

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: P642375

Luminaire Tested: ML5615LSFL409FS1E - 592H - 1200LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642375
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 592H - 1200LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 5" HAZE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

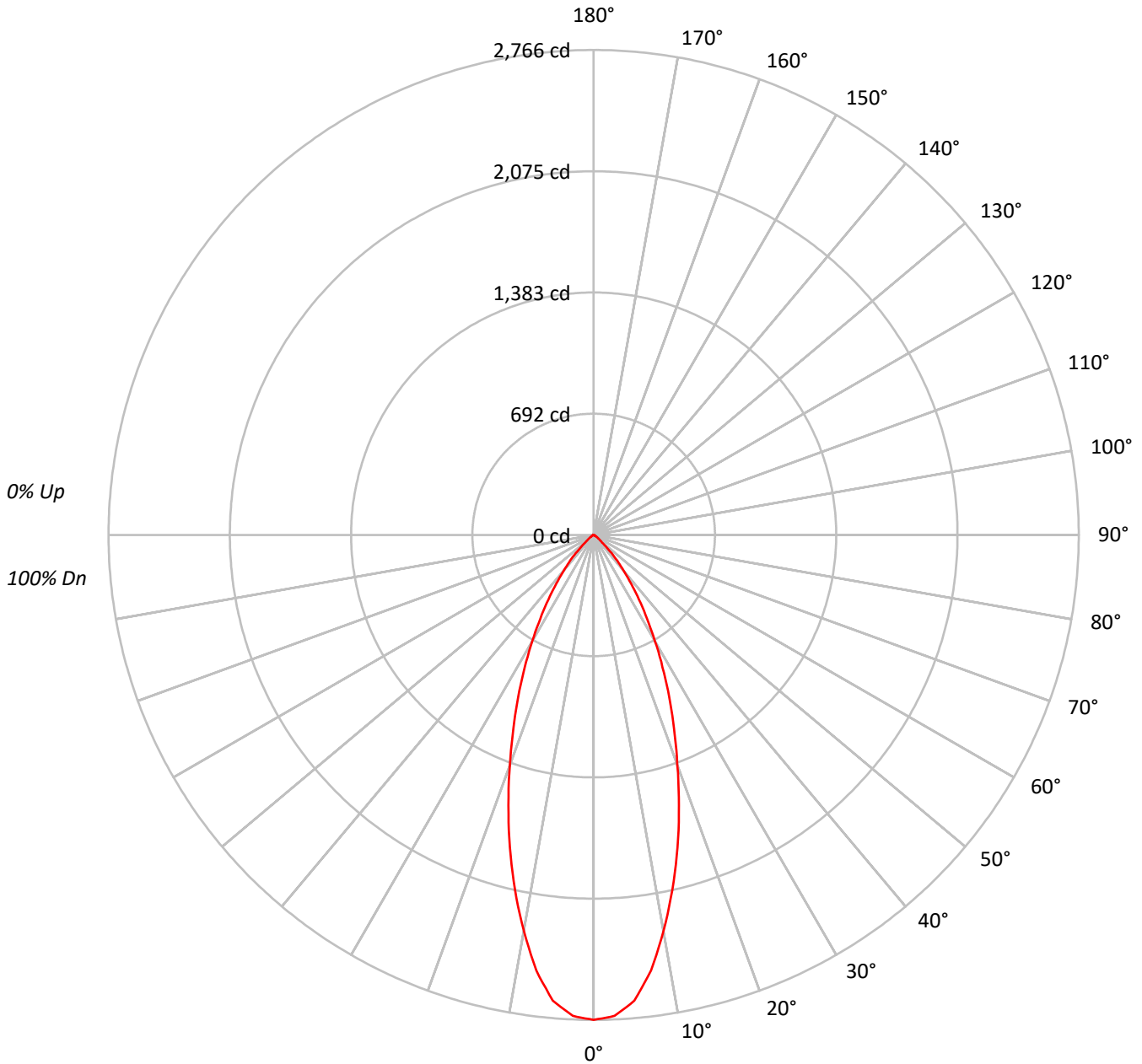
Lumens per Lamp: N/A
Luminaire Lumens: 1633.9 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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	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	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88			
3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	80	84	81	79	77			
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72			
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	70	68			
7	85	77	71	67	84	76	70	67	75	70	66	73	69	66	72	69	66	64			
8	82	72	67	63	80	72	67	63	71	66	63	70	65	62	69	65	62	61			
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57			
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	55			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	218351
5°	211316
10°	183900
15°	150817
20°	117207
25°	88574
30°	63716
35°	43385
40°	26979
45°	14770
50°	5477
55°	3165
60°	1816
65°	542
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14770 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	14.8
10°-20°	509.9	31.2
20°-30°	466.1	28.5
30°-40°	284.5	17.4
40°-50°	105.2	6.4
50°-60°	22.1	1.4
60°-70°	3.9	0.2
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°	1218.3	74.6
0°-40°	1502.8	92.0
0°-60°	1630.1	99.8
0°-90°	1633.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2766	
5°	2667	242
15°	1845	510
25°	1017	466
35°	450	284
45°	132	105
55°	23	22
65°	3	4
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2766.0
2.5°	2745.8
5°	2666.7
7.5°	2505.6
10°	2294.2
12.5°	2072.7
15°	1845.4
17.5°	1616.7
20°	1395.2
22.5°	1195.3
25°	1016.9
27.5°	850.1
30°	699.0
32.5°	565.3
35°	450.2
37.5°	349.5
40°	261.8
42.5°	198.5
45°	132.3
47.5°	71.9
50°	44.6
52.5°	33.1
55°	23.0
57.5°	15.8
60°	11.5
62.5°	7.2
65°	2.9
67.5°	0.0
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)