

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: P231507

Luminaire Tested: **SSLED-LD5-36-W-UNV-L840-CD2-U-CLR22-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: P231507  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-6)  
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-CLCDL22  
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL 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: 33269.0 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 1.63 / 1.67 / 1.65  
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')  
CIE Type: Direct

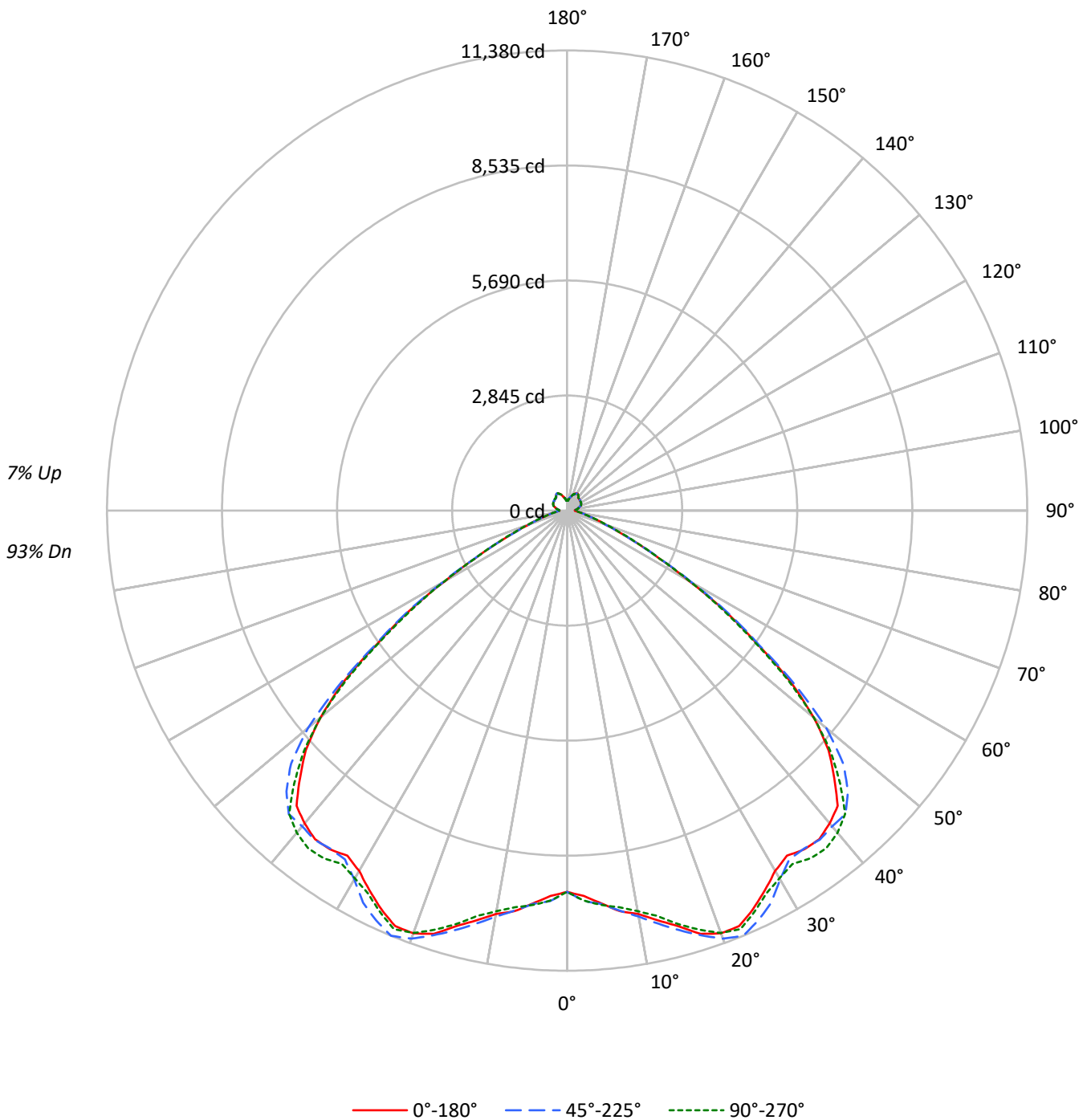
Input Watts (W): 333.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93				
1	109	105	101	98	105	102	98	95	96	94	91	91	89	87	87	85	84	81				
2	100	93	87	82	97	90	85	80	86	81	77	82	78	75	78	75	72	70				
3	92	82	75	69	89	80	73	68	76	71	66	73	68	64	69	65	62	60				
4	84	73	65	59	81	71	64	58	68	62	57	65	60	55	62	58	54	52				
5	78	66	57	51	75	64	56	50	61	54	49	59	53	48	56	51	47	45				
6	72	59	51	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	40	35	60	48	40	34	46	39	34	44	38	33	42	37	33	31				
9	57	44	36	31	56	44	36	31	42	35	30	40	34	30	39	33	29	28				
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	27	25				

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

	0°	45°	90°
0°	46511	46511	46511
5°	44796	44872	44990
10°	43843	44137	43548
15°	43873	44304	43638
20°	44105	44658	44068
25°	41823	43009	42119
30°	38698	39596	39506
35°	37923	37855	38924
40°	37213	37558	38329
45°	34468	36222	35219
50°	29629	31139	29643
55°	21622	21928	21358
60°	13538	13880	13652
65°	7627	7619	7774
70°	4239	4162	4431
75°	2532	2556	2597
80°	1775	1757	1766
85°	1217	1226	1217



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	943.4	2.8
10°-20°	3031.8	9.1
20°-30°	5046.8	15.2
30°-40°	6492.0	19.5
40°-50°	7335.0	22.0
50°-60°	5209.3	15.7
60°-70°	2009.3	6.0
70°-80°	660.8	2.0
80°-90°	281.2	0.8
90°-100°	240.8	0.7
100°-110°	327.6	1.0
110°-120°	376.6	1.1
120°-130°	358.6	1.1
130°-140°	321.3	1.0
140°-150°	292.7	0.9
150°-160°	211.8	0.6
160°-170°	103.8	0.3
170°-180°	26.3	0.1
0°-30°	9022.0	27.1
0°-40°	15514.0	46.6
0°-60°	28058.3	84.3
0°-90°	31009.6	93.2
90°-120°	944.9	2.8
90°-150°	1917.5	5.8
90°-180°	2259.0	6.8
0°-180°	33269.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9427	9427	9427	9427	9427	
5°	9750	9745	9767	9723	9792	944
15°	10640	10688	10745	10655	10584	3036
25°	10876	10820	11184	10901	10953	4997
35°	10226	10231	10207	10402	10496	6405
45°	9343	9488	9818	9634	9546	7150
55°	5713	5858	5794	5785	5643	5138
65°	1902	1871	1900	1902	1939	1995
75°	575	588	580	584	589	660
85°	240	242	242	242	240	226
90°	189	191	191	193	191	106
95°	209	209	211	213	215	184
105°	314	310	301	307	305	329
115°	382	380	380	384	386	376
125°	398	398	402	400	402	357
135°	413	411	413	419	422	320
145°	474	474	474	477	479	292
155°	459	457	442	455	455	214
165°	349	356	354	352	345	102
175°	253	250	250	250	250	26
180°	274	274	274	274	274	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9427.0	9427.0	9427.0	9427.0	9427.0
2.5°	9540.8	9651.0	9665.7	9584.9	9656.5
5°	9750.1	9744.6	9766.6	9722.6	9792.3
7.5°	9994.3	9961.2	9977.8	9922.7	9893.3
10°	10126.5	10119.1	10194.4	10115.5	10058.5
12.5°	10379.8	10365.1	10467.9	10350.4	10266.0
15°	10640.5	10688.2	10745.1	10655.2	10583.6
17.5°	10976.5	10870.0	11011.3	10857.1	10866.3
20°	11125.2	10976.5	11264.7	10998.5	11116.0
22.5°	11123.3	11038.9	11380.3	10971.0	11202.3
25°	10875.5	10820.4	11183.9	10901.2	10952.6
27.5°	10587.3	10691.9	10928.7	10787.4	10669.9
30°	10288.0	10614.8	10526.7	10765.3	10502.8
32.5°	10119.1	10433.1	10227.4	10607.5	10363.3
35°	10225.6	10231.1	10207.2	10401.8	10495.5
37.5°	10244.0	10170.5	10262.3	10311.9	10526.7
40°	10098.9	10139.3	10192.6	10313.7	10401.8
42.5°	9904.3	9950.2	10185.2	10098.9	10176.0
45°	9342.6	9487.6	9818.1	9634.5	9546.3
47.5°	8771.6	9114.9	9263.6	9217.7	8846.9
50°	7960.2	8246.6	8365.9	8340.2	7963.9
52.5°	6983.5	7029.4	7145.1	7051.4	6882.5
55°	5713.1	5858.2	5793.9	5784.7	5643.4
57.5°	4661.2	4745.6	4729.1	4705.2	4543.7
60°	3489.9	3556.0	3578.0	3570.7	3519.3
62.5°	2584.9	2597.7	2606.9	2645.4	2575.7
65°	1901.9	1870.7	1900.1	1901.9	1938.6
67.5°	1362.2	1351.2	1367.7	1376.9	1422.8
70°	1013.4	1000.5	995.0	1024.4	1059.3
72.5°	776.6	765.5	771.1	783.9	789.4
75°	574.6	587.5	580.1	583.8	589.3
77.5°	457.1	455.3	451.6	453.5	459.0
80°	378.2	374.5	374.5	370.8	376.3
82.5°	301.1	304.7	302.9	304.7	304.7
85°	240.5	242.3	242.3	242.3	240.5
87.5°	201.9	203.8	201.9	205.6	203.8
90°	189.1	190.9	190.9	192.8	190.9
92.5°	192.8	196.4	196.4	200.1	198.3
95°	209.3	209.3	211.1	213.0	214.8
97.5°	238.7	240.5	244.2	246.0	246.0
100°	266.2	269.9	271.7	273.5	277.2
102.5°	282.7	282.7	282.7	286.4	286.4
105°	313.9	310.3	301.1	306.6	304.7
107.5°	336.0	332.3	330.5	336.0	339.6
110°	359.8	356.2	354.3	359.8	363.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	370.8	369.0	369.0	372.7	376.3
115°	381.9	380.0	380.0	383.7	385.5
117.5°	387.4	387.4	391.0	391.0	392.9
120°	389.2	391.0	394.7	394.7	394.7
122.5°	394.7	392.9	398.4	396.5	398.4
125°	398.4	398.4	402.0	400.2	402.0
127.5°	402.0	400.2	403.9	403.9	403.9
130°	405.7	405.7	409.4	409.4	409.4
132.5°	409.4	407.6	411.2	413.1	416.7
135°	413.1	411.2	413.1	418.6	422.2
137.5°	416.7	414.9	414.9	420.4	425.9
140°	422.2	424.1	420.4	425.9	427.7
142.5°	447.9	447.9	442.4	447.9	455.3
145°	473.6	473.6	473.6	477.3	479.2
147.5°	486.5	488.3	490.2	490.2	492.0
150°	490.2	490.2	490.2	490.2	492.0
152.5°	484.7	482.8	471.8	481.0	482.8
155°	459.0	457.1	442.4	455.3	455.3
157.5°	436.9	435.1	420.4	433.3	435.1
160°	420.4	429.6	414.9	427.7	418.6
162.5°	380.0	398.4	389.2	392.9	378.2
165°	348.8	356.2	354.3	352.5	345.1
167.5°	328.6	336.0	332.3	334.1	323.1
170°	308.4	313.9	315.8	310.3	302.9
172.5°	273.5	277.2	282.7	273.5	273.5
175°	253.3	249.7	249.7	249.7	249.7
177.5°	262.5	262.5	264.4	258.9	258.9
180°	273.5	273.5	273.5	273.5	273.5

(END OF REPORT)