

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: P294405

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294405  
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-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5394.0 lumens  
Efficiency: N/A  
Efficacy: 102.5 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

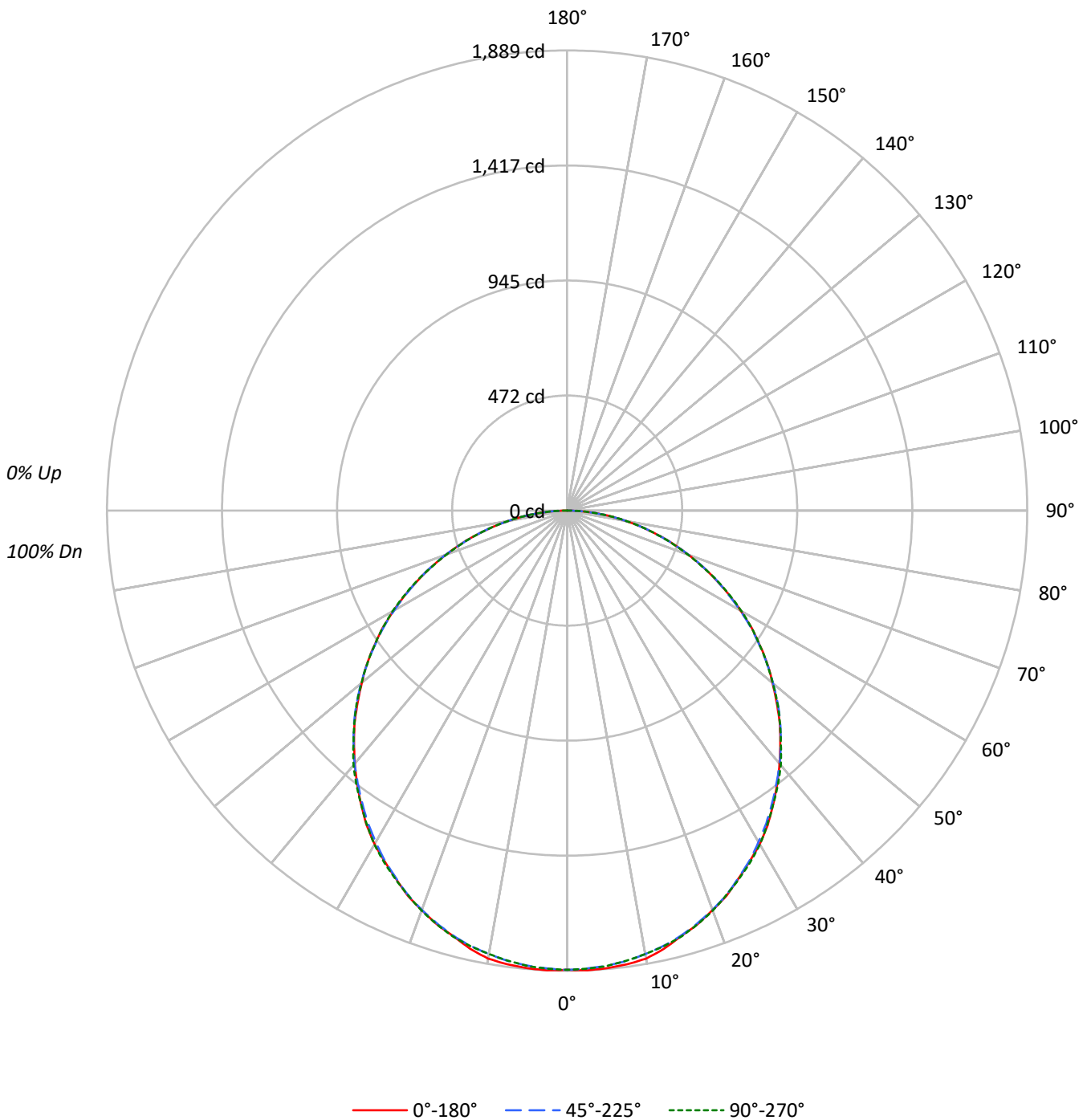
Input Watts (W): 52.638  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2537	2537	2537
5°	2546	2533	2534
10°	2551	2525	2525
15°	2518	2516	2522
20°	2499	2497	2503
25°	2472	2470	2478
30°	2457	2441	2459
35°	2422	2409	2422
40°	2382	2384	2398
45°	2348	2355	2350
50°	2303	2311	2306
55°	2268	2262	2268
60°	2215	2208	2228
65°	2146	2155	2163
70°	2077	2087	2072
75°	2004	2004	2004
80°	1892	1892	1912
85°	1748	1768	1709



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.3	3.3
10°-20°	509.6	9.4
20°-30°	768.0	14.2
30°-40°	919.8	17.1
40°-50°	952.1	17.7
50°-60°	863.3	16.0
60°-70°	669.3	12.4
70°-80°	407.0	7.5
80°-90°	126.6	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°	1455.8	27.0
0°-40°	2375.6	44.0
0°-60°	4191.0	77.7
0°-90°	5394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5394.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1885	1885	1885	1885	1885	
5°	1885	1874	1875	1872	1876	179
15°	1808	1809	1806	1800	1810	511
25°	1665	1665	1664	1669	1669	769
35°	1474	1464	1467	1473	1474	922
45°	1234	1236	1238	1233	1235	951
55°	967	962	964	968	967	864
65°	674	678	677	674	679	669
75°	385	384	385	384	385	407
85°	113	112	114	113	111	127
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1885.3	1885.3	1885.3	1885.3	1885.3
2.5°	1889.1	1881.4	1881.4	1878.9	1882.7
5°	1885.3	1873.8	1875.1	1872.5	1876.4
7.5°	1878.9	1863.6	1864.9	1862.4	1863.6
10°	1867.5	1849.6	1848.4	1847.1	1848.4
12.5°	1842.0	1831.8	1830.6	1828.0	1831.8
15°	1807.7	1808.9	1806.4	1800.0	1810.2
17.5°	1781.0	1779.7	1777.1	1770.8	1781.0
20°	1745.3	1746.6	1744.1	1741.5	1747.9
22.5°	1711.0	1707.2	1708.4	1707.2	1708.4
25°	1665.2	1665.2	1663.9	1669.0	1669.0
27.5°	1623.2	1618.1	1620.7	1625.8	1628.3
30°	1581.2	1568.5	1571.1	1576.1	1582.5
32.5°	1531.6	1518.9	1521.4	1526.5	1529.1
35°	1474.4	1464.2	1466.7	1473.1	1474.4
37.5°	1415.9	1409.5	1412.0	1417.1	1420.9
40°	1356.1	1353.5	1357.3	1356.1	1365.0
42.5°	1295.0	1293.7	1297.6	1297.6	1298.8
45°	1233.9	1236.5	1237.8	1232.7	1235.2
47.5°	1166.5	1167.8	1172.9	1170.3	1171.6
50°	1100.4	1099.1	1104.2	1105.5	1101.6
52.5°	1036.8	1030.4	1035.5	1038.0	1035.5
55°	966.8	961.7	964.3	968.1	966.8
57.5°	898.1	893.0	894.3	900.7	898.1
60°	823.1	821.8	820.5	825.6	828.1
62.5°	749.3	748.0	745.5	750.5	753.1
65°	674.2	678.0	676.8	674.2	679.3
67.5°	603.0	606.8	603.0	600.4	600.4
70°	527.9	531.7	530.5	527.9	526.7
72.5°	458.0	458.0	455.4	454.1	455.4
75°	385.4	384.2	385.4	384.2	385.4
77.5°	314.2	315.5	315.5	315.5	314.2
80°	244.2	244.2	244.2	245.5	246.8
82.5°	179.4	175.6	179.4	176.8	178.1
85°	113.2	111.9	114.5	113.2	110.7
87.5°	50.9	52.2	52.2	53.4	53.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)