

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: P292713

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292713  
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-LD5-20-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: 1641.0 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

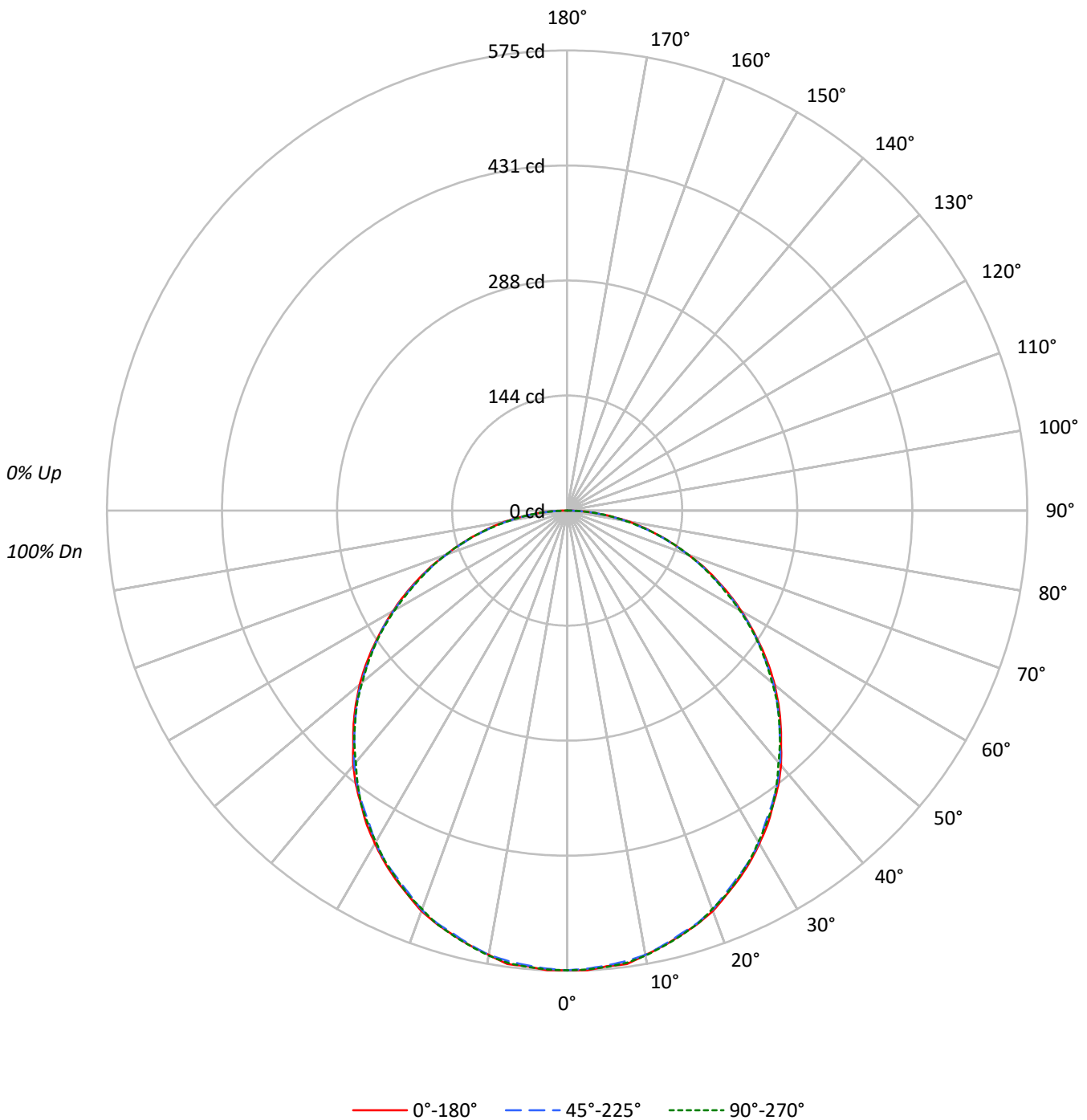
Input Watts (W): 15.438  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1546	1546	1546
5°	1544	1541	1546
10°	1541	1541	1543
15°	1530	1526	1532
20°	1525	1521	1518
25°	1508	1499	1504
30°	1493	1488	1485
35°	1474	1467	1474
40°	1461	1454	1444
45°	1436	1427	1427
50°	1416	1408	1400
55°	1386	1377	1375
60°	1354	1346	1341
65°	1319	1304	1298
70°	1266	1263	1266
75°	1223	1207	1218
80°	1210	1150	1142
85°	1071	1041	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	3.3
10°-20°	155.0	9.4
20°-30°	233.4	14.2
30°-40°	280.1	17.1
40°-50°	289.9	17.7
50°-60°	262.7	16.0
60°-70°	203.6	12.4
70°-80°	123.6	7.5
80°-90°	38.2	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°	442.8	27.0
0°-40°	723.0	44.1
0°-60°	1275.5	77.7
0°-90°	1641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1641.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	572	572	570	572	572	54
15°	549	549	548	550	550	155
25°	508	507	505	507	506	234
35°	449	449	447	447	449	281
45°	377	377	375	375	375	291
55°	295	295	293	293	293	264
65°	207	207	205	206	204	205
75°	118	117	116	116	117	125
85°	35	34	34	34	34	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	574.4	574.4	574.4	574.4	574.4
2.5°	574.8	572.4	572.9	573.9	573.9
5°	571.5	571.5	570.5	572.0	572.4
7.5°	571.5	569.1	567.6	569.1	570.0
10°	563.8	562.8	563.8	563.3	564.7
12.5°	557.0	556.1	556.1	557.5	557.5
15°	549.3	549.3	547.9	550.3	549.8
17.5°	541.6	541.6	540.6	540.6	541.6
20°	532.4	530.0	531.0	530.5	530.0
22.5°	519.9	518.5	517.5	519.0	519.4
25°	507.9	506.9	505.0	506.9	506.4
27.5°	494.9	493.9	493.4	492.5	493.4
30°	480.4	479.4	479.0	478.0	478.0
32.5°	465.9	464.0	461.6	464.0	463.5
35°	448.6	448.6	446.7	447.2	448.6
37.5°	433.2	432.2	431.3	429.8	430.3
40°	415.8	414.4	413.9	412.9	411.0
42.5°	395.6	395.6	393.7	394.2	393.7
45°	377.3	376.8	374.9	374.9	374.9
47.5°	358.0	357.5	356.1	355.1	356.1
50°	338.3	336.3	336.3	334.9	334.4
52.5°	317.5	316.1	314.2	314.6	313.7
55°	295.4	294.9	293.4	293.0	293.0
57.5°	273.2	273.7	272.7	270.8	271.3
60°	251.5	251.0	250.1	249.1	249.1
62.5°	229.4	229.4	227.4	227.4	225.5
65°	207.2	207.2	204.8	205.7	203.8
67.5°	185.0	184.5	183.1	182.6	183.1
70°	160.9	161.4	160.5	160.5	160.9
72.5°	139.3	138.8	138.3	138.3	139.3
75°	117.6	117.1	116.1	116.1	117.1
77.5°	97.8	95.4	94.9	95.9	94.4
80°	78.1	74.7	74.2	73.7	73.7
82.5°	54.9	53.5	54.0	53.5	54.4
85°	34.7	34.2	33.7	33.7	34.2
87.5°	16.4	15.4	15.4	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)