

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: P291381

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291381
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-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2063.0 lumens
Efficiency: N/A
Efficacy: 129.7 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

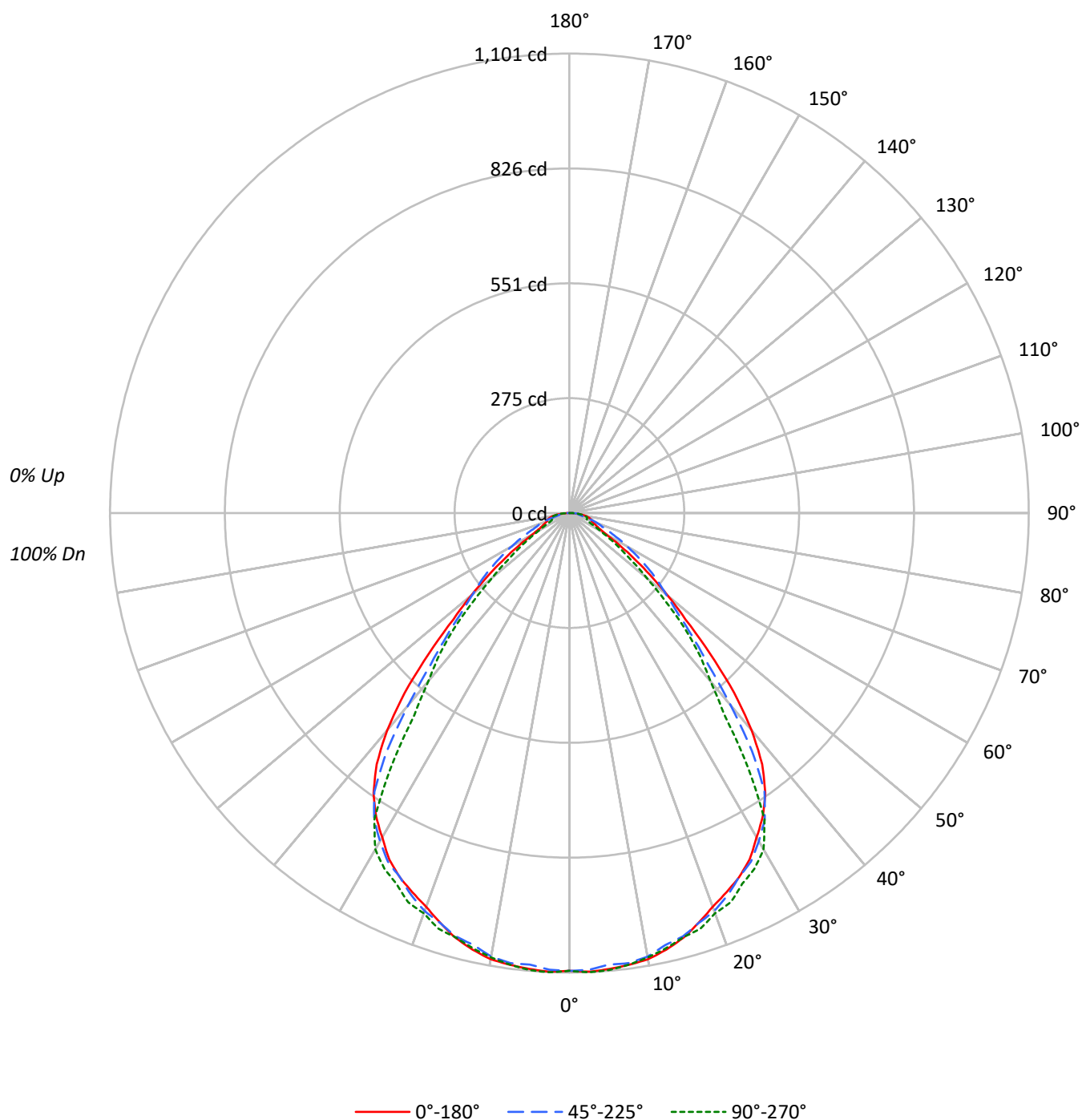
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2952	2952	2952
5°	2962	2934	2968
10°	2967	2949	2954
15°	2936	2926	2932
20°	2875	2906	2922
25°	2858	2856	2911
30°	2788	2822	2891
35°	2689	2678	2461
40°	2387	2107	1845
45°	1811	1576	1492
50°	1285	1261	1012
55°	880	1077	696
60°	544	859	465
65°	448	662	337
70°	446	576	345
75°	535	413	462
80°	615	381	578
85°	584	670	658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	5.0
10°-20°	297.1	14.4
20°-30°	446.8	21.7
30°-40°	487.0	23.6
40°-50°	341.0	16.5
50°-60°	193.0	9.4
60°-70°	105.6	5.1
70°-80°	64.0	3.1
80°-90°	24.3	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°	848.0	41.1
0°-40°	1335.0	64.7
0°-60°	1869.1	90.6
0°-90°	2063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1097	1097	1097	1097	1097	
5°	1097	1095	1086	1099	1099	104
15°	1054	1051	1050	1065	1053	296
25°	962	964	962	984	980	442
35°	818	815	815	774	749	504
45°	476	497	414	409	392	370
55°	188	224	230	228	148	171
65°	70	116	104	131	53	72
75°	52	74	40	78	44	53
85°	19	31	22	26	21	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1097.0	1097.0	1097.0	1097.0	1097.0
2.5°	1099.9	1098.4	1095.1	1101.7	1101.3
5°	1096.6	1094.7	1086.2	1098.9	1098.9
7.5°	1091.8	1087.1	1087.6	1094.7	1091.4
10°	1085.7	1077.7	1079.1	1081.0	1081.0
12.5°	1071.5	1064.0	1060.2	1066.3	1068.2
15°	1054.0	1051.2	1050.3	1065.4	1052.6
17.5°	1029.5	1035.6	1030.0	1042.2	1044.1
20°	1004.0	1015.8	1014.9	1023.4	1020.5
22.5°	983.2	990.8	990.8	1001.2	1009.7
25°	962.4	964.3	962.0	984.2	980.4
27.5°	935.5	934.1	941.7	953.0	960.5
30°	897.3	897.7	908.1	923.2	930.3
32.5°	862.3	858.1	870.8	877.4	869.9
35°	818.4	814.6	815.1	773.5	749.0
37.5°	758.4	761.7	718.3	642.3	610.1
40°	679.6	686.2	599.8	543.1	525.1
42.5°	584.2	586.1	491.6	473.2	461.4
45°	476.0	496.8	414.2	409.0	392.0
47.5°	377.3	416.0	347.1	350.4	309.8
50°	307.0	345.7	301.3	302.7	241.8
52.5°	242.7	280.5	265.9	261.6	189.8
55°	187.5	224.3	229.5	227.6	148.3
57.5°	137.9	177.6	192.7	199.8	114.3
60°	101.1	145.0	159.6	173.8	86.4
62.5°	80.3	125.6	130.8	151.6	67.1
65°	70.4	115.7	103.9	131.3	52.9
67.5°	62.8	110.0	84.5	116.2	46.3
70°	56.7	99.2	73.2	103.9	43.9
72.5°	56.7	86.9	57.6	92.1	44.4
75°	51.5	74.1	39.7	77.9	44.4
77.5°	45.8	63.3	29.8	63.3	41.6
80°	39.7	49.6	24.6	48.6	37.3
82.5°	29.3	37.3	21.3	36.4	30.2
85°	18.9	30.7	21.7	26.4	21.3
87.5°	9.0	15.6	13.7	13.2	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)