

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: P393512

Luminaire Tested: **24EN-LD2-45-UNV-L82765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-34)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-45-UNV-L82765-W2A-1-U (5700K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4415.8 lumens
Efficiency: N/A
Efficacy: 140.2 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

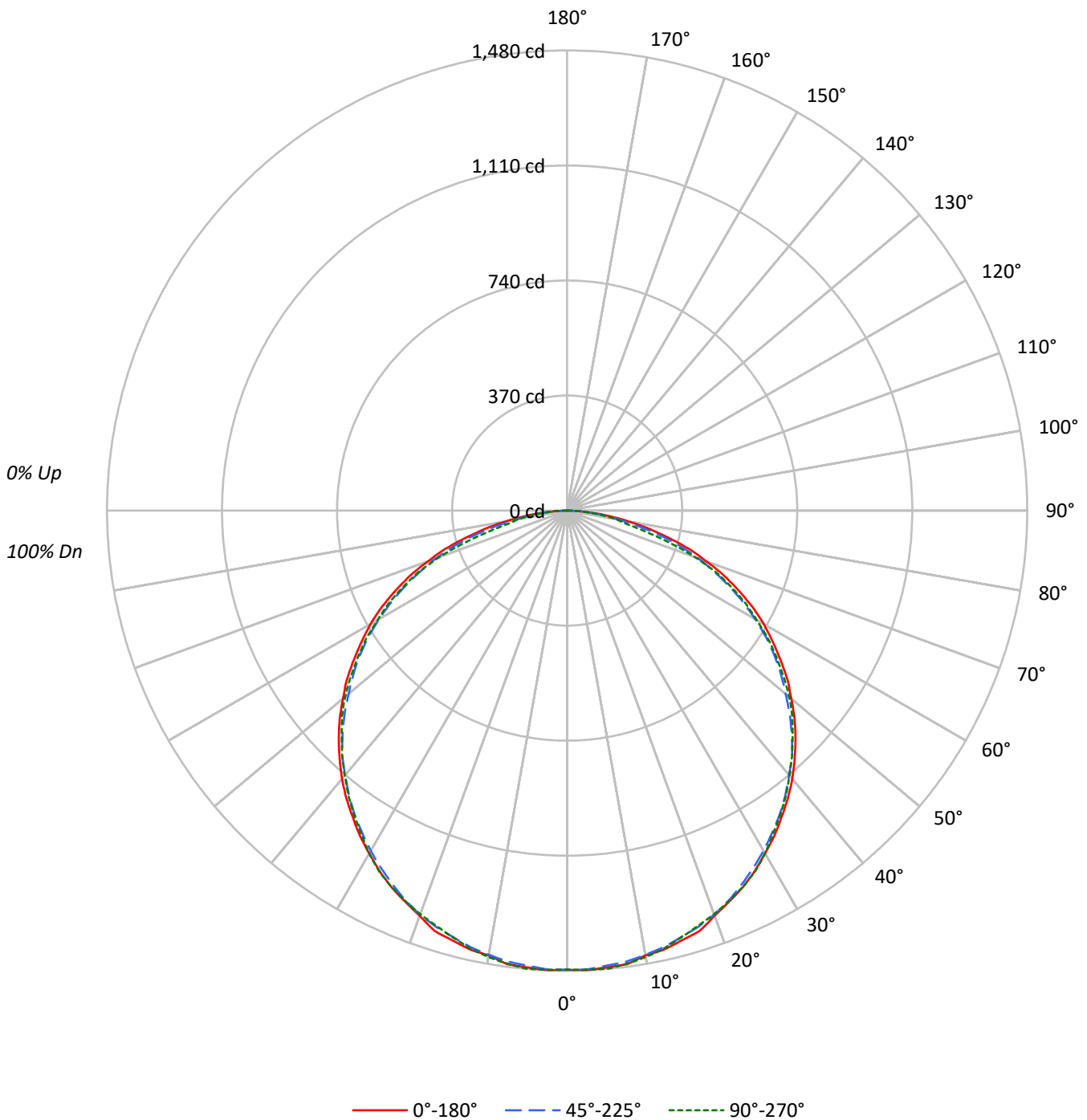
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	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°	1987	1987	1987
5°	1992	1984	1998
10°	1984	1982	1992
15°	1992	1978	1979
20°	1986	1980	1978
25°	1985	1970	1983
30°	1978	1963	1978
35°	1976	1958	1963
40°	1979	1950	1953
45°	1977	1944	1951
50°	1969	1921	1953
55°	1965	1910	1926
60°	1966	1878	1893
65°	1936	1829	1860
70°	1869	1763	1721
75°	1749	1618	1348
80°	1546	1299	1247
85°	1264	1145	1042



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	3.2
10°-20°	401.8	9.1
20°-30°	613.1	13.9
30°-40°	747.9	16.9
40°-50°	791.7	17.9
50°-60°	734.2	16.6
60°-70°	577.2	13.1
70°-80°	323.5	7.3
80°-90°	86.3	2.0
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°	1154.9	26.2
0°-40°	1902.8	43.1
0°-60°	3428.7	77.6
0°-90°	4415.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4415.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1475	1472	1469	1468	1480	140
15°	1430	1424	1420	1423	1421	404
25°	1337	1330	1327	1328	1336	616
35°	1203	1199	1192	1192	1195	754
45°	1039	1032	1022	1019	1026	801
55°	838	828	814	815	821	750
65°	608	592	574	578	584	601
75°	336	329	311	273	259	357
85°	82	75	74	70	68	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1476.6	1476.6	1476.6	1476.6	1476.6
2.5°	1479.5	1474.6	1477.5	1471.7	1477.5
5°	1474.6	1471.7	1468.9	1467.9	1479.5
7.5°	1471.7	1466.0	1463.1	1460.2	1469.8
10°	1452.5	1454.4	1450.5	1451.5	1458.3
12.5°	1445.7	1439.9	1438.0	1438.0	1441.9
15°	1430.3	1424.5	1419.7	1422.6	1420.7
17.5°	1417.8	1402.4	1403.3	1403.3	1400.4
20°	1386.9	1380.2	1383.1	1378.3	1381.1
22.5°	1360.9	1357.1	1358.0	1353.2	1359.9
25°	1336.8	1330.1	1327.2	1328.1	1335.8
27.5°	1306.9	1300.2	1296.3	1295.4	1308.9
30°	1273.2	1268.4	1263.6	1263.6	1273.2
32.5°	1240.4	1233.7	1227.9	1226.9	1232.7
35°	1202.8	1199.0	1192.2	1192.2	1195.1
37.5°	1166.2	1158.5	1152.7	1153.7	1155.6
40°	1126.7	1119.0	1110.3	1110.3	1112.2
42.5°	1083.3	1076.6	1070.8	1066.9	1070.8
45°	1039.0	1032.2	1021.6	1018.8	1025.5
47.5°	992.7	984.1	971.5	973.5	982.1
50°	940.7	932.0	917.6	922.4	933.0
52.5°	893.5	882.9	867.4	872.3	877.1
55°	837.6	827.9	814.4	815.4	821.2
57.5°	783.6	773.0	758.5	757.6	766.2
60°	730.6	716.1	697.8	698.8	703.6
62.5°	671.8	656.4	638.0	638.0	646.7
65°	608.2	591.8	574.4	578.3	584.1
67.5°	546.5	525.3	509.9	511.8	518.5
70°	475.2	460.7	448.2	441.4	437.6
72.5°	412.5	392.3	382.6	358.5	350.8
75°	336.4	328.7	311.3	272.8	259.3
77.5°	268.9	261.2	238.1	196.6	188.9
80°	199.5	201.4	167.7	161.0	161.0
82.5°	139.8	134.0	122.4	116.6	113.7
85°	81.9	75.2	74.2	70.4	67.5
87.5°	27.0	30.8	29.9	30.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)