

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: P393549

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393549
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 (4000K)
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: 4963.1 lumens
Efficiency: N/A
Efficacy: 142.2 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

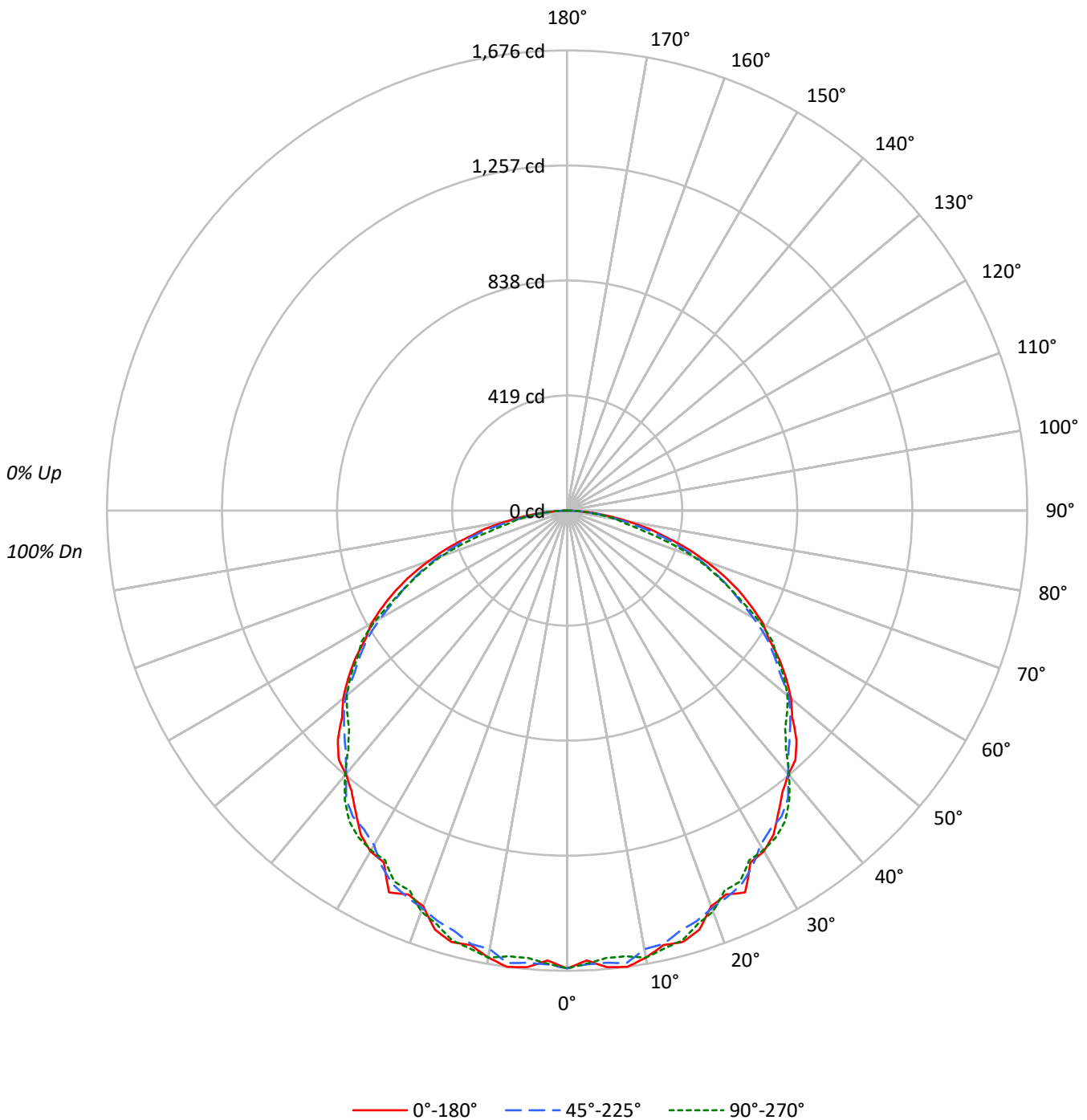
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2243	2243	2243
5°	2254	2233	2209
10°	2258	2216	2258
15°	2266	2209	2256
20°	2196	2207	2225
25°	2278	2230	2212
30°	2227	2186	2219
35°	2204	2235	2271
40°	2201	2198	2210
45°	2247	2182	2136
50°	2228	2207	2192
55°	2212	2158	2186
60°	2216	2113	2181
65°	2193	2049	2033
70°	2102	1971	1928
75°	1927	1817	1514
80°	1704	1440	1393
85°	1411	1271	1178



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	3.2
10°-20°	453.1	9.1
20°-30°	686.6	13.8
30°-40°	845.3	17.0
40°-50°	889.1	17.9
50°-60°	827.3	16.7
60°-70°	646.6	13.0
70°-80°	362.4	7.3
80°-90°	95.9	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°	1296.5	26.1
0°-40°	2141.8	43.2
0°-60°	3858.3	77.7
0°-90°	4963.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4963.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1667	1667	1667	1667	1667	
5°	1669	1651	1653	1628	1636	159
15°	1627	1608	1586	1603	1620	455
25°	1534	1481	1502	1470	1490	690
35°	1342	1358	1361	1340	1383	841
45°	1181	1169	1147	1148	1123	904
55°	943	936	920	918	932	842
65°	689	669	644	648	639	678
75°	371	362	350	308	291	398
85°	91	82	82	74	76	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1667.1	1667.1	1667.1	1667.1	1667.1
2.5°	1639.9	1672.1	1654.0	1675.1	1651.0
5°	1669.1	1651.0	1653.0	1627.9	1635.9
7.5°	1676.1	1608.8	1662.0	1634.9	1636.9
10°	1653.0	1622.9	1621.9	1620.9	1653.0
12.5°	1620.9	1632.9	1616.8	1601.8	1633.9
15°	1626.9	1607.8	1585.7	1602.8	1619.9
17.5°	1600.8	1591.7	1567.6	1611.8	1579.7
20°	1533.5	1568.6	1541.5	1565.6	1553.6
22.5°	1513.4	1542.5	1523.5	1538.5	1498.3
25°	1534.5	1481.3	1502.4	1470.2	1490.3
27.5°	1445.1	1435.1	1461.2	1450.1	1436.1
30°	1433.1	1417.0	1407.0	1408.0	1428.0
32.5°	1398.9	1381.9	1376.8	1385.9	1413.0
35°	1341.7	1357.7	1360.8	1339.7	1382.9
37.5°	1289.5	1301.5	1321.6	1320.6	1329.6
40°	1253.3	1274.4	1251.3	1261.3	1258.3
42.5°	1231.2	1212.1	1193.1	1199.1	1180.0
45°	1181.0	1168.9	1146.9	1147.9	1122.8
47.5°	1111.7	1096.6	1102.7	1085.6	1086.6
50°	1064.5	1038.4	1054.5	1022.3	1047.4
52.5°	1005.3	994.2	978.1	968.1	995.2
55°	943.0	936.0	919.9	917.9	931.9
57.5°	870.7	864.7	859.6	858.6	886.8
60°	823.5	800.4	785.3	781.3	810.4
62.5°	757.2	747.2	707.0	716.0	719.0
65°	688.9	668.8	643.7	647.7	638.7
67.5°	615.6	579.5	573.4	574.4	564.4
70°	534.3	513.2	501.1	494.1	490.1
72.5°	456.9	439.9	425.8	407.7	389.6
75°	370.6	362.5	349.5	308.3	291.2
77.5°	304.3	295.3	267.1	221.9	218.9
80°	219.9	225.0	185.8	178.8	179.8
82.5°	155.7	151.6	138.6	129.5	124.5
85°	91.4	82.3	82.3	74.3	76.3
87.5°	30.1	34.1	34.1	33.1	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)