

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: P291430

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291430
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-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3893.0 lumens
Efficiency: N/A
Efficacy: 106.5 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

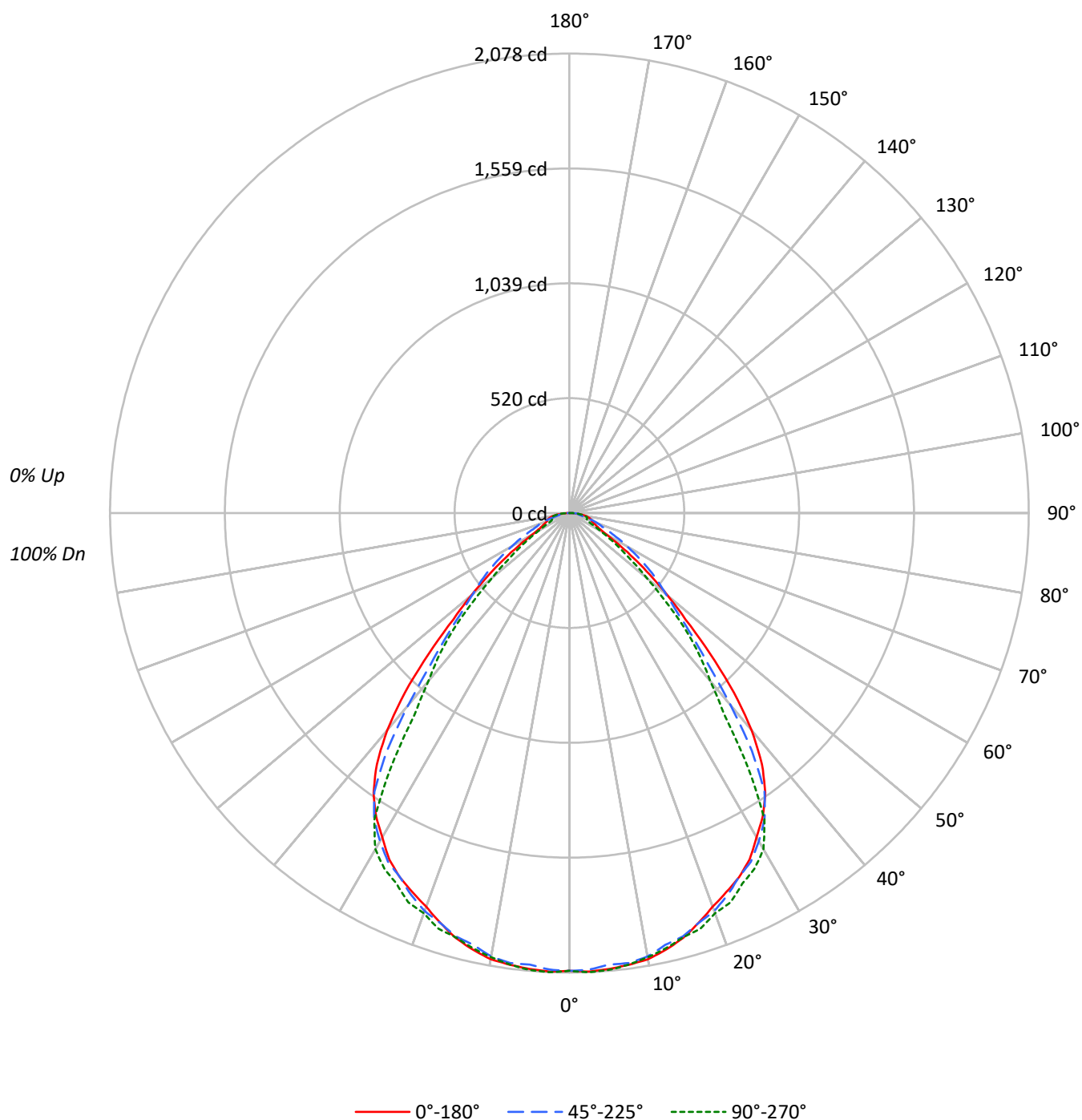
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	5571	5571	5571
5°	5590	5536	5602
10°	5598	5564	5574
15°	5541	5521	5534
20°	5426	5484	5515
25°	5393	5390	5493
30°	5261	5325	5455
35°	5073	5053	4643
40°	4505	3976	3481
45°	3419	2974	2815
50°	2425	2380	1910
55°	1660	2032	1313
60°	1026	1621	878
65°	846	1249	635
70°	841	1087	652
75°	1010	779	871
80°	1161	717	1091
85°	1099	1266	1238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.4	5.0
10°-20°	560.6	14.4
20°-30°	843.1	21.7
30°-40°	919.1	23.6
40°-50°	643.6	16.5
50°-60°	364.3	9.4
60°-70°	199.3	5.1
70°-80°	120.8	3.1
80°-90°	45.8	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°	1600.1	41.1
0°-40°	2519.2	64.7
0°-60°	3527.1	90.6
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2070	2070	2070	2070	2070	
5°	2069	2066	2050	2074	2074	197
15°	1989	1984	1982	2010	1986	559
25°	1816	1820	1815	1857	1850	834
35°	1544	1537	1538	1460	1413	952
45°	898	938	782	772	740	698
55°	354	423	433	430	280	323
65°	133	218	196	248	100	136
75°	97	140	75	147	84	101
85°	36	58	41	50	40	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2070.1	2070.1	2070.1	2070.1	2070.1
2.5°	2075.5	2072.8	2066.6	2079.1	2078.2
5°	2069.3	2065.7	2049.6	2073.7	2073.7
7.5°	2060.3	2051.4	2052.3	2065.7	2059.5
10°	2048.8	2033.6	2036.3	2039.8	2039.8
12.5°	2022.0	2007.8	2000.6	2012.2	2015.8
15°	1989.1	1983.7	1981.9	2010.4	1986.4
17.5°	1942.7	1954.3	1943.6	1966.8	1970.3
20°	1894.6	1916.9	1915.1	1931.1	1925.8
22.5°	1855.4	1869.6	1869.6	1889.2	1905.3
25°	1816.2	1819.7	1815.3	1857.2	1850.0
27.5°	1765.4	1762.7	1777.0	1798.3	1812.6
30°	1693.2	1694.1	1713.7	1742.2	1755.6
32.5°	1627.2	1619.2	1643.3	1655.8	1641.5
35°	1544.4	1537.2	1538.1	1459.7	1413.4
37.5°	1431.2	1437.4	1355.4	1212.0	1151.4
40°	1282.4	1294.8	1131.8	1024.8	991.0
42.5°	1102.4	1105.9	927.7	892.9	870.7
45°	898.3	937.5	781.5	771.7	739.7
47.5°	712.0	785.1	655.0	661.2	584.6
50°	579.2	652.3	568.6	571.2	456.3
52.5°	458.1	529.3	501.7	493.7	358.2
55°	353.8	423.3	433.1	429.5	279.8
57.5°	260.2	335.1	363.6	377.0	215.7
60°	190.7	273.6	301.2	327.9	163.1
62.5°	151.5	237.0	246.8	286.1	126.5
65°	132.8	218.3	196.1	247.7	99.8
67.5°	118.5	207.6	159.5	219.2	87.3
70°	106.9	187.1	138.1	196.1	82.9
72.5°	106.9	164.0	108.7	173.8	83.8
75°	97.1	139.9	74.9	147.0	83.8
77.5°	86.4	119.4	56.1	119.4	78.4
80°	74.9	93.6	46.3	91.8	70.4
82.5°	55.3	70.4	40.1	68.6	57.0
85°	35.6	57.9	41.0	49.9	40.1
87.5°	16.9	29.4	25.8	25.0	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)