

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: P887119

Luminaire Tested: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-3000K

Issue Date: 7/9/2024

Test Information

Test Method: LM-79-2019
Report Number: P887119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/9/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-3000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) D2W LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

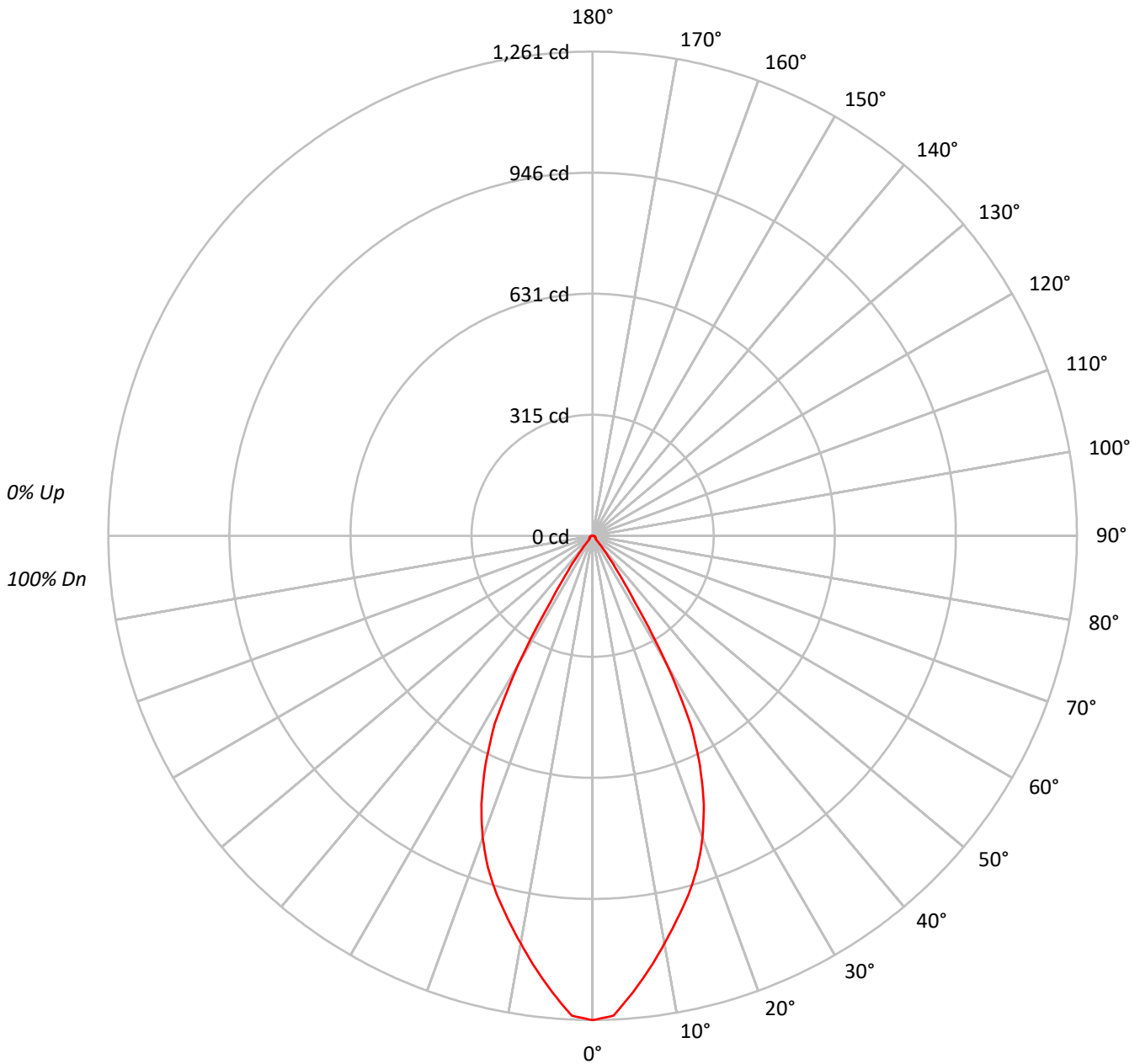
Lumens per Lamp: N/A
Luminaire Lumens: 792.8 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.78
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.4
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: P887119
CATALOG NUMBER: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P887119

CATALOG NUMBER: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-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	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83			
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74			
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66			
8	83	74	69	65	82	74	69	65	73	68	65	72	67	64	71	67	64	63			
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60			
10	76	67	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	155588
5°	147912
10°	135018
15°	123342
20°	109827
25°	89974
30°	54749
35°	16714
40°	4364
45°	2023
50°	2111
55°	2129
60°	2171
65°	2247
70°	2200
75°	2383
80°	2344
85°	2406

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 85°
 Luminance: 2406 cd/sqm



TEST NUMBER: P887119

CATALOG NUMBER: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	13.9
10°-20°	269.5	34.0
20°-30°	292.7	36.9
30°-40°	86.7	10.9
40°-50°	10.5	1.3
50°-60°	8.9	1.1
60°-70°	7.4	0.9
70°-80°	5.0	0.6
80°-90°	1.7	0.2
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°	672.5	84.8
0°-40°	759.2	95.8
0°-60°	778.6	98.2
0°-90°	792.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	792.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1261	
5°	1195	110
15°	966	269
25°	661	293
35°	111	87
45°	12	11
55°	10	9
65°	8	7
75°	5	5
85°	2	2
90°	0	



TEST NUMBER: P887119

CATALOG NUMBER: ML412LSFLD2W1E-TIR4D55WFL-TL4RDMW-600LM-3000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1261.4
2.5°	1250.9
5°	1194.6
7.5°	1136.6
10°	1078.0
12.5°	1021.1
15°	965.9
17.5°	906.3
20°	836.7
22.5°	756.6
25°	661.1
27.5°	551.7
30°	384.4
32.5°	203.2
35°	111.0
37.5°	58.0
40°	27.1
42.5°	13.3
45°	11.6
47.5°	11.0
50°	11.0
52.5°	10.5
55°	9.9
57.5°	9.4
60°	8.8
62.5°	8.3
65°	7.7
67.5°	6.6
70°	6.1
72.5°	5.5
75°	5.0
77.5°	3.9
80°	3.3
82.5°	2.2
85°	1.7
87.5°	0.6
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)