

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: P642500

Luminaire Tested: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-34)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

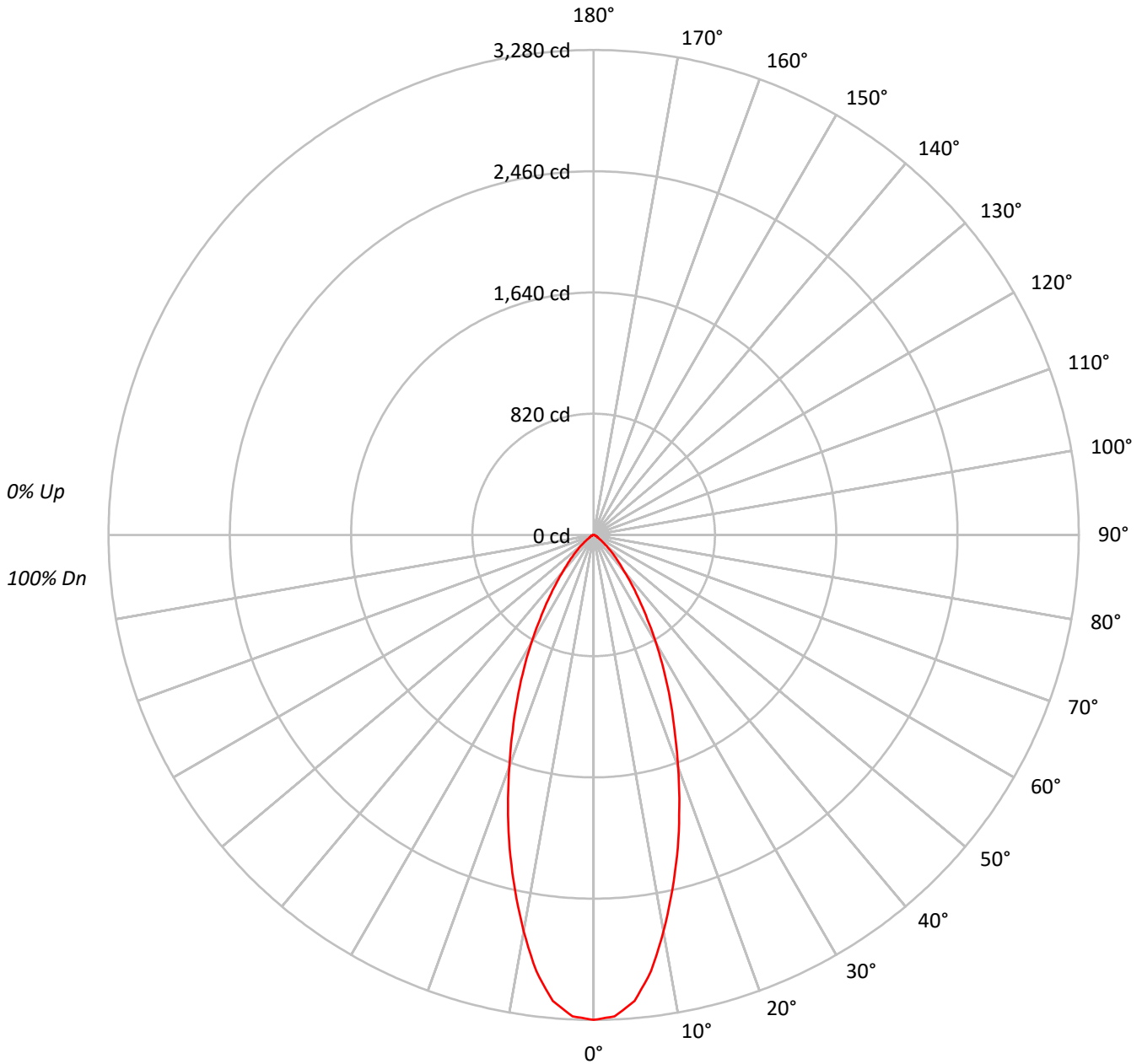
Lumens per Lamp: N/A
Luminaire Lumens: 2023.0 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
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



TEST NUMBER: P642500
CATALOG NUMBER: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K

Luminous Intensity Polar Plot





TEST NUMBER: P642500

CATALOG NUMBER: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K

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	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	91	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59			
9	77	67	61	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	55	72	63	58	54	63	58	54	62	57	54	61	57	54	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	258910
5°	250794
10°	218264
15°	179322
20°	139922
25°	106264
30°	76560
35°	51625
40°	33347
45°	21513
50°	12600
55°	7060
60°	4752
65°	3306
70°	2447
75°	2166
80°	818
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21513 cd/sqm



TEST NUMBER: P642500

CATALOG NUMBER: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.6	14.2
10°-20°	606.3	30.0
20°-30°	558.4	27.6
30°-40°	341.4	16.9
40°-50°	152.6	7.5
50°-60°	50.4	2.5
60°-70°	19.0	0.9
70°-80°	6.7	0.3
80°-90°	0.7	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°	1452.3	71.8
0°-40°	1793.6	88.7
0°-60°	1996.6	98.7
0°-90°	2023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2023.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3280	
5°	3165	288
15°	2194	606
25°	1220	558
35°	536	341
45°	193	153
55°	51	50
65°	18	19
75°	7	7
85°	0	1
90°	0	



TEST NUMBER: P642500
CATALOG NUMBER: ML5615LSFL409FS1E - 594TBZB - 1500LM - 5000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	3279.8
2.5°	3258.6
5°	3164.9
7.5°	2975.7
10°	2722.9
12.5°	2457.7
15°	2194.2
17.5°	1925.5
20°	1665.6
22.5°	1428.6
25°	1220.0
27.5°	1020.2
30°	839.9
32.5°	675.4
35°	535.7
37.5°	420.8
40°	323.6
42.5°	251.1
45°	192.7
47.5°	143.2
50°	102.6
52.5°	72.5
55°	51.3
57.5°	37.1
60°	30.1
62.5°	24.8
65°	17.7
67.5°	14.1
70°	10.6
72.5°	8.8
75°	7.1
77.5°	3.5
80°	1.8
82.5°	1.8
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

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

Scaled Data Report



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

Scaled Data Report



— 0°-180°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)