

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: P292749

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292749  
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-L82765-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: 1639.0 lumens  
Efficiency: N/A  
Efficacy: 106.8 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

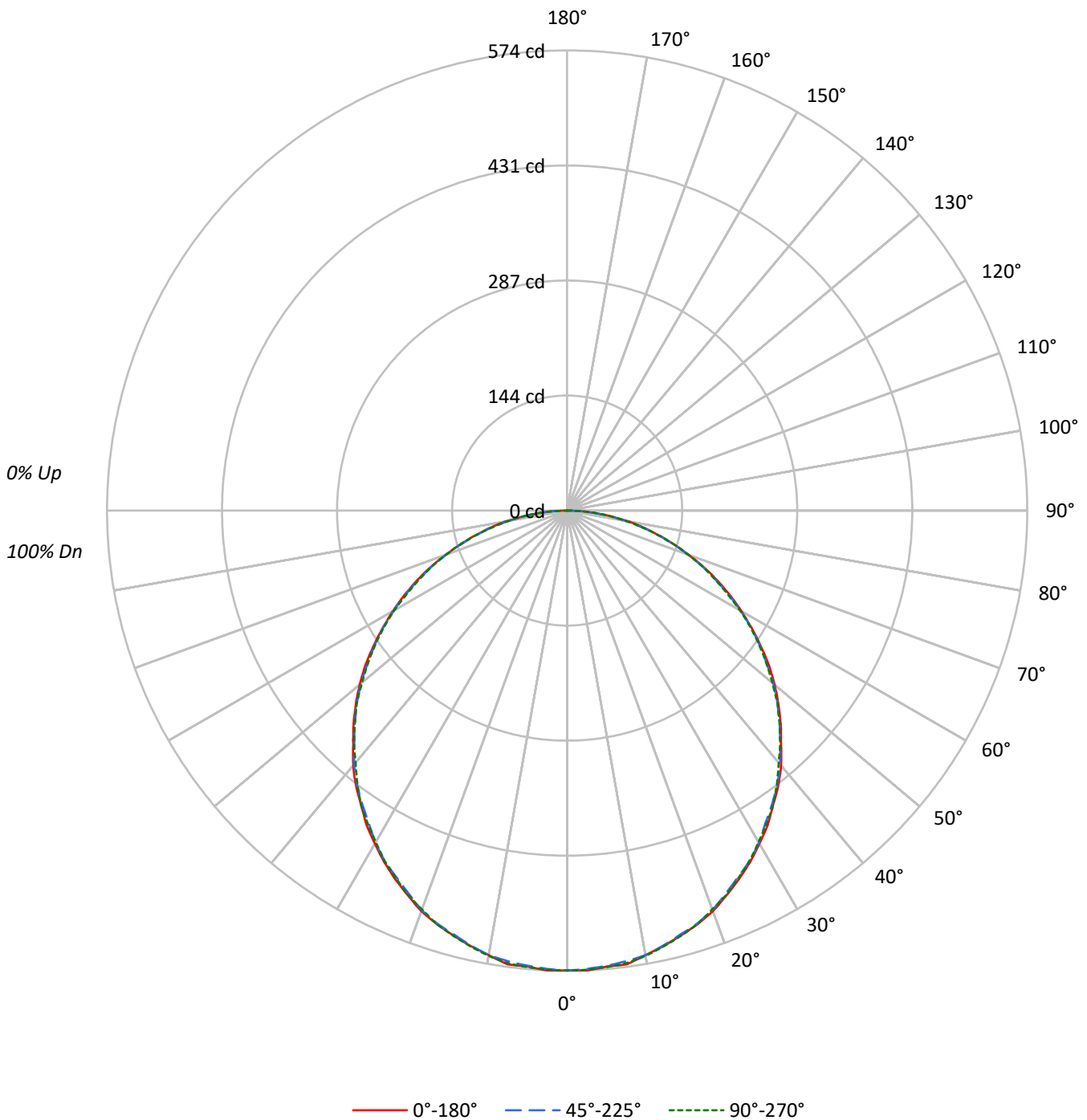
Input Watts (W): 15.345  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1544	1544	1544
5°	1542	1539	1544
10°	1539	1539	1541
15°	1528	1524	1530
20°	1523	1519	1516
25°	1506	1498	1502
30°	1491	1487	1483
35°	1472	1465	1472
40°	1459	1452	1442
45°	1434	1425	1425
50°	1414	1406	1398
55°	1384	1375	1373
60°	1352	1344	1339
65°	1317	1302	1296
70°	1264	1261	1264
75°	1221	1206	1215
80°	1209	1148	1141
85°	1071	1041	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	3.3
10°-20°	154.8	9.4
20°-30°	233.2	14.2
30°-40°	279.8	17.1
40°-50°	289.5	17.7
50°-60°	262.4	16.0
60°-70°	203.4	12.4
70°-80°	123.5	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°	442.3	27.0
0°-40°	722.1	44.1
0°-60°	1274.0	77.7
0°-90°	1639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1639.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	571	571	570	571	572	54
15°	549	549	547	550	549	155
25°	507	506	504	506	506	234
35°	448	448	446	447	448	281
45°	377	376	374	374	374	291
55°	295	294	293	293	293	264
65°	207	207	204	206	204	205
75°	117	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°	573.7	573.7	573.7	573.7	573.7
2.5°	574.1	571.7	572.2	573.2	573.2
5°	570.8	570.8	569.8	571.3	571.7
7.5°	570.8	568.4	566.9	568.4	569.3
10°	563.1	562.1	563.1	562.6	564.0
12.5°	556.3	555.4	555.4	556.8	556.8
15°	548.6	548.6	547.2	549.6	549.1
17.5°	540.9	540.9	540.0	540.0	540.9
20°	531.8	529.4	530.4	529.9	529.4
22.5°	519.3	517.8	516.9	518.3	518.8
25°	507.3	506.3	504.4	506.3	505.8
27.5°	494.3	493.3	492.8	491.9	492.8
30°	479.8	478.9	478.4	477.4	477.4
32.5°	465.4	463.5	461.0	463.5	463.0
35°	448.1	448.1	446.1	446.6	448.1
37.5°	432.7	431.7	430.7	429.3	429.8
40°	415.3	413.9	413.4	412.4	410.5
42.5°	395.1	395.1	393.2	393.7	393.2
45°	376.8	376.3	374.4	374.4	374.4
47.5°	357.6	357.1	355.7	354.7	355.7
50°	337.8	335.9	335.9	334.5	334.0
52.5°	317.2	315.7	313.8	314.3	313.3
55°	295.0	294.5	293.1	292.6	292.6
57.5°	272.9	273.4	272.4	270.5	271.0
60°	251.2	250.7	249.8	248.8	248.8
62.5°	229.1	229.1	227.2	227.2	225.2
65°	206.9	206.9	204.5	205.5	203.6
67.5°	184.8	184.3	182.9	182.4	182.9
70°	160.7	161.2	160.3	160.3	160.7
72.5°	139.1	138.6	138.1	138.1	139.1
75°	117.4	116.9	116.0	116.0	116.9
77.5°	97.7	95.3	94.8	95.8	94.3
80°	78.0	74.6	74.1	73.6	73.6
82.5°	54.9	53.4	53.9	53.4	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)