

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: METALUX

Report Number: P231446

Luminaire Tested: **SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22-FRCDL22**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P231446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-4)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22-FRCDL22
Description: STEELER WHITE REFRACTOR LENS AND CIRCULAR DROP
Light Source: (240) 3500 CCT, 80 CRI LEDS
Ballast/Driver: (1) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8122.0 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.16 / 1.37
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Semi-Direct

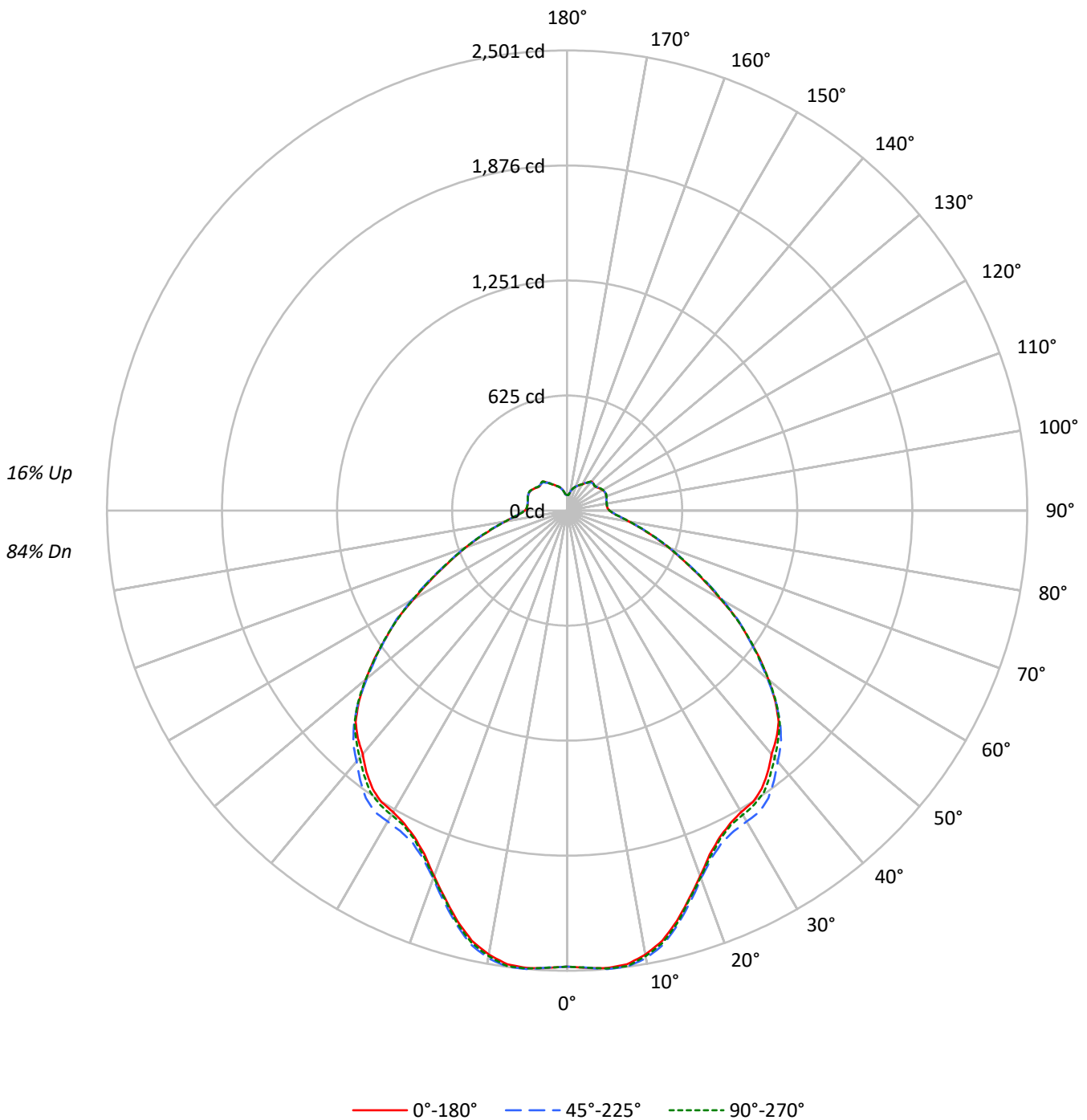
Input Watts (W): 64.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	104	100	95	91	100	96	92	88	89	85	82	82	79	77	76	74	72	69
2	95	87	80	74	91	83	77	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	61	83	73	66	60	68	62	57	63	58	54	59	55	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	47	42	38	36
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31
7	62	49	40	34	60	47	39	34	44	37	32	42	36	31	39	34	30	28
8	58	45	36	30	55	43	35	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	24	34	28	23	33	27	23	31	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10105	10105	10105
5°	9630	9652	9640
10°	9039	9112	9072
15°	8216	8283	8252
20°	7323	7367	7344
25°	6659	6763	6691
30°	6359	6559	6419
35°	6178	6386	6250
40°	5815	5989	5900
45°	5533	5575	5563
50°	4959	4933	4967
55°	4281	4283	4300
60°	3568	3612	3587
65°	2919	2945	2930
70°	2401	2416	2418
75°	1956	1981	1981
80°	1617	1629	1631
85°	1399	1410	1396



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.5	2.9
10°-20°	649.5	8.0
20°-30°	923.5	11.4
30°-40°	1166.7	14.4
40°-50°	1250.3	15.4
50°-60°	1072.3	13.2
60°-70°	758.6	9.3
70°-80°	481.5	5.9
80°-90°	300.1	3.7
90°-100°	241.2	3.0
100°-110°	234.3	2.9
110°-120°	226.0	2.8
120°-130°	191.5	2.4
130°-140°	157.2	1.9
140°-150°	116.6	1.4
150°-160°	70.7	0.9
160°-170°	35.7	0.4
170°-180°	8.9	0.1
0°-30°	1810.5	22.3
0°-40°	2977.2	36.7
0°-60°	5299.7	65.3
0°-90°	6839.9	84.2
90°-120°	701.5	8.6
90°-150°	1166.8	14.4
90°-180°	1282.0	15.8
0°-180°	8122.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2478	2478	2478	2478	2478	
5°	2496	2499	2501	2500	2498	237
15°	2308	2312	2327	2321	2319	646
25°	1960	1989	1990	2002	1969	912
35°	1845	1851	1907	1866	1866	1148
45°	1626	1629	1638	1642	1635	1240
55°	1200	1199	1200	1194	1205	1074
65°	753	758	760	758	756	753
75°	446	451	452	452	452	478
85°	267	267	269	267	267	234
90°	230	230	231	231	230	127
95°	218	218	219	219	219	178
105°	220	220	221	221	222	234
115°	228	229	229	230	230	225
125°	213	213	214	214	215	190
135°	203	203	203	204	205	157
145°	184	185	185	184	183	117
155°	151	152	152	151	152	70
165°	126	125	125	125	126	36
175°	87	87	86	87	87	9
180°	85	85	85	85	85	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2478.2	2478.2	2478.2	2478.2	2478.2
2.5°	2488.5	2488.5	2486.7	2488.0	2486.7
5°	2495.6	2498.7	2501.4	2500.1	2498.3
7.5°	2488.0	2491.1	2500.1	2497.8	2497.8
10°	2450.5	2456.3	2470.1	2466.1	2459.4
12.5°	2393.8	2403.6	2416.1	2408.5	2405.4
15°	2308.4	2311.5	2327.2	2321.4	2318.7
17.5°	2208.3	2208.3	2228.0	2227.1	2213.7
20°	2114.1	2120.8	2127.0	2133.3	2120.3
22.5°	2023.4	2046.6	2046.2	2057.8	2034.1
25°	1959.5	1989.0	1989.9	2001.9	1968.9
27.5°	1917.5	1950.6	1963.1	1962.2	1926.4
30°	1892.0	1911.2	1951.5	1926.9	1909.9
32.5°	1878.6	1879.5	1943.0	1894.7	1894.7
35°	1844.7	1851.4	1906.8	1866.1	1866.1
37.5°	1791.5	1817.4	1847.4	1831.3	1812.5
40°	1729.0	1771.9	1780.8	1778.1	1754.4
42.5°	1682.5	1706.6	1720.0	1716.9	1696.8
45°	1625.8	1629.3	1638.3	1641.9	1634.7
47.5°	1535.5	1534.2	1538.2	1540.4	1541.3
50°	1428.7	1418.5	1421.2	1420.7	1431.0
52.5°	1319.3	1306.3	1306.3	1304.1	1313.0
55°	1199.6	1199.1	1200.0	1193.7	1204.9
57.5°	1091.4	1095.0	1097.7	1090.1	1087.4
60°	963.7	975.7	975.7	972.6	969.0
62.5°	852.9	861.8	866.7	859.6	859.1
65°	753.2	757.7	759.9	758.2	755.9
67.5°	662.1	667.5	670.1	666.1	666.6
70°	585.7	587.5	589.3	593.3	589.7
72.5°	512.4	513.8	517.4	516.5	516.5
75°	445.9	450.8	451.7	451.7	451.7
77.5°	390.5	393.2	392.7	391.8	390.9
80°	340.0	342.7	342.7	342.7	343.1
82.5°	300.7	300.2	301.1	302.0	302.0
85°	267.2	266.7	269.4	267.2	266.7
87.5°	243.9	245.3	246.2	245.7	244.8
90°	230.1	230.5	231.4	231.0	230.1
92.5°	221.6	222.5	223.4	223.4	222.9
95°	218.0	218.5	219.4	219.4	218.9
97.5°	217.1	217.6	218.5	218.5	218.0
100°	217.6	218.0	218.5	218.5	218.9
102.5°	218.0	218.5	218.9	219.4	219.4
105°	220.3	220.3	220.7	221.1	221.6
107.5°	222.9	223.4	223.8	224.3	224.3
110°	226.1	226.5	226.5	227.4	227.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.3	228.7	228.7	229.6	230.1
115°	228.3	228.7	229.2	230.1	230.5
117.5°	226.5	226.5	227.0	227.8	228.7
120°	222.5	222.5	223.4	223.8	224.7
122.5°	217.6	218.0	218.9	219.4	219.8
125°	212.7	213.1	214.0	214.0	214.9
127.5°	206.0	207.3	208.2	208.2	208.6
130°	200.6	201.9	202.8	203.3	202.8
132.5°	199.3	200.6	201.9	201.0	200.1
135°	202.8	202.8	202.8	203.7	204.6
137.5°	206.4	205.5	202.4	206.0	207.3
140°	206.4	203.3	201.0	202.8	206.4
142.5°	196.1	195.2	190.8	194.3	195.7
145°	184.5	185.4	185.0	184.1	183.2
147.5°	174.7	176.5	177.8	174.2	174.2
150°	164.0	168.0	168.0	166.6	165.3
152.5°	158.2	159.0	159.0	158.2	158.6
155°	151.0	151.5	151.5	150.6	151.9
157.5°	143.9	144.8	144.8	144.8	144.3
160°	138.9	139.4	138.9	138.9	138.5
162.5°	132.7	132.2	132.2	132.2	132.7
165°	125.5	125.1	124.6	125.1	125.5
167.5°	117.1	117.1	116.6	116.6	116.6
170°	106.8	107.2	106.8	106.8	106.3
172.5°	93.4	92.9	93.4	93.4	93.8
175°	87.1	86.7	86.2	86.7	86.7
177.5°	84.9	85.3	85.3	84.9	84.4
180°	84.9	84.9	84.9	84.9	84.9

(END OF REPORT)