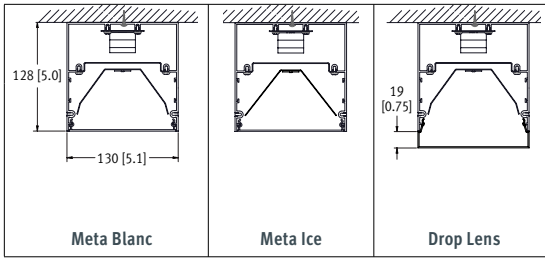


# Rail 6 S6

LED . Surface



DLC Applicable only to Meta Ice Optics



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

## ORDERING LOGIC

Example Part Number: S6-1L35K-8-M-W-L31-S-1-D-90

S6				Optics				S																		
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) Integral Driver</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																
<b>Length</b>		<b>Pattern</b>			<b>Finish</b>		<b>Options</b>		<b>Mounting</b>																	
2 = 2 ft	8 = 8 ft	G = Square / Rectangle	M = Meta Ice (High Output Semi-Diffuse)		L2	1824	17.6	104	DO = Daylight/Occupancy Sensor																	
3 = 3 ft	9 = 9 ft	U = U-Shape	MD = Drop Lens**		L3	2435	24.2	101	S = Surface																	
4 = 4 ft	10 = 10 ft	L = L-Shape	<b>Finish</b>		L4	4483	49.9	90	<b>Voltage</b>																	
5 = 5 ft	11 = 11 ft	C = Custom Pattern*	SA = Satin Aluminum		M		L1	1730	13.8	125	1 = 120 V	= None (leave space empty)														
6 = 6 ft	12 = 12 ft	Enter pattern dimensions on p.2	W = White		MD		L2	2133	17.6	121	2 = 277 V															
7 = 7 ft			C = Custom Finish Specify RAL#:		L3		L1	1509	14.0	108	3 = 347 V															
R = Continuous Rows (See p.3)			= None (leave space empty)		L4		L2	1888	17.7	107	4 = UNV (120 - 277 V)															
C = Custom Length (Consult factory)		C = Custom Finish Specify RAL#:		L1		L3	2567	24.2	106																	
= None (leave space empty)		= None (leave space empty)		L2		L4	4762	49.9	95.4																	
Based on 4ft sections.																										
<table border="1"> <thead> <tr> <th colspan="3">Lumen Adjustment Factor</th> </tr> <tr> <th>Color Temp</th> <th>80 CRI</th> <th>90 CRI</th> </tr> </thead> <tbody> <tr> <td>3000K</td> <td>0.984</td> <td>0.873</td> </tr> <tr> <td>3500K</td> <td>1.000</td> <td>0.875</td> </tr> <tr> <td>4000K</td> <td>1.032</td> <td>0.879</td> </tr> </tbody> </table>												Lumen Adjustment Factor			Color Temp	80 CRI	90 CRI	3000K	0.984	0.873	3500K	1.000	0.875	4000K	1.032	0.879
Lumen Adjustment Factor																										
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3500K	1.000	0.875																								
4000K	1.032	0.879																								

\* Consult factory for custom patterns, including X and T patterns. | \*\* Drop lens is not available with patterns.

## 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:** Metalumen luminaires are designed to utilize leading edge LED technology combined with luminaire optimized reflectors and our custom diffusers, resulting in industry leading optical performance.

**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:** Fixture is mounted directly to ceiling.

**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. Drivers are integral.

**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\_S\_SPEC\_SHEET\_20190806

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.


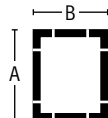
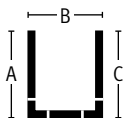
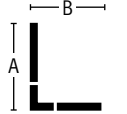
**Educational Lighting**  
Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Students 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>RAIL 6 S6 Family DLC Approved</p>	<p>For more Metalumen DLC Approved Products, visit the <a href="#">DLC Website</a></p>
-----------------------------------------------------------------------------------	------------------------------------------	------------------------------------------------------------------------------------------------

**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'

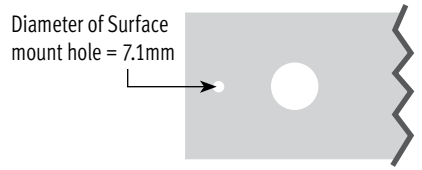
Record drawings will be sent out upon order showing mounting locations.

## MOUNTING - ROW CONFIGURATIONS

QTY	Nominal Length	Run Length Overall	Along Length	Start Length	Mid Length(s)	End Length	Light Level STD = Standard w/EM = With Emergency	
	4'	1223 [48.1]	4				STD	
							w/EM	
	8'	2442 [96.1]	8				STD	
							w/EM	
	12'	3662 [144.2]	12				STD	
							w/EM	
	16'	4880 [192.1]	8	8			STD	
							w/EM	
	20'	6100 [240.2]	12	8			STD	
							w/EM	
	24'	7320 [288.2]	12	12			STD	
							w/EM	
	28'	8538 [336.1]	8	12	8		STD	
							w/EM	
	32'	9758 [384.2]	12	8	12		STD	
							w/EM	
	36'	10978 [432.2]	12	12	12		STD	
							w/EM	
	40'	12196 [480.2]	12	8	12		STD	
							w/EM	
	44'	13416 [528.2]	12	12	12		STD	
							w/EM	
	48'	14636 [576.2]	12	12	12		STD	
							w/EM	

### LEGEND

- Standard (STD) Wire Entry Location  
(located 52mm from end on top of fixture)
- Emergency (EM) Lighting Location
- Emergency Wire Entry Location  
(located 52mm from end on top of fixture)

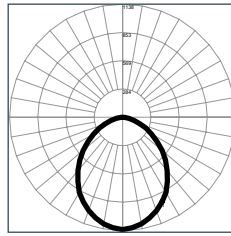


## PHOTOMETRIC DATA - 3500K - L3

### Meta Blanc

File Name: S6-1L35K4-MB-L3  
Luminaire Lumens: 2435  
Total Watts: 24.2  
Efficacy: 101 lm/W

### PHOTOMETRIC CURVE



### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1129	1129	1129	1129	1129
5	1116	1105	1138	1102	1118
10	1089	1088	1095	1089	1067
15	1048	1042	1038	1035	1038
20	997	991	983	974	977
25	938	929	914	900	889
30	874	860	834	812	806
35	786	775	749	721	707
40	700	693	653	625	621
45	610	597	567	525	520
50	521	503	465	439	431
55	425	416	383	355	346
60	340	331	302	275	273
65	259	248	227	208	201
70	185	176	162	145	142
75	120	114	102	94	89
80	63	60	53	50	48
85	25	23	21	20	19
90	6	5	5	6	5

### 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

### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

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

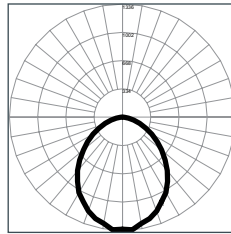
### LUMINANCE DATA (CD/M<sup>2</sup>)

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

### Meta Ice

File Name: S6-1L35K4-M-L3  
Luminaire Lumens: 2850  
Total Watts: 24  
Efficacy: 118 lm/W

### PHOTOMETRIC CURVE



### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	30	60	90
0	1323	1323	1323	1323
5	1336	1316	1318	1310
10	1274	1288	1279	1277
15	1240	1222	1226	1221
20	1181	1159	1150	1141
25	1099	1093	1063	1055
30	1028	1003	968	950
35	928	901	861	827
40	824	798	740	716
45	714	692	631	604
50	602	580	522	498
55	504	469	422	399
60	403	374	327	315
65	307	281	248	234
70	216	199	173	166
75	138	128	111	101
80	74	67	59	54
85	28	25	23	23
90	7	6	6	7

### 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

### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

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

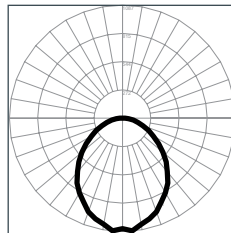
### LUMINANCE DATA (CD/M<sup>2</sup>)

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

### Drop Lens

File Name: S6-1L35K4-MD-L3  
Luminaire Lumens: 2567  
Total Watts: 24.2  
Efficacy: 106 lm/W

### PHOTOMETRIC CURVE



### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1073	1073	1073	1073	1073
5	1031	1060	1040	1054	1073
10	1042	1024	1025	1025	1008
15	1003	988	979	958	972
20	955	946	926	914	896
25	901	886	861	836	830
30	828	811	784	758	738
35	751	744	700	670	665
40	676	655	619	586	572
45	597	572	539	505	492
50	507	490	460	432	419
55	424	415	382	361	351
60	348	340	311	294	292
65	274	268	242	239	233
70	211	200	186	181	181
75	153	136	133	135	133
80	104	85	90	94	94
85	60	48	59	66	66
90	21	27	40	48	51

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	375.59	14.60
0-30	771.68	30.00
0-40	1212.34	47.10
0-60	1976.39	76.90
0-80	2372.9	92.30
<b>0-90</b>	<b>2440.39</b>	<b>94.90</b>
10-90	2340.71	91.00
20-40	836.75	32.50
20-50	1254.04	48.80
40-70	1013.81	39.40
60-80	396.51	15.40
70-80	146.76	5.70
80-90	67.49	2.60
90-110	66.87	2.60
90-120	91.47	3.60
90-130	109.45	4.30
90-150	127.52	5.00
<b>90-180</b>	<b>130.86</b>	<b>5.10</b>
110-180	63.99	2.50
0-180	2571.25	100.00

### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	118	118	118	118	115	115	115	115	108	108	108	
1	108	103	99	95	105	100	97	93	95	92	89	
2	98	91	84	78	95	88	82	77	84	79	75	
3	90	80	72	66	87	78	71	65	74	68	63	
4	83	71	63	56	80	70	62	56	67	60	55	
5	77	64	55	49	74	63	55	49	60	53	48	
6	71	58	49	43	69	57	49	43	55	47	42	
7	66	53	44	38	64	52	44	38	50	43	38	
8	61	48	40	35	60	47	40	34	46	39	34	
9	58	45	37	31	56	44	36	31	42	35	31	
10	54	41	34	28	53	41	33	28	39	33	28	

### LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	4727	2541	2053
55	3960	1850	1474
65	3237	1244	1015
75	2558	752	618
85	1832	387	342