

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: P292317

Luminaire Tested: **22GR-LD5-43-A-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292317  
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-L92765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4013.0 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

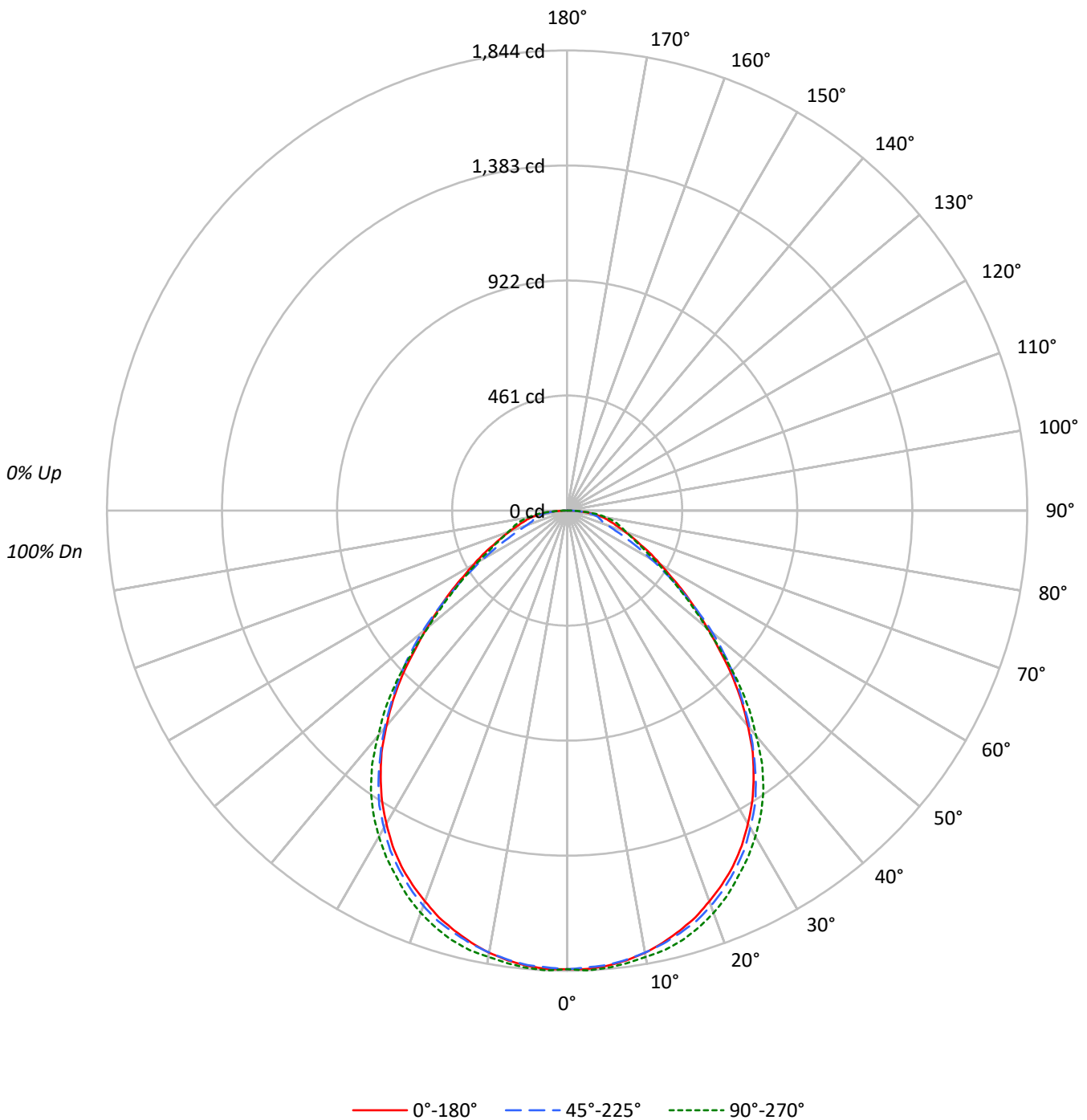
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	4945	4945	4945
5°	4947	4939	4970
10°	4917	4915	4963
15°	4855	4881	4966
20°	4771	4827	4913
25°	4669	4722	4808
30°	4501	4561	4686
35°	4279	4329	4504
40°	3956	3999	4140
45°	3554	3618	3675
50°	3073	3183	3041
55°	2681	2611	2576
60°	2322	2091	2231
65°	2075	1641	2004
70°	1925	1360	1976
75°	1922	1437	2194
80°	2128	1808	2475
85°	2220	1961	2797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.9	4.3
10°-20°	495.3	12.3
20°-30°	732.6	18.3
30°-40°	826.7	20.6
40°-50°	728.8	18.2
50°-60°	499.9	12.5
60°-70°	295.0	7.4
70°-80°	184.1	4.6
80°-90°	76.8	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°	1401.8	34.9
0°-40°	2228.5	55.5
0°-60°	3457.2	86.1
0°-90°	4013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4013.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1838	1838	1838	1838	1838	
5°	1831	1828	1828	1835	1840	174
15°	1743	1744	1752	1773	1783	491
25°	1573	1578	1590	1611	1619	722
35°	1303	1314	1318	1349	1371	812
45°	934	938	951	956	966	717
55°	572	558	557	538	549	513
65°	326	287	258	298	315	328
75°	185	166	138	193	211	198
85°	72	67	64	83	91	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1837.8	1837.8	1837.8	1837.8	1837.8
2.5°	1838.7	1834.1	1832.2	1839.7	1844.3
5°	1831.3	1827.5	1828.5	1835.0	1839.7
7.5°	1818.2	1815.4	1815.4	1824.7	1829.4
10°	1799.5	1798.6	1798.6	1809.8	1816.3
12.5°	1773.4	1774.3	1778.0	1793.0	1804.2
15°	1742.6	1744.4	1751.9	1773.4	1782.7
17.5°	1708.9	1708.9	1723.9	1740.7	1751.9
20°	1666.0	1668.8	1685.6	1704.3	1715.5
22.5°	1622.1	1626.8	1640.8	1662.2	1672.5
25°	1572.6	1578.2	1590.3	1610.9	1619.3
27.5°	1514.7	1522.2	1535.2	1550.2	1567.9
30°	1448.4	1459.6	1468.0	1488.6	1508.2
32.5°	1381.2	1391.4	1400.8	1422.2	1444.7
35°	1302.7	1313.9	1317.7	1349.4	1370.9
37.5°	1222.4	1227.1	1228.9	1260.7	1284.0
40°	1126.2	1135.6	1138.4	1163.6	1178.5
42.5°	1033.8	1037.5	1043.1	1061.8	1079.5
45°	933.8	938.5	950.7	956.3	965.6
47.5°	829.3	843.3	857.3	839.5	840.5
50°	734.0	745.2	760.2	726.5	726.5
52.5°	649.0	654.6	655.6	627.5	633.1
55°	571.5	557.5	556.6	537.9	549.1
57.5°	494.0	475.3	468.8	463.2	476.3
60°	431.4	397.8	388.5	396.9	414.6
62.5°	380.1	337.1	319.4	340.9	356.7
65°	325.9	286.7	257.7	297.9	314.7
67.5°	283.9	246.5	209.2	266.1	278.3
70°	244.7	215.7	172.8	241.9	251.2
72.5°	212.9	190.5	149.4	218.5	229.7
75°	184.9	166.2	138.2	193.3	211.0
77.5°	162.5	141.9	128.9	167.2	188.6
80°	137.3	116.7	116.7	140.1	159.7
82.5°	108.3	91.5	94.3	113.9	127.9
85°	71.9	67.2	63.5	83.1	90.6
87.5°	36.4	37.4	33.6	43.0	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)