

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: P294238

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294238  
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-L82765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3489.0 lumens  
Efficiency: N/A  
Efficacy: 133.5 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

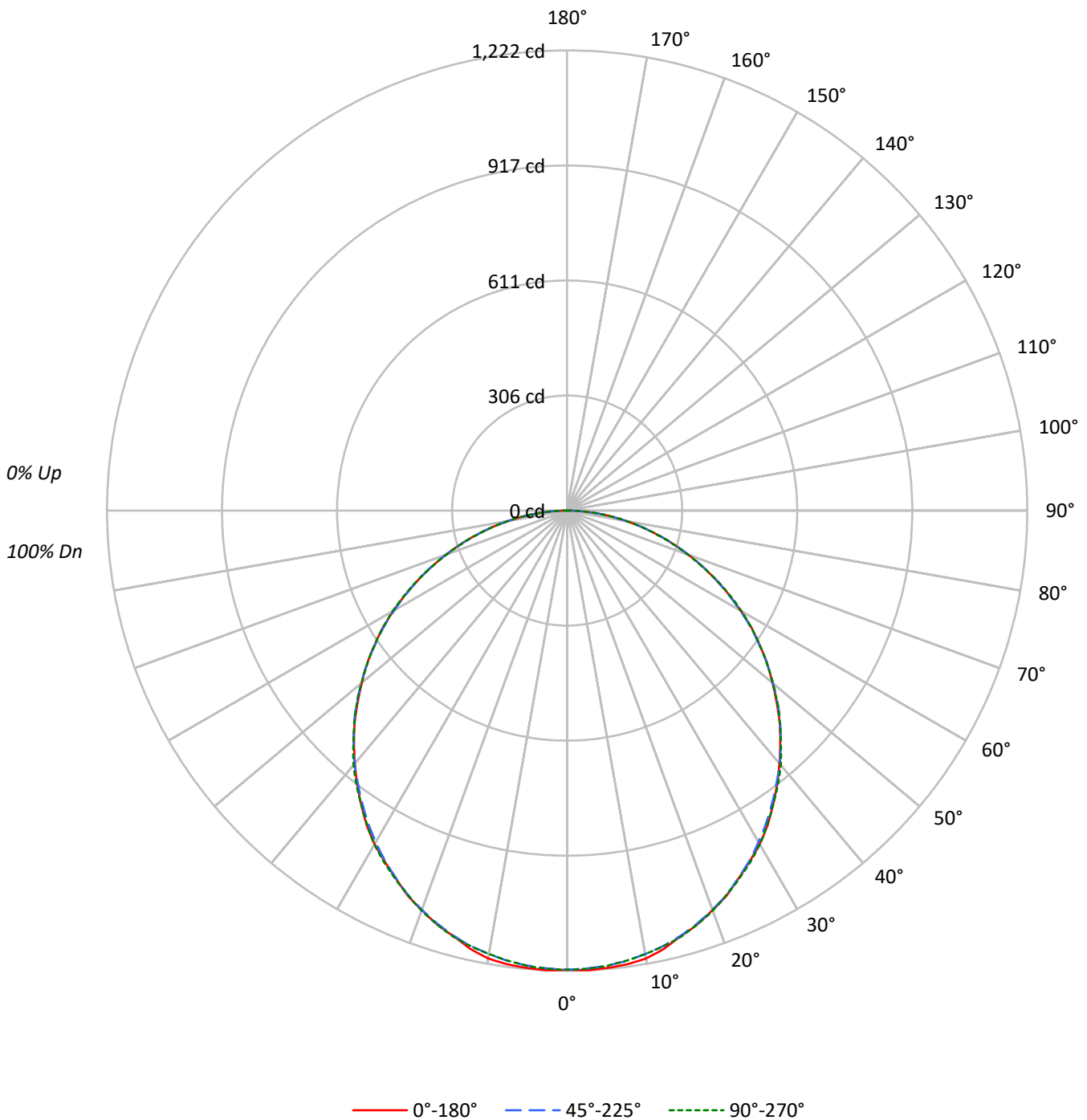
Input Watts (W): 26.133  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1641	1641	1641
5°	1647	1638	1639
10°	1650	1633	1633
15°	1629	1628	1631
20°	1616	1615	1619
25°	1599	1598	1603
30°	1589	1579	1590
35°	1566	1558	1566
40°	1541	1542	1551
45°	1519	1523	1520
50°	1490	1495	1492
55°	1467	1463	1467
60°	1433	1428	1442
65°	1388	1394	1399
70°	1343	1350	1340
75°	1296	1296	1296
80°	1224	1224	1237
85°	1130	1144	1105



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.3	3.3
10°-20°	329.6	9.4
20°-30°	496.7	14.2
30°-40°	595.0	17.1
40°-50°	615.9	17.7
50°-60°	558.4	16.0
60°-70°	432.9	12.4
70°-80°	263.3	7.5
80°-90°	81.9	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°	941.7	27.0
0°-40°	1536.6	44.0
0°-60°	2710.9	77.7
0°-90°	3489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1219	1212	1213	1211	1214	116
15°	1169	1170	1168	1164	1171	331
25°	1077	1077	1076	1080	1080	497
35°	954	947	949	953	954	597
45°	798	800	801	797	799	615
55°	625	622	624	626	625	559
65°	436	439	438	436	439	433
75°	249	248	249	248	249	263
85°	73	72	74	73	72	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1219.4	1219.4	1219.4	1219.4	1219.4
2.5°	1221.9	1217.0	1217.0	1215.3	1217.8
5°	1219.4	1212.0	1212.9	1211.2	1213.7
7.5°	1215.3	1205.5	1206.3	1204.6	1205.5
10°	1207.9	1196.4	1195.6	1194.8	1195.6
12.5°	1191.5	1184.9	1184.1	1182.4	1184.9
15°	1169.3	1170.1	1168.4	1164.3	1170.9
17.5°	1152.0	1151.2	1149.5	1145.4	1152.0
20°	1128.9	1129.8	1128.1	1126.5	1130.6
22.5°	1106.7	1104.2	1105.1	1104.2	1105.1
25°	1077.1	1077.1	1076.3	1079.6	1079.6
27.5°	1049.9	1046.6	1048.3	1051.6	1053.2
30°	1022.8	1014.6	1016.2	1019.5	1023.6
32.5°	990.7	982.5	984.1	987.4	989.1
35°	953.7	947.1	948.7	952.8	953.7
37.5°	915.8	911.7	913.3	916.6	919.1
40°	877.1	875.5	878.0	877.1	882.9
42.5°	837.6	836.8	839.3	839.3	840.1
45°	798.2	799.8	800.6	797.3	799.0
47.5°	754.5	755.4	758.7	757.0	757.8
50°	711.8	710.9	714.2	715.0	712.6
52.5°	670.6	666.5	669.8	671.4	669.8
55°	625.4	622.1	623.7	626.2	625.4
57.5°	580.9	577.6	578.5	582.6	580.9
60°	532.4	531.6	530.7	534.0	535.7
62.5°	484.7	483.8	482.2	485.5	487.1
65°	436.1	438.6	437.7	436.1	439.4
67.5°	390.0	392.5	390.0	388.4	388.4
70°	341.5	343.9	343.1	341.5	340.7
72.5°	296.2	296.2	294.6	293.8	294.6
75°	249.3	248.5	249.3	248.5	249.3
77.5°	203.2	204.1	204.1	204.1	203.2
80°	158.0	158.0	158.0	158.8	159.6
82.5°	116.0	113.6	116.0	114.4	115.2
85°	73.2	72.4	74.1	73.2	71.6
87.5°	32.9	33.7	33.7	34.6	34.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)