

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: P393628

Luminaire Tested: **24EN-LD2-58-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393628
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 (3500K)
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: 4882.9 lumens
Efficiency: N/A
Efficacy: 117.9 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

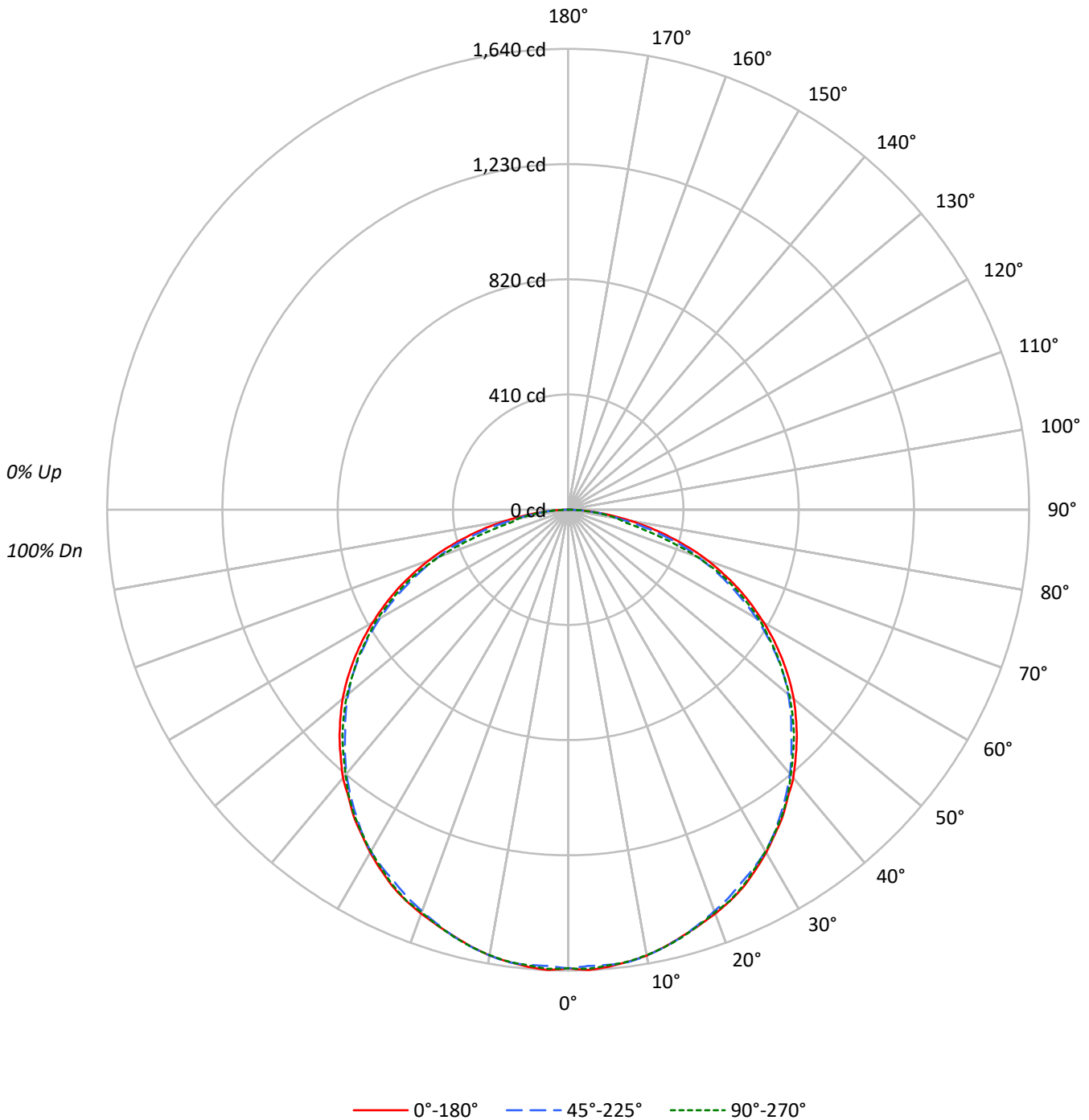
Input Watts (W): 41.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2196	2196	2196
5°	2206	2197	2199
10°	2201	2201	2199
15°	2188	2190	2192
20°	2190	2177	2183
25°	2196	2171	2190
30°	2188	2182	2182
35°	2187	2167	2180
40°	2189	2157	2164
45°	2189	2136	2162
50°	2193	2139	2151
55°	2182	2122	2134
60°	2161	2082	2123
65°	2134	2013	2069
70°	2078	1935	1906
75°	1945	1788	1486
80°	1720	1414	1382
85°	1325	1286	1169



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	3.2
10°-20°	443.8	9.1
20°-30°	677.8	13.9
30°-40°	827.2	16.9
40°-50°	874.7	17.9
50°-60°	813.6	16.7
60°-70°	638.1	13.1
70°-80°	357.9	7.3
80°-90°	95.1	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°	1276.2	26.1
0°-40°	2103.5	43.1
0°-60°	3791.8	77.7
0°-90°	4882.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4882.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1632	1632	1632	1632	1632	
5°	1633	1626	1626	1621	1628	155
15°	1571	1572	1572	1568	1573	444
25°	1479	1470	1462	1471	1475	681
35°	1331	1327	1319	1312	1327	832
45°	1150	1139	1123	1130	1136	887
55°	930	919	905	902	910	831
65°	670	653	632	639	650	662
75°	374	361	344	305	286	397
85°	86	82	83	77	76	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1632.2	1632.2	1632.2	1632.2	1632.2
2.5°	1639.8	1628.9	1625.5	1628.9	1635.6
5°	1633.1	1626.4	1626.4	1621.3	1628.0
7.5°	1623.0	1620.5	1624.7	1611.2	1622.2
10°	1611.2	1607.0	1611.2	1596.9	1609.5
12.5°	1592.7	1591.9	1593.6	1586.0	1593.6
15°	1570.9	1572.5	1572.5	1568.3	1573.4
17.5°	1550.7	1551.5	1546.5	1551.5	1549.8
20°	1529.6	1528.0	1520.4	1529.6	1524.6
22.5°	1506.9	1501.9	1493.5	1502.7	1505.3
25°	1479.2	1469.9	1462.4	1470.8	1475.0
27.5°	1444.7	1435.5	1434.6	1434.6	1438.8
30°	1408.6	1401.8	1404.3	1397.6	1404.3
32.5°	1369.0	1366.5	1364.8	1355.6	1365.7
35°	1331.2	1327.0	1319.4	1311.8	1327.0
37.5°	1284.9	1282.4	1274.8	1270.6	1282.4
40°	1246.3	1236.2	1227.8	1225.2	1232.0
42.5°	1197.5	1185.7	1175.6	1179.8	1183.2
45°	1150.4	1138.6	1122.6	1130.2	1136.1
47.5°	1099.1	1086.5	1073.9	1078.9	1082.3
50°	1047.8	1031.8	1021.7	1020.9	1027.6
52.5°	990.6	977.2	967.1	963.7	966.2
55°	930.1	919.1	904.8	901.5	909.9
57.5°	868.7	856.9	840.1	837.6	846.0
60°	803.1	791.3	773.7	773.7	788.8
62.5°	737.5	724.0	703.9	708.1	719.0
65°	670.2	652.6	632.4	639.1	650.0
67.5°	599.6	582.8	562.6	568.5	575.2
70°	528.1	509.6	491.9	486.9	484.4
72.5°	453.3	433.9	424.7	400.3	385.1
75°	374.2	360.8	343.9	305.3	285.9
77.5°	301.1	289.3	264.1	217.8	206.9
80°	222.0	221.2	182.5	177.4	178.3
82.5°	150.5	147.2	137.1	127.8	128.7
85°	85.8	82.4	83.3	77.4	75.7
87.5°	31.1	33.6	32.8	33.6	32.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)