

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: P294330

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294330  
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-L93050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4905.0 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

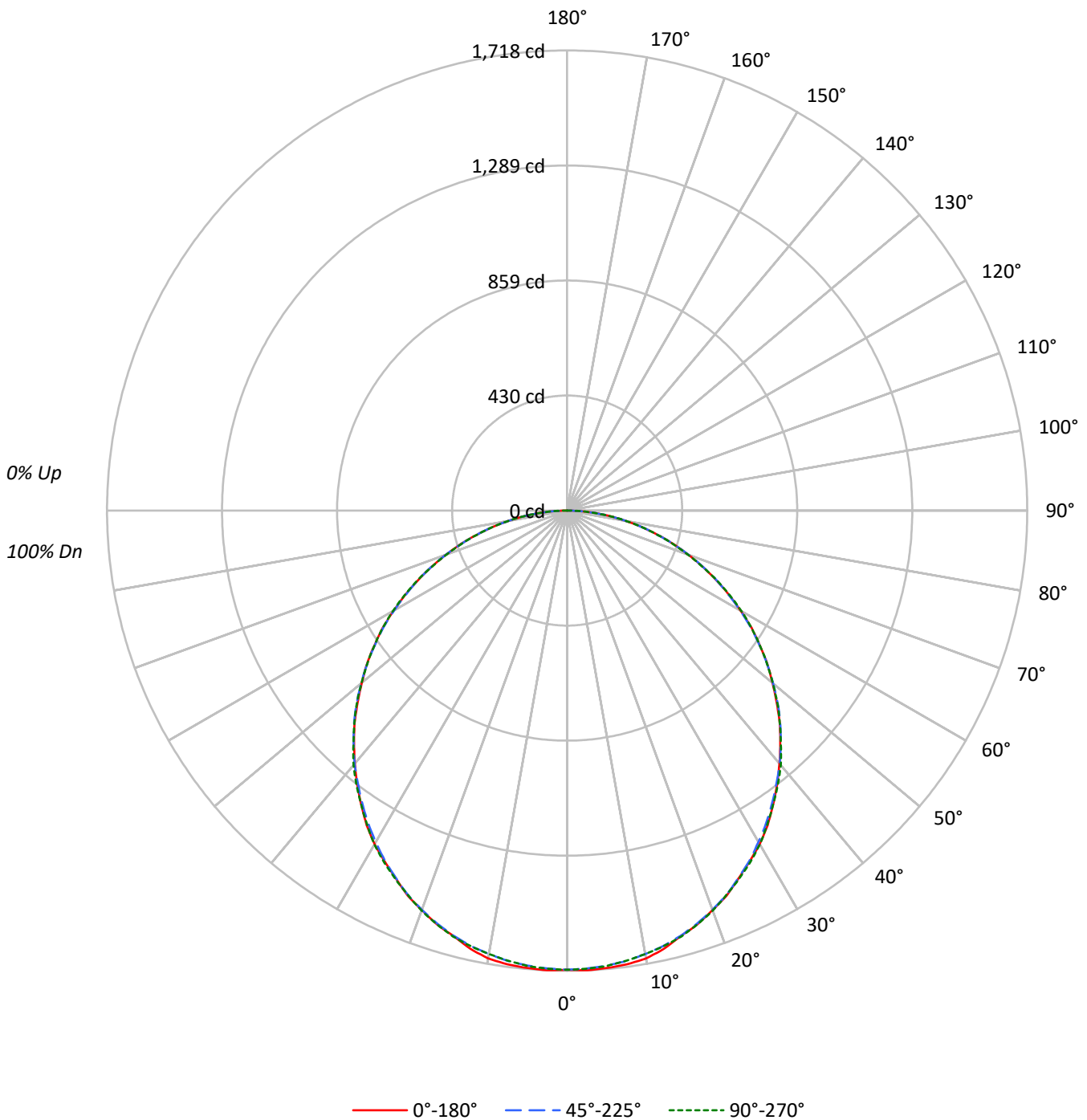
Input Watts (W): 53.753535  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2307	2307	2307
5°	2316	2303	2305
10°	2320	2296	2296
15°	2290	2288	2293
20°	2272	2271	2276
25°	2248	2246	2253
30°	2234	2220	2236
35°	2202	2191	2202
40°	2166	2168	2180
45°	2135	2142	2137
50°	2094	2102	2097
55°	2062	2057	2062
60°	2014	2008	2027
65°	1952	1959	1967
70°	1889	1898	1884
75°	1822	1822	1822
80°	1721	1721	1739
85°	1590	1607	1553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.1	3.3
10°-20°	463.4	9.4
20°-30°	698.3	14.2
30°-40°	836.4	17.1
40°-50°	865.8	17.7
50°-60°	785.0	16.0
60°-70°	608.6	12.4
70°-80°	370.1	7.5
80°-90°	115.1	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°	1323.8	27.0
0°-40°	2160.3	44.0
0°-60°	3811.1	77.7
0°-90°	4905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4905.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1714	1704	1705	1703	1706	163
15°	1644	1645	1643	1637	1646	465
25°	1514	1514	1513	1518	1518	699
35°	1341	1332	1334	1340	1341	839
45°	1122	1124	1126	1121	1123	864
55°	879	874	877	880	879	786
65°	613	617	615	613	618	608
75°	350	349	350	349	350	370
85°	103	102	104	103	101	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1714.4	1714.4	1714.4	1714.4	1714.4
2.5°	1717.8	1710.9	1710.9	1708.6	1712.0
5°	1714.4	1703.9	1705.1	1702.8	1706.3
7.5°	1708.6	1694.7	1695.8	1693.5	1694.7
10°	1698.2	1682.0	1680.8	1679.7	1680.8
12.5°	1675.0	1665.8	1664.6	1662.3	1665.8
15°	1643.8	1644.9	1642.6	1636.8	1646.1
17.5°	1619.5	1618.3	1616.0	1610.2	1619.5
20°	1587.1	1588.3	1586.0	1583.6	1589.4
22.5°	1555.9	1552.4	1553.6	1552.4	1553.6
25°	1514.2	1514.2	1513.1	1517.7	1517.7
27.5°	1476.1	1471.4	1473.7	1478.4	1480.7
30°	1437.9	1426.3	1428.6	1433.3	1439.0
32.5°	1392.8	1381.2	1383.5	1388.1	1390.5
35°	1340.7	1331.5	1333.8	1339.6	1340.7
37.5°	1287.5	1281.7	1284.0	1288.7	1292.1
40°	1233.1	1230.8	1234.3	1233.1	1241.2
42.5°	1177.6	1176.4	1179.9	1179.9	1181.1
45°	1122.1	1124.4	1125.6	1120.9	1123.2
47.5°	1060.8	1061.9	1066.6	1064.2	1065.4
50°	1000.6	999.5	1004.1	1005.2	1001.8
52.5°	942.8	937.0	941.6	943.9	941.6
55°	879.2	874.5	876.8	880.3	879.2
57.5°	816.7	812.1	813.2	819.0	816.7
60°	748.4	747.3	746.1	750.8	753.1
62.5°	681.3	680.2	677.9	682.5	684.8
65°	613.1	616.6	615.4	613.1	617.7
67.5°	548.3	551.8	548.3	546.0	546.0
70°	480.1	483.5	482.4	480.1	478.9
72.5°	416.4	416.4	414.1	413.0	414.1
75°	350.5	349.3	350.5	349.3	350.5
77.5°	285.7	286.9	286.9	286.9	285.7
80°	222.1	222.1	222.1	223.3	224.4
82.5°	163.1	159.6	163.1	160.8	161.9
85°	103.0	101.8	104.1	103.0	100.6
87.5°	46.3	47.4	47.4	48.6	48.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)