

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: P292806

Luminaire Tested: **22GR-LD5-43-FGW080-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292806  
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-LD5-43-FGW080-UNV-L82765-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: 3694.0 lumens  
Efficiency: N/A  
Efficacy: 103.2 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

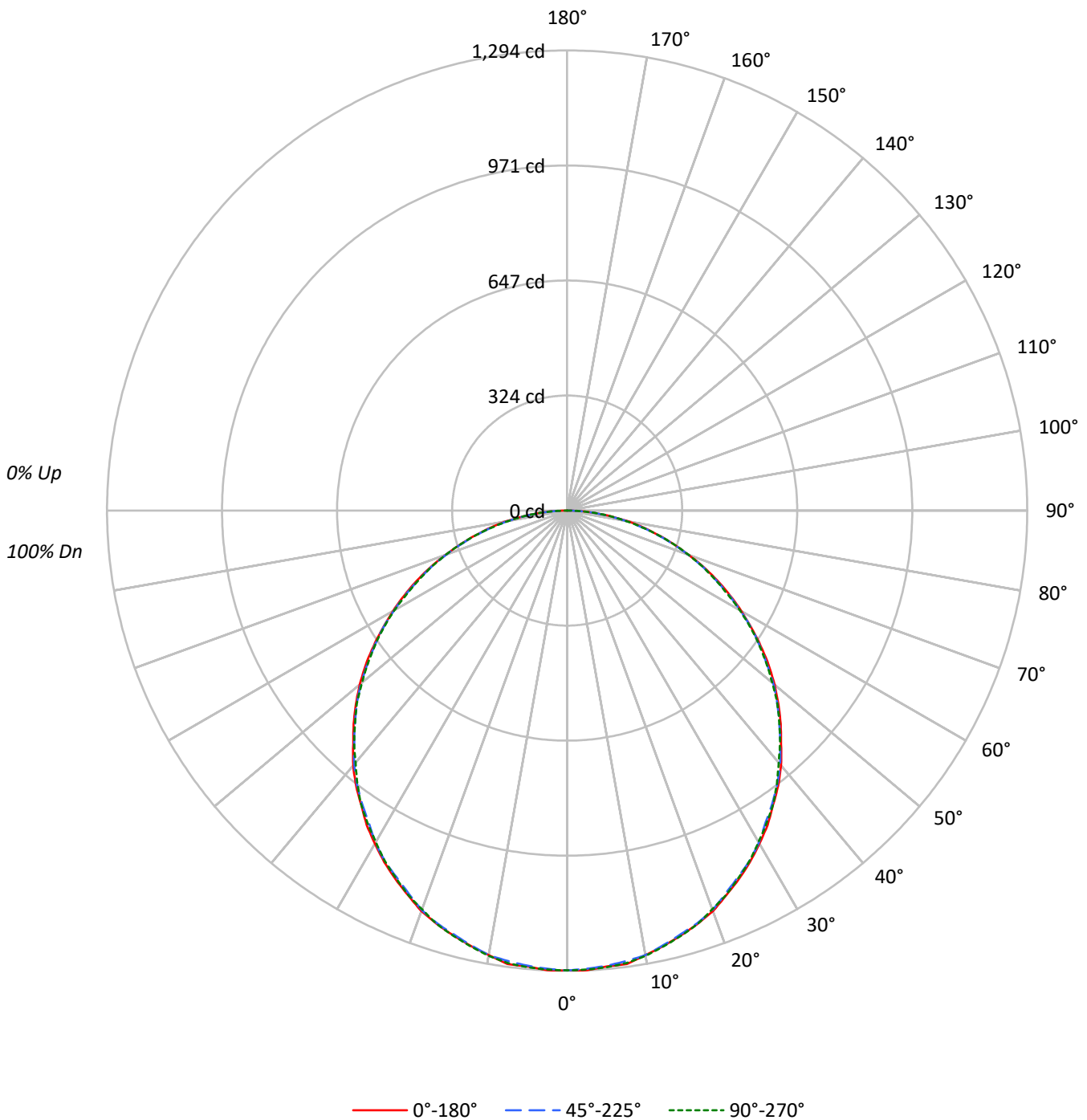
Input Watts (W): 35.805  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3479	3479	3479
5°	3475	3469	3481
10°	3468	3468	3474
15°	3445	3436	3448
20°	3432	3423	3417
25°	3394	3375	3385
30°	3360	3350	3343
35°	3317	3303	3317
40°	3288	3273	3250
45°	3232	3212	3212
50°	3188	3170	3152
55°	3119	3099	3094
60°	3047	3030	3018
65°	2970	2935	2921
70°	2851	2842	2851
75°	2752	2718	2741
80°	2723	2588	2572
85°	2411	2343	2377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.3	3.3
10°-20°	349.0	9.4
20°-30°	525.5	14.2
30°-40°	630.6	17.1
40°-50°	652.5	17.7
50°-60°	591.3	16.0
60°-70°	458.4	12.4
70°-80°	278.3	7.5
80°-90°	86.1	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°	996.8	27.0
0°-40°	1627.4	44.1
0°-60°	2871.3	77.7
0°-90°	3694.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3694.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1286	1286	1284	1288	1289	123
15°	1236	1236	1233	1239	1238	349
25°	1143	1141	1137	1141	1140	527
35°	1010	1010	1006	1007	1010	633
45°	849	848	844	844	844	655
55°	665	664	661	660	660	595
65°	466	466	461	463	459	461
75°	265	264	261	261	264	282
85°	78	77	76	76	77	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1292.9	1292.9	1292.9	1292.9	1292.9
2.5°	1294.0	1288.6	1289.7	1291.8	1291.8
5°	1286.4	1286.4	1284.3	1287.5	1288.6
7.5°	1286.4	1281.0	1277.7	1281.0	1283.2
10°	1269.1	1266.9	1269.1	1268.0	1271.2
12.5°	1253.9	1251.7	1251.7	1255.0	1255.0
15°	1236.5	1236.5	1233.3	1238.7	1237.6
17.5°	1219.2	1219.2	1217.0	1217.0	1219.2
20°	1198.6	1193.1	1195.3	1194.2	1193.1
22.5°	1170.4	1167.1	1164.9	1168.2	1169.3
25°	1143.2	1141.1	1136.7	1141.1	1140.0
27.5°	1114.0	1111.8	1110.7	1108.5	1110.7
30°	1081.4	1079.3	1078.2	1076.0	1076.0
32.5°	1048.9	1044.5	1039.1	1044.5	1043.5
35°	1009.8	1009.8	1005.5	1006.6	1009.8
37.5°	975.1	973.0	970.8	967.5	968.6
40°	936.1	932.8	931.7	929.6	925.2
42.5°	890.5	890.5	886.2	887.3	886.2
45°	849.3	848.2	843.9	843.9	843.9
47.5°	805.9	804.8	801.6	799.4	801.6
50°	761.4	757.1	757.1	753.9	752.8
52.5°	714.8	711.5	707.2	708.3	706.1
55°	664.9	663.8	660.6	659.5	659.5
57.5°	615.0	616.1	613.9	609.6	610.7
60°	566.2	565.1	562.9	560.8	560.8
62.5°	516.3	516.3	512.0	512.0	507.6
65°	466.4	466.4	461.0	463.2	458.8
67.5°	416.5	415.4	412.2	411.1	412.2
70°	362.3	363.4	361.2	361.2	362.3
72.5°	313.5	312.4	311.3	311.3	313.5
75°	264.7	263.6	261.4	261.4	263.6
77.5°	220.2	214.8	213.7	215.9	212.6
80°	175.7	168.1	167.0	166.0	166.0
82.5°	123.7	120.4	121.5	120.4	122.6
85°	78.1	77.0	75.9	75.9	77.0
87.5°	36.9	34.7	34.7	33.6	33.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)