

HOME ENTERTAINMENT CENTERS · PRIVATE CINEMAS · MEDIA ROOMS

Every LED wall has pixels. Yours should have depth.

COB or MIP is how LEDs are packaged — every factory sells it. What separates a reference display from a commodity video wall is the **surface optical engineering** above the emitters: orthogonal pixel reconstruction and an anti-reflective optical surface layer. That is our core discipline — and the reason a Nova Vista wall reads like the finest direct-view cinema displays, not like a scoreboard.



>P3

Color gamut beyond the DCI-P3 digital-cinema envelope

≤2.0%

Surface reflectance (SCI) — interference-engineered AR optics

0.07 nit

Measured black-state luminance¹

4,088:1

Measured ambient contrast¹ — 5× the bare panel

7,680 Hz

Refresh rate — flicker-free for cameras and eyes

Why two walls with the same "COB" label can look nothing alike

× GRAY BLACKS THE MOMENT LIGHTS COME ON

A bare or polished COB surface mirrors the room

Untreated LED surfaces reflect room light straight back at the viewer — blacks collapse to gray the moment a lamp or window enters the scene. Our optical surface layer holds ≤2.0% reflectance: blacks stay black with the lights on.

× THE "DIRTY WHITE" OF ETCHED AG GLARE COATINGS

Matte anti-glare scatters the image itself

Commodity walls fight reflection with rough AG etching. It kills glare — and purity with it: whites look hazy, edges soften, the screen seems permanently dusty. Our high-clarity AR layer suppresses reflection without scattering the image.

× SCREEN-DOOR TEXTURE AND MOIRE

Point emitters leave a visible grid

Discrete pixels with black gaps read as grain up close, and strike moiré the instant a camera appears — fatal in content-driven rooms. Our orthogonal grating reconstructs each pixel into a continuous luminous plane: ≥85% square-pixel fill (Grating Series); visible moiré below 5%.

× SPEC SHEETS THAT MEASURE NOTHING

Contrast numbers quoted in a dark chamber

Most COB specs quote contrast in a black room — a room your client will never watch in. We publish measured black-state luminance and ambient contrast, plus gamut, uniformity and refresh, because integrators deserve numbers, not adjectives.

THE CORE DIFFERENCE

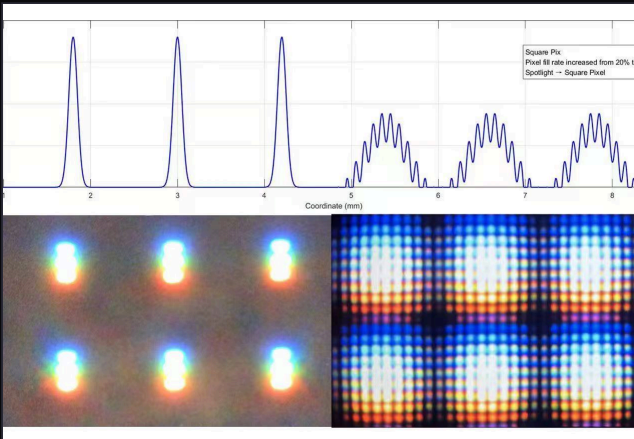
The package is a commodity. The surface is the product.

What your client notices	Ordinary fine-pitch COB / MIP (bare or AG-etched surface)	Nova Vista (surface-optical engineered)
Blacks under room light	Surface reflects the room; blacks wash gray as soon as ambient light appears	The optical surface layer creates destructive interference of external light. ≤2.0% SCI reflectance, blacks hold
Purity of white & light fields	AG etching scatters emitted light — hazy "dirty white," softened edges	High-clarity AR surface: clean whites, crisp edges, zero added haze
Pixel texture up close	Discrete point emitters + black matrix = visible grid, grain, screen-door	Point-to-surface reconstruction, ≥85% square-pixel fill — a continuous image plane
Camera & content work	Moiré with cameras; grain visible in footage of the screen	Moiré-suppressed grating — visible moiré below 5%, camera-friendly
Screen aesthetic when OFF	Uneven gloss, visible seams, tiling reflections distort the room	Uniform 40 GU gloss — one obsidian-black slab, OLED-like finish
Perceived depth & saturation	Pixel noise dilutes color; flat, "electronic" look	Spatial noise eliminated — colors read purer, image gains dimension¹

SAME EMITTERS. TWO SURFACES. MEASURED.¹

Internal lab A/B: identical P1.5625 panel, measured bare vs. with our grating + AR surface treatment.

Measured metric	Bare panel	With surface optics
Black-state luminance	0.3–0.5 cd/m²	0.07 cd/m² — 4–7× darker
Ambient contrast	≈ 800 : 1	4,088 : 1 — 5×
Color shift from optics	—	Δu'v' ≤ 0.002 — zero color penalty



Two engineered layers above the emitters

1 · Optical surface layer — creates destructive interference of external light, so reflected light cancels at the interfaces and blacks hold under room light; precision-calibrated 40 GU gloss: the "floating behind glass" clarity of the finest reference displays.

2 · Orthogonal grating — reconstructs round point emitters into square, continuous pixels; filters stray light, purifies color, kills the grid.

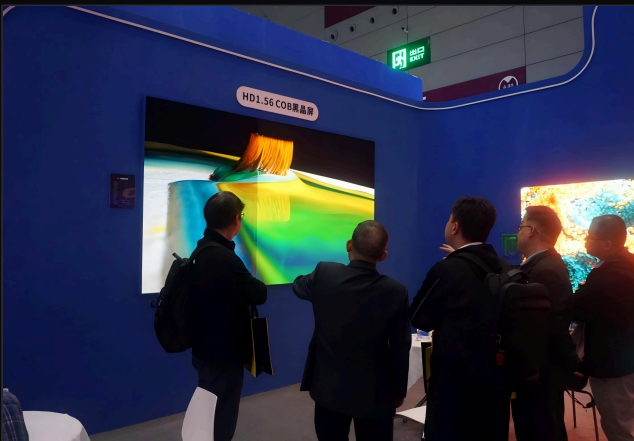


IMAGE QUALITY

Cinema-grade color and contrast, by specification.

Color beyond the digital-cinema envelope

Native gamut covers **119.63% of the DCI-P3 volume** (95.5% coverage) extending beyond the **DCI-P3** gamut used for theatrical mastering. Your clients see every color the film was graded with, not a compressed approximation.

Factory-calibrated to $\Delta E \leq 3.0$, 10-bit (1,024-level) grayscale. Color temperature 2,000–10,000 K.

HDR, engineered to the PQ mastering standard

Transfer function follows PQ (SMPTE ST 2084) — the HDR cinema mastering curve. With **up to 600 cd/m² peak** against the 299.6 cd/m² DCI HDR reference white, highlights carry genuine specular authority. Accepts HDR10 / HLG today.

Motion & flicker — built for film cadence

Native **60 / 120 Hz** selectable, with each frame rate matched to source material for judder-free playback. **≥ 3,840 Hz refresh (max 7,680 Hz)** — zero visible flicker, for viewers and cameras.

ENGINEERED AGAINST DCI'S DIRECT-VIEW CINEMA PARAMETERS

DCI Direct-View Cinema Guideline	DCI Requirement	Nova Vista
Screen reflectivity (diffuse)	< 10%	≤ 2.0% (SCI)
Pixel structure invisible at...	1.6× picture height	Met at native 4K³
Cinema frame rates	24 / 48 / 60 / 96 / 120	60 / 120 Hz selectable⁴
HDR reference white	299.6 cd/m²	Up to 600 cd/m²
Brightness uniformity	Tight tolerance	≥ 98%

DCI-P3 refers to the SMPTE ST 2113 color space — a performance benchmark, not a product certification.

PRODUCT LINEUP

Choose the pitch. We build the wall.

Pixel Pitch	Pixel Density	Native 4K Wall Size (16:9)	Closest Comfy Viewing	Refresh	Frame Rate
P0.78	1,638,400 px/m²	≈ 136" · 3.0 × 1.7 m	≈ 2.7 m	3,840–7,680 Hz	60 / 120 Hz selectable
P0.9	1,137,778 px/m²	≈ 163" · 3.6 × 2.0 m	≈ 3.2 m		
P1.25	640,000 px/m²	≈ 217" · 4.8 × 2.7 m	≈ 4.3 m		
P1.5625	409,600 px/m²	≈ 271" · 6.0 × 3.4 m	≈ 5.4 m		

Both lines run across all pitches: **Grating Series** (flagship — optical reconstruction, ≥85% square-pixel fill, moiré-suppressed) and **Deep Black Series** (Crystal-LED-class blacks at a professional price point). Custom sizes, including 2.39:1 cinema-scope walls, built to order.

DESIGN & INSTALLATION

Engineered for the way you build

- Thin, light, front-serviceable

42.5 mm die-cast aluminum cabinets at 5 kg (600 × 337.5 mm). High rigidity, excellent thermals, front-service modules — wall-hugging installs with minutes-fast swaps. 90° corner cabinets for wraparound and L-shaped rooms.
- Curved walls without steel-frame gymnastics

Five-axis CNC-machined curved cabinets with flexible PCB — smooth concave/convex radii with **no angle brackets, no support steel frame**. Flat, right-angle, convex, concave and edge-cut forms from one cabinet system.
- Quiet, cool, stable by design

Average power draw **150–300 W/m²** (Deep Black / Grating). Operating –10°C to +40°C, 10–90% RH, front IP54 / rear IP20 — engineered for enclosed, acoustically treated rooms.
- System flexibility

1G/5G receiving cards, sending/receiving in one; pixel-level calibration maintained automatically. AC 100–240 V, 50/60 Hz. Compatible with the control ecosystems you already deploy — ask about driver and processor options for your standard rack build.



Working with Nova Vista

Remote live demo	Wall walkthrough over video — motion, blacks, ambient-light behavior
Sample panel loan	Evaluation modules for your showroom or client demo
Design support	Pitch selection, viewing-distance math, layout, power & signal planning
Project pricing	Registered-project dealer pricing, lead times quoted per build
After-sales	Module-level spares strategy; front service = no wall teardown, ever

Let's spec the right wall for your next project.

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Nova Vista Screen®
by Guangzhou Accuon Electronics Co., Ltd.

¹ Internal laboratory measurement, p1.5625 test panel with grating + AR surface vs. identical bare panel; results vary by pitch and configuration

³ Pixel structure not resolvable by a viewer with 20/20 acuity at 1.6× picture height for native-4K builds at all listed pitches. ⁴ 60 / 120 Hz selectable; 120 Hz availability subject to pitch and processor configuration. All specifications are typical values and may vary by configuration; final specifications subject to commercial contract and official quotation. DCI has not tested, approved, or endorsed this product. "DCI-P3" denotes the SMPTE ST 2113 color space.