

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: P294176

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294176  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3197.0 lumens  
Efficiency: N/A  
Efficacy: 135.9 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

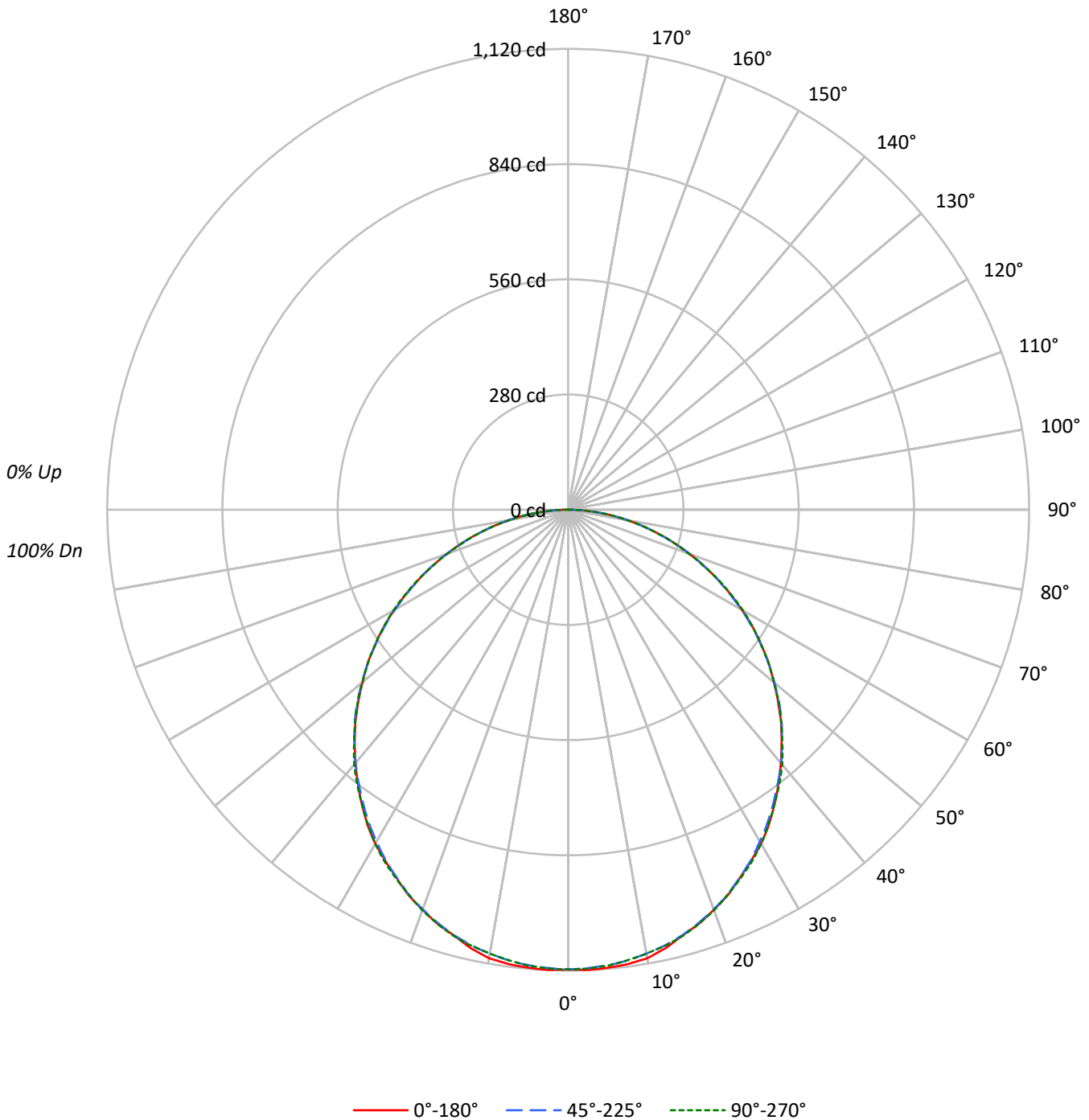
Input Watts (W): 23.529  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1503	1503	1503
5°	1509	1501	1502
10°	1512	1497	1497
15°	1492	1491	1494
20°	1481	1480	1483
25°	1465	1464	1469
30°	1456	1447	1457
35°	1435	1428	1435
40°	1412	1413	1421
45°	1392	1396	1393
50°	1365	1370	1367
55°	1344	1341	1344
60°	1313	1309	1321
65°	1272	1277	1282
70°	1231	1237	1228
75°	1188	1188	1188
80°	1122	1122	1134
85°	1036	1048	1013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	3.3
10°-20°	302.0	9.4
20°-30°	455.2	14.2
30°-40°	545.2	17.1
40°-50°	564.3	17.7
50°-60°	511.7	16.0
60°-70°	396.7	12.4
70°-80°	241.3	7.5
80°-90°	75.1	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°	862.9	27.0
0°-40°	1408.0	44.0
0°-60°	2484.0	77.7
0°-90°	3197.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3197.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1117	1111	1111	1110	1112	106
15°	1071	1072	1071	1067	1073	303
25°	987	987	986	989	989	456
35°	874	868	869	873	874	547
45°	731	733	734	731	732	563
55°	573	570	572	574	573	512
65°	400	402	401	400	403	396
75°	228	228	228	228	228	241
85°	67	66	68	67	66	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1117.4	1117.4	1117.4	1117.4	1117.4
2.5°	1119.7	1115.1	1115.1	1113.6	1115.9
5°	1117.4	1110.6	1111.4	1109.8	1112.1
7.5°	1113.6	1104.6	1105.3	1103.8	1104.6
10°	1106.8	1096.3	1095.5	1094.8	1095.5
12.5°	1091.8	1085.7	1085.0	1083.5	1085.7
15°	1071.4	1072.1	1070.6	1066.9	1072.9
17.5°	1055.6	1054.8	1053.3	1049.5	1055.6
20°	1034.5	1035.2	1033.7	1032.2	1036.0
22.5°	1014.1	1011.8	1012.6	1011.8	1012.6
25°	987.0	987.0	986.2	989.2	989.2
27.5°	962.1	959.1	960.6	963.6	965.1
30°	937.2	929.6	931.2	934.2	937.9
32.5°	907.8	900.2	901.8	904.8	906.3
35°	873.9	867.8	869.3	873.1	873.9
37.5°	839.2	835.4	836.9	839.9	842.2
40°	803.7	802.2	804.5	803.7	809.0
42.5°	767.5	766.8	769.1	769.1	769.8
45°	731.4	732.9	733.6	730.6	732.1
47.5°	691.4	692.1	695.2	693.7	694.4
50°	652.2	651.4	654.4	655.2	652.9
52.5°	614.5	610.7	613.7	615.2	613.7
55°	573.0	570.0	571.5	573.8	573.0
57.5°	532.3	529.3	530.0	533.8	532.3
60°	487.8	487.1	486.3	489.3	490.8
62.5°	444.1	443.3	441.8	444.8	446.4
65°	399.6	401.9	401.1	399.6	402.6
67.5°	357.4	359.6	357.4	355.9	355.9
70°	312.9	315.2	314.4	312.9	312.1
72.5°	271.4	271.4	269.9	269.2	269.9
75°	228.5	227.7	228.5	227.7	228.5
77.5°	186.2	187.0	187.0	187.0	186.2
80°	144.8	144.8	144.8	145.5	146.3
82.5°	106.3	104.0	106.3	104.8	105.6
85°	67.1	66.3	67.9	67.1	65.6
87.5°	30.2	30.9	30.9	31.7	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)