

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: P393533

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393533
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 (4000K)
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: 4002.0 lumens
Efficiency: N/A
Efficacy: 127.0 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

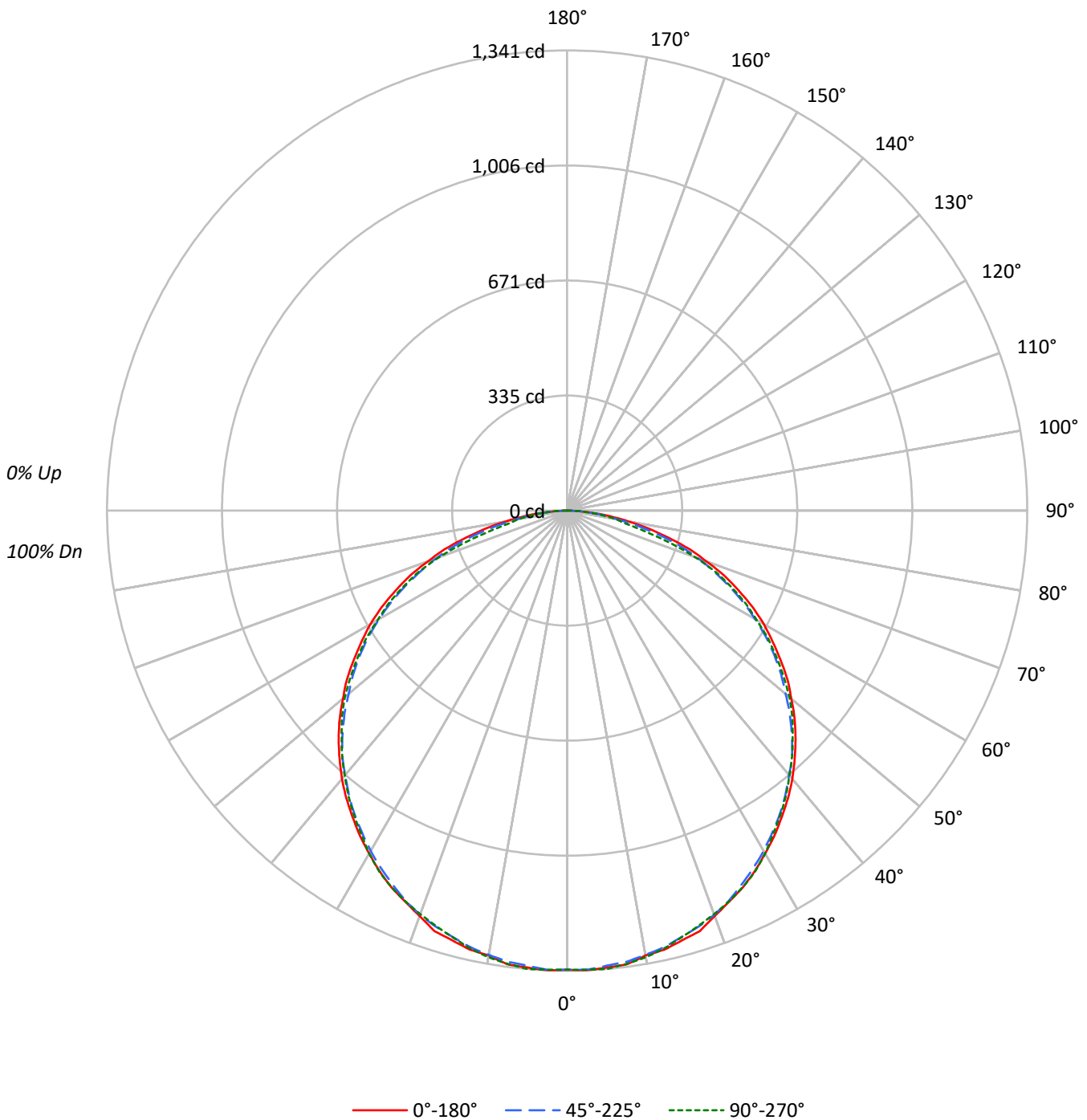
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393533

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393533

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (4000K)

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°	1801	1801	1801
5°	1805	1798	1811
10°	1799	1796	1806
15°	1806	1792	1793
20°	1800	1795	1792
25°	1799	1786	1797
30°	1793	1779	1793
35°	1791	1775	1779
40°	1793	1767	1770
45°	1792	1762	1768
50°	1784	1741	1770
55°	1781	1731	1746
60°	1782	1702	1716
65°	1755	1657	1685
70°	1694	1598	1560
75°	1585	1467	1222
80°	1401	1178	1130
85°	1145	1039	943



TEST NUMBER: P393533

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (4000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.8	3.2
10°-20°	364.2	9.1
20°-30°	555.7	13.9
30°-40°	677.9	16.9
40°-50°	717.5	17.9
50°-60°	665.4	16.6
60°-70°	523.1	13.1
70°-80°	293.2	7.3
80°-90°	78.3	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°	1046.6	26.2
0°-40°	1724.5	43.1
0°-60°	3107.4	77.6
0°-90°	4002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4002.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1336	1334	1331	1330	1341	127
15°	1296	1291	1287	1289	1288	366
25°	1212	1205	1203	1204	1211	558
35°	1090	1087	1080	1080	1083	683
45°	942	936	926	923	929	726
55°	759	750	738	739	744	679
65°	551	536	521	524	529	545
75°	305	298	282	247	235	324
85°	74	68	67	64	61	86
90°	0	0	0	0	0	



TEST NUMBER: P393533

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1338.2	1338.2	1338.2	1338.2	1338.2
2.5°	1340.8	1336.5	1339.1	1333.8	1339.1
5°	1336.5	1333.8	1331.2	1330.3	1340.8
7.5°	1333.8	1328.6	1326.0	1323.4	1332.1
10°	1316.4	1318.1	1314.6	1315.5	1321.6
12.5°	1310.3	1305.0	1303.3	1303.3	1306.8
15°	1296.3	1291.0	1286.7	1289.3	1287.5
17.5°	1284.9	1271.0	1271.8	1271.8	1269.2
20°	1257.0	1250.9	1253.5	1249.1	1251.7
22.5°	1233.4	1229.9	1230.8	1226.4	1232.5
25°	1211.6	1205.4	1202.8	1203.7	1210.7
27.5°	1184.5	1178.4	1174.9	1174.0	1186.2
30°	1153.9	1149.5	1145.2	1145.2	1153.9
32.5°	1124.2	1118.1	1112.8	1112.0	1117.2
35°	1090.1	1086.6	1080.5	1080.5	1083.1
37.5°	1056.9	1050.0	1044.7	1045.6	1047.3
40°	1021.1	1014.1	1006.3	1006.3	1008.0
42.5°	981.8	975.7	970.5	967.0	970.5
45°	941.6	935.5	925.9	923.3	929.4
47.5°	899.7	891.8	880.5	882.2	890.1
50°	852.5	844.7	831.6	835.9	845.6
52.5°	809.7	800.1	786.2	790.5	794.9
55°	759.1	750.3	738.1	739.0	744.2
57.5°	710.2	700.6	687.4	686.6	694.4
60°	662.1	649.0	632.4	633.3	637.7
62.5°	608.8	594.9	578.3	578.3	586.1
65°	551.2	536.3	520.6	524.1	529.3
67.5°	495.3	476.1	462.1	463.8	469.9
70°	430.6	417.5	406.2	400.1	396.6
72.5°	373.9	355.5	346.8	324.9	318.0
75°	304.9	297.9	282.1	247.2	235.0
77.5°	243.7	236.7	215.8	178.2	171.2
80°	180.8	182.6	152.0	145.9	145.9
82.5°	126.7	121.4	110.9	105.7	103.1
85°	74.2	68.1	67.3	63.8	61.1
87.5°	24.5	28.0	27.1	28.0	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)