

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SURE-LITES

Report Number: P11873

Luminaire Tested: **CEL7035SD**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P11873
Test Lab: PEACHTREE CITY
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SURE-LITES
Catalog Number: CEL7035SD
Description: INCANDESCENT EMERGENCY FIXTURE,
WITH MIRROR INSIDE THE DOOR, DOOR EDGE (FULLY OPEN) AT 7-9/16 INCH FROM
FIXTURE EDGE, LAMP STRAIGHT DOWN AT CENTER.
Light Source: TWO BIPIN HALOGEN INCANDESCENT MR16 12 DEGREE SPOT LAMPS
(2)75MR16/12° 75 WATTS
Ballast/Driver: -

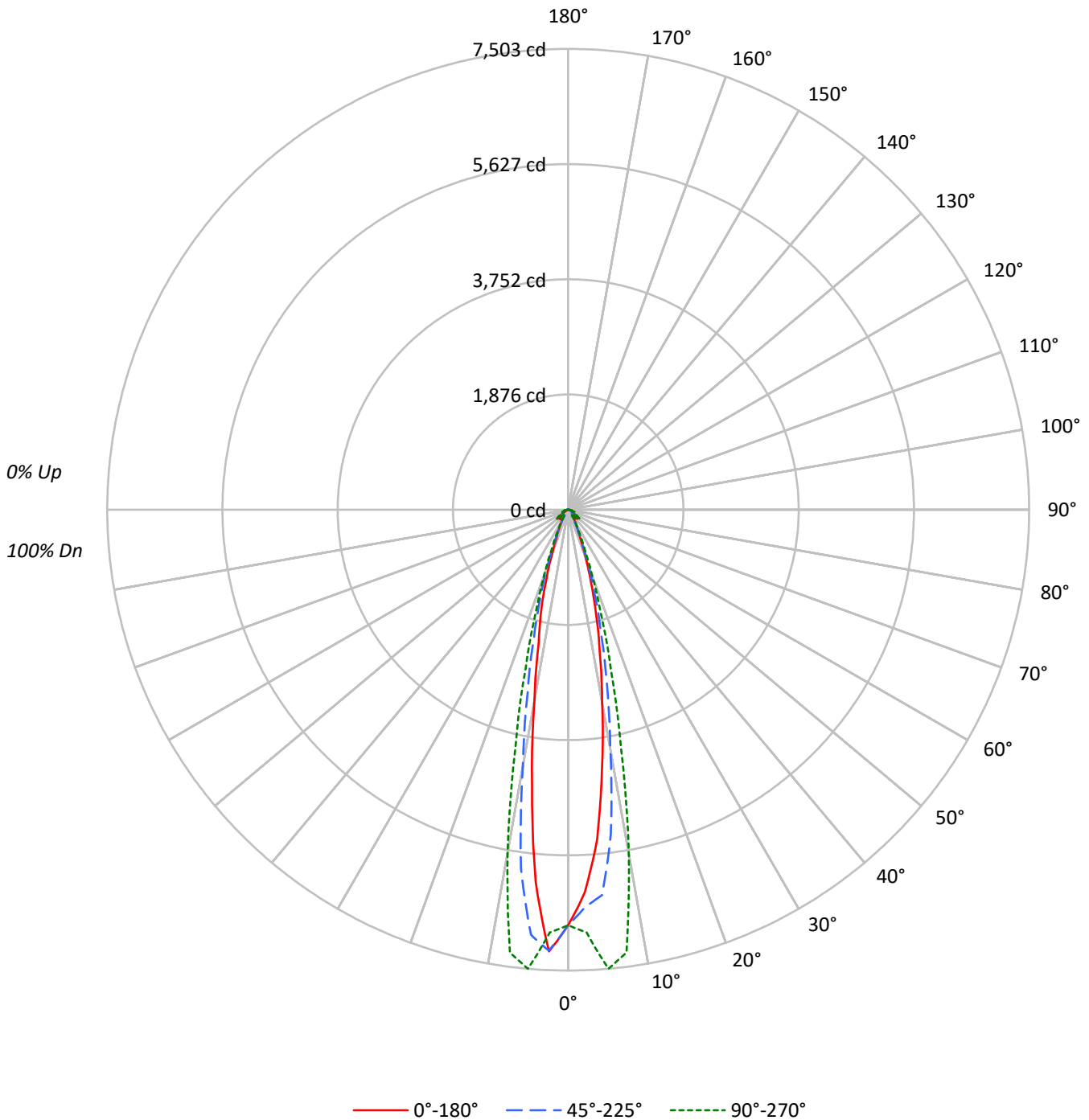
Summary

Lumens per Lamp: 1137 (2 lamps)
Luminaire Lumens: 1837.3 lumens
Efficiency: 80.8%
Efficacy: 24.5 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.47 / 0.4
Luminous Opening: Rectangular (W 0.52' x L: 0.44' x H: 0')
CIE Type: Direct

Input Watts (W): 75.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	96	96	96	96	94	94	94	94	90	90	90	86	86	86	82	82	82	81				81
1	91	89	87	85	89	87	85	83	84	82	81	81	80	78	78	77	76				75	
2	87	83	79	76	85	81	78	76	79	76	74	76	74	72	74	72	71				69	
3	83	77	73	70	81	76	73	70	74	71	68	72	70	67	70	68	66				65	
4	79	73	69	65	78	72	68	65	70	67	64	69	66	63	67	65	63				62	
5	76	69	65	62	74	69	64	61	67	64	61	66	63	60	65	62	60				59	
6	73	66	62	58	72	66	61	58	64	61	58	63	60	57	62	59	57				56	
7	70	63	59	56	69	63	59	56	62	58	55	61	58	55	60	57	55				54	
8	68	61	57	54	67	61	56	54	60	56	53	59	56	53	58	55	53				52	
9	66	59	55	52	65	58	54	52	58	54	51	57	54	51	56	53	51				50	
10	64	57	53	50	63	56	53	50	56	52	50	55	52	50	55	52	50				49	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	319614	319614	319614
5°	255492	355782	288021
10°	152247	272261	152439
15°	84996	131358	82551
20°	42126	57861	38708
25°	19598	24289	19389
30°	12436	12000	11346
35°	10149	5940	10495
40°	9620	5427	11840
45°	13895	8150	14029
50°	14551	17784	15286
55°	11695	15318	11530
60°	6424	12660	6046
65°	5365	8495	4024
70°	3315	10911	3867
75°	4015	13689	4380
80°	3264	16322	1632
85°	7588	9214	4336



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	553.3	30.1	24.3	0°	6766	6766	6766	6766	6766	
10°-20°	612.7	33.3	26.9	5°	5388	6300	7503	6948	6074	441
20°-30°	208.9	11.4	9.2	15°	1738	2055	2686	2150	1688	486
30°-40°	87.2	4.7	3.8	25°	376	382	466	403	372	194
40°-50°	115.4	6.3	5.1	35°	176	102	103	119	182	105
50°-60°	126.7	6.9	5.6	45°	208	104	122	132	210	148
60°-70°	69.0	3.8	3.0	55°	142	105	186	118	140	120
70°-80°	49.2	2.7	2.2	65°	48	34	76	32	36	45
80°-90°	15.0	0.8	0.7	75°	22	12	75	35	24	28
90°-100°	0.0	0.0	0.0	85°	14	7	17	29	8	8
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1374.9	74.8	60.5	165°	0	0	0	0	0	0
0°-40°	1462.1	79.6	64.3	175°	0	0	0	0	0	0
0°-60°	1704.2	92.8	74.9	180°	0	0	0	0	0	0
0°-90°	1837.3	100.0	80.8							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	1837.3	100.0	80.8							



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	6766	6766	6766	6766	6766	6766	6766	6766	6766	6766	6766
2.5°	6236	6238	6278	6325	6424	6514	6624	6696	6774	6890	7023
5°	5388	5425	5567	5790	6117	6482	6842	7149	7351	7503	7537
7.5°	4230	4277	4417	4664	5043	5613	6178	6659	7009	7271	7238
10°	3174	3206	3329	3449	3756	4123	4622	5181	5534	5676	5700
12.5°	2376	2371	2461	2595	2783	3027	3336	3576	3876	3981	4025
15°	1738	1736	1782	1842	1970	2140	2333	2481	2633	2686	2700
17.5°	1218	1240	1247	1299	1365	1454	1543	1658	1701	1759	1795
20°	838	854	867	880	926	928	949	1016	1092	1151	1179
22.5°	542	563	581	598	585	588	606	639	689	719	738
25°	376	390	407	431	371	394	428	417	450	466	470
27.5°	292	286	301	262	242	249	274	278	297	302	297
30°	228	231	239	182	172	172	182	195	195	220	193
32.5°	150	152	175	106	111	100	106	110	112	109	111
35°	176	181	173	156	106	99	113	98	99	103	111
37.5°	156	160	163	158	102	92	88	90	95	98	104
40°	156	164	173	164	91	110	78	94	82	88	95
42.5°	184	165	162	175	87	83	80	83	88	92	100
45°	208	189	185	198	106	103	100	105	122	122	140
47.5°	194	185	192	194	105	108	109	116	175	185	204
50°	198	190	202	189	104	123	119	206	228	242	231
52.5°	178	177	160	155	100	104	149	179	203	225	199
55°	142	139	135	130	110	100	188	183	235	186	186
57.5°	86	91	90	105	89	84	149	161	167	160	160
60°	68	69	67	73	72	53	130	135	134	134	132
62.5°	66	56	83	54	67	46	108	147	107	101	97
65°	48	49	54	58	38	30	105	97	93	76	78
67.5°	22	30	39	57	28	34	117	105	95	75	77
70°	24	23	20	28	36	23	104	99	88	79	76
72.5°	30	51	49	17	47	18	115	111	88	115	78
75°	22	22	19	28	14	10	93	95	91	75	97
77.5°	36	14	8	9	7	8	64	86	83	71	102
80°	12	14	5	5	6	6	44	69	76	60	56
82.5°	10	10	9	7	6	34	33	45	45	30	36
85°	14	5	26	19	4	10	27	15	18	17	13
87.5°	0	1	2	5	9	2	9	7	7	3	5
90°	0	0	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°
0°	6766	6766	6766	6766	6766	6766	6766	6766
2.5°	7076	7174	7160	7211	7240	7202	7203	7199
5°	7481	7307	7057	6838	6592	6302	6141	6074
7.5°	7015	6623	6135	5654	5171	4794	4591	4516
10°	5433	5019	4492	4015	3647	3374	3231	3178
12.5°	3845	3555	3222	2890	2633	2404	2254	2214
15°	2601	2449	2244	2057	1902	1792	1704	1688
17.5°	1760	1695	1572	1453	1350	1235	1181	1164
20°	1134	1082	1023	991	906	834	792	770
22.5°	717	714	630	608	599	548	530	502
25°	463	444	410	396	399	381	359	372
27.5°	293	279	258	241	272	267	272	254
30°	189	203	188	170	180	226	214	208
32.5°	145	117	104	101	125	154	152	158
35°	112	113	116	122	191	194	190	182
37.5°	114	112	119	117	196	199	195	196
40°	102	110	114	113	206	204	196	192
42.5°	99	106	111	115	192	197	197	190
45°	137	123	131	133	200	210	213	210
47.5°	130	118	116	128	196	197	202	202
50°	185	139	113	118	209	190	194	208
52.5°	177	130	134	126	163	170	173	178
55°	176	167	107	129	141	140	177	140
57.5°	157	158	85	95	90	97	87	86
60°	139	151	67	72	78	74	62	64
62.5°	109	130	43	59	76	54	63	60
65°	97	115	33	32	49	50	48	36
67.5°	136	107	35	31	46	28	21	28
70°	97	96	38	35	20	29	35	28
72.5°	87	80	19	23	33	22	26	32
75°	86	73	50	20	18	21	23	24
77.5°	149	64	17	5	21	16	12	16
80°	56	40	11	5	4	10	19	6
82.5°	39	23	12	9	7	7	9	6
85°	19	28	48	10	15	4	3	8
87.5°	12	6	5	1	2	1	3	6
90°	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°
112.5°	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0

(END OF REPORT)