

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: P393630

Luminaire Tested: **24EN-LD2-58-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393630
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-37)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-58-UNV-L93050-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 5800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5098.6 lumens
Efficiency: N/A
Efficacy: 124.7 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

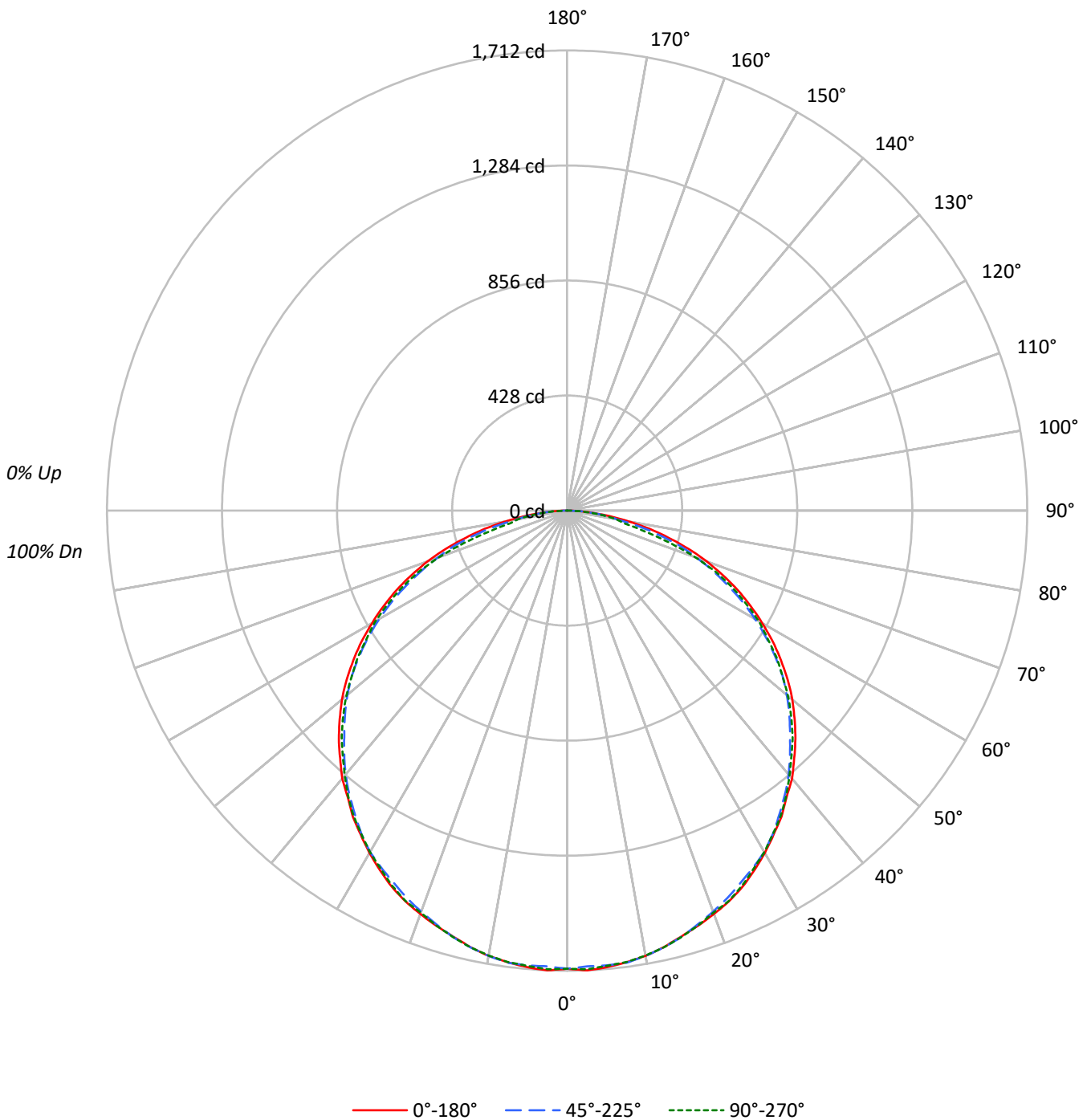
Input Watts (W): 40.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	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°	2293	2293	2293
5°	2303	2294	2296
10°	2299	2299	2296
15°	2285	2287	2288
20°	2287	2273	2279
25°	2293	2267	2287
30°	2285	2278	2278
35°	2283	2263	2276
40°	2286	2252	2259
45°	2286	2230	2257
50°	2290	2233	2246
55°	2278	2216	2229
60°	2257	2174	2216
65°	2228	2102	2161
70°	2169	2021	1990
75°	2031	1867	1552
80°	1796	1476	1443
85°	1383	1342	1220



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	3.2
10°-20°	463.4	9.1
20°-30°	707.8	13.9
30°-40°	863.8	16.9
40°-50°	913.4	17.9
50°-60°	849.5	16.7
60°-70°	666.3	13.1
70°-80°	373.7	7.3
80°-90°	99.3	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°	1332.6	26.1
0°-40°	2196.4	43.1
0°-60°	3959.3	77.7
0°-90°	5098.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5098.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1704	1704	1704	1704	1704	
5°	1705	1698	1698	1693	1700	162
15°	1640	1642	1642	1638	1643	464
25°	1544	1535	1527	1536	1540	711
35°	1390	1386	1378	1370	1386	869
45°	1201	1189	1172	1180	1186	927
55°	971	960	945	941	950	868
65°	700	681	660	667	679	691
75°	391	377	359	319	298	414
85°	90	86	87	81	79	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704.4	1704.4	1704.4	1704.4	1704.4
2.5°	1712.3	1700.8	1697.3	1700.8	1707.9
5°	1705.2	1698.2	1698.2	1692.9	1700.0
7.5°	1694.7	1692.1	1696.5	1682.4	1693.8
10°	1682.4	1678.0	1682.4	1667.5	1680.7
12.5°	1663.1	1662.2	1664.0	1656.1	1664.0
15°	1640.3	1642.0	1642.0	1637.6	1642.9
17.5°	1619.2	1620.1	1614.8	1620.1	1618.3
20°	1597.2	1595.5	1587.6	1597.2	1592.0
22.5°	1573.5	1568.3	1559.5	1569.1	1571.8
25°	1544.5	1534.9	1527.0	1535.8	1540.2
27.5°	1508.5	1498.9	1498.0	1498.0	1502.4
30°	1470.8	1463.8	1466.4	1459.4	1466.4
32.5°	1429.5	1426.9	1425.1	1415.5	1426.0
35°	1390.0	1385.6	1377.7	1369.8	1385.6
37.5°	1341.7	1339.1	1331.2	1326.8	1339.1
40°	1301.3	1290.8	1282.0	1279.4	1286.4
42.5°	1250.4	1238.1	1227.6	1232.0	1235.5
45°	1201.2	1188.9	1172.2	1180.1	1186.3
47.5°	1147.7	1134.5	1121.3	1126.6	1130.1
50°	1094.1	1077.4	1066.9	1066.0	1073.0
52.5°	1034.4	1020.3	1009.8	1006.3	1008.9
55°	971.2	959.7	944.8	941.3	950.1
57.5°	907.1	894.8	877.2	874.6	883.4
60°	838.6	826.3	807.8	807.8	823.6
62.5°	770.1	756.0	735.0	739.3	750.8
65°	699.8	681.4	660.3	667.3	678.8
67.5°	626.1	608.5	587.4	593.6	600.6
70°	551.4	532.1	513.7	508.4	505.8
72.5°	473.3	453.1	443.4	418.0	402.2
75°	390.7	376.7	359.1	318.7	298.5
77.5°	314.4	302.1	275.7	227.4	216.0
80°	231.8	230.9	190.5	185.3	186.2
82.5°	157.2	153.7	143.1	133.5	134.3
85°	89.6	86.1	86.9	80.8	79.0
87.5°	32.5	35.1	34.2	35.1	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)