

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: P640336

Luminaire Tested: ML5609LSFL40D2W1E - 693TBZB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640336  
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: ML5609LSFL40D2W1E - 693TBZB - 900LM - 3000K  
Description: ML56 RR, 40D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

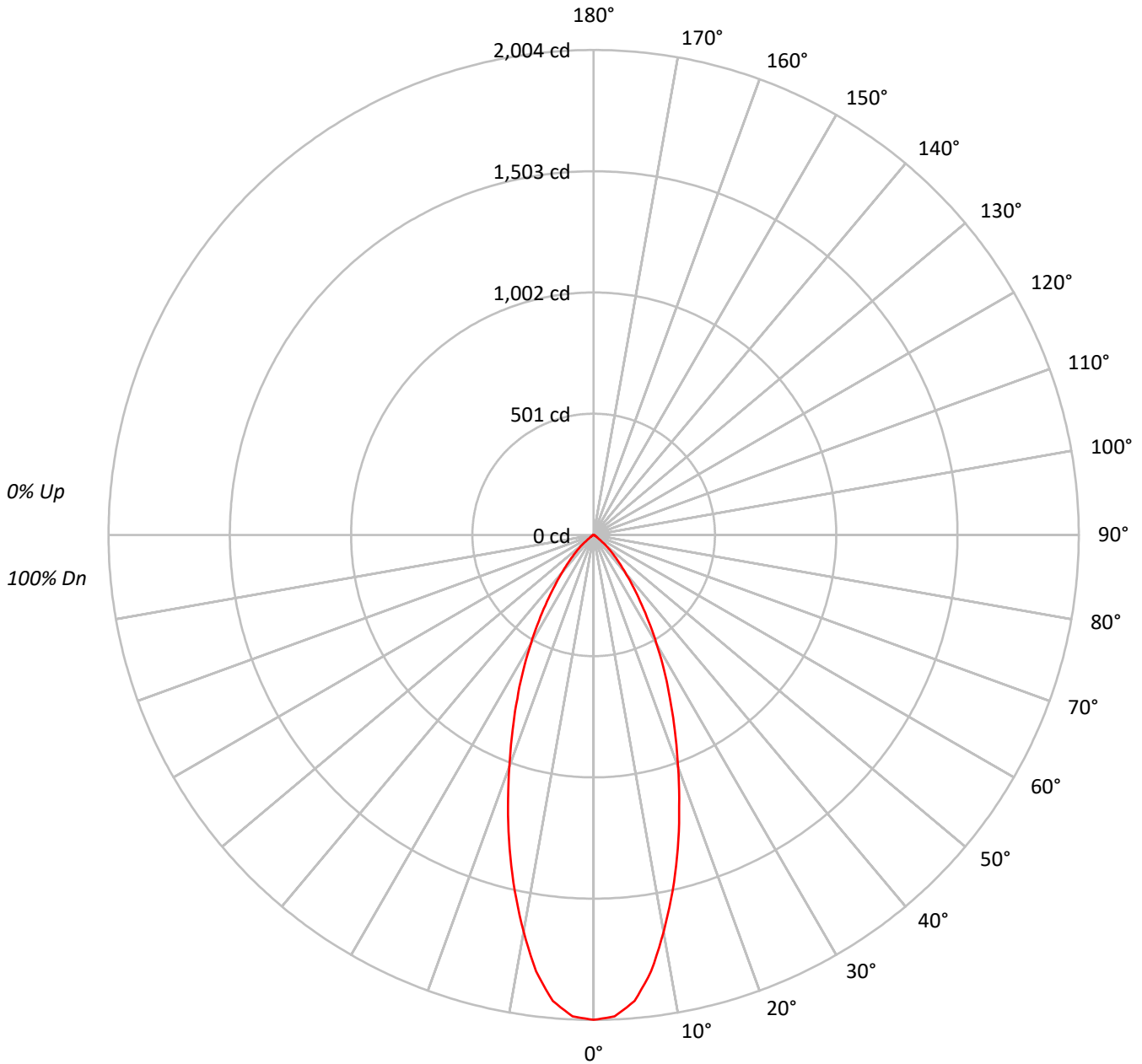
Lumens per Lamp: N/A  
Luminaire Lumens: 1217.9 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	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°	109838
5°	106400
10°	92684
15°	76192
20°	59388
25°	45136
30°	32834
35°	22372
40°	14434
45°	8947
50°	4503
55°	1854
60°	1064
65°	415
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8947 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.8	14.4
10°-20°	370.8	30.4
20°-30°	342.5	28.1
30°-40°	212.6	17.5
40°-50°	92.0	7.6
50°-60°	20.5	1.7
60°-70°	3.8	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°	889.1	73.0
0°-40°	1101.7	90.5
0°-60°	1214.1	99.7
0°-90°	1217.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1217.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2004	
5°	1934	176
15°	1342	371
25°	746	342
35°	334	213
45°	115	92
55°	19	20
65°	3	4
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2003.6
2.5°	1991.7
5°	1933.5
7.5°	1819.2
10°	1665.0
12.5°	1506.5
15°	1342.5
17.5°	1175.4
20°	1018.0
22.5°	874.5
25°	746.2
27.5°	628.7
30°	518.7
32.5°	420.6
35°	334.3
37.5°	263.1
40°	201.7
42.5°	156.4
45°	115.4
47.5°	84.1
50°	52.8
52.5°	28.0
55°	19.4
57.5°	14.0
60°	9.7
62.5°	6.5
65°	3.2
67.5°	1.1
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

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)