

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: P294371

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294371  
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-L92765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3312.0 lumens  
Efficiency: N/A  
Efficacy: 116.0 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

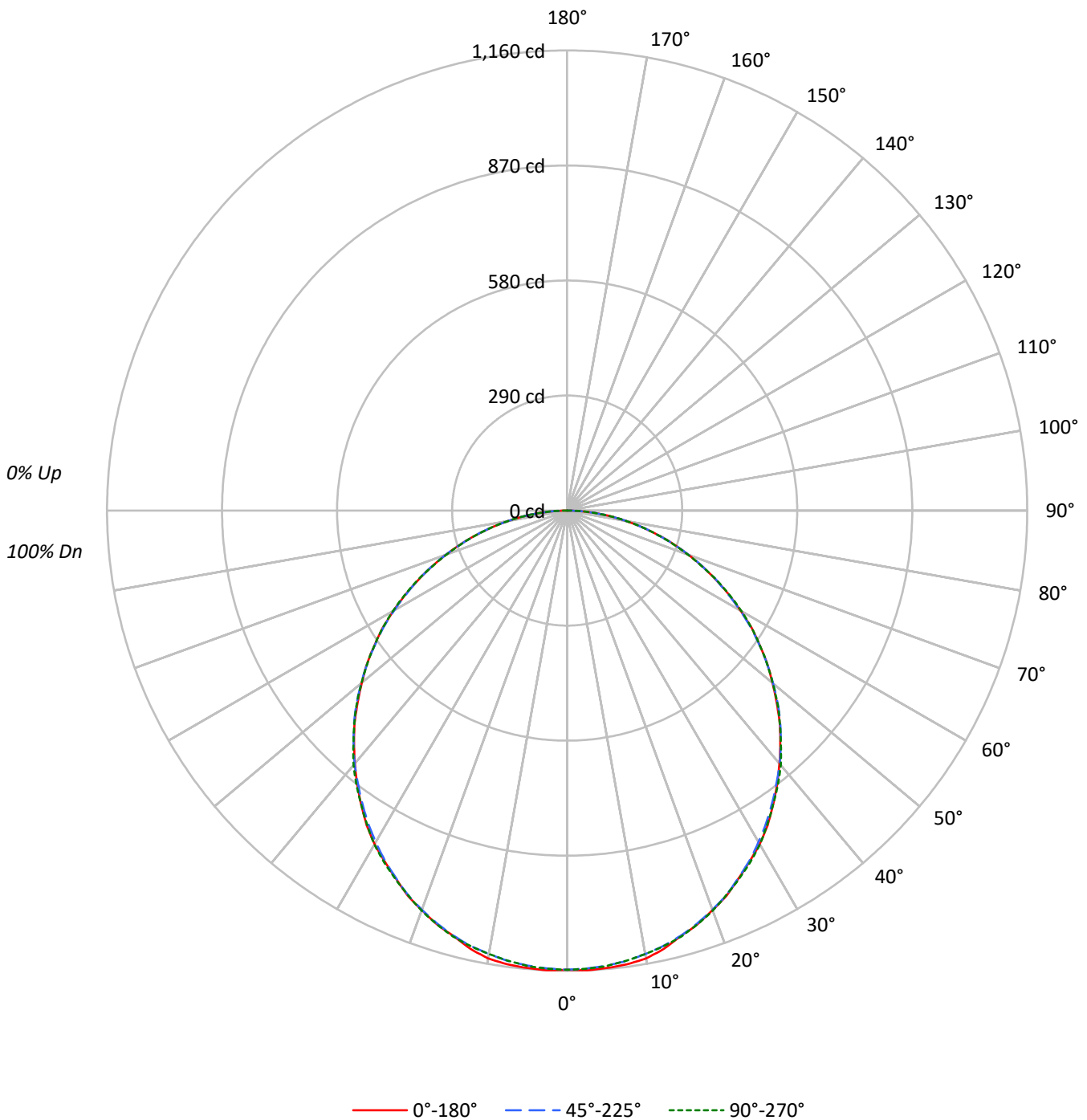
Input Watts (W): 28.551  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294371

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P294371

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-4500K

**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°	1558	1558	1558
5°	1563	1555	1556
10°	1567	1551	1551
15°	1546	1545	1548
20°	1535	1533	1537
25°	1518	1517	1521
30°	1508	1499	1510
35°	1487	1479	1487
40°	1462	1464	1472
45°	1442	1446	1443
50°	1414	1419	1416
55°	1392	1389	1392
60°	1360	1356	1368
65°	1318	1323	1328
70°	1275	1281	1272
75°	1231	1231	1231
80°	1162	1162	1174
85°	1073	1085	1050



TEST NUMBER: P294371

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.5	3.3
10°-20°	312.9	9.4
20°-30°	471.5	14.2
30°-40°	564.8	17.1
40°-50°	584.6	17.7
50°-60°	530.1	16.0
60°-70°	411.0	12.4
70°-80°	249.9	7.5
80°-90°	77.7	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°	893.9	27.0
0°-40°	1458.7	44.0
0°-60°	2573.4	77.7
0°-90°	3312.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3312.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1158	1151	1151	1150	1152	110
15°	1110	1111	1109	1105	1112	314
25°	1022	1022	1022	1025	1025	472
35°	905	899	901	904	905	566
45°	758	759	760	757	758	584
55°	594	590	592	594	594	531
65°	414	416	416	414	417	411
75°	237	236	237	236	237	250
85°	70	69	70	70	68	78
90°	0	0	0	0	0	



TEST NUMBER: P294371

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.6	1157.6	1157.6	1157.6	1157.6
2.5°	1159.9	1155.2	1155.2	1153.7	1156.0
5°	1157.6	1150.6	1151.3	1149.8	1152.1
7.5°	1153.7	1144.3	1145.1	1143.5	1144.3
10°	1146.6	1135.7	1134.9	1134.1	1134.9
12.5°	1131.0	1124.8	1124.0	1122.4	1124.8
15°	1109.9	1110.7	1109.2	1105.2	1111.5
17.5°	1093.5	1092.8	1091.2	1087.3	1093.5
20°	1071.7	1072.4	1070.9	1069.3	1073.2
22.5°	1050.6	1048.2	1049.0	1048.2	1049.0
25°	1022.5	1022.5	1021.7	1024.8	1024.8
27.5°	996.7	993.6	995.1	998.2	999.8
30°	970.9	963.1	964.7	967.8	971.7
32.5°	940.4	932.6	934.2	937.3	938.9
35°	905.3	899.0	900.6	904.5	905.3
37.5°	869.4	865.5	867.0	870.1	872.5
40°	832.6	831.1	833.4	832.6	838.1
42.5°	795.2	794.4	796.7	796.7	797.5
45°	757.7	759.2	760.0	756.9	758.4
47.5°	716.3	717.0	720.2	718.6	719.4
50°	675.6	674.9	678.0	678.8	676.4
52.5°	636.6	632.7	635.8	637.4	635.8
55°	593.6	590.5	592.1	594.4	593.6
57.5°	551.5	548.3	549.1	553.0	551.5
60°	505.4	504.6	503.8	506.9	508.5
62.5°	460.1	459.3	457.7	460.8	462.4
65°	414.0	416.3	415.5	414.0	417.1
67.5°	370.2	372.6	370.2	368.7	368.7
70°	324.2	326.5	325.7	324.2	323.4
72.5°	281.2	281.2	279.6	278.9	279.6
75°	236.7	235.9	236.7	235.9	236.7
77.5°	192.9	193.7	193.7	193.7	192.9
80°	150.0	150.0	150.0	150.8	151.5
82.5°	110.1	107.8	110.1	108.6	109.4
85°	69.5	68.7	70.3	69.5	68.0
87.5°	31.2	32.0	32.0	32.8	32.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)