

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: P235492

Luminaire Tested: **4WSNLED-LD4-64HL-F-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P235492
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-LD4-64HL-F-UNV-L830-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

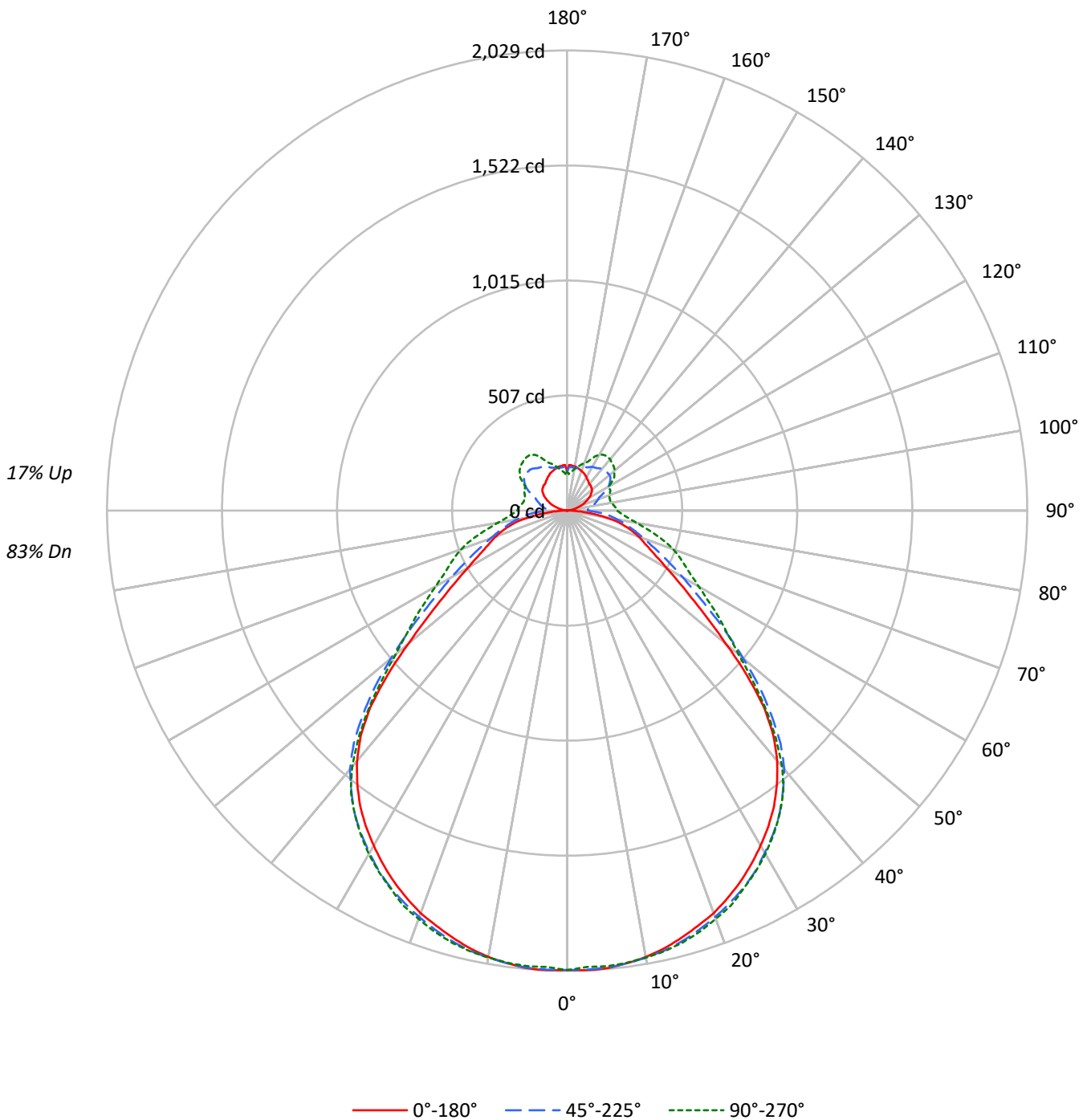
Lumens per Lamp: N/A
Luminaire Lumens: 6292.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 64.6
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°	5452	5452	5452
5°	5458	5412	5389
10°	5431	5365	5351
15°	5387	5317	5313
20°	5348	5250	5249
25°	5287	5187	5163
30°	5207	5090	5068
35°	5112	4979	4932
40°	4933	4789	4688
45°	4531	4364	4194
50°	3689	3753	3597
55°	2996	3111	3238
60°	2582	2656	2965
65°	2400	2353	2876
70°	2428	2170	2908
75°	2467	2108	2830
80°	2285	2147	2817
85°	1663	2245	3215



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	3.1
10°-20°	553.5	8.8
20°-30°	842.0	13.4
30°-40°	1009.8	16.0
40°-50°	961.3	15.3
50°-60°	684.5	10.9
60°-70°	465.4	7.4
70°-80°	314.0	5.0
80°-90°	180.0	2.9
90°-100°	116.2	1.8
100°-110°	130.9	2.1
110°-120°	162.6	2.6
120°-130°	186.5	3.0
130°-140°	177.3	2.8
140°-150°	143.6	2.3
150°-160°	98.8	1.6
160°-170°	55.6	0.9
170°-180°	17.8	0.3
0°-30°	1587.6	25.2
0°-40°	2597.4	41.3
0°-60°	4243.2	67.4
0°-90°	5202.6	82.7
90°-120°	409.7	6.5
90°-150°	917.1	14.6
90°-180°	1089.0	17.3
0°-180°	6292.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2026	2026	2026	2026	2026	
5°	2026	2014	2023	2020	2017	192
15°	1950	1947	1965	1974	1971	550
25°	1807	1810	1837	1843	1840	832
35°	1590	1599	1633	1633	1633	992
45°	1228	1258	1273	1273	1240	929
55°	667	734	768	774	813	609
65°	402	430	457	484	573	405
75°	265	222	286	341	399	276
85°	73	104	164	228	253	81
90°	0	46	91	174	219	5
95°	6	43	94	177	210	8
105°	43	64	128	177	195	45
115°	88	140	174	195	210	88
125°	128	171	232	250	253	115
135°	149	180	244	280	286	115
145°	162	180	228	280	296	101
155°	180	183	210	244	250	82
165°	192	192	195	198	204	54
175°	201	201	192	168	171	19
180°	171	171	171	171	171	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2025.9	2025.9	2025.9	2025.9	2025.9
2.5°	2029.0	2019.8	2025.9	2025.9	2013.7
5°	2025.9	2013.7	2022.9	2019.8	2016.8
7.5°	2013.7	2004.6	2013.7	2016.8	2010.7
10°	1998.5	1989.4	2001.5	2004.6	2001.5
12.5°	1977.2	1971.1	1986.3	1992.4	1989.4
15°	1949.8	1946.7	1965.0	1974.1	1971.1
17.5°	1919.3	1916.2	1937.6	1949.8	1946.7
20°	1888.8	1885.8	1907.1	1916.2	1916.2
22.5°	1849.2	1849.2	1873.6	1882.7	1885.8
25°	1806.6	1809.6	1837.0	1843.1	1840.1
27.5°	1757.8	1760.9	1794.4	1797.4	1797.4
30°	1706.0	1712.1	1742.6	1745.6	1748.7
32.5°	1651.2	1657.3	1690.8	1690.8	1693.8
35°	1590.3	1599.4	1632.9	1632.9	1632.9
37.5°	1520.2	1532.4	1562.8	1562.8	1565.9
40°	1441.0	1459.3	1489.7	1486.7	1474.5
42.5°	1346.5	1370.9	1392.2	1389.2	1361.8
45°	1227.7	1258.2	1273.4	1273.4	1239.9
47.5°	1075.4	1121.1	1148.5	1136.3	1108.9
50°	913.9	981.0	1014.5	1008.4	987.1
52.5°	776.9	853.0	886.5	883.5	889.6
55°	667.2	734.2	767.7	773.8	813.4
57.5°	578.8	639.8	667.2	685.5	734.2
60°	505.7	560.6	588.0	606.3	670.2
62.5°	447.8	490.5	517.9	539.2	615.4
65°	402.1	429.6	457.0	484.4	572.7
67.5°	365.6	371.7	402.1	441.7	536.2
70°	335.1	313.8	359.5	405.2	496.6
72.5°	301.6	265.0	322.9	368.6	450.9
75°	265.0	222.4	286.4	341.2	399.1
77.5°	225.4	185.8	255.9	310.7	350.3
80°	173.6	158.4	225.4	283.3	310.7
82.5°	121.9	131.0	195.0	259.0	277.2
85°	73.1	103.6	164.5	228.5	252.9
87.5°	33.5	76.2	124.9	198.0	234.6
90°	0.0	45.7	91.4	173.6	219.3
92.5°	3.0	45.7	91.4	176.7	216.3
95°	6.1	42.7	94.4	176.7	210.2
97.5°	12.2	42.7	103.6	173.6	204.1
100°	21.3	45.7	112.7	173.6	198.0
102.5°	30.5	48.7	121.9	176.7	195.0
105°	42.7	64.0	128.0	176.7	195.0
107.5°	54.8	85.3	137.1	179.7	195.0
110°	67.0	109.7	146.2	182.8	198.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	79.2	128.0	152.3	191.9	204.1
115°	88.3	140.1	173.6	195.0	210.2
117.5°	100.5	149.3	195.0	198.0	210.2
120°	109.7	158.4	210.2	210.2	213.3
122.5°	121.9	164.5	222.4	234.6	231.5
125°	128.0	170.6	231.5	249.8	252.9
127.5°	137.1	173.6	240.7	259.0	262.0
130°	143.2	176.7	243.7	268.1	274.2
132.5°	146.2	176.7	243.7	274.2	280.3
135°	149.3	179.7	243.7	280.3	286.4
137.5°	152.3	176.7	243.7	283.3	289.4
140°	152.3	176.7	240.7	283.3	295.5
142.5°	155.4	176.7	234.6	283.3	295.5
145°	161.5	179.7	228.5	280.3	295.5
147.5°	164.5	179.7	225.4	274.2	292.5
150°	170.6	179.7	222.4	265.0	283.3
152.5°	173.6	179.7	216.3	255.9	271.1
155°	179.7	182.8	210.2	243.7	249.8
157.5°	182.8	182.8	207.2	231.5	231.5
160°	185.8	185.8	201.1	219.3	222.4
162.5°	188.9	188.9	198.0	207.2	213.3
165°	191.9	191.9	195.0	198.0	204.1
167.5°	195.0	195.0	191.9	185.8	195.0
170°	198.0	198.0	191.9	176.7	185.8
172.5°	198.0	201.1	191.9	170.6	176.7
175°	201.1	201.1	191.9	167.6	170.6
177.5°	201.1	201.1	191.9	161.5	161.5
180°	170.6	170.6	170.6	170.6	170.6

(END OF REPORT)