

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: P393614

Luminaire Tested: **24EN-LD2-58-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-37)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-58-UNV-L83050-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 5800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5910.0 lumens
Efficiency: N/A
Efficacy: 142.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

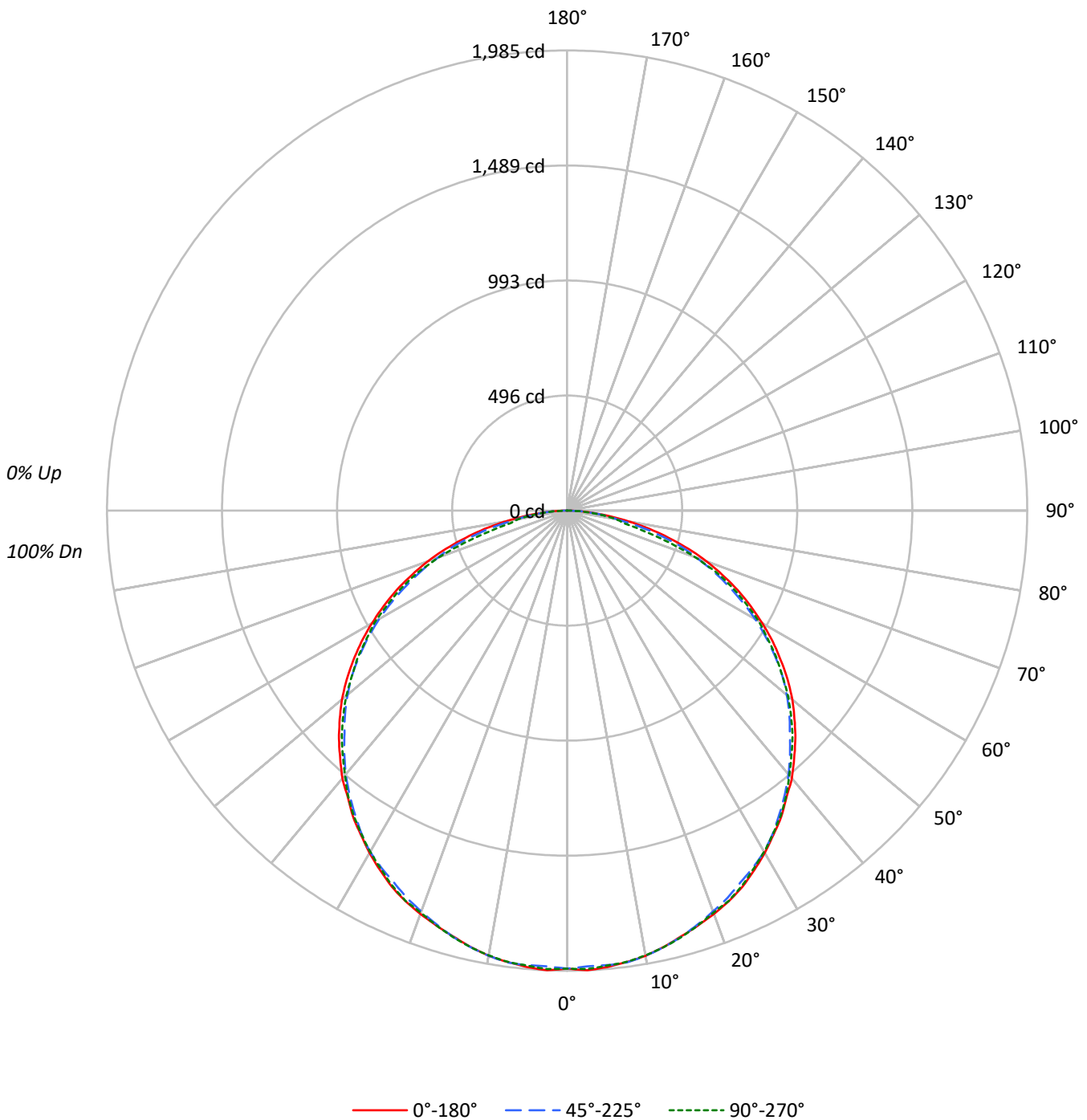
Input Watts (W): 41.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2658	2658	2658
5°	2670	2659	2661
10°	2664	2664	2662
15°	2648	2651	2653
20°	2651	2635	2642
25°	2658	2628	2650
30°	2649	2641	2641
35°	2646	2623	2638
40°	2649	2610	2619
45°	2649	2586	2617
50°	2655	2589	2604
55°	2641	2569	2583
60°	2616	2520	2569
65°	2583	2437	2505
70°	2515	2342	2306
75°	2354	2164	1799
80°	2082	1712	1672
85°	1602	1556	1414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.2	3.2
10°-20°	537.1	9.1
20°-30°	820.4	13.9
30°-40°	1001.2	16.9
40°-50°	1058.8	17.9
50°-60°	984.7	16.7
60°-70°	772.3	13.1
70°-80°	433.2	7.3
80°-90°	115.1	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°	1544.7	26.1
0°-40°	2545.9	43.1
0°-60°	4589.4	77.7
0°-90°	5910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5910.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1977	1968	1968	1962	1970	188
15°	1901	1903	1903	1898	1904	538
25°	1790	1779	1770	1780	1785	824
35°	1611	1606	1597	1588	1606	1007
45°	1392	1378	1359	1368	1375	1074
55°	1126	1112	1095	1091	1101	1006
65°	811	790	765	774	787	801
75°	453	437	416	370	346	480
85°	104	100	101	94	92	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.6	1975.6	1975.6	1975.6	1975.6
2.5°	1984.8	1971.5	1967.5	1971.5	1979.7
5°	1976.6	1968.5	1968.5	1962.4	1970.5
7.5°	1964.4	1961.4	1966.4	1950.2	1963.4
10°	1950.2	1945.1	1950.2	1932.9	1948.1
12.5°	1927.8	1926.7	1928.8	1919.6	1928.8
15°	1901.3	1903.3	1903.3	1898.2	1904.4
17.5°	1876.9	1877.9	1871.8	1877.9	1875.9
20°	1851.4	1849.4	1840.2	1851.4	1845.3
22.5°	1823.9	1817.8	1807.7	1818.9	1821.9
25°	1790.4	1779.2	1770.0	1780.2	1785.3
27.5°	1748.6	1737.4	1736.4	1736.4	1741.5
30°	1704.9	1696.7	1699.8	1691.6	1699.8
32.5°	1657.0	1654.0	1651.9	1640.7	1652.9
35°	1611.2	1606.1	1597.0	1587.8	1606.1
37.5°	1555.2	1552.2	1543.0	1537.9	1552.2
40°	1508.4	1496.2	1486.0	1483.0	1491.1
42.5°	1449.4	1435.1	1422.9	1428.0	1432.1
45°	1392.4	1378.1	1358.8	1368.0	1375.1
47.5°	1330.3	1315.0	1299.8	1305.9	1309.9
50°	1268.2	1248.9	1236.7	1235.6	1243.8
52.5°	1199.0	1182.7	1170.5	1166.4	1169.5
55°	1125.7	1112.5	1095.2	1091.1	1101.3
57.5°	1051.4	1037.2	1016.8	1013.8	1023.9
60°	972.0	957.8	936.4	936.4	954.7
62.5°	892.6	876.3	851.9	857.0	870.2
65°	811.2	789.8	765.4	773.5	786.8
67.5°	725.7	705.4	680.9	688.1	696.2
70°	639.2	616.8	595.4	589.3	586.3
72.5°	548.6	525.2	514.0	484.5	466.2
75°	452.9	436.6	416.3	369.5	346.1
77.5°	364.4	350.1	319.6	263.6	250.4
80°	268.7	267.7	220.9	214.8	215.8
82.5°	182.2	178.1	165.9	154.7	155.7
85°	103.8	99.7	100.8	93.6	91.6
87.5°	37.7	40.7	39.7	40.7	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)