

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: P393536

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393536
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 (5700K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4041.6 lumens
Efficiency: N/A
Efficacy: 129.1 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

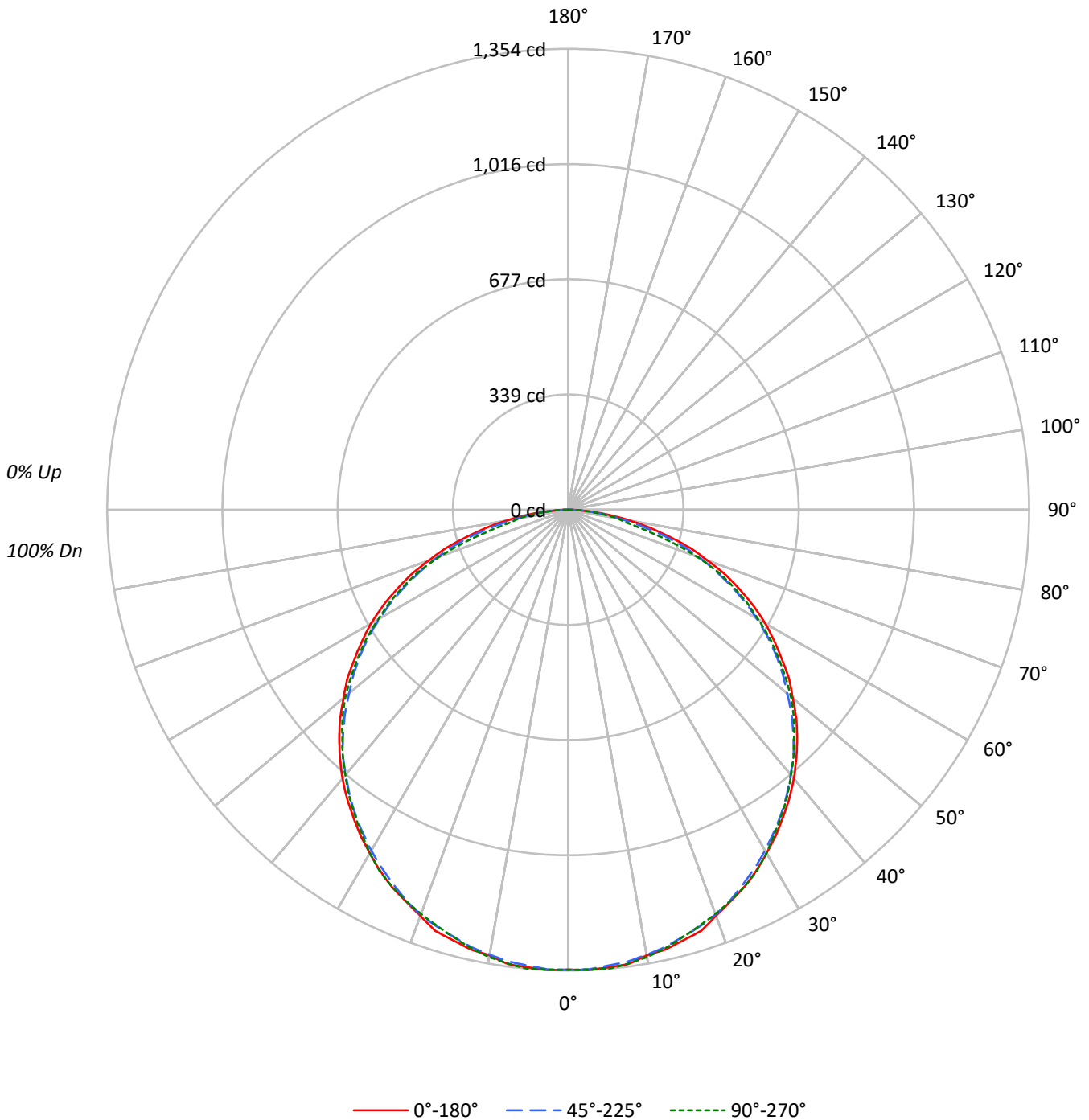
Input Watts (W): 31.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1818	1818	1818
5°	1823	1816	1829
10°	1816	1814	1824
15°	1824	1810	1811
20°	1818	1813	1810
25°	1816	1803	1815
30°	1810	1797	1810
35°	1808	1792	1797
40°	1811	1785	1788
45°	1810	1779	1786
50°	1802	1758	1787
55°	1798	1749	1763
60°	1799	1719	1733
65°	1772	1674	1702
70°	1711	1614	1576
75°	1601	1481	1234
80°	1415	1189	1141
85°	1158	1048	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	3.2
10°-20°	367.8	9.1
20°-30°	561.2	13.9
30°-40°	684.6	16.9
40°-50°	724.6	17.9
50°-60°	672.0	16.6
60°-70°	528.3	13.1
70°-80°	296.1	7.3
80°-90°	79.0	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°	1057.0	26.2
0°-40°	1741.6	43.1
0°-60°	3138.2	77.6
0°-90°	4041.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4041.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1350	1347	1344	1344	1354	128
15°	1309	1304	1299	1302	1300	370
25°	1224	1217	1215	1216	1223	564
35°	1101	1097	1091	1091	1094	690
45°	951	945	935	932	939	733
55°	767	758	745	746	752	686
65°	557	542	526	529	535	550
75°	308	301	285	250	237	327
85°	75	69	68	64	62	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1354.1	1349.7	1352.3	1347.0	1352.3
5°	1349.7	1347.0	1344.4	1343.5	1354.1
7.5°	1347.0	1341.7	1339.1	1336.5	1345.3
10°	1329.4	1331.2	1327.6	1328.5	1334.7
12.5°	1323.2	1317.9	1316.2	1316.2	1319.7
15°	1309.1	1303.8	1299.4	1302.1	1300.3
17.5°	1297.6	1283.5	1284.4	1284.4	1281.8
20°	1269.4	1263.2	1265.9	1261.5	1264.1
22.5°	1245.6	1242.1	1242.9	1238.5	1244.7
25°	1223.5	1217.4	1214.7	1215.6	1222.7
27.5°	1196.2	1190.0	1186.5	1185.6	1198.0
30°	1165.3	1160.9	1156.5	1156.5	1165.3
32.5°	1135.3	1129.2	1123.9	1123.0	1128.3
35°	1100.9	1097.4	1091.2	1091.2	1093.9
37.5°	1067.4	1060.3	1055.0	1055.9	1057.7
40°	1031.2	1024.2	1016.2	1016.2	1018.0
42.5°	991.5	985.4	980.1	976.5	980.1
45°	951.0	944.8	935.1	932.4	938.6
47.5°	908.6	900.7	889.2	891.0	898.9
50°	861.0	853.0	839.8	844.2	853.9
52.5°	817.8	808.0	793.9	798.3	802.8
55°	766.6	757.8	745.4	746.3	751.6
57.5°	717.2	707.5	694.3	693.4	701.3
60°	668.7	655.4	638.7	639.6	644.0
62.5°	614.9	600.7	584.0	584.0	591.9
65°	556.6	541.6	525.8	529.3	534.6
67.5°	500.2	480.8	466.7	468.4	474.6
70°	434.9	421.7	410.2	404.0	400.5
72.5°	377.6	359.0	350.2	328.2	321.1
75°	307.9	300.8	284.9	249.6	237.3
77.5°	246.1	239.1	217.9	180.0	172.9
80°	182.6	184.4	153.5	147.3	147.3
82.5°	127.9	122.6	112.0	106.7	104.1
85°	75.0	68.8	67.9	64.4	61.8
87.5°	24.7	28.2	27.3	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)