

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: G3-2203-583-14

Luminaire Tested: 309-FR-120-BRMT-BZME

Test Date: 6/16/2022

Test Information

Test Method: LM-79-2019
Report Number: G3-2203-583-14
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 6/16/2022
Issue Date: 6/16/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 309-FR-120-BRMT-BZME
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: 546.5 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 1.73 / 1.73 / 1.69
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 0.67' x H: 1')
CIE Type: Direct

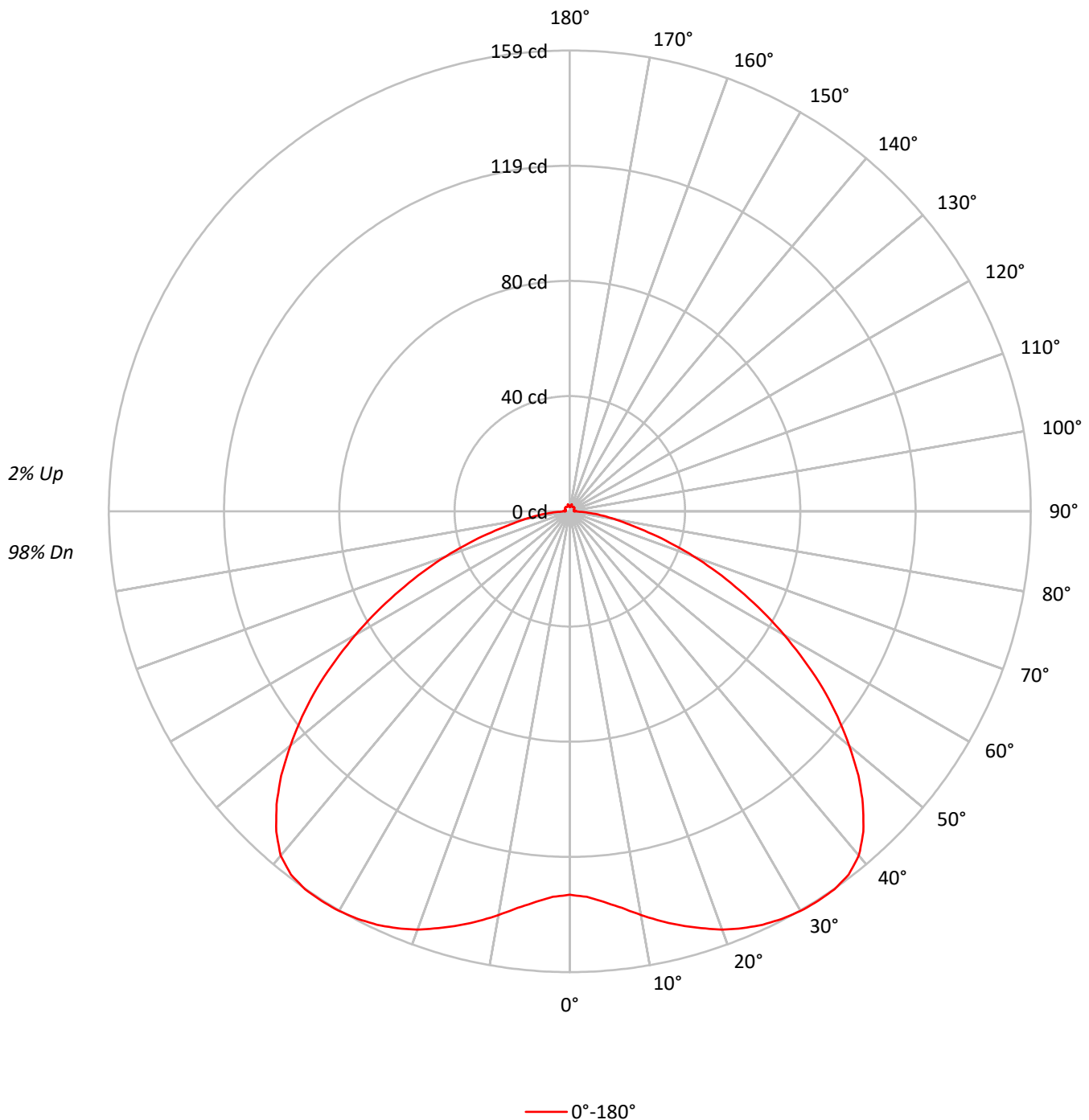
Input Watts (W): 7.7
Input Voltage (V): 120.0
Input Current (Ain): 0.0679
Voltage Rise (V): NR
Power Factor: 0.9782
Total Harmonic Distortion (THDi): 24.3
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7.0 HR
Ambient Temperature (°C): 24.7
Test Distance: 24 FT



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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	30	10	
RCR																						
0	119	119	119	119		116	116	116	116		110	110	110		105	105	105		100	100	100	
1	108	104	99	96		105	101	97	94		97	93	91		92	90	87		88	86	84	
2	98	90	83	78		96	88	82	77		84	79	75		81	76	73		77	74	71	
3	90	79	71	64		87	77	70	64		74	67	62		71	65	61		68	63	59	
4	82	70	61	54		79	68	60	54		65	58	53		63	57	52		60	55	51	
5	75	62	53	46		73	61	52	46		58	51	45		56	49	44		54	48	44	
6	69	55	46	40		67	54	46	40		52	45	39		50	44	38		49	43	38	
7	64	50	41	35		62	49	41	35		47	40	34		46	39	34		44	38	33	
8	59	45	37	31		57	44	36	31		43	36	30		42	35	30		40	34	30	
9	55	41	33	27		53	41	33	27		39	32	27		38	31	27		37	31	26	
10	51	38	30	25		50	37	30	24		36	29	24		35	29	24		34	28	24	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3204
5°	2908
10°	2750
15°	2645
20°	2561
25°	2475
30°	2386
35°	2296
40°	2171
45°	1959
50°	1700
55°	1432
60°	1150
65°	878
70°	631
75°	397
80°	229
85°	110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1959 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.1	2.4
10°-20°	42.1	7.7
20°-30°	72.7	13.3
30°-40°	99.5	18.2
40°-50°	109.7	20.1
50°-60°	94.8	17.4
60°-70°	64.3	11.8
70°-80°	30.5	5.6
80°-90°	8.3	1.5
90°-100°	2.0	0.4
100°-110°	1.5	0.3
110°-120°	1.7	0.3
120°-130°	1.7	0.3
130°-140°	1.5	0.3
140°-150°	1.2	0.2
150°-160°	0.8	0.2
160°-170°	0.6	0.1
170°-180°	0.2	0.0
0°-30°	127.9	23.4
0°-40°	227.4	41.6
0°-60°	432.0	79.0
0°-90°	535.1	97.9
90°-120°	5.2	1.0
90°-150°	9.7	1.8
90°-180°	11.0	2.0
0°-180°	546.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	132	
5°	135	13
15°	148	42
25°	157	73
35°	159	99
45°	143	110
55°	107	95
65°	65	64
75°	28	31
85°	7	8
90°	2	1
95°	2	1
105°	2	2
115°	2	2
125°	2	2
135°	2	2
145°	2	1
155°	2	1
165°	2	1
175°	2	0
180°	2	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	132.3
2.5°	133.1
5°	135.3
7.5°	138.0
10°	141.4
12.5°	144.8
15°	147.9
17.5°	150.8
20°	153.6
22.5°	155.7
25°	157.4
27.5°	158.5
30°	159.2
32.5°	159.4
35°	159.2
37.5°	158.0
40°	155.1
42.5°	149.9
45°	143.0
47.5°	135.0
50°	125.8
52.5°	116.4
55°	106.6
57.5°	95.8
60°	85.4
62.5°	75.1
65°	64.6
67.5°	55.0
70°	45.6
72.5°	36.3
75°	28.0
77.5°	21.0
80°	15.6
82.5°	11.5
85°	7.2
87.5°	3.3
90°	1.5
92.5°	2.3
95°	2.0
97.5°	1.6
100°	1.4
102.5°	1.4
105°	1.5
107.5°	1.4
110°	1.5

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	1.7
115°	1.7
117.5°	1.8
120°	1.8
122.5°	1.9
125°	1.9
127.5°	2.0
130°	2.0
132.5°	2.0
135°	2.0
137.5°	2.0
140°	1.9
142.5°	1.9
145°	1.9
147.5°	1.9
150°	1.8
152.5°	1.8
155°	1.8
157.5°	1.8
160°	1.8
162.5°	2.4
165°	2.5
167.5°	2.2
170°	2.1
172.5°	2.0
175°	1.8
177.5°	1.5
180°	1.6

(END OF REPORT)