

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: P292593

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292593  
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-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3668.0 lumens  
Efficiency: N/A  
Efficacy: 127.6 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

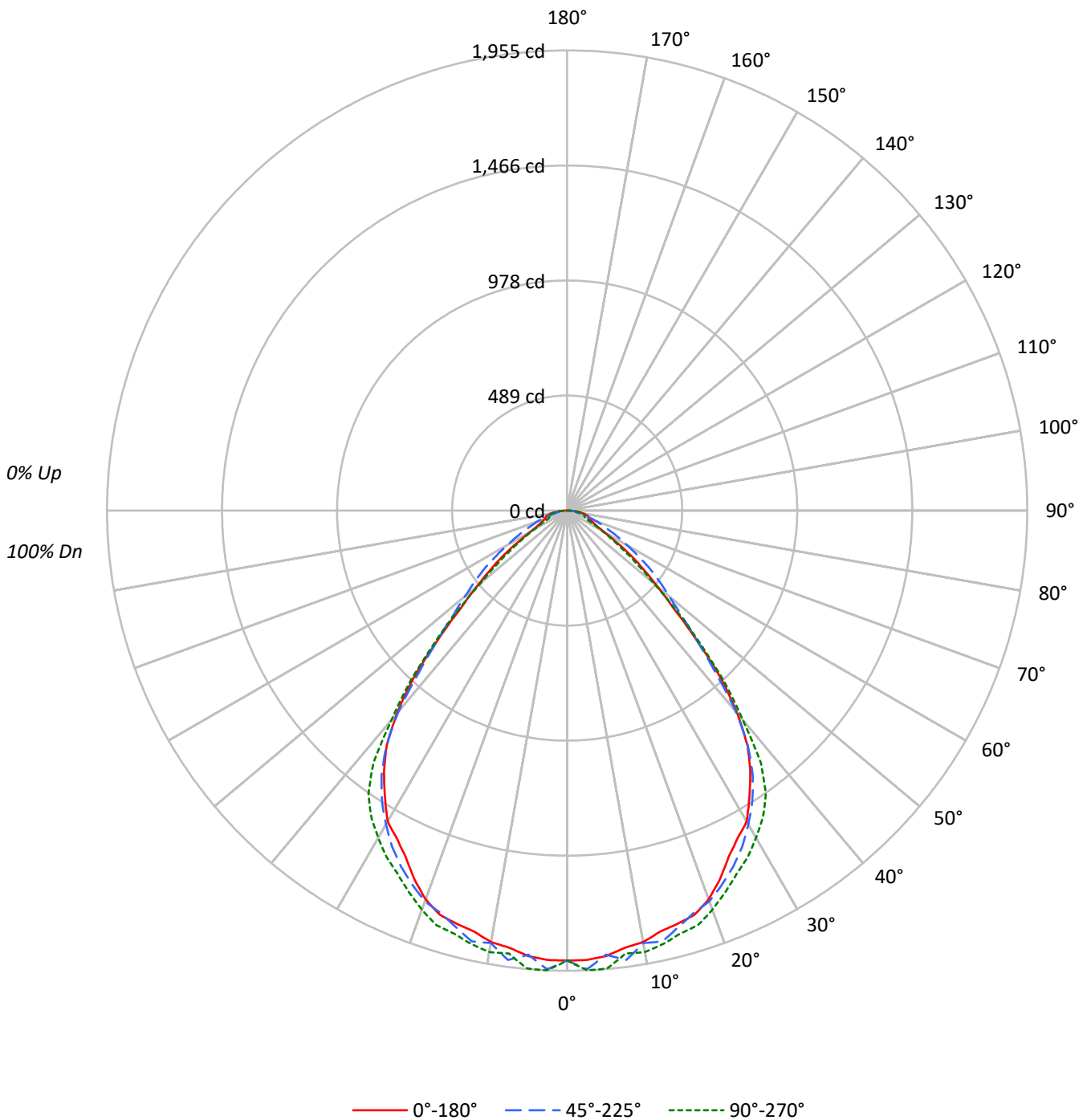
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5144	5144	5144
5°	5131	5115	5276
10°	5084	5099	5205
15°	5061	5099	5181
20°	5034	5059	5168
25°	4819	4955	5058
30°	4740	4783	4987
35°	4457	4514	4835
40°	3950	3922	4077
45°	2950	2957	3039
50°	2077	2362	2012
55°	1533	1995	1375
60°	958	1577	898
65°	781	1249	627
70°	775	1040	618
75°	962	764	800
80°	1071	603	978
85°	1068	1121	1093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.0	5.0
10°-20°	518.3	14.1
20°-30°	767.7	20.9
30°-40°	859.9	23.4
40°-50°	631.9	17.2
50°-60°	353.2	9.6
60°-70°	196.8	5.4
70°-80°	115.7	3.2
80°-90°	42.5	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°	1468.0	40.0
0°-40°	2327.9	63.5
0°-60°	3313.0	90.3
0°-90°	3668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3668.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1900	1935	1894	1932	1953	180
15°	1817	1828	1830	1858	1860	513
25°	1623	1636	1669	1692	1703	752
35°	1357	1358	1374	1436	1472	841
45°	775	838	777	832	798	606
55°	327	398	425	424	293	291
65°	123	218	196	252	98	127
75°	92	130	74	148	77	93
85°	35	51	36	47	35	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1911.7	1911.7	1911.7	1911.7	1911.7
2.5°	1910.8	1928.1	1950.5	1953.1	1954.9
5°	1899.6	1935.0	1893.5	1932.4	1953.1
7.5°	1873.6	1895.2	1925.5	1886.6	1897.8
10°	1860.7	1865.9	1865.9	1914.3	1904.7
12.5°	1831.3	1865.9	1874.5	1865.0	1885.7
15°	1816.6	1827.8	1830.4	1858.1	1859.8
17.5°	1800.2	1797.6	1791.5	1811.4	1846.8
20°	1757.8	1748.3	1766.5	1790.7	1804.5
22.5°	1695.6	1698.2	1719.8	1739.7	1755.2
25°	1623.0	1636.0	1668.8	1692.1	1703.4
27.5°	1568.6	1587.6	1610.0	1637.7	1660.2
30°	1525.4	1523.6	1539.2	1578.9	1604.9
32.5°	1441.5	1447.6	1464.0	1511.5	1547.8
35°	1356.8	1357.7	1374.1	1436.3	1471.8
37.5°	1259.2	1252.3	1261.8	1329.2	1352.5
40°	1124.4	1126.1	1116.6	1164.1	1160.7
42.5°	967.1	980.9	931.6	993.9	989.5
45°	775.2	838.3	776.9	832.2	798.5
47.5°	611.9	705.2	654.2	694.8	631.7
50°	496.1	592.0	564.3	582.5	480.5
52.5°	407.0	484.8	493.5	497.8	375.1
55°	326.7	397.5	425.2	424.3	293.0
57.5°	241.1	323.2	355.2	368.2	222.1
60°	178.0	268.8	293.0	321.5	166.8
62.5°	143.5	235.9	242.0	281.7	127.0
65°	122.7	217.8	196.2	251.5	98.5
67.5°	108.9	203.1	159.9	224.7	83.8
70°	98.5	180.6	132.2	201.4	78.6
72.5°	95.9	153.8	102.0	179.8	77.8
75°	92.5	130.5	73.5	147.8	76.9
77.5°	79.5	111.5	52.7	114.1	71.7
80°	69.1	89.0	38.9	85.6	63.1
82.5°	53.6	67.4	34.6	64.8	51.0
85°	34.6	51.0	36.3	46.7	35.4
87.5°	16.4	28.5	25.9	25.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)