

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: P292127

Luminaire Tested: **22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292127  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2176.0 lumens  
Efficiency: N/A  
Efficacy: 137.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

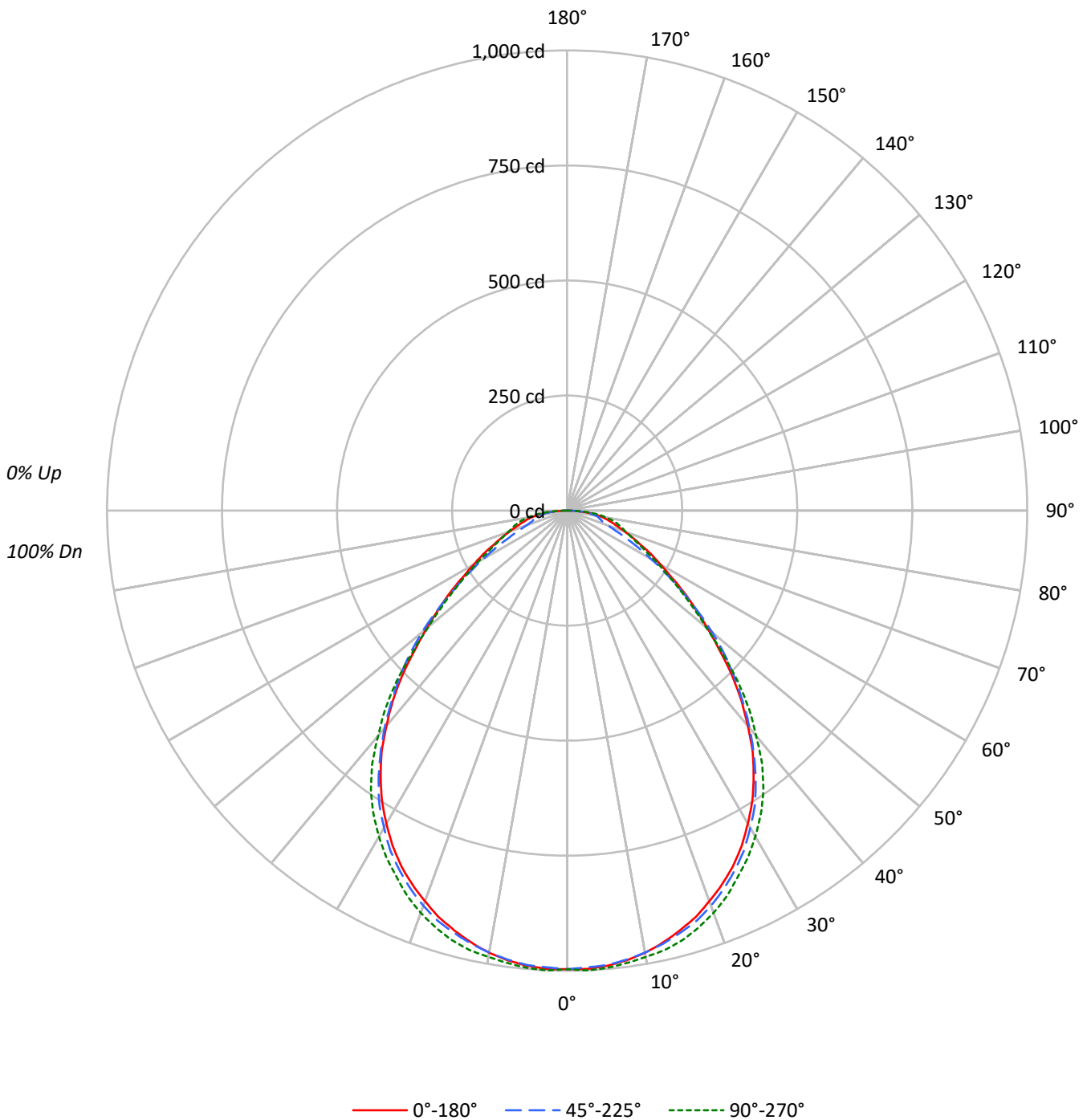
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292127

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292127

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K

**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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76					74				
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66					64				
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58					56				
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51					49				
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46					44				
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41					39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37					36				
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34					32				
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31					30				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2682	2682	2682
5°	2682	2678	2695
10°	2666	2665	2691
15°	2632	2646	2693
20°	2587	2617	2664
25°	2532	2560	2607
30°	2440	2473	2541
35°	2321	2347	2442
40°	2145	2168	2245
45°	1927	1962	1993
50°	1666	1726	1649
55°	1454	1416	1397
60°	1259	1133	1210
65°	1125	890	1086
70°	1044	737	1072
75°	1043	779	1189
80°	1153	981	1342
85°	1204	1062	1516



TEST NUMBER: P292127

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	4.3
10°-20°	268.6	12.3
20°-30°	397.2	18.3
30°-40°	448.3	20.6
40°-50°	395.2	18.2
50°-60°	271.1	12.5
60°-70°	160.0	7.4
70°-80°	99.8	4.6
80°-90°	41.6	1.9
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°	760.1	34.9
0°-40°	1208.4	55.5
0°-60°	1874.6	86.1
0°-90°	2176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2176.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	993	991	992	995	998	94
15°	945	946	950	962	967	266
25°	853	856	862	874	878	392
35°	706	712	714	732	743	440
45°	506	509	516	518	524	389
55°	310	302	302	292	298	278
65°	177	156	140	162	171	178
75°	100	90	75	105	114	108
85°	39	36	34	45	49	42
90°	0	0	0	0	0	



TEST NUMBER: P292127

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	996.5	996.5	996.5	996.5	996.5
2.5°	997.0	994.5	993.5	997.5	1000.1
5°	993.0	991.0	991.5	995.0	997.5
7.5°	985.9	984.4	984.4	989.4	992.0
10°	975.8	975.3	975.3	981.3	984.9
12.5°	961.6	962.1	964.1	972.2	978.3
15°	944.9	945.9	949.9	961.6	966.7
17.5°	926.7	926.7	934.8	943.9	949.9
20°	903.4	904.9	914.0	924.1	930.2
22.5°	879.6	882.1	889.7	901.3	906.9
25°	852.7	855.8	862.3	873.5	878.0
27.5°	821.3	825.4	832.5	840.6	850.2
30°	785.4	791.5	796.0	807.1	817.8
32.5°	748.9	754.5	759.5	771.2	783.3
35°	706.4	712.5	714.5	731.7	743.3
37.5°	662.8	665.4	666.4	683.6	696.3
40°	610.7	615.7	617.3	630.9	639.0
42.5°	560.5	562.6	565.6	575.7	585.4
45°	506.4	508.9	515.5	518.5	523.6
47.5°	449.7	457.2	464.8	455.2	455.7
50°	398.0	404.1	412.2	394.0	394.0
52.5°	351.9	355.0	355.5	340.3	343.3
55°	309.9	302.3	301.8	291.7	297.7
57.5°	267.9	257.7	254.2	251.2	258.2
60°	233.9	215.7	210.6	215.2	224.8
62.5°	206.1	182.8	173.2	184.8	193.4
65°	176.7	155.5	139.8	161.5	170.6
67.5°	153.9	133.7	113.4	144.3	150.9
70°	132.7	117.0	93.7	131.1	136.2
72.5°	115.5	103.3	81.0	118.5	124.6
75°	100.3	90.1	74.9	104.8	114.4
77.5°	88.1	77.0	69.9	90.6	102.3
80°	74.4	63.3	63.3	76.0	86.6
82.5°	58.7	49.6	51.1	61.8	69.4
85°	39.0	36.5	34.4	45.1	49.1
87.5°	19.7	20.3	18.2	23.3	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)