

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: P393502

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393502
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 (4500K)
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: 3556.8 lumens
Efficiency: N/A
Efficacy: 128.9 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

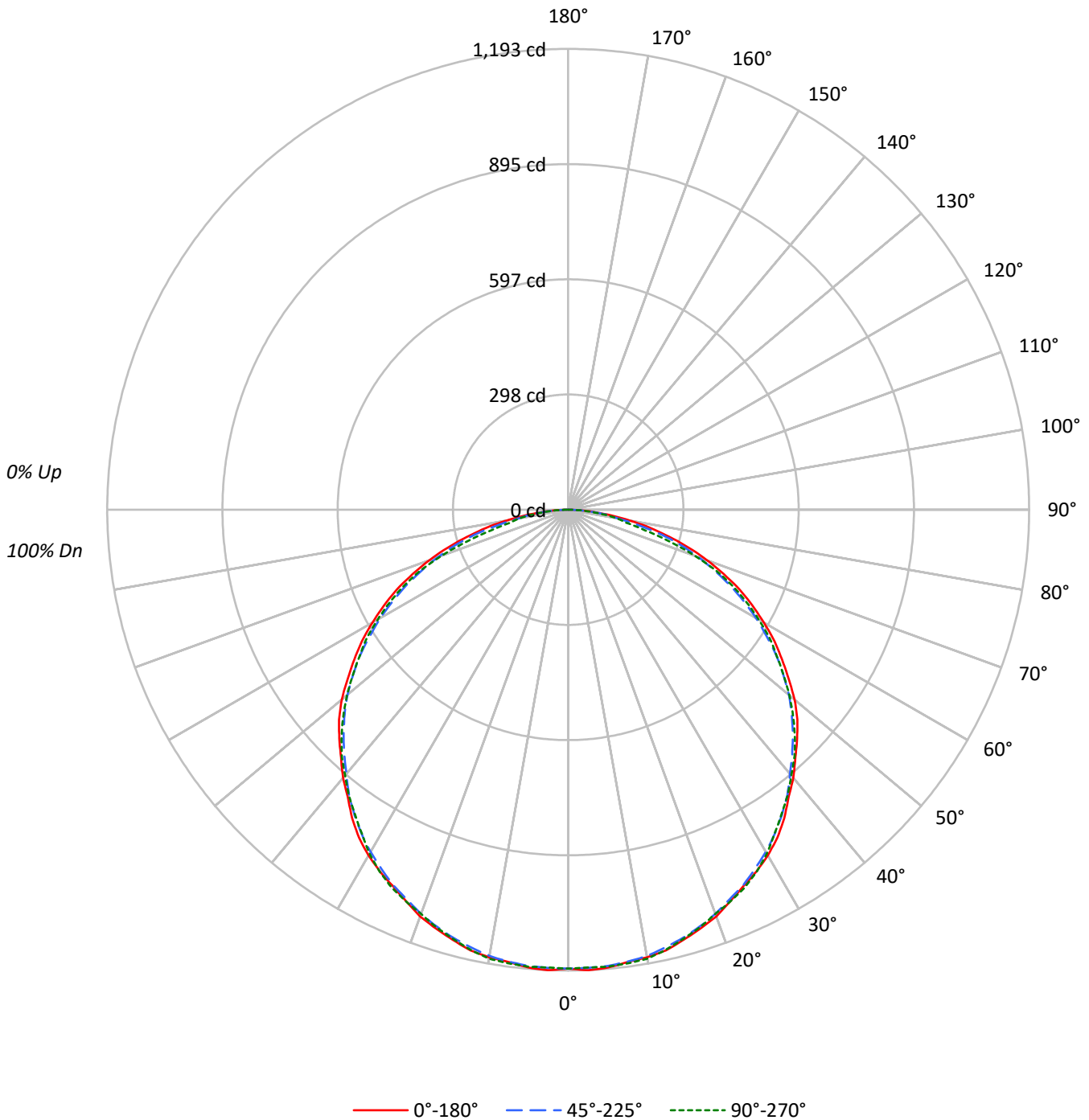
Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1598	1598	1598
5°	1607	1601	1603
10°	1608	1603	1612
15°	1606	1599	1602
20°	1604	1594	1594
25°	1596	1592	1603
30°	1606	1589	1597
35°	1601	1584	1581
40°	1592	1568	1578
45°	1594	1564	1579
50°	1601	1560	1564
55°	1584	1543	1545
60°	1574	1510	1534
65°	1560	1468	1501
70°	1503	1406	1368
75°	1406	1310	1068
80°	1252	1013	1000
85°	990	936	840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	3.2
10°-20°	324.2	9.1
20°-30°	495.1	13.9
30°-40°	604.0	17.0
40°-50°	637.7	17.9
50°-60°	591.3	16.6
60°-70°	463.2	13.0
70°-80°	259.2	7.3
80°-90°	69.2	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°	932.1	26.2
0°-40°	1536.1	43.2
0°-60°	2765.2	77.7
0°-90°	3556.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3556.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1190	1190	1185	1186	1187	113
15°	1153	1148	1148	1145	1150	326
25°	1075	1075	1072	1070	1080	497
35°	975	966	964	963	962	609
45°	838	830	822	820	830	647
55°	675	666	658	658	659	605
65°	490	475	461	464	472	482
75°	270	262	252	219	206	287
85°	64	62	61	57	54	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1188.0	1188.0	1188.0	1188.0	1188.0
2.5°	1193.3	1190.7	1187.2	1188.0	1186.3
5°	1189.8	1189.8	1185.4	1186.3	1187.2
7.5°	1181.0	1181.9	1180.1	1176.6	1184.5
10°	1176.6	1170.5	1173.1	1166.1	1180.1
12.5°	1168.7	1159.1	1160.8	1155.6	1167.0
15°	1152.9	1147.7	1147.7	1145.0	1150.3
17.5°	1137.1	1133.6	1131.8	1133.6	1133.6
20°	1120.4	1117.8	1113.4	1116.9	1113.4
22.5°	1096.7	1098.5	1091.5	1099.4	1097.6
25°	1074.8	1074.8	1072.1	1070.4	1080.0
27.5°	1055.5	1049.3	1047.6	1044.0	1056.3
30°	1033.5	1022.1	1023.0	1017.7	1028.2
32.5°	1007.2	994.0	994.9	989.6	994.0
35°	974.7	965.9	964.1	963.3	962.4
37.5°	936.9	936.0	931.6	934.3	932.5
40°	906.2	904.4	893.0	895.6	898.3
42.5°	870.2	867.5	857.9	859.6	866.7
45°	837.7	829.8	821.9	820.1	829.8
47.5°	804.3	792.0	785.0	779.7	789.4
50°	764.8	754.3	745.5	740.2	747.2
52.5°	719.1	710.4	701.6	699.8	702.5
55°	675.2	666.5	657.7	657.7	658.6
57.5°	633.1	621.7	608.5	611.1	618.2
60°	584.8	574.3	561.1	561.1	569.9
62.5°	537.4	524.2	511.0	512.8	521.6
65°	490.0	475.0	461.0	463.6	471.5
67.5°	435.5	422.4	409.2	412.7	417.1
70°	382.0	368.8	357.4	353.9	347.7
72.5°	327.5	317.0	307.3	288.0	278.4
75°	270.4	262.5	252.0	218.6	205.5
77.5°	217.8	211.6	187.9	157.2	152.8
80°	161.6	161.6	130.8	128.2	129.1
82.5°	109.8	108.0	99.2	93.1	90.4
85°	64.1	61.5	60.6	57.1	54.4
87.5°	21.1	24.6	24.6	23.7	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)