

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: P292225

Luminaire Tested: **22GR-LD5-20-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292225  
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-L93050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 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

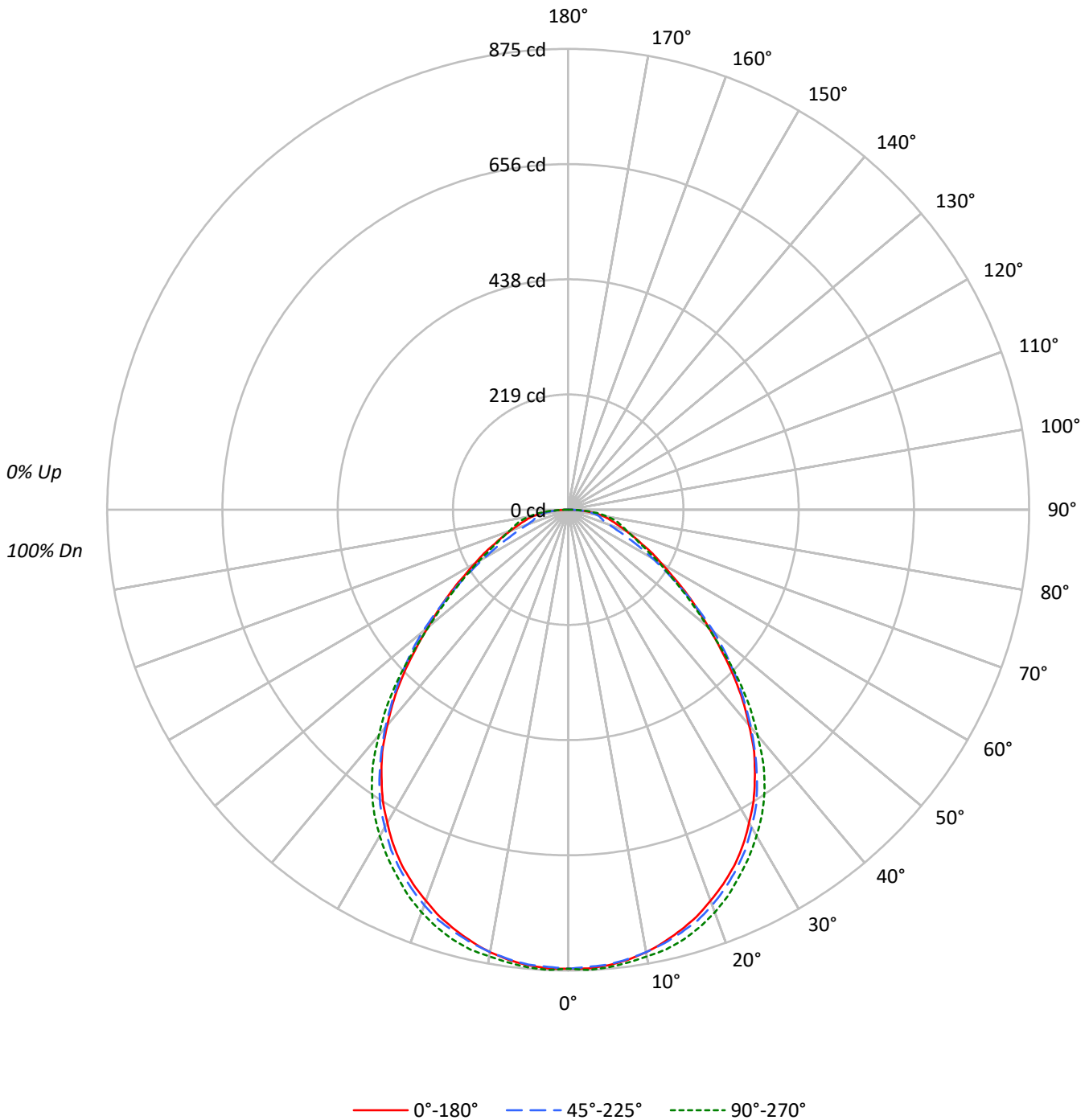
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	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°	2345	2345	2345
5°	2346	2342	2357
10°	2332	2331	2353
15°	2302	2315	2355
20°	2262	2289	2330
25°	2214	2239	2280
30°	2134	2163	2222
35°	2030	2053	2136
40°	1876	1896	1963
45°	1685	1716	1743
50°	1457	1509	1442
55°	1271	1238	1222
60°	1101	991	1058
65°	984	778	950
70°	913	644	937
75°	912	681	1041
80°	1009	859	1173
85°	1053	929	1328



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.5	4.3
10°-20°	234.9	12.3
20°-30°	347.4	18.3
30°-40°	392.0	20.6
40°-50°	345.6	18.2
50°-60°	237.1	12.5
60°-70°	139.9	7.4
70°-80°	87.3	4.6
80°-90°	36.4	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°	664.8	34.9
0°-40°	1056.8	55.5
0°-60°	1639.4	86.1
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	868	867	867	870	872	82
15°	826	827	831	841	845	233
25°	746	748	754	764	768	342
35°	618	623	625	640	650	385
45°	443	445	451	454	458	340
55°	271	264	264	255	260	243
65°	155	136	122	141	149	156
75°	88	79	66	92	100	94
85°	34	32	30	39	43	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	871.5	871.5	871.5	871.5	871.5
2.5°	871.9	869.7	868.8	872.4	874.6
5°	868.4	866.6	867.1	870.2	872.4
7.5°	862.2	860.9	860.9	865.3	867.5
10°	853.3	852.9	852.9	858.2	861.3
12.5°	840.9	841.4	843.2	850.2	855.6
15°	826.3	827.2	830.8	840.9	845.4
17.5°	810.4	810.4	817.5	825.5	830.8
20°	790.0	791.4	799.3	808.2	813.5
22.5°	769.2	771.4	778.1	788.3	793.1
25°	745.7	748.4	754.2	763.9	767.9
27.5°	718.3	721.8	728.0	735.1	743.5
30°	686.8	692.2	696.1	705.9	715.2
32.5°	655.0	659.8	664.3	674.4	685.1
35°	617.8	623.1	624.8	639.9	650.1
37.5°	579.7	581.9	582.8	597.8	608.9
40°	534.1	538.5	539.8	551.8	558.9
42.5°	490.2	492.0	494.7	503.5	511.9
45°	442.8	445.1	450.8	453.5	457.9
47.5°	393.2	399.9	406.5	398.1	398.6
50°	348.1	353.4	360.5	344.5	344.5
52.5°	307.8	310.4	310.9	297.6	300.2
55°	271.0	264.4	263.9	255.1	260.4
57.5°	234.3	225.4	222.3	219.6	225.8
60°	204.6	188.6	184.2	188.2	196.6
62.5°	180.2	159.9	151.5	161.6	169.2
65°	154.6	136.0	122.2	141.3	149.2
67.5°	134.6	116.9	99.2	126.2	132.0
70°	116.0	102.3	81.9	114.7	119.1
72.5°	101.0	90.3	70.9	103.6	108.9
75°	87.7	78.8	65.5	91.7	100.1
77.5°	77.1	67.3	61.1	79.3	89.5
80°	65.1	55.4	55.4	66.4	75.7
82.5°	51.4	43.4	44.7	54.0	60.7
85°	34.1	31.9	30.1	39.4	43.0
87.5°	17.3	17.7	15.9	20.4	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)