

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: P886926

Luminaire Tested: ML412LSFL95FS1E-TIR4D55WFL-TL4RDMW-1020LM-3000K

Issue Date: 7/9/2024

Test Information

Test Method: LM-79-2019
Report Number: P886926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/9/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML412LSFL95FS1E-TIR4D55WFL-TL4RDMW-1020LM-3000K
Description: 4IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

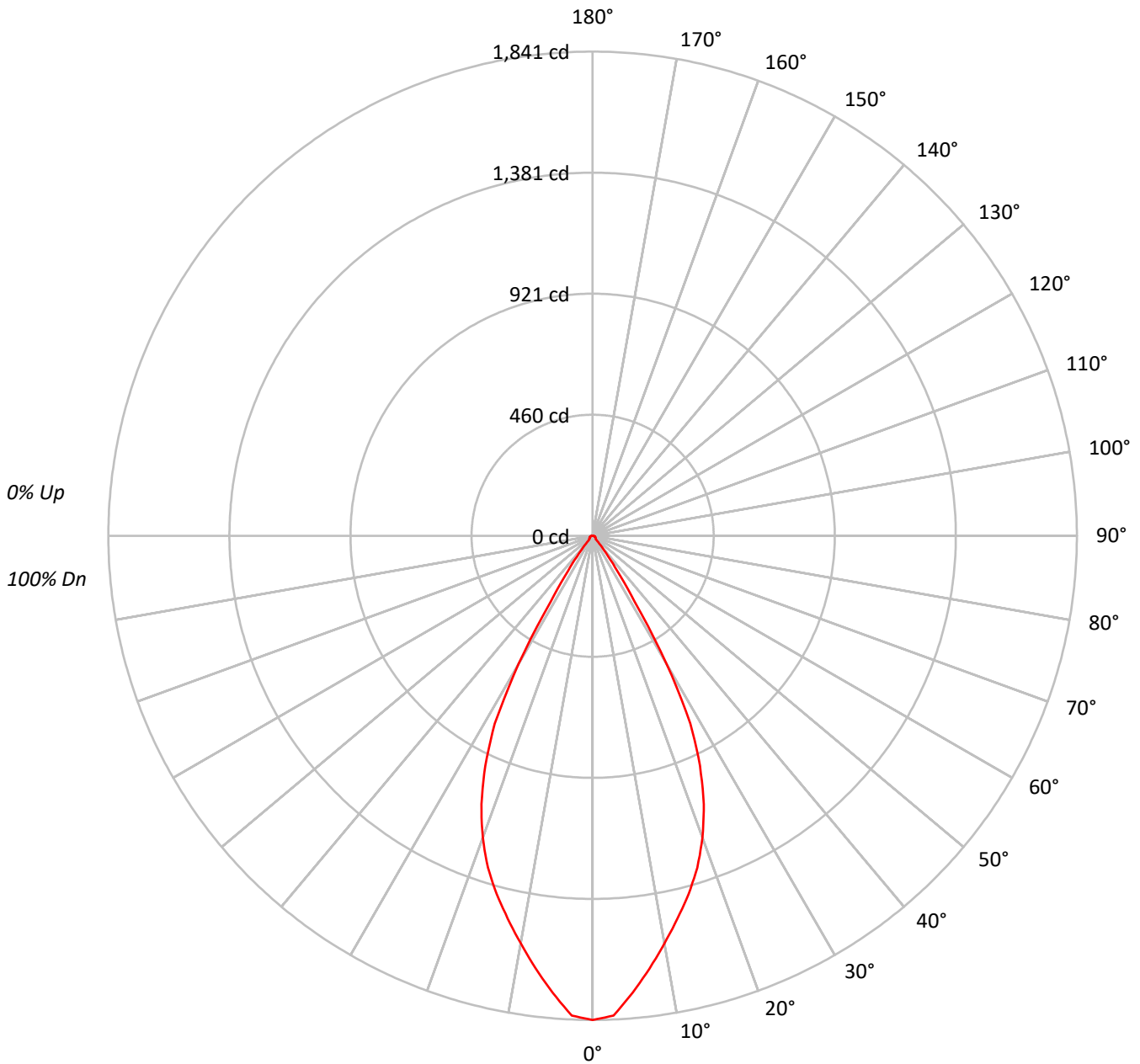
Lumens per Lamp: N/A
Luminaire Lumens: 1157.2 lumens
Efficiency: N/A
Efficacy: 65.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.78
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83			
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74			
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66			
8	83	74	69	65	82	74	69	65	73	68	65	72	67	64	71	67	64	63			
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60			
10	76	67	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	227116
5°	215899
10°	197091
15°	180052
20°	160310
25°	131333
30°	79916
35°	24394
40°	6360
45°	2948
50°	3089
55°	3118
60°	3182
65°	3298
70°	3210
75°	3479
80°	3410
85°	3397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 75°
 Luminance: 3479 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.1	13.9
10°-20°	393.4	34.0
20°-30°	427.2	36.9
30°-40°	126.6	10.9
40°-50°	15.3	1.3
50°-60°	13.0	1.1
60°-70°	10.9	0.9
70°-80°	7.3	0.6
80°-90°	2.4	0.2
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°	981.7	84.8
0°-40°	1108.2	95.8
0°-60°	1136.5	98.2
0°-90°	1157.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1157.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1841	
5°	1744	161
15°	1410	393
25°	965	427
35°	162	127
45°	17	15
55°	14	13
65°	11	11
75°	7	7
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1841.3
2.5°	1825.9
5°	1743.7
7.5°	1659.1
10°	1573.6
12.5°	1490.6
15°	1410.0
17.5°	1322.9
20°	1221.3
22.5°	1104.4
25°	965.0
27.5°	805.3
30°	561.1
32.5°	296.7
35°	162.0
37.5°	84.6
40°	39.5
42.5°	19.3
45°	16.9
47.5°	16.1
50°	16.1
52.5°	15.3
55°	14.5
57.5°	13.7
60°	12.9
62.5°	12.1
65°	11.3
67.5°	9.7
70°	8.9
72.5°	8.1
75°	7.3
77.5°	5.6
80°	4.8
82.5°	3.2
85°	2.4
87.5°	0.8
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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