

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: P886873

Luminaire Tested: ML412LSFL95FS1E-TIR4D25NFL-TL4RDSL-1020LM-4000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886873
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: ML412LSFL95FS1E-TIR4D25NFL-TL4RDSL-1020LM-4000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

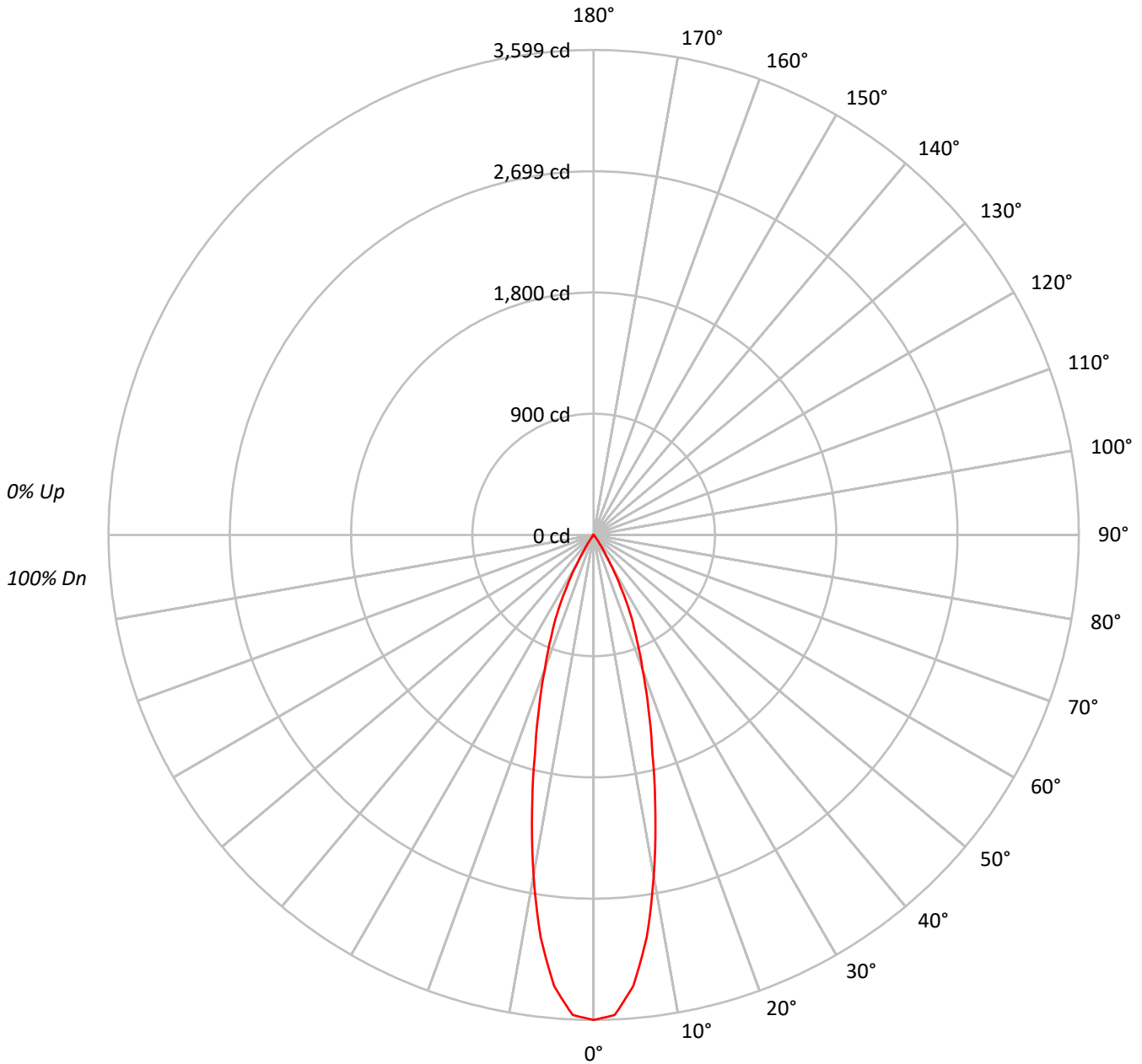
Lumens per Lamp: N/A
Luminaire Lumens: 1118.7 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.51
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	443970
5°	416074
10°	321650
15°	214939
20°	138993
25°	86843
30°	35763
35°	9652
40°	2930
45°	1657
50°	998
55°	925
60°	641
65°	496
70°	613
75°	429
80°	639
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.9	26.4
10°-20°	471.2	42.1
20°-30°	284.4	25.4
30°-40°	53.7	4.8
40°-50°	7.7	0.7
50°-60°	3.6	0.3
60°-70°	2.0	0.2
70°-80°	1.1	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°	1050.6	93.9
0°-40°	1104.3	98.7
0°-60°	1115.5	99.7
0°-90°	1118.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3599	
5°	3360	295
15°	1683	471
25°	638	284
35°	64	54
45°	10	8
55°	4	4
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3599.4
2.5°	3566.5
5°	3360.4
7.5°	3011.4
10°	2568.1
12.5°	2112.7
15°	1683.2
17.5°	1349.0
20°	1058.9
22.5°	830.4
25°	638.1
27.5°	428.6
30°	251.1
32.5°	133.3
35°	64.1
37.5°	27.7
40°	18.2
42.5°	12.1
45°	9.5
47.5°	6.9
50°	5.2
52.5°	4.3
55°	4.3
57.5°	3.5
60°	2.6
62.5°	2.6
65°	1.7
67.5°	1.7
70°	1.7
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

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— 0°-180°

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(END OF REPORT)