

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: P295894

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295894
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-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: 4619.0 lumens
Efficiency: N/A
Efficacy: 144.0 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

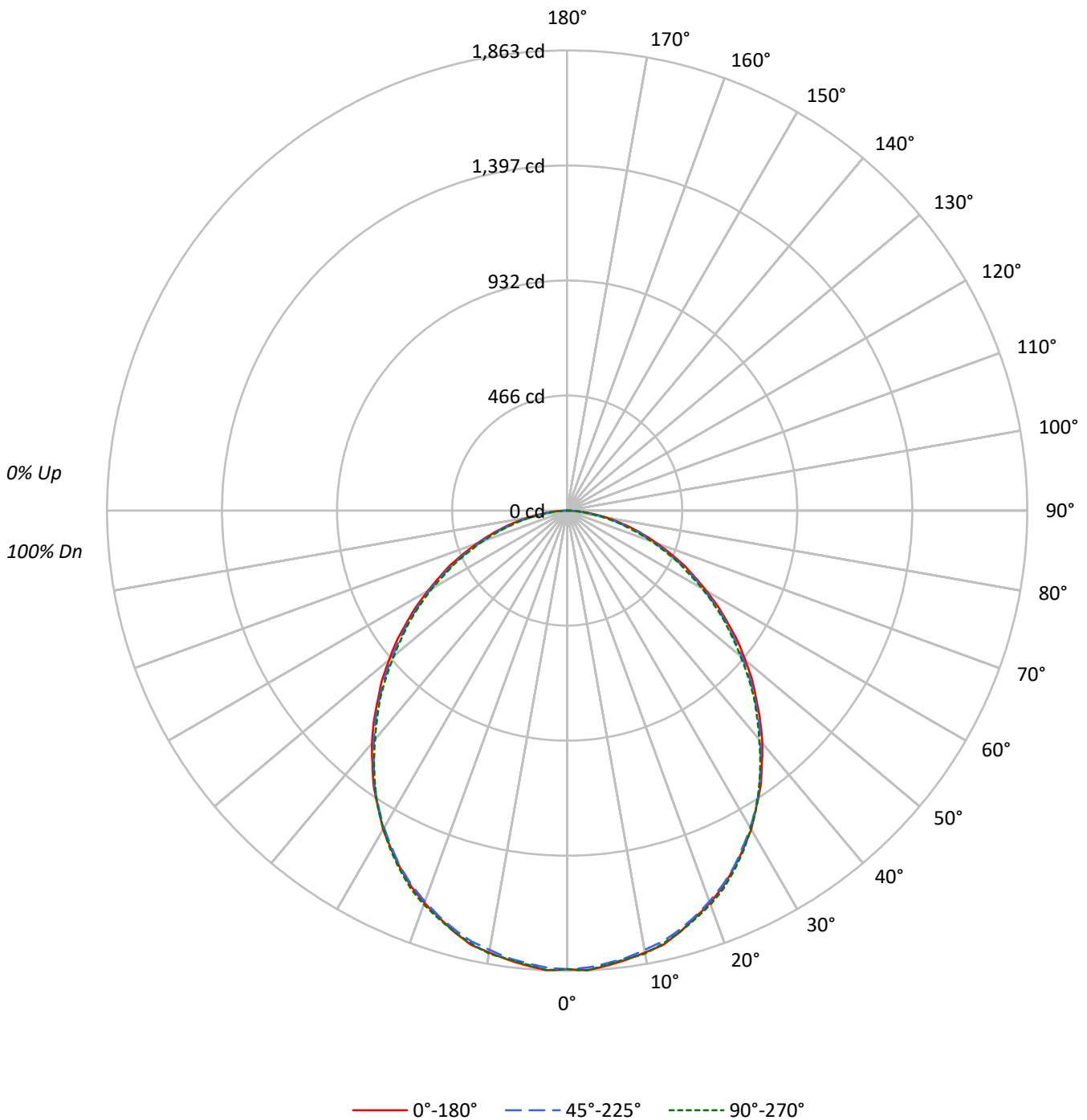
Input Watts (W): 32.085
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2498	2498	2498
5°	2498	2486	2492
10°	2482	2467	2488
15°	2460	2447	2460
20°	2420	2411	2430
25°	2371	2367	2380
30°	2315	2304	2311
35°	2242	2232	2227
40°	2159	2138	2125
45°	2061	2042	2033
50°	1968	1937	1915
55°	1863	1835	1818
60°	1752	1720	1700
65°	1656	1594	1580
70°	1518	1459	1430
75°	1394	1309	1255
80°	1224	1143	1074
85°	990	920	783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.2	3.8
10°-20°	496.6	10.8
20°-30°	734.6	15.9
30°-40°	847.8	18.4
40°-50°	828.1	17.9
50°-60°	699.3	15.1
60°-70°	498.1	10.8
70°-80°	269.7	5.8
80°-90°	69.6	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°	1406.5	30.4
0°-40°	2254.3	48.8
0°-60°	3781.7	81.9
0°-90°	4619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4619.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1857	1857	1857	1857	1857	
5°	1849	1849	1840	1845	1845	175
15°	1766	1758	1757	1764	1766	497
25°	1597	1588	1594	1600	1603	735
35°	1365	1354	1359	1354	1356	852
45°	1083	1074	1073	1068	1068	838
55°	794	784	782	775	775	712
65°	520	510	501	495	496	513
75°	268	259	252	246	241	284
85°	64	63	60	52	51	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.7	1856.7	1856.7	1856.7	1856.7
2.5°	1862.7	1855.2	1852.2	1853.7	1862.7
5°	1849.3	1849.3	1840.3	1844.8	1844.8
7.5°	1834.4	1835.8	1826.9	1834.4	1831.4
10°	1816.5	1812.0	1806.0	1818.0	1820.9
12.5°	1800.1	1789.7	1786.7	1794.1	1795.6
15°	1765.8	1758.4	1756.9	1764.3	1765.8
17.5°	1727.1	1728.6	1722.6	1733.0	1731.5
20°	1689.8	1686.8	1683.9	1695.8	1697.3
22.5°	1648.1	1639.1	1642.1	1652.6	1655.5
25°	1597.4	1588.5	1594.4	1600.4	1603.4
27.5°	1543.8	1539.3	1537.8	1545.3	1548.2
30°	1490.1	1482.7	1482.7	1491.6	1487.2
32.5°	1424.6	1418.6	1421.6	1424.6	1426.1
35°	1365.0	1354.5	1359.0	1354.5	1356.0
37.5°	1294.9	1287.5	1286.0	1284.5	1284.5
40°	1229.4	1223.4	1217.4	1217.4	1210.0
42.5°	1157.8	1150.4	1147.4	1142.9	1138.5
45°	1083.3	1074.4	1072.9	1068.4	1068.4
47.5°	1016.3	1002.9	1001.4	992.4	992.4
50°	940.3	931.3	925.4	919.4	914.9
52.5°	871.7	862.8	853.8	847.9	843.4
55°	794.2	783.8	782.3	774.9	774.9
57.5°	724.2	715.3	709.3	700.4	701.9
60°	651.2	642.2	639.3	631.8	631.8
62.5°	582.6	575.2	570.7	563.3	557.3
65°	520.1	509.6	500.7	494.7	496.2
67.5°	451.5	439.6	435.1	429.2	424.7
70°	385.9	378.5	371.0	363.6	363.6
72.5°	324.8	317.4	312.9	304.0	301.0
75°	268.2	259.3	251.8	245.9	241.4
77.5°	211.6	202.7	198.2	190.7	190.7
80°	158.0	152.0	147.5	144.5	138.6
82.5°	108.8	105.8	101.3	96.9	92.4
85°	64.1	62.6	59.6	52.2	50.7
87.5°	25.3	25.3	22.4	20.9	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)