

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: P291362

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291362
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-LD5-36-A19/156-UNV-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3554.0 lumens
Efficiency: N/A
Efficacy: 121.3 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

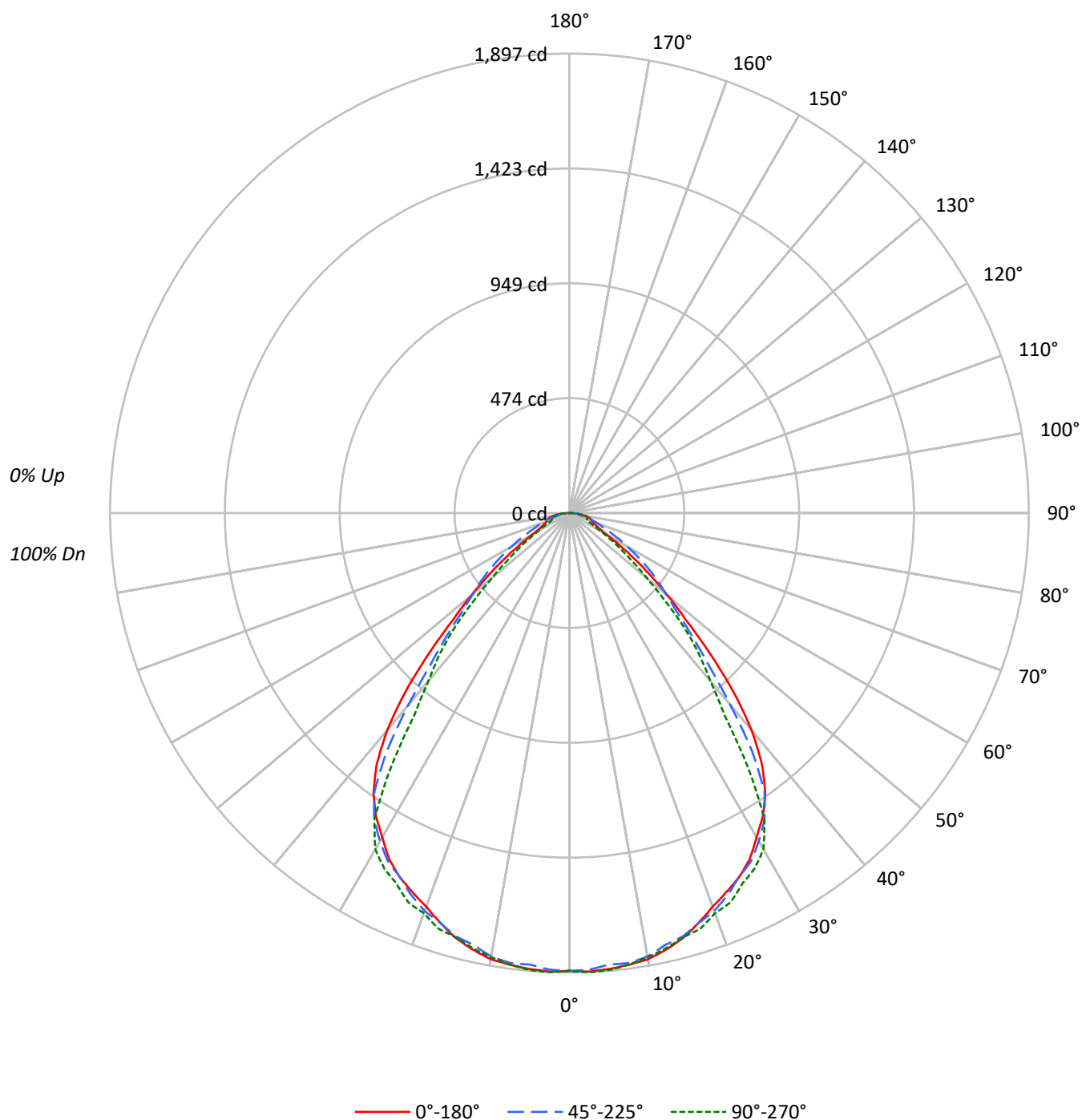
Input Watts (W): 29.295
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	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	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68		
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61		
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5086	5086	5086
5°	5103	5055	5114
10°	5111	5080	5088
15°	5059	5041	5052
20°	4953	5007	5035
25°	4923	4921	5015
30°	4803	4861	4980
35°	4632	4613	4239
40°	4112	3629	3178
45°	3121	2715	2570
50°	2214	2173	1744
55°	1515	1855	1199
60°	937	1480	801
65°	772	1140	580
70°	768	992	596
75°	922	710	795
80°	1058	656	996
85°	1003	1155	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.3	5.0
10°-20°	511.8	14.4
20°-30°	769.7	21.7
30°-40°	839.1	23.6
40°-50°	587.5	16.5
50°-60°	332.6	9.4
60°-70°	182.0	5.1
70°-80°	110.3	3.1
80°-90°	41.8	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°	1460.8	41.1
0°-40°	2299.8	64.7
0°-60°	3219.9	90.6
0°-90°	3554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3554.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1890	1890	1890	1890	1890	
5°	1889	1886	1871	1893	1893	180
15°	1816	1811	1809	1835	1813	511
25°	1658	1661	1657	1695	1689	761
35°	1410	1403	1404	1333	1290	869
45°	820	856	714	704	675	637
55°	323	386	395	392	256	295
65°	121	199	179	226	91	125
75°	89	128	68	134	76	92
85°	32	53	37	46	37	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1889.9	1889.9	1889.9	1889.9	1889.9
2.5°	1894.8	1892.3	1886.6	1898.0	1897.2
5°	1889.1	1885.8	1871.2	1893.1	1893.1
7.5°	1880.9	1872.8	1873.6	1885.8	1880.1
10°	1870.4	1856.5	1859.0	1862.2	1862.2
12.5°	1845.9	1832.9	1826.4	1837.0	1840.3
15°	1815.8	1811.0	1809.3	1835.4	1813.4
17.5°	1773.5	1784.1	1774.4	1795.5	1798.8
20°	1729.6	1749.9	1748.3	1763.0	1758.1
22.5°	1693.8	1706.8	1706.8	1724.7	1739.4
25°	1658.0	1661.3	1657.2	1695.4	1688.9
27.5°	1611.6	1609.2	1622.2	1641.7	1654.8
30°	1545.7	1546.6	1564.5	1590.5	1602.7
32.5°	1485.5	1478.2	1500.2	1511.6	1498.6
35°	1409.9	1403.4	1404.2	1332.6	1290.3
37.5°	1306.6	1312.3	1237.4	1106.4	1051.1
40°	1170.7	1182.1	1033.2	935.6	904.7
42.5°	1006.4	1009.6	846.9	815.2	794.8
45°	820.1	855.9	713.5	704.5	675.2
47.5°	650.0	716.7	598.0	603.7	533.7
50°	528.8	595.5	519.0	521.5	416.5
52.5°	418.2	483.2	458.0	450.7	327.0
55°	323.0	386.4	395.4	392.1	255.5
57.5°	237.6	305.9	331.9	344.1	196.9
60°	174.1	249.8	275.0	299.4	148.9
62.5°	138.3	216.4	225.4	261.1	115.5
65°	121.2	199.3	179.0	226.2	91.1
67.5°	108.2	189.6	145.6	200.1	79.7
70°	97.6	170.8	126.1	179.0	75.7
72.5°	97.6	149.7	99.3	158.6	76.5
75°	88.7	127.7	68.3	134.2	76.5
77.5°	78.9	109.0	51.3	109.0	71.6
80°	68.3	85.4	42.3	83.8	64.3
82.5°	50.4	64.3	36.6	62.6	52.1
85°	32.5	52.9	37.4	45.6	36.6
87.5°	15.5	26.8	23.6	22.8	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)