

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: P393522

Luminaire Tested: **24EN-LD2-45-UNV-L92765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393522
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-L92765-W2A-1-U (2700K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3438.4 lumens
Efficiency: N/A
Efficacy: 109.2 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

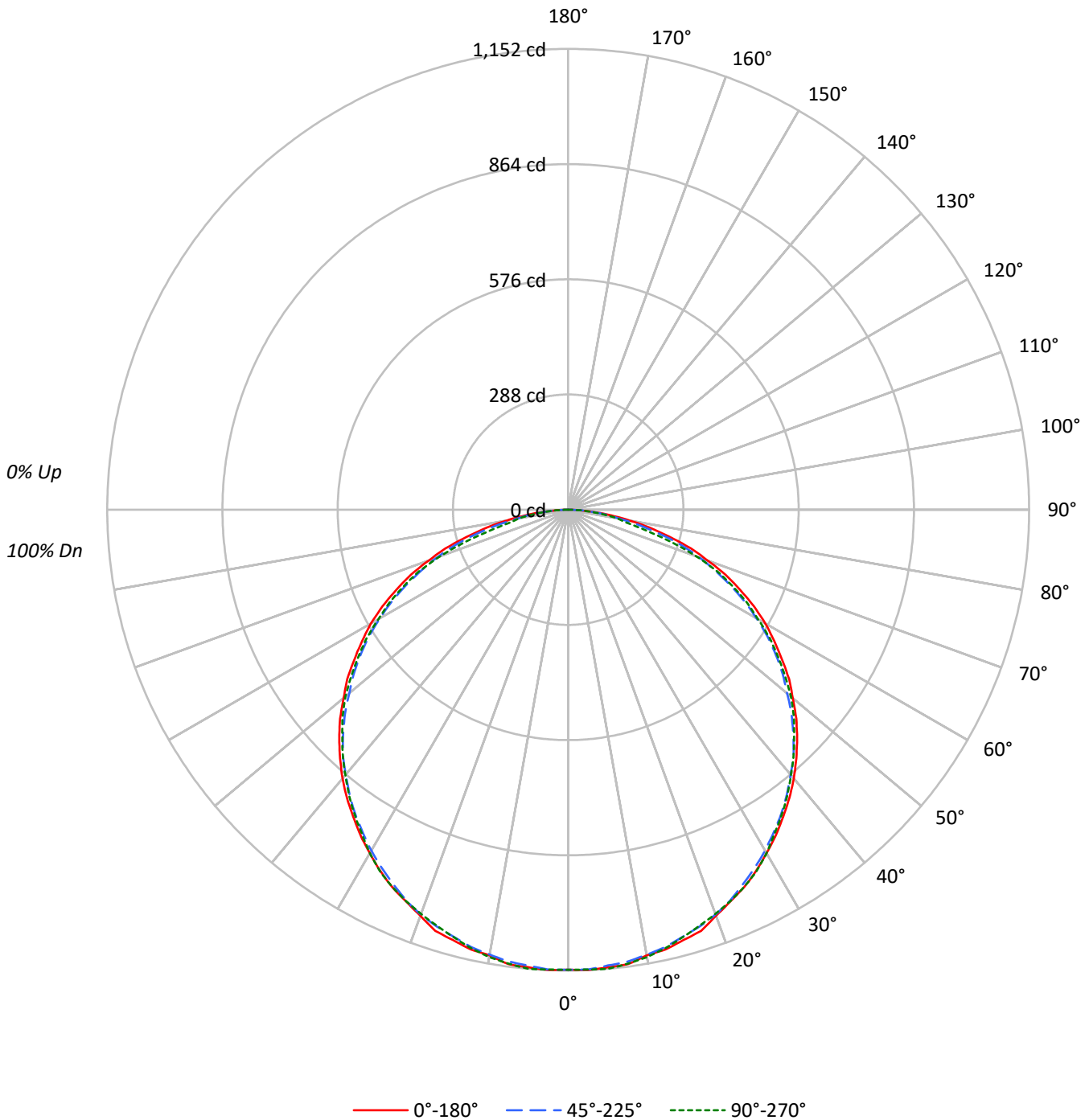
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1547	1547	1547
5°	1551	1545	1556
10°	1545	1543	1551
15°	1551	1540	1541
20°	1546	1542	1540
25°	1545	1534	1544
30°	1540	1529	1540
35°	1538	1525	1529
40°	1541	1519	1521
45°	1539	1514	1519
50°	1533	1496	1521
55°	1530	1488	1500
60°	1531	1462	1474
65°	1508	1424	1448
70°	1456	1373	1340
75°	1362	1260	1050
80°	1204	1012	971
85°	985	892	810



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	3.2
10°-20°	312.9	9.1
20°-30°	477.4	13.9
30°-40°	582.4	16.9
40°-50°	616.5	17.9
50°-60°	571.7	16.6
60°-70°	449.4	13.1
70°-80°	251.9	7.3
80°-90°	67.2	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°	899.3	26.2
0°-40°	1481.7	43.1
0°-60°	2669.9	77.6
0°-90°	3438.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3438.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1148	1146	1144	1143	1152	109
15°	1114	1109	1106	1108	1106	315
25°	1041	1036	1033	1034	1040	480
35°	937	934	928	928	931	587
45°	809	804	796	793	798	624
55°	652	645	634	635	639	584
65°	474	461	447	450	455	468
75°	262	256	242	212	202	278
85°	64	58	58	55	52	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1149.8	1149.8	1149.8	1149.8	1149.8
2.5°	1152.0	1148.3	1150.5	1146.0	1150.5
5°	1148.3	1146.0	1143.8	1143.0	1152.0
7.5°	1146.0	1141.5	1139.3	1137.0	1144.5
10°	1131.0	1132.5	1129.5	1130.3	1135.5
12.5°	1125.8	1121.3	1119.8	1119.8	1122.8
15°	1113.7	1109.2	1105.5	1107.7	1106.2
17.5°	1104.0	1092.0	1092.7	1092.7	1090.5
20°	1080.0	1074.7	1077.0	1073.2	1075.5
22.5°	1059.7	1056.7	1057.5	1053.7	1059.0
25°	1040.9	1035.7	1033.4	1034.2	1040.2
27.5°	1017.7	1012.4	1009.4	1008.7	1019.2
30°	991.4	987.7	983.9	983.9	991.4
32.5°	965.9	960.6	956.1	955.4	959.9
35°	936.6	933.6	928.4	928.4	930.6
37.5°	908.1	902.1	897.6	898.4	899.9
40°	877.3	871.3	864.6	864.6	866.1
42.5°	843.6	838.3	833.8	830.8	833.8
45°	809.0	803.8	795.5	793.3	798.5
47.5°	773.0	766.3	756.5	758.0	764.8
50°	732.5	725.7	714.5	718.2	726.5
52.5°	695.7	687.5	675.5	679.2	683.0
55°	652.2	644.7	634.2	634.9	639.4
57.5°	610.2	601.9	590.6	589.9	596.7
60°	568.9	557.6	543.4	544.1	547.9
62.5°	523.1	511.1	496.8	496.8	503.6
65°	473.6	460.8	447.3	450.3	454.8
67.5°	425.5	409.0	397.0	398.5	403.8
70°	370.0	358.7	349.0	343.7	340.7
72.5°	321.2	305.5	298.0	279.2	273.2
75°	261.9	255.9	242.4	212.4	201.9
77.5°	209.4	203.4	185.4	153.1	147.1
80°	155.4	156.9	130.6	125.3	125.3
82.5°	108.8	104.3	95.3	90.8	88.6
85°	63.8	58.5	57.8	54.8	52.5
87.5°	21.0	24.0	23.3	24.0	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)