

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: P886904

Luminaire Tested: ML412LSFL95FS1E-TIR4D40FL-TL4RDSL-1020LM-5000K

Issue Date: 7/9/2024

Test Information

Test Method: LM-79-2019
Report Number: P886904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/9/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFL95FS1E-TIR4D40FL-TL4RDSL-1020LM-5000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1368.8 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.63
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

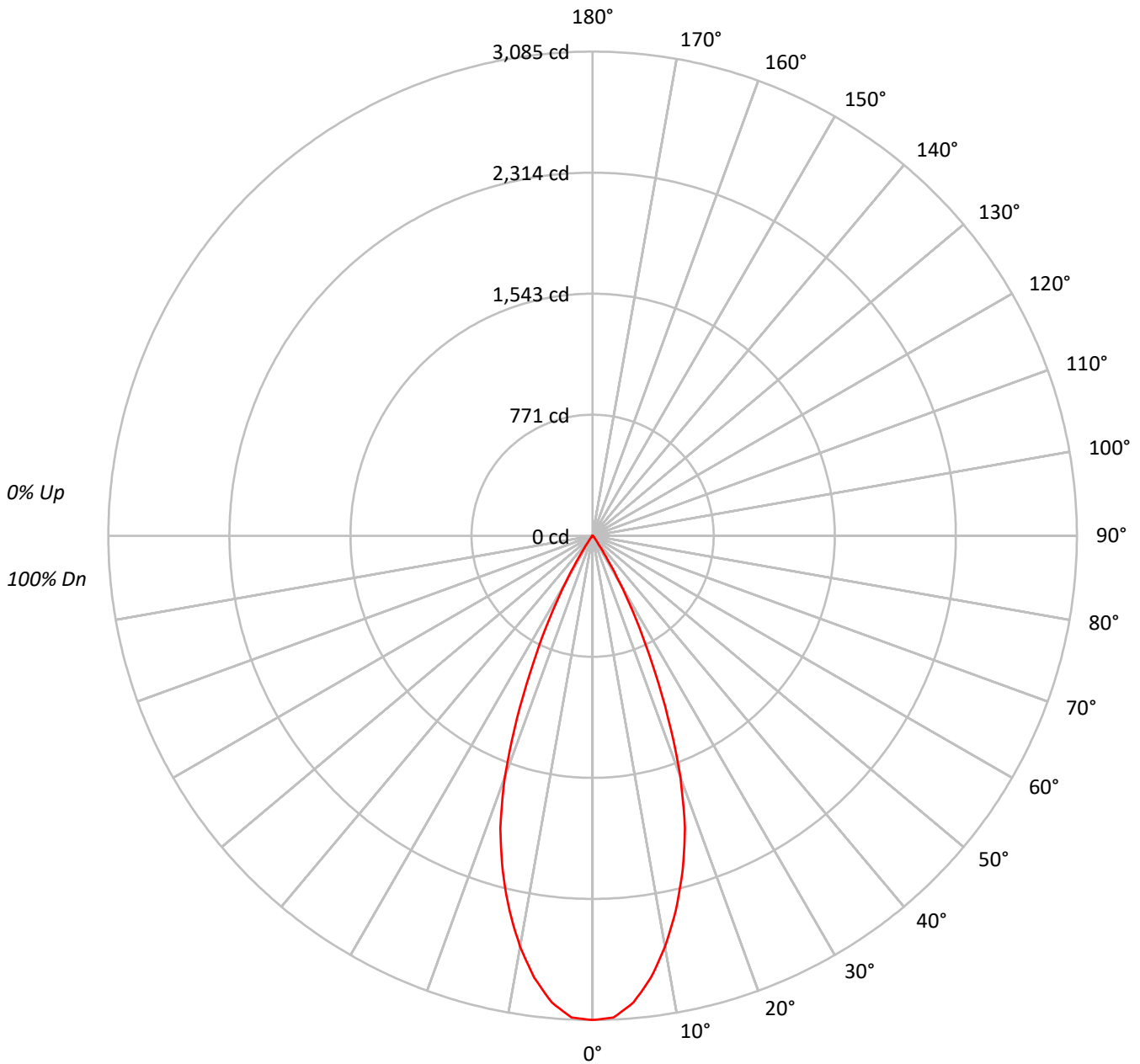
Input Watts (W): 17.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P886904

CATALOG NUMBER: ML412LSFL95FS1E-TIR4D40FL-TL4RDSL-1020LM-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P886904

CATALOG NUMBER: ML412LSFL95FS1E-TIR4D40FL-TL4RD5L-1020LM-5000K

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	115	112	110	108	112	110	108	106	106	105	103		102	101	100		99	98	97	96
2	110	106	103	100	108	104	101	99	101	99	97		98	96	95		96	94	93	91
3	106	101	97	94	104	99	96	93	97	94	91		95	92	90		92	90	89	87
4	102	96	92	88	100	95	91	88	93	89	87		91	88	86		89	87	85	83
5	98	92	87	83	97	91	86	83	89	85	82		88	84	82		86	83	81	80
6	95	88	83	79	93	87	82	79	85	82	79		84	81	78		83	80	78	76
7	91	84	79	76	90	83	79	76	82	78	75		81	77	75		80	77	74	73
8	88	81	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	74	70	67	81	74	70	67	73	69	66		73	69	66		72	69	66	65

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	380509
5°	369544
10°	332923
15°	282491
20°	214258
25°	121126
30°	48568
35°	9471
40°	2641
45°	1116
50°	691
55°	581
60°	444
65°	525
70°	325
75°	429
80°	639
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1116 cd/sqm

TEST NUMBER: P886904
 CATALOG NUMBER: ML412LSFL95FS1E-TIR4D40FL-TL4RDSL-1020LM-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.3	20.0
10°-20°	606.2	44.3
20°-30°	413.4	30.2
30°-40°	64.1	4.7
40°-50°	5.7	0.4
50°-60°	2.6	0.2
60°-70°	1.4	0.1
70°-80°	1.0	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°	1293.8	94.5
0°-40°	1357.9	99.2
0°-60°	1366.2	99.8
0°-90°	1368.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1368.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3085	
5°	2985	274
15°	2212	606
25°	890	413
35°	63	64
45°	6	6
55°	3	3
65°	2	1
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P886904

CATALOG NUMBER: ML412LSFL95FS1E-TIR4D40FL-TL4RDSL-1020LM-5000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	3084.9
2.5°	3073.0
5°	2984.6
7.5°	2840.5
10°	2658.1
12.5°	2446.6
15°	2212.2
17.5°	1955.1
20°	1632.3
22.5°	1255.7
25°	890.0
27.5°	592.7
30°	341.0
32.5°	157.8
35°	62.9
37.5°	31.9
40°	16.4
42.5°	9.1
45°	6.4
47.5°	4.6
50°	3.6
52.5°	3.6
55°	2.7
57.5°	2.7
60°	1.8
62.5°	1.8
65°	1.8
67.5°	0.9
70°	0.9
72.5°	0.9
75°	0.9
77.5°	0.9
80°	0.9
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)