

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: P393544

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-35)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-49-UNV-L82765-W2A-1-U (5700K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4763.2 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

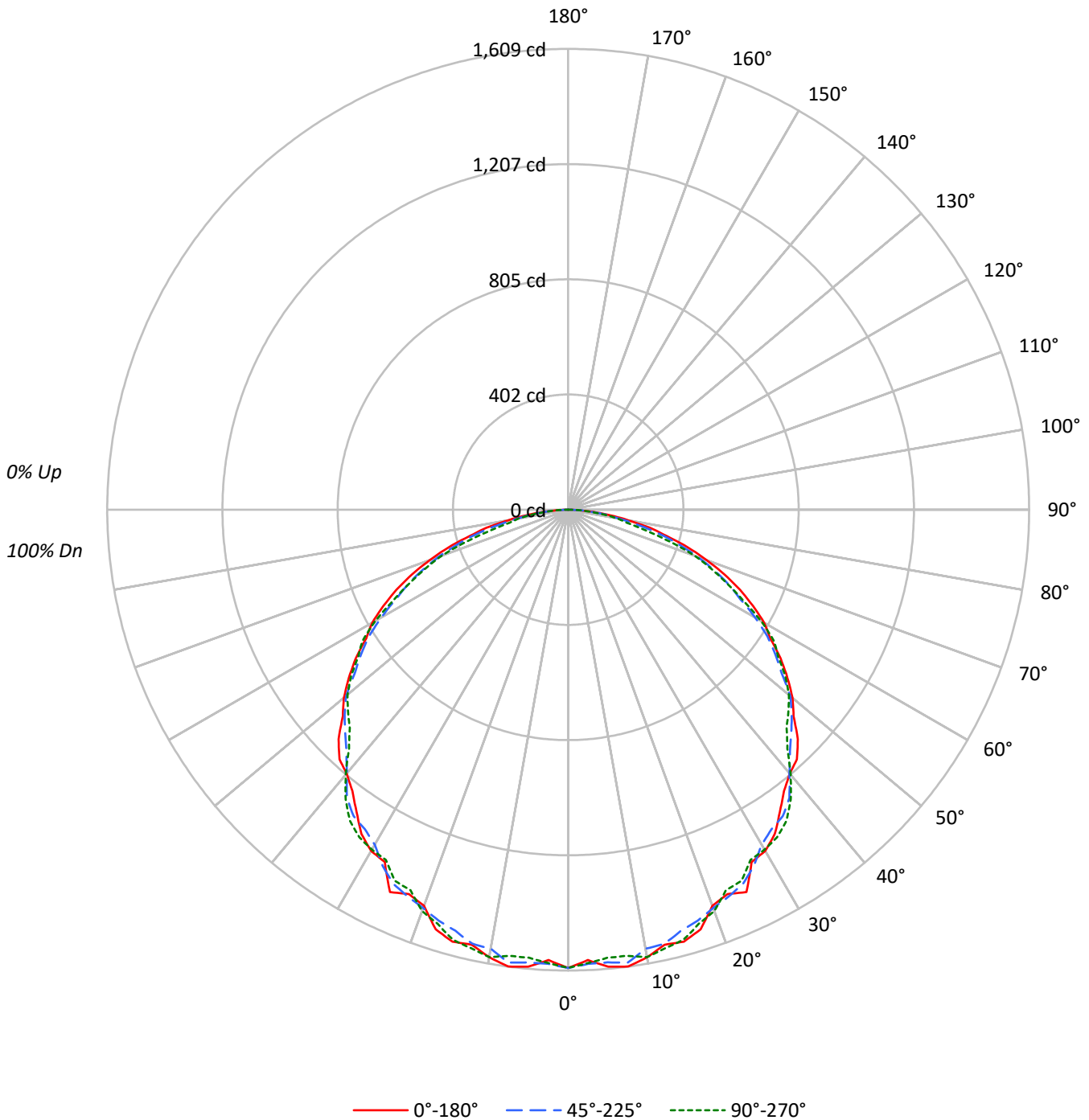
Input Watts (W): 34.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	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°	2153	2153	2153
5°	2164	2143	2121
10°	2167	2127	2167
15°	2175	2120	2165
20°	2107	2118	2135
25°	2186	2141	2123
30°	2137	2098	2129
35°	2115	2145	2180
40°	2113	2109	2121
45°	2157	2094	2050
50°	2138	2118	2104
55°	2123	2071	2098
60°	2127	2028	2093
65°	2105	1967	1952
70°	2017	1892	1850
75°	1849	1744	1453
80°	1636	1382	1337
85°	1354	1220	1132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	3.2
10°-20°	434.8	9.1
20°-30°	659.0	13.8
30°-40°	811.3	17.0
40°-50°	853.3	17.9
50°-60°	794.0	16.7
60°-70°	620.5	13.0
70°-80°	347.8	7.3
80°-90°	92.0	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°	1244.3	26.1
0°-40°	2055.6	43.2
0°-60°	3702.9	77.7
0°-90°	4763.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4763.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1602	1584	1586	1562	1570	152
15°	1561	1543	1522	1538	1555	437
25°	1473	1422	1442	1411	1430	662
35°	1288	1303	1306	1286	1327	808
45°	1133	1122	1101	1102	1078	868
55°	905	898	883	881	894	808
65°	661	642	618	622	613	651
75°	356	348	335	296	280	382
85°	88	79	79	71	73	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1599.9	1599.9	1599.9	1599.9	1599.9
2.5°	1573.9	1604.8	1587.4	1607.6	1584.5
5°	1601.9	1584.5	1586.4	1562.3	1570.1
7.5°	1608.6	1544.0	1595.1	1569.1	1571.0
10°	1586.4	1557.5	1556.6	1555.6	1586.4
12.5°	1555.6	1567.2	1551.7	1537.3	1568.1
15°	1561.4	1543.1	1521.9	1538.3	1554.6
17.5°	1536.3	1527.6	1504.5	1546.9	1516.1
20°	1471.7	1505.5	1479.5	1502.6	1491.0
22.5°	1452.5	1480.4	1462.1	1476.6	1438.0
25°	1472.7	1421.6	1441.9	1411.0	1430.3
27.5°	1386.9	1377.3	1402.4	1391.8	1378.3
30°	1375.4	1359.9	1350.3	1351.3	1370.5
32.5°	1342.6	1326.2	1321.4	1330.1	1356.1
35°	1287.7	1303.1	1306.0	1285.7	1327.2
37.5°	1237.5	1249.1	1268.4	1267.4	1276.1
40°	1202.8	1223.1	1200.9	1210.6	1207.7
42.5°	1181.6	1163.3	1145.0	1150.8	1132.5
45°	1133.4	1121.9	1100.7	1101.6	1077.5
47.5°	1066.9	1052.5	1058.3	1041.9	1042.8
50°	1021.6	996.6	1012.0	981.2	1005.3
52.5°	964.8	954.2	938.8	929.1	955.1
55°	905.0	898.3	882.9	880.9	894.4
57.5°	835.6	829.8	825.0	824.1	851.0
60°	790.3	768.2	753.7	749.8	777.8
62.5°	726.7	717.1	678.5	687.2	690.1
65°	661.2	641.9	617.8	621.7	613.0
67.5°	590.8	556.1	550.3	551.3	541.7
70°	512.8	492.5	480.9	474.2	470.3
72.5°	438.5	422.2	408.7	391.3	374.0
75°	355.6	347.9	335.4	295.9	279.5
77.5°	292.0	283.4	256.4	213.0	210.1
80°	211.1	215.9	178.3	171.6	172.5
82.5°	149.4	145.5	133.0	124.3	119.5
85°	87.7	79.0	79.0	71.3	73.3
87.5°	28.9	32.8	32.8	31.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)