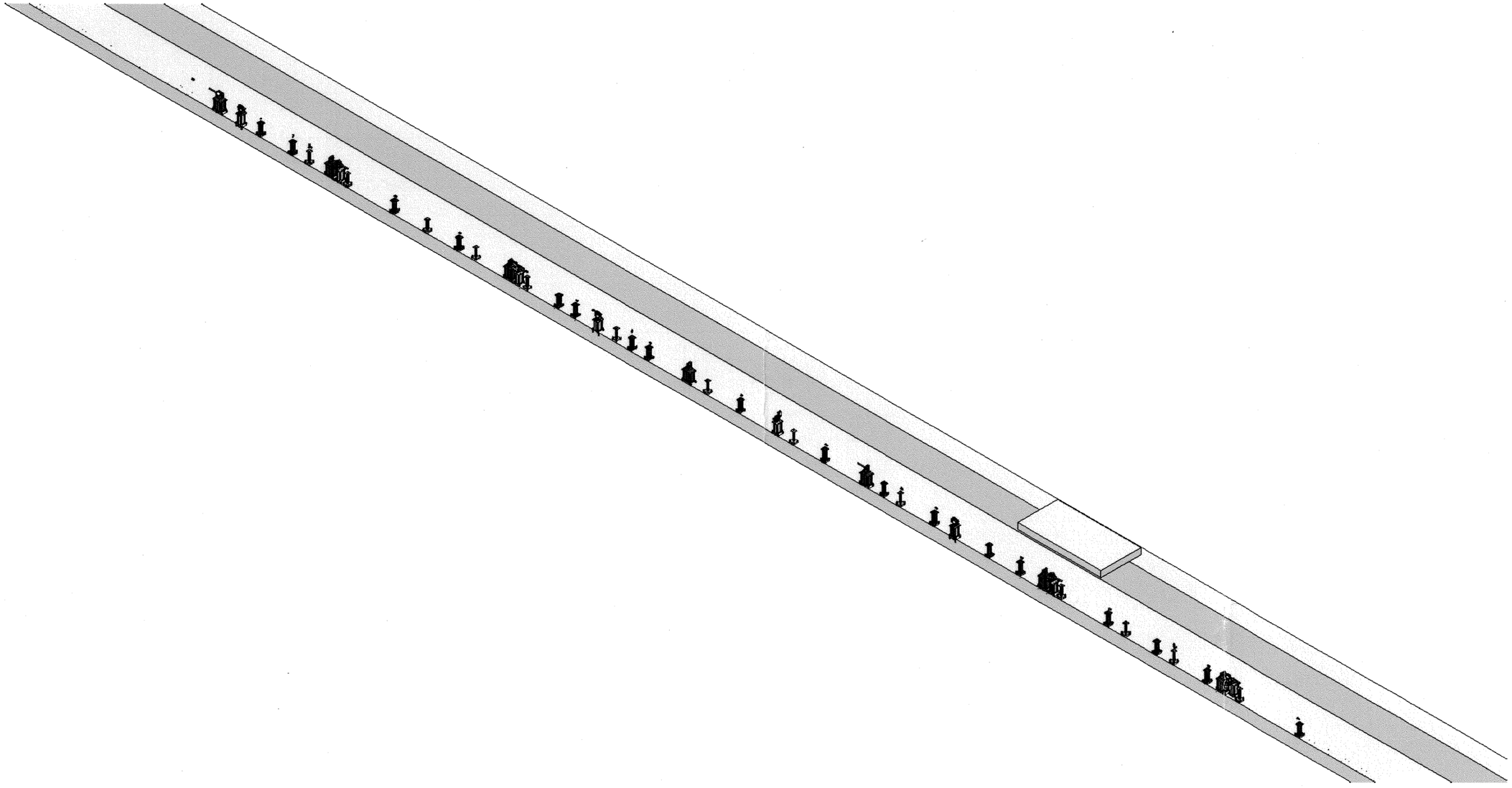
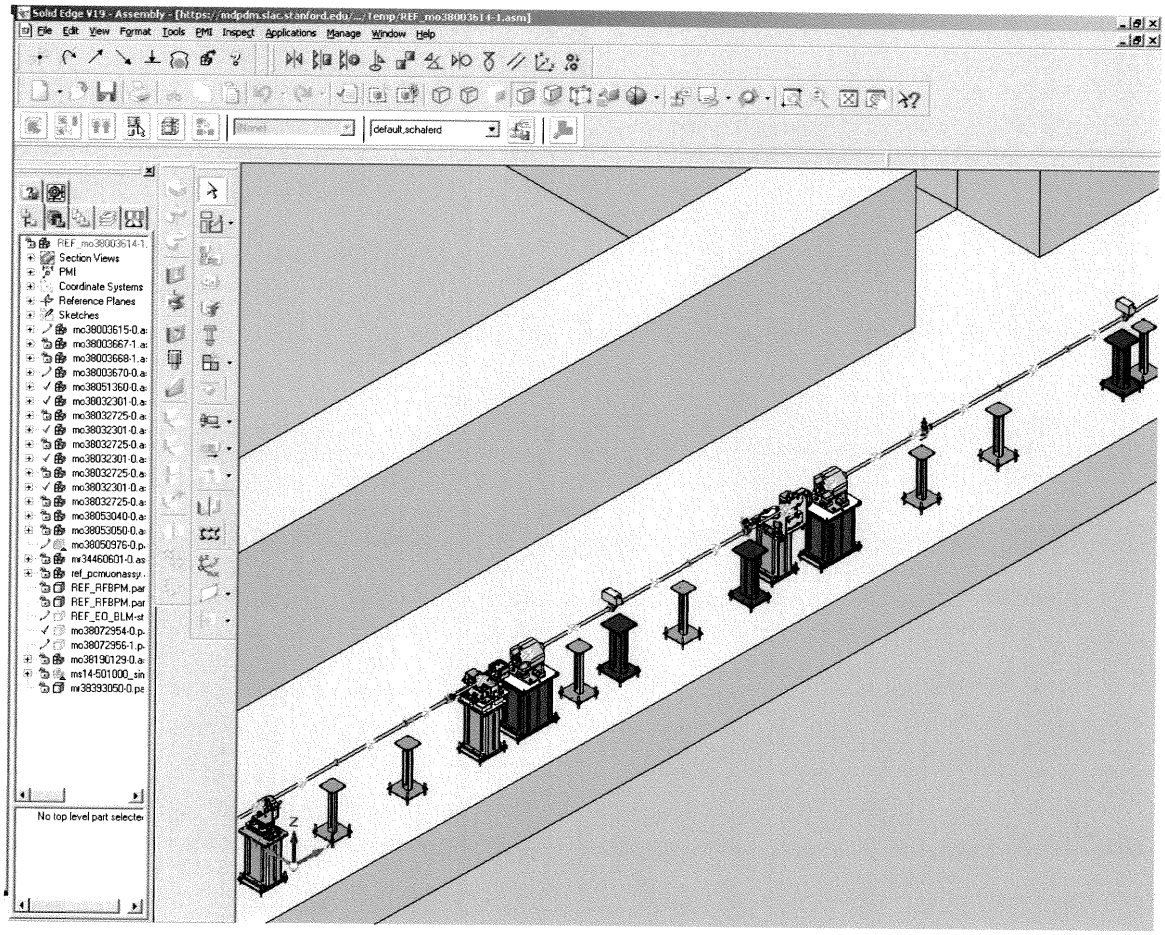
WBS Dictionary

WBS NUMBER						TITLE	DESCRIPTION
L1	L2	L3	L4	L5	L6		
1	03	07				Linac Installation & Alignment	This WBS section covers the reception of parts, components, and sub assemblies from either a Post Processing & Testing or a Rack Integration activity. Installation begins at beneficial occupancy or at a planned SLAC Linac downtime and completes all necessary activities prior to the start of commissioning. These activities are, but not limited to, mechanical installation of beam line components, installation of vacuum components, alignment, vacuum pump down, vacuum leak checking and functional testing of components and all of their respective control systems. Management of project installation activities are not covered in this section. Those activities are covered under WBS 1.3.1, System Management & Integration. This WBS section also covers the removal and/or relocation of existing SLAC Linac beam line components to make room for new LCLS Linac components such as magnets, vacuum components, RF components and diagnostic instruments.
1	03	07	06			Linac LTU System Installation & Alignment	This WBS section identifies and collects the resources and costs associated with the removal and/or relocation of SLAC FFTB beam line components and the installation of all LCLS Linac beam line components in accordance with the activity description above.

1.3.7.6 – BOE for this control account is based on 2006 installation experience (actual injector installation cost was $1.62M and actual Linac installation cost was $1.82M.) Also, cost estimate for LTU installations were based on resource loading estimate from top down and bottoms up using Accelerator department downtime resource loading.

Cable installations cost is based on number of cables, types, lengths and number of racks required. Electrical cost data (means book) was used to calculate cost for contractor to install required cables.




Solid Edge V19 - Assembly - [https://mdpdm.slac.stanford.edu/.../temp/REF_mo3800361 4-1.asm]
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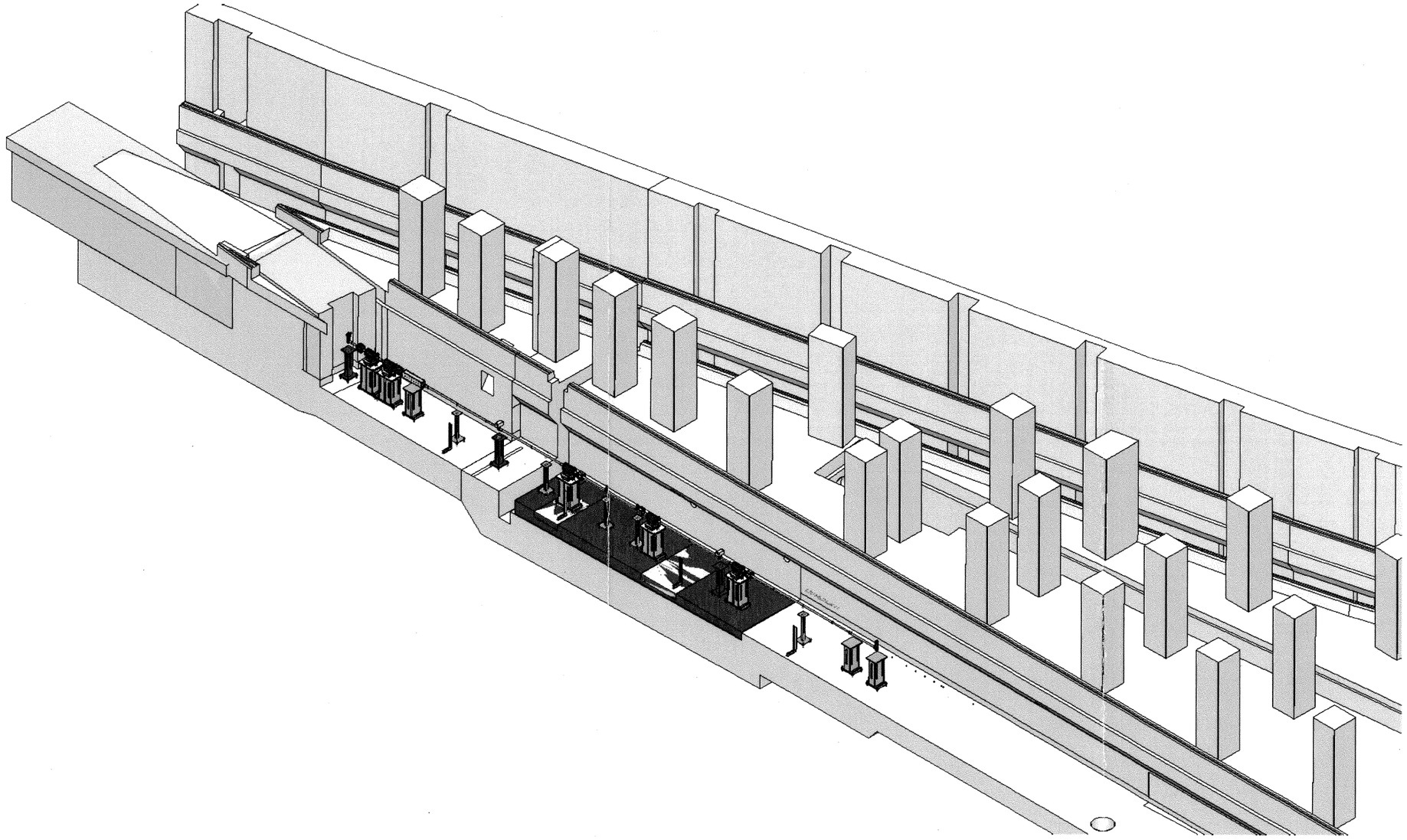


WBS Level						Step 3 CRR3 Description - New Rates	Early Start	Early Finish	OBS	Fund Type	Res Code	Units	Work Rem. Bud. Qtty		Work Rem. Full Burd and Escltd Cost			Design Maturity	Judgement Factor	BOE CODE
													Hours	$$	Labor	M&S	Total			
1	2	3	4	5	6															
1	**03**	**07**	**06**			**Linac LTU System Installation & Alignment**							**13,526**	**1,088,378**	**1,191,581**	**1,101,881**	**2,293,462**			
1	03	07	06			Network & Monumentation- BTH West	20-Dec-07	8-Jan-08		C	SL_MES2	Hrs	416		33,857		33,857	1.15	1	4
1	03	07	06			Hole template layout - BTH West	9-Jan-08	11-Jan-08		C	SL_MES2	Hrs	416		33,857		33,857	1.15	1	4
1	03	07	06			Install BTH West components	20-Feb-08	1-Apr-08		C	SL_MFAT2	Hrs	2,350		205,296		205,296	1.15	1	4
1	03	07	06			Install BTH West components	20-Feb-08	1-Apr-08		C	SL_ME2	Hrs	650		65,801		65,801	1.15	1	4
1	03	07	06			Core drill holes: LTU (BTH West)	14-Jan-08	28-Jan-08		C	SL_MSSY2	$$		50,058		50,058	50,058	1.15	1	4
1	03	07	06			Install, align & grout supports: LTU (BTH West)	29-Jan-08	19-Feb-08		C	SL_MSSY2	$$		50,058		50,058	50,058	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07		C	SL_PCE2	Hrs	252		28,520		28,520	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07		C	SL_MSSY2	$$		134,543		134,543	134,543	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07		C	SL_MDD2	Hrs	300		25,152		25,152	1.15	1	4
1	03	07	06			Install Phase III Timing Cables	5-Dec-07	5-Mar-08		C	SL_MSPF2	$$		312,572		326,075	326,075	1.15	1	4
1	03	07	06			Network & Monumentation- BTH	5-Dec-07	18-Dec-07		C	SL_MES2	Hrs	832		67,715		67,715	1.15	1	4
1	03	07	06			Hole template layout - BTH	19-Dec-07	2-Jan-08		C	SL_MES2	Hrs	832		67,715		67,715	1.15	1	4
1	03	07	06			Install LTU to EBD components	21-Mar-08	13-Jun-08		C	SL_MFAT2	Hrs	4,000		349,440		349,440	1.15	1	4
1	03	07	06			Install LTU to EBD components	21-Mar-08	13-Jun-08		C	SL_ME2	Hrs	1,150		116,417		116,417	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_PCT2	Hrs	216		13,549		13,549	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_PCE2	Hrs	540		61,870		61,870	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_PCCA2	Hrs	540		36,032		36,032	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_CT2	Hrs	360		22,581		22,581	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_CE2	Hrs	30		3,437		3,437	1.15	1	4
1	03	07	06			Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08		C	SL_CCA2	Hrs	90		6,005		6,005	1.15	1	4
1	03	07	06			Core drill holes: LTU (BTH)	3-Jan-08	16-Jan-08		C	SL_MSSY2	$$		95,652		95,652	95,652	1.15	1	4
1	03	07	06			Install, align & grout supports: LTU (BTH)	10-Jan-08	22-Feb-08		C	SL_MSSY2	$$		132,000		132,000	132,000	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08		C	SL_PCE2	Hrs	252		28,873		28,873	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08		C	SL_MSSY2	$$		313,495		313,495	313,495	1.15	1	4
1	03	07	06			Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08		C	SL_MDD2	Hrs	300		25,463		25,463	1.15	1	4

Cost Estimate Top Down

1.3.7.6	Mechanical Installation						
	tech	sprt/plan	alignment	Support	Davis Bacon	Engineer	sub-total
MFD	8	1	2	1		1	
rate	80.84	99.58	80	80		99.58	
duration (hrs)	1008	1920	1008	480		960	
Material					397440		
	651893.8	191193.6	161280	38400	397440	95596.8	$ 1,535,804.16

Cost Estimate Bottoms Up

LCLS Installation

												Work Rem. Bud. Qtty		Work Rem. Full Burd and Escltd Cos		
												Hours	$$	Labor	M&S	Total
1	03	07	06				Linac LTU System Installation & Alignment				RSC	Unit	13,526	1,088,378	1,191,581	2,293,462
1	03	07	06	S8X2_BW020	1.03.07.06	CBW30706	Network & Monumentation- BTH West	20-Dec-07	8-Jan-08	C	SL_MES2	Hrs	416		33,857	33,857
1	03	07	06	S8X2_BW030	1.03.07.06	CBW30706	Hole template layout - BTH West	9-Jan-08	11-Jan-08	C	SL_MES2	Hrs	416		33,857	33,857
1	03	07	06	S8X2_BW070	1.03.07.06	CBW30706	Install BTH West components	20-Feb-08	1-Apr-08	C	SL_MFAT2	Hrs	2,350		205,296	205,296
1	03	07	06	S8X2_BW070	1.03.07.06	CBW30706	Install BTH West components	20-Feb-08	1-Apr-08	C	SL_ME2	Hrs	650		65,801	65,801
1	03	07	06	S8X2_BW040	1.03.07.06	CBW30706	Core drill holes: LTU (BTH West)	14-Jan-08	28-Jan-08	C	SL_MSSY2	$$		50,058		50,058	50,058
1	03	07	06	S8X2_BW050	1.03.07.06	CBW30706	Install, align & grout supports: LTU (BTH West)	29-Jan-08	19-Feb-08	C	SL_MSSY2	$$		50,058		50,058	50,058
1	03	07	06	S8X2_BW060	1.03.07.06	CBW30706	Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07	C	SL_PCE2	Hrs	252		28,520	28,520
1	03	07	06	S8X2_BW060	1.03.07.06	CBW30706	Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07	C	SL_MSSY2	$$		134,543		134,543	134,543
1	03	07	06	S8X2_BW060	1.03.07.06	CBW30706	Install Racks & cable plant BTH West (B005,BSY)	4-Sep-07	28-Nov-07	C	SL_MDD2	Hrs	300		25,152	25,152
1	03	07	06	S8X2_BW062	1.03.07.06	CBW30706	Install Phase III Timing Cables	5-Dec-07	5-Mar-08	C	SL_MSPF2	$$		312,572		326,075	326,075
1	03	07	06	S8X3_BL050	1.03.07.06	CBZ30706	Network & Monumentation- BTH	5-Dec-07	18-Dec-07	C	SL_MES2	Hrs	832		67,715		67,715
1	03	07	06	S8X3_BL060	1.03.07.06	CBZ30706	Hole template layout - BTH	19-Dec-07	2-Jan-08	C	SL_MES2	Hrs	832		67,715		67,715
1	03	07	06	S8X3_BL100	1.03.07.06	CBZ30706	Install LTU to EBD components	21-Mar-08	13-Jun-08	C	SL_MFAT2	Hrs	4,000		349,440		349,440
1	03	07	06	S8X3_BL100	1.03.07.06	CBZ30706	Install LTU to EBD components	21-Mar-08	13-Jun-08	C	SL_ME2	Hrs	1,150		116,417		116,417
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_PCT2	Hrs	216		13,549		13,549
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_PCE2	Hrs	540		61,870		61,870
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_PCCA2	Hrs	540		36,032		36,032
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_CT2	Hrs	360		22,581		22,581
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_CE2	Hrs	30		3,437		3,437
1	03	07	06	S8X3_BL110	1.03.07.06	CBZ30706	Terminate cable plant BTH (SB 2.1,2.2,2.3)	16-Jun-08	14-Jul-08	C	SL_CCA2	Hrs	90		6,005		6,005
1	03	07	06	S8X3_BL070	1.03.07.06	CBZ30706/	Core drill holes: LTU (BTH)	3-Jan-08	16-Jan-08	C	SL_MSSY2	$$		95,652		95,652	95,652
1	03	07	06	S8X3_BL080	1.03.07.06	CBZ30706/	Install, align & grout supports: LTU (BTH)	10-Jan-08	22-Feb-08	C	SL_MSSY2	$$		132,000		132,000	132,000
1	03	07	06	S8X3_BL090	1.03.07.06	CBZ30706(	Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08	C	SL_PCE2	Hrs	252		28,873		28,873
1	03	07	06	S8X3_BL090	1.03.07.06	CBZ30706(	Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08	C	SL_MSSY2	$$		313,495		313,495	313,495
1	03	07	06	S8X3_BL090	1.03.07.06	CBZ30706(	Install Racks & cable plant BTH (SB 2.1,2.2)	3-Mar-08	23-May-08	C	SL_MDD2	Hrs	300		25,463		25,463

AD Installation Resource Loading Schedule

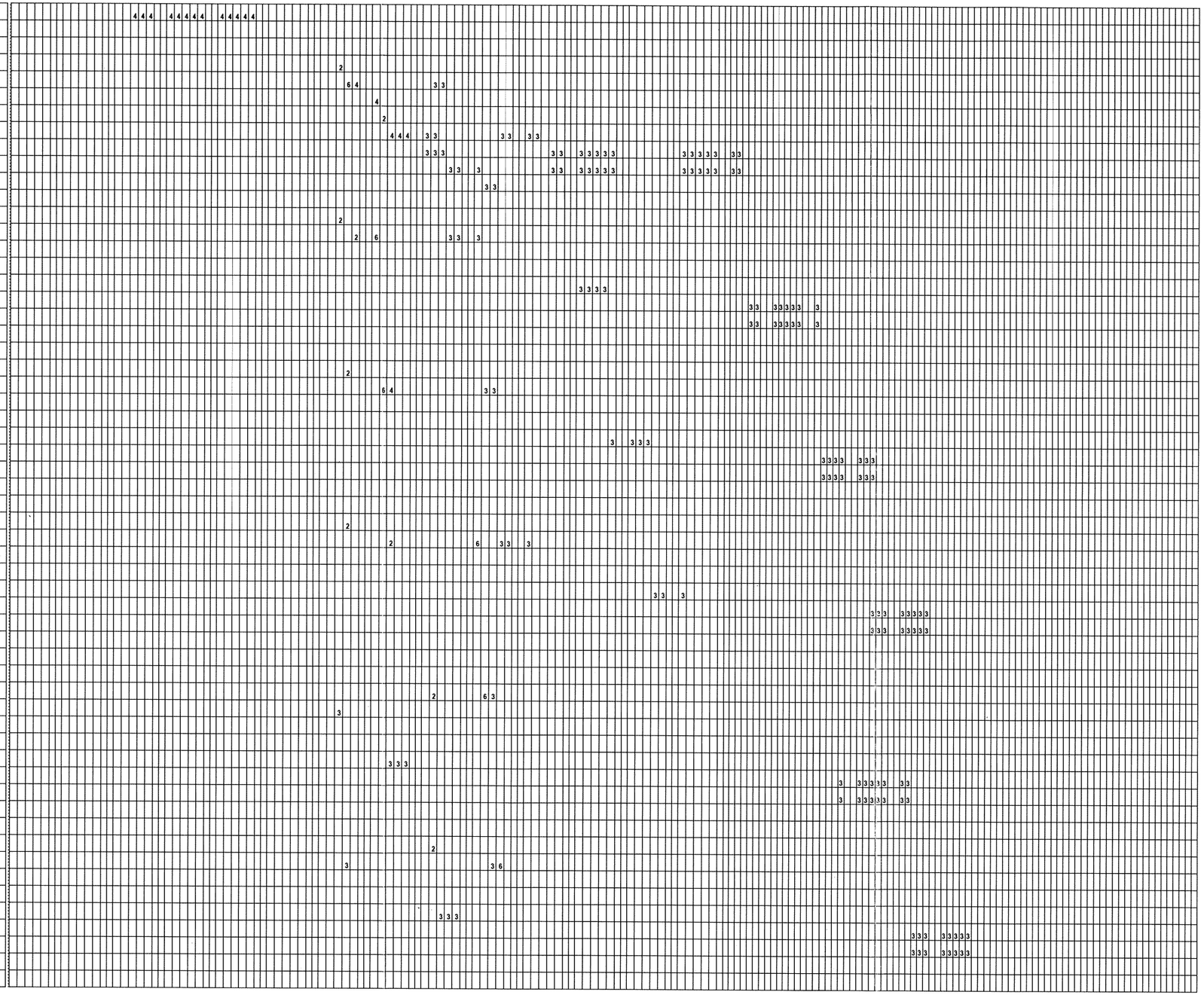
FY2008 LCLS Installation Schedule

1 LTU Kathleen Ratcliffe

** TAKE TIME FOR SAFETY **

STAT	PROJECT NUMBER	JOB NBR	DESCRIPTION OF WORK TO BE DONE	PROJECT MANAGER	TASK PERSON RESPONS	AREA MANAGER	AREA LOCATION	SHOP	SHIFT OR FORM REQ'D	MRG	MGRT	MGRA	LOC	RSC	BQ
			Network and Monementation							Boyce	LeCocq	Ratcliffe	BTHW	AEG	52
			BTHW Installation												
			LTU Section 71 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTHW	AEG	2
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	16
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	4
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTHW	AEG	2
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	30
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDM	51
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDV	51
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTHW	MFDV	6
			LTU Section 72 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTHW	AEG	2
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	17
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTHW	AEG	
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	12
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDM	24
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDV	24
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTHW	MFDV	
			LTU Section 73 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTHW	AEG	2
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	16
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTHW	AEG	
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTHW	LCLXL	12
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDM	21
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDV	21
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTHW	MFDV	
			LTU Section 74 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTHW	AEG	2
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTHW	LC,XL	17
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTHW	LC,XL	
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTHW	AEG	
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTHW	LC,XL	9
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDM	24
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTHW	MFDV	24
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTHW	MFDV	
			BTH Installation												
			LTU Section 75 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTH	AEG	11
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTH	LC,XL	3
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTH	LC,XL	
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTH	LC,XL	9
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTH	MFDM	24
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTH	MFDV	24
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 76 Installation												
			Anchor Hole Location Layout							Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes							Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	12
			Bottom Plate Installation							Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates							Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns							Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation							Boyce	Bostic	Ratcliffe	BTH	MFDM	24
			Vacuum Component Installation							Boyce	Bostic	Ratcliffe	BTH	MFDV	24
			Pumpdown and Leak Check Section							Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 77 Installation												

WEEK -1	WEEK 0	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23
11/19/07	11/26/07	12/03/07	12/10/07	12/17/07	12/24/07	12/31/07	01/07/08	01/14/08	01/21/08	01/28/08	02/04/08	02/11/08	02/18/08	02/25/08	03/03/08	03/10/08	03/17/08	03/24/08	03/31/08	04/07/08	04/14/08	04/21/08	04/28/08	05/05/08
THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU	THRU
11/25/07	12/2/07	12/9/07	12/16/07	12/23/07	12/30/07	1/6/08	1/13/08	1/20/08	1/27/08	2/3/08	2/10/08	2/17/08	2/24/08	3/2/08	3/9/08	3/16/08	3/23/08	3/30/08	4/6/08	4/13/08	4/20/08	4/27/08	5/4/08	5/11/08
M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S



FY2008 LCLS Installation Schedule

1 LTU Kathleen Ratcliffe

** TAKE TIME FOR SAFETY **

STAT	PROJECT NUMBER	JOB NBR	DESCRIPTION OF WORK TO BE DONE	PROJECT MANAGER	TASK PERSON RESPONS	AREA MANAGER	AREA LOCATION	SHOP	SHIFT FORM REQ'D
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	12
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	24
			Vacuum Compcnent Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	24
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 78 Installation						
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	6
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	

WEEK -1	WEEK 0	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23
11/19/07 THRU 11/25/07	11/26/07 THRU 12/2/07	12/03/07 THRU 12/9/07	12/10/07 THRU 12/16/07	12/17/07 THRU 12/23/07	12/24/07 THRU 12/30/07	12/31/07 THRU 1/6/08	01/07/08 THRU 1/13/08	01/14/08 THRU 1/20/08	01/21/08 THRU 1/27/08	01/28/08 THRU 2/3/08	02/04/08 THRU 2/10/08	02/11/08 THRU 2/17/08	02/18/08 THRU 2/24/08	02/25/08 THRU 3/2/08	03/03/08 THRU 3/9/08	03/10/08 THRU 3/16/08	03/17/08 THRU 3/23/08	03/24/08 THRU 3/30/08	03/31/08 THRU 4/6/08	04/07/08 THRU 4/13/08	04/14/08 THRU 4/20/08	04/21/08 THRU 4/27/08	04/28/08 THRU 5/4/08	05/05/08 THRU 5/11/08
M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S
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FY2008 LCLS Installation Schedule

1 LTU Kathleen Ratcliffe

TAKE TIME FOR SAFETY

STAT	PROJECT NUMBER	JOB NBR	DESCRIPTION OF WORK TO BE DONE	PROJECT MANAGER	TASK PERSON RESPONS	AREA MANAGER	AREA LOCATION	SHOP	SHIFT OR FORM REQ'D
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	24
			Vacuum Component Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	24
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 79 Installation						
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	12
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	24
			Vacuum Component Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	24
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 80 Installation						
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	6
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	3
			Vacuum Component Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	3
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 81 Installation						
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	15
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	
			Vacuum Component Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			LTU Section 82 Installation Drawings						
			Anchor Hole Location Layout	Boyce	LeCocq	Ratcliffe	BTH	AEG	2
			Core Drill Holes	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	9
			Bottom Plate Installation	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	
			Align Bottom Plates	Boyce	LeCocq	Ratcliffe	BTH	AEG	
			Install Support Columns	Boyce	Ratcliffe	Ratcliffe	BTH	LCLXL	6
			Magnet and Diagnostics Installation	Boyce	Bostic	Ratcliffe	BTH	MFDM	
			Vacuum Component Installation	Boyce	Bostic	Ratcliffe	BTH	MFDV	
			Pumpdown and Leak Check Section	Boyce	Bostic	Ratcliffe	BTH	MFDV	

WEEK -1	WEEK 0	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23
11/19/07 THRU 11/25/07	11/26/07 THRU 12/2/07	12/03/07 THRU 12/9/07	12/10/07 THRU 12/16/07	12/17/07 THRU 12/23/07	12/24/07 THRU 12/30/07	12/31/07 THRU 1/6/08	01/07/08 THRU 1/13/08	01/14/08 THRU 1/20/08	01/21/08 THRU 1/27/08	01/28/08 THRU 2/3/08	02/04/08 THRU 2/10/08	02/11/08 THRU 2/17/08	02/18/08 THRU 2/24/08	02/25/08 THRU 3/2/08	03/03/08 THRU 3/9/08	03/10/08 THRU 3/16/08	03/17/08 THRU 3/23/08	03/24/08 THRU 3/30/08	03/31/08 THRU 4/6/08	04/07/08 THRU 4/13/08	04/14/08 THRU 4/20/08	04/21/08 THRU 4/27/08	04/28/08 THRU 5/4/08	05/05/08 THRU 5/11/08
M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S	M T W T F S S
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AD Installation

Sum of BQ		
MGRA	RSC	Total
Ratcliffe	AEG	87
	LCLXL	277
	MFDM	243
	MFDV	249
Ratcliffe Total		856
(blank)	(blank)	0
(blank) Total		0
Grand Total		856

AD Rsc	AD to LCLS	hrs/unit	BQ (Hrs)	FY08 Rate	Total Cost
Alignment Engr	SL_MES	8	696	80.06	**55,722**
General Contractor	SL_MSPS	8			**0**
MFD Mech Tech	SL_MFAT	8	1,944	85.93	**167,048**
MFD Vac Tech	SL_MFAT	8	1,992	85.93	**171,173**

FTEs (3months)

Alignment	4.2
Techs - Mech	11.6
Techs - Vac	11.9

Cable Installation

1.3.7.6 Mechanical Installation

	tech	sprt/plan	alignment	misc	Davis Bacon		sub-total	budget CRR1	BCR??overrun	
MFD	8	1	2	1	12	1				
rate	72	90	80	80	80	90				
duration (hrs)	1008	1920	1008	480	414	960				
Material					132480					
	580608	172800	161280	38400	397440	86400	$ 1,436,928.00	**$ 550,631.00**	$ 796,707.00	15% contingency
									$ 886,297.00	no contingency

1.3.7.7 Mechanical Installation

	tech	sprt/plan	alignment	misc	Davis Bacon		sub-total	budgetd		
MFD	7	1	2	1	12	1				
rate	72	90	80	80	80	90				
duration (hrs)	640	1000	320	160	160	960				
Material					153600					
	322560	90000	51200	12800	153600	86400	$ 716,560.00	**$ 463,049.00**	$ 291,537.65	15% contingency
									$ 253,511.00	no contingency

Cable installation Phase 4 (excluding Undulator hall, FEE and NEH)

	B911	B912	B913	B921			budgetd		
DB Labor	135866	128131	153244	160617	150000	577858			
ED&I						150000			
						$ 727,858.00	**$ 535,799.00**	$ 220,867.85	15% contingency
								$ 192,059.00	no contingency

PHASE	D-B MATERIAL	D-B LABOR HRS		ED&I	CONT.	DB TOTAL
LCLSPH3 S24	16,965	294,634	2,893	Below	0	311,599
LCLSPH3 B005 105,106, B136	37,245	319,395	3,136	Below	0	356,641
LCLSPH3 BTH W	11,099	51,092	502	Below	0	62,191
LCLSPH4 BTH 2.1 (B911)	21,710	135,886	1,218	Below	0	157,596
LCLSPH4 BTH 2.2 (B912)	5,184	128,131	1,149	Below	0	133,315
LCLSPH4 BTH 2.3 (B913)	4,461	153,244	1,505	Below	0	157,704
LCLSPH4 BTH 3.1 (B921)	4,461	160,617	1,577	Below	0	165,078
LCLSPH4 UNDULATOR	30,138	498,228	4,892	Below	0	528,366
LCLSPH4 FEE,NEH	16,215	182,183	0	Below	0	198,398
Timing (B136,105,106,911,912,913,921)					0	334,526
LCLSPH5 FEH, X-RAY	13,685	87,087	781	Below	0	100,772
LABOR TOTAL (PH3, 4, 5)	**161,162**	**2,010,498**	**17,651**	**0**	**0**	**2,506,186**

	SLAC MATERIALS	D-B TOTAL	ESCALATION	ED&I	
PHASE 3	283,510	730,430	37,092	296,188	1,347,220
PHASE 4	465,039	1,674,984	83,749	300,000	2,523,772
PHASE 5	47,284	100,772	5,039	160,000	313,095
LABOR MATERIALS and ED&I TOTAL					4,184,086

NOTES:

1. Material cost does not include racks
2. ED&I (4 FTE Designer/UTR, 0.75 FTE Manager/Engineer)
3. PH5 estimate is preliminary cable plant not well defined yet
4. **The majority of the information used for this estimate goes back to April 2007**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**ENGINEER'S ESTIMATE**		**DATE PREPARED: 03/01/07**								LCLSPH4 EST BTH2.1		
2	**DESCRIPTION:**					**ESTIMATOR: P. Rodriguez**					REV4 5/18/07		
3	**LCLS PH4 CABLE PLANT INSTALLATION - BTH 2.1 (B911)**												
4	**I T E M**	**MATERIAL**				**L A B O R**							
5		UNIT	NO.	UNIT $	TOTAL $	NO.	UNIT	TOTAL HRS.	$/HR	TOTAL $	**TOTAL$/SYST.**		**SLAC PURCHASE MATERIALS**
7	**TRAYS**												
8	Trays18x4 (6 Sections)	FT	72	0.00	$0	72	0.300	22	97.00	$2,095			936
9	Tray Supports	LOT	1	800.00	$800	1	40.000	40	97.00	$3,880			
10	Tray Fittings	EA	12	0.00	$0	12	3.000	36	97.00	$3,492			1440
11	Trays Dividers(FT)	FT	630	0.00	$0	630	0.060	38	97.00	$3,667			3150
12	Trays Drop Outs	EA	10	0.00	$0	10	1.000	10	97.00	$970			200
13	Patch Panels	EA	4	0.00	$0	4	6.000	24	97.00	$2,328			
14	Faston Block	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
15	Boxes	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
16	4/0Bare Cu Gnd	FT	40	5.00	$200	28	0.060	2	97.00	$163			
17	Gnd Clamps	EA	4	35.00	$140	4	1.000	4	97.00	$388			
18	3/4" Flex	FT	40	0.50	$20	28	0.050	1	97.00	$136			
19	1" Flex	FT	30	0.94	$28	21	0.080	2	97.00	$163			
20	2" Flex	FT	30	3.00	$90	21	0.200	4	97.00	$407			
21	Flex Fittings	LOT	1	100.00	$100	1	16.000	11	97.00	$1,086			
22	**DC**												
23	3/0AWG	FT	400	0.00	$0	360	0.060	22	97.00	$2,095			1600
24	2/0AWG	FT	2,400	0.00	$0	2,160	0.050	108	97.00	$10,476			7200
25	2C#2	FT	0	0.00	$0	0	0.045	0	97.00	$0			0
26	2C#4	FT	0	0.00	$0	0	0.030	0	97.00	$0			0
27	2C#12	FT	3,200	0.00	$0	2,880	0.025	72	97.00	$6,984			4000
28	Lugs & Cable handling	EA	30	500.00	$15,000	30	0.500	15	97.00	$1,455			180
29	**I&C**												
30	I&C Cables	FT	15,200	0.00	$0	15,200	0.040	608	97.00	$58,976			
31	Misc. Materials	LOT	1	2000.00	$2,000	1	20.000	20	97.00	$1,940			
32	Connectors	LOT	1	500.00	$500	1	120.000	120	97.00	$11,640			
33													
34	TOTAL DIRECT				$18,878			**1,218**		$118,162			18706
35													
36	**TOTAL DIRECT + 5% for Equipment**				**$21,710**					**$135,886**	**$157,596**		
37	**CONTINGENCY**										**$0**		
38	**GRAND TOTAL**										**$157,596**		
39													
40													
41													

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**ENGINEER'S ESTIMATE**		**DATE PREPARED: 03/01/07**								LCLSPH4 ES BTH 2.2		
2	**DESCRIPTION:**					**ESTIMATOR: P. Rodriguez**					REV3 5/18/07		
3	**LCLS PH4 CABLE PLANT INSTALLATION - BTH 2.2 (B912)**												
4	**I T E M**	**MATERIAL**				**L A B O R**							
5		UNIT	NO.	UNIT $	TOTAL $	NO.	UNIT	TOTAL HRS.	$/HR	TOTAL $	**TOTAL$/SYST.**		**SLAC PURCHASE MATERIALS**
7	**TRAYS**												
8	Trays18x4 (3 Sections)	FT	72	0.00	$0	72	0.300	22	97.00	$2,095			936
9	Tray Supports	LOT	1	1000.00	$1,000	1	70.000	70	97.00	$6,790			
10	Tray Fittings	EA	6	0.00	$0	6	3.000	18	97.00	$1,746			720
11	Trays Dividers(FT)	FT	630	0.00	$0	630	0.060	38	97.00	$3,667			3150
12	Trays Drop Outs	EA	8	0.00	$0	8	1.000	8	97.00	$776			160
13	Patch Panels	EA	4	0.00	$0	4	6.000	24	97.00	$2,328			
14	Faston Block	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
15	Boxes	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
16	4/0Bare Cu Gnd	FT	80	5.00	$400	56	0.060	3	97.00	$326			
17	Gnd Clamps	EA	8	35.00	$280	8	1.000	8	97.00	$776			
18	3/4" Flex	FT	40	0.50	$20	28	0.050	1	97.00	$136			
19	1" Flex	FT	30	0.94	$28	21	0.080	2	97.00	$163			
20	2" Flex	FT	30	3.00	$90	21	0.200	4	97.00	$407			
21	Flex Fittings	LOT	1	100.00	$100	1	16.000	11	97.00	$1,086			
22	**DC**												
23	3/0AWG	FT	0	0.00	$0	0	0.060	0	97.00	$0			0
24	2/0AWG	FT	2,000	0.00	$0	1,600	0.050	80	97.00	$7,760			6000
25	2C#2	FT	0	0.00	$0	0	0.045	0	97.00	$0			0
26	2C#6	FT	200	0.00	$0	180	0.030	5	97.00	$524			500
27	2C#12	FT	2,000	0.00	$0	1,800	0.025	45	97.00	$4,365			2500
28	Lugs & Cable handling	EA	30	3.00	$90	30	1.000	30	97.00	$2,910			180
29	**I&C**												
30	I&C Cables	FT	13,475	0.00	$0	13,475	0.040	539	97.00	$52,283			
31	Misc. Materials	LOT	1	2000.00	$2,000	1	20.000	20	97.00	$1,940			
32	Term & Cable handling	LOT	1	500.00	$500	1	160.000	160	97.00	$15,520			
33													
34	TOTAL DIRECT				$4,508			**1,149**		$111,418			14146
35													
36	**TOTAL DIRECT + 5% for Equipment**				**$5,184**					**$128,131**	**$133,315**		
37													
38	**CONTINGENCY**										**$0**		
39	**GRAND TOTAL**										**$133,315**		
40													
41													
42													

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	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**ENGINEER'S ESTIMATE**		**DATE PREPARED: 03/01/07**								LCLSPH4 EST BTH 2.3		
2	**DESCRIPTION:**					**ESTIMATOR: P. Rodriguez**					EST		
3	**LCLS PH4 CABLE PLANT INSTALLATION - BTH 2.3 (B913)**										R3 5/18/07		
4	**I T E M**	**MATERIAL**				**L A B O R**							
5		UNIT	NO.	UNIT $	TOTAL $	NO.	UNIT	TOTAL HRS.	$/HR	TOTAL $	**TOTAL$/SYST.**		**SLAC PURCHASE MATERIALS**
7	**TRAYS**												
8	Trays18x4 (6 Sections)	FT	72	0.00	$0	72	0.300	22	97.00	$2,095			936
9	Tray Supports	LOT	1	1000.00	$1,000	1	40.000	40	97.00	$3,880			
10	Tray Fittings	EA	14	0.00	$0	14	3.000	42	97.00	$4,074			1680
11	Trays Dividers(FT)	FT	800	0.00	$0	800	0.060	48	97.00	$4,656			4000
12	Trays Drop Outs	EA	2	0.00	$0	2	1.000	2	97.00	$194			40
13	Patch Panels	EA	4	0.00	$0	4	6.000	24	97.00	$2,328			
14	Faston Block	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
15	Boxes	EA	3	0.00	$0	3	10.000	30	97.00	$2,910			
16	4/0Bare Cu Gnd	FT	60	5.00	$300	42	0.060	3	97.00	$244			
17	Gnd Clamps	EA	6	35.00	$210	6	1.000	6	97.00	$582			
18	3/4" Flex	FT	40	0.50	$20	28	0.050	1	97.00	$136			
19	1" Flex	FT	30	0.94	$28	21	0.080	2	97.00	$163			
20	2" Flex	FT	30	3.00	$90	21	0.200	4	97.00	$407			
21	Flex Fittings	LOT	1	100.00	$100	1	16.000	11	97.00	$1,086			
22	**DC**												
23	2C#18 (See Und.)	FT	0	0.00	$0	0	0.025	0	97.00	$0			0
24	2C#4 (See Und)	FT	0	0.00	$0	0	0.025	0	97.00	$0			0
25	Lugs & Cable handling	EA	0	2.00	$0	0	0.500	0	97.00	$0			0
26	**I&C**												
27	I&C Cables	FT	25,500	0.00	$0	25,500	0.040	1,020	97.00	$98,940			
28	Misc. Materials	LOT	1	2000.00	$2,000	1	20.000	20	97.00	$1,940			
29	Term & Cable handling	LOT	1	500.00	$500	1	200.000	200	97.00	$19,400			
30													
31	TOTAL DIRECT				$4,248			**1,505**		$145,946			6656
32													
33	**TOTAL DIRECT + 5% for Equipment**				**$4,461**					**$153,244**	**$157,704**		
34													
35	**CONTINGENCY**										**$0**		
36	**GRAND TOTAL**										**$157,704**		
37													
38													
39													

Magnet/Power System

Values Based on Standardizing

Database Names (Primary, SLC Micro Name, IOC Location, Unit); SLC; LCLS

Area	Magnet Name (Element)	Primary	SLC Micro Name	IOC Location	Unit	Magnet Type (Keyword)	Z Linac Coordinates (m)	LCLS Coordinate System (m)	Magnet - New (N)/Existing (E)/Refurbished (R)	Magnet Quantity	Magnet - Unipolar (U) or Bipolar (B)	Magnet Fast Feedbck Loop #	Magnet - String (s) or Individually (I) Powered	Magnet - Single Inductance (H)	Magnet Long Term Stability (10 second, 30C) in RMS ppm	SLC Magnet Single Maximum Volts	SLC Magnet Total Maximum Volts	SLC Magnet Maximum Amps	LCLS Magnet Single Maximum Volts (40C)	LCLS Magnet Total Maximum Volts (40C)	LCLS Magnet Maximum Amps	LCLS Magnet Total Minimum Volts	LCLS Magnet Minimum Amps	LCLS Magnet Maximum di/dt Volts
DL1	BX01 Trim	BTRM	IM20	IN20	661	TRIM	2032.08123900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	12.0	NA	NA	0.0
DL1	BX01, BX02	BEND	IM20	IN20	661, 751	BEND	2032.08123900, 2033.76132300		N	2	U	NA	S	1.00E-06	100	NA	NA	NA	9.0	18	335	NA	NA	0.0
INJ	BXH1 Trim	BTRM	IM20	IN20	451	TRIM	2025.53162400		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	12.0	NA	NA	0.0
INJ	BXH1, BXH2,BXH3,BXH4	BEND	IM20	IN20	451, 461, 475, 481	BEND	2025.42591200, 2025.64298700, 2026.40479900, 2026.62187400		N	4	U	NA	S	1.00E-06	600	NA	NA	NA	9.0	36	335	NA	NA	0.0
INJ	BXH3 Trim	BTRM	IM20	IN20	475	TRIM	2026.40479900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	12.0	NA	NA	0.0
INJ	BXH4 Trim	BTRM	IM20	IN20	481	TRIM	2026.62187400		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	12.0	NA	NA	0.0
INJ	QB	QUAD	IM20	IN20	731	QUAD	2032.91778800		N	1	U	NA	I	1.00E-06	500	NA	NA	NA	23.35	23	30	9	11.870	0.0
INJ	QE01	QUAD	IM20	IN20	425	QUAD	2024.96044900		N	1	B	NA	I	1.00E-06	10000	NA	NA	NA	1.97	2	5	0	0.000	0.0
INJ	QE02	QUAD	IM20	IN20	441	QUAD	2025.37002500		N	1	B	NA	I	1.00E-06	5000	NA	NA	NA	1.97	2	5	0	0.000	0.0
INJ	QE03	QUAD	IM20	IN20	511	QUAD	2027.38797800		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	1.97	2	5	0	0.000	0.0
INJ	QE04	QUAD	IM20	IN20	525	QUAD	2027.71563900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	1.97	2	5	0	0.000	0.0
INJ	QM01	QUAD	IM20	IN20	631	QUAD	2031.30925900		N	1	U	NA	I	1.00E-06	1000	NA	NA	NA	2.95	3	8	0	0.126	0.0
INJ	QM02	QUAD	IM20	IN20	651	QUAD	2031.76456200		N	1	U	NA	I	1.00E-06	1000	NA	NA	NA	2.95	3	8	0	-0.126	0.0
DL1	QM03	QUAD	IM20	IN20	771	QUAD	2034.22768200		N	1	U	NA	I	1.00E-06	3000	NA	NA	NA	2.95	3	8	0	-0.126	0.0
DL1	QM04	QUAD	IM20	IN20	781	QUAD	2034.63268200		N	1	U	NA	I	1.00E-06	1000	NA	NA	NA	2.95	3	8	0	0.126	0.0
INJ	XC06	XCOR	IM20	IN20	491	XCOR	2027.03983900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
INJ	XC07	XCOR	IM20	IN20	521	XCOR	2027.61816000		N	1	B	1	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
INJ	XC08	XCOR	IM20	IN20	641	XCOR	2031.58762500		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
DL1	XC09	XCOR	IM20	IN20	721	XCOR	2032.74516600		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
DL1	XC10	XCOR	IM20	IN20	761	XCOR	2034.02823200		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
INJ	YC06	YCOR	IM20	IN20	492	YCOR	2027.03983900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
INJ	YC07	YCOR	IM20	IN20	522	YCOR	2027.61816000		N	1	B	1	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
INJ	YC08	YCOR	IM20	IN20	642	YCOR	2031.58762500		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
DL1	YC09	YCOR	IM20	IN20	722	YCOR	2032.74516600		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
DL1	YC10	YCOR	IM20	IN20	762	YCOR	2034.02823200		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10	10	Later	Later	0.0
GSPEC	QG02	QUAD	IM20	IN20	811	QUAD	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	20.0	20	10	0	0	0.0
GSPEC	QG03	QUAD	IM20	IN20	831	QUAD	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	20.0	20	10	0	0	0.0
GSPEC	XCG1	XCOR	IM20	IN20	811	XCOR	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	24.0	24	5	0	0	0.0
GSPEC	XCG2	XCOR	IM20	IN20	831	XCOR	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	24.0	24	5	0	0	0.0
GSPEC	YCG1	YCOR	IM20	IN20	812	YCOR	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	24.0	24	5	0	0	0.0
GSPEC	YCG2	YCOR	IM20	IN20	832	YCOR	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	24.0	24	5	0	0	0.0
GUN	BXG	BEND	IM20	IN20	231	BEND	2018.86333700		N	1	U	NA	I	1.00E-06	100	NA	NA	NA	3.9	4	25	0	0	0.0
GUN	BXG Trim	BTRM	IM20	IN20	231	TRIM	2018.86333700		N	1	B	NA	I	1.00E-06	500	NA	NA	NA	20.0	20	12	0	0	0.0
GUN	XC01	XCOR	IM20	IN20	221	CORR	2018.58728300		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
GUN	YC01	YCOR	IM20	IN20	222	CORR	2018.58728300		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
GUN	CQ01	QUAD	IM20	IN20	121	QUAD	2018.08022800		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	6	0	0	0.0
GUN	SOL1BK	SOLN	IM20	IN20	111	SOLE	Later		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	5.32	5	5	0	0	0.0
GUN	SOL1	SOLN	IM20	IN20	121	SOLE	2018.08022800		N	1	U	NA	I	1.00E-06	200	NA	NA	NA	21.8	22	269	0	0	0.0
GUN	SQ01	QUAD	IM20	IN20	122	QUAD	2018.08022800		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	6	0	0	0.0
GUN	XC00	XCOR	IM20	IN20	121	XCOR	2018.08022800		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
GUN	YC00	YCOR	IM20	IN20	122	YCOR	2018.08022800		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	QA01	QUAD	IM20	IN20	361	QUAD	2021.72271300		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	0.74	1	2	0	0	0.0
INJ	QA02	QUAD	IM20	IN20	371	QUAD	2021.97247300		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	0.74	1	2	0	0	0.0
INJ	SOL2	SOLN	IM20	IN20	311	SOLE	2019.51128600		N	1	U	NA	I	1.00E-06	1000	NA	NA	NA	140.0	140	30	0	0	0.0
INJ	XC02	XCOR	IM20	IN20	311	XCOR	2019.20160600		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	XC03	XCOR	IM20	IN20	341	XCOR	2021.44124900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	XC04	XCOR	IM20	IN20	381	XCOR	2022.41608100		N	1	B	1	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	XC05	XCOR	IM20	IN20	411	XCOR	2024.65572500		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	YC02	YCOR	IM20	IN20	312	YCOR	2019.20160600		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	YC03	YCOR	IM20	IN20	342	YCOR	2021.44124900		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	YC04	YCOR	IM20	IN20	382	YCOR	2022.41608100		N	1	B	1	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	YC05	YCOR	IM20	IN20	412	YCOR	2024.65572500		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	10	0	0	0.0
INJ	BXS	BEND	IM20	IN20	931	BEND	Later		N	1	U	NA	I	1.00E-06	100	NA	NA	NA	24.0	24	265	0	0	0.0
ISPEC	QS01	QUAD	IM20	IN20	941	QUAD	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	3.0	2.96	7.59	0	0	0.0
ISPEC	QS02	QUAD	IM20	IN20	961	QUAD	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	3.9	4	10	0	0	0.0
ISPEC	XCS1	XCOR	IM20	IN20	911	XCOR	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	10.0	10	10	0	0	0.0
ISPEC	XCS2	XCOR	IM20	IN20	951	XCOR	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	10.0	10	10	0	0	0.0
ISPEC	YCS1	YCOR	IM20	IN20	912	YCOR	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	10.0	10	10	0	0	0.0
ISPEC	YCS2	YCOR	IM20	IN20	952	YCOR	Later		N	1	B	NA	I	1.00E-06	1000	6.8	NA	NA	10.0	10	10	0	0	0.0
ector 20 Bulk F	NA	LGPS	IM20	IN20	1	NA			N	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ector 20 Bulk F	NA	LGPS	IM20	IN20	2	NA			N	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ector 20 Bulk F	NA	LGPS	LM21	LI21	2	NA			N	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L1	XC11	XCOR	LM21	LI21	101	XCOR			N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0
L1	YC11	YCOR	LM21	LI21	102	YCOR			N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0

Cable Data

Individual or String
Cable - Based on Standardizing I +10%

Power Supply Data

DC Requirement
Power Supply Ratings and Other Information

Ground Cable

EI Drawing

EI Number

Magnet Name (Element)	Cable - NEC Type or Other Data	Cable 1/C, 2/C or 3/C	Cable 1/C R (75C) (Ohm/kft)	Cable Round Trip Length(ft)	Cable Voltage Drop (V)	Cable Loss (kW)	Power Supply Tag Number	LCLS Installation Phase	Power Supply Building Number	Power Supply Rack Number	Power Supply Location or Connection	Power Supply New (N) or Existing (E)	Magnet Ground Cable Type	EI Number
BX01 Trim	#8	2/C	0.80900	400	4	0.0	BX01T-PS	I	B002	LKG-03	LKG-0308B TB01 1&2	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
BX01, BX02	#500	1/C	0.02650	400	4	1.2	BXS1-PS	I	B002	LKG-01	LKG-0111	N	#2 AWG	EI-380-201-20
BXH1 Trim	#8	2/C	0.80900	400	4	0.0	BXH1T-PS	I	B002	LKG-03	LKG-0308B TB01 3&4	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
BXH1, BXH2,BXH3,BXH4	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	MSBXH-PS	I	B002	LKG-01	LKG-0101 & LKG-0106	N	#2 AWG	EI-380-201-22
BXH3 Trim	#8	2/C	0.80900	400	4	0.0	BXH3T-PS	I	B002	LKG-03	LKG-0308B TB01 5&6	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
BXH4 Trim	#8	2/C	0.80900	400	4	0.0	BXH4T-PS	I	B002	LKG-03	LKG-0308B TB01 7&8	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QB	#8	2/C	0.80900	400	10	0.3	QB-PS	I	B002	LKG-04	LKG-0416B TB04 1&2	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
QE01	#12	2/C	2.05000	400	4	0.0	QE01-PS	I	B002	LKG-03	LKG-0308B TB03 1&2	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QE02	#12	2/C	2.05000	400	4	0.0	QE02-PS	I	B002	LKG-03	LKG-0308B TB03 3&4	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QE03	#12	2/C	2.05000	400	4	0.0	QE03-PS	I	B002	LKG-03	LKG-0308B TB03 5&6	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QE04	#12	2/C	2.05000	400	4	0.0	QE04-PS	I	B002	LKG-03	LKG-0308B TB03 7&8	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QM01	#12	2/C	2.05000	400	6	0.0	QM01-PS	I	B002	LKG-03	LKG-0308B TB04 1&2	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QM02	#12	2/C	2.05000	400	6	0.0	QM02-PS	I	B002	LKG-03	LKG-0308B TB04 3&4	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QM03	#12	2/C	2.05000	400	6	0.0	QM03-PS	I	B002	LKG-03	LKG-0308B TB04 5&6	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
QM04	#12	2/C	2.05000	400	6	0.0	QM04-PS	I	B002	LKG-03	LKG-0308B TB04 7&8	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
XC06	#12	2/C	2.05000	400	8	0.1	XC06-PS	I	B002	LKG-03	LKG-0316B TB01 1&2	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XC07	#12	2/C	2.05000	400	8	0.1	XC07-PS	I	B002	LKG-03	LKG-0316B TB01 3&4	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XC08	#12	2/C	2.05000	400	8	0.1	XC08-PS	I	B002	LKG-03	LKG-0316B TB01 5&6	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XC09	#12	2/C	2.05000	400	8	0.1	XC09-PS	I	B002	LKG-03	LKG-0316B TB01 7&8	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XC10	#12	2/C	2.05000	400	8	0.1	XC10-PS	I	B002	LKG-03	LKG-0316B TB02 1&2	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YC06	#12	2/C	2.05000	400	8	0.1	YC06-PS	I	B002	LKG-03	LKG-0316B TB02 3&4	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YC07	#12	2/C	2.05000	400	8	0.1	YC07-PS	I	B002	LKG-03	LKG-0316B TB02 5&6	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YC08	#12	2/C	2.05000	400	8	0.1	YC08-PS	I	B002	LKG-03	LKG-0316B TB02 7&8	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YC09	#12	2/C	2.05000	400	8	0.1	YC09-PS	I	B002	LKG-03	LKG-0316B TB03 1&2	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YC10	#12	2/C	2.05000	400	8	0.1	YC10-PS	I	B002	LKG-03	LKG-0316B TB03 3&4	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
QG02	#12	2/C	2.05000	400	8	0.1	QG02-PS	I	B002	LKG-03	LKG-0316B TB03 5&6	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
QG03	#12	2/C	2.05000	400	8	0.1	QG03-PS	I	B002	LKG-03	LKG-0316B TB03 7&8	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XCG1	#12	2/C	2.05000	400	4	0.0	XCG1-PS	I	B002	LKG-03	LKG-0316B TB04 1&2	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
XCG2	#12	2/C	2.05000	400	4	0.0	XCG2-PS	I	B002	LKG-03	LKG-0316B TB04 3&4	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YCG1	#12	2/C	2.05000	400	4	0.0	YCG1-PS	I	B002	LKG-03	LKG-0316B TB04 5&6	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
YCG2	#12	2/C	2.05000	400	4	0.0	YCG2-PS	I	B002	LKG-03	LKG-0316B TB04 7&8	N	#10 AWG	EI-380-201-28 Sheet 2 of 2
BXG	#8	2/C	0.80900	400	8	0.2	BXG-PS	I	B002	LKG-04	LKG-0416B TB03 5&6	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
BXG Trim	#8	2/C	0.80900	400	4	0.0	BXGT-PS	I	B002	LKG-04	LKG-0408B TB01 1&2	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
XC01	#12	2/C	2.05000	400	8	0.1	XC01-PS	I	B002	LKG-04	LKG-0408B TB01 5&6	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
YC01	#12	2/C	2.05000	400	8	0.1	YC01-PS	I	B002	LKG-04	LKG-0408B TB03 1&2	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
CQ01	#8	2/C	0.80900	400	2	0.0	CQ01-PS	I	B002	LKG-04	LKG-0408B TB02 1&2	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
SOL1BK	#8	2/C	0.80900	400	2	0.0	SOL1BK-PS	I	B002	LKG-04	LKG-0408B TB02 7&8	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
SOL1	#350	1/C	0.03820	400	4	1.1	SOL1-PS	I	B002	LKG-02	LKG-0206	N	#2 AWG	EI-380-201-25
SQ01	#8	2/C	0.80900	400	2	0.0	SQ01-PS	I	B002	LKG-04	LKG-0408B TB03 3&4	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
XC00	#12	2/C	2.05000	400	8	0.1	XC00-PS	I	B002	LKG-04	LKG-0408B TB03 5&6	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
YC00	#12	2/C	2.05000	400	8	0.1	YC00-PS	I	B002	LKG-04	LKG-0408B TB04 1&2	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
QA01	#12	2/C	2.05000	400	2	0.0	QA01-PS	I	B002	LKG-04	LKG-0408B TB04 3&4	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
QA02	#12	2/C	2.05000	400	2	0.0	QA02-PS	I	B002	LKG-04	LKG-0408B TB04 5&6	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
SOL2	#8	2/C	0.80900	400	10	0.3	SOL2-PS	I	B002	LKG-02	LKG-0201	N	#2 AWG	EI-380-201-26
XC02	#12	2/C	2.05000	400	8	0.1	XC02-PS	I	B002	LKG-04	LKG-0408B TB04 7&8	N	#10 AWG	EI-380-201-34 Sheet 1 of 2
XC03	#12	2/C	2.05000	400	8	0.1	XC03-PS	I	B002	LKG-04	LKG-0416B TB01 1&2	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
XC04	#12	2/C	2.05000	400	8	0.1	XC04-PS	I	B002	LKG-04	LKG-0416B TB01 3&4	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
XC05	#12	2/C	2.05000	400	8	0.1	XC05-PS	I	B002	LKG-04	LKG-0416B TB01 5&6	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
YC02	#12	2/C	2.05000	400	8	0.1	YC02-PS	I	B002	LKG-04	LKG-0416B TB01 7&8	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
YC03	#12	2/C	2.05000	400	8	0.1	YC03-PS	I	B002	LKG-04	LKG-0416B TB02 1&2	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
YC04	#12	2/C	2.05000	400	8	0.1	YC04-PS	I	B002	LKG-04	LKG-0416B TB02 3&4	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
YC05	#12	2/C	2.05000	400	8	0.1	YC05-PS	I	B002	LKG-04	LKG-0416B TB02 5&6	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
BXS	#500	1/C	0.02650	400	3	0.7	BXS-PS	I	B002	LKG-02	LKG-0211	N	#2 AWG	EI-380-201-24
QS01	#12	2/C	2.05000	400	6	0.0	QS01-PS	I	B002	LKG-04	LKG-0416B TB02 7&8	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
QS02	#12	2/C	2.05000	400	8	0.1	QS02-PS	I	B002	LKG-04	LKG-0416B TB03 1&2	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
XCS1	#12	2/C	2.05000	400	8	0.1	XCS1-PS	I	B002	LKG-04	LKG-0416B TB04 3&4	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
XCS2	#12	2/C	2.05000	400	8	0.1	XCS2-PS	I	B002	LKG-04	LKG-0416B TB04 5&6	N	#10 AWG	EI-380-201-34 Sheet 2 of 2
YCS1	#12	2/C	2.05000	400	8	0.1	YSC1-PS	I	B002	LKG-03	LKG-0308B TB02 5&6	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
YCS2	#12	2/C	2.05000	400	8	0.1	YCS2-PS	I	B002	LKG-03	LKG-0308B TB02 7&8	N	#10 AWG	EI-380-201-28 Sheet 1 of 2
NA	NA	NA	NA	NA	NA	NA	S20PS1-PS	I	B002	LKG-03	LKG-0301	N	#2 AWG	EI-380-201-28 Sheet 1 of 2
NA	NA	NA	NA	NA	NA	NA	S20PS2-PS	I	B002	LKG-04	LKG-0401	N	#2 AWG	EI-380-201-34 Sheet 1 of 2
NA	NA	NA	NA	NA	NA	NA	S20PS3-PS	I	B002	LKG-05	LKG-0501	N	#2 AWG	EI-380-201-30 Sheet 1 of 2
XC11	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC11--PS	I	B002	LKG-05	LKG-0508B TB02 1&2	N	#NAME?	EI-380-201-30 Sheet 1 of 2
YC11	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC11--PS	I	B002	LKG-05	LKG-0508B TB03 5&6	N	#NAME?	EI-380-201-30 Sheet 1 of 2

L1	QA11	QUAD	LM21	LI21	131	QUAD		N	1	U	NA	I	1.00E-06	2000	Later	Later	NA	6.8	7	2.7	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QA11--PS	I	B002	LKG-05	LKG-0508B TB01 1&2	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L1	XCA11	XCOR	LM21	LI21	135	XCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XCA11-PS	I	B002	LKG-05	LKG-0508B TB02 7&8	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L1	YCA11	YCOR	LM21	LI21	136	YCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YCA11-PS	I	B002	LKG-05	LKG-0508B TB04 3&4	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L1	QA12	QUAD	LM21	LI21	161	QUAD		N	1	U	NA	I	1.00E-06	5000	Later	Later	NA	6.8	7	2.7	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QA12-PS	I	B002	LKG-05	LKG-0508B TB01 3&4	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L1	XCA12	XCOR	LM21	LI21	165	XCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XCA12-PS	I	B002	LKG-05	LKG-0508B TB03 1&2	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L1	YCA12	YCOR	LM21	LI21	166	YCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YCA12-PS	I	B002	LKG-05	LKG-0508B TB04 5&6	N	#NAME?	EI-380-201-30 Sheet 1 of 2
BC1, L2	Q21201,Q21301,Q21401,Q21501,Q21601,Q21701,Q21801,Q21901	LGPS	LI21	LI21	1	QUAD		E	8	U	NA	S	1.00E-06	2000	NA	NA	NA	17	136	198	0	0	0.0	350AL	1/C	0.06050	510	6	1.2	MSQ21-PS	I	B002			E	#10 AWG	SS-101-165-21
BC1	Q21201 QE Boost	QUAD	LI21	LI21	201	QUAD		E	1	U	NA	I	1.00E-06	2000	NA	NA	NA	7.885	8	1.3	0	0	0.0	#6 AL	2/C	0.80800	200	0	0.0	Q21201-PS	I	B002	KA21-04	KA21-0401	E	#10 AWG	SS-101-165-21
BC1	Q21301 QE Boost	QUAD	LI21	LI21	301	QUAD		E	1	U	NA	I	1.00E-06	-	NA	NA	NA	7.885	8	6.1	0	0	0.0	#6 AL	2/C	0.80800	200	1	0.0	Q21301-PS	I	B002	KA21-04	KA21-0404	E	#10 AWG	SS-101-165-21
L2	Q21401 QE Boost	QUAD	LI21	LI21	401	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	2.4	0	0	0.0	#6 AL	2/C	0.80800	200	0	0.0	Q21401-PS		B002	KA21-04	KA21-0407	E	#10 AWG	SS-101-165-21
L2	Q21501 QE Boost	QUAD	LI21	LI21	501	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	1.5	0	0	0.0	#6 AL	2/C	0.80800	200	0	0.0	Q21501-PS		B002	KA21-04	KA21-0410	E	#10 AWG	SS-101-165-21
L2	Q21601 QE Boost	QUAD	LI21	LI21	601	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	1.6	0	0	0.0	#6 AL	2/C	0.80800	200	0	0.0	Q21601-PS		B002	KA21-04	KA21-0413	E	#10 AWG	SS-101-165-21
L2	Q21701 QE Boost	QUAD	LI21	LI21	701	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	3.1	0	0	0.0	#6 AL	2/C	0.80800	200	0	0.0	Q21701-PS		B002	KA21-04	KA21-0416	E	#10 AWG	SS-101-165-21
L2	Q21801 QE Boost	QUAD	LI21	LI21	801	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	5.8	0	0	0.0	#6 AL	2/C	0.80800	200	1	0.0	Q21801-PS		B002	KA21-04	KA21-0419	E	#10 AWG	SS-101-165-21
L2	Q21901 QE Boost	QUAD	LI21	LI21	901	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	5.8	0	0	0.0	#6 AL	2/C	0.80800	200	1	0.0	Q21901-PS		B002	KA21-04	KA21-0422	E	#10 AWG	SS-101-165-21
L2	YC21203	YCOR	LI21	LI21	203	YCOR		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10	0.288	0	0	0.0	#NAME?	2/C	0.80800	400	0	0.0	YC21203-PS		B002	KA21-01	KA21-0116 CH-1	E	#10 AWG	SS-101-162-11
L2	XC21202	XCOR	LI21	LI21	202	XCOR		N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	11.0	11	0.288	0	0	0.0	#NAME?	2/C	0.80800	400	0	0.0	XC21202-PS		B002	KA21-01	KA21-0116 CH-0	E	#10 AWG	SS-101-162-11
BC1	BX11 Trim	BTRM	LM21	LI21	215	TRIM	2046.18970000	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	6.00	0	0	0.0	#8	2/C	0.80900	600	3	0.0	BX11-PS	I	B002	LKG-05	LKG-0516B TB01 1&2	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	X11, BX12, BX13, BX1	BEND	LM21	LI21	215, 231, 241, 261	BEND	2046.1897, 2048.82780000, 2049.86120000, 2052.49930000	N	4	U	NA	S	1.00E-06	100	Later	Later	NA	6.7	27	300.00	0	0	0.0	#500	2/C	0.02650	600	5	1.4	MSBX1-PS	I	B002	LKG-06	LKG-0601 & LKG-0606	N	#2 AWG	EI-380-201-29
BC1	BX13 Trim	BTRM	LM21	LI21	241	TRIM	2049.86120000	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	6.00	0	0	0.0	#8	2/C	0.80900	600	3	0.0	BX13T-PS	I	B002	LKG-05	LKG-0516B TB01 3&4	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	BX14 Trim	BTRM	LM21	LI21	261	TRIM	2052.49930000	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	6.00	0	0	0.0	#8	2/C	0.80900	600	3	0.0	BX14T-PS	I	B002	LKG-05	LKG-0516B TB01 5&6	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	CQ11	QUAD	LM21	LI21	221	QUAD	2046.58975000	N	1	B	NA	I	1.00E-06	2000	Later	Later	NA	6.7	7	6.00	0	0.126	0.0	#12	2/C	2.05000	600	7	0.0	CQ11-PS	I	B002	LKG-05	LKG-0516B TB02 5&6	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	CQ12	QUAD	LM21	LI21	251	QUAD	2052.09925000	N	1	B	NA	I	1.00E-06	2000	Later	Later	NA	6.7	7	6.00	0	0.126	0.0	#12	2/C	2.05000	600	7	0.0	CQ12-PS	I	B002	LKG-05	LKG-0516B TB02 7&8	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	QM11	QUAD	LM21	LI21	211	QUAD	2045.89345000	N	1	U	NA	I	1.00E-06	1000	Later	Later	NA	3.0	3	7.59	0	0.126	0.0	#12	2/C	2.05000	600	9	0.1	QM11-PS	I	B002	LKG-05	LKG-0516B TB03 1&2	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	QM12	QUAD	LM21	LI21	271	QUAD	2052.97835000	N	1	U	NA	I	1.00E-06	700	Later	Later	NA	3.0	3	7.59	0	0	0.0	#12	2/C	2.05000	600	9	0.1	QM12-PS	I	B002	LKG-05	LKG-0516B TB03 3&4	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	QM13	QUAD	LM21	LI21	278	QUAD	2053.64912700	N	1	U	NA	I	1.00E-06	1000	Later	Later	NA	3.0	3	7.59	0	0	0.0	#12	2/C	2.05000	600	9	0.1	QM13-PS	I	B002	LKG-05	LKG-0516B TB03 5&6	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	XCM11	XCOR	LM21	LI21	191	XCOR	2045.49871200	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	10.00	0	0	0.0	#12	2/C	2.05000	600	12	0.1	XCM11-PS	I	B002	LKG-05	LKG-0516B TB03 7&8	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	XCM13	XCOR	LM21	LI21	275	XCOR	2053.88052700	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	10.00	0	0	0.0	#12	2/C	2.05000	600	12	0.1	XCM13-PS	I	B002	LKG-05	LKG-0516B TB04 1&2	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	YCM11	YCOR	LM21	LI21	192	XCOR	2046.49871200	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	10.00	0	0	0.0	#12	2/C	2.05000	600	12	0.1	YCM11-PS	I	B002	LKG-05	LKG-0516B TB04 5&6	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	YCM12	YCOR	LM21	LI21	276	YCOR	2053.20975000	N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10.0	10	10.00	0	0	0.0	#12	2/C	2.05000	600	12	0.1	YCM12-PS	I	B002	LKG-05	LKG-0516B TB04 3&4	N	#10 AWG	EI-380-201-30 Sheet 2 of 2
BC1	XC21302	XCOR	LI21	LI21	302	XCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	0.3	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21302-PS	I	B002	KA21-01	KA21-0116 CH-2	E	#10 AWG	SS-101-162-11
BC1	YC21303	YCOR	LI21	LI21	303	YCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	0.3	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21303-PS	I	B002	KA21-01	KA21-0116 CH-3	E	#10 AWG	SS-101-162-11
BC1	XCM14	XCOR	LM21	LI21	325	XCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	10.0	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XCM14-PS	I	B002	LKG-05	LKG-0508B TB03 3&4	N	#NAME?	EI-380-201-30 Sheet 1 of 2
BC1	QM14	QUAD	LM21	LI21	315	QUAD		N	1	U	NA	I	1.00E-06	1000	Later	Later	NA	6.8	7	7.6	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QM14-PS	I	B002	LKG-05	LKG-0508B TB01 5&6	N	#NAME?	EI-380-201-30 Sheet 1 of 2
BC1	QM15	QUAD	LM21	LI21	335	QUAD		N	1	U	NA	I	1.00E-06	700	Later	Later	NA	6.8	7	7.6	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QM15-PS	I	B002	LKG-05	LKG-0508B TB01 7&8	N	#NAME?	EI-380-201-30 Sheet 1 of 2
BC1	YCM15	YCOR	LM21	LI21	325	YCOR		N	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YCM15-PS	I	B002	LKG-05	LKG-0508B TB04 7&8	N	#NAME?	EI-380-201-30 Sheet 1 of 2
L2	XC21402	XCOR	LI21	LI21	402	XCOR		E	1	B	2	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21402-PS	II	B002	KA21-01	KA21-0116 CH-4	E	#10 AWG	SS-101-162-11
L2	YC21403	YCOR	LI21	LI21	403	YCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21403-PS		B002	KA21-01	KA21-0116 CH-5	E	#10 AWG	SS-101-162-11
L2	XC21502	XCOR	LI21	LI21	502	XCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21502-PS		B002	KA21-01	KA21-0116 CH-6	E	#10 AWG	SS-101-162-11
L2	YC21503	YCOR	LI21	LI21	503	YCOR		E	1	B	2	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21503-PS	II	B002	KA21-01	KA21-0116 CH-7	E	#10 AWG	SS-101-162-11
L2	XC21602	XCOR	LI21	LI21	602	XCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21602-PS		B002	KA21-01	KA21-0116 CH-8	E	#10 AWG	SS-101-162-11
L2	YC21603	YCOR	LI21	LI21	603	YCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21603-PS		B002	KA21-01	KA21-0116 CH-9	E	#10 AWG	SS-101-162-11
L2	XC21702	XCOR	LI21	LI21	702	XCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21702-PS		B002	KA21-01	KA21-0116 CH-10	E	#10 AWG	SS-101-162-11
L2	YC21703	YCOR	LI21	LI21	703	YCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21703-PS		B002	KA21-01	KA21-0116 CH-11	E	#10 AWG	SS-101-162-11
L2	XC21802	XCOR	LI21	LI21	802	XCOR		E	1	B	2	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21802-PS	II	B002	KA21-01	KA21-0116 CH-12	E	#10 AWG	SS-101-162-11
L2	YC21803	YCOR	LI21	LI21	803	YCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	2.9	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21803-PS		B002	KA21-01	KA21-0116 CH-13	E	#10 AWG	SS-101-162-11
L2	XC21900	XCOR	LI21	LI21	900	XCOR		E	1	B	NA	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	XC21900-PS		B002	KA21-01	KA21-0116 CH-14	E	#10 AWG	SS-101-162-11
L2	YC21900	YCOR	LI21	LI21	900	YCOR		E	1	B	2	I	1.00E-06	1000	Later	Later	NA	10	10	5.7	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	YC21900-PS	II	B002	KA21-01	KA21-0116 CH-15	E	#10 AWG	SS-101-162-11
L2	Q22201,Q22301,Q22401,Q22501,Q22601,Q22701,Q22801,Q22901	LGPS	LI22	LI22	1	QUAD		E	8	U	NA	S	1.00E-06	5000	NA	NA	NA	7.885	63	95	0	0	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ22-PS		B002			E	#10 AWG	Later
L2	Q22201 QE Boost	QUAD	LI22	LI22	201	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	1.32	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22201-PS		B002			E	#10 AWG	Later
L2	Q22301 QE Boost	QUAD	LI22	LI22	301	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	6.13	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22301-PS		B002			E	#10 AWG	Later
L2	Q22401 QE Boost	QUAD	LI22	LI22	401	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	2.39	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22401-PS		B002			E	#10 AWG	Later
L2	Q22501 QE Boost	QUAD	LI22	LI22	501	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	1.48	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22501-PS		B002			E	#10 AWG	Later
L2	Q22601 QE Boost	QUAD	LI22	LI22	601	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	1.59	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22601-PS		B002			E	#10 AWG	Later
L2	Q22701 QE Boost	QUAD	LI22	LI22	701	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	3.09	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22701-PS		B002			E	#10 AWG	Later
L2	Q22801 QE Boost	QUAD	LI22	LI22	801	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	5.78	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22801-PS		B002			E	#10 AWG	Later
L2	Q22901 QE Boost	QUAD	LI22	LI22	901	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	5.78	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q22901-PS		B002			E	#10 AWG	Later
L2	XC22202	XCOR	LI22	LI22	202	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22202-PS		B002			E	#10 AWG	Later
L2	YC22203	YCOR	LI22	LI22	203	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22203-PS		B002			E	#10 AWG	Later
L2	XC22302	XCOR	LI22	LI22	302	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22302-PS		B002			E	#10 AWG	Later
L2	YC22303	YCOR	LI22	LI22	303	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22303-PS		B002			E	#10 AWG	Later
L2	XC22402	XCOR	LI22	LI22	402	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22402-PS		B002			E	#10 AWG	Later
L2	YC22403	YCOR	LI22	LI22	403	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22403-PS		B002			E	#10 AWG	Later
L2	XC22502	XCOR	LI22	LI22	502	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22502-PS		B002			E	#10 AWG	Later
L2	YC22503	YCOR	LI22	LI22	503	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22503-PS		B002			E	#10 AWG	Later
L2	XC22602	XCOR	LI22	LI22	602	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22602-PS		B002			E	#10 AWG	Later

L2	YC22603	YCOR	LI22	LI22	603	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22603-PS		B002		E	#10 AWG	Later
L2	XC22702	XCOR	LI22	LI22	702	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22702-PS		B002		E	#10 AWG	Later
L2	YC22703	YCOR	LI22	LI22	703	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YX22703-PS		B002		E	#10 AWG	Later
L2	XC22802	XCOR	LI22	LI22	802	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22802-PS		B002		E	#10 AWG	Later
L2	YC22803	YCOR	LI22	LI22	803	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22803-PS		B002		E	#10 AWG	Later
L2	XC22900	XCOR	LI22	LI22	900	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC22900-PS		B002		E	#10 AWG	Later
L2	YC22900	YCOR	LI22	LI22	900	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC22900-PS		B002		E	#10 AWG	Later
L2	Q23201,Q23301,Q23401,Q23501,Q23601, Q23701,Q23801,Q23901	LGPS	LI23	LI23	1	QUAD		E	8	U	NA	S	1.00E-06	5000	NA	NA	NA	7.885	63	95	0	0	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ23-PS		B002		E	#10 AWG	Later
L2	Q23201 QE Boost	QUAD	LI23	LI23	201	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23201-PS		B002		E	#10 AWG	Later
L2	Q23301 QE Boost	QUAD	LI23	LI23	301	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23301-PS		B002		E	#10 AWG	Later
L2	Q23401 QE Boost	QUAD	LI23	LI23	401	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23401-PS		B002		E	#10 AWG	Later
L2	Q23501 QE Boost	QUAD	LI23	LI23	501	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23501-PS		B002		E	#10 AWG	Later
L2	Q23601 QE Boost	QUAD	LI23	LI23	601	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23601-PS		B002		E	#10 AWG	Later
L2	Q23701 QE Boost	QUAD	LI23	LI23	701	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23701-PS		B002		E	#10 AWG	Later
L2	Q23801 QE Boost	QUAD	LI23	LI23	801	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23801-PS		B002		E	#10 AWG	Later
L2	Q23901 QE Boost	QUAD	LI23	LI23	901	QUAD		E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q23901-PS		B002		E	#10 AWG	Later
L2	XC23202	XCOR	LI23	LI23	202	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23202-PS		B002		E	#10 AWG	Later
L2	YC23203	YCOR	LI23	LI23	203	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23203-PS		B002		E	#10 AWG	Later
L2	XC23302	XCOR	LI23	LI23	302	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YX23302-PS		B002		E	#10 AWG	Later
L2	YC23303	YCOR	LI23	LI23	303	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23303-PS		B002		E	#10 AWG	Later
L2	XC23402	XCOR	LI23	LI23	402	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23402-PS		B002		E	#10 AWG	Later
L2	YC23403	YCOR	LI23	LI23	403	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23403-PS		B002		E	#10 AWG	Later
L2	XC23502	XCOR	LI23	LI23	502	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23502-PS		B002		E	#10 AWG	Later
L2	YC23503	YCOR	LI23	LI23	503	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23503-PS		B002		E	#10 AWG	Later
L2	XC23602	XCOR	LI23	LI23	602	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23602-PS		B002		E	#10 AWG	Later
L2	YC23603	YCOR	LI23	LI23	603	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23603-PS		B002		E	#10 AWG	Later
L2	XC23702	XCOR	LI23	LI23	702	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23702-PS		B002		E	#10 AWG	Later
L2	YC23703	YCOR	LI23	LI23	703	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YX23703-PS		B002		E	#10 AWG	Later
L2	XC23802	XCOR	LI23	LI23	802	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23802-PS		B002		E	#10 AWG	Later
L2	YC23803	YCOR	LI23	LI23	803	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23802-PS		B002		E	#10 AWG	Later
L2	XC23900	XCOR	LI23	LI23	900	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC23900-PS		B002		E	#10 AWG	Later
L2	YC23900	YCOR	LI23	LI23	900	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC23900-PS		B002		E	#10 AWG	Later
L2	Q24201,Q24301,Q24401,Q24501	LGPS	LI24	LI24	1	QUAD		E	4	U	NA	S	1.00E-06	5000	18.3	73	143	10.624	42	128	0	0	0.0	350AL	1/C	0.06050	510	4	0.6	MSQ24-PS		B002		E	#10 AWG	Later
L2	Q24201 QE Boost	QUAD	LI24	LI24	201	QUAD		E	1	U	NA	I	1.00E-06	5000	18.3	18	143	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	23	3.3	Q24201-PS		B002		E	#10 AWG	Later
L2	Q24301 QE Boost	QUAD	LI24	LI24	301	QUAD		E	1	U	NA	I	1.00E-06	5000	18.3	18	143	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	23	3.3	Q24301-PS		B002		E	#10 AWG	Later
L2	Q24401 QE Boost	QUAD	LI24	LI24	401	QUAD		E	1	U	NA	I	1.00E-06	4000	18.3	18	143	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	23	3.3	Q24401-PS		B002		E	#10 AWG	Later
L2	Q24501 QE Boost	QUAD	LI24	LI24	501	QUAD		E	1	U	NA	I	1.00E-06	4000	18.3	18	143	7.885	8	95	0	0	0.0	#6 AL	2/C	0.80800	200	23	3.3	Q24501-PS		B002		E	#10 AWG	Later
L2	Q24601 - No boost	QUAD	LM24	LI24	601	QUAD		N	1	U	NA	I	1.00E-06	5000	18.3	18	143	12	12	26	0	0	0.0	#350	2/C	0.03820	400	2	0.3	Q24601-PS	II	B002	LKG-X1	N	#2 AWG	Later
L2	Q24701A, Q24701B No boost	QUAD	LM24	LI24	701, 702	QUAD		N	2	U	NA	S	1.00E-06	2000	18.3	37	143	12	24	52	0	0	0.0	#350	2/C	0.03820	400	2	0.3	Q24701A/B-PS	II	B002	LKG-X1	N	#2 AWG	Later
L2	Q24901A, Q24901B No boost	QUAD	LM24	LI24	901, 902	QUAD		N	2	U	NA	S	1.00E-06	2000	18.3	37	143	12	24	52	0	0	0.0	#350	2/C	0.03820	400	2	0.3	Q24901A/B-PS	II	B002	LKG-X1	N	#2 AWG	Later
L2	XC24202	XCOR	LI24	LI24	202	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24202-PS		B002		E	#10 AWG	Later
L2	YC24203	YCOR	LI24	LI24	203	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC24203-PS		B002		E	#10 AWG	Later
L2	XC24302	XCOR	LI24	LI24	302	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24302-PS		B002		E	#10 AWG	Later
L2	YC24303	YCOR	LI24	LI24	303	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC24303-PS		B002		E	#10 AWG	Later
L2	XC24402	XCOR	LI24	LI24	402	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24402-PS		B002		E	#10 AWG	Later
L2	YC24403	YCOR	LI24	LI24	403	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC24403-PS		B002		E	#10 AWG	Later
L2	XC24502	XCOR	LI24	LI24	502	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24502-PS		B002		E	#10 AWG	Later
L2	YC24503	YCOR	LI24	LI24	503	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC24503-PS		B002		E	#10 AWG	Later
L2	XC24602	XCOR	LI24	LI24	602	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24602-PS		B002		E	#10 AWG	Later
L2	XC24603	XCOR	LI24	LI24	603	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24603-PS		B002		E	#10 AWG	Later
L2	XC24702	XCOR	LI24	LI24	702	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC24702-PS		B002		E	#10 AWG	Later
L2	YC24703	YCOR	LI24	LI24	703	YCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	5.718	0	0	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC24703-PS		B002		E	#10 AWG	Later
BC2	BX21 Trim	BTRM	LM25	LI25		TRIM	2414.54631500	N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10	10	12	Later	Later	0.0	#8	2/C	0.80900	400	4	0.0	BX21T-PS	II	B002	LKG-X4	N	#10 AWG	Later
BC2	BX21, BX22, BX23, BX24	BEND	LM25	LI25		BEND	2414.54631500 2425.04631500 2426.54631500 2437.04631500	N	4	U	NA	S	1.00E-06	100	NA	NA	NA	9.97	39.88	202	Later	Later	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSBX2-PS	II	B002	LKG-X2	N	#2 AWG	Later
BC2	BX23 Trim	BTRM	LM25	LI25		TRIM	2426.54631500	N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10	10	12	Later	Later	0.0	#8	2/C	0.80900	400	4	0.0	BX23T-PS	II	B002	LKG-X4	N	#10 AWG	Later
BC2	BX24 Trim	BTRM	LM25	LI25		TRIM	2426.54631500	N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10	10	12	Later	Later	0.0	#8	2/C	0.80900	400	4	0.0	BX24T-PS	II	B002	LKG-X4	N	#10 AWG	Later
BC2	CQ21	QUAD	LM25	LI25		QUAD	2416.88421300	N	1	B	NA	I	1.00E-06	2000	NA	NA	NA	6.73	6.73	10	Later	Later	0.0	#10	2/C	1.29000	400	5	0.1	CQ21-PS	II	B002	LKG-X4	N	#10 AWG	Later
BC2	CQ22	QUAD	LM25	LI25		QUAD	2434.70841800	N	1	B	NA	I	1.00E-06	2000	NA	NA	NA	6.73	6.73	10	Later	Later	0.0	#10	2/C	1.29000	400	5	0.1	CQ22-PS	II	B002	LKG-X4	N	#10 AWG	Later
BC2	QM21	QUAD	LM25	LI25		QUAD	2437.9628000	N	1	U	NA	I	1.00E-06	500	NA	NA	NA	138	138	102.5	12	11	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QM21-PS	II	B002	LKG-X2	N	#2 AWG	Later
BC2	QM22	QUAD	LM25	LI25		QUAD	2437.9628000	N	1	U	NA	I	1.00E-06	500	NA	NA	NA	138	138	102.5	12	11	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QM22-PS	II	B002	LKG-X2	N	#2 AWG	Later
L2	XC24900	XCOR	LI24	LI24	900	XCOR		E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	138.48	138.5	5.718	?	?	0.0	#10	2/C	1.29000	200	1	0.0	XC24900-PS		B002		E	#10 AWG	Later
L2	YC24900	YCOR	LM24	LI24	900	YCOR		E	1	B	3	I	1.00E-06	1000	NA	NA	NA	10.00	10.0	2.88	?	?	0.0	#10	2/C	1.29000	200	1	0.0	YC24900-PS	II	B002	LKG-X4	N	#10 AWG	Later
L3	Q25201,Q25301,Q25401,Q25501,Q25601, Q25701,Q25801,Q25901	LGPS	LI25	LI25	1	QUAD		E	8	U	NA	S	1.00E-06	3000	NA	NA	NA	7.885	63	95	?	?	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ25-PS		B002		E	#2 AWG	Later
L3	Q25201 QE Boost	QUAD	LI25	LI25	201	QUAD		E	1	U	NA	I	1.00E-06	3000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25201-PS		B002		E	#2 AWG	Later
L3	Q25301 QE Boost	QUAD	LI25	LI25	301	QUAD		E	1	U	NA	I	1.00E-06	4000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25301-PS		B002		E	#2 AWG	Later

L3	Q25401 QE Boost	QUAD	LI25	LI25	401	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25401-PS		B002		E	#2 AWG	Later
L3	Q25501 QE Boost	QUAD	LI25	LI25	501	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25501-PS		B002		E	#2 AWG	Later
L3	Q25601 QE Boost	QUAD	LI25	LI25	601	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25601-PS		B002		E	#2 AWG	Later
L3	Q25701 QE Boost	QUAD	LI25	LI25	701	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25701-PS		B002		E	#2 AWG	Later
L3	Q25801 QE Boost	QUAD	LI25	LI25	801	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25801-PS		B002		E	#2 AWG	Later
L3	Q25901 QE Boost	QUAD	LI25	LI25	901	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q25901-PS		B002		E	#2 AWG	Later
L3	BXKIK	KICK	LM25	LI25		KICKER	Pulsed Mag	1		NA			5000															0.0	BXKIK-PS	II	B002	LKG-X5	N	#10 AWG	Later
L3	XC25202	XCOR	LM25	LI25	202	XCOR	E	1	B	3	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25202-PS	II	B002	LKG-X4	E	#10 AWG	Later
L3	YC25203	YCOR	LI25	LI25	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25203-PS		B002		E	#10 AWG	Later
L3	XC25302	XCOR	LI25	LI25	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25302-PS		B002		E	#10 AWG	Later
L3	YC25303	YCOR	LI25	LI25	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25303-PS		B002		E	#10 AWG	Later
L3	XC25402	XCOR	LI25	LI25	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25402-PS		B002		E	#10 AWG	Later
L3	YC25403	YCOR	LI25	LI25	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25403-PS		B002		E	#10 AWG	Later
L3	XC25502	XCOR	LI25	LI25	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25502-PS		B002		E	#10 AWG	Later
L3	YC25503	YCOR	LM25	LI25	503	YCOR	E	1	B	3	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25503-PS	II	B002	LKG-X4	N	#10 AWG	Later
L3	XC25602	XCOR	LM25	LI25	602	XCOR	E	1	B	3	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25602-PS	II	B002	LKG-X4	N	#10 AWG	Later
L3	YC25603	YCOR	LI25	LI25	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25603-PS		B002		E	#10 AWG	Later
L3	XC25702	XCOR	LI25	LI25	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25702-PS		B002		E	#10 AWG	Later
L3	YC25703	YCOR	LI25	LI25	703	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25703-PS		B002		E	#10 AWG	Later
L3	XC25802	XCOR	LI25	LI25	802	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25802-PS		B002		E	#10 AWG	Later
L3	YC25803	YCOR	LI25	LI25	803	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25803-PS		B002		E	#10 AWG	Later
L3	XC25900	XCOR	LI25	LI25	900	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	XC25900-PS		B002		E	#10 AWG	Later
L3	YC25900	YCOR	LI25	LI25	900	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#10	2/C	1.29000	400	3	0.0	YC25900-PS		B002		E	#10 AWG	Later
L3	Q26201,Q26301,Q26401,Q26501,Q26601,Q26701,Q26801,Q26901	LGPS	LI26	LI26	1	QUAD	E	8	U	NA	S	1.00E-06	Later	NA	NA	NA	7.885	63	95	?	?	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ26-PS		B002		E	#10 AWG	Later
L3	Q26201 QE Boost	QUAD	LI26	LI26	201	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26201-PS		B002		E	#2 AWG	Later
L3	Q26301 QE Boost	QUAD	LI26	LI26	301	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26301-PS		B002		E	#2 AWG	Later
L3	Q26401 QE Boost	QUAD	LI26	LI26	401	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26401-PS		B002		E	#2 AWG	Later
L3	Q26501 QE Boost	QUAD	LI26	LI26	501	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26501-PS		B002		E	#2 AWG	Later
L3	Q26601 QE Boost	QUAD	LI26	LI26	601	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26601-PS		B002		E	#2 AWG	Later
L3	Q26701 QE Boost	QUAD	LI26	LI26	701	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26701-PS		B002		E	#2 AWG	Later
L3	Q26801 QE Boost	QUAD	LI26	LI26	801	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26801-PS		B002		E	#2 AWG	Later
L3	Q26901 QE Boost	QUAD	LI26	LI26	901	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q26901-PS		B002		E	#2 AWG	Later
L3	XC26202	XCOR	LI26	LI26	202	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	0.80800	200	1	0.0	XC26202-PS		B002		E	#10 AWG	Later
L3	YC26203	YCOR	LI26	LI26	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26203-PS		B002		E	#10 AWG	Later
L3	XC26302	XCOR	LI26	LI26	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26302-PS		B002		E	#10 AWG	Later
L3	YC26303	YCOR	LI26	LI26	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26303-PS		B002		E	#10 AWG	Later
L3	XC26402	XCOR	LI26	LI26	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26402-PS		B002		E	#10 AWG	Later
L3	YC26403	YCOR	LI26	LI26	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26403-PS		B002		E	#10 AWG	Later
L3	XC26502	XCOR	LI26	LI26	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26502-PS		B002		E	#10 AWG	Later
L3	YC26503	YCOR	LI26	LI26	503	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26503-PS		B002		E	#10 AWG	Later
L3	XC26602	XCOR	LI26	LI26	602	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26602-PS		B002		E	#10 AWG	Later
L3	YC26603	YCOR	LI26	LI26	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26603-PS		B002		E	#10 AWG	Later
L3	XC26702	XCOR	LI26	LI26	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26702-PS		B002		E	#10 AWG	Later
L3	YC26703	YCOR	LI26	LI26	703	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26703-PS		B002		E	#10 AWG	Later
L3	XC26802	XCOR	LI26	LI26	802	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC62802-PS		B002		E	#10 AWG	Later
L3	YC26803	YCOR	LI26	LI26	803	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26803-PS		B002		E	#10 AWG	Later
L3	XC26900	XCOR	LI26	LI26	900	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC26900-PS		B002		E	#10 AWG	Later
L3	YC26900	YCOR	LI26	LI26	900	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC26900-PS		B002		E	#10 AWG	Later
L3	Q27201,Q27301,Q27401,Q27501,Q27601,Q27701,Q27801,Q27901	LGPS	LI27	LI27	1	QUAD	E	8	U	NA	S	1.00E-06	5000	NA	NA	NA	7.885	63	95	?	?	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ27-PS		B002		E	#2 AWG	Later
L3	Q27201 QE Boost	QUAD	LI27	LI27	201	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27201-PS		B002		E	#2 AWG	Later
L3	Q27301 QE Boost	QUAD	LI27	LI27	301	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27301-PS		B002		E	#2 AWG	Later
L3	Q27401 QE Boost	QUAD	LI27	LI27	401	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27401-PS		B002		E	#2 AWG	Later
L3	Q27501 QE Boost	QUAD	LI27	LI27	501	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27501-PS		B002		E	#2 AWG	Later
L3	Q27601 QE Boost	QUAD	LI27	LI27	601	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27601-PS		B002		E	#2 AWG	Later
L3	Q27701 QE Boost	QUAD	LI27	LI27	701	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27701-PS		B002		E	#2 AWG	Later
L3	Q27801 QE Boost	QUAD	LI27	LI27	801	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27801-PS		B002		E	#2 AWG	Later
L3	Q27901 QE Boost	QUAD	LI27	LI27	901	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q27901-PS		B002		E	#2 AWG	Later
L3	XC27202	XCOR	LI27	LI27	202	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27202-PS		B002		E	#10 AWG	Later
L3	YC27203	YCOR	LI27	LI27	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27203-PS		B002		E	#10 AWG	Later
L3	XC27302	XCOR	LI27	LI27	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27302-PS		B002		E	#10 AWG	Later
L3	YC27303	YCOR	LI27	LI27	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27303-PS		B002		E	#10 AWG	Later
L3	XC27402	XCOR	LI27	LI27	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27402-PS		B002		E	#10 AWG	Later
L3	YC27403	YCOR	LI27	LI27	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27403-PS		B002		E	#10 AWG	Later
L3	XC27502	XCOR	LI27	LI27	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27502-PS		B002		E	#10 AWG	Later
L3	YC27503	YCOR	LI27	LI27	503	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27503-PS		B002		E	#10 AWG	Later
L3	XC27602	XCOR	LI27	LI27	602	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27602-PS		B002		E	#10 AWG	Later
L3	YC27603	YCOR	LI27	LI27	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27603-PS		B002		E	#10 AWG	Later
L3	XC27702	XCOR	LI27	LI27	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27702-PS		B002		E	#10 AWG	Later
L3	YC27703	YCOR	LI27	LI27	703	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27703-PS		B002		E	#10 AWG	Later
L3	XC27802	XCOR	LI27	LI27	802	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27802-PS		B002		E	#10 AWG	Later
L3	YC27803	YCOR	LI27	LI27	803	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27803-PS		B002		E	#10 AWG	Later
L3	XC27900	XCOR	LI27	LI27	900	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC27900-PS		B002		E	#10 AWG	Later
L3	YC27900	YCOR	LI27	LI27	900	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC27900-PS		B002		E	#10 AWG	Later

L3	Q28201,Q28301,Q28401,Q28501,Q28601,Q28701,Q28801,Q28901	LGPS	LI28	LI28	1	QUAD	E	8	U	NA	S	1.00E-06	5000	NA	NA	NA	7.885	63	95	?	?	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ28-PS	B002	E	#10 AWG	Later
L3	Q28201 QE Boost	QUAD	LI28	LI28	201	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28201-PS	B002	E	#10 AWG	Later
L3	Q28301 QE Boost	QUAD	LI28	LI28	301	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28301-PS	B002	E	#10 AWG	Later
L3	Q28401 QE Boost	QUAD	LI28	LI28	401	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28401-PS	B002	E	#10 AWG	Later
L3	Q28501 QE Boost	QUAD	LI28	LI28	501	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28501-PS	B002	E	#10 AWG	Later
L3	Q28601 QE Boost	QUAD	LI28	LI28	601	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28601-PS	B002	E	#10 AWG	Later
L3	Q28701 QE Boost	QUAD	LI28	LI28	701	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28701-PS	B002	E	#10 AWG	Later
L3	Q28801 QE Boost	QUAD	LI28	LI28	801	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28801-PS	B002	E	#10 AWG	Later
L3	Q28901 QE Boost	QUAD	LI28	LI28	901	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q28901-PS	B002	E	#10 AWG	Later
L3	XC28202	XCOR	LI28	LI28	202	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28202-PS	B002	E	#10 AWG	Later
L3	YC28203	YCOR	LI28	LI28	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28203-PS	B002	E	#10 AWG	Later
L3	XC28302	XCOR	LI28	LI28	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28302-PS	B002	E	#10 AWG	Later
L3	YC28303	YCOR	LI28	LI28	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28303-PS	B002	E	#10 AWG	Later
L3	XC28402	XCOR	LI28	LI28	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28402-PS	B002	E	#10 AWG	Later
L3	YC28403	YCOR	LI28	LI28	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28403-PS	B002	E	#10 AWG	Later
L3	XC28502	XCOR	LI28	LI28	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28502-PS	B002	E	#10 AWG	Later
L3	YC28503	YCOR	LI28	LI28	503	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28503-PS	B002	E	#10 AWG	Later
L3	XC28602	XCOR	LI28	LI28	602	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28602-PS	B002	E	#10 AWG	Later
L3	YC28603	YCOR	LI28	LI28	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28603-PS	B002	E	#10 AWG	Later
L3	XC28702	XCOR	LI28	LI28	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28702-PS	B002	E	#10 AWG	Later
L3	YC28703	YCOR	LI28	LI28	703	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28703-PS	B002	E	#10 AWG	Later
L3	XC28802	XCOR	LI28	LI28	802	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28802-PS	B002	E	#10 AWG	Later
L3	YC28803	YCOR	LI28	LI28	803	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28803-PS	B002	E	#10 AWG	Later
L3	XC28900	XCOR	LI28	LI28	900	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC28900-PS	B002	E	#10 AWG	Later
L3	YC28900	YCOR	LI28	LI28	900	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC28900-PS	B002	E	#10 AWG	Later
L3	Q29201,Q29301,Q29401,Q29501,Q29601,Q29701,Q29801,Q29901	LGPS	LI29	LI29	1	QUAD	E	8	U	NA	S	1.00E-06	5000	NA	NA	NA	7.885	63	95	?	?	0.0	350AL	1/C	0.06050	510	3	0.3	MSQ29-PS	B002	E	#10 AWG	Later
L3	Q29201 QE Boost	QUAD	LI29	LI29	201	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29201-PS	B002	E	#10 AWG	Later
L3	Q29301 QE Boost	QUAD	LI29	LI29	301	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29301-PS	B002	E	#10 AWG	Later
L3	Q29401 QE Boost	QUAD	LI29	LI29	401	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29401-PS	B002	E	#10 AWG	Later
L3	Q29501 QE Boost	QUAD	LI29	LI29	501	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29501-PS	B002	E	#10 AWG	Later
L3	Q29601 QE Boost	QUAD	LI29	LI29	601	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29601-PS	B002	E	#10 AWG	Later
L3	Q29701 QE Boost	QUAD	LI29	LI29	701	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29701-PS	B002	E	#10 AWG	Later
L3	Q29801 QE Boost	QUAD	LI29	LI29	801	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29801-PS	B002	E	#10 AWG	Later
L3	Q29901 QE Boost	QUAD	LI29	LI29	901	QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	7.885	8	95	?	?	0.0	#6 AL	2/C	0.80800	200	15	1.5	Q29901-PS	B002	E	#10 AWG	Later
L3	XC29202	XCOR	LI29	LI29	202	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29202-PS	B002	E	#10 AWG	Later
L3	YC29203	YCOR	LI29	LI29	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29203-PS	B002	E	#10 AWG	Later
L3	XC29302	XCOR	LI29	LI29	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29302-PS	B002	E	#10 AWG	Later
L3	YC29303	YCOR	LI29	LI29	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29303-PS	B002	E	#10 AWG	Later
L3	XC29402	XCOR	LI29	LI29	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29402-PS	B002	E	#10 AWG	Later
L3	YC29403	YCOR	LI29	LI29	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29403-PS	B002	E	#10 AWG	Later
L3	XC29502	XCOR	LI29	LI29	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29502-PS	B002	E	#10 AWG	Later
L3	YC29503	YCOR	LI29	LI29	503	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29503-PS	B002	E	#10 AWG	Later
L3	XC29602	XCOR	LI29	LI29	602	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29602-PS	B002	E	#10 AWG	Later
L3	YC29603	YCOR	LI29	LI29	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29603-PS	B002	E	#10 AWG	Later
L3	XC29702	XCOR	LI29	LI29	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29702-PS	B002	E	#10 AWG	Later
L3	YC29703	YCOR	LI29	LI29	703	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29703-PS	B002	E	#10 AWG	Later
L3	XC29802	XCOR	LI29	LI29	802	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29802-PS	B002	E	#10 AWG	Later
L3	YC29803	YCOR	LI29	LI29	803	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29803-PS	B002	E	#10 AWG	Later
L3	XC29900	XCOR	LI29	LI29	900	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC29900-PS	B002	E	#10 AWG	Later
L3	YC29900	YCOR	LI29	LI29	900	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	?	?	0.0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC29900-PS	B002	E	#10 AWG	Later
L3	Q30201	QUAD	LI30	LI30	201	QUAD	E	1	U	NA	S	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30201-PS	B002	E	#10 AWG	Later
L3	Q30201	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30201-PS	B002	E	#10 AWG	Later
L3	Q30301	QUAD	LI30	LI30	301	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30301-PS	B002	E	#10 AWG	Later
L3	Q30301	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30301-PS	B002	E	#10 AWG	Later
L3	Q30401	QUAD	LI30	LI30	401	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30401-PS	B002	E	#10 AWG	Later
L3	Q30401	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30401-PS	B002	E	#10 AWG	Later
L3	Q30501	QUAD	LI30	LI30	501	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30501-PS	B002	E	#10 AWG	Later
L3	Q30501	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30501-PS	B002	E	#10 AWG	Later
L3	Q30601	QUAD	LI30	LI30	601	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30601-PS	B002	E	#10 AWG	Later
L3	Q30601	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30601-PS	B002	E	#10 AWG	Later
L3	Q30701	QUAD	LI30	LI30	701	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30701-PS	B002	E	#10 AWG	Later
L3	Q30701	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30701-PS	B002	E	#10 AWG	Later
L3	Q30801	QUAD	LI30	LI30	801	QUAD	E	1	U	NA	I	1.00E-06	Later	NA	NA	NA	8	8	198	?	?	0.0	350AL	1/C	0.06050	200	2	0.5	Q30801-PS	B002	E	#10 AWG	Later
L3	Q30801	QUAD	LI30	LI30		QUAD	E	1	U	NA	I	1.00E-06	5000	NA	NA	NA	Later	Later	Later	Later	Later	Later	#6AL	2/C	0.80800	200	#VALUE!	#VALUE!	Q30801-PS	B002	E	#10 AWG	Later
L3	XC30202	XCOR	LI30	LI30	202	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30202-PS	B002	E	#10 AWG	Later
L3	YC30203	YCOR	LI30	LI30	203	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30203-PS	B002	E	#10 AWG	Later
L3	XC30302	XCOR	LI30	LI30	302	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30302-PS	B002	E	#10 AWG	Later
L3	YC30303	YCOR	LI30	LI30	303	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30303-PS	B002	E	#10 AWG	Later
L3	XC30402	XCOR	LI30	LI30	402	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30402-PS	B002	E	#10 AWG	Later
L3	YC30403	YCOR	LI30	LI30	403	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30403-PS	B002	E	#10 AWG	Later
L3	XC30502	XCOR	LI30	LI30	502	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30502-PS	B002	E	#10 AWG	Later
L3	YC30503	YCOR	LI30	LI30	503	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	5.718	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30503-PS	B002	E	#10 AWG	Later
L3	XC30602	XCOR	LI30	LI30	602	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30602-PS	B002	E	#10 AWG	Later
L3	YC30603	YCOR	LI30	LI30	603	YCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30603-PS	B002	E	#10 AWG	Later
L3	XC30702	XCOR	LI30	LI30	702	XCOR	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30702-PS	B002	E	#10 AWG	Later

L3	YC30703	YCOR	LI30	LI30	703	YCOR			E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30703-PS		B002		E	#10 AWG	Later
L3	XC30802	XCOR	LI30	LI30	802	XCOR			E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30802-PS		B002		E	#10 AWG	Later
L3	YC30803	YCOR	LI30	LI30	803	YCOR			E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30803-PS		B002		E	#10 AWG	Later
L3	XC30900	XCOR	LI30	LI30	900	XCOR			E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC30900-PS		B002		E	#10 AWG	Later
L3	YC30900	YCOR	LI30	LI30	900	YCOR			E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	6	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC30900-PS		B002		E	#10 AWG	Later
BSY	Q5	QUAD	N/A	BSY1		QUAD		139.83474340	E	1	U	NA	I	1.00E-06	500	NA	NA	NA	4.6	5	41.7	Later	Later	0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	Q5-PS	II	B005	B005-267	N	#2 AWG	Later
BSY	Q50Q1, Q50Q2, Q50Q3	QUAD	N/A	BSY2		QUAD		-1.85752249, 14.32492616, 18.80930929	E	3	U	NA	S	1.00E-06	4000	NA	NA	NA	4.41	13	165	Later	Later	0	#4/0	1/C	0.06260	400	4	0.7	MSQ50-PS	II	B136	Later	N	#10 AWG	Later
BSY	Q6	QUAD	N/A	BSY1		QUAD		143.83459180	N	1	U	NA	I	1.00E-06	400	NA	NA	NA	4.7	5	42.2	Later	Later	0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	Q6-PS	II	B005	B005-267	N	#2 AWG	Later
BSY	QA0	QUAD	N/A	BSY1		QUAD		158.43960160	N	1	U	NA	I	1.00E-06	2000	NA	NA	NA	4.5	5	41	Later	Later	0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QA0-PS	II	B005	B005-267	N	#2 AWG	Later
BSY	QSM1	QUAD	N/A	BSY1		QUAD		139.26590960	E	1	U	NA	I	1.00E-06	NA	NA	NA	NA	Later	Later	9.8	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	QSM1-PS	II	B005	B005-263	N	#10 AWG	Later
BSY	XC460009T	XCOR	CA11	CA11	9	XCOR		2.68830697	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC460009T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	XC460026T	XCOR	CA11	CA11	26	XCOR		13.42934192	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC460026T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	XC460034T	XCOR	CA11	CA11	34	XCOR		17.12165468	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC460034T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	XC460036T	XCOR	CA11	CA11	36	XCOR		17.82764699	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC460036T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	XC6	XCOR	N/A	BSY1		XCOR		143.60413430	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#12	2/C	2.05000	200	4	0.0	XC6-PS	II	B005	B005-263	N	#10 AWG	Later
BSY	XC920020T	XCOR	CB00	CB00	20	XCOR		50.48096015	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC920020T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	XC921010T	XCOR	CB00	CB00	1010	XCOR		135.98454740	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	XC921010T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	XCA0	XCOR	N/A	BSY1		XCOR		158.20914420	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#12	2/C	2.05000	200	4	0.0	XCA0-PS	II	B005	B005-263	N	#10 AWG	Later
BSY	YC460010T	YCOR	CA11	CA11	10	YCOR		3.03882315	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC460010T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	YC460027T	YCOR	CA11	CA11	27	YCOR		13.77985810	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC460027T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	YC460035T	YCOR	CA11	CA11	35	YCOR		17.36865199	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC460035T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	YC460037T	YCOR	CA11	CA11	37	YCOR		18.17816317	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC460037T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	YC5	YCOR	N/A	BSY1		YCOR		140.06520090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#12	2/C	2.05000	200	4	0.0	YC5-PS	II	B005	B005-263	N	#10 AWG	Later
BSY	YC920020T	YCOR	CB00	CB00	20	YCOR		50.80495662	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC920020T-PS	II	B005	B005-263	N	#NAME?	Later
BSY	YC921010T	YCOR	CB00	CB00	1010	YCOR		136.26145530	E	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#NAME?	2/C	#NAME?	200	#NAME?	#NAME?	YC921010T-PS	NA	NA	NA	N	#10 AWG	Later
BSY	YCA0	YCOR	N/A	BSY1		YCOR		158.67005910	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10	10	10	Later	Later	0	#12	2/C	2.05000	200	4	0.0	YCA0-PS	II	B005	B005-263	N	#10 AWG	Later
LTU	BX32 Trim	BTRM				TRIM		208.59833970	N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10.0	10.0	30.0	0	0	0.0	#8	1/C	0.80900	400	10	0.3	BX32T-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	X31, BX32, BX35, BX3	BEND				BEND		208.59833970, 237.40259030, 280.21308640, 309.01733710	R	4	U	NA	S	1.00E-06	30	NA	NA	NA	15.2	60.8	303.9	Later	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSBX3-PS	III	B005	B005-264	N	#2 AWG	Later
LTU	BX35 Trim	BTRM				TRIM		280.21308640	N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10.0	10.0	30.0	0	0	0.0	#8	1/C	0.80900	400	10	0.3	BX35T-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	BX36 Trim	BTRM				TRIM			N	1	B	NA	I	1.00E-06	500	NA	NA	NA	10.0	10.0	30.0	0	0	0.0	#8	1/C	0.80900	400	10	0.3	BX36T-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	BY1, BY2	BEND				BEND		179.1948153, 204.35250620	N	2	B	NA	S	1.00E-06	500	NA	NA	NA	10.0	20.0	10.0	0	0	0.0	#12	2/C	2.05000	400	8	0.1	MSBY-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	BYKIK	KICK				KICKER		252.14803280	N	1	U	NA	I	1.00E-06	5000	Later	Later	Later	Later	Later	Later	Later	Later	Later	Later	Later	Later	Later	#VALUE!	#VALUE!	BYKIK-PS	III	B005	B005-268	Later	Later	Later
LTU	BYW1, BYW2, BYW3	BEND				BEND		220.73845410, 221.26269160, 221.78692910	N	3	U	NA	S	1.00E-06	1000	NA	NA	NA	11.0	32.9	219.3	Later	0	0.0	#350	1/C	0.03820	400	3	0.7	MSBYW-PS	III	B005	B005-264	N	#2 AWG	Later
LTU	BYW2 Trim	BTRM	Later	Later	Later	TRIM	Later	221.26269160	N	1	B	NA	1	1.00E-06	1000	NA	NA	NA	35.0	35.0	6.0	Later	Later	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	BYW2T-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	QDL31, QDL32, QDL33, QDL34	QUAD	N/A	LTU2		QUAD		223.00050240, 258.80783840, 294.61517430, 330.42577090	R	4	U	NA	S	1.00E-06	4000	NA	NA	NA	20.5	82.0	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSQDL-PS	III	2.1	B2.1-01	N	#2 AWG	Later
LTU	QE31, QE32, QE33, QE34, QE35, QE36	QUAD	N/A	LTU2		QUAD		385.18226750, 402.81402090, 420.44577420, 438.07752750, 455.70928090, 473.34103420	N	6	U	NA	S	1.00E-06	2000	NA	NA	NA	5.8	35.1	15.0	0	0	0.0	#6	1/C	0.51000	400	3	0.0	MSQE-PS	III	2.2	B2.2-03	N	#10 AWG	Later
LTU	QEM1	QUAD	N/A	LTU2		QUAD		352.75317090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QEM1-PS	III	2.1	B2.1-01	N	#2 AWG	Later
LTU	QEM2	QUAD	N/A	LTU2		QUAD		357.21409090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QEM2-PS	III	2.1	B2.1-01	N	#2 AWG	Later
LTU	QEM3	QUAD	N/A	LTU2		QUAD		369.67501090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QEM3-PS	III	2.1	B2.1-02	N	#2 AWG	Later
LTU	QEM3V	QUAD	N/A	LTU2		QUAD		370.25947090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	2.3	2.3	6.0	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QEM3V-PS	III	2.1	Later	N	#10 AWG	Later
LTU	QEM4	QUAD	N/A	LTU2		QUAD		374.13593090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QEM4-PS	III	2.1	B2.1-02	N	#2 AWG	Later
LTU	QT11, QT13, QT21, QT23, QT31, QT33, QT41, QT43	QUAD	N/A	LTU2		QUAD		239.44430800, 242.36570300, 275.24997380, 278.17136880, 311.05929090, 313.98113090, 346.87041090, 349.79225090	R	8	U	NA	S	1.00E-06	1500	NA	NA	NA	35.4	283.5	71.3	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSQT1-PS	III	2.1	B2.1-02	N	#2 AWG	Later
LTU	QT12, QT22, QT32, QT42	QUAD	N/A	LTU2		QUAD		240.90500550, 276.71067130, 312.52021090, 348.331330090	R	4	U	NA	S	1.00E-06	1000	NA	NA	NA	34.9	139.7	140.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSQT2-PS	III	2.1	B2.1-03	N	#2 AWG	Later
LTU	QUM1	QUAD	N/A	LTU3		QUAD		488.13737090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QUM1-PS	III	2.2	B2.2-01	N	#2 AWG	Later
LTU	QUM2	QUAD	N/A	LTU3		QUAD		494.84829090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QUM2-PS	III	2.2	B2.2-01	N	#2 AWG	Later
LTU	QUM3	QUAD	N/A	LTU3		QUAD		503.30921090	R	1	B	NA	I	1.00E-06	4000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QUM3-PS	III	2.2	B2.2-02	N	#2 AWG	Later
LTU	QUM4	QUAD	N/A	LTU3		QUAD		507.77013090	R	1	B	NA	I	1.00E-06	2000	NA	NA	NA	20.5	20.5	164.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QUM4-PS	III	2.2	B2.2-02	N	#2 AWG	Later
LTU	QVB1, QVB2, QVB3	QUAD	N/A	LTU1		QUAD		187.31275180, 191.77365970	R	3	U	NA	S	1.00E-06	1000	NA	NA	NA	34.9	104.7	68.5	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	MSQVB-PS	III	B005	B005-265	N	#2 AWG	Later
LTU	QVM1	QUAD	N/A	LTU1		QUAD		176.99095750	R	1	U	NA	I	1.00E-06	500	NA	NA	NA	39.4	39.4	145.0	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QVM1-PS	III	B005	B005-265	N	#2 AWG	Later
LTU	QVM2	QUAD	N/A	LTU1		QUAD		177.95186700	R	1	U	NA	I	1.00E-06	700	NA	NA	NA	49.6	49.6	145.0	0	0	0.0	#NAME?	2/C	#NAME?	400	#NAME?	#NAME?	QVM2-PS	III	B005	B005-265	N	#2 AWG	Later
LTU	QVM3	QUAD	N/A	LTU1		QUAD		205.59546590	R	1	U	NA	I	1.00E-06	500	NA	NA	NA	43.8	43.8	145.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QVM3-PS	III	B005	B005-266	N	#2 AWG	Later
LTU	QVM4	QUAD	N/A	LTU1		QUAD		206.55638590	R	1	U	NA	I	1.00E-06	700	NA	NA	NA	44.4	44.4	145.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	QVM4-PS	III	B005	B005-266	N	#2 AWG	Later
LTU	XCDL1	XCOR	N/A	LTU1		XCOR		222.37006640	N	1	U	NA	S	1.00E-06	500	NA	NA	NA	19.4	19.4	10.0	0	0	0.0	#4	1/C	0.32100	400	1	0.0	XCDL1-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	XCDL2	XCOR	N/A	LTU1		XCOR		258.17747440	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCDL2-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	XCDL3	XCOR	N/A	LTU1		XCOR		293.88474210	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCDL3-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	XCDL4	XCOR	N/A	LTU1		XCOR		329.79531090	N	1	B	FF	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCDL4-PS	III	B005	B005-263	N	#10 AWG	Later
LTU	XCE31	XCOR	N/A	LTU3		XCOR		384.55180750	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCE31-PS	III	2.2	B2.2-03	N	#10 AWG	Later
LTU	XCE33	XCOR	N/A	LTU3		XCOR		419.81531420	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCE33-PS	III	2.2	B2.2-03	N	#10 AWG	Later
LTU	XCE35	XCOR	N/A	LTU3		XCOR		455.07882090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#12	1/C	2.05000	400	8	0.1	XCE35-PS	III	2.2	B2.2-03	N	#10 AWG	Later

LTU	XCEM2	XCOR	N/A	LTU2	XCOR	357.84455090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#12	1/C	2.05000	400	8	0.1	XC3M2-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCEM4	XCOR	N/A	LTU2	XCOR	373.50547090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCEM4-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCQT12	XCOR	N/A	LTU2	XCOR	240.27464150	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCQT12-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCQT22	XCOR	N/A	LTU2	XCOR	276.08030730	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCQT22-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCQT32	XCOR	N/A	LTU2	XCOR	311.88975090	N	1	B	FF	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCQT32-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCQT42	XCOR	N/A	LTU2	XCOR	347.70087090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCQT42-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	XCUM1	XCOR	N/A	LTU3	XCOR	487.50691090	N	1	B	4	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCUM1-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	XCUM4	XCOR	N/A	LTU3	XCOR	507.13967090	N	1	B	4	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCUM4-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	XCVB2	XCOR	N/A	LTU1	XCOR	191.14320140	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCVB2-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	XCVM2	XCOR	N/A	LTU1	XCOR	178.43232180	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCVM2-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	XCVM3	XCOR	N/A	LTU1	XCOR	205.11500590	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	XCVM3-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	YCDL1	YCOR	N/A	LTU2	YCOR	224.03092320	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCDL1-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCDL2	YCOR	N/A	LTU2	YCOR	259.43820230	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCDL2-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCDL3	YCOR	N/A	LTU2	YCOR	295.64559510	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCDL3-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCDL4	YCOR	N/A	LTU2	YCOR	330.90623090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCDL4-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCE32	YCOR	N/A	LTU3	YCOR	402.18356090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCE32-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	YCE34	YCOR	N/A	LTU3	YCOR	437.44706750	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCE34-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	YCE36	YCOR	N/A	LTU3	YCOR	472.71057420	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCE36-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	YCEM1	YCOR	N/A	LTU2	YCOR	352.12271090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	6.8	6.8	Later	Later	Later	Later	Later	Later	Later	Later	#VALUE!	#VALUE!	YCEM1-PS	III	2.1	B2.1-04		Later	Later		
LTU	YCEM3	YCOR	N/A	LTU2	YCOR	369.04455090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCEM3-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCQT12	YCOR	N/A	LTU2	YCOR	241.53536950	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCQT12-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCQT22	YCOR	N/A	LTU2	YCOR	277.34103520	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCQT22-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCQT32	YCOR	N/A	LTU2	YCOR	313.15067090	N	1	B	FF	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCQT32-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCQT42	YCOR	N/A	LTU2	YCOR	348.96179090	N	1	B	FF	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCQT42-PS	III	2.1	B2.1-04		N	#10 AWG		Later
LTU	YCUM2	YCOR	N/A	LTU3	YCOR	494.21783090	N	1	B	4	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCUM2-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	YCUM3	YCOR	N/A	LTU3	YCOR	502.67875090	N	1	B	4	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCUM3-PS	III	2.2	B2.2-03		N	#10 AWG		Later
LTU	YCVB1	YCOR	N/A	LTU1	YCOR	187.94321010	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCVB1-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	YCVB3	YCOR	N/A	LTU1	YCOR	196.86502580	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCVB3-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	YCVM1	YCOR	N/A	LTU1	YCOR	176.42050370	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCVM1-PS	III	B005	B005-263		N	#10 AWG		Later
LTU	YCVM4	YCOR	N/A	LTU1	YCOR	206.07592590	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	1/C	#NAME?	400	#NAME?	#NAME?	YCVM4-PS	III	B005	B005-263		N	#10 AWG		Later
UND	QD10	QUAD	N/A	UND1	QUAD	518.86789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD10-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD12	QUAD	N/A	UND1	QUAD	522.73789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD12-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD14	QUAD	N/A	UND1	QUAD	526.60789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD14-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD16	QUAD	N/A	UND1	QUAD	530.90589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD16-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD18	QUAD	N/A	UND2	QUAD	534.77589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD18-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD2	QUAD	N/A	UND1	QUAD	538.64589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD2-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD20	QUAD	N/A	UND2	QUAD	542.94389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD20-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD22	QUAD	N/A	UND2	QUAD	546.81389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD22-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD24	QUAD	N/A	UND2	QUAD	550.68389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD24-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD26	QUAD	N/A	UND2	QUAD	554.98189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD26-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD28	QUAD	N/A	UND2	QUAD	558.85189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD28-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD30	QUAD	N/A	UND2	QUAD	562.72189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD30-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD32	QUAD	N/A	UND2	QUAD	567.01989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD32-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QD4	QUAD	N/A	UND1	QUAD	570.88989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD4-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD6	QUAD	N/A	UND1	QUAD	574.75989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD6-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QD8	QUAD	N/A	UND1	QUAD	579.05789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QD8-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF1	QUAD	N/A	UND1	QUAD	582.92789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF1-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF11	QUAD	N/A	UND1	QUAD	586.79789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF11-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF13	QUAD	N/A	UND1	QUAD	591.09589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF13-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF15	QUAD	N/A	UND1	QUAD	594.96589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF15-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF17	QUAD	N/A	UND1	QUAD	598.83589090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF17-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF19	QUAD	N/A	UND2	QUAD	603.13389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF19-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF21	QUAD	N/A	UND2	QUAD	607.00389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF21-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF23	QUAD	N/A	UND2	QUAD	610.87389090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF23-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF25	QUAD	N/A	UND2	QUAD	615.17189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF25-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF27	QUAD	N/A	UND2	QUAD	619.04189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF27-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF29	QUAD	N/A	UND2	QUAD	622.91189090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF29-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF3	QUAD	N/A	UND1	QUAD	627.20989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF3-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF31	QUAD	N/A	UND2	QUAD	631.07989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF31-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF33	QUAD	N/A	UND2	QUAD	634.94989090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF33-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	QF5	QUAD	N/A	UND1	QUAD	639.24789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF5-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF7	QUAD	N/A	UND1	QUAD	643.11789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF7-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	QF9	QUAD	N/A	UND1	QUAD	646.98789090	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	3.1	3.1	6.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	QF9-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU1	XCOR	N/A	UND1	XCOR	518.86789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU1-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU10	XCOR	N/A	UND1	XCOR	522.73789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU10-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU11	XCOR	N/A	UND1	XCOR	526.60789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU11-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU12	XCOR	N/A	UND1	XCOR	530.90589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU12-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU13	XCOR	N/A	UND1	XCOR	534.77589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU13-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU14	XCOR	N/A	UND1	XCOR	538.64589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU14-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU15	XCOR	N/A	UND1	XCOR	542.94389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU15-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU16	XCOR	N/A	UND1	XCOR	546.81389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU16-PS	III	2.3	B2.3-01		N	#10 AWG		Later
UND	XCU17	XCOR	N/A	UND2	XCOR	550.68389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU17-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	XCU18	XCOR	N/A	UND2	XCOR	554.98189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU18-PS	III	3.1	B3.1-01		N	#10 AWG		Later
UND	XCU19	XCOR	N/A	UND2	XCOR	558.85189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU19-PS	III	3.1	B3.1-02		N	#10 AWG		Later
UND	XCU2	XCOR	N/A	UND1	XCOR	562.72189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU2-PS	III	2.3	B2.3-02		N	#10 AWG		Later
UND	XCU20	XCOR	N/A	UND2	XCOR	567.01989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU20-PS	III	3.1	B3.1-02		N	#10 AWG		Later
UND	XCU21	XCOR	N/A	UND2	XCOR	570.88989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU21-PS	III	3.1	B3.1-02		N	#10 AWG		Later
UND	XCU22	XCOR	N/A	UND2	XCOR	574.75989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU22-PS	III	3.1	B3.1-02		N	#10 AWG		Later

UND	XCU23	XCOR	N/A	UND2	XCOR		579.05789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU23-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	XCU24	XCOR	N/A	UND2	XCOR		582.92789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU24-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	XCU25	XCOR	N/A	UND2	XCOR		586.79789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU25-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU26	XCOR	N/A	UND2	XCOR		591.09589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU26-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU27	XCOR	N/A	UND2	XCOR		594.96589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU27-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU28	XCOR	N/A	UND2	XCOR		598.83589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU28-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU29	XCOR	N/A	UND2	XCOR		603.13389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU29-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU3	XCOR	N/A	UND1	XCOR		607.00389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU3-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU30	XCOR	N/A	UND2	XCOR		610.87389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU30-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU31	XCOR	N/A	UND2	XCOR		615.17189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU31-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU32	XCOR	N/A	UND2	XCOR		619.04189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU32-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU33	XCOR	N/A	UND2	XCOR		622.91189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU33-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	XCU4	XCOR	N/A	UND1	XCOR		627.20989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU4-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU5	XCOR	N/A	UND1	XCOR		631.07989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU5-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU6	XCOR	N/A	UND1	XCOR		634.94989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU6-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU7	XCOR	N/A	UND1	XCOR		639.24789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU7-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU8	XCOR	N/A	UND1	XCOR		643.11789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU8-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	XCU9	XCOR	N/A	UND1	XCOR		646.98789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU9-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU1	YCOR	N/A	UND1	YCOR		518.86789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU1-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU10	YCOR	N/A	UND1	YCOR		522.73789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCU10-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU11	YCOR	N/A	UND1	YCOR		526.60789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU11-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU12	YCOR	N/A	UND1	YCOR		530.90589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU12-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU13	YCOR	N/A	UND1	YCOR		534.77589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU13-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU14	YCOR	N/A	UND1	YCOR		538.64589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU14-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU15	YCOR	N/A	UND1	YCOR		542.94389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU15-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU16	YCOR	N/A	UND1	YCOR		546.81389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU16-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU17	YCOR	N/A	UND2	YCOR		550.68389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU17-PS	III	3.1	B3.1-01	N	#10 AWG	Later
UND	YCU18	YCOR	N/A	UND2	YCOR		554.98189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU18-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU19	YCOR	N/A	UND2	YCOR		558.85189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU19-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU2	YCOR	N/A	UND1	YCOR		562.72189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU2-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU20	YCOR	N/A	UND2	YCOR		567.01989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU20-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU21	YCOR	N/A	UND2	YCOR		570.88989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU21-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU22	YCOR	N/A	UND2	YCOR		574.75989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU22-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU23	YCOR	N/A	UND2	YCOR		579.05789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU23-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU24	YCOR	N/A	UND2	YCOR		582.92789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU24-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU25	YCOR	N/A	UND2	YCOR		586.79789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU25-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU26	YCOR	N/A	UND2	YCOR		591.09589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU26-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU27	YCOR	N/A	UND2	YCOR		594.96589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU27-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU28	YCOR	N/A	UND2	YCOR		598.83589090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU28-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU29	YCOR	N/A	UND2	YCOR		603.13389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU29-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU3	YCOR	N/A	UND1	YCOR		607.00389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU3-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU30	YCOR	N/A	UND2	YCOR		610.87389090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU30-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU31	YCOR	N/A	UND2	YCOR		615.17189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU31-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU32	YCOR	N/A	UND2	YCOR		619.04189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU32-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU33	YCOR	N/A	UND2	YCOR		622.91189090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU33-PS	III	3.1	B3.1-02	N	#10 AWG	Later
UND	YCU4	YCOR	N/A	UND1	YCOR		627.20989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU4-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU5	YCOR	N/A	UND1	YCOR		631.07989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU5-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU6	YCOR	N/A	UND1	YCOR		634.94989090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU6-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU7	YCOR	N/A	UND1	YCOR		639.24789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU7-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU8	YCOR	N/A	UND1	YCOR		643.11789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU8-PS	III	2.3	B2.3-02	N	#10 AWG	Later
UND	YCU9	YCOR	N/A	UND1	YCOR		646.98789090	N	1	B	NA	I	1.00E-06	Later	NA	NA	NA	0.1	0.1	1.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCU9-PS	III	2.3	B2.3-02	N	#10 AWG	Later
DUMP	BXPM1, BXPM2, BXPM3	BEND	N/A	DMP1	BEND	NA	Later	N	3	U	NA	S	1.00E-06		NA	NA	NA	6.7	20.0	2000	0	0	0.0	Later	1/C	NA	Later	NA	NA	MSBXPM-PS	III	3.1			#10 AWG	
DUMP	BYD1, BYD2, BYD3	BEND	N/A	DMP1	BEND	NA	687.95257440, 689.65173220, 691.34873320	N	3	U	NA	S	1.00E-06	50	NA	NA	NA	25.0	75.0	307.0	0	0	0.0	#500	1/C	0.02650	500	4	1.2	MSBYD-PS	III	3.1	B3.1-03	N	#2 AWG	Later
DUMP	MUSPLR	SOLN	N/A	DMP1	Later	NA	Later	N	1	U	NA	I	1.00E-06	Later	NA	NA	NA	50.0	50.0	100.0	0	0	0.0	#NAME?	1/C	#NAME?	500	#NAME?	#NAME?	MUSPLR-PS	III	3.1	B3.1-03	N	#2 AWG	Later
DUMP	QDMP1, QDMP2	QUAD	N/A	DMP1	QUAD	NA	64883300, 704.6948:	MD	2	U	NA	S	1.00E-06	1000	NA	NA	NA	50.0	100.0	40.0	0	0	0.0	#NAME?	1/C	#NAME?	500	#NAME?	#NAME?	MSQDMP-PS	III	3.1	B3.1-03	N	#2 AWG	Later
DUMP	QUE1	QUAD	N/A	DMP1	QUAD	NA	659.39562590	MD	1	U	NA	I	1.00E-06	5000	NA	NA	NA	50.0	50.0	40.0	0	0	0.0	#NAME?	1/C	#NAME?	500	#NAME?	#NAME?	QUE1-PS	III	3.1	B3.1-04	N	#2 AWG	Later
DUMP	QUE2	QUAD	N/A	DMP1	QUAD	NA	671.65654590	MD	1	U	NA	I	1.00E-06	5000	NA	NA	NA	50.0	50.0	40.0	0	0	0.0	#NAME?	1/C	#NAME?	500	#NAME?	#NAME?	QUE2-PS	III	3.1	B3.1-04	N	#2 AWG	Later
DUMP	XCD3	XCOR	N/A	DMP1	XCOR	NA	686.95263590	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCD3-PS	III	3.1	B3.1-02	N	#NAME?	Later
DUMP	XCDD	XCOR	N/A	DMP1	XCOR	NA	705.36726880	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCDD-PS	III	3.1	B3.1-02	N	#NAME?	Later
DUMP	XCUE1	XCOR	N/A	DMP1	XCOR	NA	670.92608590	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	XCUE1-PS	III	3.1	B3.1-02	N	#NAME?	Later
DUMP	YCD3	YCOR	N/A	DMP1	YCOR	NA	686.66982090	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCD3-PS	III	3.1	B3.1-02	N	#NAME?	Later
DUMP	YCDD	YCOR	N/A	DMP1	YCOR	NA	702.97640150	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCDD-PS	III	3.1	B3.1-02	N	#NAME?	Later
DUMP	YCUE1	YCOR	N/A	DMP1	YCOR	NA	660.12608590	N	1	B	NA	I	1.00E-06	1000	NA	NA	NA	10.0	10.0	10.0	0	0	0.0	#NAME?	2/C	#NAME?	500	#NAME?	#NAME?	YCUE1-PS	III	3.1	B3.1-02	N	#NAME?	Later

Electrical Cost Data (Means)

LCLS LONG HAUL CABLE/CONNECTOR SYSTEM ANALYSIS

LINAC BPM MATERIAL COSTS SEC 21 - BTH-WEST	$95,940
PHASE III TOTAL MATERIAL COSTS (BC2) (NO BPMs)	$119,029
PHASE IV TOTAL MATERIAL COSTS 2.1 - 3.1 (NO BPMs)	$300,469
TOTAL MATERIAL COST	$515,437

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Authors; Michael De Salvo / Mario Ortega

SECTOR 24

SYSTEM	MEAN LENGTH	WIRE SCANNER (4)	VAC VALVES (2)	VAC GAUGE (0)	VAC PUMP (13)	KLIXON	TRP (2)	BMLN (1)	BCS (2)	MPS (1)	RF BPM (0)	BPM (2)	LLRF (0)	TOROID (4)	IONC (2)	COLL (2)	OTR (1)	PPS (0)	TRUNK (1)	TOTAL	IC	HV	MV	CABLE FT	Ft COST	TOTAL
RG214	220																			0			4	0	$2.89	$0
LMR400	170											8		4						12	10			2040	$1.20	$2,448
1/2" HELIAX	170												7							7				1190	$0.90	$1,071
2.0HEL	85								2											2				170	$13.04	$2,217
TYPE C	220				13										2					15		19		3300	$0.26	$858
3C18OS	145					6			2											8	2			1160	$0.70	$812
3PR20TLN	170								1											1	1			170	$1.50	$255
18PR 22 GA	170						2			1										3	2			510	$1.96	$1,000
9C18TLN	170		2																	2	2			340	$2.75	$935
4PR18TLN	170																			0				0	$1.36	$0
RG58	170								8	4										12	2			2040	$0.85	$1,734
32C18TLN	170								1								1			2	2			340	$9.04	$3,074
12C18TLN	220							1								2				3	3			660	$3.09	$2,039
4PR22ITN	220							1								2				3	3			660	$1.20	$792
RG59	170																1			1	1			170	$0.53	$90
FIBOPT11	170																1			1	1			170	$6.00	$1,020
FIBOPT9	170																1			1	1			170	$2.00	$340
50C18TLN	1500								1											1	1			1500	$6.00	$9,000
36PR18OS	170																		1	1	1			170	$6.00	$1,020
COAX TRUNK	170																			0	0			0	$8.30	$0
TOTALS	4820																			75	32	19	4	14760	TOTAL	$28,705
																							TOTAL FT Sec 24	14760		

SECTOR 27,28

SYSTEM	MEAN LENGTH	WIRE SCANNER (4)	VAC VALVES (0)	VAC GAUGE (0)	VAC PUMP (0)	MAN VALVE (0)	TRP (0)	BTM (0)	BCS (0)	MPS	RF BPM (0)	BPM (0)	BLMO (0)	TOROID (0)	IONC (0)	COLL (0)	OTR (0)	PPS (0)	TRUNK (1)	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
RG214	220	4																		4			16	880	$2.89	$2,543
TYPE C	220	4																		4		16		880	$0.26	$229
2PR20TLN	220								1											1	1			220	$1.00	$220
12C18TLN	220	4																		4	16			880	$3.09	$2,719
4PR22ITN	220	4																		4	16			880	$1.20	$1,056
TOTALS	1100																			17	33	16	16	3740	TOTAL	$6,767
																								TOTAL FT Sec 27,28	3740	

B136

SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (0)	VAC GAUGE (0)	VAC PUMP (0)	MAN VALVE (0)	TRP (0)	BTM (0)	BCS	MPS	RF BPM	BPM (6)	BLMO	TOROID	IONC	COLL	OTR	PPS	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
RG214	130																			0				0	$2.89	$0
LMR400	130											24								24	24			3120	$1.20	$3,744
1/4 HELSF	130																			0				0	$0.90	$0
2.0HEL	85																			0				0	$13.04	$0
TYPE C	130																			0				0	$0.26	$0
3C18OS	130																			0				0	$0.70	$0
18PR 22 GA	130																			0				0	$1.96	$0
9C18TLN	130																			0				0	$2.75	$0
4PR18TLN	130																			0				0	$1.36	$0
RG58	130																			0				0	$0.85	$0
32C18TLN	130																			0				0	$0.85	$0
12C18TLN	130																			0				0	$9.04	$0
4PR22ITN	130																			0				0	$3.09	$0
RG59	130																			0				0	$1.20	$0
FIBOPT11	130																			0				0	$0.53	$0
FIBOPT9	130																			0				0	$6.00	$0
50C18TLN	250								1											1	1			250	$3.00	$750
36PR18OS	275																			0				0	$6.00	$0
TOTALS	2560																			25	25	0	0	3370	TOTAL	$4,494
																								TOTAL FT B136	3370	

MCC (B005)

SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (0)	VAC GAUGE (0)	VAC PUMP (0)	MAN VALVE (0)	TRP (0)	BTM (0)	BCS (1)	MPS	RF BPM (0)	BPM (0)	BLMO (0)	TOROID (0)	IONC (0)	COLL (0)	OTR (0)	PPS (1)	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
RG214	285																			0				0	$2.89	$0
LMR400	280																		5	5	10			1400	$1.20	$1,680
1/4" HELIAX	285																			0				0	$0.90	$0
2.0HEL	85																			0				0	$13.04	$0
TYPE C	285																			0				0	$0.26	$0
3C18OS	285								1											1	1			285	$0.70	$200
18PR 22 GA	285																			0				0	$1.96	$0
9C18TLN	285																			0				0	$2.75	$0
4PR18TLN	285																			0				0	$1.36	$0
RG58	285																			0				0	$0.85	$0
32C18TLN	285																			0				0	$9.04	$0
12C18TLN	285																			0				0	$3.09	$0
4PR22ITN	285									FFTB REMOVAL ESTIMATE										0				0	$1.20	$0

LCLS LONG HAUL CABLE/CONNECTOR SYSTEM ANALYSIS

LINAC BPM MATERIAL COSTS SEC 21 - BTH-WEST	$95,940
PHASE III TOTAL MATERIAL COSTS (BC2) (NO BPMs)	$119,029
PHASE IV TOTAL MATERIAL COSTS 2.1 - 3.1 (NO BPMs)	$300,469
TOTAL MATERIAL COST	$515,437

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Authors; Michael De Salvo / Mario Ortega

78	RG59 TRUNK	285																	5	5	10			1425	$0.53	$755
79	FIBOPT11	285																		0				0	$6.00	$0
80	FIBOPT9	285																		0				0	$2.00	$0
81	50C18TLN	700								1										1	1			700	$3.00	$2,100
82	36PR16OS	280																	1	1	1			280	$6.00	$1,680
83	COAX TRUNK	280																		0	1			0		$0
84	TOTALS	5615																		13	23	0	0	4090	TOTAL	$6,415
85																						TOTAL FT MCC		4090		

BTH WEST (B106)

88	SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (1)	VAC GAUGE (0)	VAC PUMP (0)	MAN VALVE (0)	TRP (0)	BTM (0)	BCS (0)	MPS	RF BPM (0)	BPM (7)	BLMO (0)	TOROID (0)	IONC (0)	COLL (0)	OTR (0)	PPS (0)	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
89	RG214	190																			0				0	$2.89	$0
90	LMR400	190											28								28	28			5320	$1.20	$6,384
91	1/4" HELIAX	190																			0				0	$0.90	$0
92	2.0HEL	85																			0				0	$13.04	$0
93	TYPE C	190																			0				0	$0.26	$0
94	3C18OS	190																			0				0	$0.70	$0
95	18PR 22 GA	190																			0				0	$1.96	$0
96	9C18TLN	190																			0				0	$2.75	$0
97	4PR18TLN	190																			0				0	$1.36	$0
98	RG58	190																			0				0	$0.85	$0
99	32C18TLN	190																			0				0	$9.04	$0
100	12C18TLN	190																			0				0	$3.09	$0
101	4PR22ITN	190																			0				0	$1.20	$0
102	RG59 TRUNK	380																		10	10	10			3800	$0.53	$2,014
103	FIBOPT11	190																			0				0	$6.00	$0
104	FIBOPT9	190																			0				0	$2.00	$0
105	50C18TLN	380																			0	1			0	$3.00	$0
106	36PR16OS	380																		1	1	1			380	$6.00	$2,280
107	COAX TRUNK	380																			0				0	$12.00	$0
108	TOTALS	4265																			39	40	0	0	9500	TOTAL	$10,678
109																							TOTAL FT B106		9500		

BTH WEST (B105)

113	SYSTEM	MEAN LENGTH	WIRE SCANNER	VAC VALVES (2)	VAC GAUGE (5)	VAC PUMP (8)	MAN VALVE (3)	TRP (2)	BTM	BCS	MPS	RF BPM	BPM (8)	BLMO	TOROID	IONC	COLL	OTR (2)	PPS	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
114	RG214	160																			0				0	$2.89	$0
115	LMR400	160											32		4,1						32	37			5120	$1.20	$6,144
116	RG59	160																2			2	2			320	$0.53	$170
117	2.0HEL	85																			0				0	$13.04	$0
118	TYPE C	160			5	8															13		13		2080	$0.26	$541
119	3C18OS	160																			0	1			0	$0.70	$0
120	18PR 22 GA	160						2													2	2			320	$1.96	$627
121	9C18TLN	160		2			3														5	5			800	$2.75	$2,200
122	4PR18TLN	160			5																5	5			800	$1.36	$1,088
123	RG58	160			5																5			7	800	$0.85	$680
124	32C18TLN	160																2			2	2			320	$9.04	$2,893
125	12PR18TLN	500																	1		1	1			500	$3.09	$1,545
126	4PR22ITN	160																			0				0	$1.20	$0
127	RG59 TRUNK	555																		5	5	12			2775	$0.53	$1,471
128	FIBOPT11	160																2			2	2			320	$6.00	$1,920
129	FIBOPT9	160																2			2	2			320	$2.00	$640
130	50C18TLN	700																			0	1			0	$3.00	$0
131	36PR16OS	555																		1	1	1			555	$6.00	$3,330
132	LMR400 TRUNK	555																		5	5	10			2775	$1.20	$3,330
133	TOTALS	5030																			82	83	13	7	15030		$26,578
134																							TOTAL FT B105		15030		

BTH 2.1 (911) STA 1160

mcc to 2.1

138	SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (0)	VAC GAUGE (0)	VAC PUMP (8)	MAN VALVE (0)	TRP (2)	BTM (0)	BCS (1)	MPS	RF BPM (1)	BPM (8)	BLMO (3)	TOROID (1)	IONC (0)	COLL (3)	OTR (1)	PPS	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
139	RG214	200																			0				0	$2.89	$0
140	LMR400	200											32		2,1					5	37	42			7400	$1.20	$8,880
141	1/4" HELIAX	200																			0				0	$0.90	$0
142	2.0HEL	85																			0				0	$13.04	$0
143	TYPE C	200				8						3									11		11		2200	$0.26	$572
144	3C18OS	200																			0				0	$0.70	$0
145	18PR 22 GA	200						2													2	2			400	$1.96	$784
146	9C18TLN	200																			0				0	$2.75	$0
147	4PR18TLN	200												1							1	1			200	$1.36	$272
148	RG58	200																			0				0	$0.85	$0
149	32C18TLN	200																1			1	1			200	$9.04	$1,808
150	12C18TLN	200															6				6	6			1200	$3.09	$3,708
151	4PR22ITN	200										FSTR REMOVAL ESTIMATE									0				0	$1.20	$0

LCLS LONG HAUL CABLE/CONNECTOR SYSTEM ANALYSIS

LINAC BPM MATERIAL COSTS SEC 21 - BTH-WEST	$95,940
PHASE III TOTAL MATERIAL COSTS (BC2) (NO BPMs)	$119,029
PHASE IV TOTAL MATERIAL COSTS 2.1 - 3.1 (NO BPMs)	$300,469
TOTAL MATERIAL COST	$515,437

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152	RG59	200															1		10	11	11			2200	$0.53	$1,166
153	FIBOPT11	200															1			1	1			200	$6.00	$1,200
154	FIBOPT9	200															1			1	1			200	$2.00	$400
155	50C18TLN	700							1											1	1			700	$3.00	$2,100
156	36PR16OS	300																	1	1	1			300	$6.00	$1,800
157	LMR400 TRUNK	300																	5	5	10			1500	$1.20	$1,800
158	TOTALS	4385																		78	77	11	0	15200	TOTAL	$24,490
159																						TOTAL FT BTH 2.1		15200		
160																										
161																										

BTH 2.2 (912) STA 1360

	SYSTEM	MEAN LENGTH	WIRE SCANNER	VAC VALVES (5)	VAC GAUGE (8)	VAC PUMP (8)	MAN VALVE (0)	TRP (2)	BTM (0)	BCS (0)	MPS	RF BPM (1)	BPM (4)	BLMO (0)	TOROID (0)	IONC (0)	COLL	OTR (0)	PPS (0)	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
164	RG214	175	4																		4	4		7	700	$2.89	$2,023
165	LMR400	175											16								16	16			2800	$1.20	$3,360
166	1/4" HELIAX	175																			0				0	$0.90	$0
167	2.0HEL	85																			0				0	$13.04	$0
168	TYPE C	175										3									3	3			525	$0.26	$137
169	3C18OS	175																			0				0	$0.70	$0
170	18PR 22 GA	175	4			8		2													14	14			2450	$1.96	$4,802
171	9C18TLN	175																			0				0	$2.75	$0
172	4PR18TLN	175		5	8																13	13			2275	$1.36	$3,094
173	RG58	175			8																8	8			1400	$0.85	$1,190
174	32C18TLN	175																			0			8	0	$9.04	$0
175	12C18TLN	175																			0				0	$3.09	$0
176	4PR22ITN	175	4																		4	4			700	$1.20	$840
177	RG59	175	4																	10	14	14			2450	$0.53	$1,299
178	FIBOPT11	175																			0				0	$6.00	$0
179	FIBOPT9	175																			0				0	$2.00	$0
180	50C18TLN	175																			0				0	$3.00	$0
181	36PR16OS	175																		1	1	2			175	$2.49	$436
182	RG59 COAX TRUNK	300																		5	5	10			1500	$0.53	$795
183	LMR400 TRUNK	300																		5	5	10			1500	$1.20	$1,800
184	TOTALS	3660																			87	76	0	15	16475	TOTAL	$19,775
185																						TOTAL FT BTH 2.2			13475		
186																										

BTH 2.3 (B913) STA 1573

	SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (0)	VAC GAUGE (0)	VAC PUMP (0)	MAN VALVE (0)	TRP (3)	BTM (0)	BCS	MPS	RF BPM (6)	BPM (6)	BLMO	TOROID	IONC	COLL	OTR	PPS	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
189	RG214	200																			0				0	$2.89	$0
190	LMR400	200											24		2,1						24	27			4800	$1.20	$5,760
191	1/4" HELIAX	200																			0				0	$0.90	$0
192	2.0HEL	85																			0				0	$13.04	$0
193	TYPE C	200										18									18	18			3600	$0.26	$936
194	3C18OS	200																			0				0	$0.70	$0
195	18PR 22 GA	200						3													3	3			600	$1.96	$1,176
196	50C18TLN	700								1											1	1			700	$3.00	$2,100
197	4PR18TLN	200																			0				0	$1.36	$0
198	RG58	200								6						4					10	2	8		2000	$0.85	$1,700
199	32C18TLN	200																			0				0	$9.04	$0
200	12C18TLN	200																1			1	1			200	$3.09	$618
201	4PR22ITN	200																			0				0	$1.20	$0
202	RG59	1200																	1		1	1			1200	$0.53	$636
203	FIBOPT11	200																			0				0	$6.00	$0
204	FIBOPT9	200																1			1	1			200	$2.00	$400
205	50C18TLN	200																1			1	1			200	$3.00	$600
206	36PR16OS	700																		1	1	2			700	$2.49	$1,743
207	36PR16AS	3000																	1		1	1			3000	$16.00	$48,000
208	24PR16AS	800																	1		1	1			800	$12.00	$9,600
209	12PR16AS	500																	1		1	1			500	$8.00	$4,000
210	RG59 COAX TRUNK	700																		5	5	10			3500	$0.53	$1,855
211	LMR400 TRUNK	700																		5	5	10			3500	$1.20	$4,200
212	TOTALS	11185																			69	80	8	0	25500	TOTAL	$83,324
213																						TOTAL FT B913			25500		
214																											
215																											

UNDULATOR SYSTEM (Treaty Flange to Treaty Flange + Complete WPM/HLS)

	SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (2)	VAC GAUGE (0)	VAC PUMP (33)	MAN VALVE (0)	HLS	RF BPM	BCS	MPS	BLM (0)	BPM (0)	BLMO	TOROID	WPM	COLL	OTR	PPS	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
218	RG214		0																		0				0	$2.89	$0
219	LMR400																				0				0	$1.20	$0
220	1/4" HELIAX	235							136												136				31960	$0.90	$28,764
221	1/4" HELIAX	20														552					552				11040	$0.90	$9,936
222	TYPE C	235				33															33				7755	$0.26	$2,016
223	3C18OS	235									66										66				15510	$0.70	$10,857
224	9C18TLN						0														0				0	$2.75	$0
225	4PR18TLN	235		2	0						FFTB REMOVAL ESTIMATE										2				470	$1.36	$639

LCLS LONG HAUL CABLE/CONNECTOR SYSTEM ANALYSIS

LINAC BPM MATERIAL COSTS SEC 21 - BTH-WEST	$95,940
PHASE III TOTAL MATERIAL COSTS (BC2) (NO BPMs)	$119,029
PHASE IV TOTAL MATERIAL COSTS 2.1 - 3.1 (NO BPMs)	$300,469
TOTAL MATERIAL COST	**$515,437**

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Authors; Michael De Salvo / Mario Ortega

226	LMR400														0						0				
227	RG58				0																0			0	$1.20	$0
228	32C18TLN																				0			0	$0.85	$0
229	12C18TLN																				0			0	$9.04	$0
230	12PR 22 GA	235							34				0								0			0	$3.09	$0
231	24PR18TLN	800								1											34			7990	$1.96	$15,660
232	4PR22ITN																				1			800	$6.00	$4,800
233	FIBOPTX?	210					6														0			0	$1.20	$0
234	CAT6	50					141														6			1260	$6.00	$7,560
235	CAT6	180										0									141			7050	$0.56	$3,948
236	CAT6	20														6					0			0	$0.56	$0
237	TOTALS	2455																			6			120	$0.56	$67
238																					977	0	0	0	83955	TOTAL	$84,248
239																							TOTAL FT Undulator Hall		83955		

EBD 3.1 (B921)

240	SYSTEM	MEAN LENGTH	WIRE SCANNER (0)	VAC VALVES (2)	VAC GAUGE (4)	VAC PUMP (4)	MAN VALVE (1)	TRP (3)	BTM (0)	BCS (1)	MPS	RF BPM (2)	BPM (3)	BLMO	TOROID (4)	IONC (14)	COLL (0)	OTR (1)	PPS (1)	TRUNK	TOTAL	IC	HV	CV	CABLE FT	Ft COST	TOTAL
241	RG214	300																			0				0	$2.89	$0
242	LMR400	300											12		8						20	30			6000	$1.20	$7,200
243	1/4 HELSF	300										6									6	6			1800	$0.90	$1,620
244	2.0HEL	85																			0				0	$13.04	$0
245	TYPE C	300			4	4															8		8		2400	$0.26	$624
246	3C18OS	300								4											4	1			1200	$0.70	$840
247	18PR 22 GA	300						3													3	3			900	$1.96	$1,764
248	9C18TLN	300		2			1														3	1			900	$2.75	$2,475
249	4PR18TLN	300			4																4	4			1200	$1.36	$1,632
250	RG58	300			4					2						28					34	18	14	2	10200	$0.85	$8,670
251	32C18TLN	300																1			1	1			300	$9.04	$2,712
252	12C18TLN	300																			0				0	$3.09	$0
253	4PR22ITN	300																			0				0	$1.20	$0
254	RG59	300																1			1	11			300	$0.53	$159
255	FIBOPT11	300																1			1	1			300	$6.00	$1,800
256	FIBOPT9	300																1			1	1			300	$2.00	$600
257	50C18TLN	300								1											1	1			300	$3.00	$900
258	36PR16OS	300																			0	1			0	$2.49	$0
259	36PR16AS	600																			0	1			0	$16.00	$0
260	COAX TRUNK	600																			0	1			0	$12.00	$0
261	TOTALS	6385																			87	81	22	2	26100	TOTAL	$30,996
262																							TOTAL FT B921		26100		
263																							Total cable feet		214720		Total cable

LINAC TO 3.1

cable type	TOTALS
RG214	1580
LMR400	47275
1/4" HELIAX	45990
2.0HEL	170
TYPE C	22740
3C18OS	18155
18PR 22 GA	5180
9C18TLN	7220
4PR18TLN	4945
RG58	16440
32C18TLN	1160
12C18TLN	3440
4PR22ITN	2240
CAT6	
RG59	19640

LINAC TO BTH WEST

cable type	TOTALS
RG214	880
LMR400	19775
1/4" HELIAX	1190
2.0HEL	1360
TYPE C	6260
3C18OS	1445
18PR 22 GA	490
9C18TLN	
4PR18TLN	800
RG58	2840
32C18TLN	660
12C18TLN	2040
4PR22ITN	1540
CAT6	
RG59	8490

PHASE	D-B MATERIAL	D-B LABOR HRS		ED&I	CONT.	DB TOTAL
LCLSPH3 S24	16,965	294,634	2,893	Below	0	311,599
LCLSPH3 B005 105,106, B136	37,245	319,395	3,136	Below	0	356,641
LCLSPH3 BTH W	11,099	51,092	502	Below	0	62,191
LCLSPH4 BTH 2.1 (B911)	21,710	135,886	1,218	Below	0	157,596
LCLSPH4 BTH 2.2 (B912)	5,184	128,131	1,149	Below	0	133,315
LCLSPH4 BTH 2.3 (B913)	4,461	153,244	1,505	Below	0	157,704
LCLSPH4 BTH 3.1 (B921)	4,461	160,617	1,577	Below	0	165,078
LCLSPH4 UNDULATOR	30,138	498,228	4,892	Below	0	528,366
LCLSPH4 FEE,NEH	16,215	182,183	0	Below	0	198,398
Timing (B136,105,106,911,912,913,921)					0	334,526
LCLSPH5 FEH, X-RAY	13,685	87,087	781	Below	0	100,772
LABOR TOTAL (PH3, 4, 5)	**161,162**	**2,010,498**	**17,651**	**0**	**0**	**2,506,186**

	SLAC MATERIALS	D-B TOTAL	ESCALATION	ED&I	
PHASE 3	283,510	730,430	37,092	296,188	1,347,220
PHASE 4	465,039	1,674,984	83,749	300,000	2,523,772
PHASE 5	47,284	100,772	5,039	160,000	313,095
LABOR MATERIALS and ED&I TOTAL					4,184,086

NOTES:

1. Material cost does not include racks
2. ED&I (4 FTE Designer/UTR, 0.75 FTE Manager/Engineer)
3. PH3 estimate is preliminary cable plant not well defined yet
4. **The majority of the information used for this estimate goes back to April 2007**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**ENGINEER'S ESTIMATE**		**DATE PREPARED: 04/07/07**								LCLSPH4 Timing		
2	**DESCRIPTION:**					**ESTIMATOR: P. Rodriguez**					REV0 4/7/07		
3	**LCLS PH3 CABLE PLANT INSTALLATION - Timing**												
4	**I T E M**	**MATERIAL**				**L A B O R**							
5		UNIT	NO.	UNIT $	TOTAL $	NO.	UNIT	TOTAL HRS.	$/HR	TOTAL $	**TOTAL$/SYST.**		**SLAC PURCHASE MATERIALS**
7	**FO**												
8	FIBOPT12 (B136)	FT	3,600	0.00	$0	3,600	0.040	144	97.00	$13,968			
9	FIBOPT12 (B106)	FT	9,000	0.00	$0	9,000	0.040	360	97.00	$34,920			
10	FIBOPT12 (B105)	FT	4,700	0.00	$0	4,700	0.040	188	97.00	$18,236			
11	FIBOPT12 (B911)	FT	5,000	0.00	$0	5,000	0.040	200	97.00	$19,400			
12	FIBOPT12 (B912)	FT	5,000	0.00	$0	5,000	0.040	200	97.00	$19,400			
13	FIBOPT12 (B913)	FT	11,000	0.00	$0	11,000	0.040	440	97.00	$42,680			
14	FIBOPT12 (B921)	FT	12,000	0.00	$0	12,000	0.040	480	97.00	$46,560			
15	1/2 Heliax (B136)	FT	3,600	0.00	$0	3,600	0.035	126	97.00	$12,222			
16	1/2 Heliax (B106)	FT	4,200	0.00	$0	4,200	0.035	147	97.00	$14,259			
17	1/2 Heliax (B105)	FT	4,400	0.00	$0	4,400	0.035	154	97.00	$14,938			
18	1/2 Heliax (B911)	FT	4,700	0.00	$0	5,000	0.035	175	97.00	$16,975			
19	1/2 Heliax (B912)	FT	5,000	0.00	$0	5,000	0.035	175	97.00	$16,975			
20	1/2 Heliax (B913)	FT	5,400	0.00	$0	5,400	0.035	189	97.00	$18,333			
21	1/2 Heliax (B921)	FT	5,900	0.00	$0	5,900	0.035	207	97.00	$20,031			
22													
23	Connectors	EA	50	0.00	$0	50	2.000	100	97.00	$9,700			
24													
25	TOTAL DIRECT				$0			**3,285**		$318,597			
26													
27	**TOTAL DIRECT + 5% for Equipment**				**$0**					**$334,526**	**$334,526**		**177285**
28													
29	**CONTINGENCY**										**$0**		
30	**LABOR GRAND TOTAL**										**$334,526**		