

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: P393504

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393504
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40-UNV-L93050-W2A-1-U (5700K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3573.3 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

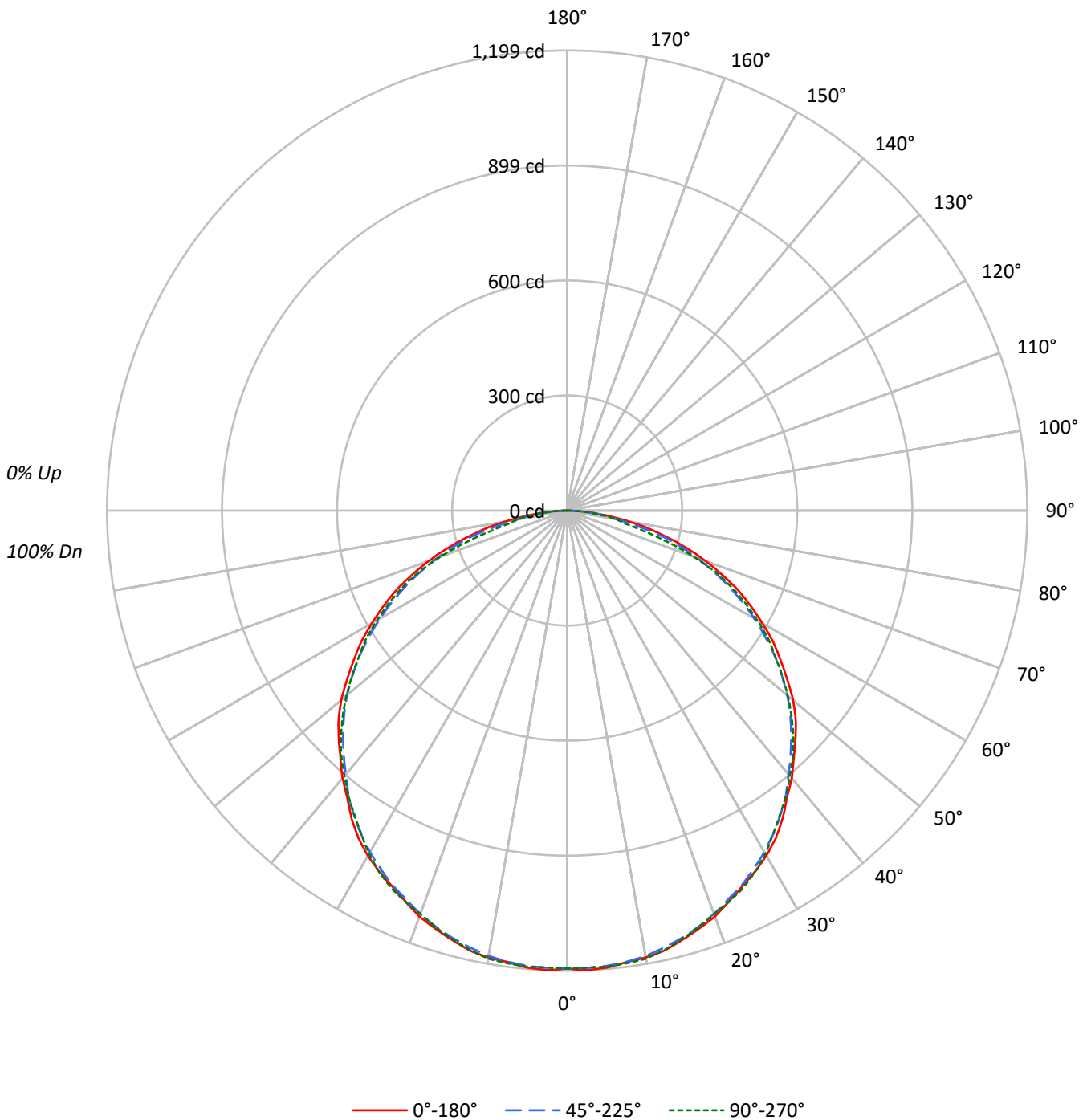
Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	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	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	42	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	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1606	1606	1606
5°	1614	1608	1611
10°	1615	1610	1620
15°	1613	1606	1610
20°	1612	1602	1602
25°	1603	1599	1611
30°	1613	1597	1605
35°	1608	1591	1588
40°	1599	1576	1585
45°	1601	1571	1586
50°	1608	1568	1571
55°	1591	1550	1552
60°	1581	1517	1541
65°	1567	1474	1508
70°	1509	1412	1374
75°	1412	1316	1073
80°	1258	1018	1005
85°	994	940	844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.2
10°-20°	325.7	9.1
20°-30°	497.4	13.9
30°-40°	606.8	17.0
40°-50°	640.7	17.9
50°-60°	594.1	16.6
60°-70°	465.4	13.0
70°-80°	260.4	7.3
80°-90°	69.5	1.9
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°	936.4	26.2
0°-40°	1543.2	43.2
0°-60°	2778.0	77.7
0°-90°	3573.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1195	1195	1191	1192	1193	114
15°	1158	1153	1153	1150	1156	327
25°	1080	1080	1077	1075	1085	499
35°	979	970	969	968	967	612
45°	842	834	826	824	834	650
55°	678	670	661	661	662	607
65°	492	477	463	466	474	484
75°	272	264	253	220	206	288
85°	64	62	61	57	55	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1193.5	1193.5	1193.5	1193.5	1193.5
2.5°	1198.8	1196.2	1192.7	1193.5	1191.8
5°	1195.3	1195.3	1190.9	1191.8	1192.7
7.5°	1186.5	1187.4	1185.6	1182.1	1190.0
10°	1182.1	1175.9	1178.6	1171.5	1185.6
12.5°	1174.1	1164.4	1166.2	1160.9	1172.4
15°	1158.3	1153.0	1153.0	1150.3	1155.6
17.5°	1142.4	1138.9	1137.1	1138.9	1138.9
20°	1125.6	1123.0	1118.6	1122.1	1118.6
22.5°	1101.8	1103.6	1096.5	1104.5	1102.7
25°	1079.8	1079.8	1077.1	1075.3	1085.0
27.5°	1060.3	1054.2	1052.4	1048.9	1061.2
30°	1038.3	1026.8	1027.7	1022.4	1033.0
32.5°	1011.8	998.6	999.5	994.2	998.6
35°	979.2	970.4	968.6	967.7	966.8
37.5°	941.3	940.4	936.0	938.6	936.8
40°	910.4	908.6	897.1	899.8	902.4
42.5°	874.2	871.6	861.9	863.6	870.7
45°	841.6	833.6	825.7	823.9	833.6
47.5°	808.0	795.7	788.6	783.3	793.1
50°	768.4	757.8	748.9	743.7	750.7
52.5°	722.5	713.7	704.8	703.1	705.7
55°	678.4	669.6	660.7	660.7	661.6
57.5°	636.0	624.6	611.3	614.0	621.0
60°	587.5	576.9	563.7	563.7	572.5
62.5°	539.9	526.6	513.4	515.2	524.0
65°	492.2	477.2	463.1	465.8	473.7
67.5°	437.5	424.3	411.1	414.6	419.0
70°	383.7	370.5	359.0	355.5	349.3
72.5°	329.0	318.5	308.8	289.3	279.6
75°	271.7	263.8	253.2	219.7	206.4
77.5°	218.8	212.6	188.8	157.9	153.5
80°	162.3	162.3	131.4	128.8	129.7
82.5°	110.3	108.5	99.7	93.5	90.9
85°	64.4	61.8	60.9	57.3	54.7
87.5°	21.2	24.7	24.7	23.8	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)