

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: P293991

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293991  
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-L82765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3985.0 lumens  
Efficiency: N/A  
Efficacy: 141.9 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

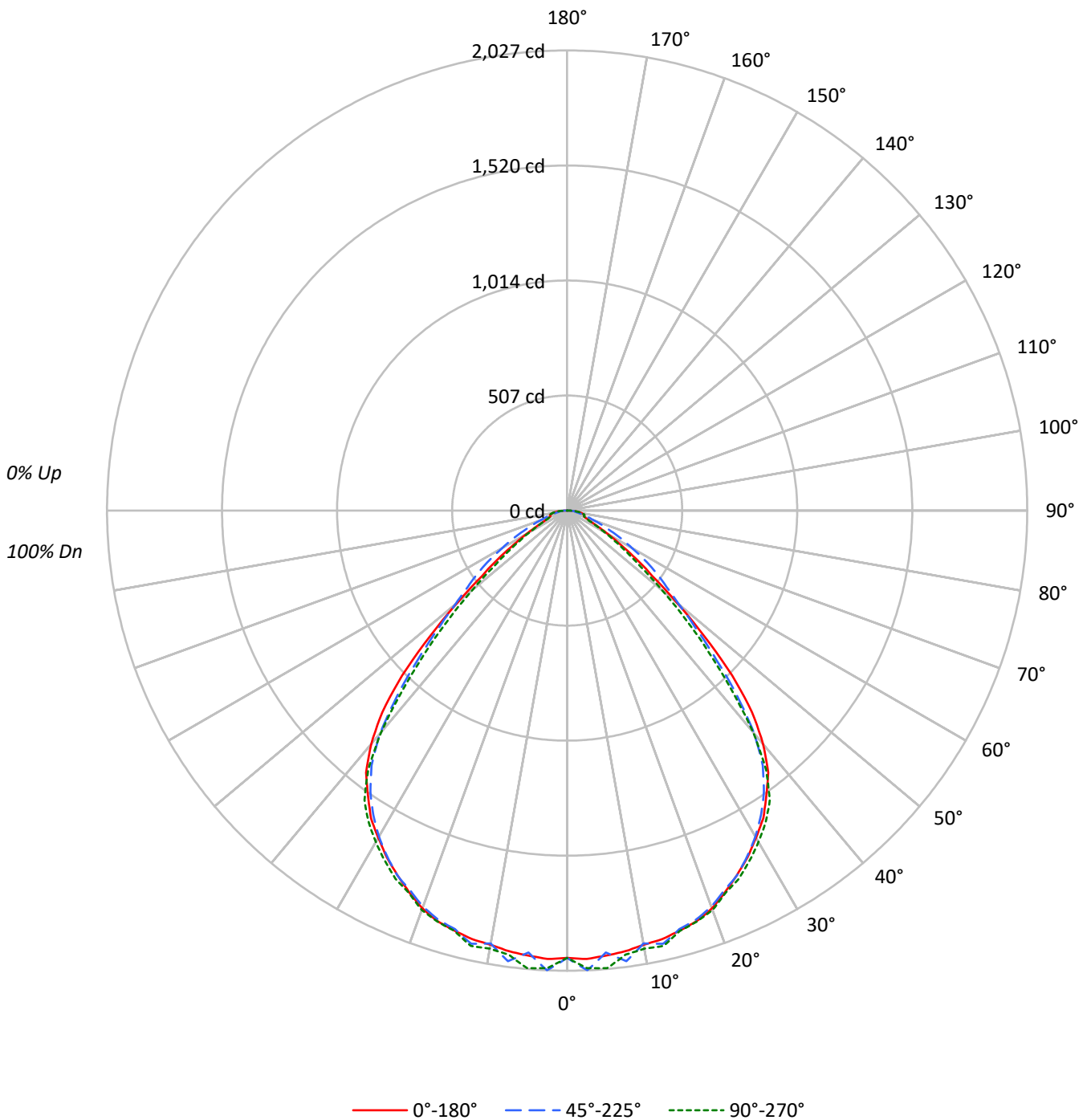
Input Watts (W): 28.086  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2651	2651	2651
5°	2657	2640	2733
10°	2653	2645	2677
15°	2668	2659	2670
20°	2670	2659	2681
25°	2629	2631	2657
30°	2585	2577	2619
35°	2512	2482	2556
40°	2359	2254	2241
45°	1956	1769	1678
50°	1316	1342	1147
55°	868	1126	752
60°	556	889	515
65°	358	678	348
70°	317	486	317
75°	409	386	413
80°	501	332	525
85°	584	494	613



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.7	4.7
10°-20°	541.7	13.6
20°-30°	815.6	20.5
30°-40°	945.3	23.7
40°-50°	738.4	18.5
50°-60°	394.3	9.9
60°-70°	202.8	5.1
70°-80°	114.7	2.9
80°-90°	43.6	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°	1546.0	38.8
0°-40°	2491.3	62.5
0°-60°	3624.0	90.9
0°-90°	3985.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3985.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1967	2022	1954	2008	2024	187
15°	1915	1928	1909	1921	1917	541
25°	1771	1765	1772	1770	1789	816
35°	1530	1522	1511	1541	1556	954
45°	1028	1028	930	922	882	775
55°	370	468	480	433	321	341
65°	113	235	213	234	109	124
75°	79	148	74	138	79	80
85°	38	49	32	49	40	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1970.5	1970.5	1970.5	1970.5	1970.5
2.5°	1976.9	2012.7	2026.8	2009.5	2017.2
5°	1967.3	2022.3	1954.5	2008.2	2023.6
7.5°	1958.3	1952.5	2001.8	1950.6	1972.4
10°	1941.7	1945.5	1935.9	1972.4	1959.6
12.5°	1934.0	1956.4	1954.5	1935.9	1964.1
15°	1915.4	1927.6	1909.0	1921.2	1916.7
17.5°	1896.9	1891.1	1889.2	1894.3	1898.8
20°	1864.9	1845.7	1857.2	1858.5	1872.6
22.5°	1818.8	1807.3	1809.8	1821.4	1822.6
25°	1770.8	1765.0	1772.1	1769.5	1789.4
27.5°	1720.9	1713.2	1717.7	1727.3	1739.4
30°	1663.9	1662.0	1658.8	1667.1	1685.7
32.5°	1607.6	1592.2	1589.7	1607.0	1628.1
35°	1529.5	1522.5	1511.0	1541.0	1556.4
37.5°	1455.3	1433.5	1415.0	1432.9	1439.3
40°	1343.3	1326.7	1283.1	1285.1	1276.1
42.5°	1205.7	1193.5	1110.3	1095.6	1070.7
45°	1027.8	1028.4	929.9	921.6	881.9
47.5°	821.1	857.6	771.8	762.2	703.3
50°	628.5	694.4	641.3	625.9	547.8
52.5°	471.7	568.3	551.7	518.4	410.9
55°	369.9	467.8	480.0	432.6	320.6
57.5°	278.4	385.3	405.1	366.1	247.7
60°	206.7	324.5	330.2	314.9	191.4
62.5°	153.6	275.8	268.1	270.1	142.1
65°	112.6	234.9	213.1	234.2	109.4
67.5°	92.2	203.5	165.8	202.9	89.0
70°	80.6	180.5	123.5	178.6	80.6
72.5°	78.1	165.8	97.9	158.7	78.7
75°	78.7	147.8	74.2	138.2	79.4
77.5°	72.3	121.6	56.3	117.8	75.5
80°	64.6	92.2	42.9	93.4	67.8
82.5°	55.0	67.2	34.6	69.1	57.0
85°	37.8	49.3	32.0	49.3	39.7
87.5°	17.9	29.4	19.8	28.2	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)