

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: P294231

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294231  
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-LD5-34-FGW080-UNV-L82765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3182.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 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

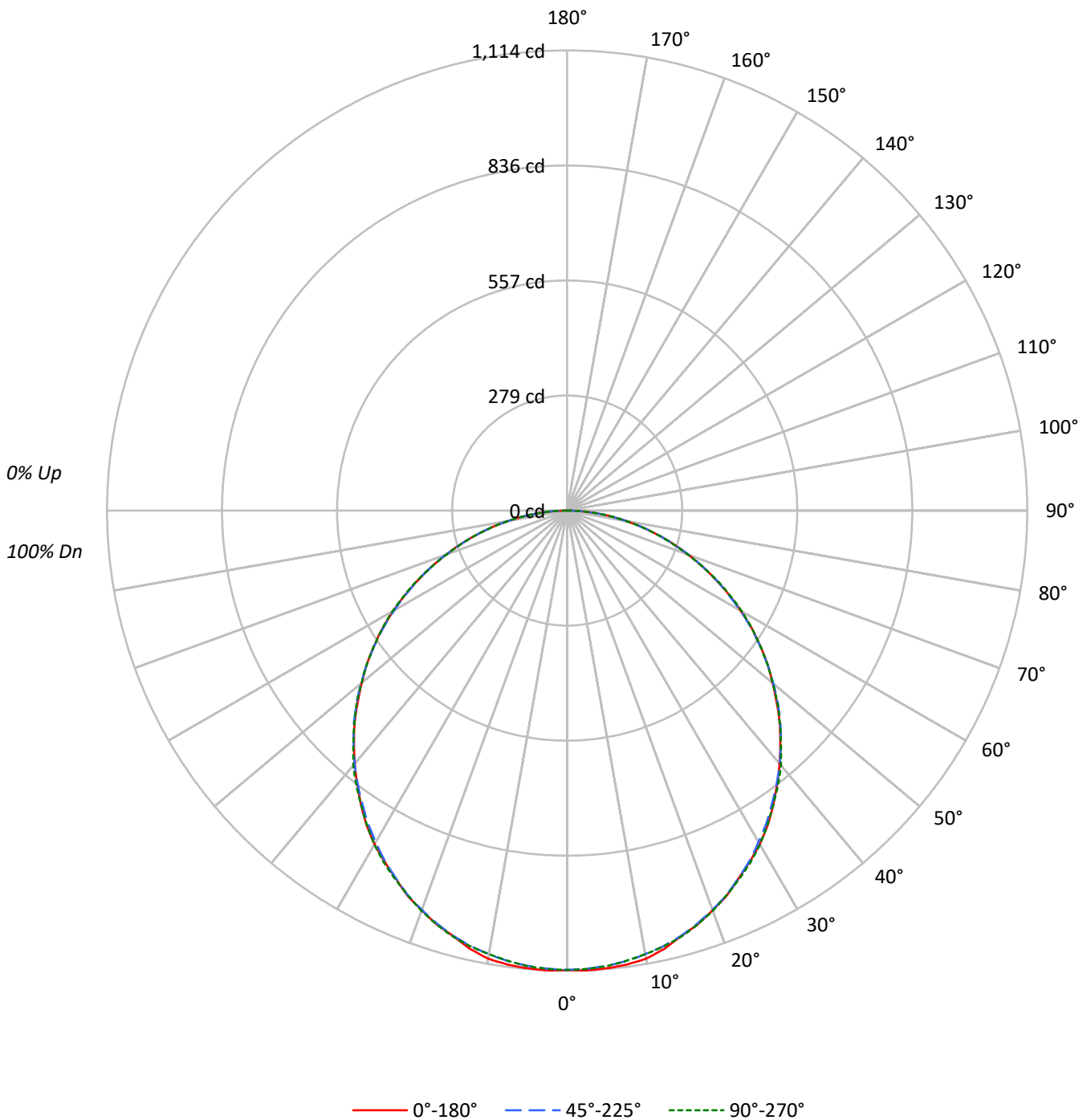
Input Watts (W): 23.994  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1496	1496	1496
5°	1502	1494	1495
10°	1505	1490	1490
15°	1485	1484	1488
20°	1474	1473	1476
25°	1458	1457	1462
30°	1449	1440	1450
35°	1429	1421	1429
40°	1405	1406	1414
45°	1385	1389	1387
50°	1359	1364	1360
55°	1338	1334	1338
60°	1306	1302	1315
65°	1266	1271	1276
70°	1225	1231	1222
75°	1182	1182	1182
80°	1117	1117	1128
85°	1031	1042	1008



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	3.3
10°-20°	300.6	9.4
20°-30°	453.0	14.2
30°-40°	542.6	17.1
40°-50°	561.7	17.7
50°-60°	509.3	16.0
60°-70°	394.8	12.4
70°-80°	240.1	7.5
80°-90°	74.7	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°	858.8	27.0
0°-40°	1401.4	44.0
0°-60°	2472.4	77.7
0°-90°	3182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3182.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1105	1106	1105	1107	106
15°	1066	1067	1066	1062	1068	302
25°	982	982	982	985	985	453
35°	870	864	865	869	870	544
45°	728	729	730	727	729	561
55°	570	567	569	571	570	510
65°	398	400	399	398	401	394
75°	227	227	227	227	227	240
85°	67	66	68	67	65	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1112.1	1112.1	1112.1	1112.1	1112.1
2.5°	1114.4	1109.9	1109.9	1108.4	1110.6
5°	1112.1	1105.4	1106.1	1104.6	1106.9
7.5°	1108.4	1099.4	1100.1	1098.6	1099.4
10°	1101.6	1091.1	1090.4	1089.6	1090.4
12.5°	1086.6	1080.6	1079.9	1078.4	1080.6
15°	1066.4	1067.1	1065.6	1061.9	1067.9
17.5°	1050.6	1049.9	1048.4	1044.6	1050.6
20°	1029.6	1030.3	1028.8	1027.3	1031.1
22.5°	1009.3	1007.1	1007.8	1007.1	1007.8
25°	982.3	982.3	981.6	984.6	984.6
27.5°	957.6	954.6	956.1	959.1	960.6
30°	932.8	925.3	926.8	929.8	933.5
32.5°	903.5	896.0	897.5	900.5	902.0
35°	869.8	863.8	865.3	869.0	869.8
37.5°	835.2	831.5	833.0	836.0	838.2
40°	800.0	798.5	800.7	800.0	805.2
42.5°	763.9	763.2	765.4	765.4	766.2
45°	727.9	729.4	730.2	727.2	728.7
47.5°	688.1	688.9	691.9	690.4	691.2
50°	649.1	648.4	651.4	652.1	649.9
52.5°	611.6	607.9	610.9	612.4	610.9
55°	570.3	567.3	568.8	571.1	570.3
57.5°	529.8	526.8	527.6	531.3	529.8
60°	485.5	484.8	484.0	487.0	488.5
62.5°	442.0	441.3	439.8	442.8	444.3
65°	397.7	400.0	399.2	397.7	400.7
67.5°	355.7	358.0	355.7	354.2	354.2
70°	311.4	313.7	312.9	311.4	310.7
72.5°	270.2	270.2	268.7	267.9	268.7
75°	227.4	226.6	227.4	226.6	227.4
77.5°	185.4	186.1	186.1	186.1	185.4
80°	144.1	144.1	144.1	144.8	145.6
82.5°	105.8	103.6	105.8	104.3	105.1
85°	66.8	66.0	67.5	66.8	65.3
87.5°	30.0	30.8	30.8	31.5	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)