

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: P640378

Luminaire Tested: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640378
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K
Description: ML56 RR, 25D TIR OPTIC, 6" BLACK BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

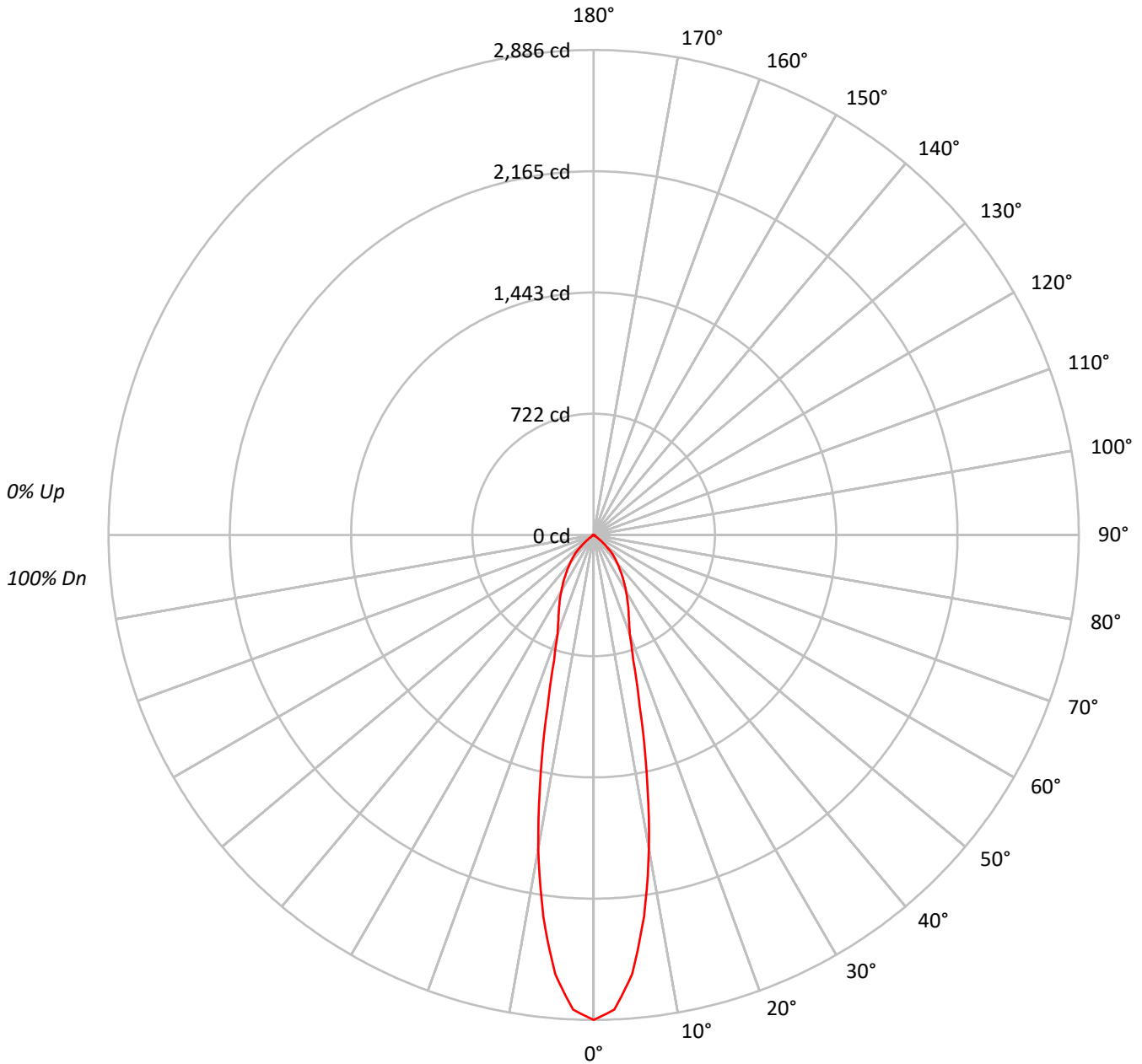
Lumens per Lamp: N/A
Luminaire Lumens: 1076.2 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P640378
CATALOG NUMBER: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640378

CATALOG NUMBER: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K

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			
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88			
3	103	97	92	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82			
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77			
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73			
6	90	81	76	72	88	80	75	71	79	74	71	78	74	70	76	73	70	69			
7	86	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65			
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62			
9	79	70	64	60	78	69	64	60	68	64	60	67	63	60	67	63	60	59			
10	76	67	61	58	75	66	61	57	65	61	57	65	60	57	64	60	57	56			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	158211
5°	144337
10°	105542
15°	60046
20°	36555
25°	29615
30°	24301
35°	19629
40°	15515
45°	11792
50°	5978
55°	1338
60°	822
65°	415
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11792 cd/sqm



TEST NUMBER: P640378

CATALOG NUMBER: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.6	21.1
10°-20°	304.0	28.2
20°-30°	225.5	21.0
30°-40°	184.0	17.1
40°-50°	112.4	10.4
50°-60°	20.3	1.9
60°-70°	3.3	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°	756.1	70.3
0°-40°	940.1	87.4
0°-60°	1072.9	99.7
0°-90°	1076.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1076.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2886	
5°	2623	227
15°	1058	304
25°	490	225
35°	293	184
45°	152	112
55°	14	20
65°	3	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640378

CATALOG NUMBER: ML5609LSNFL25D2W1E - 693BB - 900LM - 3000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2886.0
2.5°	2827.8
5°	2622.9
7.5°	2291.8
10°	1896.0
12.5°	1454.9
15°	1058.0
17.5°	780.8
20°	626.6
22.5°	546.8
25°	489.6
27.5°	434.6
30°	383.9
32.5°	337.6
35°	293.3
37.5°	253.4
40°	216.8
42.5°	184.4
45°	152.1
47.5°	108.9
50°	70.1
52.5°	30.2
55°	14.0
57.5°	9.7
60°	7.5
62.5°	5.4
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

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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)