

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



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: P642448

Luminaire Tested: ML5615LSFL409FS1E - 593TBZB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642448  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-31)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSFL409FS1E - 593TBZB - 1200LM - 3500K  
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

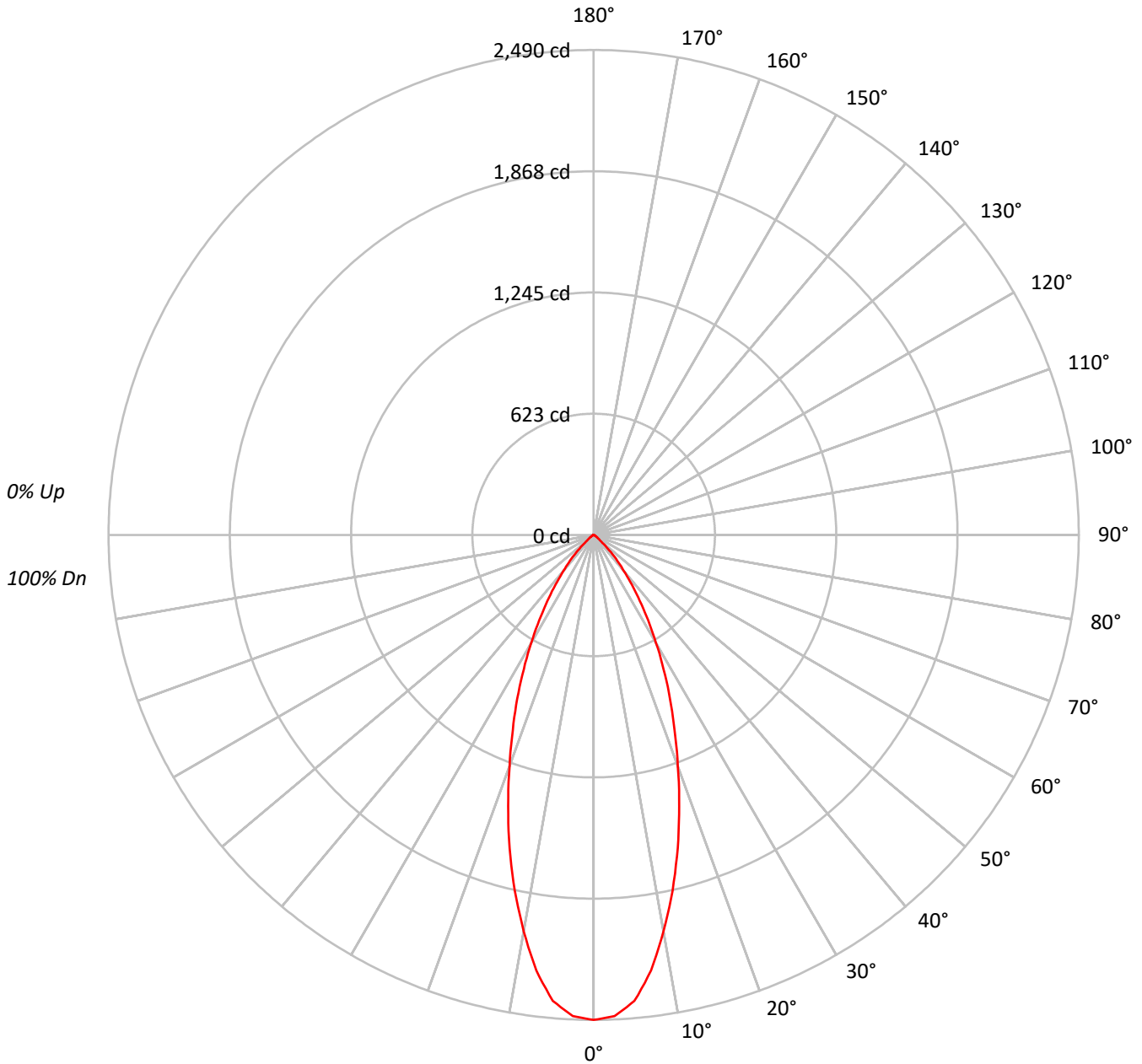
Lumens per Lamp: N/A  
Luminaire Lumens: 1484.6 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				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				100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94				94
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88				88
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	89	86	84	82				82
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77				77
5	94	86	80	76	92	85	80	76	83	79	75	81	77	74	80	76	74	72				72
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68				68
7	85	76	71	67	84	76	70	66	74	70	66	73	69	66	72	68	65	64				64
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61				61
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57				57
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54				54

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	196571
5°	190332
10°	165640
15°	136106
20°	106109
25°	80796
30°	58356
35°	39800
40°	24660
45°	13877
50°	5084
55°	2945
60°	1689
65°	504
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13877 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.2	14.7
10°-20°	460.3	31.0
20°-30°	424.4	28.6
30°-40°	261.1	17.6
40°-50°	96.9	6.5
50°-60°	20.3	1.4
60°-70°	3.6	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°	1102.8	74.3
0°-40°	1363.9	91.9
0°-60°	1481.0	99.8
0°-90°	1484.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1484.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2490	
5°	2402	218
15°	1665	460
25°	928	424
35°	413	261
45°	124	97
55°	21	20
65°	3	4
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2490.1
2.5°	2472.7
5°	2401.9
7.5°	2256.2
10°	2066.4
12.5°	1869.9
15°	1665.4
17.5°	1459.6
20°	1263.1
22.5°	1084.0
25°	927.6
27.5°	776.6
30°	640.2
32.5°	518.6
35°	413.0
37.5°	322.1
40°	239.3
42.5°	180.4
45°	124.3
47.5°	66.8
50°	41.4
52.5°	29.4
55°	21.4
57.5°	14.7
60°	10.7
62.5°	6.7
65°	2.7
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

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)