

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: P291521

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291521
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-LD5-40-A19/156-UNV-L92765-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3402.0 lumens
Efficiency: N/A
Efficacy: 100.8 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

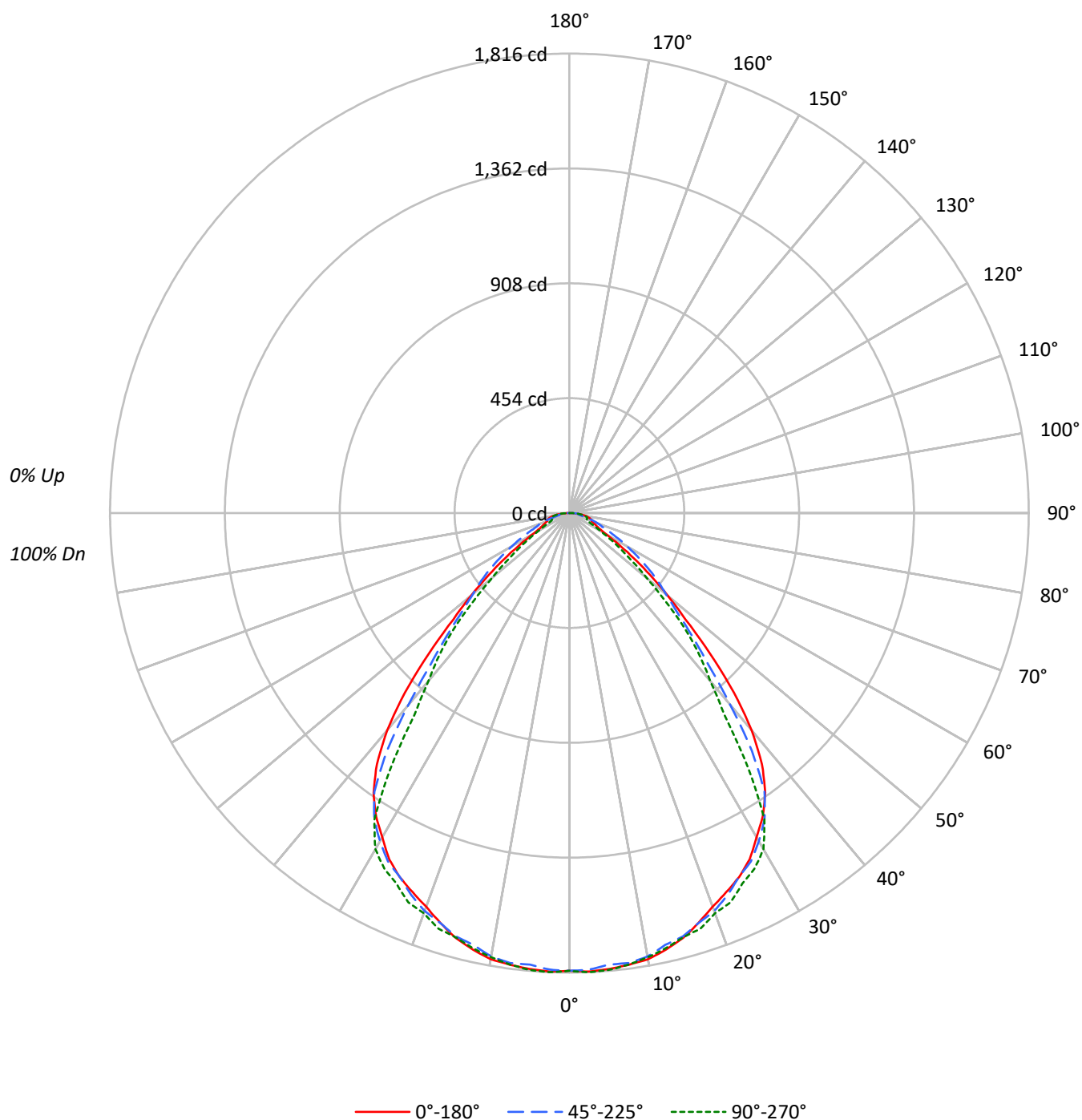
Input Watts (W): 33.759
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4868	4868	4868
5°	4885	4838	4895
10°	4892	4862	4871
15°	4842	4825	4836
20°	4741	4792	4819
25°	4712	4710	4800
30°	4598	4653	4767
35°	4434	4415	4057
40°	3936	3474	3042
45°	2987	2599	2460
50°	2119	2080	1669
55°	1451	1776	1147
60°	897	1417	767
65°	739	1091	555
70°	736	950	570
75°	883	680	761
80°	1013	628	953
85°	963	1105	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.6	5.0
10°-20°	489.9	14.4
20°-30°	736.7	21.7
30°-40°	803.2	23.6
40°-50°	562.4	16.5
50°-60°	318.3	9.4
60°-70°	174.2	5.1
70°-80°	105.6	3.1
80°-90°	40.0	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°	1398.3	41.1
0°-40°	2201.5	64.7
0°-60°	3082.2	90.6
0°-90°	3402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3402.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1808	1805	1791	1812	1812	172
15°	1738	1734	1732	1757	1736	489
25°	1587	1590	1586	1623	1617	729
35°	1350	1343	1344	1276	1235	832
45°	785	819	683	674	646	610
55°	309	370	378	375	244	283
65°	116	191	171	216	87	119
75°	85	122	65	128	73	88
85°	31	51	36	44	35	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1809.1	1809.1	1809.1	1809.1	1809.1
2.5°	1813.7	1811.4	1805.9	1816.8	1816.1
5°	1808.3	1805.2	1791.1	1812.2	1812.2
7.5°	1800.5	1792.7	1793.5	1805.2	1799.7
10°	1790.4	1777.1	1779.5	1782.6	1782.6
12.5°	1767.0	1754.5	1748.3	1758.4	1761.5
15°	1738.2	1733.5	1732.0	1756.9	1735.8
17.5°	1697.7	1707.8	1698.5	1718.7	1721.8
20°	1655.6	1675.1	1673.5	1687.6	1682.9
22.5°	1621.4	1633.8	1633.8	1651.0	1665.0
25°	1587.1	1590.2	1586.3	1622.9	1616.7
27.5°	1542.7	1540.4	1552.8	1571.5	1584.0
30°	1479.6	1480.4	1497.5	1522.5	1534.2
32.5°	1422.0	1415.0	1436.0	1446.9	1434.5
35°	1349.6	1343.4	1344.1	1275.6	1235.1
37.5°	1250.7	1256.1	1184.5	1059.1	1006.2
40°	1120.6	1131.5	989.0	895.6	866.0
42.5°	963.3	966.4	810.7	780.3	760.8
45°	785.0	819.3	683.0	674.4	646.4
47.5°	622.2	686.1	572.4	577.8	510.9
50°	506.2	570.0	496.8	499.2	398.7
52.5°	400.3	462.6	438.4	431.4	313.1
55°	309.2	369.9	378.5	375.4	244.5
57.5°	227.4	292.8	317.7	329.4	188.5
60°	166.7	239.1	263.2	286.6	142.5
62.5°	132.4	207.1	215.7	250.0	110.6
65°	116.0	190.8	171.3	216.5	87.2
67.5°	103.6	181.5	139.4	191.6	76.3
70°	93.5	163.5	120.7	171.3	72.4
72.5°	93.5	143.3	95.0	151.9	73.2
75°	84.9	122.3	65.4	128.5	73.2
77.5°	75.5	104.4	49.1	104.4	68.5
80°	65.4	81.8	40.5	80.2	61.5
82.5°	48.3	61.5	35.0	60.0	49.8
85°	31.2	50.6	35.8	43.6	35.0
87.5°	14.8	25.7	22.6	21.8	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)