

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: P393530

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393530  
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-L93050-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: 3955.8 lumens  
Efficiency: N/A  
Efficacy: 124.8 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

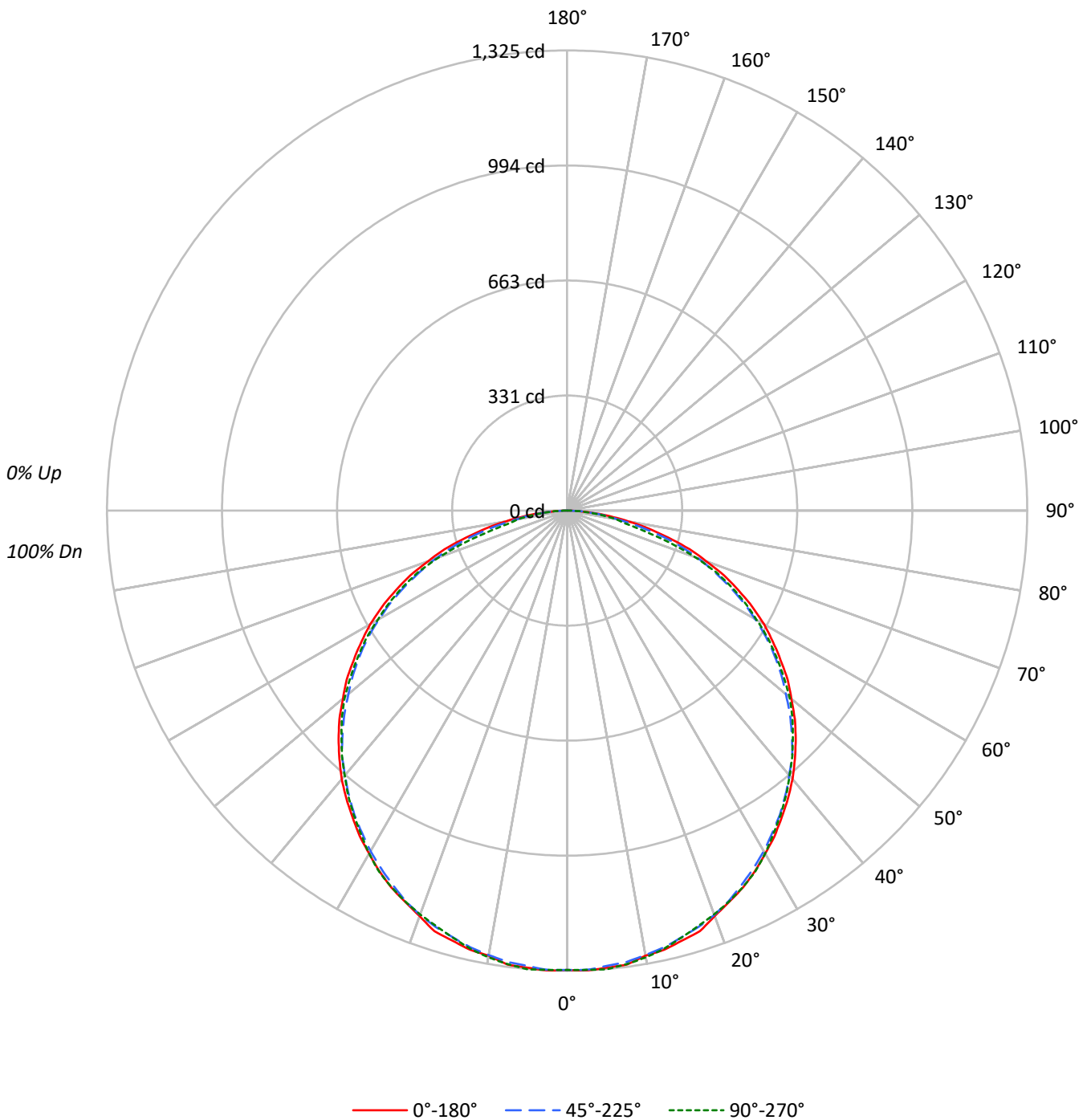
Input Watts (W): 31.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1780	1780	1780
5°	1784	1777	1790
10°	1778	1775	1785
15°	1785	1772	1773
20°	1779	1774	1772
25°	1778	1765	1777
30°	1772	1759	1772
35°	1770	1754	1759
40°	1773	1747	1750
45°	1771	1741	1748
50°	1764	1721	1750
55°	1760	1711	1726
60°	1761	1682	1696
65°	1734	1638	1666
70°	1675	1579	1542
75°	1566	1450	1208
80°	1385	1164	1117
85°	1133	1027	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.3	3.2
10°-20°	360.0	9.1
20°-30°	549.3	13.9
30°-40°	670.1	16.9
40°-50°	709.2	17.9
50°-60°	657.8	16.6
60°-70°	517.1	13.1
70°-80°	289.8	7.3
80°-90°	77.4	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°	1034.6	26.2
0°-40°	1704.6	43.1
0°-60°	3071.6	77.6
0°-90°	3955.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3955.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1321	1318	1316	1315	1325	126
15°	1281	1276	1272	1274	1273	362
25°	1198	1192	1189	1190	1197	552
35°	1078	1074	1068	1068	1071	675
45°	931	925	915	913	919	718
55°	750	742	730	730	736	672
65°	545	530	515	518	523	539
75°	301	294	279	244	232	320
85°	73	67	66	63	60	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1322.8	1322.8	1322.8	1322.8	1322.8
2.5°	1325.4	1321.0	1323.6	1318.5	1323.6
5°	1321.0	1318.5	1315.9	1315.0	1325.4
7.5°	1318.5	1313.3	1310.7	1308.1	1316.7
10°	1301.2	1302.9	1299.5	1300.3	1306.4
12.5°	1295.1	1290.0	1288.2	1288.2	1291.7
15°	1281.3	1276.2	1271.8	1274.4	1272.7
17.5°	1270.1	1256.3	1257.2	1257.2	1254.6
20°	1242.5	1236.4	1239.0	1234.7	1237.3
22.5°	1219.2	1215.7	1216.6	1212.3	1218.3
25°	1197.6	1191.5	1188.9	1189.8	1196.7
27.5°	1170.8	1164.8	1161.3	1160.5	1172.5
30°	1140.6	1136.3	1132.0	1132.0	1140.6
32.5°	1111.2	1105.2	1100.0	1099.1	1104.3
35°	1077.6	1074.1	1068.1	1068.1	1070.7
37.5°	1044.8	1037.8	1032.7	1033.5	1035.3
40°	1009.4	1002.4	994.7	994.7	996.4
42.5°	970.5	964.5	959.3	955.8	959.3
45°	930.8	924.7	915.2	912.6	918.7
47.5°	889.3	881.6	870.3	872.1	879.8
50°	842.7	834.9	822.0	826.3	835.8
52.5°	800.4	790.9	777.1	781.4	785.7
55°	750.3	741.7	729.6	730.5	735.6
57.5°	702.0	692.5	679.5	678.7	686.4
60°	654.5	641.5	625.1	626.0	630.3
62.5°	601.8	588.0	571.6	571.6	579.4
65°	544.8	530.1	514.6	518.1	523.2
67.5°	489.6	470.6	456.8	458.5	464.5
70°	425.7	412.7	401.5	395.5	392.0
72.5°	369.5	351.4	342.8	321.2	314.3
75°	301.3	294.4	278.9	244.4	232.3
77.5°	240.9	234.0	213.3	176.1	169.2
80°	178.7	180.5	150.2	144.2	144.2
82.5°	125.2	120.0	109.7	104.5	101.9
85°	73.4	67.3	66.5	63.0	60.4
87.5°	24.2	27.6	26.8	27.6	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)