

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: P393483

Luminaire Tested: **24EN-LD2-40-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393483
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 (3000K)
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: 3985.6 lumens
Efficiency: N/A
Efficacy: 139.8 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

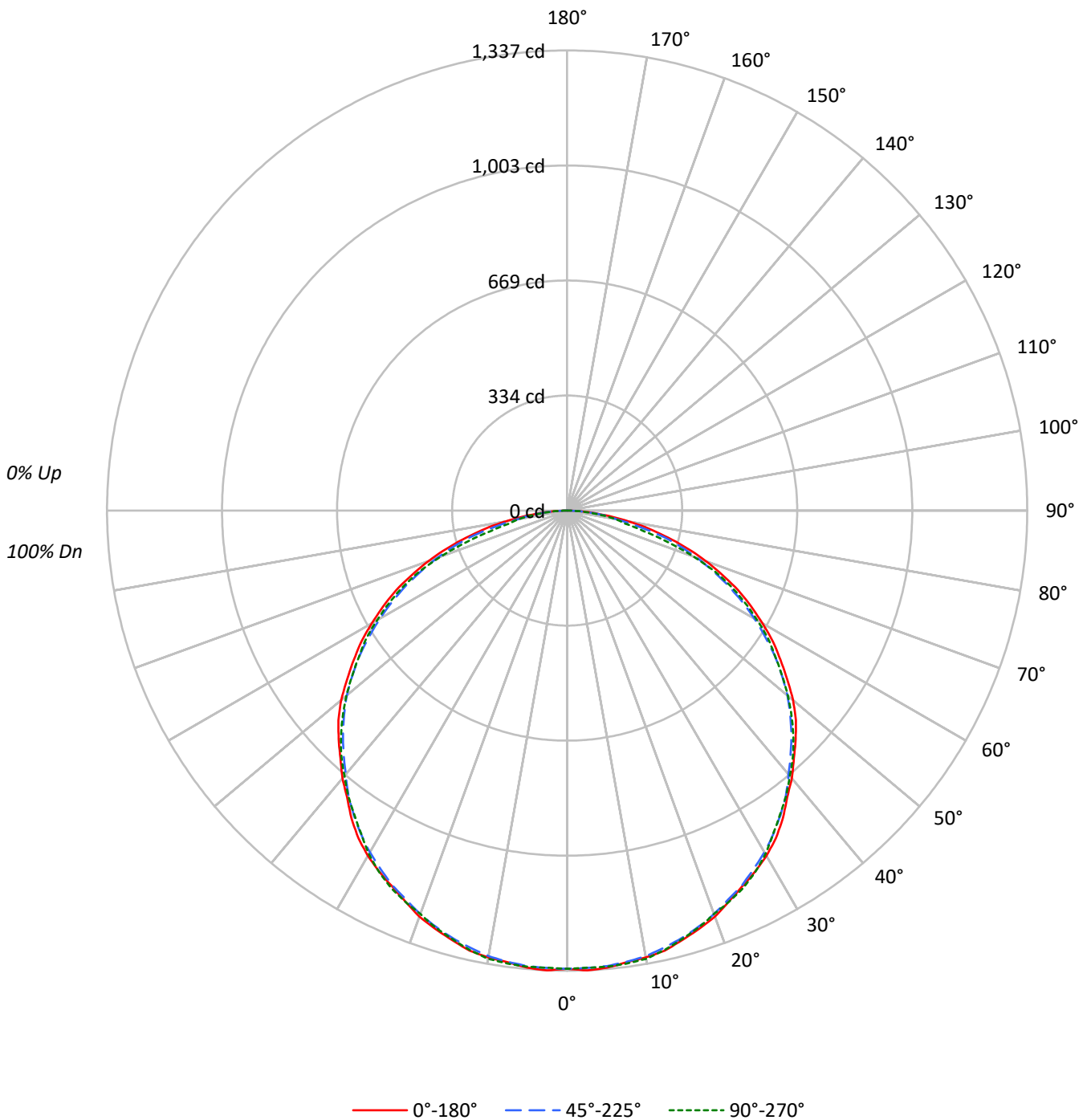
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1791	1791	1791
5°	1801	1794	1797
10°	1801	1796	1807
15°	1800	1791	1796
20°	1798	1786	1786
25°	1788	1784	1797
30°	1799	1781	1790
35°	1794	1775	1771
40°	1783	1758	1768
45°	1786	1752	1769
50°	1794	1749	1753
55°	1775	1729	1731
60°	1763	1692	1718
65°	1748	1645	1682
70°	1684	1576	1533
75°	1576	1468	1197
80°	1402	1136	1120
85°	1108	1048	942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.2
10°-20°	363.3	9.1
20°-30°	554.8	13.9
30°-40°	676.8	17.0
40°-50°	714.6	17.9
50°-60°	662.6	16.6
60°-70°	519.1	13.0
70°-80°	290.5	7.3
80°-90°	77.5	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°	1044.5	26.2
0°-40°	1721.3	43.2
0°-60°	3098.5	77.7
0°-90°	3985.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3985.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1331	1331	1331	1331	1331	
5°	1333	1333	1328	1329	1330	127
15°	1292	1286	1286	1283	1289	365
25°	1204	1204	1201	1199	1210	557
35°	1092	1082	1080	1079	1078	683
45°	939	930	921	919	930	725
55°	757	747	737	737	738	677
65°	549	532	517	520	528	540
75°	303	294	282	245	230	321
85°	72	69	68	64	61	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1331.3	1331.3	1331.3	1331.3	1331.3
2.5°	1337.2	1334.2	1330.3	1331.3	1329.3
5°	1333.2	1333.2	1328.3	1329.3	1330.3
7.5°	1323.4	1324.4	1322.4	1318.5	1327.3
10°	1318.5	1311.6	1314.6	1306.7	1322.4
12.5°	1309.6	1298.8	1300.8	1294.9	1307.7
15°	1291.9	1286.0	1286.0	1283.1	1289.0
17.5°	1274.2	1270.3	1268.3	1270.3	1270.3
20°	1255.5	1252.6	1247.6	1251.6	1247.6
22.5°	1228.9	1230.9	1223.0	1231.9	1229.9
25°	1204.4	1204.4	1201.4	1199.4	1210.3
27.5°	1182.7	1175.8	1173.8	1169.9	1183.7
30°	1158.1	1145.3	1146.3	1140.4	1152.2
32.5°	1128.6	1113.8	1114.8	1108.9	1113.8
35°	1092.2	1082.3	1080.4	1079.4	1078.4
37.5°	1049.9	1048.9	1044.0	1046.9	1045.0
40°	1015.4	1013.5	1000.7	1003.6	1006.6
42.5°	975.1	972.1	961.3	963.3	971.2
45°	938.7	929.8	921.0	919.0	929.8
47.5°	901.3	887.5	879.6	873.7	884.6
50°	857.0	845.2	835.4	829.5	837.3
52.5°	805.9	796.0	786.2	784.2	787.2
55°	756.7	746.8	737.0	737.0	738.0
57.5°	709.4	696.6	681.9	684.8	692.7
60°	655.3	643.5	628.7	628.7	638.6
62.5°	602.2	587.4	572.7	574.6	584.5
65°	549.0	532.3	516.6	519.5	528.4
67.5°	488.0	473.3	458.5	462.5	467.4
70°	428.0	413.3	400.5	396.5	389.6
72.5°	367.0	355.2	344.4	322.7	311.9
75°	303.1	294.2	282.4	245.0	230.2
77.5°	244.0	237.1	210.6	176.1	171.2
80°	181.0	181.0	146.6	143.7	144.6
82.5°	123.0	121.0	111.2	104.3	101.3
85°	71.8	68.9	67.9	64.0	61.0
87.5°	23.6	27.6	27.6	26.6	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)