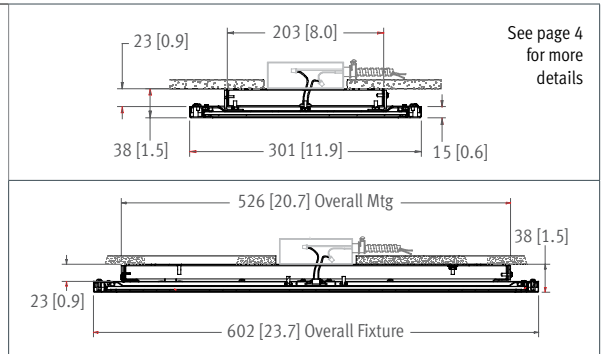
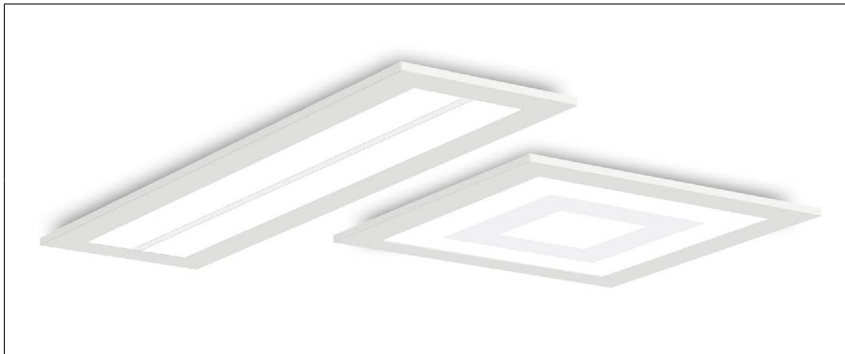


# Scene SCEM

LED . Surface



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



## ORDERING LOGIC

SCEM				AM	1	S		N		
Series/Model	Color Temp	Size	Optics	Finish	LL/Driver	Circuitry	Mounting	Voltage	Controls	Options
<b>Color Temp</b>	<b>Optics</b>			<b>Light Level (LL)/Driver</b>			<b>Circuitry</b>		<b>Controls</b>	
2L30K= 3000K	2x2'	PQ = Perforated Square	CC = Circle in Circle	<b>Fixture Lumens</b> Light level measured at 3500K. Add 3% lumen output for 4000K. Add 6% lumen output for 5000K. Subtract 2% lumen output for 3000K.			1 = 1 Circuit (Standard)		N = None	
2L35K= 3500K		QQ = Square in Square	SD = Standard Diffuser				<b>Mounting</b>		<b>Options</b>	
2L40K= 4000K	1x4'	PS = Perforated Strip	SD = Standard Diffuser				S = Surface		RF = Medical Power Line Filter	
2L50K= 5000K	<b>Custom Graphic</b> Must be ordered through the SCENE PHOTO GRAPHICS Spec Sheet						Available for vertical or horizontal mounting		N = None	
<b>Size</b>	<b>Finish</b>						<b>Voltage</b>			
22 = 2 x 2'	AM = Antimicrobial White Paint						1 = 120 V			
14 = 1 x 4'							2 = 277 V			
							3 = 347 V			
							4 = 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 antimicrobial white paint. For custom finish, consult factory.

**Mounting:** Surface mounting brackets provided.  
**Driver:** 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. All drivers are remote mounted.  
**Options:** Consult factory for Lutron LED driver options:  
 • LHE H-Series Hi-lume 1% EcoSystem  
 • LAE A-Series Hi-lume 1% EcoSystem  
 • LA2 A-Series Hi-lume 1% 2-wire

• L5E 5-series EcoSystem  
**Approvals:** Certified to NRTL safety and IES Recommended testing standards. All components are UL/CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant.  
**Environment:** Suitable for dry or damp locations.

## 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.

## LUMINAIRE WATTAGE AND OUTPUT SPECIFICATION

2 X 2	Light Level	Perforated Square (PQ)			Square in Square (QQ)			Circle in Circle (CC)			Standard Diffuse (SD)		
		Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)
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

1 X 4	Light Level	Perforated Strip (PS)			Standard Diffuse (SD)		
		Wattage	Lumens Delivered	Efficacy (LPW)	Wattage	Lumens Delivered	Efficacy (LPW)
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.

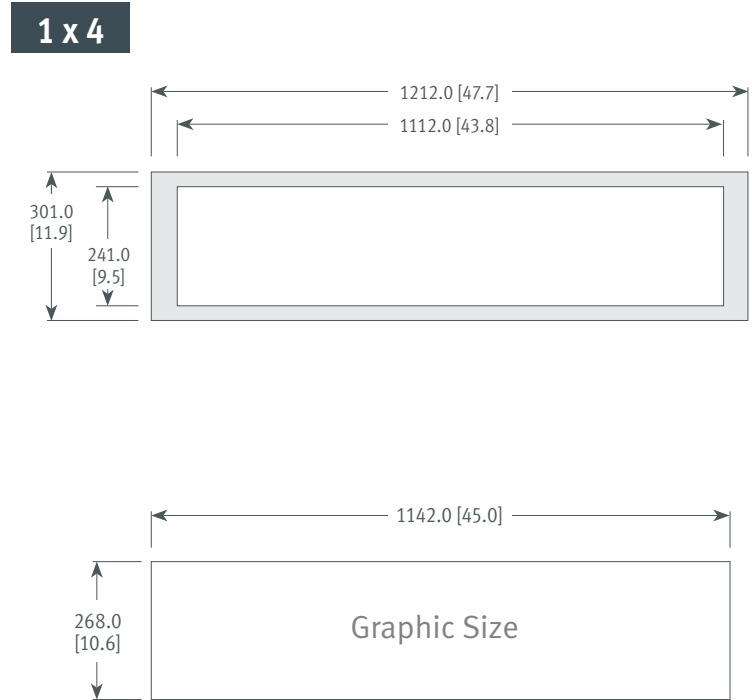
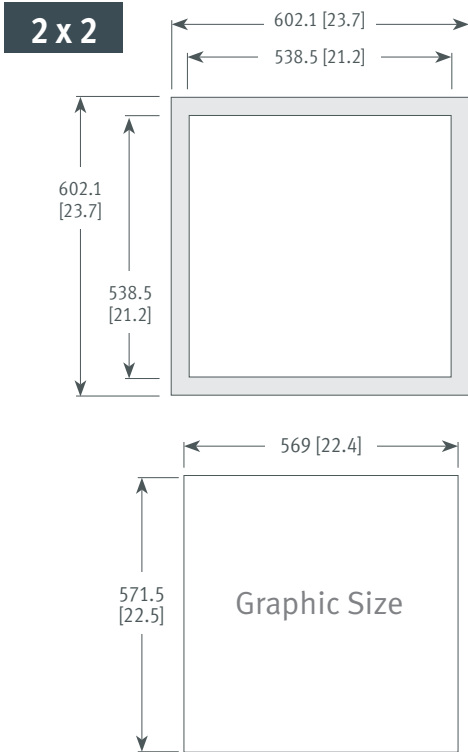
### REMOTE MOUNTING

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.

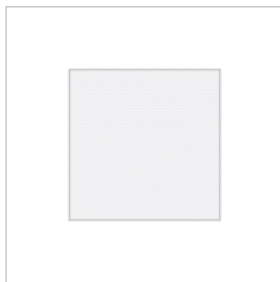
### ELECTRONIC NON-INTERFERENCE

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.

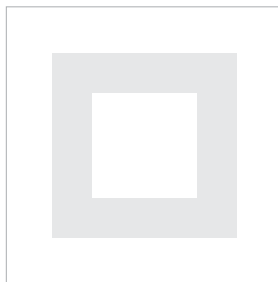
**DIMENSIONS**



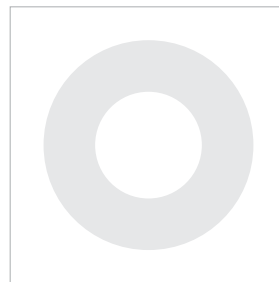
**STANDARD OPTICS**



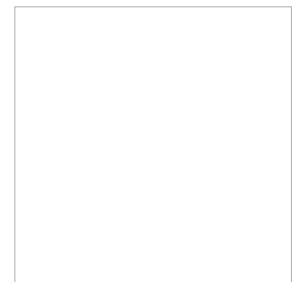
PQ - Perforated Square



QQ - Square in Square



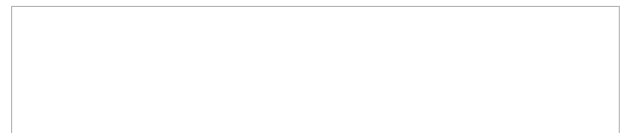
CC - Circle In Circle



SD - Standard Diffuse



PS - Perforated Strip



SD - Standard Diffuse

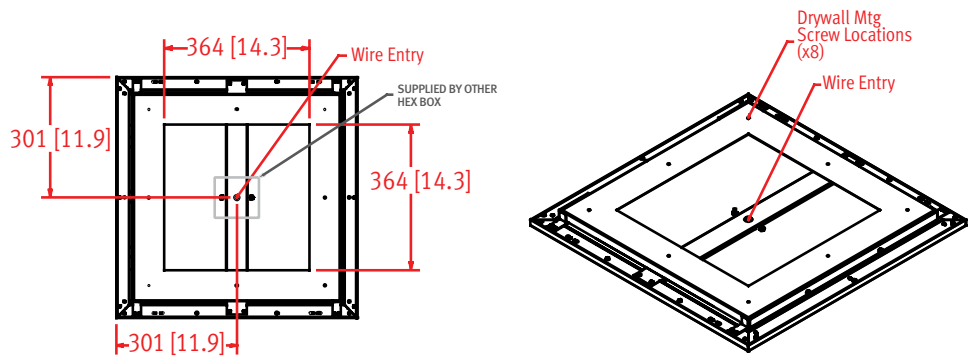
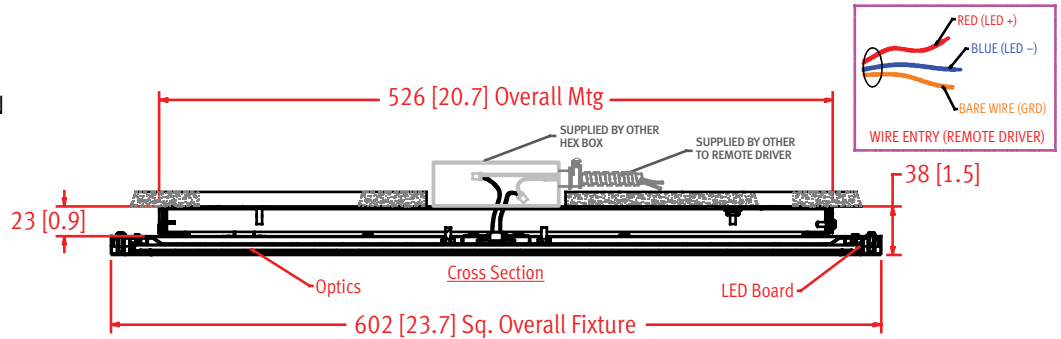
**TO CLEAN THE OPTICS:** Gently wipe down the optics with a clean, dry cloth to remove any dust and light residues.

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

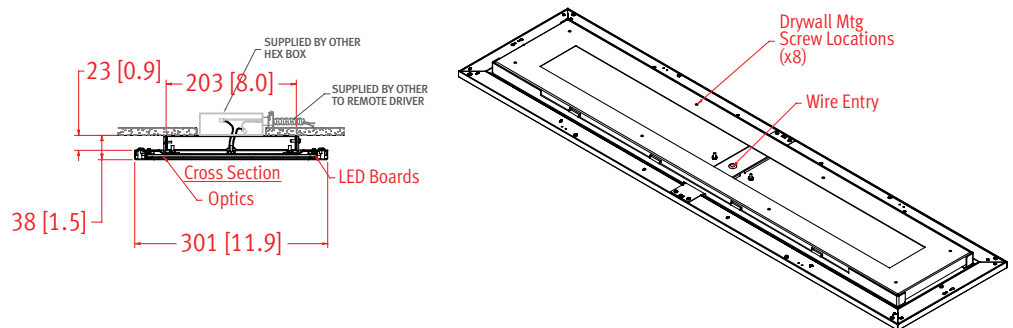
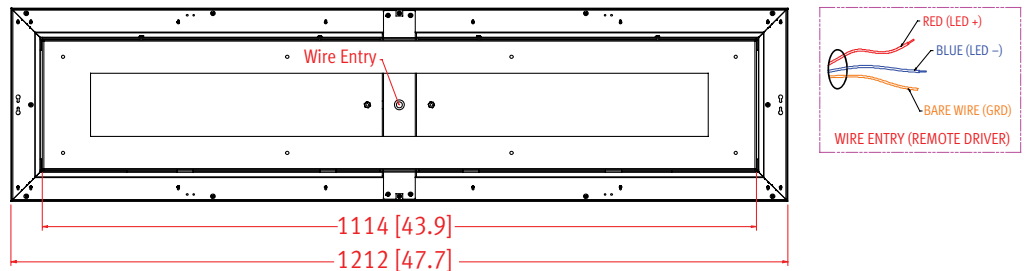
**WARNING:** Hard wiping and abrasive cloths will scratch the optics. DO NOT USE cleaning products containing alcohol or acetone which will damage the optics.

CROSS SECTIONS

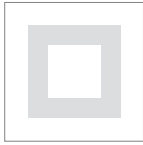
2x2  
 Surface Drywall  
 Remote Driver  
 SCEM-2L35K-22-SD-AM-L51-S-4-N



1x4  
 Surface Drywall  
 Remote Driver  
 SCEM-2L35K-14-SD-AM-L51-S-4-N



**PHOTOMETRIC DATA - 3500K**



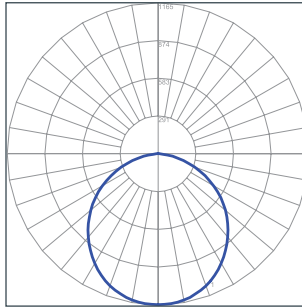
**File Name:** SCE-2L35K-22-QQ-L6  
**Luminaire Lumens:** 3251  
**Total Watts:** 43  
**Efficacy:** 76 lms/W  
**Optics Graphic:** Square in Square

**COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method  
 Effective Floor Cavity Reflectance = .20

RC	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	109	104	100	96	106	102	98	95	98	95	92	89
2	99	91	84	78	96	89	83	77	85	80	76	72
3	90	80	72	65	88	78	71	65	75	69	63	58
4	83	71	62	55	80	69	61	55	67	60	54	49
5	76	63	54	48	74	62	54	47	60	52	47	42
6	70	57	48	41	68	56	47	41	54	47	41	36
7	65	52	43	37	63	51	42	36	49	42	36	31
8	61	47	39	33	59	46	38	33	45	38	32	27
9	57	43	35	29	55	43	35	29	41	34	29	24
10	53	40	32	27	52	39	32	27	38	31	26	21

**PHOTOMETRIC CURVE**



**CANDLE DISTRIBUTION**

Vertical Angle	Horizontal 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

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

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



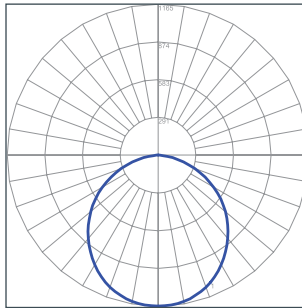
**File Name:** SCE-2L35K-22-CC-L6  
**Luminaire Lumens:** 3251  
**Total Watts:** 43  
**Efficacy:** 76 lms/W  
**Optics Graphic:** Circle in Circle

**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	109	104	100	96	106	102	98	95	98	95	92	89
2	99	91	84	78	96	89	83	77	85	80	76	72
3	90	80	72	65	88	78	71	65	75	69	63	58
4	83	71	62	55	80	69	61	55	67	60	54	49
5	76	63	54	48	74	62	54	47	60	52	47	42
6	70	57	48	41	68	56	47	41	54	47	41	36
7	65	52	43	37	63	51	42	36	49	42	36	31
8	61	47	39	33	59	46	38	33	45	38	32	27
9	57	43	35	29	55	43	35	29	41	34	29	24
10	53	40	32	27	52	39	32	27	38	31	26	21

**PHOTOMETRIC CURVE**



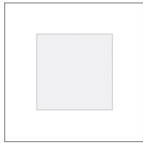
**CANDLE DISTRIBUTION**

Vertical Angle	Horizontal 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

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

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

**PHOTOMETRIC DATA - 3500K**



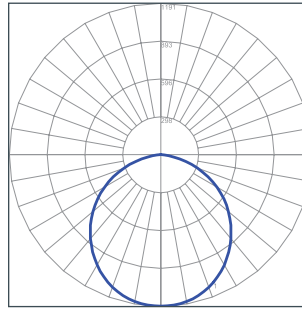
**File Name:** SCE-2L35K-22-PQ-L6  
**Luminaire Lumens:** 3316  
**Total Watts:** 43  
**Efficacy:** 77 lms/W  
**Optics Graphic:** Perforated Square

**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
<b>RCR</b>												
0	119	119	119	119	116	116	116	116	111	111	111	111
1	109	104	100	96	106	102	98	95	98	95	92	89
2	99	91	84	79	97	89	83	78	86	80	76	72
3	90	80	72	65	88	78	71	65	75	69	64	60
4	83	71	62	55	80	70	61	55	67	60	54	50
5	76	63	54	48	74	62	54	47	60	53	47	43
6	70	57	48	42	68	56	48	41	54	47	41	37
7	65	52	43	37	63	51	43	37	49	42	36	32
8	61	47	39	33	59	46	38	33	45	38	32	28
9	57	43	35	29	55	43	35	29	42	34	29	25
10	53	40	32	27	52	39	32	27	38	31	27	23

**PHOTOMETRIC CURVE**



**CANDLE DISTRIBUTION**

Vertical Angle	Horizontal 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

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

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



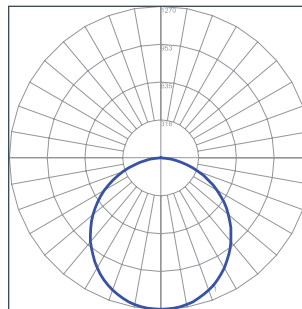
**File Name:** SCE-2L35K-22-SD-L6  
**Luminaire Lumens:** 3581  
**Total Watts:** 43  
**Efficacy:** 83 lms/W  
**Optics Graphic:** Standard Diffuse

**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
<b>RCR</b>												
0	119	119	119	119	116	116	116	116	111	111	111	111
1	109	104	100	96	106	102	98	94	97	94	91	88
2	99	91	84	78	96	89	82	77	85	80	75	71
3	90	80	71	65	88	78	70	64	75	68	63	59
4	82	70	62	55	80	69	61	54	67	59	54	50
5	76	63	54	47	74	62	53	47	60	52	46	42
6	70	57	48	41	68	56	47	41	54	46	41	37
7	65	51	43	36	63	51	42	36	49	41	36	32
8	60	47	38	32	59	46	38	32	45	37	32	28
9	56	43	35	29	55	42	34	29	41	34	29	25
10	53	40	32	26	52	39	32	26	38	31	26	22

**PHOTOMETRIC CURVE**



**CANDLE DISTRIBUTION**

Vertical Angle	Horizontal 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

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

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

**PHOTOMETRIC DATA - 3500K**



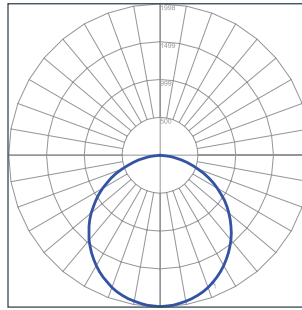
**File Name:** SCE-2L35K-14-PS-L5  
**Luminaire Lumens:** 5668  
**Total Watts:** 74  
**Efficacy:** 77 lms/W  
**Optics Down:** Perforated Strip

**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
<b>RCR</b>												
0	119	119	119	119	116	116	116	116	111	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 Angle	Horizontal Angle		
	0	45	90
45	6999	6999	6999
55	6743	6743	6743
65	6274	6274	6274
75	5303	5303	5303
85	3209	3209	3209

**CANDLE DISTRIBUTION**

Vertical Angle	Horizontal 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



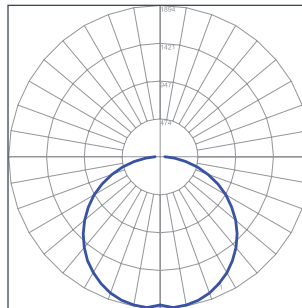
**File Name:** SCE-2L35K-14-SD-L5  
**Luminaire Lumens:** 5814  
**Total Watts:** 7  
**Efficacy:** 80 lms/W  
**Optics Down:** Standard Diffuse

**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
<b>RCR</b>												
0	119	119	119	119	116	116	116	116	111	111	111	111
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	

**PHOTOMETRIC CURVE**



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

Vertical Angle	Horizontal 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 Angle	Horizontal 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