

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: G3-2203-583-3

Luminaire Tested: 301-FIL-120-GNMT-BZME

Test Date: 6/10/2022

Test Information

Test Method: LM-79-2019
Report Number: G3-2203-583-3
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 6/10/2022
Issue Date: 6/10/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 301-FIL-120-GNMT-BZME
Description: 3D PRINTED LED LAMP BASED DECORATIVE LUMIANIRE, ENAMEL GREEN MATTE (OPAQUE) SHADE, FILAMENT LAMP
Light Source: 1 PHILIPS
FILAMENT BULB - 60W EQUIVALENT 929001969604
8A19/PER/927-922/CL/G/E26/WGX 1FB T20. PHILIPS
Ballast/Driver: PHILIPS
INTEGRAL TO LAMP

Summary

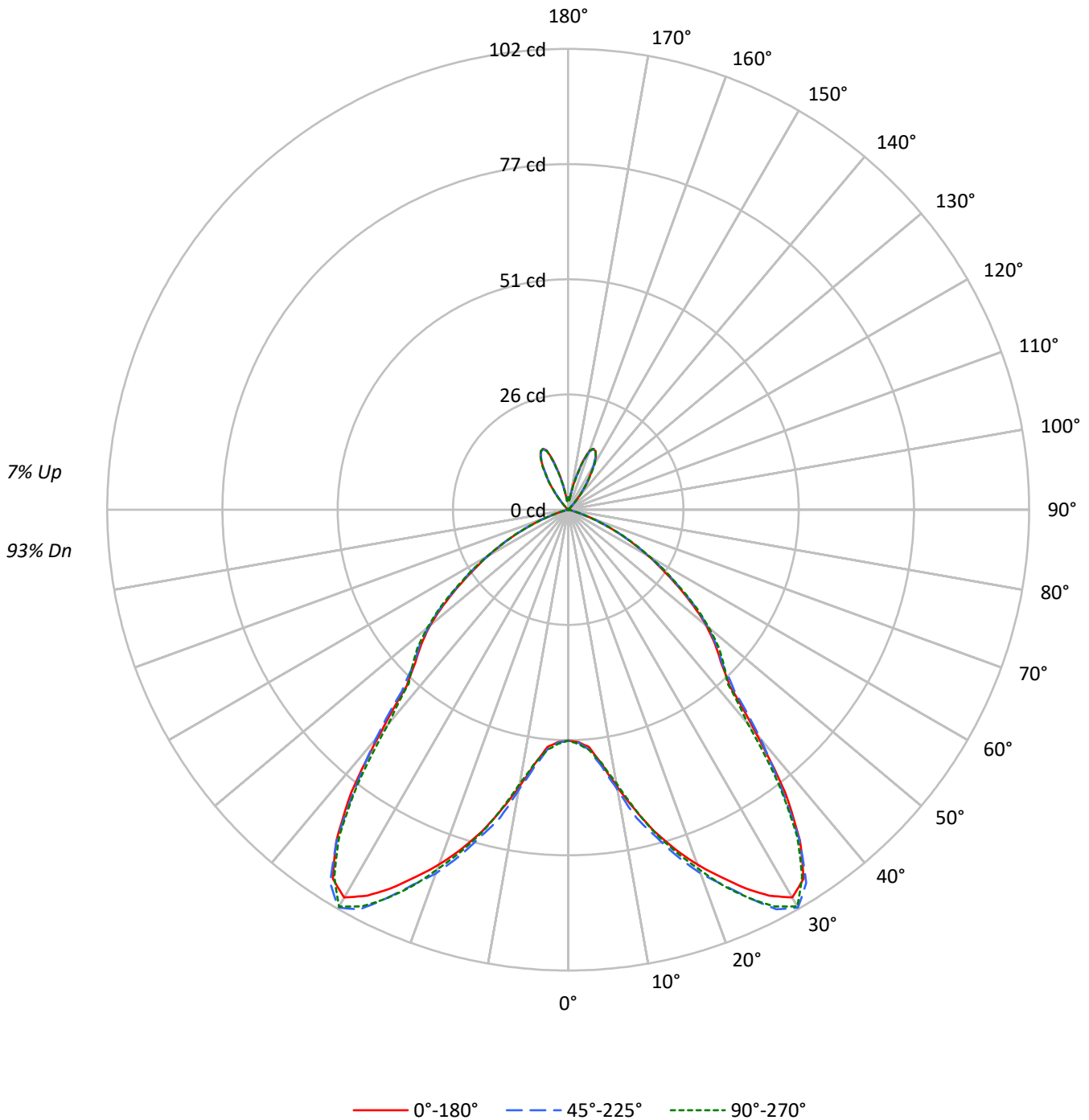
Lumens per Lamp: N/A
Luminaire Lumens: 217.8 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.74 / 1.73 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 1.17' x L: 1.17' x H: 1.26')
CIE Type: Direct

Input Watts (W): 7.8
Input Voltage (V): 120.0
Input Current (Ain): 0.0794
Voltage Rise (V): NR
Power Factor: 0.9982
Total Harmonic Distortion (THDi): 70.5%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7.0 HR
Ambient Temperature (°C): 24.1
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									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93																												
1	110	106	102	99	106	103	100	97	98	95	93	93	91	89	88	87	85	83																												
2	101	94	89	84	98	92	87	83	88	83	80	83	80	77	80	77	74	72																												
3	93	84	78	72	91	82	76	71	79	73	69	75	71	67	72	68	65	63																												
4	86	76	68	62	84	74	67	62	71	65	60	68	63	59	65	61	57	55																												
5	80	68	60	54	77	67	59	54	64	58	53	61	56	51	59	54	50	48																												
6	74	62	54	48	72	60	53	47	58	51	46	56	50	46	54	49	45	43																												
7	68	56	48	42	66	55	47	42	53	46	41	51	45	41	49	44	40	38																												
8	64	51	43	38	62	50	43	38	48	42	37	47	41	36	45	40	36	34																												
9	59	47	39	34	58	46	39	34	45	38	33	43	37	33	42	36	32	31																												
10	56	43	36	31	54	42	35	31	41	35	30	40	34	30	38	33	29	28																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	404	404	404
5°	382	373	387
10°	419	398	415
15°	468	435	470
20°	505	463	511
25°	536	483	550
30°	557	493	570
35°	491	416	485
40°	350	299	335
45°	257	213	261
50°	214	175	218
55°	161	131	165
60°	113	90	115
65°	69	54	71
70°	31	25	33
75°	5	5	6
80°	3	3	3
85°	2	1	2

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 261 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.4	2.5
10°-20°	21.4	9.8
20°-30°	43.6	20.0
30°-40°	53.1	24.4
40°-50°	38.0	17.5
50°-60°	27.1	12.4
60°-70°	12.4	5.7
70°-80°	1.9	0.9
80°-90°	0.3	0.1
90°-100°	0.1	0.1
100°-110°	0.2	0.1
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.6	0.3
140°-150°	4.3	2.0
150°-160°	6.3	2.9
160°-170°	2.7	1.2
170°-180°	0.3	0.1
0°-30°	70.4	32.3
0°-40°	123.5	56.7
0°-60°	188.6	86.6
0°-90°	203.3	93.3
90°-120°	0.4	0.2
90°-150°	5.4	2.5
90°-180°	15.0	6.9
0°-180°	217.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	51	51	51	51	51	
5°	53	53	53	54	53	5
15°	74	75	75	75	74	21
25°	92	93	95	95	95	43
35°	89	85	89	88	88	54
45°	48	48	48	49	49	38
55°	30	30	30	31	30	27
65°	12	12	12	12	13	12
75°	1	1	1	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	1	0	0	0	0	1
145°	7	7	7	7	7	4
155°	14	14	14	14	14	6
165°	9	9	8	8	9	3
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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 CATALOG NUMBER: 301-FIL-120-GNMT-BZME

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	51.1	51.1	51.1	51.1	51.1
2.5°	51.5	51.5	51.6	51.9	51.9
5°	52.7	52.8	53.3	53.5	53.4
7.5°	56.7	56.4	57.4	56.9	56.5
10°	62.2	62.3	62.9	62.4	61.5
12.5°	67.9	68.7	69.9	68.5	67.7
15°	73.7	74.9	74.9	74.6	74.0
17.5°	78.8	80.8	80.5	80.0	79.5
20°	83.6	86.1	85.7	86.0	84.7
22.5°	87.9	90.1	89.9	90.5	90.2
25°	92.4	93.3	94.8	94.7	94.9
27.5°	96.3	96.3	99.7	99.1	99.0
30°	99.1	97.2	101.7	101.2	101.4
32.5°	96.9	93.8	98.0	96.0	96.3
35°	89.4	84.7	89.2	87.7	88.3
37.5°	78.8	72.6	77.1	75.3	76.5
40°	64.8	61.4	66.1	62.7	61.9
42.5°	52.9	52.1	54.5	52.4	52.2
45°	47.8	47.8	48.2	48.6	48.7
47.5°	44.1	44.2	44.6	45.0	45.2
50°	39.9	39.9	40.2	40.6	40.6
52.5°	34.9	35.2	35.6	35.8	35.9
55°	29.7	29.9	30.2	30.6	30.4
57.5°	24.8	25.0	25.5	25.6	25.6
60°	20.5	20.5	20.7	20.8	20.9
62.5°	16.3	16.3	16.4	16.7	16.5
65°	12.2	12.2	12.4	12.5	12.6
67.5°	8.4	8.6	8.7	8.7	8.6
70°	5.4	5.5	5.6	5.4	5.6
72.5°	2.7	2.8	2.8	2.8	2.8
75°	0.9	1.0	1.0	0.9	1.0
77.5°	0.6	0.6	0.6	0.6	0.6
80°	0.5	0.6	0.6	0.5	0.5
82.5°	0.4	0.4	0.4	0.4	0.4
85°	0.3	0.3	0.3	0.3	0.3
87.5°	0.1	0.1	0.1	0.1	0.1
90°	0.1	0.1	0.1	0.1	0.1
92.5°	0.2	0.2	0.2	0.2	0.2
95°	0.1	0.1	0.1	0.1	0.1
97.5°	0.1	0.1	0.1	0.1	0.1
100°	0.2	0.2	0.2	0.2	0.1
102.5°	0.2	0.2	0.2	0.2	0.2
105°	0.2	0.1	0.1	0.1	0.1
107.5°	0.2	0.1	0.2	0.2	0.1
110°	0.1	0.1	0.0	0.1	0.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.1	0.1	0.0	0.1	0.1
115°	0.2	0.1	0.1	0.1	0.1
117.5°	0.1	0.1	0.1	0.1	0.2
120°	0.2	0.1	0.1	0.1	0.2
122.5°	0.2	0.1	0.0	0.1	0.2
125°	0.2	0.1	0.0	0.1	0.2
127.5°	0.1	0.0	0.0	0.0	0.2
130°	0.2	0.0	0.0	0.1	0.2
132.5°	0.3	0.0	0.0	0.1	0.1
135°	0.6	0.3	0.0	0.2	0.4
137.5°	1.7	1.3	1.0	1.2	1.5
140°	3.2	2.9	2.6	2.8	3.1
142.5°	5.1	4.9	4.6	4.9	4.9
145°	7.4	7.2	6.9	7.1	7.3
147.5°	9.1	9.2	9.0	9.4	9.4
150°	11.3	11.4	11.2	11.6	11.7
152.5°	13.3	13.1	13.0	13.3	13.2
155°	14.3	14.2	14.2	14.2	14.3
157.5°	14.6	14.5	14.5	14.5	14.6
160°	14.0	13.9	13.7	13.7	13.8
162.5°	11.8	12.0	11.4	11.4	11.6
165°	9.1	9.0	8.5	8.5	8.6
167.5°	6.4	6.4	6.1	6.1	6.1
170°	3.8	4.2	4.0	3.8	3.6
172.5°	2.1	2.4	2.3	2.1	1.9
175°	2.2	2.4	2.4	2.3	2.1
177.5°	2.4	2.6	2.8	2.7	2.7
180°	2.5	2.5	2.5	2.5	2.5

(END OF REPORT)