

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: P292158

Luminaire Tested: **22GR-LD5-43-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292158  
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-LD5-43-A-UNV-L83050-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4601.0 lumens  
Efficiency: N/A  
Efficacy: 124.6 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

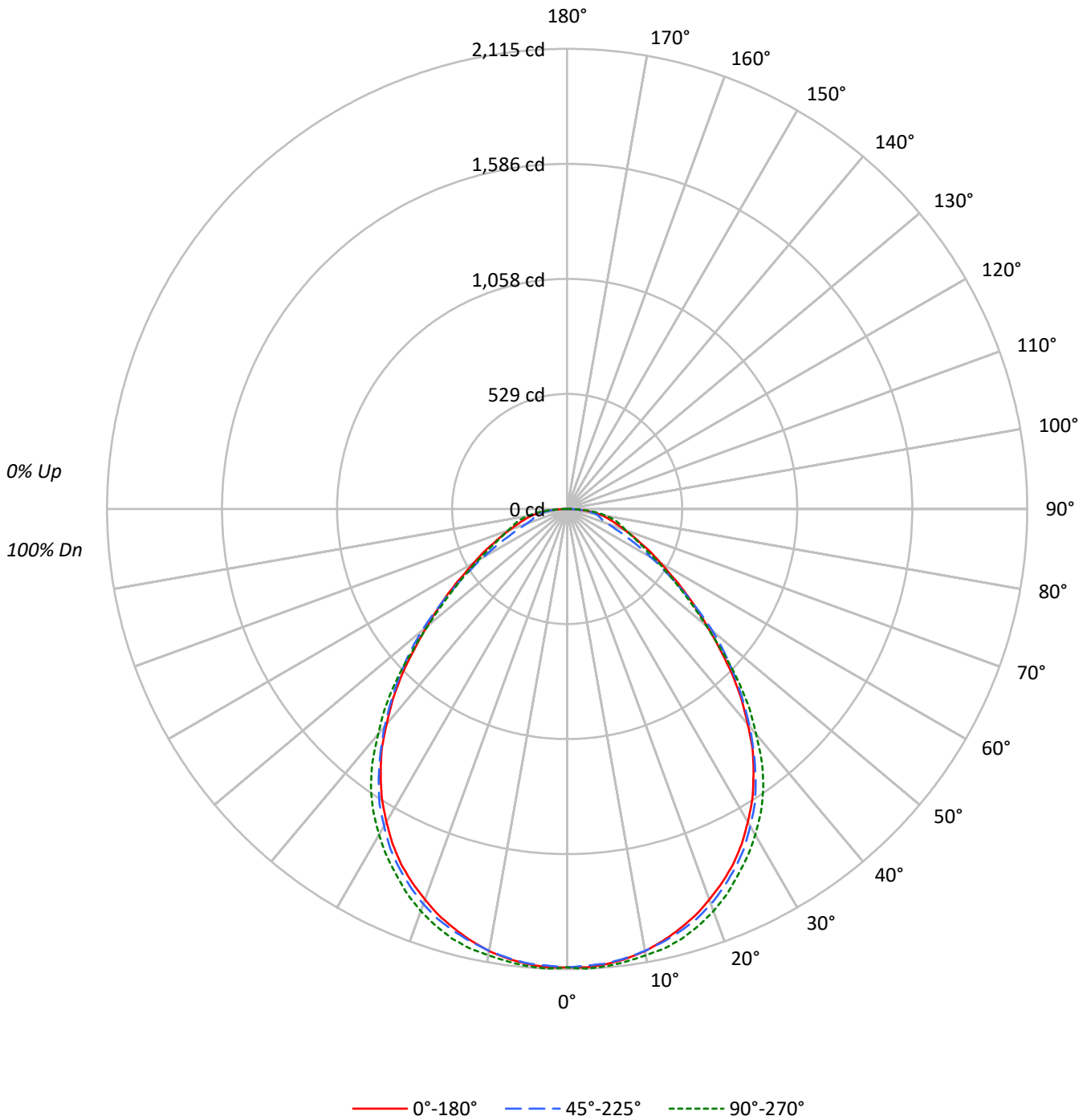
Input Watts (W): 36.921  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5670	5670	5670
5°	5672	5663	5697
10°	5638	5635	5690
15°	5566	5596	5694
20°	5470	5534	5632
25°	5353	5414	5513
30°	5160	5230	5373
35°	4907	4963	5163
40°	4536	4585	4747
45°	4075	4148	4213
50°	3523	3648	3487
55°	3074	2994	2954
60°	2662	2397	2559
65°	2379	1882	2297
70°	2207	1559	2266
75°	2204	1648	2516
80°	2439	2073	2837
85°	2544	2248	3208



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.4	4.3
10°-20°	567.9	12.3
20°-30°	839.9	18.3
30°-40°	947.8	20.6
40°-50°	835.5	18.2
50°-60°	573.2	12.5
60°-70°	338.2	7.4
70°-80°	211.1	4.6
80°-90°	88.0	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°	1607.2	34.9
0°-40°	2555.0	55.5
0°-60°	3963.7	86.1
0°-90°	4601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2107	2107	2107	2107	2107	
5°	2100	2095	2096	2104	2109	199
15°	1998	2000	2009	2033	2044	563
25°	1803	1809	1823	1847	1857	828
35°	1494	1506	1511	1547	1572	931
45°	1071	1076	1090	1096	1107	822
55°	655	639	638	617	630	588
65°	374	329	296	342	361	376
75°	212	191	158	222	242	227
85°	82	77	73	95	104	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2107.1	2107.1	2107.1	2107.1	2107.1
2.5°	2108.2	2102.8	2100.7	2109.2	2114.6
5°	2099.6	2095.3	2096.4	2103.9	2109.2
7.5°	2084.6	2081.4	2081.4	2092.1	2097.5
10°	2063.2	2062.1	2062.1	2075.0	2082.5
12.5°	2033.2	2034.3	2038.6	2055.7	2068.5
15°	1997.9	2000.0	2008.6	2033.2	2043.9
17.5°	1959.3	1959.3	1976.5	1995.7	2008.6
20°	1910.1	1913.3	1932.6	1954.0	1966.8
22.5°	1859.8	1865.1	1881.2	1905.8	1917.6
25°	1803.0	1809.4	1823.4	1846.9	1856.6
27.5°	1736.6	1745.2	1760.2	1777.3	1797.7
30°	1660.6	1673.5	1683.1	1706.7	1729.1
32.5°	1583.5	1595.3	1606.0	1630.6	1656.3
35°	1493.6	1506.4	1510.7	1547.1	1571.8
37.5°	1401.5	1406.9	1409.0	1445.4	1472.2
40°	1291.2	1301.9	1305.2	1334.1	1351.2
42.5°	1185.2	1189.5	1195.9	1217.4	1237.7
45°	1070.7	1076.0	1089.9	1096.4	1107.1
47.5°	950.8	966.8	982.9	962.5	963.6
50°	841.6	854.4	871.5	833.0	833.0
52.5°	744.1	750.5	751.6	719.5	725.9
55°	655.3	639.2	638.1	616.7	629.6
57.5°	566.4	545.0	537.5	531.1	546.0
60°	494.7	456.1	445.4	455.0	475.4
62.5°	435.8	386.5	366.2	390.8	409.0
65°	373.7	328.7	295.5	341.5	360.8
67.5°	325.5	282.7	239.8	305.1	319.1
70°	280.5	247.3	198.1	277.3	288.0
72.5°	244.1	218.4	171.3	250.5	263.4
75°	212.0	190.6	158.5	221.6	242.0
77.5°	186.3	162.7	147.8	191.7	216.3
80°	157.4	133.8	133.8	160.6	183.1
82.5°	124.2	104.9	108.1	130.6	146.7
85°	82.4	77.1	72.8	95.3	103.9
87.5°	41.8	42.8	38.5	49.3	50.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)