

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: P296001

Luminaire Tested: **24RLN-LD5-80-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296001
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-LD5-80-UNV-L93050-W2A1-U-4500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7531.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

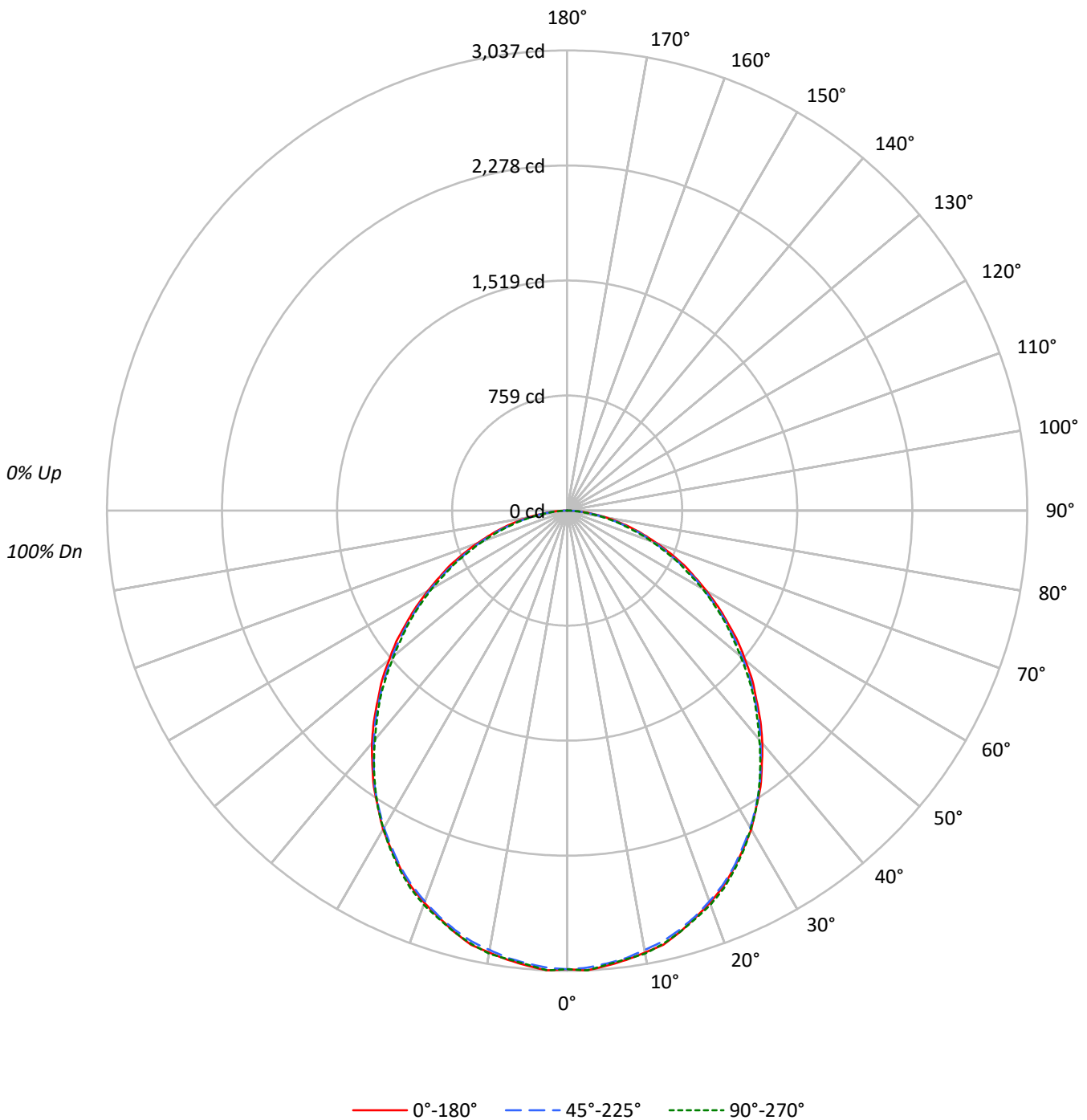
Input Watts (W): 63.24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4073	4073	4073
5°	4072	4053	4062
10°	4046	4023	4056
15°	4010	3990	4010
20°	3945	3931	3962
25°	3867	3859	3881
30°	3775	3756	3767
35°	3655	3640	3631
40°	3521	3486	3465
45°	3361	3329	3315
50°	3209	3158	3123
55°	3038	2992	2964
60°	2857	2805	2772
65°	2699	2599	2576
70°	2476	2380	2332
75°	2273	2135	2046
80°	1995	1863	1751
85°	1613	1501	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.6	3.8
10°-20°	809.7	10.8
20°-30°	1197.8	15.9
30°-40°	1382.4	18.4
40°-50°	1350.1	17.9
50°-60°	1140.1	15.1
60°-70°	812.1	10.8
70°-80°	439.7	5.8
80°-90°	113.4	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°	2293.2	30.4
0°-40°	3675.5	48.8
0°-60°	6165.8	81.9
0°-90°	7531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3027	3027	3027	3027	3027	
5°	3015	3015	3000	3008	3008	286
15°	2879	2867	2864	2877	2879	811
25°	2604	2590	2600	2609	2614	1199
35°	2226	2208	2216	2208	2211	1389
45°	1766	1752	1749	1742	1742	1366
55°	1295	1278	1276	1263	1263	1161
65°	848	831	816	807	809	836
75°	437	423	411	401	394	463
85°	104	102	97	85	83	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3027.2	3027.2	3027.2	3027.2	3027.2
2.5°	3037.0	3024.8	3020.0	3022.4	3037.0
5°	3015.1	3015.1	3000.5	3007.8	3007.8
7.5°	2990.8	2993.2	2978.7	2990.8	2985.9
10°	2961.6	2954.4	2944.6	2964.1	2968.9
12.5°	2934.9	2917.9	2913.1	2925.2	2927.6
15°	2879.0	2866.9	2864.5	2876.6	2879.0
17.5°	2815.9	2818.3	2808.6	2825.6	2823.2
20°	2755.1	2750.3	2745.4	2764.9	2767.3
22.5°	2687.1	2672.5	2677.4	2694.4	2699.3
25°	2604.5	2589.9	2599.6	2609.4	2614.2
27.5°	2517.0	2509.7	2507.3	2519.5	2524.3
30°	2429.6	2417.4	2417.4	2432.0	2424.7
32.5°	2322.7	2313.0	2317.8	2322.7	2325.1
35°	2225.5	2208.5	2215.8	2208.5	2210.9
37.5°	2111.3	2099.2	2096.7	2094.3	2094.3
40°	2004.4	1994.7	1985.0	1985.0	1972.8
42.5°	1887.8	1875.6	1870.8	1863.5	1856.2
45°	1766.3	1751.7	1749.3	1742.0	1742.0
47.5°	1657.0	1635.1	1632.7	1618.1	1618.1
50°	1533.1	1518.5	1508.8	1499.0	1491.8
52.5°	1421.3	1406.7	1392.1	1382.4	1375.1
55°	1295.0	1278.0	1275.5	1263.4	1263.4
57.5°	1180.8	1166.2	1156.5	1141.9	1144.3
60°	1061.7	1047.1	1042.3	1030.1	1030.1
62.5°	950.0	937.8	930.5	918.4	908.7
65°	847.9	830.9	816.3	806.6	809.0
67.5°	736.2	716.7	709.4	699.7	692.4
70°	629.3	617.1	605.0	592.8	592.8
72.5°	529.6	517.5	510.2	495.6	490.8
75°	437.3	422.7	410.6	400.9	393.6
77.5°	345.0	330.4	323.1	311.0	311.0
80°	257.5	247.8	240.5	235.7	226.0
82.5°	177.4	172.5	165.2	157.9	150.6
85°	104.5	102.0	97.2	85.0	82.6
87.5°	41.3	41.3	36.4	34.0	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)