

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: P292219

Luminaire Tested: **22GR-LD5-43-A-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292219  
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-L82765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4470.0 lumens  
Efficiency: N/A  
Efficacy: 124.2 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

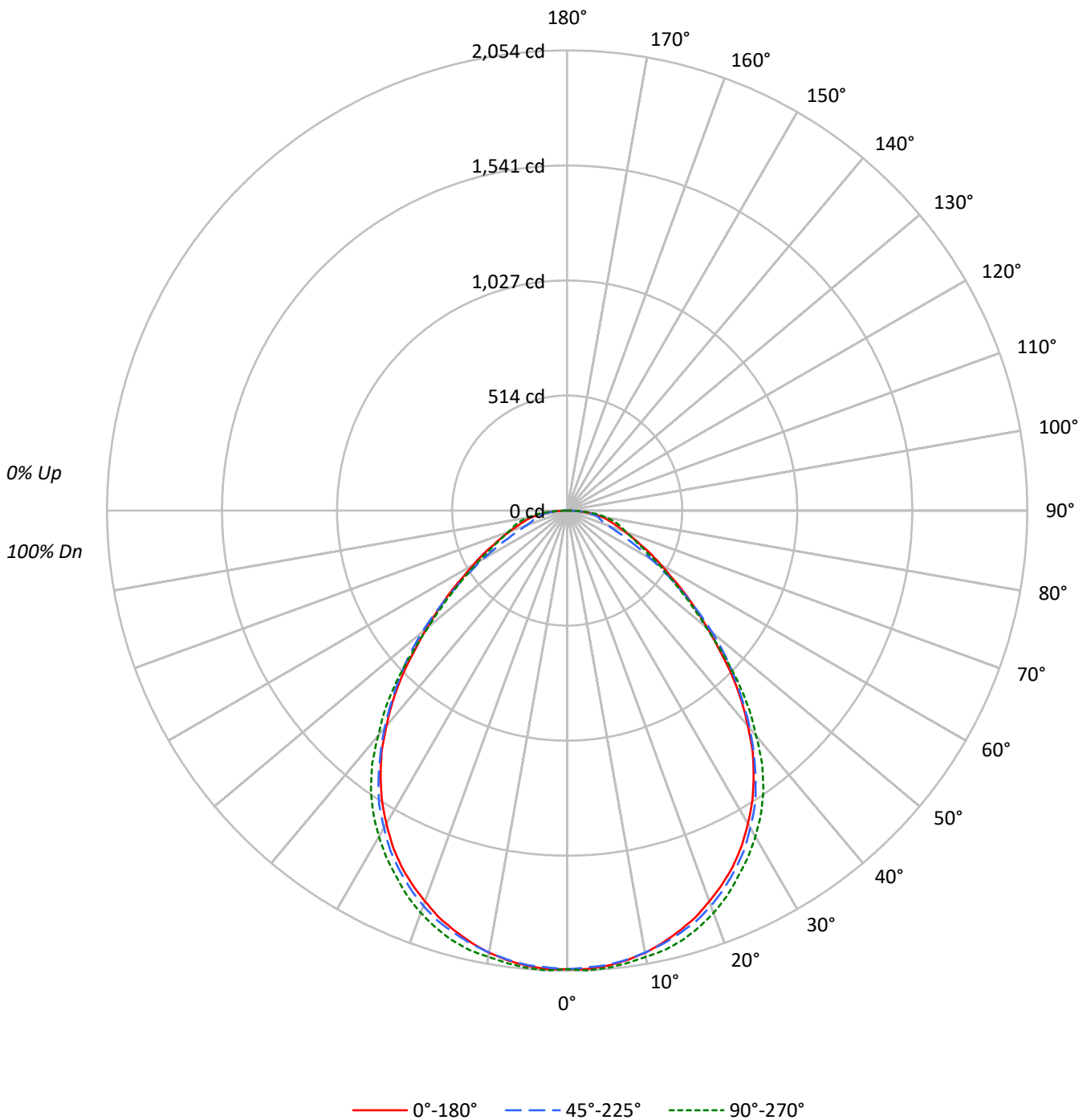
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5509	5509	5509
5°	5510	5502	5535
10°	5477	5474	5528
15°	5407	5436	5532
20°	5314	5377	5472
25°	5201	5260	5355
30°	5013	5081	5220
35°	4767	4822	5016
40°	4407	4454	4611
45°	3959	4030	4093
50°	3423	3545	3388
55°	2987	2909	2869
60°	2587	2329	2485
65°	2311	1828	2232
70°	2144	1514	2201
75°	2142	1600	2444
80°	2369	2015	2757
85°	2473	2183	3115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.7	4.3
10°-20°	551.7	12.3
20°-30°	816.0	18.3
30°-40°	920.8	20.6
40°-50°	811.7	18.2
50°-60°	556.9	12.5
60°-70°	328.6	7.4
70°-80°	205.0	4.6
80°-90°	85.5	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°	1561.5	34.9
0°-40°	2482.3	55.5
0°-60°	3850.9	86.1
0°-90°	4470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4470.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2047	2047	2047	2047	2047	
5°	2040	2036	2037	2044	2049	194
15°	1941	1943	1951	1975	1986	547
25°	1752	1758	1771	1794	1804	804
35°	1451	1464	1468	1503	1527	904
45°	1040	1045	1059	1065	1076	799
55°	637	621	620	599	612	571
65°	363	319	287	332	350	366
75°	206	185	154	215	235	221
85°	80	75	71	93	101	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2047.1	2047.1	2047.1	2047.1	2047.1
2.5°	2048.1	2042.9	2040.9	2049.2	2054.4
5°	2039.8	2035.7	2036.7	2044.0	2049.2
7.5°	2025.3	2022.1	2022.1	2032.5	2037.7
10°	2004.5	2003.4	2003.4	2015.9	2023.2
12.5°	1975.3	1976.4	1980.5	1997.2	2009.7
15°	1941.0	1943.1	1951.4	1975.3	1985.7
17.5°	1903.6	1903.6	1920.2	1938.9	1951.4
20°	1855.7	1858.8	1877.5	1898.4	1910.8
22.5°	1806.8	1812.0	1827.6	1851.5	1863.0
25°	1751.7	1757.9	1771.4	1794.3	1803.7
27.5°	1687.2	1695.5	1710.1	1726.7	1746.5
30°	1613.3	1625.8	1635.2	1658.1	1679.9
32.5°	1538.4	1549.9	1560.3	1584.2	1609.2
35°	1451.1	1463.6	1467.7	1503.1	1527.0
37.5°	1361.6	1366.8	1368.9	1404.3	1430.3
40°	1254.5	1264.9	1268.0	1296.1	1312.7
42.5°	1151.5	1155.7	1161.9	1182.7	1202.5
45°	1040.2	1045.4	1058.9	1065.2	1075.6
47.5°	923.7	939.3	954.9	935.1	936.2
50°	817.6	830.1	846.7	809.3	809.3
52.5°	722.9	729.2	730.2	699.0	705.3
55°	636.6	621.0	620.0	599.2	611.6
57.5°	550.3	529.5	522.2	515.9	530.5
60°	480.6	443.1	432.7	442.1	461.8
62.5°	423.4	375.5	355.7	379.7	397.4
65°	363.0	319.3	287.1	331.8	350.5
67.5°	316.2	274.6	233.0	296.5	310.0
70°	272.5	240.3	192.4	269.4	279.8
72.5°	237.2	212.2	166.4	243.4	255.9
75°	206.0	185.2	153.9	215.3	235.1
77.5°	181.0	158.1	143.5	186.2	210.1
80°	152.9	130.0	130.0	156.0	177.9
82.5°	120.7	101.9	105.1	126.9	142.5
85°	80.1	74.9	70.7	92.6	100.9
87.5°	40.6	41.6	37.4	47.8	48.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)