

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: P393677

Luminaire Tested: **24EN-LD2-70-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-39)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-70-UNV-L83050-W2A-1-U (4000K)
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7042.2 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

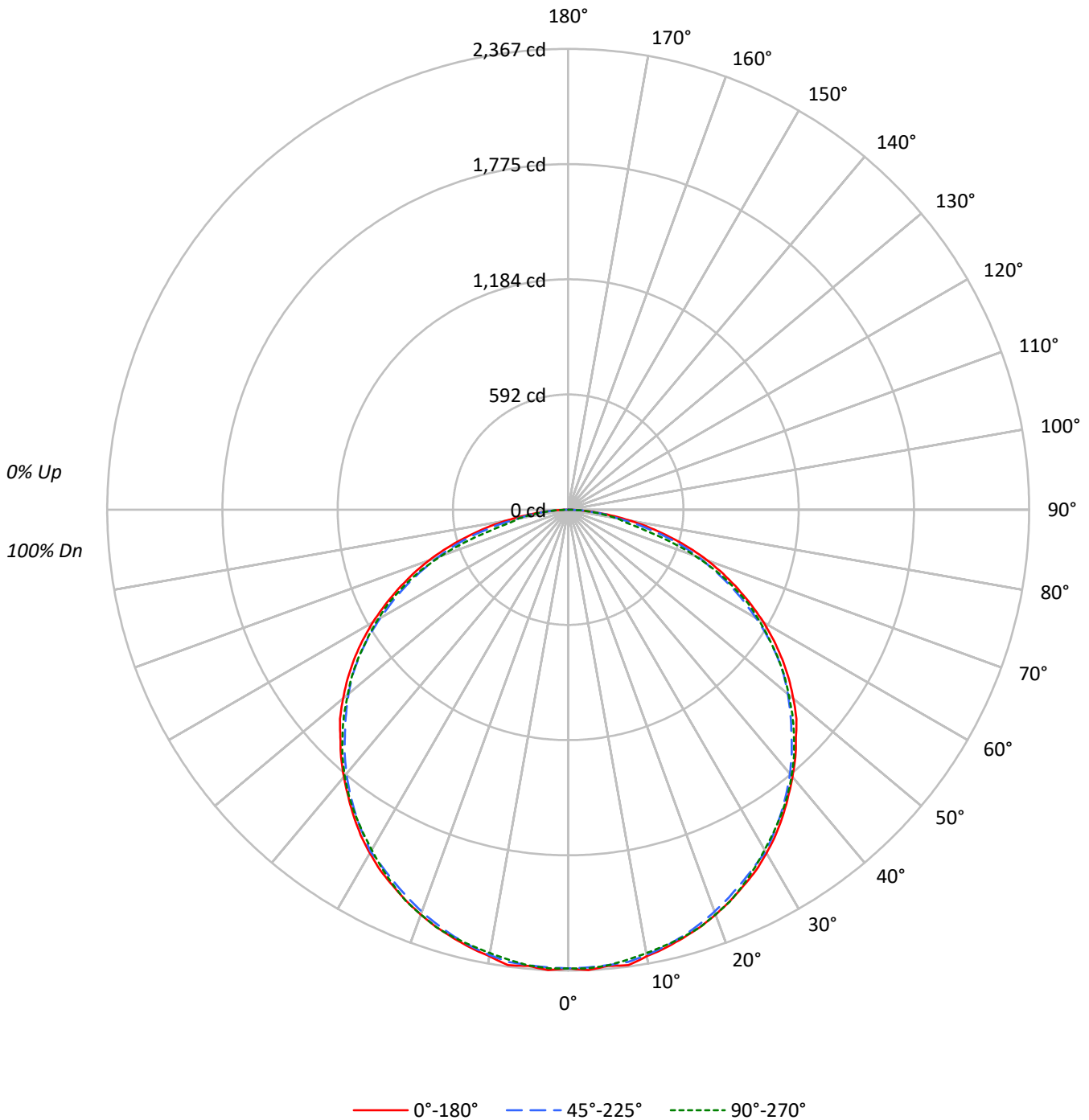
Input Watts (W): 51.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3170	3170	3170
5°	3177	3171	3172
10°	3182	3174	3160
15°	3173	3160	3167
20°	3169	3146	3168
25°	3164	3135	3156
30°	3164	3150	3134
35°	3155	3129	3136
40°	3147	3111	3134
45°	3147	3084	3119
50°	3159	3082	3092
55°	3150	3067	3074
60°	3119	2997	3038
65°	3060	2910	2970
70°	2991	2793	2730
75°	2809	2584	2125
80°	2490	2015	1969
85°	1984	1814	1675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.4	3.2
10°-20°	640.6	9.1
20°-30°	978.2	13.9
30°-40°	1193.8	17.0
40°-50°	1262.1	17.9
50°-60°	1173.7	16.7
60°-70°	918.5	13.0
70°-80°	515.4	7.3
80°-90°	136.7	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°	1842.2	26.2
0°-40°	3036.0	43.1
0°-60°	5471.7	77.7
0°-90°	7042.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7042.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2356	2356	2356	2356	2356	
5°	2352	2349	2348	2346	2349	225
15°	2278	2271	2269	2259	2274	643
25°	2131	2120	2112	2124	2126	983
35°	1921	1913	1905	1898	1909	1202
45°	1654	1641	1621	1631	1639	1279
55°	1343	1325	1308	1302	1310	1199
65°	961	940	914	919	933	951
75°	540	520	497	439	409	571
85°	128	120	118	110	108	150
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2356.0	2356.0	2356.0	2356.0	2356.0
2.5°	2367.0	2352.0	2353.0	2358.0	2358.0
5°	2352.0	2348.9	2347.9	2345.9	2348.9
7.5°	2360.0	2339.9	2342.9	2330.9	2331.9
10°	2328.9	2320.8	2322.8	2313.8	2312.8
12.5°	2305.8	2302.7	2297.7	2288.7	2293.7
15°	2277.6	2270.6	2268.6	2258.6	2273.6
17.5°	2248.5	2237.5	2234.5	2228.4	2248.5
20°	2213.4	2203.3	2197.3	2196.3	2212.4
22.5°	2174.2	2164.2	2155.1	2162.2	2176.2
25°	2131.0	2120.0	2111.9	2124.0	2126.0
27.5°	2088.8	2075.8	2067.8	2074.8	2073.8
30°	2036.6	2025.6	2027.6	2020.6	2017.5
32.5°	1982.4	1972.4	1967.3	1960.3	1963.3
35°	1921.1	1913.1	1905.1	1898.0	1909.1
37.5°	1855.9	1850.8	1839.8	1832.8	1849.8
40°	1791.6	1780.5	1771.5	1766.5	1784.6
42.5°	1726.3	1714.3	1698.2	1697.2	1716.3
45°	1654.0	1640.9	1620.9	1630.9	1638.9
47.5°	1589.7	1568.6	1546.5	1556.6	1561.6
50°	1509.4	1492.3	1472.2	1476.3	1477.3
52.5°	1428.0	1414.0	1394.9	1389.9	1398.9
55°	1342.7	1324.6	1307.5	1301.5	1310.5
57.5°	1252.3	1236.2	1214.1	1206.1	1218.2
60°	1158.9	1137.8	1113.7	1113.7	1128.8
62.5°	1060.5	1043.4	1014.3	1018.3	1040.4
65°	961.1	940.0	913.9	918.9	932.9
67.5°	861.6	840.6	809.4	816.5	822.5
70°	760.2	734.1	710.0	703.0	693.9
72.5°	650.8	626.7	610.6	572.4	557.4
75°	540.3	520.2	497.1	438.9	408.7
77.5°	431.8	418.8	381.6	313.3	301.3
80°	321.4	315.3	260.1	255.1	254.1
82.5°	218.9	214.9	197.8	183.8	180.8
85°	128.5	119.5	117.5	109.5	108.5
87.5°	44.2	48.2	47.2	48.2	47.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)