

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: P294125

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294125  
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-LD5-48-A19/156-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3846.0 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

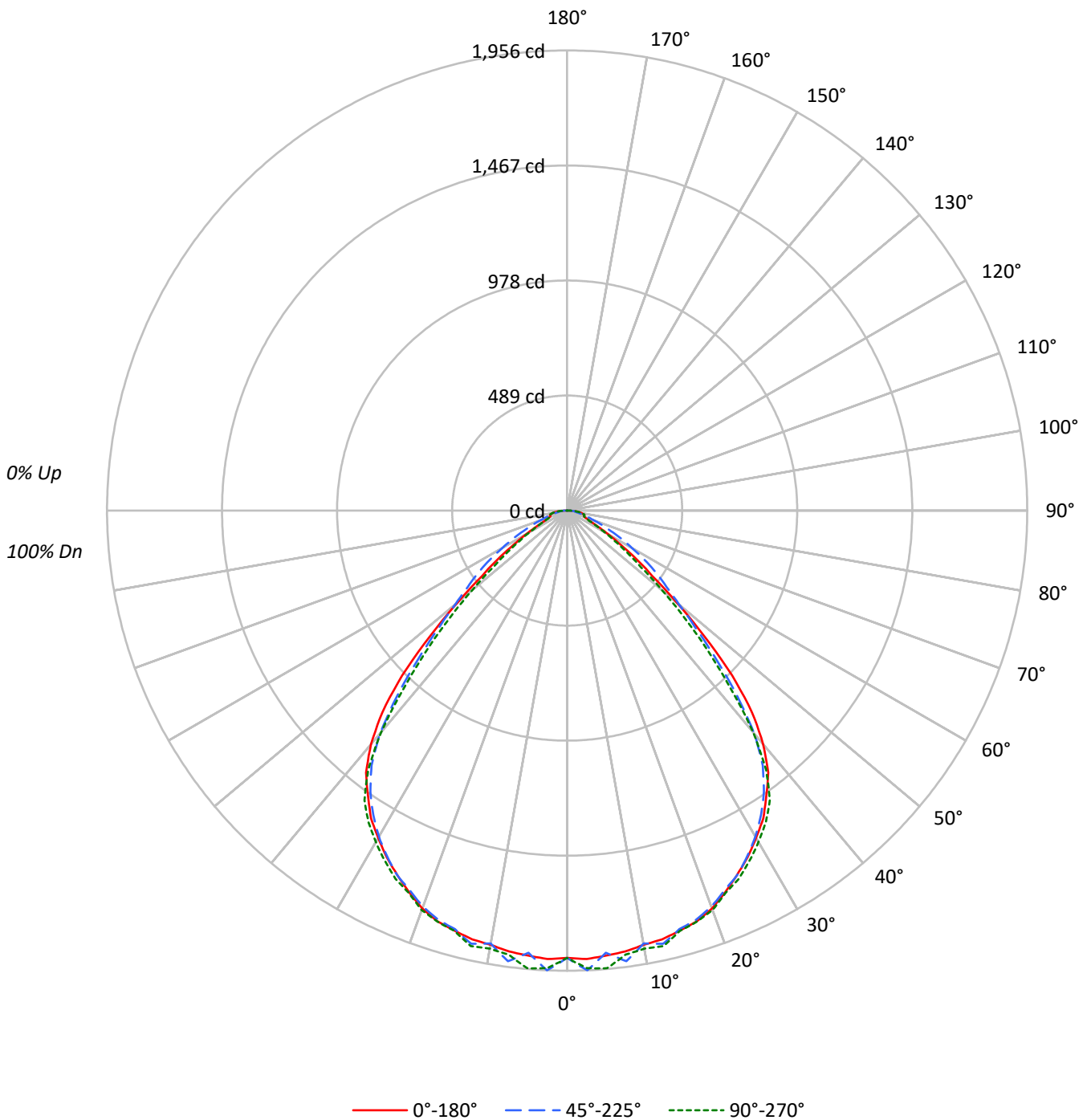
Input Watts (W): 32.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2559	2559	2559
5°	2564	2548	2638
10°	2560	2553	2584
15°	2575	2566	2577
20°	2577	2566	2588
25°	2537	2539	2564
30°	2495	2487	2528
35°	2425	2395	2467
40°	2277	2175	2163
45°	1887	1708	1619
50°	1270	1295	1107
55°	837	1087	726
60°	537	858	497
65°	346	655	336
70°	306	469	306
75°	395	372	398
80°	483	321	508
85°	562	477	591



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.1	4.7
10°-20°	522.8	13.6
20°-30°	787.1	20.5
30°-40°	912.3	23.7
40°-50°	712.7	18.5
50°-60°	380.5	9.9
60°-70°	195.7	5.1
70°-80°	110.7	2.9
80°-90°	42.1	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°	1492.0	38.8
0°-40°	2404.3	62.5
0°-60°	3497.5	90.9
0°-90°	3846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1902	1902	1902	1902	1902	
5°	1899	1952	1886	1938	1953	181
15°	1849	1860	1842	1854	1850	522
25°	1709	1704	1710	1708	1727	788
35°	1476	1469	1458	1487	1502	920
45°	992	993	897	889	851	747
55°	357	452	463	418	309	329
65°	109	227	206	226	106	119
75°	76	143	72	133	77	77
85°	36	48	31	48	38	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1901.7	1901.7	1901.7	1901.7	1901.7
2.5°	1907.9	1942.5	1956.1	1939.4	1946.8
5°	1898.6	1951.8	1886.3	1938.2	1953.0
7.5°	1890.0	1884.4	1932.0	1882.6	1903.6
10°	1873.9	1877.6	1868.4	1903.6	1891.2
12.5°	1866.5	1888.1	1886.3	1868.4	1895.6
15°	1848.6	1860.4	1842.4	1854.2	1849.9
17.5°	1830.7	1825.1	1823.3	1828.2	1832.6
20°	1799.8	1781.3	1792.4	1793.6	1807.2
22.5°	1755.4	1744.2	1746.7	1757.8	1759.1
25°	1709.0	1703.5	1710.3	1707.8	1726.9
27.5°	1660.9	1653.4	1657.8	1667.0	1678.8
30°	1605.9	1604.0	1600.9	1609.0	1626.9
32.5°	1551.5	1536.7	1534.2	1550.9	1571.3
35°	1476.2	1469.4	1458.3	1487.3	1502.1
37.5°	1404.5	1383.5	1365.6	1382.9	1389.1
40°	1296.4	1280.4	1238.4	1240.2	1231.6
42.5°	1163.6	1151.9	1071.6	1057.4	1033.3
45°	991.9	992.6	897.4	889.4	851.1
47.5°	792.4	827.6	744.9	735.6	678.8
50°	606.5	670.1	618.9	604.1	528.7
52.5°	455.2	548.5	532.4	500.3	396.5
55°	357.0	451.5	463.2	417.5	309.4
57.5°	268.7	371.8	391.0	353.3	239.0
60°	199.5	313.1	318.7	303.9	184.7
62.5°	148.2	266.2	258.8	260.6	137.1
65°	108.7	226.7	205.7	226.1	105.6
67.5°	88.9	196.4	160.0	195.8	85.9
70°	77.8	174.2	119.2	172.3	77.8
72.5°	75.4	160.0	94.5	153.2	76.0
75°	76.0	142.7	71.6	133.4	76.6
77.5°	69.8	117.4	54.4	113.6	72.9
80°	62.4	88.9	41.4	90.2	65.5
82.5°	53.1	64.9	33.4	66.7	55.0
85°	36.4	47.6	30.9	47.6	38.3
87.5°	17.3	28.4	19.1	27.2	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)