

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: P235490

Luminaire Tested: **4WSNLED-LD4-56HL-F-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P235490
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSNLED-LD4-56HL-F-UNV-L830-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

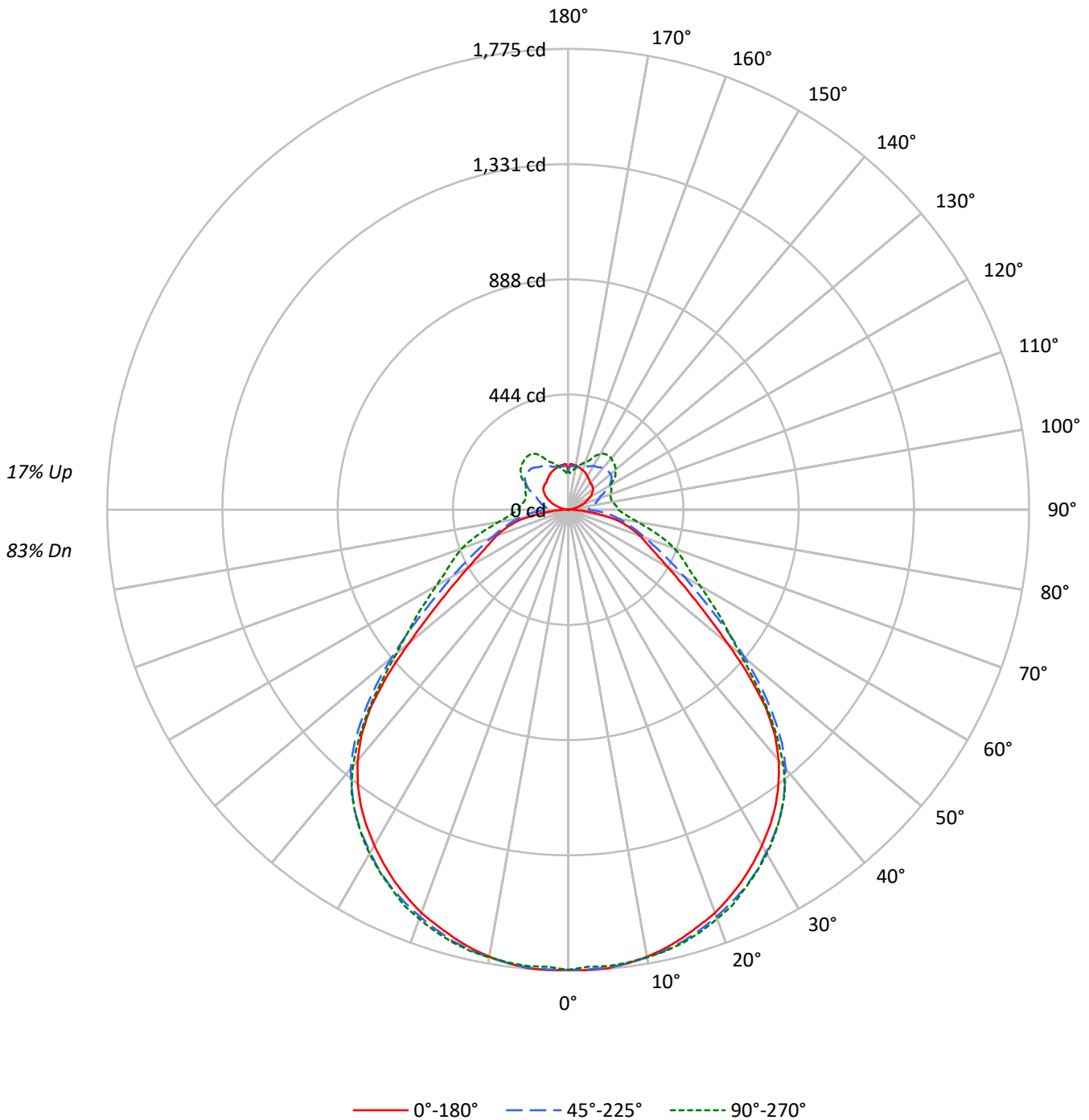
Lumens per Lamp: N/A
Luminaire Lumens: 5505.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 54.1
Input Voltage (V): 120
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4770	4770	4770
5°	4775	4735	4715
10°	4752	4694	4682
15°	4713	4652	4649
20°	4679	4594	4592
25°	4626	4539	4517
30°	4556	4453	4434
35°	4473	4356	4316
40°	4316	4190	4102
45°	3964	3818	3670
50°	3227	3284	3147
55°	2621	2722	2833
60°	2259	2324	2594
65°	2099	2058	2516
70°	2124	1898	2545
75°	2159	1845	2476
80°	2000	1879	2466
85°	1456	1963	2812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	3.1
10°-20°	484.3	8.8
20°-30°	736.7	13.4
30°-40°	883.5	16.0
40°-50°	841.0	15.3
50°-60°	598.9	10.9
60°-70°	407.1	7.4
70°-80°	274.7	5.0
80°-90°	157.5	2.9
90°-100°	101.7	1.8
100°-110°	114.5	2.1
110°-120°	142.3	2.6
120°-130°	163.2	3.0
130°-140°	155.1	2.8
140°-150°	125.6	2.3
150°-160°	86.5	1.6
160°-170°	48.7	0.9
170°-180°	15.6	0.3
0°-30°	1389.0	25.2
0°-40°	2272.6	41.3
0°-60°	3712.5	67.4
0°-90°	4551.8	82.7
90°-120°	358.4	6.5
90°-150°	802.4	14.6
90°-180°	953.0	17.3
0°-180°	5505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1772	1772	1772	1772	1772	
5°	1772	1762	1770	1767	1764	168
15°	1706	1703	1719	1727	1724	482
25°	1581	1583	1607	1613	1610	728
35°	1391	1399	1429	1429	1429	868
45°	1074	1101	1114	1114	1085	813
55°	584	642	672	677	712	533
65°	352	376	400	424	501	354
75°	232	195	251	298	349	242
85°	64	91	144	200	221	71
90°	0	40	80	152	192	4
95°	5	37	83	155	184	7
105°	37	56	112	155	171	40
115°	77	123	152	171	184	77
125°	112	149	203	219	221	100
135°	131	157	213	245	251	101
145°	141	157	200	245	258	88
155°	157	160	184	213	219	72
165°	168	168	171	173	179	47
175°	176	176	168	147	149	17
180°	149	149	149	149	149	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1772.5	1772.5	1772.5	1772.5	1772.5
2.5°	1775.2	1767.2	1772.5	1772.5	1761.9
5°	1772.5	1761.9	1769.8	1767.2	1764.5
7.5°	1761.9	1753.9	1761.9	1764.5	1759.2
10°	1748.5	1740.5	1751.2	1753.9	1751.2
12.5°	1729.9	1724.5	1737.9	1743.2	1740.5
15°	1705.9	1703.2	1719.2	1727.2	1724.5
17.5°	1679.2	1676.6	1695.2	1705.9	1703.2
20°	1652.6	1649.9	1668.6	1676.6	1676.6
22.5°	1617.9	1617.9	1639.2	1647.2	1649.9
25°	1580.6	1583.3	1607.3	1612.6	1609.9
27.5°	1538.0	1540.6	1569.9	1572.6	1572.6
30°	1492.6	1498.0	1524.6	1527.3	1530.0
32.5°	1444.7	1450.0	1479.3	1479.3	1482.0
35°	1391.4	1399.4	1428.7	1428.7	1428.7
37.5°	1330.1	1340.7	1367.4	1367.4	1370.0
40°	1260.8	1276.7	1303.4	1300.7	1290.1
42.5°	1178.1	1199.4	1218.1	1215.4	1191.5
45°	1074.2	1100.8	1114.2	1114.2	1084.8
47.5°	940.9	980.9	1004.9	994.2	970.2
50°	799.6	858.3	887.6	882.3	863.6
52.5°	679.7	746.3	775.6	773.0	778.3
55°	583.7	642.4	671.7	677.0	711.7
57.5°	506.4	559.7	583.7	599.7	642.4
60°	442.5	490.4	514.4	530.4	586.4
62.5°	391.8	429.1	453.1	471.8	538.4
65°	351.8	375.8	399.8	423.8	501.1
67.5°	319.9	325.2	351.8	386.5	469.1
70°	293.2	274.5	314.5	354.5	434.5
72.5°	263.9	231.9	282.5	322.5	394.5
75°	231.9	194.6	250.6	298.5	349.2
77.5°	197.2	162.6	223.9	271.9	306.5
80°	151.9	138.6	197.2	247.9	271.9
82.5°	106.6	114.6	170.6	226.6	242.6
85°	64.0	90.6	143.9	199.9	221.2
87.5°	29.3	66.6	109.3	173.3	205.2
90°	0.0	40.0	80.0	151.9	191.9
92.5°	2.7	40.0	80.0	154.6	189.2
95°	5.3	37.3	82.6	154.6	183.9
97.5°	10.7	37.3	90.6	151.9	178.6
100°	18.7	40.0	98.6	151.9	173.3
102.5°	26.7	42.6	106.6	154.6	170.6
105°	37.3	56.0	111.9	154.6	170.6
107.5°	48.0	74.6	119.9	157.3	170.6
110°	58.6	96.0	127.9	159.9	173.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.3	111.9	133.3	167.9	178.6
115°	77.3	122.6	151.9	170.6	183.9
117.5°	88.0	130.6	170.6	173.3	183.9
120°	96.0	138.6	183.9	183.9	186.6
122.5°	106.6	143.9	194.6	205.2	202.6
125°	111.9	149.3	202.6	218.6	221.2
127.5°	119.9	151.9	210.6	226.6	229.2
130°	125.3	154.6	213.2	234.6	239.9
132.5°	127.9	154.6	213.2	239.9	245.2
135°	130.6	157.3	213.2	245.2	250.6
137.5°	133.3	154.6	213.2	247.9	253.2
140°	133.3	154.6	210.6	247.9	258.5
142.5°	135.9	154.6	205.2	247.9	258.5
145°	141.3	157.3	199.9	245.2	258.5
147.5°	143.9	157.3	197.2	239.9	255.9
150°	149.3	157.3	194.6	231.9	247.9
152.5°	151.9	157.3	189.2	223.9	237.2
155°	157.3	159.9	183.9	213.2	218.6
157.5°	159.9	159.9	181.2	202.6	202.6
160°	162.6	162.6	175.9	191.9	194.6
162.5°	165.3	165.3	173.3	181.2	186.6
165°	167.9	167.9	170.6	173.3	178.6
167.5°	170.6	170.6	167.9	162.6	170.6
170°	173.3	173.3	167.9	154.6	162.6
172.5°	173.3	175.9	167.9	149.3	154.6
175°	175.9	175.9	167.9	146.6	149.3
177.5°	175.9	175.9	167.9	141.3	141.3
180°	149.3	149.3	149.3	149.3	149.3

(END OF REPORT)