

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: P291415

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291415
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-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3547.0 lumens
Efficiency: N/A
Efficacy: 119.6 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

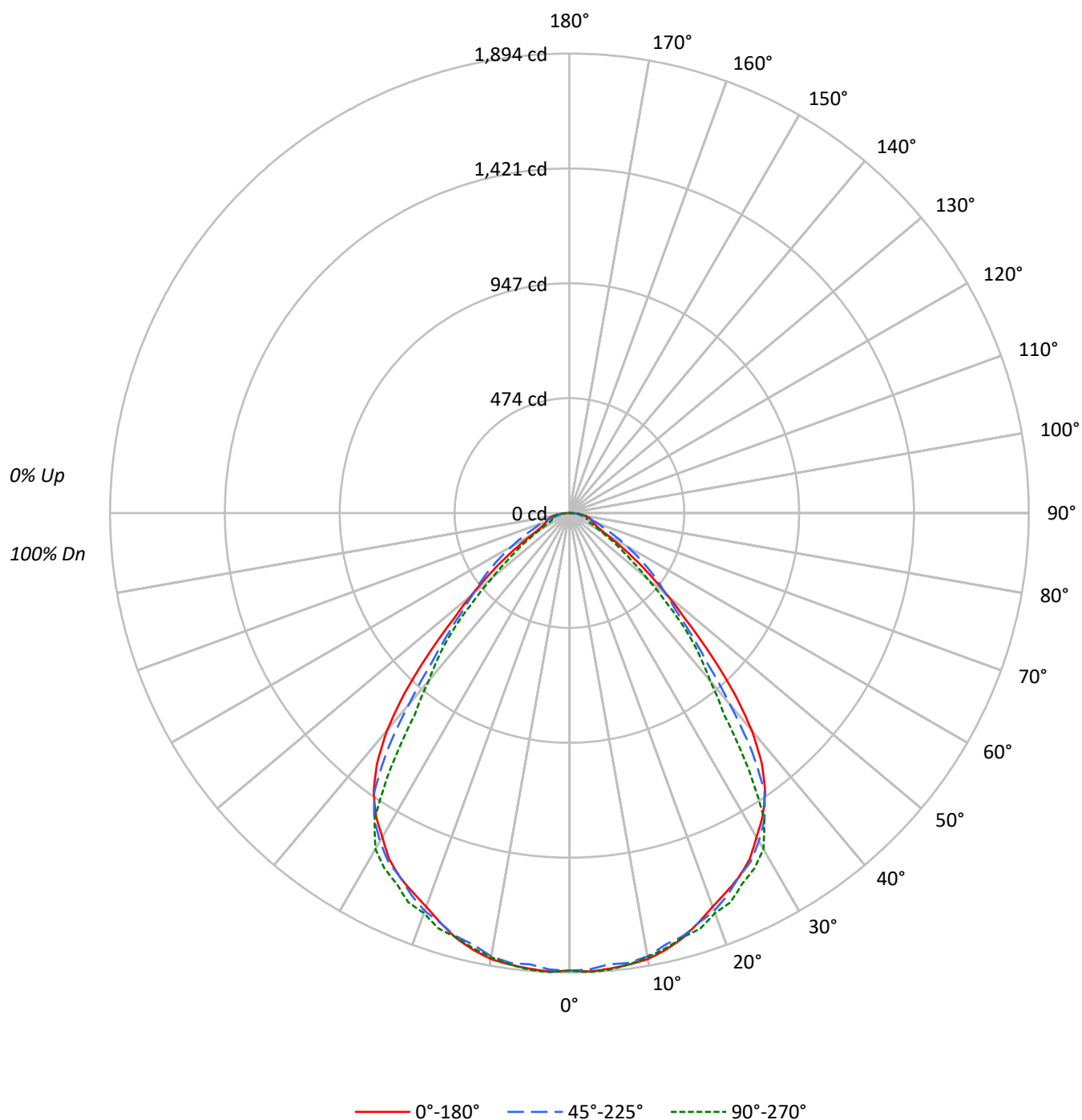
Input Watts (W): 29.667
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5076	5076	5076
5°	5093	5045	5104
10°	5101	5070	5079
15°	5049	5031	5042
20°	4943	4997	5025
25°	4913	4911	5005
30°	4794	4852	4970
35°	4622	4604	4231
40°	4104	3622	3172
45°	3115	2710	2565
50°	2210	2169	1740
55°	1512	1851	1196
60°	935	1477	800
65°	770	1137	579
70°	766	991	594
75°	920	709	793
80°	1057	654	993
85°	1003	1152	1127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	5.0
10°-20°	510.8	14.4
20°-30°	768.2	21.7
30°-40°	837.4	23.6
40°-50°	586.4	16.5
50°-60°	331.9	9.4
60°-70°	181.6	5.1
70°-80°	110.1	3.1
80°-90°	41.7	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°	1457.9	41.1
0°-40°	2295.3	64.7
0°-60°	3213.6	90.6
0°-90°	3547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1885	1882	1868	1889	1889	179
15°	1812	1807	1806	1832	1810	510
25°	1655	1658	1654	1692	1686	760
35°	1407	1401	1401	1330	1288	867
45°	818	854	712	703	674	636
55°	322	386	395	391	255	295
65°	121	199	179	226	91	124
75°	88	128	68	134	76	92
85°	32	53	37	46	36	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.2	1886.2	1886.2	1886.2	1886.2
2.5°	1891.0	1888.6	1882.9	1894.3	1893.5
5°	1885.3	1882.1	1867.5	1889.4	1889.4
7.5°	1877.2	1869.1	1869.9	1882.1	1876.4
10°	1866.7	1852.9	1855.3	1858.6	1858.6
12.5°	1842.3	1829.3	1822.8	1833.4	1836.6
15°	1812.3	1807.4	1805.8	1831.8	1809.8
17.5°	1770.0	1780.6	1770.9	1792.0	1795.2
20°	1726.2	1746.5	1744.9	1759.5	1754.6
22.5°	1690.5	1703.5	1703.5	1721.3	1735.9
25°	1654.8	1658.0	1653.9	1692.1	1685.6
27.5°	1608.5	1606.0	1619.0	1638.5	1651.5
30°	1542.7	1543.5	1561.4	1587.4	1599.5
32.5°	1482.6	1475.3	1497.2	1508.6	1495.6
35°	1407.1	1400.6	1401.4	1330.0	1287.8
37.5°	1304.0	1309.7	1235.0	1104.3	1049.0
40°	1168.4	1179.8	1031.2	933.7	902.9
42.5°	1004.4	1007.6	845.2	813.6	793.3
45°	818.4	854.2	712.1	703.1	673.9
47.5°	648.7	715.3	596.8	602.5	532.6
50°	527.8	594.3	518.0	520.5	415.7
52.5°	417.3	482.3	457.1	449.8	326.4
55°	322.3	385.7	394.6	391.4	255.0
57.5°	237.1	305.3	331.3	343.5	196.5
60°	173.8	249.3	274.4	298.8	148.6
62.5°	138.0	216.0	224.9	260.6	115.3
65°	121.0	198.9	178.6	225.7	90.9
67.5°	108.0	189.2	145.3	199.7	79.6
70°	97.4	170.5	125.9	178.6	75.5
72.5°	97.4	149.4	99.1	158.3	76.3
75°	88.5	127.5	68.2	134.0	76.3
77.5°	78.8	108.8	51.2	108.8	71.5
80°	68.2	85.3	42.2	83.6	64.1
82.5°	50.3	64.1	36.5	62.5	52.0
85°	32.5	52.8	37.3	45.5	36.5
87.5°	15.4	26.8	23.5	22.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)