

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: P293997

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293997  
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-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4265.0 lumens  
Efficiency: N/A  
Efficacy: 146.1 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

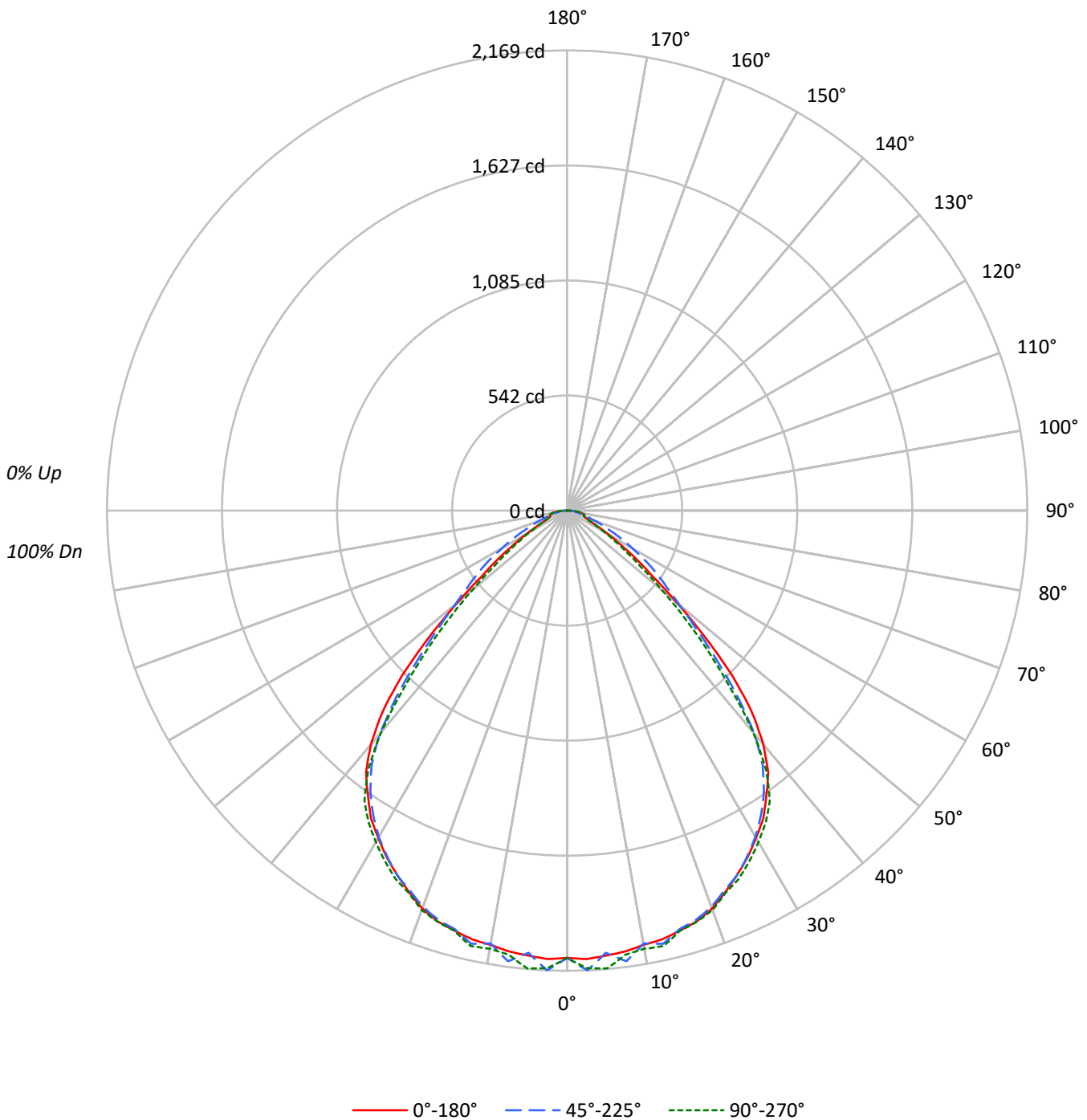
Input Watts (W): 29.202  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2838	2838	2838
5°	2844	2825	2925
10°	2839	2831	2865
15°	2856	2846	2858
20°	2858	2846	2870
25°	2814	2816	2843
30°	2767	2758	2803
35°	2689	2656	2736
40°	2525	2412	2399
45°	2093	1894	1796
50°	1408	1437	1227
55°	929	1205	805
60°	595	951	551
65°	384	726	373
70°	339	520	339
75°	438	413	441
80°	536	356	563
85°	624	528	656



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.9	4.7
10°-20°	579.8	13.6
20°-30°	872.9	20.5
30°-40°	1011.7	23.7
40°-50°	790.3	18.5
50°-60°	422.0	9.9
60°-70°	217.0	5.1
70°-80°	122.8	2.9
80°-90°	46.6	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°	1654.6	38.8
0°-40°	2666.3	62.5
0°-60°	3878.6	90.9
0°-90°	4265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4265.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2109	2109	2109	2109	2109	
5°	2106	2164	2092	2149	2166	200
15°	2050	2063	2043	2056	2051	579
25°	1895	1889	1897	1894	1915	873
35°	1637	1630	1617	1649	1666	1021
45°	1100	1101	995	986	944	829
55°	396	501	514	463	343	365
65°	120	251	228	251	117	132
75°	84	158	80	148	85	85
85°	40	53	34	53	42	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2108.9	2108.9	2108.9	2108.9	2108.9
2.5°	2115.8	2154.1	2169.2	2150.7	2158.9
5°	2105.5	2164.4	2091.8	2149.3	2165.8
7.5°	2095.9	2089.7	2142.5	2087.7	2111.0
10°	2078.1	2082.2	2071.9	2111.0	2097.3
12.5°	2069.9	2093.9	2091.8	2071.9	2102.1
15°	2050.0	2063.0	2043.2	2056.2	2051.4
17.5°	2030.2	2024.0	2021.9	2027.4	2032.2
20°	1995.9	1975.4	1987.7	1989.1	2004.1
22.5°	1946.6	1934.3	1937.0	1949.3	1950.7
25°	1895.2	1889.1	1896.6	1893.9	1915.1
27.5°	1841.8	1833.6	1838.4	1848.6	1861.7
30°	1780.8	1778.8	1775.4	1784.3	1804.1
32.5°	1720.6	1704.1	1701.4	1719.9	1742.5
35°	1637.0	1629.5	1617.1	1649.3	1665.8
37.5°	1557.5	1534.3	1514.4	1533.6	1540.4
40°	1437.7	1419.9	1373.3	1375.4	1365.8
42.5°	1290.4	1277.4	1188.4	1172.6	1145.9
45°	1100.0	1100.7	995.2	986.3	943.8
47.5°	878.8	917.8	826.0	815.8	752.7
50°	672.6	743.2	686.3	669.9	586.3
52.5°	504.8	608.2	590.4	554.8	439.7
55°	395.9	500.7	513.7	463.0	343.2
57.5°	297.9	412.3	433.6	391.8	265.1
60°	221.2	347.3	353.4	337.0	204.8
62.5°	164.4	295.2	287.0	289.0	152.1
65°	120.5	251.4	228.1	250.7	117.1
67.5°	98.6	217.8	177.4	217.1	95.2
70°	86.3	193.2	132.2	191.1	86.3
72.5°	83.6	177.4	104.8	169.9	84.2
75°	84.2	158.2	79.5	147.9	84.9
77.5°	77.4	130.1	60.3	126.0	80.8
80°	69.2	98.6	45.9	100.0	72.6
82.5°	58.9	71.9	37.0	74.0	61.0
85°	40.4	52.7	34.2	52.7	42.5
87.5°	19.2	31.5	21.2	30.1	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)