

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: P294265

Luminaire Tested: **24GR-LD5-56-FGW080-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294265  
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-LD5-56-FGW080-UNV-L82765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5109.0 lumens  
Efficiency: N/A  
Efficacy: 127.5 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

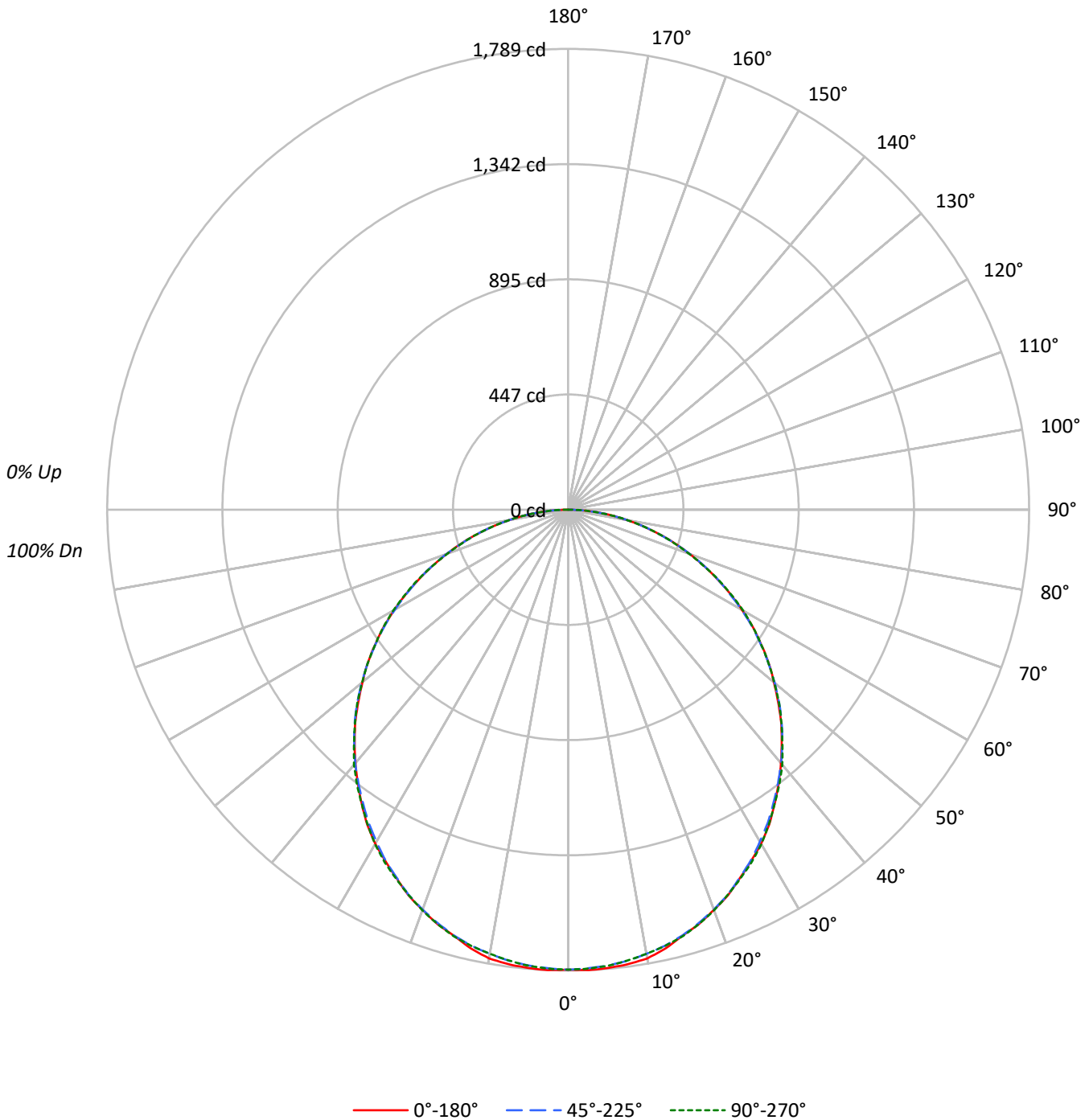
Input Watts (W): 40.083  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2403	2403	2403
5°	2412	2399	2400
10°	2417	2392	2392
15°	2385	2383	2388
20°	2367	2365	2370
25°	2341	2340	2347
30°	2327	2312	2329
35°	2294	2282	2294
40°	2256	2258	2271
45°	2224	2231	2226
50°	2182	2189	2184
55°	2148	2142	2148
60°	2098	2091	2111
65°	2033	2041	2048
70°	1967	1976	1962
75°	1898	1898	1898
80°	1792	1792	1811
85°	1655	1673	1618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.8	3.3
10°-20°	482.7	9.4
20°-30°	727.4	14.2
30°-40°	871.2	17.1
40°-50°	901.8	17.7
50°-60°	817.7	16.0
60°-70°	633.9	12.4
70°-80°	385.5	7.5
80°-90°	119.9	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°	1378.9	27.0
0°-40°	2250.1	44.0
0°-60°	3969.6	77.7
0°-90°	5109.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5109.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1786	1786	1786	1786	1786	
5°	1786	1775	1776	1774	1777	170
15°	1712	1713	1711	1705	1715	484
25°	1577	1577	1576	1581	1581	728
35°	1396	1387	1389	1395	1396	874
45°	1169	1171	1172	1168	1170	900
55°	916	911	913	917	916	818
65°	639	642	641	639	643	633
75°	365	364	365	364	365	386
85°	107	106	108	107	105	120
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1785.7	1785.7	1785.7	1785.7	1785.7
2.5°	1789.3	1782.0	1782.0	1779.6	1783.2
5°	1785.7	1774.8	1776.0	1773.6	1777.2
7.5°	1779.6	1765.2	1766.4	1764.0	1765.2
10°	1768.8	1751.9	1750.7	1749.5	1750.7
12.5°	1744.7	1735.0	1733.8	1731.4	1735.0
15°	1712.2	1713.4	1711.0	1704.9	1714.6
17.5°	1686.9	1685.6	1683.2	1677.2	1686.9
20°	1653.1	1654.3	1651.9	1649.5	1655.5
22.5°	1620.6	1617.0	1618.2	1617.0	1618.2
25°	1577.2	1577.2	1576.0	1580.8	1580.8
27.5°	1537.4	1532.6	1535.0	1539.9	1542.3
30°	1497.7	1485.6	1488.0	1492.9	1498.9
32.5°	1450.7	1438.6	1441.1	1445.9	1448.3
35°	1396.5	1386.8	1389.2	1395.3	1396.5
37.5°	1341.0	1335.0	1337.4	1342.3	1345.9
40°	1284.4	1282.0	1285.6	1284.4	1292.9
42.5°	1226.6	1225.4	1229.0	1229.0	1230.2
45°	1168.7	1171.2	1172.4	1167.5	1170.0
47.5°	1104.9	1106.1	1110.9	1108.5	1109.7
50°	1042.2	1041.0	1045.8	1047.1	1043.4
52.5°	982.0	976.0	980.8	983.2	980.8
55°	915.7	910.9	913.3	916.9	915.7
57.5°	850.7	845.8	847.0	853.1	850.7
60°	779.6	778.4	777.2	782.0	784.4
62.5°	709.7	708.5	706.1	710.9	713.3
65°	638.6	642.2	641.0	638.6	643.4
67.5°	571.1	574.7	571.1	568.7	568.7
70°	500.0	503.6	502.4	500.0	498.8
72.5°	433.8	433.8	431.4	430.1	431.4
75°	365.1	363.9	365.1	363.9	365.1
77.5°	297.6	298.8	298.8	298.8	297.6
80°	231.3	231.3	231.3	232.5	233.7
82.5°	169.9	166.3	169.9	167.5	168.7
85°	107.2	106.0	108.4	107.2	104.8
87.5°	48.2	49.4	49.4	50.6	50.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)