

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: P642651

Luminaire Tested: ML5615LSFL409FS1E - 693WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 693WB - 900LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

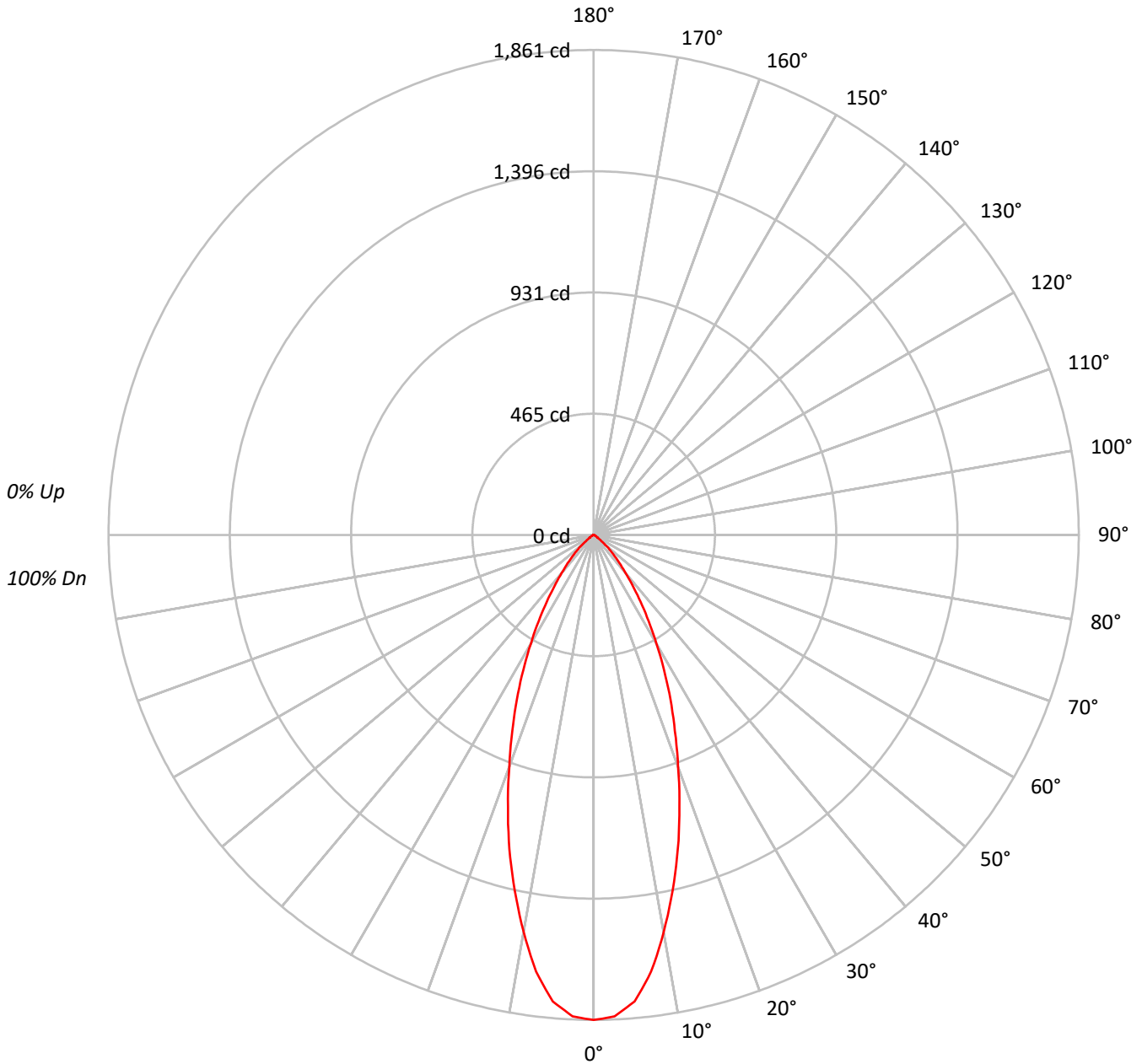
Lumens per Lamp: N/A
Luminaire Lumens: 1144.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.5
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									
RC	80									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	100	98	97	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	79	75	82	77	74	80	76	73	79	75	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63																			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59																			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56																			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	55	62	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	102037
5°	98905
10°	86126
15°	70840
20°	55252
25°	42105
30°	30517
35°	20947
40°	13597
45°	8450
50°	4520
55°	1912
60°	1316
65°	778
70°	481
75°	424
80°	631
85°	629

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8450 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	14.3
10°-20°	344.8	30.1
20°-30°	318.8	27.9
30°-40°	198.6	17.4
40°-50°	87.3	7.6
50°-60°	21.3	1.9
60°-70°	6.3	0.5
70°-80°	2.5	0.2
80°-90°	1.1	0.1
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°	826.9	72.3
0°-40°	1025.4	89.6
0°-60°	1134.1	99.1
0°-90°	1144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1144.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1861	
5°	1797	163
15°	1248	345
25°	696	319
35°	313	199
45°	109	87
55°	20	21
65°	6	6
75°	2	3
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1861.3
2.5°	1849.3
5°	1797.3
7.5°	1690.3
10°	1547.2
12.5°	1398.2
15°	1248.2
17.5°	1094.2
20°	947.1
22.5°	814.1
25°	696.1
27.5°	584.1
30°	482.1
32.5°	392.1
35°	313.0
37.5°	246.0
40°	190.0
42.5°	147.0
45°	109.0
47.5°	81.0
50°	53.0
52.5°	28.0
55°	20.0
57.5°	16.0
60°	12.0
62.5°	9.0
65°	6.0
67.5°	3.0
70°	3.0
72.5°	3.0
75°	2.0
77.5°	2.0
80°	2.0
82.5°	1.0
85°	1.0
87.5°	1.0
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)