

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: P295933

Luminaire Tested: **24RLN-LD5-67-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295933  
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-LD5-67-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: 6982.0 lumens  
Efficiency: N/A  
Efficacy: 139.5 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

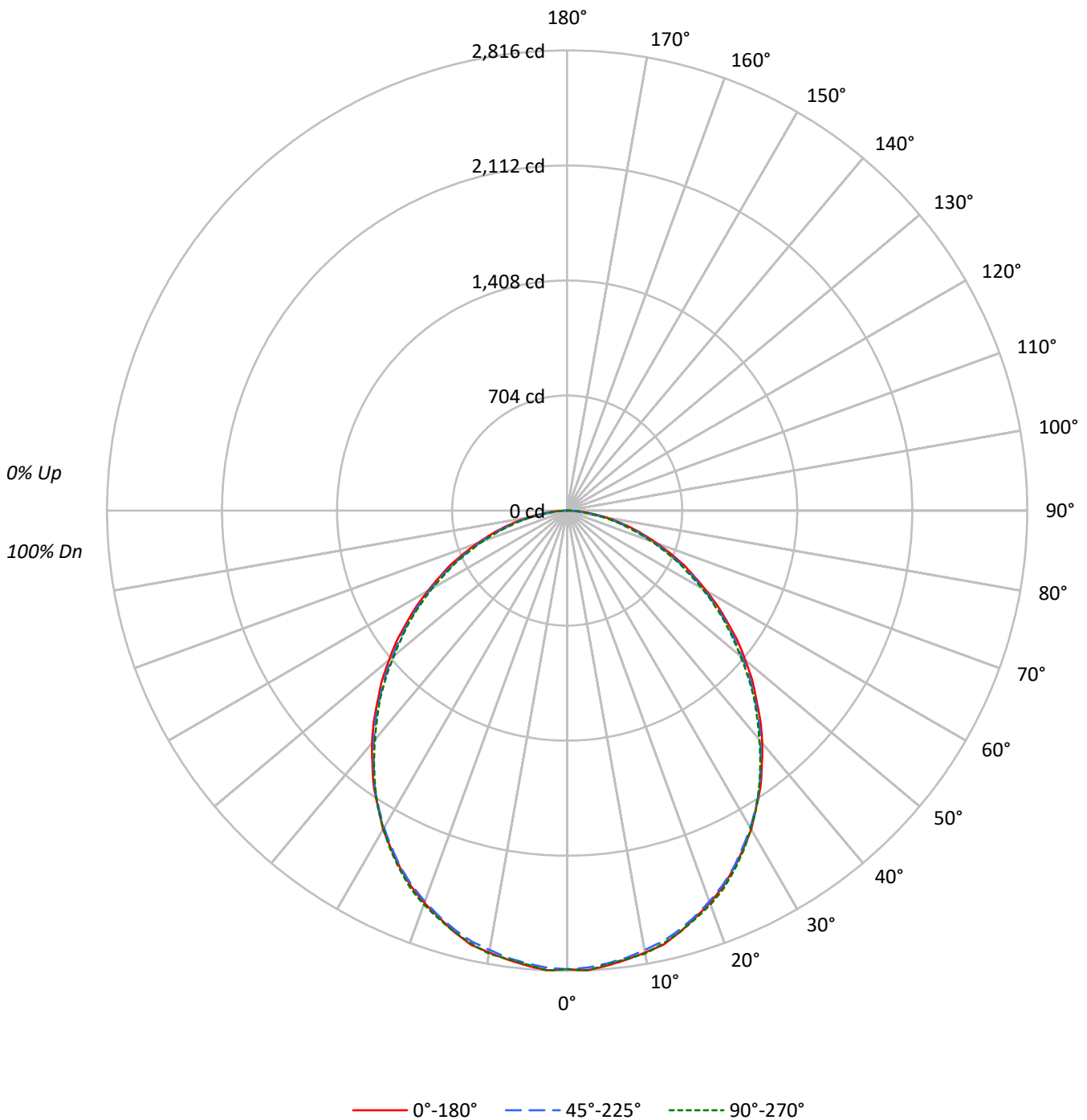
Input Watts (W): 50.034  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3776	3776	3776
5°	3775	3757	3766
10°	3751	3730	3761
15°	3718	3699	3718
20°	3657	3644	3674
25°	3585	3578	3598
30°	3500	3482	3493
35°	3389	3374	3367
40°	3264	3232	3212
45°	3116	3086	3073
50°	2975	2928	2895
55°	2816	2774	2748
60°	2649	2600	2570
65°	2503	2409	2388
70°	2295	2207	2162
75°	2108	1979	1897
80°	1850	1728	1623
85°	1496	1391	1183



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	264.8	3.8
10°-20°	750.7	10.8
20°-30°	1110.5	15.9
30°-40°	1281.6	18.4
40°-50°	1251.7	17.9
50°-60°	1057.0	15.1
60°-70°	752.9	10.8
70°-80°	407.6	5.8
80°-90°	105.2	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°	2126.0	30.4
0°-40°	3407.6	48.8
0°-60°	5716.3	81.9
0°-90°	6982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6982.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2807	2807	2807	2807	2807	
5°	2795	2795	2782	2788	2788	265
15°	2669	2658	2656	2667	2669	752
25°	2415	2401	2410	2419	2424	1112
35°	2063	2048	2054	2048	2050	1288
45°	1638	1624	1622	1615	1615	1266
55°	1201	1185	1182	1171	1171	1076
65°	786	770	757	748	750	775
75°	405	392	381	372	365	429
85°	97	95	90	79	77	114
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2806.6	2806.6	2806.6	2806.6	2806.6
2.5°	2815.6	2804.3	2799.8	2802.1	2815.6
5°	2795.3	2795.3	2781.8	2788.5	2788.5
7.5°	2772.8	2775.0	2761.5	2772.8	2768.3
10°	2745.7	2739.0	2730.0	2748.0	2752.5
12.5°	2721.0	2705.2	2700.7	2712.0	2714.2
15°	2669.2	2657.9	2655.7	2666.9	2669.2
17.5°	2610.6	2612.9	2603.8	2619.6	2617.4
20°	2554.3	2549.8	2545.3	2563.3	2565.6
22.5°	2491.2	2477.7	2482.2	2498.0	2502.5
25°	2414.6	2401.1	2410.1	2419.1	2423.6
27.5°	2333.5	2326.8	2324.5	2335.8	2340.3
30°	2252.5	2241.2	2241.2	2254.7	2248.0
32.5°	2153.4	2144.3	2148.8	2153.4	2155.6
35°	2063.3	2047.5	2054.2	2047.5	2049.7
37.5°	1957.4	1946.1	1943.9	1941.6	1941.6
40°	1858.3	1849.3	1840.3	1840.3	1829.0
42.5°	1750.2	1738.9	1734.4	1727.6	1720.9
45°	1637.5	1624.0	1621.8	1615.0	1615.0
47.5°	1536.2	1515.9	1513.7	1500.1	1500.1
50°	1421.3	1407.8	1398.8	1389.8	1383.0
52.5°	1317.7	1304.2	1290.7	1281.6	1274.9
55°	1200.6	1184.8	1182.5	1171.3	1171.3
57.5°	1094.7	1081.2	1072.2	1058.7	1060.9
60°	984.3	970.8	966.3	955.0	955.0
62.5°	880.7	869.4	862.7	851.4	842.4
65°	786.1	770.3	756.8	747.8	750.1
67.5°	682.5	664.5	657.7	648.7	642.0
70°	583.4	572.1	560.9	549.6	549.6
72.5°	491.0	479.8	473.0	459.5	455.0
75°	405.4	391.9	380.7	371.7	364.9
77.5°	319.8	306.3	299.6	288.3	288.3
80°	238.8	229.8	223.0	218.5	209.5
82.5°	164.4	159.9	153.2	146.4	139.7
85°	96.9	94.6	90.1	78.8	76.6
87.5°	38.3	38.3	33.8	31.5	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)