

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: P294416

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294416  
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-L92765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6549.0 lumens  
Efficiency: N/A  
Efficacy: 103.0 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

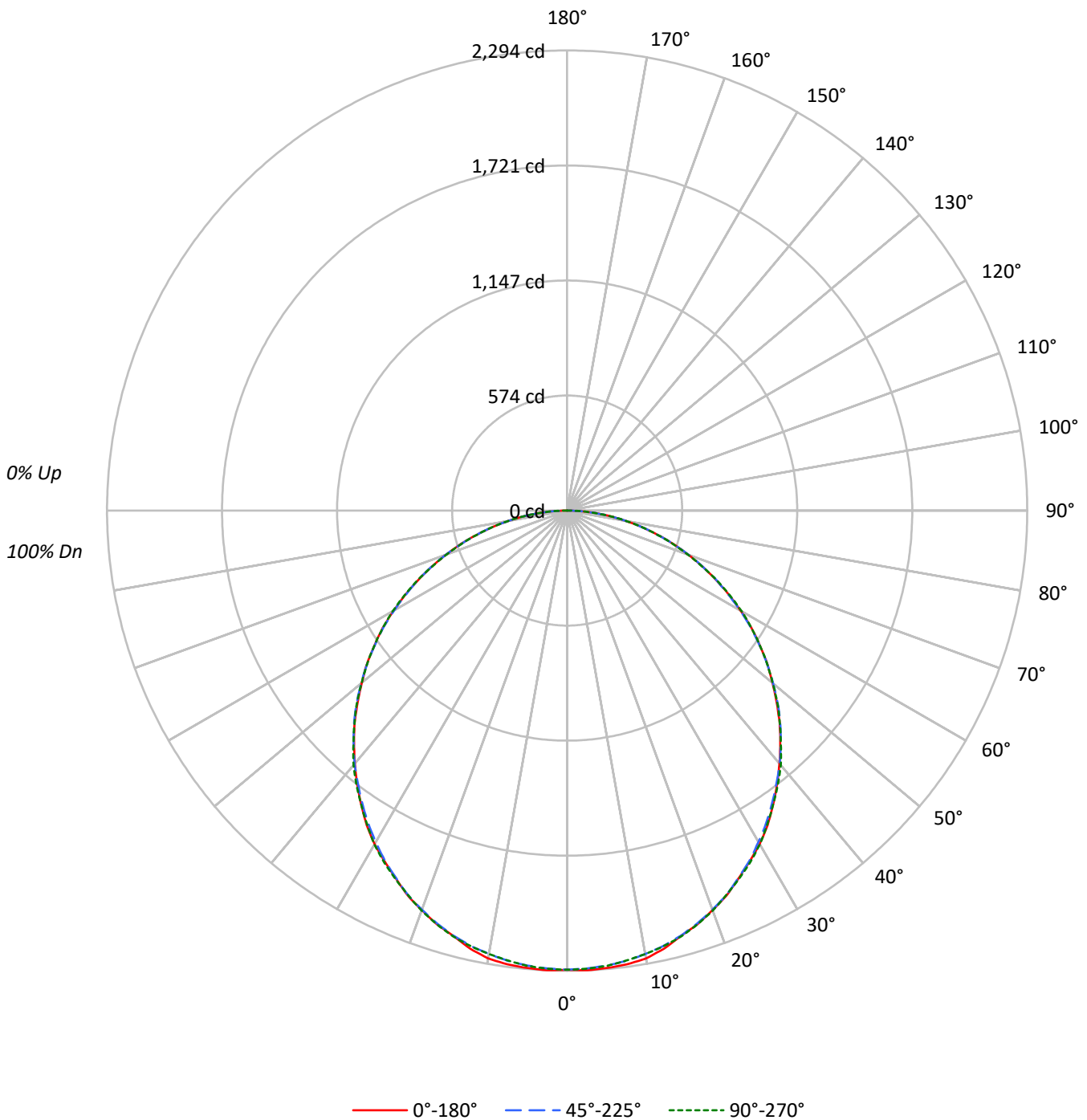
Input Watts (W): 63.612  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3080	3080	3080
5°	3092	3075	3077
10°	3098	3066	3066
15°	3057	3055	3061
20°	3034	3032	3039
25°	3002	2999	3008
30°	2983	2964	2985
35°	2940	2925	2940
40°	2892	2895	2911
45°	2851	2860	2854
50°	2797	2806	2800
55°	2753	2746	2753
60°	2689	2681	2706
65°	2606	2616	2626
70°	2522	2534	2515
75°	2433	2433	2433
80°	2297	2297	2321
85°	2123	2146	2075



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.4	3.3
10°-20°	618.7	9.4
20°-30°	932.4	14.2
30°-40°	1116.8	17.1
40°-50°	1156.0	17.7
50°-60°	1048.1	16.0
60°-70°	812.6	12.4
70°-80°	494.2	7.5
80°-90°	153.7	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°	1767.6	27.0
0°-40°	2884.3	44.0
0°-60°	5088.4	77.7
0°-90°	6549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2289	2289	2289	2289	2289	
5°	2289	2275	2277	2274	2278	218
15°	2195	2196	2193	2186	2198	621
25°	2022	2022	2020	2026	2026	933
35°	1790	1778	1781	1788	1790	1120
45°	1498	1501	1503	1497	1500	1154
55°	1174	1168	1171	1175	1174	1049
65°	819	823	822	819	825	812
75°	468	466	468	466	468	494
85°	138	136	139	138	134	154
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2289.0	2289.0	2289.0	2289.0	2289.0
2.5°	2293.6	2284.3	2284.3	2281.2	2285.9
5°	2289.0	2275.1	2276.6	2273.5	2278.1
7.5°	2281.2	2262.7	2264.2	2261.1	2262.7
10°	2267.3	2245.7	2244.2	2242.6	2244.2
12.5°	2236.4	2224.1	2222.5	2219.4	2224.1
15°	2194.7	2196.3	2193.2	2185.5	2197.8
17.5°	2162.3	2160.8	2157.7	2149.9	2162.3
20°	2119.1	2120.6	2117.5	2114.4	2122.1
22.5°	2077.4	2072.7	2074.3	2072.7	2074.3
25°	2021.8	2021.8	2020.2	2026.4	2026.4
27.5°	1970.8	1964.6	1967.7	1973.9	1977.0
30°	1919.8	1904.4	1907.5	1913.6	1921.4
32.5°	1859.6	1844.1	1847.2	1853.4	1856.5
35°	1790.1	1777.7	1780.8	1788.5	1790.1
37.5°	1719.0	1711.3	1714.4	1720.6	1725.2
40°	1646.4	1643.3	1648.0	1646.4	1657.2
42.5°	1572.3	1570.8	1575.4	1575.4	1576.9
45°	1498.2	1501.3	1502.8	1496.6	1499.7
47.5°	1416.3	1417.9	1424.0	1420.9	1422.5
50°	1336.0	1334.4	1340.6	1342.2	1337.5
52.5°	1258.8	1251.0	1257.2	1260.3	1257.2
55°	1173.8	1167.6	1170.7	1175.4	1173.8
57.5°	1090.4	1084.2	1085.8	1093.5	1090.4
60°	999.3	997.7	996.2	1002.4	1005.5
62.5°	909.7	908.2	905.1	911.3	914.3
65°	818.6	823.2	821.7	818.6	824.8
67.5°	732.1	736.7	732.1	729.0	729.0
70°	641.0	645.6	644.1	641.0	639.4
72.5°	556.0	556.0	552.9	551.4	552.9
75°	468.0	466.4	468.0	466.4	468.0
77.5°	381.5	383.0	383.0	383.0	381.5
80°	296.5	296.5	296.5	298.1	299.6
82.5°	217.8	213.1	217.8	214.7	216.2
85°	137.5	135.9	139.0	137.5	134.4
87.5°	61.8	63.3	63.3	64.9	64.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)