

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: P886931

Luminaire Tested: ML412LSFL95FS1E-TIR4D55WFL-TL4RDSL-1020LM-3000K

Issue Date: 7/9/2024

Test Information

Test Method: LM-79-2019
Report Number: P886931
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-3000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

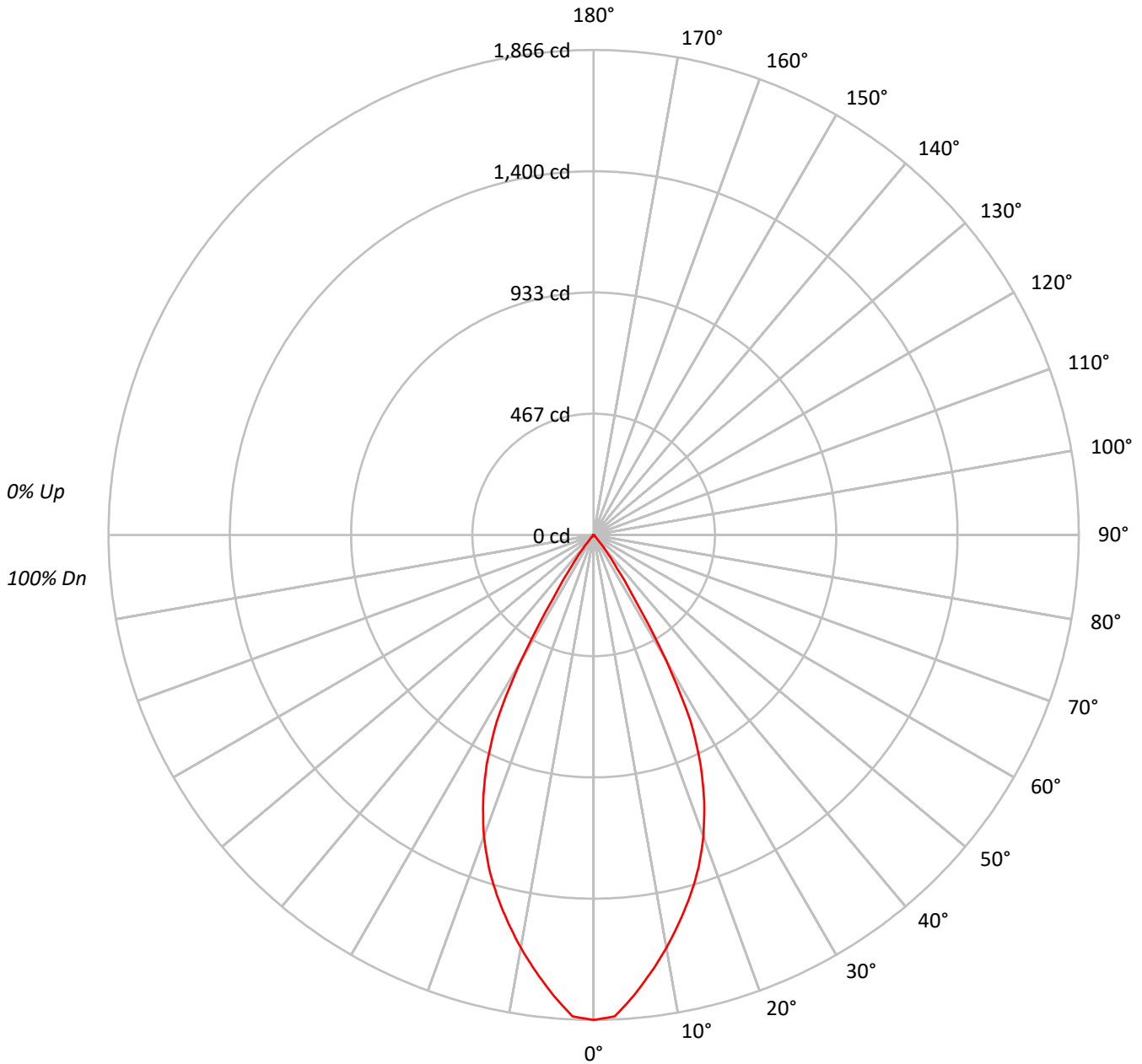
Lumens per Lamp: N/A
Luminaire Lumens: 1131.4 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.77
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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	61	77	69	64	60	68	63	60		67	63	60		67	63	60	59

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	230175
5°	220171
10°	202013
15°	183424
20°	161990
25°	132409
30°	79332
35°	23430
40°	5056
45°	1273
50°	921
55°	688
60°	592
65°	467
70°	289
75°	381
80°	568
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1273 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	14.5
10°-20°	400.4	35.4
20°-30°	429.4	38.0
30°-40°	123.4	10.9
40°-50°	7.8	0.7
50°-60°	3.1	0.3
60°-70°	1.8	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°	994.3	87.9
0°-40°	1117.7	98.8
0°-60°	1128.6	99.8
0°-90°	1131.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1131.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1866	
5°	1778	165
15°	1436	400
25°	973	429
35°	156	123
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°	1866.1
2.5°	1854.0
5°	1778.2
7.5°	1696.0
10°	1612.9
12.5°	1525.1
15°	1436.4
17.5°	1341.3
20°	1234.1
22.5°	1111.6
25°	972.9
27.5°	806.9
30°	557.0
32.5°	296.6
35°	155.6
37.5°	77.4
40°	31.4
42.5°	10.5
45°	7.3
47.5°	5.6
50°	4.8
52.5°	4.0
55°	3.2
57.5°	3.2
60°	2.4
62.5°	2.4
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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