

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: P393616

Luminaire Tested: **24EN-LD2-58-UNV-L83050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393616
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 (5700K)
Description: 2X4 ENCOUNTER, 5800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5916.0 lumens
Efficiency: N/A
Efficacy: 143.6 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

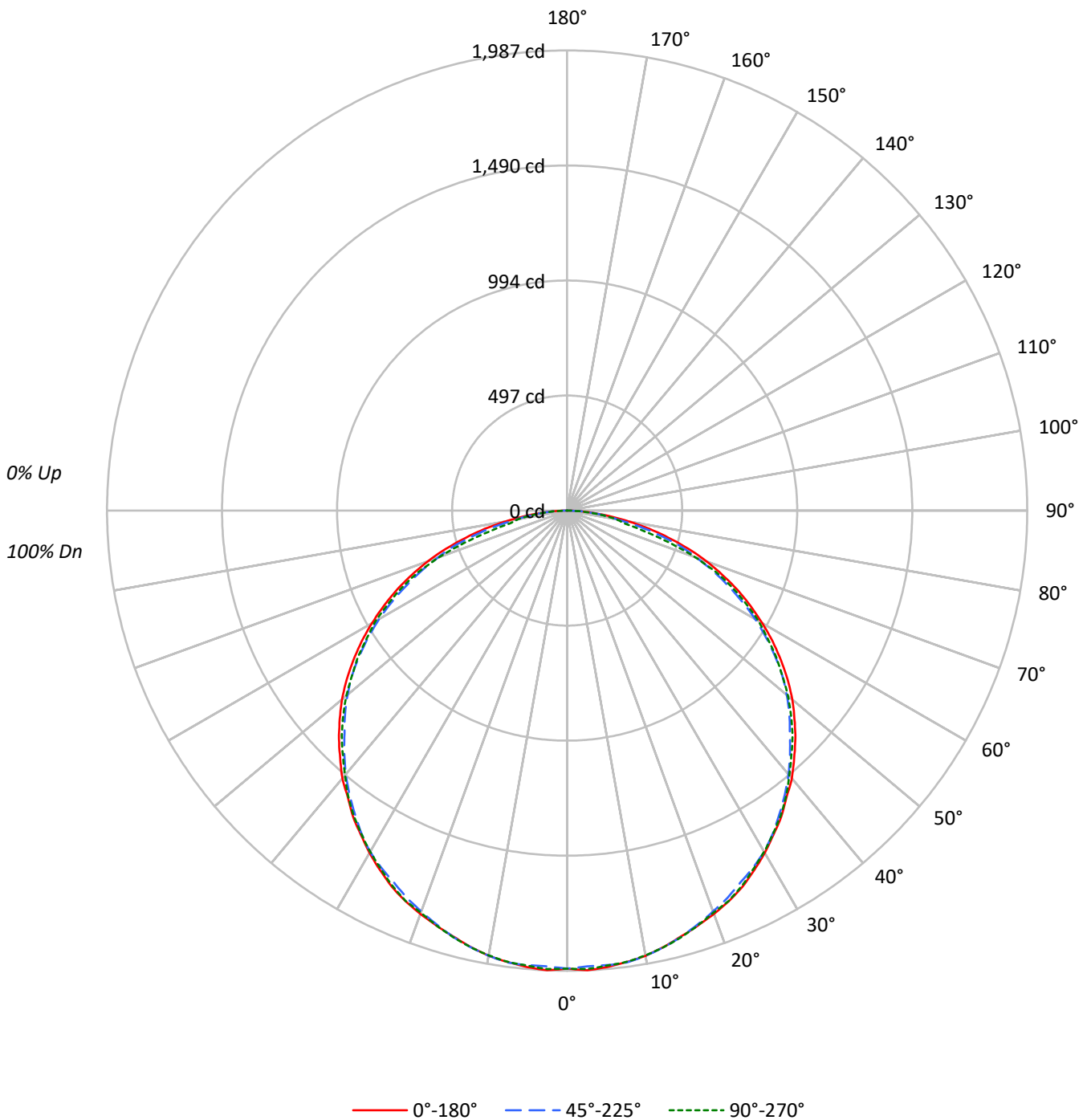
Input Watts (W): 41.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2661	2661	2661
5°	2672	2661	2664
10°	2667	2667	2664
15°	2651	2654	2655
20°	2654	2638	2645
25°	2661	2630	2653
30°	2651	2644	2644
35°	2649	2626	2641
40°	2652	2613	2622
45°	2652	2588	2619
50°	2657	2591	2606
55°	2643	2572	2586
60°	2618	2523	2572
65°	2585	2439	2507
70°	2517	2345	2309
75°	2357	2166	1801
80°	2084	1713	1674
85°	1604	1558	1416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	3.2
10°-20°	537.7	9.1
20°-30°	821.2	13.9
30°-40°	1002.3	16.9
40°-50°	1059.8	17.9
50°-60°	985.7	16.7
60°-70°	773.1	13.1
70°-80°	433.6	7.3
80°-90°	115.2	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°	1546.3	26.1
0°-40°	2548.6	43.1
0°-60°	4594.1	77.7
0°-90°	5916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1978	1978	1978	1978	1978	
5°	1979	1970	1970	1964	1972	188
15°	1903	1905	1905	1900	1906	538
25°	1792	1781	1772	1782	1787	825
35°	1613	1608	1599	1589	1608	1008
45°	1394	1380	1360	1369	1376	1075
55°	1127	1114	1096	1092	1102	1007
65°	812	791	766	774	788	802
75°	453	437	417	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°	1977.6	1977.6	1977.6	1977.6	1977.6
2.5°	1986.8	1973.5	1969.5	1973.5	1981.7
5°	1978.6	1970.5	1970.5	1964.4	1972.5
7.5°	1966.4	1963.4	1968.4	1952.1	1965.4
10°	1952.1	1947.1	1952.1	1934.8	1950.1
12.5°	1929.7	1928.7	1930.7	1921.6	1930.7
15°	1903.2	1905.3	1905.3	1900.2	1906.3
17.5°	1878.8	1879.8	1873.7	1879.8	1877.8
20°	1853.3	1851.3	1842.1	1853.3	1847.2
22.5°	1825.8	1819.7	1809.5	1820.7	1823.8
25°	1792.2	1781.0	1771.8	1782.0	1787.1
27.5°	1750.4	1739.2	1738.2	1738.2	1743.3
30°	1706.6	1698.4	1701.5	1693.4	1701.5
32.5°	1658.7	1655.7	1653.6	1642.4	1654.6
35°	1612.9	1607.8	1598.6	1589.4	1607.8
37.5°	1556.8	1553.8	1544.6	1539.5	1553.8
40°	1510.0	1497.7	1487.5	1484.5	1492.6
42.5°	1450.9	1436.6	1424.4	1429.5	1433.5
45°	1393.8	1379.5	1360.2	1369.4	1376.5
47.5°	1331.7	1316.4	1301.1	1307.2	1311.3
50°	1269.5	1250.1	1237.9	1236.9	1245.1
52.5°	1200.2	1183.9	1171.7	1167.6	1170.7
55°	1126.9	1113.6	1096.3	1092.2	1102.4
57.5°	1052.5	1038.2	1017.8	1014.8	1025.0
60°	973.0	958.8	937.4	937.4	955.7
62.5°	893.5	877.2	852.8	857.9	871.1
65°	812.0	790.6	766.2	774.3	787.6
67.5°	726.5	706.1	681.6	688.8	696.9
70°	639.8	617.4	596.0	589.9	586.9
72.5°	549.2	525.7	514.5	485.0	466.6
75°	453.4	437.1	416.7	369.8	346.4
77.5°	364.8	350.5	319.9	263.9	250.6
80°	269.0	268.0	221.1	215.0	216.0
82.5°	182.4	178.3	166.1	154.9	155.9
85°	103.9	99.8	100.9	93.7	91.7
87.5°	37.7	40.8	39.7	40.8	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)