

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: P393613

Luminaire Tested: **24EN-LD2-58-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393613
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 (4000K)
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: 5831.2 lumens
Efficiency: N/A
Efficacy: 139.8 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

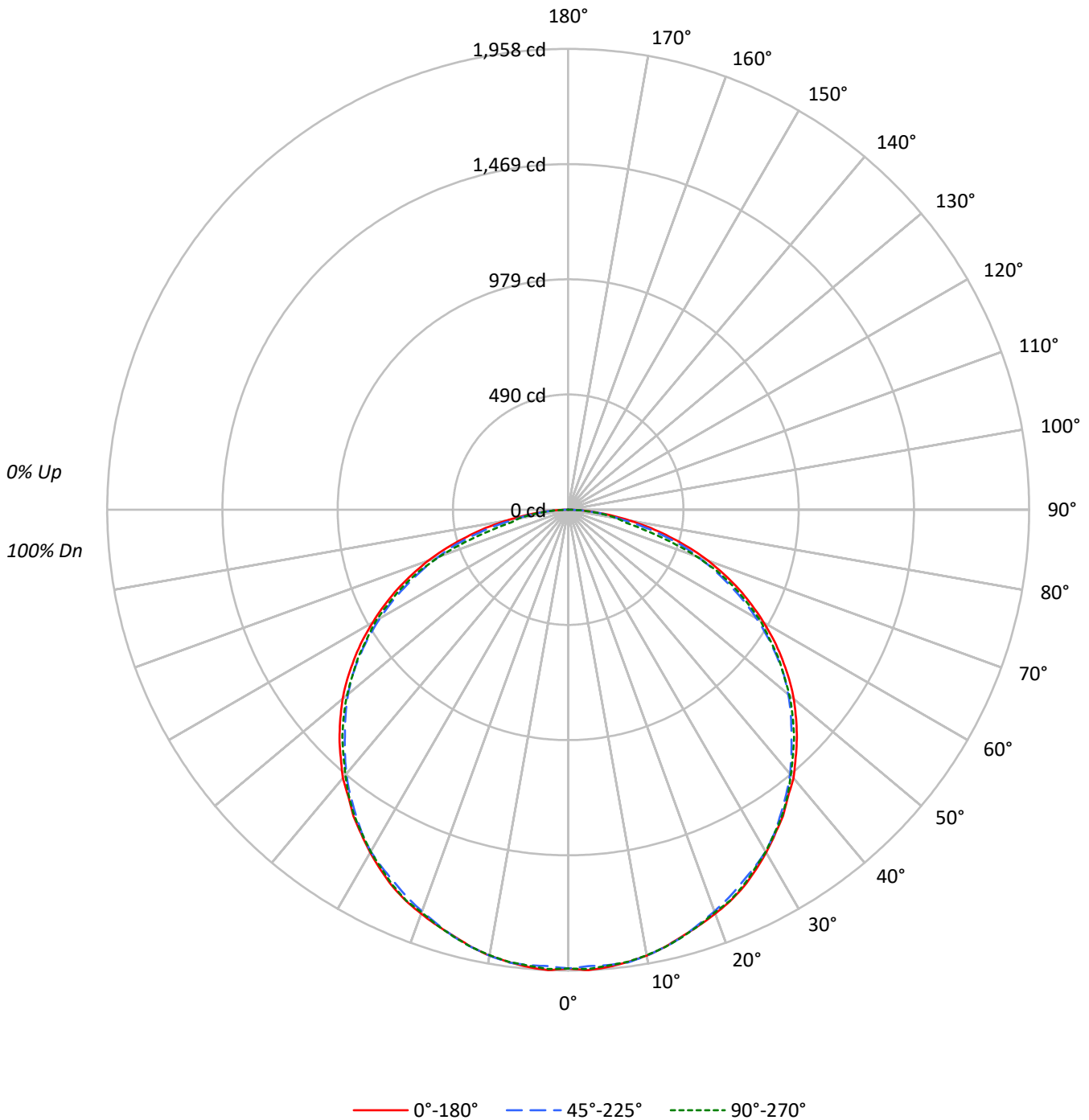
Input Watts (W): 41.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2623	2623	2623
5°	2634	2623	2626
10°	2629	2629	2626
15°	2613	2616	2617
20°	2616	2600	2607
25°	2623	2593	2615
30°	2613	2606	2606
35°	2611	2588	2603
40°	2614	2575	2584
45°	2614	2551	2582
50°	2619	2554	2569
55°	2605	2535	2549
60°	2581	2486	2535
65°	2548	2404	2472
70°	2481	2311	2275
75°	2323	2135	1775
80°	2054	1688	1650
85°	1581	1535	1396



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.7	3.2
10°-20°	530.0	9.1
20°-30°	809.4	13.9
30°-40°	987.9	16.9
40°-50°	1044.6	17.9
50°-60°	971.6	16.7
60°-70°	762.0	13.1
70°-80°	427.4	7.3
80°-90°	113.5	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°	1524.1	26.1
0°-40°	2512.0	43.1
0°-60°	4528.2	77.7
0°-90°	5831.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5831.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1950	1942	1942	1936	1944	185
15°	1876	1878	1878	1873	1879	530
25°	1766	1755	1746	1756	1762	813
35°	1590	1585	1576	1567	1585	994
45°	1374	1360	1341	1350	1357	1060
55°	1111	1098	1081	1077	1087	993
65°	800	779	755	763	776	790
75°	447	431	411	364	341	473
85°	102	98	99	92	90	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1949.3	1949.3	1949.3	1949.3	1949.3
2.5°	1958.3	1945.2	1941.2	1945.2	1953.3
5°	1950.3	1942.2	1942.2	1936.2	1944.2
7.5°	1938.2	1935.2	1940.2	1924.1	1937.2
10°	1924.1	1919.1	1924.1	1907.1	1922.1
12.5°	1902.1	1901.1	1903.1	1894.0	1903.1
15°	1875.9	1878.0	1878.0	1872.9	1879.0
17.5°	1851.8	1852.8	1846.8	1852.8	1850.8
20°	1826.7	1824.7	1815.7	1826.7	1820.7
22.5°	1799.6	1793.6	1783.6	1794.6	1797.6
25°	1766.5	1755.4	1746.4	1756.4	1761.5
27.5°	1725.3	1714.3	1713.3	1713.3	1718.3
30°	1682.1	1674.1	1677.1	1669.1	1677.1
32.5°	1634.9	1631.9	1629.9	1618.9	1630.9
35°	1589.7	1584.7	1575.7	1566.6	1584.7
37.5°	1534.5	1531.5	1522.4	1517.4	1531.5
40°	1488.3	1476.3	1466.2	1463.2	1471.2
42.5°	1430.1	1416.0	1403.9	1409.0	1413.0
45°	1373.8	1359.8	1340.7	1349.7	1356.7
47.5°	1312.6	1297.5	1282.4	1288.5	1292.5
50°	1251.3	1232.2	1220.2	1219.2	1227.2
52.5°	1183.0	1166.9	1154.9	1150.9	1153.9
55°	1110.7	1097.6	1080.6	1076.6	1086.6
57.5°	1037.4	1023.3	1003.2	1000.2	1010.3
60°	959.1	945.0	923.9	923.9	942.0
62.5°	880.7	864.7	840.6	845.6	858.6
65°	800.4	779.3	755.2	763.2	776.3
67.5°	716.0	695.9	671.8	678.9	686.9
70°	630.7	608.6	587.5	581.5	578.4
72.5°	541.3	518.2	507.1	478.0	459.9
75°	446.9	430.8	410.7	364.5	341.4
77.5°	359.5	345.5	315.3	260.1	247.0
80°	265.1	264.1	217.9	211.9	212.9
82.5°	179.8	175.7	163.7	152.6	153.7
85°	102.4	98.4	99.4	92.4	90.4
87.5°	37.2	40.2	39.2	40.2	39.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)