

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: P293022

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7444.0 lumens  
Efficiency: N/A  
Efficacy: 138.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

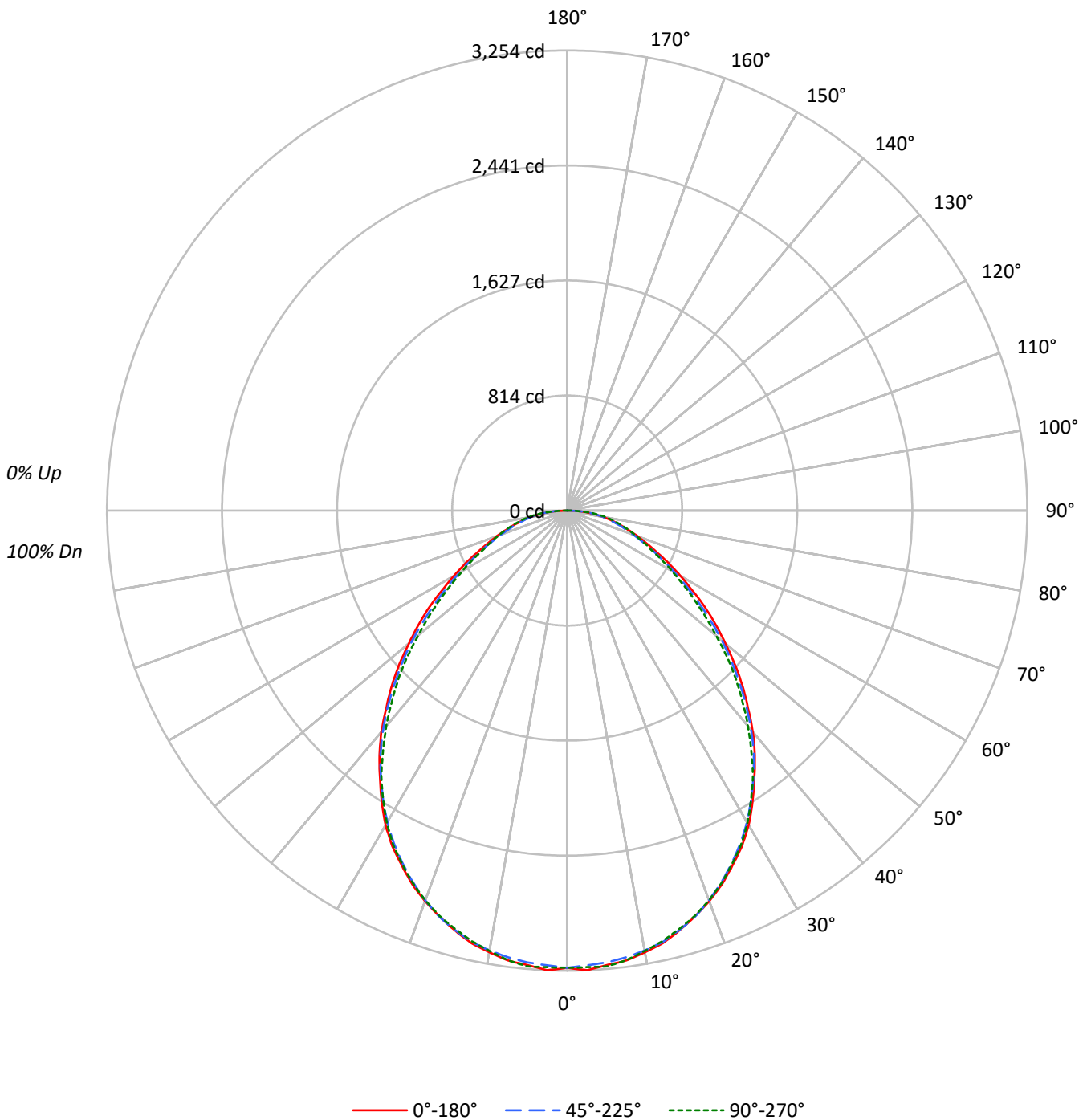
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

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

	0°	45°	90°
0°	4351	4351	4351
5°	4357	4332	4369
10°	4334	4315	4319
15°	4280	4275	4265
20°	4208	4199	4199
25°	4110	4087	4096
30°	3991	3950	3962
35°	3790	3773	3763
40°	3589	3557	3495
45°	3336	3278	3214
50°	3056	2989	2876
55°	2791	2665	2575
60°	2487	2368	2305
65°	2239	2122	2092
70°	2078	1951	2030
75°	1987	1900	2059
80°	1987	1987	2201
85°	2062	2086	2323



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.4	4.1
10°-20°	864.2	11.6
20°-30°	1268.3	17.0
30°-40°	1433.9	19.3
40°-50°	1325.2	17.8
50°-60°	1021.0	13.7
60°-70°	676.1	9.1
70°-80°	402.5	5.4
80°-90°	147.4	2.0
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°	2437.8	32.7
0°-40°	3871.7	52.0
0°-60°	6218.0	83.5
0°-90°	7444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7444.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3234	3234	3234	3234	3234	
5°	3226	3226	3207	3209	3235	307
15°	3072	3066	3069	3068	3062	866
25°	2768	2761	2753	2750	2759	1275
35°	2308	2305	2297	2286	2291	1444
45°	1753	1741	1723	1692	1689	1351
55°	1190	1165	1136	1106	1098	1061
65°	703	692	666	660	657	705
75°	382	373	365	382	396	408
85°	134	126	135	149	150	142
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3233.5	3233.5	3233.5	3233.5	3233.5
2.5°	3253.5	3236.6	3218.1	3218.1	3232.0
5°	3225.8	3225.8	3207.4	3208.9	3235.0
7.5°	3208.9	3199.7	3187.4	3187.4	3207.4
10°	3172.1	3164.4	3158.3	3155.2	3161.3
12.5°	3132.2	3119.9	3124.5	3119.9	3118.3
15°	3072.3	3066.1	3069.2	3067.7	3061.5
17.5°	3007.8	3004.7	3010.9	3000.1	3004.7
20°	2938.7	2929.5	2932.6	2926.4	2932.6
22.5°	2860.4	2854.3	2846.6	2838.9	2851.2
25°	2768.3	2760.6	2752.9	2749.9	2759.1
27.5°	2676.2	2663.9	2653.1	2650.1	2663.9
30°	2568.7	2554.9	2542.6	2539.5	2550.3
32.5°	2441.2	2438.2	2422.8	2416.7	2421.3
35°	2307.7	2304.6	2296.9	2286.2	2290.8
37.5°	2180.2	2178.7	2167.9	2149.5	2137.2
40°	2043.6	2032.8	2025.2	1999.1	1989.8
42.5°	1893.1	1890.0	1876.2	1847.1	1836.3
45°	1753.4	1741.1	1722.7	1692.0	1688.9
47.5°	1609.1	1592.2	1575.3	1536.9	1535.4
50°	1460.1	1447.9	1427.9	1389.5	1374.2
52.5°	1322.0	1305.1	1277.4	1240.6	1232.9
55°	1189.9	1165.3	1136.2	1105.5	1097.8
57.5°	1048.7	1037.9	1002.6	978.0	968.8
60°	924.3	915.1	879.8	856.7	856.7
62.5°	812.2	798.4	767.7	752.3	752.3
65°	703.2	692.5	666.4	660.2	657.1
67.5°	609.5	595.7	577.3	575.8	583.4
70°	528.2	511.3	495.9	511.3	515.9
72.5°	451.4	440.7	426.8	446.8	456.0
75°	382.3	373.1	365.4	382.3	396.1
77.5°	319.4	310.1	310.1	328.6	340.9
80°	256.4	250.3	256.4	271.8	284.0
82.5°	196.5	191.9	199.6	215.0	222.6
85°	133.6	125.9	135.1	148.9	150.5
87.5°	63.0	61.4	67.6	76.8	75.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)