

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: P393594

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393594
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 (2700K)
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: 4706.6 lumens
Efficiency: N/A
Efficacy: 121.9 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

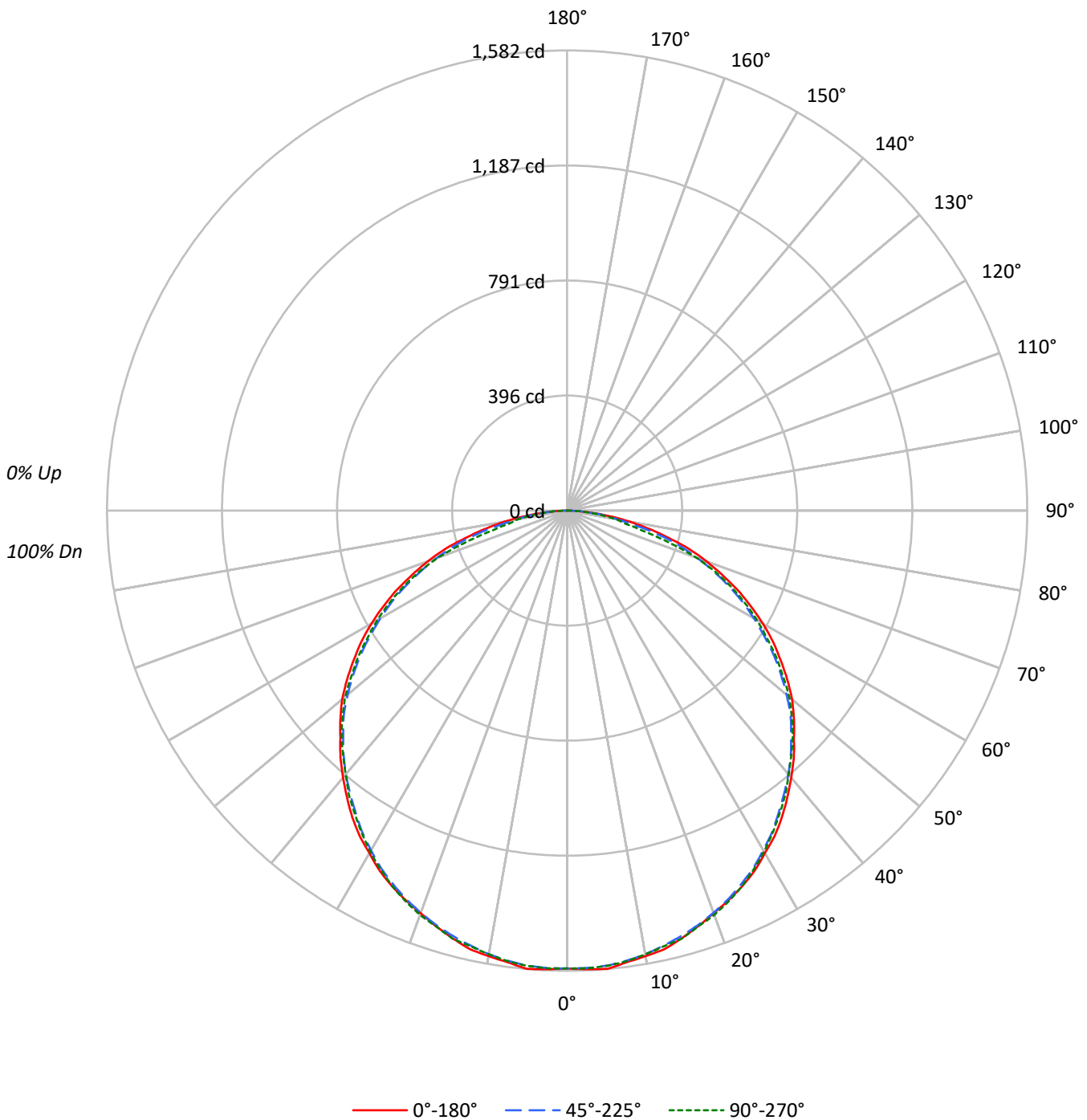
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393594

CATALOG NUMBER: 24EN-LD2-54-UNV-L93050-W2A-1-U (2700K)

Luminous Intensity Polar Plot





TEST NUMBER: P393594

CATALOG NUMBER: 24EN-LD2-54-UNV-L93050-W2A-1-U (2700K)

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°	2118	2118	2118
5°	2136	2121	2122
10°	2125	2116	2116
15°	2120	2110	2122
20°	2109	2107	2118
25°	2115	2104	2114
30°	2113	2095	2103
35°	2115	2082	2090
40°	2105	2078	2081
45°	2098	2072	2087
50°	2113	2062	2086
55°	2100	2035	2058
60°	2091	1996	2028
65°	2059	1949	1985
70°	2001	1878	1854
75°	1867	1733	1405
80°	1673	1364	1318
85°	1346	1213	1107



TEST NUMBER: P393594

CATALOG NUMBER: 24EN-LD2-54-UNV-L93050-W2A-1-U (2700K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.3	3.2
10°-20°	428.4	9.1
20°-30°	653.6	13.9
30°-40°	797.6	16.9
40°-50°	843.9	17.9
50°-60°	783.1	16.6
60°-70°	614.5	13.1
70°-80°	344.9	7.3
80°-90°	91.4	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°	1231.2	26.2
0°-40°	2028.8	43.1
0°-60°	3655.8	77.7
0°-90°	4706.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4706.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1582	1571	1571	1567	1571	150
15°	1522	1520	1514	1514	1523	430
25°	1425	1414	1417	1413	1424	657
35°	1287	1279	1268	1271	1273	805
45°	1103	1098	1089	1084	1097	853
55°	895	882	868	870	877	801
65°	647	629	612	612	623	638
75°	359	348	333	294	270	382
85°	87	79	79	72	72	101
90°	0	0	0	0	0	



TEST NUMBER: P393594

CATALOG NUMBER: 24EN-LD2-54-UNV-L93050-W2A-1-U (2700K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1574.0	1574.0	1574.0	1574.0	1574.0
2.5°	1578.4	1573.2	1574.0	1572.3	1574.9
5°	1581.8	1571.4	1570.6	1567.1	1571.4
7.5°	1566.3	1562.8	1561.1	1560.2	1562.8
10°	1555.0	1549.0	1549.0	1549.9	1549.0
12.5°	1544.7	1536.0	1531.7	1534.3	1534.3
15°	1522.2	1519.6	1514.5	1513.6	1523.1
17.5°	1498.1	1499.8	1494.6	1493.7	1498.9
20°	1473.0	1472.1	1471.3	1467.0	1479.1
22.5°	1449.7	1445.4	1446.2	1441.1	1453.2
25°	1424.7	1414.3	1416.9	1412.6	1423.8
27.5°	1396.2	1384.1	1385.8	1385.8	1390.1
30°	1359.9	1349.5	1348.7	1353.9	1353.9
32.5°	1327.1	1316.7	1311.6	1312.4	1314.1
35°	1287.4	1278.7	1267.5	1271.0	1272.7
37.5°	1243.3	1239.0	1226.1	1226.1	1232.1
40°	1198.4	1192.4	1182.9	1180.3	1184.6
42.5°	1153.5	1147.5	1138.0	1133.7	1140.6
45°	1102.6	1098.3	1088.8	1084.5	1096.6
47.5°	1057.7	1048.2	1042.2	1038.7	1047.3
50°	1009.4	995.5	985.2	986.9	996.4
52.5°	954.1	941.1	926.5	929.9	935.1
55°	895.4	881.6	867.7	870.3	877.2
57.5°	839.3	825.4	803.9	808.2	813.4
60°	777.1	758.1	741.7	744.3	753.8
62.5°	711.5	695.9	679.5	681.2	689.9
65°	646.7	629.4	612.2	612.2	623.4
67.5°	575.9	563.8	544.8	544.8	551.7
70°	508.6	493.0	477.5	467.1	471.4
72.5°	440.3	421.4	409.3	383.4	372.1
75°	359.2	348.0	333.3	294.4	270.3
77.5°	285.8	279.8	251.3	210.7	200.3
80°	215.9	211.5	176.1	170.1	170.1
82.5°	147.6	143.3	133.0	122.6	120.9
85°	87.2	79.4	78.6	72.5	71.7
87.5°	28.5	32.8	31.1	31.9	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)