

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: P291361

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291361
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-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: 3358.0 lumens
Efficiency: N/A
Efficacy: 115.0 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

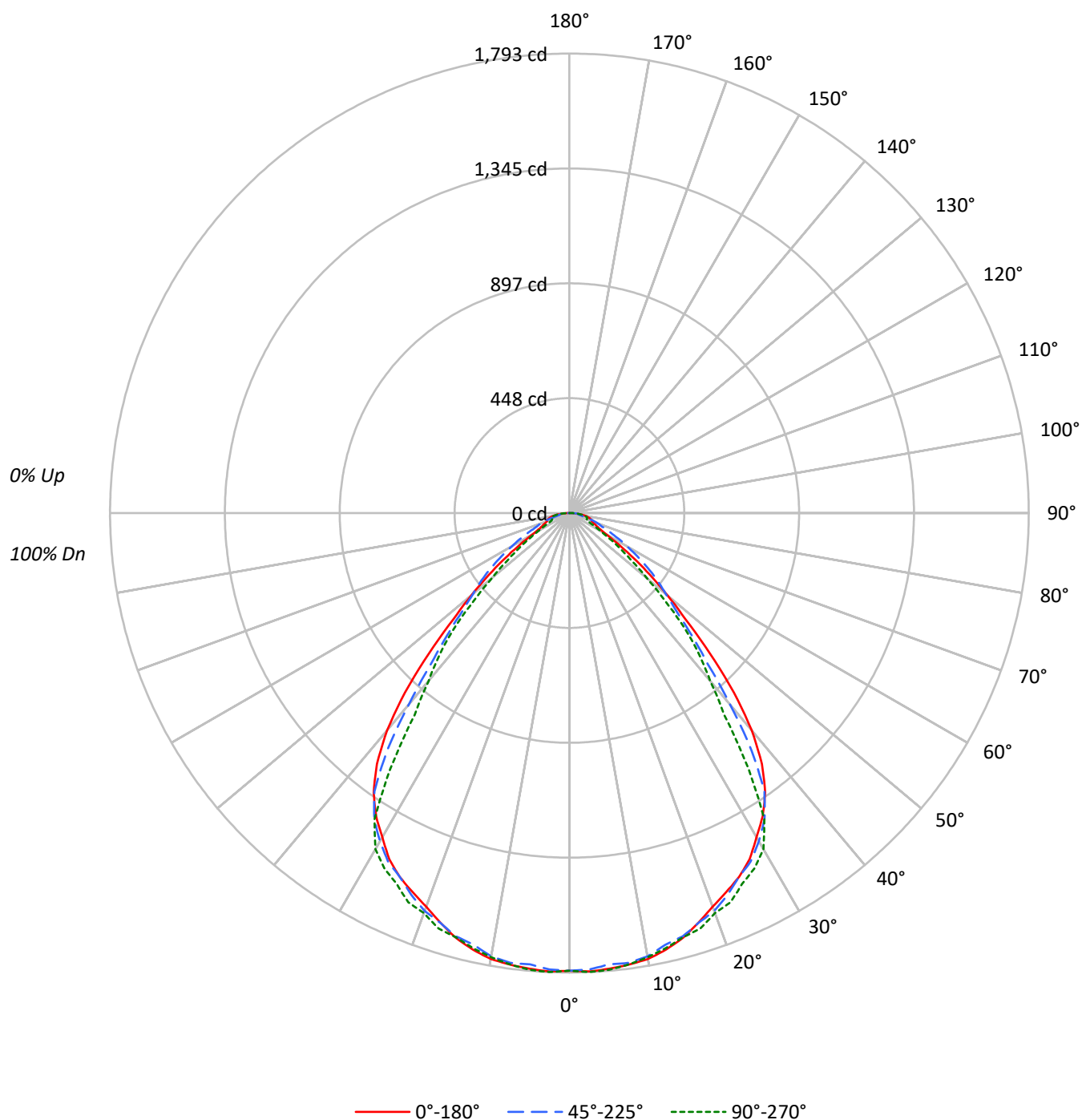
Input Watts (W): 29.202
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4805	4805	4805
5°	4821	4776	4832
10°	4829	4799	4808
15°	4780	4763	4773
20°	4680	4731	4757
25°	4651	4649	4738
30°	4538	4593	4705
35°	4376	4358	4005
40°	3886	3429	3003
45°	2949	2565	2428
50°	2092	2053	1648
55°	1432	1753	1133
60°	885	1398	757
65°	729	1077	548
70°	725	937	563
75°	871	672	752
80°	1001	620	941
85°	948	1093	1068



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	5.0
10°-20°	483.6	14.4
20°-30°	727.2	21.7
30°-40°	792.8	23.6
40°-50°	555.1	16.5
50°-60°	314.2	9.4
60°-70°	171.9	5.1
70°-80°	104.2	3.1
80°-90°	39.5	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°	1380.2	41.1
0°-40°	2173.0	64.7
0°-60°	3042.4	90.6
0°-90°	3358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3358.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1786	1786	1786	1786	1786	
5°	1785	1782	1768	1789	1789	170
15°	1716	1711	1710	1734	1713	483
25°	1567	1570	1566	1602	1596	719
35°	1332	1326	1327	1259	1219	821
45°	775	809	674	666	638	602
55°	305	365	374	370	241	279
65°	114	188	169	214	86	118
75°	84	121	65	127	72	87
85°	31	50	35	43	35	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1785.7	1785.7	1785.7	1785.7	1785.7
2.5°	1790.3	1788.0	1782.6	1793.3	1792.6
5°	1784.9	1781.8	1768.0	1788.7	1788.7
7.5°	1777.2	1769.5	1770.3	1781.8	1776.4
10°	1767.2	1754.1	1756.4	1759.5	1759.5
12.5°	1744.1	1731.8	1725.7	1735.7	1738.8
15°	1715.7	1711.1	1709.6	1734.2	1713.4
17.5°	1675.7	1685.7	1676.5	1696.5	1699.6
20°	1634.2	1653.4	1651.9	1665.7	1661.1
22.5°	1600.4	1612.7	1612.7	1629.6	1643.4
25°	1566.6	1569.7	1565.8	1601.9	1595.8
27.5°	1522.8	1520.5	1532.8	1551.2	1563.5
30°	1460.5	1461.3	1478.2	1502.8	1514.3
32.5°	1403.6	1396.7	1417.5	1428.2	1415.9
35°	1332.1	1326.0	1326.7	1259.1	1219.1
37.5°	1234.5	1239.9	1169.2	1045.4	993.1
40°	1106.1	1116.9	976.2	884.0	854.8
42.5°	950.9	953.9	800.2	770.2	751.0
45°	774.8	808.7	674.1	665.7	638.0
47.5°	614.2	677.2	565.0	570.4	504.3
50°	499.6	562.7	490.4	492.7	393.6
52.5°	395.1	456.6	432.8	425.9	309.0
55°	305.2	365.1	373.6	370.5	241.4
57.5°	224.5	289.0	313.6	325.2	186.0
60°	164.5	236.0	259.8	282.9	140.7
62.5°	130.7	204.5	212.9	246.7	109.2
65°	114.5	188.3	169.1	213.7	86.1
67.5°	102.2	179.1	137.6	189.1	75.3
70°	92.2	161.4	119.1	169.1	71.5
72.5°	92.2	141.4	93.8	149.9	72.3
75°	83.8	120.7	64.6	126.8	72.3
77.5°	74.6	103.0	48.4	103.0	67.6
80°	64.6	80.7	40.0	79.2	60.7
82.5°	47.7	60.7	34.6	59.2	49.2
85°	30.7	50.0	35.4	43.0	34.6
87.5°	14.6	25.4	22.3	21.5	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)