

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: P886867

Luminaire Tested: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

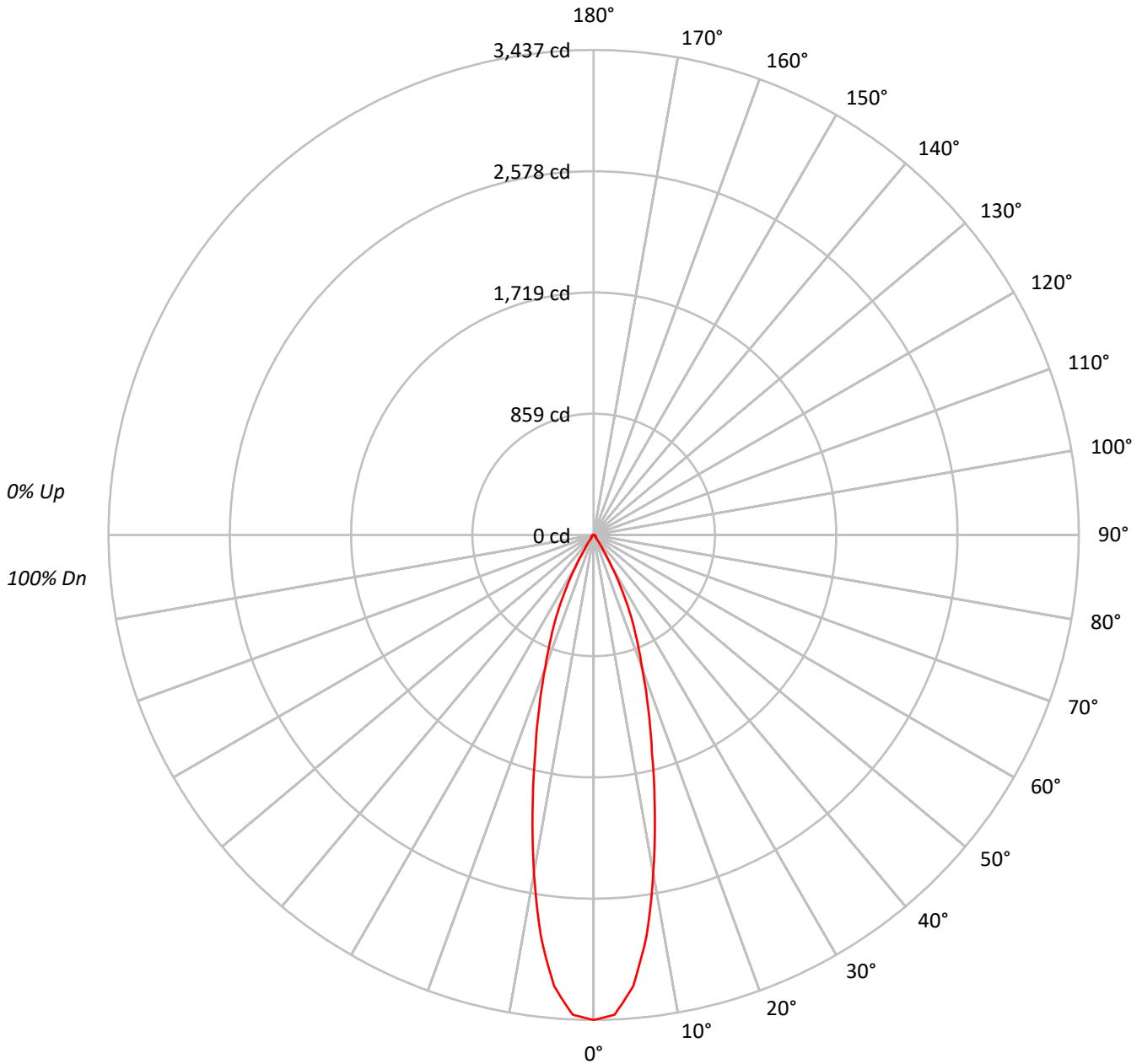
Lumens per Lamp: N/A
Luminaire Lumens: 1107.5 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.51
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 17.6
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



TEST NUMBER: P886867
CATALOG NUMBER: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P886867

CATALOG NUMBER: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K

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	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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																											
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																											
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																											
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82																											
5	98	91	86	83	96	90	86	82	88	84	82	87	83	81	85	82	80	79																											
6	94	87	82	79	93	86	82	78	85	81	78	84	80	77	82	79	77	76																											
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73																											
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70																											
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68																											
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65																											

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	423951
5°	397464
10°	304830
15°	203893
20°	131800
25°	82352
30°	34353
35°	10059
40°	4170
45°	3489
50°	3531
55°	3591
60°	3503
65°	3648
70°	3606
75°	3574
80°	3552
85°	3538

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 4807 cd/sqm



TEST NUMBER: P886867

CATALOG NUMBER: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.0	25.4
10°-20°	446.8	40.3
20°-30°	270.5	24.4
30°-40°	54.9	5.0
40°-50°	16.0	1.4
50°-60°	14.9	1.3
60°-70°	12.3	1.1
70°-80°	8.2	0.7
80°-90°	3.0	0.3
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°	998.3	90.1
0°-40°	1053.2	95.1
0°-60°	1084.1	97.9
0°-90°	1107.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1107.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3437	
5°	3210	281
15°	1597	447
25°	605	271
35°	67	55
45°	20	16
55°	17	15
65°	12	12
75°	8	8
85°	2	3
90°	0	



TEST NUMBER: P886867
CATALOG NUMBER: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3500K

CANDELA DISTRIBUTION (FULL):

0°	
0°	3437.1
2.5°	3403.7
5°	3210.1
7.5°	2868.7
10°	2433.8
12.5°	1999.8
15°	1596.7
17.5°	1281.2
20°	1004.1
22.5°	790.4
25°	605.1
27.5°	409.0
30°	241.2
32.5°	131.0
35°	66.8
37.5°	34.2
40°	25.9
42.5°	22.5
45°	20.0
47.5°	18.4
50°	18.4
52.5°	17.5
55°	16.7
57.5°	15.9
60°	14.2
62.5°	13.4
65°	12.5
67.5°	11.7
70°	10.0
72.5°	9.2
75°	7.5
77.5°	6.7
80°	5.0
82.5°	4.2
85°	2.5
87.5°	1.7
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)