

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: P291342

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291342
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-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2004.0 lumens
Efficiency: N/A
Efficacy: 129.0 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

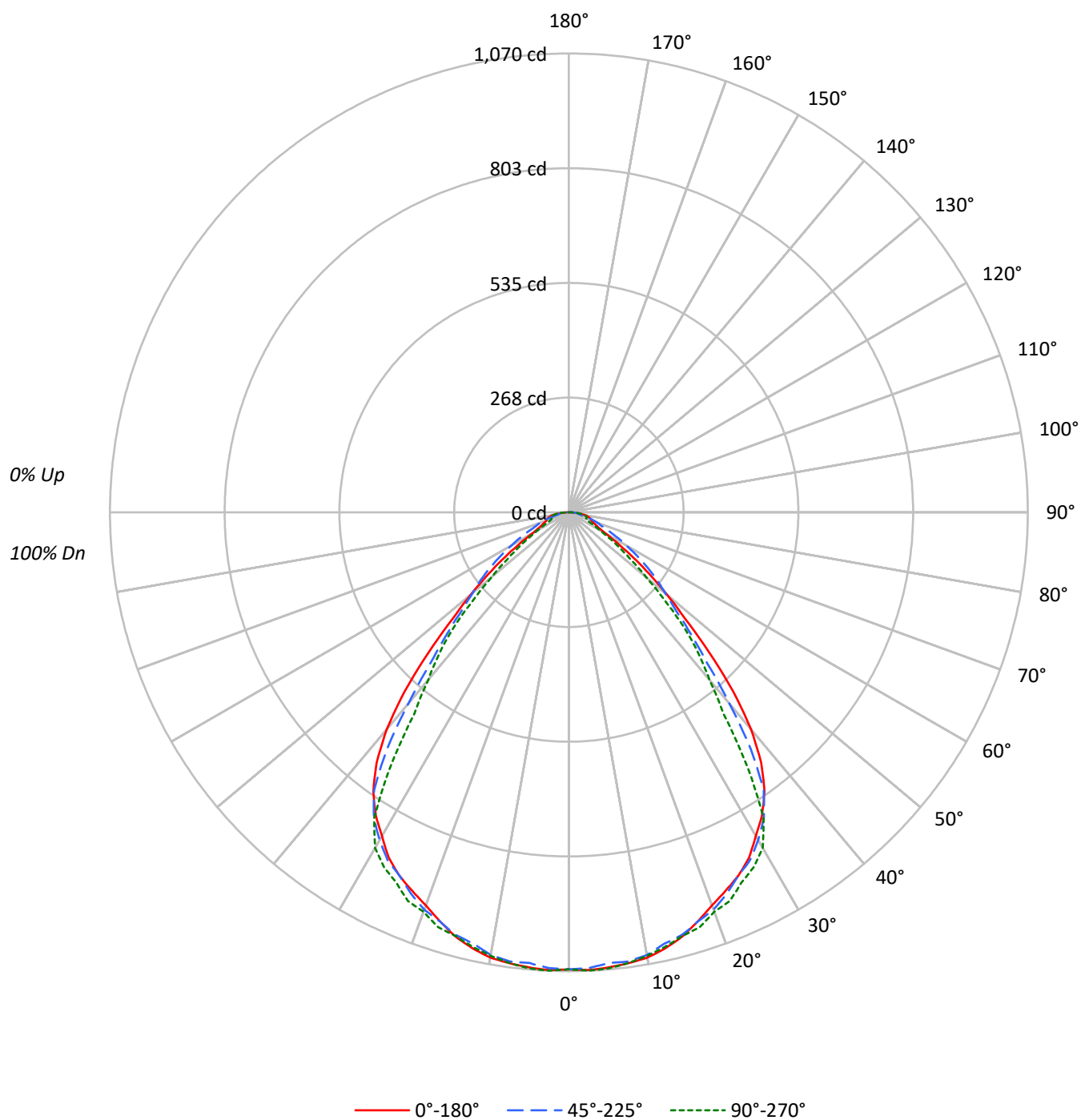
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2868	2868	2868
5°	2877	2850	2884
10°	2882	2864	2869
15°	2852	2842	2849
20°	2793	2823	2839
25°	2776	2775	2828
30°	2708	2741	2808
35°	2612	2601	2390
40°	2319	2047	1792
45°	1760	1531	1449
50°	1248	1225	983
55°	854	1046	676
60°	529	835	452
65°	436	642	327
70°	433	559	336
75°	520	400	448
80°	597	370	561
85°	565	651	636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.1	5.0
10°-20°	288.6	14.4
20°-30°	434.0	21.7
30°-40°	473.1	23.6
40°-50°	331.3	16.5
50°-60°	187.5	9.4
60°-70°	102.6	5.1
70°-80°	62.2	3.1
80°-90°	23.6	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°	823.7	41.1
0°-40°	1296.8	64.7
0°-60°	1815.6	90.6
0°-90°	2004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1065	1063	1055	1068	1068	101
15°	1024	1021	1020	1035	1022	288
25°	935	937	934	956	952	429
35°	795	791	792	751	728	490
45°	462	483	402	397	381	359
55°	182	218	223	221	144	167
65°	68	112	101	128	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°	1065.6	1065.6	1065.6	1065.6	1065.6
2.5°	1068.4	1067.0	1063.8	1070.2	1069.8
5°	1065.2	1063.4	1055.1	1067.5	1067.5
7.5°	1060.6	1056.0	1056.5	1063.4	1060.1
10°	1054.6	1046.8	1048.2	1050.1	1050.1
12.5°	1040.9	1033.5	1029.9	1035.8	1037.7
15°	1023.9	1021.2	1020.2	1034.9	1022.5
17.5°	1000.0	1006.0	1000.5	1012.4	1014.3
20°	975.3	986.7	985.8	994.1	991.3
22.5°	955.1	962.4	962.4	972.5	980.8
25°	934.9	936.7	934.5	956.0	952.3
27.5°	908.8	907.4	914.7	925.7	933.1
30°	871.6	872.1	882.2	896.8	903.7
32.5°	837.7	833.5	845.9	852.3	845.0
35°	795.0	791.3	791.8	751.4	727.6
37.5°	736.7	739.9	697.7	623.9	592.7
40°	660.1	666.5	582.6	527.5	510.1
42.5°	567.5	569.3	477.5	459.7	448.2
45°	462.4	482.6	402.3	397.3	380.8
47.5°	366.5	404.1	337.2	340.4	300.9
50°	298.2	335.8	292.7	294.1	234.9
52.5°	235.8	272.5	258.3	254.1	184.4
55°	182.1	217.9	222.9	221.1	144.0
57.5°	134.0	172.5	187.2	194.0	111.0
60°	98.2	140.8	155.1	168.8	83.9
62.5°	78.0	122.0	127.1	147.3	65.1
65°	68.4	112.4	100.9	127.5	51.4
67.5°	61.0	106.9	82.1	112.8	45.0
70°	55.0	96.3	71.1	100.9	42.7
72.5°	55.0	84.4	56.0	89.5	43.1
75°	50.0	72.0	38.5	75.7	43.1
77.5°	44.5	61.5	28.9	61.5	40.4
80°	38.5	48.2	23.9	47.3	36.2
82.5°	28.4	36.2	20.6	35.3	29.4
85°	18.3	29.8	21.1	25.7	20.6
87.5°	8.7	15.1	13.3	12.8	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)