

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: P291469

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291469
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-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3300.0 lumens
Efficiency: N/A
Efficacy: 88.3 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

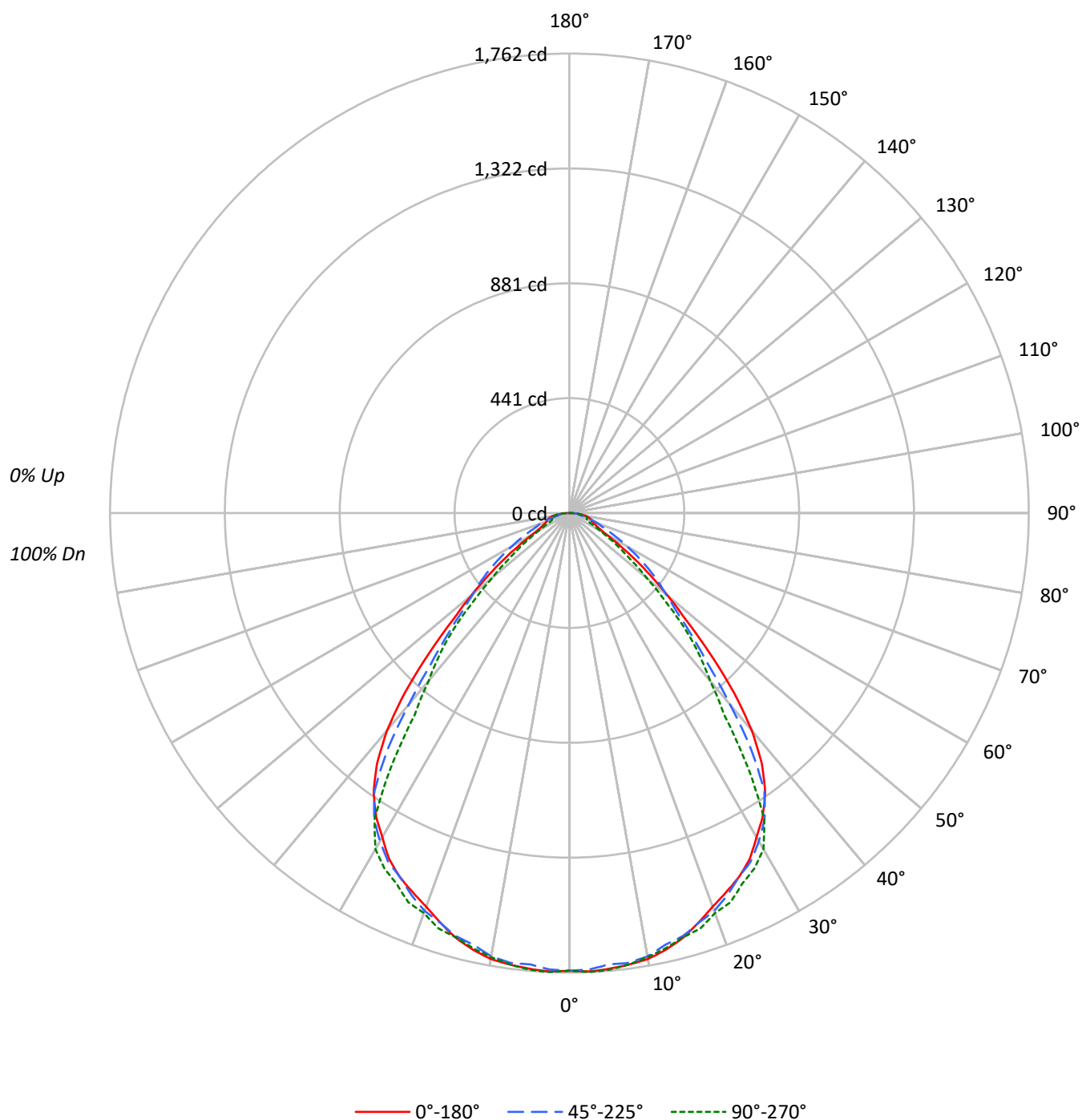
Input Watts (W): 37.386
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
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°	4722	4722	4722
5°	4738	4693	4748
10°	4746	4717	4725
15°	4697	4680	4691
20°	4599	4649	4675
25°	4571	4569	4656
30°	4460	4514	4624
35°	4300	4283	3936
40°	3818	3370	2951
45°	2898	2521	2386
50°	2056	2017	1619
55°	1407	1722	1113
60°	870	1374	744
65°	717	1058	539
70°	713	921	553
75°	856	660	738
80°	984	609	925
85°	932	1071	1050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.5	5.0
10°-20°	475.2	14.4
20°-30°	714.7	21.7
30°-40°	779.1	23.6
40°-50°	545.5	16.5
50°-60°	308.8	9.4
60°-70°	169.0	5.1
70°-80°	102.4	3.1
80°-90°	38.8	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°	1356.4	41.1
0°-40°	2135.5	64.7
0°-60°	2989.8	90.6
0°-90°	3300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1754	1751	1737	1758	1758	167
15°	1686	1682	1680	1704	1684	474
25°	1540	1542	1539	1574	1568	707
35°	1309	1303	1304	1237	1198	807
45°	762	795	662	654	627	591
55°	300	359	367	364	237	274
65°	113	185	166	210	85	116
75°	82	119	64	125	71	85
85°	30	49	35	42	34	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1754.8	1754.8	1754.8	1754.8	1754.8
2.5°	1759.3	1757.1	1751.8	1762.4	1761.6
5°	1754.1	1751.0	1737.4	1757.8	1757.8
7.5°	1746.5	1738.9	1739.7	1751.0	1745.7
10°	1736.7	1723.8	1726.1	1729.1	1729.1
12.5°	1714.0	1701.9	1695.9	1705.7	1708.7
15°	1686.1	1681.5	1680.0	1704.2	1683.8
17.5°	1646.8	1656.6	1647.5	1667.2	1670.2
20°	1606.0	1624.9	1623.4	1637.0	1632.4
22.5°	1572.8	1584.8	1584.8	1601.5	1615.1
25°	1539.5	1542.5	1538.8	1574.3	1568.2
27.5°	1496.5	1494.2	1506.3	1524.4	1536.5
30°	1435.3	1436.0	1452.6	1476.8	1488.2
32.5°	1379.4	1372.6	1393.0	1403.5	1391.5
35°	1309.1	1303.1	1303.8	1237.4	1198.1
37.5°	1213.2	1218.5	1149.0	1027.4	976.0
40°	1087.0	1097.6	959.4	868.7	840.0
42.5°	934.4	937.5	786.4	756.9	738.0
45°	761.5	794.7	662.5	654.2	627.0
47.5°	603.6	665.5	555.2	560.5	495.5
50°	491.0	553.0	481.9	484.2	386.8
52.5°	388.3	448.7	425.3	418.5	303.7
55°	299.9	358.8	367.1	364.1	237.2
57.5°	220.6	284.0	308.2	319.5	182.8
60°	161.7	231.9	255.3	278.0	138.2
62.5°	128.4	200.9	209.2	242.5	107.3
65°	112.6	185.1	166.2	210.0	84.6
67.5°	100.5	176.0	135.2	185.8	74.0
70°	90.6	158.6	117.1	166.2	70.3
72.5°	90.6	139.0	92.2	147.3	71.0
75°	82.3	118.6	63.5	124.6	71.0
77.5°	73.3	101.2	47.6	101.2	66.5
80°	63.5	79.3	39.3	77.8	59.7
82.5°	46.8	59.7	34.0	58.2	48.3
85°	30.2	49.1	34.7	42.3	34.0
87.5°	14.4	24.9	21.9	21.2	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)