

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: P293154

Luminaire Tested: **24GR-LD5-85-F1-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293154  
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-LD5-85-F1-UNV-L92765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7092.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

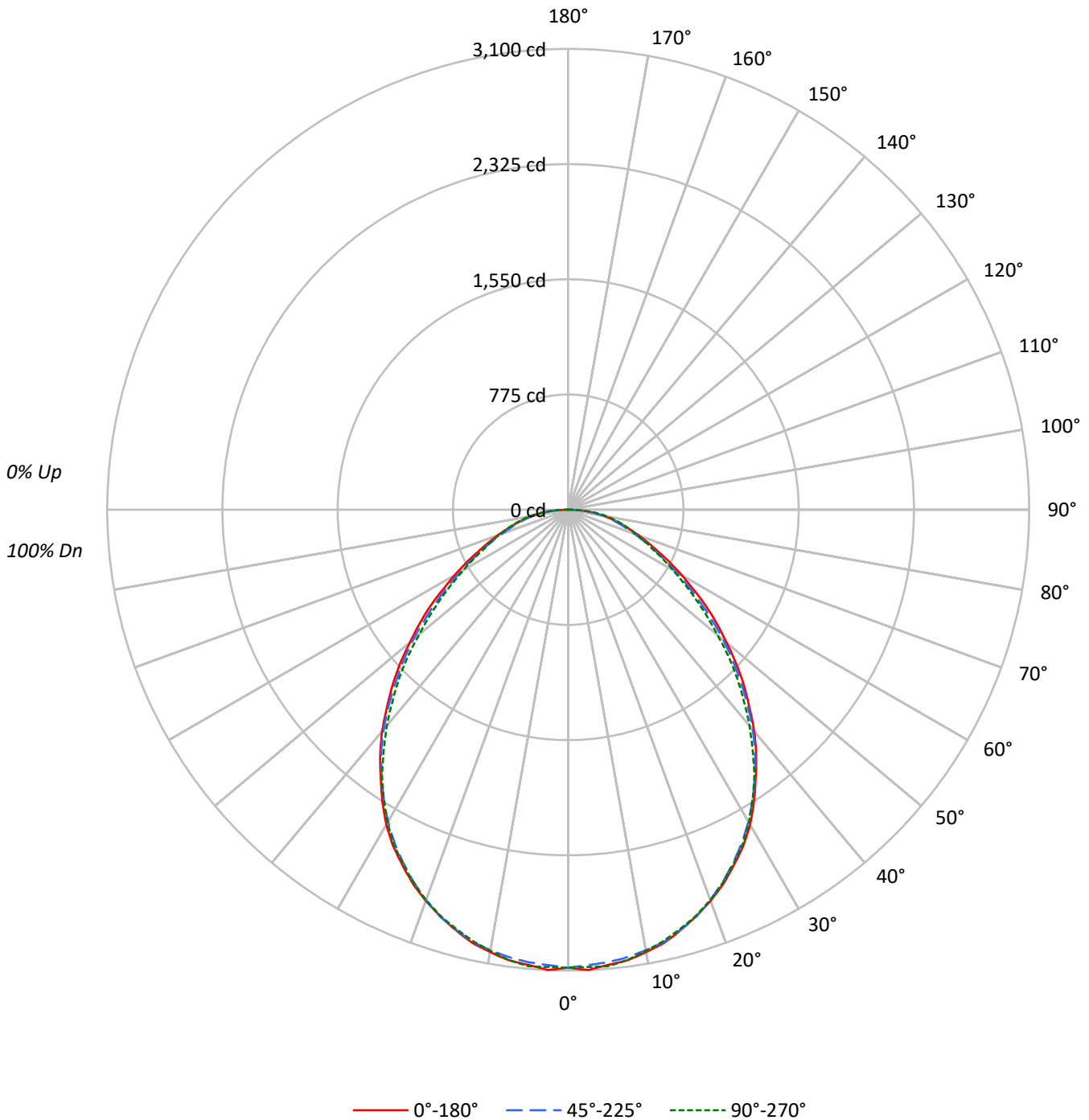
Input Watts (W): 62.589  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4145	4145	4145
5°	4151	4127	4163
10°	4129	4111	4115
15°	4077	4073	4063
20°	4009	4000	4000
25°	3915	3894	3902
30°	3802	3763	3775
35°	3611	3594	3585
40°	3420	3389	3330
45°	3179	3123	3062
50°	2912	2848	2740
55°	2659	2539	2453
60°	2370	2256	2196
65°	2133	2021	1993
70°	1980	1859	1934
75°	1893	1810	1962
80°	1893	1893	2097
85°	1965	1987	2214



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.9	4.1
10°-20°	823.3	11.6
20°-30°	1208.3	17.0
30°-40°	1366.1	19.3
40°-50°	1262.6	17.8
50°-60°	972.7	13.7
60°-70°	644.1	9.1
70°-80°	383.4	5.4
80°-90°	140.5	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°	2322.6	32.7
0°-40°	3688.7	52.0
0°-60°	5924.0	83.5
0°-90°	7092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7092.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3081	3081	3081	3081	3081	
5°	3073	3073	3056	3057	3082	292
15°	2927	2921	2924	2923	2917	825
25°	2637	2630	2623	2620	2629	1214
35°	2198	2196	2188	2178	2182	1376
45°	1670	1659	1641	1612	1609	1287
55°	1134	1110	1082	1053	1046	1011
65°	670	660	635	629	626	672
75°	364	356	348	364	377	388
85°	127	120	129	142	143	135
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3080.6	3080.6	3080.6	3080.6	3080.6
2.5°	3099.6	3083.5	3066.0	3066.0	3079.1
5°	3073.3	3073.3	3055.7	3057.2	3082.1
7.5°	3057.2	3048.4	3036.7	3036.7	3055.7
10°	3022.1	3014.8	3008.9	3006.0	3011.8
12.5°	2984.1	2972.4	2976.7	2972.4	2970.9
15°	2927.0	2921.2	2924.1	2922.6	2916.8
17.5°	2865.6	2862.6	2868.5	2858.3	2862.6
20°	2799.7	2791.0	2793.9	2788.0	2793.9
22.5°	2725.1	2719.3	2712.0	2704.7	2716.4
25°	2637.4	2630.1	2622.7	2619.8	2628.6
27.5°	2549.6	2537.9	2527.7	2524.7	2537.9
30°	2447.2	2434.1	2422.3	2419.4	2429.7
32.5°	2325.8	2322.9	2308.3	2302.4	2306.8
35°	2198.5	2195.6	2188.3	2178.1	2182.5
37.5°	2077.1	2075.7	2065.4	2047.9	2036.2
40°	1946.9	1936.7	1929.4	1904.5	1895.8
42.5°	1803.6	1800.7	1787.5	1759.7	1749.5
45°	1670.5	1658.8	1641.2	1612.0	1609.0
47.5°	1533.0	1516.9	1500.8	1464.2	1462.8
50°	1391.1	1379.4	1360.4	1323.8	1309.2
52.5°	1259.4	1243.4	1217.0	1181.9	1174.6
55°	1133.6	1110.2	1082.5	1053.2	1045.9
57.5°	999.1	988.8	955.2	931.8	923.0
60°	880.6	871.8	838.2	816.2	816.2
62.5°	773.8	760.6	731.4	716.8	716.8
65°	669.9	659.7	634.8	629.0	626.1
67.5°	580.7	567.6	550.0	548.5	555.9
70°	503.2	487.1	472.5	487.1	491.5
72.5°	430.1	419.8	406.7	425.7	434.4
75°	364.2	355.5	348.1	364.2	377.4
77.5°	304.3	295.5	295.5	313.0	324.7
80°	244.3	238.4	244.3	258.9	270.6
82.5°	187.2	182.8	190.2	204.8	212.1
85°	127.3	119.9	128.7	141.9	143.4
87.5°	60.0	58.5	64.4	73.1	71.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)