

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: P291476

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291476
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-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1715.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

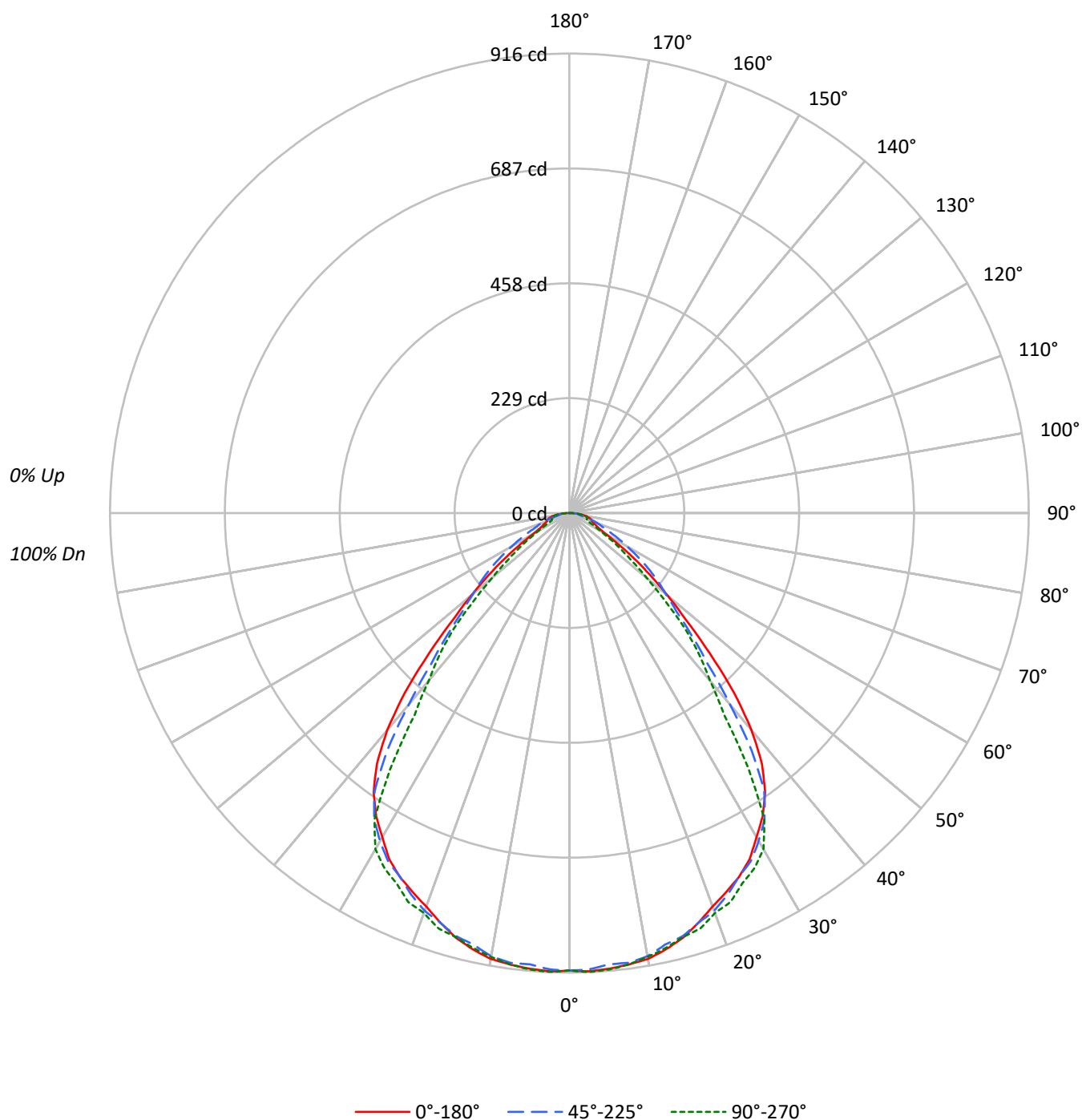
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2454	2454	2454
5°	2462	2439	2468
10°	2466	2451	2455
15°	2441	2432	2438
20°	2390	2416	2430
25°	2376	2374	2420
30°	2318	2346	2403
35°	2235	2226	2045
40°	1984	1751	1534
45°	1506	1310	1240
50°	1068	1049	841
55°	731	895	578
60°	452	714	386
65°	372	550	280
70°	371	479	287
75°	445	343	384
80°	511	316	480
85°	485	559	546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	5.0
10°-20°	247.0	14.4
20°-30°	371.4	21.7
30°-40°	404.9	23.6
40°-50°	283.5	16.5
50°-60°	160.5	9.4
60°-70°	87.8	5.1
70°-80°	53.2	3.1
80°-90°	20.2	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°	704.9	41.1
0°-40°	1109.8	64.7
0°-60°	1553.8	90.6
0°-90°	1715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1715.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	903	914	914	87
15°	876	874	873	886	875	246
25°	800	802	800	818	815	367
35°	680	677	678	643	623	419
45°	396	413	344	340	326	307
55°	156	186	191	189	123	142
65°	58	96	86	109	44	60
75°	43	62	33	65	37	44
85°	16	26	18	22	18	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	912.0	912.0	912.0	912.0	912.0
2.5°	914.3	913.1	910.4	915.9	915.5
5°	911.6	910.0	902.9	913.5	913.5
7.5°	907.7	903.7	904.1	910.0	907.3
10°	902.5	895.9	897.1	898.6	898.6
12.5°	890.8	884.5	881.3	886.5	888.0
15°	876.2	873.9	873.1	885.7	875.1
17.5°	855.8	860.9	856.2	866.4	868.0
20°	834.6	844.4	843.7	850.7	848.4
22.5°	817.4	823.6	823.6	832.3	839.3
25°	800.1	801.7	799.7	818.1	815.0
27.5°	777.7	776.5	782.8	792.2	798.5
30°	745.9	746.3	754.9	767.5	773.4
32.5°	716.9	713.3	723.9	729.4	723.1
35°	680.3	677.2	677.6	643.1	622.6
37.5°	630.5	633.2	597.1	533.9	507.2
40°	564.9	570.4	498.6	451.5	436.6
42.5°	485.6	487.2	408.7	393.4	383.6
45°	395.7	413.0	344.3	340.0	325.8
47.5°	313.7	345.9	288.5	291.3	257.5
50°	255.2	287.4	250.5	251.6	201.0
52.5°	201.8	233.2	221.0	217.5	157.8
55°	155.9	186.5	190.8	189.2	123.3
57.5°	114.6	147.6	160.2	166.1	95.0
60°	84.0	120.5	132.7	144.5	71.8
62.5°	66.7	104.4	108.7	126.0	55.7
65°	58.5	96.2	86.4	109.1	44.0
67.5°	52.2	91.5	70.3	96.6	38.5
70°	47.1	82.4	60.9	86.4	36.5
72.5°	47.1	72.2	47.9	76.6	36.9
75°	42.8	61.6	33.0	64.8	36.9
77.5°	38.1	52.6	24.7	52.6	34.5
80°	33.0	41.2	20.4	40.4	31.0
82.5°	24.3	31.0	17.7	30.2	25.1
85°	15.7	25.5	18.1	22.0	17.7
87.5°	7.5	13.0	11.4	11.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)