

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: P231429

Luminaire Tested: **SSLED-LD5-12-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: P231429  
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-LD5-12-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: 11749.0 lumens  
Efficiency: N/A  
Efficacy: 137.7 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

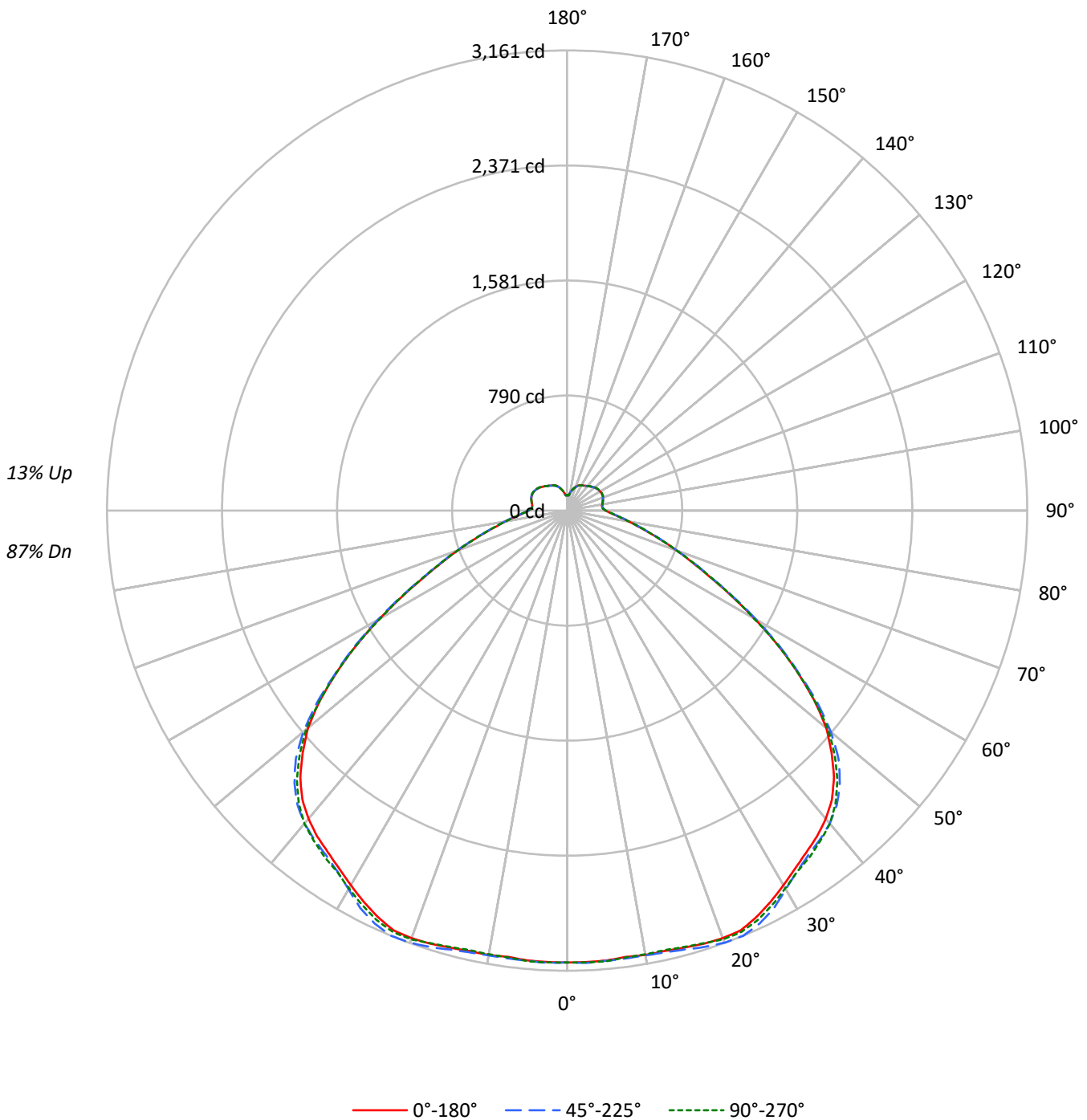
Input Watts (W): 85.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231429

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-CLCDL22

### Luminous Intensity Polar Plot





TEST NUMBER: P231429

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-CLCDL22

**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°	15314	15314	15314
5°	14252	14263	14275
10°	13419	13430	13397
15°	12814	12871	12795
20°	12391	12522	12426
25°	11843	12034	11926
30°	11177	11297	11272
35°	10625	10715	10774
40°	10183	10341	10346
45°	9563	9773	9686
50°	8648	8802	8714
55°	7295	7334	7302
60°	5772	5829	5740
65°	4354	4403	4374
70°	3345	3358	3332
75°	2555	2589	2564
80°	2018	2036	2012
85°	1635	1661	1651



TEST NUMBER: P231429

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-CLCDL22

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.9	2.5
10°-20°	883.4	7.5
20°-30°	1429.5	12.2
30°-40°	1817.0	15.5
40°-50°	2014.3	17.1
50°-60°	1725.6	14.7
60°-70°	1103.7	9.4
70°-80°	629.4	5.4
80°-90°	365.3	3.1
90°-100°	270.0	2.3
100°-110°	268.6	2.3
110°-120°	262.5	2.2
120°-130°	229.9	2.0
130°-140°	180.8	1.5
140°-150°	131.6	1.1
150°-160°	87.3	0.7
160°-170°	43.6	0.4
170°-180°	10.7	0.1
0°-30°	2608.8	22.2
0°-40°	4425.8	37.7
0°-60°	8165.7	69.5
0°-90°	10264.0	87.4
90°-120°	801.1	6.8
90°-150°	1343.3	11.4
90°-180°	1485.0	12.6
0°-180°	11749.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3102	3101	3104	3101	3107	296
15°	3108	3113	3122	3111	3103	882
25°	3080	3098	3129	3099	3101	1418
35°	2865	2893	2889	2906	2905	1799
45°	2592	2614	2649	2631	2625	1988
55°	1928	1938	1938	1934	1930	1717
65°	1086	1096	1098	1099	1091	1096
75°	580	582	588	584	582	626
85°	323	328	328	326	326	288
90°	264	265	266	265	264	146
95°	242	242	243	242	242	199
105°	253	254	254	254	254	268
115°	264	265	265	266	266	262
125°	256	256	257	257	258	229
135°	233	233	233	233	234	180
145°	209	209	208	208	209	131
155°	190	190	187	189	190	88
165°	152	152	152	151	152	44
175°	105	105	104	104	105	11
180°	106	106	106	106	106	



TEST NUMBER: P231429

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3103.9	3103.9	3103.9	3103.9	3103.9
2.5°	3104.5	3109.6	3110.2	3106.4	3106.4
5°	3102.0	3101.3	3104.5	3101.3	3107.1
7.5°	3092.4	3093.0	3102.6	3096.9	3096.2
10°	3099.4	3093.0	3102.0	3094.3	3094.3
12.5°	3098.8	3097.5	3107.7	3098.8	3092.4
15°	3107.7	3113.4	3121.7	3110.9	3103.2
17.5°	3120.4	3127.4	3142.7	3122.3	3116.0
20°	3125.5	3128.7	3158.7	3128.7	3134.5
22.5°	3119.8	3124.3	3161.2	3124.3	3131.9
25°	3079.7	3098.1	3129.4	3098.8	3101.3
27.5°	3028.7	3059.9	3077.7	3063.1	3052.9
30°	2971.3	3012.7	3003.2	3020.4	2996.8
32.5°	2914.6	2954.8	2938.2	2963.7	2940.7
35°	2864.9	2892.9	2889.1	2905.7	2905.1
37.5°	2820.9	2837.5	2850.3	2857.3	2858.5
40°	2763.6	2786.5	2806.3	2801.8	2807.6
42.5°	2692.2	2717.1	2742.6	2729.2	2727.9
45°	2592.2	2613.8	2648.9	2631.1	2625.3
47.5°	2464.1	2504.9	2529.1	2510.0	2493.4
50°	2323.3	2343.7	2364.7	2353.9	2341.1
52.5°	2139.1	2140.4	2165.9	2151.2	2141.0
55°	1927.6	1937.8	1937.8	1933.9	1929.5
57.5°	1713.5	1721.1	1726.2	1720.5	1713.5
60°	1487.9	1496.2	1502.5	1500.0	1479.6
62.5°	1277.0	1285.3	1289.1	1281.4	1283.3
65°	1085.8	1096.0	1097.9	1099.2	1090.9
67.5°	929.1	936.7	941.2	937.3	936.7
70°	799.7	801.6	802.9	805.4	796.5
72.5°	682.5	683.1	686.3	686.9	681.8
75°	579.9	582.4	587.5	583.7	581.8
77.5°	495.1	498.9	501.5	502.8	500.2
80°	430.1	430.8	433.9	431.4	428.8
82.5°	373.4	373.4	375.3	375.3	374.0
85°	323.1	327.5	328.2	325.6	326.3
87.5°	289.3	291.2	291.8	290.6	289.9
90°	264.4	265.1	266.4	265.1	264.4
92.5°	248.5	249.8	250.4	249.8	250.4
95°	241.5	241.5	243.4	242.1	242.1
97.5°	241.5	241.5	243.4	242.8	242.1
100°	244.7	245.3	246.0	246.0	246.0
102.5°	248.5	249.2	249.8	249.8	249.8
105°	253.0	253.6	254.2	254.2	254.2
107.5°	257.4	258.1	258.7	258.7	258.7
110°	261.9	261.3	262.5	262.5	263.2



TEST NUMBER: P231429

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	263.8	264.4	264.4	265.1	265.7
115°	264.4	265.1	265.1	266.4	266.4
117.5°	264.4	264.4	265.1	265.7	266.4
120°	261.9	262.5	263.2	263.8	264.4
122.5°	260.0	260.0	260.6	261.3	261.9
125°	255.5	256.2	256.8	257.4	258.1
127.5°	251.1	251.1	251.7	252.3	253.0
130°	246.0	246.0	246.6	247.2	247.9
132.5°	239.0	239.6	239.6	240.2	240.9
135°	232.6	233.2	232.6	233.2	233.9
137.5°	226.2	226.2	225.6	226.2	226.8
140°	219.2	219.8	219.2	219.8	219.8
142.5°	213.5	214.7	214.1	214.1	214.7
145°	209.0	209.0	208.4	208.4	209.0
147.5°	203.9	204.5	203.9	203.9	203.9
150°	198.8	199.4	198.2	198.8	198.8
152.5°	195.0	195.6	192.4	195.0	195.0
155°	189.9	189.9	186.7	188.6	189.9
157.5°	182.9	182.2	180.3	182.2	181.6
160°	174.0	174.6	172.7	173.3	172.7
162.5°	162.5	163.8	163.1	163.1	162.5
165°	152.3	152.3	151.7	151.0	151.7
167.5°	140.8	140.8	140.2	140.8	140.2
170°	126.8	128.1	127.4	128.1	126.8
172.5°	112.8	112.1	112.1	112.1	112.1
175°	105.1	105.1	104.5	104.5	105.1
177.5°	104.5	104.5	105.1	103.9	103.9
180°	105.8	105.8	105.8	105.8	105.8

(END OF REPORT)