

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: P294300

Luminaire Tested: **24GR-LD5-34-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294300  
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-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2368.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 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

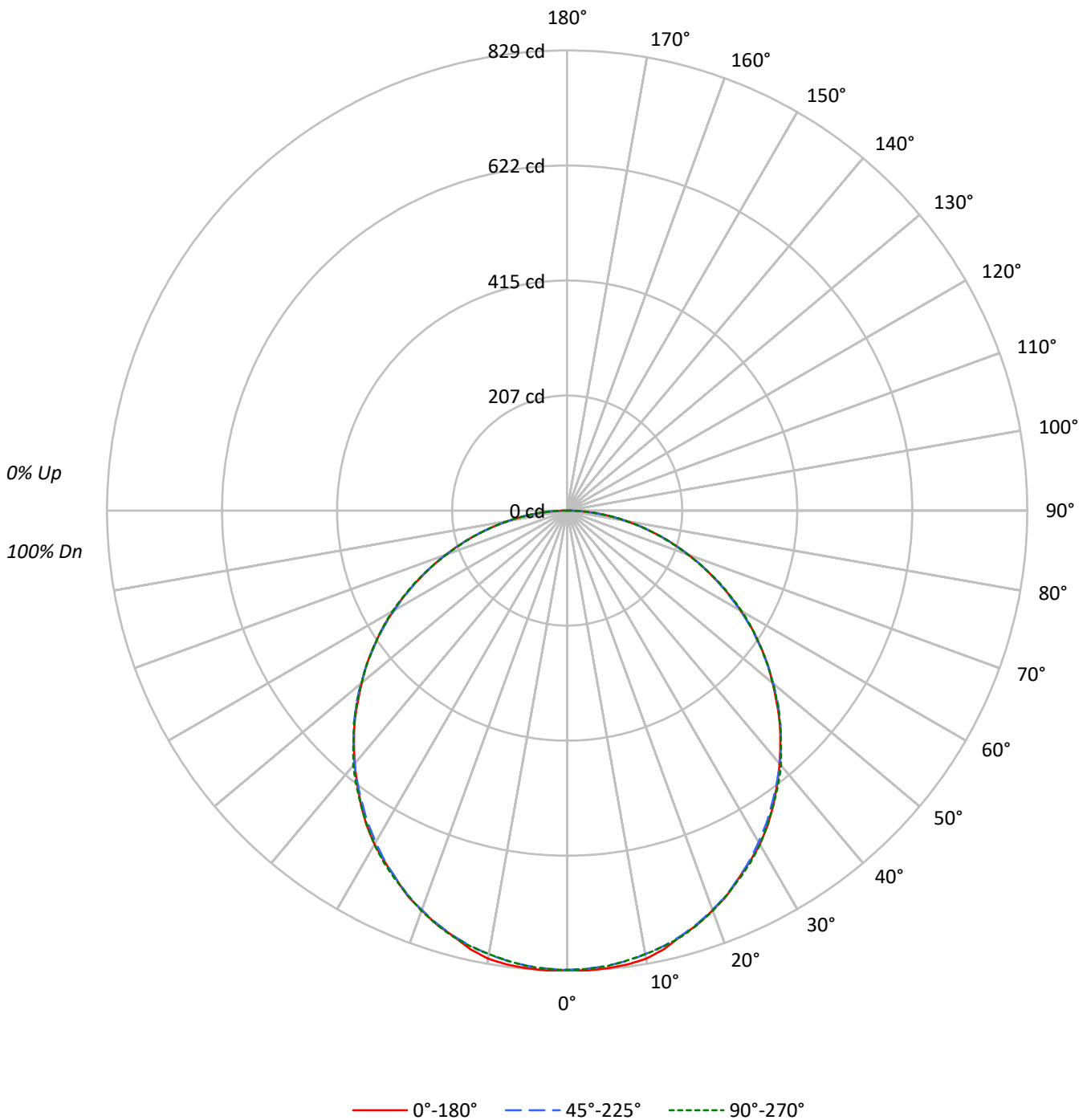
Input Watts (W): 23.499333  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1114	1114	1114
5°	1118	1112	1113
10°	1120	1109	1109
15°	1105	1105	1107
20°	1097	1096	1099
25°	1085	1084	1088
30°	1079	1072	1079
35°	1063	1058	1063
40°	1046	1047	1052
45°	1031	1034	1032
50°	1011	1015	1012
55°	996	993	996
60°	972	969	978
65°	942	946	949
70°	912	916	910
75°	880	880	880
80°	831	831	839
85°	767	777	750



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	3.3
10°-20°	223.7	9.4
20°-30°	337.1	14.2
30°-40°	403.8	17.1
40°-50°	418.0	17.7
50°-60°	379.0	16.0
60°-70°	293.8	12.4
70°-80°	178.7	7.5
80°-90°	55.6	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°	639.1	27.0
0°-40°	1042.9	44.0
0°-60°	1839.9	77.7
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	828	823	823	822	824	79
15°	794	794	793	790	795	224
25°	731	731	730	733	733	337
35°	647	643	644	647	647	405
45°	542	543	543	541	542	417
55°	424	422	423	425	424	379
65°	296	298	297	296	298	294
75°	169	169	169	169	169	179
85°	50	49	50	50	49	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	827.6	827.6	827.6	827.6	827.6
2.5°	829.3	826.0	826.0	824.9	826.5
5°	827.6	822.6	823.2	822.1	823.7
7.5°	824.9	818.1	818.7	817.6	818.1
10°	819.8	812.0	811.4	810.9	811.4
12.5°	808.7	804.2	803.6	802.5	804.2
15°	793.6	794.1	793.0	790.2	794.7
17.5°	781.8	781.3	780.2	777.4	781.8
20°	766.2	766.8	765.7	764.5	767.3
22.5°	751.1	749.5	750.0	749.5	750.0
25°	731.0	731.0	730.5	732.7	732.7
27.5°	712.6	710.4	711.5	713.7	714.8
30°	694.2	688.6	689.7	691.9	694.7
32.5°	672.4	666.8	667.9	670.2	671.3
35°	647.3	642.8	643.9	646.7	647.3
37.5°	621.6	618.8	619.9	622.1	623.8
40°	595.3	594.2	595.9	595.3	599.2
42.5°	568.5	568.0	569.6	569.6	570.2
45°	541.7	542.8	543.4	541.2	542.3
47.5°	512.1	512.7	514.9	513.8	514.3
50°	483.1	482.5	484.7	485.3	483.6
52.5°	455.1	452.4	454.6	455.7	454.6
55°	424.4	422.2	423.3	425.0	424.4
57.5°	394.3	392.0	392.6	395.4	394.3
60°	361.3	360.8	360.2	362.4	363.6
62.5°	328.9	328.4	327.3	329.5	330.6
65°	296.0	297.7	297.1	296.0	298.2
67.5°	264.7	266.4	264.7	263.6	263.6
70°	231.8	233.4	232.9	231.8	231.2
72.5°	201.0	201.0	199.9	199.4	199.9
75°	169.2	168.7	169.2	168.7	169.2
77.5°	137.9	138.5	138.5	138.5	137.9
80°	107.2	107.2	107.2	107.8	108.3
82.5°	78.7	77.1	78.7	77.6	78.2
85°	49.7	49.1	50.3	49.7	48.6
87.5°	22.3	22.9	22.9	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)