

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: P393547

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393547
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-L83050-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4862.7 lumens
Efficiency: N/A
Efficacy: 138.1 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

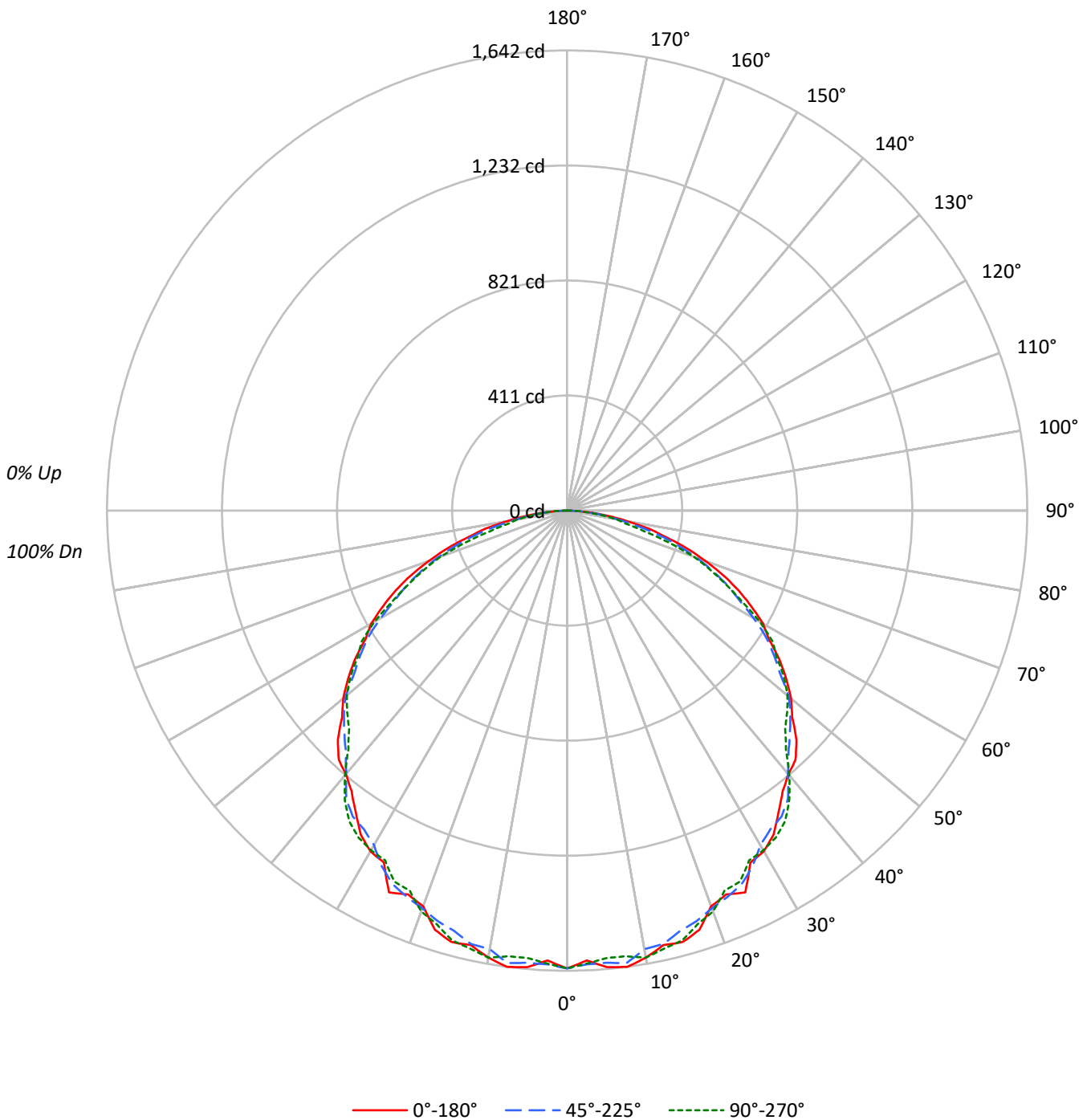
Input Watts (W): 35.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2198	2198	2198
5°	2209	2187	2165
10°	2213	2171	2213
15°	2220	2164	2211
20°	2151	2163	2180
25°	2232	2185	2168
30°	2181	2142	2174
35°	2159	2190	2225
40°	2157	2153	2165
45°	2202	2138	2093
50°	2183	2162	2148
55°	2167	2114	2142
60°	2171	2070	2137
65°	2149	2008	1992
70°	2059	1932	1889
75°	1888	1780	1483
80°	1670	1410	1364
85°	1382	1246	1155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	3.2
10°-20°	443.9	9.1
20°-30°	672.7	13.8
30°-40°	828.2	17.0
40°-50°	871.1	17.9
50°-60°	810.6	16.7
60°-70°	633.5	13.0
70°-80°	355.0	7.3
80°-90°	93.9	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°	1270.3	26.1
0°-40°	2098.5	43.2
0°-60°	3780.2	77.7
0°-90°	4862.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4862.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1635	1618	1620	1595	1603	156
15°	1594	1575	1554	1570	1587	446
25°	1504	1451	1472	1440	1460	676
35°	1315	1330	1333	1313	1355	824
45°	1157	1145	1124	1125	1100	886
55°	924	917	901	899	913	825
65°	675	655	631	635	626	665
75°	363	355	342	302	285	390
85°	90	81	81	73	75	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1633.4	1633.4	1633.4	1633.4	1633.4
2.5°	1606.8	1638.3	1620.6	1641.2	1617.6
5°	1635.3	1617.6	1619.6	1595.0	1602.8
7.5°	1642.2	1576.3	1628.4	1601.9	1603.8
10°	1619.6	1590.1	1589.1	1588.1	1619.6
12.5°	1588.1	1599.9	1584.2	1569.4	1600.9
15°	1594.0	1575.3	1553.7	1570.4	1587.1
17.5°	1568.4	1559.6	1535.9	1579.2	1547.7
20°	1502.5	1536.9	1510.4	1534.0	1522.2
22.5°	1482.8	1511.3	1492.6	1507.4	1468.0
25°	1503.5	1451.3	1472.0	1440.5	1460.2
27.5°	1415.9	1406.1	1431.6	1420.8	1407.0
30°	1404.1	1388.3	1378.5	1379.5	1399.2
32.5°	1370.6	1353.9	1349.0	1357.8	1384.4
35°	1314.6	1330.3	1333.2	1312.6	1354.9
37.5°	1263.4	1275.2	1294.9	1293.9	1302.7
40°	1228.0	1248.6	1226.0	1235.8	1232.9
42.5°	1206.3	1187.6	1168.9	1174.8	1156.1
45°	1157.1	1145.3	1123.7	1124.7	1100.1
47.5°	1089.2	1074.5	1080.4	1063.6	1064.6
50°	1043.0	1017.4	1033.1	1001.7	1026.3
52.5°	984.9	974.1	958.4	948.5	975.1
55°	923.9	917.0	901.3	899.3	913.1
57.5°	853.1	847.2	842.3	841.3	868.8
60°	806.8	784.2	769.4	765.5	794.0
62.5°	741.9	732.1	692.7	701.6	704.5
65°	675.0	655.3	630.7	634.6	625.8
67.5°	603.2	567.7	561.8	562.8	553.0
70°	523.5	502.8	491.0	484.1	480.2
72.5°	447.7	431.0	417.2	399.5	381.8
75°	363.1	355.2	342.4	302.1	285.3
77.5°	298.1	289.3	261.7	217.5	214.5
80°	215.5	220.4	182.0	175.1	176.1
82.5°	152.5	148.6	135.8	126.9	122.0
85°	89.5	80.7	80.7	72.8	74.8
87.5°	29.5	33.5	33.5	32.5	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)