

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: P393506

Luminaire Tested: **24EN-LD2-45-UNV-L82765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393506
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 (2700K)
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: 4162.0 lumens
Efficiency: N/A
Efficacy: 130.9 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

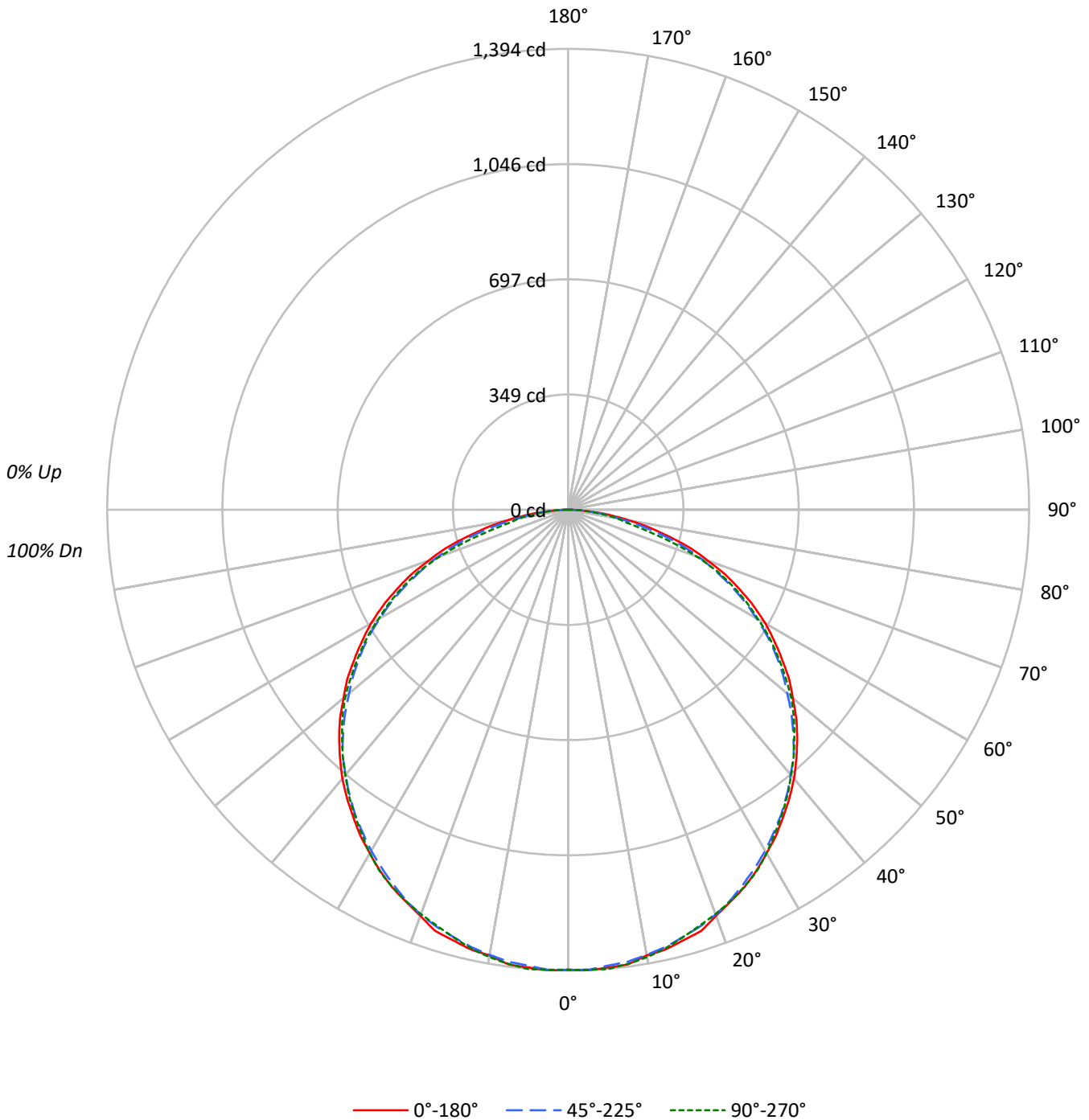
Input Watts (W): 31.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1873	1873	1873
5°	1877	1870	1883
10°	1870	1868	1878
15°	1878	1864	1865
20°	1872	1867	1864
25°	1871	1857	1869
30°	1864	1850	1864
35°	1862	1846	1850
40°	1865	1838	1841
45°	1863	1832	1839
50°	1856	1810	1841
55°	1852	1801	1816
60°	1853	1770	1785
65°	1825	1724	1753
70°	1762	1662	1622
75°	1648	1525	1271
80°	1457	1225	1175
85°	1192	1079	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	3.2
10°-20°	378.7	9.1
20°-30°	577.9	13.9
30°-40°	705.0	16.9
40°-50°	746.2	17.9
50°-60°	692.0	16.6
60°-70°	544.0	13.1
70°-80°	304.9	7.3
80°-90°	81.4	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°	1088.5	26.2
0°-40°	1793.5	43.1
0°-60°	3231.7	77.6
0°-90°	4162.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4162.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1390	1387	1384	1384	1394	132
15°	1348	1343	1338	1341	1339	381
25°	1260	1254	1251	1252	1259	580
35°	1134	1130	1124	1124	1126	710
45°	979	973	963	960	967	755
55°	789	780	768	768	774	707
65°	573	558	541	545	550	567
75°	317	310	293	257	244	337
85°	77	71	70	66	64	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1391.7	1391.7	1391.7	1391.7	1391.7
2.5°	1394.4	1389.9	1392.6	1387.2	1392.6
5°	1389.9	1387.2	1384.4	1383.5	1394.4
7.5°	1387.2	1381.7	1379.0	1376.3	1385.4
10°	1369.0	1370.8	1367.2	1368.1	1374.5
12.5°	1362.6	1357.2	1355.4	1355.4	1359.0
15°	1348.1	1342.7	1338.1	1340.8	1339.0
17.5°	1336.3	1321.8	1322.7	1322.7	1319.9
20°	1307.2	1300.9	1303.6	1299.1	1301.8
22.5°	1282.7	1279.1	1280.0	1275.4	1281.8
25°	1260.0	1253.6	1250.9	1251.8	1259.1
27.5°	1231.8	1225.5	1221.8	1220.9	1233.6
30°	1200.0	1195.5	1191.0	1191.0	1200.0
32.5°	1169.1	1162.8	1157.3	1156.4	1161.9
35°	1133.7	1130.1	1123.7	1123.7	1126.5
37.5°	1099.2	1091.9	1086.5	1087.4	1089.2
40°	1062.0	1054.7	1046.5	1046.5	1048.3
42.5°	1021.1	1014.7	1009.3	1005.6	1009.3
45°	979.3	972.9	962.9	960.2	966.6
47.5°	935.7	927.5	915.7	917.5	925.7
50°	886.6	878.5	864.8	869.4	879.4
52.5°	842.1	832.1	817.6	822.1	826.7
55°	789.4	780.3	767.6	768.5	774.0
57.5°	738.6	728.6	714.9	714.0	722.2
60°	688.6	675.0	657.7	658.6	663.2
62.5°	633.2	618.6	601.4	601.4	609.6
65°	573.2	557.8	541.4	545.1	550.5
67.5°	515.1	495.1	480.6	482.4	488.7
70°	447.9	434.2	422.4	416.1	412.4
72.5°	388.8	369.7	360.6	337.9	330.7
75°	317.0	309.8	293.4	257.1	244.4
77.5°	253.5	246.2	224.4	185.3	178.1
80°	188.0	189.9	158.1	151.7	151.7
82.5°	131.7	126.3	115.4	109.9	107.2
85°	77.2	70.9	69.9	66.3	63.6
87.5°	25.4	29.1	28.2	29.1	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)