

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: P292663

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2177.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

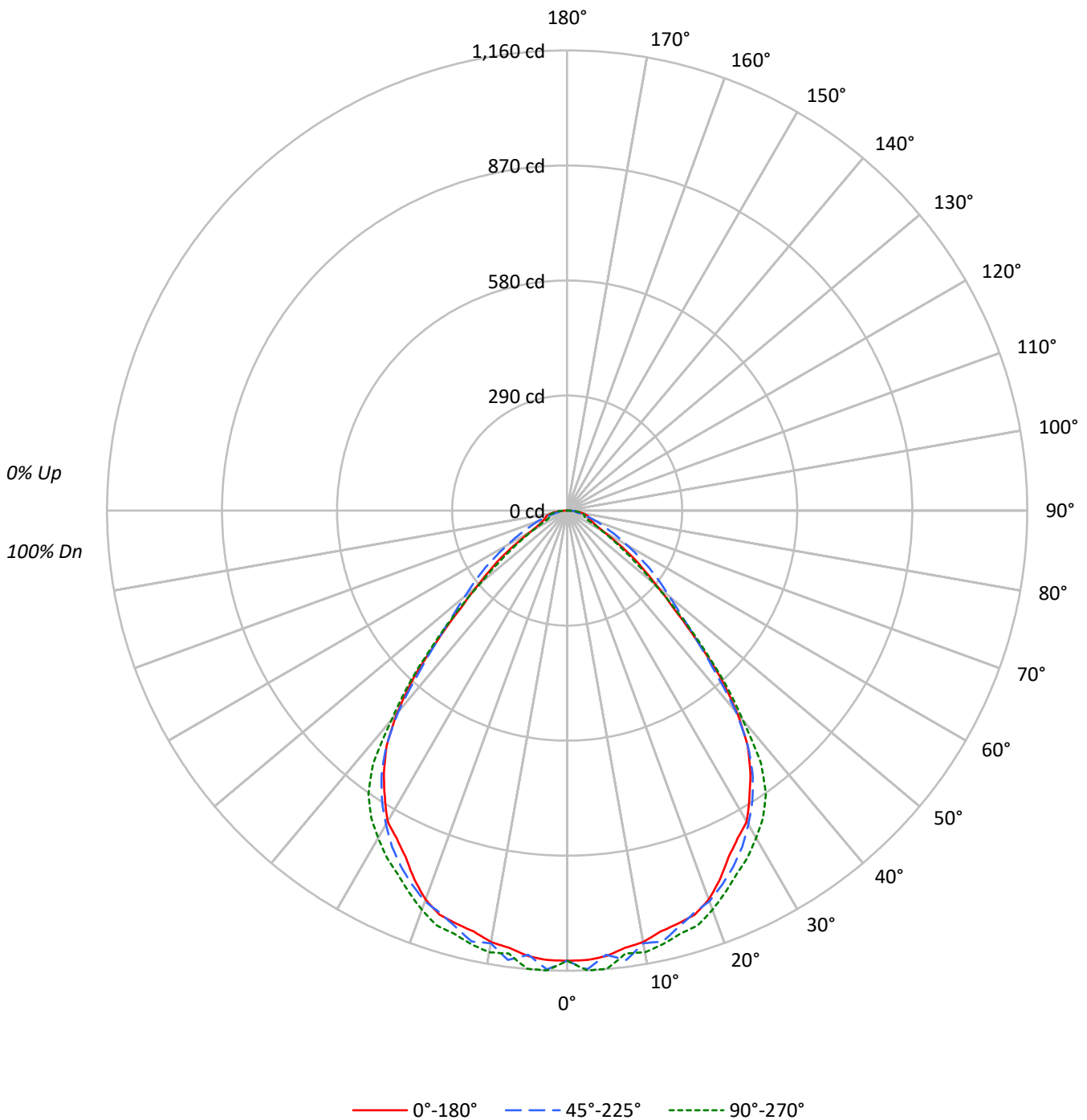
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	100	108	105	102	99	101	98	96		97	95	93		93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64		72	67	63		70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57		66	61	56		64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51		61	55	50		59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46		56	50	46		55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	41		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35		45	39	35		44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3053	3053	3053
5°	3045	3036	3131
10°	3017	3026	3089
15°	3004	3027	3075
20°	2988	3002	3067
25°	2860	2941	3002
30°	2813	2838	2960
35°	2645	2679	2870
40°	2344	2328	2420
45°	1751	1755	1803
50°	1232	1402	1194
55°	910	1184	816
60°	569	936	533
65°	464	741	372
70°	460	618	367
75°	571	453	475
80°	635	358	580
85°	633	664	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	5.0
10°-20°	307.6	14.1
20°-30°	455.6	20.9
30°-40°	510.4	23.4
40°-50°	375.0	17.2
50°-60°	209.6	9.6
60°-70°	116.8	5.4
70°-80°	68.6	3.2
80°-90°	25.2	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°	871.3	40.0
0°-40°	1381.7	63.5
0°-60°	1966.3	90.3
0°-90°	2177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1127	1148	1124	1147	1159	107
15°	1078	1085	1086	1103	1104	305
25°	963	971	990	1004	1011	446
35°	805	806	816	852	874	499
45°	460	498	461	494	474	359
55°	194	236	252	252	174	173
65°	73	129	116	149	58	75
75°	55	78	44	88	46	55
85°	20	30	22	28	21	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1134.6	1134.6	1134.6	1134.6	<i>1134.6</i>
2.5°	<i>1134.1</i>	<i>1144.3</i>	<i>1157.7</i>	<i>1159.2</i>	<i>1160.2</i>
5°	1127.4	1148.4	1123.8	1146.9	<i>1159.2</i>
7.5°	1112.0	1124.8	1142.8	1119.7	<i>1126.4</i>
10°	1104.3	1107.4	1107.4	1136.1	<i>1130.5</i>
12.5°	1086.9	1107.4	1112.5	1106.9	<i>1119.2</i>
15°	1078.2	1084.8	1086.4	1102.8	<i>1103.8</i>
17.5°	1068.4	1066.9	1063.3	1075.1	<i>1096.1</i>
20°	1043.3	1037.6	1048.4	1062.8	<i>1071.0</i>
22.5°	1006.4	1007.9	1020.7	1032.5	<i>1041.8</i>
25°	963.3	971.0	990.5	1004.3	<i>1011.0</i>
27.5°	931.0	942.2	955.6	972.0	<i>985.3</i>
30°	905.3	904.3	913.5	937.1	<i>952.5</i>
32.5°	855.6	859.2	868.9	897.1	<i>918.7</i>
35°	805.3	805.8	815.6	852.5	<i>873.5</i>
37.5°	747.3	743.2	748.9	788.9	<i>802.7</i>
40°	667.3	668.3	662.7	690.9	<i>688.9</i>
42.5°	574.0	582.2	552.9	589.9	<i>587.3</i>
45°	460.1	497.5	461.1	493.9	<i>473.9</i>
47.5°	363.2	418.5	388.3	412.4	<i>374.9</i>
50°	294.4	351.4	334.9	345.7	<i>285.2</i>
52.5°	241.6	287.8	292.9	295.4	<i>222.6</i>
55°	193.9	235.9	252.4	251.8	<i>173.9</i>
57.5°	143.1	191.8	210.8	218.5	<i>131.8</i>
60°	105.7	159.5	173.9	190.8	<i>99.0</i>
62.5°	85.1	140.0	143.6	167.2	<i>75.4</i>
65°	72.8	129.3	116.4	149.3	<i>58.5</i>
67.5°	64.6	120.5	94.9	133.4	<i>49.8</i>
70°	58.5	107.2	78.5	119.5	<i>46.7</i>
72.5°	56.9	91.3	60.5	106.7	<i>46.2</i>
75°	54.9	77.5	43.6	87.7	<i>45.7</i>
77.5°	47.2	66.2	31.3	67.7	<i>42.6</i>
80°	41.0	52.8	23.1	50.8	<i>37.4</i>
82.5°	31.8	40.0	20.5	38.5	<i>30.3</i>
85°	20.5	30.3	21.5	27.7	<i>21.0</i>
87.5°	9.7	16.9	15.4	14.9	<i>10.8</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)