

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: P292811

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292811  
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-L93050-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1351.0 lumens  
Efficiency: N/A  
Efficacy: 85.4 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

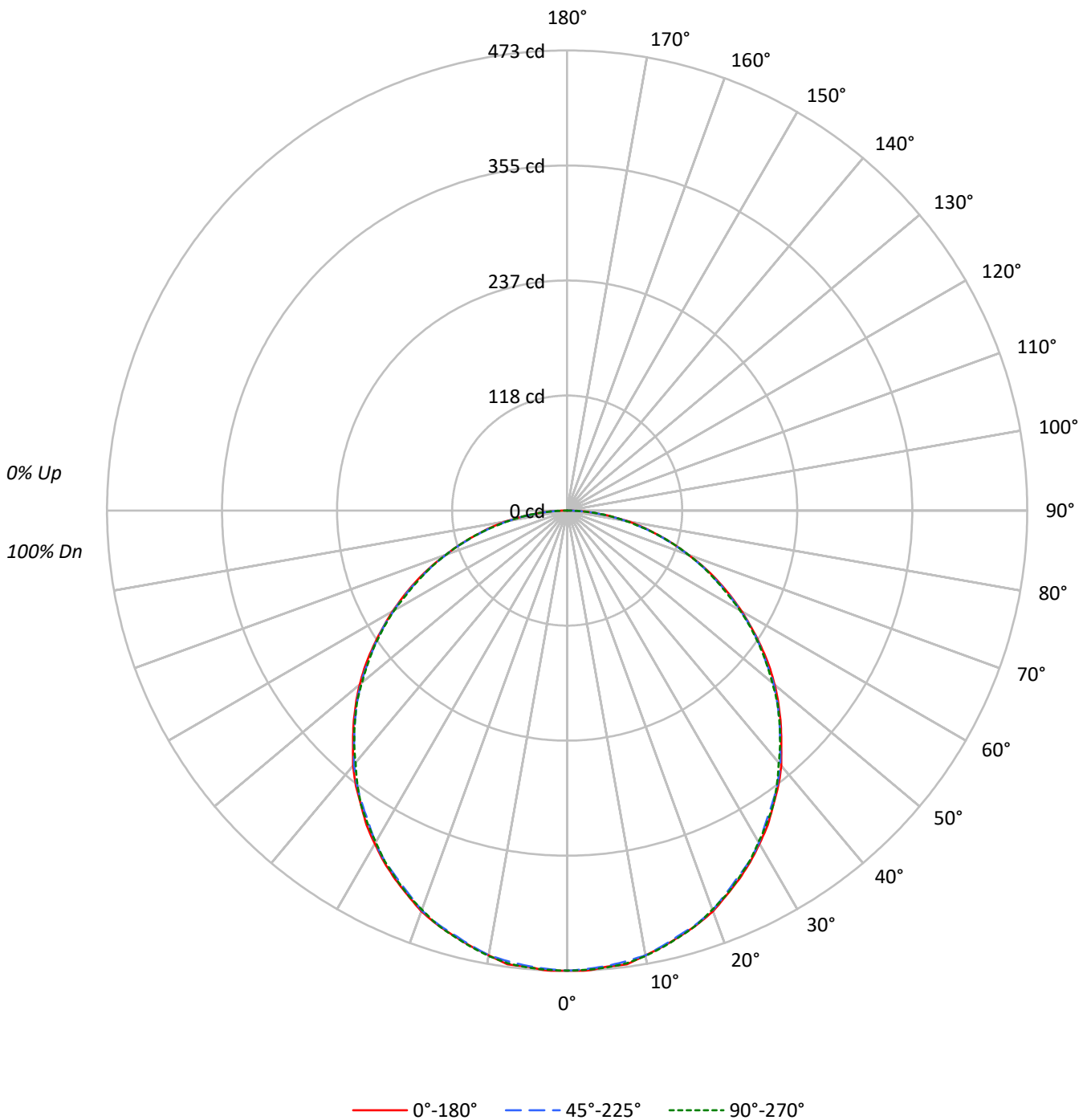
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1273	1273	1273
5°	1271	1269	1273
10°	1268	1268	1270
15°	1260	1256	1261
20°	1255	1252	1250
25°	1241	1234	1238
30°	1229	1225	1223
35°	1213	1208	1213
40°	1202	1197	1189
45°	1182	1174	1174
50°	1166	1159	1153
55°	1141	1133	1132
60°	1115	1108	1104
65°	1086	1074	1068
70°	1042	1039	1042
75°	1006	994	1002
80°	996	947	941
85°	883	858	871



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.7	3.3
10°-20°	127.6	9.4
20°-30°	192.2	14.2
30°-40°	230.6	17.1
40°-50°	238.7	17.7
50°-60°	216.2	16.0
60°-70°	167.6	12.4
70°-80°	101.8	7.5
80°-90°	31.5	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°	364.5	27.0
0°-40°	595.2	44.1
0°-60°	1050.1	77.7
0°-90°	1351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1351.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	473	473	473	473	473	
5°	470	470	470	471	471	45
15°	452	452	451	453	453	128
25°	418	417	416	417	417	193
35°	369	369	368	368	369	232
45°	311	310	309	309	309	240
55°	243	243	242	241	241	217
65°	171	171	169	169	168	169
75°	97	96	96	96	96	103
85°	29	28	28	28	28	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	472.9	472.9	472.9	472.9	472.9
2.5°	473.3	471.3	471.7	472.5	472.5
5°	470.5	470.5	469.7	470.9	471.3
7.5°	470.5	468.5	467.3	468.5	469.3
10°	464.1	463.3	464.1	463.7	464.9
12.5°	458.6	457.8	457.8	459.0	459.0
15°	452.2	452.2	451.0	453.0	452.6
17.5°	445.9	445.9	445.1	445.1	445.9
20°	438.3	436.4	437.2	436.8	436.4
22.5°	428.0	426.8	426.1	427.2	427.6
25°	418.1	417.3	415.7	417.3	416.9
27.5°	407.4	406.6	406.2	405.4	406.2
30°	395.5	394.7	394.3	393.5	393.5
32.5°	383.6	382.0	380.0	382.0	381.6
35°	369.3	369.3	367.7	368.1	369.3
37.5°	356.6	355.8	355.0	353.9	354.3
40°	342.3	341.2	340.8	340.0	338.4
42.5°	325.7	325.7	324.1	324.5	324.1
45°	310.6	310.2	308.6	308.6	308.6
47.5°	294.7	294.3	293.2	292.4	293.2
50°	278.5	276.9	276.9	275.7	275.3
52.5°	261.4	260.2	258.6	259.0	258.2
55°	243.2	242.8	241.6	241.2	241.2
57.5°	224.9	225.3	224.5	222.9	223.3
60°	207.1	206.7	205.9	205.1	205.1
62.5°	188.8	188.8	187.2	187.2	185.7
65°	170.6	170.6	168.6	169.4	167.8
67.5°	152.3	151.9	150.7	150.3	150.7
70°	132.5	132.9	132.1	132.1	132.5
72.5°	114.6	114.2	113.9	113.9	114.6
75°	96.8	96.4	95.6	95.6	96.4
77.5°	80.5	78.5	78.1	78.9	77.8
80°	64.3	61.5	61.1	60.7	60.7
82.5°	45.2	44.0	44.4	44.0	44.8
85°	28.6	28.2	27.8	27.8	28.2
87.5°	13.5	12.7	12.7	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)