

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: P292594

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-36-A19/156-UNV-L82765-W2A1-U-5500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3705.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

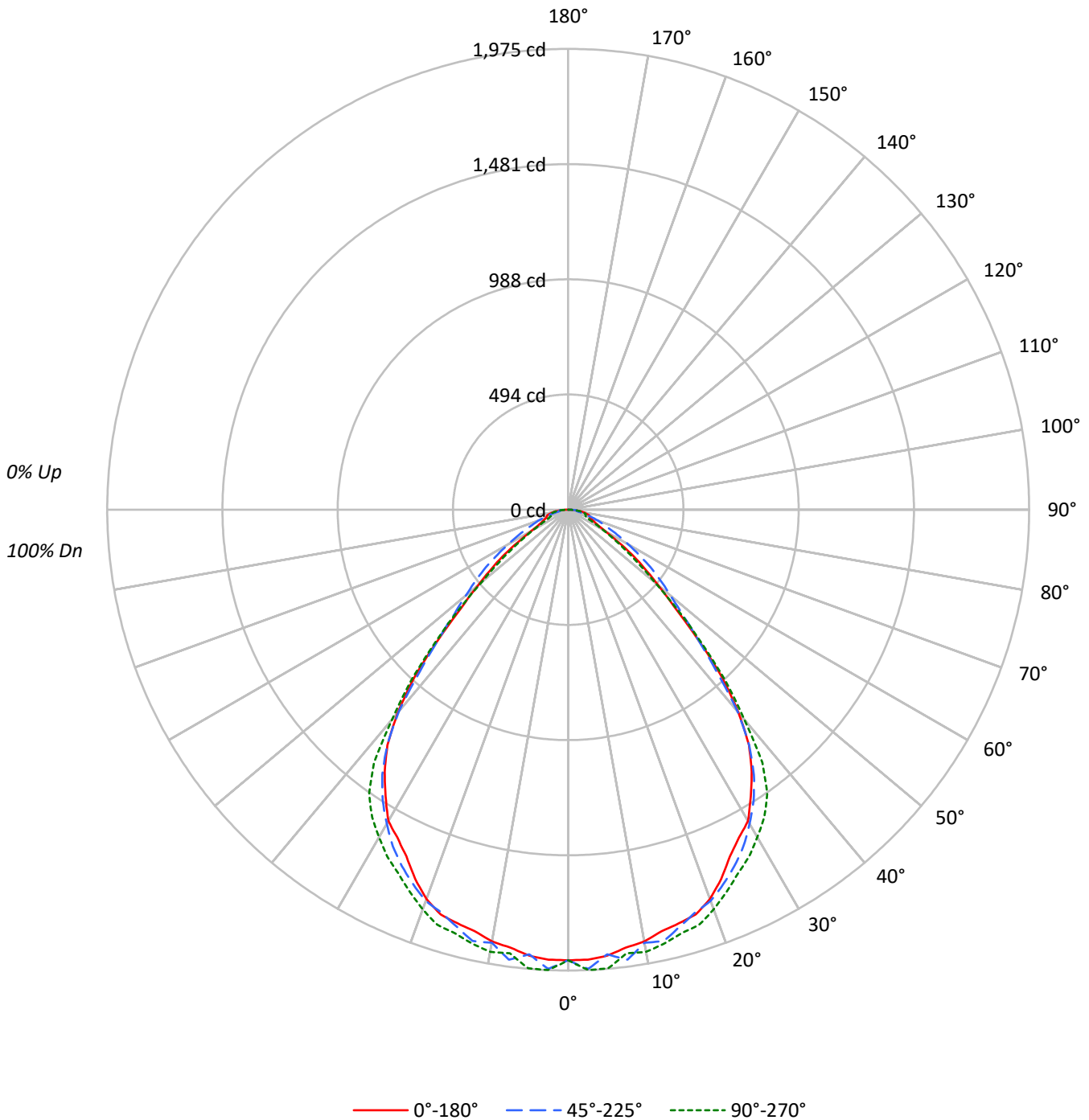
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

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

	0°	45°	90°
0°	5196	5196	5196
5°	5183	5166	5329
10°	5135	5150	5257
15°	5112	5151	5234
20°	5085	5110	5220
25°	4868	5005	5109
30°	4787	4831	5037
35°	4502	4560	4884
40°	3990	3962	4118
45°	2980	2987	3070
50°	2098	2386	2032
55°	1548	2015	1388
60°	968	1593	907
65°	790	1262	634
70°	783	1051	625
75°	971	771	808
80°	1082	609	987
85°	1078	1133	1105



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.8	5.0
10°-20°	523.6	14.1
20°-30°	775.4	20.9
30°-40°	868.6	23.4
40°-50°	638.2	17.2
50°-60°	356.8	9.6
60°-70°	198.8	5.4
70°-80°	116.8	3.2
80°-90°	42.9	1.2
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°	1482.8	40.0
0°-40°	2351.4	63.5
0°-60°	3346.4	90.3
0°-90°	3705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1919	1954	1913	1952	1973	182
15°	1835	1846	1849	1877	1879	518
25°	1639	1652	1686	1709	1721	760
35°	1370	1371	1388	1451	1487	849
45°	783	847	785	841	807	612
55°	330	402	430	429	296	294
65°	124	220	198	254	100	128
75°	93	132	74	149	78	94
85°	35	52	37	47	36	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1930.9	1930.9	1930.9	1930.9	1930.9
2.5°	1930.1	1947.5	1970.2	1972.8	1974.6
5°	1918.7	1954.5	1912.6	1951.9	1972.8
7.5°	1892.5	1914.4	1944.9	1905.6	1917.0
10°	1879.4	1884.7	1884.7	1933.6	1924.0
12.5°	1849.8	1884.7	1893.4	1883.8	1904.8
15°	1834.9	1846.3	1848.9	1876.8	1878.6
17.5°	1818.3	1815.7	1809.6	1829.7	1865.5
20°	1775.6	1766.0	1784.3	1808.7	1822.7
22.5°	1712.7	1715.3	1737.2	1757.2	1772.9
25°	1639.4	1652.5	1685.6	1709.2	1720.6
27.5°	1584.4	1603.6	1626.3	1654.2	1676.9
30°	1540.7	1539.0	1554.7	1594.9	1621.0
32.5°	1456.1	1462.2	1478.8	1526.8	1563.4
35°	1370.5	1371.4	1388.0	1450.8	1486.6
37.5°	1271.9	1264.9	1274.5	1342.6	1366.2
40°	1135.7	1137.4	1127.8	1175.9	1172.4
42.5°	976.8	990.8	941.0	1003.9	999.5
45°	783.0	846.8	784.8	840.6	806.6
47.5°	618.0	712.3	660.8	701.8	638.1
50°	501.1	598.0	570.0	588.4	485.4
52.5°	411.2	489.7	498.4	502.8	378.9
55°	330.0	401.6	429.5	428.6	295.9
57.5°	243.6	326.5	358.8	371.9	224.3
60°	179.8	271.5	295.9	324.7	168.5
62.5°	144.9	238.3	244.4	284.6	128.3
65°	124.0	220.0	198.2	254.0	99.5
67.5°	110.0	205.1	161.5	227.0	84.7
70°	99.5	182.4	133.6	203.4	79.4
72.5°	96.9	155.4	103.0	181.6	78.6
75°	93.4	131.8	74.2	149.3	77.7
77.5°	80.3	112.6	53.2	115.2	72.5
80°	69.8	89.9	39.3	86.4	63.7
82.5°	54.1	68.1	34.9	65.5	51.5
85°	34.9	51.5	36.7	47.1	35.8
87.5°	16.6	28.8	26.2	25.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)