

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: P292716

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292716  
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-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1841.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

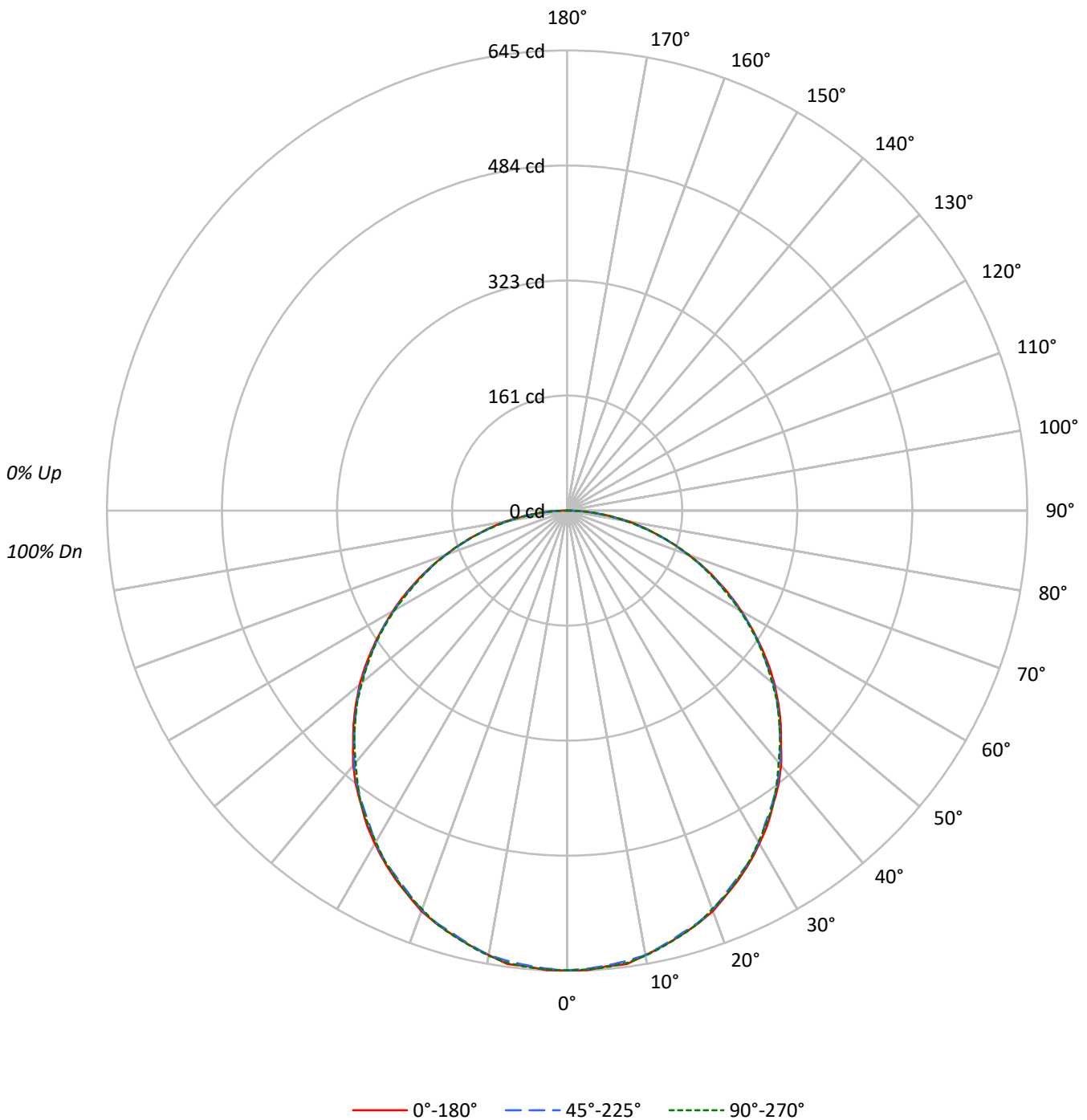
Input Watts (W): 16.182  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1734	1734	1734
5°	1732	1729	1735
10°	1728	1728	1731
15°	1717	1712	1718
20°	1710	1706	1703
25°	1692	1682	1687
30°	1675	1670	1666
35°	1653	1646	1653
40°	1639	1631	1620
45°	1611	1601	1601
50°	1589	1580	1571
55°	1555	1544	1542
60°	1519	1510	1504
65°	1480	1463	1456
70°	1421	1416	1421
75°	1371	1355	1366
80°	1358	1289	1282
85°	1201	1167	1186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.0	3.3
10°-20°	173.9	9.4
20°-30°	261.9	14.2
30°-40°	314.3	17.1
40°-50°	325.2	17.7
50°-60°	294.7	16.0
60°-70°	228.4	12.4
70°-80°	138.7	7.5
80°-90°	42.9	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°	496.8	27.0
0°-40°	811.1	44.1
0°-60°	1431.0	77.7
0°-90°	1841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1841.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	641	641	640	642	642	61
15°	616	616	615	617	617	174
25°	570	569	566	569	568	263
35°	503	503	501	502	503	316
45°	423	423	421	421	421	327
55°	331	331	329	329	329	296
65°	232	232	230	231	229	230
75°	132	131	130	130	131	140
85°	39	38	38	38	38	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	644.4	644.4	644.4	644.4	644.4
2.5°	644.9	642.2	642.7	643.8	643.8
5°	641.1	641.1	640.0	641.7	642.2
7.5°	641.1	638.4	636.8	638.4	639.5
10°	632.5	631.4	632.5	631.9	633.6
12.5°	624.9	623.8	623.8	625.4	625.4
15°	616.3	616.3	614.6	617.3	616.8
17.5°	607.6	607.6	606.5	606.5	607.6
20°	597.3	594.6	595.7	595.2	594.6
22.5°	583.3	581.7	580.6	582.2	582.7
25°	569.8	568.7	566.5	568.7	568.1
27.5°	555.2	554.1	553.6	552.5	553.6
30°	539.0	537.9	537.3	536.3	536.3
32.5°	522.7	520.6	517.9	520.6	520.0
35°	503.3	503.3	501.1	501.7	503.3
37.5°	486.0	484.9	483.8	482.2	482.7
40°	466.5	464.9	464.4	463.3	461.1
42.5°	443.8	443.8	441.7	442.2	441.7
45°	423.3	422.7	420.6	420.6	420.6
47.5°	401.6	401.1	399.5	398.4	399.5
50°	379.5	377.3	377.3	375.7	375.2
52.5°	356.2	354.6	352.5	353.0	351.9
55°	331.4	330.8	329.2	328.7	328.7
57.5°	306.5	307.0	306.0	303.8	304.3
60°	282.2	281.6	280.6	279.5	279.5
62.5°	257.3	257.3	255.2	255.2	253.0
65°	232.4	232.4	229.7	230.8	228.7
67.5°	207.6	207.0	205.4	204.9	205.4
70°	180.6	181.1	180.0	180.0	180.6
72.5°	156.2	155.7	155.1	155.1	156.2
75°	131.9	131.4	130.3	130.3	131.4
77.5°	109.7	107.0	106.5	107.6	106.0
80°	87.6	83.8	83.2	82.7	82.7
82.5°	61.6	60.0	60.5	60.0	61.1
85°	38.9	38.4	37.8	37.8	38.4
87.5°	18.4	17.3	17.3	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)