

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: P294344

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294344  
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-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2408.0 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

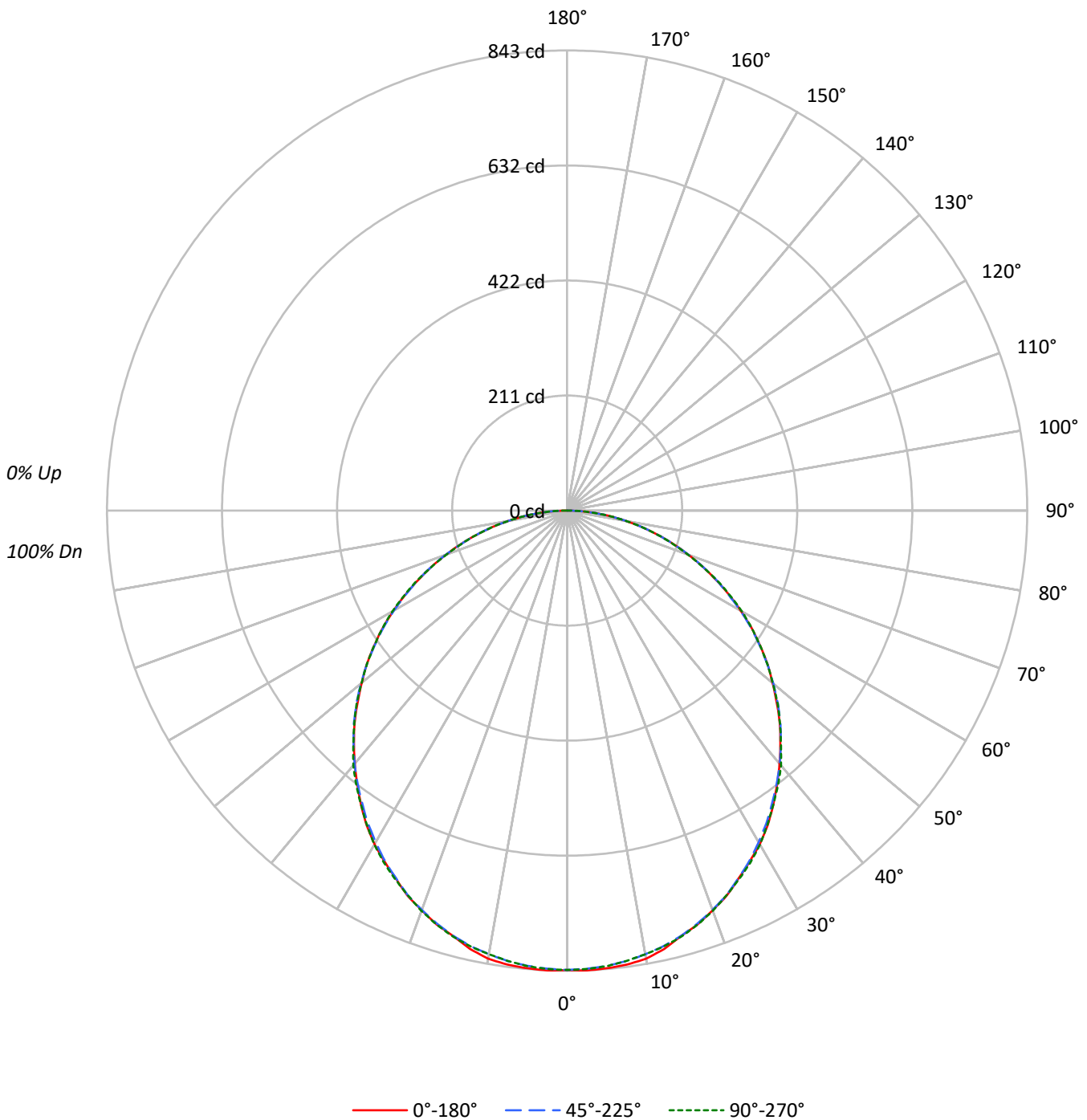
Input Watts (W): 20.367  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294344

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P294344

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K

**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°	1132	1132	1132
5°	1137	1131	1131
10°	1139	1127	1127
15°	1124	1123	1126
20°	1116	1115	1117
25°	1104	1103	1106
30°	1097	1090	1098
35°	1081	1076	1081
40°	1063	1064	1070
45°	1048	1051	1049
50°	1028	1032	1029
55°	1012	1010	1012
60°	989	986	995
65°	958	962	966
70°	927	932	925
75°	895	895	895
80°	845	845	854
85°	780	789	763



TEST NUMBER: P294344

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	3.3
10°-20°	227.5	9.4
20°-30°	342.8	14.2
30°-40°	410.6	17.1
40°-50°	425.1	17.7
50°-60°	385.4	16.0
60°-70°	298.8	12.4
70°-80°	181.7	7.5
80°-90°	56.5	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°	649.9	27.0
0°-40°	1060.5	44.0
0°-60°	1871.0	77.7
0°-90°	2408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2408.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	842	836	837	836	838	80
15°	807	808	806	804	808	228
25°	743	743	743	745	745	343
35°	658	654	655	658	658	412
45°	551	552	553	550	551	424
55°	432	429	430	432	432	386
65°	301	303	302	301	303	299
75°	172	172	172	172	172	182
85°	50	50	51	50	49	57
90°	0	0	0	0	0	



TEST NUMBER: P294344

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	841.6	841.6	841.6	841.6	841.6
2.5°	843.3	839.9	839.9	838.8	840.5
5°	841.6	836.5	837.1	835.9	837.6
7.5°	838.8	832.0	832.5	831.4	832.0
10°	833.7	825.7	825.2	824.6	825.2
12.5°	822.3	817.8	817.2	816.1	817.8
15°	807.0	807.5	806.4	803.6	808.1
17.5°	795.1	794.5	793.4	790.5	795.1
20°	779.2	779.7	778.6	777.5	780.3
22.5°	763.8	762.1	762.7	762.1	762.7
25°	743.4	743.4	742.8	745.1	745.1
27.5°	724.6	722.4	723.5	725.8	726.9
30°	705.9	700.2	701.4	703.6	706.5
32.5°	683.7	678.1	679.2	681.5	682.6
35°	658.2	653.6	654.8	657.6	658.2
37.5°	632.1	629.2	630.4	632.6	634.3
40°	605.4	604.2	605.9	605.4	609.4
42.5°	578.1	577.6	579.3	579.3	579.8
45°	550.9	552.0	552.6	550.3	551.4
47.5°	520.8	521.3	523.6	522.5	523.0
50°	491.2	490.7	492.9	493.5	491.8
52.5°	462.8	460.0	462.3	463.4	462.3
55°	431.6	429.3	430.5	432.2	431.6
57.5°	400.9	398.7	399.2	402.1	400.9
60°	367.4	366.9	366.3	368.6	369.7
62.5°	334.5	333.9	332.8	335.1	336.2
65°	301.0	302.7	302.1	301.0	303.3
67.5°	269.2	270.9	269.2	268.0	268.0
70°	235.7	237.4	236.8	235.7	235.1
72.5°	204.4	204.4	203.3	202.7	203.3
75°	172.1	171.5	172.1	171.5	172.1
77.5°	140.3	140.8	140.8	140.8	140.3
80°	109.0	109.0	109.0	109.6	110.2
82.5°	80.1	78.4	80.1	78.9	79.5
85°	50.5	50.0	51.1	50.5	49.4
87.5°	22.7	23.3	23.3	23.9	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)