

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: P393563

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393563
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-L93050-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4061.1 lumens
Efficiency: N/A
Efficacy: 117.0 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

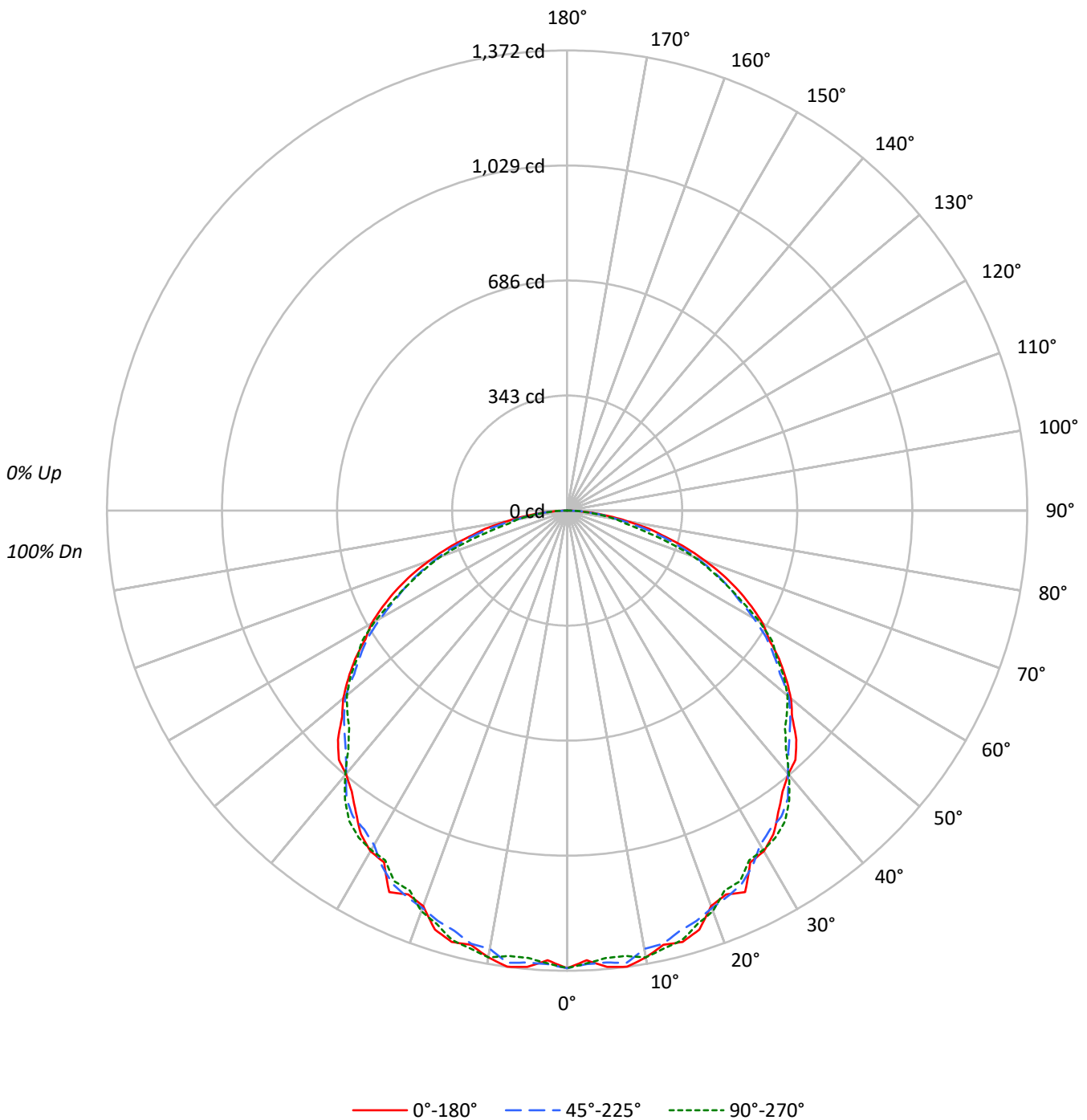
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1835	1835	1835
5°	1845	1827	1808
10°	1848	1813	1848
15°	1854	1807	1846
20°	1797	1806	1820
25°	1864	1825	1810
30°	1822	1789	1815
35°	1803	1829	1859
40°	1801	1798	1808
45°	1839	1786	1748
50°	1823	1806	1794
55°	1810	1766	1789
60°	1813	1729	1784
65°	1795	1677	1664
70°	1720	1613	1578
75°	1576	1487	1239
80°	1395	1178	1140
85°	1155	1041	965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.2
10°-20°	370.7	9.1
20°-30°	561.9	13.8
30°-40°	691.7	17.0
40°-50°	727.5	17.9
50°-60°	676.9	16.7
60°-70°	529.1	13.0
70°-80°	296.5	7.3
80°-90°	78.5	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°	1060.9	26.1
0°-40°	1752.6	43.2
0°-60°	3157.1	77.7
0°-90°	4061.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4061.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1366	1351	1353	1332	1339	130
15°	1331	1316	1298	1312	1326	373
25°	1256	1212	1229	1203	1220	565
35°	1098	1111	1114	1096	1132	689
45°	966	956	938	939	919	740
55°	772	766	753	751	763	689
65°	564	547	527	530	523	555
75°	303	297	286	252	238	326
85°	75	67	67	61	62	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.1	1364.1	1364.1	1364.1	1364.1
2.5°	1341.9	1368.2	1353.4	1370.7	1350.9
5°	1365.7	1350.9	1352.6	1332.0	1338.6
7.5°	1371.5	1316.4	1360.0	1337.8	1339.4
10°	1352.6	1327.9	1327.1	1326.3	1352.6
12.5°	1326.3	1336.2	1323.0	1310.7	1337.0
15°	1331.2	1315.6	1297.5	1311.5	1325.5
17.5°	1309.9	1302.5	1282.7	1318.9	1292.6
20°	1254.8	1283.6	1261.4	1281.1	1271.2
22.5°	1238.4	1262.2	1246.6	1258.9	1226.0
25°	1255.6	1212.1	1229.3	1203.0	1219.5
27.5°	1182.5	1174.3	1195.6	1186.6	1175.1
30°	1172.6	1159.5	1151.3	1152.1	1168.5
32.5°	1144.7	1130.7	1126.6	1134.0	1156.2
35°	1097.8	1111.0	1113.5	1096.2	1131.5
37.5°	1055.1	1065.0	1081.4	1080.6	1088.0
40°	1025.5	1042.8	1023.9	1032.1	1029.6
42.5°	1007.5	991.8	976.2	981.2	965.5
45°	966.4	956.5	938.4	939.3	918.7
47.5°	909.7	897.3	902.3	888.3	889.1
50°	871.0	849.7	862.8	836.5	857.1
52.5°	822.6	813.5	800.4	792.2	814.3
55°	771.6	765.9	752.7	751.1	762.6
57.5°	712.5	707.5	703.4	702.6	725.6
60°	673.8	654.9	642.6	639.3	663.1
62.5°	619.6	611.4	578.5	585.9	588.4
65°	563.7	547.3	526.7	530.0	522.6
67.5°	503.7	474.1	469.2	470.0	461.8
70°	437.2	419.9	410.0	404.3	401.0
72.5°	373.9	359.9	348.4	333.6	318.8
75°	303.2	296.6	286.0	252.3	238.3
77.5°	249.0	241.6	218.6	181.6	179.1
80°	180.0	184.1	152.0	146.3	147.1
82.5°	127.4	124.1	113.4	106.0	101.9
85°	74.8	67.4	67.4	60.8	62.5
87.5°	24.7	27.9	27.9	27.1	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)