

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: P393558

Luminaire Tested: **24EN-LD2-49-UNV-L92765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393558
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-L92765-W2A-1-U (4500K)
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: 4059.9 lumens
Efficiency: N/A
Efficacy: 117.3 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

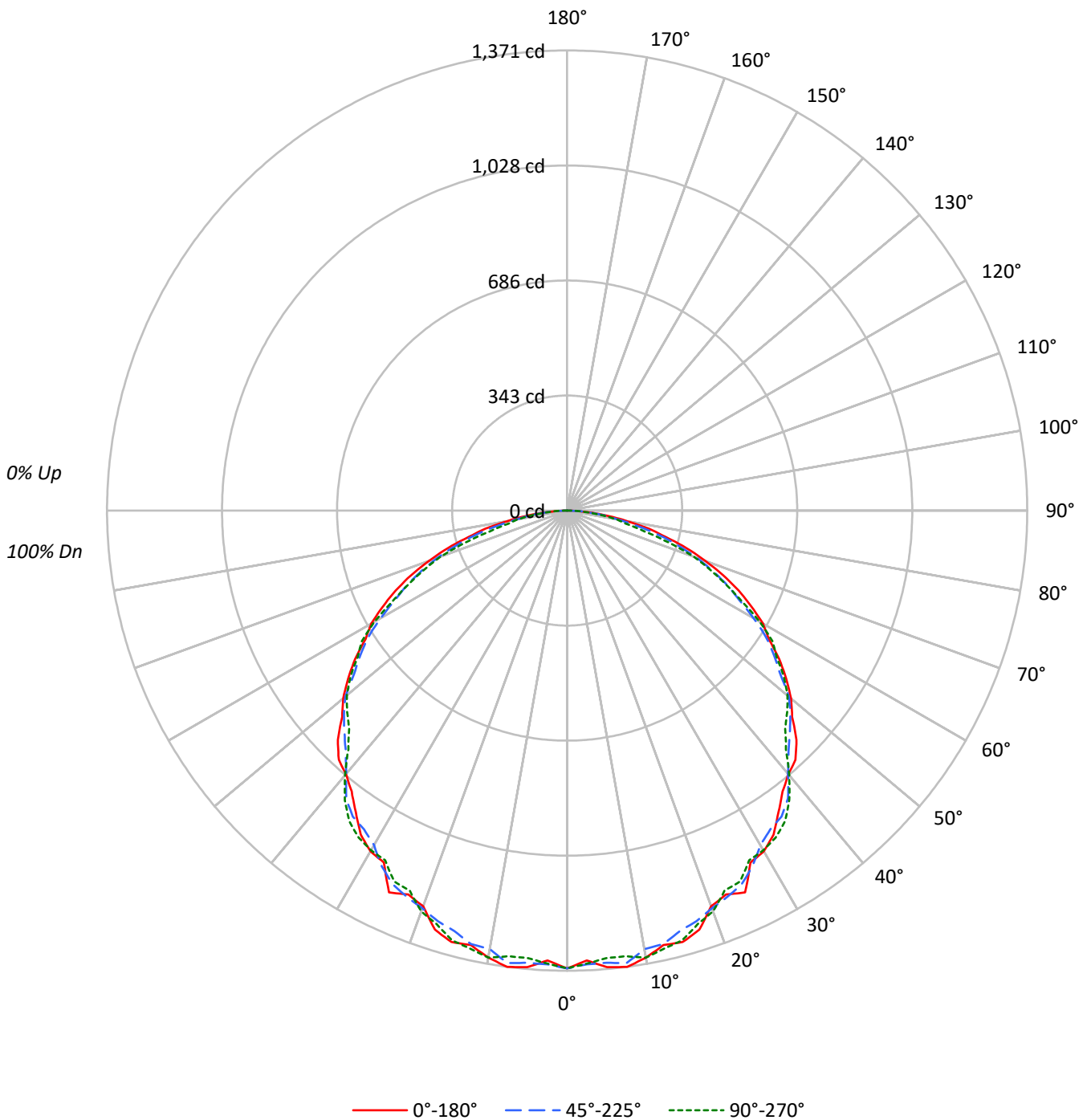
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1835	1835	1835
5°	1844	1826	1807
10°	1847	1813	1847
15°	1854	1807	1846
20°	1796	1806	1820
25°	1863	1824	1810
30°	1821	1788	1815
35°	1803	1828	1858
40°	1801	1798	1808
45°	1838	1785	1748
50°	1823	1806	1793
55°	1810	1765	1788
60°	1813	1729	1784
65°	1794	1677	1663
70°	1719	1613	1577
75°	1576	1486	1238
80°	1394	1178	1139
85°	1155	1041	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.2
10°-20°	370.6	9.1
20°-30°	561.7	13.8
30°-40°	691.5	17.0
40°-50°	727.3	17.9
50°-60°	676.7	16.7
60°-70°	528.9	13.0
70°-80°	296.4	7.3
80°-90°	78.4	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°	1060.6	26.1
0°-40°	1752.1	43.2
0°-60°	3156.1	77.7
0°-90°	4059.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4059.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1365	1350	1352	1332	1338	130
15°	1331	1315	1297	1311	1325	372
25°	1255	1212	1229	1203	1219	564
35°	1098	1111	1113	1096	1131	688
45°	966	956	938	939	918	740
55°	771	766	752	751	762	689
65°	564	547	527	530	522	555
75°	303	297	286	252	238	325
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°	1363.7	1363.7	1363.7	1363.7	1363.7
2.5°	1341.5	1367.8	1353.0	1370.2	1350.5
5°	1365.3	1350.5	1352.2	1331.6	1338.2
7.5°	1371.1	1316.0	1359.6	1337.4	1339.0
10°	1352.2	1327.5	1326.7	1325.9	1352.2
12.5°	1325.9	1335.7	1322.6	1310.3	1336.6
15°	1330.8	1315.2	1297.1	1311.1	1325.1
17.5°	1309.5	1302.1	1282.3	1318.5	1292.2
20°	1254.4	1283.2	1261.0	1280.7	1270.8
22.5°	1238.0	1261.8	1246.2	1258.5	1225.7
25°	1255.2	1211.7	1228.9	1202.7	1219.1
27.5°	1182.1	1173.9	1195.3	1186.2	1174.7
30°	1172.3	1159.1	1150.9	1151.7	1168.2
32.5°	1144.3	1130.4	1126.3	1133.7	1155.8
35°	1097.5	1110.7	1113.1	1095.9	1131.2
37.5°	1054.8	1064.7	1081.1	1080.3	1087.7
40°	1025.2	1042.5	1023.6	1031.8	1029.3
42.5°	1007.1	991.5	975.9	980.9	965.3
45°	966.1	956.2	938.1	939.0	918.4
47.5°	909.4	897.1	902.0	888.0	888.9
50°	870.8	849.4	862.6	836.3	856.8
52.5°	822.3	813.3	800.1	791.9	814.1
55°	771.4	765.6	752.5	750.8	762.3
57.5°	712.2	707.3	703.2	702.4	725.4
60°	673.6	654.7	642.4	639.1	662.9
62.5°	619.4	611.2	578.3	585.7	588.2
65°	563.5	547.1	526.6	529.9	522.5
67.5°	503.6	474.0	469.1	469.9	461.7
70°	437.0	419.8	409.9	404.2	400.9
72.5°	373.8	359.8	348.3	333.5	318.7
75°	303.1	296.6	285.9	252.2	238.2
77.5°	248.9	241.5	218.5	181.5	179.1
80°	179.9	184.0	152.0	146.2	147.0
82.5°	127.3	124.0	113.4	106.0	101.9
85°	74.8	67.4	67.4	60.8	62.4
87.5°	24.6	27.9	27.9	27.1	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)