

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: P393590

Luminaire Tested: **24EN-LD2-54-UNV-L92765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393590
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-L92765-W2A-1-U (4500K)
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: 4478.0 lumens
Efficiency: N/A
Efficacy: 115.7 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

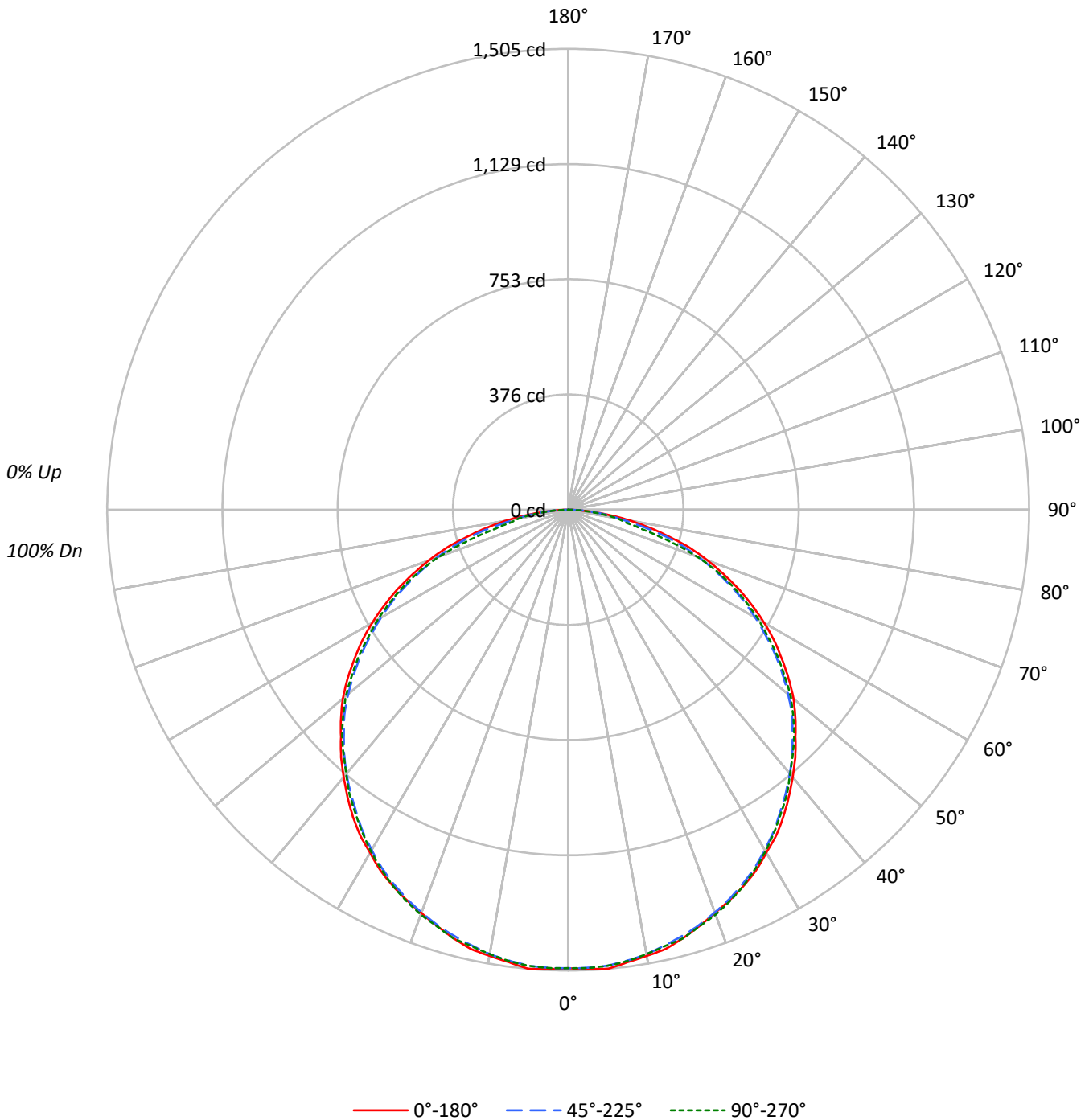
Input Watts (W): 38.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2015	2015	2015
5°	2033	2018	2019
10°	2021	2014	2014
15°	2017	2007	2019
20°	2007	2004	2015
25°	2012	2001	2011
30°	2010	1994	2001
35°	2012	1981	1989
40°	2003	1977	1980
45°	1996	1971	1985
50°	2010	1962	1984
55°	1998	1937	1958
60°	1989	1899	1930
65°	1959	1854	1888
70°	1904	1787	1764
75°	1776	1648	1337
80°	1592	1299	1254
85°	1281	1155	1053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	3.2
10°-20°	407.5	9.1
20°-30°	621.9	13.9
30°-40°	758.8	16.9
40°-50°	802.9	17.9
50°-60°	745.0	16.6
60°-70°	584.6	13.1
70°-80°	328.2	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°	1171.4	26.2
0°-40°	1930.2	43.1
0°-60°	3478.2	77.7
0°-90°	4478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4478.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1505	1495	1494	1491	1495	143
15°	1448	1446	1441	1440	1449	409
25°	1356	1346	1348	1344	1355	625
35°	1225	1217	1206	1209	1211	766
45°	1049	1045	1036	1032	1043	812
55°	852	839	826	828	835	762
65°	615	599	582	582	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°	1497.6	1497.6	1497.6	1497.6	1497.6
2.5°	1501.7	1496.8	1497.6	1495.9	1498.4
5°	1505.0	1495.1	1494.3	1491.0	1495.1
7.5°	1490.2	1486.9	1485.3	1484.4	1486.9
10°	1479.5	1473.8	1473.8	1474.6	1473.8
12.5°	1469.6	1461.4	1457.3	1459.8	1459.8
15°	1448.3	1445.8	1440.9	1440.1	1449.1
17.5°	1425.3	1426.9	1422.0	1421.2	1426.1
20°	1401.5	1400.6	1399.8	1395.7	1407.2
22.5°	1379.3	1375.2	1376.0	1371.1	1382.6
25°	1355.5	1345.6	1348.1	1344.0	1354.6
27.5°	1328.3	1316.8	1318.5	1318.5	1322.6
30°	1293.8	1284.0	1283.2	1288.1	1288.1
32.5°	1262.6	1252.8	1247.8	1248.7	1250.3
35°	1224.8	1216.6	1205.9	1209.2	1210.9
37.5°	1182.9	1178.8	1166.5	1166.5	1172.3
40°	1140.2	1134.5	1125.4	1123.0	1127.1
42.5°	1097.5	1091.8	1082.7	1078.6	1085.2
45°	1049.0	1044.9	1035.9	1031.8	1043.3
47.5°	1006.3	997.3	991.5	988.3	996.5
50°	960.3	947.2	937.3	939.0	948.0
52.5°	907.7	895.4	881.5	884.7	889.7
55°	851.9	838.7	825.6	828.1	834.6
57.5°	798.5	785.3	764.8	768.9	773.8
60°	739.3	721.3	705.7	708.1	717.2
62.5°	676.9	662.1	646.5	648.2	656.4
65°	615.3	598.9	582.4	582.4	593.1
67.5°	547.9	536.4	518.4	518.4	524.9
70°	483.9	469.1	454.3	444.4	448.5
72.5°	419.0	400.9	389.4	364.7	354.1
75°	341.7	331.1	317.1	280.1	257.1
77.5°	271.9	266.2	239.1	200.4	190.6
80°	205.4	201.3	167.6	161.8	161.8
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)