

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: P642478

Luminaire Tested: ML5615LSFL409FS1E - 594SNB - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-33)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 594SNB - 1200LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1534.1 lumens
Efficiency: N/A
Efficacy: 114.5 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

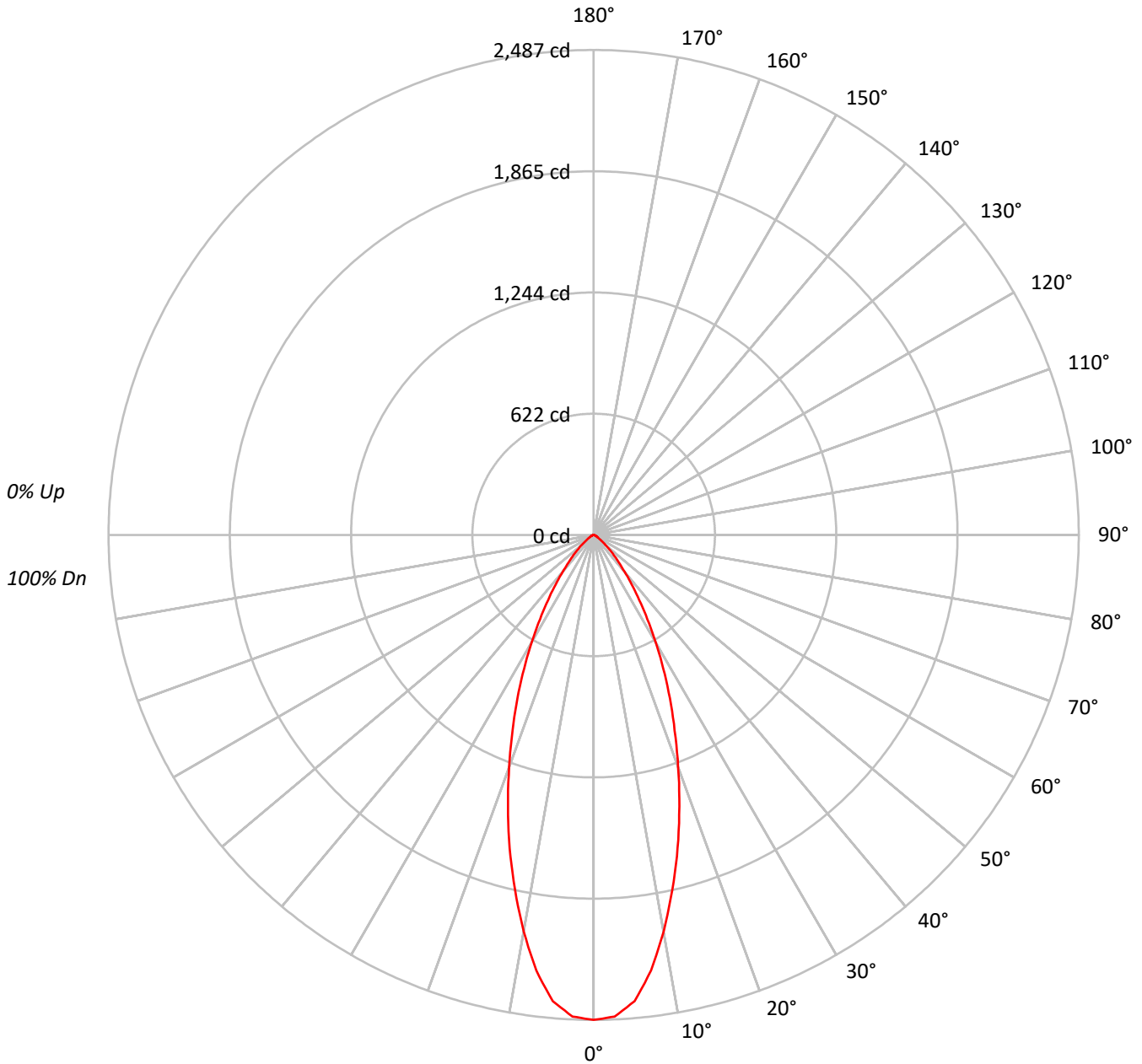
Input Watts (W): 13.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									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	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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	92	92	90	89	89	87	87	85	83	81	81																
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87	87	85	83	81	81	81	81	81	81	81	81	81																
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81	81	81	81	81	81	81	81	81	81	81	81	81	81															
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76	76	76	76	76	76	76	76	76	76	76	76	76																
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	79	75	72	71	71	71	71	71	71	71	71	71	71	71	71	71																
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66	66	66	66	66	66	66	66	66	66	66	66	66	66															
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62	62	62	62	62	62	62	62	62															
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59															
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56															
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53	53	53	53	53	53	53	53	53	53	53	53	53	53															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	196318
5°	190190
10°	165512
15°	135893
20°	106361
25°	80499
30°	57828
35°	39261
40°	25319
45°	16400
50°	9518
55°	5326
60°	3584
65°	2503
70°	1846
75°	1617
80°	1227
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16400 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.0	14.2
10°-20°	459.8	30.0
20°-30°	423.2	27.6
30°-40°	258.8	16.9
40°-50°	115.6	7.5
50°-60°	38.3	2.5
60°-70°	14.3	0.9
70°-80°	5.3	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°	1101.0	71.8
0°-40°	1359.8	88.6
0°-60°	1513.8	98.7
0°-90°	1534.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2487	
5°	2400	218
15°	1663	460
25°	924	423
35°	407	259
45°	147	116
55°	39	38
65°	13	14
75°	5	5
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2486.9
2.5°	2472.2
5°	2400.1
7.5°	2253.1
10°	2064.8
12.5°	1863.1
15°	1662.8
17.5°	1459.8
20°	1266.1
22.5°	1084.5
25°	924.2
27.5°	772.0
30°	634.4
32.5°	511.5
35°	407.4
37.5°	319.2
40°	245.7
42.5°	189.7
45°	146.9
47.5°	108.2
50°	77.5
52.5°	54.8
55°	38.7
57.5°	29.4
60°	22.7
62.5°	18.7
65°	13.4
67.5°	10.7
70°	8.0
72.5°	6.7
75°	5.3
77.5°	2.7
80°	2.7
82.5°	1.3
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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