

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: P231502

Luminaire Tested: **SSLED-LD5-24-W-UNV-L850-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: P231502
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-LD5-24-W-UNV-L850-CD2-U-CLR22-CLCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL DROP
Light Source: (240) 5000 CCT, 80 CRI LEDS
Ballast/Driver: (2) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23246.0 lumens
Efficiency: N/A
Efficacy: 122.0 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

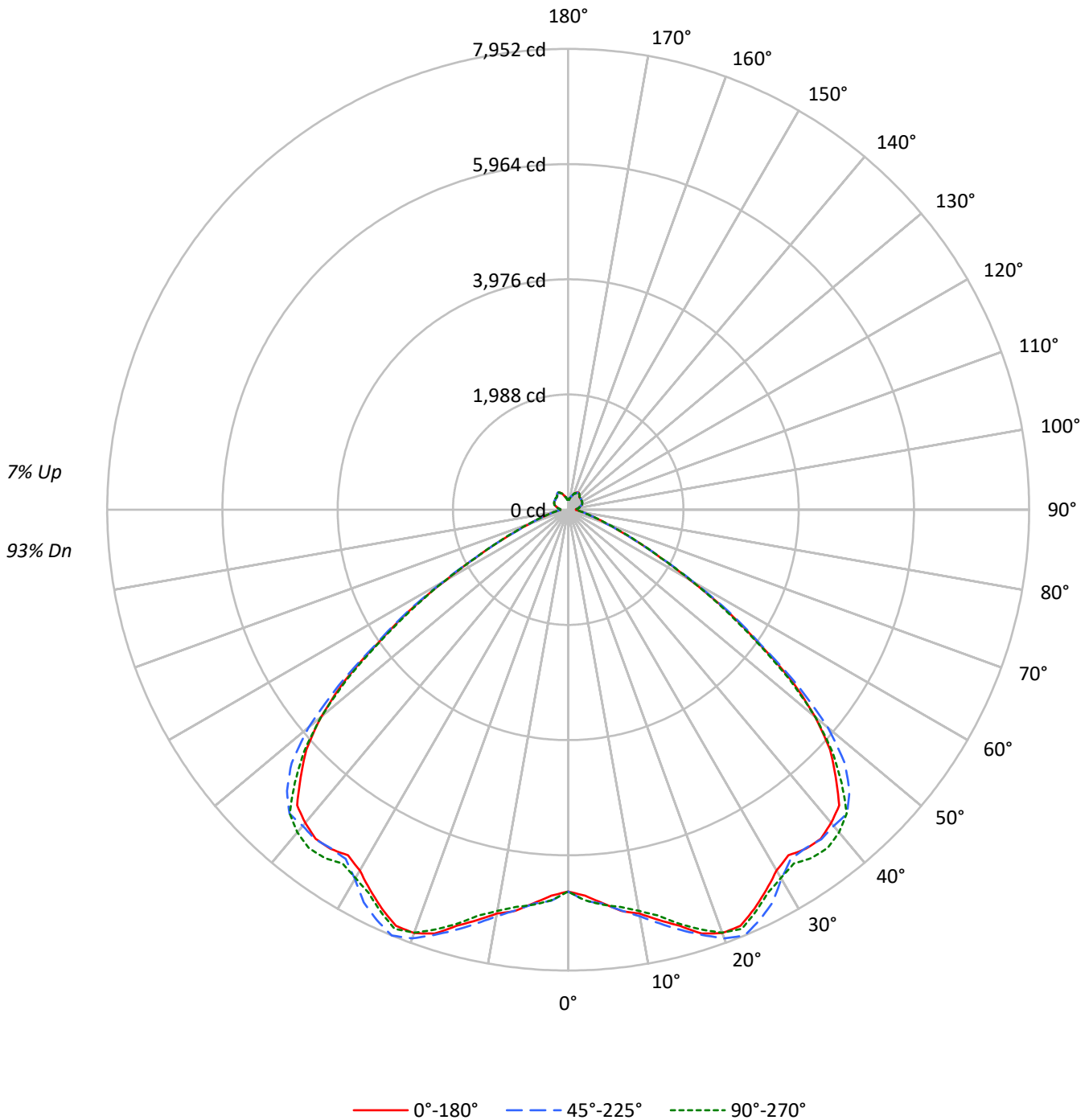
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	32499	32499	32499
5°	31300	31353	31436
10°	30634	30840	30429
15°	30655	30956	30491
20°	30817	31204	30792
25°	29223	30051	29430
30°	27040	27667	27604
35°	26498	26450	27197
40°	26002	26243	26782
45°	24083	25309	24609
50°	20702	21758	20712
55°	15108	15322	14923
60°	9459	9698	9539
65°	5329	5324	5432
70°	2962	2908	3096
75°	1769	1786	1815
80°	1240	1228	1234
85°	850	857	850



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	659.2	2.8
10°-20°	2118.4	9.1
20°-30°	3526.3	15.2
30°-40°	4536.2	19.5
40°-50°	5125.2	22.0
50°-60°	3639.9	15.7
60°-70°	1403.9	6.0
70°-80°	461.7	2.0
80°-90°	196.5	0.8
90°-100°	168.2	0.7
100°-110°	228.9	1.0
110°-120°	263.1	1.1
120°-130°	250.6	1.1
130°-140°	224.5	1.0
140°-150°	204.5	0.9
150°-160°	148.0	0.6
160°-170°	72.5	0.3
170°-180°	18.4	0.1
0°-30°	6303.9	27.1
0°-40°	10840.1	46.6
0°-60°	19605.2	84.3
0°-90°	21667.3	93.2
90°-120°	660.2	2.8
90°-150°	1339.8	5.8
90°-180°	1579.0	6.8
0°-180°	23246.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6587	6587	6587	6587	6587	
5°	6813	6809	6824	6793	6842	659
15°	7435	7468	7508	7445	7395	2121
25°	7599	7560	7814	7617	7653	3492
35°	7145	7149	7132	7268	7334	4475
45°	6528	6629	6860	6732	6670	4996
55°	3992	4093	4048	4042	3943	3590
65°	1329	1307	1328	1329	1355	1394
75°	402	410	405	408	412	461
85°	168	169	169	169	168	158
90°	132	133	133	135	133	74
95°	146	146	148	149	150	129
105°	219	217	210	214	213	230
115°	267	266	266	268	269	262
125°	278	278	281	280	281	249
135°	289	287	289	292	295	224
145°	331	331	331	334	335	204
155°	321	319	309	318	318	149
165°	244	249	248	246	241	71
175°	177	174	174	174	174	18
180°	191	191	191	191	191	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6586.9	6586.9	6586.9	6586.9	6586.9
2.5°	6666.5	6743.4	6753.7	6697.2	6747.3
5°	6812.7	6808.8	6824.2	6793.4	6842.2
7.5°	6983.3	6960.2	6971.8	6933.3	6912.7
10°	7075.7	7070.5	7123.1	7068.0	7028.2
12.5°	7252.7	7242.4	7314.2	7232.2	7173.1
15°	7434.8	7468.2	7507.9	7445.1	7395.1
17.5°	7669.6	7595.2	7693.9	7586.2	7592.6
20°	7773.5	7669.6	7871.0	7685.0	7767.1
22.5°	7772.2	7713.2	7951.8	7665.7	7827.3
25°	7599.0	7560.5	7814.5	7617.0	7652.9
27.5°	7397.6	7470.7	7636.2	7537.4	7455.3
30°	7188.5	7416.9	7355.3	7522.1	7338.6
32.5°	7070.5	7289.9	7146.2	7411.7	7241.1
35°	7144.9	7148.8	7132.1	7268.1	7333.5
37.5°	7157.8	7106.4	7170.6	7205.2	7355.3
40°	7056.4	7084.6	7121.8	7206.5	7268.1
42.5°	6920.4	6952.5	7116.7	7056.4	7110.3
45°	6527.9	6629.3	6860.2	6731.9	6670.3
47.5°	6129.0	6368.9	6472.8	6440.7	6181.6
50°	5562.0	5762.1	5845.5	5827.5	5564.6
52.5°	4879.6	4911.7	4992.5	4927.0	4809.0
55°	3991.9	4093.3	4048.4	4041.9	3943.2
57.5°	3256.9	3315.9	3304.4	3287.7	3174.8
60°	2438.5	2484.7	2500.1	2495.0	2459.0
62.5°	1806.1	1815.1	1821.5	1848.4	1799.7
65°	1328.9	1307.1	1327.6	1328.9	1354.6
67.5°	951.8	944.1	955.6	962.1	994.1
70°	708.1	699.1	695.3	715.8	740.1
72.5°	542.6	534.9	538.8	547.7	551.6
75°	401.5	410.5	405.3	407.9	411.8
77.5°	319.4	318.1	315.6	316.8	320.7
80°	264.2	261.7	261.7	259.1	263.0
82.5°	210.4	212.9	211.7	212.9	212.9
85°	168.0	169.3	169.3	169.3	168.0
87.5°	141.1	142.4	141.1	143.7	142.4
90°	132.1	133.4	133.4	134.7	133.4
92.5°	134.7	137.3	137.3	139.8	138.5
95°	146.2	146.2	147.5	148.8	150.1
97.5°	166.8	168.0	170.6	171.9	171.9
100°	186.0	188.6	189.8	191.1	193.7
102.5°	197.5	197.5	197.5	200.1	200.1
105°	219.4	216.8	210.4	214.2	212.9
107.5°	234.7	232.2	230.9	234.7	237.3
110°	251.4	248.9	247.6	251.4	254.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	259.1	257.8	257.8	260.4	263.0
115°	266.8	265.5	265.5	268.1	269.4
117.5°	270.7	270.7	273.2	273.2	274.5
120°	271.9	273.2	275.8	275.8	275.8
122.5°	275.8	274.5	278.4	277.1	278.4
125°	278.4	278.4	280.9	279.6	280.9
127.5°	280.9	279.6	282.2	282.2	282.2
130°	283.5	283.5	286.1	286.1	286.1
132.5°	286.1	284.8	287.3	288.6	291.2
135°	288.6	287.3	288.6	292.5	295.0
137.5°	291.2	289.9	289.9	293.8	297.6
140°	295.0	296.3	293.8	297.6	298.9
142.5°	313.0	313.0	309.1	313.0	318.1
145°	330.9	330.9	330.9	333.5	334.8
147.5°	339.9	341.2	342.5	342.5	343.8
150°	342.5	342.5	342.5	342.5	343.8
152.5°	338.6	337.4	329.7	336.1	337.4
155°	320.7	319.4	309.1	318.1	318.1
157.5°	305.3	304.0	293.8	302.7	304.0
160°	293.8	300.2	289.9	298.9	292.5
162.5°	265.5	278.4	271.9	274.5	264.2
165°	243.7	248.9	247.6	246.3	241.2
167.5°	229.6	234.7	232.2	233.5	225.8
170°	215.5	219.4	220.6	216.8	211.7
172.5°	191.1	193.7	197.5	191.1	191.1
175°	177.0	174.5	174.5	174.5	174.5
177.5°	183.4	183.4	184.7	180.9	180.9
180°	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)