

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: P291492

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291492
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-LD5-28-A19/156-UNV-L92765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2195.0 lumens
Efficiency: N/A
Efficacy: 99.2 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

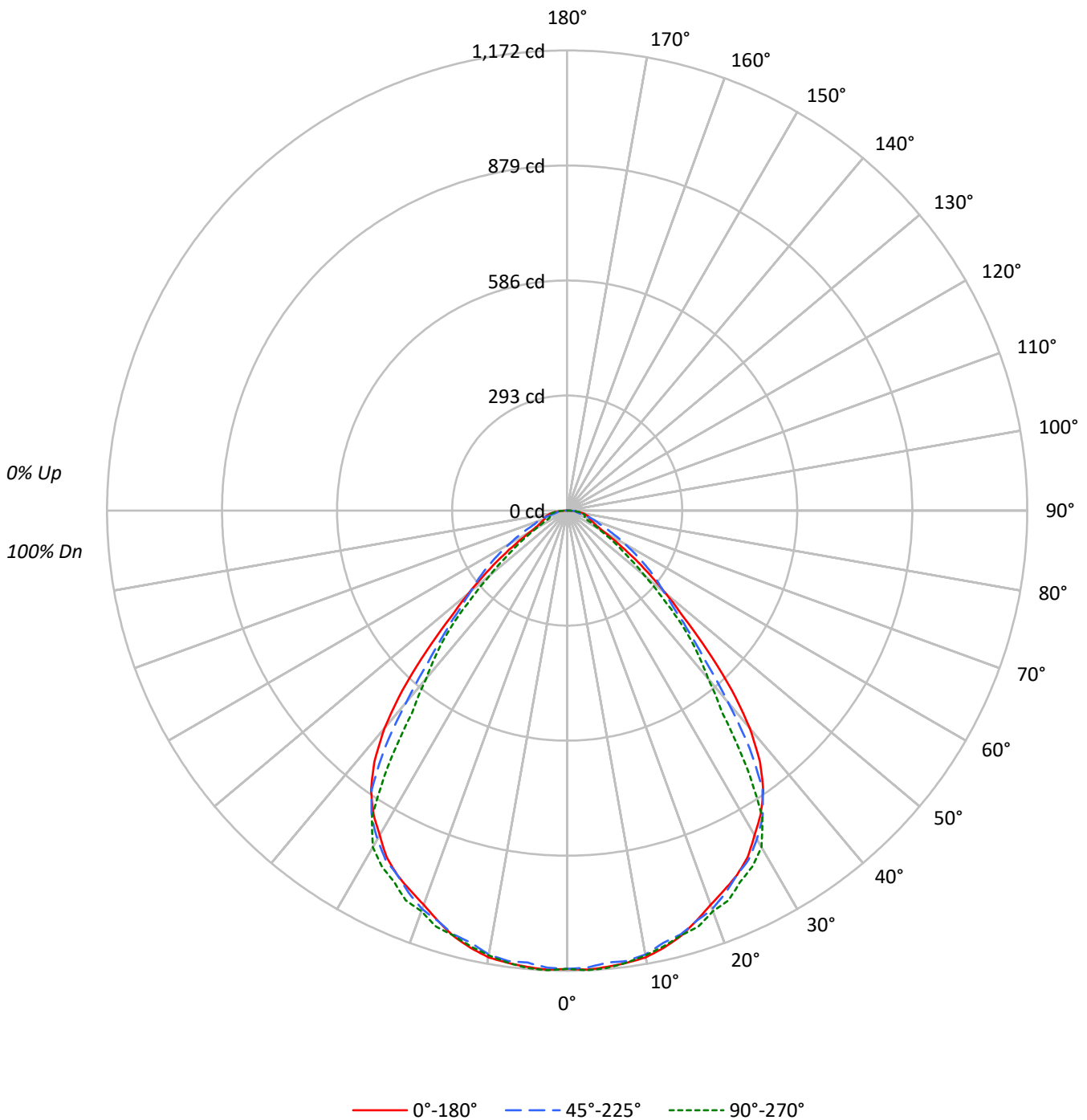
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	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	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°	3141	3141	3141
5°	3152	3122	3158
10°	3157	3137	3143
15°	3124	3113	3120
20°	3059	3092	3109
25°	3040	3039	3097
30°	2967	3002	3076
35°	2861	2849	2618
40°	2540	2242	1963
45°	1928	1677	1587
50°	1367	1342	1077
55°	936	1146	740
60°	579	914	495
65°	477	704	358
70°	474	613	367
75°	570	439	491
80°	654	404	615
85°	621	713	698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	5.0
10°-20°	316.1	14.4
20°-30°	475.4	21.7
30°-40°	518.2	23.6
40°-50°	362.9	16.5
50°-60°	205.4	9.4
60°-70°	112.4	5.1
70°-80°	68.1	3.1
80°-90°	25.8	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°	902.2	41.1
0°-40°	1420.4	64.7
0°-60°	1988.7	90.6
0°-90°	2195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1167	1165	1156	1169	1169	111
15°	1122	1118	1118	1134	1120	315
25°	1024	1026	1024	1047	1043	470
35°	871	867	867	823	797	537
45°	506	529	441	435	417	393
55°	200	239	244	242	158	182
65°	75	123	110	140	56	77
75°	55	79	42	83	47	57
85°	20	33	23	28	23	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1167.2	1167.2	1167.2	1167.2	1167.2
2.5°	1170.2	1168.7	1165.2	1172.2	1171.7
5°	1166.7	1164.7	1155.7	1169.2	1169.2
7.5°	1161.7	1156.7	1157.2	1164.7	1161.2
10°	1155.2	1146.6	1148.1	1150.1	1150.1
12.5°	1140.1	1132.0	1128.0	1134.6	1136.6
15°	1121.5	1118.5	1117.5	1133.6	1120.0
17.5°	1095.4	1101.9	1095.9	1108.9	1110.9
20°	1068.2	1080.8	1079.8	1088.8	1085.8
22.5°	1046.1	1054.2	1054.2	1065.2	1074.3
25°	1024.0	1026.0	1023.5	1047.1	1043.1
27.5°	995.4	993.9	1001.9	1014.0	1022.0
30°	954.7	955.2	966.2	982.3	989.8
32.5°	917.5	913.0	926.5	933.6	925.5
35°	870.8	866.7	867.2	823.0	796.9
37.5°	807.0	810.5	764.2	683.3	649.2
40°	723.0	730.1	638.1	577.8	558.7
42.5°	621.5	623.6	523.1	503.5	490.9
45°	506.5	528.6	440.7	435.1	417.0
47.5°	401.5	442.7	369.3	372.8	329.6
50°	326.6	367.8	320.6	322.1	257.3
52.5°	258.3	298.5	282.9	278.4	202.0
55°	199.5	238.7	244.2	242.2	157.8
57.5°	146.7	188.9	205.0	212.5	121.6
60°	107.5	154.3	169.8	184.9	92.0
62.5°	85.4	133.7	139.2	161.3	71.3
65°	74.9	123.1	110.5	139.7	56.3
67.5°	66.8	117.1	89.9	123.6	49.2
70°	60.3	105.5	77.9	110.5	46.7
72.5°	60.3	92.5	61.3	98.0	47.2
75°	54.8	78.9	42.2	82.9	47.2
77.5°	48.7	67.3	31.7	67.3	44.2
80°	42.2	52.8	26.1	51.8	39.7
82.5°	31.2	39.7	22.6	38.7	32.2
85°	20.1	32.7	23.1	28.1	22.6
87.5°	9.5	16.6	14.6	14.1	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)