

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: P393532

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393532
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 (3500K)
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: 3852.7 lumens
Efficiency: N/A
Efficacy: 121.5 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

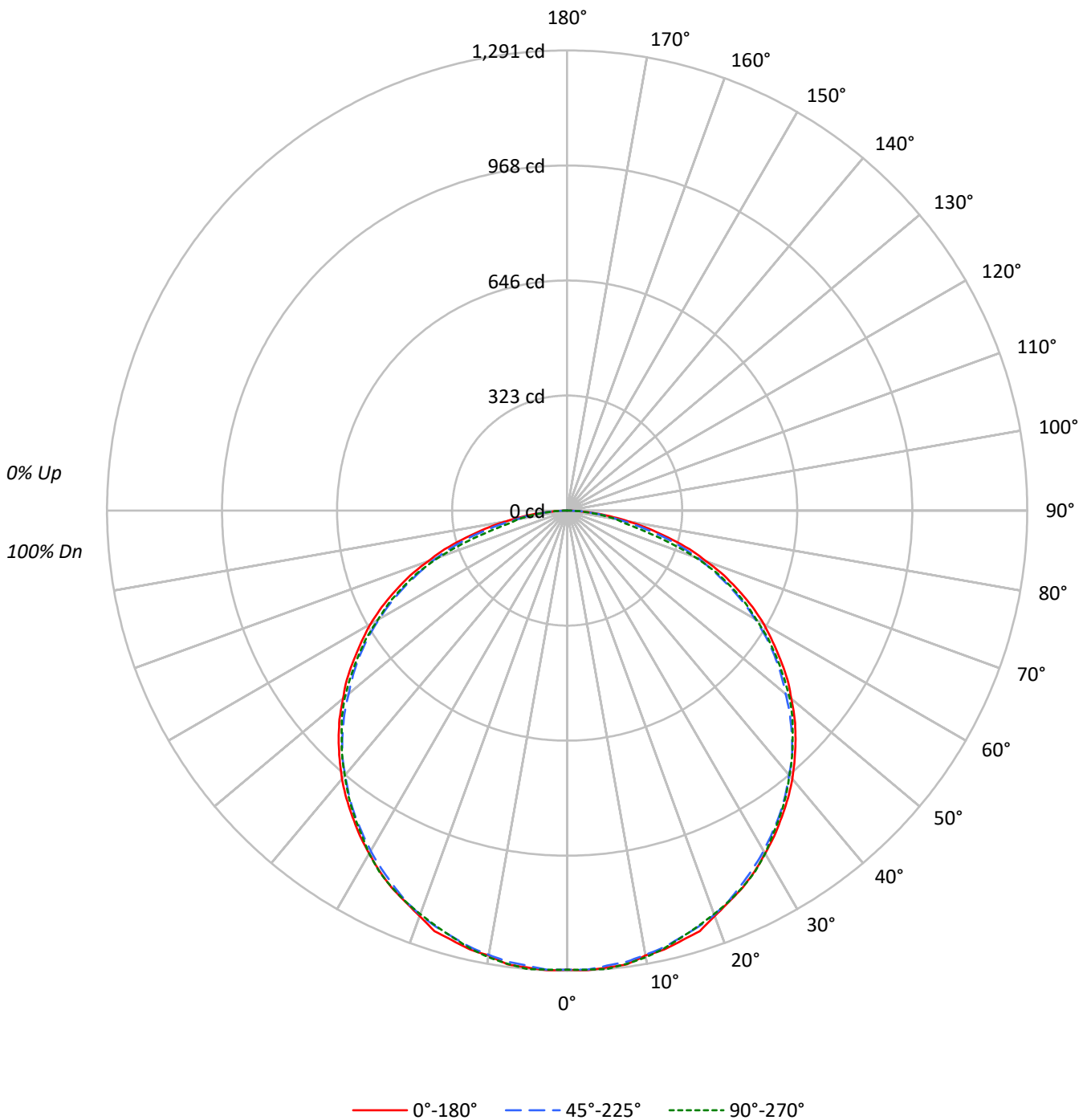
Input Watts (W): 31.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1733	1733	1733
5°	1738	1731	1743
10°	1731	1729	1738
15°	1738	1725	1727
20°	1733	1728	1725
25°	1732	1719	1730
30°	1726	1713	1726
35°	1724	1709	1713
40°	1727	1701	1704
45°	1725	1696	1702
50°	1718	1676	1704
55°	1714	1667	1681
60°	1715	1638	1652
65°	1689	1596	1622
70°	1631	1538	1502
75°	1526	1412	1176
80°	1349	1134	1088
85°	1104	1000	909



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.1	3.2
10°-20°	350.6	9.1
20°-30°	534.9	13.9
30°-40°	652.6	16.9
40°-50°	690.7	17.9
50°-60°	640.6	16.6
60°-70°	503.6	13.1
70°-80°	282.2	7.3
80°-90°	75.3	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°	1007.6	26.2
0°-40°	1660.2	43.1
0°-60°	2991.5	77.6
0°-90°	3852.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3852.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1287	1284	1282	1281	1291	122
15°	1248	1243	1239	1241	1240	352
25°	1166	1160	1158	1159	1166	537
35°	1050	1046	1040	1040	1043	657
45°	906	901	891	889	895	699
55°	731	722	711	711	716	654
65°	531	516	501	505	510	525
75°	294	287	272	238	226	312
85°	72	66	65	61	59	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1288.3	1288.3	1288.3	1288.3	1288.3
2.5°	1290.8	1286.6	1289.1	1284.1	1289.1
5°	1286.6	1284.1	1281.6	1280.7	1290.8
7.5°	1284.1	1279.1	1276.5	1274.0	1282.4
10°	1267.3	1269.0	1265.6	1266.4	1272.3
12.5°	1261.4	1256.3	1254.7	1254.7	1258.0
15°	1247.9	1242.9	1238.7	1241.2	1239.5
17.5°	1237.0	1223.5	1224.4	1224.4	1221.9
20°	1210.1	1204.2	1206.7	1202.5	1205.0
22.5°	1187.4	1184.0	1184.9	1180.7	1186.5
25°	1166.4	1160.5	1158.0	1158.8	1165.5
27.5°	1140.3	1134.4	1131.0	1130.2	1142.0
30°	1110.9	1106.7	1102.5	1102.5	1110.9
32.5°	1082.3	1076.4	1071.3	1070.5	1075.5
35°	1049.5	1046.1	1040.2	1040.2	1042.7
37.5°	1017.5	1010.8	1005.7	1006.6	1008.3
40°	983.0	976.3	968.7	968.7	970.4
42.5°	945.2	939.3	934.3	930.9	934.3
45°	906.5	900.6	891.4	888.9	894.7
47.5°	866.2	858.6	847.7	849.3	856.9
50°	820.7	813.2	800.6	804.8	814.0
52.5°	779.5	770.3	756.8	761.0	765.2
55°	730.8	722.4	710.6	711.4	716.5
57.5°	683.7	674.4	661.8	661.0	668.5
60°	637.4	624.8	608.8	609.7	613.9
62.5°	586.1	572.7	556.7	556.7	564.3
65°	530.6	516.3	501.2	504.6	509.6
67.5°	476.8	458.3	444.9	446.5	452.4
70°	414.6	402.0	391.0	385.1	381.8
72.5°	359.9	342.3	333.8	312.8	306.1
75°	293.5	286.8	271.6	238.0	226.2
77.5°	234.6	227.9	207.7	171.5	164.8
80°	174.1	175.8	146.3	140.4	140.4
82.5°	121.9	116.9	106.8	101.8	99.2
85°	71.5	65.6	64.8	61.4	58.9
87.5°	23.5	26.9	26.1	26.9	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)