

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: P393534

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-34)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-45-UNV-L93050-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4023.0 lumens
Efficiency: N/A
Efficacy: 128.5 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

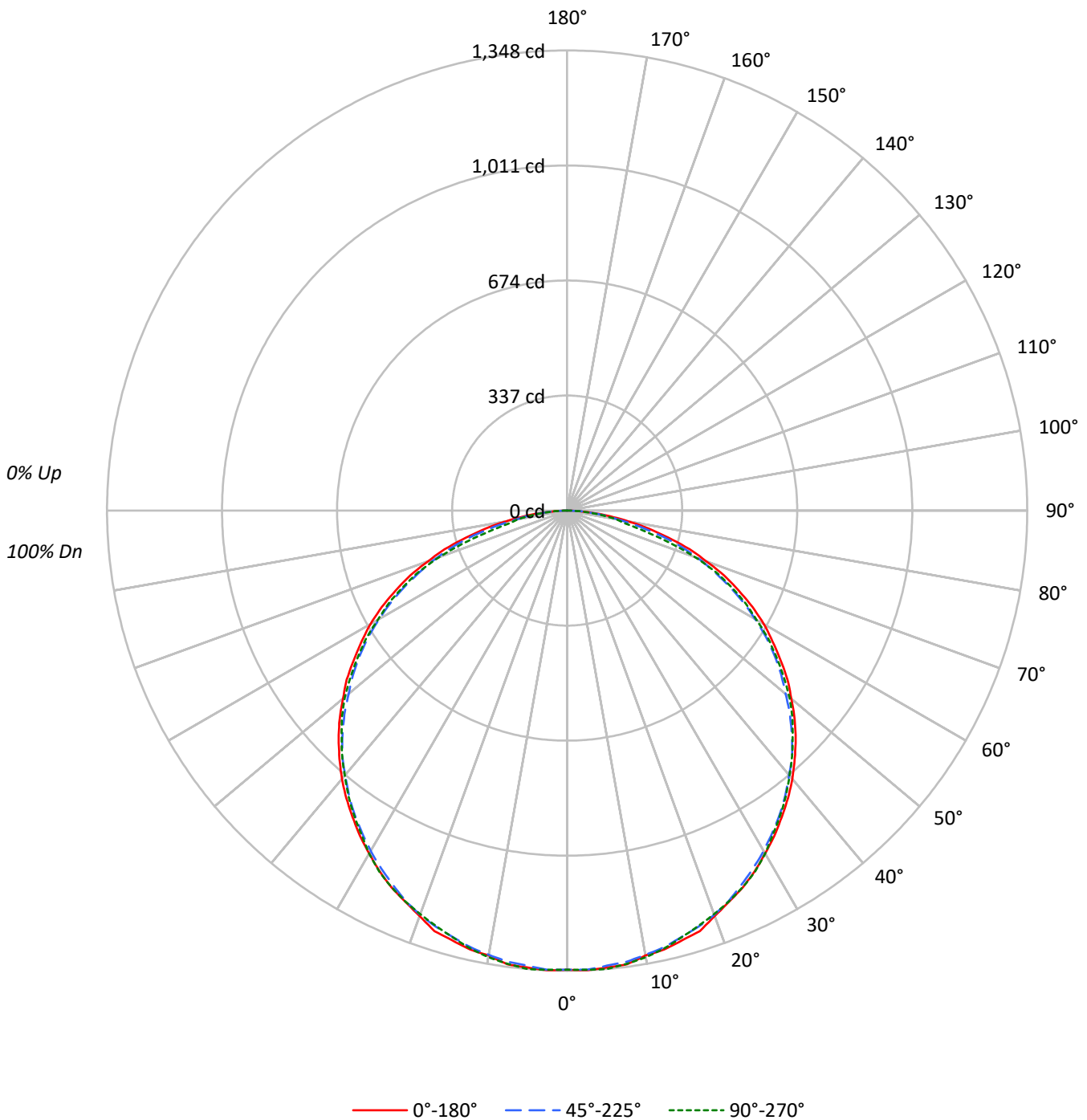
Input Watts (W): 31.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	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°	1810	1810	1810
5°	1815	1807	1821
10°	1808	1805	1815
15°	1815	1802	1803
20°	1809	1804	1802
25°	1808	1795	1807
30°	1802	1789	1802
35°	1800	1784	1788
40°	1803	1777	1780
45°	1801	1771	1778
50°	1794	1750	1779
55°	1790	1741	1755
60°	1791	1711	1725
65°	1764	1666	1694
70°	1703	1606	1568
75°	1593	1474	1228
80°	1409	1184	1136
85°	1152	1044	949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	3.2
10°-20°	366.1	9.1
20°-30°	558.6	13.9
30°-40°	681.4	16.9
40°-50°	721.2	17.9
50°-60°	668.9	16.6
60°-70°	525.9	13.1
70°-80°	294.7	7.3
80°-90°	78.7	2.0
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°	1052.1	26.2
0°-40°	1733.6	43.1
0°-60°	3123.7	77.6
0°-90°	4023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1344	1341	1338	1337	1348	128
15°	1303	1298	1293	1296	1294	368
25°	1218	1212	1209	1210	1217	561
35°	1096	1092	1086	1086	1089	686
45°	947	940	931	928	934	730
55°	763	754	742	743	748	683
65°	554	539	523	527	532	548
75°	306	299	284	248	236	326
85°	75	68	68	64	62	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1345.2	1345.2	1345.2	1345.2	1345.2
2.5°	1347.9	1343.5	1346.1	1340.8	1346.1
5°	1343.5	1340.8	1338.2	1337.3	1347.9
7.5°	1340.8	1335.6	1332.9	1330.3	1339.1
10°	1323.3	1325.0	1321.5	1322.4	1328.5
12.5°	1317.1	1311.9	1310.1	1310.1	1313.6
15°	1303.1	1297.8	1293.4	1296.0	1294.3
17.5°	1291.7	1277.6	1278.5	1278.5	1275.9
20°	1263.6	1257.4	1260.0	1255.7	1258.3
22.5°	1239.9	1236.3	1237.2	1232.8	1239.0
25°	1217.9	1211.8	1209.1	1210.0	1217.0
27.5°	1190.7	1184.5	1181.0	1180.1	1192.4
30°	1159.9	1155.6	1151.2	1151.2	1159.9
32.5°	1130.1	1123.9	1118.7	1117.8	1123.1
35°	1095.8	1092.3	1086.2	1086.2	1088.8
37.5°	1062.5	1055.5	1050.2	1051.1	1052.8
40°	1026.5	1019.5	1011.6	1011.6	1013.3
42.5°	987.0	980.8	975.5	972.0	975.5
45°	946.6	940.4	930.8	928.1	934.3
47.5°	904.4	896.5	885.1	886.9	894.8
50°	857.0	849.1	835.9	840.3	850.0
52.5°	814.0	804.3	790.3	794.7	799.1
55°	763.1	754.3	742.0	742.9	748.1
57.5°	713.9	704.2	691.1	690.2	698.1
60°	665.6	652.4	635.7	636.6	641.0
62.5°	612.0	598.0	581.3	581.3	589.2
65°	554.1	539.1	523.3	526.8	532.1
67.5°	497.9	478.6	464.5	466.3	472.4
70°	432.9	419.7	408.3	402.2	398.6
72.5°	375.8	357.4	348.6	326.6	319.6
75°	306.5	299.4	283.6	248.5	236.2
77.5°	245.0	238.0	216.9	179.1	172.1
80°	181.8	183.5	152.8	146.6	146.6
82.5°	127.3	122.1	111.5	106.2	103.6
85°	74.6	68.5	67.6	64.1	61.5
87.5°	24.6	28.1	27.2	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)