

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: P291343

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291343
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-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: 2104.0 lumens
Efficiency: N/A
Efficacy: 132.3 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

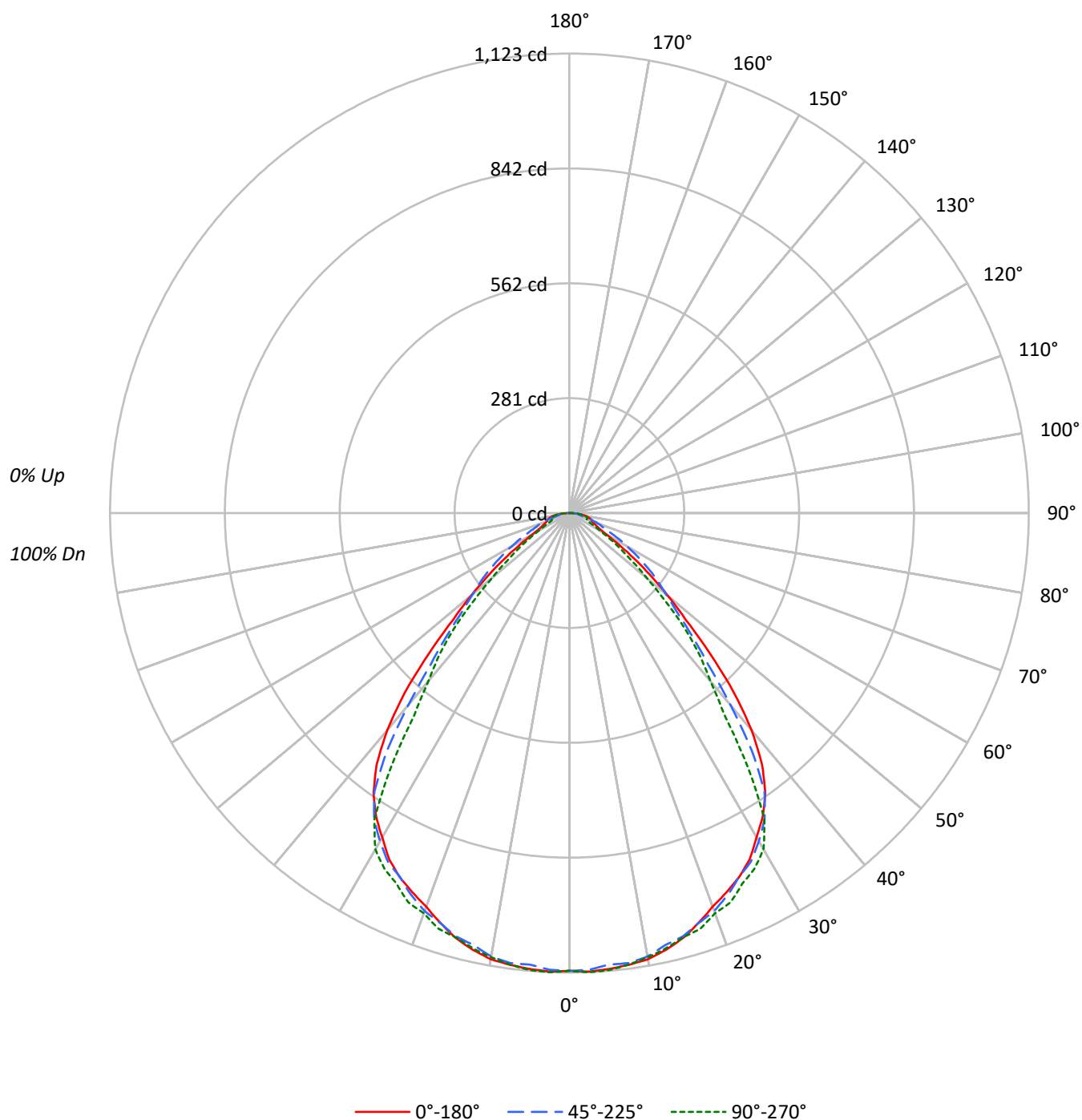
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3011	3011	3011
5°	3021	2992	3028
10°	3026	3007	3012
15°	2995	2984	2991
20°	2932	2964	2981
25°	2915	2913	2969
30°	2843	2878	2948
35°	2742	2731	2509
40°	2435	2149	1881
45°	1848	1607	1521
50°	1311	1286	1032
55°	897	1098	709
60°	555	876	474
65°	457	675	343
70°	455	588	352
75°	546	421	471
80°	628	387	589
85°	596	685	670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	5.0
10°-20°	303.0	14.4
20°-30°	455.7	21.7
30°-40°	496.7	23.6
40°-50°	347.8	16.5
50°-60°	196.9	9.4
60°-70°	107.7	5.1
70°-80°	65.3	3.1
80°-90°	24.8	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°	864.8	41.1
0°-40°	1361.5	64.7
0°-60°	1906.3	90.6
0°-90°	2104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2104.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1118	1116	1108	1121	1121	106
15°	1075	1072	1071	1087	1074	302
25°	982	984	981	1004	1000	451
35°	835	831	831	789	764	514
45°	486	507	422	417	400	377
55°	191	229	234	232	151	175
65°	72	118	106	134	54	74
75°	52	76	40	80	45	54
85°	19	31	22	27	22	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.8	1118.8	1118.8	1118.8	1118.8
2.5°	1121.7	1120.3	1116.9	1123.6	1123.2
5°	1118.3	1116.4	1107.7	1120.8	1120.8
7.5°	1113.5	1108.7	1109.2	1116.4	1113.0
10°	1107.3	1099.1	1100.5	1102.4	1102.4
12.5°	1092.8	1085.1	1081.3	1087.5	1089.4
15°	1075.0	1072.1	1071.1	1086.6	1073.6
17.5°	1050.0	1056.2	1050.4	1063.0	1064.9
20°	1023.9	1036.0	1035.0	1043.7	1040.8
22.5°	1002.8	1010.5	1010.5	1021.1	1029.7
25°	981.6	983.5	981.1	1003.7	999.9
27.5°	954.1	952.7	960.4	971.9	979.6
30°	915.1	915.6	926.2	941.6	948.8
32.5°	879.5	875.1	888.1	894.9	887.2
35°	834.7	830.8	831.3	788.9	763.9
37.5°	773.5	776.9	732.6	655.0	622.3
40°	693.1	699.8	611.7	553.9	535.6
42.5°	595.8	597.7	501.4	482.6	470.6
45°	485.5	506.7	422.4	417.1	399.8
47.5°	384.8	424.3	354.0	357.4	315.9
50°	313.1	352.6	307.3	308.7	246.6
52.5°	247.6	286.1	271.2	266.8	193.6
55°	191.2	228.8	234.1	232.1	151.2
57.5°	140.6	181.1	196.5	203.7	116.6
60°	103.1	147.9	162.8	177.2	88.1
62.5°	81.9	128.1	133.4	154.6	68.4
65°	71.8	118.0	106.0	133.9	53.9
67.5°	64.1	112.2	86.2	118.5	47.2
70°	57.8	101.1	74.7	106.0	44.8
72.5°	57.8	88.6	58.8	93.9	45.3
75°	52.5	75.6	40.5	79.5	45.3
77.5°	46.7	64.5	30.3	64.5	42.4
80°	40.5	50.6	25.0	49.6	38.0
82.5°	29.9	38.0	21.7	37.1	30.8
85°	19.3	31.3	22.2	27.0	21.7
87.5°	9.2	15.9	14.0	13.5	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)