

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: P887097

Luminaire Tested: ML412LSFLD2W1E-TIR4D25NFL-TL4RDSL-600LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P887097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFLD2W1E-TIR4D25NFL-TL4RDSL-600LM-3000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) D2W LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 713.9 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.51
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

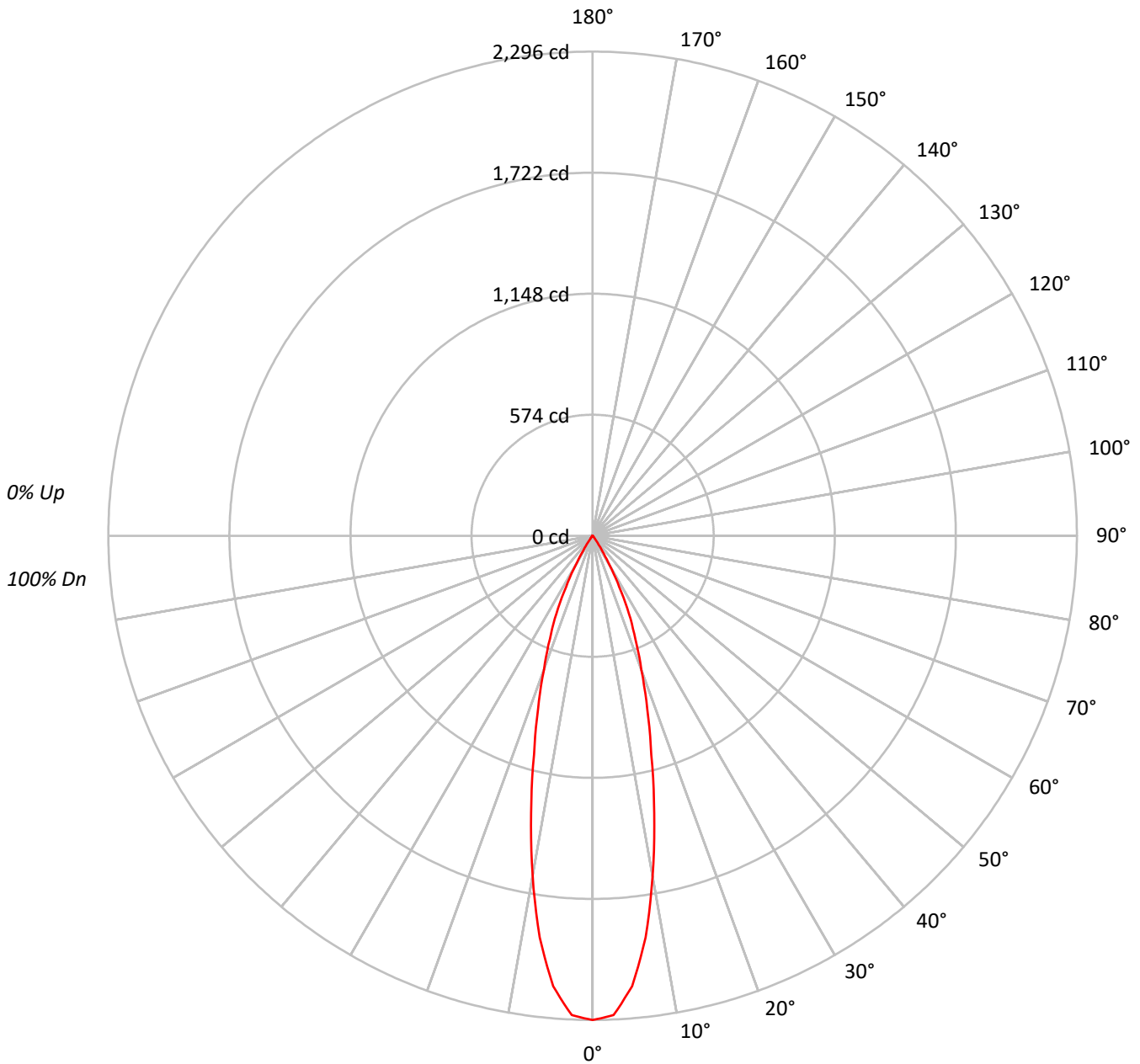
Input Watts (W): 9.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				100															
1	115	112	110	109	112	110	108	107	106	105	104	103	101	100	99	98	98	96				96															
2	110	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92				92															
3	107	101	98	94	105	100	97	94	98	95	92	95	93	91	93	91	89	88				88															
4	103	97	93	89	101	96	92	89	94	90	88	92	89	87	90	88	86	85				85															
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	82	81				81															
6	96	89	84	81	95	88	84	81	87	83	80	86	82	80	84	82	79	78				78															
7	93	86	81	78	92	85	81	78	84	80	77	83	79	77	82	79	76	75				75															
8	90	82	78	75	89	82	78	75	81	77	74	80	77	74	79	76	74	73				73															
9	87	79	75	72	86	79	75	72	78	74	72	77	74	71	77	74	71	70				70															
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68				68															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	283251
5°	265463
10°	205220
15°	137134
20°	88680
25°	55405
30°	22817
35°	6159
40°	1868
45°	1064
50°	633
55°	602
60°	419
65°	321
70°	397
75°	286
80°	426
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1064 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	26.4
10°-20°	300.6	42.1
20°-30°	181.5	25.4
30°-40°	34.3	4.8
40°-50°	4.9	0.7
50°-60°	2.3	0.3
60°-70°	1.3	0.2
70°-80°	0.7	0.1
80°-90°	0.1	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°	670.3	93.9
0°-40°	704.6	98.7
0°-60°	711.8	99.7
0°-90°	713.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	713.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2296	
5°	2144	188
15°	1074	301
25°	407	181
35°	41	34
45°	6	5
55°	3	2
65°	1	1
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2296.4
2.5°	2275.4
5°	2144.0
7.5°	1921.3
10°	1638.5
12.5°	1347.9
15°	1073.9
17.5°	860.7
20°	675.6
22.5°	529.8
25°	407.1
27.5°	273.5
30°	160.2
32.5°	85.1
35°	40.9
37.5°	17.7
40°	11.6
42.5°	7.7
45°	6.1
47.5°	4.4
50°	3.3
52.5°	2.8
55°	2.8
57.5°	2.2
60°	1.7
62.5°	1.7
65°	1.1
67.5°	1.1
70°	1.1
72.5°	0.6
75°	0.6
77.5°	0.6
80°	0.6
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

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— 0°-180°

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(END OF REPORT)