

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: P291360

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291360
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-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3370.0 lumens
Efficiency: N/A
Efficacy: 125.0 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

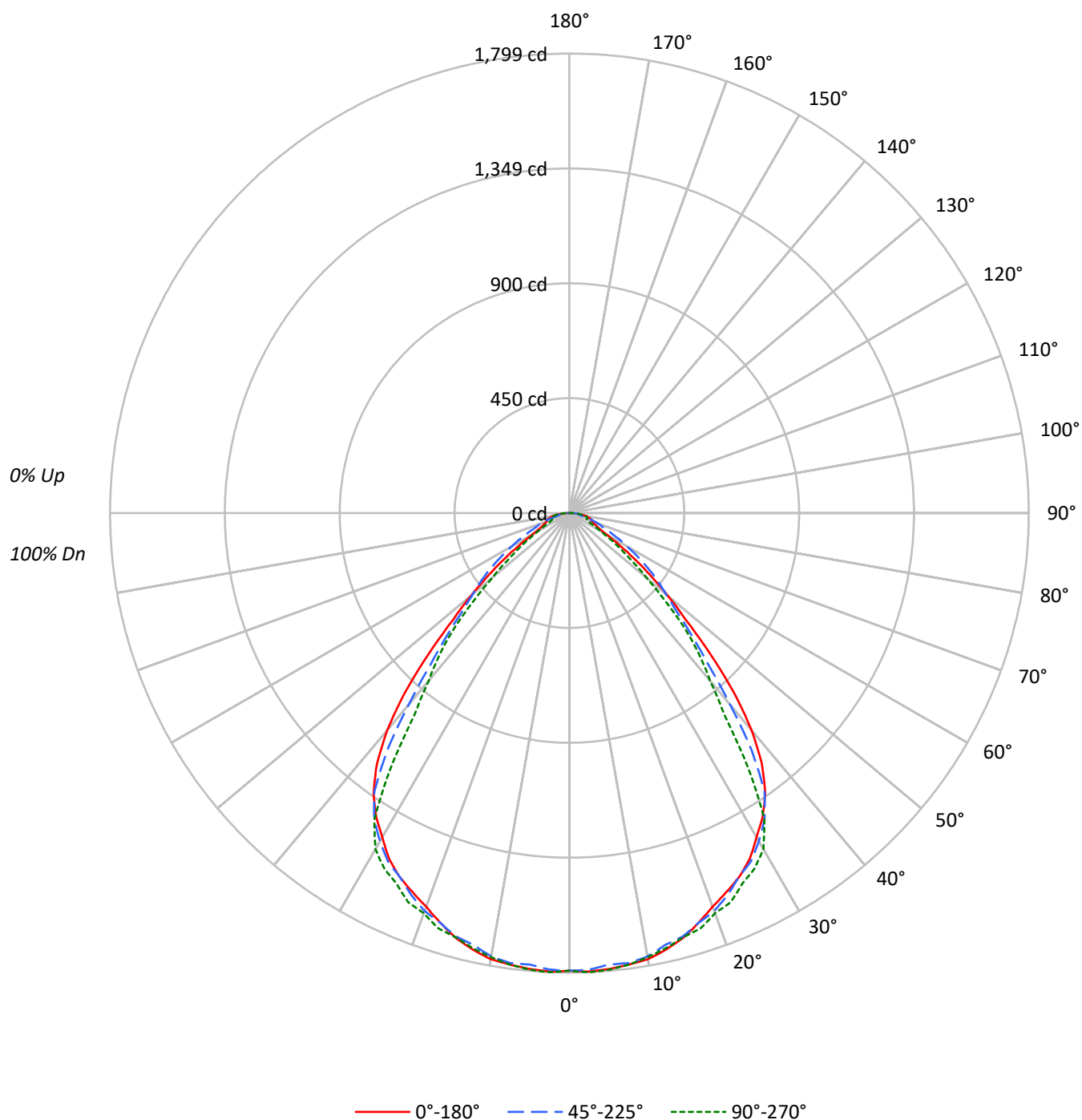
Input Watts (W): 26.97
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291360

CATALOG NUMBER: 14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P291360

CATALOG NUMBER: 14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K

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°	4822	4822	4822
5°	4839	4793	4849
10°	4846	4817	4825
15°	4797	4780	4790
20°	4697	4747	4774
25°	4668	4666	4755
30°	4554	4610	4722
35°	4392	4374	4019
40°	3900	3442	3013
45°	2959	2575	2437
50°	2099	2061	1654
55°	1437	1759	1136
60°	889	1403	760
65°	732	1081	550
70°	729	941	564
75°	874	674	754
80°	1004	621	944
85°	954	1096	1071



TEST NUMBER: P291360

CATALOG NUMBER: 14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	5.0
10°-20°	485.3	14.4
20°-30°	729.8	21.7
30°-40°	795.6	23.6
40°-50°	557.1	16.5
50°-60°	315.3	9.4
60°-70°	172.5	5.1
70°-80°	104.6	3.1
80°-90°	39.6	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°	1385.2	41.1
0°-40°	2180.8	64.7
0°-60°	3053.2	90.6
0°-90°	3370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3370.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1791	1788	1774	1795	1795	170
15°	1722	1717	1716	1740	1720	484
25°	1572	1575	1571	1608	1602	722
35°	1337	1331	1332	1264	1224	824
45°	778	812	676	668	640	604
55°	306	366	375	372	242	280
65°	115	189	170	214	86	118
75°	84	121	65	127	72	87
85°	31	50	36	43	35	34
90°	0	0	0	0	0	



TEST NUMBER: P291360

CATALOG NUMBER: 14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1792.0	1792.0	1792.0	1792.0	1792.0
2.5°	1796.7	1794.3	1788.9	1799.7	1799.0
5°	1791.3	1788.2	1774.3	1795.1	1795.1
7.5°	1783.5	1775.8	1776.6	1788.2	1782.8
10°	1773.5	1760.4	1762.7	1765.8	1765.8
12.5°	1750.4	1738.0	1731.9	1741.9	1745.0
15°	1721.8	1717.2	1715.7	1740.3	1719.5
17.5°	1681.7	1691.7	1682.5	1702.5	1705.6
20°	1640.1	1659.3	1657.8	1671.7	1667.1
22.5°	1606.1	1618.5	1618.5	1635.4	1649.3
25°	1572.2	1575.3	1571.4	1607.7	1601.5
27.5°	1528.2	1525.9	1538.2	1556.7	1569.1
30°	1465.7	1466.5	1483.5	1508.1	1519.7
32.5°	1408.6	1401.7	1422.5	1433.3	1421.0
35°	1336.9	1330.7	1331.5	1263.6	1223.5
37.5°	1238.9	1244.3	1173.3	1049.1	996.7
40°	1110.1	1120.9	979.7	887.1	857.8
42.5°	954.3	957.3	803.1	773.0	753.7
45°	777.6	811.5	676.5	668.1	640.3
47.5°	616.4	679.6	567.0	572.4	506.1
50°	501.4	564.7	492.2	494.5	395.0
52.5°	396.5	458.2	434.3	427.4	310.1
55°	306.3	366.4	374.9	371.8	242.2
57.5°	225.3	290.1	314.7	326.3	186.7
60°	165.1	236.8	260.7	283.9	141.2
62.5°	131.1	205.2	213.7	247.6	109.5
65°	114.9	189.0	169.7	214.5	86.4
67.5°	102.6	179.7	138.1	189.8	75.6
70°	92.6	162.0	119.6	169.7	71.7
72.5°	92.6	141.9	94.1	150.4	72.5
75°	84.1	121.1	64.8	127.3	72.5
77.5°	74.8	103.4	48.6	103.4	67.9
80°	64.8	81.0	40.1	79.5	60.9
82.5°	47.8	60.9	34.7	59.4	49.4
85°	30.9	50.1	35.5	43.2	34.7
87.5°	14.7	25.5	22.4	21.6	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)