

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: P234522

Luminaire Tested: **4WSNLED-LD4-56HL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234522
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-L840-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

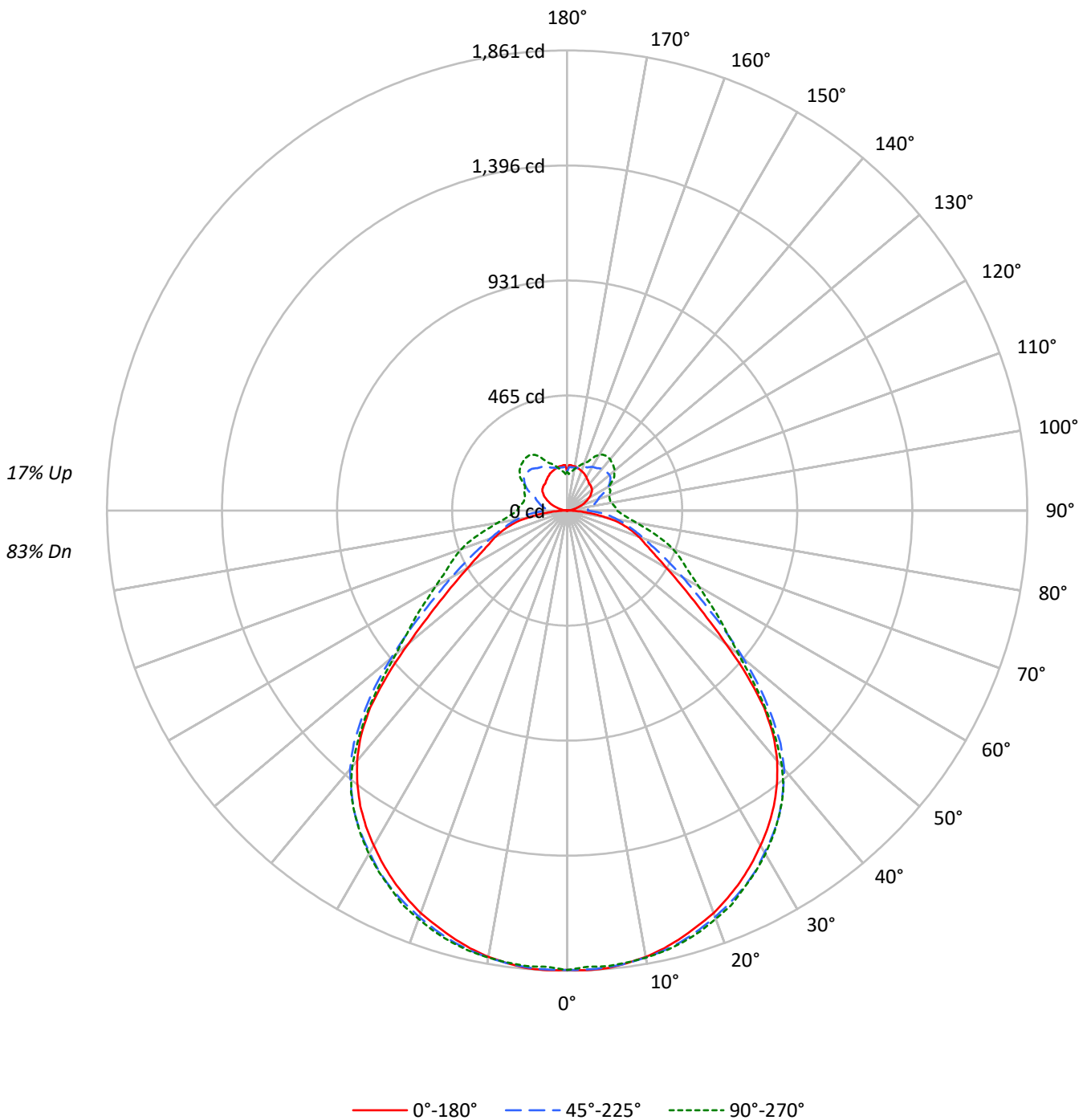
Lumens per Lamp: N/A
Luminaire Lumens: 5769.9 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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	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°	4999	4999	4999
5°	5005	4963	4942
10°	4980	4920	4907
15°	4940	4876	4873
20°	4904	4815	4813
25°	4848	4757	4734
30°	4775	4668	4647
35°	4688	4566	4523
40°	4523	4392	4299
45°	4155	4002	3847
50°	3383	3441	3298
55°	2748	2853	2969
60°	2368	2436	2719
65°	2201	2157	2637
70°	2227	1990	2667
75°	2264	1933	2595
80°	2096	1969	2584
85°	1524	2059	2948



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.2	3.1
10°-20°	507.6	8.8
20°-30°	772.2	13.4
30°-40°	926.0	16.0
40°-50°	881.5	15.3
50°-60°	627.7	10.9
60°-70°	426.8	7.4
70°-80°	287.9	5.0
80°-90°	165.1	2.9
90°-100°	106.6	1.8
100°-110°	120.0	2.1
110°-120°	149.1	2.6
120°-130°	171.0	3.0
130°-140°	162.6	2.8
140°-150°	131.6	2.3
150°-160°	90.6	1.6
160°-170°	51.0	0.9
170°-180°	16.4	0.3
0°-30°	1455.9	25.2
0°-40°	2381.9	41.3
0°-60°	3891.2	67.4
0°-90°	4770.9	82.7
90°-120°	375.7	6.5
90°-150°	840.9	14.6
90°-180°	999.0	17.3
0°-180°	5769.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1858	1847	1855	1852	1850	176
15°	1788	1785	1802	1810	1808	505
25°	1657	1660	1685	1690	1687	763
35°	1458	1467	1497	1497	1497	909
45°	1126	1154	1168	1168	1137	852
55°	612	673	704	710	746	559
65°	369	394	419	444	525	371
75°	243	204	263	313	366	253
85°	67	95	151	210	232	74
90°	0	42	84	159	201	5
95°	6	39	87	162	193	8
105°	39	59	117	162	179	42
115°	81	128	159	179	193	81
125°	117	156	212	229	232	105
135°	137	165	224	257	263	106
145°	148	165	210	257	271	92
155°	165	168	193	224	229	76
165°	176	176	179	182	187	50
175°	184	184	176	154	156	17
180°	156	156	156	156	156	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1857.8	1857.8	1857.8	1857.8	1857.8
2.5°	1860.6	1852.3	1857.8	1857.8	1846.7
5°	1857.8	1846.7	1855.0	1852.3	1849.5
7.5°	1846.7	1838.3	1846.7	1849.5	1843.9
10°	1832.7	1824.3	1835.5	1838.3	1835.5
12.5°	1813.1	1807.6	1821.5	1827.1	1824.3
15°	1788.0	1785.2	1802.0	1810.3	1807.6
17.5°	1760.1	1757.3	1776.8	1788.0	1785.2
20°	1732.1	1729.3	1748.9	1757.3	1757.3
22.5°	1695.8	1695.8	1718.2	1726.5	1729.3
25°	1656.7	1659.5	1684.6	1690.2	1687.4
27.5°	1612.0	1614.8	1645.5	1648.3	1648.3
30°	1564.5	1570.1	1598.0	1600.8	1603.6
32.5°	1514.2	1519.8	1550.5	1550.5	1553.3
35°	1458.3	1466.7	1497.4	1497.4	1497.4
37.5°	1394.1	1405.3	1433.2	1433.2	1436.0
40°	1321.4	1338.2	1366.1	1363.3	1352.2
42.5°	1234.8	1257.2	1276.7	1273.9	1248.8
45°	1125.9	1153.8	1167.8	1167.8	1137.1
47.5°	986.2	1028.1	1053.2	1042.1	1016.9
50°	838.1	899.6	930.3	924.7	905.2
52.5°	712.4	782.2	813.0	810.2	815.8
55°	611.8	673.3	704.0	709.6	745.9
57.5°	530.8	586.7	611.8	628.6	673.3
60°	463.8	514.0	539.2	556.0	614.6
62.5°	410.7	449.8	474.9	494.5	564.3
65°	368.8	393.9	419.1	444.2	525.2
67.5°	335.2	340.8	368.8	405.1	491.7
70°	307.3	287.8	329.7	371.6	455.4
72.5°	276.6	243.1	296.1	338.0	413.5
75°	243.1	203.9	262.6	312.9	366.0
77.5°	206.7	170.4	234.7	285.0	321.3
80°	159.2	145.3	206.7	259.8	285.0
82.5°	111.7	120.1	178.8	237.5	254.2
85°	67.0	95.0	150.9	209.5	231.9
87.5°	30.7	69.8	114.5	181.6	215.1
90°	0.0	41.9	83.8	159.2	201.1
92.5°	2.8	41.9	83.8	162.0	198.4
95°	5.6	39.1	86.6	162.0	192.8
97.5°	11.2	39.1	95.0	159.2	187.2
100°	19.6	41.9	103.4	159.2	181.6
102.5°	27.9	44.7	111.7	162.0	178.8
105°	39.1	58.7	117.3	162.0	178.8
107.5°	50.3	78.2	125.7	164.8	178.8
110°	61.5	100.6	134.1	167.6	181.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	72.6	117.3	139.7	176.0	187.2
115°	81.0	128.5	159.2	178.8	192.8
117.5°	92.2	136.9	178.8	181.6	192.8
120°	100.6	145.3	192.8	192.8	195.6
122.5°	111.7	150.9	203.9	215.1	212.3
125°	117.3	156.4	212.3	229.1	231.9
127.5°	125.7	159.2	220.7	237.5	240.3
130°	131.3	162.0	223.5	245.8	251.4
132.5°	134.1	162.0	223.5	251.4	257.0
135°	136.9	164.8	223.5	257.0	262.6
137.5°	139.7	162.0	223.5	259.8	265.4
140°	139.7	162.0	220.7	259.8	271.0
142.5°	142.5	162.0	215.1	259.8	271.0
145°	148.1	164.8	209.5	257.0	271.0
147.5°	150.9	164.8	206.7	251.4	268.2
150°	156.4	164.8	203.9	243.1	259.8
152.5°	159.2	164.8	198.4	234.7	248.6
155°	164.8	167.6	192.8	223.5	229.1
157.5°	167.6	167.6	190.0	212.3	212.3
160°	170.4	170.4	184.4	201.1	203.9
162.5°	173.2	173.2	181.6	190.0	195.6
165°	176.0	176.0	178.8	181.6	187.2
167.5°	178.8	178.8	176.0	170.4	178.8
170°	181.6	181.6	176.0	162.0	170.4
172.5°	181.6	184.4	176.0	156.4	162.0
175°	184.4	184.4	176.0	153.7	156.4
177.5°	184.4	184.4	176.0	148.1	148.1
180°	156.4	156.4	156.4	156.4	156.4

(END OF REPORT)