

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: P294142

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294142  
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-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4880.0 lumens  
Efficiency: N/A  
Efficacy: 106.4 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

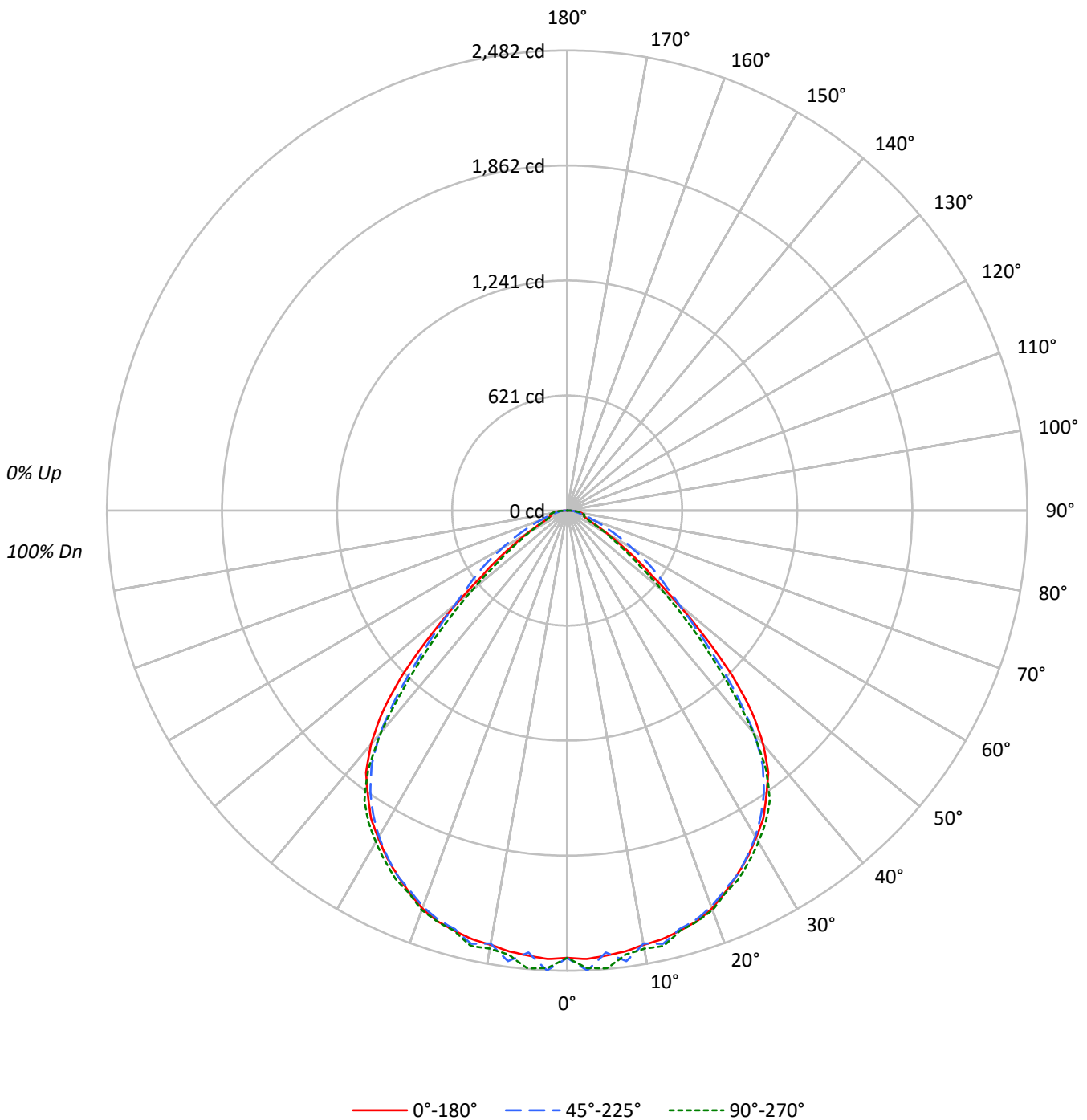
Input Watts (W): 45.849  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294142

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P294142

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K

**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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41		51	45	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	37		47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

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

	0°	45°	90°
0°	3247	3247	3247
5°	3254	3233	3347
10°	3249	3239	3279
15°	3267	3256	3270
20°	3270	3256	3283
25°	3219	3222	3253
30°	3166	3156	3207
35°	3076	3039	3131
40°	2889	2760	2745
45°	2395	2167	2055
50°	1611	1644	1404
55°	1063	1379	921
60°	681	1088	630
65°	439	831	427
70°	388	595	388
75°	501	473	505
80°	614	407	644
85°	713	605	750



TEST NUMBER: P294142

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.0	4.7
10°-20°	663.4	13.6
20°-30°	998.7	20.5
30°-40°	1157.6	23.7
40°-50°	904.3	18.5
50°-60°	482.9	9.9
60°-70°	248.3	5.1
70°-80°	140.5	2.9
80°-90°	53.3	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°	1893.2	38.8
0°-40°	3050.8	62.5
0°-60°	4437.9	90.9
0°-90°	4880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4880.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2413	2413	2413	2413	2413	
5°	2409	2476	2393	2459	2478	229
15°	2346	2360	2338	2353	2347	663
25°	2168	2162	2170	2167	2191	999
35°	1873	1864	1850	1887	1906	1168
45°	1259	1259	1139	1128	1080	948
55°	453	573	588	530	393	418
65°	138	288	261	287	134	152
75°	96	181	91	169	97	98
85°	46	60	39	60	49	48
90°	0	0	0	0	0	



TEST NUMBER: P294142

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2413.0	2413.0	2413.0	2413.0	2413.0
2.5°	2420.9	2464.7	2482.0	2460.8	2470.2
5°	2409.1	2476.5	2393.4	2459.3	2478.1
7.5°	2398.1	2391.1	2451.4	2388.7	2415.4
10°	2377.8	2382.5	2370.7	2415.4	2399.7
12.5°	2368.3	2395.8	2393.4	2370.7	2405.2
15°	2345.6	2360.5	2337.8	2352.7	2347.2
17.5°	2322.9	2315.8	2313.5	2319.8	2325.2
20°	2283.7	2260.2	2274.3	2275.9	2293.1
22.5°	2227.3	2213.2	2216.3	2230.4	2232.0
25°	2168.5	2161.5	2170.1	2166.9	2191.2
27.5°	2107.4	2098.0	2103.5	2115.2	2130.1
30°	2037.6	2035.3	2031.4	2041.5	2064.3
32.5°	1968.7	1949.9	1946.7	1967.9	1993.7
35°	1873.0	1864.4	1850.3	1887.2	1906.0
37.5°	1782.1	1755.5	1732.8	1754.7	1762.5
40°	1645.0	1624.6	1571.3	1573.7	1562.7
42.5°	1476.5	1461.6	1359.7	1341.7	1311.1
45°	1258.6	1259.4	1138.7	1128.5	1079.9
47.5°	1005.5	1050.2	945.1	933.4	861.3
50°	769.6	850.3	785.3	766.5	670.8
52.5°	577.6	695.9	675.6	634.8	503.1
55°	453.0	572.9	587.8	529.8	392.6
57.5°	340.9	471.8	496.1	448.3	303.3
60°	253.1	397.3	404.4	385.6	234.3
62.5°	188.1	337.8	328.4	330.7	174.0
65°	137.9	287.6	261.0	286.8	134.0
67.5°	112.9	249.2	203.0	248.4	108.9
70°	98.7	221.0	151.3	218.7	98.7
72.5°	95.6	203.0	119.9	194.4	96.4
75°	96.4	181.0	90.9	169.3	97.2
77.5°	88.6	148.9	69.0	144.2	92.5
80°	79.2	112.9	52.5	114.4	83.1
82.5°	67.4	82.3	42.3	84.6	69.7
85°	46.2	60.3	39.2	60.3	48.6
87.5°	21.9	36.1	24.3	34.5	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)