

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: P294123

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294123  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-A19/156-UNV-L92765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3872.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

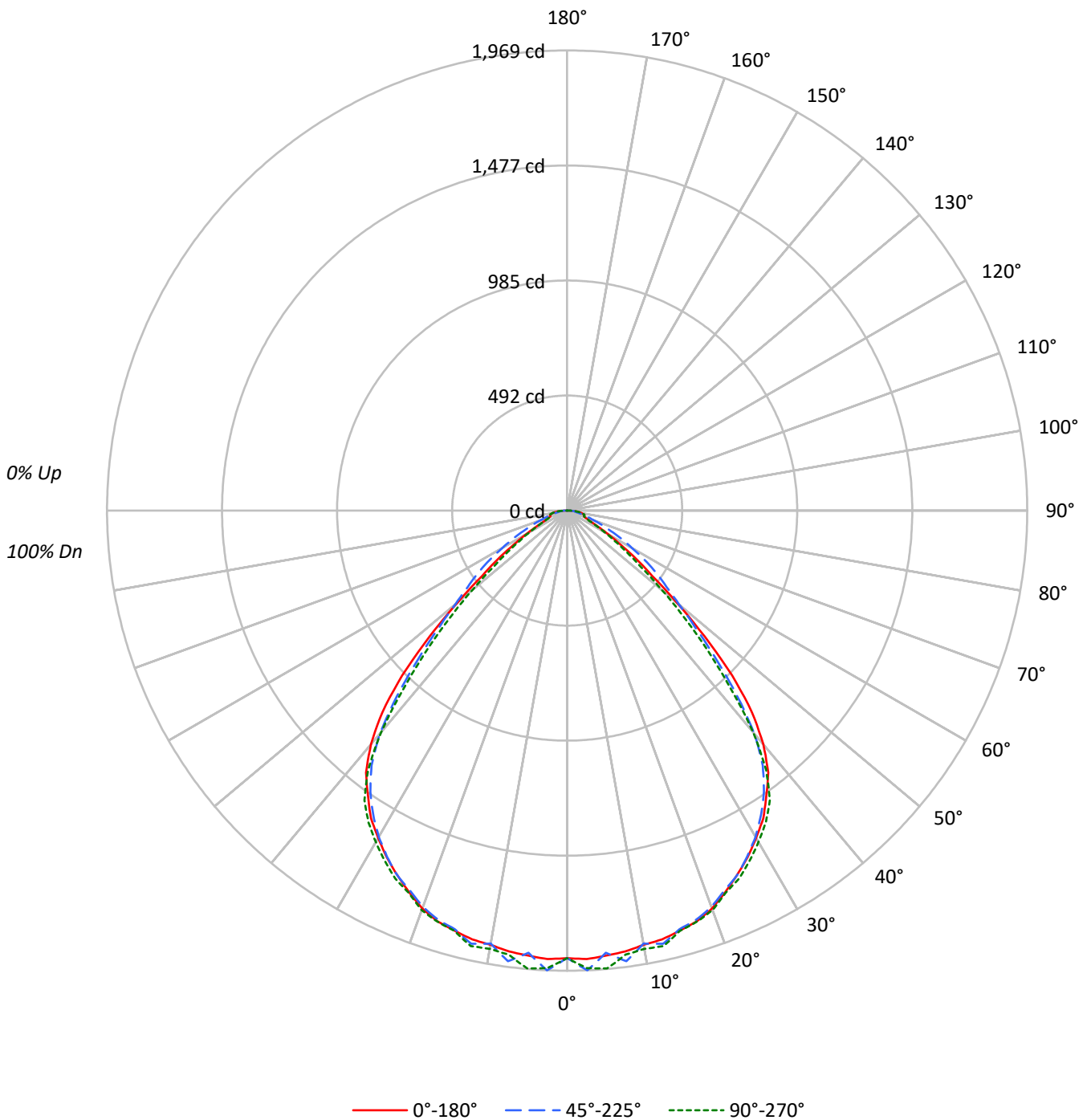
Input Watts (W): 29.295  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

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

	0°	45°	90°
0°	2576	2576	2576
5°	2582	2565	2656
10°	2578	2570	2601
15°	2592	2584	2594
20°	2594	2584	2605
25°	2554	2556	2581
30°	2512	2504	2545
35°	2441	2411	2484
40°	2292	2190	2178
45°	1900	1719	1631
50°	1278	1304	1114
55°	843	1094	731
60°	540	864	500
65°	348	659	338
70°	308	472	308
75°	398	375	401
80°	487	323	511
85°	567	480	596



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.3	4.7
10°-20°	526.4	13.6
20°-30°	792.4	20.5
30°-40°	918.5	23.7
40°-50°	717.5	18.5
50°-60°	383.1	9.9
60°-70°	197.0	5.1
70°-80°	111.4	2.9
80°-90°	42.3	1.1
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°	1502.1	38.8
0°-40°	2420.6	62.5
0°-60°	3521.2	90.9
0°-90°	3872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3872.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1915	1915	1915	1915	1915	
5°	1912	1965	1899	1951	1966	182
15°	1861	1873	1855	1867	1862	526
25°	1721	1715	1722	1719	1739	793
35°	1486	1479	1468	1497	1512	926
45°	999	999	904	895	857	753
55°	359	455	466	420	312	332
65°	109	228	207	228	106	120
75°	76	144	72	134	77	78
85°	37	48	31	48	39	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1914.6	1914.6	1914.6	1914.6	1914.6
2.5°	1920.8	1955.6	1969.3	1952.5	1960.0
5°	1911.5	1965.0	1899.0	1951.3	1966.2
7.5°	1902.8	1897.2	1945.1	1895.3	1916.5
10°	1886.6	1890.3	1881.0	1916.5	1904.0
12.5°	1879.1	1900.9	1899.0	1881.0	1908.4
15°	1861.1	1872.9	1854.9	1866.7	1862.4
17.5°	1843.1	1837.5	1835.6	1840.6	1844.9
20°	1812.0	1793.3	1804.5	1805.8	1819.5
22.5°	1767.2	1756.0	1758.5	1769.7	1771.0
25°	1720.6	1715.0	1721.8	1719.3	1738.6
27.5°	1672.1	1664.6	1669.0	1678.3	1690.1
30°	1616.7	1614.9	1611.8	1619.8	1637.9
32.5°	1562.0	1547.1	1544.6	1561.4	1581.9
35°	1486.2	1479.3	1468.1	1497.3	1512.3
37.5°	1414.0	1392.9	1374.9	1392.3	1398.5
40°	1305.2	1289.0	1246.8	1248.6	1239.9
42.5°	1171.5	1159.7	1078.9	1064.6	1040.3
45°	998.6	999.3	903.5	895.4	856.9
47.5°	797.8	833.2	749.9	740.6	683.4
50°	610.6	674.7	623.1	608.1	532.3
52.5°	458.3	552.2	536.0	503.7	399.2
55°	359.4	454.6	466.4	420.4	311.5
57.5°	270.5	374.3	393.6	355.7	240.6
60°	200.8	315.3	320.9	305.9	185.9
62.5°	149.2	268.0	260.5	262.4	138.0
65°	109.4	228.2	207.1	227.6	106.3
67.5°	89.5	197.7	161.1	197.1	86.4
70°	78.3	175.4	120.0	173.5	78.3
72.5°	75.9	161.1	95.1	154.2	76.5
75°	76.5	143.6	72.1	134.3	77.1
77.5°	70.3	118.1	54.7	114.4	73.4
80°	62.8	89.5	41.7	90.8	65.9
82.5°	53.5	65.3	33.6	67.2	55.3
85°	36.7	47.9	31.1	47.9	38.6
87.5°	17.4	28.6	19.3	27.4	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)