

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: P393543

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (5000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393543
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 (5000K)
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: 4745.7 lumens
Efficiency: N/A
Efficacy: 137.6 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

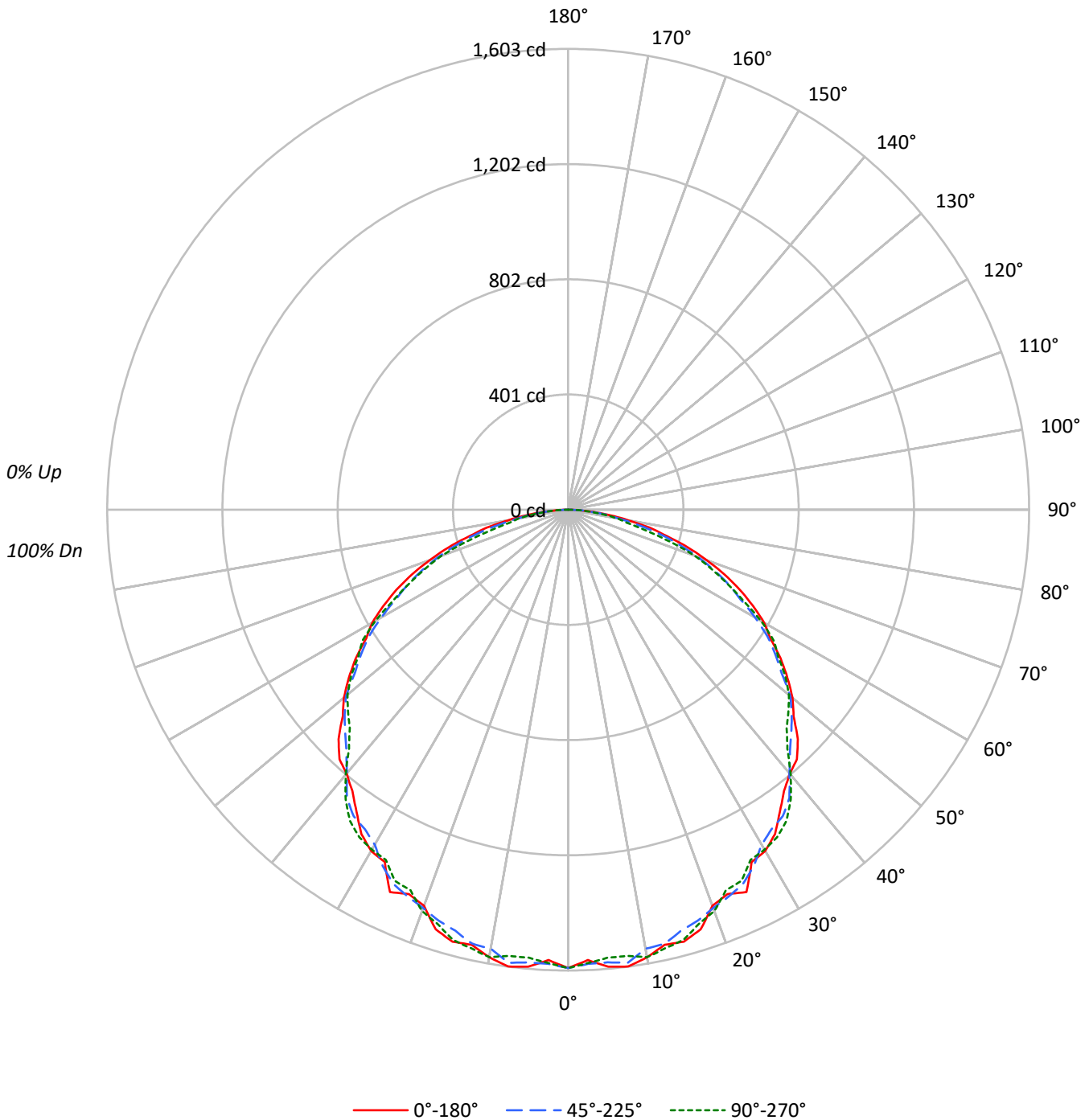
Input Watts (W): 34.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2145	2145	2145
5°	2156	2135	2113
10°	2159	2119	2159
15°	2167	2112	2158
20°	2100	2111	2127
25°	2178	2133	2116
30°	2129	2090	2121
35°	2107	2137	2172
40°	2105	2102	2113
45°	2149	2087	2043
50°	2131	2111	2097
55°	2115	2063	2090
60°	2119	2021	2085
65°	2097	1960	1944
70°	2010	1885	1843
75°	1842	1737	1448
80°	1629	1377	1332
85°	1349	1215	1127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.2
10°-20°	433.2	9.1
20°-30°	656.6	13.8
30°-40°	808.3	17.0
40°-50°	850.2	17.9
50°-60°	791.1	16.7
60°-70°	618.3	13.0
70°-80°	346.5	7.3
80°-90°	91.7	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°	1239.8	26.1
0°-40°	2048.0	43.2
0°-60°	3689.3	77.7
0°-90°	4745.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4745.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1596	1579	1581	1557	1564	152
15°	1556	1537	1516	1533	1549	435
25°	1467	1416	1437	1406	1425	660
35°	1283	1298	1301	1281	1322	805
45°	1129	1118	1097	1098	1074	865
55°	902	895	880	878	891	805
65°	659	640	616	619	611	649
75°	354	347	334	295	278	380
85°	87	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°	1594.1	1594.1	1594.1	1594.1	1594.1
2.5°	1568.1	1598.9	1581.6	1601.7	1578.7
5°	1596.0	1578.7	1580.6	1556.6	1564.3
7.5°	1602.7	1538.4	1589.3	1563.3	1565.2
10°	1580.6	1551.8	1550.8	1549.9	1580.6
12.5°	1549.9	1561.4	1546.0	1531.6	1562.4
15°	1555.6	1537.4	1516.3	1532.6	1548.9
17.5°	1530.7	1522.0	1499.0	1541.2	1510.5
20°	1466.3	1499.9	1474.0	1497.1	1485.5
22.5°	1447.1	1475.0	1456.7	1471.1	1432.7
25°	1467.3	1416.4	1436.6	1405.8	1425.0
27.5°	1381.8	1372.2	1397.2	1386.6	1373.2
30°	1370.3	1354.9	1345.3	1346.3	1365.5
32.5°	1337.7	1321.3	1316.5	1325.2	1351.1
35°	1282.9	1298.3	1301.2	1281.0	1322.3
37.5°	1233.0	1244.5	1263.7	1262.8	1271.4
40°	1198.4	1218.6	1196.5	1206.1	1203.2
42.5°	1177.3	1159.0	1140.8	1146.6	1128.3
45°	1129.3	1117.8	1096.6	1097.6	1073.6
47.5°	1063.0	1048.6	1054.4	1038.1	1039.0
50°	1017.9	992.9	1008.3	977.6	1001.6
52.5°	961.2	950.7	935.3	925.7	951.6
55°	901.7	895.0	879.6	877.7	891.1
57.5°	832.6	826.8	822.0	821.0	847.9
60°	787.4	765.3	750.9	747.1	774.9
62.5°	724.0	714.4	676.0	684.7	687.6
65°	658.7	639.5	615.5	619.4	610.7
67.5°	588.6	554.1	548.3	549.3	539.7
70°	510.9	490.7	479.2	472.5	468.6
72.5°	436.9	420.6	407.2	389.9	372.6
75°	354.3	346.7	334.2	294.8	278.5
77.5°	291.0	282.3	255.4	212.2	209.3
80°	210.3	215.1	177.7	170.9	171.9
82.5°	148.8	145.0	132.5	123.9	119.1
85°	87.4	78.7	78.7	71.1	73.0
87.5°	28.8	32.6	32.6	31.7	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)