

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: P642640

Luminaire Tested: ML5615LSFL409FS1E - 693TBZB - 900LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 693TBZB - 900LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1285.1 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

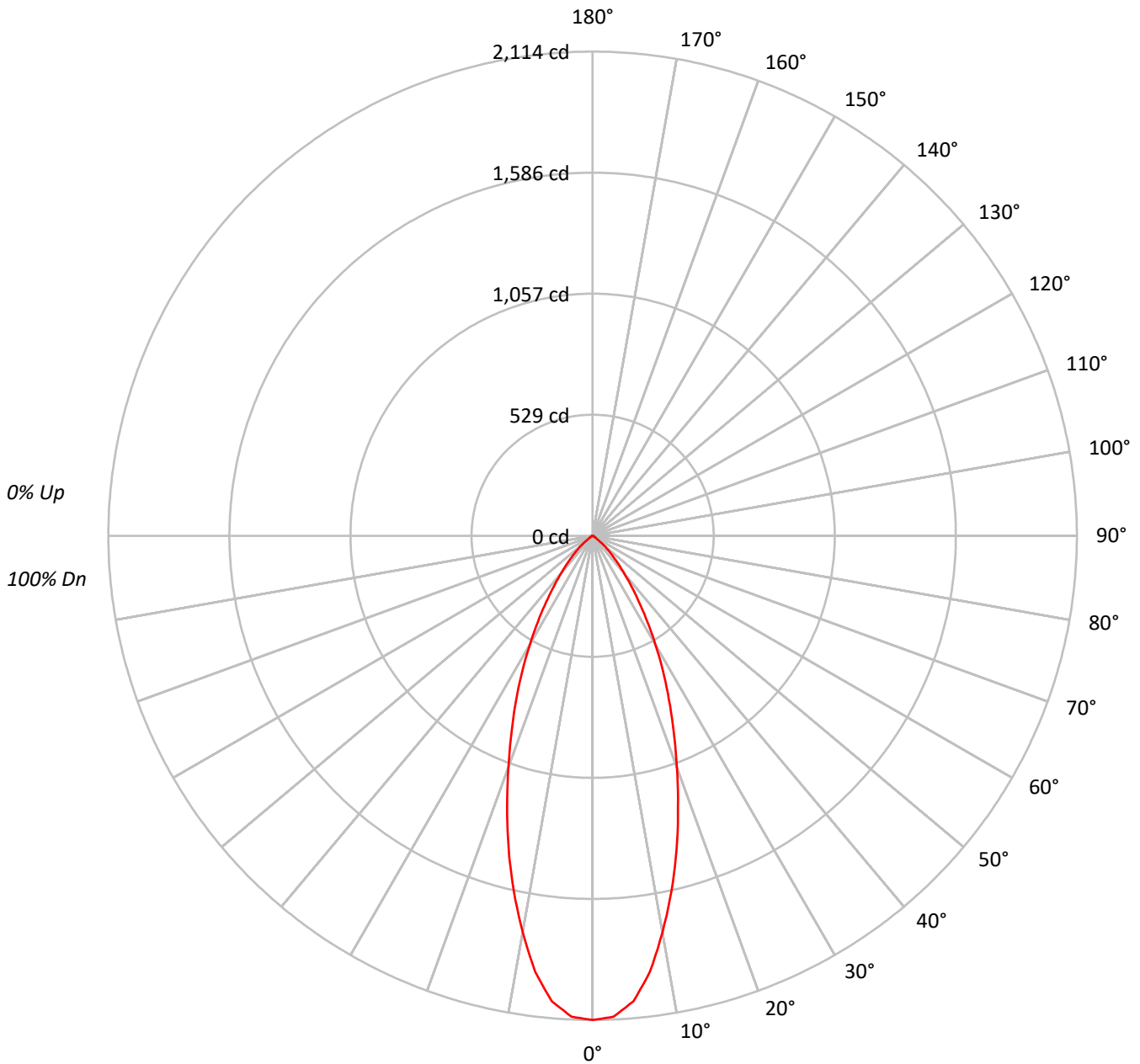
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
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	102	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	81	78	77																			
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72																			
6	89	80	75	70	87	80	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	59	76	68	62	58	67	62	58	66	61	58	65	61	58	57																			
10	74	65	59	55	73	64	59	55	63	59	55	63	58	55	62	58	55	54																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	115895
5°	112266
10°	97794
15°	80398
20°	62661
25°	47628
30°	34645
35°	23604
40°	15229
45°	9435
50°	4759
55°	1959
60°	1118
65°	441
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9435 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	14.4
10°-20°	391.3	30.4
20°-30°	361.4	28.1
30°-40°	224.3	17.5
40°-50°	97.1	7.6
50°-60°	21.6	1.7
60°-70°	4.0	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°	938.1	73.0
0°-40°	1162.4	90.5
0°-60°	1281.1	99.7
0°-90°	1285.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1285.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2114	
5°	2040	185
15°	1417	391
25°	787	361
35°	353	224
45°	122	97
55°	20	22
65°	3	4
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2114.1
2.5°	2101.6
5°	2040.1
7.5°	1919.5
10°	1756.8
12.5°	1589.5
15°	1416.6
17.5°	1240.2
20°	1074.1
22.5°	922.8
25°	787.4
27.5°	663.3
30°	547.3
32.5°	443.8
35°	352.7
37.5°	277.6
40°	212.8
42.5°	165.0
45°	121.7
47.5°	88.8
50°	55.8
52.5°	29.6
55°	20.5
57.5°	14.8
60°	10.2
62.5°	6.8
65°	3.4
67.5°	1.1
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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(END OF REPORT)