

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: P702010

Luminaire Tested: 340-4C-20-D010 / 340-EU4C-1020-9050-4LBW1LI-GCC

Issue Date: 8/30/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P702010  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/30/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: SHAPER  
Catalog Number: 340-4C-20-D010 / 340-EU4C-1020-9050-4LBW1LI-GCC  
Description: FARALLON 4" LED GLASS DOWNLIGHT. GLASS-IN-A-GLASS, CLEAR INSIDE, CLEAR OUTSIDE GLA  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

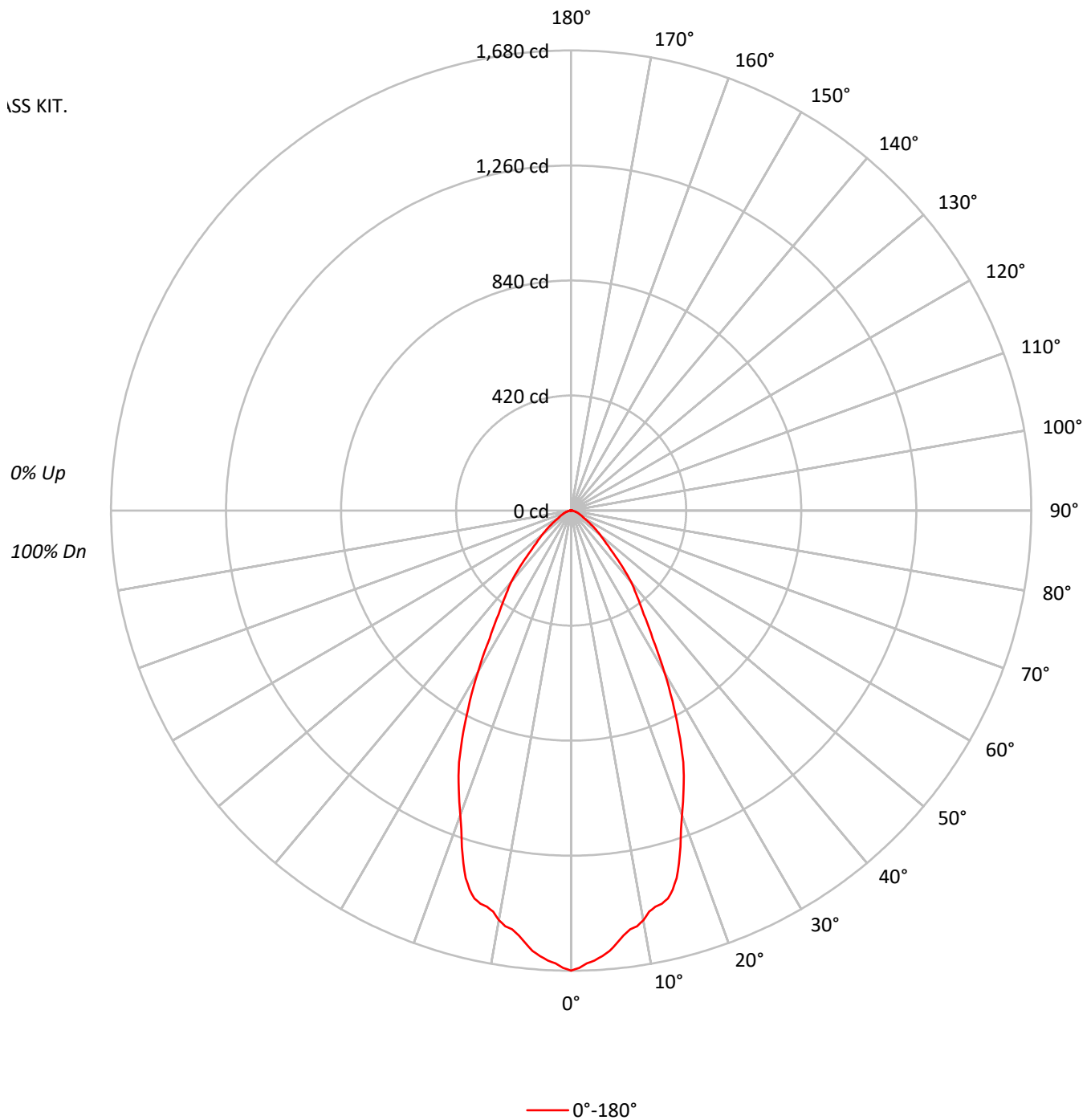
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1584.6 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.83 / 0.83  
Luminous Opening: Circular (Dia: 0.34' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	109	107	104	110	107	105	102	103	101	99		99	98	96		96	94	93	91
2	106	101	96	92	104	99	95	91	95	92	89		92	89	87		89	87	85	83
3	100	93	87	83	98	91	86	82	88	84	80		86	82	79		84	81	78	76
4	94	86	79	75	92	85	79	74	82	77	73		80	76	72		78	75	72	70
5	89	80	73	68	87	79	72	68	77	71	67		75	70	67		73	69	66	64
6	84	74	68	63	82	73	67	63	72	66	62		70	65	62		69	65	61	60
7	79	69	63	58	78	69	62	58	67	62	58		66	61	57		65	60	57	55
8	75	65	58	54	74	64	58	54	63	58	54		62	57	53		61	56	53	52
9	71	61	55	50	70	61	54	50	60	54	50		59	53	50		58	53	50	48
10	68	58	51	47	67	57	51	47	56	51	47		55	50	47		55	50	47	45

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	194817
5°	187947
10°	178861
15°	172031
20°	145952
25°	121754
30°	91137
35°	65443
40°	51629
45°	34248
50°	25009
55°	17714
60°	12201
65°	10484
70°	9190
75°	7842
80°	6412
85°	6388

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 34248 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.4	9.5
10°-20°	390.5	24.6
20°-30°	429.7	27.1
30°-40°	297.9	18.8
40°-50°	169.8	10.7
50°-60°	80.7	5.1
60°-70°	38.2	2.4
70°-80°	18.7	1.2
80°-90°	5.4	0.3
90°-100°	2.0	0.1
100°-110°	1.3	0.1
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	970.6	61.3
0°-40°	1268.5	80.1
0°-60°	1519.1	95.9
0°-90°	1581.4	99.8
90°-120°	3.2	0.2
90°-150°	3.2	0.2
90°-180°	3.0	0.2
0°-180°	1584.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1680	
5°	1614	150
15°	1433	391
25°	951	430
35°	462	298
45°	209	170
55°	88	81
65°	38	38
75°	18	19
85°	5	5
90°	2	1
95°	2	2
105°	2	1
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1679.7
1°	1670.1
2°	1654.2
3°	1644.6
4°	1630.3
5°	1614.3
6°	1588.8
7°	1563.3
8°	1544.2
9°	1536.3
10°	1518.7
11°	1491.6
12°	1478.9
13°	1472.5
14°	1459.8
15°	1432.7
16°	1396.0
17°	1346.6
18°	1290.8
19°	1231.9
20°	1182.5
21°	1139.4
22°	1096.4
23°	1051.8
24°	1005.6
25°	951.4
27.5°	814.3
30°	680.5
32.5°	554.6
35°	462.2
37.5°	395.2
40°	341.0
42.5°	272.5
45°	208.8
47.5°	167.3
50°	138.6
52.5°	113.1
55°	87.6
57.5°	66.9
60°	52.6
62.5°	44.6
65°	38.2
67.5°	31.9
70°	27.1
72.5°	22.3

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**CANDELA DISTRIBUTION (continued):**

	0°
75°	17.5
77.5°	12.7
80°	9.6
82.5°	6.4
85°	4.8
87.5°	3.2
90°	1.6
92.5°	1.6
95°	1.6
97.5°	1.6
100°	3.2
102.5°	1.6
105°	1.6
107.5°	0.0
110°	0.0
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

(END OF REPORT)