

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: HALO

Report Number: P642613

Luminaire Tested: ML5615LSFL409FS1E - 693SNB - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 693SNB - 1200LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1520.7 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.7
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

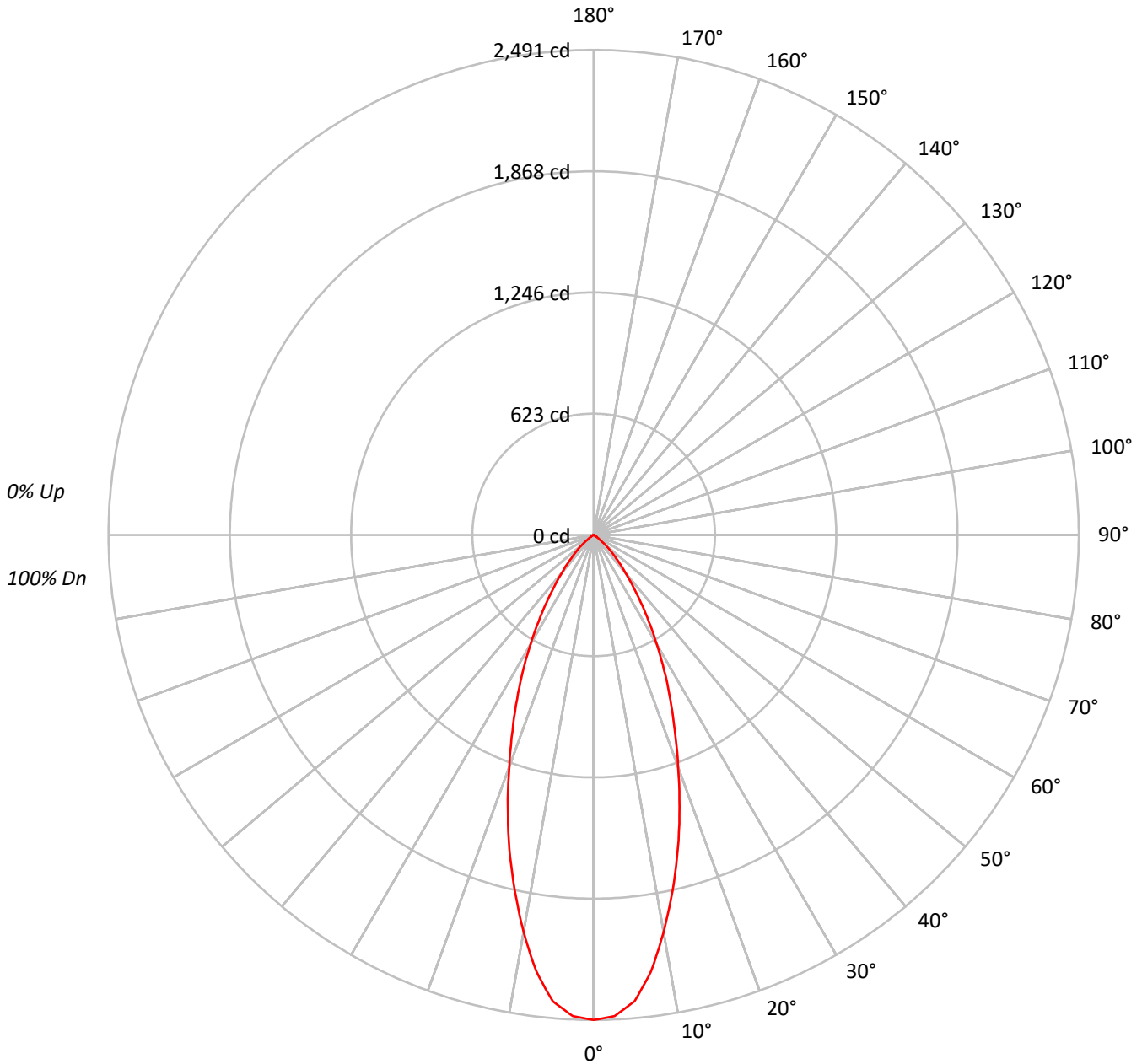
Input Watts (W): 13.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94		
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88		
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82		
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	80	78	76		
5	93	85	80	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72		
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67		
7	85	76	70	66	83	75	70	66	74	69	65	73	68	65	72	68	65	63		
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60		
9	77	68	62	58	76	67	62	58	67	62	58	66	61	58	65	61	58	56		
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	136573
5°	132313
10°	115234
15°	94791
20°	73956
25°	56296
30°	40968
35°	28101
40°	18184
45°	11195
50°	6047
55°	2303
60°	1469
65°	519
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11195 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.5	14.4
10°-20°	461.4	30.3
20°-30°	426.8	28.1
30°-40°	266.1	17.5
40°-50°	116.3	7.6
50°-60°	26.7	1.8
60°-70°	4.9	0.3
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
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°	1106.7	72.8
0°-40°	1372.8	90.3
0°-60°	1515.8	99.7
0°-90°	1520.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1520.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2491	
5°	2404	218
15°	1670	461
25°	931	427
35°	420	266
45°	144	116
55°	24	27
65°	4	5
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2491.3
2.5°	2473.9
5°	2404.4
7.5°	2260.0
10°	2070.1
12.5°	1870.8
15°	1670.2
17.5°	1465.6
20°	1267.7
22.5°	1088.5
25°	930.7
27.5°	783.6
30°	647.2
32.5°	525.5
35°	419.9
37.5°	329.0
40°	254.1
42.5°	196.6
45°	144.4
47.5°	107.0
50°	70.9
52.5°	36.1
55°	24.1
57.5°	18.7
60°	13.4
62.5°	8.0
65°	4.0
67.5°	1.3
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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