

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: P393542

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393542
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 (4500K)
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: 4753.4 lumens
Efficiency: N/A
Efficacy: 137.4 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

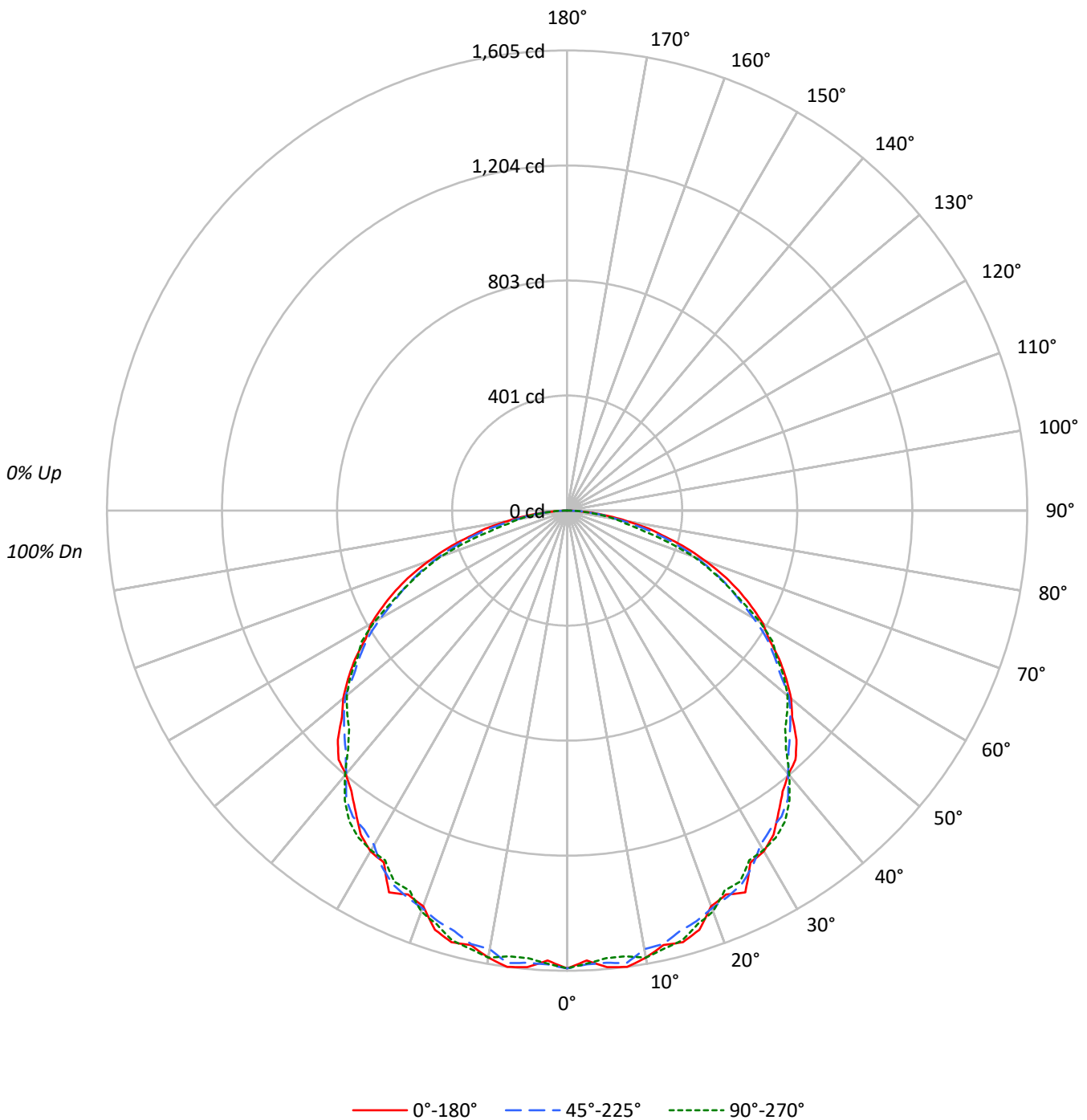
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2148	2148	2148
5°	2159	2138	2116
10°	2163	2122	2163
15°	2170	2115	2161
20°	2103	2114	2131
25°	2182	2136	2119
30°	2132	2094	2125
35°	2111	2141	2175
40°	2108	2105	2117
45°	2152	2090	2046
50°	2134	2114	2100
55°	2119	2067	2094
60°	2122	2024	2089
65°	2101	1963	1947
70°	2013	1888	1847
75°	1845	1740	1450
80°	1632	1378	1334
85°	1351	1218	1129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	3.2
10°-20°	433.9	9.1
20°-30°	657.6	13.8
30°-40°	809.6	17.0
40°-50°	851.6	17.9
50°-60°	792.3	16.7
60°-70°	619.3	13.0
70°-80°	347.0	7.3
80°-90°	91.8	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°	1241.8	26.1
0°-40°	2051.4	43.2
0°-60°	3695.3	77.7
0°-90°	4753.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4753.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1599	1581	1583	1559	1567	152
15°	1558	1540	1519	1535	1551	436
25°	1470	1419	1439	1408	1427	661
35°	1285	1300	1303	1283	1324	806
45°	1131	1120	1098	1099	1075	866
55°	903	896	881	879	893	806
65°	660	641	616	620	612	650
75°	355	347	335	295	279	381
85°	88	79	79	71	73	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1596.6	1596.6	1596.6	1596.6	1596.6
2.5°	1570.7	1601.4	1584.1	1604.3	1581.2
5°	1598.6	1581.2	1583.2	1559.1	1566.8
7.5°	1605.3	1540.9	1591.8	1565.9	1567.8
10°	1583.2	1554.3	1553.4	1552.4	1583.2
12.5°	1552.4	1563.9	1548.5	1534.1	1564.9
15°	1558.2	1539.9	1518.7	1535.1	1551.4
17.5°	1533.2	1524.5	1501.4	1543.7	1513.0
20°	1468.7	1502.4	1476.4	1499.5	1488.0
22.5°	1449.5	1477.4	1459.1	1473.5	1435.0
25°	1469.7	1418.7	1438.9	1408.1	1427.4
27.5°	1384.1	1374.5	1399.5	1388.9	1375.4
30°	1372.5	1357.1	1347.5	1348.5	1367.7
32.5°	1339.8	1323.5	1318.7	1327.3	1353.3
35°	1285.0	1300.4	1303.3	1283.1	1324.4
37.5°	1235.0	1246.5	1265.8	1264.8	1273.5
40°	1200.4	1220.6	1198.4	1208.1	1205.2
42.5°	1179.2	1160.9	1142.7	1148.4	1130.1
45°	1131.1	1119.6	1098.4	1099.4	1075.3
47.5°	1064.7	1050.3	1056.1	1039.7	1040.7
50°	1019.5	994.5	1009.9	979.1	1003.2
52.5°	962.8	952.2	936.8	927.2	953.2
55°	903.2	896.4	881.0	879.1	892.6
57.5°	833.9	828.1	823.3	822.4	849.3
60°	788.7	766.6	752.2	748.3	776.2
62.5°	725.2	715.6	677.1	685.8	688.7
65°	659.8	640.6	616.5	620.4	611.7
67.5°	589.6	555.0	549.2	550.2	540.5
70°	511.7	491.5	480.0	473.2	469.4
72.5°	437.6	421.3	407.8	390.5	373.2
75°	354.9	347.2	334.7	295.3	278.9
77.5°	291.4	282.8	255.8	212.6	209.7
80°	210.6	215.4	177.9	171.2	172.2
82.5°	149.1	145.2	132.7	124.1	119.3
85°	87.5	78.9	78.9	71.2	73.1
87.5°	28.9	32.7	32.7	31.7	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)