

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: P295942

Luminaire Tested: **24RLN-LD5-74-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295942  
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-LD5-74-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: 7750.0 lumens  
Efficiency: N/A  
Efficacy: 136.8 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

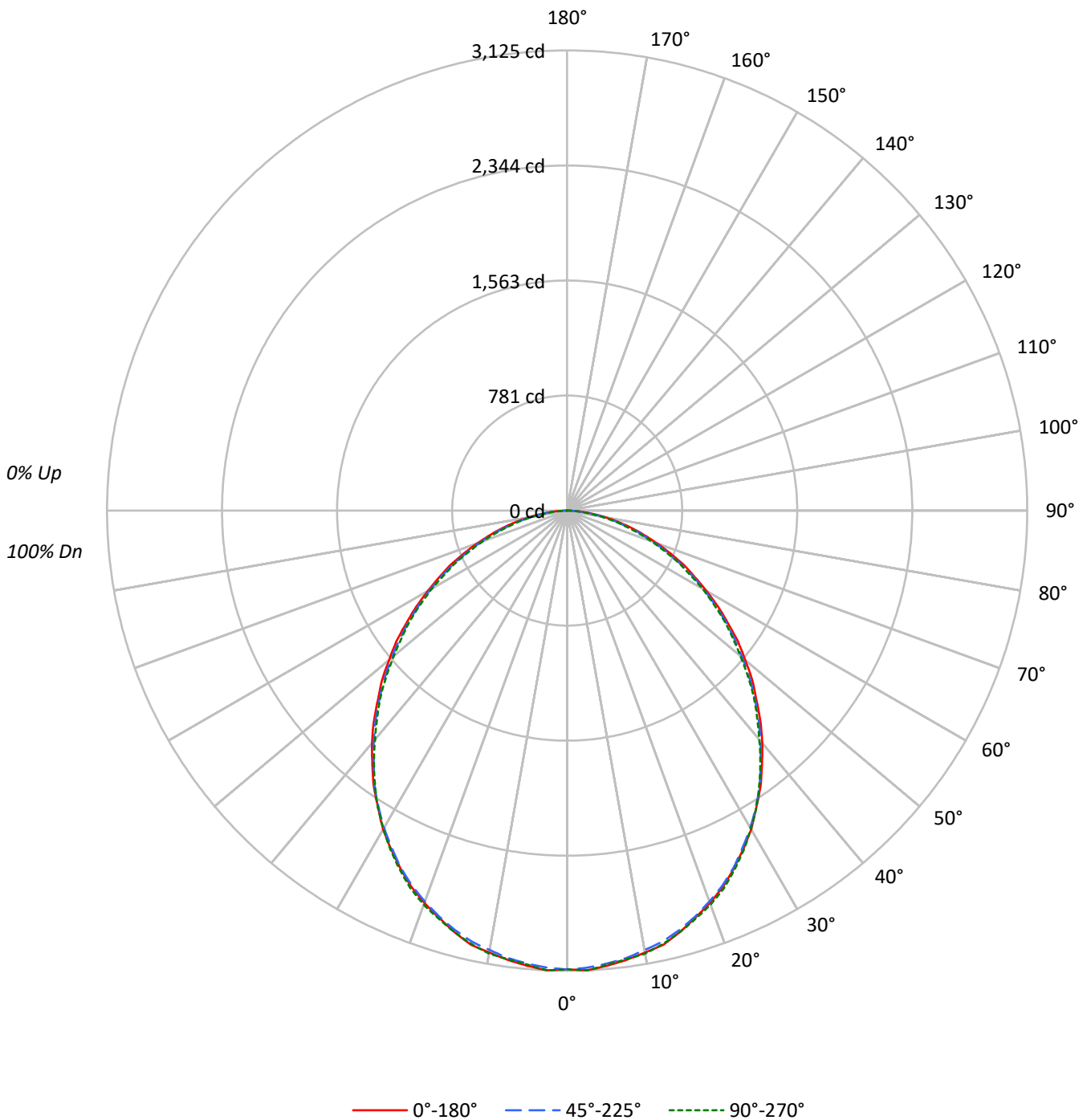
Input Watts (W): 56.637  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4192	4192	4192
5°	4191	4170	4181
10°	4164	4140	4174
15°	4127	4106	4127
20°	4060	4045	4078
25°	3979	3972	3994
30°	3884	3865	3877
35°	3762	3745	3737
40°	3623	3588	3566
45°	3459	3425	3411
50°	3302	3250	3213
55°	3126	3079	3050
60°	2940	2886	2853
65°	2778	2675	2651
70°	2548	2449	2400
75°	2339	2196	2105
80°	2053	1918	1801
85°	1660	1544	1312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.9	3.8
10°-20°	833.3	10.8
20°-30°	1232.6	15.9
30°-40°	1422.6	18.4
40°-50°	1389.4	17.9
50°-60°	1173.2	15.1
60°-70°	835.7	10.8
70°-80°	452.5	5.8
80°-90°	116.7	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°	2359.8	30.4
0°-40°	3782.4	48.8
0°-60°	6345.1	81.9
0°-90°	7750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7750.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3115	3115	3115	3115	3115	
5°	3103	3103	3088	3095	3095	294
15°	2963	2950	2948	2960	2963	835
25°	2680	2665	2675	2685	2690	1234
35°	2290	2273	2280	2273	2275	1429
45°	1818	1803	1800	1793	1793	1406
55°	1333	1315	1313	1300	1300	1195
65°	873	855	840	830	833	860
75°	450	435	422	412	405	476
85°	108	105	100	88	85	126
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3115.3	3115.3	3115.3	3115.3	3115.3
2.5°	3125.3	3112.8	3107.8	3110.3	3125.3
5°	3102.8	3102.8	3087.8	3095.3	3095.3
7.5°	3077.8	3080.3	3065.3	3077.8	3072.8
10°	3047.8	3040.3	3030.3	3050.3	3055.3
12.5°	3020.3	3002.8	2997.8	3010.3	3012.8
15°	2962.8	2950.3	2947.8	2960.3	2962.8
17.5°	2897.8	2900.3	2890.3	2907.8	2905.3
20°	2835.3	2830.3	2825.3	2845.3	2847.8
22.5°	2765.2	2750.2	2755.2	2772.7	2777.7
25°	2680.2	2665.2	2675.2	2685.2	2690.2
27.5°	2590.2	2582.7	2580.2	2592.7	2597.7
30°	2500.2	2487.7	2487.7	2502.7	2495.2
32.5°	2390.2	2380.2	2385.2	2390.2	2392.7
35°	2290.2	2272.7	2280.2	2272.7	2275.2
37.5°	2172.7	2160.2	2157.7	2155.2	2155.2
40°	2062.7	2052.7	2042.7	2042.7	2030.2
42.5°	1942.7	1930.2	1925.2	1917.7	1910.2
45°	1817.7	1802.7	1800.2	1792.7	1792.7
47.5°	1705.2	1682.7	1680.2	1665.1	1665.1
50°	1577.6	1562.6	1552.6	1542.6	1535.1
52.5°	1462.6	1447.6	1432.6	1422.6	1415.1
55°	1332.6	1315.1	1312.6	1300.1	1300.1
57.5°	1215.1	1200.1	1190.1	1175.1	1177.6
60°	1092.6	1077.6	1072.6	1060.1	1060.1
62.5°	977.6	965.1	957.6	945.1	935.1
65°	872.6	855.1	840.1	830.1	832.6
67.5°	757.6	737.6	730.1	720.1	712.6
70°	647.6	635.1	622.6	610.1	610.1
72.5°	545.0	532.5	525.0	510.0	505.0
75°	450.0	435.0	422.5	412.5	405.0
77.5°	355.0	340.0	332.5	320.0	320.0
80°	265.0	255.0	247.5	242.5	232.5
82.5°	182.5	177.5	170.0	162.5	155.0
85°	107.5	105.0	100.0	87.5	85.0
87.5°	42.5	42.5	37.5	35.0	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)