

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: P393595

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393595
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-36)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-54-UNV-L93050-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4479.4 lumens
Efficiency: N/A
Efficacy: 115.4 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

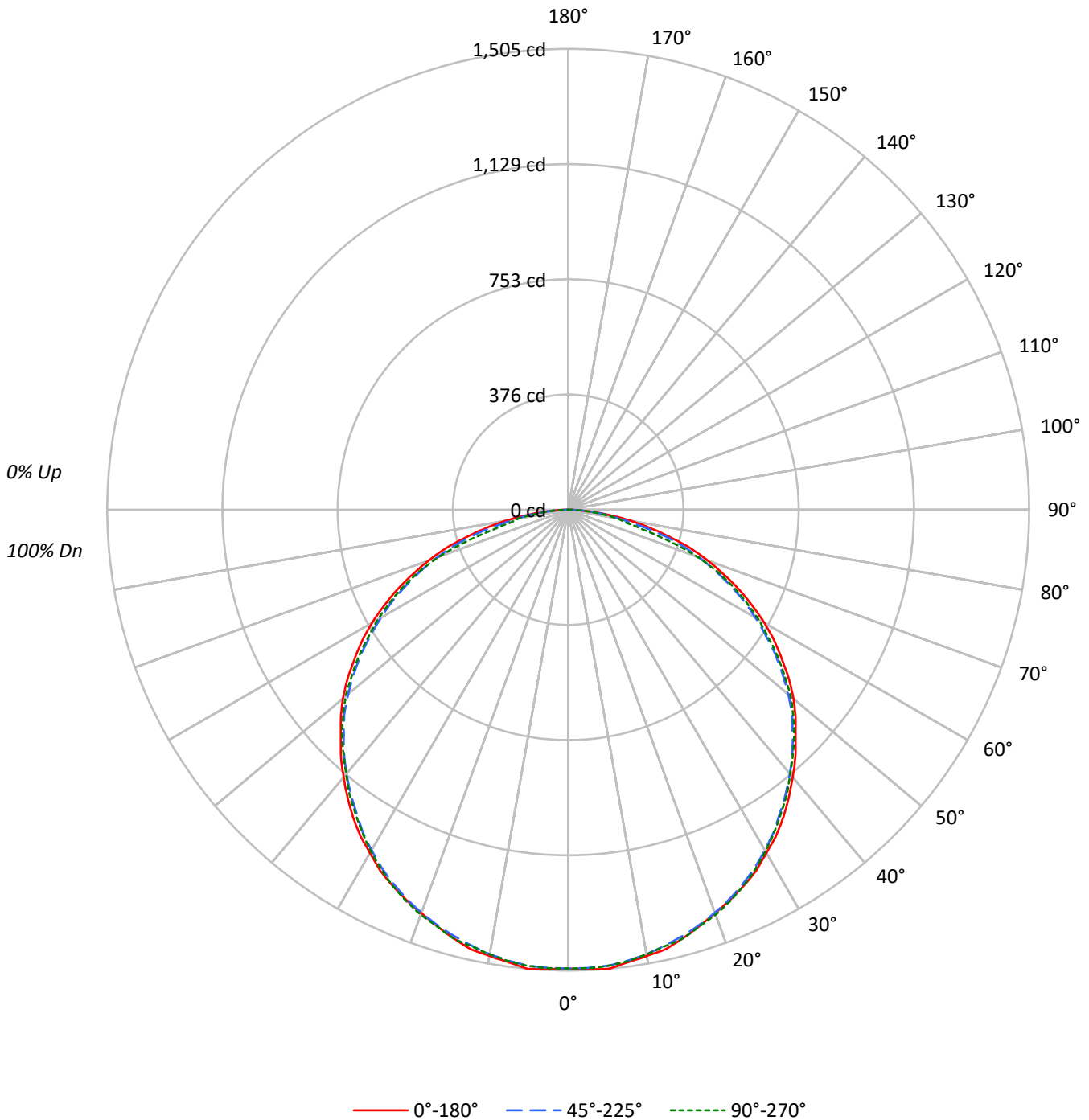
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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°	2016	2016	2016
5°	2033	2019	2020
10°	2022	2014	2014
15°	2018	2008	2019
20°	2007	2005	2015
25°	2013	2002	2012
30°	2011	1994	2002
35°	2012	1981	1989
40°	2003	1977	1980
45°	1997	1972	1986
50°	2011	1963	1985
55°	1999	1937	1958
60°	1990	1900	1931
65°	1960	1855	1889
70°	1904	1788	1765
75°	1777	1649	1337
80°	1592	1299	1254
85°	1281	1155	1053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.1	3.2
10°-20°	407.7	9.1
20°-30°	622.0	13.9
30°-40°	759.1	16.9
40°-50°	803.2	17.9
50°-60°	745.3	16.6
60°-70°	584.8	13.1
70°-80°	328.3	7.3
80°-90°	87.0	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°	1171.8	26.2
0°-40°	1930.8	43.1
0°-60°	3479.3	77.7
0°-90°	4479.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4479.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1505	1496	1495	1492	1496	143
15°	1449	1446	1441	1440	1450	409
25°	1356	1346	1348	1344	1355	625
35°	1225	1217	1206	1210	1211	766
45°	1049	1045	1036	1032	1044	812
55°	852	839	826	828	835	763
65°	616	599	583	583	593	607
75°	342	331	317	280	257	363
85°	83	76	75	69	68	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1498.0	1498.0	1498.0	1498.0	1498.0
2.5°	1502.1	1497.2	1498.0	1496.4	1498.9
5°	1505.4	1495.6	1494.8	1491.5	1495.6
7.5°	1490.6	1487.4	1485.7	1484.9	1487.4
10°	1480.0	1474.2	1474.2	1475.0	1474.2
12.5°	1470.1	1461.9	1457.8	1460.2	1460.2
15°	1448.7	1446.3	1441.3	1440.5	1449.6
17.5°	1425.7	1427.4	1422.4	1421.6	1426.5
20°	1401.9	1401.1	1400.3	1396.1	1407.6
22.5°	1379.7	1375.6	1376.4	1371.5	1383.0
25°	1355.9	1346.0	1348.5	1344.4	1355.1
27.5°	1328.8	1317.3	1318.9	1318.9	1323.0
30°	1294.2	1284.4	1283.6	1288.5	1288.5
32.5°	1263.0	1253.2	1248.2	1249.0	1250.7
35°	1225.2	1217.0	1206.3	1209.6	1211.2
37.5°	1183.3	1179.2	1166.9	1166.9	1172.6
40°	1140.6	1134.8	1125.8	1123.3	1127.4
42.5°	1097.8	1092.1	1083.1	1078.9	1085.5
45°	1049.4	1045.3	1036.2	1032.1	1043.6
47.5°	1006.6	997.6	991.8	988.6	996.8
50°	960.6	947.5	937.6	939.3	948.3
52.5°	908.0	895.7	881.7	885.0	889.9
55°	852.1	839.0	825.9	828.3	834.9
57.5°	798.7	785.6	765.0	769.2	774.1
60°	739.6	721.5	705.9	708.3	717.4
62.5°	677.1	662.3	646.7	648.4	656.6
65°	615.5	599.1	582.6	582.6	593.3
67.5°	548.1	536.6	518.5	518.5	525.1
70°	484.0	469.2	454.4	444.6	448.7
72.5°	419.1	401.0	389.5	364.9	354.2
75°	341.8	331.2	317.2	280.2	257.2
77.5°	272.0	266.2	239.1	200.5	190.6
80°	205.4	201.3	167.6	161.9	161.9
82.5°	140.5	136.4	126.5	116.7	115.0
85°	83.0	75.6	74.8	69.0	68.2
87.5°	27.1	31.2	29.6	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)