

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: P294411

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294411  
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-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5983.0 lumens  
Efficiency: N/A  
Efficacy: 108.9 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

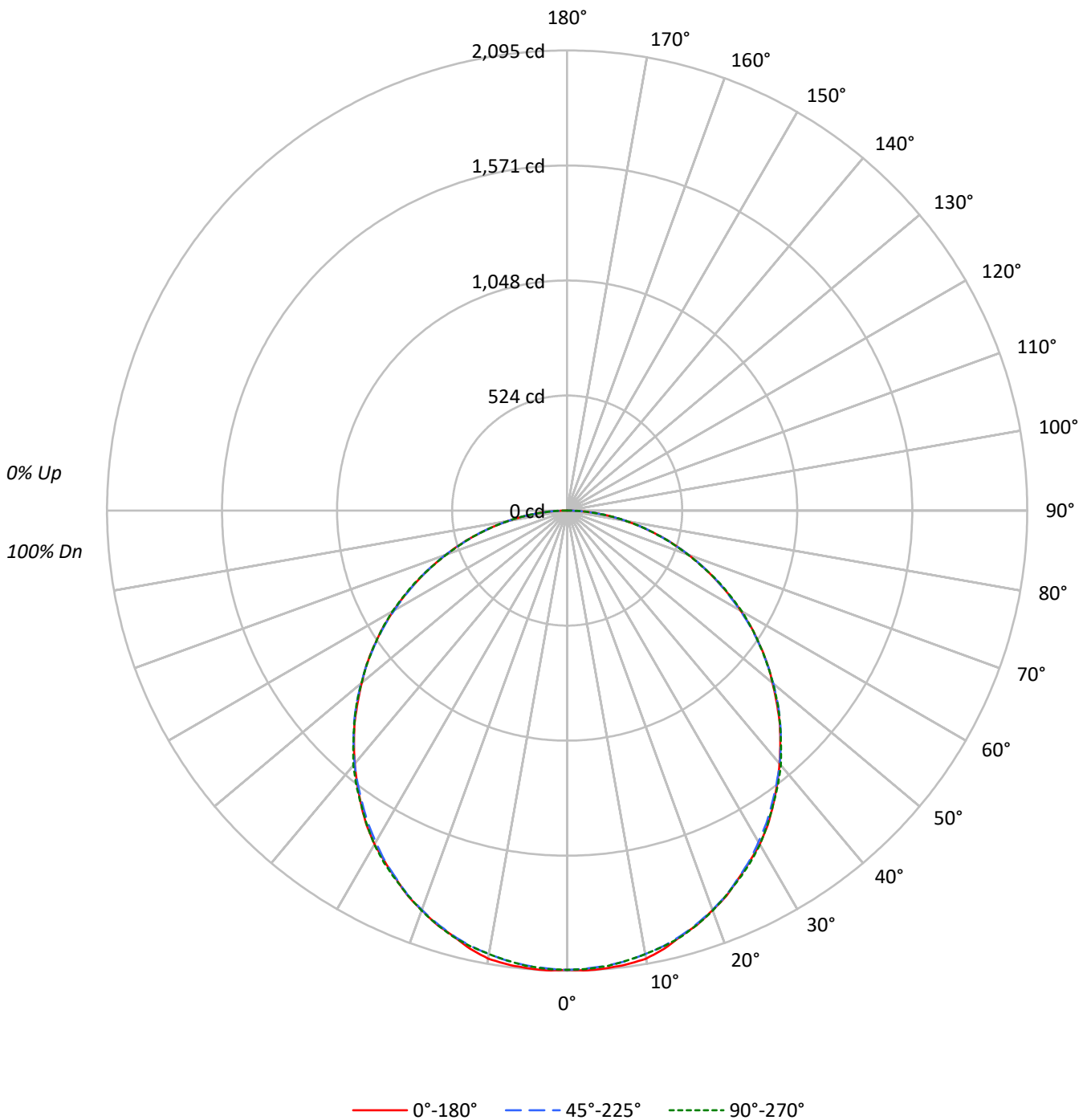
Input Watts (W): 54.963  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2814	2814	2814
5°	2824	2809	2811
10°	2830	2801	2801
15°	2793	2791	2797
20°	2772	2770	2776
25°	2742	2740	2748
30°	2725	2707	2727
35°	2686	2672	2686
40°	2642	2644	2659
45°	2604	2612	2607
50°	2555	2564	2558
55°	2516	2509	2516
60°	2457	2449	2472
65°	2381	2390	2399
70°	2304	2315	2298
75°	2222	2222	2222
80°	2099	2099	2121
85°	1939	1961	1896



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.7	3.3
10°-20°	565.2	9.4
20°-30°	851.8	14.2
30°-40°	1020.2	17.1
40°-50°	1056.1	17.7
50°-60°	957.6	16.0
60°-70°	742.4	12.4
70°-80°	451.5	7.5
80°-90°	140.5	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°	1614.8	27.0
0°-40°	2635.0	44.0
0°-60°	4648.7	77.7
0°-90°	5983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5983.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2091	2091	2091	2091	2091	
5°	2091	2078	2080	2077	2081	199
15°	2005	2006	2004	1997	2008	567
25°	1847	1847	1846	1851	1851	853
35°	1635	1624	1627	1634	1635	1023
45°	1369	1372	1373	1367	1370	1054
55°	1072	1067	1070	1074	1072	959
65°	748	752	751	748	754	742
75°	428	426	428	426	428	452
85°	126	124	127	126	123	141
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2091.1	2091.1	2091.1	2091.1	2091.1
2.5°	2095.4	2086.9	2086.9	2084.1	2088.3
5°	2091.1	2078.4	2079.8	2077.0	2081.3
7.5°	2084.1	2067.1	2068.6	2065.7	2067.1
10°	2071.4	2051.6	2050.2	2048.8	2050.2
12.5°	2043.2	2031.9	2030.5	2027.6	2031.9
15°	2005.1	2006.5	2003.6	1996.6	2007.9
17.5°	1975.4	1974.0	1971.2	1964.1	1975.4
20°	1935.9	1937.3	1934.5	1931.7	1938.7
22.5°	1897.8	1893.6	1895.0	1893.6	1895.0
25°	1847.0	1847.0	1845.6	1851.3	1851.3
27.5°	1800.5	1794.8	1797.6	1803.3	1806.1
30°	1753.9	1739.8	1742.6	1748.3	1755.3
32.5°	1698.9	1684.8	1687.6	1693.2	1696.0
35°	1635.4	1624.1	1626.9	1634.0	1635.4
37.5°	1570.5	1563.4	1566.2	1571.9	1576.1
40°	1504.1	1501.3	1505.6	1504.1	1514.0
42.5°	1436.4	1435.0	1439.2	1439.2	1440.6
45°	1368.7	1371.5	1372.9	1367.3	1370.1
47.5°	1293.9	1295.3	1301.0	1298.1	1299.5
50°	1220.5	1219.1	1224.8	1226.2	1221.9
52.5°	1150.0	1142.9	1148.6	1151.4	1148.6
55°	1072.4	1066.7	1069.6	1073.8	1072.4
57.5°	996.2	990.5	991.9	999.0	996.2
60°	912.9	911.5	910.1	915.8	918.6
62.5°	831.1	829.7	826.9	832.5	835.3
65°	747.8	752.1	750.7	747.8	753.5
67.5°	668.8	673.1	668.8	666.0	666.0
70°	585.6	589.8	588.4	585.6	584.2
72.5°	508.0	508.0	505.1	503.7	505.1
75°	427.5	426.1	427.5	426.1	427.5
77.5°	348.5	349.9	349.9	349.9	348.5
80°	270.9	270.9	270.9	272.3	273.7
82.5°	199.0	194.7	199.0	196.1	197.5
85°	125.6	124.2	127.0	125.6	122.8
87.5°	56.4	57.9	57.9	59.3	59.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)