

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: P292229

Luminaire Tested: **22GR-LD5-24-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292229  
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-LD5-24-A-UNV-L93050-W2A1-U-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2068.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

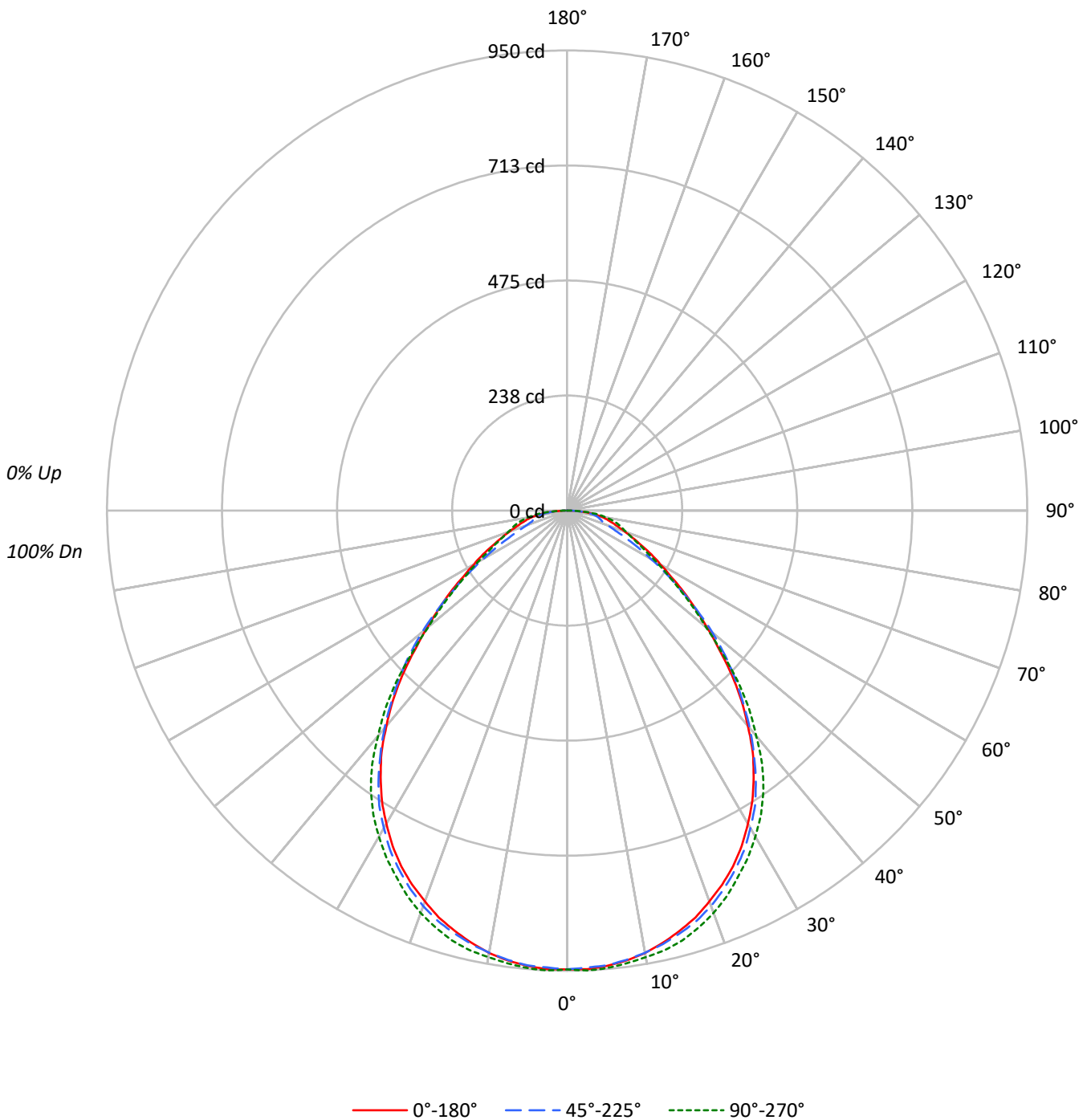
Input Watts (W): 18.507  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2549	2549	2549
5°	2549	2545	2561
10°	2534	2533	2558
15°	2502	2515	2559
20°	2458	2487	2531
25°	2406	2433	2478
30°	2319	2351	2415
35°	2205	2231	2321
40°	2039	2061	2133
45°	1831	1864	1894
50°	1584	1640	1567
55°	1382	1346	1328
60°	1196	1077	1150
65°	1070	846	1033
70°	992	700	1019
75°	991	740	1131
80°	1096	933	1275
85°	1145	1010	1442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.6	4.3
10°-20°	255.3	12.3
20°-30°	377.5	18.3
30°-40°	426.0	20.6
40°-50°	375.5	18.2
50°-60°	257.6	12.5
60°-70°	152.0	7.4
70°-80°	94.9	4.6
80°-90°	39.5	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°	722.4	34.9
0°-40°	1148.4	55.5
0°-60°	1781.6	86.1
0°-90°	2068.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2068.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	944	942	942	946	948	90
15°	898	899	903	914	919	253
25°	810	813	820	830	834	372
35°	671	677	679	695	706	418
45°	481	484	490	493	498	370
55°	294	287	287	277	283	264
65°	168	148	133	154	162	169
75°	95	86	71	100	109	102
85°	37	35	33	43	47	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	947.1	947.1	947.1	947.1	947.1
2.5°	947.6	945.1	944.2	948.0	950.4
5°	943.7	941.8	942.3	945.6	948.0
7.5°	937.0	935.5	935.5	940.3	942.7
10°	927.3	926.9	926.9	932.6	936.0
12.5°	913.9	914.3	916.3	924.0	929.7
15°	898.0	898.9	902.8	913.9	918.7
17.5°	880.7	880.7	888.4	897.0	902.8
20°	858.5	860.0	868.6	878.3	884.0
22.5°	835.9	838.3	845.5	856.6	861.9
25°	810.4	813.3	819.5	830.1	834.5
27.5°	780.6	784.4	791.1	798.8	808.0
30°	746.4	752.2	756.5	767.1	777.2
32.5°	711.7	717.0	721.9	732.9	744.5
35°	671.3	677.1	679.0	695.4	706.5
37.5°	629.9	632.3	633.3	649.7	661.7
40°	580.4	585.2	586.6	599.6	607.3
42.5°	532.7	534.7	537.5	547.2	556.3
45°	481.2	483.6	489.9	492.8	497.6
47.5°	427.3	434.6	441.8	432.6	433.1
50°	378.3	384.0	391.7	374.4	374.4
52.5°	334.5	337.3	337.8	323.4	326.3
55°	294.5	287.3	286.8	277.2	283.0
57.5°	254.6	244.9	241.6	238.7	245.4
60°	222.3	205.0	200.2	204.5	213.7
62.5°	195.9	173.7	164.6	175.7	183.8
65°	168.0	147.7	132.8	153.5	162.2
67.5°	146.3	127.0	107.8	137.2	143.4
70°	126.1	111.2	89.0	124.6	129.5
72.5°	109.7	98.2	77.0	112.6	118.4
75°	95.3	85.7	71.2	99.6	108.8
77.5°	83.7	73.1	66.4	86.1	97.2
80°	70.7	60.2	60.2	72.2	82.3
82.5°	55.8	47.2	48.6	58.7	65.9
85°	37.1	34.6	32.7	42.8	46.7
87.5°	18.8	19.2	17.3	22.1	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)