

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: P294175

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294175  
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-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3044.0 lumens  
Efficiency: N/A  
Efficacy: 132.5 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

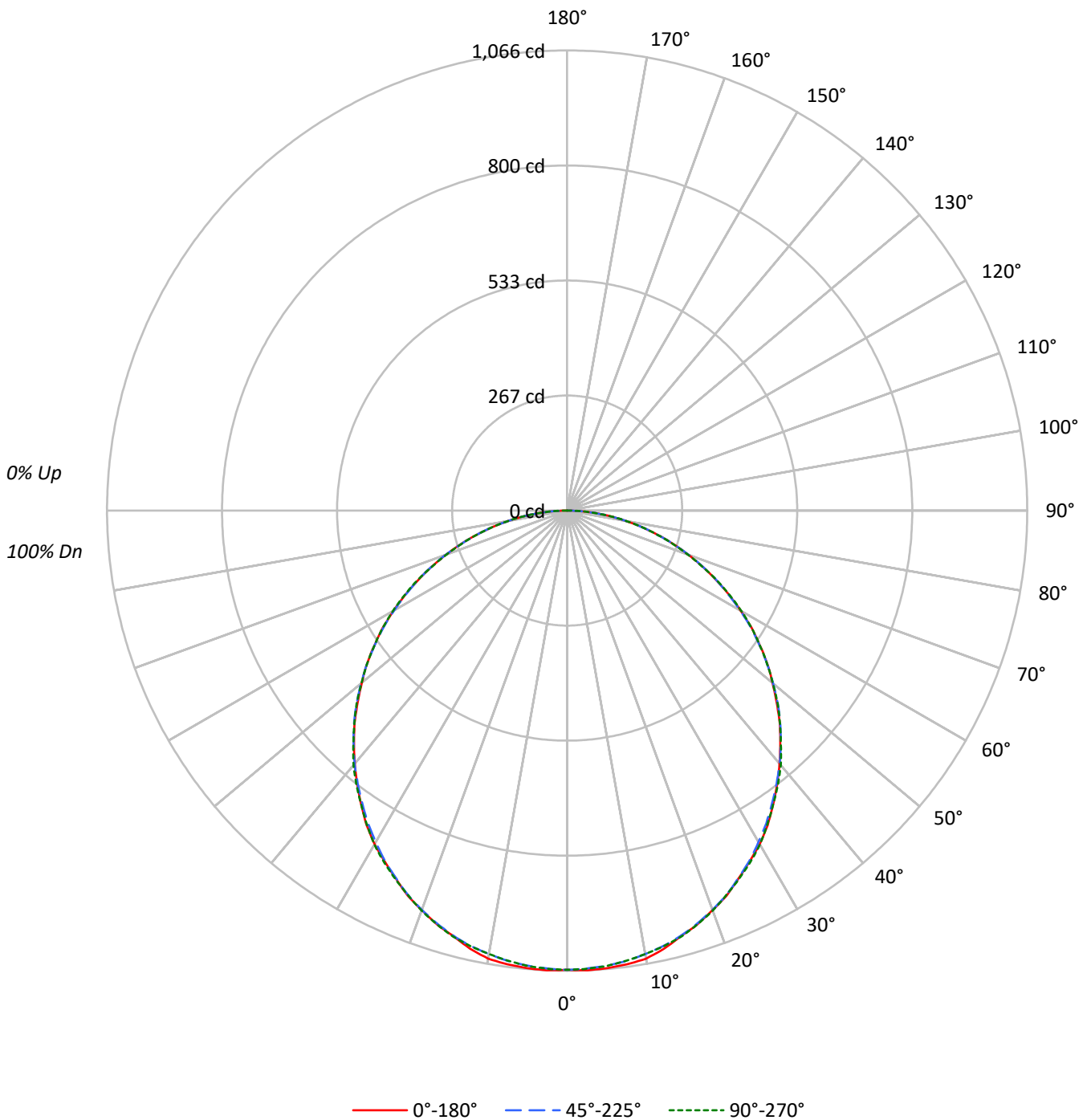
Input Watts (W): 22.971  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1431	1431	1431
5°	1437	1429	1430
10°	1440	1425	1425
15°	1421	1420	1423
20°	1410	1409	1412
25°	1395	1394	1398
30°	1386	1377	1388
35°	1367	1360	1367
40°	1344	1345	1353
45°	1325	1329	1326
50°	1300	1304	1301
55°	1280	1277	1280
60°	1250	1246	1257
65°	1211	1216	1221
70°	1172	1178	1169
75°	1131	1131	1131
80°	1068	1068	1079
85°	986	997	965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	3.3
10°-20°	287.6	9.4
20°-30°	433.4	14.2
30°-40°	519.1	17.1
40°-50°	537.3	17.7
50°-60°	487.2	16.0
60°-70°	377.7	12.4
70°-80°	229.7	7.5
80°-90°	71.5	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°	821.6	27.0
0°-40°	1340.6	44.0
0°-60°	2365.1	77.7
0°-90°	3044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3044.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1064	1058	1058	1057	1059	101
15°	1020	1021	1019	1016	1022	288
25°	940	940	939	942	942	434
35°	832	826	828	831	832	520
45°	696	698	698	696	697	536
55°	546	543	544	546	546	488
65°	380	383	382	380	383	377
75°	218	217	218	217	218	230
85°	64	63	65	64	62	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.9	1063.9	1063.9	1063.9	1063.9
2.5°	1066.1	1061.8	1061.8	1060.3	1062.5
5°	1063.9	1057.5	1058.2	1056.7	1058.9
7.5°	1060.3	1051.7	1052.4	1051.0	1051.7
10°	1053.9	1043.8	1043.1	1042.4	1043.1
12.5°	1039.5	1033.8	1033.0	1031.6	1033.8
15°	1020.1	1020.8	1019.4	1015.8	1021.6
17.5°	1005.0	1004.3	1002.9	999.3	1005.0
20°	984.9	985.7	984.2	982.8	986.4
22.5°	965.6	963.4	964.1	963.4	964.1
25°	939.7	939.7	939.0	941.9	941.9
27.5°	916.0	913.2	914.6	917.5	918.9
30°	892.3	885.2	886.6	889.5	893.1
32.5°	864.3	857.2	858.6	861.5	862.9
35°	832.0	826.3	827.7	831.3	832.0
37.5°	799.0	795.4	796.9	799.7	801.9
40°	765.3	763.8	766.0	765.3	770.3
42.5°	730.8	730.1	732.2	732.2	733.0
45°	696.4	697.8	698.5	695.6	697.1
47.5°	658.3	659.0	661.9	660.5	661.2
50°	621.0	620.3	623.1	623.8	621.7
52.5°	585.1	581.5	584.4	585.8	584.4
55°	545.6	542.7	544.2	546.3	545.6
57.5°	506.8	504.0	504.7	508.3	506.8
60°	464.5	463.8	463.0	465.9	467.3
62.5°	422.8	422.1	420.7	423.6	425.0
65°	380.5	382.6	381.9	380.5	383.4
67.5°	340.3	342.4	340.3	338.8	338.8
70°	297.9	300.1	299.4	297.9	297.2
72.5°	258.4	258.4	257.0	256.3	257.0
75°	217.5	216.8	217.5	216.8	217.5
77.5°	177.3	178.0	178.0	178.0	177.3
80°	137.8	137.8	137.8	138.6	139.3
82.5°	101.2	99.1	101.2	99.8	100.5
85°	63.9	63.2	64.6	63.9	62.5
87.5°	28.7	29.4	29.4	30.2	30.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)