

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: P292723

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292723  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-26)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2304.0 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

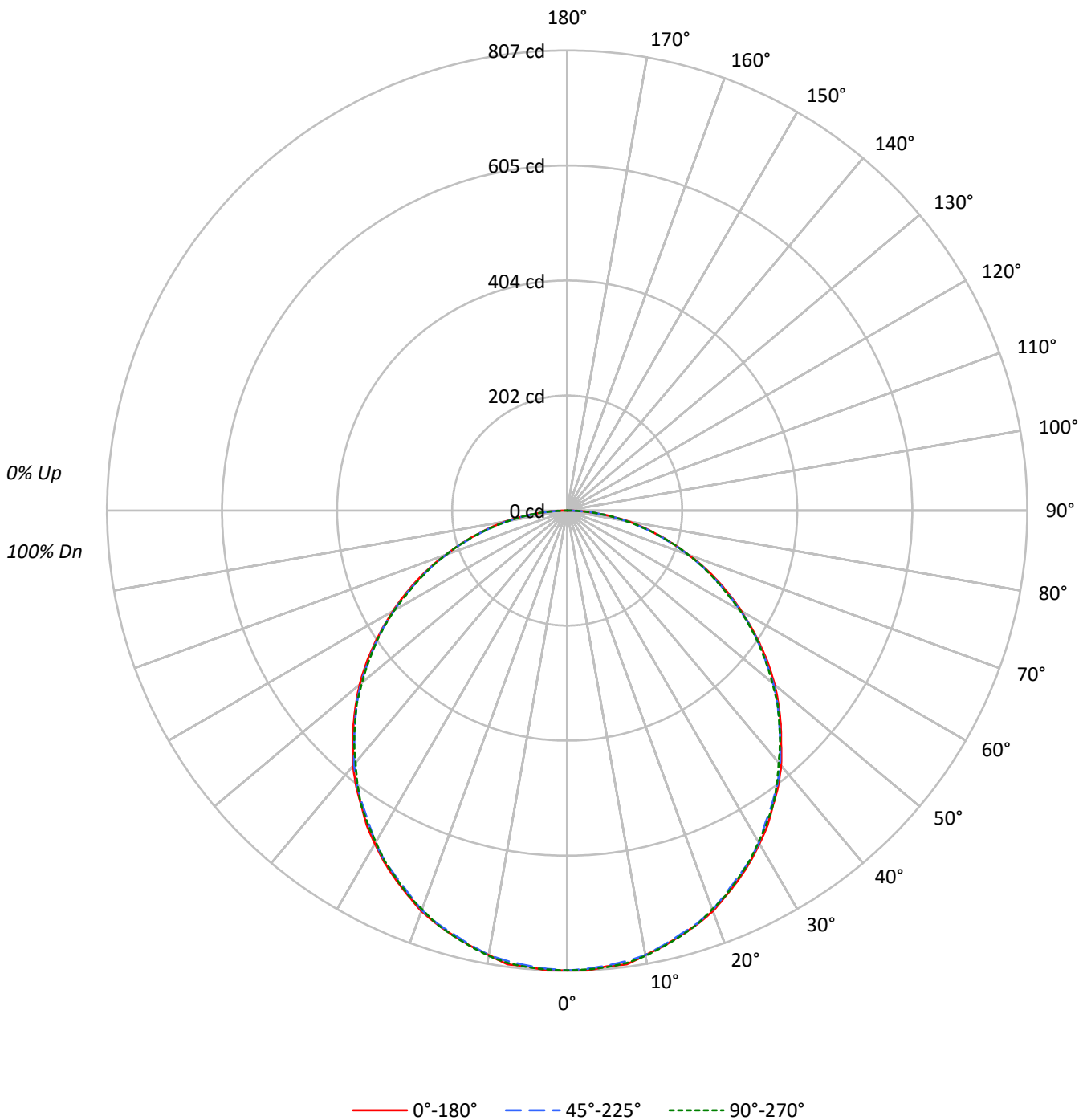
Input Watts (W): 22.041  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292723

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292723

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K

**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	85	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°	2170	2170	2170
5°	2167	2164	2171
10°	2163	2163	2167
15°	2148	2143	2150
20°	2141	2135	2131
25°	2117	2105	2111
30°	2096	2090	2085
35°	2069	2060	2069
40°	2051	2041	2027
45°	2016	2003	2003
50°	1988	1977	1966
55°	1946	1933	1930
60°	1900	1890	1883
65°	1852	1831	1822
70°	1778	1773	1778
75°	1717	1695	1709
80°	1698	1615	1604
85°	1504	1463	1482



TEST NUMBER: P292723

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	3.3
10°-20°	217.7	9.4
20°-30°	327.8	14.2
30°-40°	393.3	17.1
40°-50°	407.0	17.7
50°-60°	368.8	16.0
60°-70°	285.9	12.4
70°-80°	173.6	7.5
80°-90°	53.7	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°	621.7	27.0
0°-40°	1015.0	44.1
0°-60°	1790.8	77.7
0°-90°	2304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2304.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	802	802	801	803	804	76
15°	771	771	769	773	772	218
25°	713	712	709	712	711	329
35°	630	630	627	628	630	395
45°	530	529	526	526	526	409
55°	415	414	412	411	411	371
65°	291	291	288	289	286	288
75°	165	164	163	163	164	176
85°	49	48	47	47	48	55
90°	0	0	0	0	0	



TEST NUMBER: P292723

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	806.4	806.4	806.4	806.4	806.4
2.5°	807.1	803.7	804.4	805.7	805.7
5°	802.4	802.4	801.0	803.0	803.7
7.5°	802.4	799.0	797.0	799.0	800.3
10°	791.5	790.2	791.5	790.9	792.9
12.5°	782.1	780.7	780.7	782.7	782.7
15°	771.2	771.2	769.2	772.6	771.9
17.5°	760.4	760.4	759.1	759.1	760.4
20°	747.6	744.2	745.5	744.9	744.2
22.5°	730.0	727.9	726.6	728.6	729.3
25°	713.1	711.7	709.0	711.7	711.0
27.5°	694.8	693.4	692.8	691.4	692.8
30°	674.5	673.1	672.5	671.1	671.1
32.5°	654.2	651.5	648.1	651.5	650.8
35°	629.8	629.8	627.1	627.8	629.8
37.5°	608.2	606.8	605.5	603.5	604.1
40°	583.8	581.8	581.1	579.8	577.1
42.5°	555.4	555.4	552.7	553.4	552.7
45°	529.7	529.0	526.3	526.3	526.3
47.5°	502.7	502.0	500.0	498.6	500.0
50°	474.9	472.2	472.2	470.2	469.5
52.5°	445.8	443.8	441.1	441.8	440.4
55°	414.7	414.0	412.0	411.3	411.3
57.5°	383.6	384.3	382.9	380.2	380.9
60°	353.1	352.5	351.1	349.8	349.8
62.5°	322.0	322.0	319.3	319.3	316.6
65°	290.9	290.9	287.5	288.9	286.2
67.5°	259.8	259.1	257.1	256.4	257.1
70°	226.0	226.6	225.3	225.3	226.0
72.5°	195.5	194.8	194.2	194.2	195.5
75°	165.1	164.4	163.0	163.0	164.4
77.5°	137.3	134.0	133.3	134.6	132.6
80°	109.6	104.9	104.2	103.5	103.5
82.5°	77.1	75.1	75.8	75.1	76.4
85°	48.7	48.0	47.4	47.4	48.0
87.5°	23.0	21.6	21.6	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)