

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: P231528

Luminaire Tested: **SSLED-LD5-36-W-UNV-L840-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: P231528  
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-LD5-36-W-UNV-L840-CD2-U-CLR22-FRCDL22  
Description: STEELER CLEAR REFRACTOR LENS AND CIRCULAR DROP  
Light Source: (240) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: (2) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32437.0 lumens  
Efficiency: N/A  
Efficacy: 97.2 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

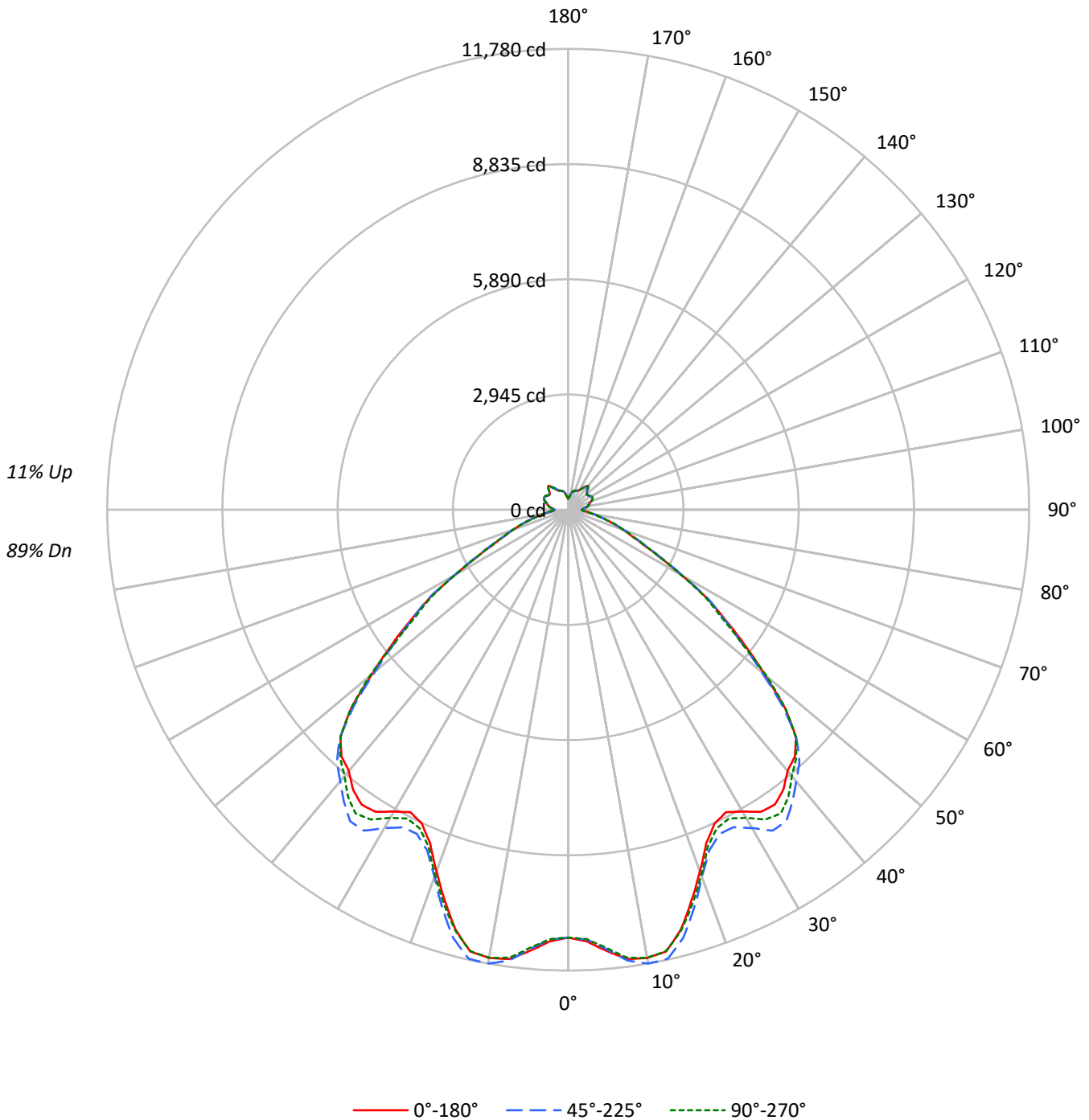
Input Watts (W): 333.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	44592	44592	44592
5°	43693	43516	43388
10°	42913	43455	42900
15°	39562	40353	39641
20°	34083	34579	34426
25°	30085	31077	30534
30°	29936	31577	30559
35°	30828	32550	31732
40°	29320	30481	29888
45°	28026	28076	27989
50°	22722	22404	22958
55°	17475	17278	16957
60°	12417	12498	12315
65°	8240	8467	8339
70°	6104	6171	6194
75°	4437	4445	4445
80°	3168	3125	3151
85°	2210	2220	2220



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1092.3	3.4
10°-20°	3110.9	9.6
20°-30°	4286.9	13.2
30°-40°	5831.4	18.0
40°-50°	6216.0	19.2
50°-60°	4384.5	13.5
60°-70°	2238.0	6.9
70°-80°	1096.2	3.4
80°-90°	497.1	1.5
90°-100°	458.9	1.4
100°-110°	589.6	1.8
110°-120°	667.0	2.1
120°-130°	574.2	1.8
130°-140°	534.2	1.6
140°-150°	435.4	1.3
150°-160°	253.5	0.8
160°-170°	136.8	0.4
170°-180°	34.1	0.1
0°-30°	8490.2	26.2
0°-40°	14321.5	44.2
0°-60°	24922.0	76.8
0°-90°	28753.2	88.6
90°-120°	1715.5	5.3
90°-150°	3259.3	10.0
90°-180°	3684.0	11.4
0°-180°	32437.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10936	10936	10936	10936	10936	
5°	11323	11300	11278	11241	11244	###
15°	11116	11213	11338	11217	11138	3083
25°	8852	9161	9144	9254	8984	4172
35°	9205	9225	9719	9363	9475	5683
45°	8236	8204	8250	8281	8224	6165
55°	4896	4942	4841	4859	4751	4399
65°	2126	2150	2185	2163	2152	2207
75°	1012	1008	1013	1006	1013	1094
85°	422	424	424	422	424	399
90°	349	351	349	352	352	196
95°	417	415	413	419	420	358
105°	560	554	547	549	553	591
115°	685	683	681	683	690	667
125°	632	630	633	633	637	573
135°	688	687	688	700	701	536
145°	700	690	701	690	690	439
155°	534	536	542	536	540	250
165°	486	483	483	479	486	137
175°	330	329	325	329	329	34
180°	285	285	285	285	285	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10936.0	10936.0	10936.0	10936.0	10936.0
2.5°	11046.2	11027.8	10998.4	10991.1	10985.6
5°	11323.4	11299.5	11277.5	11240.8	11244.4
7.5°	11584.1	11598.8	11624.5	11580.4	11551.0
10°	11633.6	11688.7	11780.5	11705.2	11630.0
12.5°	11567.5	11655.7	11753.0	11642.8	11554.7
15°	11115.9	11213.2	11338.1	11216.9	11138.0
17.5°	10477.1	10559.7	10690.0	10554.2	10565.2
20°	9840.0	9930.0	9983.2	10012.6	9939.2
22.5°	9221.4	9458.2	9419.6	9533.5	9318.7
25°	8852.4	9160.8	9144.3	9254.4	8984.5
27.5°	8718.3	9078.2	9147.9	9153.4	8898.3
30°	8907.4	9050.6	9395.8	9153.4	9092.9
32.5°	9158.9	9107.5	9726.2	9256.2	9390.3
35°	9204.8	9225.0	9718.9	9362.7	9474.7
37.5°	9024.9	9248.9	9412.3	9392.1	9245.2
40°	8718.3	9078.2	9063.5	9168.1	8887.2
42.5°	8567.8	8744.0	8744.0	8819.3	8622.9
45°	8235.5	8204.3	8250.2	8281.4	8224.5
47.5°	7523.2	7464.5	7435.1	7543.4	7537.9
50°	6546.6	6508.0	6454.8	6583.3	6614.5
52.5°	5694.7	5614.0	5564.4	5601.1	5566.2
55°	4896.2	4942.0	4841.1	4859.4	4751.1
57.5°	4189.4	4292.2	4246.3	4231.6	4150.8
60°	3354.1	3425.7	3376.1	3398.1	3326.5
62.5°	2638.1	2687.7	2709.7	2700.5	2663.8
65°	2125.9	2149.8	2184.6	2162.6	2151.6
67.5°	1755.1	1777.1	1786.3	1780.8	1788.1
70°	1488.9	1494.4	1505.4	1488.9	1510.9
72.5°	1246.5	1257.5	1257.5	1259.4	1270.4
75°	1011.5	1007.9	1013.4	1006.0	1013.4
77.5°	813.3	813.3	809.6	805.9	816.9
80°	666.4	659.1	657.2	655.4	662.7
82.5°	530.6	532.4	532.4	530.6	528.7
85°	422.2	424.1	424.1	422.2	424.1
87.5°	363.5	363.5	365.3	365.3	363.5
90°	348.8	350.6	348.8	352.5	352.5
92.5°	372.7	372.7	374.5	378.2	376.3
95°	416.7	414.9	413.1	418.6	420.4
97.5°	459.0	457.1	460.8	464.5	468.1
100°	506.7	506.7	510.4	512.2	515.9
102.5°	526.9	526.9	525.0	530.6	534.2
105°	559.9	554.4	547.1	548.9	552.6
107.5°	585.6	583.8	582.0	585.6	587.5
110°	624.2	622.3	622.3	622.3	626.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	662.7	662.7	660.9	662.7	666.4
115°	684.8	682.9	681.1	682.9	690.3
117.5°	690.3	690.3	686.6	692.1	697.6
120°	681.1	679.3	679.3	682.9	688.4
122.5°	657.2	655.4	655.4	659.1	664.6
125°	631.5	629.7	633.4	633.4	637.0
127.5°	613.2	615.0	618.7	615.0	616.8
130°	616.8	618.7	626.0	620.5	620.5
132.5°	637.0	638.9	651.7	648.0	648.0
135°	688.4	686.6	688.4	699.5	701.3
137.5°	747.2	732.5	712.3	749.0	758.2
140°	796.7	756.4	749.0	765.5	793.1
142.5°	760.0	738.0	719.6	741.7	758.2
145°	699.5	690.3	701.3	690.3	690.3
147.5°	629.7	642.5	666.4	633.4	631.5
150°	576.4	602.2	611.3	593.0	580.1
152.5°	552.6	563.6	569.1	559.9	559.9
155°	534.2	536.1	541.6	536.1	539.7
157.5°	521.4	526.9	526.9	526.9	525.0
160°	510.4	517.7	515.9	515.9	512.2
162.5°	503.0	506.7	504.9	504.9	504.9
165°	486.5	482.8	482.8	479.2	486.5
167.5°	459.0	453.4	453.4	451.6	457.1
170°	424.1	424.1	422.2	422.2	418.6
172.5°	367.2	365.3	363.5	363.5	363.5
175°	330.4	328.6	324.9	328.6	328.6
177.5°	302.9	302.9	304.7	301.1	301.1
180°	284.6	284.6	284.6	284.6	284.6

(END OF REPORT)