

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: P294406

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294406  
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-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5568.0 lumens  
Efficiency: N/A  
Efficacy: 104.7 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

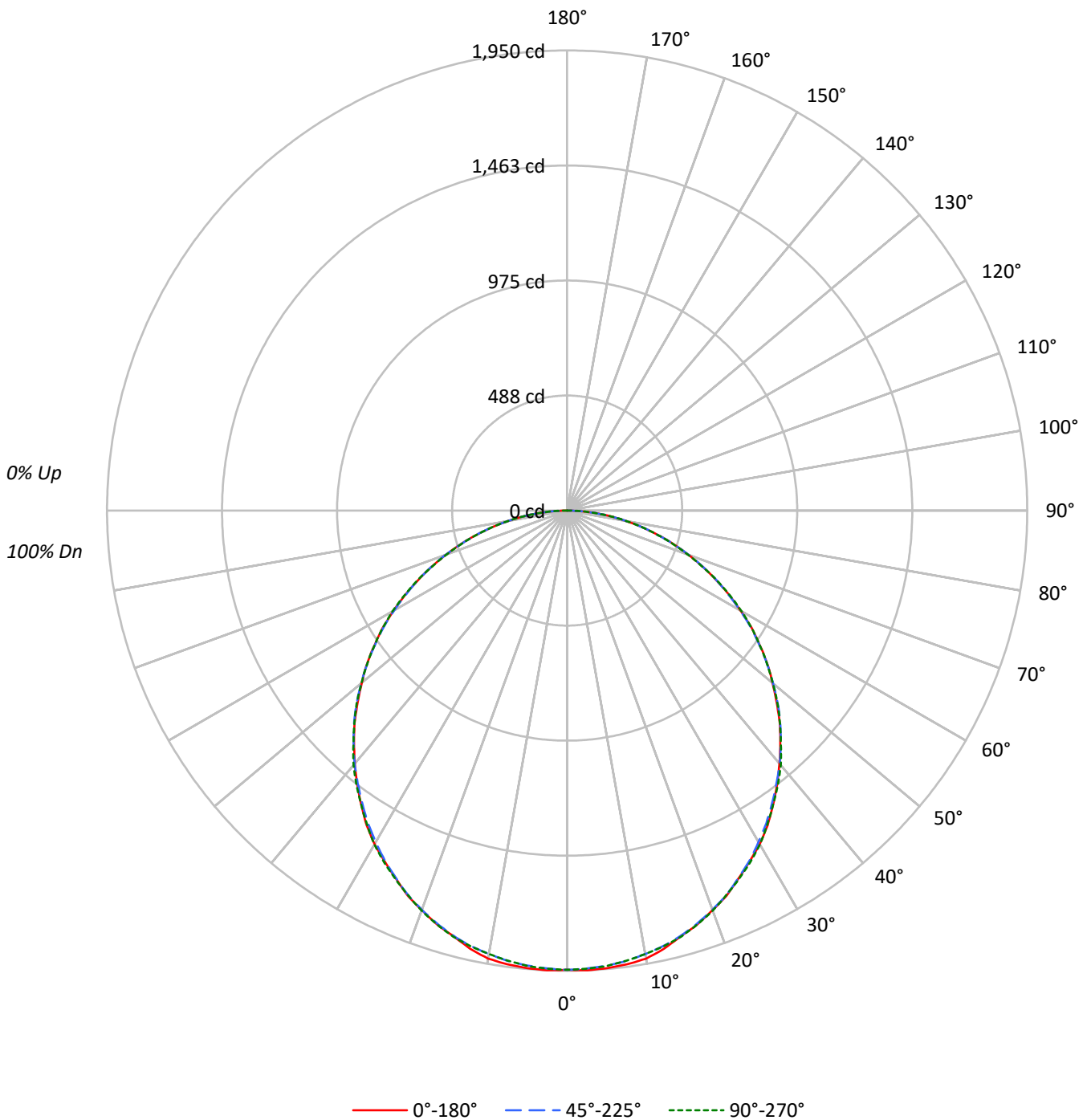
Input Watts (W): 53.196  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2618	2618	2618
5°	2628	2614	2616
10°	2634	2607	2607
15°	2599	2597	2603
20°	2580	2578	2583
25°	2552	2550	2558
30°	2536	2520	2538
35°	2500	2487	2500
40°	2459	2461	2475
45°	2424	2431	2426
50°	2378	2386	2380
55°	2341	2335	2341
60°	2286	2279	2301
65°	2216	2224	2232
70°	2144	2154	2138
75°	2069	2069	2069
80°	1953	1953	1974
85°	1805	1825	1763



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	3.3
10°-20°	526.0	9.4
20°-30°	792.7	14.2
30°-40°	949.5	17.1
40°-50°	982.8	17.7
50°-60°	891.1	16.0
60°-70°	690.9	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°	1502.8	27.0
0°-40°	2452.3	44.0
0°-60°	4326.2	77.7
0°-90°	5568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5568.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1946	1934	1936	1933	1937	185
15°	1866	1867	1865	1858	1869	528
25°	1719	1719	1718	1723	1723	793
35°	1522	1511	1514	1521	1522	952
45°	1274	1276	1278	1272	1275	981
55°	998	993	995	999	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°	1946.1	1946.1	1946.1	1946.1	1946.1
2.5°	1950.0	1942.1	1942.1	1939.5	1943.5
5°	1946.1	1934.3	1935.6	1932.9	1936.9
7.5°	1939.5	1923.8	1925.1	1922.4	1923.8
10°	1927.7	1909.3	1908.0	1906.7	1908.0
12.5°	1901.4	1890.9	1889.6	1887.0	1890.9
15°	1866.0	1867.3	1864.7	1858.1	1868.6
17.5°	1838.4	1837.1	1834.5	1827.9	1838.4
20°	1801.6	1802.9	1800.3	1797.7	1804.3
22.5°	1766.2	1762.2	1763.6	1762.2	1763.6
25°	1718.9	1718.9	1717.6	1722.8	1722.8
27.5°	1675.6	1670.3	1672.9	1678.2	1680.8
30°	1632.2	1619.1	1621.7	1627.0	1633.6
32.5°	1581.0	1567.9	1570.5	1575.8	1578.4
35°	1521.9	1511.4	1514.1	1520.6	1521.9
37.5°	1461.5	1455.0	1457.6	1462.8	1466.8
40°	1399.8	1397.2	1401.1	1399.8	1409.0
42.5°	1336.8	1335.5	1339.4	1339.4	1340.7
45°	1273.8	1276.4	1277.7	1272.4	1275.1
47.5°	1204.2	1205.5	1210.7	1208.1	1209.4
50°	1135.9	1134.6	1139.8	1141.1	1137.2
52.5°	1070.2	1063.6	1068.9	1071.5	1068.9
55°	998.0	992.7	995.4	999.3	998.0
57.5°	927.1	921.8	923.1	929.7	927.1
60°	849.6	848.3	847.0	852.2	854.9
62.5°	773.4	772.1	769.5	774.8	777.4
65°	696.0	699.9	698.6	696.0	701.2
67.5°	622.4	626.4	622.4	619.8	619.8
70°	545.0	548.9	547.6	545.0	543.6
72.5°	472.7	472.7	470.1	468.8	470.1
75°	397.9	396.6	397.9	396.6	397.9
77.5°	324.3	325.7	325.7	325.7	324.3
80°	252.1	252.1	252.1	253.4	254.8
82.5°	185.2	181.2	185.2	182.5	183.8
85°	116.9	115.6	118.2	116.9	114.2
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)