

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: P291346

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291346
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-LD5-24-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2217.0 lumens
Efficiency: N/A
Efficacy: 121.6 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

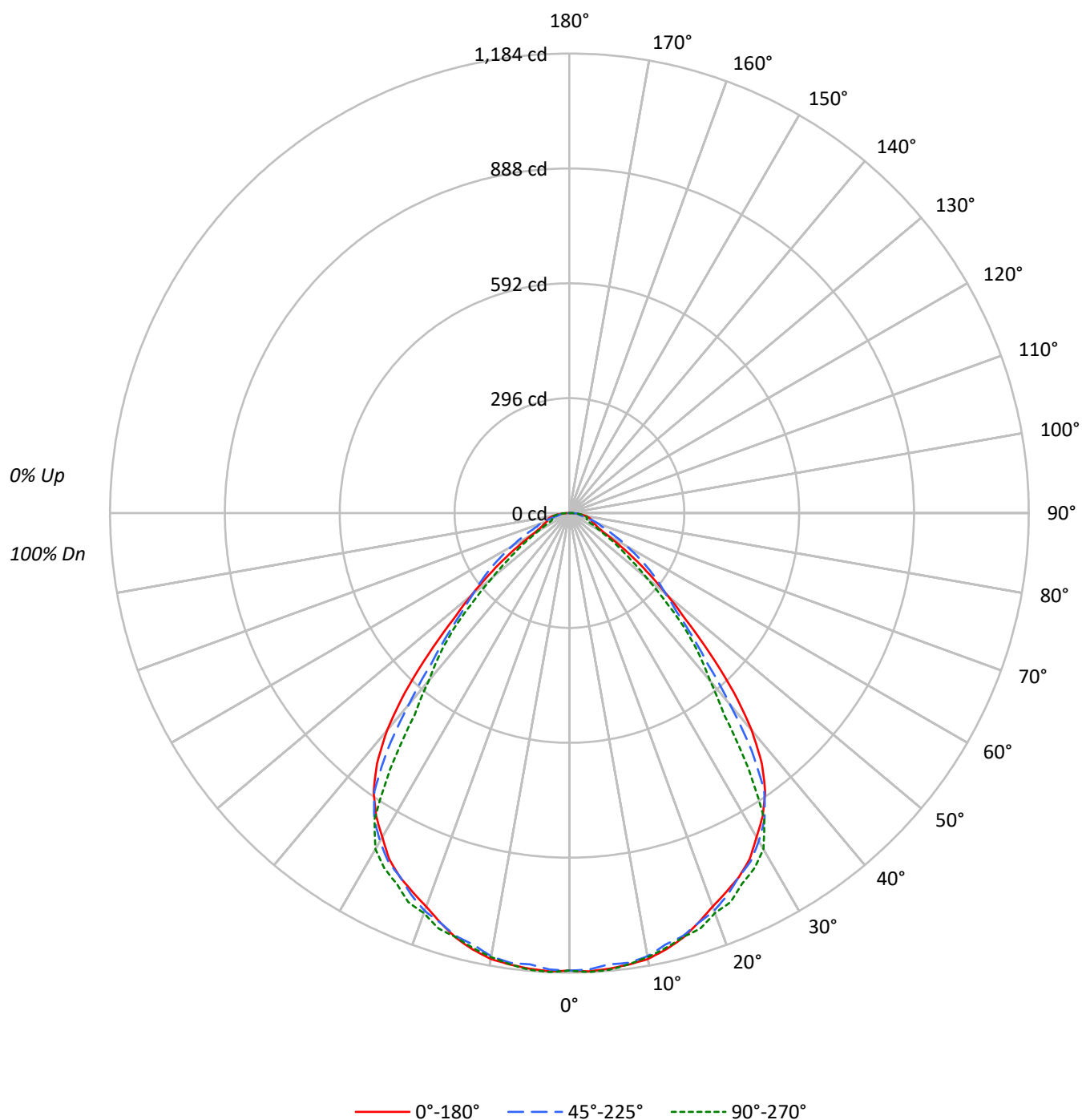
Input Watts (W): 18.228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3172	3172	3172
5°	3183	3153	3190
10°	3188	3169	3174
15°	3156	3144	3151
20°	3090	3123	3141
25°	3071	3070	3128
30°	2996	3032	3107
35°	2889	2877	2644
40°	2565	2264	1982
45°	1947	1694	1603
50°	1381	1356	1088
55°	945	1157	748
60°	584	923	500
65°	481	711	362
70°	479	619	371
75°	575	443	496
80°	660	409	621
85°	627	719	704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.9	5.0
10°-20°	319.3	14.4
20°-30°	480.1	21.7
30°-40°	523.4	23.6
40°-50°	366.5	16.5
50°-60°	207.5	9.4
60°-70°	113.5	5.1
70°-80°	68.8	3.1
80°-90°	26.1	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°	911.2	41.1
0°-40°	1434.6	64.7
0°-60°	2008.6	90.6
0°-90°	2217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1178	1176	1167	1181	1181	112
15°	1133	1130	1129	1145	1131	319
25°	1034	1036	1034	1058	1054	475
35°	880	875	876	831	805	542
45°	512	534	445	440	421	397
55°	202	241	247	245	159	184
65°	76	124	112	141	57	78
75°	55	80	43	84	48	57
85°	20	33	23	28	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1178.9	1178.9	1178.9	1178.9	1178.9
2.5°	1182.0	1180.4	1176.9	1184.0	1183.5
5°	1178.4	1176.4	1167.2	1180.9	1180.9
7.5°	1173.3	1168.3	1168.8	1176.4	1172.8
10°	1166.7	1158.1	1159.6	1161.7	1161.7
12.5°	1151.5	1143.4	1139.3	1145.9	1148.0
15°	1132.7	1129.7	1128.7	1144.9	1131.2
17.5°	1106.3	1112.9	1106.8	1120.0	1122.1
20°	1078.9	1091.6	1090.6	1099.7	1096.7
22.5°	1056.6	1064.7	1064.7	1075.9	1085.0
25°	1034.3	1036.3	1033.8	1057.6	1053.6
27.5°	1005.4	1003.8	1011.9	1024.1	1032.2
30°	964.2	964.8	975.9	992.2	999.8
32.5°	926.7	922.1	935.8	942.9	934.8
35°	879.5	875.4	875.9	831.3	804.9
37.5°	815.0	818.6	771.9	690.2	655.7
40°	730.3	737.4	644.5	583.6	564.3
42.5°	627.8	629.8	528.3	508.5	495.8
45°	511.6	533.9	445.1	439.5	421.2
47.5°	405.5	447.1	373.0	376.6	332.9
50°	329.9	371.5	323.8	325.3	259.8
52.5°	260.9	301.5	285.7	281.2	204.0
55°	201.5	241.1	246.6	244.6	159.4
57.5°	148.2	190.8	207.1	214.7	122.8
60°	108.6	155.8	171.5	186.8	92.9
62.5°	86.3	135.0	140.6	162.9	72.1
65°	75.6	124.3	111.6	141.1	56.8
67.5°	67.5	118.2	90.8	124.8	49.7
70°	60.9	106.6	78.7	111.6	47.2
72.5°	60.9	93.4	61.9	99.0	47.7
75°	55.3	79.7	42.6	83.7	47.7
77.5°	49.2	68.0	32.0	68.0	44.7
80°	42.6	53.3	26.4	52.3	40.1
82.5°	31.5	40.1	22.8	39.1	32.5
85°	20.3	33.0	23.3	28.4	22.8
87.5°	9.6	16.7	14.7	14.2	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)