

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: P294310

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-FGW080-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2843.0 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

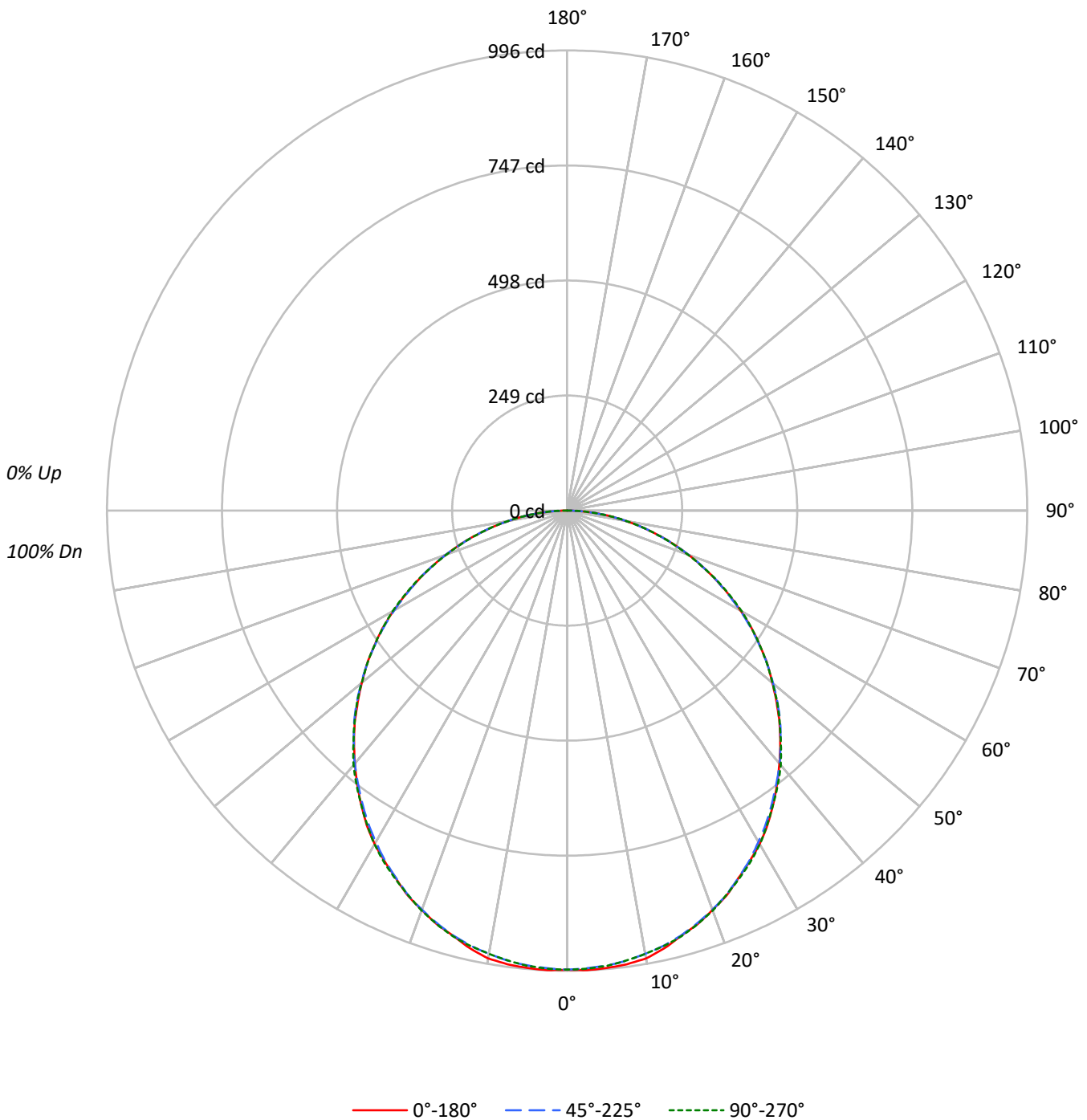
Input Watts (W): 28.636839  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	84	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°	1337	1337	1337
5°	1342	1335	1336
10°	1345	1331	1331
15°	1327	1326	1329
20°	1317	1316	1319
25°	1303	1302	1306
30°	1295	1287	1296
35°	1276	1270	1276
40°	1255	1257	1264
45°	1238	1241	1239
50°	1214	1218	1215
55°	1195	1192	1195
60°	1167	1164	1175
65°	1131	1136	1140
70°	1095	1100	1092
75°	1056	1056	1056
80°	997	997	1008
85°	922	931	900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.0	3.3
10°-20°	268.6	9.4
20°-30°	404.8	14.2
30°-40°	484.8	17.1
40°-50°	501.8	17.7
50°-60°	455.0	16.0
60°-70°	352.8	12.4
70°-80°	214.5	7.5
80°-90°	66.7	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°	767.3	27.0
0°-40°	1252.1	44.0
0°-60°	2209.0	77.7
0°-90°	2843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2843.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	994	988	988	987	989	95
15°	953	953	952	949	954	269
25°	878	878	877	880	880	405
35°	777	772	773	776	777	486
45°	650	652	652	650	651	501
55°	510	507	508	510	510	455
65°	355	357	357	355	358	352
75°	203	202	203	202	203	215
85°	60	59	60	60	58	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	993.7	993.7	993.7	993.7	993.7
2.5°	995.7	991.6	991.6	990.3	992.3
5°	993.7	987.6	988.3	987.0	989.0
7.5°	990.3	982.3	982.9	981.6	982.3
10°	984.3	974.9	974.2	973.5	974.2
12.5°	970.9	965.5	964.8	963.5	965.5
15°	952.8	953.4	952.1	948.7	954.1
17.5°	938.7	938.0	936.7	933.3	938.7
20°	919.9	920.6	919.2	917.9	921.2
22.5°	901.8	899.8	900.5	899.8	900.5
25°	877.7	877.7	877.0	879.7	879.7
27.5°	855.5	852.9	854.2	856.9	858.2
30°	833.4	826.7	828.1	830.7	834.1
32.5°	807.3	800.6	801.9	804.6	805.9
35°	777.1	771.7	773.1	776.4	777.1
37.5°	746.3	742.9	744.2	746.9	748.9
40°	714.7	713.4	715.4	714.7	719.4
42.5°	682.6	681.9	683.9	683.9	684.6
45°	650.4	651.7	652.4	649.7	651.0
47.5°	614.8	615.5	618.2	616.8	617.5
50°	580.0	579.3	582.0	582.7	580.6
52.5°	546.4	543.1	545.8	547.1	545.8
55°	509.6	506.9	508.2	510.2	509.6
57.5°	473.4	470.7	471.4	474.7	473.4
60°	433.8	433.1	432.5	435.1	436.5
62.5°	394.9	394.2	392.9	395.6	396.9
65°	355.4	357.4	356.7	355.4	358.0
67.5°	317.8	319.8	317.8	316.5	316.5
70°	278.3	280.3	279.6	278.3	277.6
72.5°	241.4	241.4	240.0	239.4	240.0
75°	203.2	202.5	203.2	202.5	203.2
77.5°	165.6	166.3	166.3	166.3	165.6
80°	128.7	128.7	128.7	129.4	130.1
82.5°	94.5	92.5	94.5	93.2	93.9
85°	59.7	59.0	60.3	59.7	58.3
87.5°	26.8	27.5	27.5	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)