

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: P294291

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294291  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7442.0 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

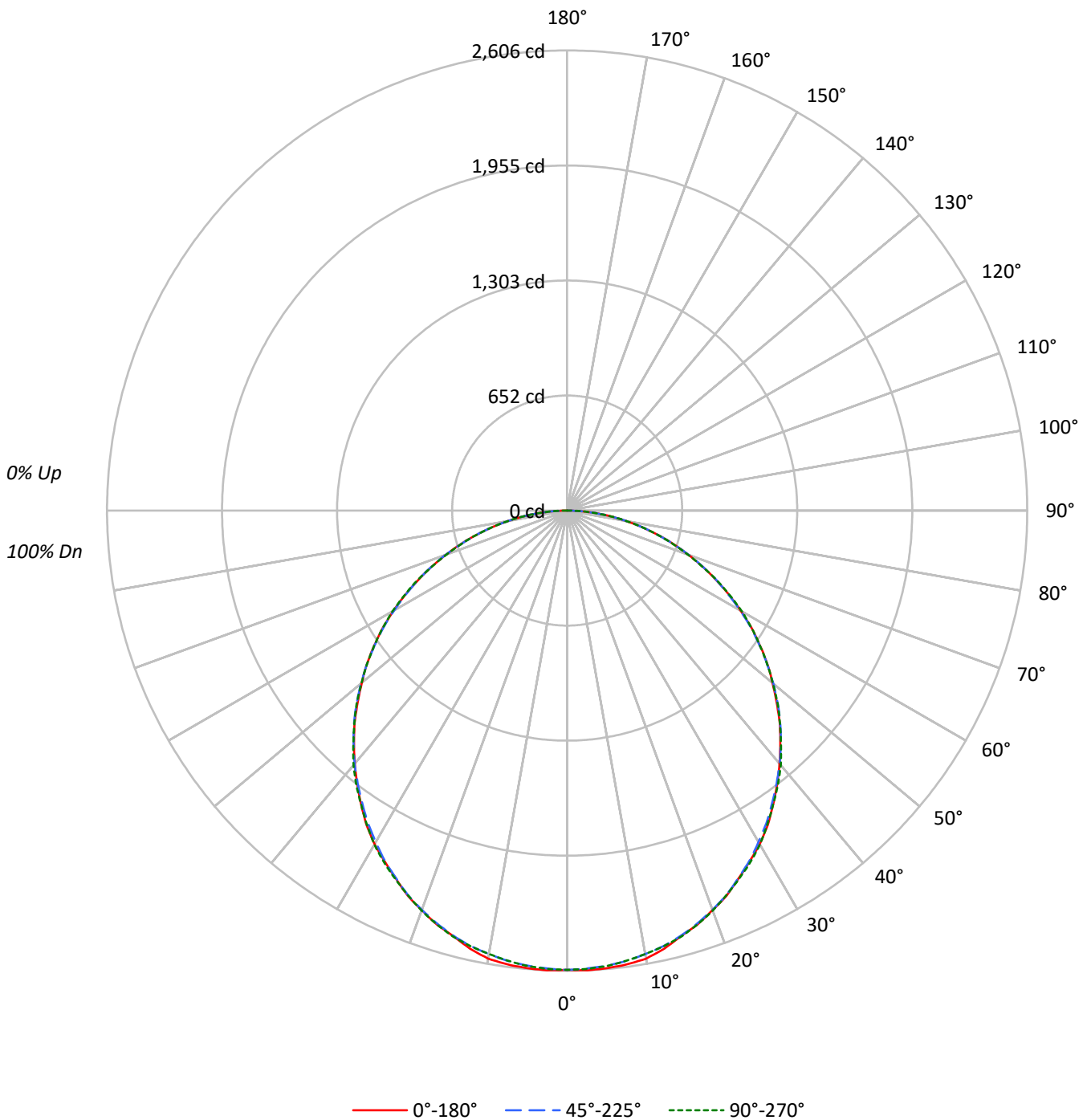
Input Watts (W): 63.891  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3500	3500	3500
5°	3513	3494	3497
10°	3520	3484	3484
15°	3474	3472	3479
20°	3448	3445	3453
25°	3411	3408	3419
30°	3389	3368	3392
35°	3341	3324	3341
40°	3286	3289	3308
45°	3240	3249	3243
50°	3178	3189	3181
55°	3129	3121	3129
60°	3056	3046	3075
65°	2961	2973	2984
70°	2865	2879	2858
75°	2765	2765	2765
80°	2611	2611	2638
85°	2411	2439	2357



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.9	3.3
10°-20°	703.1	9.4
20°-30°	1059.5	14.2
30°-40°	1269.0	17.1
40°-50°	1313.6	17.7
50°-60°	1191.1	16.0
60°-70°	923.4	12.4
70°-80°	561.6	7.5
80°-90°	174.7	2.3
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°	2008.6	27.0
0°-40°	3277.6	44.0
0°-60°	5782.3	77.7
0°-90°	7442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7442.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2601	2601	2601	2601	2601	
5°	2601	2585	2587	2584	2589	248
15°	2494	2496	2492	2484	2498	705
25°	2297	2297	2296	2303	2303	1061
35°	2034	2020	2024	2032	2034	1272
45°	1702	1706	1708	1701	1704	1311
55°	1334	1327	1330	1336	1334	1192
65°	930	936	934	930	937	923
75°	532	530	532	530	532	562
85°	156	154	158	156	153	175
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2601.1	2601.1	2601.1	2601.1	2601.1
2.5°	2606.3	2595.8	2595.8	2592.3	2597.6
5°	2601.1	2585.3	2587.0	2583.5	2588.8
7.5°	2592.3	2571.2	2573.0	2569.5	2571.2
10°	2576.5	2551.9	2550.2	2548.4	2550.2
12.5°	2541.4	2527.4	2525.6	2522.1	2527.4
15°	2494.0	2495.8	2492.2	2483.5	2497.5
17.5°	2457.1	2455.4	2451.9	2443.1	2457.1
20°	2408.0	2409.8	2406.2	2402.7	2411.5
22.5°	2360.6	2355.3	2357.1	2355.3	2357.1
25°	2297.4	2297.4	2295.7	2302.7	2302.7
27.5°	2239.5	2232.5	2236.0	2243.0	2246.5
30°	2181.6	2164.0	2167.6	2174.6	2183.3
32.5°	2113.1	2095.6	2099.1	2106.1	2109.6
35°	2034.2	2020.1	2023.6	2032.4	2034.2
37.5°	1953.4	1944.7	1948.2	1955.2	1960.5
40°	1870.9	1867.4	1872.7	1870.9	1883.2
42.5°	1786.7	1784.9	1790.2	1790.2	1792.0
45°	1702.5	1706.0	1707.7	1700.7	1704.2
47.5°	1609.4	1611.2	1618.2	1614.7	1616.5
50°	1518.2	1516.4	1523.4	1525.2	1519.9
52.5°	1430.4	1421.6	1428.7	1432.2	1428.7
55°	1333.9	1326.9	1330.4	1335.6	1333.9
57.5°	1239.1	1232.1	1233.8	1242.6	1239.1
60°	1135.6	1133.8	1132.0	1139.1	1142.6
62.5°	1033.8	1032.0	1028.5	1035.5	1039.0
65°	930.2	935.5	933.7	930.2	937.2
67.5°	831.9	837.2	831.9	828.4	828.4
70°	728.4	733.6	731.9	728.4	726.6
72.5°	631.8	631.8	628.3	626.6	628.3
75°	531.8	530.0	531.8	530.0	531.8
77.5°	433.5	435.3	435.3	435.3	433.5
80°	337.0	337.0	337.0	338.7	340.5
82.5°	247.5	242.2	247.5	244.0	245.7
85°	156.2	154.4	158.0	156.2	152.7
87.5°	70.2	72.0	72.0	73.7	73.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)