

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: P294369

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294369  
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-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: 3127.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 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

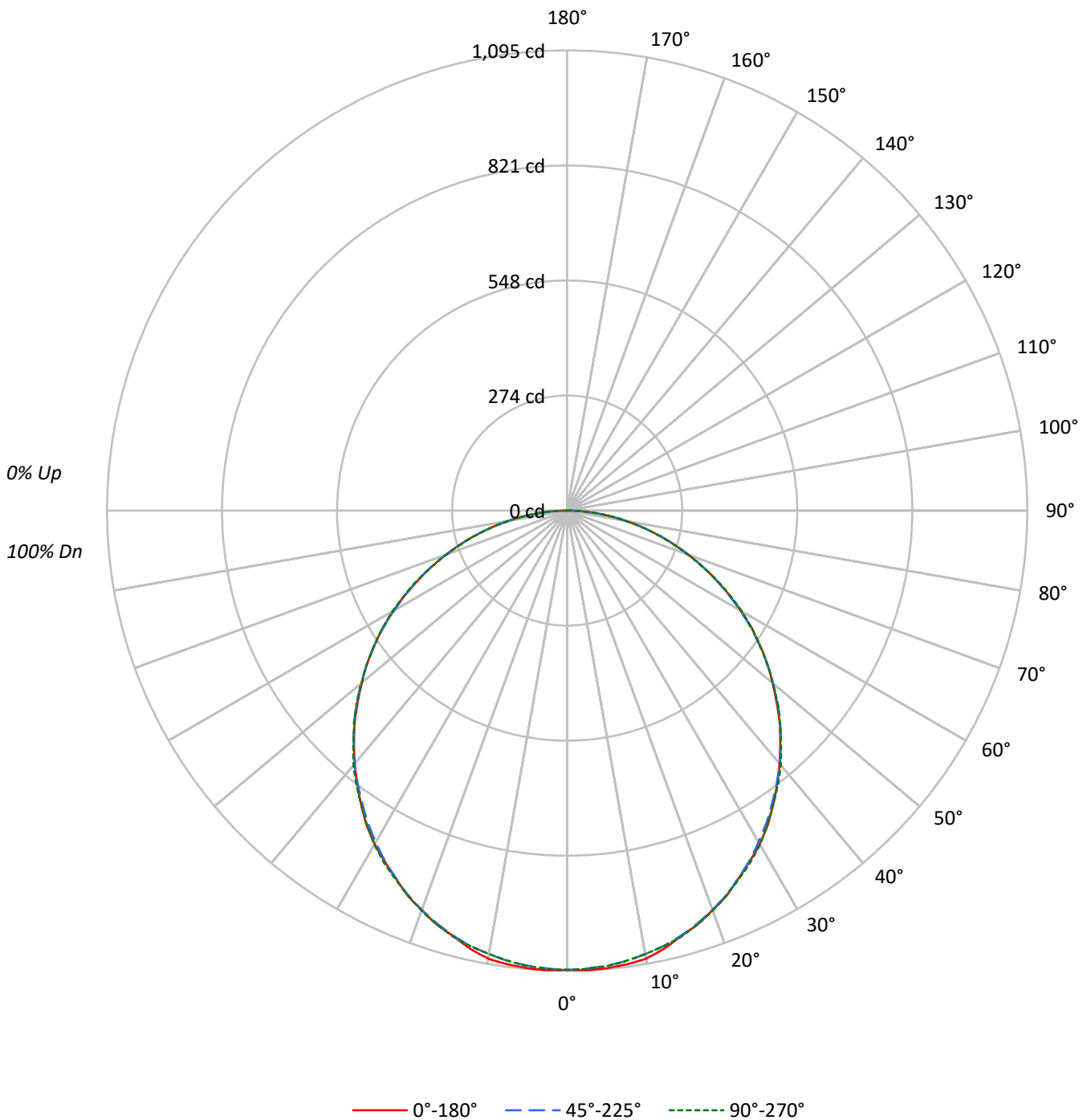
Input Watts (W): 28.086  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294369

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P294369

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-3500K

**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°	1470	1470	1470
5°	1476	1468	1469
10°	1479	1464	1464
15°	1460	1459	1462
20°	1449	1448	1451
25°	1433	1432	1436
30°	1424	1415	1425
35°	1404	1397	1404
40°	1381	1382	1390
45°	1361	1365	1363
50°	1335	1340	1337
55°	1315	1311	1315
60°	1284	1280	1292
65°	1245	1249	1254
70°	1204	1210	1201
75°	1162	1162	1162
80°	1097	1097	1109
85°	1013	1025	991



TEST NUMBER: P294369

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	3.3
10°-20°	295.4	9.4
20°-30°	445.2	14.2
30°-40°	533.2	17.1
40°-50°	552.0	17.7
50°-60°	500.5	16.0
60°-70°	388.0	12.4
70°-80°	236.0	7.5
80°-90°	73.4	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°	844.0	27.0
0°-40°	1377.2	44.0
0°-60°	2429.6	77.7
0°-90°	3127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3127.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1093	1086	1087	1086	1088	104
15°	1048	1049	1047	1044	1049	296
25°	965	965	965	968	968	446
35°	855	849	850	854	855	535
45°	715	717	718	715	716	551
55°	560	558	559	561	560	501
65°	391	393	392	391	394	388
75°	224	223	224	223	224	236
85°	66	65	66	66	64	73
90°	0	0	0	0	0	



TEST NUMBER: P294369

CATALOG NUMBER: 24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1092.9	1092.9	1092.9	1092.9	1092.9
2.5°	1095.1	1090.7	1090.7	1089.2	1091.4
5°	1092.9	1086.3	1087.0	1085.5	1087.8
7.5°	1089.2	1080.4	1081.1	1079.6	1080.4
10°	1082.6	1072.3	1071.5	1070.8	1071.5
12.5°	1067.8	1061.9	1061.2	1059.7	1061.9
15°	1047.9	1048.7	1047.2	1043.5	1049.4
17.5°	1032.5	1031.7	1030.2	1026.6	1032.5
20°	1011.8	1012.5	1011.1	1009.6	1013.3
22.5°	991.9	989.7	990.4	989.7	990.4
25°	965.3	965.3	964.6	967.6	967.6
27.5°	941.0	938.1	939.5	942.5	944.0
30°	916.7	909.3	910.8	913.7	917.4
32.5°	887.9	880.5	882.0	885.0	886.4
35°	854.7	848.8	850.3	854.0	854.7
37.5°	820.8	817.1	818.6	821.5	823.7
40°	786.1	784.7	786.9	786.1	791.3
42.5°	750.7	750.0	752.2	752.2	753.0
45°	715.3	716.8	717.6	714.6	716.1
47.5°	676.3	677.0	679.9	678.5	679.2
50°	637.9	637.2	640.1	640.9	638.6
52.5°	601.0	597.3	600.3	601.8	600.3
55°	560.5	557.5	559.0	561.2	560.5
57.5°	520.6	517.7	518.4	522.1	520.6
60°	477.1	476.4	475.7	478.6	480.1
62.5°	434.4	433.6	432.2	435.1	436.6
65°	390.9	393.1	392.3	390.9	393.8
67.5°	349.6	351.8	349.6	348.1	348.1
70°	306.0	308.3	307.5	306.0	305.3
72.5°	265.5	265.5	264.0	263.3	264.0
75°	223.5	222.7	223.5	222.7	223.5
77.5°	182.2	182.9	182.9	182.9	182.2
80°	141.6	141.6	141.6	142.3	143.1
82.5°	104.0	101.8	104.0	102.5	103.2
85°	65.6	64.9	66.4	65.6	64.2
87.5°	29.5	30.2	30.2	31.0	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)