

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: P291477

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291477
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-L92765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1770.0 lumens
Efficiency: N/A
Efficacy: 112.6 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

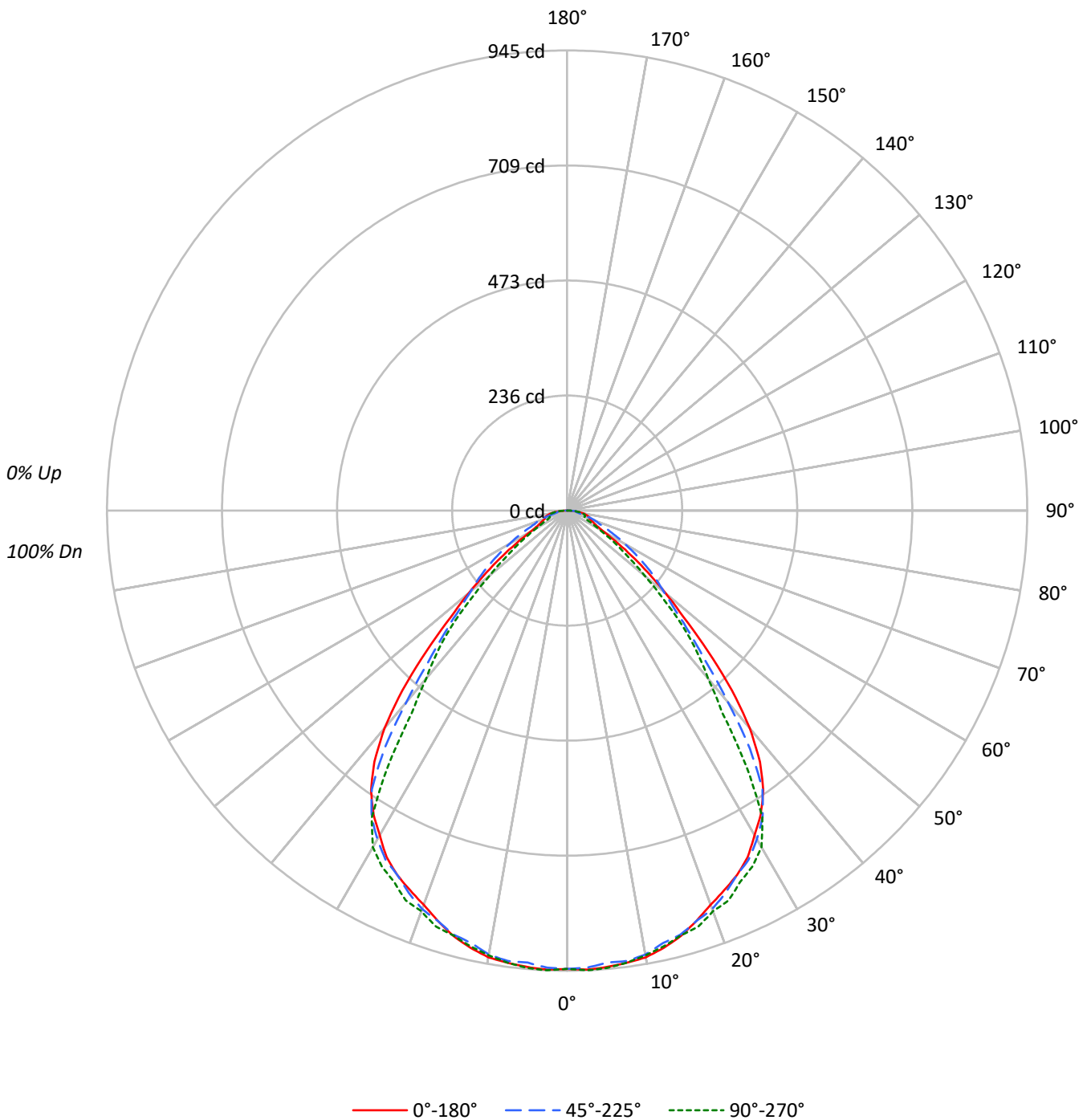
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291477

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P291477

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2533	2533	2533
5°	2541	2517	2547
10°	2545	2530	2534
15°	2519	2510	2516
20°	2467	2493	2507
25°	2452	2450	2497
30°	2392	2421	2480
35°	2307	2297	2111
40°	2048	1808	1583
45°	1554	1352	1280
50°	1103	1082	868
55°	755	924	597
60°	467	737	399
65°	385	567	289
70°	382	494	297
75°	460	354	396
80°	527	327	496
85°	500	574	562



TEST NUMBER: P291477

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	5.0
10°-20°	254.9	14.4
20°-30°	383.3	21.7
30°-40°	417.9	23.6
40°-50°	292.6	16.5
50°-60°	165.6	9.4
60°-70°	90.6	5.1
70°-80°	54.9	3.1
80°-90°	20.8	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°	727.5	41.1
0°-40°	1145.4	64.7
0°-60°	1603.6	90.6
0°-90°	1770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1770.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	941	939	932	943	943	90
15°	904	902	901	914	903	254
25°	826	827	825	844	841	379
35°	702	699	699	664	643	433
45°	408	426	355	351	336	317
55°	161	192	197	195	127	147
65°	60	99	89	113	45	62
75°	44	64	34	67	38	46
85°	16	26	19	23	18	18
90°	0	0	0	0	0	



TEST NUMBER: P291477

CATALOG NUMBER: 14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	941.2	941.2	941.2	941.2	941.2
2.5°	943.6	942.4	939.6	945.3	944.9
5°	940.8	939.2	931.9	942.8	942.8
7.5°	936.8	932.7	933.1	939.2	936.4
10°	931.5	924.6	925.8	927.4	927.4
12.5°	919.3	912.9	909.6	914.9	916.5
15°	904.3	901.9	901.1	914.1	903.1
17.5°	883.3	888.5	883.7	894.2	895.8
20°	861.4	871.5	870.7	878.0	875.6
22.5°	843.6	850.1	850.1	859.0	866.3
25°	825.7	827.4	825.3	844.4	841.1
27.5°	802.6	801.4	807.9	817.6	824.1
30°	769.8	770.2	779.1	792.1	798.2
32.5°	739.8	736.2	747.1	752.8	746.3
35°	702.2	698.9	699.3	663.7	642.6
37.5°	650.7	653.5	616.3	551.0	523.5
40°	583.0	588.7	514.6	465.9	450.6
42.5°	501.2	502.8	421.8	406.0	395.9
45°	408.4	426.2	355.3	350.9	336.3
47.5°	323.7	357.0	297.8	300.6	265.8
50°	263.4	296.6	258.5	259.7	207.4
52.5°	208.3	240.7	228.1	224.5	162.9
55°	160.9	192.5	196.9	195.3	127.2
57.5°	118.3	152.3	165.3	171.4	98.1
60°	86.7	124.4	136.9	149.1	74.1
62.5°	68.9	107.8	112.2	130.1	57.5
65°	60.4	99.3	89.1	112.6	45.4
67.5°	53.9	94.4	72.5	99.7	39.7
70°	48.6	85.1	62.8	89.1	37.7
72.5°	48.6	74.6	49.4	79.0	38.1
75°	44.2	63.6	34.0	66.9	38.1
77.5°	39.3	54.3	25.5	54.3	35.7
80°	34.0	42.5	21.1	41.7	32.0
82.5°	25.1	32.0	18.2	31.2	25.9
85°	16.2	26.3	18.6	22.7	18.2
87.5°	7.7	13.4	11.8	11.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)