

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: P295816

Luminaire Tested: **24RLN-LD5-31-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-UNV-L83050-W2A1-U-4500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3286.0 lumens
Efficiency: N/A
Efficacy: 147.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

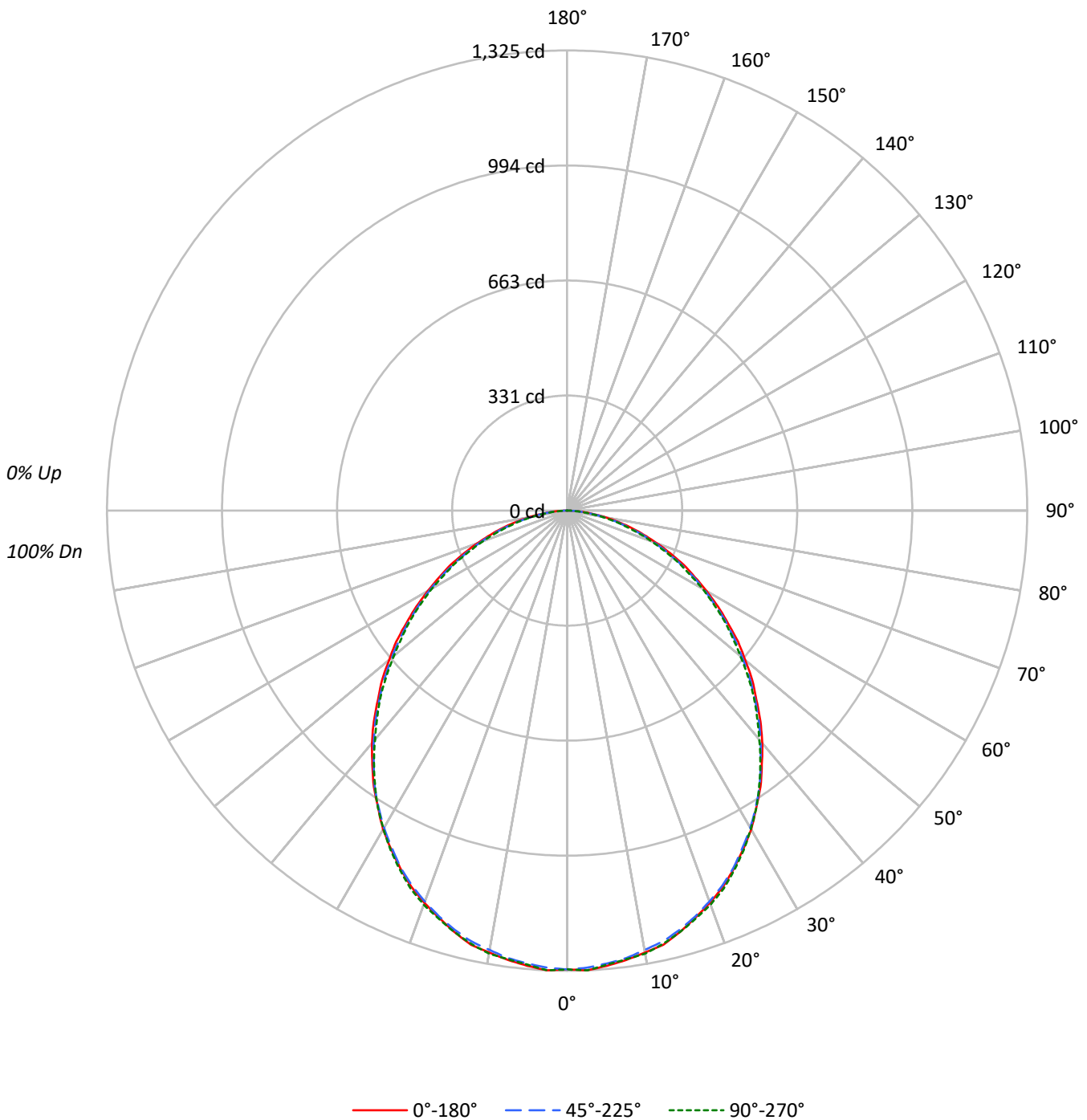
Input Watts (W): 22.227
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1777	1777	1777
5°	1777	1768	1773
10°	1766	1755	1770
15°	1750	1741	1750
20°	1721	1715	1729
25°	1687	1684	1693
30°	1647	1639	1644
35°	1595	1588	1585
40°	1536	1521	1512
45°	1466	1452	1446
50°	1400	1378	1362
55°	1325	1305	1293
60°	1247	1224	1210
65°	1178	1134	1124
70°	1080	1039	1018
75°	992	932	893
80°	871	813	764
85°	704	655	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	3.8
10°-20°	353.3	10.8
20°-30°	522.6	15.9
30°-40°	603.2	18.4
40°-50°	589.1	17.9
50°-60°	497.5	15.1
60°-70°	354.3	10.8
70°-80°	191.9	5.8
80°-90°	49.5	1.5
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°	1000.6	30.4
0°-40°	1603.7	48.8
0°-60°	2690.3	81.9
0°-90°	3286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1316	1316	1309	1312	1312	125
15°	1256	1251	1250	1255	1256	354
25°	1136	1130	1134	1138	1141	523
35°	971	964	967	964	965	606
45°	771	764	763	760	760	596
55°	565	558	556	551	551	507
65°	370	363	356	352	353	365
75°	191	184	179	175	172	202
85°	46	44	42	37	36	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1320.9	1320.9	1320.9	1320.9	1320.9
2.5°	1325.1	1319.8	1317.7	1318.8	1325.1
5°	1315.6	1315.6	1309.2	1312.4	1312.4
7.5°	1305.0	1306.0	1299.7	1305.0	1302.9
10°	1292.3	1289.1	1284.8	1293.3	1295.4
12.5°	1280.6	1273.2	1271.1	1276.4	1277.4
15°	1256.2	1250.9	1249.9	1255.2	1256.2
17.5°	1228.7	1229.7	1225.5	1232.9	1231.8
20°	1202.1	1200.0	1197.9	1206.4	1207.4
22.5°	1172.5	1166.1	1168.2	1175.6	1177.8
25°	1136.4	1130.1	1134.3	1138.5	1140.7
27.5°	1098.3	1095.1	1094.0	1099.3	1101.4
30°	1060.1	1054.8	1054.8	1061.2	1058.0
32.5°	1013.5	1009.2	1011.3	1013.5	1014.5
35°	971.0	963.6	966.8	963.6	964.7
37.5°	921.2	915.9	914.9	913.8	913.8
40°	874.6	870.3	866.1	866.1	860.8
42.5°	823.7	818.4	816.3	813.1	809.9
45°	770.7	764.3	763.3	760.1	760.1
47.5°	723.0	713.4	712.4	706.0	706.0
50°	668.9	662.6	658.3	654.1	650.9
52.5°	620.2	613.8	607.4	603.2	600.0
55°	565.0	557.6	556.5	551.2	551.2
57.5°	515.2	508.8	504.6	498.2	499.3
60°	463.3	456.9	454.8	449.5	449.5
62.5°	414.5	409.2	406.0	400.7	396.5
65°	370.0	362.6	356.2	352.0	353.0
67.5°	321.2	312.7	309.5	305.3	302.1
70°	274.6	269.3	264.0	258.7	258.7
72.5°	231.1	225.8	222.6	216.3	214.1
75°	190.8	184.5	179.2	174.9	171.7
77.5°	150.5	144.2	141.0	135.7	135.7
80°	112.4	108.1	104.9	102.8	98.6
82.5°	77.4	75.3	72.1	68.9	65.7
85°	45.6	44.5	42.4	37.1	36.0
87.5°	18.0	18.0	15.9	14.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)