

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: P291475

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291475
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-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: 1633.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

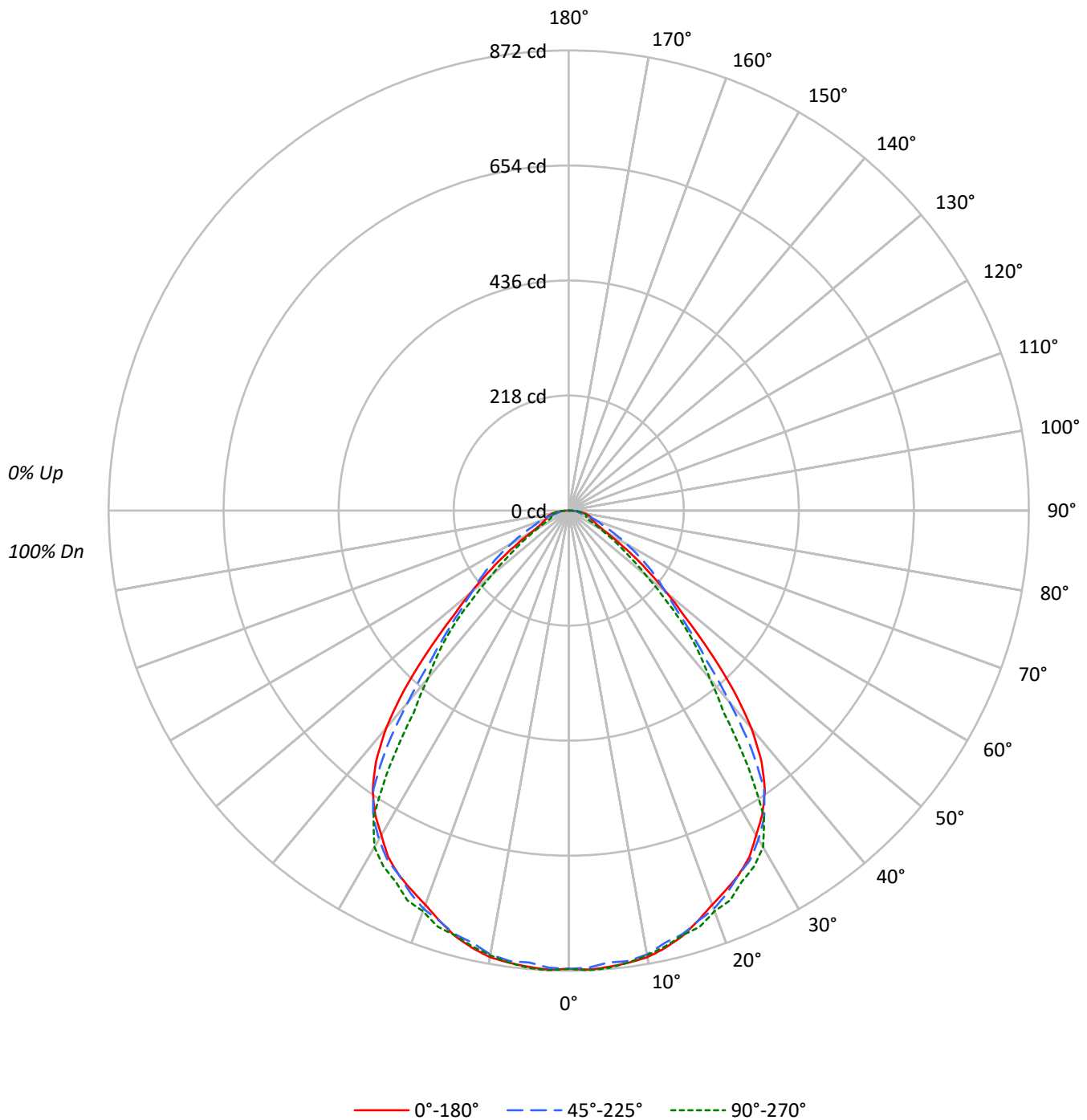
Input Watts (W): 15.345
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2337	2337	2337
5°	2345	2323	2350
10°	2348	2334	2338
15°	2324	2316	2321
20°	2276	2300	2313
25°	2262	2261	2304
30°	2207	2234	2288
35°	2128	2120	1948
40°	1890	1668	1460
45°	1434	1247	1181
50°	1017	998	801
55°	696	852	551
60°	431	680	368
65°	355	523	267
70°	353	456	274
75°	423	326	365
80°	487	301	457
85°	463	531	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	5.0
10°-20°	235.2	14.4
20°-30°	353.7	21.7
30°-40°	385.5	23.6
40°-50°	270.0	16.5
50°-60°	152.8	9.4
60°-70°	83.6	5.1
70°-80°	50.7	3.1
80°-90°	19.2	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°	671.2	41.1
0°-40°	1056.7	64.7
0°-60°	1479.5	90.6
0°-90°	1633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	868	866	860	870	870	83
15°	834	832	831	843	833	235
25°	762	763	762	779	776	350
35°	648	645	645	612	593	399
45°	377	393	328	324	310	293
55°	148	178	182	180	117	136
65°	56	92	82	104	42	57
75°	41	59	31	62	35	42
85°	15	24	17	21	17	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	868.4	868.4	868.4	868.4	868.4
2.5°	870.6	869.5	866.9	872.1	871.7
5°	868.0	866.5	859.8	869.9	869.9
7.5°	864.3	860.5	860.9	866.5	863.9
10°	859.4	853.0	854.2	855.7	855.7
12.5°	848.2	842.2	839.2	844.1	845.6
15°	834.3	832.1	831.4	843.3	833.2
17.5°	814.9	819.8	815.3	825.0	826.5
20°	794.7	804.1	803.3	810.1	807.8
22.5°	778.3	784.3	784.3	792.5	799.2
25°	761.8	763.3	761.5	779.0	776.0
27.5°	740.5	739.4	745.4	754.4	760.3
30°	710.2	710.6	718.8	730.8	736.4
32.5°	682.6	679.2	689.3	694.5	688.6
35°	647.8	644.8	645.2	612.3	592.9
37.5°	600.3	603.0	568.6	508.4	483.0
40°	537.9	543.1	474.7	429.9	415.7
42.5°	462.4	463.9	389.1	374.6	365.2
45°	376.8	393.3	327.8	323.7	310.3
47.5°	298.7	329.3	274.8	277.4	245.2
50°	243.0	273.6	238.5	239.6	191.4
52.5°	192.1	222.0	210.5	207.1	150.3
55°	148.4	177.6	181.7	180.2	117.4
57.5°	109.2	140.6	152.5	158.1	90.5
60°	80.0	114.8	126.3	137.6	68.4
62.5°	63.5	99.4	103.5	120.0	53.1
65°	55.7	91.6	82.2	103.9	41.9
67.5°	49.7	87.1	66.9	92.0	36.6
70°	44.9	78.5	57.9	82.2	34.8
72.5°	44.9	68.8	45.6	72.9	35.1
75°	40.7	58.7	31.4	61.7	35.1
77.5°	36.3	50.1	23.6	50.1	32.9
80°	31.4	39.3	19.4	38.5	29.5
82.5°	23.2	29.5	16.8	28.8	23.9
85°	15.0	24.3	17.2	20.9	16.8
87.5°	7.1	12.3	10.8	10.5	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)