

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: P231426

Luminaire Tested: **SSLED-LD5-9-W-UNV-L840-CD1-U-FRR22-CLCDL22**

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: P231426  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-3)  
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-L840-CD1-U-FRR22-CLCDL22  
Description: STEELER WHITE REFRACTOR LENS AND CONICAL DROP  
Light Source: (240) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8810.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.43 / 1.55  
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')  
CIE Type: Semi-Direct

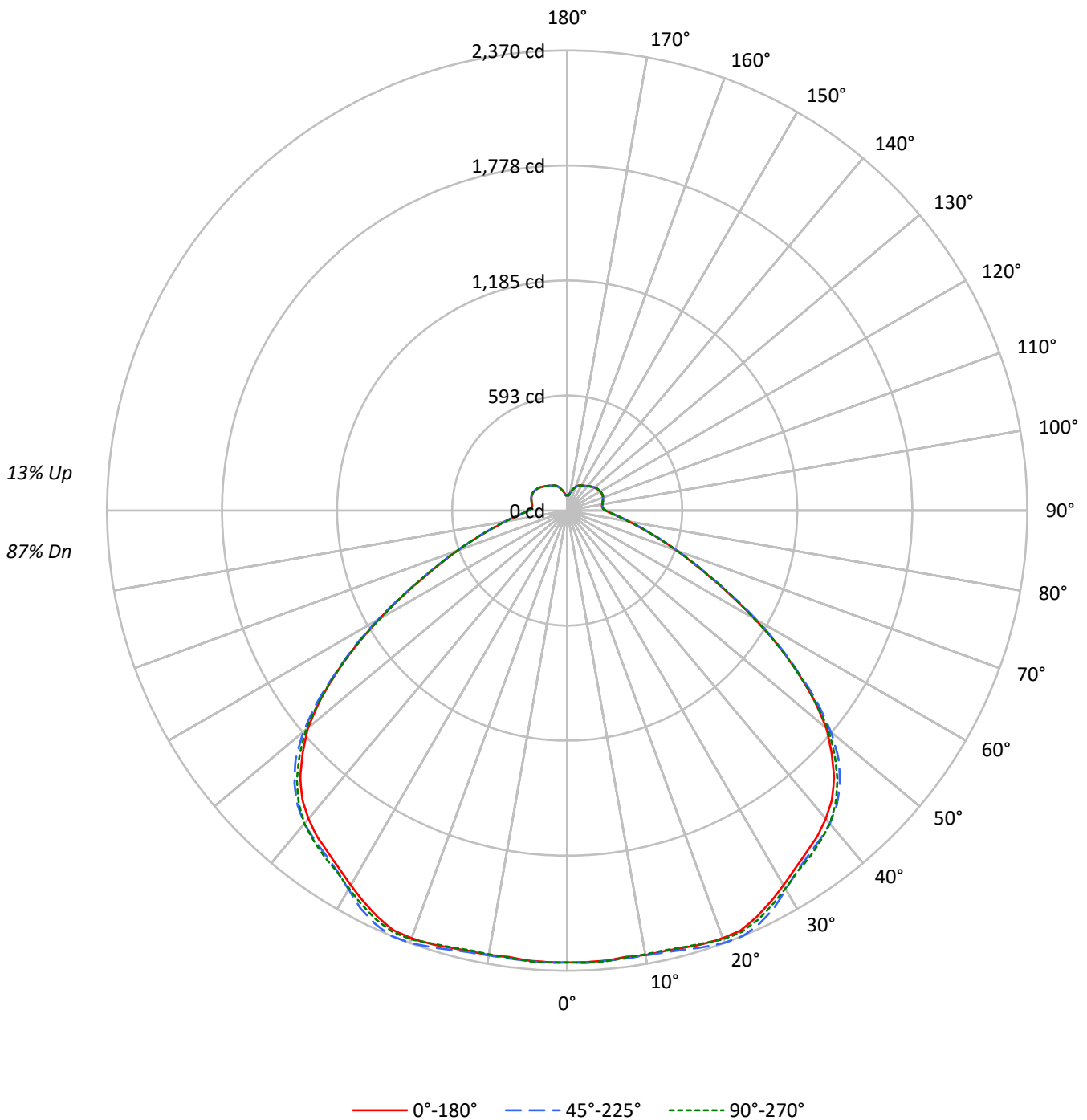
Input Watts (W): 64.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	106	101	96	92	101	97	93	90	91	87	85	85	82	80	79	77	75	72
2	96	88	81	75	92	85	79	73	79	74	70	74	70	66	69	66	63	60
3	87	77	69	62	84	74	67	61	70	63	58	65	60	56	61	57	53	51
4	80	68	59	53	77	66	58	52	62	55	50	58	52	48	54	50	46	43
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	39	37
6	68	54	45	39	65	53	44	38	50	42	37	47	41	36	44	39	35	32
7	62	49	40	34	60	48	40	34	45	38	33	42	36	32	40	35	31	28
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	22
10	51	37	30	24	49	37	29	24	35	28	23	33	27	23	31	26	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11483	11483	11483
5°	10687	10695	10704
10°	10062	10070	10046
15°	9608	9652	9595
20°	9291	9390	9318
25°	8881	9024	8943
30°	8381	8471	8453
35°	7967	8034	8079
40°	7636	7754	7758
45°	7171	7328	7263
50°	6484	6600	6534
55°	5470	5499	5476
60°	4328	4371	4304
65°	3265	3301	3280
70°	2508	2518	2498
75°	1916	1941	1922
80°	1513	1527	1509
85°	1226	1245	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.9	2.5
10°-20°	662.5	7.5
20°-30°	1071.9	12.2
30°-40°	1362.5	15.5
40°-50°	1510.4	17.1
50°-60°	1294.0	14.7
60°-70°	827.6	9.4
70°-80°	471.9	5.4
80°-90°	273.9	3.1
90°-100°	202.5	2.3
100°-110°	201.4	2.3
110°-120°	196.9	2.2
120°-130°	172.4	2.0
130°-140°	135.5	1.5
140°-150°	98.7	1.1
150°-160°	65.4	0.7
160°-170°	32.7	0.4
170°-180°	8.1	0.1
0°-30°	1956.2	22.2
0°-40°	3318.7	37.7
0°-60°	6123.1	69.5
0°-90°	7696.5	87.4
90°-120°	600.7	6.8
90°-150°	1007.3	11.4
90°-180°	1113.0	12.6
0°-180°	8810.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2327	2327	2327	2327	2327	
5°	2326	2326	2328	2326	2330	222
15°	2330	2335	2341	2333	2327	661
25°	2309	2323	2346	2324	2326	1064
35°	2148	2169	2166	2179	2178	1349
45°	1944	1960	1986	1973	1969	1491
55°	1445	1453	1453	1450	1447	1287
65°	814	822	823	824	818	822
75°	435	437	440	438	436	469
85°	242	246	246	244	245	216
90°	198	199	200	199	198	110
95°	181	181	182	182	182	149
105°	190	190	191	191	191	201
115°	198	199	199	200	200	196
125°	192	192	193	193	194	172
135°	174	175	174	175	175	135
145°	157	157	156	156	157	99
155°	142	142	140	141	142	66
165°	114	114	114	113	114	33
175°	79	79	78	78	79	8
180°	79	79	79	79	79	



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CATALOG NUMBER: SSLED-LD5-9-W-UNV-L840-CD1-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2327.4	2327.4	2327.4	2327.4	2327.4
2.5°	2327.9	2331.7	2332.2	2329.3	2329.3
5°	2326.0	2325.5	2327.9	2325.5	2329.8
7.5°	2318.8	2319.3	2326.5	2322.2	2321.7
10°	2324.1	2319.3	2326.0	2320.3	2320.3
12.5°	2323.6	2322.7	2330.3	2323.6	2318.8
15°	2330.3	2334.6	2340.8	2332.7	2327.0
17.5°	2339.9	2345.1	2356.6	2341.3	2336.5
20°	2343.7	2346.1	2368.5	2346.1	2350.4
22.5°	2339.4	2342.7	2370.4	2342.7	2348.5
25°	2309.3	2323.1	2346.5	2323.6	2325.5
27.5°	2271.1	2294.5	2307.8	2296.9	2289.2
30°	2228.1	2259.1	2251.9	2264.8	2247.2
32.5°	2185.5	2215.6	2203.2	2222.3	2205.1
35°	2148.3	2169.3	2166.4	2178.8	2178.4
37.5°	2115.3	2127.7	2137.3	2142.5	2143.5
40°	2072.3	2089.5	2104.3	2101.0	2105.3
42.5°	2018.8	2037.4	2056.5	2046.5	2045.5
45°	1943.8	1960.0	1986.3	1972.9	1968.6
47.5°	1847.7	1878.3	1896.4	1882.1	1869.7
50°	1742.1	1757.4	1773.2	1765.0	1755.5
52.5°	1604.0	1605.0	1624.1	1613.1	1605.5
55°	1445.4	1453.0	1453.0	1450.2	1446.8
57.5°	1284.8	1290.6	1294.4	1290.1	1284.8
60°	1115.7	1121.9	1126.7	1124.8	1109.5
62.5°	957.5	963.8	966.6	960.9	962.3
65°	814.2	821.8	823.3	824.2	818.0
67.5°	696.7	702.4	705.7	702.9	702.4
70°	599.7	601.1	602.0	604.0	597.3
72.5°	511.7	512.2	514.6	515.1	511.3
75°	434.8	436.7	440.5	437.7	436.2
77.5°	371.3	374.1	376.0	377.0	375.1
80°	322.5	323.0	325.4	323.5	321.6
82.5°	280.0	280.0	281.4	281.4	280.5
85°	242.3	245.6	246.1	244.2	244.6
87.5°	216.9	218.4	218.8	217.9	217.4
90°	198.3	198.8	199.7	198.8	198.3
92.5°	186.3	187.3	187.8	187.3	187.8
95°	181.1	181.1	182.5	181.6	181.6
97.5°	181.1	181.1	182.5	182.0	181.6
100°	183.5	184.0	184.4	184.4	184.4
102.5°	186.3	186.8	187.3	187.3	187.3
105°	189.7	190.2	190.6	190.6	190.6
107.5°	193.0	193.5	194.0	194.0	194.0
110°	196.4	195.9	196.9	196.9	197.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	197.8	198.3	198.3	198.8	199.2
115°	198.3	198.8	198.8	199.7	199.7
117.5°	198.3	198.3	198.8	199.2	199.7
120°	196.4	196.9	197.3	197.8	198.3
122.5°	194.9	194.9	195.4	195.9	196.4
125°	191.6	192.1	192.6	193.0	193.5
127.5°	188.3	188.3	188.7	189.2	189.7
130°	184.4	184.4	184.9	185.4	185.9
132.5°	179.2	179.7	179.7	180.1	180.6
135°	174.4	174.9	174.4	174.9	175.4
137.5°	169.6	169.6	169.1	169.6	170.1
140°	164.4	164.8	164.4	164.8	164.8
142.5°	160.1	161.0	160.5	160.5	161.0
145°	156.7	156.7	156.2	156.2	156.7
147.5°	152.9	153.4	152.9	152.9	152.9
150°	149.1	149.6	148.6	149.1	149.1
152.5°	146.2	146.7	144.3	146.2	146.2
155°	142.4	142.4	140.0	141.4	142.4
157.5°	137.1	136.7	135.2	136.7	136.2
160°	130.4	130.9	129.5	130.0	129.5
162.5°	121.8	122.8	122.3	122.3	121.8
165°	114.2	114.2	113.7	113.2	113.7
167.5°	105.6	105.6	105.1	105.6	105.1
170°	95.1	96.0	95.6	96.0	95.1
172.5°	84.6	84.1	84.1	84.1	84.1
175°	78.8	78.8	78.4	78.4	78.8
177.5°	78.4	78.4	78.8	77.9	77.9
180°	79.3	79.3	79.3	79.3	79.3

(END OF REPORT)