

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: P291408

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291408
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-L82765-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: 3274.0 lumens
Efficiency: N/A
Efficacy: 124.8 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

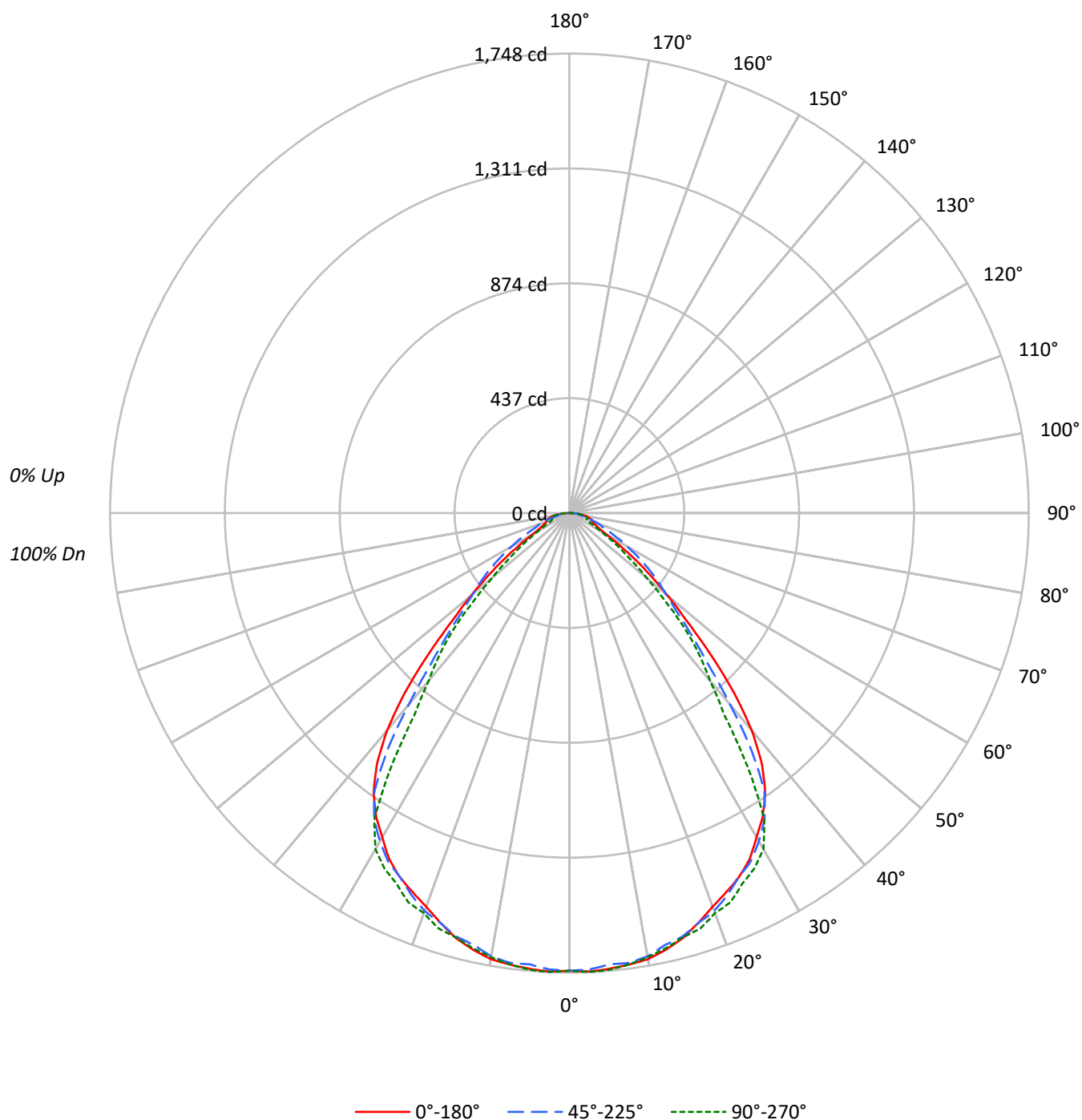
Input Watts (W): 26.226
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	0
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88	
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77	
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68	
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61	
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54	
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49	
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44	
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40	
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37	
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4685	4685	4685
5°	4701	4656	4711
10°	4708	4679	4688
15°	4660	4644	4654
20°	4563	4612	4638
25°	4535	4533	4620
30°	4425	4478	4588
35°	4267	4250	3905
40°	3789	3344	2928
45°	2875	2501	2367
50°	2039	2002	1606
55°	1396	1709	1104
60°	863	1363	738
65°	711	1050	534
70°	707	914	548
75°	849	655	732
80°	976	604	917
85°	926	1065	1041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.2	5.0
10°-20°	471.5	14.4
20°-30°	709.0	21.7
30°-40°	773.0	23.6
40°-50°	541.2	16.5
50°-60°	306.4	9.4
60°-70°	167.6	5.1
70°-80°	101.6	3.1
80°-90°	38.5	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°	1345.7	41.1
0°-40°	2118.7	64.7
0°-60°	2966.3	90.6
0°-90°	3274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1741	1741	1741	1741	1741	
5°	1740	1737	1724	1744	1744	166
15°	1673	1668	1667	1691	1670	470
25°	1527	1530	1527	1562	1556	701
35°	1299	1293	1294	1228	1189	800
45°	756	788	657	649	622	587
55°	298	356	364	361	235	272
65°	112	184	165	208	84	115
75°	82	118	63	124	70	85
85°	30	49	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°	1741.0	1741.0	1741.0	1741.0	1741.0
2.5°	1745.5	1743.2	1738.0	1748.5	1747.7
5°	1740.2	1737.2	1723.7	1744.0	1744.0
7.5°	1732.7	1725.2	1726.0	1737.2	1732.0
10°	1723.0	1710.3	1712.5	1715.5	1715.5
12.5°	1700.5	1688.5	1682.5	1692.3	1695.3
15°	1672.8	1668.3	1666.8	1690.8	1670.5
17.5°	1633.8	1643.6	1634.6	1654.0	1657.0
20°	1593.3	1612.1	1610.6	1624.1	1619.6
22.5°	1560.4	1572.4	1572.4	1588.8	1602.3
25°	1527.4	1530.4	1526.6	1561.9	1555.9
27.5°	1484.7	1482.4	1494.4	1512.4	1524.4
30°	1424.0	1424.7	1441.2	1465.2	1476.4
32.5°	1368.5	1361.8	1382.0	1392.5	1380.5
35°	1298.8	1292.8	1293.6	1227.6	1188.6
37.5°	1203.6	1208.9	1139.9	1019.3	968.3
40°	1078.5	1089.0	951.8	861.9	833.4
42.5°	927.1	930.1	780.2	751.0	732.2
45°	755.5	788.4	657.3	649.0	622.0
47.5°	598.8	660.3	550.9	556.1	491.6
50°	487.1	548.6	478.2	480.4	383.7
52.5°	385.2	445.2	421.9	415.2	301.3
55°	297.5	356.0	364.2	361.2	235.3
57.5°	218.8	281.8	305.8	317.0	181.4
60°	160.4	230.1	253.3	275.8	137.2
62.5°	127.4	199.4	207.6	240.6	106.4
65°	111.7	183.6	164.9	208.3	83.9
67.5°	99.7	174.6	134.2	184.4	73.4
70°	89.9	157.4	116.2	164.9	69.7
72.5°	89.9	137.9	91.4	146.1	70.4
75°	81.7	117.7	63.0	123.7	70.4
77.5°	72.7	100.4	47.2	100.4	66.0
80°	63.0	78.7	39.0	77.2	59.2
82.5°	46.5	59.2	33.7	57.7	48.0
85°	30.0	48.7	34.5	42.0	33.7
87.5°	14.2	24.7	21.7	21.0	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)