

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: P1046639

Luminaire Tested: FMNL1112FS5--935

Issue Date: 07/03/2025

Test Information

Test Method: LM-79-2019
Report Number: P1046639
Test Lab: Cooper lighting solutions
Issue Date: 07/03/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: FMNL1112FS5--935
Description: HALO 11 inch 90 CRI COLOR SELECTABLE flush mount White Trim FIXTURE with night light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

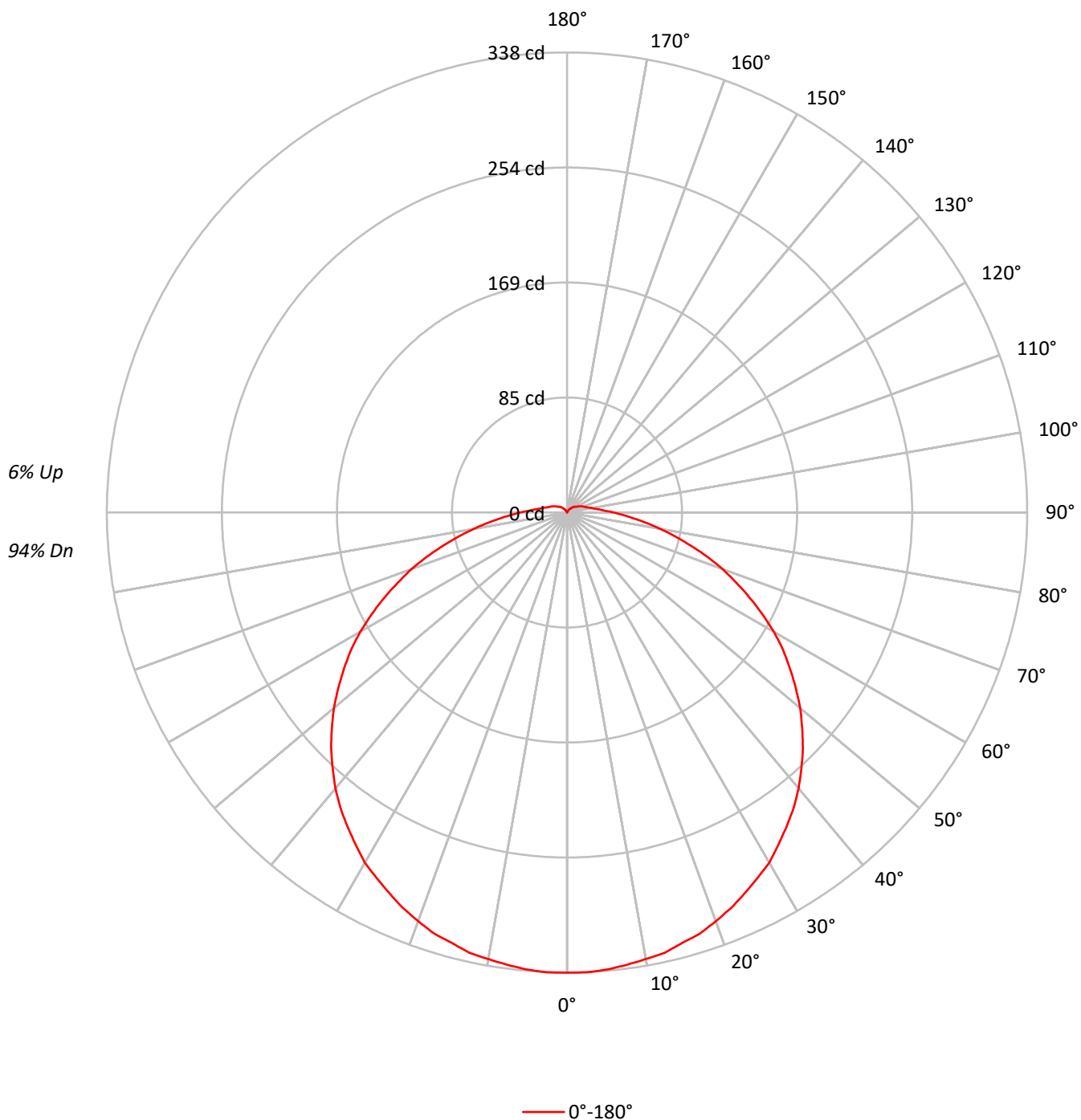
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1179.5 lumens
Efficiency: N/A
Efficacy: 93.6 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: P1046639
CATALOG NUMBER: FMNL1112FS5--935

Luminous Intensity Polar Plot



TEST NUMBER: P1046639

CATALOG NUMBER: FMNL1112FS5--935

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5721
5°	5725
10°	5725
15°	5733
20°	5753
25°	5763
30°	5803
35°	5810
40°	5844
45°	5862
50°	5883
55°	5897
60°	5935
65°	5925
70°	6011
75°	6152
80°	6782
85°	9513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 87.5°

Luminance: 15981 cd/sqm

TEST NUMBER: P1046639

CATALOG NUMBER: FMNL1112FS5--935

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	2.7
10°-20°	92.6	7.8
20°-30°	142.5	12.1
30°-40°	176.2	14.9
40°-50°	188.9	16.0
50°-60°	178.9	15.2
60°-70°	146.7	12.4
70°-80°	100.0	8.5
80°-90°	54.8	4.6
90°-100°	27.3	2.3
100°-110°	16.1	1.4
110°-120°	10.7	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°	267.2	22.6
0°-40°	443.4	37.6
0°-60°	811.2	68.8
0°-90°	1112.6	94.3
90°-120°	54.1	4.6
90°-150°	66.4	5.6
90°-180°	67.0	5.7
0°-180°	1179.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	338	
5°	337	32
15°	327	93
25°	309	143
35°	281	176
45°	245	189
55°	200	179
65°	148	147
75°	94	100
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: P1046639

CATALOG NUMBER: FMNL1112FS5--935

CANDELA DISTRIBUTION (FULL):

0°	
0°	338.1
2.5°	338.1
5°	337.1
7.5°	335.2
10°	333.2
12.5°	331.3
15°	327.3
17.5°	324.4
20°	319.5
22.5°	314.6
25°	308.7
27.5°	302.8
30°	297.0
32.5°	289.1
35°	281.3
37.5°	273.4
40°	264.6
42.5°	254.8
45°	245.0
47.5°	234.2
50°	223.5
52.5°	211.7
55°	199.9
57.5°	188.2
60°	175.4
62.5°	161.7
65°	148.0
67.5°	134.3
70°	121.5
72.5°	107.8
75°	94.1
77.5°	81.3
80°	69.6
82.5°	58.8
85°	49.0
87.5°	41.2
90°	34.3
92.5°	28.4
95°	24.5
97.5°	20.6
100°	18.6
102.5°	16.7
105°	14.7
107.5°	13.7
110°	12.7



TEST NUMBER: P1046639
CATALOG NUMBER: FMNL1112FS5--935

CANDELA DISTRIBUTION (continued):

	0°
112.5°	11.8
115°	10.8
117.5°	9.8
120°	8.8
122.5°	7.8
125°	7.8
127.5°	6.9
130°	5.9
132.5°	5.9
135°	4.9
137.5°	3.9
140°	3.9
142.5°	2.9
145°	2.9
147.5°	2.0
150°	2.0
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: P1046639

CATALOG NUMBER: FMNL1112FS5--935

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	18.0	19.5	18.4	20.0	20.4	18.0	19.5	18.4	20.0	20.4
	3H	20.1	21.5	20.5	21.9	22.4	20.1	21.5	20.5	21.9	22.4
	4H	21.0	22.3	21.5	22.8	23.3	21.0	22.3	21.5	22.8	23.3
	6H	21.8	23.1	22.3	23.6	24.1	21.8	23.1	22.3	23.6	24.1
	8H	22.2	23.4	22.7	23.9	24.5	22.2	23.4	22.7	23.9	24.5
	12H	22.6	23.8	23.2	24.3	24.9	22.6	23.8	23.2	24.3	24.9
4H	2H	18.7	20.0	19.1	20.5	21.0	18.7	20.0	19.1	20.5	21.0
	3H	21.0	22.2	21.5	22.7	23.2	21.0	22.2	21.5	22.7	23.2
	4H	22.1	23.1	22.6	23.7	24.2	22.1	23.1	22.6	23.7	24.2
	6H	23.1	24.0	23.6	24.6	25.1	23.1	24.0	23.6	24.6	25.1
	8H	23.6	24.5	24.1	25.0	25.6	23.6	24.5	24.1	25.0	25.6
	12H	24.1	24.9	24.7	25.5	26.1	24.1	24.9	24.7	25.5	26.1
8H	4H	22.5	23.4	23.1	23.9	24.5	22.5	23.4	23.1	23.9	24.5
	6H	23.7	24.5	24.3	25.1	25.7	23.7	24.5	24.3	25.1	25.7
	8H	24.4	25.0	25.0	25.6	26.2	24.4	25.0	25.0	25.6	26.2
	12H	25.1	25.7	25.7	26.2	26.9	25.1	25.7	25.7	26.2	26.9
12H	4H	22.6	23.4	23.2	24.0	24.6	22.6	23.4	23.2	24.0	24.6
	6H	23.9	24.6	24.5	25.1	25.8	23.9	24.6	24.5	25.1	25.8
	8H	24.6	25.2	25.2	25.8	26.5	24.6	25.2	25.2	25.8	26.5

(END OF REPORT)