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SPEC. NUMBER

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Product Group

MLED

REV.

O

Release Date

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Product Pre-Specification

BYH009 Ultra

Rev. O

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Change History

- () Original Specification
- () Final Specification

Rev.	Page	Modified Content Description	Revision Date	Revision Person
0	-	Original Design	2025/03/18	

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1.0 Scope of application

This specification is suitable for indoor full-color point spacing P0.9 COB front main tenance cabinet, the following is the general product parameters, if there is special requirements, can be customized according to customer requirements.

2.0 Product description

2.1 Product introduction

Full flip COB mini-LED technology solution, higher light efficiency, low flicker, to achieve a more environmentally friendly, healthier picture display effect, using the leading drive design and surface treatment scheme, can achieve lower power consumption and higher display contrast.

2.2 Product features

- 1) Display every pixel on the module unit module, using full flip R, G, B chip package, each chip is fixed on the substrate;
- 2) The display unit of the box body is a pre-maintenance magnetic suction structure, which is equipped with professional magnetic suction tools to complete installation and maintenance;
- 3) Modular structure design, simple connection, light weight, more convenient in installation and disassembly;
- 4) High contrast to achieve better display effect;
- 5) Low power consumption, energy saving and environmental protection;

2.3 Product pictures

Front view of a Cabinet	Back view of a Cabinet

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3.0 Product technical parameters

3.1 mechanical parameters

	Item	Technical parameters	Remark
MDL	Pitch(mm)	0.9375	
	LED Type	COB 0407	
	Resolution	160*360	
	Size(mm*mm)	150*337.5	
	The surface hardness	2H	
	Protection grade	IP65	
Cabinet	Composition of Cabinet	4*1	
	Resolution	640*360	
	Size(mm*mm)	600*337.5	
	Pixel density(dot/m ²)	1137778	
	Thickness(mm)	32.3	
	Weight (kg)	4.5	
	Maintenance mode	Front	
	Material	ADC12	
	Flatness(mm)	≤0.1	

3.2 Electrical parameters

Item	Technical parameters	Remark
Average power consumption of a cabinet(W)	12	@600nit
Max power consumption of a cabinet(W)	36	@600nit
Average power consumption per square meter(W)	60	@600nit
Max power consumption per square meter(W)	180	@600nit
Power supply requirements(V)	AC 100-240	

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3.3 Optical parameters

Item	Technical parameters	Remark
Single point brightness correction	Support	
Single point chromaticity correction	Support	
Brightness(cd/m ²)	Typ 1500, Max 2000	
Color coordinates	Typ 0.313 0.329, Adjustable	
Color temperature(K)	Typ 9300, 2000 ~ 15000 Adjustable	
Color gamut	Typ. 99% DCI-P3	
Horizontal Angle of view(°)	160±10	
vertical Angle of view(°)	160±10	
Colour cast(°)	170±10	$\Delta u'v' \leq 0.02$
Relative deviation of pixel center distance	$\leq 3\%$	
Luminance uniformity	$\geq 97\%$	
Chroma uniformity	$\Delta u'v' \leq 0.005$	
Ambient light contrast	$\geq 20000:1$	10 lux light environment
Contrast	$\geq 1,000,000:1$	Darkroom L0

3.4 System parameters

Item	Technical parameters	Remark
frame frequency(Hz)	60	
refresh rate(Hz)	≥ 7680	
Drive mode	PM Constant current drive	
Grayscale (bit)	≥ 16	