

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: P393526

Luminaire Tested: **24EN-LD2-45-UNV-L92765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393526  
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 (4500K)  
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: 3763.7 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

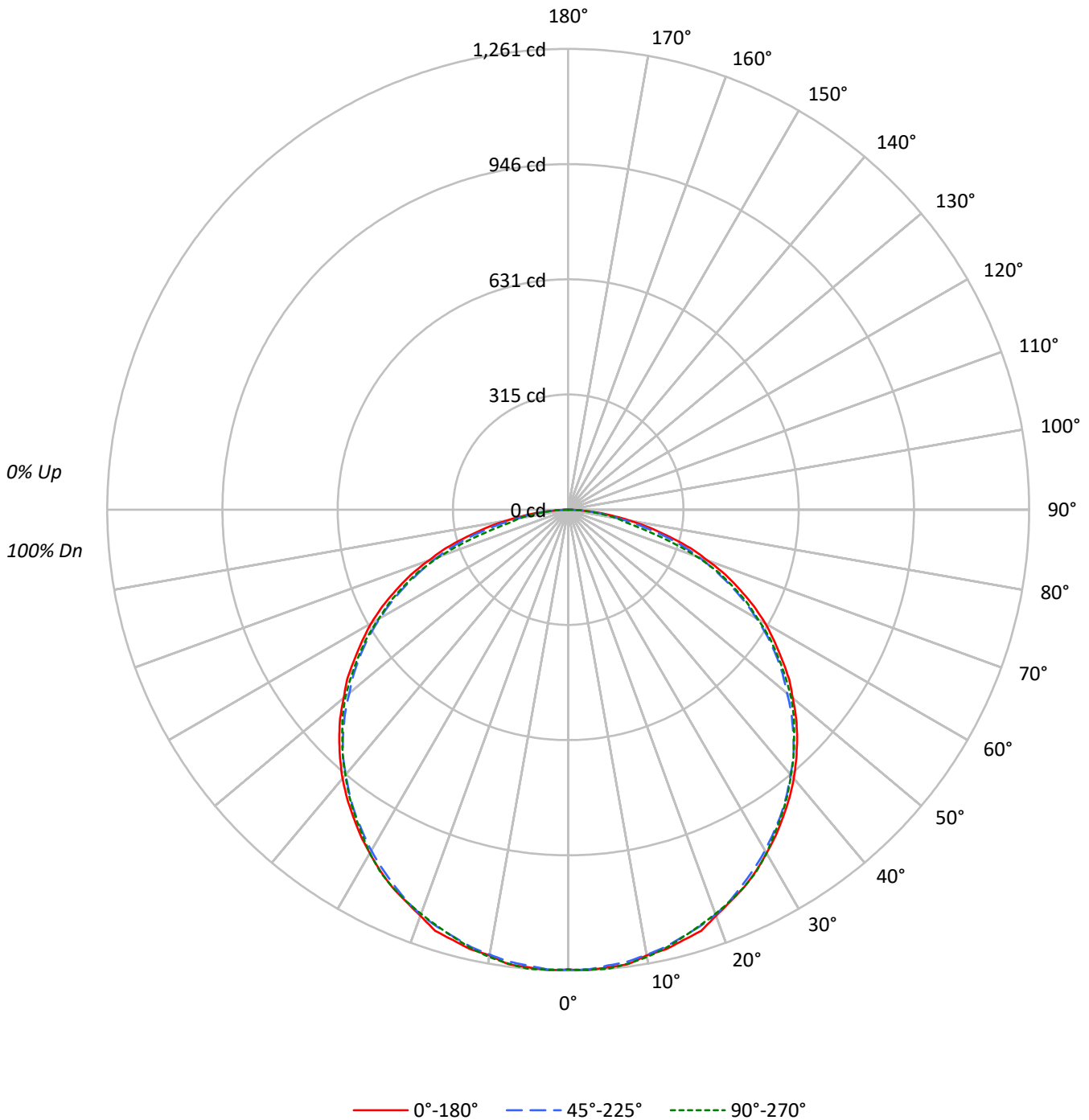
Input Watts (W): 31.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1693	1693	1693
5°	1698	1691	1703
10°	1691	1689	1698
15°	1698	1686	1687
20°	1693	1688	1686
25°	1692	1679	1690
30°	1686	1673	1686
35°	1684	1669	1673
40°	1687	1662	1665
45°	1685	1657	1663
50°	1678	1637	1665
55°	1675	1628	1642
60°	1676	1601	1614
65°	1650	1559	1585
70°	1593	1503	1467
75°	1490	1379	1149
80°	1317	1107	1063
85°	1078	977	888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.2	3.2
10°-20°	342.5	9.1
20°-30°	522.6	13.9
30°-40°	637.5	16.9
40°-50°	674.8	17.9
50°-60°	625.8	16.6
60°-70°	492.0	13.1
70°-80°	275.7	7.3
80°-90°	73.6	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°	984.3	26.2
0°-40°	1621.8	43.1
0°-60°	2922.4	77.6
0°-90°	3763.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1257	1254	1252	1251	1261	120
15°	1219	1214	1210	1212	1211	344
25°	1139	1134	1131	1132	1139	525
35°	1025	1022	1016	1016	1019	642
45°	886	880	871	868	874	683
55°	714	706	694	695	700	639
65°	518	504	490	493	498	512
75°	287	280	265	232	221	305
85°	70	64	63	60	58	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1258.5	1258.5	1258.5	1258.5	1258.5
2.5°	1261.0	1256.9	1259.3	1254.4	1259.3
5°	1256.9	1254.4	1252.0	1251.1	1261.0
7.5°	1254.4	1249.5	1247.0	1244.6	1252.8
10°	1238.0	1239.6	1236.3	1237.2	1242.9
12.5°	1232.2	1227.3	1225.7	1225.7	1228.9
15°	1219.1	1214.2	1210.1	1212.5	1210.9
17.5°	1208.4	1195.3	1196.1	1196.1	1193.6
20°	1182.1	1176.4	1178.8	1174.7	1177.2
22.5°	1159.9	1156.7	1157.5	1153.4	1159.1
25°	1139.4	1133.7	1131.2	1132.0	1138.6
27.5°	1113.9	1108.2	1104.9	1104.1	1115.6
30°	1085.2	1081.1	1077.0	1077.0	1085.2
32.5°	1057.3	1051.5	1046.6	1045.8	1050.7
35°	1025.2	1021.9	1016.2	1016.2	1018.6
37.5°	994.0	987.4	982.5	983.3	985.0
40°	960.3	953.8	946.4	946.4	948.0
42.5°	923.4	917.6	912.7	909.4	912.7
45°	885.6	879.8	870.8	868.3	874.1
47.5°	846.1	838.7	828.1	829.7	837.1
50°	801.8	794.4	782.1	786.2	795.2
52.5°	761.5	752.5	739.3	743.4	747.6
55°	713.9	705.7	694.2	695.0	699.9
57.5°	667.9	658.8	646.5	645.7	653.1
60°	622.7	610.4	594.8	595.6	599.7
62.5°	572.6	559.4	543.8	543.8	551.2
65°	518.4	504.4	489.6	492.9	497.8
67.5°	465.8	447.7	434.6	436.2	442.0
70°	405.0	392.7	382.0	376.2	373.0
72.5°	351.6	334.3	326.1	305.6	299.0
75°	286.7	280.1	265.3	232.5	221.0
77.5°	229.2	222.6	202.9	167.6	161.0
80°	170.0	171.7	142.9	137.2	137.2
82.5°	119.1	114.2	104.3	99.4	96.9
85°	69.8	64.1	63.3	60.0	57.5
87.5°	23.0	26.3	25.5	26.3	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)