

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: P642627

Luminaire Tested: ML5615LSFL409FS1E - 693TBZB - 1200LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642627
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 - 1200LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

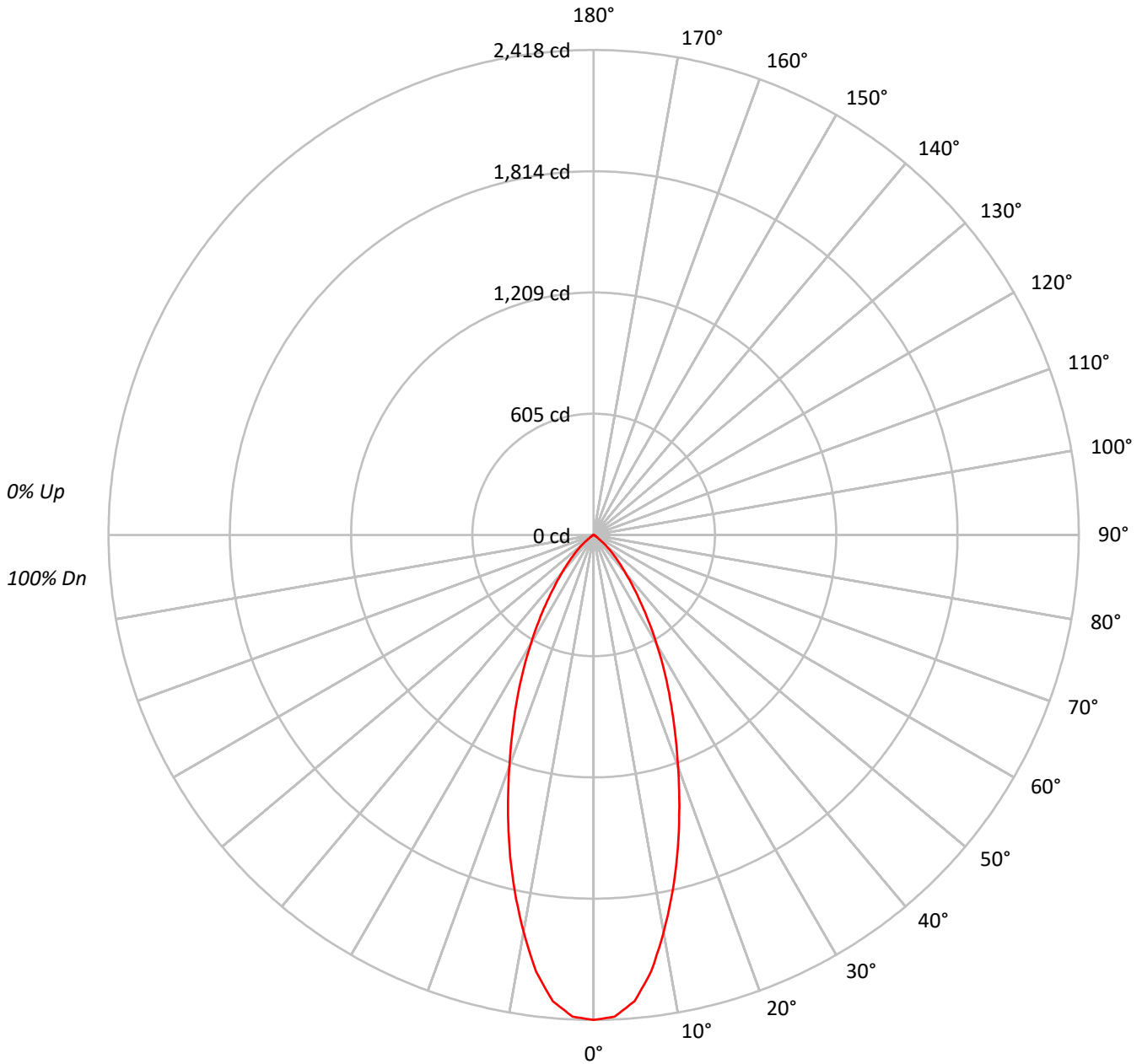
Lumens per Lamp: N/A
Luminaire Lumens: 1470.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 13.4
Input Voltage (V): NR
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	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°	132566
5°	128417
10°	111866
15°	91964
20°	71675
25°	54481
30°	39626
35°	27003
40°	17418
45°	10800
50°	5441
55°	2236
60°	1283
65°	506
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10800 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.2	14.4
10°-20°	447.6	30.4
20°-30°	413.4	28.1
30°-40°	256.6	17.5
40°-50°	111.0	7.6
50°-60°	24.7	1.7
60°-70°	4.6	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°	1073.1	73.0
0°-40°	1329.7	90.5
0°-60°	1465.4	99.7
0°-90°	1470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2418	
5°	2334	212
15°	1620	448
25°	901	413
35°	404	257
45°	139	111
55°	23	25
65°	4	5
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2418.2
2.5°	2403.9
5°	2333.6
7.5°	2195.7
10°	2009.6
12.5°	1818.2
15°	1620.4
17.5°	1418.7
20°	1228.6
22.5°	1055.5
25°	900.7
27.5°	758.8
30°	626.0
32.5°	507.6
35°	403.5
37.5°	317.6
40°	243.4
42.5°	188.7
45°	139.3
47.5°	101.5
50°	63.8
52.5°	33.8
55°	23.4
57.5°	16.9
60°	11.7
62.5°	7.8
65°	3.9
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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(END OF REPORT)