

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: P393612

Luminaire Tested: **24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393612  
Test Lab: INNOVATION CENTER (G3)  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)  
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: 5806.5 lumens  
Efficiency: N/A  
Efficacy: 138.2 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

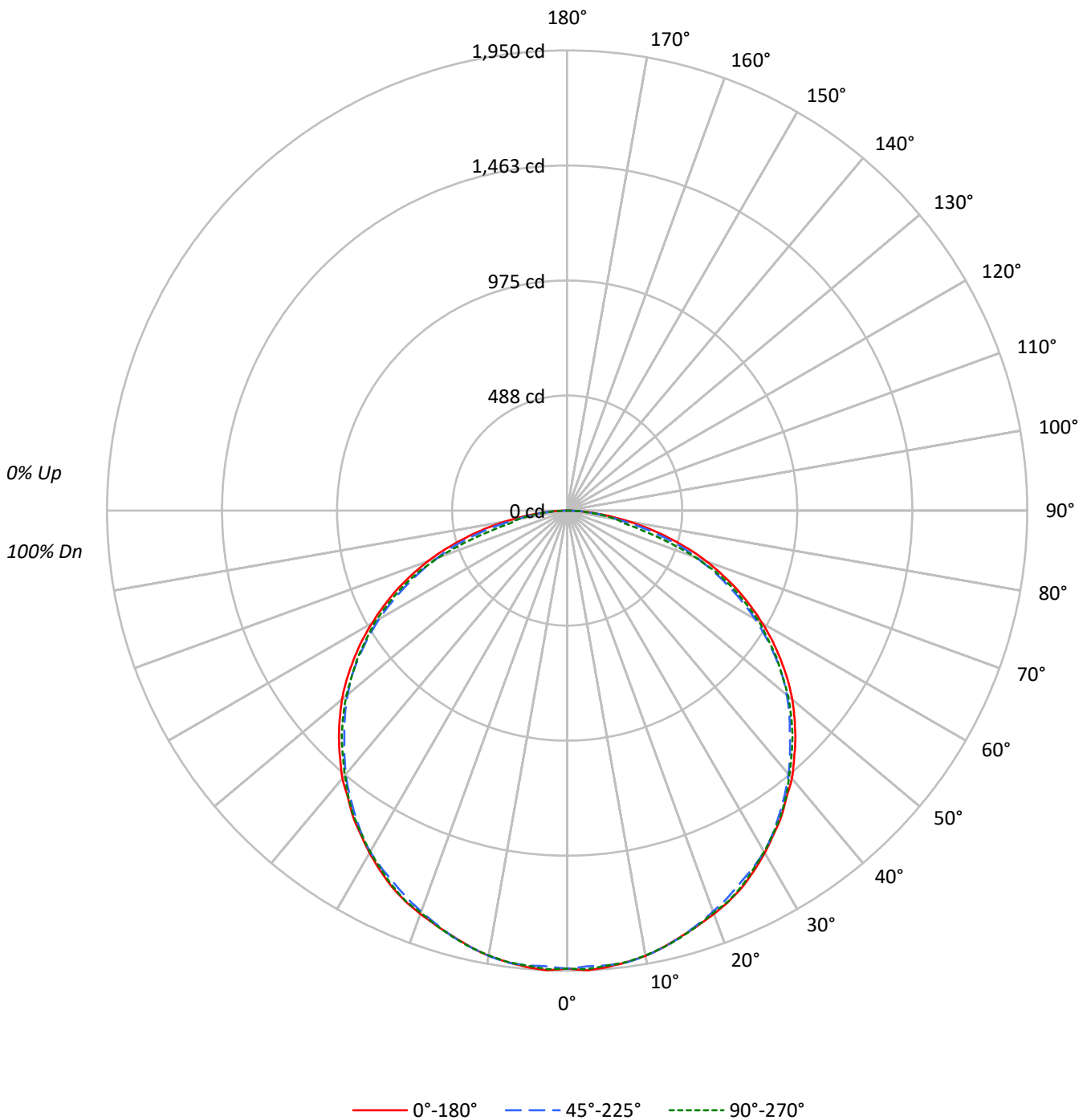
Input Watts (W): 42  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P393612

CATALOG NUMBER: 24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P393612

CATALOG NUMBER: 24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)

**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°	2612	2612	2612
5°	2623	2612	2615
10°	2618	2618	2615
15°	2602	2605	2606
20°	2605	2589	2596
25°	2611	2582	2604
30°	2602	2595	2595
35°	2600	2577	2592
40°	2603	2564	2573
45°	2603	2540	2571
50°	2608	2543	2558
55°	2594	2524	2538
60°	2570	2476	2524
65°	2537	2394	2461
70°	2471	2301	2266
75°	2313	2126	1768
80°	2046	1681	1643
85°	1575	1528	1389



TEST NUMBER: P393612

CATALOG NUMBER: 24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.9	3.2
10°-20°	527.7	9.1
20°-30°	806.0	13.9
30°-40°	983.7	16.9
40°-50°	1040.2	17.9
50°-60°	967.5	16.7
60°-70°	758.8	13.1
70°-80°	425.6	7.3
80°-90°	113.1	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°	1517.7	26.1
0°-40°	2501.4	43.1
0°-60°	4509.1	77.7
0°-90°	5806.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5806.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1942	1934	1934	1928	1936	184
15°	1868	1870	1870	1865	1871	528
25°	1759	1748	1739	1749	1754	810
35°	1583	1578	1569	1560	1578	990
45°	1368	1354	1335	1344	1351	1055
55°	1106	1093	1076	1072	1082	988
65°	797	776	752	760	773	787
75°	445	429	409	363	340	471
85°	102	98	99	92	90	122
90°	0	0	0	0	0	



TEST NUMBER: P393612

CATALOG NUMBER: 24EN-LD2-58-UNV-L83050-W2A-1-U (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1941	1941	1941	1941	1941
2.5°	1950	1937	1933	1937	1945
5°	1942	1934	1934	1928	1936
7.5°	1930	1927	1932	1916	1929
10°	1916	1911	1916	1899	1914
12.5°	1894	1893	1895	1886	1895
15°	1868	1870	1870	1865	1871
17.5°	1844	1845	1839	1845	1843
20°	1819	1817	1808	1819	1813
22.5°	1792	1786	1776	1787	1790
25°	1759	1748	1739	1749	1754
27.5°	1718	1707	1706	1706	1711
30°	1675	1667	1670	1662	1670
32.5°	1628	1625	1623	1612	1624
35°	1583	1578	1569	1560	1578
37.5°	1528	1525	1516	1511	1525
40°	1482	1470	1460	1457	1465
42.5°	1424	1410	1398	1403	1407
45°	1368	1354	1335	1344	1351
47.5°	1307	1292	1277	1283	1287
50°	1246	1227	1215	1214	1222
52.5°	1178	1162	1150	1146	1149
55°	1106	1093	1076	1072	1082
57.5°	1033	1019	999	996	1006
60°	955	941	920	920	938
62.5°	877	861	837	842	855
65°	797	776	752	760	773
67.5°	713	693	669	676	684
70°	628	606	585	579	576
72.5°	539	516	505	476	458
75°	445	429	409	363	340
77.5°	358	344	314	259	246
80°	264	263	217	211	212
82.5°	179	175	163	152	153
85°	102	98	99	92	90
87.5°	37	40	39	40	39
90°	0	0	0	0	0

(END OF REPORT)