

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: P393626

Luminaire Tested: **24EN-LD2-58-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393626
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-37)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-58-UNV-L93050-W2A-1-U (2700K)
Description: 2X4 ENCOUNTER, 5800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5013.5 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

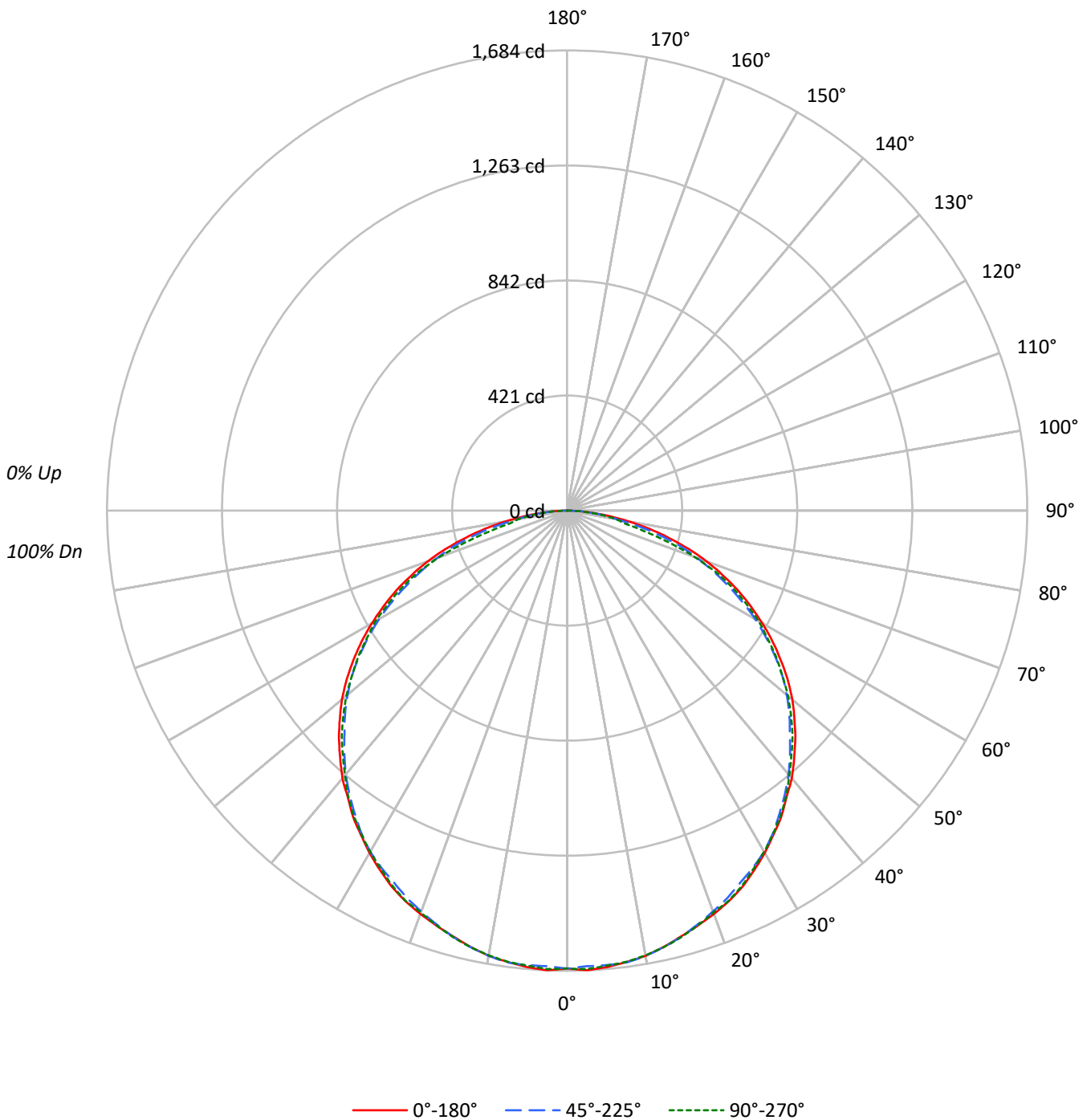
Input Watts (W): 41.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2255	2255	2255
5°	2265	2255	2258
10°	2260	2260	2258
15°	2247	2249	2250
20°	2249	2235	2241
25°	2255	2229	2248
30°	2247	2240	2240
35°	2245	2225	2238
40°	2248	2214	2222
45°	2248	2193	2220
50°	2252	2196	2209
55°	2240	2179	2191
60°	2219	2138	2179
65°	2191	2067	2125
70°	2133	1987	1956
75°	1997	1836	1526
80°	1766	1452	1418
85°	1360	1320	1200



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	3.2
10°-20°	455.7	9.1
20°-30°	695.9	13.9
30°-40°	849.4	16.9
40°-50°	898.2	17.9
50°-60°	835.4	16.7
60°-70°	655.2	13.1
70°-80°	367.5	7.3
80°-90°	97.6	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°	1310.4	26.1
0°-40°	2159.8	43.1
0°-60°	3893.3	77.7
0°-90°	5013.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5013.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1676	1676	1676	1676	1676	
5°	1677	1670	1670	1665	1672	159
15°	1613	1615	1615	1610	1616	456
25°	1519	1509	1502	1510	1514	699
35°	1367	1362	1355	1347	1362	855
45°	1181	1169	1153	1160	1166	911
55°	955	944	929	926	934	853
65°	688	670	649	656	667	679
75°	384	370	353	313	294	407
85°	88	85	86	79	78	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1675.9	1675.9	1675.9	1675.9	1675.9
2.5°	1683.7	1672.5	1669.0	1672.5	1679.4
5°	1676.8	1669.9	1669.9	1664.7	1671.6
7.5°	1666.4	1663.8	1668.1	1654.3	1665.6
10°	1654.3	1650.0	1654.3	1639.7	1652.6
12.5°	1635.3	1634.5	1636.2	1628.4	1636.2
15°	1612.9	1614.6	1614.6	1610.3	1615.5
17.5°	1592.2	1593.0	1587.9	1593.0	1591.3
20°	1570.6	1568.9	1561.1	1570.6	1565.4
22.5°	1547.3	1542.1	1533.5	1543.0	1545.5
25°	1518.8	1509.3	1501.5	1510.1	1514.5
27.5°	1483.4	1473.9	1473.0	1473.0	1477.3
30°	1446.2	1439.3	1441.9	1435.0	1441.9
32.5°	1405.7	1403.1	1401.3	1391.9	1402.2
35°	1366.8	1362.5	1354.7	1347.0	1362.5
37.5°	1319.3	1316.7	1309.0	1304.6	1316.7
40°	1279.6	1269.2	1260.6	1258.0	1264.9
42.5°	1229.5	1217.4	1207.1	1211.4	1214.8
45°	1181.2	1169.1	1152.7	1160.5	1166.5
47.5°	1128.5	1115.6	1102.6	1107.8	1111.2
50°	1075.8	1059.4	1049.1	1048.2	1055.1
52.5°	1017.1	1003.3	992.9	989.5	992.1
55°	955.0	943.7	929.1	925.6	934.2
57.5°	891.9	879.8	862.6	860.0	868.6
60°	824.6	812.5	794.4	794.4	809.9
62.5°	757.2	743.4	722.7	727.0	738.2
65°	688.2	670.0	649.3	656.2	667.4
67.5°	615.6	598.4	577.6	583.7	590.6
70°	542.2	523.2	505.1	499.9	497.3
72.5°	465.4	445.5	436.0	411.0	395.5
75°	384.2	370.4	353.1	313.4	293.6
77.5°	309.1	297.0	271.1	223.6	212.4
80°	227.9	227.1	187.4	182.2	183.0
82.5°	154.6	151.1	140.7	131.2	132.1
85°	88.1	84.6	85.5	79.4	77.7
87.5°	31.9	34.5	33.7	34.5	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)