

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: P393605

Luminaire Tested: **24EN-LD2-58-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393605  
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-L82765-W2A-1-U (4000K)  
Description: 2X4 ENCOUNTER, 5800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5424.1 lumens  
Efficiency: N/A  
Efficacy: 130.4 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

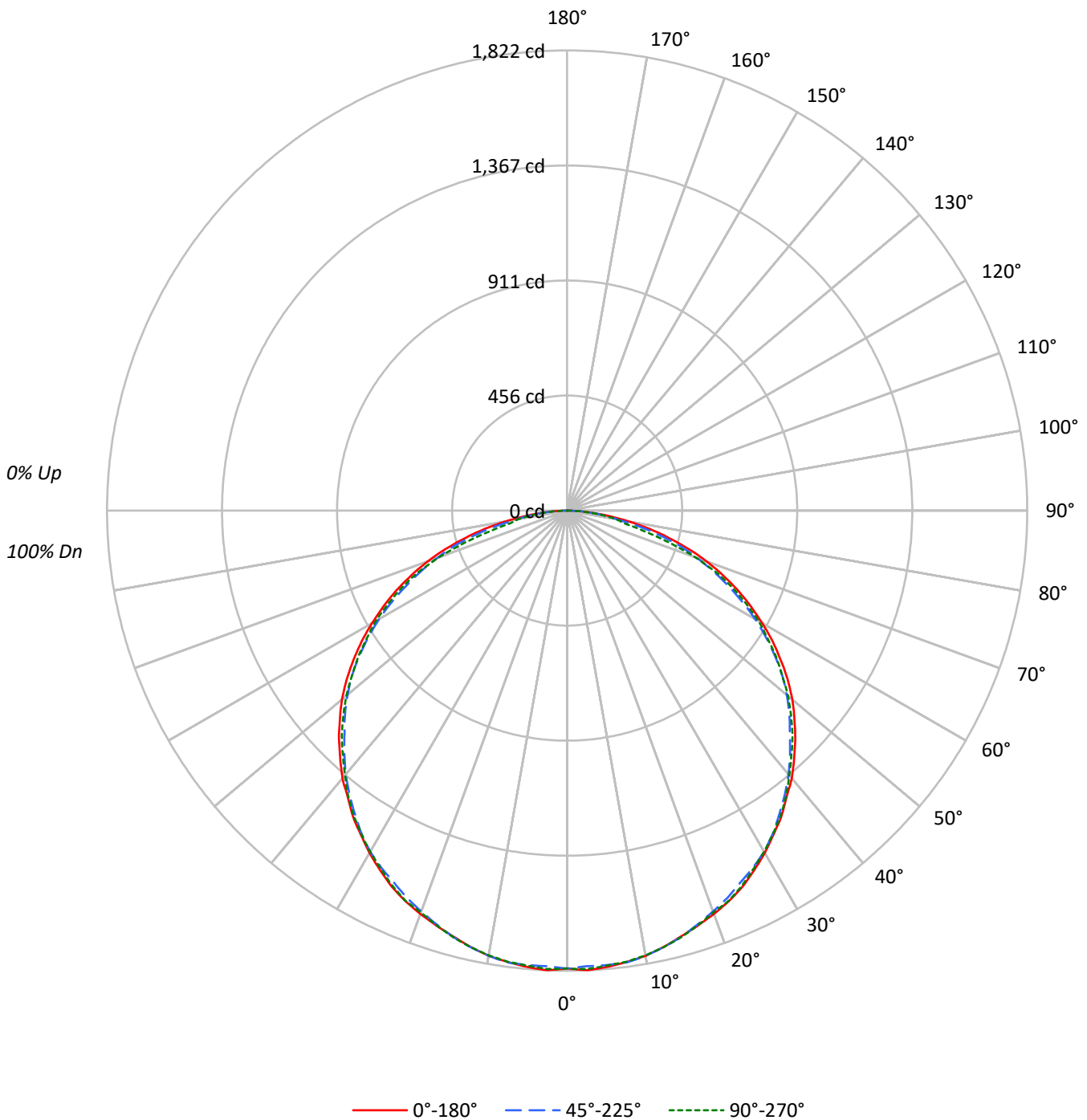
Input Watts (W): 41.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	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°	2440	2440	2440
5°	2450	2440	2443
10°	2445	2445	2443
15°	2431	2433	2435
20°	2433	2418	2425
25°	2439	2412	2432
30°	2431	2424	2424
35°	2429	2407	2421
40°	2432	2396	2404
45°	2432	2373	2401
50°	2436	2376	2389
55°	2424	2358	2371
60°	2401	2313	2358
65°	2370	2237	2299
70°	2308	2150	2117
75°	2161	1986	1651
80°	1911	1571	1534
85°	1471	1428	1298



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.8	3.2
10°-20°	493.0	9.1
20°-30°	752.9	13.9
30°-40°	918.9	16.9
40°-50°	971.7	17.9
50°-60°	903.8	16.7
60°-70°	708.8	13.1
70°-80°	397.6	7.3
80°-90°	105.6	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°	1417.7	26.1
0°-40°	2336.6	43.1
0°-60°	4212.1	77.7
0°-90°	5424.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5424.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1813	1813	1813	1813	1813	
5°	1814	1807	1807	1801	1808	172
15°	1745	1747	1747	1742	1748	493
25°	1643	1633	1624	1634	1638	757
35°	1479	1474	1466	1457	1474	925
45°	1278	1265	1247	1256	1262	986
55°	1033	1021	1005	1001	1011	923
65°	744	725	702	710	722	735
75°	416	401	382	339	318	440
85°	95	92	92	86	84	114
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1813.2	1813.2	1813.2	1813.2	1813.2
2.5°	1821.6	1809.4	1805.7	1809.4	1816.9
5°	1814.1	1806.6	1806.6	1801.0	1808.5
7.5°	1802.9	1800.1	1804.8	1789.8	1802.0
10°	1789.8	1785.2	1789.8	1773.9	1788.0
12.5°	1769.3	1768.3	1770.2	1761.8	1770.2
15°	1745.0	1746.9	1746.9	1742.2	1747.8
17.5°	1722.6	1723.5	1717.9	1723.5	1721.6
20°	1699.2	1697.3	1688.9	1699.2	1693.6
22.5°	1674.0	1668.4	1659.0	1669.3	1672.1
25°	1643.2	1632.9	1624.5	1633.8	1638.5
27.5°	1604.9	1594.6	1593.7	1593.7	1598.3
30°	1564.7	1557.2	1560.0	1552.5	1560.0
32.5°	1520.8	1518.0	1516.1	1505.8	1517.1
35°	1478.8	1474.1	1465.7	1457.3	1474.1
37.5°	1427.4	1424.6	1416.2	1411.5	1424.6
40°	1384.4	1373.2	1363.9	1361.1	1368.5
42.5°	1330.2	1317.1	1305.9	1310.6	1314.3
45°	1277.9	1264.8	1247.1	1255.5	1262.0
47.5°	1220.9	1206.9	1192.9	1198.5	1202.2
50°	1163.9	1146.2	1135.0	1134.1	1141.5
52.5°	1100.4	1085.5	1074.3	1070.5	1073.3
55°	1033.2	1021.0	1005.1	1001.4	1010.7
57.5°	965.0	951.9	933.2	930.4	939.8
60°	892.1	879.0	859.4	859.4	876.2
62.5°	819.2	804.3	781.9	786.6	798.7
65°	744.5	724.9	702.5	710.0	722.1
67.5°	666.0	647.4	624.9	631.5	639.0
70°	586.6	566.1	546.5	540.9	538.1
72.5°	503.5	482.0	471.7	444.7	427.8
75°	415.7	400.7	382.1	339.1	317.6
77.5°	334.4	321.3	293.3	241.9	229.8
80°	246.6	245.7	202.7	197.1	198.0
82.5°	167.2	163.5	152.3	142.0	142.9
85°	95.3	91.5	92.5	85.9	84.1
87.5°	34.6	37.4	36.4	37.4	36.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)