

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: P1046640

Luminaire Tested: FMNL1112FS5--940

Issue Date: 07/03/2025

Test Information

Test Method: LM-79-2019
Report Number: P1046640
Test Lab: Cooper lighting solutions
Issue Date: 07/03/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: FMNL1112FS5--940
Description: HALO 11 inch 90 CRI COLOR SELECTABLE flush mount White Trim FIXTURE with night light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

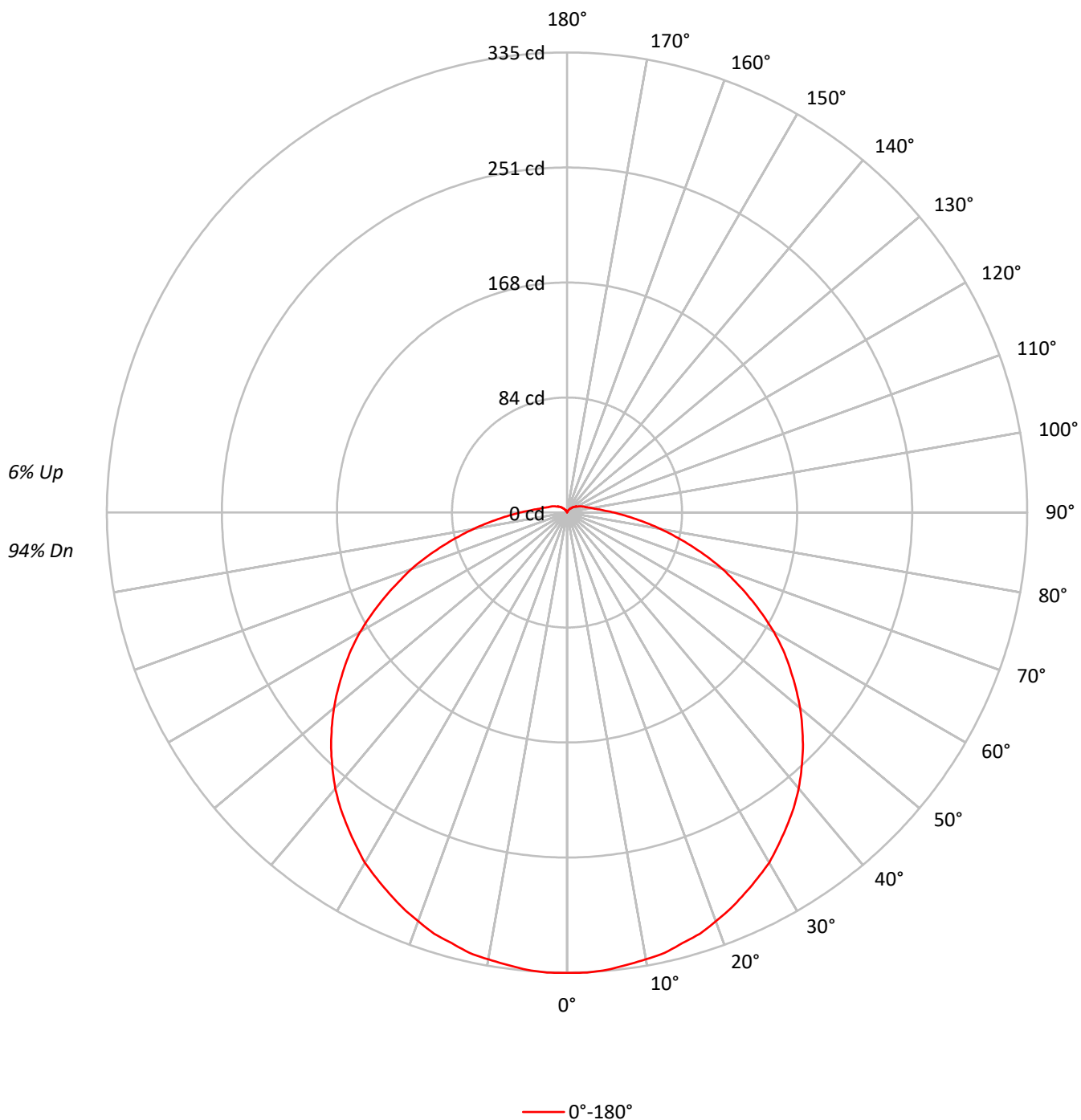
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1169.5 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.3 / 1.43
Luminous Opening: Circular (Dia: 0.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
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: 28.75 FT

TEST NUMBER: P1046640
CATALOG NUMBER: FMNL1112FS5--940

Luminous Intensity Polar Plot





TEST NUMBER: P1046640

CATALOG NUMBER: FMNL1112FS5--940

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94		
1	106	100	96	91	102	98	93	89	92	89	85	87	84	82	83	80	78	76		
2	96	87	79	73	92	84	77	72	80	74	69	76	71	67	72	68	64	62		
3	87	76	67	60	84	73	65	59	70	63	57	66	60	55	63	58	54	51		
4	79	67	57	50	76	65	56	50	62	54	48	59	52	47	56	50	46	43		
5	73	59	50	43	70	58	49	42	55	47	41	52	46	40	50	44	39	37		
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	35	32		
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28		
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	25		
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	23		
10	50	37	29	23	49	36	28	23	35	28	23	33	27	23	32	26	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5673
5°	5678
10°	5677
15°	5686
20°	5704
25°	5715
30°	5752
35°	5761
40°	5796
45°	5812
50°	5833
55°	5847
60°	5885
65°	5873
70°	5961
75°	6099
80°	6723
85°	9435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 87.5°

Luminance: 15826 cd/sqm

TEST NUMBER: P1046640
CATALOG NUMBER: FMNL1112FS5--940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	2.7
10°-20°	91.8	7.9
20°-30°	141.3	12.1
30°-40°	174.7	14.9
40°-50°	187.4	16.0
50°-60°	177.3	15.2
60°-70°	145.4	12.4
70°-80°	99.2	8.5
80°-90°	54.3	4.6
90°-100°	27.1	2.3
100°-110°	16.0	1.4
110°-120°	10.6	0.9
120°-130°	6.7	0.6
130°-140°	3.8	0.3
140°-150°	1.7	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	264.9	22.7
0°-40°	439.6	37.6
0°-60°	804.3	68.8
0°-90°	1103.2	94.3
90°-120°	53.7	4.6
90°-150°	65.8	5.6
90°-180°	66.0	5.6
0°-180°	1169.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	335	
5°	334	32
15°	325	92
25°	306	141
35°	279	175
45°	243	187
55°	198	177
65°	147	145
75°	93	99
85°	49	44
90°	34	19
95°	24	19
105°	15	16
115°	11	11
125°	8	7
135°	5	4
145°	3	2
155°	1	1
165°	0	0
175°	0	0
180°	0	

TEST NUMBER: P1046640

CATALOG NUMBER: FMNL1112FS5--940

CANDELA DISTRIBUTION (FULL):

0°	
0°	335.3
2.5°	335.3
5°	334.3
7.5°	332.3
10°	330.4
12.5°	328.5
15°	324.6
17.5°	321.7
20°	316.8
22.5°	311.9
25°	306.1
27.5°	300.3
30°	294.4
32.5°	286.7
35°	278.9
37.5°	271.1
40°	262.4
42.5°	252.7
45°	242.9
47.5°	232.3
50°	221.6
52.5°	209.9
55°	198.2
57.5°	186.6
60°	173.9
62.5°	160.3
65°	146.7
67.5°	133.1
70°	120.5
72.5°	106.9
75°	93.3
77.5°	80.7
80°	69.0
82.5°	58.3
85°	48.6
87.5°	40.8
90°	34.0
92.5°	28.2
95°	24.3
97.5°	20.4
100°	18.5
102.5°	16.5
105°	14.6
107.5°	13.6
110°	12.6

TEST NUMBER: P1046640

CATALOG NUMBER: FMNL1112FS5--940

CANDELA DISTRIBUTION (continued):

	0°
112.5°	11.7
115°	10.7
117.5°	9.7
120°	8.7
122.5°	7.8
125°	7.8
127.5°	6.8
130°	5.8
132.5°	5.8
135°	4.9
137.5°	3.9
140°	3.9
142.5°	2.9
145°	2.9
147.5°	1.9
150°	1.9
152.5°	1.0
155°	1.0
157.5°	1.0
160°	1.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0



TEST NUMBER: P1046640
CATALOG NUMBER: FMNL1112FS5--940

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.9	19.5	18.4	19.9	20.4	17.9	19.5	18.4	19.9	20.4
	3H	20.0	21.5	20.5	21.9	22.4	20.0	21.5	20.5	21.9	22.4
	4H	20.9	22.3	21.4	22.8	23.3	20.9	22.3	21.4	22.8	23.3
	6H	21.8	23.1	22.3	23.5	24.1	21.8	23.1	22.3	23.5	24.1
	8H	22.2	23.4	22.7	23.9	24.4	22.2	23.4	22.7	23.9	24.4
	12H	22.6	23.8	23.1	24.3	24.8	22.6	23.8	23.1	24.3	24.8
4H	2H	18.6	20.0	19.1	20.4	21.0	18.6	20.0	19.1	20.4	21.0
	3H	21.0	22.1	21.5	22.6	23.2	21.0	22.1	21.5	22.6	23.2
	4H	22.1	23.1	22.6	23.6	24.2	22.1	23.1	22.6	23.6	24.2
	6H	23.1	24.0	23.6	24.5	25.1	23.1	24.0	23.6	24.5	25.1
	8H	23.6	24.4	24.1	25.0	25.6	23.6	24.4	24.1	25.0	25.6
	12H	24.1	24.9	24.6	25.4	26.0	24.1	24.9	24.6	25.4	26.0
8H	4H	22.5	23.4	23.0	23.9	24.5	22.5	23.4	23.0	23.9	24.5
	6H	23.7	24.4	24.3	25.0	25.6	23.7	24.4	24.3	25.0	25.6
	8H	24.3	25.0	24.9	25.6	26.2	24.3	25.0	24.9	25.6	26.2
	12H	25.0	25.6	25.6	26.2	26.9	25.0	25.6	25.6	26.2	26.9
12H	4H	22.6	23.4	23.1	23.9	24.5	22.6	23.4	23.1	23.9	24.5
	6H	23.9	24.5	24.5	25.1	25.7	23.9	24.5	24.5	25.1	25.7
	8H	24.6	25.2	25.2	25.8	26.4	24.6	25.2	25.2	25.8	26.4

(END OF REPORT)