

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: G3-2203-583-6

Luminaire Tested: 303-FR-120-GDME-DC

Test Date: 6/11/2022

Test Information

Test Method: LM-79-2019
Report Number: G3-2203-583-6
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 6/11/2022
Issue Date: 6/11/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 303-FR-120-GDME-DC
Description: 3D PRINTED LED LAMP BASED DECORATIVE LUMIANIRE, GOLD METALLIC (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: 252.1 lumens
Efficiency: N/A
Efficacy: 34.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.14
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.71' x H: 0.83')
CIE Type: Direct

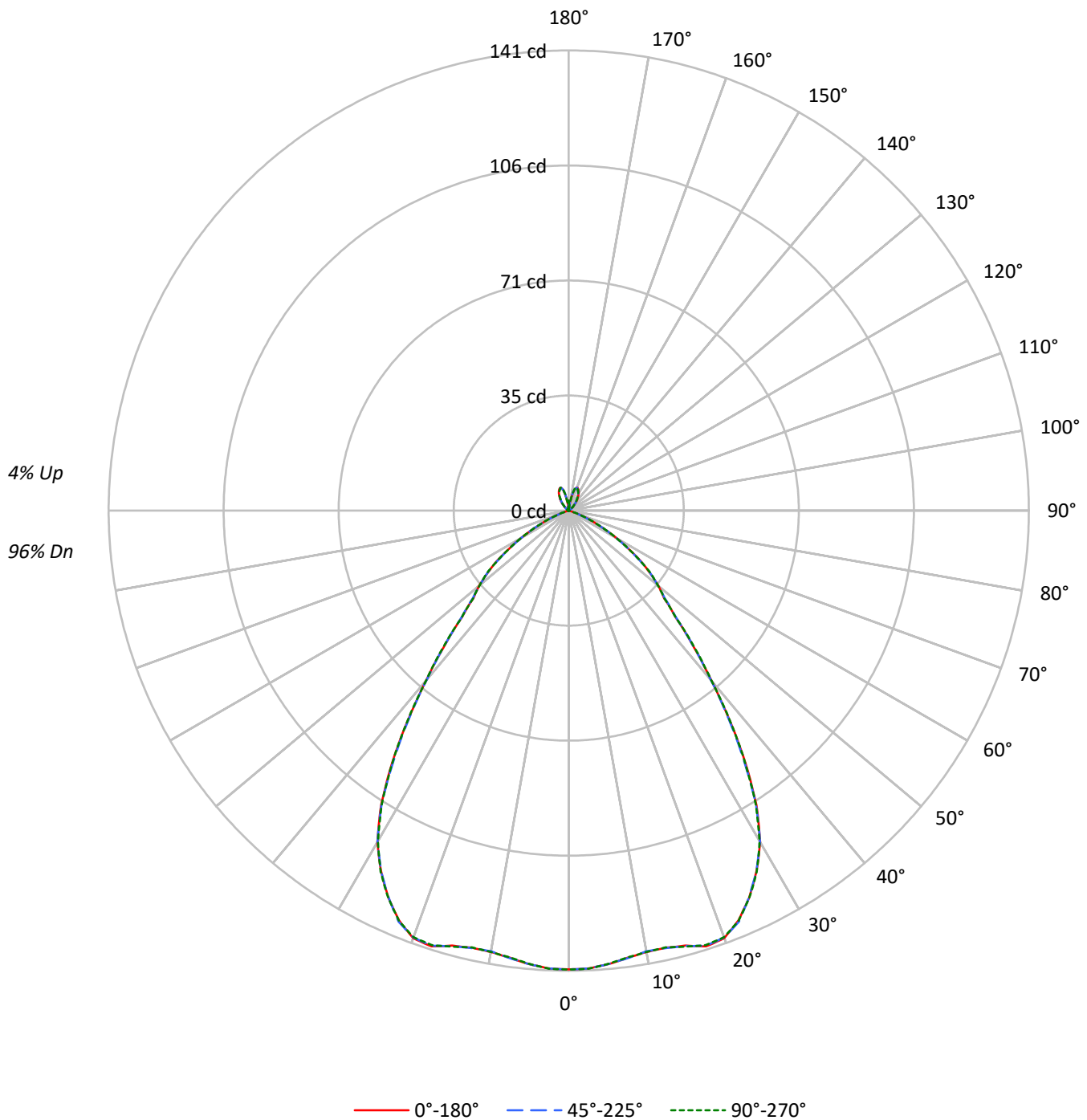
Input Watts (W): 7.4
Input Voltage (V): 120.0
Input Current (Ain): 0.0653
Voltage Rise (V): NR
Power Factor: 0.9982
Total Harmonic Distortion (THDi): 70.5%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7.0 HR
Ambient Temperature (°C): 24.4
Test Distance: 24 FT



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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	118	118	118	118	115	115	115	115		109	109	109		103	103	103		98	98	98
1	111	108	104	102	108	105	102	100		100	98	96		96	94	92		91	90	89
2	104	97	92	88	101	95	91	87		91	87	84		88	84	82		84	82	79
3	96	88	82	77	94	87	81	76		83	78	74		80	76	73		77	74	71
4	90	80	73	68	88	79	72	67		76	71	66		73	69	65		71	67	64
5	84	73	66	61	82	72	65	60		70	64	59		67	62	58		65	61	57
6	78	67	60	55	76	66	59	54		64	58	53		62	57	53		60	56	52
7	73	62	55	49	72	61	54	49		59	53	49		58	52	48		56	51	47
8	69	57	50	45	67	56	50	45		55	49	44		53	48	44		52	47	43
9	65	53	46	41	63	52	46	41		51	45	41		50	44	40		48	43	40
10	61	49	42	38	60	49	42	38		48	42	37		46	41	37		45	40	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3016	3016	3016
5°	2724	2622	2722
10°	2477	2309	2477
15°	2330	2121	2335
20°	2228	1979	2224
25°	1999	1742	2001
30°	1730	1481	1725
35°	1356	1133	1351
40°	958	792	958
45°	648	532	648
50°	497	399	495
55°	375	292	371
60°	242	187	239
65°	128	98	128
70°	41	32	41
75°	9	7	9
80°	6	5	6
85°	5	2	3

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 648 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	5.3
10°-20°	39.3	15.6
20°-30°	59.8	23.7
30°-40°	58.1	23.0
40°-50°	37.4	14.8
50°-60°	23.6	9.3
60°-70°	9.0	3.6
70°-80°	1.0	0.4
80°-90°	0.2	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.2	0.1
120°-130°	0.6	0.3
130°-140°	1.7	0.7
140°-150°	2.9	1.1
150°-160°	3.1	1.2
160°-170°	1.8	0.7
170°-180°	0.2	0.1
0°-30°	112.3	44.6
0°-40°	170.4	67.6
0°-60°	231.3	91.8
0°-90°	241.6	95.8
90°-120°	0.2	0.1
90°-150°	5.5	2.2
90°-180°	11.0	4.4
0°-180°	252.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	141	141	141	141	141	
5°	140	140	140	140	139	13
15°	138	138	138	138	138	39
25°	131	131	131	131	131	60
35°	94	94	94	94	94	58
45°	46	46	47	47	46	37
55°	27	26	26	26	27	24
65°	9	9	9	9	9	9
75°	1	1	1	1	1	1
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°	1	1	1	1	1	1
135°	2	2	2	2	2	2
145°	5	5	5	4	4	3
155°	7	7	7	7	7	3
165°	6	7	6	7	7	2
175°	1	1	1	1	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	140.6	140.6	140.6	140.6	140.6
2.5°	140.4	140.4	140.4	140.4	140.5
5°	139.5	139.5	139.5	139.5	139.4
7.5°	138.2	138.1	138.3	138.3	138.1
10°	137.3	137.2	137.1	137.2	137.3
12.5°	137.2	137.1	137.3	137.2	137.1
15°	138.0	138.2	138.1	138.0	138.3
17.5°	140.0	139.8	139.8	139.7	139.6
20°	139.4	139.5	139.2	139.4	139.1
22.5°	135.9	135.7	136.3	136.0	136.0
25°	130.8	130.8	130.7	130.9	130.9
27.5°	124.6	124.6	124.5	124.5	124.8
30°	117.3	116.8	117.2	116.8	116.9
32.5°	107.0	106.3	106.7	106.9	106.6
35°	94.4	93.6	93.7	94.5	94.1
37.5°	80.9	80.8	80.5	80.2	81.2
40°	68.0	67.5	67.8	67.6	68.0
42.5°	56.7	56.2	56.6	56.2	57.3
45°	46.5	46.5	46.7	46.7	46.5
47.5°	39.6	39.7	40.0	40.2	39.7
50°	35.8	35.9	35.7	35.9	35.6
52.5°	31.3	31.4	31.5	31.4	31.7
55°	26.9	26.4	26.4	26.4	26.6
57.5°	21.5	21.6	21.4	21.5	21.5
60°	17.1	16.8	16.9	16.9	16.9
62.5°	12.5	12.6	12.6	12.5	12.6
65°	8.9	8.9	8.8	8.8	8.9
67.5°	5.4	5.5	5.5	5.4	5.6
70°	2.8	2.8	2.8	2.9	2.8
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.6	0.6	0.6
80°	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.3	0.4	0.4
85°	0.3	0.2	0.2	0.3	0.2
87.5°	0.1	0.1	0.1	0.1	0.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.1	0.0	0.0	0.0	0.1
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.1	0.0	0.1	0.0	0.0
110°	0.0	0.1	0.1	0.1	0.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.2	0.2	0.2	0.2	0.2
117.5°	0.4	0.4	0.4	0.4	0.3
120°	0.4	0.4	0.4	0.4	0.4
122.5°	0.5	0.5	0.5	0.5	0.5
125°	0.7	0.7	0.6	0.7	0.6
127.5°	0.9	0.9	0.9	0.9	0.9
130°	1.3	1.3	1.3	1.3	1.3
132.5°	1.8	1.7	1.7	1.7	1.8
135°	2.3	2.3	2.2	2.1	2.1
137.5°	3.0	2.9	2.8	2.7	2.7
140°	3.6	3.5	3.4	3.3	3.3
142.5°	4.3	4.0	4.0	3.9	3.9
145°	4.8	4.6	4.6	4.5	4.5
147.5°	5.4	5.2	5.2	5.3	5.3
150°	6.0	5.8	5.7	5.9	5.8
152.5°	6.5	6.3	6.2	6.3	6.2
155°	7.0	6.8	6.7	6.8	6.7
157.5°	7.3	7.1	7.1	7.2	7.1
160°	7.5	7.4	7.4	7.6	7.4
162.5°	7.2	7.3	7.2	7.4	7.4
165°	6.5	6.6	6.5	6.6	6.8
167.5°	5.0	5.2	5.2	5.3	5.3
170°	3.1	3.2	3.3	3.3	3.2
172.5°	1.2	1.3	1.3	1.2	1.3
175°	0.7	0.7	0.6	0.6	0.6
177.5°	1.3	1.3	1.2	1.2	1.2
180°	3.1	3.1	3.1	3.1	3.1

(END OF REPORT)