

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: P294301

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294301  
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-L93050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2587.0 lumens  
Efficiency: N/A  
Efficacy: 110.5 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

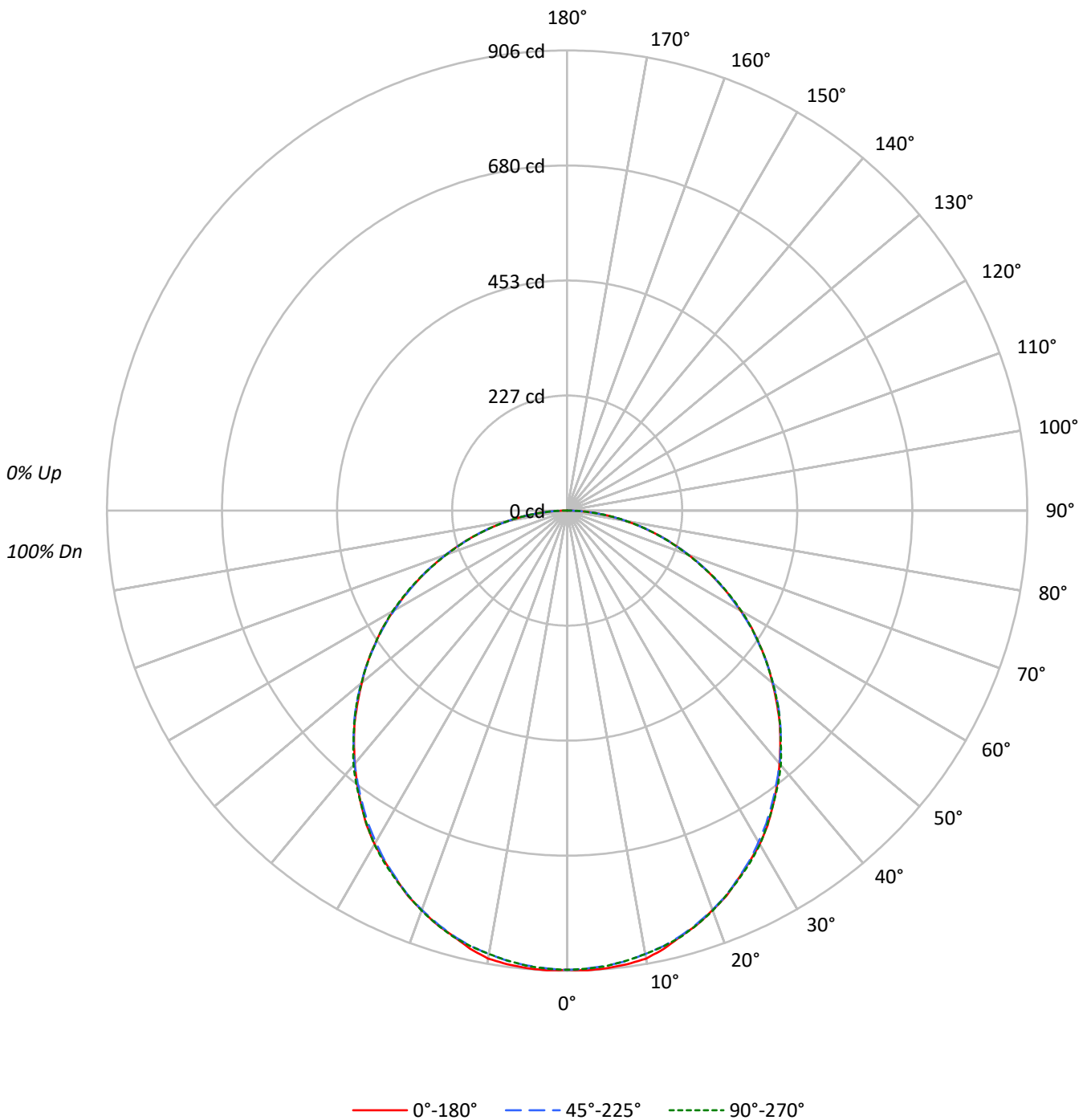
Input Watts (W): 23.407449  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1217	1217	1217
5°	1221	1215	1215
10°	1224	1211	1211
15°	1208	1207	1209
20°	1199	1198	1200
25°	1186	1185	1188
30°	1178	1171	1179
35°	1161	1156	1161
40°	1142	1143	1150
45°	1126	1130	1127
50°	1105	1109	1106
55°	1088	1085	1088
60°	1062	1059	1069
65°	1030	1033	1037
70°	996	1001	994
75°	961	961	961
80°	907	907	917
85°	838	848	820



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.5	3.3
10°-20°	244.4	9.4
20°-30°	368.3	14.2
30°-40°	441.1	17.1
40°-50°	456.6	17.7
50°-60°	414.0	16.0
60°-70°	321.0	12.4
70°-80°	195.2	7.5
80°-90°	60.7	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°	698.2	27.0
0°-40°	1139.4	44.0
0°-60°	2010.1	77.7
0°-90°	2587.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2587.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	899	899	898	900	86
15°	867	868	866	863	868	245
25°	799	799	798	800	800	369
35°	707	702	704	706	707	442
45°	592	593	594	591	592	456
55°	464	461	462	464	464	414
65°	323	325	325	323	326	321
75°	185	184	185	184	185	195
85°	54	54	55	54	53	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.2	904.2	904.2	904.2	904.2
2.5°	906.0	902.4	902.4	901.1	903.0
5°	904.2	898.7	899.3	898.1	899.9
7.5°	901.1	893.8	894.4	893.2	893.8
10°	895.6	887.1	886.5	885.9	886.5
12.5°	883.4	878.6	878.0	876.7	878.6
15°	867.0	867.6	866.4	863.3	868.2
17.5°	854.2	853.5	852.3	849.3	854.2
20°	837.1	837.7	836.5	835.2	838.3
22.5°	820.6	818.8	819.4	818.8	819.4
25°	798.6	798.6	798.0	800.5	800.5
27.5°	778.5	776.1	777.3	779.7	780.9
30°	758.4	752.3	753.5	755.9	759.0
32.5°	734.6	728.5	729.7	732.1	733.4
35°	707.1	702.2	703.5	706.5	707.1
37.5°	679.1	676.0	677.2	679.7	681.5
40°	650.4	649.2	651.0	650.4	654.7
42.5°	621.1	620.5	622.3	622.3	622.9
45°	591.8	593.0	593.6	591.2	592.4
47.5°	559.5	560.1	562.5	561.3	561.9
50°	527.7	527.1	529.6	530.2	528.4
52.5°	497.2	494.2	496.6	497.9	496.6
55°	463.7	461.2	462.5	464.3	463.7
57.5°	430.7	428.3	428.9	432.0	430.7
60°	394.7	394.1	393.5	396.0	397.2
62.5°	359.4	358.7	357.5	360.0	361.2
65°	323.4	325.2	324.6	323.4	325.8
67.5°	289.2	291.0	289.2	288.0	288.0
70°	253.2	255.0	254.4	253.2	252.6
72.5°	219.6	219.6	218.4	217.8	218.4
75°	184.9	184.3	184.9	184.3	184.9
77.5°	150.7	151.3	151.3	151.3	150.7
80°	117.1	117.1	117.1	117.8	118.4
82.5°	86.0	84.2	86.0	84.8	85.4
85°	54.3	53.7	54.9	54.3	53.1
87.5°	24.4	25.0	25.0	25.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)