

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: P291431

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4005.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

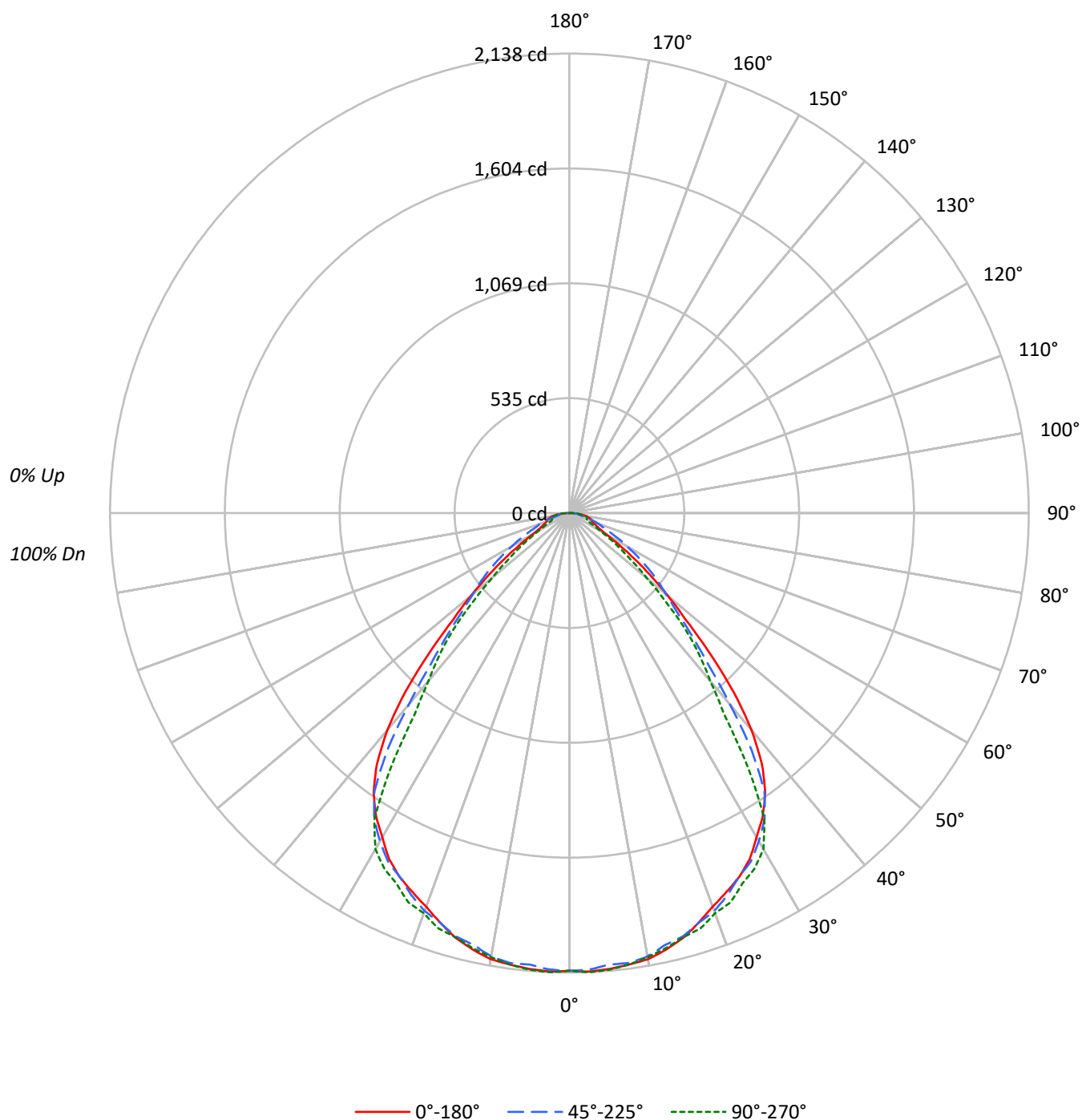
Input Watts (W): 36.27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291431

CATALOG NUMBER: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P291431

CATALOG NUMBER: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5731	5731	5731
5°	5750	5696	5763
10°	5759	5724	5734
15°	5701	5680	5693
20°	5582	5642	5674
25°	5548	5545	5651
30°	5413	5478	5612
35°	5219	5198	4777
40°	4634	4090	3581
45°	3517	3060	2896
50°	2495	2449	1965
55°	1708	2091	1351
60°	1056	1668	903
65°	870	1284	654
70°	865	1118	671
75°	1039	801	896
80°	1193	739	1122
85°	1133	1303	1275



TEST NUMBER: P291431

CATALOG NUMBER: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	5.0
10°-20°	576.8	14.4
20°-30°	867.3	21.7
30°-40°	945.5	23.6
40°-50°	662.1	16.5
50°-60°	374.8	9.4
60°-70°	205.1	5.1
70°-80°	124.3	3.1
80°-90°	47.1	1.2
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°	1646.2	41.1
0°-40°	2591.7	64.7
0°-60°	3628.5	90.6
0°-90°	4005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2130	2130	2130	2130	2130	
5°	2129	2125	2109	2133	2133	203
15°	2046	2041	2039	2068	2044	575
25°	1868	1872	1868	1911	1903	858
35°	1589	1582	1582	1502	1454	979
45°	924	964	804	794	761	718
55°	364	436	446	442	288	333
65°	137	225	202	255	103	140
75°	100	144	77	151	86	104
85°	37	60	42	51	41	41
90°	0	0	0	0	0	



TEST NUMBER: P291431

CATALOG NUMBER: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2129.7	2129.7	2129.7	2129.7	2129.7
2.5°	2135.2	2132.5	2126.0	2138.9	2138.0
5°	2128.8	2125.1	2108.6	2133.4	2133.4
7.5°	2119.6	2110.5	2111.4	2125.1	2118.7
10°	2107.7	2092.1	2094.9	2098.5	2098.5
12.5°	2080.2	2065.5	2058.2	2070.1	2073.8
15°	2046.3	2040.8	2038.9	2068.3	2043.5
17.5°	1998.6	2010.5	1999.5	2023.4	2027.0
20°	1949.1	1972.0	1970.2	1986.7	1981.2
22.5°	1908.8	1923.4	1923.4	1943.6	1960.1
25°	1868.4	1872.1	1867.5	1910.6	1903.3
27.5°	1816.2	1813.4	1828.1	1850.1	1864.8
30°	1741.9	1742.8	1763.0	1792.3	1806.1
32.5°	1674.1	1665.8	1690.6	1703.4	1688.7
35°	1588.8	1581.5	1582.4	1501.7	1454.0
37.5°	1472.4	1478.8	1394.4	1246.8	1184.5
40°	1319.3	1332.1	1164.3	1054.3	1019.5
42.5°	1134.1	1137.7	954.4	918.6	895.7
45°	924.1	964.5	804.0	793.9	760.9
47.5°	732.5	807.7	673.8	680.3	601.4
50°	595.9	671.1	584.9	587.7	469.4
52.5°	471.2	544.6	516.2	507.9	368.5
55°	364.0	435.5	445.6	441.9	287.9
57.5°	267.7	344.7	374.1	387.8	221.9
60°	196.2	281.5	309.9	337.4	167.8
62.5°	155.9	243.9	254.0	294.3	130.2
65°	136.6	224.6	201.7	254.9	102.7
67.5°	121.9	213.6	164.1	225.5	89.8
70°	110.0	192.5	142.1	201.7	85.3
72.5°	110.0	168.7	111.8	178.8	86.2
75°	99.9	143.9	77.0	151.3	86.2
77.5°	88.9	122.8	57.8	122.8	80.7
80°	77.0	96.3	47.7	94.4	72.4
82.5°	56.8	72.4	41.3	70.6	58.7
85°	36.7	59.6	42.2	51.3	41.3
87.5°	17.4	30.3	26.6	25.7	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)