

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: P292868

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292868  
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-L92765-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2208.0 lumens  
Efficiency: N/A  
Efficacy: 98.5 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

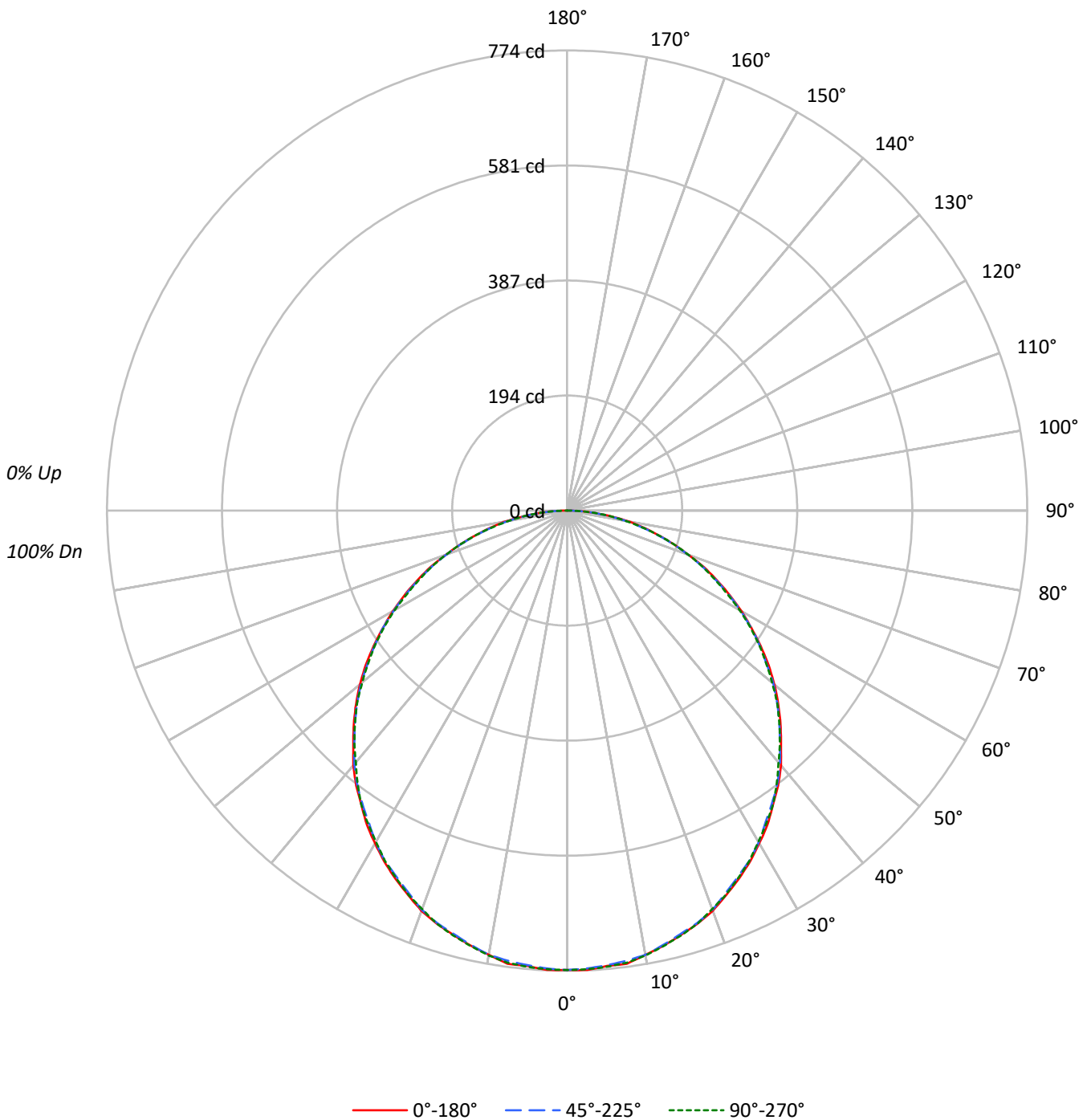
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2080	2080	2080
5°	2077	2073	2081
10°	2073	2073	2076
15°	2059	2054	2061
20°	2052	2046	2042
25°	2029	2018	2023
30°	2009	2002	1999
35°	1983	1974	1983
40°	1965	1956	1943
45°	1932	1920	1920
50°	1905	1894	1883
55°	1864	1852	1849
60°	1821	1811	1804
65°	1775	1754	1746
70°	1703	1699	1703
75°	1645	1624	1638
80°	1627	1547	1537
85°	1442	1402	1420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.1	3.3
10°-20°	208.6	9.4
20°-30°	314.1	14.2
30°-40°	377.0	17.1
40°-50°	390.0	17.7
50°-60°	353.4	16.0
60°-70°	274.0	12.4
70°-80°	166.3	7.5
80°-90°	51.5	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°	595.8	27.0
0°-40°	972.8	44.1
0°-60°	1716.2	77.7
0°-90°	2208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2208.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	769	769	768	770	770	73
15°	739	739	737	740	740	209
25°	683	682	680	682	681	315
35°	604	604	601	602	604	378
45°	508	507	504	504	504	392
55°	397	397	395	394	394	355
65°	279	279	276	277	274	276
75°	158	158	156	156	158	168
85°	47	46	45	45	46	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772.8	772.8	772.8	772.8	772.8
2.5°	773.5	770.2	770.9	772.2	772.2
5°	768.9	768.9	767.6	769.6	770.2
7.5°	768.9	765.7	763.7	765.7	767.0
10°	758.6	757.3	758.6	757.9	759.9
12.5°	749.5	748.2	748.2	750.1	750.1
15°	739.1	739.1	737.2	740.4	739.8
17.5°	728.7	728.7	727.4	727.4	728.7
20°	716.4	713.2	714.5	713.8	713.2
22.5°	699.6	697.6	696.3	698.3	698.9
25°	683.3	682.1	679.5	682.1	681.4
27.5°	665.8	664.5	663.9	662.6	663.9
30°	646.4	645.1	644.4	643.2	643.2
32.5°	626.9	624.4	621.1	624.4	623.7
35°	603.6	603.6	601.0	601.7	603.6
37.5°	582.9	581.6	580.3	578.3	579.0
40°	559.5	557.6	556.9	555.6	553.0
42.5°	532.3	532.3	529.7	530.3	529.7
45°	507.6	507.0	504.4	504.4	504.4
47.5°	481.7	481.1	479.1	477.8	479.1
50°	455.1	452.5	452.5	450.6	449.9
52.5°	427.3	425.3	422.7	423.4	422.1
55°	397.4	396.8	394.8	394.2	394.2
57.5°	367.6	368.3	367.0	364.4	365.0
60°	338.4	337.8	336.5	335.2	335.2
62.5°	308.6	308.6	306.0	306.0	303.4
65°	278.8	278.8	275.5	276.8	274.2
67.5°	249.0	248.3	246.4	245.7	246.4
70°	216.5	217.2	215.9	215.9	216.5
72.5°	187.4	186.7	186.1	186.1	187.4
75°	158.2	157.5	156.2	156.2	157.5
77.5°	131.6	128.4	127.7	129.0	127.1
80°	105.0	100.5	99.8	99.2	99.2
82.5°	73.9	72.0	72.6	72.0	73.3
85°	46.7	46.0	45.4	45.4	46.0
87.5°	22.0	20.7	20.7	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)