

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: P294119

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294119  
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-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3697.0 lumens  
Efficiency: N/A  
Efficacy: 129.5 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

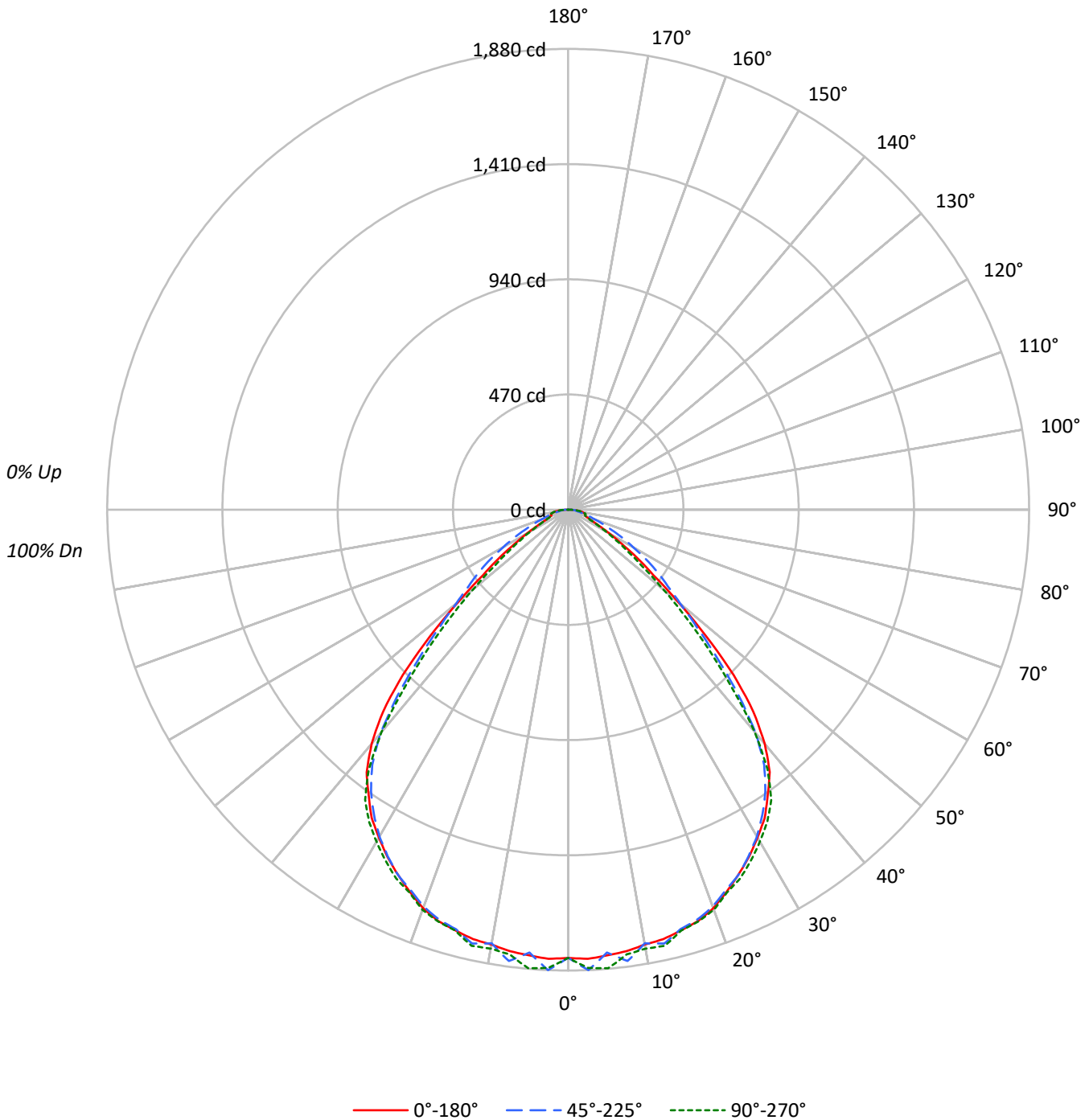
Input Watts (W): 28.551  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2460	2460	2460
5°	2465	2449	2536
10°	2461	2454	2484
15°	2475	2467	2477
20°	2477	2467	2487
25°	2439	2441	2464
30°	2398	2391	2430
35°	2331	2303	2372
40°	2189	2091	2079
45°	1814	1642	1557
50°	1220	1245	1064
55°	805	1045	698
60°	516	825	478
65°	333	629	323
70°	294	451	294
75°	379	358	383
80°	465	308	487
85°	540	459	568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.0	4.7
10°-20°	502.6	13.6
20°-30°	756.6	20.5
30°-40°	877.0	23.7
40°-50°	685.1	18.5
50°-60°	365.8	9.9
60°-70°	188.1	5.1
70°-80°	106.4	2.9
80°-90°	40.4	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°	1434.2	38.8
0°-40°	2311.2	62.5
0°-60°	3362.1	90.9
0°-90°	3697.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3697.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1828	1828	1828	1828	1828	
5°	1825	1876	1813	1863	1877	174
15°	1777	1788	1771	1782	1778	502
25°	1643	1638	1644	1642	1660	757
35°	1419	1412	1402	1430	1444	885
45°	954	954	863	855	818	719
55°	343	434	445	401	298	317
65°	104	218	198	217	102	115
75°	73	137	69	128	74	74
85°	35	46	30	46	37	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1828.1	1828.1	1828.1	1828.1	1828.1
2.5°	1834.0	1867.2	1880.3	1864.3	1871.4
5°	1825.1	1876.2	1813.2	1863.1	1877.3
7.5°	1816.8	1811.4	1857.2	1809.7	1829.8
10°	1801.3	1804.9	1796.0	1829.8	1818.0
12.5°	1794.2	1815.0	1813.2	1796.0	1822.1
15°	1777.0	1788.3	1771.1	1782.3	1778.2
17.5°	1759.8	1754.4	1752.7	1757.4	1761.6
20°	1730.1	1712.3	1723.0	1724.2	1737.2
22.5°	1687.3	1676.7	1679.0	1689.7	1690.9
25°	1642.8	1637.5	1644.0	1641.6	1660.0
27.5°	1596.5	1589.4	1593.5	1602.4	1613.7
30°	1543.7	1541.9	1538.9	1546.6	1563.9
32.5°	1491.4	1477.2	1474.8	1490.8	1510.4
35°	1419.0	1412.5	1401.8	1429.7	1443.9
37.5°	1350.1	1329.9	1312.7	1329.3	1335.3
40°	1246.2	1230.8	1190.4	1192.2	1183.9
42.5°	1118.6	1107.3	1030.1	1016.4	993.3
45°	953.5	954.1	862.7	855.0	818.1
47.5°	761.7	795.6	716.0	707.1	652.5
50°	583.0	644.2	594.9	580.7	508.2
52.5°	437.6	527.2	511.8	480.9	381.2
55°	343.2	434.0	445.3	401.4	297.5
57.5°	258.3	357.4	375.8	339.6	229.8
60°	191.8	301.0	306.4	292.1	177.5
62.5°	142.5	255.9	248.8	250.5	131.8
65°	104.5	217.9	197.7	217.3	101.5
67.5°	85.5	188.8	153.8	188.2	82.5
70°	74.8	167.4	114.6	165.6	74.8
72.5°	72.4	153.8	90.8	147.2	73.0
75°	73.0	137.1	68.9	128.2	73.6
77.5°	67.1	112.8	52.2	109.2	70.1
80°	60.0	85.5	39.8	86.7	62.9
82.5°	51.1	62.3	32.1	64.1	52.8
85°	35.0	45.7	29.7	45.7	36.8
87.5°	16.6	27.3	18.4	26.1	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)