

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: P294279

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294279  
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-LD5-72-FGW080-UNV-L82765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6157.0 lumens  
Efficiency: N/A  
Efficacy: 116.6 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

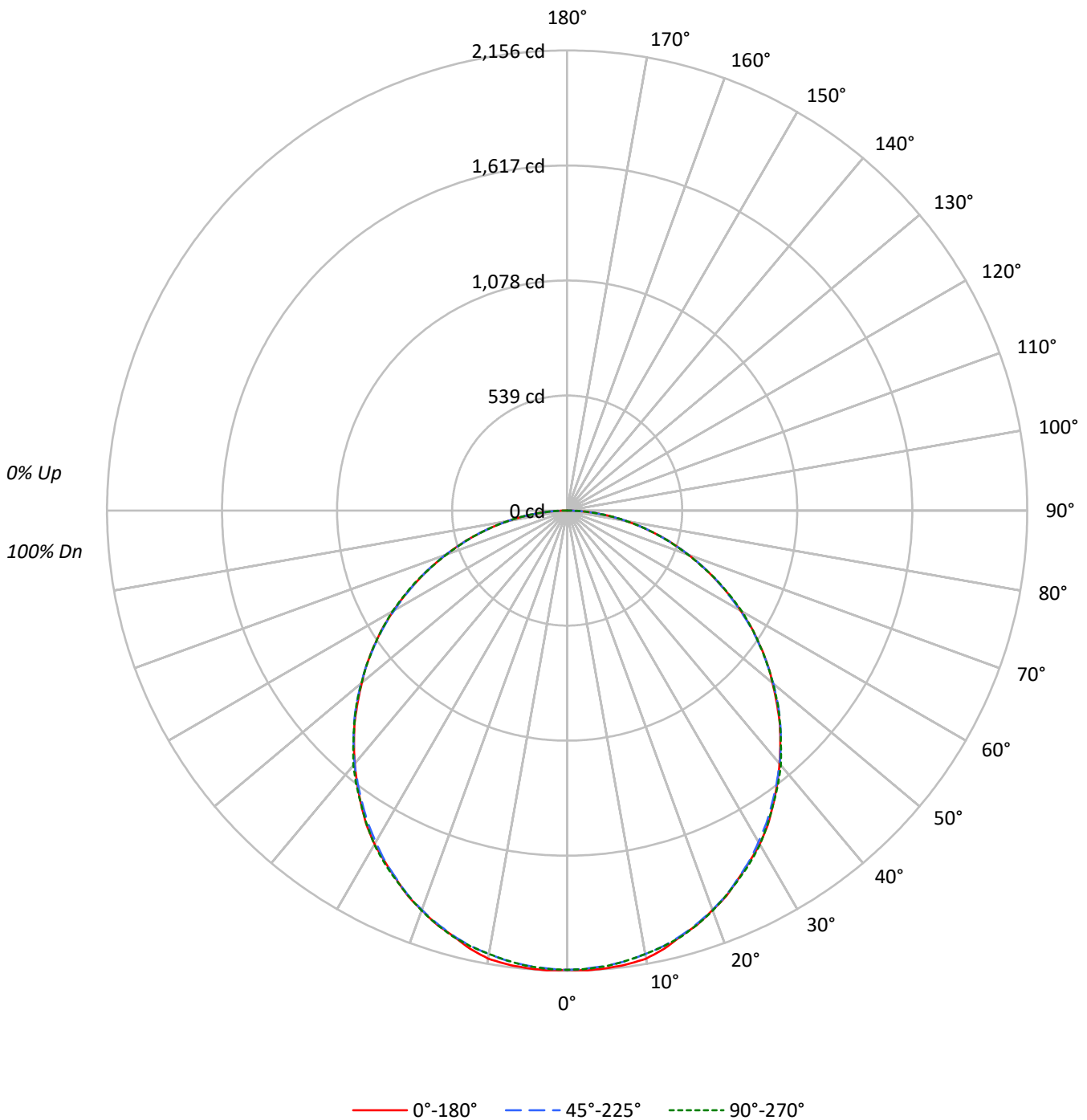
Input Watts (W): 52.824  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2895	2895	2895
5°	2906	2891	2893
10°	2912	2883	2883
15°	2874	2872	2878
20°	2853	2851	2857
25°	2822	2820	2828
30°	2804	2786	2806
35°	2764	2750	2764
40°	2719	2721	2737
45°	2680	2688	2683
50°	2629	2638	2632
55°	2589	2582	2589
60°	2528	2520	2544
65°	2450	2459	2469
70°	2371	2382	2365
75°	2287	2287	2287
80°	2160	2160	2183
85°	1995	2018	1950



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.5	3.3
10°-20°	581.7	9.4
20°-30°	876.6	14.2
30°-40°	1049.9	17.1
40°-50°	1086.8	17.7
50°-60°	985.4	16.0
60°-70°	764.0	12.4
70°-80°	464.6	7.5
80°-90°	144.5	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°	1661.8	27.0
0°-40°	2711.7	44.0
0°-60°	4783.9	77.7
0°-90°	6157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6157.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2152	2152	2152	2152	2152	
5°	2152	2139	2140	2137	2142	205
15°	2063	2065	2062	2055	2066	583
25°	1901	1901	1899	1905	1905	877
35°	1683	1671	1674	1682	1683	1053
45°	1408	1411	1413	1407	1410	1085
55°	1104	1098	1101	1105	1104	986
65°	770	774	772	770	775	763
75°	440	438	440	438	440	465
85°	129	128	131	129	126	145
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2151.9	2151.9	2151.9	2151.9	2151.9
2.5°	2156.3	2147.6	2147.6	2144.7	2149.0
5°	2151.9	2138.9	2140.3	2137.4	2141.8
7.5°	2144.7	2127.3	2128.7	2125.8	2127.3
10°	2131.6	2111.3	2109.8	2108.4	2109.8
12.5°	2102.6	2091.0	2089.5	2086.6	2091.0
15°	2063.4	2064.8	2061.9	2054.7	2066.3
17.5°	2032.9	2031.4	2028.5	2021.3	2032.9
20°	1992.2	1993.7	1990.8	1987.9	1995.1
22.5°	1953.0	1948.7	1950.1	1948.7	1950.1
25°	1900.7	1900.7	1899.3	1905.1	1905.1
27.5°	1852.8	1847.0	1849.9	1855.7	1858.6
30°	1804.9	1790.4	1793.3	1799.1	1806.4
32.5°	1748.3	1733.8	1736.7	1742.5	1745.4
35°	1682.9	1671.3	1674.2	1681.5	1682.9
37.5°	1616.1	1608.9	1611.8	1617.6	1621.9
40°	1547.9	1545.0	1549.3	1547.9	1558.1
42.5°	1478.2	1476.7	1481.1	1481.1	1482.5
45°	1408.5	1411.4	1412.8	1407.0	1409.9
47.5°	1331.5	1333.0	1338.8	1335.9	1337.3
50°	1256.0	1254.6	1260.4	1261.8	1257.5
52.5°	1183.4	1176.2	1182.0	1184.9	1182.0
55°	1103.6	1097.8	1100.7	1105.0	1103.6
57.5°	1025.1	1019.3	1020.8	1028.1	1025.1
60°	939.5	938.0	936.6	942.4	945.3
62.5°	855.3	853.8	850.9	856.7	859.6
65°	769.6	773.9	772.5	769.6	775.4
67.5°	688.3	692.6	688.3	685.4	685.4
70°	602.6	607.0	605.5	602.6	601.1
72.5°	522.7	522.7	519.8	518.4	519.8
75°	440.0	438.5	440.0	438.5	440.0
77.5°	358.7	360.1	360.1	360.1	358.7
80°	278.8	278.8	278.8	280.2	281.7
82.5°	204.7	200.4	204.7	201.8	203.3
85°	129.2	127.8	130.7	129.2	126.3
87.5°	58.1	59.5	59.5	61.0	61.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)