

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: P393510

Luminaire Tested: **24EN-LD2-45-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393510
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 (4500K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4406.7 lumens
Efficiency: N/A
Efficacy: 139.0 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

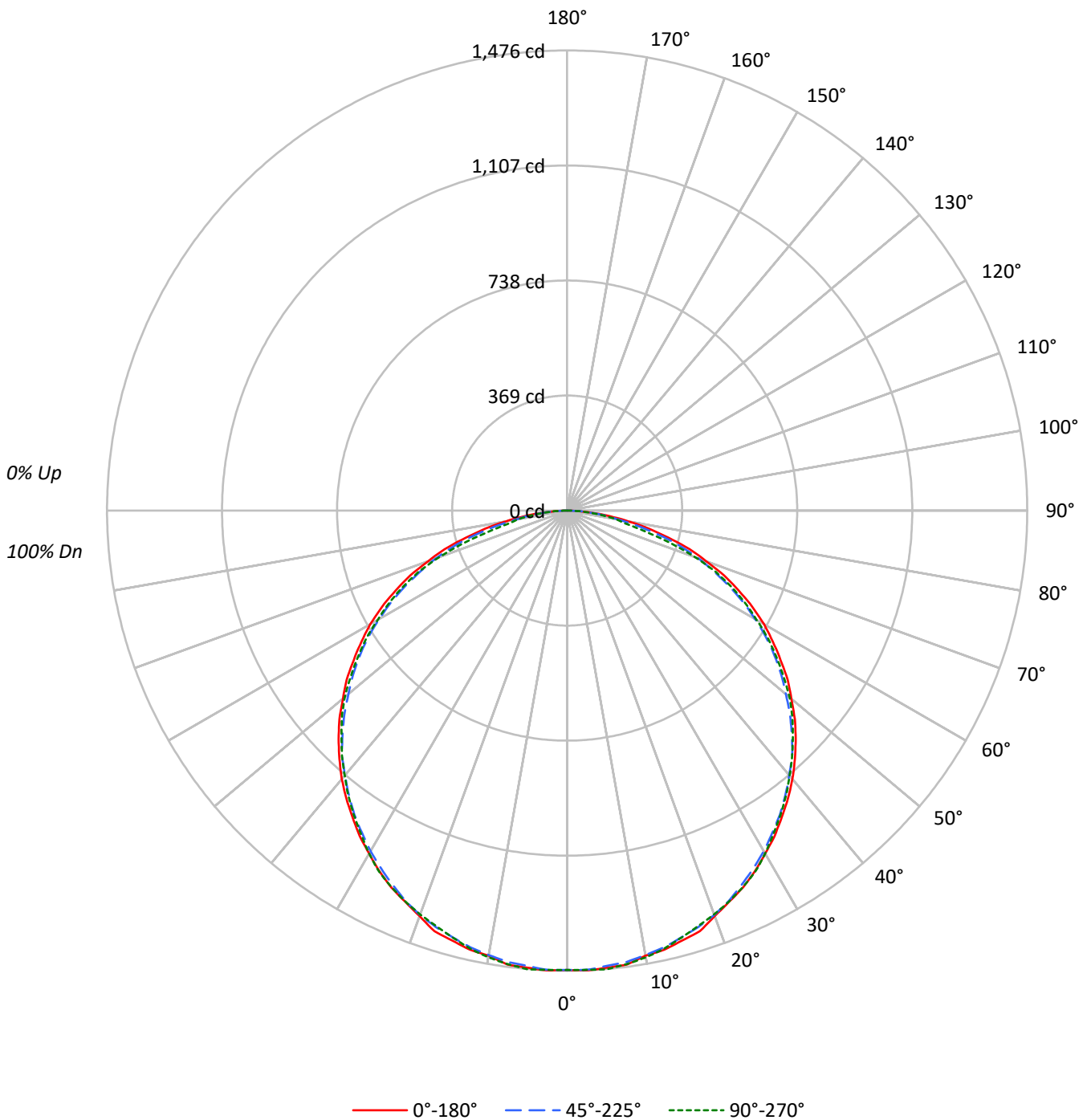
Input Watts (W): 31.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1983	1983	1983
5°	1988	1980	1994
10°	1980	1978	1988
15°	1988	1974	1975
20°	1982	1976	1974
25°	1981	1966	1979
30°	1974	1959	1974
35°	1972	1954	1959
40°	1975	1946	1950
45°	1973	1940	1947
50°	1965	1917	1949
55°	1961	1906	1922
60°	1962	1874	1889
65°	1932	1825	1856
70°	1865	1760	1718
75°	1745	1615	1345
80°	1543	1297	1244
85°	1263	1144	1039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	3.2
10°-20°	401.0	9.1
20°-30°	611.9	13.9
30°-40°	746.4	16.9
40°-50°	790.0	17.9
50°-60°	732.7	16.6
60°-70°	576.0	13.1
70°-80°	322.8	7.3
80°-90°	86.2	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°	1152.5	26.2
0°-40°	1898.9	43.1
0°-60°	3421.6	77.6
0°-90°	4406.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4406.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1472	1469	1466	1465	1476	140
15°	1427	1422	1417	1420	1418	403
25°	1334	1327	1324	1325	1333	615
35°	1200	1196	1190	1190	1193	752
45°	1037	1030	1020	1017	1023	800
55°	836	826	813	814	820	748
65°	607	591	573	577	583	600
75°	336	328	311	272	259	357
85°	82	75	74	70	67	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.5	1473.5	1473.5	1473.5	1473.5
2.5°	1476.4	1471.6	1474.5	1468.7	1474.5
5°	1471.6	1468.7	1465.8	1464.9	1476.4
7.5°	1468.7	1462.9	1460.1	1457.2	1466.8
10°	1449.5	1451.4	1447.6	1448.5	1455.2
12.5°	1442.7	1437.0	1435.0	1435.0	1438.9
15°	1427.4	1421.6	1416.8	1419.7	1417.7
17.5°	1414.9	1399.5	1400.4	1400.4	1397.5
20°	1384.1	1377.3	1380.2	1375.4	1378.3
22.5°	1358.1	1354.3	1355.2	1350.4	1357.1
25°	1334.1	1327.3	1324.4	1325.4	1333.1
27.5°	1304.2	1297.5	1293.7	1292.7	1306.2
30°	1270.6	1265.8	1261.0	1261.0	1270.6
32.5°	1237.9	1231.1	1225.4	1224.4	1230.2
35°	1200.4	1196.5	1189.8	1189.8	1192.7
37.5°	1163.8	1156.1	1150.3	1151.3	1153.2
40°	1124.4	1116.7	1108.0	1108.0	1110.0
42.5°	1081.1	1074.4	1068.6	1064.7	1068.6
45°	1036.9	1030.1	1019.5	1016.7	1023.4
47.5°	990.7	982.0	969.5	971.4	980.1
50°	938.7	930.1	915.7	920.5	931.1
52.5°	891.6	881.0	865.6	870.5	875.3
55°	835.8	826.2	812.7	813.7	819.5
57.5°	782.0	771.4	757.0	756.0	764.7
60°	729.1	714.6	696.4	697.3	702.1
62.5°	670.4	655.0	636.7	636.7	645.4
65°	606.9	590.6	573.3	577.1	582.9
67.5°	545.4	524.2	508.8	510.7	517.5
70°	474.2	459.8	447.3	440.5	436.7
72.5°	411.7	391.5	381.8	357.8	350.1
75°	335.7	328.0	310.7	272.2	258.7
77.5°	268.4	260.7	237.6	196.2	188.5
80°	199.1	201.0	167.4	160.6	160.6
82.5°	139.5	133.7	122.2	116.4	113.5
85°	81.8	75.0	74.1	70.2	67.3
87.5°	26.9	30.8	29.8	30.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)