

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: P294257

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294257  
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-LD5-48-FGW080-UNV-L82765-W2A1-U-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4408.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 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

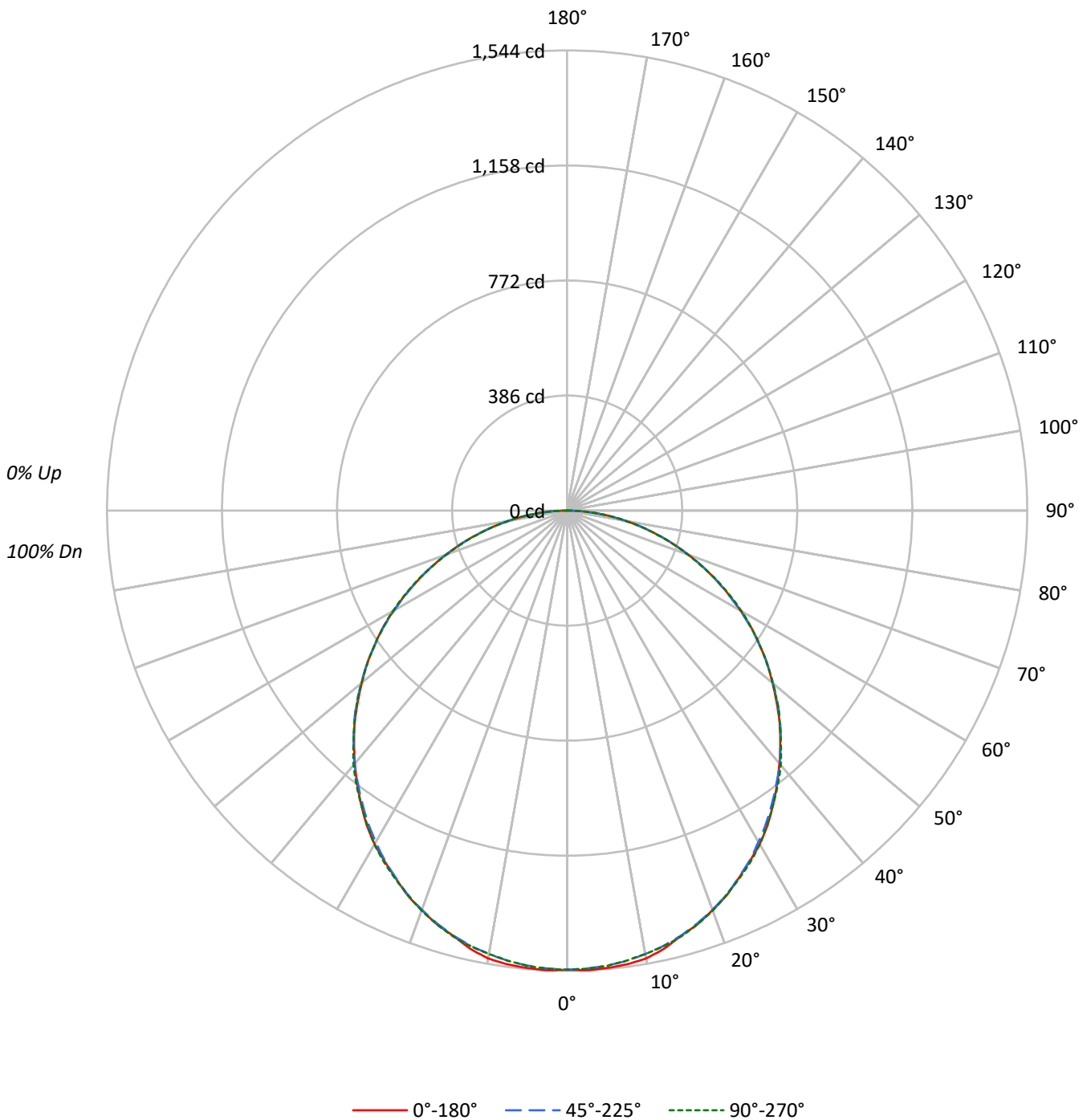
Input Watts (W): 33.759  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2073	2073	2073
5°	2081	2070	2071
10°	2085	2064	2064
15°	2058	2056	2061
20°	2042	2041	2045
25°	2020	2019	2025
30°	2008	1995	2009
35°	1979	1969	1979
40°	1946	1948	1959
45°	1919	1925	1921
50°	1882	1889	1885
55°	1853	1848	1853
60°	1810	1804	1821
65°	1754	1761	1767
70°	1697	1705	1693
75°	1638	1638	1638
80°	1547	1547	1563
85°	1428	1445	1396



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.7	3.3
10°-20°	416.4	9.4
20°-30°	627.6	14.2
30°-40°	751.7	17.1
40°-50°	778.1	17.7
50°-60°	705.5	16.0
60°-70°	547.0	12.4
70°-80°	332.6	7.5
80°-90°	103.5	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°	1189.7	27.0
0°-40°	1941.4	44.0
0°-60°	3424.9	77.7
0°-90°	4408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4408.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1541	1541	1541	1541	1541	
5°	1541	1531	1532	1530	1533	147
15°	1477	1478	1476	1471	1479	418
25°	1361	1361	1360	1364	1364	628
35°	1205	1196	1199	1204	1205	754
45°	1008	1010	1012	1007	1009	777
55°	790	786	788	791	790	706
65°	551	554	553	551	555	546
75°	315	314	315	314	315	333
85°	92	92	94	92	90	104
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1540.6	1540.6	1540.6	1540.6	1540.6
2.5°	1543.8	1537.5	1537.5	1535.4	1538.6
5°	1540.6	1531.3	1532.3	1530.3	1533.4
7.5°	1535.4	1523.0	1524.0	1521.9	1523.0
10°	1526.1	1511.5	1510.5	1509.5	1510.5
12.5°	1505.3	1497.0	1495.9	1493.9	1497.0
15°	1477.2	1478.3	1476.2	1471.0	1479.3
17.5°	1455.4	1454.4	1452.3	1447.1	1455.4
20°	1426.3	1427.3	1425.3	1423.2	1428.4
22.5°	1398.2	1395.1	1396.1	1395.1	1396.1
25°	1360.8	1360.8	1359.8	1363.9	1363.9
27.5°	1326.5	1322.3	1324.4	1328.6	1330.7
30°	1292.2	1281.8	1283.9	1288.0	1293.2
32.5°	1251.6	1241.2	1243.3	1247.5	1249.6
35°	1204.9	1196.5	1198.6	1203.8	1204.9
37.5°	1157.0	1151.8	1153.9	1158.1	1161.2
40°	1108.2	1106.1	1109.2	1108.2	1115.5
42.5°	1058.3	1057.2	1060.4	1060.4	1061.4
45°	1008.4	1010.5	1011.5	1007.3	1009.4
47.5°	953.3	954.3	958.5	956.4	957.4
50°	899.2	898.2	902.3	903.4	900.3
52.5°	847.3	842.1	846.2	848.3	846.2
55°	790.1	785.9	788.0	791.1	790.1
57.5°	733.9	729.8	730.8	736.0	733.9
60°	672.6	671.6	670.5	674.7	676.8
62.5°	612.3	611.3	609.2	613.3	615.4
65°	551.0	554.1	553.1	551.0	555.1
67.5°	492.8	495.9	492.8	490.7	490.7
70°	431.4	434.5	433.5	431.4	430.4
72.5°	374.2	374.2	372.2	371.1	372.2
75°	315.0	314.0	315.0	314.0	315.0
77.5°	256.8	257.8	257.8	257.8	256.8
80°	199.6	199.6	199.6	200.6	201.7
82.5°	146.6	143.5	146.6	144.5	145.5
85°	92.5	91.5	93.6	92.5	90.4
87.5°	41.6	42.6	42.6	43.7	43.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)