

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: P294182

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294182  
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-LD5-38-FGW080-UNV-L83050-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3557.0 lumens  
Efficiency: N/A  
Efficacy: 133.7 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

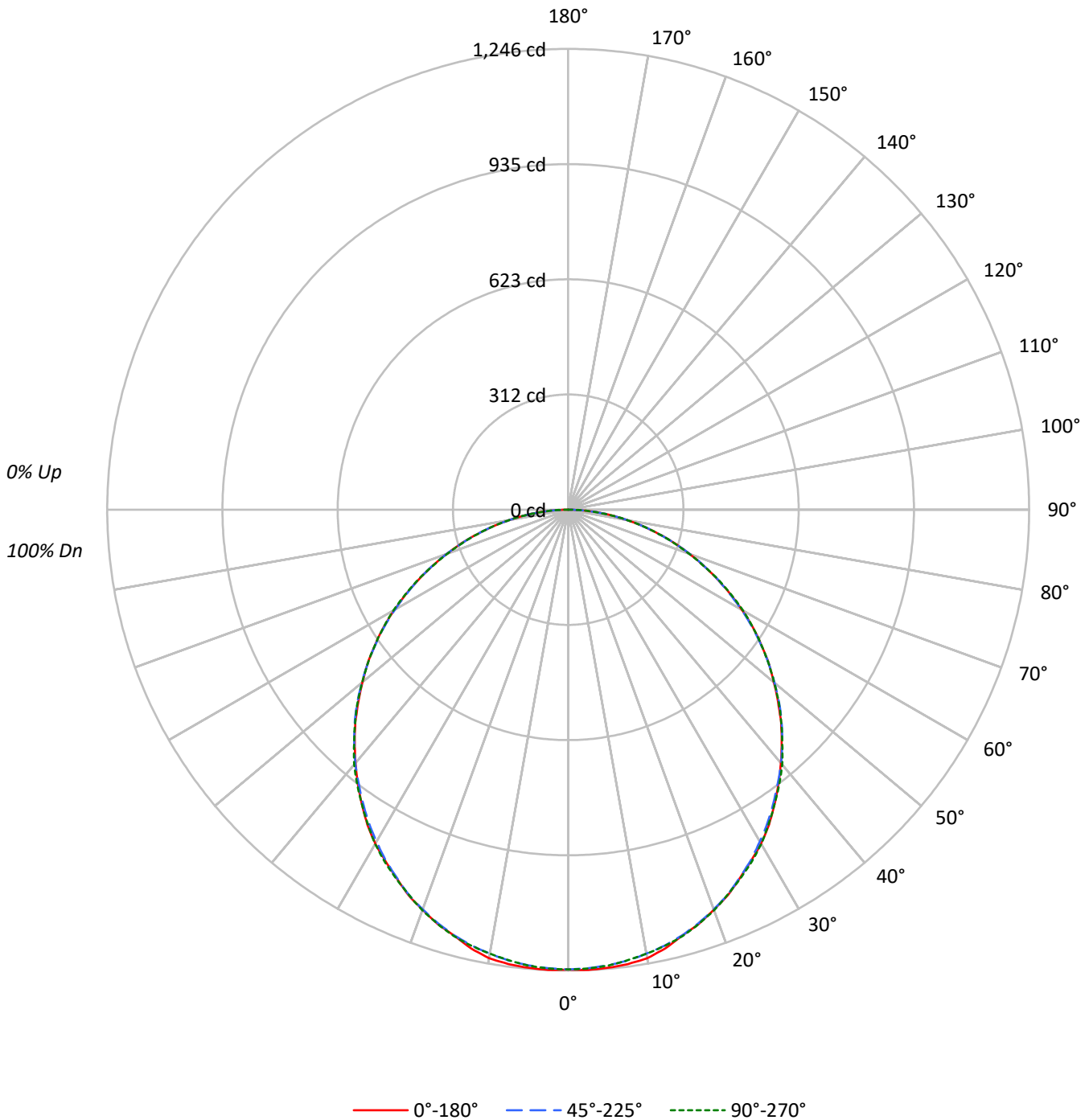
Input Watts (W): 26.598  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1673	1673	1673
5°	1679	1670	1671
10°	1683	1665	1665
15°	1660	1659	1663
20°	1648	1647	1650
25°	1630	1629	1634
30°	1620	1610	1621
35°	1597	1589	1597
40°	1571	1572	1581
45°	1548	1553	1550
50°	1519	1524	1521
55°	1495	1492	1495
60°	1461	1456	1470
65°	1415	1421	1426
70°	1369	1376	1366
75°	1321	1321	1321
80°	1248	1248	1261
85°	1153	1166	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.3
10°-20°	336.0	9.4
20°-30°	506.4	14.2
30°-40°	606.6	17.1
40°-50°	627.9	17.7
50°-60°	569.3	16.0
60°-70°	441.4	12.4
70°-80°	268.4	7.5
80°-90°	83.5	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°	960.0	27.0
0°-40°	1566.6	44.0
0°-60°	2763.7	77.7
0°-90°	3557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1243	1243	1243	1243	1243	
5°	1243	1236	1236	1235	1237	118
15°	1192	1193	1191	1187	1194	337
25°	1098	1098	1097	1101	1101	507
35°	972	966	967	971	972	608
45°	814	815	816	813	814	627
55°	638	634	636	638	638	570
65°	445	447	446	445	448	441
75°	254	253	254	253	254	269
85°	75	74	76	75	73	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1243.2	1243.2	1243.2	1243.2	1243.2
2.5°	1245.7	1240.7	1240.7	1239.0	1241.5
5°	1243.2	1235.7	1236.5	1234.8	1237.3
7.5°	1239.0	1229.0	1229.8	1228.1	1229.0
10°	1231.5	1219.7	1218.9	1218.0	1218.9
12.5°	1214.7	1208.0	1207.1	1205.5	1208.0
15°	1192.0	1192.9	1191.2	1187.0	1193.7
17.5°	1174.4	1173.6	1171.9	1167.7	1174.4
20°	1150.9	1151.8	1150.1	1148.4	1152.6
22.5°	1128.3	1125.8	1126.6	1125.8	1126.6
25°	1098.1	1098.1	1097.2	1100.6	1100.6
27.5°	1070.4	1067.0	1068.7	1072.1	1073.8
30°	1042.7	1034.3	1036.0	1039.4	1043.6
32.5°	1010.0	1001.6	1003.3	1006.6	1008.3
35°	972.3	965.5	967.2	971.4	972.3
37.5°	933.7	929.5	931.2	934.5	937.0
40°	894.2	892.6	895.1	894.2	900.1
42.5°	854.0	853.1	855.7	855.7	856.5
45°	813.7	815.4	816.2	812.9	814.5
47.5°	769.2	770.1	773.4	771.8	772.6
50°	725.6	724.8	728.1	729.0	726.5
52.5°	683.7	679.5	682.8	684.5	682.8
55°	637.5	634.2	635.9	638.4	637.5
57.5°	592.2	588.9	589.7	593.9	592.2
60°	542.8	541.9	541.1	544.4	546.1
62.5°	494.1	493.3	491.6	494.9	496.6
65°	444.6	447.1	446.3	444.6	448.0
67.5°	397.6	400.1	397.6	395.9	395.9
70°	348.1	350.6	349.8	348.1	347.3
72.5°	302.0	302.0	300.3	299.5	300.3
75°	254.2	253.3	254.2	253.3	254.2
77.5°	207.2	208.0	208.0	208.0	207.2
80°	161.1	161.1	161.1	161.9	162.7
82.5°	118.3	115.8	118.3	116.6	117.4
85°	74.7	73.8	75.5	74.7	73.0
87.5°	33.6	34.4	34.4	35.2	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)