

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: P640339

Luminaire Tested: ML5609LSFL40D2W1E - 694TBZB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-45)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 694TBZB - 900LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

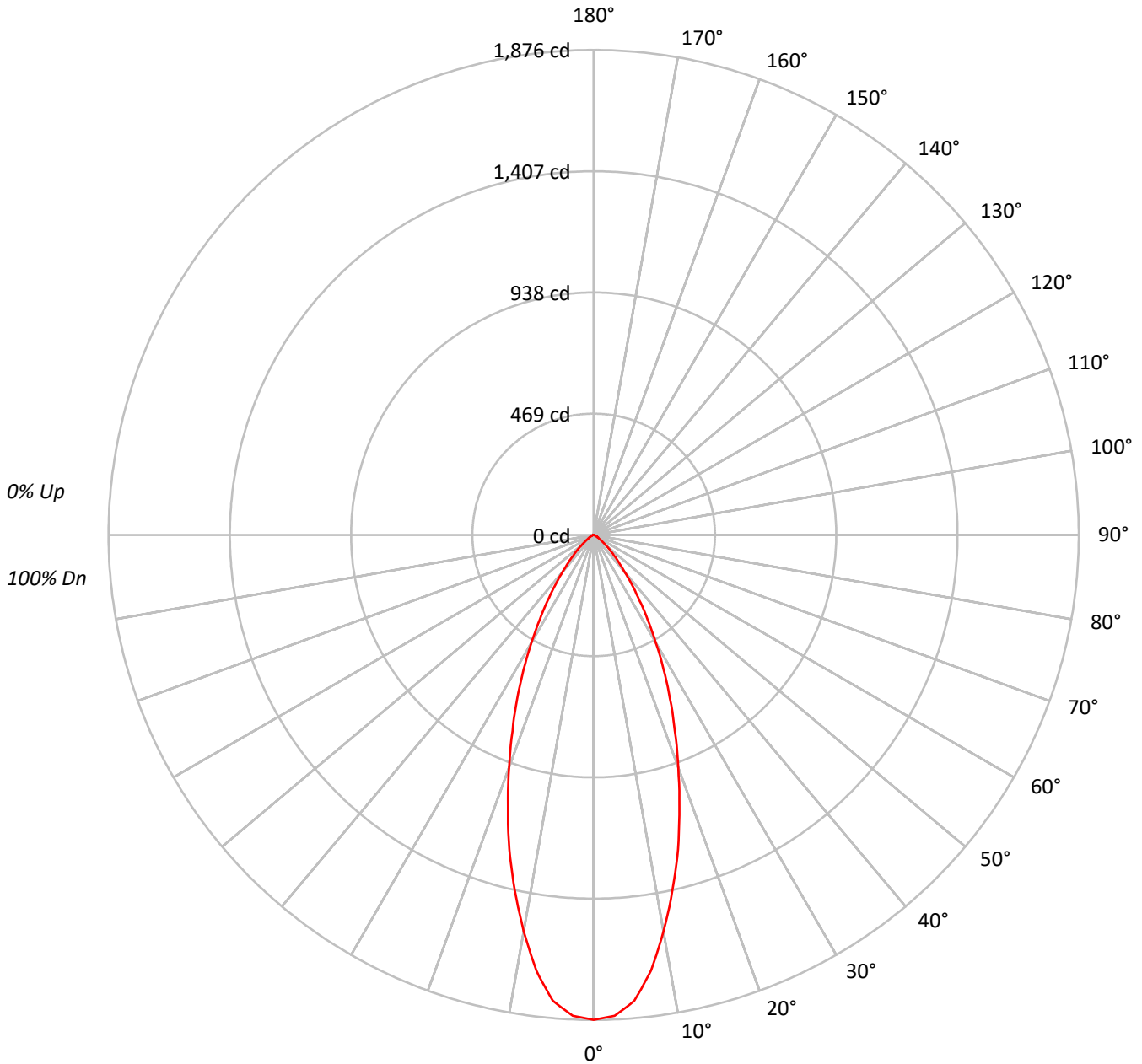
Lumens per Lamp: N/A
Luminaire Lumens: 1159.8 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
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	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	57	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	102843
5°	99537
10°	86655
15°	71533
20°	55777
25°	42281
30°	30391
35°	20699
40°	13368
45°	8567
50°	5057
55°	2781
60°	1875
65°	1297
70°	962
75°	635
80°	316
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8567 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	14.2
10°-20°	347.5	30.0
20°-30°	320.3	27.6
30°-40°	196.3	16.9
40°-50°	87.8	7.6
50°-60°	28.9	2.5
60°-70°	10.8	0.9
70°-80°	3.5	0.3
80°-90°	0.4	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°	832.1	71.7
0°-40°	1028.3	88.7
0°-60°	1145.1	98.7
0°-90°	1159.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1159.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1876	
5°	1809	164
15°	1260	347
25°	699	320
35°	309	196
45°	110	88
55°	29	29
65°	10	11
75°	3	4
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1876.0
2.5°	1862.0
5°	1808.8
7.5°	1699.3
10°	1556.7
12.5°	1408.0
15°	1260.4
17.5°	1101.7
20°	956.1
22.5°	820.5
25°	699.0
27.5°	585.5
30°	480.1
32.5°	387.7
35°	309.3
37.5°	242.0
40°	186.8
42.5°	144.6
45°	110.5
47.5°	82.4
50°	59.3
52.5°	41.2
55°	29.1
57.5°	22.1
60°	17.1
62.5°	14.1
65°	10.0
67.5°	8.0
70°	6.0
72.5°	5.0
75°	3.0
77.5°	2.0
80°	1.0
82.5°	1.0
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)