

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: P291481

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291481
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-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1889.0 lumens
Efficiency: N/A
Efficacy: 118.1 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

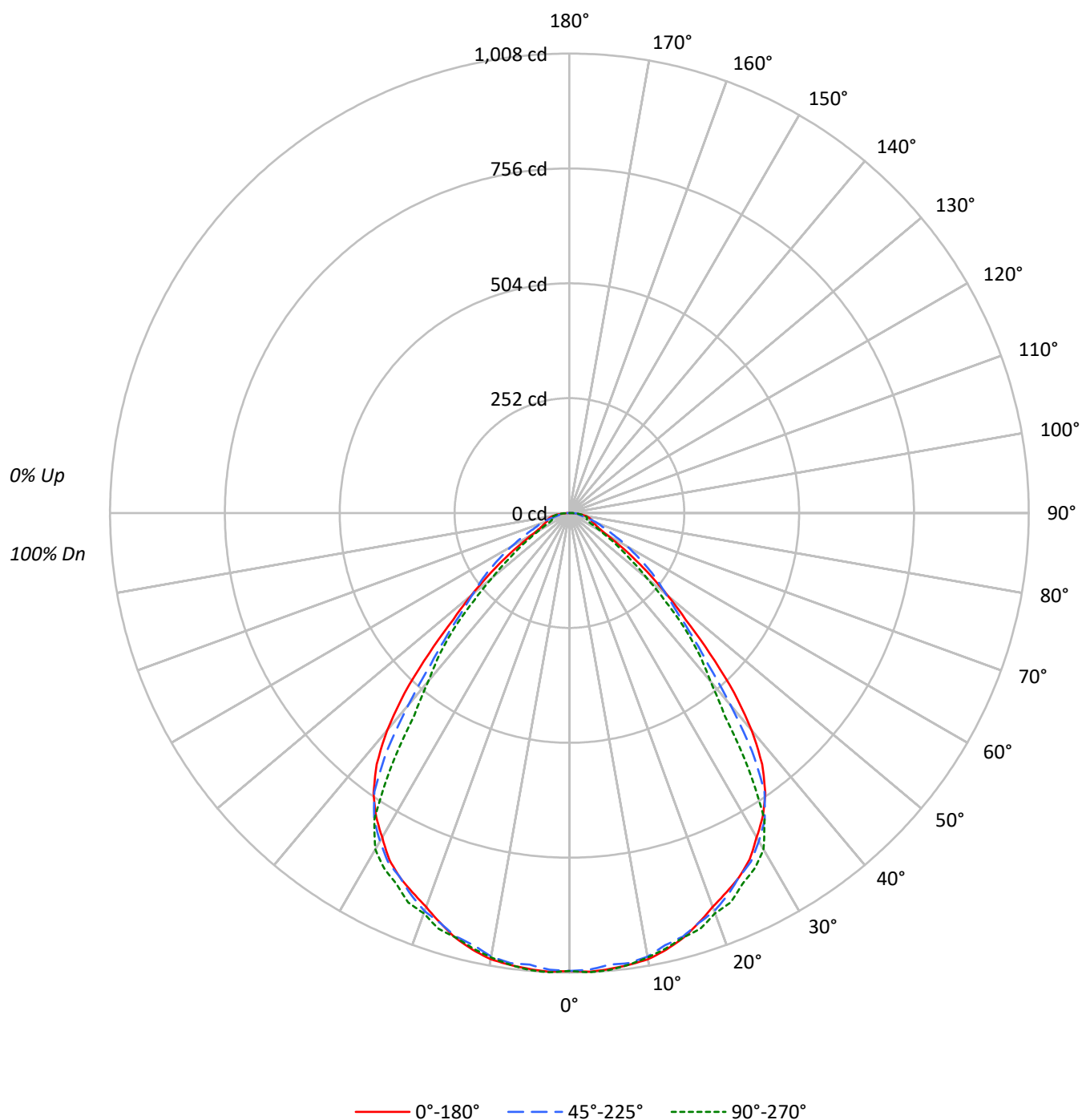
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	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		100
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93		88
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81		77
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71		68
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63		61
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57		54
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51		49
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46		44
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42		40
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38		37
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35		34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2703	2703	2703
5°	2712	2687	2718
10°	2716	2700	2705
15°	2689	2679	2685
20°	2633	2661	2676
25°	2617	2615	2665
30°	2553	2584	2647
35°	2462	2452	2253
40°	2186	1929	1689
45°	1659	1443	1366
50°	1177	1155	927
55°	806	986	637
60°	498	787	426
65°	410	606	308
70°	408	527	316
75°	490	377	422
80°	563	349	530
85°	534	614	602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	5.0
10°-20°	272.0	14.4
20°-30°	409.1	21.7
30°-40°	446.0	23.6
40°-50°	312.3	16.5
50°-60°	176.8	9.4
60°-70°	96.7	5.1
70°-80°	58.6	3.1
80°-90°	22.2	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°	776.4	41.1
0°-40°	1222.4	64.7
0°-60°	1711.4	90.6
0°-90°	1889.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1889.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1004	1002	995	1006	1006	96
15°	965	963	962	976	964	271
25°	881	883	881	901	898	405
35°	749	746	746	708	686	462
45°	436	455	379	374	359	339
55°	172	205	210	208	136	157
65°	64	106	95	120	48	66
75°	47	68	36	71	41	49
85°	17	28	20	24	20	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1004.5	1004.5	1004.5	1004.5	1004.5
2.5°	1007.1	1005.8	1002.8	1008.8	1008.4
5°	1004.1	1002.3	994.6	1006.2	1006.2
7.5°	999.7	995.4	995.8	1002.3	999.3
10°	994.1	986.8	988.1	989.8	989.8
12.5°	981.1	974.2	970.8	976.4	978.1
15°	965.1	962.6	961.7	975.5	963.8
17.5°	942.7	948.3	943.1	954.3	956.1
20°	919.3	930.1	929.3	937.0	934.4
22.5°	900.3	907.2	907.2	916.7	924.5
25°	881.3	883.0	880.8	901.1	897.7
27.5°	856.6	855.3	862.2	872.6	879.5
30°	821.6	822.0	831.5	845.4	851.9
32.5°	789.6	785.7	797.4	803.4	796.5
35°	749.4	745.9	746.3	708.3	685.8
37.5°	694.5	697.5	657.7	588.1	558.7
40°	622.2	628.3	549.2	497.3	480.8
42.5°	534.9	536.6	450.1	433.3	422.5
45°	435.9	454.9	379.2	374.5	358.9
47.5°	345.5	381.0	317.8	320.9	283.7
50°	281.1	316.5	275.9	277.2	221.4
52.5°	222.3	256.9	243.4	239.6	173.8
55°	171.7	205.4	210.2	208.4	135.8
57.5°	126.3	162.6	176.4	182.9	104.6
60°	92.5	132.8	146.2	159.1	79.1
62.5°	73.5	115.0	119.8	138.8	61.4
65°	64.4	105.9	95.1	120.2	48.4
67.5°	57.5	100.8	77.4	106.4	42.4
70°	51.9	90.8	67.0	95.1	40.2
72.5°	51.9	79.6	52.8	84.3	40.6
75°	47.1	67.9	36.3	71.3	40.6
77.5°	41.9	57.9	27.2	57.9	38.1
80°	36.3	45.4	22.5	44.5	34.2
82.5°	26.8	34.2	19.5	33.3	27.7
85°	17.3	28.1	19.9	24.2	19.5
87.5°	8.2	14.3	12.5	12.1	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)