

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: P231521

Luminaire Tested: **SSLED-LD5-24-W-UNV-L835-CD2-U-CLR22-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: P231521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SSLED-LD5-24-W-UNV-L835-CD2-U-CLR22-FRCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CIRCULAR DROP
Light Source: (240) 3500 CCT, 80 CRI LEDS
Ballast/Driver: (2) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20542.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.45
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Semi-Direct

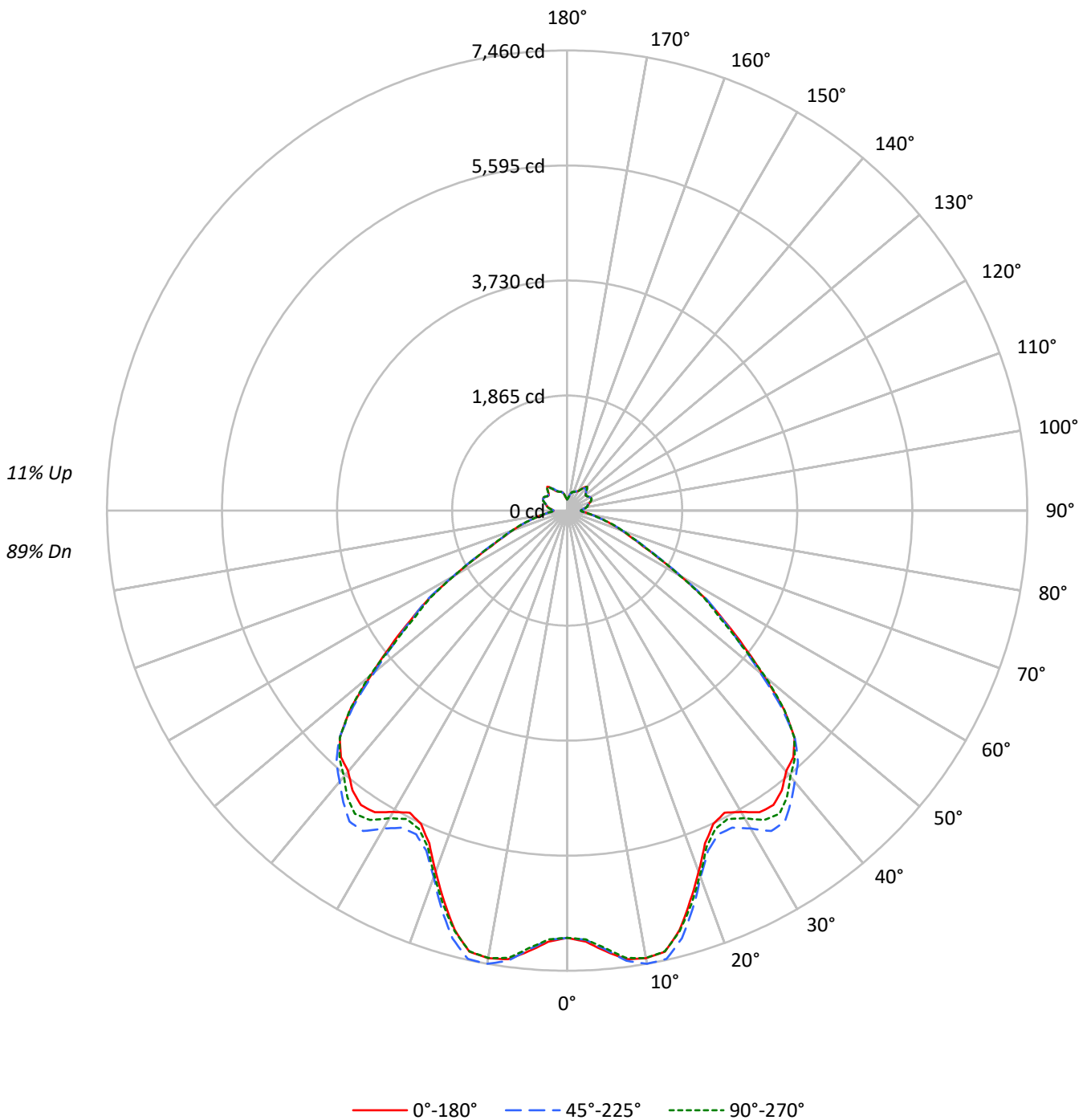
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	98	98	98	92	92	92	89
1	107	103	99	95	103	99	96	93	93	90	88	87	85	83	82	80	79	76
2	98	91	85	79	95	88	82	78	83	78	74	78	74	71	73	70	68	65
3	90	80	73	67	87	78	71	66	73	68	63	69	65	61	65	62	58	56
4	83	72	63	57	80	70	62	56	66	59	54	62	57	52	59	54	51	48
5	76	64	56	50	73	62	55	49	59	52	47	56	50	46	53	48	44	42
6	70	58	49	43	68	56	48	43	53	47	42	51	45	40	48	43	39	37
7	65	53	44	38	63	51	43	38	49	42	37	46	40	36	44	39	35	33
8	61	48	40	34	59	47	39	34	45	38	33	42	36	32	40	35	31	29
9	57	44	36	31	55	43	35	30	41	34	30	39	33	29	37	32	28	26
10	53	40	33	28	51	40	32	27	38	31	27	36	30	26	35	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28240	28240	28240
5°	27670	27558	27477
10°	27177	27520	27168
15°	25054	25555	25104
20°	21584	21898	21802
25°	19052	19681	19337
30°	18958	19997	19353
35°	19523	20613	20095
40°	18568	19303	18928
45°	17749	17780	17725
50°	14390	14188	14539
55°	11067	10942	10739
60°	7863	7915	7799
65°	5218	5362	5281
70°	3865	3908	3922
75°	2810	2815	2815
80°	2006	1979	1996
85°	1400	1406	1406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	691.8	3.4
10°-20°	1970.1	9.6
20°-30°	2714.9	13.2
30°-40°	3692.9	18.0
40°-50°	3936.5	19.2
50°-60°	2776.7	13.5
60°-70°	1417.3	6.9
70°-80°	694.2	3.4
80°-90°	314.8	1.5
90°-100°	290.6	1.4
100°-110°	373.4	1.8
110°-120°	422.4	2.1
120°-130°	363.7	1.8
130°-140°	338.3	1.6
140°-150°	275.7	1.3
150°-160°	160.5	0.8
160°-170°	86.6	0.4
170°-180°	21.6	0.1
0°-30°	5376.7	26.2
0°-40°	9069.7	44.2
0°-60°	15782.9	76.8
0°-90°	18209.1	88.6
90°-120°	1086.4	5.3
90°-150°	2064.1	10.0
90°-180°	2333.0	11.4
0°-180°	20542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6926	6926	6926	6926	6926	
5°	7171	7156	7142	7119	7121	692
15°	7040	7101	7180	7104	7054	1952
25°	5606	5801	5791	5861	5690	2642
35°	5829	5842	6155	5929	6000	3599
45°	5216	5196	5225	5244	5208	3904
55°	3101	3130	3066	3077	3009	2786
65°	1346	1361	1384	1370	1363	1398
75°	641	638	642	637	642	693
85°	267	269	269	267	269	253
90°	221	222	221	223	223	124
95°	264	263	262	265	266	227
105°	355	351	346	348	350	375
115°	434	432	431	432	437	423
125°	400	399	401	401	403	363
135°	436	435	436	443	444	339
145°	443	437	444	437	437	278
155°	338	340	343	340	342	158
165°	308	306	306	303	308	87
175°	209	208	206	208	208	22
180°	180	180	180	180	180	



TEST NUMBER: P231521

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6925.7	6925.7	6925.7	6925.7	6925.7
2.5°	6995.4	6983.8	6965.2	6960.5	6957.1
5°	7171.0	7155.9	7141.9	7118.7	7121.0
7.5°	7336.1	7345.4	7361.6	7333.7	7315.1
10°	7367.5	7402.3	7460.5	7412.8	7365.1
12.5°	7325.6	7381.4	7443.0	7373.3	7317.5
15°	7039.6	7101.2	7180.3	7103.5	7053.6
17.5°	6635.0	6687.3	6769.9	6683.8	6690.8
20°	6231.6	6288.6	6322.3	6340.9	6294.4
22.5°	5839.8	5989.8	5965.4	6037.4	5901.4
25°	5606.1	5801.4	5791.0	5860.7	5689.8
27.5°	5521.2	5749.1	5793.3	5796.8	5635.2
30°	5641.0	5731.7	5950.2	5796.8	5758.4
32.5°	5800.3	5767.7	6159.5	5861.9	5946.7
35°	5829.3	5842.1	6154.9	5929.3	6000.2
37.5°	5715.4	5857.2	5960.7	5947.9	5854.9
40°	5521.2	5749.1	5739.8	5806.1	5628.2
42.5°	5425.9	5537.5	5537.5	5585.2	5460.8
45°	5215.5	5195.7	5224.8	5244.5	5208.5
47.5°	4764.4	4727.2	4708.6	4777.2	4773.7
50°	4145.9	4121.5	4087.7	4169.1	4188.9
52.5°	3606.4	3555.3	3523.9	3547.1	3525.0
55°	3100.7	3129.7	3065.8	3077.4	3008.8
57.5°	2653.1	2718.2	2689.1	2679.8	2628.7
60°	2124.1	2169.4	2138.0	2152.0	2106.6
62.5°	1670.7	1702.1	1716.0	1710.2	1686.9
65°	1346.3	1361.4	1383.5	1369.6	1362.6
67.5°	1111.5	1125.4	1131.2	1127.7	1132.4
70°	942.9	946.4	953.3	942.9	956.8
72.5°	789.4	796.4	796.4	797.6	804.5
75°	640.6	638.3	641.8	637.1	641.8
77.5°	515.0	515.0	512.7	510.4	517.4
80°	422.0	417.4	416.2	415.1	419.7
82.5°	336.0	337.2	337.2	336.0	334.8
85°	267.4	268.6	268.6	267.4	268.6
87.5°	230.2	230.2	231.4	231.4	230.2
90°	220.9	222.1	220.9	223.2	223.2
92.5°	236.0	236.0	237.2	239.5	238.3
95°	263.9	262.7	261.6	265.1	266.2
97.5°	290.7	289.5	291.8	294.1	296.5
100°	320.9	320.9	323.2	324.4	326.7
102.5°	333.7	333.7	332.5	336.0	338.3
105°	354.6	351.1	346.5	347.6	349.9
107.5°	370.9	369.7	368.5	370.9	372.0
110°	395.3	394.1	394.1	394.1	396.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	419.7	419.7	418.5	419.7	422.0
115°	433.7	432.5	431.3	432.5	437.1
117.5°	437.1	437.1	434.8	438.3	441.8
120°	431.3	430.2	430.2	432.5	436.0
122.5°	416.2	415.1	415.1	417.4	420.9
125°	399.9	398.8	401.1	401.1	403.4
127.5°	388.3	389.5	391.8	389.5	390.6
130°	390.6	391.8	396.4	393.0	393.0
132.5°	403.4	404.6	412.7	410.4	410.4
135°	436.0	434.8	436.0	443.0	444.1
137.5°	473.2	463.9	451.1	474.3	480.2
140°	504.6	479.0	474.3	484.8	502.2
142.5°	481.3	467.4	455.7	469.7	480.2
145°	443.0	437.1	444.1	437.1	437.1
147.5°	398.8	406.9	422.0	401.1	399.9
150°	365.1	381.3	387.1	375.5	367.4
152.5°	349.9	356.9	360.4	354.6	354.6
155°	338.3	339.5	343.0	339.5	341.8
157.5°	330.2	333.7	333.7	333.7	332.5
160°	323.2	327.9	326.7	326.7	324.4
162.5°	318.6	320.9	319.7	319.7	319.7
165°	308.1	305.8	305.8	303.4	308.1
167.5°	290.7	287.2	287.2	286.0	289.5
170°	268.6	268.6	267.4	267.4	265.1
172.5°	232.5	231.4	230.2	230.2	230.2
175°	209.3	208.1	205.8	208.1	208.1
177.5°	191.8	191.8	193.0	190.7	190.7
180°	180.2	180.2	180.2	180.2	180.2

(END OF REPORT)