

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: P393540

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-35)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-49-UNV-L82765-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4680.7 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

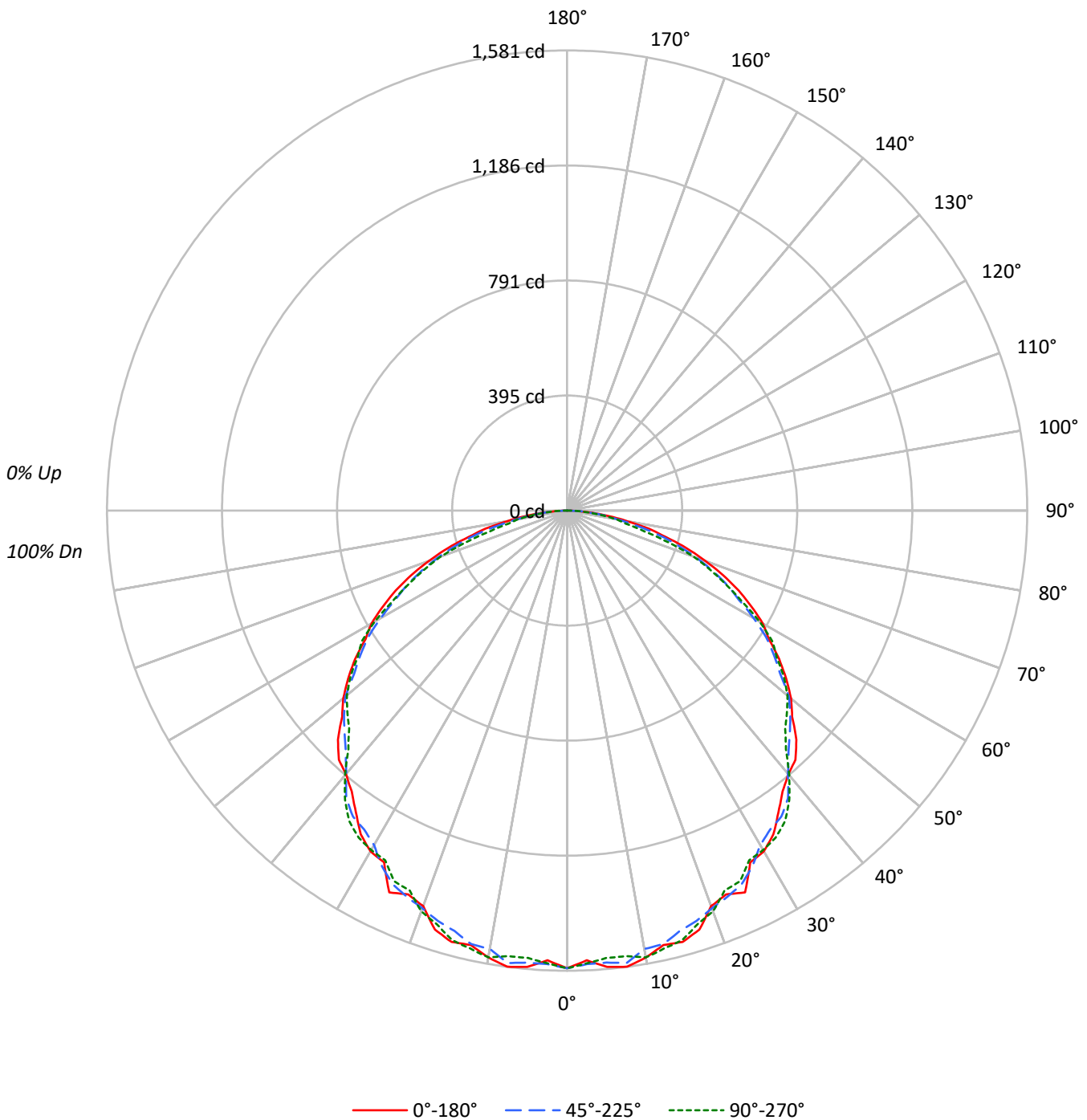
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	79	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	41	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	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2115	2115	2115
5°	2126	2105	2084
10°	2130	2090	2130
15°	2137	2083	2128
20°	2071	2082	2098
25°	2148	2104	2087
30°	2100	2062	2092
35°	2078	2108	2142
40°	2076	2073	2084
45°	2119	2058	2015
50°	2101	2082	2068
55°	2086	2035	2062
60°	2090	1993	2057
65°	2068	1933	1918
70°	1982	1859	1818
75°	1817	1713	1428
80°	1607	1358	1313
85°	1331	1200	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	3.2
10°-20°	427.3	9.1
20°-30°	647.6	13.8
30°-40°	797.2	17.0
40°-50°	838.5	17.9
50°-60°	780.2	16.7
60°-70°	609.8	13.0
70°-80°	341.7	7.3
80°-90°	90.4	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°	1222.8	26.1
0°-40°	2020.0	43.2
0°-60°	3638.7	77.7
0°-90°	4680.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4680.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1572	1572	1572	1572	1572	
5°	1574	1557	1559	1535	1543	150
15°	1534	1516	1496	1512	1528	429
25°	1447	1397	1417	1387	1406	651
35°	1265	1280	1283	1263	1304	794
45°	1114	1102	1082	1083	1059	853
55°	889	883	868	866	879	794
65°	650	631	607	611	602	640
75°	350	342	330	291	275	375
85°	86	78	78	70	72	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1572.2	1572.2	1572.2	1572.2	1572.2
2.5°	1546.6	1576.9	1559.9	1579.8	1557.1
5°	1574.1	1557.1	1558.9	1535.3	1542.8
7.5°	1580.7	1517.3	1567.5	1541.9	1543.8
10°	1558.9	1530.5	1529.6	1528.6	1558.9
12.5°	1528.6	1540.0	1524.9	1510.6	1541.0
15°	1534.3	1516.3	1495.5	1511.6	1527.7
17.5°	1509.7	1501.2	1478.4	1520.1	1489.8
20°	1446.2	1479.4	1453.8	1476.6	1465.2
22.5°	1427.3	1454.8	1436.8	1451.0	1413.1
25°	1447.2	1397.0	1416.9	1386.6	1405.5
27.5°	1362.9	1353.4	1378.1	1367.6	1354.4
30°	1351.5	1336.4	1326.9	1327.9	1346.8
32.5°	1319.3	1303.2	1298.5	1307.0	1332.6
35°	1265.3	1280.5	1283.3	1263.4	1304.2
37.5°	1216.1	1227.5	1246.4	1245.5	1254.0
40°	1182.0	1201.9	1180.1	1189.6	1186.7
42.5°	1161.2	1143.2	1125.2	1130.9	1112.9
45°	1113.8	1102.4	1081.6	1082.6	1058.9
47.5°	1048.5	1034.2	1039.9	1023.8	1024.8
50°	1003.9	979.3	994.5	964.2	987.8
52.5°	948.1	937.6	922.5	913.0	938.6
55°	889.3	882.7	867.6	865.7	878.9
57.5°	821.1	815.5	810.7	809.8	836.3
60°	776.6	754.8	740.6	736.9	764.3
62.5°	714.1	704.7	666.8	675.3	678.1
65°	649.7	630.8	607.1	610.9	602.4
67.5°	580.6	546.5	540.8	541.7	532.3
70°	503.9	484.0	472.6	466.0	462.2
72.5°	430.9	414.8	401.6	384.5	367.5
75°	349.5	341.9	329.6	290.8	274.7
77.5°	287.0	278.5	251.9	209.3	206.5
80°	207.4	212.2	175.2	168.6	169.5
82.5°	146.8	143.0	130.7	122.2	117.4
85°	86.2	77.7	77.7	70.1	72.0
87.5°	28.4	32.2	32.2	31.3	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)