

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: P291383

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291383
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-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2089.0 lumens
Efficiency: N/A
Efficacy: 130.6 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

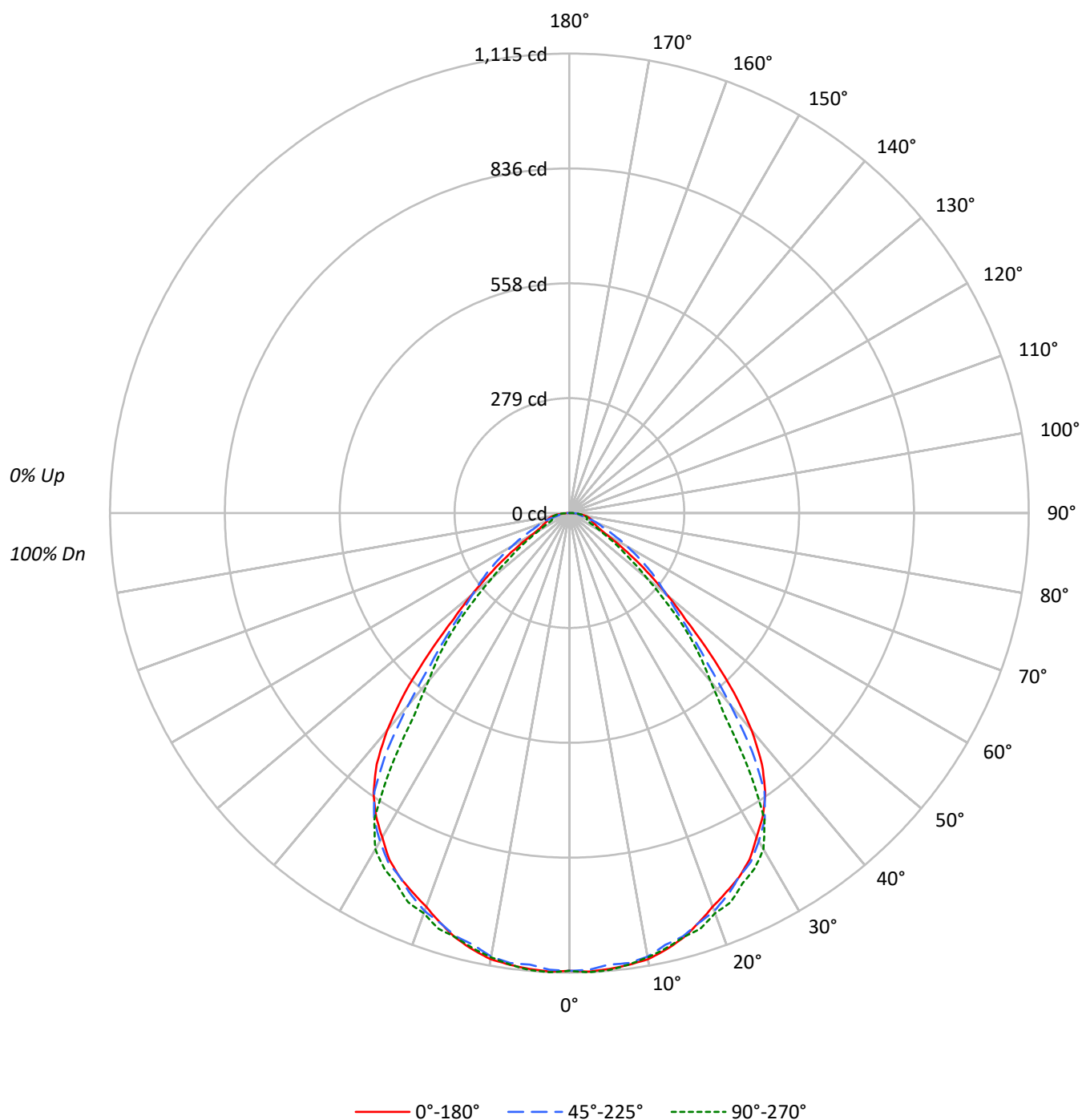
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291383

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P291383

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K

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°	2989	2989	2989
5°	2999	2971	3006
10°	3004	2986	2991
15°	2973	2963	2969
20°	2911	2943	2959
25°	2894	2892	2947
30°	2823	2857	2927
35°	2722	2712	2491
40°	2417	2133	1868
45°	1834	1596	1510
50°	1301	1277	1025
55°	890	1090	705
60°	551	870	471
65°	454	670	341
70°	452	583	350
75°	542	418	468
80°	623	386	586
85°	590	679	664



TEST NUMBER: P291383

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	5.0
10°-20°	300.8	14.4
20°-30°	452.4	21.7
30°-40°	493.2	23.6
40°-50°	345.3	16.5
50°-60°	195.5	9.4
60°-70°	107.0	5.1
70°-80°	64.8	3.1
80°-90°	24.6	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°	858.6	41.1
0°-40°	1351.8	64.7
0°-60°	1892.6	90.6
0°-90°	2089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2089.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1111	1111	1111	1111	1111	
5°	1110	1108	1100	1113	1113	106
15°	1067	1064	1064	1079	1066	300
25°	975	976	974	997	993	448
35°	829	825	825	783	758	511
45°	482	503	419	414	397	374
55°	190	227	232	230	150	174
65°	71	117	105	133	54	73
75°	52	75	40	79	45	54
85°	19	31	22	27	22	21
90°	0	0	0	0	0	



TEST NUMBER: P291383

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.8	1110.8	1110.8	1110.8	1110.8
2.5°	1113.7	1112.3	1108.9	1115.6	1115.2
5°	1110.4	1108.5	1099.9	1112.8	1112.8
7.5°	1105.6	1100.8	1101.3	1108.5	1105.1
10°	1099.4	1091.2	1092.7	1094.6	1094.6
12.5°	1085.0	1077.4	1073.5	1079.8	1081.7
15°	1067.3	1064.5	1063.5	1078.8	1065.9
17.5°	1042.5	1048.7	1042.9	1055.4	1057.3
20°	1016.6	1028.6	1027.6	1036.3	1033.4
22.5°	995.6	1003.3	1003.3	1013.8	1022.4
25°	974.6	976.5	974.1	996.6	992.7
27.5°	947.3	945.9	953.5	965.0	972.7
30°	908.6	909.1	919.6	934.9	942.0
32.5°	873.2	868.9	881.8	888.5	880.8
35°	828.7	824.9	825.4	783.3	758.4
37.5°	768.0	771.3	727.3	650.3	617.8
40°	688.1	694.8	607.3	549.9	531.8
42.5°	591.5	593.4	497.8	479.2	467.2
45°	482.0	503.1	419.4	414.1	396.9
47.5°	382.1	421.3	351.5	354.8	313.7
50°	310.8	350.0	305.1	306.5	244.8
52.5°	245.8	284.0	269.2	264.9	192.2
55°	189.8	227.1	232.4	230.5	150.2
57.5°	139.6	179.8	195.1	202.3	115.7
60°	102.3	146.8	161.6	176.0	87.5
62.5°	81.3	127.2	132.5	153.5	67.9
65°	71.3	117.2	105.2	132.9	53.6
67.5°	63.6	111.4	85.6	117.6	46.9
70°	57.4	100.4	74.1	105.2	44.5
72.5°	57.4	88.0	58.3	93.2	45.0
75°	52.1	75.1	40.2	78.9	45.0
77.5°	46.4	64.1	30.1	64.1	42.1
80°	40.2	50.2	24.9	49.3	37.8
82.5°	29.6	37.8	21.5	36.8	30.6
85°	19.1	31.1	22.0	26.8	21.5
87.5°	9.1	15.8	13.9	13.4	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)