

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: P393498

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393498
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 (2700K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3497.5 lumens
Efficiency: N/A
Efficacy: 124.9 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

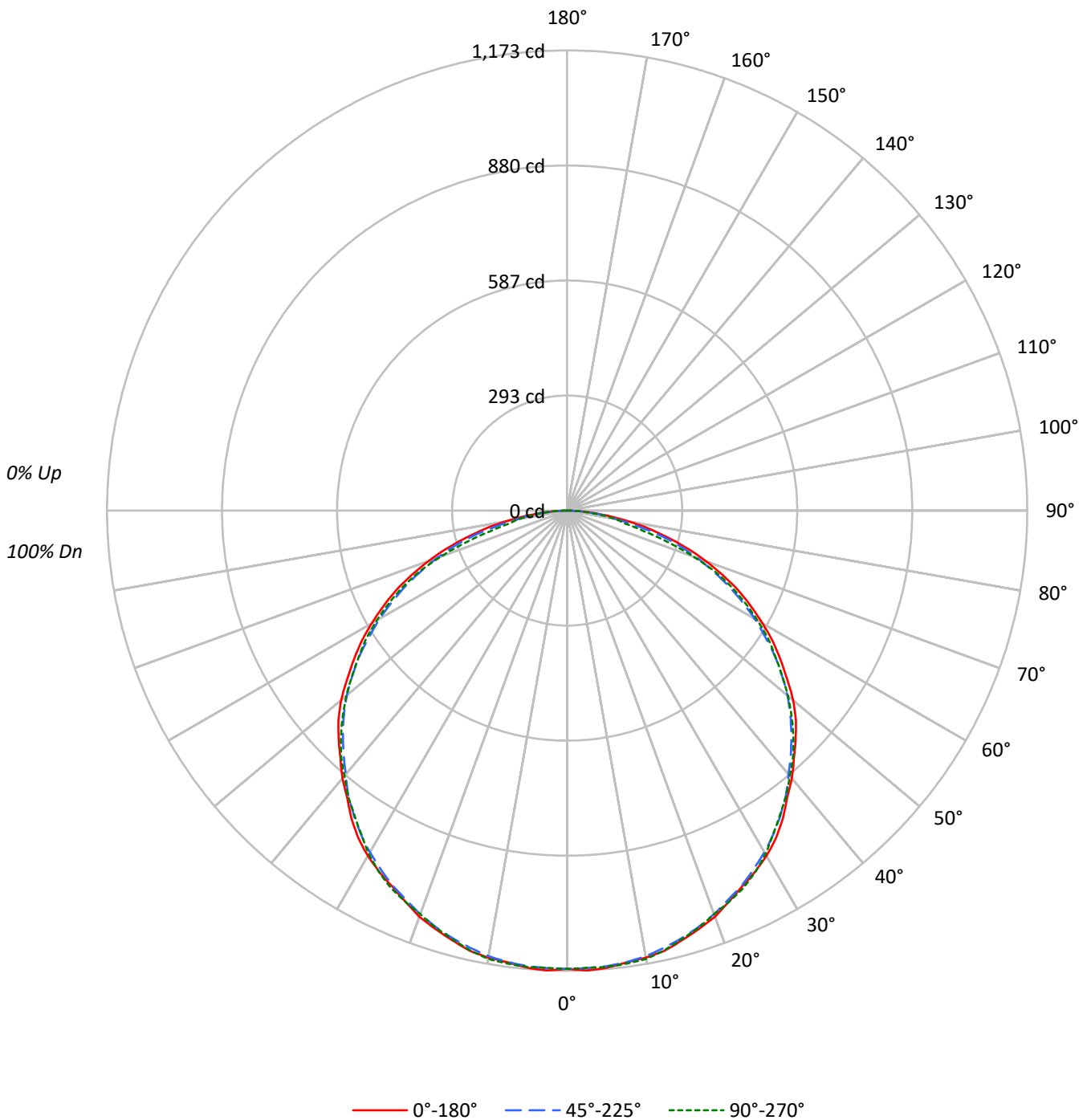
Input Watts (W): 28
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1572	1572	1572
5°	1580	1574	1577
10°	1581	1576	1586
15°	1579	1572	1576
20°	1577	1568	1568
25°	1569	1565	1577
30°	1579	1563	1571
35°	1574	1557	1554
40°	1565	1542	1551
45°	1567	1538	1553
50°	1574	1535	1538
55°	1558	1517	1519
60°	1547	1485	1508
65°	1534	1443	1476
70°	1478	1382	1345
75°	1382	1288	1050
80°	1231	997	983
85°	973	920	826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.9	3.2
10°-20°	318.8	9.1
20°-30°	486.8	13.9
30°-40°	593.9	17.0
40°-50°	627.1	17.9
50°-60°	581.5	16.6
60°-70°	455.5	13.0
70°-80°	254.9	7.3
80°-90°	68.0	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°	916.5	26.2
0°-40°	1510.5	43.2
0°-60°	2719.0	77.7
0°-90°	3497.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3497.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1170	1170	1166	1166	1167	111
15°	1134	1128	1128	1126	1131	320
25°	1057	1057	1054	1052	1062	489
35°	958	950	948	947	946	599
45°	824	816	808	806	816	636
55°	664	655	647	647	648	594
65°	482	467	453	456	464	474
75°	266	258	248	215	202	282
85°	63	60	60	56	54	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1173.4	1170.8	1167.4	1168.2	1166.5
5°	1169.9	1169.9	1165.6	1166.5	1167.4
7.5°	1161.3	1162.2	1160.5	1157.0	1164.8
10°	1157.0	1151.0	1153.5	1146.6	1160.5
12.5°	1149.2	1139.7	1141.5	1136.3	1147.5
15°	1133.7	1128.5	1128.5	1125.9	1131.1
17.5°	1118.1	1114.7	1113.0	1114.7	1114.7
20°	1101.7	1099.1	1094.8	1098.3	1094.8
22.5°	1078.4	1080.2	1073.2	1081.0	1079.3
25°	1056.8	1056.8	1054.2	1052.5	1062.0
27.5°	1037.8	1031.8	1030.1	1026.6	1038.7
30°	1016.3	1005.0	1005.9	1000.7	1011.1
32.5°	990.4	977.4	978.3	973.1	977.4
35°	958.4	949.8	948.0	947.2	946.3
37.5°	921.3	920.4	916.1	918.7	917.0
40°	891.1	889.3	878.1	880.7	883.3
42.5°	855.7	853.1	843.6	845.3	852.2
45°	823.7	815.9	808.2	806.4	815.9
47.5°	790.9	778.8	771.9	766.7	776.2
50°	752.0	741.7	733.1	727.9	734.8
52.5°	707.2	698.5	689.9	688.2	690.7
55°	664.0	655.3	646.7	646.7	647.6
57.5°	622.5	611.3	598.4	600.9	607.9
60°	575.0	564.7	551.7	551.7	560.4
62.5°	528.4	515.5	502.5	504.2	512.9
65°	481.8	467.1	453.3	455.9	463.7
67.5°	428.3	415.3	402.4	405.8	410.1
70°	375.6	362.6	351.4	348.0	341.9
72.5°	322.1	311.7	302.2	283.2	273.7
75°	265.9	258.2	247.8	215.0	202.0
77.5°	214.1	208.1	184.8	154.6	150.2
80°	158.9	158.9	128.7	126.1	126.9
82.5°	107.9	106.2	97.6	91.5	88.9
85°	63.0	60.4	59.6	56.1	53.5
87.5°	20.7	24.2	24.2	23.3	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)