

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: P294372

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294372  
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-L92765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3379.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 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

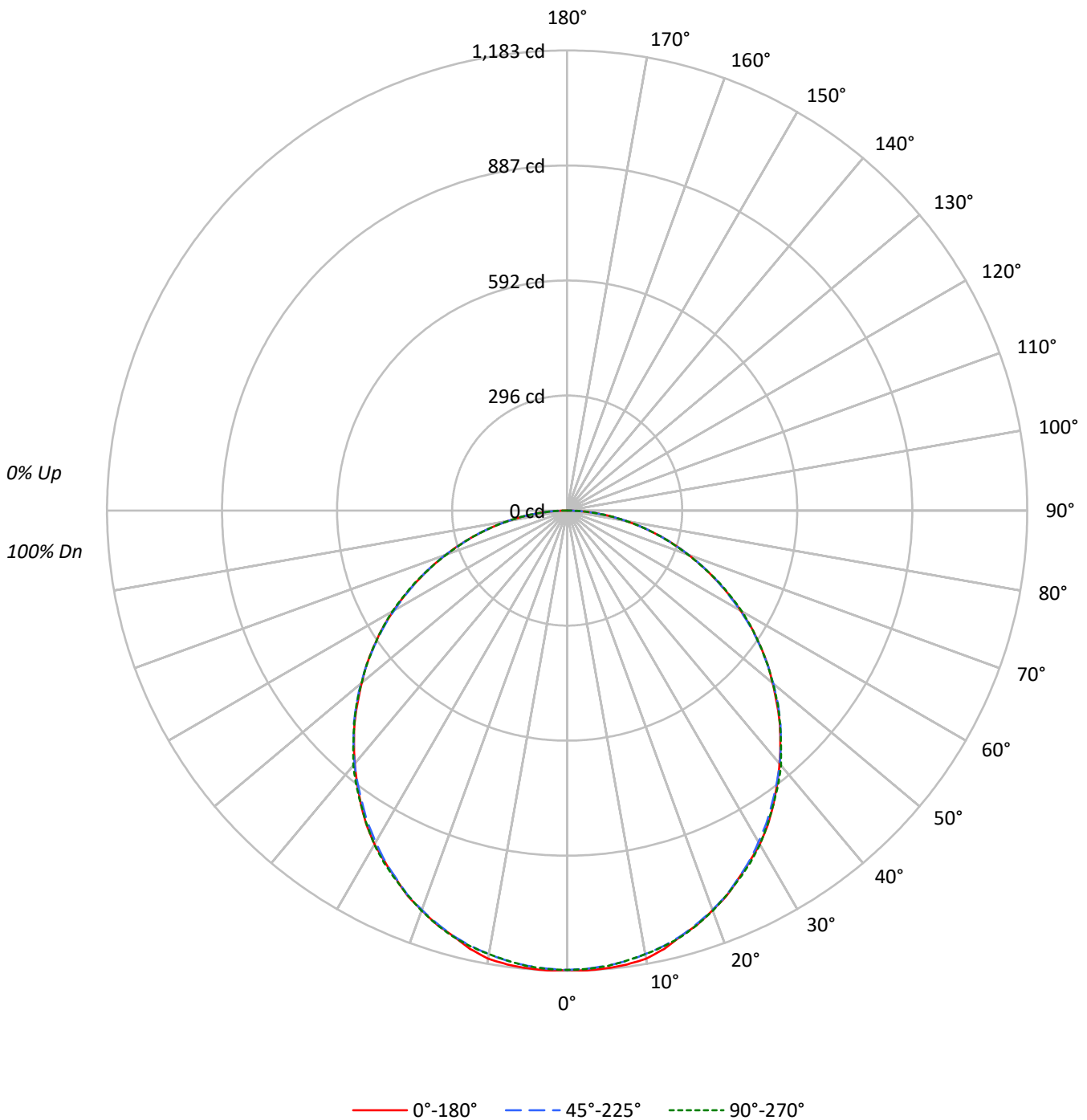
Input Watts (W): 28.644  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1589	1589	1589
5°	1595	1586	1588
10°	1598	1582	1582
15°	1577	1576	1580
20°	1565	1564	1568
25°	1549	1547	1552
30°	1539	1529	1540
35°	1517	1509	1517
40°	1492	1493	1502
45°	1471	1475	1472
50°	1443	1448	1445
55°	1421	1417	1421
60°	1387	1383	1396
65°	1345	1350	1355
70°	1301	1307	1298
75°	1255	1255	1255
80°	1185	1185	1198
85°	1095	1107	1070



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	3.3
10°-20°	319.2	9.4
20°-30°	481.1	14.2
30°-40°	576.2	17.1
40°-50°	596.4	17.7
50°-60°	540.8	16.0
60°-70°	419.3	12.4
70°-80°	255.0	7.5
80°-90°	79.3	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°	912.0	27.0
0°-40°	1488.2	44.0
0°-60°	2625.4	77.7
0°-90°	3379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3379.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1181	1174	1175	1173	1175	112
15°	1132	1133	1132	1128	1134	320
25°	1043	1043	1042	1046	1046	482
35°	924	917	919	923	924	578
45°	773	775	775	772	774	595
55°	606	602	604	606	606	541
65°	422	425	424	422	426	419
75°	242	241	242	241	242	255
85°	71	70	72	71	69	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1181.0	1181.0	1181.0	1181.0	1181.0
2.5°	1183.4	1178.6	1178.6	1177.0	1179.4
5°	1181.0	1173.8	1174.6	1173.0	1175.4
7.5°	1177.0	1167.5	1168.2	1166.7	1167.5
10°	1169.8	1158.7	1157.9	1157.1	1157.9
12.5°	1153.9	1147.5	1146.7	1145.1	1147.5
15°	1132.4	1133.2	1131.6	1127.6	1134.0
17.5°	1115.7	1114.9	1113.3	1109.3	1115.7
20°	1093.3	1094.1	1092.5	1091.0	1094.9
22.5°	1071.8	1069.4	1070.2	1069.4	1070.2
25°	1043.1	1043.1	1042.3	1045.5	1045.5
27.5°	1016.8	1013.7	1015.2	1018.4	1020.0
30°	990.5	982.6	984.2	987.4	991.3
32.5°	959.5	951.5	953.1	956.3	957.9
35°	923.6	917.2	918.8	922.8	923.6
37.5°	886.9	883.0	884.6	887.7	890.1
40°	849.5	847.9	850.3	849.5	855.1
42.5°	811.2	810.4	812.8	812.8	813.6
45°	773.0	774.6	775.4	772.2	773.8
47.5°	730.8	731.6	734.7	733.1	733.9
50°	689.3	688.5	691.7	692.5	690.1
52.5°	649.5	645.5	648.7	650.3	648.7
55°	605.6	602.5	604.0	606.4	605.6
57.5°	562.6	559.4	560.2	564.2	562.6
60°	515.6	514.8	514.0	517.2	518.8
62.5°	469.4	468.6	467.0	470.2	471.8
65°	422.4	424.7	423.9	422.4	425.5
67.5°	377.7	380.1	377.7	376.1	376.1
70°	330.7	333.1	332.3	330.7	329.9
72.5°	286.9	286.9	285.3	284.5	285.3
75°	241.5	240.7	241.5	240.7	241.5
77.5°	196.8	197.6	197.6	197.6	196.8
80°	153.0	153.0	153.0	153.8	154.6
82.5°	112.4	110.0	112.4	110.8	111.6
85°	70.9	70.1	71.7	70.9	69.3
87.5°	31.9	32.7	32.7	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)