

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: P642371

Luminaire Tested: ML5615LSFL409FS1E - 592H - 1200LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642371
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 - 2700K
Description: ML56 RR, 40D TIR OPTIC, 5" HAZE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

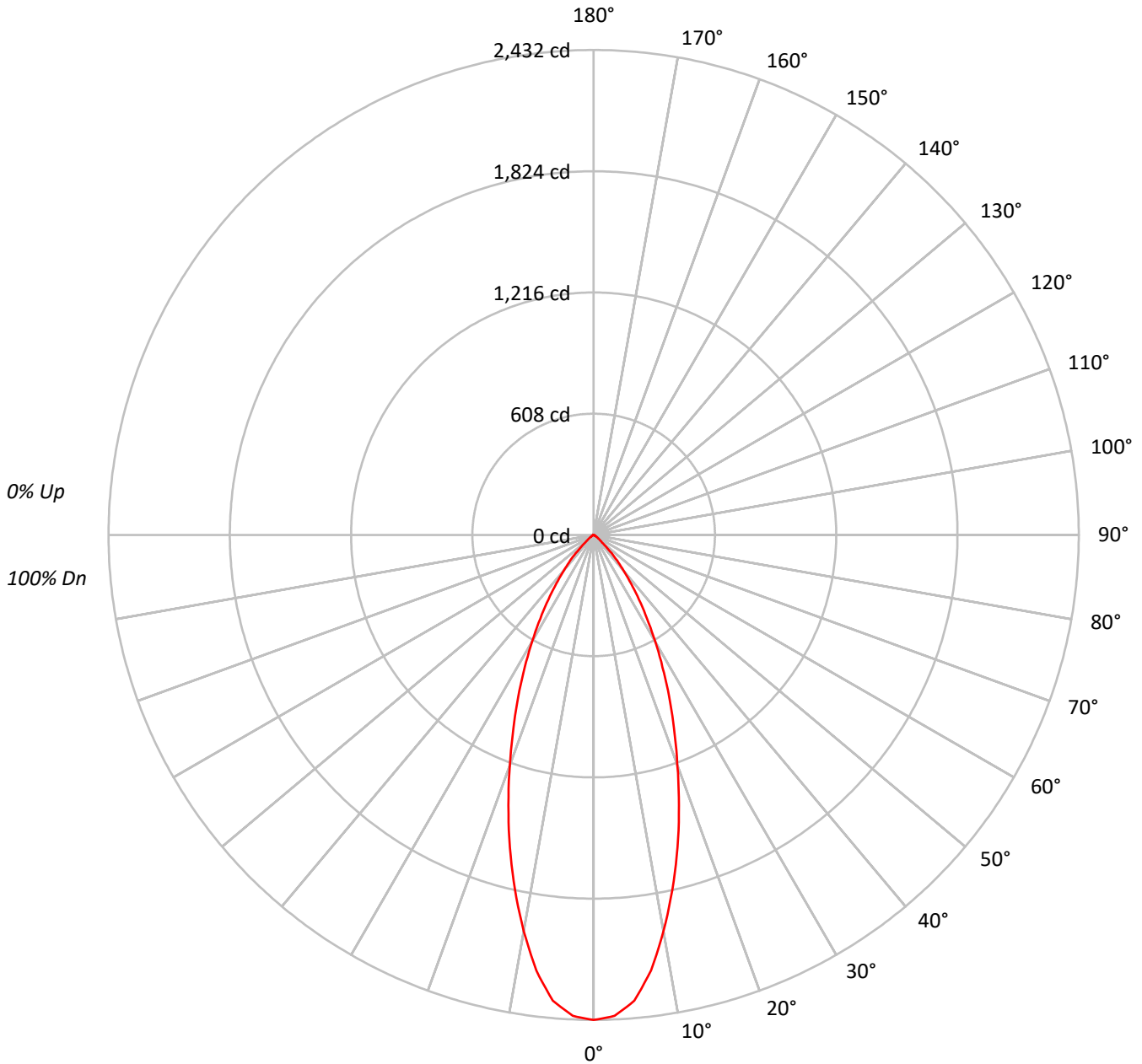
Lumens per Lamp: N/A
Luminaire Lumens: 1436.7 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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
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°	192000
5°	185816
10°	161704
15°	132616
20°	103060
25°	77886
30°	56032
35°	38153
40°	23722
45°	12995
50°	4814
55°	2780
60°	1595
65°	467
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12995 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.0	14.8
10°-20°	448.4	31.2
20°-30°	409.9	28.5
30°-40°	250.2	17.4
40°-50°	92.5	6.4
50°-60°	19.4	1.4
60°-70°	3.4	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°	1071.3	74.6
0°-40°	1321.4	92.0
0°-60°	1433.4	99.8
0°-90°	1436.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1436.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2432	
5°	2345	213
15°	1623	448
25°	894	410
35°	396	250
45°	116	92
55°	20	19
65°	2	3
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2432.2
2.5°	2414.4
5°	2344.9
7.5°	2203.2
10°	2017.3
12.5°	1822.5
15°	1622.7
17.5°	1421.6
20°	1226.8
22.5°	1051.0
25°	894.2
27.5°	747.5
30°	614.7
32.5°	497.1
35°	395.9
37.5°	307.3
40°	230.2
42.5°	174.5
45°	116.4
47.5°	63.2
50°	39.2
52.5°	29.1
55°	20.2
57.5°	13.9
60°	10.1
62.5°	6.3
65°	2.5
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)