

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: P393514

Luminaire Tested: **24EN-LD2-45-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393514
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-L83050-W2A-1-U (2700K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4420.3 lumens
Efficiency: N/A
Efficacy: 140.8 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

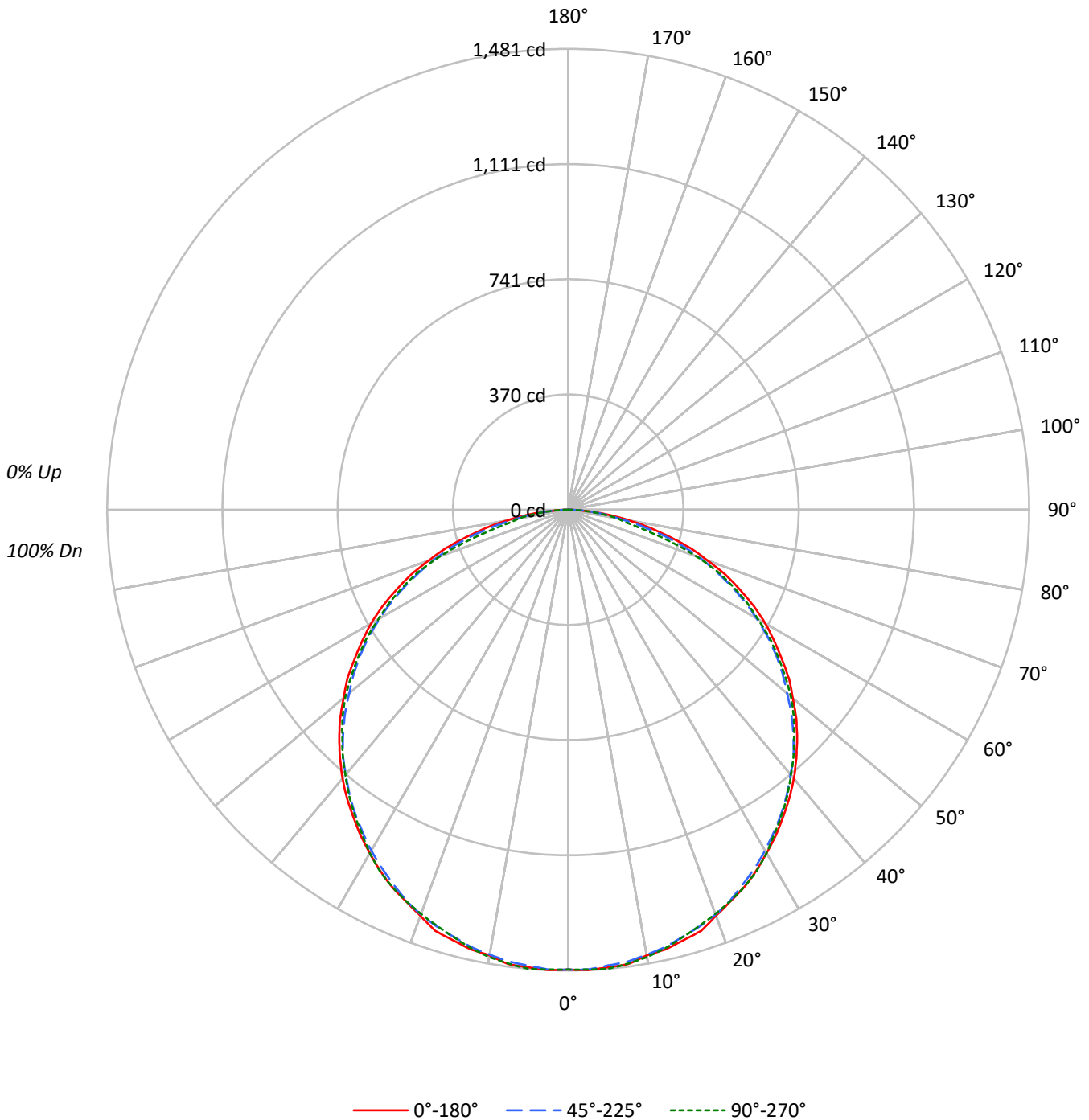
Input Watts (W): 31.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1989	1989	1989
5°	1994	1986	2000
10°	1987	1984	1994
15°	1994	1980	1981
20°	1988	1982	1980
25°	1987	1972	1985
30°	1980	1965	1980
35°	1978	1960	1965
40°	1981	1952	1956
45°	1979	1946	1953
50°	1971	1923	1955
55°	1967	1913	1928
60°	1968	1880	1895
65°	1938	1831	1862
70°	1871	1765	1723
75°	1750	1620	1349
80°	1547	1301	1248
85°	1266	1147	1042



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.1	3.2
10°-20°	402.2	9.1
20°-30°	613.8	13.9
30°-40°	748.7	16.9
40°-50°	792.5	17.9
50°-60°	735.0	16.6
60°-70°	577.8	13.1
70°-80°	323.8	7.3
80°-90°	86.4	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°	1156.1	26.2
0°-40°	1904.8	43.1
0°-60°	3432.3	77.6
0°-90°	4420.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4420.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1476	1473	1470	1469	1481	140
15°	1432	1426	1421	1424	1422	404
25°	1338	1332	1329	1330	1337	616
35°	1204	1200	1194	1194	1196	754
45°	1040	1033	1023	1020	1027	802
55°	838	829	815	816	822	750
65°	609	592	575	579	585	602
75°	337	329	312	273	260	358
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°	1478.1	1478.1	1478.1	1478.1	1478.1
2.5°	1481.0	1476.2	1479.1	1473.3	1479.1
5°	1476.2	1473.3	1470.4	1469.4	1481.0
7.5°	1473.3	1467.5	1464.6	1461.7	1471.4
10°	1454.0	1455.9	1452.1	1453.0	1459.8
12.5°	1447.2	1441.4	1439.5	1439.5	1443.4
15°	1431.8	1426.0	1421.2	1424.1	1422.1
17.5°	1419.3	1403.8	1404.8	1404.8	1401.9
20°	1388.4	1381.6	1384.5	1379.7	1382.6
22.5°	1362.3	1358.5	1359.4	1354.6	1361.4
25°	1338.2	1331.5	1328.6	1329.5	1337.2
27.5°	1308.3	1301.5	1297.7	1296.7	1310.2
30°	1274.5	1269.7	1264.9	1264.9	1274.5
32.5°	1241.7	1235.0	1229.2	1228.2	1234.0
35°	1204.1	1200.2	1193.5	1193.5	1196.4
37.5°	1167.4	1159.7	1153.9	1154.9	1156.8
40°	1127.9	1120.2	1111.5	1111.5	1113.4
42.5°	1084.5	1077.7	1071.9	1068.1	1071.9
45°	1040.1	1033.3	1022.7	1019.8	1026.6
47.5°	993.8	985.1	972.5	974.5	983.2
50°	941.7	933.0	918.5	923.3	933.9
52.5°	894.4	883.8	868.3	873.2	878.0
55°	838.4	828.8	815.3	816.2	822.0
57.5°	784.4	773.8	759.3	758.3	767.0
60°	731.3	716.9	698.5	699.5	704.3
62.5°	672.5	657.0	638.7	638.7	647.4
65°	608.8	592.4	575.0	578.9	584.7
67.5°	547.1	525.8	510.4	512.3	519.1
70°	475.7	461.2	448.6	441.9	438.0
72.5°	412.9	392.7	383.0	358.9	351.2
75°	336.7	329.0	311.6	273.0	259.5
77.5°	269.2	261.5	238.3	196.8	189.1
80°	199.7	201.6	167.9	161.1	161.1
82.5°	139.9	134.1	122.5	116.7	113.8
85°	82.0	75.3	74.3	70.4	67.5
87.5°	27.0	30.9	29.9	30.9	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)