

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: P886756

Luminaire Tested: ML310LSFL9FS1E-TIR4D55WFL-TL3RDSL-1000LM-5000K

Issue Date: 7/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886756  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL9FS1E-TIR4D55WFL-TL3RDSL-1000LM-5000K  
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

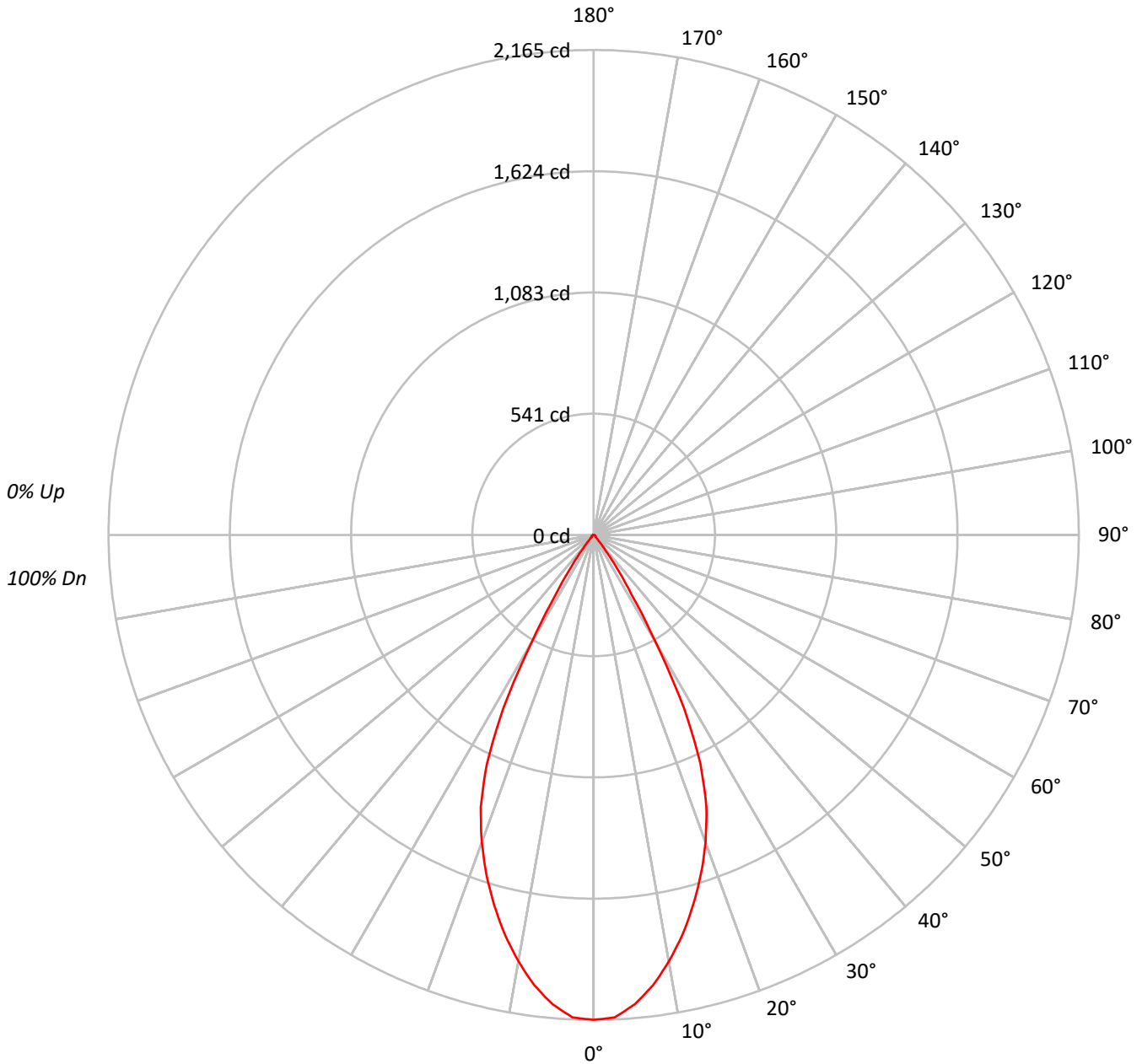
Lumens per Lamp: N/A  
Luminaire Lumens: 1327.8 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 0.8 / 0.8 / 0.76  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.8  
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	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94					94			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89					89			
3	104	99	94	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84					84			
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80					80			
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75					75			
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71					71			
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68					68			
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	68	66	65					65			
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	61					61			
10	78	69	64	60	77	68	64	60	68	63	60	67	63	60	66	62	60	59					59			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	474677
5°	462975
10°	430431
15°	388879
20°	340556
25°	272677
30°	139313
35°	46204
40°	12280
45°	4311
50°	3957
55°	3976
60°	4079
65°	3580
70°	3719
75°	3897
80°	4420
85°	3019

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 80°  
 Luminance: 4420 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.3	14.7
10°-20°	477.0	35.9
20°-30°	488.0	36.7
30°-40°	131.0	9.9
40°-50°	13.8	1.0
50°-60°	9.1	0.7
60°-70°	7.3	0.5
70°-80°	4.9	0.4
80°-90°	1.4	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°	1160.4	87.4
0°-40°	1291.4	97.3
0°-60°	1314.2	99.0
0°-90°	1327.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1327.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2165	
5°	2103	195
15°	1713	477
25°	1127	488
35°	173	131
45°	14	14
55°	10	9
65°	7	7
75°	5	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2164.7
2.5°	2155.5
5°	2103.3
7.5°	2028.1
10°	1933.1
12.5°	1828.8
15°	1713.0
17.5°	1590.2
20°	1459.4
22.5°	1315.7
25°	1127.0
27.5°	874.5
30°	550.2
32.5°	313.9
35°	172.6
37.5°	89.2
40°	42.9
42.5°	18.5
45°	13.9
47.5°	12.7
50°	11.6
52.5°	10.4
55°	10.4
57.5°	9.3
60°	9.3
62.5°	8.1
65°	6.9
67.5°	6.9
70°	5.8
72.5°	5.8
75°	4.6
77.5°	3.5
80°	3.5
82.5°	2.3
85°	1.2
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)