

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: P393478

Luminaire Tested: **24EN-LD2-40-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393478
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-L82765-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3896.0 lumens
Efficiency: N/A
Efficacy: 139.1 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

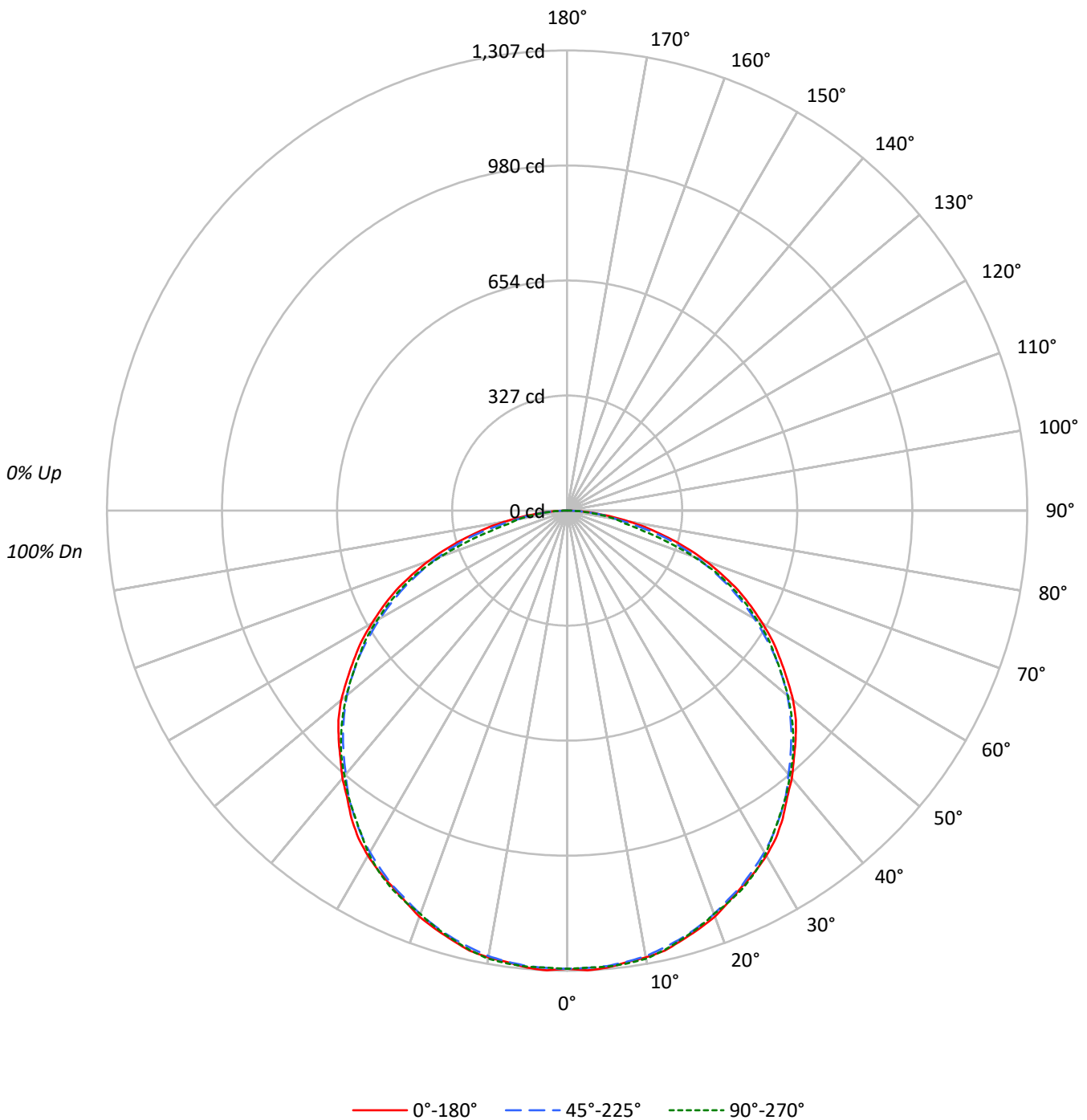
Input Watts (W): 28
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1751	1751	1751
5°	1760	1754	1756
10°	1761	1756	1766
15°	1759	1751	1755
20°	1757	1746	1746
25°	1748	1743	1756
30°	1759	1741	1750
35°	1754	1735	1732
40°	1743	1718	1728
45°	1746	1713	1729
50°	1754	1709	1713
55°	1735	1690	1692
60°	1724	1654	1680
65°	1709	1608	1644
70°	1646	1540	1498
75°	1540	1435	1170
80°	1371	1110	1096
85°	1084	1025	920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	3.2
10°-20°	355.2	9.1
20°-30°	542.3	13.9
30°-40°	661.6	17.0
40°-50°	698.6	17.9
50°-60°	647.7	16.6
60°-70°	507.4	13.0
70°-80°	283.9	7.3
80°-90°	75.8	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°	1021.0	26.2
0°-40°	1682.6	43.2
0°-60°	3028.9	77.7
0°-90°	3896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1303	1303	1298	1299	1300	124
15°	1263	1257	1257	1254	1260	357
25°	1177	1177	1174	1172	1183	544
35°	1068	1058	1056	1055	1054	667
45°	918	909	900	898	909	708
55°	740	730	720	720	721	662
65°	537	520	505	508	516	528
75°	296	288	276	240	225	314
85°	70	67	66	62	60	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1301.4	1301.4	1301.4	1301.4	1301.4
2.5°	1307.1	1304.2	1300.4	1301.4	1299.4
5°	1303.3	1303.3	1298.5	1299.4	1300.4
7.5°	1293.7	1294.6	1292.7	1288.9	1297.5
10°	1288.9	1282.1	1285.0	1277.3	1292.7
12.5°	1280.2	1269.6	1271.5	1265.8	1278.3
15°	1262.9	1257.1	1257.1	1254.2	1260.0
17.5°	1245.6	1241.7	1239.8	1241.7	1241.7
20°	1227.3	1224.4	1219.6	1223.4	1219.6
22.5°	1201.3	1203.2	1195.6	1204.2	1202.3
25°	1177.3	1177.3	1174.4	1172.5	1183.1
27.5°	1156.1	1149.4	1147.5	1143.6	1157.1
30°	1132.1	1119.6	1120.5	1114.8	1126.3
32.5°	1103.2	1088.8	1089.8	1084.0	1088.8
35°	1067.6	1058.0	1056.1	1055.1	1054.2
37.5°	1026.3	1025.3	1020.5	1023.4	1021.5
40°	992.6	990.7	978.2	981.1	984.0
42.5°	953.2	950.3	939.7	941.6	949.3
45°	917.6	908.9	900.3	898.3	908.9
47.5°	881.0	867.6	859.9	854.1	864.7
50°	837.8	826.2	816.6	810.8	818.5
52.5°	787.7	778.1	768.5	766.6	769.5
55°	739.6	730.0	720.4	720.4	721.4
57.5°	693.5	681.0	666.5	669.4	677.1
60°	640.6	629.0	614.6	614.6	624.2
62.5°	588.6	574.2	559.8	561.7	571.3
65°	536.7	520.3	505.0	507.8	516.5
67.5°	477.1	462.6	448.2	452.1	456.9
70°	418.4	404.0	391.5	387.6	380.9
72.5°	358.8	347.2	336.6	315.5	304.9
75°	296.2	287.6	276.0	239.5	225.1
77.5°	238.5	231.8	205.8	172.2	167.4
80°	177.0	177.0	143.3	140.4	141.4
82.5°	120.2	118.3	108.7	102.0	99.1
85°	70.2	67.3	66.4	62.5	59.6
87.5°	23.1	26.9	26.9	26.0	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)