

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: P642632

Luminaire Tested: ML5615LSFL409FS1E - 693TBZB - 1500LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642632
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 - 1500LM - 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

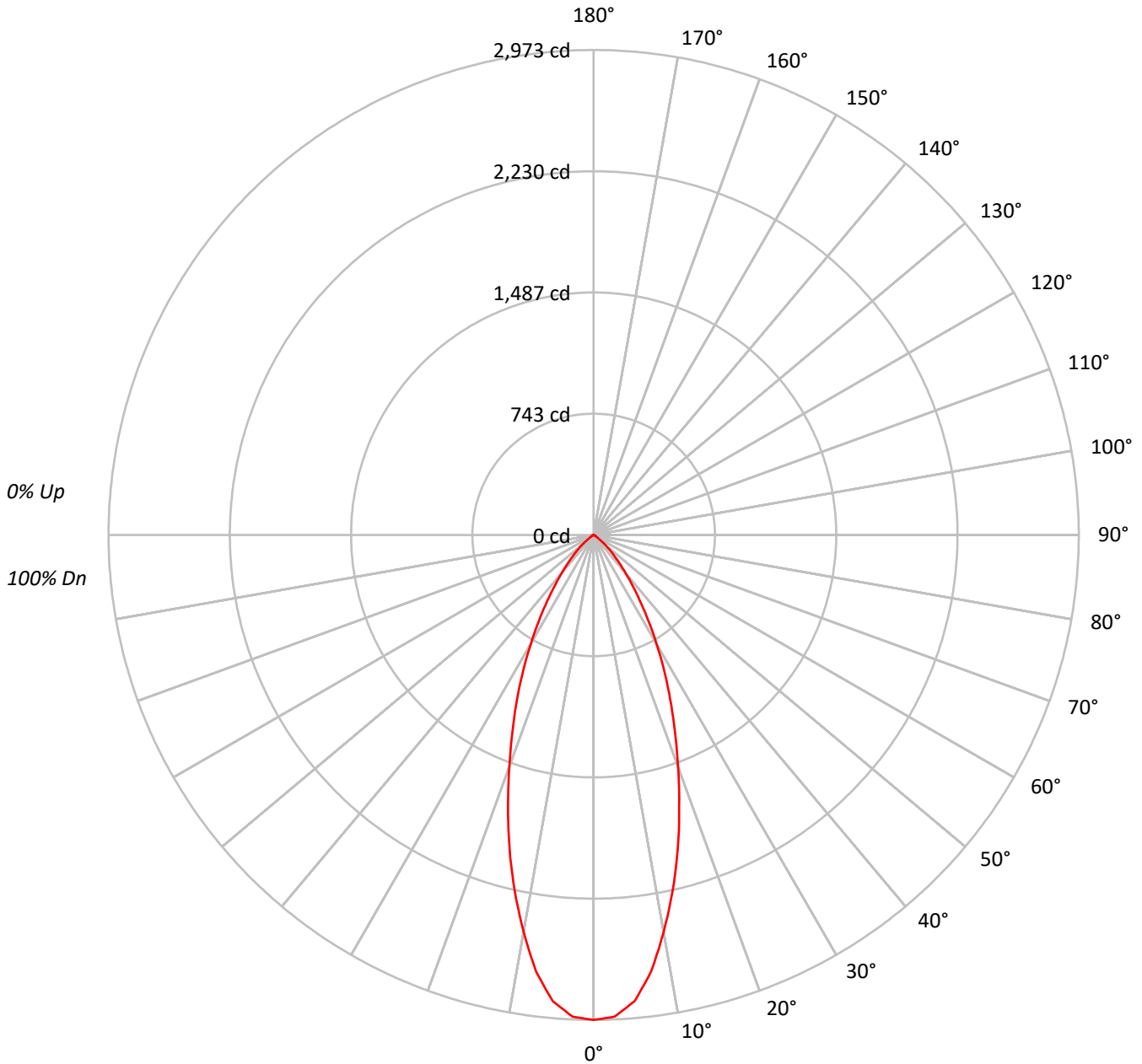
Lumens per Lamp: N/A
Luminaire Lumens: 1807.2 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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			100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	98	98	97	96	94			94
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			88
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82			82
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	81	78	77			77
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72			72
6	89	80	75	70	87	80	74	70	78	73	70	77	72	69	75	72	69	67			67
7	85	76	70	66	83	75	70	66	74	69	65	73	68	65	72	68	65	63			63
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60			60
9	77	68	62	59	76	68	62	58	67	62	58	66	61	58	65	61	58	57			57
10	74	65	59	55	73	64	59	55	63	59	55	63	58	55	62	58	55	54			54

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	162986
5°	157880
10°	137528
15°	113065
20°	88120
25°	66978
30°	48723
35°	33194
40°	21412
45°	13273
50°	6686
55°	2753
60°	1579
65°	623
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13273 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.8	14.4
10°-20°	550.3	30.4
20°-30°	508.2	28.1
30°-40°	315.4	17.5
40°-50°	136.5	7.6
50°-60°	30.4	1.7
60°-70°	5.7	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°	1319.3	73.0
0°-40°	1634.7	90.5
0°-60°	1801.6	99.7
0°-90°	1807.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2973	
5°	2869	261
15°	1992	550
25°	1107	508
35°	496	315
45°	171	136
55°	29	30
65°	5	6
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2973.1
2.5°	2955.5
5°	2869.0
7.5°	2699.4
10°	2470.6
12.5°	2235.4
15°	1992.2
17.5°	1744.1
20°	1510.5
22.5°	1297.7
25°	1107.3
27.5°	932.9
30°	769.7
32.5°	624.1
35°	496.0
37.5°	390.4
40°	299.2
42.5°	232.0
45°	171.2
47.5°	124.8
50°	78.4
52.5°	41.6
55°	28.8
57.5°	20.8
60°	14.4
62.5°	9.6
65°	4.8
67.5°	1.6
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)