

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: P231480

Luminaire Tested: **SSLED-LD5-24-W-UNV-L840-CD2-U-CLR22**

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: P231480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-5)
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-L840-CD2-U-CLR22
Description: STEELER CLEAR REFRACTOR LENS
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: 23450.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 1.48 / 1.49
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Direct

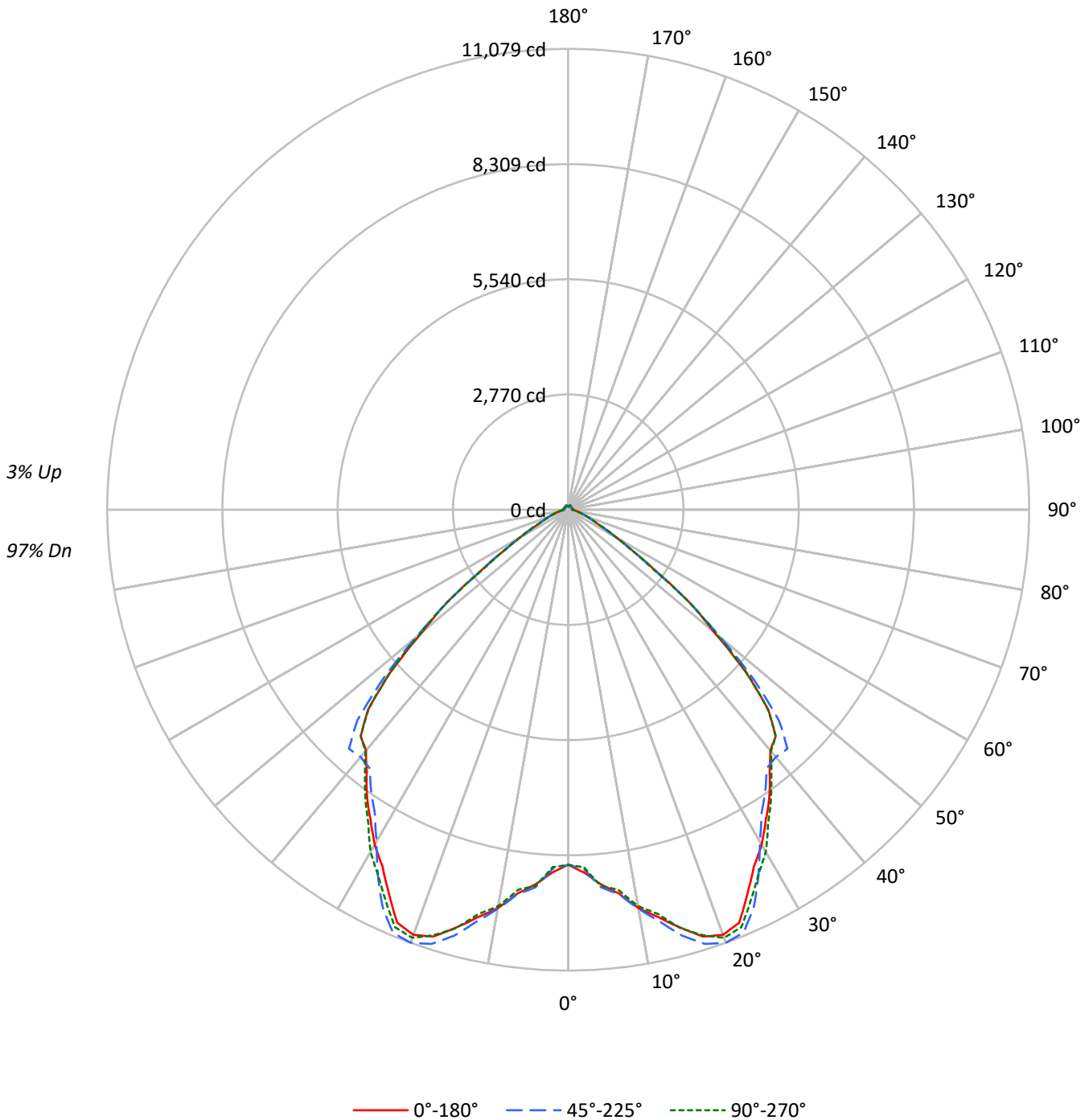
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97				
1	111	107	103	100	108	104	101	99	100	97	95	95	94	92	92	90	89	86				
2	103	96	91	86	100	94	89	85	90	86	82	87	83	80	83	81	78	76				
3	95	86	80	74	93	85	78	73	81	76	72	78	74	70	76	72	69	67				
4	88	78	70	65	86	76	70	64	74	68	63	71	66	62	69	65	61	59				
5	82	71	63	57	80	69	62	57	67	61	56	65	59	55	63	58	54	52				
6	76	64	56	51	74	63	56	50	61	55	50	59	54	49	58	53	49	47				
7	71	59	51	45	69	58	50	45	56	49	45	54	49	44	53	48	44	42				
8	66	54	46	41	64	53	46	41	52	45	40	50	44	40	49	43	39	38				
9	62	50	42	37	60	49	42	37	48	41	36	46	40	36	45	40	36	34				
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34816	34816	34816
5°	34876	35179	35030
10°	35859	35941	35684
15°	37015	37736	37055
20°	37672	38374	37930
25°	34626	35856	35260
30°	31250	30945	31923
35°	28243	27664	28455
40°	25412	26111	25500
45°	23142	24382	23100
50°	15890	16564	16137
55°	9173	8862	8951
60°	4953	5041	4962
65°	2848	2969	2892
70°	1947	1998	1998
75°	1380	1402	1385
80°	1029	1040	1023
85°	735	742	729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	880.8	3.8
10°-20°	2986.4	12.7
20°-30°	4790.2	20.4
30°-40°	5267.3	22.5
40°-50°	5125.8	21.9
50°-60°	2457.6	10.5
60°-70°	803.6	3.4
70°-80°	350.3	1.5
80°-90°	161.8	0.7
90°-100°	110.2	0.5
100°-110°	111.9	0.5
110°-120°	101.2	0.4
120°-130°	80.6	0.3
130°-140°	71.1	0.3
140°-150°	65.3	0.3
150°-160°	50.8	0.2
160°-170°	27.6	0.1
170°-180°	7.5	0.0
0°-30°	8657.4	36.9
0°-40°	13924.8	59.4
0°-60°	21508.1	91.7
0°-90°	22823.8	97.3
90°-120°	323.2	1.4
90°-150°	540.3	2.3
90°-180°	626.0	2.7
0°-180°	23450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8539	8539	8539	8539	8539	
5°	9038	9032	9117	9082	9078	881
15°	10400	10516	10603	10480	10411	2959
25°	10189	10544	10550	10665	10375	4684
35°	8433	8251	8260	8334	8496	5264
45°	6800	6714	7165	6722	6788	5011
55°	2570	2583	2483	2560	2508	2448
65°	735	748	766	762	746	787
75°	315	317	320	317	316	347
85°	140	140	142	142	139	131
90°	98	101	101	102	100	55
95°	93	92	93	96	97	81
105°	114	104	104	100	108	113
115°	98	104	103	103	101	101
125°	86	86	86	87	90	80
135°	92	91	88	91	93	72
145°	104	103	104	104	107	65
155°	111	111	111	111	109	51
165°	98	97	97	96	94	28
175°	77	77	76	76	77	8
180°	78	78	78	78	78	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8538.6	8538.6	8538.6	8538.6	8538.6
2.5°	8728.9	8684.1	8641.9	8610.8	8603.3
5°	9038.5	9032.3	9116.8	9082.0	9078.3
7.5°	9305.8	9322.0	9318.3	9273.5	9215.1
10°	9721.2	9724.9	9743.5	9718.7	9673.9
12.5°	10037.0	10180.0	10136.5	10091.7	9952.4
15°	10400.1	10515.7	10602.7	10479.6	10411.3
17.5°	10758.2	10881.3	10945.9	10914.8	10723.4
20°	10876.3	11067.8	11079.0	11108.8	10950.9
22.5°	10743.3	10962.1	11003.1	11060.3	10865.1
25°	10188.7	10544.3	10550.5	10664.9	10375.2
27.5°	9666.4	9966.1	9902.7	10115.3	9895.2
30°	9298.4	9350.6	9207.6	9476.2	9498.6
32.5°	8840.8	8711.5	8649.3	8776.1	8941.5
35°	8433.0	8251.4	8260.1	8333.5	8496.4
37.5°	7955.5	8082.3	7836.1	8184.3	8020.1
40°	7556.3	7801.3	7764.0	7861.0	7582.4
42.5°	7379.8	7356.1	7798.8	7371.1	7381.0
45°	6800.3	6714.5	7164.7	6722.0	6787.9
47.5°	5798.1	6077.9	6061.7	6161.2	5834.2
50°	4578.3	4864.3	4772.3	4983.7	4649.2
52.5°	3696.7	3573.6	3671.9	3612.2	3696.7
55°	2570.2	2582.6	2483.1	2560.2	2508.0
57.5°	1822.9	1863.9	1827.8	1825.4	1806.7
60°	1337.9	1342.9	1361.6	1357.8	1340.4
62.5°	978.6	988.5	1009.7	1008.4	997.2
65°	734.9	748.5	766.0	762.2	746.1
67.5°	573.2	588.1	591.9	594.4	596.8
70°	475.0	480.0	487.4	487.4	487.4
72.5°	395.4	401.6	402.9	404.1	401.6
75°	314.6	317.1	319.6	317.1	315.8
77.5°	259.9	259.9	258.6	257.4	258.6
80°	216.4	217.6	218.8	216.4	215.1
82.5°	176.6	177.8	179.1	177.8	177.8
85°	140.5	140.5	141.8	141.8	139.3
87.5°	115.6	115.6	115.6	116.9	115.6
90°	98.2	100.7	100.7	102.0	99.5
92.5°	88.3	90.8	90.8	93.3	90.8
95°	93.3	92.0	93.3	95.7	97.0
97.5°	104.4	106.9	110.7	114.4	110.7
100°	109.4	118.1	120.6	120.6	113.2
102.5°	106.9	105.7	110.7	108.2	111.9
105°	114.4	104.4	104.4	99.5	108.2
107.5°	100.7	105.7	89.5	105.7	99.5
110°	102.0	99.5	98.2	102.0	103.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.4	95.7	103.2	95.7	104.4
115°	98.2	104.4	103.2	103.2	100.7
117.5°	102.0	104.4	106.9	108.2	102.0
120°	99.5	95.7	99.5	102.0	102.0
122.5°	89.5	88.3	89.5	92.0	97.0
125°	85.8	85.8	85.8	87.0	89.5
127.5°	87.0	87.0	85.8	87.0	88.3
130°	90.8	89.5	90.8	90.8	92.0
132.5°	92.0	90.8	88.3	90.8	94.5
135°	92.0	90.8	88.3	90.8	93.3
137.5°	93.3	92.0	92.0	92.0	94.5
140°	95.7	97.0	97.0	97.0	97.0
142.5°	100.7	100.7	100.7	100.7	103.2
145°	104.4	103.2	104.4	104.4	106.9
147.5°	108.2	106.9	108.2	108.2	109.4
150°	110.7	109.4	110.7	110.7	110.7
152.5°	111.9	110.7	111.9	111.9	111.9
155°	110.7	110.7	110.7	110.7	109.4
157.5°	108.2	108.2	108.2	108.2	106.9
160°	105.7	106.9	105.7	105.7	104.4
162.5°	102.0	102.0	102.0	100.7	100.7
165°	98.2	97.0	97.0	95.7	94.5
167.5°	93.3	92.0	90.8	90.8	89.5
170°	85.8	85.8	85.8	84.6	84.6
172.5°	78.3	77.1	77.1	77.1	75.8
175°	77.1	77.1	75.8	75.8	77.1
177.5°	77.1	77.1	78.3	77.1	77.1
180°	78.3	78.3	78.3	78.3	78.3

(END OF REPORT)