

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: P294399

Luminaire Tested: **24GR-LD5-64-FGW080-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294399  
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-L92765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5158.0 lumens  
Efficiency: N/A  
Efficacy: 109.6 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

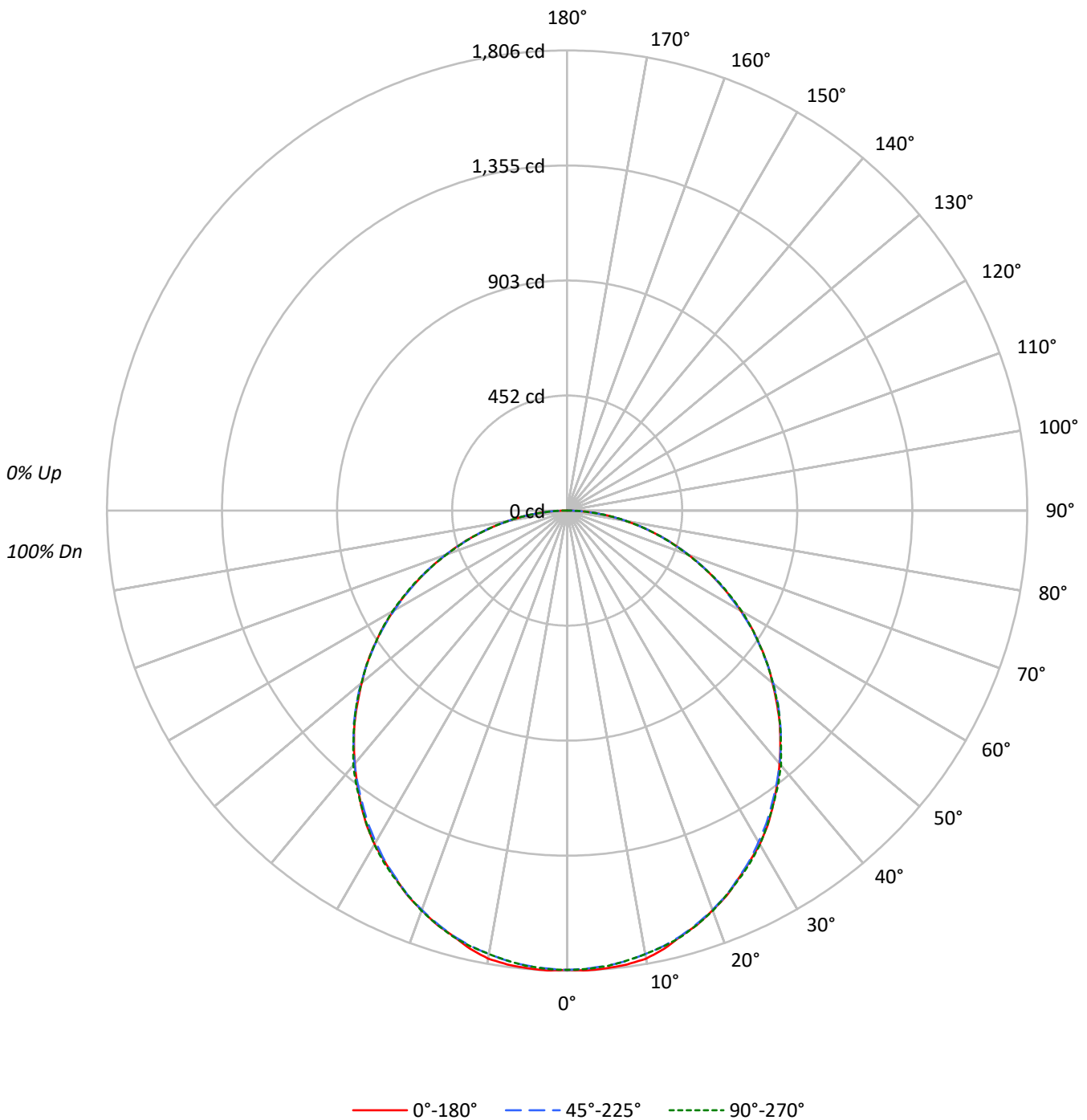
Input Watts (W): 47.058  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2426	2426	2426
5°	2435	2422	2423
10°	2440	2415	2415
15°	2408	2406	2411
20°	2390	2388	2393
25°	2364	2362	2369
30°	2349	2334	2351
35°	2316	2304	2316
40°	2278	2280	2293
45°	2245	2252	2248
50°	2202	2210	2205
55°	2169	2163	2169
60°	2118	2111	2131
65°	2053	2060	2068
70°	1986	1996	1981
75°	1916	1916	1916
80°	1810	1810	1829
85°	1672	1690	1633



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.5	3.3
10°-20°	487.3	9.4
20°-30°	734.4	14.2
30°-40°	879.6	17.1
40°-50°	910.5	17.7
50°-60°	825.5	16.0
60°-70°	640.0	12.4
70°-80°	389.2	7.5
80°-90°	121.1	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°	1392.1	27.0
0°-40°	2271.7	44.0
0°-60°	4007.7	77.7
0°-90°	5158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5158.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1803	1792	1793	1791	1794	172
15°	1729	1730	1727	1721	1731	489
25°	1592	1592	1591	1596	1596	735
35°	1410	1400	1403	1409	1410	882
45°	1180	1182	1184	1179	1181	909
55°	924	920	922	926	924	826
65°	645	648	647	645	650	639
75°	369	367	369	367	369	389
85°	108	107	110	108	106	121
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1802.8	1802.8	1802.8	1802.8	1802.8
2.5°	1806.4	1799.1	1799.1	1796.7	1800.3
5°	1802.8	1791.8	1793.0	1790.6	1794.3
7.5°	1796.7	1782.1	1783.3	1780.9	1782.1
10°	1785.7	1768.7	1767.5	1766.3	1767.5
12.5°	1761.4	1751.7	1750.5	1748.0	1751.7
15°	1728.6	1729.8	1727.4	1721.3	1731.0
17.5°	1703.0	1701.8	1699.4	1693.3	1703.0
20°	1669.0	1670.2	1667.8	1665.3	1671.4
22.5°	1636.1	1632.5	1633.7	1632.5	1633.7
25°	1592.3	1592.3	1591.1	1596.0	1596.0
27.5°	1552.2	1547.3	1549.8	1554.6	1557.1
30°	1512.0	1499.9	1502.3	1507.2	1513.3
32.5°	1464.6	1452.4	1454.9	1459.7	1462.2
35°	1409.9	1400.1	1402.6	1408.7	1409.9
37.5°	1353.9	1347.8	1350.3	1355.1	1358.8
40°	1296.7	1294.3	1298.0	1296.7	1305.3
42.5°	1238.3	1237.1	1240.8	1240.8	1242.0
45°	1180.0	1182.4	1183.6	1178.7	1181.2
47.5°	1115.5	1116.7	1121.6	1119.1	1120.4
50°	1052.2	1051.0	1055.9	1057.1	1053.4
52.5°	991.4	985.3	990.2	992.6	990.2
55°	924.5	919.6	922.1	925.7	924.5
57.5°	858.8	853.9	855.2	861.2	858.8
60°	787.0	785.8	784.6	789.5	791.9
62.5°	716.5	715.3	712.8	717.7	720.1
65°	644.7	648.4	647.2	644.7	649.6
67.5°	576.6	580.2	576.6	574.2	574.2
70°	504.8	508.5	507.3	504.8	503.6
72.5°	437.9	437.9	435.5	434.3	435.5
75°	368.6	367.4	368.6	367.4	368.6
77.5°	300.5	301.7	301.7	301.7	300.5
80°	233.6	233.6	233.6	234.8	236.0
82.5°	171.5	167.9	171.5	169.1	170.3
85°	108.3	107.0	109.5	108.3	105.8
87.5°	48.7	49.9	49.9	51.1	51.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)