

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: P393597

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393597
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 (4000K)
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: 4761.5 lumens
Efficiency: N/A
Efficacy: 124.0 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

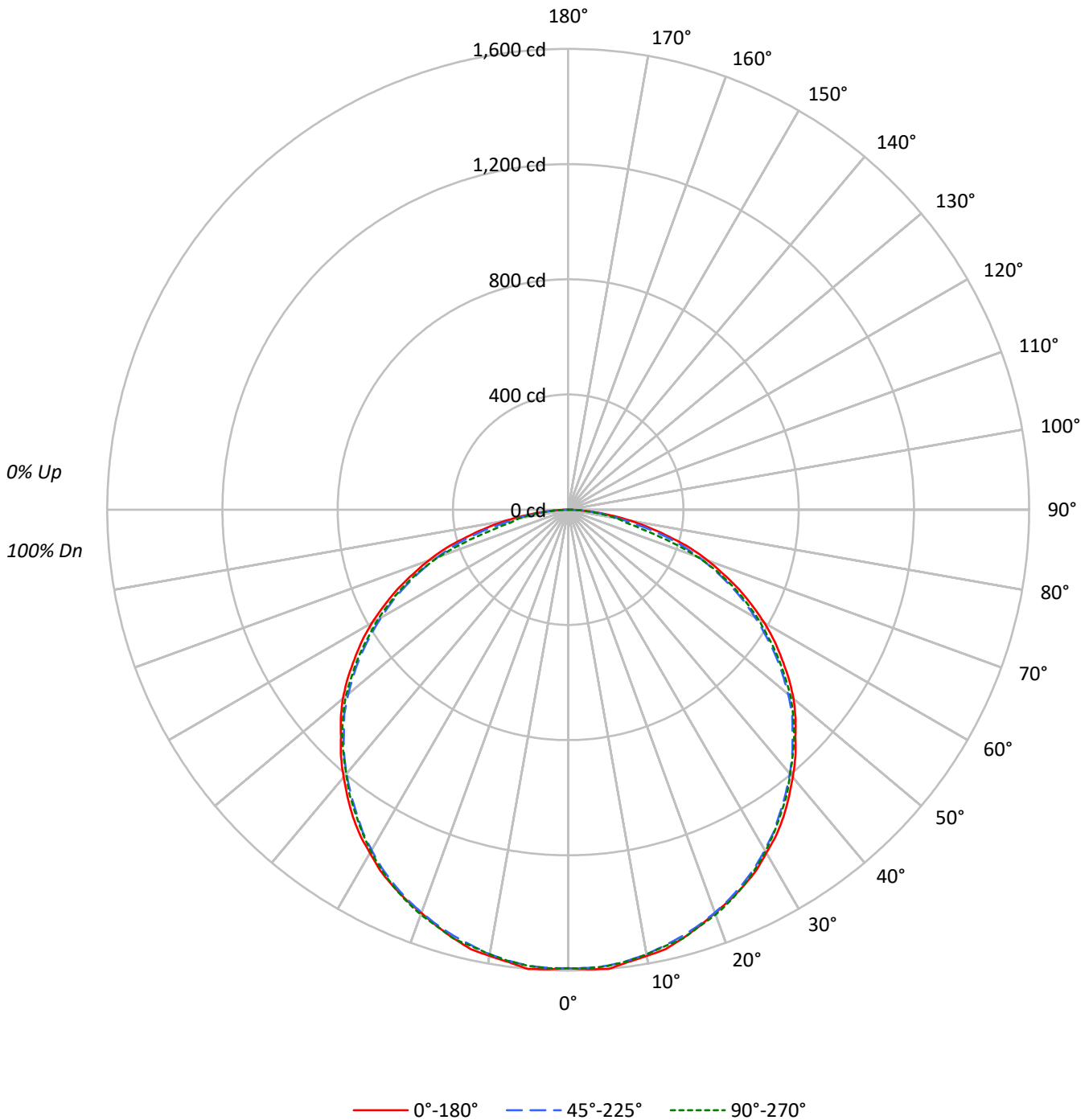
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2143	2143	2143
5°	2161	2146	2147
10°	2149	2141	2141
15°	2145	2134	2146
20°	2134	2131	2142
25°	2140	2128	2138
30°	2137	2120	2128
35°	2139	2106	2115
40°	2129	2102	2105
45°	2123	2096	2111
50°	2137	2086	2110
55°	2125	2059	2082
60°	2116	2019	2052
65°	2083	1972	2008
70°	2024	1900	1876
75°	1889	1753	1421
80°	1692	1381	1333
85°	1362	1227	1119



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	3.2
10°-20°	433.4	9.1
20°-30°	661.2	13.9
30°-40°	806.9	16.9
40°-50°	853.8	17.9
50°-60°	792.2	16.6
60°-70°	621.6	13.1
70°-80°	349.0	7.3
80°-90°	92.5	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°	1245.6	26.2
0°-40°	2052.5	43.1
0°-60°	3698.4	77.7
0°-90°	4761.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4761.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1600	1590	1589	1585	1590	152
15°	1540	1537	1532	1531	1541	435
25°	1441	1431	1433	1429	1440	664
35°	1302	1294	1282	1286	1288	814
45°	1116	1111	1102	1097	1109	863
55°	906	892	878	880	888	811
65°	654	637	619	619	631	645
75°	363	352	337	298	273	386
85°	88	80	80	73	72	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.4	1592.4	1592.4	1592.4	1592.4
2.5°	1596.8	1591.5	1592.4	1590.7	1593.3
5°	1600.3	1589.8	1588.9	1585.4	1589.8
7.5°	1584.5	1581.0	1579.3	1578.4	1581.0
10°	1573.2	1567.1	1567.1	1567.9	1567.1
12.5°	1562.7	1554.0	1549.6	1552.2	1552.2
15°	1540.0	1537.4	1532.1	1531.3	1540.9
17.5°	1515.5	1517.3	1512.0	1511.2	1516.4
20°	1490.2	1489.3	1488.5	1484.1	1496.3
22.5°	1466.6	1462.2	1463.1	1457.9	1470.1
25°	1441.3	1430.8	1433.4	1429.1	1440.4
27.5°	1412.5	1400.2	1402.0	1402.0	1406.3
30°	1375.8	1365.3	1364.4	1369.7	1369.7
32.5°	1342.6	1332.1	1326.9	1327.7	1329.5
35°	1302.4	1293.7	1282.3	1285.8	1287.5
37.5°	1257.8	1253.5	1240.4	1240.4	1246.5
40°	1212.4	1206.3	1196.7	1194.1	1198.4
42.5°	1167.0	1160.9	1151.3	1146.9	1153.9
45°	1115.5	1111.1	1101.5	1097.1	1109.4
47.5°	1070.0	1060.4	1054.3	1050.8	1059.6
50°	1021.1	1007.2	996.7	998.4	1008.0
52.5°	965.2	952.1	937.3	940.8	946.0
55°	905.8	891.8	877.9	880.5	887.5
57.5°	849.0	835.1	813.2	817.6	822.8
60°	786.2	766.9	750.3	753.0	762.6
62.5°	719.8	704.0	687.4	689.2	697.9
65°	654.3	636.8	619.3	619.3	630.7
67.5°	582.6	570.4	551.2	551.2	558.2
70°	514.5	498.8	483.0	472.6	476.9
72.5°	445.5	426.3	414.0	387.8	376.5
75°	363.4	352.0	337.2	297.9	273.4
77.5°	289.1	283.0	254.2	213.1	202.7
80°	218.4	214.0	178.2	172.1	172.1
82.5°	149.4	145.0	134.5	124.0	122.3
85°	88.2	80.4	79.5	73.4	72.5
87.5°	28.8	33.2	31.4	32.3	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)