

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: P294246

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294246  
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-LD5-42-FGW080-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3764.0 lumens  
Efficiency: N/A  
Efficacy: 131.4 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

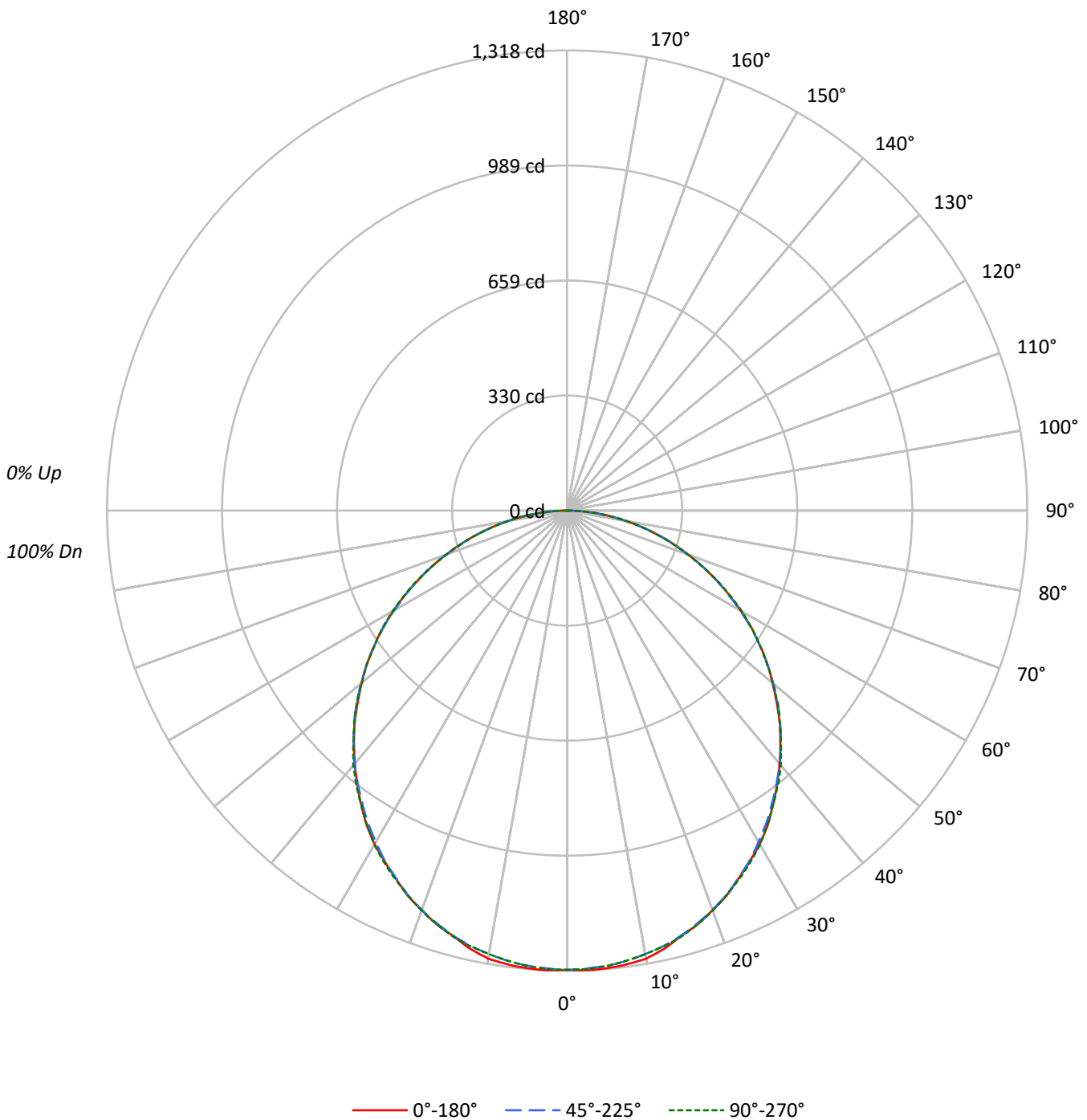
Input Watts (W): 28.644  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1770	1770	1770
5°	1777	1767	1768
10°	1780	1762	1762
15°	1757	1756	1760
20°	1744	1743	1746
25°	1725	1724	1729
30°	1714	1703	1716
35°	1690	1681	1690
40°	1662	1664	1673
45°	1639	1643	1640
50°	1607	1613	1609
55°	1582	1578	1582
60°	1545	1541	1555
65°	1498	1504	1509
70°	1449	1456	1446
75°	1398	1398	1398
80°	1320	1320	1334
85°	1220	1233	1192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.4	3.3
10°-20°	355.6	9.4
20°-30°	535.9	14.2
30°-40°	641.8	17.1
40°-50°	664.4	17.7
50°-60°	602.4	16.0
60°-70°	467.1	12.4
70°-80°	284.0	7.5
80°-90°	88.4	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°	1015.9	27.0
0°-40°	1657.7	44.0
0°-60°	2924.6	77.7
0°-90°	3764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3764.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1316	1308	1308	1307	1309	125
15°	1261	1262	1260	1256	1263	357
25°	1162	1162	1161	1165	1165	536
35°	1029	1022	1024	1028	1029	644
45°	861	863	864	860	862	663
55°	675	671	673	676	675	603
65°	470	473	472	470	474	467
75°	269	268	269	268	269	284
85°	79	78	80	79	77	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1315.6	1315.6	1315.6	1315.6	1315.6
2.5°	1318.2	1312.9	1312.9	1311.1	1313.8
5°	1315.6	1307.6	1308.5	1306.7	1309.3
7.5°	1311.1	1300.5	1301.4	1299.6	1300.5
10°	1303.1	1290.7	1289.8	1288.9	1289.8
12.5°	1285.4	1278.3	1277.4	1275.6	1278.3
15°	1261.4	1262.3	1260.5	1256.1	1263.2
17.5°	1242.8	1241.9	1240.1	1235.7	1242.8
20°	1217.9	1218.8	1217.0	1215.3	1219.7
22.5°	1193.9	1191.3	1192.2	1191.3	1192.2
25°	1162.0	1162.0	1161.1	1164.7	1164.7
27.5°	1132.7	1129.1	1130.9	1134.5	1136.2
30°	1103.4	1094.5	1096.3	1099.9	1104.3
32.5°	1068.8	1059.9	1061.7	1065.2	1067.0
35°	1028.8	1021.7	1023.5	1027.9	1028.8
37.5°	988.0	983.6	985.3	988.9	991.6
40°	946.3	944.5	947.2	946.3	952.5
42.5°	903.7	902.8	905.4	905.4	906.3
45°	861.1	862.8	863.7	860.2	862.0
47.5°	814.0	814.9	818.5	816.7	817.6
50°	767.9	767.0	770.5	771.4	768.7
52.5°	723.5	719.0	722.6	724.4	722.6
55°	674.6	671.1	672.9	675.5	674.6
57.5°	626.7	623.2	624.0	628.5	626.7
60°	574.3	573.4	572.6	576.1	577.9
62.5°	522.9	522.0	520.2	523.7	525.5
65°	470.5	473.1	472.3	470.5	474.0
67.5°	420.8	423.4	420.8	419.0	419.0
70°	368.4	371.1	370.2	368.4	367.5
72.5°	319.6	319.6	317.8	316.9	317.8
75°	269.0	268.1	269.0	268.1	269.0
77.5°	219.3	220.1	220.1	220.1	219.3
80°	170.4	170.4	170.4	171.3	172.2
82.5°	125.2	122.5	125.2	123.4	124.3
85°	79.0	78.1	79.9	79.0	77.2
87.5°	35.5	36.4	36.4	37.3	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)