

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: P393486

Luminaire Tested: **24EN-LD2-40-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393486
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 (4500K)
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: 4122.9 lumens
Efficiency: N/A
Efficacy: 147.2 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

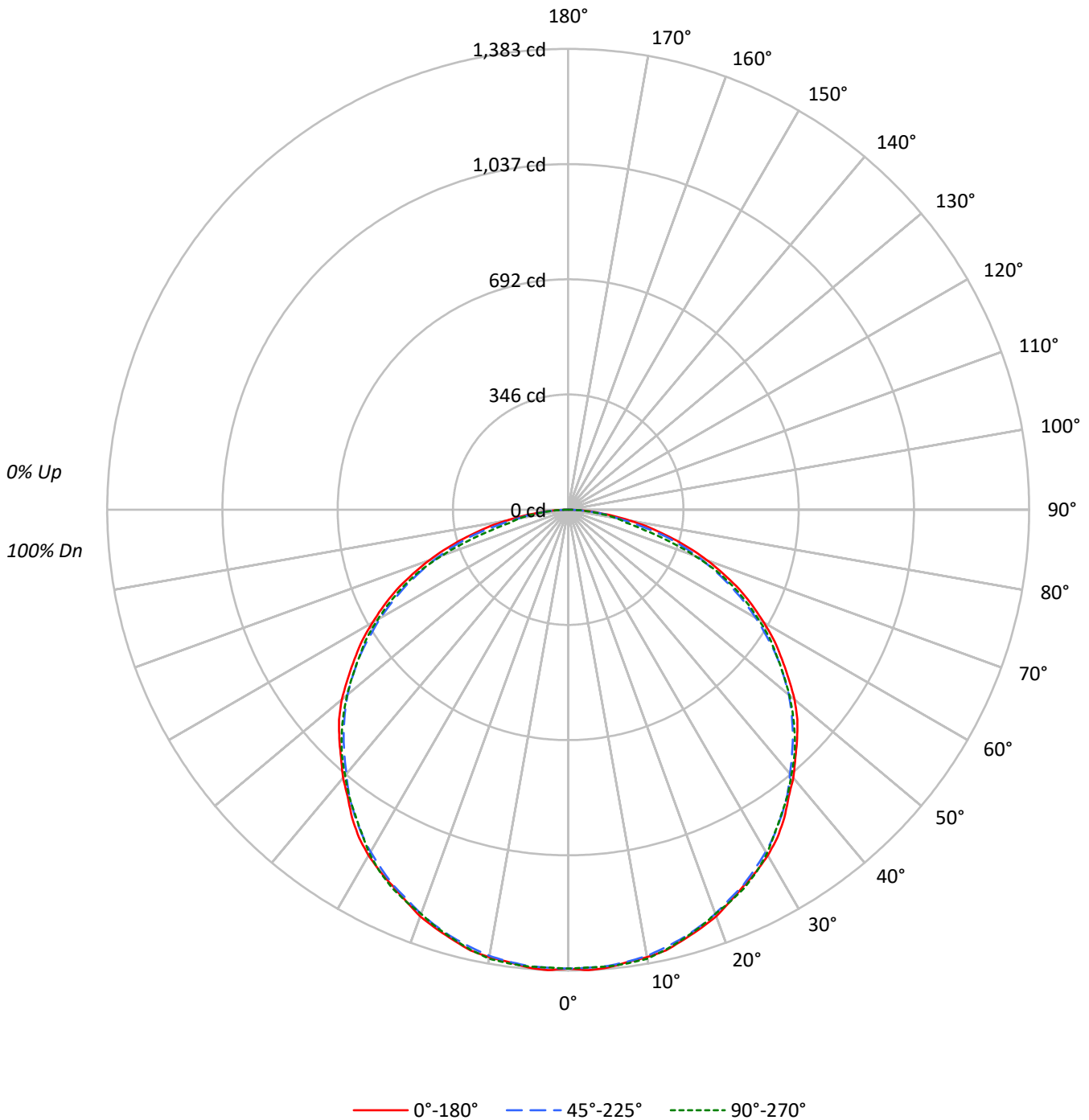
Input Watts (W): 28
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1853	1853	1853
5°	1863	1856	1859
10°	1863	1858	1869
15°	1862	1853	1857
20°	1860	1848	1848
25°	1849	1845	1859
30°	1861	1842	1852
35°	1856	1836	1832
40°	1845	1818	1829
45°	1848	1813	1830
50°	1856	1809	1813
55°	1836	1788	1791
60°	1824	1750	1778
65°	1808	1701	1740
70°	1742	1630	1586
75°	1630	1519	1238
80°	1451	1175	1159
85°	1147	1084	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	3.2
10°-20°	375.8	9.1
20°-30°	573.9	13.9
30°-40°	700.1	17.0
40°-50°	739.2	17.9
50°-60°	685.4	16.6
60°-70°	537.0	13.0
70°-80°	300.5	7.3
80°-90°	80.2	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°	1080.5	26.2
0°-40°	1780.6	43.2
0°-60°	3205.2	77.7
0°-90°	4122.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4122.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1379	1379	1374	1375	1376	131
15°	1336	1330	1330	1327	1333	377
25°	1246	1246	1243	1241	1252	576
35°	1130	1120	1118	1117	1116	706
45°	971	962	953	951	962	750
55°	783	772	762	762	763	701
65°	568	551	534	537	547	558
75°	314	304	292	253	238	332
85°	74	71	70	66	63	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.1	1377.1	1377.1	1377.1	1377.1
2.5°	1383.2	1380.2	1376.1	1377.1	1375.1
5°	1379.2	1379.2	1374.1	1375.1	1376.1
7.5°	1369.0	1370.0	1368.0	1363.9	1373.0
10°	1363.9	1356.8	1359.8	1351.7	1368.0
12.5°	1354.7	1343.5	1345.6	1339.5	1352.7
15°	1336.4	1330.3	1330.3	1327.2	1333.4
17.5°	1318.1	1314.0	1312.0	1314.0	1314.0
20°	1298.7	1295.7	1290.6	1294.7	1290.6
22.5°	1271.3	1273.3	1265.2	1274.3	1272.3
25°	1245.8	1245.8	1242.8	1240.7	1251.9
27.5°	1223.4	1216.3	1214.3	1210.2	1224.4
30°	1198.0	1184.7	1185.8	1179.7	1191.9
32.5°	1167.4	1152.2	1153.2	1147.1	1152.2
35°	1129.8	1119.6	1117.6	1116.6	1115.5
37.5°	1086.0	1085.0	1079.9	1083.0	1080.9
40°	1050.4	1048.4	1035.1	1038.2	1041.2
42.5°	1008.7	1005.6	994.4	996.5	1004.6
45°	971.0	961.8	952.7	950.6	961.8
47.5°	932.3	918.1	909.9	903.8	915.0
50°	886.5	874.3	864.1	858.0	866.2
52.5°	833.6	823.4	813.2	811.2	814.3
55°	782.7	772.5	762.4	762.4	763.4
57.5°	733.9	720.6	705.4	708.4	716.5
60°	677.9	665.7	650.4	650.4	660.6
62.5°	622.9	607.6	592.4	594.4	604.6
65°	567.9	550.6	534.4	537.4	546.6
67.5°	504.8	489.6	474.3	478.4	483.5
70°	442.8	427.5	414.3	410.2	403.1
72.5°	379.6	367.4	356.2	333.8	322.7
75°	313.5	304.3	292.1	253.4	238.2
77.5°	252.4	245.3	217.8	182.2	177.1
80°	187.3	187.3	151.7	148.6	149.6
82.5°	127.2	125.2	115.0	107.9	104.8
85°	74.3	71.2	70.2	66.2	63.1
87.5°	24.4	28.5	28.5	27.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)