

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: P294271

Luminaire Tested: **24GR-LD5-64-FGW080-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294271  
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-LD5-64-FGW080-UNV-L82765-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: 5569.0 lumens  
Efficiency: N/A  
Efficacy: 119.8 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

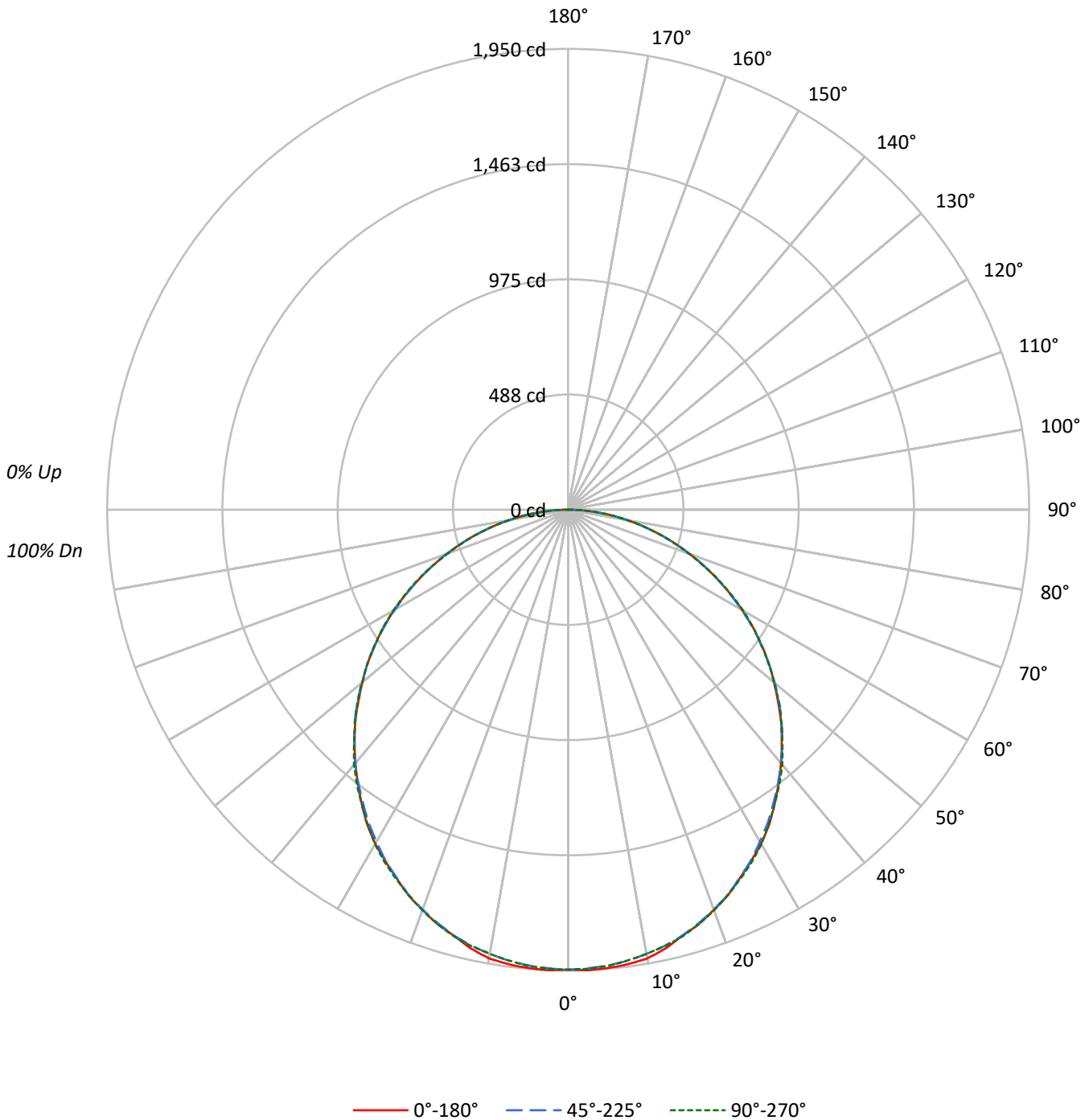
Input Watts (W): 46.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2619	2619	2619
5°	2629	2615	2616
10°	2634	2607	2607
15°	2600	2598	2603
20°	2580	2578	2584
25°	2552	2550	2558
30°	2536	2520	2538
35°	2500	2487	2500
40°	2459	2461	2475
45°	2424	2432	2427
50°	2378	2386	2381
55°	2342	2335	2342
60°	2287	2280	2301
65°	2216	2224	2233
70°	2144	2155	2139
75°	2069	2069	2069
80°	1954	1954	1974
85°	1805	1825	1765



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	3.3
10°-20°	526.1	9.4
20°-30°	792.9	14.2
30°-40°	949.6	17.1
40°-50°	983.0	17.7
50°-60°	891.3	16.0
60°-70°	691.0	12.4
70°-80°	420.2	7.5
80°-90°	130.7	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°	1503.1	27.0
0°-40°	2452.7	44.0
0°-60°	4327.0	77.7
0°-90°	5569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5569.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1946	1935	1936	1933	1937	185
15°	1866	1868	1865	1858	1869	528
25°	1719	1719	1718	1723	1723	794
35°	1522	1512	1514	1521	1522	952
45°	1274	1277	1278	1273	1275	981
55°	998	993	996	1000	998	892
65°	696	700	699	696	701	690
75°	398	397	398	397	398	420
85°	117	116	118	117	114	131
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1950.4	1942.5	1942.5	1939.9	1943.8
5°	1946.4	1934.6	1935.9	1933.3	1937.2
7.5°	1939.9	1924.1	1925.4	1922.8	1924.1
10°	1928.0	1909.7	1908.3	1907.0	1908.3
12.5°	1901.8	1891.3	1890.0	1887.3	1891.3
15°	1866.3	1867.6	1865.0	1858.4	1868.9
17.5°	1838.7	1837.4	1834.8	1828.2	1838.7
20°	1802.0	1803.3	1800.6	1798.0	1804.6
22.5°	1766.5	1762.6	1763.9	1762.6	1763.9
25°	1719.2	1719.2	1717.9	1723.2	1723.2
27.5°	1675.9	1670.6	1673.2	1678.5	1681.1
30°	1632.5	1619.4	1622.0	1627.3	1633.8
32.5°	1581.3	1568.2	1570.8	1576.1	1578.7
35°	1522.2	1511.7	1514.3	1520.9	1522.2
37.5°	1461.8	1455.2	1457.9	1463.1	1467.0
40°	1400.1	1397.4	1401.4	1400.1	1409.3
42.5°	1337.0	1335.7	1339.6	1339.6	1341.0
45°	1274.0	1276.6	1277.9	1272.7	1275.3
47.5°	1204.4	1205.7	1210.9	1208.3	1209.6
50°	1136.1	1134.8	1140.0	1141.3	1137.4
52.5°	1070.4	1063.8	1069.1	1071.7	1069.1
55°	998.2	992.9	995.5	999.5	998.2
57.5°	927.2	922.0	923.3	929.9	927.2
60°	849.8	848.4	847.1	852.4	855.0
62.5°	773.6	772.3	769.6	774.9	777.5
65°	696.1	700.0	698.7	696.1	701.3
67.5°	622.5	626.5	622.5	619.9	619.9
70°	545.1	549.0	547.7	545.1	543.7
72.5°	472.8	472.8	470.2	468.9	470.2
75°	398.0	396.6	398.0	396.6	398.0
77.5°	324.4	325.7	325.7	325.7	324.4
80°	252.2	252.2	252.2	253.5	254.8
82.5°	185.2	181.2	185.2	182.6	183.9
85°	116.9	115.6	118.2	116.9	114.3
87.5°	52.5	53.8	53.8	55.2	55.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)