

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: P393581

Luminaire Tested: **24EN-LD2-54-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393581
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-L83050-W2A-1-U (4000K)
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5474.2 lumens
Efficiency: N/A
Efficacy: 140.4 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

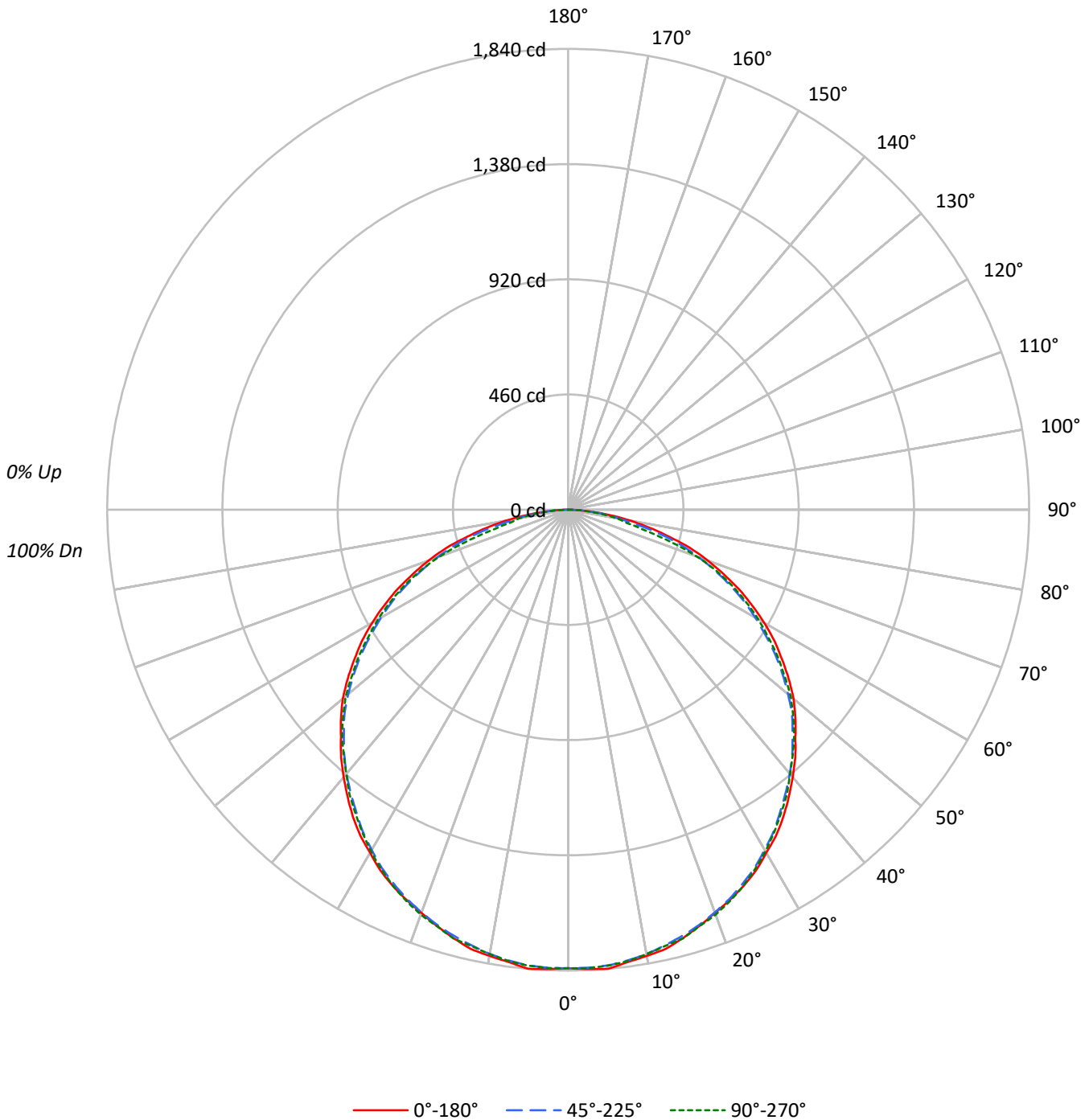
Input Watts (W): 39
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393581

CATALOG NUMBER: 24EN-LD2-54-UNV-L83050-W2A-1-U (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393581

CATALOG NUMBER: 24EN-LD2-54-UNV-L83050-W2A-1-U (4000K)

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°	2463	2463	2463
5°	2485	2467	2469
10°	2471	2461	2461
15°	2466	2454	2468
20°	2453	2450	2463
25°	2460	2447	2458
30°	2457	2437	2447
35°	2459	2421	2431
40°	2448	2416	2420
45°	2440	2410	2427
50°	2457	2399	2426
55°	2443	2368	2393
60°	2432	2322	2359
65°	2395	2267	2309
70°	2327	2185	2157
75°	2172	2015	1634
80°	1946	1588	1533
85°	1565	1411	1288



TEST NUMBER: P393581

CATALOG NUMBER: 24EN-LD2-54-UNV-L83050-W2A-1-U (4000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	3.2
10°-20°	498.2	9.1
20°-30°	760.2	13.9
30°-40°	927.7	16.9
40°-50°	981.6	17.9
50°-60°	910.8	16.6
60°-70°	714.7	13.1
70°-80°	401.2	7.3
80°-90°	106.4	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°	1432.0	26.2
0°-40°	2359.7	43.1
0°-60°	4252.0	77.7
0°-90°	5474.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5474.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1831	1831	1831	1831	1831	
5°	1840	1828	1827	1823	1828	174
15°	1770	1768	1762	1760	1772	500
25°	1657	1645	1648	1643	1656	764
35°	1497	1487	1474	1478	1480	936
45°	1282	1277	1266	1261	1275	992
55°	1041	1025	1009	1012	1020	932
65°	752	732	712	712	725	742
75°	418	405	388	342	314	444
85°	101	92	91	84	83	117
90°	0	0	0	0	0	



TEST NUMBER: P393581

CATALOG NUMBER: 24EN-LD2-54-UNV-L83050-W2A-1-U (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1830.8	1830.8	1830.8	1830.8	1830.8
2.5°	1835.8	1829.7	1830.8	1828.7	1831.8
5°	1839.8	1827.7	1826.7	1822.7	1827.7
7.5°	1821.7	1817.7	1815.7	1814.7	1817.7
10°	1808.7	1801.6	1801.6	1802.6	1801.6
12.5°	1796.6	1786.6	1781.5	1784.6	1784.6
15°	1770.5	1767.5	1761.5	1760.5	1771.5
17.5°	1742.4	1744.4	1738.4	1737.4	1743.4
20°	1713.3	1712.2	1711.2	1706.2	1720.3
22.5°	1686.1	1681.1	1682.1	1676.1	1690.2
25°	1657.0	1645.0	1648.0	1643.0	1656.0
27.5°	1623.9	1609.8	1611.8	1611.8	1616.8
30°	1581.7	1569.6	1568.6	1574.7	1574.7
32.5°	1543.5	1531.5	1525.5	1526.5	1528.5
35°	1497.3	1487.3	1474.2	1478.3	1480.3
37.5°	1446.1	1441.1	1426.0	1426.0	1433.1
40°	1393.9	1386.9	1375.8	1372.8	1377.8
42.5°	1341.7	1334.7	1323.6	1318.6	1326.6
45°	1282.4	1277.4	1266.4	1261.3	1275.4
47.5°	1230.2	1219.2	1212.1	1208.1	1218.2
50°	1174.0	1157.9	1145.9	1147.9	1158.9
52.5°	1109.7	1094.6	1077.6	1081.6	1087.6
55°	1041.4	1025.3	1009.3	1012.3	1020.3
57.5°	976.1	960.1	935.0	940.0	946.0
60°	903.8	881.7	862.7	865.7	876.7
62.5°	827.5	809.4	790.3	792.4	802.4
65°	752.2	732.1	712.0	712.0	725.1
67.5°	669.8	655.8	633.7	633.7	641.7
70°	591.5	573.4	555.4	543.3	548.3
72.5°	512.2	490.1	476.0	445.9	432.8
75°	417.8	404.7	387.6	342.4	314.3
77.5°	332.4	325.4	292.2	245.0	233.0
80°	251.1	246.0	204.9	197.8	197.8
82.5°	171.7	166.7	154.7	142.6	140.6
85°	101.4	92.4	91.4	84.4	83.4
87.5°	33.1	38.2	36.2	37.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)