

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: SHAPER

Report Number: G3-2203-583-17

Luminaire Tested: 311-FR-120-BRMT-WHST

Test Date: 06/16/22

Test Information

Test Method: LM-79-2019
Report Number: G3-2203-583-17
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 06/16/22
Issue Date: 06/16/22
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 311-FR-120-BRMT-WHST
Description: 3D PRINTED LED LAMP BASED DECORATIVE LUMIANIRE, STONE BROWN MATTE (OPAQUE) SHADE, FROSTED LAMP
Light Source: 1 PHILIPS
FROSTED BULB - 60W EQUIVALENT 929002036204 8.8A19/PER/930/P/E26/DIM
6/1FB T20. PHILIPS
Ballast/Driver: PHILIPS
INTEGRAL TO LAMP

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 338.7 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 0.67' x H: 1')
CIE Type: Direct

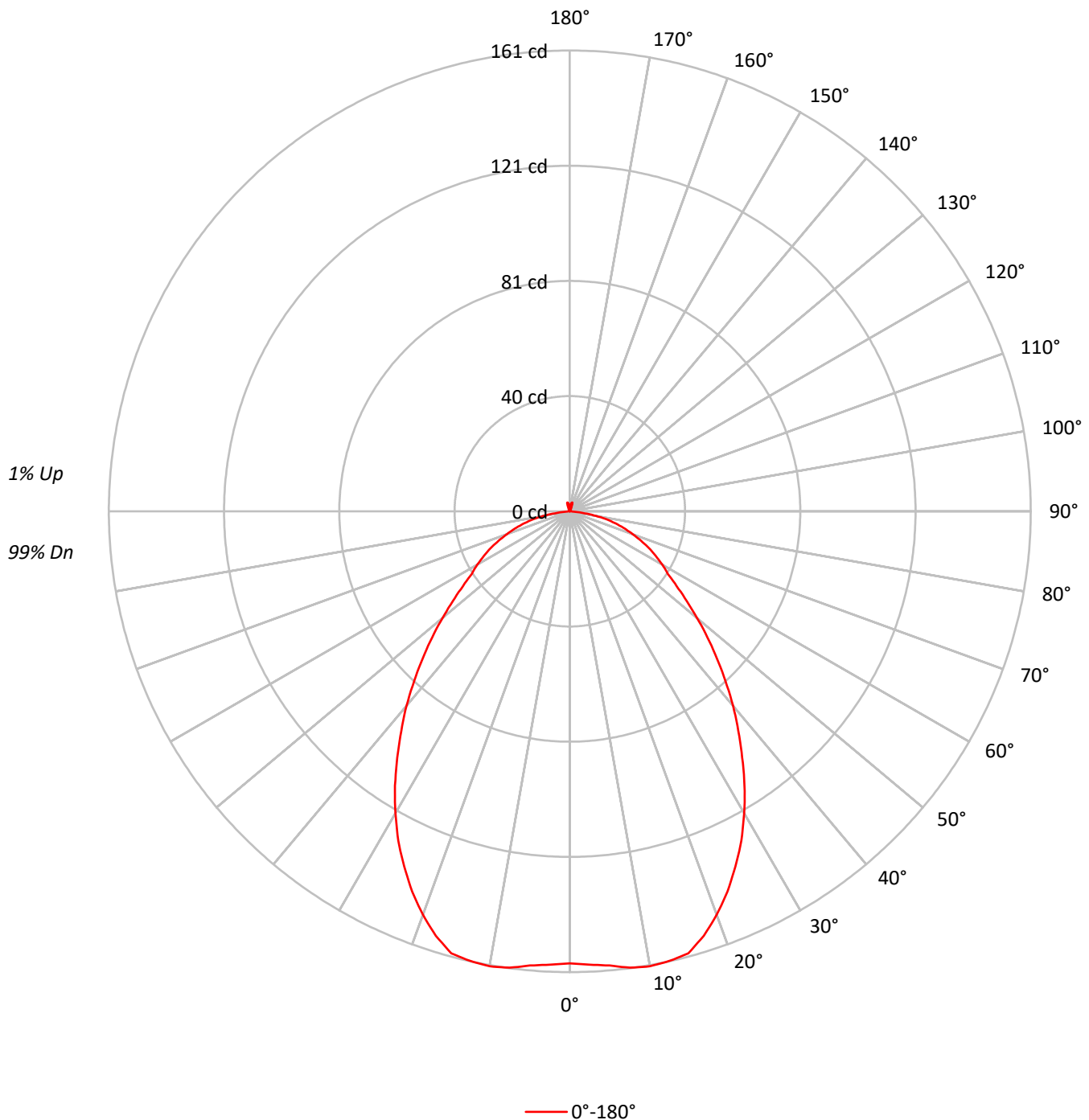
Input Watts (W): 7.6
Input Voltage (V): 119.9
Input Current (A_{in}): 0.0673
Voltage Rise (V): NR
Power Factor: 0.9484
Total Harmonic Distortion (THDi): 24.0%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 25.3
Test Distance: 24 FT



TEST NUMBER: G3-2203-583-17

CATALOG NUMBER: 311-FR-120-BRMT-WHST

Luminous Intensity Polar Plot





TEST NUMBER: G3-2203-583-17

CATALOG NUMBER: 311-FR-120-BRMT-WHST

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		101
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		91
2	101	94	88	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	91	82	75	70	79	73	68		76	71	67		74
4	86	75	67	61	84	74	66	60	71	65	59		69	63	59		67
5	80	68	59	53	78	67	59	53	65	58	52		63	57	52		61
6	74	62	53	47	72	61	53	47	59	52	47		57	51	46		56
7	69	56	48	43	67	56	48	42	54	47	42		53	46	42		51
8	65	52	44	38	63	51	44	38	50	43	38		49	42	38		47
9	61	48	40	35	59	47	40	35	46	39	35		45	39	34		44
10	57	44	37	32	56	44	37	32	43	36	32		42	36	32		41

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3824
5°	3424
10°	3139
15°	2860
20°	2501
25°	2153
30°	1825
35°	1514
40°	1242
45°	996
50°	784
55°	611
60°	502
65°	415
70°	324
75°	238
80°	138
85°	15

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 996 cd/sqm



TEST NUMBER: G3-2203-583-17

CATALOG NUMBER: 311-FR-120-BRMT-WHST

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.3	4.5
10°-20°	44.6	13.2
20°-30°	62.8	18.5
30°-40°	65.6	19.4
40°-50°	56.1	16.6
50°-60°	41.4	12.2
60°-70°	30.1	8.9
70°-80°	17.6	5.2
80°-90°	3.0	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.1	0.0
130°-140°	0.3	0.1
140°-150°	0.3	0.1
150°-160°	0.5	0.1
160°-170°	0.8	0.2
170°-180°	0.2	0.1
0°-30°	122.8	36.2
0°-40°	188.4	55.6
0°-60°	285.9	84.4
0°-90°	336.6	99.4
90°-120°	0.0	0.0
90°-150°	0.7	0.2
90°-180°	2.0	0.6
0°-180°	338.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	158	
5°	159	15
15°	160	45
25°	137	63
35°	105	66
45°	73	56
55°	46	41
65°	30	30
75°	17	18
85°	1	3
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	1	0
165°	3	1
175°	1	0
180°	1	

TEST NUMBER: G3-2203-583-17

CATALOG NUMBER: 311-FR-120-BRMT-WHST

CANDELA DISTRIBUTION (FULL):

0°	
0°	157.9
2.5°	158.5
5°	159.3
7.5°	160.8
10°	161.4
12.5°	160.9
15°	159.9
17.5°	155.5
20°	150.0
22.5°	143.8
25°	136.9
27.5°	129.7
30°	121.8
32.5°	113.6
35°	105.0
37.5°	96.7
40°	88.7
42.5°	80.4
45°	72.7
47.5°	65.2
50°	58.0
52.5°	51.5
55°	45.5
57.5°	40.6
60°	37.3
62.5°	33.9
65°	30.5
67.5°	26.9
70°	23.4
72.5°	20.1
75°	16.8
77.5°	13.4
80°	9.4
82.5°	5.2
85°	1.0
87.5°	0.1
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	0.0
102.5°	0.0
105°	0.0
107.5°	0.0
110°	0.0

TEST NUMBER: G3-2203-583-17

CATALOG NUMBER: 311-FR-120-BRMT-WHST

CANDELA DISTRIBUTION (continued):

	0°
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.1
127.5°	0.2
130°	0.3
132.5°	0.3
135°	0.3
137.5°	0.4
140°	0.4
142.5°	0.5
145°	0.5
147.5°	0.6
150°	0.6
152.5°	0.7
155°	0.9
157.5°	1.3
160°	2.1
162.5°	3.1
165°	3.2
167.5°	2.9
170°	2.8
172.5°	2.3
175°	1.4
177.5°	1.1
180°	1.0

(END OF REPORT)