

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: P393521

Luminaire Tested: **24EN-LD2-45-UNV-L83050-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393521  
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 (6500K)  
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4668.0 lumens  
Efficiency: N/A  
Efficacy: 147.7 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

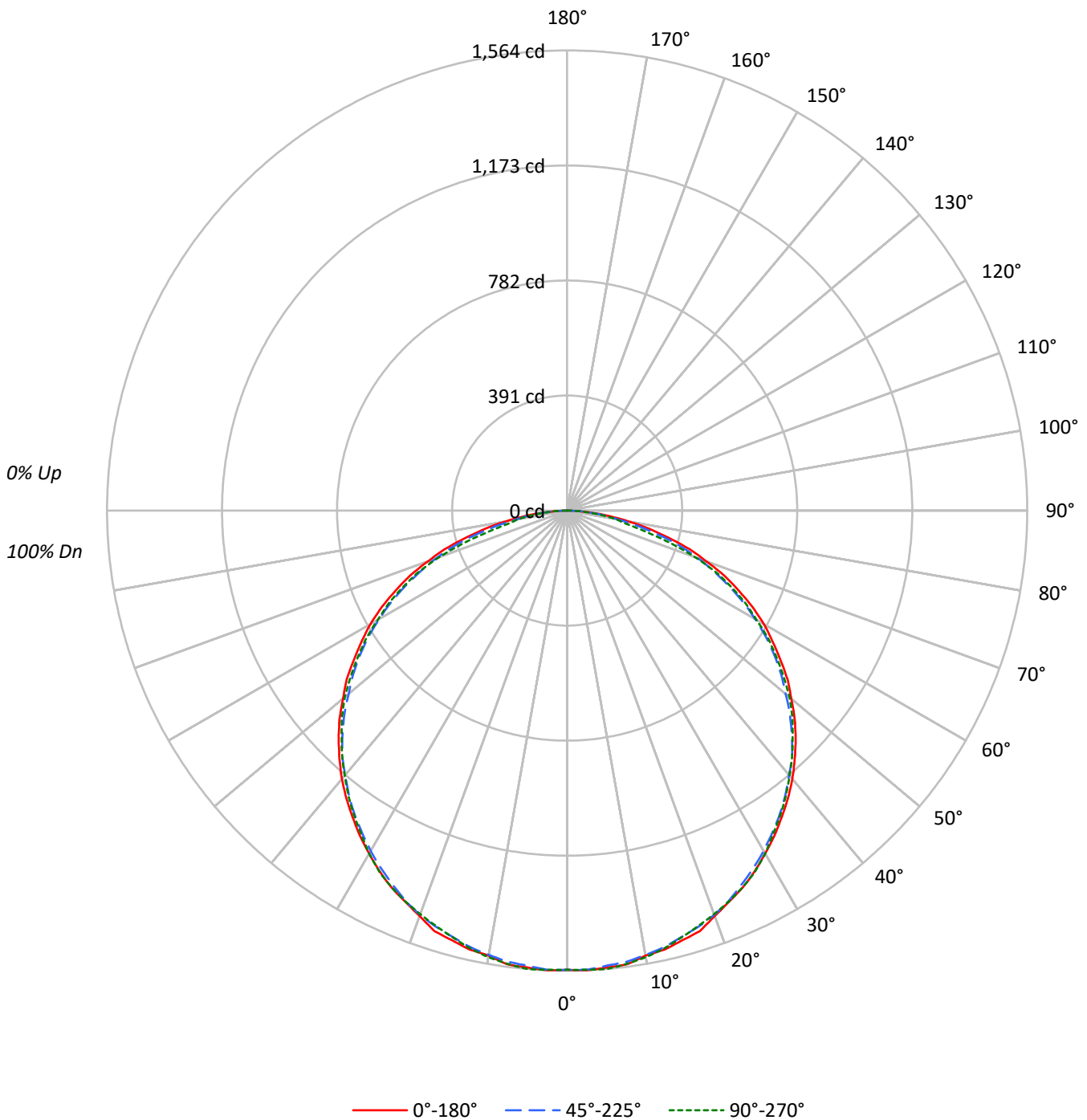
Input Watts (W): 31.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2100	2100	2100
5°	2105	2097	2112
10°	2098	2095	2106
15°	2106	2091	2092
20°	2099	2093	2090
25°	2098	2083	2096
30°	2091	2075	2091
35°	2088	2070	2075
40°	2092	2062	2065
45°	2090	2055	2063
50°	2081	2030	2065
55°	2077	2019	2036
60°	2078	1985	2002
65°	2047	1933	1966
70°	1976	1864	1820
75°	1849	1711	1425
80°	1634	1374	1319
85°	1337	1212	1101



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.9	3.2
10°-20°	424.8	9.1
20°-30°	648.1	13.9
30°-40°	790.7	16.9
40°-50°	836.9	17.9
50°-60°	776.2	16.6
60°-70°	610.2	13.1
70°-80°	342.0	7.3
80°-90°	91.3	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°	1220.8	26.2
0°-40°	2011.5	43.1
0°-60°	3624.5	77.6
0°-90°	4668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4668.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1559	1556	1553	1552	1564	148
15°	1512	1506	1501	1504	1502	427
25°	1413	1406	1403	1404	1412	651
35°	1272	1268	1260	1260	1263	797
45°	1098	1091	1080	1077	1084	847
55°	885	875	861	862	868	792
65°	643	626	607	611	617	636
75°	356	347	329	288	274	378
85°	87	80	78	74	71	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1560.9	1560.9	1560.9	1560.9	1560.9
2.5°	1564.0	1558.9	1561.9	1555.8	1561.9
5°	1558.9	1555.8	1552.7	1551.7	1564.0
7.5°	1555.8	1549.7	1546.6	1543.6	1553.8
10°	1535.4	1537.5	1533.4	1534.4	1541.5
12.5°	1528.3	1522.2	1520.1	1520.1	1524.2
15°	1512.0	1505.9	1500.8	1503.8	1501.8
17.5°	1498.7	1482.4	1483.5	1483.5	1480.4
20°	1466.1	1459.0	1462.1	1457.0	1460.0
22.5°	1438.6	1434.6	1435.6	1430.5	1437.6
25°	1413.2	1406.0	1403.0	1404.0	1412.1
27.5°	1381.6	1374.4	1370.4	1369.4	1383.6
30°	1345.9	1340.8	1335.7	1335.7	1345.9
32.5°	1311.3	1304.1	1298.0	1297.0	1303.1
35°	1271.5	1267.5	1260.3	1260.3	1263.4
37.5°	1232.8	1224.7	1218.6	1219.6	1221.6
40°	1191.1	1182.9	1173.7	1173.7	1175.8
42.5°	1145.2	1138.1	1132.0	1127.9	1132.0
45°	1098.3	1091.2	1080.0	1076.9	1084.1
47.5°	1049.4	1040.3	1027.0	1029.1	1038.2
50°	994.4	985.2	970.0	975.1	986.3
52.5°	944.5	933.3	917.0	922.1	927.2
55°	885.4	875.2	860.9	862.0	868.1
57.5°	828.3	817.1	801.8	800.8	810.0
60°	772.3	757.0	737.7	738.7	743.8
62.5°	710.1	693.8	674.5	674.5	683.7
65°	642.9	625.6	607.2	611.3	617.4
67.5°	577.7	555.3	539.0	541.0	548.1
70°	502.3	487.0	473.8	466.6	462.6
72.5°	436.1	414.7	404.5	379.0	370.9
75°	355.6	347.4	329.1	288.3	274.1
77.5°	284.3	276.1	251.7	207.8	199.7
80°	210.9	212.9	177.3	170.2	170.2
82.5°	147.7	141.6	129.4	123.3	120.2
85°	86.6	79.5	78.5	74.4	71.3
87.5°	28.5	32.6	31.6	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)