

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: P886930

Luminaire Tested: ML412LSFL95FS1E-TIR4D55WFL-TL4RDSL-1020LM-2700K

Issue Date: 7/9/2024

Test Information

Test Method: LM-79-2019
Report Number: P886930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/9/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFL95FS1E-TIR4D55WFL-TL4RDSL-1020LM-2700K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT
Ballast/Driver: -

Summary

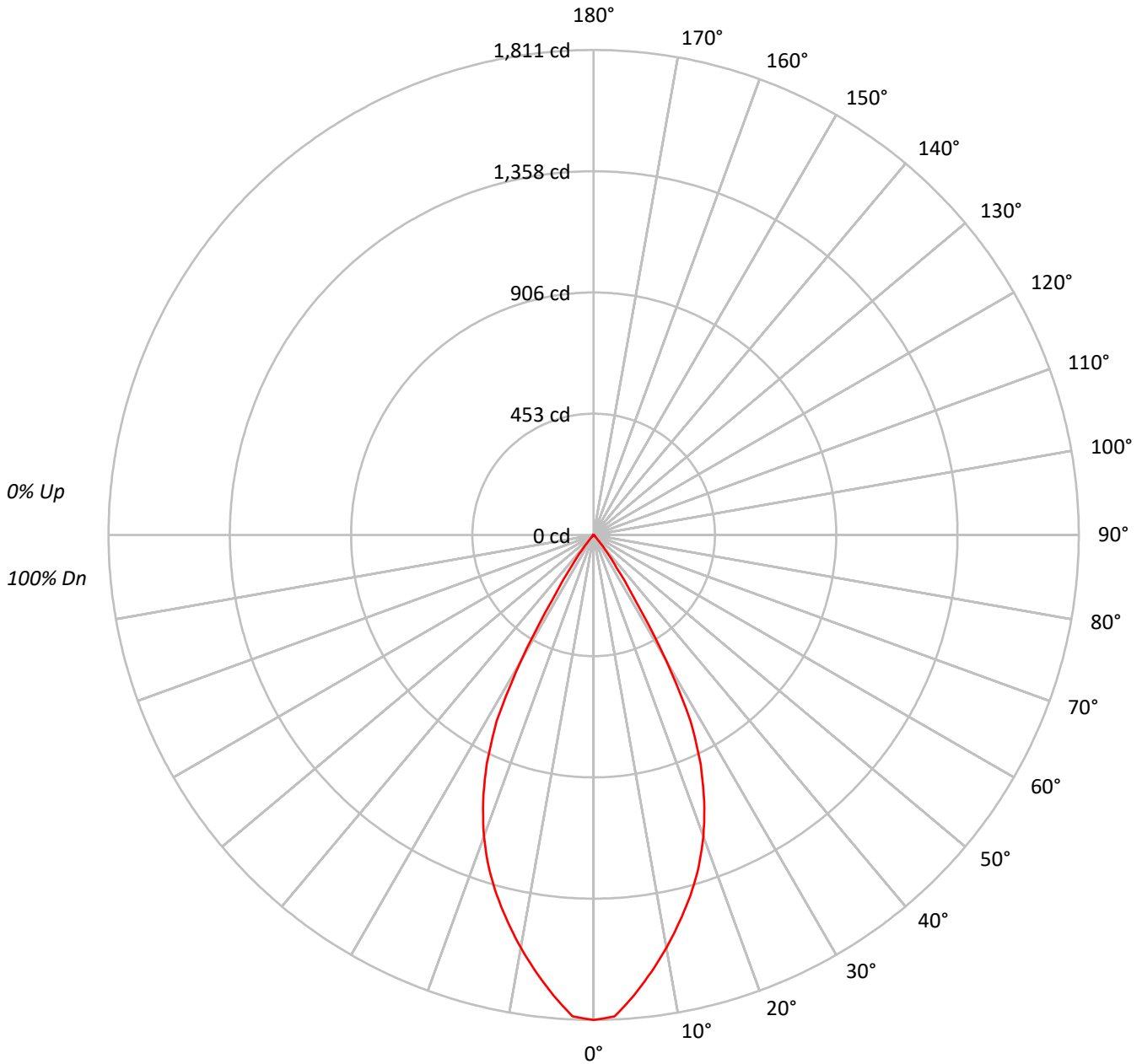
Lumens per Lamp: N/A
Luminaire Lumens: 1098.2 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.77
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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					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	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	96	95				
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90				
3	105	99	94	91	103	98	93	90	95	92	89	93	90	87	90	88	86	85				
4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	81	80				
5	96	88	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76				
6	92	84	79	75	90	83	78	75	82	77	74	80	77	74	79	76	73	72				
7	88	80	74	71	87	79	74	71	78	73	70	77	73	70	76	72	69	68				
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65				
9	81	72	67	64	80	72	67	64	71	66	63	70	66	63	69	66	63	62				
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	67	63	60	59				

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	223416
5°	213708
10°	196089
15°	178048
20°	157238
25°	128530
30°	77010
35°	22737
40°	4911
45°	1221
50°	902
55°	667
60°	567
65°	467
70°	289
75°	381
80°	568
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1221 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.7	14.5
10°-20°	388.7	35.4
20°-30°	416.8	38.0
30°-40°	119.7	10.9
40°-50°	7.6	0.7
50°-60°	3.0	0.3
60°-70°	1.7	0.2
70°-80°	0.8	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°	965.2	87.9
0°-40°	1084.9	98.8
0°-60°	1095.5	99.8
0°-90°	1098.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1811	
5°	1726	160
15°	1394	389
25°	944	417
35°	151	120
45°	7	8
55°	3	3
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1811.3
2.5°	1799.6
5°	1726.0
7.5°	1646.2
10°	1565.6
12.5°	1480.3
15°	1394.3
17.5°	1301.9
20°	1197.9
22.5°	1079.0
25°	944.4
27.5°	783.2
30°	540.7
32.5°	287.9
35°	151.0
37.5°	75.1
40°	30.5
42.5°	10.2
45°	7.0
47.5°	5.5
50°	4.7
52.5°	3.9
55°	3.1
57.5°	3.1
60°	2.3
62.5°	2.3
65°	1.6
67.5°	1.6
70°	0.8
72.5°	0.8
75°	0.8
77.5°	0.8
80°	0.8
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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