

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: P291412

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291412
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-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3261.0 lumens
Efficiency: N/A
Efficacy: 111.3 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

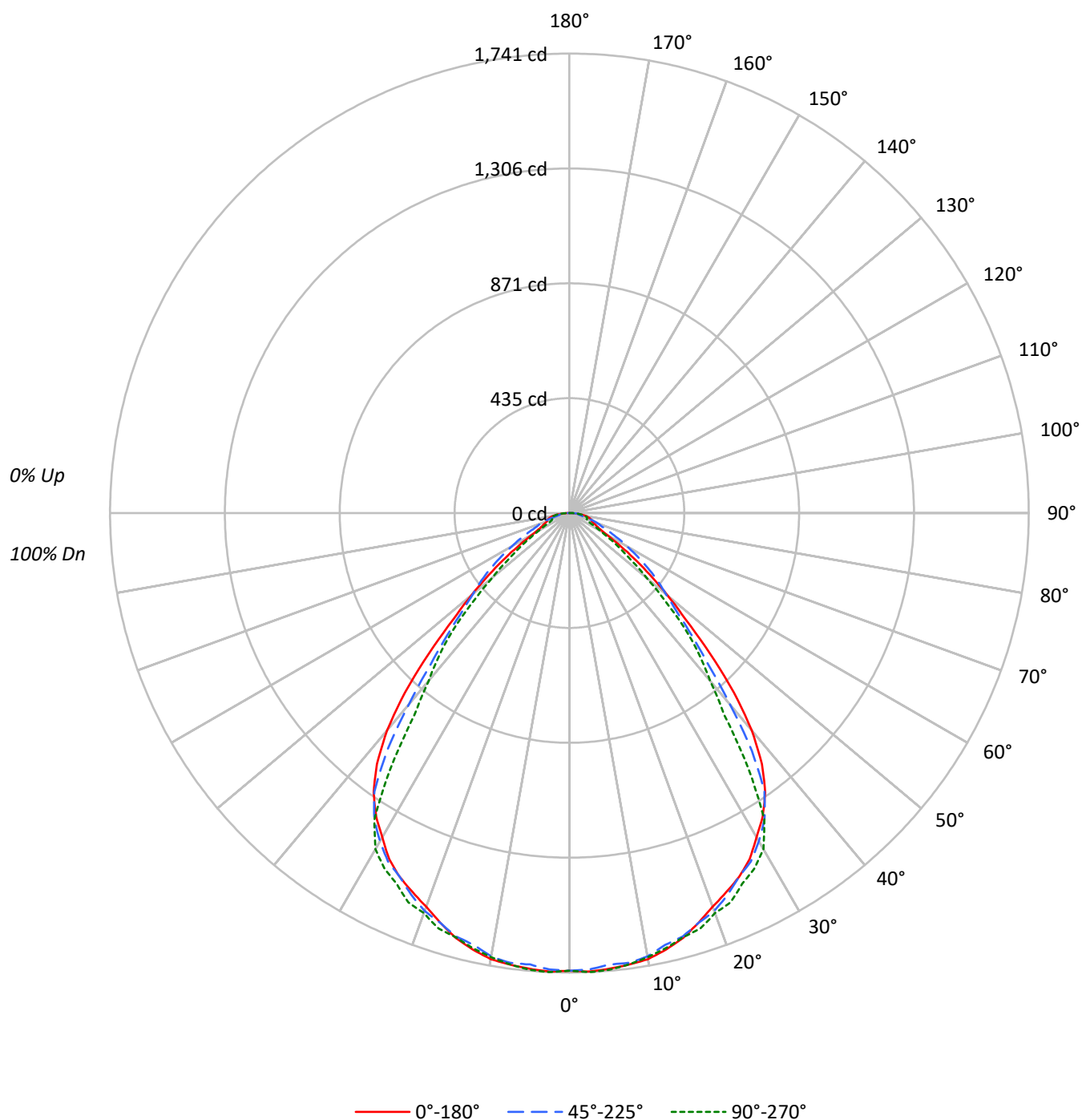
Input Watts (W): 29.295
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	4666	4666	4666
5°	4682	4638	4692
10°	4690	4661	4669
15°	4642	4625	4635
20°	4545	4594	4619
25°	4517	4515	4601
30°	4407	4460	4570
35°	4250	4232	3889
40°	3773	3330	2916
45°	2864	2492	2358
50°	2031	1994	1600
55°	1391	1702	1100
60°	859	1358	735
65°	708	1046	532
70°	705	910	546
75°	846	652	730
80°	972	601	914
85°	923	1059	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	5.0
10°-20°	469.6	14.4
20°-30°	706.2	21.7
30°-40°	769.9	23.6
40°-50°	539.1	16.5
50°-60°	305.2	9.4
60°-70°	167.0	5.1
70°-80°	101.2	3.1
80°-90°	38.4	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°	1340.4	41.1
0°-40°	2110.2	64.7
0°-60°	2954.5	90.6
0°-90°	3261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1733	1730	1717	1737	1737	165
15°	1666	1662	1660	1684	1664	469
25°	1521	1524	1521	1556	1550	699
35°	1294	1288	1288	1223	1184	797
45°	752	785	655	646	620	584
55°	296	355	363	360	234	271
65°	111	183	164	208	84	114
75°	81	117	63	123	70	84
85°	30	48	34	42	34	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1734.1	1734.1	1734.1	1734.1	1734.1
2.5°	1738.6	1736.3	1731.1	1741.5	1740.8
5°	1733.3	1730.3	1716.9	1737.1	1737.1
7.5°	1725.9	1718.4	1719.1	1730.3	1725.1
10°	1716.2	1703.5	1705.7	1708.7	1708.7
12.5°	1693.8	1681.8	1675.8	1685.6	1688.5
15°	1666.1	1661.7	1660.2	1684.1	1663.9
17.5°	1627.3	1637.0	1628.1	1647.5	1650.5
20°	1587.0	1605.7	1604.2	1617.6	1613.1
22.5°	1554.2	1566.1	1566.1	1582.5	1596.0
25°	1521.3	1524.3	1520.6	1555.7	1549.7
27.5°	1478.8	1476.5	1488.5	1506.4	1518.3
30°	1418.3	1419.1	1435.5	1459.4	1470.6
32.5°	1363.1	1356.4	1376.5	1387.0	1375.0
35°	1293.6	1287.7	1288.4	1222.7	1183.9
37.5°	1198.8	1204.1	1135.4	1015.2	964.5
40°	1074.2	1084.6	948.0	858.5	830.1
42.5°	923.4	926.4	777.1	748.0	729.3
45°	752.5	785.3	654.7	646.5	619.6
47.5°	596.4	657.6	548.7	553.9	489.7
50°	485.2	546.4	476.3	478.5	382.2
52.5°	383.7	443.4	420.3	413.5	300.1
55°	296.4	354.6	362.8	359.8	234.4
57.5°	218.0	280.7	304.6	315.8	180.6
60°	159.7	229.2	252.3	274.7	136.6
62.5°	126.9	198.6	206.8	239.6	106.0
65°	111.2	182.9	164.2	207.5	83.6
67.5°	99.3	173.9	133.6	183.6	73.2
70°	89.6	156.8	115.7	164.2	69.4
72.5°	89.6	137.4	91.1	145.6	70.2
75°	81.4	117.2	62.7	123.2	70.2
77.5°	72.4	100.0	47.0	100.0	65.7
80°	62.7	78.4	38.8	76.9	59.0
82.5°	46.3	59.0	33.6	57.5	47.8
85°	29.9	48.5	34.3	41.8	33.6
87.5°	14.2	24.6	21.6	20.9	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)