

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: P294206

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294206  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6620.0 lumens  
Efficiency: N/A  
Efficacy: 123.2 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

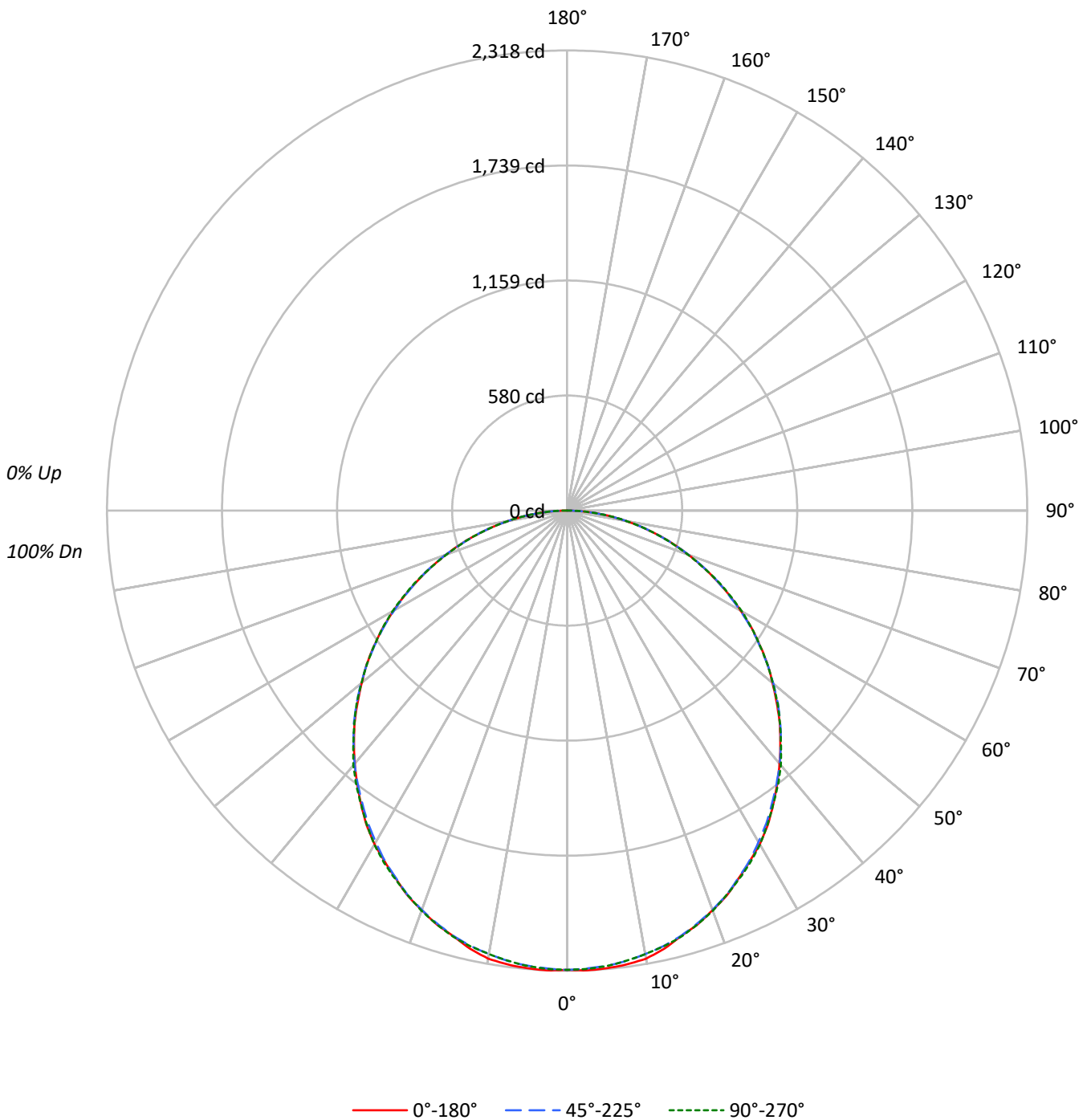
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294206

CATALOG NUMBER: 24GR-LD5-72-FGW080-UNV-L83050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P294206

CATALOG NUMBER: 24GR-LD5-72-FGW080-UNV-L83050-W2A1-U-4000K

**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°	3113	3113	3113
5°	3125	3108	3110
10°	3131	3099	3099
15°	3090	3088	3095
20°	3067	3065	3072
25°	3034	3032	3041
30°	3015	2996	3017
35°	2972	2957	2972
40°	2923	2926	2942
45°	2882	2891	2885
50°	2827	2837	2830
55°	2783	2776	2783
60°	2718	2710	2735
65°	2635	2644	2654
70°	2549	2561	2543
75°	2459	2459	2459
80°	2323	2323	2347
85°	2146	2169	2096



TEST NUMBER: P294206

CATALOG NUMBER: 24GR-LD5-72-FGW080-UNV-L83050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.8	3.3
10°-20°	625.4	9.4
20°-30°	942.5	14.2
30°-40°	1128.9	17.1
40°-50°	1168.5	17.7
50°-60°	1059.5	16.0
60°-70°	821.4	12.4
70°-80°	499.5	7.5
80°-90°	155.4	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°	1786.7	27.0
0°-40°	2915.6	44.0
0°-60°	5143.6	77.7
0°-90°	6620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6620.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2314	2314	2314	2314	2314	
5°	2314	2300	2301	2298	2303	220
15°	2218	2220	2217	2209	2222	627
25°	2044	2044	2042	2048	2048	943
35°	1810	1797	1800	1808	1810	1132
45°	1514	1518	1519	1513	1516	1167
55°	1186	1180	1183	1188	1186	1061
65°	828	832	831	828	834	821
75°	473	472	473	472	473	500
85°	139	137	140	139	136	155
90°	0	0	0	0	0	



TEST NUMBER: P294206

CATALOG NUMBER: 24GR-LD5-72-FGW080-UNV-L83050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2313.8	2313.8	2313.8	2313.8	2313.8
2.5°	2318.4	2309.1	2309.1	2306.0	2310.6
5°	2313.8	2299.7	2301.3	2298.2	2302.8
7.5°	2306.0	2287.2	2288.8	2285.7	2287.2
10°	2291.9	2270.1	2268.5	2266.9	2268.5
12.5°	2260.7	2248.2	2246.6	2243.5	2248.2
15°	2218.5	2220.1	2217.0	2209.2	2221.7
17.5°	2185.7	2184.2	2181.1	2173.3	2185.7
20°	2142.0	2143.6	2140.5	2137.3	2145.2
22.5°	2099.9	2095.2	2096.8	2095.2	2096.8
25°	2043.7	2043.7	2042.1	2048.4	2048.4
27.5°	1992.1	1985.9	1989.0	1995.3	1998.4
30°	1940.6	1925.0	1928.1	1934.4	1942.2
32.5°	1879.7	1864.1	1867.2	1873.5	1876.6
35°	1809.5	1797.0	1800.1	1807.9	1809.5
37.5°	1737.7	1729.9	1733.0	1739.2	1743.9
40°	1664.3	1661.2	1665.8	1664.3	1675.2
42.5°	1589.3	1587.8	1592.5	1592.5	1594.0
45°	1514.4	1517.5	1519.1	1512.8	1516.0
47.5°	1431.7	1433.2	1439.5	1436.3	1437.9
50°	1350.5	1348.9	1355.2	1356.7	1352.0
52.5°	1272.4	1264.6	1270.9	1274.0	1270.9
55°	1186.5	1180.3	1183.4	1188.1	1186.5
57.5°	1102.2	1096.0	1097.6	1105.4	1102.2
60°	1010.1	1008.6	1007.0	1013.2	1016.4
62.5°	919.6	918.0	914.9	921.1	924.3
65°	827.5	832.1	830.6	827.5	833.7
67.5°	740.0	744.7	740.0	736.9	736.9
70°	647.9	652.6	651.0	647.9	646.4
72.5°	562.0	562.0	558.9	557.4	558.9
75°	473.1	471.5	473.1	471.5	473.1
77.5°	385.6	387.2	387.2	387.2	385.6
80°	299.8	299.8	299.8	301.3	302.9
82.5°	220.1	215.5	220.1	217.0	218.6
85°	139.0	137.4	140.5	139.0	135.8
87.5°	62.4	64.0	64.0	65.6	65.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)