

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: P294409

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294409  
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-L92765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5917.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

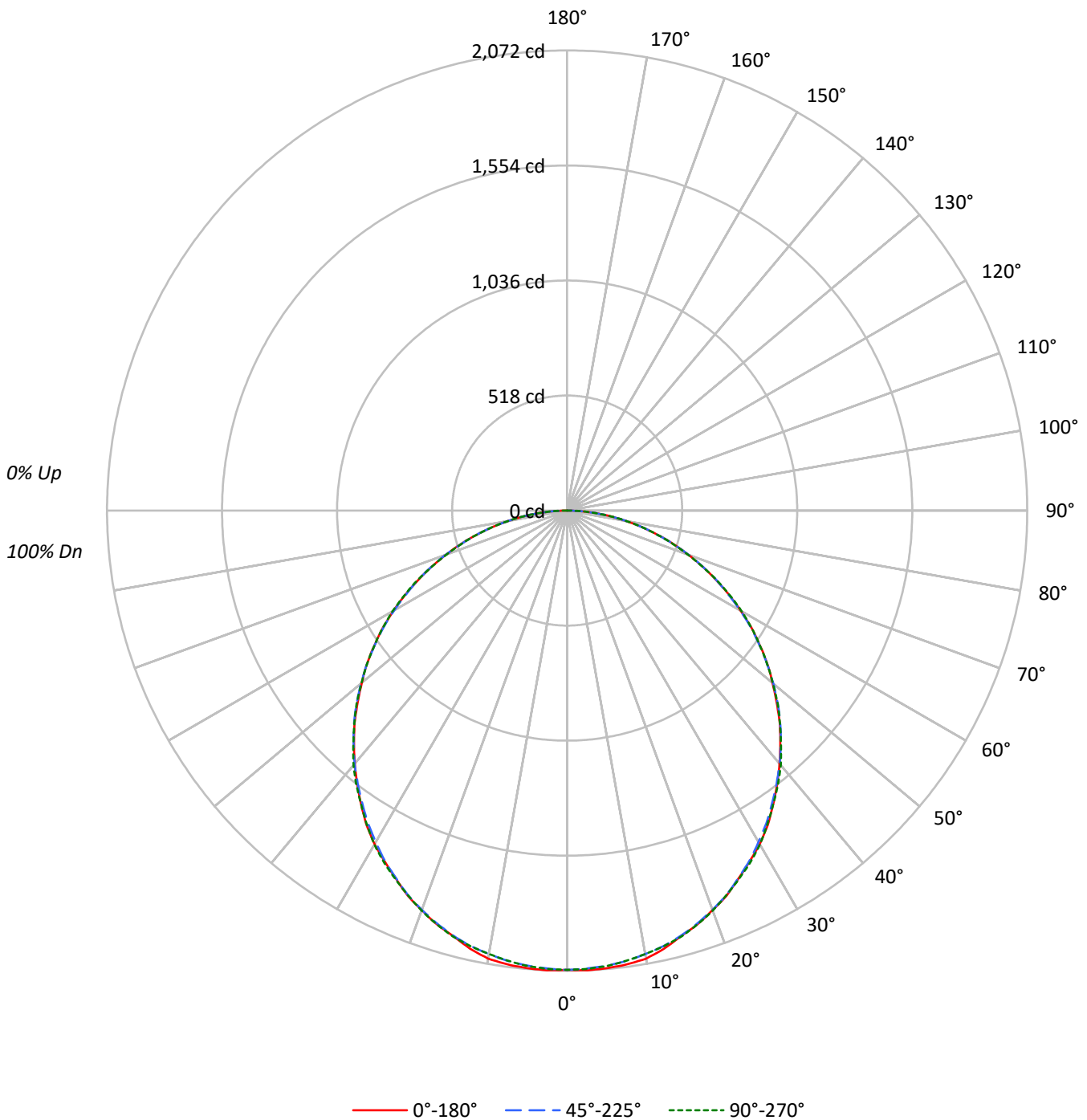
Input Watts (W): 54.033  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2783	2783	2783
5°	2793	2778	2780
10°	2799	2770	2770
15°	2762	2760	2766
20°	2741	2739	2745
25°	2712	2710	2718
30°	2695	2678	2697
35°	2656	2643	2656
40°	2613	2615	2630
45°	2576	2584	2578
50°	2527	2536	2530
55°	2488	2481	2488
60°	2430	2422	2444
65°	2355	2364	2372
70°	2278	2289	2273
75°	2198	2198	2198
80°	2076	2076	2097
85°	1917	1939	1874



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.5	3.3
10°-20°	559.0	9.4
20°-30°	842.4	14.2
30°-40°	1009.0	17.1
40°-50°	1044.4	17.7
50°-60°	947.0	16.0
60°-70°	734.2	12.4
70°-80°	446.5	7.5
80°-90°	138.9	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°	1597.0	27.0
0°-40°	2606.0	44.0
0°-60°	4597.4	77.7
0°-90°	5917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5917.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2068	2056	2057	2054	2058	197
15°	1983	1984	1982	1975	1986	561
25°	1827	1827	1825	1831	1831	843
35°	1617	1606	1609	1616	1617	1012
45°	1354	1356	1358	1352	1355	1043
55°	1060	1055	1058	1062	1060	948
65°	740	744	742	740	745	733
75°	423	421	423	421	423	447
85°	124	123	126	124	121	139
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.1	2068.1	2068.1	2068.1	2068.1
2.5°	2072.2	2063.9	2063.9	2061.1	2065.3
5°	2068.1	2055.5	2056.9	2054.1	2058.3
7.5°	2061.1	2044.3	2045.7	2042.9	2044.3
10°	2048.5	2029.0	2027.6	2026.2	2027.6
12.5°	2020.6	2009.5	2008.1	2005.3	2009.5
15°	1982.9	1984.3	1981.5	1974.6	1985.7
17.5°	1953.6	1952.2	1949.4	1942.5	1953.6
20°	1914.6	1916.0	1913.2	1910.4	1917.4
22.5°	1876.9	1872.7	1874.1	1872.7	1874.1
25°	1826.6	1826.6	1825.3	1830.8	1830.8
27.5°	1780.6	1775.0	1777.8	1783.4	1786.2
30°	1734.5	1720.6	1723.4	1729.0	1735.9
32.5°	1680.1	1666.2	1669.0	1674.5	1677.3
35°	1617.3	1606.2	1609.0	1615.9	1617.3
37.5°	1553.1	1546.2	1549.0	1554.5	1558.7
40°	1487.6	1484.8	1488.9	1487.6	1497.3
42.5°	1420.6	1419.2	1423.4	1423.4	1424.8
45°	1353.6	1356.4	1357.8	1352.2	1355.0
47.5°	1279.6	1281.0	1286.6	1283.8	1285.2
50°	1207.1	1205.7	1211.3	1212.6	1208.5
52.5°	1137.3	1130.3	1135.9	1138.7	1135.9
55°	1060.5	1055.0	1057.8	1061.9	1060.5
57.5°	985.2	979.6	981.0	988.0	985.2
60°	902.9	901.5	900.1	905.6	908.4
62.5°	821.9	820.5	817.7	823.3	826.1
65°	739.6	743.8	742.4	739.6	745.2
67.5°	661.4	665.6	661.4	658.7	658.7
70°	579.1	583.3	581.9	579.1	577.7
72.5°	502.4	502.4	499.6	498.2	499.6
75°	422.8	421.4	422.8	421.4	422.8
77.5°	344.7	346.1	346.1	346.1	344.7
80°	267.9	267.9	267.9	269.3	270.7
82.5°	196.8	192.6	196.8	194.0	195.4
85°	124.2	122.8	125.6	124.2	121.4
87.5°	55.8	57.2	57.2	58.6	58.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)