

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: P295829

Luminaire Tested: **24RLN-LD5-45-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295829
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-LD5-45-UNV-L83050-W2A1-U-3500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4547.0 lumens
Efficiency: N/A
Efficacy: 144.2 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

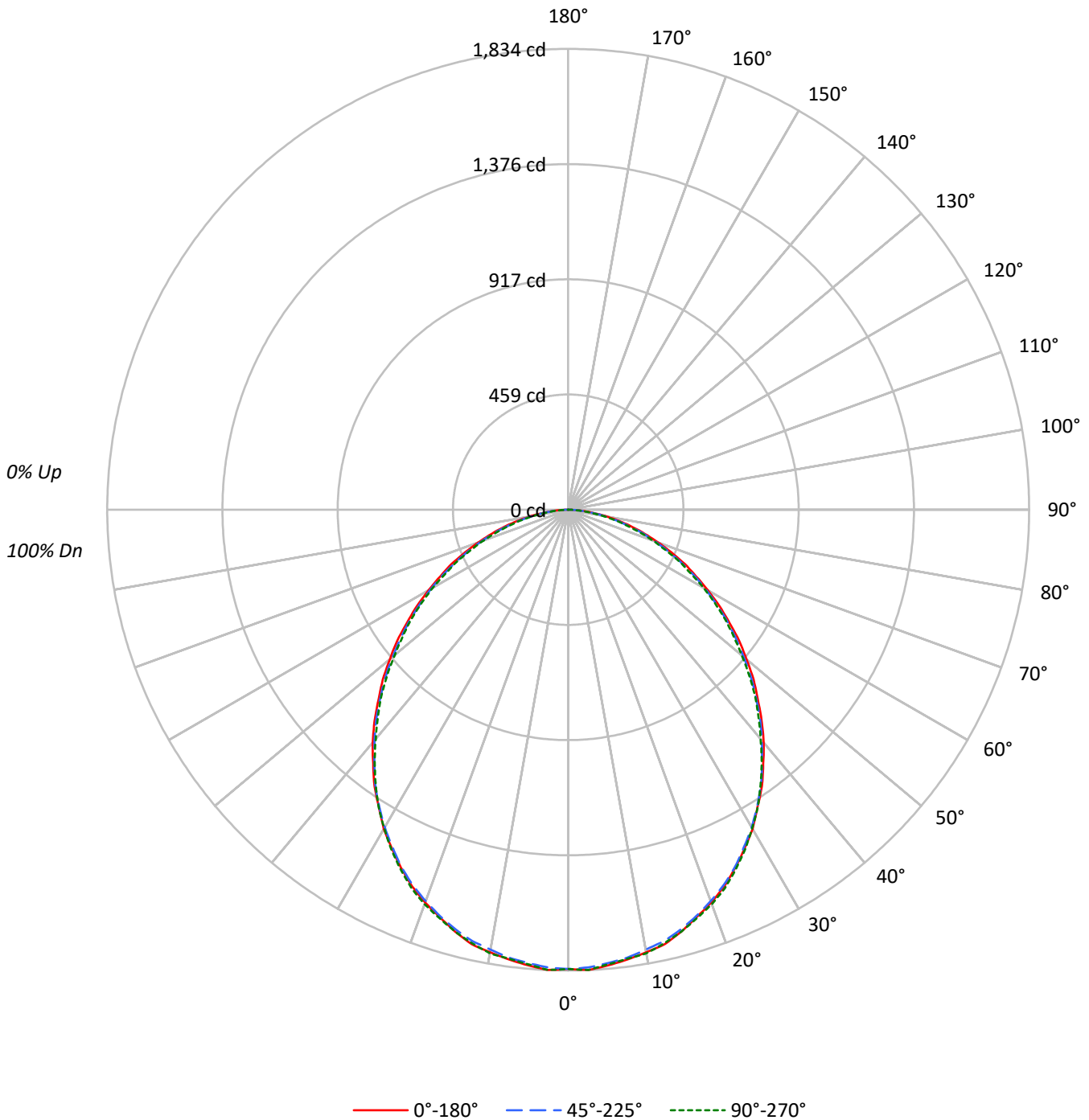
Input Watts (W): 31.527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2459	2459	2459
5°	2459	2447	2453
10°	2443	2429	2449
15°	2421	2409	2421
20°	2382	2373	2392
25°	2335	2330	2343
30°	2279	2268	2275
35°	2207	2197	2193
40°	2126	2105	2092
45°	2029	2010	2001
50°	1937	1907	1885
55°	1834	1806	1789
60°	1725	1693	1674
65°	1630	1569	1555
70°	1495	1437	1408
75°	1372	1289	1235
80°	1205	1125	1057
85°	974	906	770



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	3.8
10°-20°	488.9	10.8
20°-30°	723.2	15.9
30°-40°	834.6	18.4
40°-50°	815.2	17.9
50°-60°	688.4	15.1
60°-70°	490.3	10.8
70°-80°	265.5	5.8
80°-90°	68.5	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°	1384.5	30.4
0°-40°	2219.2	48.8
0°-60°	3722.7	81.9
0°-90°	4547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1828	1828	1828	1828	1828	
5°	1820	1820	1812	1816	1816	173
15°	1738	1731	1730	1737	1738	490
25°	1572	1564	1570	1576	1578	724
35°	1344	1333	1338	1333	1335	839
45°	1066	1058	1056	1052	1052	825
55°	782	772	770	763	763	701
65°	512	502	493	487	488	505
75°	264	255	248	242	238	279
85°	63	62	59	51	50	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1827.8	1827.8	1827.8	1827.8	1827.8
2.5°	1833.6	1826.3	1823.4	1824.8	1833.6
5°	1820.4	1820.4	1811.6	1816.0	1816.0
7.5°	1805.8	1807.2	1798.4	1805.8	1802.8
10°	1788.2	1783.8	1777.9	1789.6	1792.6
12.5°	1772.0	1761.8	1758.8	1766.2	1767.6
15°	1738.3	1730.9	1729.5	1736.8	1738.3
17.5°	1700.1	1701.6	1695.7	1706.0	1704.5
20°	1663.5	1660.5	1657.6	1669.3	1670.8
22.5°	1622.4	1613.6	1616.5	1626.8	1629.7
25°	1572.5	1563.7	1569.6	1575.5	1578.4
27.5°	1519.7	1515.3	1513.8	1521.2	1524.1
30°	1466.9	1459.6	1459.6	1468.4	1464.0
32.5°	1402.4	1396.5	1399.4	1402.4	1403.8
35°	1343.7	1333.4	1337.8	1333.4	1334.9
37.5°	1274.7	1267.4	1265.9	1264.5	1264.5
40°	1210.2	1204.3	1198.5	1198.5	1191.1
42.5°	1139.8	1132.5	1129.5	1125.1	1120.7
45°	1066.4	1057.6	1056.2	1051.8	1051.8
47.5°	1000.4	987.2	985.8	977.0	977.0
50°	925.6	916.8	910.9	905.1	900.7
52.5°	858.1	849.3	840.5	834.7	830.3
55°	781.9	771.6	770.1	762.8	762.8
57.5°	712.9	704.1	698.2	689.4	690.9
60°	641.0	632.2	629.3	622.0	622.0
62.5°	573.6	566.2	561.8	554.5	548.6
65°	512.0	501.7	492.9	487.0	488.5
67.5°	444.5	432.7	428.3	422.5	418.1
70°	379.9	372.6	365.3	357.9	357.9
72.5°	319.8	312.5	308.1	299.2	296.3
75°	264.0	255.2	247.9	242.0	237.6
77.5°	208.3	199.5	195.1	187.8	187.8
80°	155.5	149.6	145.2	142.3	136.4
82.5°	107.1	104.2	99.7	95.3	90.9
85°	63.1	61.6	58.7	51.3	49.9
87.5°	24.9	24.9	22.0	20.5	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)