

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: P294297

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294297  
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-LD5-30-FGW080-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2440.0 lumens  
Efficiency: N/A  
Efficacy: 118.9 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

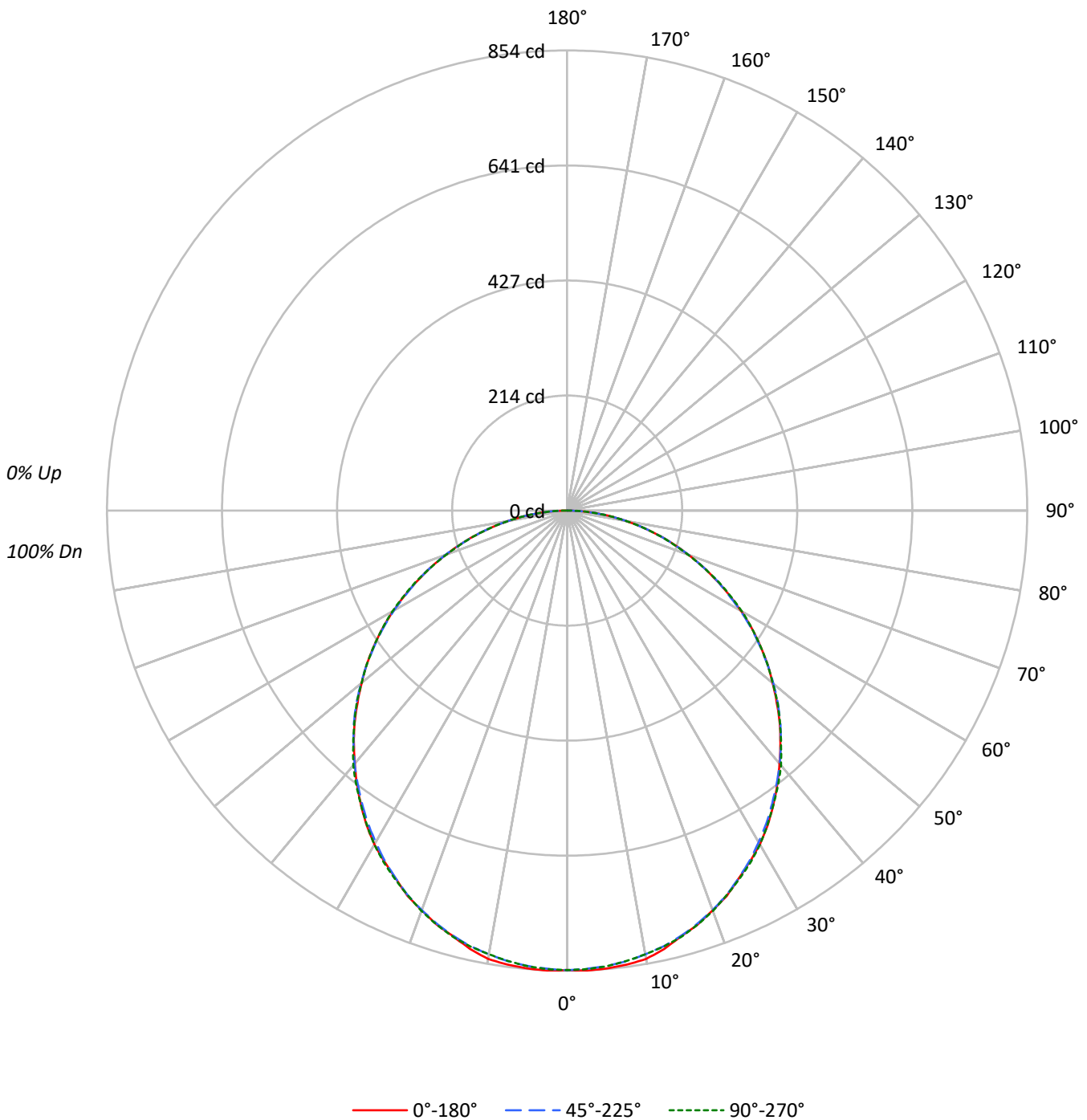
Input Watts (W): 20.51487  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1147	1147	1147
5°	1152	1146	1146
10°	1154	1142	1142
15°	1139	1138	1141
20°	1130	1130	1132
25°	1118	1117	1121
30°	1111	1104	1112
35°	1095	1090	1095
40°	1077	1078	1085
45°	1062	1065	1063
50°	1042	1046	1043
55°	1026	1023	1026
60°	1002	999	1008
65°	971	975	978
70°	939	944	937
75°	907	907	907
80°	856	856	865
85°	790	800	773



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	3.3
10°-20°	230.5	9.4
20°-30°	347.4	14.2
30°-40°	416.1	17.1
40°-50°	430.7	17.7
50°-60°	390.5	16.0
60°-70°	302.8	12.4
70°-80°	184.1	7.5
80°-90°	57.3	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°	658.5	27.0
0°-40°	1074.6	44.0
0°-60°	1895.8	77.7
0°-90°	2440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2440.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	853	848	848	847	849	81
15°	818	818	817	814	819	231
25°	753	753	753	755	755	348
35°	667	662	664	666	667	417
45°	558	559	560	558	559	430
55°	437	435	436	438	437	391
65°	305	307	306	305	307	302
75°	174	174	174	174	174	184
85°	51	51	52	51	50	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	852.8	852.8	852.8	852.8	852.8
2.5°	854.5	851.1	851.1	849.9	851.7
5°	852.8	847.6	848.2	847.1	848.8
7.5°	849.9	843.0	843.6	842.5	843.0
10°	844.8	836.7	836.1	835.5	836.1
12.5°	833.2	828.6	828.1	826.9	828.6
15°	817.7	818.3	817.1	814.3	818.9
17.5°	805.6	805.0	803.9	801.0	805.6
20°	789.5	790.1	788.9	787.8	790.7
22.5°	774.0	772.2	772.8	772.2	772.8
25°	753.3	753.3	752.7	755.0	755.0
27.5°	734.3	732.0	733.1	735.4	736.6
30°	715.3	709.5	710.7	713.0	715.9
32.5°	692.8	687.1	688.2	690.5	691.7
35°	666.9	662.3	663.5	666.4	666.9
37.5°	640.5	637.6	638.7	641.0	642.8
40°	613.4	612.3	614.0	613.4	617.5
42.5°	585.8	585.2	587.0	587.0	587.5
45°	558.2	559.3	559.9	557.6	558.8
47.5°	527.7	528.3	530.6	529.4	530.0
50°	497.8	497.2	499.5	500.1	498.3
52.5°	469.0	466.1	468.4	469.6	468.4
55°	437.3	435.0	436.2	437.9	437.3
57.5°	406.3	404.0	404.5	407.4	406.3
60°	372.3	371.7	371.2	373.5	374.6
62.5°	338.9	338.4	337.2	339.5	340.7
65°	305.0	306.7	306.1	305.0	307.3
67.5°	272.8	274.5	272.8	271.6	271.6
70°	238.8	240.5	240.0	238.8	238.2
72.5°	207.2	207.2	206.0	205.4	206.0
75°	174.4	173.8	174.4	173.8	174.4
77.5°	142.1	142.7	142.7	142.7	142.1
80°	110.5	110.5	110.5	111.1	111.6
82.5°	81.1	79.4	81.1	80.0	80.6
85°	51.2	50.6	51.8	51.2	50.1
87.5°	23.0	23.6	23.6	24.2	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)