

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: P886866

Luminaire Tested: ML412LSFL95FS1E-TIR4D25NFL-TL4RDMW-1020LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886866
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-3000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

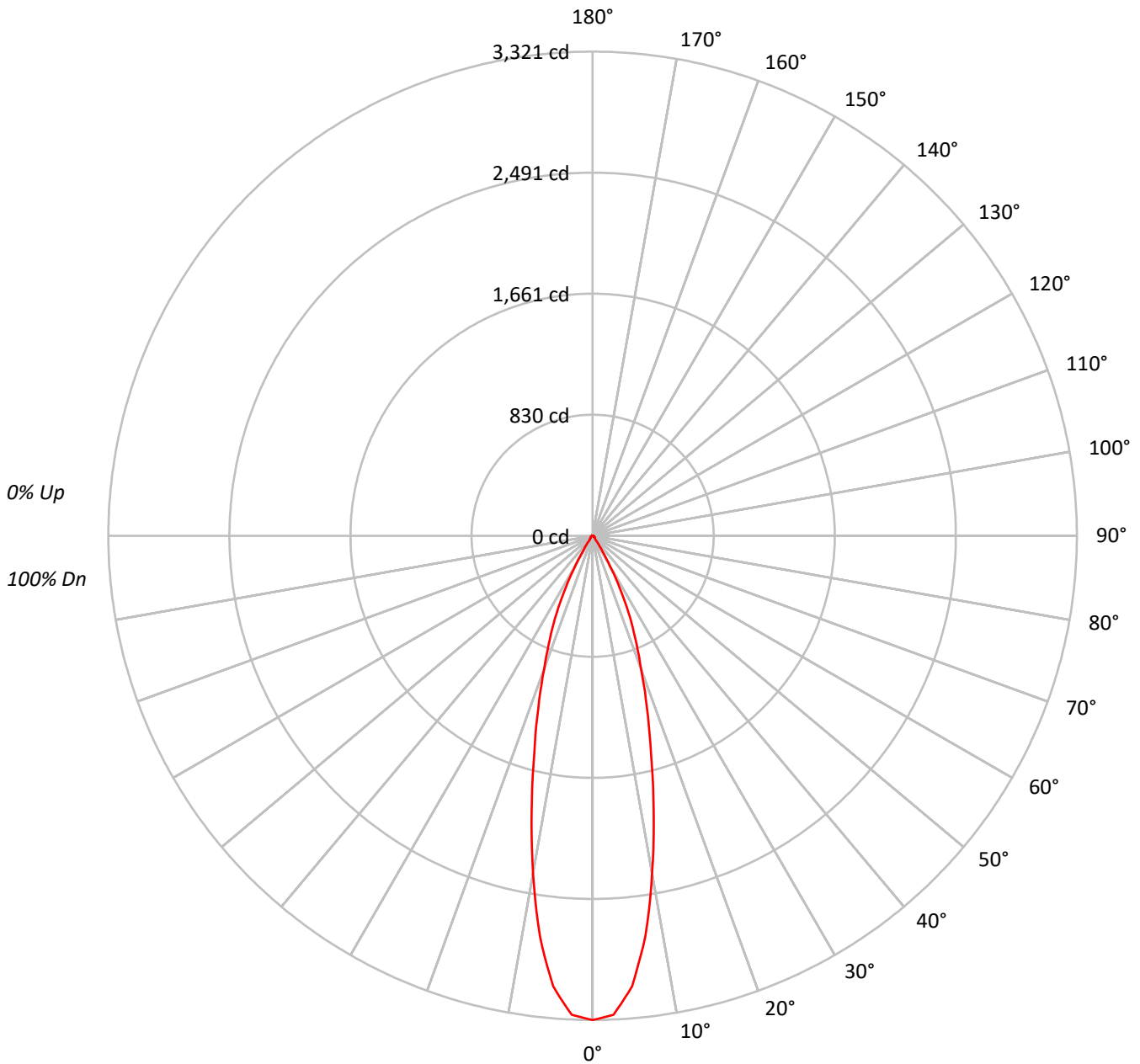
Lumens per Lamp: N/A
Luminaire Lumens: 1070.1 lumens
Efficiency: N/A
Efficacy: 60.8 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.51
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



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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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95				95															
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90				90															
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86				86															
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82				82															
5	98	91	86	83	96	90	86	82	88	84	82	87	83	81	85	82	80	79				79															
6	94	87	82	79	93	86	82	78	85	81	78	84	80	77	82	79	77	76				76															
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73				73															
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70				70															
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68				68															
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65				65															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	409655
5°	384055
10°	294559
15°	197023
20°	127350
25°	79576
30°	33200
35°	9712
40°	4025
45°	3384
50°	3396
55°	3462
60°	3380
65°	3532
70°	3498
75°	3479
80°	3410
85°	3397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 4524 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	25.4
10°-20°	431.7	40.3
20°-30°	261.4	24.4
30°-40°	53.0	5.0
40°-50°	15.5	1.4
50°-60°	14.3	1.3
60°-70°	11.9	1.1
70°-80°	7.9	0.7
80°-90°	2.8	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°	964.7	90.1
0°-40°	1017.7	95.1
0°-60°	1047.5	97.9
0°-90°	1070.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1070.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3321	
5°	3102	272
15°	1543	432
25°	585	261
35°	64	53
45°	19	15
55°	16	14
65°	12	12
75°	7	8
85°	2	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3321.2
2.5°	3288.9
5°	3101.8
7.5°	2772.0
10°	2351.8
12.5°	1932.4
15°	1542.9
17.5°	1238.0
20°	970.2
22.5°	763.8
25°	584.7
27.5°	395.2
30°	233.1
32.5°	126.6
35°	64.5
37.5°	33.1
40°	25.0
42.5°	21.8
45°	19.4
47.5°	17.7
50°	17.7
52.5°	16.9
55°	16.1
57.5°	15.3
60°	13.7
62.5°	12.9
65°	12.1
67.5°	11.3
70°	9.7
72.5°	8.9
75°	7.3
77.5°	6.5
80°	4.8
82.5°	4.0
85°	2.4
87.5°	1.6
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

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— 0°-180°

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