

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: P393485

Luminaire Tested: **24EN-LD2-40-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40-UNV-L83050-W2A-1-U (4000K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4067.9 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

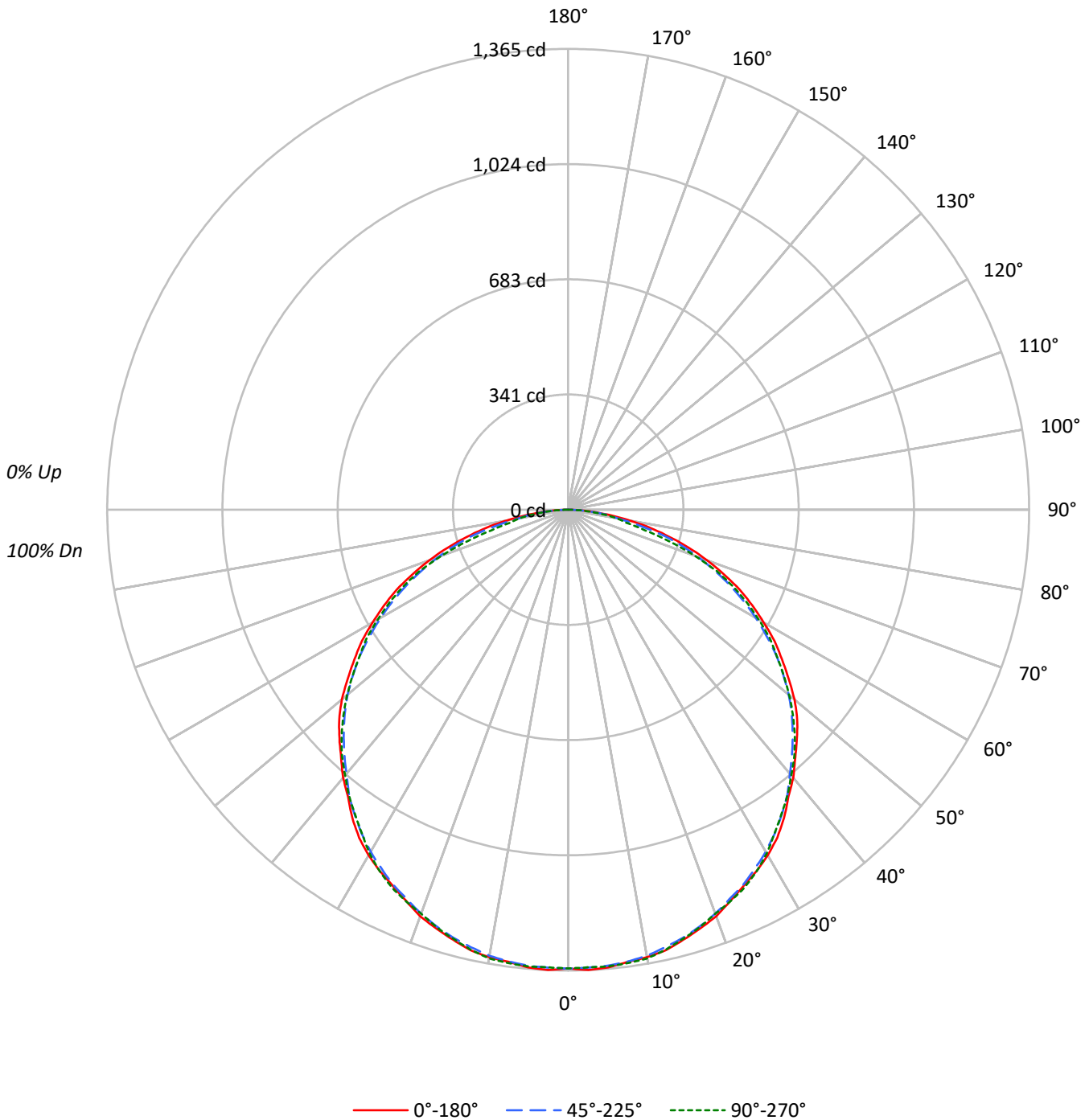
Input Watts (W): 28.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	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	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	42	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	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1828	1828	1828
5°	1838	1831	1834
10°	1839	1833	1844
15°	1837	1828	1833
20°	1835	1823	1823
25°	1825	1820	1834
30°	1836	1818	1827
35°	1831	1811	1808
40°	1820	1794	1804
45°	1823	1789	1806
50°	1831	1785	1789
55°	1812	1765	1767
60°	1800	1727	1754
65°	1784	1678	1717
70°	1718	1608	1565
75°	1608	1498	1222
80°	1432	1159	1144
85°	1132	1070	962



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	3.2
10°-20°	370.8	9.1
20°-30°	566.2	13.9
30°-40°	690.8	17.0
40°-50°	729.4	17.9
50°-60°	676.3	16.6
60°-70°	529.8	13.0
70°-80°	296.5	7.3
80°-90°	79.1	1.9
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°	1066.0	26.2
0°-40°	1756.8	43.2
0°-60°	3162.5	77.7
0°-90°	4067.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4067.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1361	1361	1356	1357	1358	129
15°	1319	1313	1313	1310	1316	372
25°	1229	1229	1226	1224	1235	568
35°	1115	1105	1103	1102	1101	697
45°	958	949	940	938	949	740
55°	772	762	752	752	753	691
65°	560	543	527	530	539	551
75°	309	300	288	250	235	328
85°	73	70	69	65	62	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1358.8	1358.8	1358.8	1358.8	1358.8
2.5°	1364.8	1361.8	1357.7	1358.8	1356.7
5°	1360.8	1360.8	1355.7	1356.7	1357.7
7.5°	1350.7	1351.7	1349.7	1345.7	1354.7
10°	1345.7	1338.7	1341.7	1333.6	1349.7
12.5°	1336.7	1325.6	1327.6	1321.6	1334.7
15°	1318.6	1312.6	1312.6	1309.5	1315.6
17.5°	1300.5	1296.5	1294.5	1296.5	1296.5
20°	1281.4	1278.4	1273.4	1277.4	1273.4
22.5°	1254.3	1256.3	1248.3	1257.3	1255.3
25°	1229.2	1229.2	1226.2	1224.2	1235.2
27.5°	1207.1	1200.1	1198.1	1194.1	1208.1
30°	1182.0	1168.9	1170.0	1163.9	1176.0
32.5°	1151.9	1136.8	1137.8	1131.8	1136.8
35°	1114.7	1104.7	1102.7	1101.7	1100.7
37.5°	1071.5	1070.5	1065.5	1068.5	1066.5
40°	1036.4	1034.4	1021.3	1024.3	1027.3
42.5°	995.2	992.2	981.2	983.2	991.2
45°	958.1	949.0	940.0	938.0	949.0
47.5°	919.9	905.8	897.8	891.8	902.8
50°	874.7	862.7	852.6	846.6	854.6
52.5°	822.5	812.4	802.4	800.4	803.4
55°	772.3	762.2	752.2	752.2	753.2
57.5°	724.1	711.0	695.9	699.0	707.0
60°	668.8	656.8	641.7	641.7	651.8
62.5°	614.6	599.5	584.5	586.5	596.5
65°	560.4	543.3	527.2	530.2	539.3
67.5°	498.1	483.0	468.0	472.0	477.0
70°	436.8	421.8	408.7	404.7	397.7
72.5°	374.6	362.5	351.5	329.4	318.3
75°	309.3	300.3	288.2	250.1	235.0
77.5°	249.1	242.0	214.9	179.8	174.7
80°	184.8	184.8	149.6	146.6	147.6
82.5°	125.5	123.5	113.5	106.5	103.4
85°	73.3	70.3	69.3	65.3	62.3
87.5°	24.1	28.1	28.1	27.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)