

### **ORDERING LOGIC**

SCEM			AM	1			N
Series/Model	Color Temp Size	Optics	Finish	LL/Driver Circo	uitry Mounting	g Voltage Co	ntrols Options
Color Temp	Optio	:s		Light Level (LL)/[	)river*	Circuitry	Controls
<b>2L30K =</b> 3000K	<b>PQ =</b> Perforated Square	<b>CC =</b> Circle in Circle		Fixture Lume	ns	1 = 1 Circuit (Standard)	<b>N =</b> None
<b>2L35K =</b> 3500K	<b>QQ</b> = Square in Square	<b>SD =</b> Standard Diffuser		measured at 3500K. Ao K or subtract 2% lumen		Mounting	Options
<b>2L40K</b> = 4000K	<b>PS =</b> Perforated Strip	<b>SD =</b> Standard Diffuser	0-10V Dimming (Standard	Perforated Square in Square Square	500K Circle in Standard Circle Diffuse	<b>T =</b> Recessed T-Bar	<b>RF =</b> Medical Power Line Filter
<b>2L50K =</b> 5000K	<b>Custom G</b> Must be ordered through the SCEN		L4 =	= 2053 2042	2040 2227   2816 3185	<b>D</b> = Recessed Drywall	<b>N =</b> None
Size	Finis	h	L6 =	<b>a</b> 3794 3852	3251 3581 3846 4090	Voltage	
<b>22 =</b> 2 x 2'	<b>AM =</b> Anti-microbial White Pa	int		0-10V 1x4@3 Dimming Standard) Perforated Strip	500K Standard Diffuse	<b>1 =</b> 120 V	
<b>14 =</b> 1 x 4'				L3 = 1905 L4 = 3727	2037 4068	<b>2 =</b> 277 V	
				L5 = 5668 L6 = 6469	5814 6522	<b>3 =</b> 347 V	
				* All drivers remote m	ounted.	<b>4 =</b> UNV (120 - 277V)	

### **SPECIFICATIONS**

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

**Housing:** Luminaire body is constructed with 100% aluminum with welded seams and stainless steel hardware.

Optical System: The light emitted from the MetaLED mid-flux LEDs is channeled inside Metalumen's AccuRay® optical plane where a precisely controlled micro dot matrix pattern directs, shapes and distributes the light throughout the material. A high performance optical reflector and diffuser further guide and extract the light with superb efficiency and beam control. Standard optics are available. Custom

graphics must be ordered through the SCENE PHOTO GRAPHICS Spec Sheet. **CRI:** 83+ (3500K) (80 minimum) Consult factory for 90+ CRI. **Lumen Maintenance:** At an ambient operating temperature of 25°C the LED lifetime expectancy > 60 000hrs at L70. **Finish:** The luminaire housing and associated parts are finished in highly reflective, matte powder coat white paint (91% reflectance) or anti-microbial white paint. For custom finish, consult factory.

Mounting: Fits 9/16" and 15/16" T-Bars. Mounting brackets/clips provided. Driver: Metalumen offers dimming drivers as a standard on our entire LED product offering at 0-10V. Dimming is 10%-100% range Power factor is > 90% with a Class 2 rating. All drivers remote mounted. Options: Consult factory for Lutron driver options:

- L3DAE Hi-lume 1% EcoSystem LED Driver
- L3DA3W Hi-lume 1% 3-wire LED Driver
- LTEA2W Hi-lume 1% 2-wire LED Driver

- LDE1 Hi-lume 1% -H EcoSystem LED Driver
- LDE5 5-Series EcoSystem LED Driver

• FCJ010 EcoSystem to 0-10V Wireless RF Approvals: Certified to NRTL safety and IES Recommendation testing standards. All components are UL/CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant. Environment: Suitable for dry or damp locations.

FILE NAME: SCENE\_SCEM\_LED\_D\_T\_SPEC\_SHEET

EC\_SHEET 20170210

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

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Date \_

### 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**

MEDILUMEN // Healthcare Lighting Every product in our broad line of healthcare luminaires has been strategically engineered to meet modern healthcare demands while addressing patient needs and aesthetic requirements.

M E T A Proprietary to Metalumen these LED boards have a raw efficacy of over 120lm/w. These boards are available in both 24 and 48 per linear foot based on your ceiling height application. A slim LED platform for any of your LED linear application.

MRI LIGHTING | All products in our line of Healthcare/MRI luminaires have been carefully engineered to meet the stringent safety requirements of MRI/imaging rooms while providing soft, homogenous illumination to maintain a calm and comforting environment for patients.

# LUMINAIRE WATTAGE AND OUTPUT SPECIFICATION

	Light Perforated Square (PQ)		Square in Square (QQ)			Circle in Circle (CC)			Standard Diffuse (SD)				
2	Level	Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)
2   2	L4 =	24	2053	86	24	2042	85	24	2040	85	24	2227	93
'	L5 =	37	2947	80	37	2816	76	37	2816	76	37	3185	86
	L6 =	43	3316	77	43	3251	76	43	3251	76	43	3581	83
	L7 =	51	3794	74	51	3852	76	51	3846	75	51	4090	80

	Liql	ht	Per	forated Strip	(PS)	Standard Diffuse (SD)			
X 4	Level		Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)	
5	L3	=	21	1905	91	21	2037	97	
	L4	=	48	3727	78	48	4068	85	
	L5	=	74	5668	77	74	5814	79	
	L6	=	85	6469	76	85	6522	77	

# **MRI COMPLIANCE INFORMATION**

#### NON-FERROUS COMPONENTS

Due to the strong MRI magnetic force, a projectile effect of over 40mph into the tube can be generated by even small ferrous objects, potentially causing serious injury. Therefore, all MRI fixtures are carefully engineered with non-ferrous materials. Housings made from aluminum extrusion, internal parts are built from aluminum or plastics, all hardware are from SS.

#### MAGNETIC TESTING

Prior to shipment, all assembled luminaires are tested for trace magnetic properties with a hand-held bar magnet to ensure no ferrous materials exist.

#### **REMOTE MOUNTING**

All MRI compliant luminaires are to be remote mounted due to steel construction of the fluorescent ballast or LED driver. In an LED configuration, the electricity going from the driver to the fixture is Direct Current (DC) which further reduces the chance of interference.

#### ELECTRONIC NON-INTERFERENCE

Luminaires meet the most stringent requirements for electromagnetic compatibility. MRI machines emit powerful radio frequency pulses and imaging may be compromised by electronics interference within the area. All fixtures should not interfere with, nor should they be susceptible to, these frequencies. An RF filter can be utilized to eliminate interference.

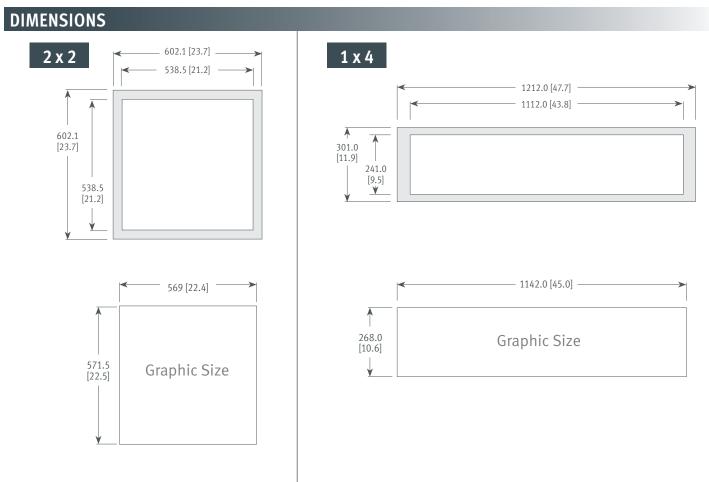
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### Scene SCEM LED. Recessed



# STANDARD OPTICS





PQ - Perforated Square

QQ - Square in Square





CC - Circle In Circle

20170210

**PS** - Perforated Strip

SD - Standard Diffuse

TO CLEAN THE OPTICS: Gently wipe down the optics with a clean, dry cloth to remove any dust and light residues.

For heavier smudges, spray clean cloth with mild soap and water solution and gently wipe optics surface.

WARNING: Hard wiping and abrasive cloths will scratch the optics. DO NOT USE cleaning products containing alcohol or acetone which will damage the optics.

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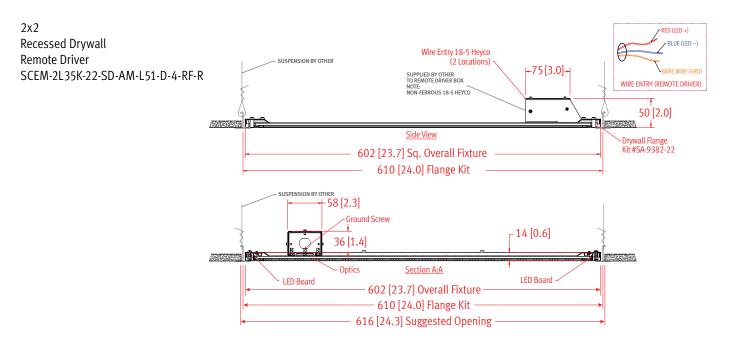
570 Southgate Drive, Guelph, Ontario N1G 4P6 Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

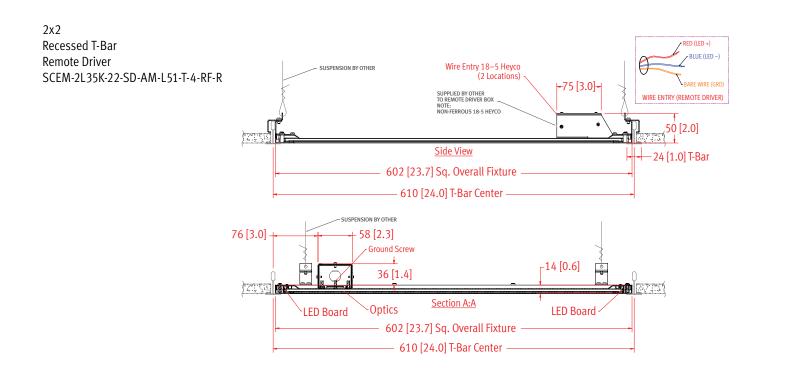
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### Scene SCEM LED. Recessed

# **CROSS SECTIONS**

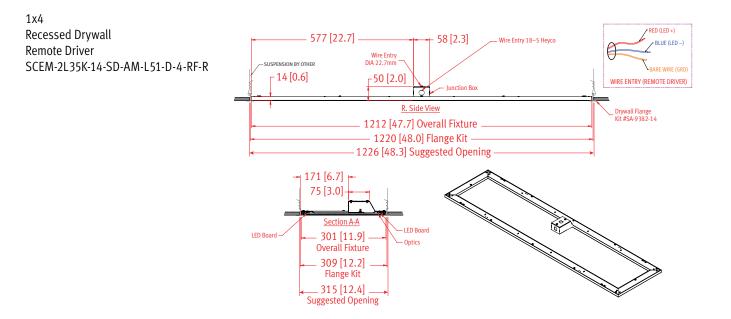


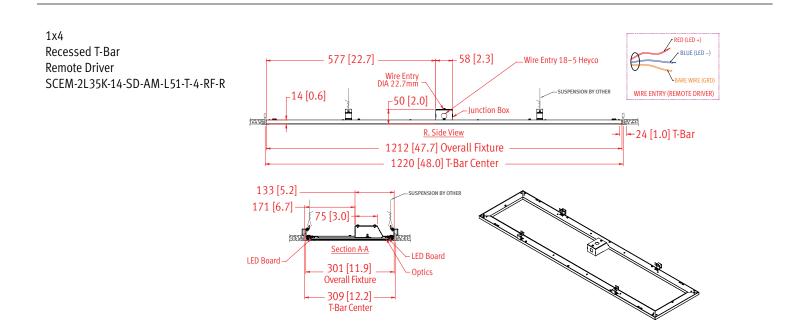


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# **CROSS SECTIONS**





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APPROVALS: Signature

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### **PHOTOMETRIC DATA - 3500K**



File Name: SCE-2L35K-22-QQ-L6 Luminaire Lumens: 3251 Total Watts: 43 Efficacy: 76 lms/W Optics Graphic: Square in Square

#### **COEFFICIENTS OF UTILIZATION Zonal Cavity Method**

Effective Floor Cavity Reflectance = .20

RC		8	0			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	11
1	109	104	100	96	106	102	98	95	98	95	92
2	99	91	84	78	96	89	83	77	85	80	76
3	90	80	72	65	88	78	71	65	75	69	63
4	83	71	62	55	80	69	61	55	67	60	54
5	76	63	54	48	74	62	54	47	60	52	47
6	70	57	48	41	68	56	47	41	54	47	41
7	65	52	43	37	63	51	42	36	49	42	36
8	61	47	39	33	59	46	38	33	45	38	32
9	57	43	35	29	55	43	35	29	41	34	29
10	53	40	32	27	52	39	32	27	38	31	26

### **PHOTOMETRIC CURVE**

**CANDLE DISTRIBUTION** 

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

Vertical	Horizontal Angle							
Angle	0	45	90					
45	3736	3736	3736					
55	3571	3571	3571					
65	3294	3294	3294					
75	2750	2750	2750					
85	1553	1553	1553					

Vertical		Hori	zontal A	Ingle	
Angle	0	22.5	45	67.5	90
0	1165	1165	1165	1165	1165
5	1161	1161	1161	1161	1161
10	1146	1146	1146	1146	1146
15	1120	1120	1120	1120	1120
20	1084	1084	1084	1084	1084
25	1036	1036	1036	1036	1036
30	977	977	977	977	977
35	910	910	910	910	910
40	838	838	838	838	838
45	761	761	761	761	761
50	679	679	679	679	679
55	590	590	590	590	590
60	499	499	499	499	499
65	401	401	401	401	401
70	302	302	302	302	302
75	205	205	205	205	205
80	114	114	114	114	114
85	39	39	39	39	39
90	0	0	0	0	0



File Name: SCE-2L35K-22-CC-L6 Luminaire Lumens: 3251 Total Watts: 43 76 lms/W **Optics** Graphic: Circle in Circle

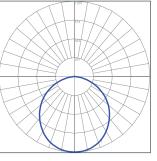
#### **COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

Efficacy:

RC		8	0			7	D			50	
RW	70	50	30	10	70	50	30	10	50	30	1
RCR											
0	119	119	119	119	116	116	116	116	111	111	11
1	109	104	100	96	106	102	98	95	98	95	9
2	99	91	84	78	96	89	83	77	85	80	76
3	90	80	72	65	88	78	71	65	75	69	6
4	83	71	62	55	80	69	61	55	67	60	54
5	76	63	54	48	74	62	54	47	60	52	47
6	70	57	48	41	68	56	47	41	54	47	41
7	65	52	43	37	63	51	42	36	49	42	36
8	61	47	39	33	59	46	38	33	45	38	32
9	57	43	35	29	55	43	35	29	41	34	29
10	53	40	32	27	52	39	32	27	38	31	26

### **PHOTOMETRIC CURVE**



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

Vertical	Horizontal Angle							
Angle	0	45	90					
45	3736	3736	3736					
55	3571	3571	3571					
65	3294	3294	3294					
75	2750	2750	2750					
85	1553	1553	1553					

#### **CANDLE DISTRIBUTION**

Vertical		Hori	zontal /	Angle	
Angle	0	22.5	45	67.5	90
0	1165	1165	1165	1165	1165
5	1161	1161	1161	1161	1161
10	1146	1146	1146	1146	1146
15	1120	1120	1120	1120	1120
20	1084	1084	1084	1084	1084
25	1036	1036	1036	1036	1036
30	977	977	977	977	977
35	910	910	910	910	910
40	838	838	838	838	838
45	761	761	761	761	761
50	679	679	679	679	679
55	590	590	590	590	590
60	499	499	499	499	499
65	401	401	401	401	401
70	302	302	302	302	302
75	205	205	205	205	205
80	114	114	114	114	114
85	39	39	39	39	39
90	Ő	0	0	0	0

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FILE NAME: SCENE\_SCEM\_LED\_D\_T\_SPEC\_SHEET 20170210

# **PHOTOMETRIC DATA - 3500K**

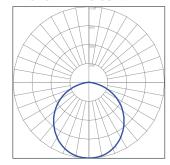


File Name: SCE-2L35K-22-PQ-L6 Luminaire Lumens: 3316 **Total Watts:** 43 77 lms/W Efficacy: Optics Graphic: Perforated Square

### **COEFFICIENTS OF UTILIZATION** Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC		8	0			7	0			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	11
1	109	104	100	96	106	102	98	95	98	95	92
2	99	91	84	79	97	89	83	78	86	80	76
3	90	80	72	65	88	78	71	65	75	69	64
4	83	71	62	55	80	70	61	55	67	60	54
5	76	63	54	48	74	62	54	47	60	53	47
6	70	57	48	42	68	56	48	41	54	47	41
7	65	52	43	37	63	51	43	37	49	42	36
8	61	47	39	33	59	46	38	33	45	38	32
9	57	43	35	29	55	43	35	29	42	34	29
10	53	40	32	27	52	39	32	27	38	31	27

#### **PHOTOMETRIC CURVE**



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

Vertical	Horizontal Angle							
Angle	0	45	90					
45	3834	3834	3834					
55	3674	3674	3674					
65	3376	3376	3376					
75	2736	2736	2736					
85	1195	1195	1195					

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Vertical	Horizontal Angle								
Angle	0	22.5	45	67.5	90				
0	1191	1191	1191	1191	1191				
5	1186	1186	1186	1186	1186				
10	1172	1172	1172	1172	1172				
15	1146	1146	1146	1146	1146				
20	1108	1108	1108	1108	1108				
25	1060	1060	1060	1060	1060				
30	1001	1001	1001	1001	1001				
35	933	933	933	933	933				
40	859	859	859	859	859				
45	781	781	781	781	781				
50	697	697	697	697	697				
55	607	607	607	607	607				
60	512	512	512	512	512				
65	411	411	411	411	411				
70	307	307	307	307	307				
75	204	204	204	204	204				
80	106	106	106	106	106				
85	30	30	30	30	30				
90	0	0	0	0	0				



File Name: SCE-2L35K-22-SD-L6 Luminaire Lumens: 3581 Total Watts: 43 Efficacy: 83 lms/W **Optics Graphic:** Standard Diffuse

#### **COEFFICIENTS OF UTILIZATION**

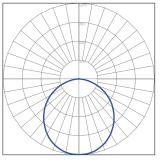
**Zonal Cavity Method** 

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
1	109	104	100	96	106	102	98	94	97	94	91
2	99	91	84	78	96	89	82	77	85	80	75
3	90	80	71	65	88	78	70	64	75	68	63
4	82	70	62	55	80	69	61	54	67	59	54
5	76	63	54	47	74	62	53	47	60	52	46
6	70	57	48	41	68	56	47	41	54	46	41
7	65	51	43	36	63	51	42	36	49	41	36
8	60	47	38	32	59	46	38	32	45	37	32
9	56	43	35	29	55	42	34	29	41	34	29
10	53	40	32	26	52	39	32	26	38	31	26

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#### **PHOTOMETRIC CURVE**



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

Vertical	Horizontal Angle					
Angle	0	45	90			
45	4039	4053	4068			
55	3872	3890	3908			
65	3590	3606	3639			
75	3050	3090	3117			
85	1969	1969	2009			

#### **CANDLE DISTRIBUTION**

Vertical		Hori	zontal /	Angle	
Angle	0	22.5	45	67.5	90
0	1270	1270	1270	1270	1270
5	1265	1264	1264	1265	1264
10	1250	1250	1249	1250	1250
15	1221	1221	1221	1222	1222
20	1180	1180	1181	1182	1182
25	1128	1128	1130	1131	1131
30	1066	1066	1068	1070	1070
35	994	993	996	999	999
40	916	917	919	922	922
45	832	832	835	838	838
50	742	743	746	748	749
55	647	647	650	652	653
60	547	547	550	552	553
65	442	442	444	448	448
70	336	335	337	341	341
75	230	230	233	235	235
80	133	132	134	137	136
85	50	49	50	51	51
90	0	0	0	0	0



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### **PHOTOMETRIC DATA - 3500K**

Efficacy:

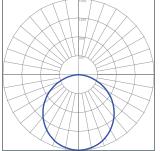


File Name: SCE-2L35K-14-PS-L5 Luminaire Lumens: 5668 Total Watts: 74 77 lms/W **Optics Down:** Perforated Strip

#### **COEFFICIENTS OF UTILIZATION** Zonal Cavity Method

Effective Floor Cavity Reflectance = .20

RC		8	0			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
1	109	104	100	96	106	102	98	94	97	94	91
2	99	91	84	78	96	89	82	77	85	80	75
3	90	79	71	65	88	78	70	64	75	68	63
4	82	70	62	55	80	69	61	54	67	59	54
5	76	63	54	47	74	62	53	47	60	52	46
6	70	57	48	41	68	56	47	41	54	46	41
7	65	51	42	36	63	50	42	36	49	41	36
8	60	47	38	32	59	46	38	32	45	37	32
9	56	43	35	29	55	42	34	29	41	34	29
10	53	40	32	26	52	39	31	26	38	31	26



PHOTOMETRIC CURVE

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

Vertical	Horizontal Angle					
Angle	0	45	90			
45	6999	6999	6999			
55	6743	6743	6743			
65	6274	6274	6274			
75	5303	5303	5303			
85	3209	3209	3209			

(	CAND	LE DI	STRI	BU	ΓΙΟΝ	
	Vertical Angle		Hori	izonta	l Angle	
	Angle	0	22.5	45	67.5	90

Angle	0	22.5	45	67.5	90
0	1998	1998	1998	1998	1998
5	1985	1985	1985	1985	1985
10	1957	1957	1957	1957	1957
15	1915	1915	1915	1915	1915
20	1856	1856	1856	1856	1856
25	1776	1776	1776	1776	1776
30	1684	1684	1684	1684	1684
35	1575	1575	1575	1575	1575
40	1456	1456	1456	1456	1456
45	1327	1327	1327	1327	1327
50	1187	1187	1187	1187	1187
55	1037	1037	1037	1037	1037
60	877	877	877	877	877
65	711	711	711	711	711
70	538	538	538	538	538
75	368	368	368	368	368
80	210	210	210	210	210
85	75	75	75	75	75
90	0	0	0	0	0

#### File Name: SCE-2L35K-14-SD-L5 Luminaire Lumens: 5814 Total Watts: 74 Efficacy: 79 lms/W Standard Diffuse Optics Down:

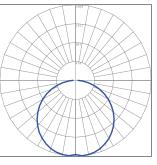
#### **COEFFICIENTS OF UTILIZATION** Zonal Cavity Method

Effective Floor Cavity Reflectance = .20

RC		8	0			7	0			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	11
1	108	103	99	94	105	101	97	93	96	93	90
2	98	89	82	76	95	87	81	75	84	78	74
3	89	78	70	63	87	77	69	62	73	67	61
4	81	69	60	53	79	68	59	53	65	58	52
5	75	61	52	45	73	60	52	45	58	50	45
6	69	55	46	39	67	54	46	39	52	45	39
7	64	50	41	35	62	49	41	35	48	40	34
8	59	46	37	31	58	45	37	31	43	36	31
9	55	42	33	28	54	41	33	28	40	33	27
10	52	38	30	25	51	38	30	25	37	30	25

20170210

#### PHOTOMETRIC CURVE



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

Vertical	Horizontal Angle						
Angle	0	45	90				
45	5180	5121	4912				
55	5142	5039	4731				
65	5084	4880	4392				
75	5005	4562	3705				
85	5614	4289	2132				

#### **CANDLE DISTRIBUTION**

Vertical		Horizon	tal Angle	
Angle	0	30	60	90
0	1852.1	1852.1	1852.1	1852.1
5	1894.4	1832.1	1836.4	1885.8
10	1883.9	1826	1825.8	1865.2
15	1856.1	1805.6	1802.9	1829
20	1811.5	1771	1766.3	1776.2
25	1750.5	1721	1714.9	1707.6
30	1674.3	1655.4	1647.3	1624.4
35	1583.3	1573.1	1561.7	1526.9
40	1478.9	1472.7	1457.6	1415.8
45	1362.4	1355.2	1338.8	1292
50	1234.5	1225.5	1207.1	1155.9
55	1097.1	1085.3	1065	1009.4
60	952.6	936.2	914.6	853.2
65	799.2	780.4	754	690.4
70	640.9	618.7	588.2	522
75	481.8	456.4	421.9	356.7
80	325.7	300.6	261.7	200.8
85	182	157.6	120.5	69.1
90	61.3	42.8	14.3	.7



FILE NAME: SCENE\_SCEM\_LED\_D\_T\_SPEC\_SHEET