

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: P292740

Luminaire Tested: **22GR-LD5-40-FGW080-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292740  
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-LD5-40-FGW080-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3576.1 lumens  
Efficiency: N/A  
Efficacy: 108.0 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

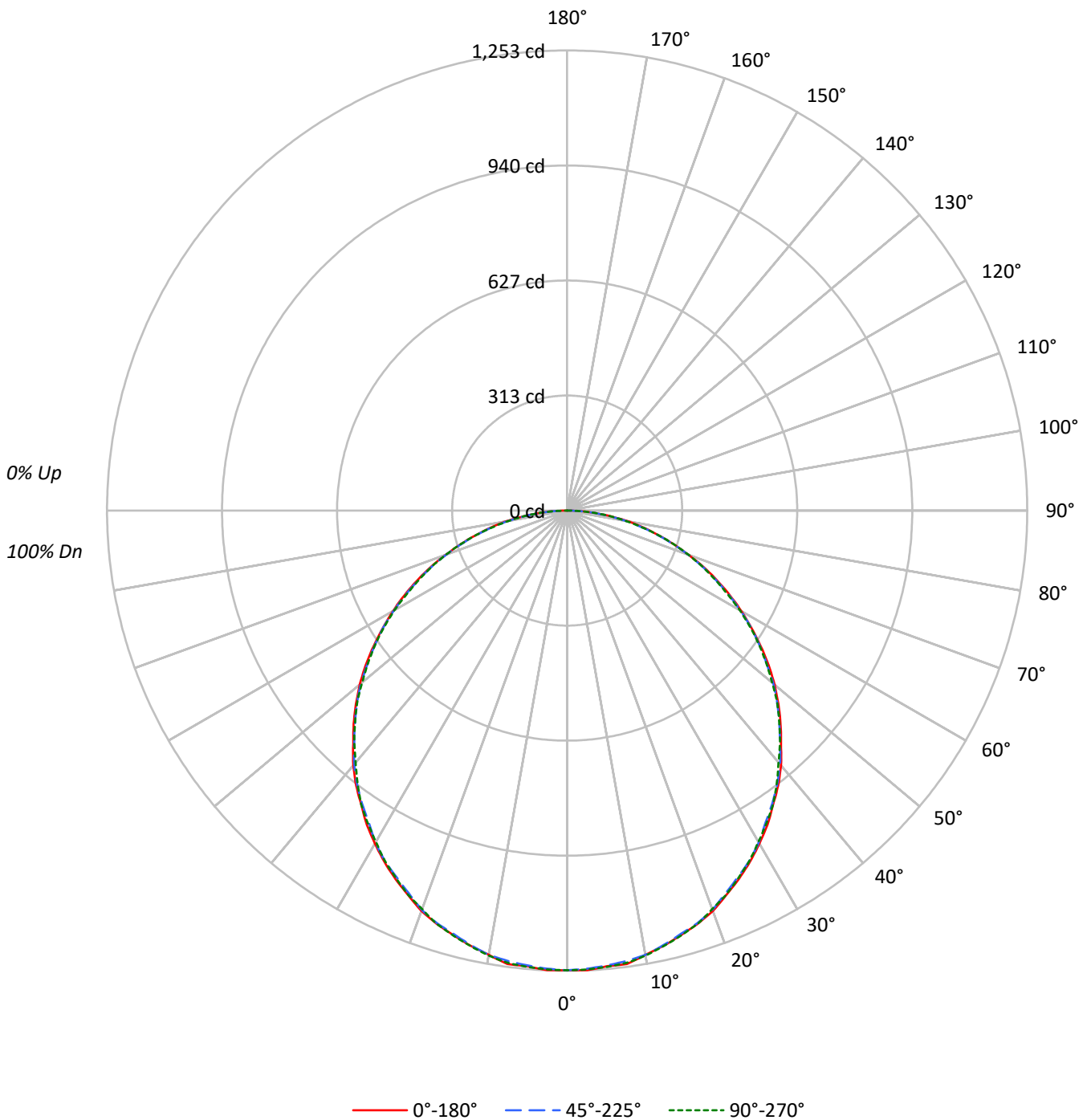
Input Watts (W): 33.108  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3368	3368	3368
5°	3364	3358	3370
10°	3357	3357	3363
15°	3335	3326	3338
20°	3323	3314	3308
25°	3286	3267	3277
30°	3253	3243	3237
35°	3211	3198	3211
40°	3183	3169	3146
45°	3129	3109	3109
50°	3086	3068	3051
55°	3020	3000	2995
60°	2950	2933	2922
65°	2875	2842	2828
70°	2759	2751	2759
75°	2664	2632	2653
80°	2636	2506	2490
85°	2334	2269	2303



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.4	3.3
10°-20°	337.8	9.4
20°-30°	508.7	14.2
30°-40°	610.5	17.1
40°-50°	631.7	17.7
50°-60°	572.4	16.0
60°-70°	443.7	12.4
70°-80°	269.4	7.5
80°-90°	83.4	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°	964.9	27.0
0°-40°	1575.4	44.1
0°-60°	2779.6	77.7
0°-90°	3576.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3576.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1245	1245	1243	1246	1247	119
15°	1197	1197	1194	1199	1198	338
25°	1107	1105	1100	1105	1104	510
35°	978	978	973	974	978	613
45°	822	821	817	817	817	634
55°	644	643	640	638	638	576
65°	452	452	446	448	444	446
75°	256	255	253	253	255	273
85°	76	75	74	74	75	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1251.6	1251.6	1251.6	1251.6	1251.6
2.5°	1252.7	1247.4	1248.5	1250.6	1250.6
5°	1245.3	1245.3	1243.2	1246.4	1247.4
7.5°	1245.3	1240.1	1236.9	1240.1	1242.2
10°	1228.5	1226.4	1228.5	1227.5	1230.6
12.5°	1213.8	1211.7	1211.7	1214.9	1214.9
15°	1197.0	1197.0	1193.9	1199.1	1198.1
17.5°	1180.2	1180.2	1178.1	1178.1	1180.2
20°	1160.3	1155.0	1157.1	1156.1	1155.0
22.5°	1133.0	1129.8	1127.7	1130.9	1131.9
25°	1106.7	1104.6	1100.4	1104.6	1103.6
27.5°	1078.4	1076.3	1075.2	1073.1	1075.2
30°	1046.9	1044.8	1043.7	1041.6	1041.6
32.5°	1015.4	1011.2	1005.9	1011.2	1010.1
35°	977.6	977.6	973.4	974.4	977.6
37.5°	944.0	941.9	939.8	936.6	937.7
40°	906.2	903.0	902.0	899.9	895.7
42.5°	862.1	862.1	857.9	858.9	857.9
45°	822.2	821.1	816.9	816.9	816.9
47.5°	780.2	779.1	776.0	773.9	776.0
50°	737.1	732.9	732.9	729.8	728.7
52.5°	692.0	688.8	684.6	685.7	683.6
55°	643.7	642.6	639.5	638.4	638.4
57.5°	595.4	596.4	594.3	590.1	591.2
60°	548.1	547.1	545.0	542.9	542.9
62.5°	499.8	499.8	495.6	495.6	491.4
65°	451.5	451.5	446.3	448.4	444.2
67.5°	403.2	402.2	399.0	398.0	399.0
70°	350.7	351.8	349.7	349.7	350.7
72.5°	303.5	302.4	301.4	301.4	303.5
75°	256.2	255.2	253.1	253.1	255.2
77.5°	213.2	207.9	206.9	209.0	205.8
80°	170.1	162.8	161.7	160.7	160.7
82.5°	119.7	116.6	117.6	116.6	118.7
85°	75.6	74.6	73.5	73.5	74.6
87.5°	35.7	33.6	33.6	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)