

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: P393694

Luminaire Tested: **24EN-LD2-70-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393694
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-39)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-70-UNV-L93050-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6157.5 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

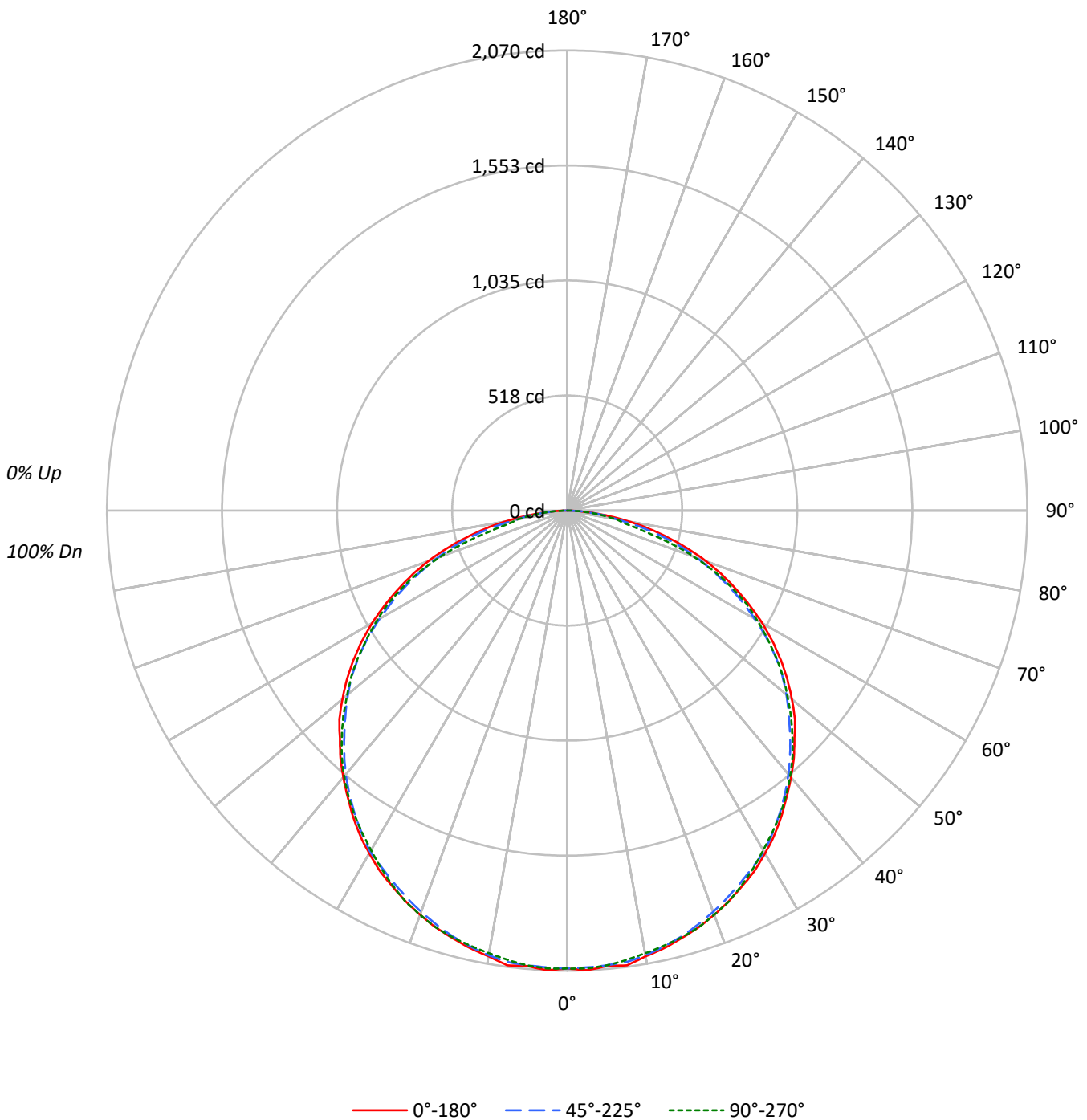
Input Watts (W): 50.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2772	2772	2772
5°	2778	2773	2774
10°	2782	2775	2763
15°	2774	2763	2769
20°	2771	2751	2770
25°	2766	2741	2760
30°	2767	2754	2741
35°	2759	2736	2742
40°	2751	2721	2741
45°	2752	2697	2727
50°	2763	2695	2704
55°	2754	2682	2688
60°	2727	2620	2656
65°	2675	2544	2597
70°	2615	2442	2387
75°	2456	2260	1858
80°	2177	1762	1722
85°	1735	1585	1463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.3	3.2
10°-20°	560.1	9.1
20°-30°	855.3	13.9
30°-40°	1043.8	17.0
40°-50°	1103.5	17.9
50°-60°	1026.2	16.7
60°-70°	803.1	13.0
70°-80°	450.6	7.3
80°-90°	119.5	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1610.7	26.2
0°-40°	2654.6	43.1
0°-60°	4784.3	77.7
0°-90°	6157.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6157.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2060	2060	2060	2060	2060	
5°	2056	2054	2053	2051	2054	196
15°	1992	1985	1984	1975	1988	563
25°	1863	1854	1847	1857	1859	860
35°	1680	1673	1666	1660	1669	1051
45°	1446	1435	1417	1426	1433	1118
55°	1174	1158	1143	1138	1146	1048
65°	840	822	799	803	816	832
75°	472	455	435	384	357	499
85°	112	104	103	96	95	131
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2060.0	2060.0	2060.0	2060.0	2060.0
2.5°	2069.6	2056.5	2057.3	2061.7	2061.7
5°	2056.5	2053.8	2053.0	2051.2	2053.8
7.5°	2063.5	2045.9	2048.6	2038.0	2038.9
10°	2036.3	2029.2	2031.0	2023.1	2022.2
12.5°	2016.1	2013.4	2009.1	2001.1	2005.5
15°	1991.5	1985.3	1983.6	1974.8	1988.0
17.5°	1966.0	1956.4	1953.7	1948.5	1966.0
20°	1935.3	1926.5	1921.2	1920.4	1934.4
22.5°	1901.0	1892.3	1884.4	1890.5	1902.8
25°	1863.3	1853.6	1846.6	1857.1	1858.9
27.5°	1826.4	1815.0	1808.0	1814.1	1813.2
30°	1780.8	1771.1	1772.8	1766.7	1764.1
32.5°	1733.3	1724.6	1720.2	1714.0	1716.7
35°	1679.8	1672.7	1665.7	1659.6	1669.2
37.5°	1622.7	1618.3	1608.6	1602.5	1617.4
40°	1566.5	1556.8	1548.9	1544.5	1560.4
42.5°	1509.4	1498.9	1484.8	1484.0	1500.6
45°	1446.2	1434.8	1417.2	1426.0	1433.0
47.5°	1390.0	1371.6	1352.2	1361.0	1365.4
50°	1319.8	1304.8	1287.3	1290.8	1291.7
52.5°	1248.6	1236.3	1219.7	1215.3	1223.2
55°	1174.0	1158.2	1143.3	1138.0	1145.9
57.5°	1095.0	1080.9	1061.6	1054.6	1065.1
60°	1013.3	994.9	973.8	973.8	987.0
62.5°	927.3	912.3	886.9	890.4	909.7
65°	840.3	821.9	799.1	803.4	815.7
67.5°	753.4	735.0	707.7	713.9	719.1
70°	664.7	641.9	620.8	614.7	606.8
72.5°	569.0	547.9	533.9	500.5	487.3
75°	472.4	454.8	434.7	383.7	357.4
77.5°	377.6	366.2	333.7	274.0	263.4
80°	281.0	275.7	227.4	223.0	222.2
82.5°	191.4	187.9	173.0	160.7	158.1
85°	112.4	104.5	102.7	95.7	94.8
87.5°	38.6	42.1	41.3	42.1	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)