

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: P294356

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294356  
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-L92765-W2A1-U-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2870.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 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

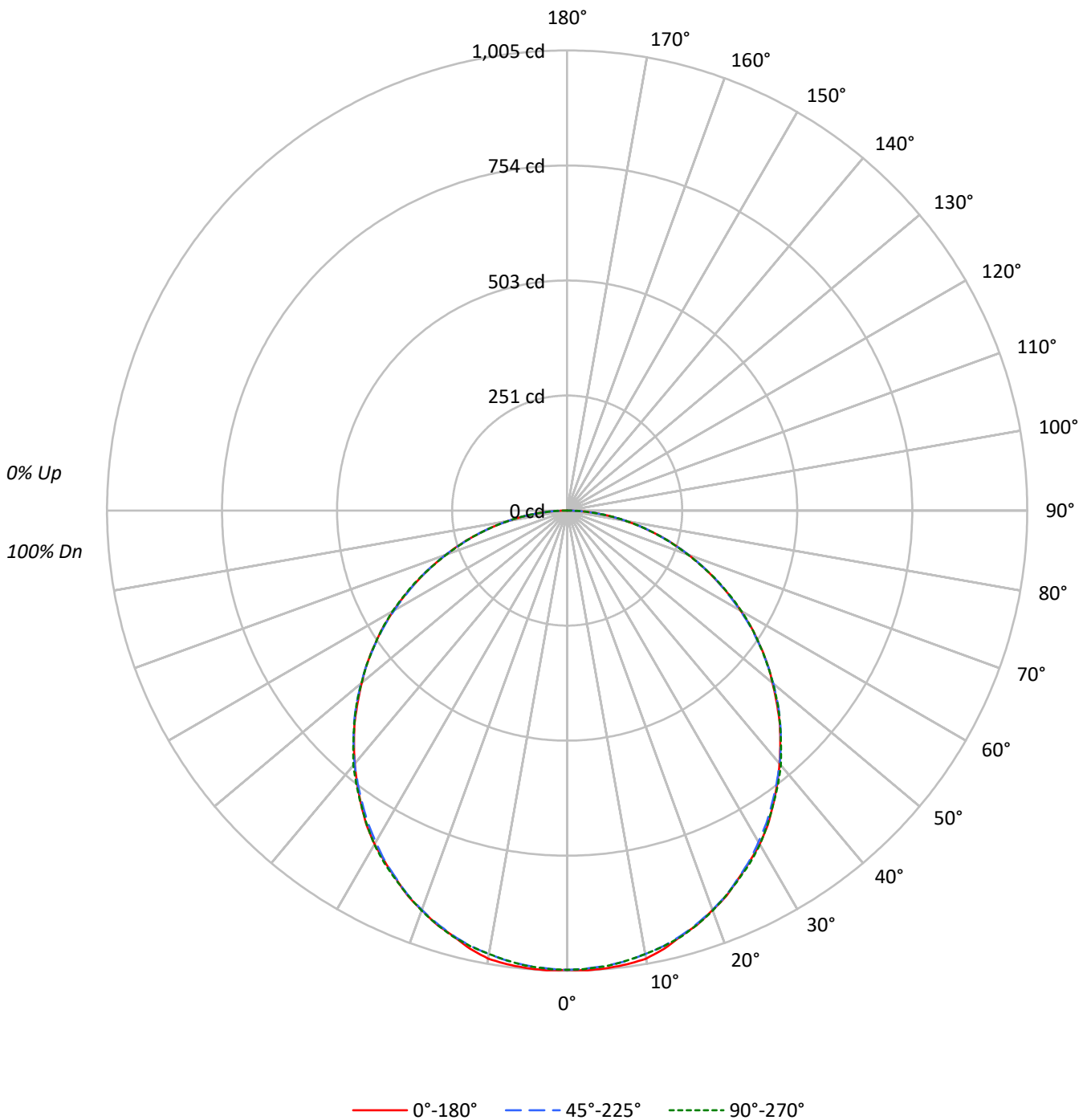
Input Watts (W): 23.715  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1350	1350	1350
5°	1355	1348	1348
10°	1358	1344	1344
15°	1340	1339	1342
20°	1330	1329	1332
25°	1315	1314	1318
30°	1307	1299	1308
35°	1289	1282	1289
40°	1267	1268	1276
45°	1249	1253	1251
50°	1226	1230	1227
55°	1207	1204	1207
60°	1178	1175	1186
65°	1142	1146	1151
70°	1105	1110	1102
75°	1066	1066	1066
80°	1007	1007	1017
85°	929	940	909



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	3.3
10°-20°	271.1	9.4
20°-30°	408.6	14.2
30°-40°	489.4	17.1
40°-50°	506.6	17.7
50°-60°	459.3	16.0
60°-70°	356.1	12.4
70°-80°	216.6	7.5
80°-90°	67.4	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°	774.6	27.0
0°-40°	1264.0	44.0
0°-60°	2230.0	77.7
0°-90°	2870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2870.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1003	1003	1003	1003	1003	
5°	1003	997	998	996	998	95
15°	962	962	961	958	963	272
25°	886	886	885	888	888	409
35°	784	779	780	784	784	491
45°	656	658	659	656	657	506
55°	514	512	513	515	514	460
65°	359	361	360	359	361	356
75°	205	204	205	204	205	217
85°	60	60	61	60	59	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1003.1	1003.1	1003.1	1003.1	1003.1
2.5°	1005.1	1001.1	1001.1	999.7	1001.7
5°	1003.1	997.0	997.7	996.3	998.4
7.5°	999.7	991.6	992.3	990.9	991.6
10°	993.6	984.1	983.5	982.8	983.5
12.5°	980.1	974.7	974.0	972.6	974.7
15°	961.8	962.5	961.1	957.7	963.2
17.5°	947.6	946.9	945.6	942.2	947.6
20°	928.6	929.3	928.0	926.6	930.0
22.5°	910.4	908.3	909.0	908.3	909.0
25°	886.0	886.0	885.3	888.0	888.0
27.5°	863.7	861.0	862.3	865.0	866.4
30°	841.3	834.6	835.9	838.6	842.0
32.5°	814.9	808.2	809.5	812.2	813.6
35°	784.5	779.1	780.4	783.8	784.5
37.5°	753.3	750.0	751.3	754.0	756.0
40°	721.5	720.2	722.2	721.5	726.3
42.5°	689.0	688.4	690.4	690.4	691.1
45°	656.5	657.9	658.6	655.9	657.2
47.5°	620.7	621.4	624.1	622.7	623.4
50°	585.5	584.8	587.5	588.2	586.2
52.5°	551.6	548.3	551.0	552.3	551.0
55°	514.4	511.7	513.1	515.1	514.4
57.5°	477.9	475.2	475.8	479.2	477.9
60°	437.9	437.2	436.6	439.3	440.6
62.5°	398.7	398.0	396.6	399.3	400.7
65°	358.7	360.8	360.1	358.7	361.4
67.5°	320.8	322.9	320.8	319.5	319.5
70°	280.9	282.9	282.2	280.9	280.2
72.5°	243.7	243.7	242.3	241.6	242.3
75°	205.1	204.4	205.1	204.4	205.1
77.5°	167.2	167.9	167.9	167.9	167.2
80°	130.0	130.0	130.0	130.6	131.3
82.5°	95.4	93.4	95.4	94.1	94.8
85°	60.2	59.6	60.9	60.2	58.9
87.5°	27.1	27.8	27.8	28.4	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)