

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: P292157

Luminaire Tested: **22GR-LD5-43-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292157  
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-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: 4558.0 lumens  
Efficiency: N/A  
Efficacy: 126.6 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

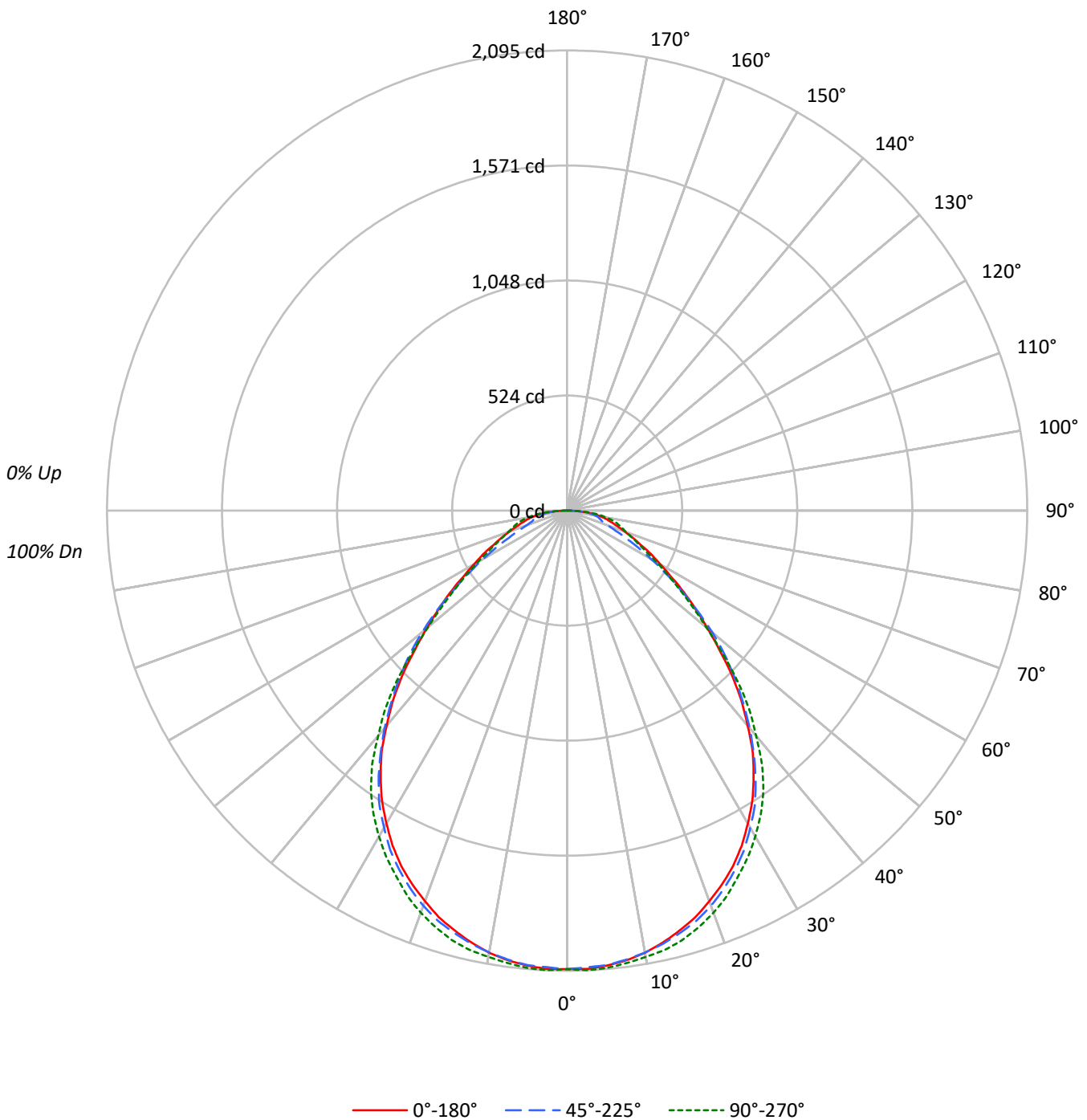
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5617	5617	5617
5°	5619	5610	5644
10°	5585	5582	5637
15°	5514	5543	5641
20°	5419	5483	5580
25°	5304	5363	5461
30°	5112	5181	5323
35°	4861	4916	5115
40°	4494	4542	4702
45°	4037	4109	4174
50°	3490	3615	3455
55°	3045	2966	2926
60°	2637	2375	2534
65°	2357	1864	2276
70°	2186	1544	2245
75°	2183	1632	2492
80°	2416	2055	2811
85°	2523	2226	3177



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.5	4.3
10°-20°	562.6	12.3
20°-30°	832.1	18.3
30°-40°	939.0	20.6
40°-50°	827.7	18.2
50°-60°	567.8	12.5
60°-70°	335.0	7.4
70°-80°	209.1	4.6
80°-90°	87.2	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°	1592.2	34.9
0°-40°	2531.1	55.5
0°-60°	3926.7	86.1
0°-90°	4558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4558.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2087	2087	2087	2087	2087	
5°	2080	2076	2077	2084	2090	197
15°	1979	1981	1990	2014	2025	558
25°	1786	1792	1806	1830	1839	820
35°	1480	1492	1497	1533	1557	922
45°	1061	1066	1080	1086	1097	815
55°	649	633	632	611	624	582
65°	370	326	293	338	357	373
75°	210	189	157	220	240	225
85°	82	76	72	94	103	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2087.4	2087.4	2087.4	2087.4	2087.4
2.5°	2088.5	2083.2	2081.0	2089.5	2094.8
5°	2080.0	2075.7	2076.8	2084.2	2089.5
7.5°	2065.1	2061.9	2061.9	2072.5	2077.9
10°	2043.9	2042.9	2042.9	2055.6	2063.0
12.5°	2014.2	2015.3	2019.5	2036.5	2049.2
15°	1979.2	1981.3	1989.8	2014.2	2024.8
17.5°	1941.0	1941.0	1958.0	1977.1	1989.8
20°	1892.2	1895.4	1914.5	1935.7	1948.5
22.5°	1842.4	1847.7	1863.6	1888.0	1899.7
25°	1786.2	1792.5	1806.3	1829.7	1839.2
27.5°	1720.4	1728.9	1743.7	1760.7	1780.9
30°	1645.1	1657.8	1667.4	1690.7	1713.0
32.5°	1568.7	1580.4	1591.0	1615.4	1640.9
35°	1479.6	1492.4	1496.6	1532.7	1557.1
37.5°	1388.4	1393.7	1395.8	1431.9	1458.4
40°	1279.2	1289.8	1293.0	1321.6	1338.6
42.5°	1174.2	1178.4	1184.8	1206.0	1226.1
45°	1060.7	1066.0	1079.8	1086.1	1096.7
47.5°	941.9	957.8	973.7	953.5	954.6
50°	833.7	846.4	863.4	825.2	825.2
52.5°	737.2	743.5	744.6	712.8	719.1
55°	649.1	633.2	632.2	610.9	623.7
57.5°	561.1	539.9	532.5	526.1	540.9
60°	490.0	451.8	441.2	450.8	470.9
62.5°	431.7	382.9	362.7	387.1	405.2
65°	370.2	325.6	292.7	338.4	357.4
67.5°	322.4	280.0	237.6	302.3	316.1
70°	277.9	245.0	196.2	274.7	285.3
72.5°	241.8	216.4	169.7	248.2	260.9
75°	210.0	188.8	157.0	219.6	239.7
77.5°	184.6	161.2	146.4	189.9	214.3
80°	155.9	132.6	132.6	159.1	181.4
82.5°	123.0	103.9	107.1	129.4	145.3
85°	81.7	76.4	72.1	94.4	102.9
87.5°	41.4	42.4	38.2	48.8	49.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)