

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: P295897

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295897
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-L82765-W2A1-U-5700K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4740.0 lumens
Efficiency: N/A
Efficacy: 146.0 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

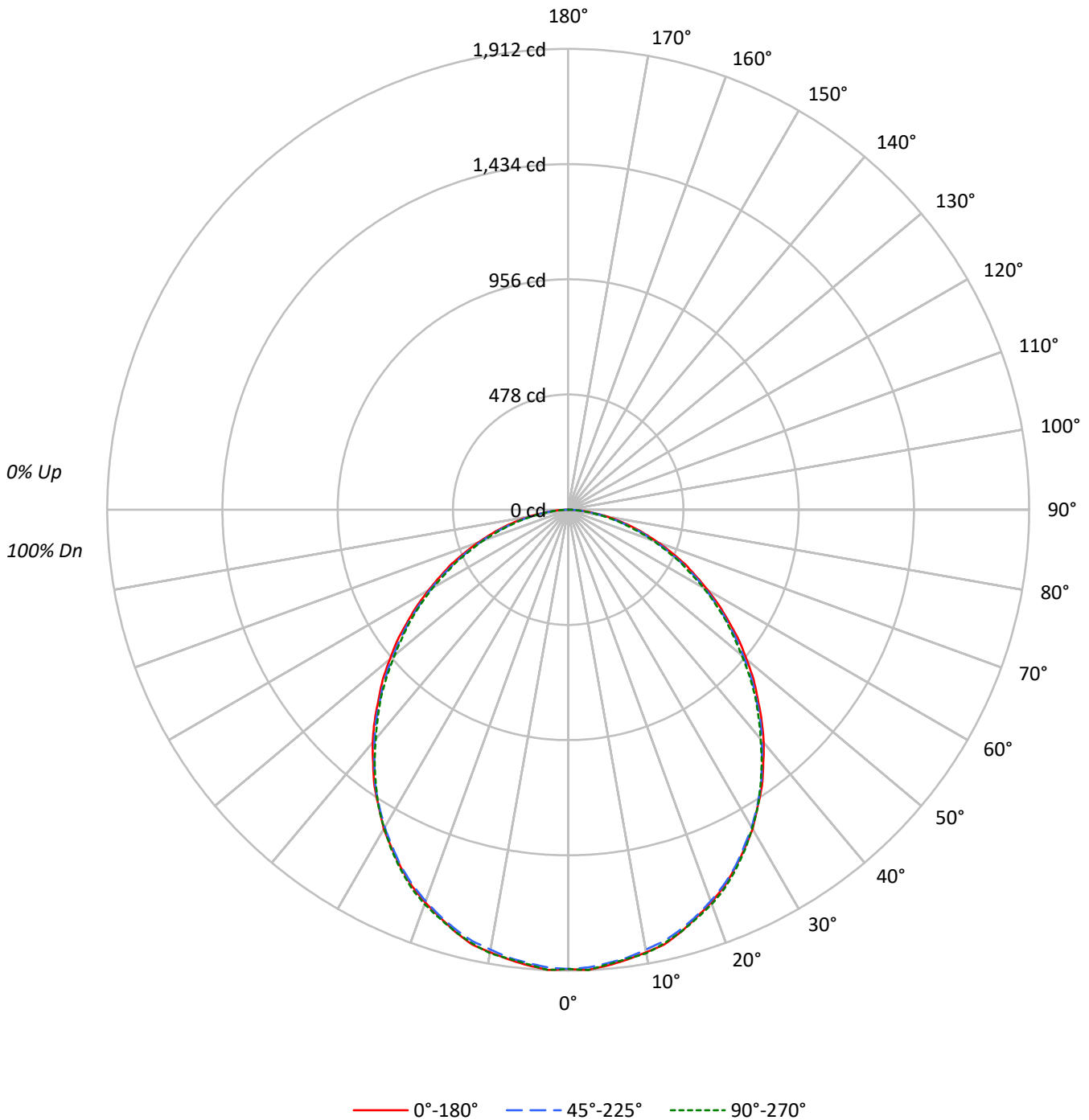
Input Watts (W): 32.457
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2564	2564	2564
5°	2563	2551	2557
10°	2547	2532	2553
15°	2524	2511	2524
20°	2483	2474	2494
25°	2434	2429	2443
30°	2376	2364	2371
35°	2301	2291	2286
40°	2216	2194	2181
45°	2115	2095	2086
50°	2020	1988	1965
55°	1912	1883	1865
60°	1798	1765	1745
65°	1699	1636	1621
70°	1558	1498	1468
75°	1431	1343	1288
80°	1256	1173	1102
85°	1016	945	803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	3.8
10°-20°	509.7	10.8
20°-30°	753.9	15.9
30°-40°	870.1	18.4
40°-50°	849.8	17.9
50°-60°	717.6	15.1
60°-70°	511.1	10.8
70°-80°	276.7	5.8
80°-90°	71.4	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°	1443.3	30.4
0°-40°	2313.4	48.8
0°-60°	3880.7	81.9
0°-90°	4740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4740.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1898	1898	1888	1893	1893	180
15°	1812	1804	1803	1810	1812	510
25°	1639	1630	1636	1642	1645	755
35°	1401	1390	1395	1390	1392	874
45°	1112	1102	1101	1096	1096	860
55°	815	804	803	795	795	731
65°	534	523	514	508	509	526
75°	275	266	258	252	248	291
85°	66	64	61	54	52	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.3	1905.3	1905.3	1905.3	1905.3
2.5°	1911.5	1903.8	1900.8	1902.3	1911.5
5°	1897.7	1897.7	1888.5	1893.1	1893.1
7.5°	1882.4	1883.9	1874.8	1882.4	1879.3
10°	1864.1	1859.5	1853.4	1865.6	1868.6
12.5°	1847.2	1836.5	1833.5	1841.1	1842.6
15°	1812.1	1804.4	1802.9	1810.5	1812.1
17.5°	1772.3	1773.8	1767.7	1778.4	1776.9
20°	1734.1	1731.0	1728.0	1740.2	1741.7
22.5°	1691.3	1682.1	1685.1	1695.8	1698.9
25°	1639.3	1630.1	1636.2	1642.3	1645.4
27.5°	1584.2	1579.6	1578.1	1585.7	1588.8
30°	1529.2	1521.5	1521.5	1530.7	1526.1
32.5°	1461.9	1455.8	1458.8	1461.9	1463.4
35°	1400.7	1390.0	1394.6	1390.0	1391.5
37.5°	1328.8	1321.2	1319.7	1318.1	1318.1
40°	1261.6	1255.4	1249.3	1249.3	1241.7
42.5°	1188.2	1180.5	1177.5	1172.9	1168.3
45°	1111.7	1102.5	1101.0	1096.4	1096.4
47.5°	1042.9	1029.1	1027.6	1018.4	1018.4
50°	964.9	955.7	949.6	943.5	938.9
52.5°	894.6	885.4	876.2	870.1	865.5
55°	815.0	804.3	802.8	795.2	795.2
57.5°	743.2	734.0	727.9	718.7	720.2
60°	668.2	659.1	656.0	648.4	648.4
62.5°	597.9	590.3	585.7	578.0	571.9
65°	533.7	523.0	513.8	507.7	509.2
67.5°	463.3	451.1	446.5	440.4	435.8
70°	396.1	388.4	380.8	373.1	373.1
72.5°	333.4	325.7	321.1	312.0	308.9
75°	275.3	266.1	258.4	252.3	247.7
77.5°	217.1	208.0	203.4	195.7	195.7
80°	162.1	156.0	151.4	148.3	142.2
82.5°	111.6	108.6	104.0	99.4	94.8
85°	65.8	64.2	61.2	53.5	52.0
87.5°	26.0	26.0	22.9	21.4	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)