

# Rail 6 S6

LED . Recessed T-Bar Flanged . TechZone



CAT #:
PREP BY:
DATE:
PROJECT:
TYPE:
NOTES:



## ORDERING LOGIC

Example Part Number: S6-1L35K-8-MB-W-L31-T-1-D-90

S6				Optics					T				
Series	Color Temp	Length	Pattern	Up	Down	Finish	LL/Driver	Circuitry	Mounting	Voltage	Controls	Options	
<b>Color Temp</b>		<b>Optics Up</b>		<b>Light Level (LL) / Driver</b>			<b>Circuitry</b>		<b>Controls</b>				
1L30K = 3000K	90 CRI is available under Options	None (leave space empty)		<b>Performance at 3500K 0-10V Dimming (Standard)</b>			1 = 1 Circuit		None (leave space empty)				
1L35K = 3500K		<b>Optics Down</b>			Optics	Light Level	Lumens Delivered	Wattage	Efficacy (lm/W)	EM = Emergency / Night Light		D = Daylight Sensor	
1L40K = 4000K		MB = Meta Blanc (Opal Diffuse)			MB	L1	1479	13.8	107	B = Battery Pack		O = Occupancy Sensor	
1LTUN = 2-White Tunable (2700 - 6500K)		M = Meta Ice (High Output Semi-Diffuse)				L2	1824	17.6	104	<b>Mounting</b>		DO = Daylight/Occupancy Sensor	
<b>Length</b>		<b>Pattern</b>		<b>Finish</b>			T = Recessed T-Bar TechZone Compatible †		<b>Options</b>				
2 = 2 ft	8 = 8 ft	G = Square / Rectangle		SA = Satin Aluminum			M		90 = 90 CRI				
3 = 3 ft	9 = 9 ft	U = U-Shape		W = White			L1		None (leave space empty)				
4 = 4 ft	10 = 10 ft	L = L-Shape		C = Custom Finish Specify RAL#:			L2						
5 = 5 ft	11 = 11 ft	C = Custom Pattern*					L3						
6 = 6 ft	12 = 12 ft	Enter pattern dimensions on p.2					L4						
7 = 7 ft							L4						
R = Continuous Rows (See p.3)							Based on 4ft sections.						
C = Custom Length (Consult factory)		None (leave space empty)					<b>Lumen Adjustment Factor</b>						
None (leave space empty)							Color Temp		80 CRI	90 CRI			
							3000K		0.984	0.873			
							3500K		1.000	0.875			
							4000K		1.032	0.879			
									1 = 120 V				
									2 = 277 V				
									3 = 347 V				
									4 = UNV (120 - 277 V)				

\* Consult factory for custom patterns, including X and T patterns. | † Optimized to fit 15/16" T-bar. Will fit most 9/16" T-bars.

## SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Rigid extruded aluminum body, 2.0mm (0.08") nominal wall thickness, and steel formed end caps.  
**Optical System:** Mid flux LED technology transmits to an internal high performance, side-kicking reflector that then passes through our Meta Blanc or Meta Ice acrylic diffuser for smooth distribution, creating a continuation of smooth consistent light.  
**CRI:** 83+ for 3500K, 80 minimum for all CCTs in standard configurations.

**Lumen Maintenance:** Minimum 50,000h with TM-21 lumen maintenance of 85% @ 25°C ambient temperature (calculated based on IESNA LM-80-08 LED test data). L70: ≥ 60 000hrs.  
**Finish:** Satin aluminum and white are standard finishes. For custom finish, contact factory.  
**Weight:** 1.7 kg/300mm [ 3.8 lb/ft ]  
**Mounting:** Optimized to fit 15/16" t-bar. Will fit most 9/16" t-bars. TechZone compatible.

**Electrical:** Factory prewired with easy wire quick connect sections.  
**Drivers:** Metalumen offers dimming drivers as a standard on our entire LED product offering at 0-10V. Dimming range is 10%-100%. Power factor is > 90%. Class 2 rating.  
**Lutron Driver Options:** Consult factory for Lutron LED driver options:  
**LHE** H-Series Hi-lume 1% EcoSystem  
**LA2** A-Series Hi-lume 1% 2-wire

**L5E** 5-Series EcoSystem 5-Series  
**Controls:** Refer to Ordering Logic chart above.  
**Approvals:** Certified to NRTL safety and IES recommendation testing standards. cULus listed. All components are CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant.  
**Environment:** Suitable for dry or damp locations.

APPROVALS Signature \_\_\_\_\_

Date \_\_\_\_\_

FILE NAME: S6\_T\_SPEC\_SHEET\_20190507

570 Southgate Drive, Guelph, Ontario N1G 4P6  
 Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

1.800.621.6785 | T 519.822.4381 | F 519.822.4589  
 www.metalumen.com

**Metalumen**

## WARRANTY

Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

## FEATURES



**Commercial Lighting** - With over 30 years of successful architectural lighting, providing unique concept and installation solutions has become second nature. Metalumen's Start to End Development Process results in unique performance, design and architectural requirements from concept through implementation. Metalumen's Lighting Solutions have been applied to customer

projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time, allow the customer to determine their level of involvement in Metalumen's Start to End Development Process.



**Educational Lighting** Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Students challenge themselves throughout the day to achieve, and Metalumen is

dedicated to this by creating sustainable environments that foster enhanced educational experiences.



Suitable for dry or damp locations.

	<p><b>RAIL 6 S6 Family DLC Approved</b></p> <p>Applicable only to Meta Ice Optics</p>	<p>For more Metalumen DLC Approved Products, visit the <a href="#">DLC Website</a></p>
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## PATTERNS

	Square (G)	Rectangle (G)	U-Shape (U)	L-Shape (L)
Select Pattern				
Pattern Configuration				
Indicate Desired Lengths (ft)	A =	A = B =	A =      B = C =	A = B =
Minimum Lengths	4' for all sides		A = 3', B = 4', C = 3'	A = 3', B = 3'

Record drawings will be sent out upon order showing mounting locations.

## MOUNTING - ROW CONFIGURATIONS

QTY	Nominal Length	Run Length Overall	Alone Length	Start Length	Mid Length(s)	End Length	Light Level STD = Standard w/EM = With Emergency	
	4'	For 4' T-Bar Centers	4				STD	
							w/EM	
	8'	For 8' T-Bar Centers	8				STD	
							w/EM	
	12'	For 12' T-Bar Centers	12				STD	
							w/EM	
	16'	For 16' T-Bar Centers	8		8		STD	
							w/EM	
	20'	For 20' T-Bar Centers	12		8		STD	
							w/EM	
	24'	For 24' T-Bar Centers	12		12		STD	
							w/EM	
	28'	For 28' T-Bar Centers	8	12	8		STD	
							w/EM	
	32'	For 32' T-Bar Centers	12	8	12		STD	
							w/EM	
	36'	For 36' T-Bar Centers	12	12	12		STD	
							w/EM	
	40'	For 40' T-Bar Centers	12	8	12		STD	
							w/EM	
	44'	For 44' T-Bar Centers	12	12	12		STD	
							w/EM	
	48'	For 48' T-Bar Centers	12	12	12		STD	
							w/EM	

### LEGEND

- Standard (STD) Wire Entry Location (located on the end cap)
- Emergency (EM) Lighting Location
- Emergency Wire Entry Location (located on the end cap)

**PHOTOMETRIC DATA - 3500K - L3**

**Meta Blanc**

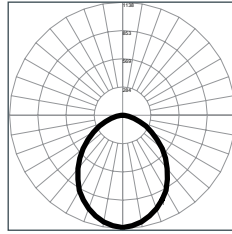
File Name: S6-1L35K-4-MB-L3  
 Luminaire Lumens: 2435  
 Total Watts: 24.2  
 Efficacy: 101 lm/W

**COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC RW	80				70				50			
	70	50	30	10	70	50	30	10	70	50	30	10
RCR												
0	119	119	119	119	116	116	116	116	111	111	111	111
1	110	106	102	98	107	103	100	97	99	96	94	94
2	101	93	87	82	98	91	86	81	88	83	79	79
3	93	83	75	69	90	81	74	69	78	72	68	68
4	85	74	66	60	83	73	65	59	70	64	59	59
5	79	67	58	52	77	66	58	52	64	57	51	51
6	73	61	52	46	71	60	52	46	58	51	45	45
7	68	55	47	41	66	54	47	41	53	46	41	41
8	64	51	43	37	62	50	42	37	49	42	37	37
9	60	47	39	34	58	46	39	33	45	38	33	33
10	56	43	36	31	55	43	35	31	42	35	30	30

**PHOTOMETRIC CURVE**



**LUMINANCE DATA (CD/M²)**

Vertical Angle	Horizontal Angle		
	0	45	90
45	4443	2684	2224
55	3665	1899	1520
65	2843	1223	937
75	1889	623	454
85	733	153	113

**CANDELA DISTRIBUTION**

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1128.98	1128.98	1128.98	1128.98	1128.98
5	1115.81	1104.53	1137.92	1101.96	1118.38
10	1089.44	1088.08	1095.13	1088.71	1066.99
15	1048.49	1042.42	1037.6	1035	1037.64
20	997.4	990.93	982.9	974.04	977
25	937.71	929.21	914.03	900.04	889.19
30	874.03	859.77	834.43	811.73	806.19
35	785.53	775.18	749.12	720.87	707.12
40	699.56	692.68	652.76	625.15	620.55
45	610.4	596.68	566.6	525.29	520.33
50	520.58	502.71	465.37	439.2	431.41
55	425.19	416.21	382.53	354.58	346.39
60	339.58	330.66	302.17	275.02	272.7
65	258.96	248.26	227.05	208.46	201.37
70	185.3	176.26	161.94	144.98	142.11
75	119.78	114.16	102.22	94.27	88.71
80	63.06	60.21	53.44	50.22	48.25
85	24.79	23.06	21.02	20.01	19.18
90	6.05	5.38	4.76	5.61	5.35

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-20	398.56	16.40
0-30	819.17	33.60
0-40	1286.98	52.80
0-60	2067.21	84.90
0-80	2407.16	98.80
<b>0-90</b>	<b>2435.28</b>	<b>100.00</b>
10-90	2329.65	95.70
20-40	888.43	36.50
20-50	1323.53	54.30
40-70	1008.36	41.40
60-80	339.95	14.00
70-80	111.82	4.60
80-90	28.12	1.20
90-110	0.00	0.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
<b>90-180</b>	<b>0.00</b>	<b>0.00</b>
110-180	0.00	0.00
0-180	2435.28	100.00

**Meta Ice**

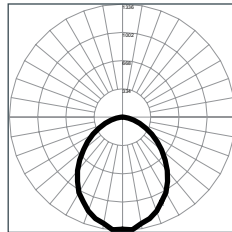
File Name: S6-1L35K-4-M-L3  
 Luminaire Lumens: 2850  
 Total Watts: 24  
 Efficacy: 118 lm/W

**COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC RW	80				70				50			
	70	50	30	10	70	50	30	10	70	50	30	10
RCR												
0	101	101	101	101	99	99	99	99	94	94	94	94
1	93	90	86	84	91	88	85	82	84	82	80	80
2	86	79	74	70	84	78	73	69	75	71	67	67
3	79	71	64	59	77	69	63	59	67	62	58	58
4	73	63	56	51	71	62	56	51	60	54	50	50
5	67	57	50	44	65	56	49	44	54	48	44	44
6	62	52	44	39	61	51	44	39	49	43	39	39
7	58	47	40	35	56	46	40	35	45	39	35	35
8	54	43	36	32	53	43	36	31	41	36	31	31
9	51	40	33	29	50	39	33	29	38	32	28	28
10	48	37	30	26	47	36	30	26	36	30	26	26

**PHOTOMETRIC CURVE**



**LUMINANCE DATA (CD/M²)**

Vertical Angle	Horizontal Angle		
	0	45	90
45	5198	3134	2581
55	4347	2212	1751
65	3365	1427	1090
75	2172	730	518
85	839	175	137

**CANDELA DISTRIBUTION**

Vertical Angle	Horizontal Angle			
	0	30	60	90
0	1322.81	1322.81	1322.81	1322.81
5	1336.31	1316.14	1318.16	1310.24
10	1274.36	1288.29	1278.81	1276.54
15	1240.44	1222.49	1225.81	1221.28
20	1181.26	1159.12	1149.92	1141.46
25	1099.07	1092.99	1062.96	1055.19
30	1027.54	1002.89	968.3	950.02
35	927.73	900.76	861.03	827.29
40	824.4	798.29	739.54	715.72
45	714.17	692.26	631.04	603.97
50	602.18	579.78	521.68	497.59
55	504.3	468.79	422.14	399.02
60	402.82	374.31	327.2	314.76
65	306.52	281.33	248.38	234.29
70	216.3	199.09	173.28	165.55
75	137.76	128.38	111.18	101.1
80	73.5	67.31	58.82	54.19
85	28.37	25.48	22.68	23.31
90	7.12	5.51	5.92	7.26

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-20	469.73	16.50
0-30	965.33	33.80
0-40	1515.31	53.10
0-60	2426.99	85.00
0-80	2822.14	98.90
<b>0-90</b>	<b>2854.5</b>	<b>100.00</b>
10-90	2729.9	95.60
20-40	1045.58	36.60
20-50	1555.12	54.50
40-70	1177.51	41.30
60-80	395.15	13.80
70-80	129.32	4.50
80-90	32.36	1.10
90-110	0.00	0.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
<b>90-180</b>	<b>0.00</b>	<b>0.00</b>
110-180	0.00	0.00
0-180	2854.5	100.00