

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: G3-2203-583-19

Luminaire Tested: 313-FR-120-CL-WHST

Test Date: 6/9/2022

Test Information

Test Method: LM-79-2019
Report Number: G3-2203-583-19
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 6/9/2022
Issue Date: 6/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 313-FR-120-CL-WHST
Description: 3D PRINTED LED LAMP BASED DECORATIVE LUMIANIRE, CLEAR (TRANSLUCENT)
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: 630.9 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 0.65' x H: 0.96')
CIE Type: Semi-Direct

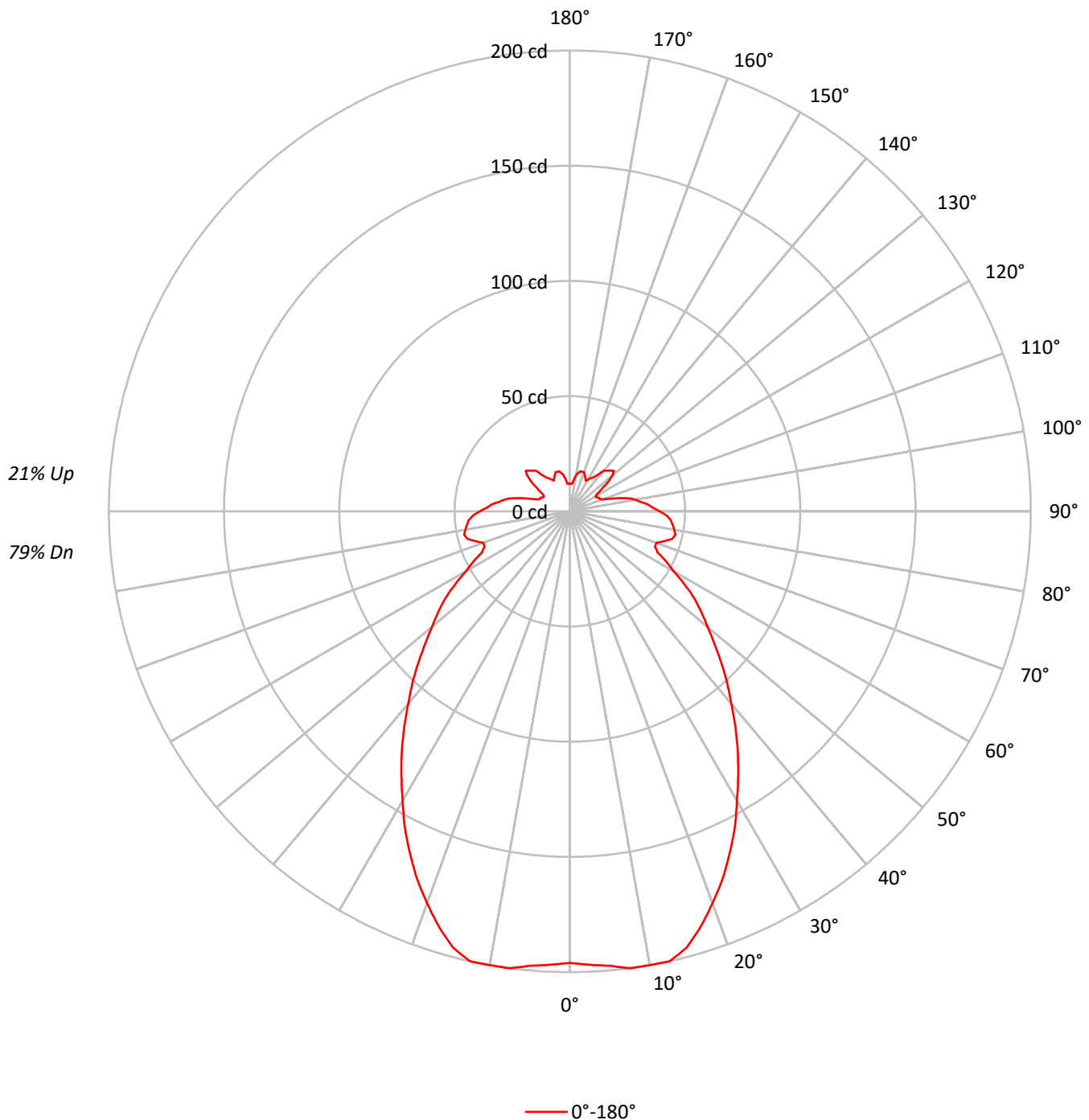
Input Watts (W): 7.7
Input Voltage (V): 120.0
Input Current (Ain): 0.0676
Voltage Rise (V): NR
Power Factor: 0.9775
Total Harmonic Distortion (THDi): 24.4%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7.0 HR
Ambient Temperature (°C): 24.4
Test Distance: 24 FT



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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
RCR																	
0	114	114	114	114	109	109	109	109	99	99	99		91	91	91		83
1	102	96	91	87	97	92	87	83	84	80	77		76	73	71		69
2	92	84	76	70	88	80	73	68	73	68	63		67	62	59		61
3	85	74	65	59	80	71	63	57	65	58	53		59	54	50		54
4	78	66	57	50	74	63	55	49	58	51	46		53	47	43		48
5	72	59	50	44	68	57	49	42	52	45	40		48	42	38		44
6	66	53	45	38	63	51	43	37	47	41	35		44	38	33		40
7	62	49	40	34	59	47	39	33	43	37	32		40	34	30		37
8	58	44	36	31	55	43	35	30	40	33	28		37	31	27		34
9	54	41	33	28	51	40	32	27	37	30	26		34	29	25		32
10	51	38	30	25	48	37	29	25	34	28	24		32	26	22		30

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4993
5°	4485
10°	4106
15°	3706
20°	3194
25°	2732
30°	2304
35°	1943
40°	1620
45°	1354
50°	1121
55°	944
60°	746
65°	608
70°	590
75°	696
80°	721
85°	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1354 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	3.0
10°-20°	54.7	8.7
20°-30°	75.3	11.9
30°-40°	79.3	12.6
40°-50°	71.8	11.4
50°-60°	58.5	9.3
60°-70°	43.3	6.9
70°-80°	47.4	7.5
80°-90°	47.3	7.5
90°-100°	36.8	5.8
100°-110°	23.3	3.7
110°-120°	13.7	2.2
120°-130°	15.7	2.5
130°-140°	19.1	3.0
140°-150°	11.8	1.9
150°-160°	7.5	1.2
160°-170°	5.0	0.8
170°-180°	1.3	0.2
0°-30°	149.0	23.6
0°-40°	228.3	36.2
0°-60°	358.6	56.8
0°-90°	496.7	78.7
90°-120°	73.8	11.7
90°-150°	120.4	19.1
90°-180°	134.0	21.2
0°-180°	630.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	196	
5°	198	19
15°	196	55
25°	164	75
35°	127	79
45°	93	72
55°	66	59
65°	42	43
75°	46	47
85°	44	36
90°	39	21
95°	34	27
105°	22	23
115°	14	14
125°	17	16
135°	25	19
145°	18	12
155°	16	7
165°	18	5
175°	12	1
180°	12	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	196
2.5°	197
5°	198
7.5°	200
10°	200
12.5°	200
15°	196
17.5°	189
20°	181
22.5°	173
25°	164
27.5°	155
30°	145
32.5°	136
35°	127
37.5°	118
40°	109
42.5°	101
45°	93
47.5°	85
50°	78
52.5°	72
55°	66
57.5°	59
60°	52
62.5°	47
65°	42
67.5°	40
70°	40
72.5°	43
75°	46
77.5°	47
80°	46
82.5°	45
85°	44
87.5°	42
90°	39
92.5°	36
95°	34
97.5°	31
100°	29
102.5°	26
105°	22
107.5°	18
110°	15



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	14
115°	14
117.5°	13
120°	13
122.5°	14
125°	17
127.5°	21
130°	24
132.5°	26
135°	25
137.5°	24
140°	23
142.5°	20
145°	18
147.5°	17
150°	16
152.5°	15
155°	16
157.5°	17
160°	18
162.5°	18
165°	18
167.5°	17
170°	16
172.5°	14
175°	12
177.5°	12
180°	12

(END OF REPORT)