

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: P294221

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294221  
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-LD5-30-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: 2771.0 lumens  
Efficiency: N/A  
Efficacy: 134.8 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

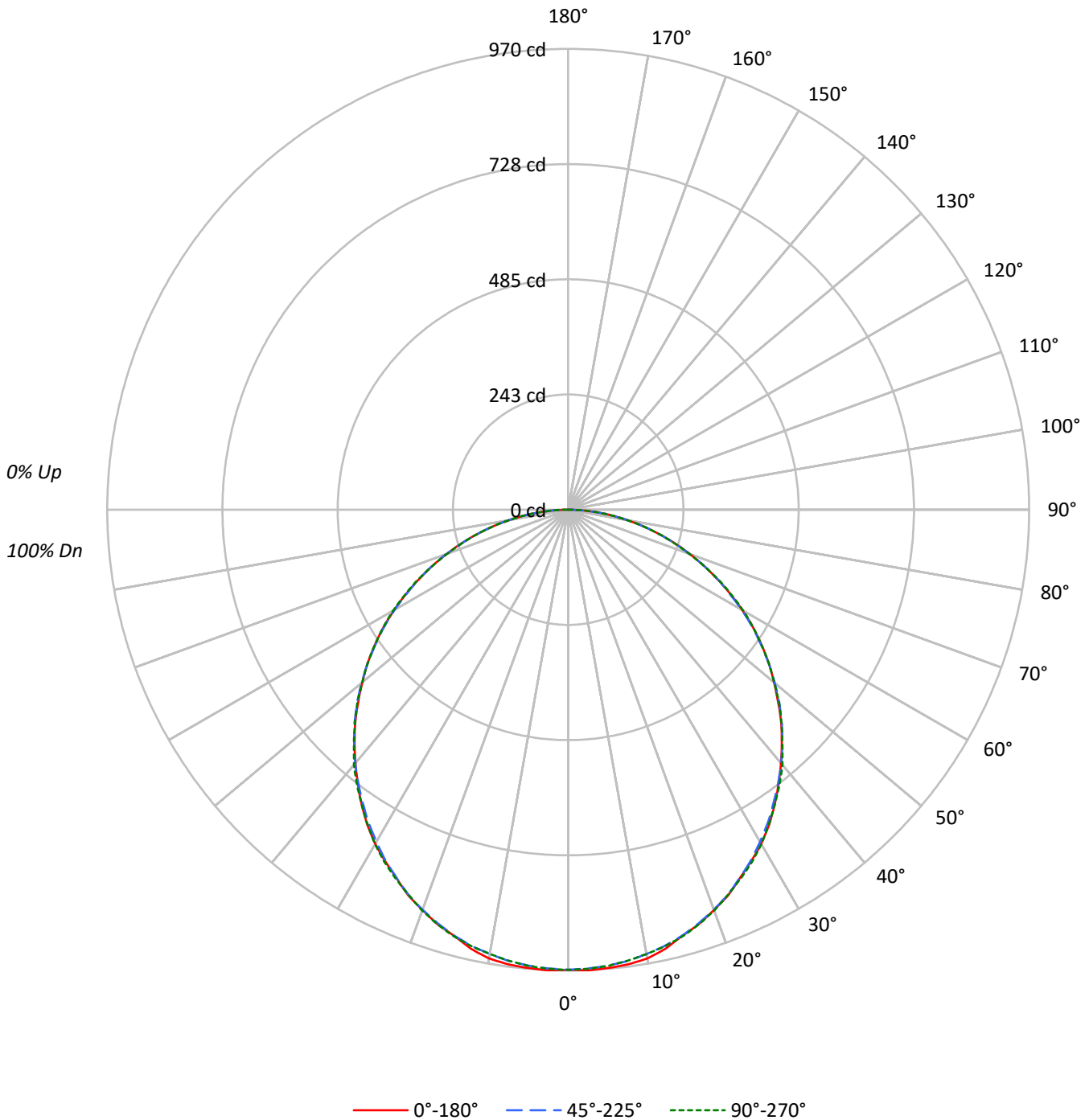
Input Watts (W): 20.553  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294221

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L82765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P294221

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L82765-W2A1-U-5700K

**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°	1303	1303	1303
5°	1308	1301	1302
10°	1311	1297	1297
15°	1293	1293	1295
20°	1284	1283	1286
25°	1270	1269	1273
30°	1262	1254	1263
35°	1244	1238	1244
40°	1224	1225	1232
45°	1206	1210	1208
50°	1183	1187	1185
55°	1165	1162	1165
60°	1138	1134	1145
65°	1103	1107	1111
70°	1067	1072	1065
75°	1029	1029	1029
80°	972	972	982
85°	898	908	878



TEST NUMBER: P294221

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L82765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.6	3.3
10°-20°	261.8	9.4
20°-30°	394.5	14.2
30°-40°	472.5	17.1
40°-50°	489.1	17.7
50°-60°	443.5	16.0
60°-70°	343.9	12.4
70°-80°	209.1	7.5
80°-90°	65.0	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°	747.9	27.0
0°-40°	1220.4	44.0
0°-60°	2153.0	77.7
0°-90°	2771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2771.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	968	963	963	962	964	92
15°	929	929	928	925	930	263
25°	855	855	855	857	857	395
35°	757	752	754	757	757	474
45°	634	635	636	633	635	488
55°	497	494	495	497	497	444
65°	346	348	348	346	349	344
75°	198	197	198	197	198	209
85°	58	58	59	58	57	65
90°	0	0	0	0	0	



TEST NUMBER: P294221

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L82765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	968.5	968.5	968.5	968.5	968.5
2.5°	970.5	966.5	966.5	965.2	967.2
5°	968.5	962.6	963.3	962.0	963.9
7.5°	965.2	957.4	958.0	956.7	957.4
10°	959.3	950.2	949.5	948.9	949.5
12.5°	946.3	941.0	940.4	939.1	941.0
15°	928.6	929.3	928.0	924.7	929.9
17.5°	914.9	914.3	912.9	909.7	914.9
20°	896.6	897.3	896.0	894.7	897.9
22.5°	879.0	877.0	877.7	877.0	877.7
25°	855.4	855.4	854.8	857.4	857.4
27.5°	833.9	831.3	832.6	835.2	836.5
30°	812.3	805.8	807.1	809.7	813.0
32.5°	786.8	780.3	781.6	784.2	785.5
35°	757.4	752.2	753.5	756.8	757.4
37.5°	727.4	724.1	725.4	728.0	730.0
40°	696.6	695.3	697.3	696.6	701.2
42.5°	665.3	664.6	666.6	666.6	667.2
45°	633.9	635.2	635.9	633.2	634.6
47.5°	599.3	599.9	602.5	601.2	601.9
50°	565.3	564.6	567.2	567.9	565.9
52.5°	532.6	529.3	532.0	533.3	532.0
55°	496.7	494.1	495.4	497.3	496.7
57.5°	461.4	458.8	459.4	462.7	461.4
60°	422.8	422.2	421.5	424.1	425.4
62.5°	384.9	384.3	383.0	385.6	386.9
65°	346.4	348.3	347.7	346.4	349.0
67.5°	309.8	311.7	309.8	308.5	308.5
70°	271.2	273.2	272.5	271.2	270.6
72.5°	235.3	235.3	234.0	233.3	234.0
75°	198.0	197.4	198.0	197.4	198.0
77.5°	161.4	162.1	162.1	162.1	161.4
80°	125.5	125.5	125.5	126.1	126.8
82.5°	92.1	90.2	92.1	90.8	91.5
85°	58.2	57.5	58.8	58.2	56.9
87.5°	26.1	26.8	26.8	27.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)