

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: P393604

Luminaire Tested: **24EN-LD2-58-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393604
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 (3500K)
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: 5499.4 lumens
Efficiency: N/A
Efficacy: 132.2 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

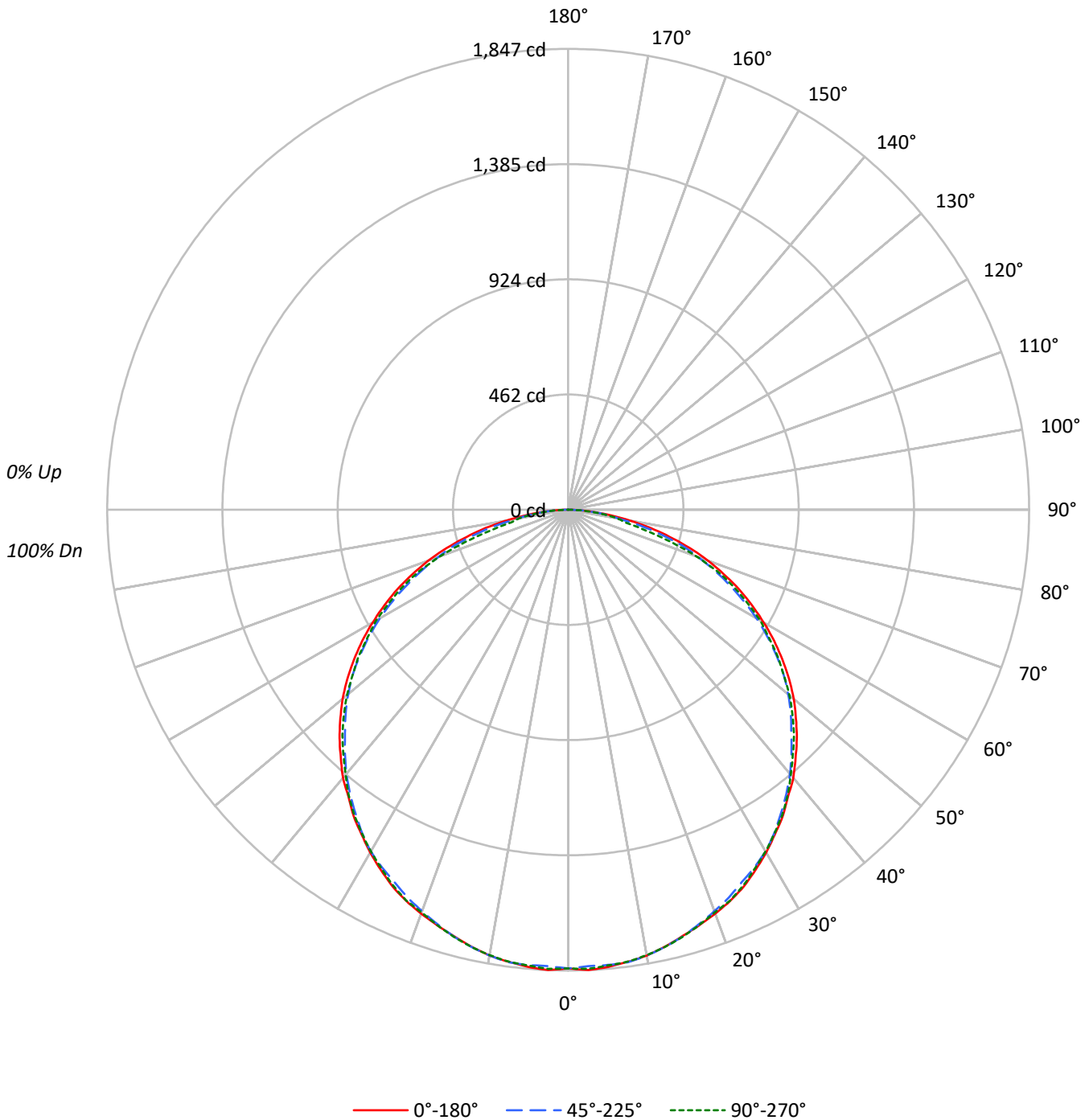
Input Watts (W): 41.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393604

CATALOG NUMBER: 24EN-LD2-58-UNV-L82765-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393604

CATALOG NUMBER: 24EN-LD2-58-UNV-L82765-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	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°	2473	2473	2473
5°	2484	2474	2477
10°	2479	2479	2477
15°	2464	2467	2468
20°	2467	2452	2459
25°	2473	2445	2466
30°	2465	2457	2457
35°	2463	2441	2455
40°	2465	2429	2437
45°	2465	2406	2435
50°	2470	2409	2423
55°	2457	2391	2404
60°	2434	2345	2391
65°	2403	2267	2331
70°	2340	2180	2146
75°	2191	2014	1674
80°	1937	1592	1556
85°	1491	1448	1315



TEST NUMBER: P393604

CATALOG NUMBER: 24EN-LD2-58-UNV-L82765-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.2	3.2
10°-20°	499.8	9.1
20°-30°	763.4	13.9
30°-40°	931.7	16.9
40°-50°	985.2	17.9
50°-60°	916.3	16.7
60°-70°	718.7	13.1
70°-80°	403.1	7.3
80°-90°	107.1	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°	1437.4	26.1
0°-40°	2369.1	43.1
0°-60°	4270.6	77.7
0°-90°	5499.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5499.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1838	1838	1838	1838	1838	
5°	1839	1832	1832	1826	1834	175
15°	1769	1771	1771	1766	1772	500
25°	1666	1656	1647	1656	1661	767
35°	1499	1494	1486	1478	1494	937
45°	1296	1282	1264	1273	1280	999
55°	1048	1035	1019	1015	1025	936
65°	755	735	712	720	732	745
75°	422	406	387	344	322	447
85°	97	93	94	87	85	116
90°	0	0	0	0	0	



TEST NUMBER: P393604

CATALOG NUMBER: 24EN-LD2-58-UNV-L82765-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1838.3	1838.3	1838.3	1838.3	1838.3
2.5°	1846.9	1834.6	1830.8	1834.6	1842.1
5°	1839.3	1831.7	1831.7	1826.0	1833.6
7.5°	1827.9	1825.1	1829.8	1814.7	1827.0
10°	1814.7	1809.9	1814.7	1798.6	1812.8
12.5°	1793.8	1792.9	1794.8	1786.3	1794.8
15°	1769.2	1771.1	1771.1	1766.4	1772.1
17.5°	1746.5	1747.4	1741.7	1747.4	1745.5
20°	1722.8	1720.9	1712.4	1722.8	1717.1
22.5°	1697.2	1691.5	1682.1	1692.5	1695.3
25°	1666.0	1655.6	1647.0	1656.5	1661.2
27.5°	1627.1	1616.7	1615.8	1615.8	1620.5
30°	1586.4	1578.8	1581.7	1574.1	1581.7
32.5°	1541.9	1539.1	1537.2	1526.7	1538.1
35°	1499.3	1494.5	1486.0	1477.5	1494.5
37.5°	1447.2	1444.3	1435.8	1431.1	1444.3
40°	1403.6	1392.3	1382.8	1379.9	1387.5
42.5°	1348.7	1335.4	1324.1	1328.8	1332.6
45°	1295.7	1282.4	1264.4	1272.9	1279.6
47.5°	1237.9	1223.7	1209.5	1215.1	1218.9
50°	1180.1	1162.1	1150.7	1149.8	1157.4
52.5°	1115.7	1100.5	1089.2	1085.4	1088.2
55°	1047.5	1035.2	1019.1	1015.3	1024.8
57.5°	978.4	965.1	946.2	943.3	952.8
60°	904.5	891.2	871.3	871.3	888.4
62.5°	830.6	815.5	792.7	797.5	809.8
65°	754.9	735.0	712.2	719.8	732.1
67.5°	675.3	656.4	633.6	640.2	647.8
70°	594.8	574.0	554.1	548.4	545.5
72.5°	510.5	488.7	478.3	450.8	433.8
75°	421.5	406.3	387.4	343.8	322.0
77.5°	339.1	325.8	297.4	245.3	233.0
80°	250.0	249.1	205.5	199.8	200.8
82.5°	169.5	165.7	154.4	144.0	144.9
85°	96.6	92.8	93.8	87.1	85.2
87.5°	35.0	37.9	36.9	37.9	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)