

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: P393610

Luminaire Tested: **24EN-LD2-58-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393610  
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 (2700K)  
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: 5602.2 lumens  
Efficiency: N/A  
Efficacy: 136.6 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

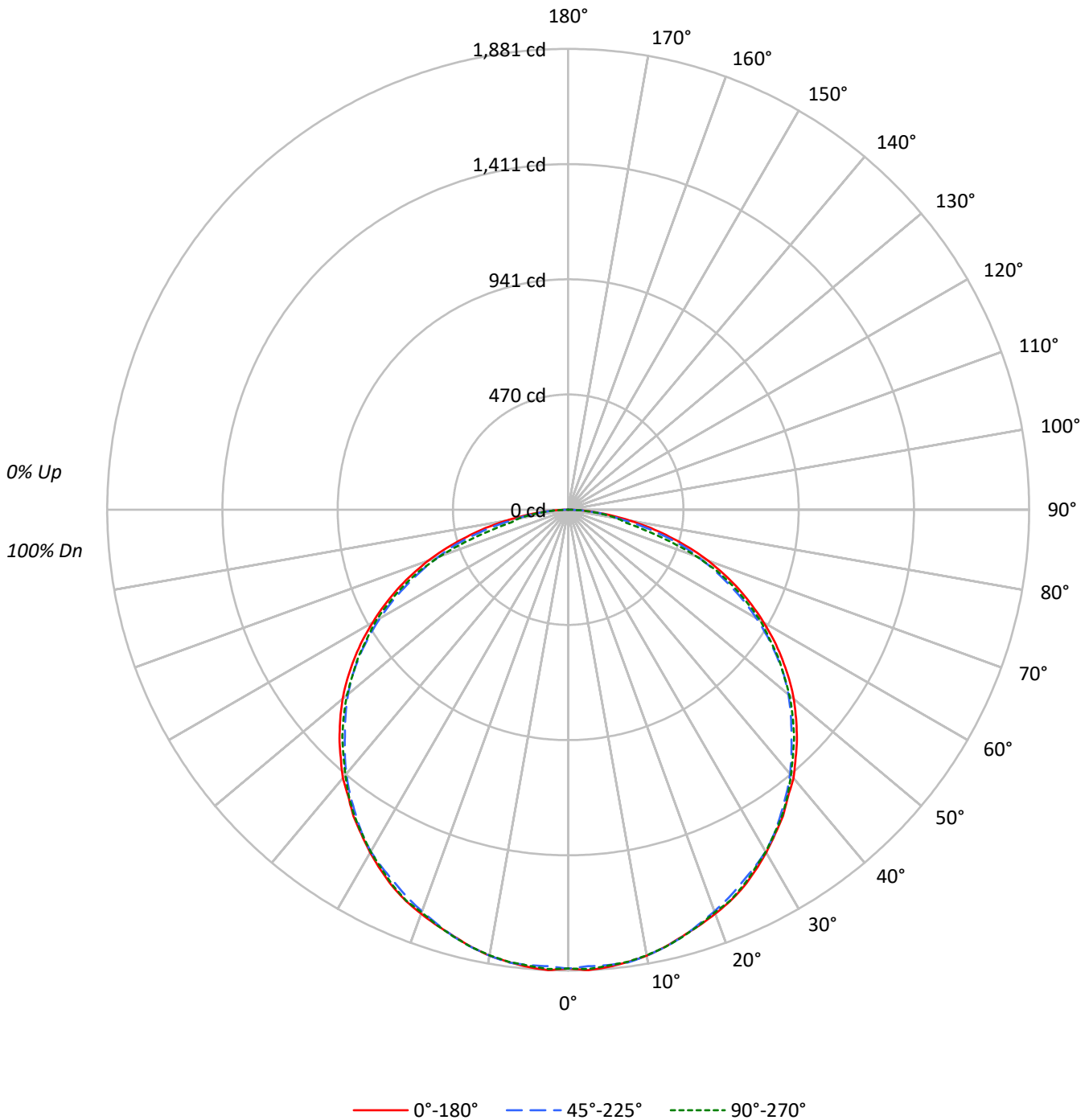
Input Watts (W): 41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2520	2520	2520
5°	2531	2520	2523
10°	2526	2526	2523
15°	2511	2513	2515
20°	2513	2498	2505
25°	2519	2491	2512
30°	2511	2503	2503
35°	2509	2486	2501
40°	2511	2474	2483
45°	2512	2451	2480
50°	2516	2454	2468
55°	2503	2435	2449
60°	2479	2389	2435
65°	2448	2310	2374
70°	2384	2220	2186
75°	2232	2051	1705
80°	1974	1623	1585
85°	1519	1474	1340



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.4	3.2
10°-20°	509.2	9.1
20°-30°	777.7	13.9
30°-40°	949.1	16.9
40°-50°	1003.6	17.9
50°-60°	933.4	16.7
60°-70°	732.1	13.1
70°-80°	410.6	7.3
80°-90°	109.1	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°	1464.3	26.1
0°-40°	2413.4	43.1
0°-60°	4350.4	77.7
0°-90°	5602.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5602.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1873	1873	1873	1873	1873	
5°	1874	1866	1866	1860	1868	178
15°	1802	1804	1804	1799	1805	510
25°	1697	1686	1678	1688	1692	781
35°	1527	1522	1514	1505	1522	955
45°	1320	1306	1288	1297	1304	1018
55°	1067	1054	1038	1034	1044	954
65°	769	749	726	733	746	759
75°	429	414	395	350	328	455
85°	98	95	96	89	87	118
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1872.7	1872.7	1872.7	1872.7	1872.7
2.5°	1881.4	1868.9	1865.0	1868.9	1876.6
5°	1873.7	1866.0	1866.0	1860.2	1867.9
7.5°	1862.1	1859.2	1864.0	1848.6	1861.1
10°	1848.6	1843.8	1848.6	1832.2	1846.7
12.5°	1827.4	1826.4	1828.3	1819.7	1828.3
15°	1802.3	1804.2	1804.2	1799.4	1805.2
17.5°	1779.1	1780.1	1774.3	1780.1	1778.2
20°	1755.0	1753.1	1744.4	1755.0	1749.2
22.5°	1729.0	1723.2	1713.5	1724.1	1727.0
25°	1697.1	1686.5	1677.8	1687.5	1692.3
27.5°	1657.6	1647.0	1646.0	1646.0	1650.8
30°	1616.1	1608.4	1611.3	1603.5	1611.3
32.5°	1570.7	1567.8	1565.9	1555.3	1566.9
35°	1527.3	1522.5	1513.8	1505.1	1522.5
37.5°	1474.2	1471.4	1462.7	1457.8	1471.4
40°	1429.9	1418.3	1408.6	1405.7	1413.5
42.5°	1373.9	1360.4	1348.8	1353.6	1357.5
45°	1319.9	1306.4	1288.0	1296.7	1303.5
47.5°	1261.0	1246.5	1232.1	1237.9	1241.7
50°	1202.2	1183.8	1172.3	1171.3	1179.0
52.5°	1136.6	1121.1	1109.5	1105.7	1108.6
55°	1067.1	1054.5	1038.1	1034.3	1043.9
57.5°	996.7	983.2	963.9	961.0	970.6
60°	921.4	907.9	887.6	887.6	905.0
62.5°	846.1	830.7	807.6	812.4	824.9
65°	769.0	748.7	725.5	733.3	745.8
67.5°	687.9	668.6	645.5	652.2	659.9
70°	605.9	584.7	564.4	558.6	555.7
72.5°	520.0	497.8	487.2	459.3	441.9
75°	429.3	413.9	394.6	350.2	328.0
77.5°	345.4	331.9	303.0	249.9	237.3
80°	254.7	253.7	209.4	203.6	204.5
82.5°	172.7	168.8	157.3	146.7	147.6
85°	98.4	94.6	95.5	88.8	86.8
87.5°	35.7	38.6	37.6	38.6	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)