

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: P291498

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291498
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-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2629.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

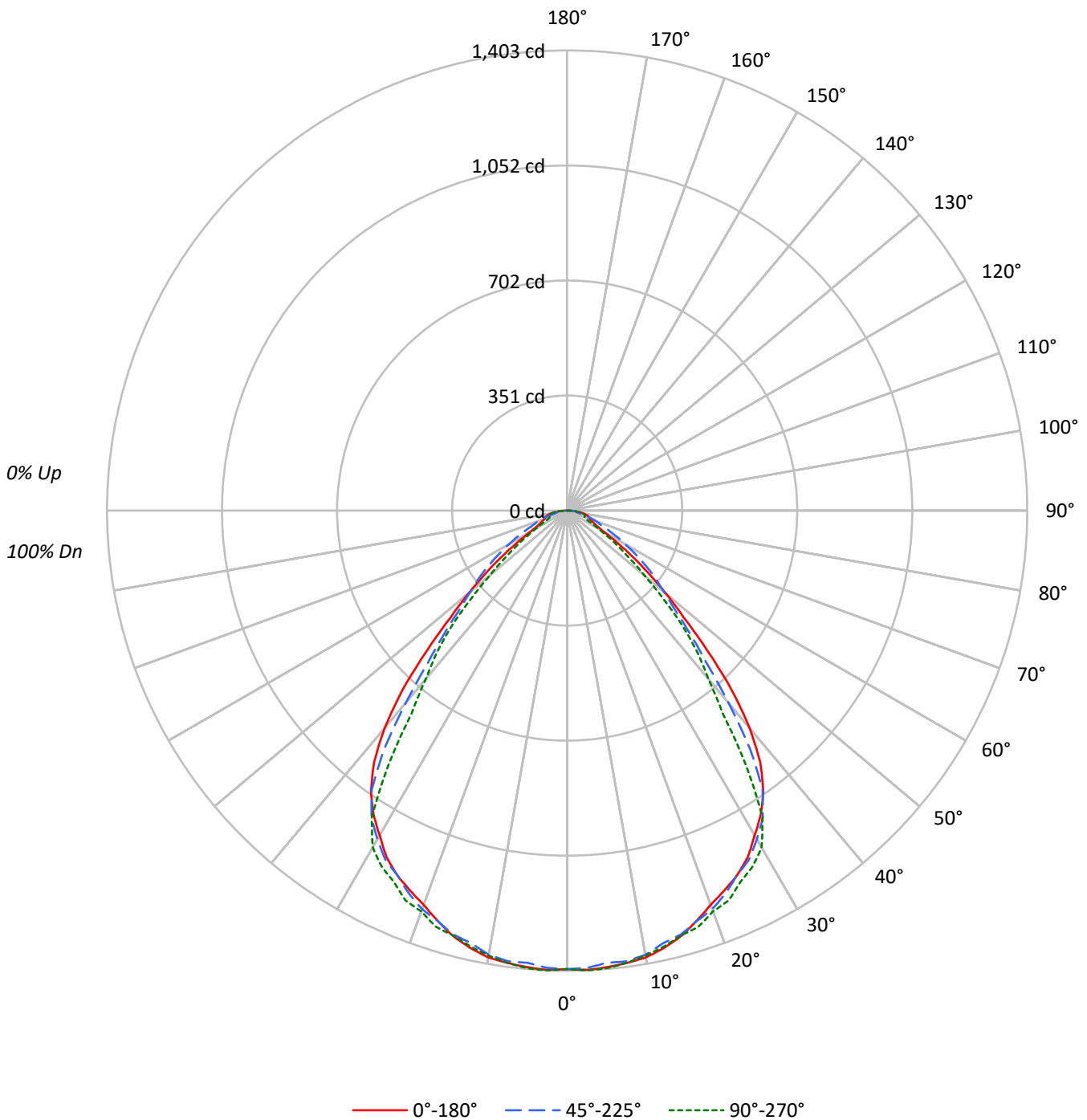
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291498

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P291498

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	3762	3762	3762
5°	3775	3739	3783
10°	3781	3757	3764
15°	3742	3729	3737
20°	3664	3704	3724
25°	3642	3640	3710
30°	3553	3596	3684
35°	3426	3412	3136
40°	3042	2685	2351
45°	2308	2009	1901
50°	1638	1608	1290
55°	1121	1372	887
60°	693	1095	593
65°	571	843	429
70°	568	734	441
75°	682	526	588
80°	784	485	736
85°	744	855	837



TEST NUMBER: P291498

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	5.0
10°-20°	378.6	14.4
20°-30°	569.3	21.7
30°-40°	620.7	23.6
40°-50°	434.6	16.5
50°-60°	246.0	9.4
60°-70°	134.6	5.1
70°-80°	81.6	3.1
80°-90°	30.9	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°	1080.6	41.1
0°-40°	1701.3	64.7
0°-60°	2381.9	90.6
0°-90°	2629.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2629.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1398	1398	1398	1398	1398	
5°	1397	1395	1384	1400	1400	133
15°	1343	1340	1338	1358	1341	378
25°	1226	1229	1226	1254	1249	563
35°	1043	1038	1039	986	954	643
45°	607	633	528	521	500	471
55°	239	286	292	290	189	218
65°	90	147	132	167	67	92
75°	66	94	51	99	57	68
85°	24	39	28	34	27	27
90°	0	0	0	0	0	



TEST NUMBER: P291498

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1398.0	1398.0	1398.0	1398.0	1398.0
2.5°	1401.6	1399.8	1395.6	1404.0	1403.4
5°	1397.4	1395.0	1384.2	1400.4	1400.4
7.5°	1391.4	1385.4	1386.0	1395.0	1390.8
10°	1383.6	1373.3	1375.1	1377.5	1377.5
12.5°	1365.5	1355.9	1351.1	1358.9	1361.3
15°	1343.2	1339.6	1338.4	1357.7	1341.4
17.5°	1311.9	1319.8	1312.5	1328.2	1330.6
20°	1279.4	1294.5	1293.3	1304.1	1300.5
22.5°	1253.0	1262.6	1262.6	1275.8	1286.7
25°	1226.5	1228.9	1225.9	1254.2	1249.4
27.5°	1192.2	1190.4	1200.0	1214.4	1224.1
30°	1143.4	1144.0	1157.3	1176.5	1185.6
32.5°	1098.9	1093.5	1109.7	1118.2	1108.5
35°	1042.9	1038.1	1038.7	985.8	954.5
37.5°	966.5	970.7	915.3	818.5	777.5
40°	866.0	874.4	764.3	692.1	669.2
42.5°	744.4	746.8	626.5	603.0	588.0
45°	606.6	633.1	527.8	521.2	499.5
47.5°	480.8	530.2	442.3	446.5	394.8
50°	391.2	440.5	384.0	385.8	308.1
52.5°	309.3	357.5	338.8	333.4	241.9
55°	238.9	285.9	292.5	290.1	189.0
57.5°	175.7	226.3	245.5	254.6	145.6
60°	128.8	184.8	203.4	221.5	110.1
62.5°	102.3	160.1	166.7	193.2	85.5
65°	89.7	147.4	132.4	167.3	67.4
67.5°	80.0	140.2	107.7	148.0	59.0
70°	72.2	126.4	93.3	132.4	56.0
72.5°	72.2	110.7	73.4	117.4	56.6
75°	65.6	94.5	50.6	99.3	56.6
77.5°	58.4	80.6	37.9	80.6	53.0
80°	50.6	63.2	31.3	62.0	47.5
82.5°	37.3	47.5	27.1	46.3	38.5
85°	24.1	39.1	27.7	33.7	27.1
87.5°	11.4	19.9	17.5	16.9	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)