

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: P291379

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291379
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-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2000.0 lumens
Efficiency: N/A
Efficacy: 127.3 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

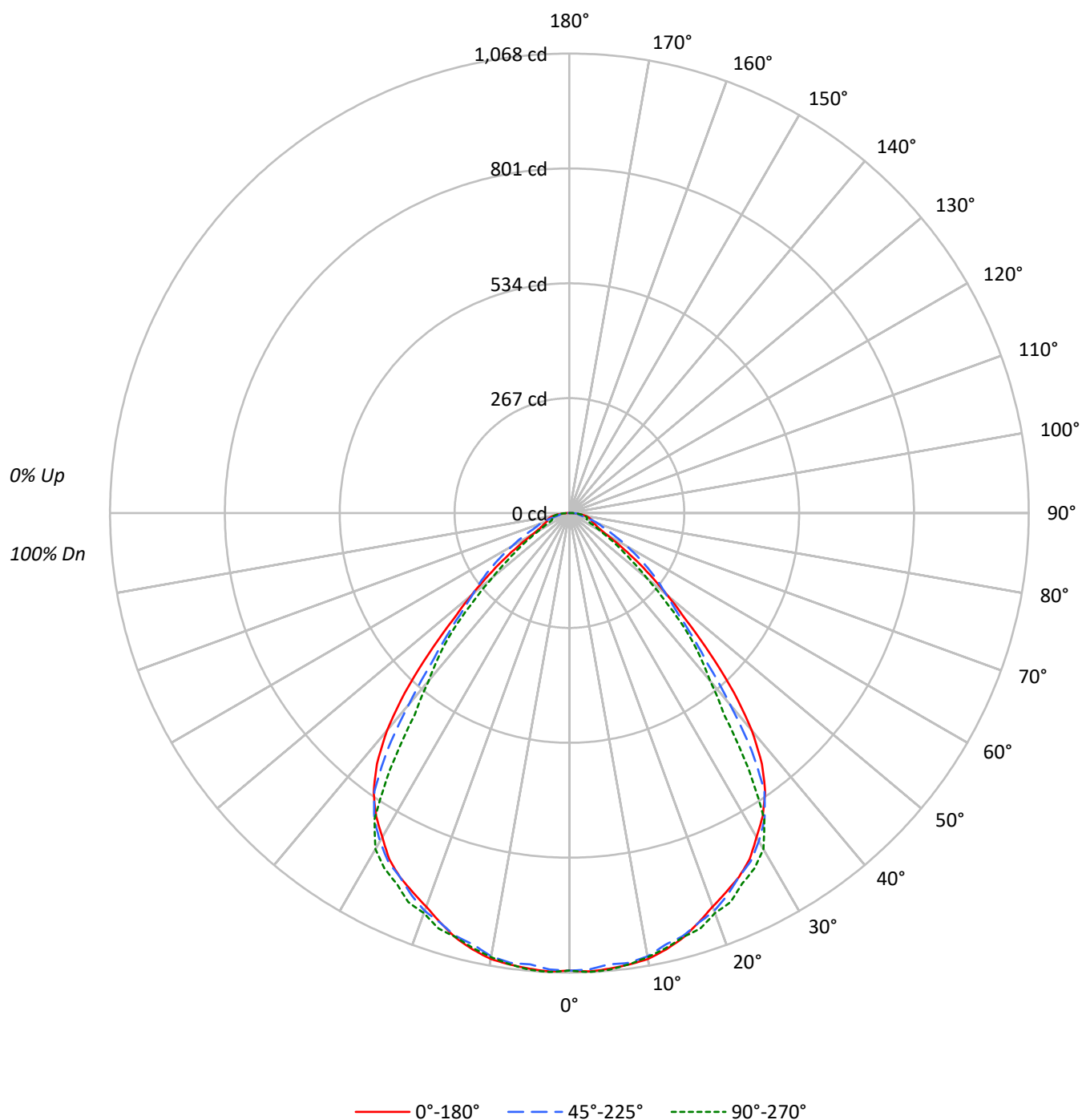
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2862	2862	2862
5°	2872	2844	2878
10°	2876	2858	2864
15°	2847	2837	2843
20°	2787	2818	2833
25°	2770	2769	2822
30°	2703	2736	2802
35°	2606	2596	2385
40°	2314	2042	1788
45°	1756	1528	1446
50°	1246	1223	981
55°	853	1044	675
60°	527	833	451
65°	434	641	327
70°	432	559	335
75°	519	400	447
80°	597	369	561
85°	565	651	636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	5.0
10°-20°	288.0	14.4
20°-30°	433.1	21.7
30°-40°	472.2	23.6
40°-50°	330.6	16.5
50°-60°	187.2	9.4
60°-70°	102.4	5.1
70°-80°	62.1	3.1
80°-90°	23.5	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°	822.1	41.1
0°-40°	1294.2	64.7
0°-60°	1812.0	90.6
0°-90°	2000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2000.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1061	1053	1065	1065	101
15°	1022	1019	1018	1033	1020	287
25°	933	935	933	954	950	429
35°	793	790	790	750	726	489
45°	462	482	402	396	380	358
55°	182	218	222	221	144	166
65°	68	112	101	127	51	70
75°	50	72	38	76	43	52
85°	18	30	21	26	21	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1063.5	1063.5	1063.5	1063.5	1063.5
2.5°	1066.3	1064.9	1061.7	1068.1	1067.6
5°	1063.1	1061.2	1053.0	1065.4	1065.4
7.5°	1058.5	1053.9	1054.4	1061.2	1058.0
10°	1052.5	1044.8	1046.1	1048.0	1048.0
12.5°	1038.8	1031.5	1027.8	1033.8	1035.6
15°	1021.9	1019.1	1018.2	1032.8	1020.5
17.5°	998.1	1004.0	998.5	1010.4	1012.2
20°	973.3	984.8	983.9	992.1	989.4
22.5°	953.2	960.5	960.5	970.6	978.8
25°	933.0	934.9	932.6	954.1	950.4
27.5°	906.9	905.6	912.9	923.9	931.2
30°	869.9	870.3	880.4	895.0	901.9
32.5°	836.0	831.9	844.2	850.6	843.3
35°	793.4	789.7	790.2	749.9	726.1
37.5°	735.3	738.5	696.3	622.6	591.5
40°	658.8	665.2	581.4	526.5	509.1
42.5°	566.3	568.2	476.6	458.7	447.3
45°	461.5	481.6	401.5	396.5	380.0
47.5°	365.8	403.3	336.5	339.7	300.3
50°	297.6	335.1	292.1	293.5	234.4
52.5°	235.3	271.9	257.8	253.6	184.0
55°	181.8	217.5	222.5	220.7	143.8
57.5°	133.7	172.1	186.8	193.7	110.8
60°	98.0	140.6	154.7	168.5	83.8
62.5°	77.8	121.8	126.8	147.0	65.0
65°	68.2	112.2	100.7	127.3	51.3
67.5°	60.9	106.7	82.0	112.6	44.9
70°	54.9	96.1	71.0	100.7	42.6
72.5°	54.9	84.2	55.9	89.3	43.0
75°	49.9	71.9	38.5	75.5	43.0
77.5°	44.4	61.3	28.8	61.3	40.3
80°	38.5	48.1	23.8	47.2	36.2
82.5°	28.4	36.2	20.6	35.3	29.3
85°	18.3	29.8	21.1	25.6	20.6
87.5°	8.7	15.1	13.3	12.8	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)