

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: P231500

Luminaire Tested: **SSLED-LD5-24-W-UNV-L835-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: P231500
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-L835-CD2-U-CLR22-CLCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL 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: 21069.0 lumens
Efficiency: N/A
Efficacy: 110.5 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

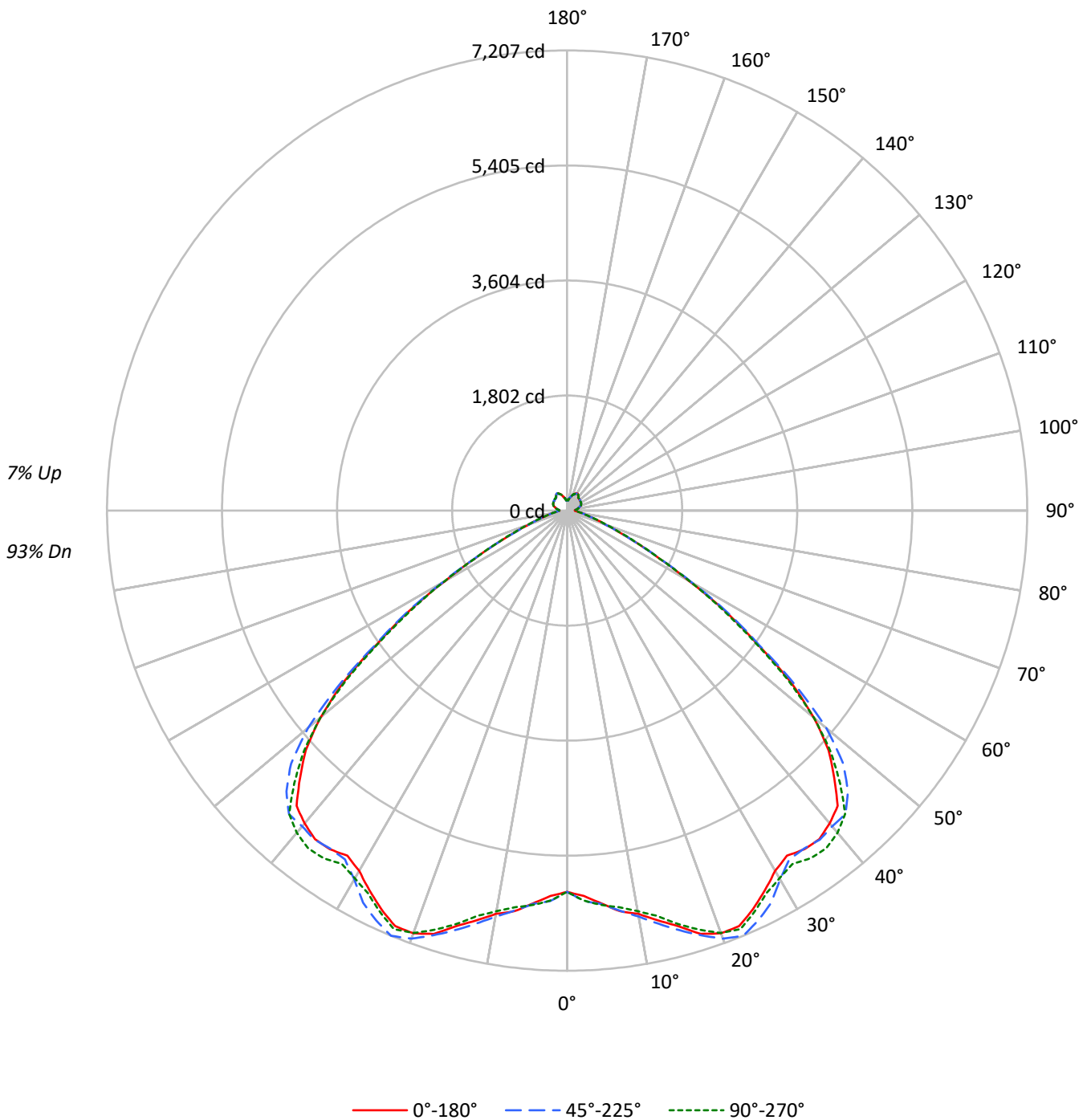
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	29455	29455	29455
5°	28369	28417	28492
10°	27765	27951	27579
15°	27784	28057	27636
20°	27931	28281	27908
25°	26486	27237	26674
30°	24507	25076	25019
35°	24016	23973	24650
40°	23567	23785	24274
45°	21828	22939	22304
50°	18764	19720	18772
55°	13693	13886	13526
60°	8573	8790	8646
65°	4830	4825	4923
70°	2685	2636	2806
75°	1603	1619	1644
80°	1124	1113	1118
85°	771	777	771



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	597.4	2.8
10°-20°	1920.0	9.1
20°-30°	3196.1	15.2
30°-40°	4111.4	19.5
40°-50°	4645.2	22.0
50°-60°	3299.0	15.7
60°-70°	1272.4	6.0
70°-80°	418.5	2.0
80°-90°	178.1	0.8
90°-100°	152.5	0.7
100°-110°	207.5	1.0
110°-120°	238.5	1.1
120°-130°	227.1	1.1
130°-140°	203.5	1.0
140°-150°	185.4	0.9
150°-160°	134.1	0.6
160°-170°	65.7	0.3
170°-180°	16.7	0.1
0°-30°	5713.6	27.1
0°-40°	9824.9	46.6
0°-60°	17769.1	84.3
0°-90°	19638.2	93.2
90°-120°	598.4	2.8
90°-150°	1214.4	5.8
90°-180°	1431.0	6.8
0°-180°	21069.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5970	5970	5970	5970	5970	
5°	6175	6171	6185	6157	6201	598
15°	6739	6769	6805	6748	6702	1923
25°	6887	6852	7083	6904	6936	3165
35°	6476	6479	6464	6587	6647	4056
45°	5917	6008	6218	6101	6046	4528
55°	3618	3710	3669	3663	3574	3254
65°	1204	1185	1203	1204	1228	1263
75°	364	372	367	370	373	418
85°	152	154	154	154	152	143
90°	120	121	121	122	121	67
95°	132	132	134	135	136	117
105°	199	196	191	194	193	208
115°	242	241	241	243	244	238
125°	252	252	255	254	255	226
135°	262	260	262	265	267	203
145°	300	300	300	302	303	185
155°	291	290	280	288	288	135
165°	221	226	224	223	219	65
175°	160	158	158	158	158	17
180°	173	173	173	173	173	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5970.1	5970.1	5970.1	5970.1	5970.1
2.5°	6042.1	6111.9	6121.2	6070.0	6115.4
5°	6174.7	6171.2	6185.1	6157.2	6201.4
7.5°	6329.3	6308.4	6318.8	6284.0	6265.4
10°	6413.0	6408.4	6456.0	6406.0	6370.0
12.5°	6573.5	6564.2	6629.3	6554.9	6501.4
15°	6738.6	6768.8	6804.8	6747.9	6702.5
17.5°	6951.3	6883.9	6973.4	6875.7	6881.6
20°	7045.5	6951.3	7133.8	6965.3	7039.7
22.5°	7044.3	6990.8	7207.1	6947.8	7094.3
25°	6887.4	6852.5	7082.7	6903.6	6936.2
27.5°	6704.8	6771.1	6921.1	6831.6	6757.2
30°	6515.3	6722.3	6666.5	6817.6	6651.4
32.5°	6408.4	6607.2	6477.0	6717.6	6563.0
35°	6475.8	6479.3	6464.2	6587.4	6646.7
37.5°	6487.4	6440.9	6499.1	6530.4	6666.5
40°	6395.6	6421.2	6454.9	6531.6	6587.4
42.5°	6272.3	6301.4	6450.2	6395.6	6444.4
45°	5916.6	6008.4	6217.7	6101.4	6045.6
47.5°	5555.0	5772.4	5866.6	5837.5	5602.7
50°	5041.1	5222.5	5298.1	5281.8	5043.4
52.5°	4422.6	4451.7	4524.9	4465.6	4358.7
55°	3618.1	3709.9	3669.2	3663.4	3573.9
57.5°	2951.9	3005.4	2994.9	2979.8	2877.5
60°	2210.1	2252.0	2265.9	2261.3	2228.7
62.5°	1637.0	1645.1	1650.9	1675.3	1631.2
65°	1204.5	1184.7	1203.3	1204.5	1227.7
67.5°	862.7	855.7	866.2	872.0	901.0
70°	641.8	633.6	630.1	648.7	670.8
72.5°	491.8	484.8	488.3	496.4	499.9
75°	363.9	372.0	367.4	369.7	373.2
77.5°	289.5	288.3	286.0	287.2	290.7
80°	239.5	237.2	237.2	234.8	238.3
82.5°	190.7	193.0	191.8	193.0	193.0
85°	152.3	153.5	153.5	153.5	152.3
87.5°	127.9	129.1	127.9	130.2	129.1
90°	119.7	120.9	120.9	122.1	120.9
92.5°	122.1	124.4	124.4	126.7	125.6
95°	132.5	132.5	133.7	134.9	136.0
97.5°	151.1	152.3	154.6	155.8	155.8
100°	168.6	170.9	172.1	173.2	175.6
102.5°	179.0	179.0	179.0	181.4	181.4
105°	198.8	196.5	190.7	194.2	193.0
107.5°	212.8	210.4	209.3	212.8	215.1
110°	227.9	225.5	224.4	227.9	230.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	234.8	233.7	233.7	236.0	238.3
115°	241.8	240.7	240.7	243.0	244.2
117.5°	245.3	245.3	247.6	247.6	248.8
120°	246.5	247.6	250.0	250.0	250.0
122.5°	250.0	248.8	252.3	251.1	252.3
125°	252.3	252.3	254.6	253.5	254.6
127.5°	254.6	253.5	255.8	255.8	255.8
130°	256.9	256.9	259.3	259.3	259.3
132.5°	259.3	258.1	260.4	261.6	263.9
135°	261.6	260.4	261.6	265.1	267.4
137.5°	263.9	262.8	262.8	266.2	269.7
140°	267.4	268.6	266.2	269.7	270.9
142.5°	283.7	283.7	280.2	283.7	288.3
145°	300.0	300.0	300.0	302.3	303.4
147.5°	308.1	309.3	310.4	310.4	311.6
150°	310.4	310.4	310.4	310.4	311.6
152.5°	306.9	305.8	298.8	304.6	305.8
155°	290.7	289.5	280.2	288.3	288.3
157.5°	276.7	275.5	266.2	274.4	275.5
160°	266.2	272.1	262.8	270.9	265.1
162.5°	240.7	252.3	246.5	248.8	239.5
165°	220.9	225.5	224.4	223.2	218.6
167.5°	208.1	212.8	210.4	211.6	204.6
170°	195.3	198.8	200.0	196.5	191.8
172.5°	173.2	175.6	179.0	173.2	173.2
175°	160.4	158.1	158.1	158.1	158.1
177.5°	166.3	166.3	167.4	163.9	163.9
180°	173.2	173.2	173.2	173.2	173.2

(END OF REPORT)