

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: P393507

Luminaire Tested: **24EN-LD2-45-UNV-L82765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393507
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-L82765-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4202.3 lumens
Efficiency: N/A
Efficacy: 131.7 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

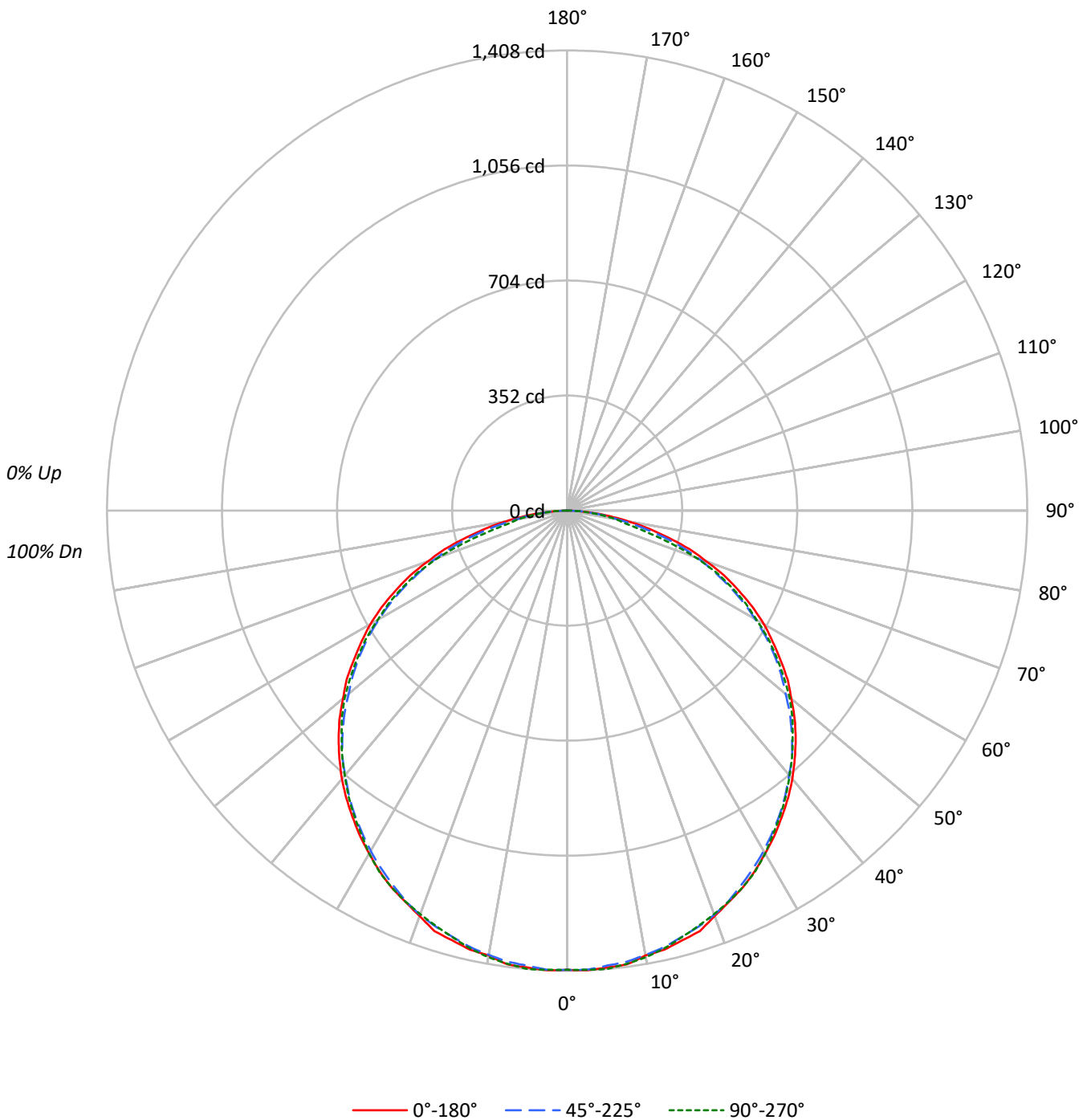
Input Watts (W): 31.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1891	1891	1891
5°	1895	1888	1902
10°	1888	1886	1896
15°	1896	1882	1883
20°	1890	1885	1882
25°	1889	1875	1887
30°	1882	1868	1882
35°	1880	1864	1868
40°	1883	1856	1859
45°	1881	1850	1857
50°	1874	1828	1859
55°	1870	1818	1833
60°	1871	1787	1802
65°	1843	1741	1769
70°	1779	1678	1638
75°	1664	1540	1282
80°	1471	1237	1187
85°	1204	1090	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.2
10°-20°	382.4	9.1
20°-30°	583.5	13.9
30°-40°	711.8	16.9
40°-50°	753.4	17.9
50°-60°	698.7	16.6
60°-70°	549.3	13.1
70°-80°	307.9	7.3
80°-90°	82.2	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°	1099.0	26.2
0°-40°	1810.8	43.1
0°-60°	3262.9	77.6
0°-90°	4202.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4202.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1403	1401	1398	1397	1408	133
15°	1361	1356	1351	1354	1352	384
25°	1272	1266	1263	1264	1271	586
35°	1145	1141	1135	1135	1137	717
45°	989	982	972	970	976	763
55°	797	788	775	776	782	713
65°	579	563	547	550	556	572
75°	320	313	296	260	247	340
85°	78	72	71	67	64	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.2	1405.2	1405.2	1405.2	1405.2
2.5°	1407.9	1403.3	1406.1	1400.6	1406.1
5°	1403.3	1400.6	1397.8	1396.9	1407.9
7.5°	1400.6	1395.1	1392.3	1389.6	1398.8
10°	1382.2	1384.1	1380.4	1381.3	1387.7
12.5°	1375.8	1370.3	1368.5	1368.5	1372.2
15°	1361.2	1355.6	1351.1	1353.8	1352.0
17.5°	1349.2	1334.6	1335.5	1335.5	1332.7
20°	1319.9	1313.5	1316.2	1311.6	1314.4
22.5°	1295.1	1291.4	1292.4	1287.8	1294.2
25°	1272.2	1265.8	1263.0	1263.9	1271.3
27.5°	1243.7	1237.3	1233.7	1232.7	1245.6
30°	1211.6	1207.1	1202.5	1202.5	1211.6
32.5°	1180.5	1174.0	1168.5	1167.6	1173.1
35°	1144.7	1141.0	1134.6	1134.6	1137.3
37.5°	1109.8	1102.5	1097.0	1097.9	1099.7
40°	1072.2	1064.9	1056.6	1056.6	1058.5
42.5°	1031.0	1024.5	1019.0	1015.4	1019.0
45°	988.8	982.3	972.3	969.5	975.9
47.5°	944.7	936.5	924.6	926.4	934.6
50°	895.2	886.9	873.2	877.8	887.9
52.5°	850.3	840.2	825.5	830.1	834.7
55°	797.1	787.9	775.0	776.0	781.5
57.5°	745.7	735.6	721.8	720.9	729.2
60°	695.3	681.5	664.1	665.0	669.6
62.5°	639.3	624.6	607.2	607.2	615.5
65°	578.8	563.2	546.7	550.3	555.8
67.5°	520.1	499.9	485.2	487.0	493.5
70°	452.2	438.4	426.5	420.1	416.4
72.5°	392.6	373.3	364.1	341.2	333.9
75°	320.1	312.8	296.3	259.6	246.7
77.5°	255.9	248.6	226.6	187.1	179.8
80°	189.9	191.7	159.6	153.2	153.2
82.5°	133.0	127.5	116.5	111.0	108.2
85°	78.0	71.5	70.6	67.0	64.2
87.5°	25.7	29.4	28.4	29.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)