LUMO

AI-Powered Design Platform with Intelligent BrandKit System

Complete Software Specification Document

Version: 1.0
Date: October 27, 2025
Status: Final Specification
Classification: Confidential

Document Information:

- Sections: 6 major parts, 25 chapters
- Target Audience: Product teams, investors, developers, designers

---

Contact:

- Website: www.lumotechnology.com
- Email: hello@lumotechnology.com
- Sales: sales@lumotechnology.com
- Support: support@lumotechnology.com

TABLE OF CONTENTS

EXECUTIVE SUMMARY

PART 1: BRANDKIT AI - CORE INNOVATION

PART 2: SKETCH-TO-RENDER ENGINE

PART 3: ADVANCED FEATURES

PART 4: COLLABORATION & WORKSPACE

PART 5: PRODUCTION & EXPORT

PART 6: PLATFORM & TECHNICAL

APPENDICES

EXECUTIVE SUMMARY

What is LUMO?

LUMO is a revolutionary AI-powered design platform that transforms how designers create, maintain, and deliver brand-consistent visual content. At its core is the **BrandKit AI system** - the most advanced brand consistency technology in the industry.

The Problem We Solve

Brand Inconsistency Crisis:

- Designers struggle to maintain brand consistency across projects
- Traditional tools lack intelligent brand enforcement
- Manual brand guideline adherence is time-consuming and error-prone
- Multi-brand management is complex and fragmented
- Quality control requires extensive review cycles

Design Workflow Inefficiency:

- Traditional rendering takes hours or days
- Iteration cycles are slow and expensive
- Collaboration tools are disconnected
- Production pipelines are fragmented
- Learning curves are steep

The LUMO Solution

Revolutionary BrandKit AI (Core Innovation)

The BrandKit AI system is LUMO's defining feature - an intelligent brand management system that:

Learns Your Brand:

- Analyzes 25-200 training images
- Extracts brand DNA (colors, materials, forms, details)
- Understands design language patterns
- Creates intelligent enforcement rules
- Continuously learns and adapts

Enforces Consistency:

- Real-time brand validation (0-100% score)
- Automatic brand-compliant suggestions
- Deviation detection and correction
- Multi-dimensional consistency (form, color, material, detail)
- Context-aware flexibility

Scales Effortlessly:

- Manage unlimited brands
- Multi-brand portfolio support
- Sub-brand hierarchies
- Regional variations
- Team-wide deployment

Complete Design Platform

Sketch-to-Render Engine:

- Transform sketches to photorealistic renders in 8-15 seconds
- Multiple quality tiers (Draft to 8K Ultra)
- Brand-aware generation
- Professional materials and lighting

3D Capabilities:

- Instant 2D-to-3D generation
- Multiple quality options
- AR/VR export ready
- CAD integration

Advanced Tools:

- Professional drawing toolkit
- AI-powered editing (Enhance, Modify, Color Match)
- Reference systems
- Batch operations

Team Collaboration:

- Real-time co-working
- Infinite canvas workspace

- Version control
- Comment systems
- Role-based permissions

Production Ready:

- Enterprise export options
- All professional formats
- Integration ecosystem
- Automated workflows

Key Differentiators

1. BrandKit AI (Unique to LUMO)

No other platform offers intelligent, learning-based brand consistency management at this level.

2. Speed & Quality

Generate publication-ready renders in seconds, not hours.

3. Complete Workflow

One platform for entire design-to-delivery pipeline.

4. Enterprise Scale

Built for the largest organizations with strictest requirements.

5. Continuous Innovation

AI-powered platform that improves over time.

Target Market

Primary Users:

- Industrial Designers
- Product Designers
- Automotive Designers

- Fashion Designers
- Brand Managers
- Creative Directors
- Design Agencies
- In-house Design Teams

Industries:

- Consumer Electronics
- Automotive
- Fashion & Apparel
- Furniture & Home
- Architecture
- Consumer Products
- Luxury Goods

Company Sizes:

- Freelancers & Solo Designers
- Small Studios (3-10 people)
- Agencies (10-50 people)
- Corporations (50-500+ designers)
- Global Brands (1000+ users)

Business Model

Subscription Tiers:

- **Starter**: $29/month - Learning & testing
- **Professional**: $79/month - Individual professionals
- **Business**: $199/month - Collaborative teams
- **Enterprise**: Custom pricing - Large organizations
- **Education**: $9/student/month - Students & institutions

Revenue Streams:

1. Subscription revenue (primary)
2. Credit purchases (pay-as-you-go)
3. Enterprise licenses
4. Professional services
5. Marketplace (future)

Market Opportunity

Total Addressable Market:

- Global design software market: $15B (2025)
- AI design tools segment: $3B (growing 45% YoY)
- BrandKit AI creates new category: $500M+ opportunity

Competitive Landscape:

- Traditional tools: Adobe, Sketch, Figma (no AI brand management)
- AI rendering: Midjourney, Stable Diffusion (no brand control)
- LUMO: Only platform combining both with BrandKit AI

Traction & Validation

Development Status:

- Core platform: Complete
- BrandKit AI: Production ready
- Beta testing: 500+ users
- Enterprise pilots: 5 Fortune 500 companies
- Average brand score: 89%
- User satisfaction: 4.7/5

Key Metrics:

- Time saved vs traditional: 87%
- Brand consistency improvement: +41%
- User productivity increase: 3.2x
- Customer retention: 94%

Investment Highlights

Strong Technology Moat:

- Proprietary BrandKit AI system
- Multi-model rendering architecture
- 18 months development lead
- Patent-pending algorithms

Scalable Business:

- Cloud-native infrastructure
- 99.99% uptime SLA
- Auto-scaling architecture
- Global deployment ready

Large Market:

- $15B+ addressable market
- Growing AI adoption
- Enterprise demand
- Global opportunity

Experienced Team:

- AI/ML experts from Google, Adobe
- Design industry veterans
- Enterprise SaaS experience
- Proven track record

Success Metrics

Year 1 Targets:

- 10,000 paid users
- $5M ARR
- 95% retention
- 50 enterprise customers
- 4.8/5 satisfaction

Year 3 Vision:

- 100,000 paid users
- $50M ARR
- Market leader in AI design
- Industry standard for brand management

PART 1: BRANDKIT AI - CORE INNOVATION

The revolutionary system that sets LUMO apart

---

1. BrandKit System Architecture

1.1 Overview & Philosophy

The BrandKit AI is LUMO's revolutionary core feature that transforms how designers maintain brand consistency. Unlike traditional style presets, BrandKit AI is an intelligent, learning system that understands and enforces brand DNA at a fundamental level.

Key Differentiators:

- **Intelligent Brand Learning**: AI learns brand's visual language, not just applying filters
- **Multi-Dimensional Consistency**: Maintains consistency across form, color, material, finish, typography, composition
- **Adaptive Intelligence**: Evolves with brand as new designs are created
- **Context-Aware Application**: Understands when to strictly enforce vs allow creative flexibility
- **Cross-Platform Consistency**: Ensures brand coherence across all design disciplines

1.2 BrandKit Core Components

Brand DNA Profile

The foundational element capturing brand's visual identity essence.

Visual Language Parameters:

- Form Language: Geometric vs organic, simple vs complex
- Proportion Systems: Golden ratio, aspect ratios, scale relationships
- Surface Treatment: Texture preferences, finish types, detailing
- Material Palette: Primary, secondary, accent materials
- Color Philosophy: Primary, secondary, accent colors, relationships
- Lighting Style: Dramatic vs subtle, hard vs soft shadows

- Composition Rules: Layout, negative space, focal points
- Detail Density: Minimalist vs ornate, detail concentration

Brand Personality Attributes:

- Emotional Tone: Luxury, playful, professional, innovative
- Design Ethos: Sustainable, tech-forward, heritage-inspired
- Target Audience: Demographics, psychographics
- Brand Values: Core principles in design
- Competitive Positioning: Visual differentiation

Visual Training Library

Curated collection training AI to understand brand.

Image Categories (60-200 images recommended):

1. Hero Products (20-50 images)
2. Material & Finish References (15-30 images)
3. Form Language Examples (15-25 images)
4. Environmental Context (10-20 images)
5. Color Applications (10-15 images)
6. Typography & Graphics (5-10 images)

Training Requirements:

- Minimum: 25 images for basic training
- Recommended: 60-100 for comprehensive understanding
- Optimal: 150-200 for advanced intelligence
- Quality: Minimum 2K, 4K preferred
- Diversity: Multiple perspectives and applications

Brand Rules Engine

Automated enforcement and guidance system.

Rule Types:

Mandatory Rules (Hard Constraints):

- Brand color accuracy (ΔE tolerance)
- Prohibited color combinations
- Required material pairings

- Mandatory logo placement
- Signature form elements
- Restricted stylistic approaches

Guidance Rules (Soft Constraints):

- Preferred proportion systems
- Recommended material combinations
- Suggested composition approaches
- Typical detail density

Context-Sensitive Rules:

- Product category-specific guidelines
- Market segment adaptations
- Regional variations
- Seasonal considerations

Brand Intelligence Dashboard

Real-time monitoring and insights.

Consistency Metrics:

- Brand Adherence Score (0-100%)
- Color Fidelity Score
- Form Language Score
- Material Accuracy Score
- Composition Alignment Score
- Detail Consistency Score

Deviation Alerts:

- Real-time warnings during creation
- Post-generation analysis reports
- Comparison to brand standards
- Suggested corrections
- Severity classification

Usage Analytics:

- Most used brand elements
- Common deviations

- Designer patterns
- Team consistency metrics
- Temporal consistency trends

1.3 BrandKit Types & Tiers

Personal BrandKit (Individual Designers)

- Single brand profile
- Up to 100 training images
- Private library access
- Basic brand rules engine
- Individual usage analytics

Professional BrandKit (Studios & Agencies)

- Up to 10 brand profiles
- Up to 200 training images per brand
- Shared team library
- Advanced brand rules engine
- Team consistency analytics
- Client collaboration portals

Enterprise BrandKit (Corporations)

- Unlimited brand profiles
- Unlimited training images
- Global brand hierarchy support
- Sub-brand management
- Advanced AI training
- Custom rule development
- API access for brand validation
- Dedicated brand success manager

Collaborative BrandKit (Brand-Designer Partnerships)

- Shared ownership model
- Brand owner controls
- Designer execution access
- Approval workflows
- Version comparison

2. Brand DNA Engine

2.1 AI Training Process

Initial Training Phase (5-15 minutes)

Stage 1: Image Analysis

- Upload training images
- Multi-dimensional analysis:
  - Color extraction and palette building
  - Form language pattern recognition
  - Material classification
  - Surface treatment analysis
  - Composition structure mapping
  - Lighting characteristic identification
  - Detail density assessment
  - Proportion system detection

Extracted Parameters:

- Color Profile: L*a*b* values, distributions, relationships
- Form Vocabulary: Curve analysis, surface continuity, edge treatment
- Material Library: Material types, combinations, finishes
- Detail Language: Detail size, clustering, refinement level

Stage 2: Pattern Learning

- Identifies recurring design patterns
- Builds statistical model of brand
- Generates brand DNA fingerprint
- Creates decision trees
- Establishes confidence scores

Stage 3: Validation & Testing

- Generates test renders
- Comparison against training set
- Adjustment of learning weights
- Iteration until consistency threshold met

- User review of test outputs

Continuous Learning System

Real-Time Refinement: As designers create new work:

- Every approved design feeds back into BrandKit
- AI adjusts understanding based on new data
- Weights shift toward recent approved directions
- Maintains historical understanding
- Detects intentional brand evolution vs drift

Learning Triggers:

- User marks render as "Brand Perfect"
- User exports final design
- User saves to brand portfolio
- Admin approves design
- Design passes brand validation checks

Evolution Management:

- Original brand baseline preserved
- Monthly snapshots maintained
- Major milestone versions saved
- Current state tracked
- Predicted future direction analyzed
- Rollback to any historical state available

Multi-Brand Intelligence

Cross-Brand Learning: When managing multiple brands, AI learns meta-patterns:

- How automotive brands differ from consumer electronics
- Industry-specific design languages
- Category conventions vs brand differentiation
- Market segment visual expectations
- Regional aesthetic preferences

Transfer Learning:

- Faster training for similar brand types
- Better suggestions for new brand creation

- Industry benchmark comparisons
- Competitive analysis capabilities

2.2 Brand DNA Application

Generation-Time Brand Enforcement

Pre-Generation Brand Check: Before initiating render:

- Analyzes sketch against brand forms
- Evaluates prompt against guidelines
- Checks color selections against palette
- Validates material choices
- Assesses composition structure
- Provides pre-generation brand score
- Offers optimization suggestions

BrandKit Influence Slider (0-100%):

- 0%: Pure AI creativity, ignore brand
- 25%: Loose brand inspiration
- 50%: Balanced brand adherence
- 75%: Strong brand consistency
- 100%: Maximum brand fidelity

Multi-Element Brand Consistency: System doesn't just apply brand to isolated elements but understands relationships between materials, transitions, details, colors, and lighting.

2.3 Brand Validation System

Automated Brand Scoring

Post-Generation Analysis: After each render, automatic evaluation across:

- Color Analysis (accuracy, usage, harmony)
- Form Analysis (curves, proportions, edge treatment)
- Material Analysis (accuracy, pairing, finish)
- Detail Analysis (density, placement, character)
- Composition Analysis (layout, focal point, negative space)

Overall Brand Adherence Score: 0-100%

- 90-100: PERFECT - Exemplary brand representation

- 80-89: STRONG - Clear brand alignment
- 70-79: MODERATE - Brand recognizable, adjustments recommended
- 60-69: WEAK - Significant deviations
- 0-59: OFF-BRAND - Major deviations

Deviation Detection & Reporting

Detailed analysis identifies specific deviations with:

- Location identification
- Expected vs generated comparison
- Impact assessment
- Correction suggestions
- Visual deviation mapping

Brand Approval Workflows

Single Approval: Designer → Brand Validation → Auto-decision based on score

Team Approval: Designer → Peer Review → Brand Validation → Creative Director → Brand Manager

Client Approval: Agency Designer → Internal Review → Brand Validation → Client Review

All approvals tracked with complete audit trail.

---

3. Style Training & Learning

3.1 Custom Palette Creation

Beyond BrandKit DNA, Custom Palettes control HOW your brand renders visually.

Palette vs BrandKit Distinction:

- **BrandKit DNA**: Defines WHAT your brand is (colors, materials, forms)
- **Custom Palette**: Defines HOW your brand renders (lighting, atmosphere, aesthetic style)

Palette Training Process:

1. Collect 4-30 images representing desired aesthetic
2. Configure palette settings (emphasis areas, strictness)
3. AI trains for 5-20 minutes
4. Test palette with sample sketches
5. Iterate until satisfied

Palette Library Structure: Brands typically need multiple palettes for different contexts:

- Studio_Pristine (product launches)
- Studio_Dramatic (hero marketing)
- Environment_Urban (lifestyle marketing)
- Environment_Track (performance marketing)
- Clay_Development (design development)
- Technical_Cutaway (documentation)

3.2 Palette Sharing & Marketplace

Enterprise Palette Publishing:

- Internal publishing to company library
- Access permissions by department/project/role
- Version control and management
- Usage analytics

Marketplace System (Future Feature):

- Designers can sell successful palettes
- Revenue sharing model
- Categories by industry and style
- Ratings and reviews
- Passive income opportunity

---

4. Brand Consistency Management

4.1 Real-Time Brand Monitoring

Live Brand Feedback System: During sketch creation, designers receive:

- Real-time brand guidance

- Form language tracking
- Proportion alignment checking
- Suggestion for brand improvements
- Live brand score calculation

Color Picker Brand Integration: When selecting colors:

- Brand colors prominently displayed
- Warnings for off-brand colors
- Snap-to-brand options
- ΔE proximity indicators

Material Selection Brand Guidance: When choosing materials:

- Brand material intelligence
- Typical material pairings
- Finish recommendations
- Avoid lists for off-brand materials

4.2 Brand Drift Detection

Temporal Consistency Monitoring: Tracks brand adherence over time to detect:

- Stable periods
- Gradual drift
- Sudden changes
- Most common deviations
- Recommended corrective actions

Team Consistency Dashboard: Monitors team-wide brand performance:

- Team average scores
- Individual performance
- Team strengths and improvement areas
- Recommended training sessions

4.3 Brand Guardian System

AI Brand Guardian (Always Active): Monitors in real-time and can:

- Prevent off-brand renders
- Suggest brand improvements

- Block exports below threshold
- Approve high-scoring exports
- Log override attempts

Override Logging: When designers override brand guidance:

- Logs reason and context
- Tracks approval chain
- Feeds into brand evolution data
- Maintains audit trail

4.4 Brand Compliance & Reporting

Automated Compliance Reports: Generate comprehensive quarterly reports including:

- Overall brand adherence metrics
- Category breakdowns
- Regional performance
- Product category performance
- Top performers
- Improvement areas
- Trend forecasts

Audit Trail System: Complete design lineage tracking:

- Creation timeline
- All modifications
- Approval chain
- Brand analysis details
- Files generated
- Usage rights
- Full metadata

Client Compliance Portals: For agency-client relationships:

- Dedicated client view
- Submission tracking
- Approval workflows
- Brand performance dashboards
- Communication tools

4.5 Brand Evolution Management

Controlled Brand Updates: Manage brand refreshes systematically:

- Propose changes
- Impact analysis
- Rollout strategy (phased)
- Compatibility planning
- Approval workflow

A/B Brand Testing: Test brand variations before full rollout:

- Create test variants
- Controlled user groups
- Metrics tracking
- Statistical analysis
- Adoption decisions

---

5. Multi-Brand Management

5.1 Brand Portfolio System

Brand Hierarchy Management: Organize complex brand portfolios:

- Parent corporations
- Brand divisions
- Sub-brands
- Regional variants
- Brand relationships and rules

Cross-Brand Policies: Define allowed/restricted similarities:

- Visual similarity limits
- Color palette differentiation
- Form language distinction
- Brand confusion risk minimization

5.2 Brand Switching & Context

Intelligent Brand Detection: AI suggests appropriate brand based on:

- Project brief keywords

- Folder naming
- Previous work
- Product category
- Team member

Brand Lock System: Prevents accidental brand switching with:

- Lock confirmation
- Reason logging
- Permission requirements
- Warning systems

5.3 Brand Comparison Tools

Side-by-Side Brand Testing: Generate same sketch with multiple brands simultaneously for:

- Brand selection decisions
- Competitive analysis
- Portfolio strategy
- Market positioning

Brand Differentiation Analysis: Automated measurement of visual distance between brands:

- Color differentiation score
- Form language differences
- Material usage comparison
- Detail language uniqueness
- Composition variations
- Consumer perception testing

---

6. Brand Asset Library

6.1 Centralized Brand Assets

Brand Asset Repository: Comprehensive management of:

- Training images (categorized)
- Color definitions (all formats)
- Material library (24+ materials typical)

- Form guidelines (curves, proportions)
- Detail library (45+ signature details)
- Reference renders (hundreds)
- Brand guidelines (PDF)
- Custom palettes (6-12 typical)
- Brand rules (30+ active)
- Analytics and reports

6.2 Advanced Color Management

Brand Color System: Complete specifications for each brand color:

- Multiple format values (Pantone, CMYK, RGB, HEX, L*ab**)
- Material applications and tolerances
- Usage rules and restrictions
- Tolerance specifications (ΔE)
- Pairing guidelines

Color Harmony Tools: Generate harmonious schemes respecting brand:

- Monochromatic, analogous, complementary options
- Brand compliance checking
- Alternative suggestions

6.3 Material Library System

Detailed Material Specifications: Each material documented with:

- Physical specifications
- Visual characteristics
- Rendering parameters
- Typical applications
- Pairing rules
- Manufacturing notes
- Brand importance rating

Material Library Statistics:

- Total materials: 24 typical
- Primary materials: 3 must-use
- Secondary materials: 8 common
- Accent materials: 13 situational

- Most used combinations tracked

6.4 Detail Language Library

Signature Design Details: Complete catalog of brand details:

- Specifications (size, depth, spacing)
- Typical locations
- Scale variations
- Material applications
- Rendering guidance
- Brand importance rating

Detail Usage Guidelines: Detail density by product tier:

- Flagship: All signature details, 8-12 secondary
- Standard: Key signature details, 4-6 secondary
- Entry: 1-2 signature details minimum

6.5 Brand Asset Versioning

Historical Brand Versions: Complete version history maintained:

- Current version (active primary)
- Recent versions (ongoing projects)
- Archived versions (historical reference)
- Version comparison tools
- Change logs

Brand Migration Tools: Upgrade projects to new brand versions with:

- Compatibility analysis
- Impact assessment
- Risk evaluation
- Migration options (full, mixed, stay)

---

7. Brand Analytics & Intelligence

7.1 Brand Performance Analytics

Brand Dashboard: Comprehensive real-time metrics:

- Overall Brand Health Score (0-100)
- Average Brand Score across all work
- Consistency Index
- Designer Adherence Rate
- Approval Rate
- Time to Brand-Ready

Detailed Analytics:

- Brand adherence by category
- Trend analysis over time
- Usage statistics
- Quality distribution
- Team performance
- Efficiency metrics
- Predictive insights

7.2 Competitive Brand Analysis

Market Position Intelligence:

- Brand differentiation scores vs competitors
- Visual similarity analysis
- Market position mapping
- Recognition element strength
- Strategic recommendations

Brand Strength Analysis:

- Color recognition (%)
- Material recognition (%)
- Detail recognition (%)
- Form language recognition (%)
- Overall recognition score

End of Part 1: BrandKit AI - Core Innovation

PART 2: SKETCH-TO-RENDER ENGINE

Professional AI rendering system

---

8. Core Rendering System

8.1 AI Rendering Architecture

Multi-Model Rendering Pipeline: LUMO uses specialized AI models working together:

1. Form Generator (3D understanding, proportions)
2. Material Renderer (surface qualities, textures)
3. Lighting Composer (mood, presentation)
4. Detail Enhancer (brand signature elements)
5. Composition Optimizer (framing, layout)

Processing Flow: User Input → Preprocessing → Multi-Model Generation → Synthesis → Brand Validation → Quality Enhancement → Output

Performance Metrics:

- Average generation: 8-15 seconds
- Quality: 4K capable, 8K available
- Success rate: 96.3%
- Brand accuracy: 89.4% average

8.2 Rendering Quality Tiers

Draft Mode:

- Speed: 3-5 seconds
- Quality: Basic
- Resolution: 1024x1024
- Use: Rapid ideation
- Credits: 1 per generation

Standard Mode:

- Speed: 8-12 seconds

- Quality: High
- Resolution: 2048x2048
- Use: Development work
- Credits: 2 per generation
- **RECOMMENDED DEFAULT**

Professional Mode:

- Speed: 15-25 seconds
- Quality: Excellent
- Resolution: 4096x4096
- Use: Client presentations
- Credits: 4 per generation

Ultra Mode:

- Speed: 30-60 seconds
- Quality: Studio Quality
- Resolution: 8192x8192
- Use: Marketing materials
- Credits: 8 per generation
- Pro/Enterprise only

8.3 Batch Generation System

Multi-Variant Generation: Generate 2, 4, 8, 16, or 32 variants simultaneously.

Variation Strategies:

- **Balanced**: Mix of interpretations (default)
- **Tight**: Very similar results
- **Exploratory**: Wide variation range
- **Custom**: Advanced settings

Batch Results: Grid view with brand scores, sorting options, comparison tools, and batch operations.

8.4 Progressive Refinement System

Iterative Enhancement:

- Start with initial generation

- Apply corrections (color, detail, etc.)
- Polish with enhance feature
- Track improvement across passes
- Smart suggestions for next refinement

9. Generation Modes & Algorithms

9.1 Render Mode (Primary Generation)

Purpose: Transform sketches into photorealistic renders

Drawing Influence Settings:

- 0-25%: Sketch as loose inspiration
- 25-50%: Sketch guides but flexible
- 50-75%: Sketch respected with refinement
- 75-90%: Sketch followed precisely
- 90-100%: Maximum sketch fidelity

Brand Integration: With BrandKit active, system automatically:

- Analyzes sketch for brand compatibility
- Adjusts forms toward brand language
- Applies materials from brand library
- Enforces colors from brand palette
- Adds details per brand guidelines
- Styles lighting per brand aesthetic
- Follows composition rules

Optimal Settings:

- Drawing Influence: 80-90%
- BrandKit Influence: 85-95%
- Palette Influence: 75-85%
- Quality: Standard or Professional

9.2 Refine Mode (Enhancement Generation)

Purpose: Enhance existing renders while preserving design

Key Differences from Render:

- Enhances EXISTING render (not creating from sketch)
- Preserves current pixels
- Adds detail and quality
- Maintains design intent
- Keeps painted colors

Color Behavior: Refine mode PRESERVES painted colors - perfect for CMF work and colorway exploration.

Workflow:

1. Generate initial render (Render Mode)
2. Paint color corrections if needed
3. Refine (Drawing Influence: 90%)
4. Refine again if desired (Influence: 85%)
5. Enhance feature for final polish

9.3 Inpainting Mode (Regional Editing)

Purpose: Edit specific regions of renders

Capabilities:

- Select any area with precision tools
- Edit only selected region
- Seamless integration with surroundings
- Context-aware generation
- Brand-compliant regional edits

Inpainting Modes:

1. **Regenerate**: Replace selected area completely
2. **Refine**: Enhance selected area
3. **Remove**: Remove selected element
4. **Blend**: Smooth transitions

Context Awareness: System analyzes surrounding materials, lighting, colors, detail density, and style for seamless integration.

10. Drawing & Creation Tools

10.1 Professional Drawing Toolkit

Complete Tool Set:

- Brush Tool [B]: Primary sketching, pressure sensitive
- Eraser Tool [E]: Standard/soft/hard edge modes
- Paint Bucket Tool [K]: Fast area filling, critical for Color Match
- Shape Tools: Box [I], Ellipse [O], Line [L]
- Transform Tool [M]: Move, scale, rotate, skew
- Skew Tool [T]: Perspective adjustments
- Symmetry Tool [Y]: Perfect symmetrical drawing
- Selection Tools [G]: Lasso, Brush, Bezier, Automatic

Color Tools:

- Advanced color picker (HSB/RGB/HEX/LAB/CMYK)
- Brand color integration
- Color swatches and palettes
- Gradient creator
- Eyedropper tool

Advanced Tools:

- Rulers & guides
- Measurement tool
- Zoom & pan (10%-6400%)
- Unlimited undo/redo
- History scrubber
- Quick save system

10.2 Layer Management System

Layer Types:

- Sketch layers
- Rendering layers
- 3D model layers
- Reference layers
- Text/annotation layers
- Adjustment layers

Layer Operations:

- Show/hide, lock/unlock
- Reorder via drag-and-drop
- Duplicate, delete, merge
- Group into folders
- Blend modes and opacity
- Layer effects and styles

Smart Features:

- Layer filtering and search
- Batch operations
- Version control
- Layer comps (saved states)

10.3 Canvas & Workspace

Canvas Types:

Brush Studio (Fixed Canvas):

- Traditional fixed canvas
- Set dimensions
- Export entire canvas
- Best for single renders

Workbench (Infinite Canvas):

- Unlimited workspace
- Pan infinitely
- Multiple artboards
- Best for exploration and collaboration

Navigation Controls:

- Pan: Space + Drag
- Zoom: Ctrl + Scroll
- Quick zoom buttons
- Navigator panel minimap
- History navigation
- Bookmarks

Workspace Layouts:

- Essentials (default)
- Drawing Focus
- Rendering Workflow
- Collaboration
- Custom layouts saved

11. AI Prompting System

11.1 Advanced Prompt Engineering

Prompt Structure: [Subject], [Properties], [Context], [Modifiers]

Example: "Premium wireless headphones, brushed aluminum and leather, floating in dark studio, cinematic lighting, 8k quality"

Prompt Components:

1. **Subject** (Required): What you're designing
2. **Materials** (Highly Recommended): Surface qualities
3. **Colors** (Optional with BrandKit): Specific colors
4. **Form Language** (Optional): Shape characteristics
5. **View/Angle** (Recommended): Desired perspective
6. **Context/Environment** (Optional): Background and setting
7. **Lighting** (Optional): Light quality and direction
8. **Quality Modifiers** (Optional): Enhancement keywords

Prompt Weighting System:

- (term)+ or (term:1.1) = Emphasize
- (term)++ or (term:1.3) = Strong emphasis
- (term)+++ or (term:1.5) = Maximum emphasis
- (term)- or (term:0.9) = De-emphasize
- Effective range: 0.5-1.5

Word Order Importance: First words = Most influential, Last words = Least influential

Negative Prompts: Tell AI what to avoid in separate field (e.g., "plastic, cheap, toy-like, glossy")

Prompt Templates:

- Product Studio Shot
- Lifestyle Context
- Technical/Cutaway
- Dramatic Hero
- Minimalist/Clean
- Form Development
- Brand-Specific (auto-generated with BrandKit)

11.2 Intelligent Prompt Suggestions

AI-Powered Enhancement:

- As-you-type suggestions
- Contextual completions
- Brand-aware suggestions
- Anti-pattern warnings
- Prompt optimization tool
- Prompt library (save successful prompts)

End of Part 2: Sketch-to-Render Engine

PART 3: ADVANCED FEATURES

Professional tools for complete workflows

---

12. 3D Capabilities & Generation

12.1 Instant 3D (2D to 3D)

Overview: Convert any 2D render to 3D model in 10-60 seconds.

3D Quality Tiers:

Standard 3D (10-15 sec):

- ~50K triangles, 2K texture
- Quick visualization
- Good for angle exploration

Detailed Smooth (30-40 sec):

- ~150K triangles, 4K texture
- Clean topology for editing
- CAD software import ready

Detailed (45-60 sec):

- ~300K+ triangles, 8K texture
- Maximum detail preservation
- Marketing quality

Multi-View 3D: Use 2-6 views for enhanced accuracy (98% vs 80% with single view).

3D Export Formats:

- GLB/GLTF (recommended, textures embedded)
- OBJ + MTL (universal)
- FBX (Autodesk standard)
- STL (3D printing)
- USDZ (Apple AR)

12.2 3D Model Import & Integration

Supported Formats: GLB, GLTF, OBJ, FBX, STL, USDZ, Collada, STEP, IGES

Workflow:

1. Import 3D model
2. Position and set view angle
3. Sketch modifications over model
4. Generate with perfect perspective
5. Render from 3D for multiple angles

Brand Integration: Automatically map imported materials to brand materials.

12.3 AR Export & Viewing

Capabilities:

- View designs at actual size in real environment
- iOS (USDZ) and Android (GLB) support
- No app installation required
- True-to-scale viewing
- Interactive exploration

Use Cases:

- Client presentations ("see it in your office")
- Scale validation
- E-commerce visualization
- Trade show demos

---

13. Reference Systems

13.1 Reference Images

Reference Types:

- Style Reference (overall aesthetic)
- Material Reference (specific materials)
- Color Reference (palette inspiration)
- Composition Reference (layout)
- Lighting Reference (light setup)

Smart Integration: AI analyzes references and intelligently blends with BrandKit to maintain brand compliance while adopting reference aesthetics.

13.2 Try-On Feature

Virtual Garment Visualization: Apply garment designs to model photos.

Workflow:

1. Upload model photo
2. Select region (use selection tools)
3. Upload garment reference
4. Generate application
5. Adjust fit and draping

Use Cases:

- Fashion design visualization
- Apparel mockups
- E-commerce imagery
- Colorway exploration

---

14. Editing & Modification Tools

14.1 Magic Tools Suite

Magic Erase: Remove unwanted elements instantly with AI context filling.

Magic Enhance: One-click quality boost for materials, details, lighting, and polish.

Remove Background: Automatic background removal with transparent output.

Color Transfer: Change colors of selected areas while preserving materials.

Smart Upscale: AI-powered resolution increase (2X, 4X, 8X) with detail enhancement.

14.2 Custom Modify System

Natural Language Editing: Describe desired changes in plain language - AI understands and applies.

Examples:

- "Add water droplets showing waterproof"
- "Show product being held by hands"
- "Place car on mountain road at sunset"
- "Add wear and tear, well-loved appearance"

Context-Aware: AI understands product category and applies modifications appropriately.

Brand-Aware: When BrandKit active, modifications maintain brand compliance.

14.3 Preset Modify Functions

New Views: Generate product from different angles using 3D cube interface or dropdown.

Form Variation: Explore design alternatives on 2D grid (Geometric↔Organic, Simple↔Complex).

Extract Material: Create flat material swatches from renders for CMF work.

Change Expression: Modify character facial expressions with presets or custom descriptions.

Scene Builder: Create contextual environments around products.

---

15. Color Management System

15.1 Color Match Feature

Purpose: Ensure sketch colors carry through to render with exact accuracy (critical for CMF workflows).

How It Works:

- Sketch colors → LOCKED → Exact colors in output
- AI adds materials, lighting, details while preserving colors
- Achieves ΔE < 1.0 (imperceptible difference)

Modes:

- Strict: ΔE < 1.0 target (exact)
- Balanced: ΔE < 3.0 target (close)
- Guided: ΔE < 5.0 acceptable (flexible)

Color Accuracy Report: Post-generation analysis showing ΔE measurements per color region.

Use Cases:

- CMF development
- Colorway visualization
- Pantone matching
- Tech pack creation
- Brand color enforcement

15.2 Advanced Color Tools

Professional Features:

- Color picker (all formats: HEX, RGB, HSB, LAB, CMYK)
- Brand color integration with snap-to-brand
- Color harmony generator
- Gradient creator
- Pantone matching
- Color blindness simulator (accessibility)
- Material color preview (see color on different materials)
- Color palette manager

CMF Workflow: Week 1: Color exploration → Week 2: Material studies → Week 3: Integration → Week 4: Documentation

---

LUM○

PART 4: COLLABORATION & WORKSPACE

Team productivity and real-time co-working

---

16. Infinite Canvas (Workbench)

16.1 Workbench Architecture

Revolutionary Workspace:

- Truly infinite canvas (no boundaries)
- Real-time collaboration
- Multiple simultaneous projects
- Visual organization
- Non-linear workflow

Canvas Elements:

1. **Image Blocks**: Windows to renders
2. **Prompt Blocks**: Generation controls
3. **Text Annotations**: Notes and labels
4. **Connection Lines**: Visual relationships
5. **Section Frames**: Organized content groups

Navigation:

- Pan: Space + Drag
- Zoom: Ctrl + Scroll (10%-6400%)
- Quick zoom and fit controls
- Navigator minimap

- Bookmarks for key locations
- History navigation

Workbench Templates:

- Product Development (concept to final)
- Client Presentation (structured pitch)
- Design Exploration (radial variations)
- Colorway Template (grid comparison)
- Iteration Timeline (evolution view)

Presentation Mode: Create guided presentation paths through workspace for client pitches.

---

17. Team Collaboration Features

17.1 Real-Time Collaboration

Live Presence:

- See team members' cursors
- View what they're working on
- Follow mode (sync viewports)
- Status indicators
- Active editing locks

Collaborative Features:

- Simultaneous editing (safe concurrent)
- Comment system with @mentions
- Visual annotations (arrows, highlights)
- Task assignment
- Change tracking and activity feed
- Video conferencing integration

Conflict Prevention: First user locks element, others see "In use by [Name]", auto-unlocks when done.

17.2 Workspace Management

Hierarchy: Organization → Workspace → Team → Projects

Role-Based Access:

- **Owner**: Full control, billing
- **Admin**: Manage members, BrandKits, all projects
- **Editor**: Create, generate, edit, export
- **Commenter**: View, comment, limited features
- **Viewer**: View only (unlimited FREE)

Workspace Features:

- Independent file libraries
- Separate BrandKits
- Custom team settings
- Isolated billing
- Usage analytics
- Team performance metrics

---

18. Version Control & History

18.1 Automatic Versioning

Every change creates version:

- Each generation
- Each edit
- Each modification
- Manual snapshots

Version History Panel: Shows all versions with timestamps, creators, actions, brand scores, and preview thumbnails.

Version Actions:

- View any version
- Restore to make current
- Compare side-by-side
- Export specific version
- Branch (create alternate path)

18.2 Milestones & Branching

Milestones: Mark important versions (e.g., "Client Approved for Launch") with descriptions, categories, and team notifications.

Branching: Create alternate version paths for exploration while preserving main work.

Merge & Compare: Compare branches, merge features, switch between paths.

18.3 Backup & Recovery

Automatic Backup:

- Every 2 minutes: Auto-save
- Every 30 minutes: Snapshot
- Daily/Weekly/Monthly: Archives

Retention:

- Real-time: 30 days
- Snapshots: 90 days
- Daily: 1 year
- Weekly: 3 years
- Monthly: Permanent

Recovery Objectives:

- RTO: < 1 hour
- RPO: < 15 minutes
- Data durability: 99.999999999%

End of Part 4: Collaboration & Workspace

PART 5: PRODUCTION & EXPORT

Professional output for all workflows

---

19. Export System

19.1 Image Formats

PNG (Recommended):

- Resolution: Current to 8K
- Transparency support
- Color space options (sRGB, Adobe RGB, Display P3)
- Bit depth: 8-bit or 16-bit
- Metadata inclusion

Other Formats:

- JPEG (adjustable quality)
- TIFF (professional print)
- WebP (modern web)

Layered Formats:

- PSD (Photoshop) - full editability
- LUMO Native (.lumo) - complete project

19.2 3D & Specialized Exports

3D Formats:

- GLB/GLTF (web, textures embedded)
- OBJ + MTL (universal)
- FBX (Autodesk)
- STL (3D printing)
- USDZ (Apple AR)

Specialized Exports:

- Watermarking (text/logo)
- Contact sheets (project overview)
- Presentation decks (auto-generated PowerPoint/Keynote)
- Portfolio pages (Behance/Dribbble layouts)
- Tech packs (manufacturing documentation)
- CMF boards (color/material/finish)
- Animation sequences (360°, exploded view)
- Metadata exports (JSON, CSV, PDF)

19.3 Batch & Cloud Export

Batch Export: Export multiple files simultaneously with:

- Multiple format generation
- Custom naming conventions
- Organized folder structure
- Metadata files
- Contact sheets

Cloud Export: Direct export to:

- Google Drive
- Dropbox
- OneDrive
- Amazon S3 (Enterprise)
- Custom FTP/SFTP

Email Export: Send directly via email with compression and review links.

---

20. Integration Capabilities

20.1 Design Software

Adobe Creative Cloud:

- Photoshop plugin
- Illustrator plugin
- InDesign plugin
- After Effects integration

Other Design Tools:

- Sketch/Figma import
- Blender/Cinema 4D integration
- 3DS Max/Maya support

20.2 CAD Software

Engineering Integration:

- SolidWorks
- AutoCAD/Inventor/Fusion 360
- Rhino/Grasshopper
- Direct model import
- Manufacturing to marketing pipeline

20.3 Cloud & Communication

Cloud Storage:

- Google Drive
- Dropbox
- OneDrive
- Box (Enterprise)
- Amazon S3 (Enterprise)

Communication Tools:

- Slack integration
- Microsoft Teams
- Discord
- Notifications and bot commands

Project Management:

- Asana
- Monday.com
- Jira
- Trello

DAM Systems:

- Bynder
- Widen
- Brandfolder
- Automatic asset pushing

20.4 E-Commerce & API

E-Commerce:

- Shopify integration
- WooCommerce/Magento
- Amazon Seller Central
- Automated product imagery

API Access (Enterprise):

- RESTful API
- SDK available (Python, JavaScript, Java, Node.js)
- Webhooks
- Rate limits: 1000 requests/hour

---

21. Production Workflows

21.1 End-to-End Workflows

Product Launch Workflow (5 weeks):

- Week 1: Initial concepts
- Week 2-3: Development and variants
- Week 4: Refinement
- Week 5: Production assets

- Week 6+: Launch support

Marketing Campaign Workflow (8-10 days):

- Days 1-2: Hero images
- Days 3-4: Supporting assets
- Day 5: Digital adaptations
- Day 6: Print materials
- Days 7-8: Motion content

E-Commerce Workflow: Automated batch production of product photography:

- 47 products × 9 views = 423 images
- Generation time: 4-5 hours
- Platform-ready exports
- Fraction of traditional cost

CMF Development Workflow (4 weeks):

- Week 1: Color exploration
- Week 2: Material studies
- Week 3: Integration
- Week 4: Documentation

Brand Guidelines Creation: Use LUMO to build comprehensive brand guidelines with all assets, specifications, and examples.

End of Part 5: Production & Export

PART 6: PLATFORM & TECHNICAL

Enterprise infrastructure and business model

---

22. Platform Architecture

22.1 System Requirements

Minimum Specifications:

- Windows 10/macOS 11/Chrome OS/iPad OS 15+
- Intel Core i5 8th gen or equivalent
- 8 GB RAM
- Integrated graphics
- 10 Mbps internet
- Modern browser (Chrome 90+, Firefox 88+, Safari 14+, Edge 90+)

Recommended Specifications:

- Intel Core i7 10th gen+ or equivalent
- 16 GB RAM (32 GB for large projects)
- Dedicated GPU (GTX 1660 or better)
- 50 Mbps+ internet
- 1920x1080+ display
- Color accurate monitor

Professional Workstation:

- Top-tier CPU (i9, Ryzen 9, M2 Max/Ultra)
- 32-64 GB RAM
- High-end GPU (RTX 4080/4090)
- 1TB NVMe SSD
- 4K+ calibrated display
- Gigabit fiber internet

22.2 Cloud Infrastructure

Backend Architecture:

- Multi-region deployment (AWS/GCP/Azure)
- Load-balanced globally
- CDN-accelerated
- GPU compute clusters (NVIDIA A100/H100)
- Auto-scaling
- 99.99% uptime SLA

Performance:

- Draft: 3-5 seconds
- Standard: 8-12 seconds
- Professional: 15-25 seconds
- Ultra: 30-60 seconds
- 3D: 10-60 seconds (quality dependent)

22.3 Platform Support

Native Applications:

- Windows desktop app
- macOS app (Universal Binary, Apple Silicon optimized)
- Linux app (Beta)
- iOS app (iPhone & iPad, Apple Pencil support)
- Android app (phone & tablet, stylus support)
- Progressive Web App (PWA)

---

23. Security & Compliance

23.1 Data Security

Encryption:

- At Rest: AES-256
- In Transit: TLS 1.3
- End-to-End: Optional client-side encryption
- Zero-knowledge architecture available

Data Privacy:

- No training on your data
- Your designs remain private
- No data sharing/selling
- GDPR compliant
- CCPA compliant

23.2 Access Control

Authentication:

- Email + strong password
- Multi-Factor Authentication (SMS, TOTP, hardware keys)
- Enterprise SSO (SAML 2.0, OAuth 2.0, Active Directory)
- Session management
- IP whitelisting (Enterprise)

Authorization:

- Role-based access control (RBAC)
- Fine-grained permissions
- Project-level access
- Audit logging

23.3 Compliance Certifications

Current Certifications:

- ✓ SOC 2 Type II
- ✓ ISO 27001:2013
- ✓ GDPR Compliant
- ✓ CCPA Compliant

- ✓ PCI DSS Level 1

Enterprise Add-ons:

- HIPAA Business Associate Agreement
- FedRAMP Authorization (in process)
- ISO 9001 Quality Management

Data Residency: Choose data region (EU, US, Asia-Pacific) for sovereignty compliance.

23.4 Monitoring & Backup

Security Monitoring:

- 24/7 threat monitoring
- Intrusion detection
- DDoS protection
- Vulnerability scanning
- Annual penetration testing
- Bug bounty program

Backup System:

- Real-time: Continuous replication
- Hourly: Incremental backups
- Daily: Full backups
- Weekly/Monthly: Archives
- Geographic distribution
- 99.999999999% data durability

---

24. Pricing & Plans

24.1 Subscription Tiers

STARTER - $29/month

- 50 generations/month
- Draft & Standard quality
- 1 basic BrandKit
- 5 GB storage

- Watermarked exports
- Community support

PROFESSIONAL - $79/month (annual) or $69/month

- Unlimited generations
- All quality modes including Ultra
- 10 advanced BrandKits
- Unlimited Custom Palettes
- 4K & 8K exports
- No watermarks
- 100 GB storage
- Priority generation
- Email support (24h)

Business- $199/month (3 users)

- Everything in Professional
- Real-time collaboration
- Unlimited free viewers
- Shared workspace
- Team BrandKit library
- Version control
- 500 GB shared storage
- Priority support (12h)
- Team training session

ENTERPRISE - Custom Pricing

- Everything in Team
- Unlimited users and workspaces
- Custom BrandKit training
- API access
- SSO integration
- Advanced security
- Audit logs (7-year retention)
- Custom storage (5TB+)
- Dedicated account manager
- 24/7 support (1h response)
- Custom SLA

EDUCATION - $9/student/month

© 2025 LUMO TECHNOLOGY. All rights reserved.

- 50% off Professional features
- Institutional licensing available
- Classroom collaboration
- Student portfolios

24.2 Credit System

Credit Costs:

- Draft: 1 credit
- Standard: 2 credits
- Professional: 4 credits
- Ultra: 8-10 credits
- 3D Standard: 3 credits
- 3D Detailed: 6-10 credits
- Enhance: 2 credits
- Custom Modify: 2 credits

Credit Packs (Pay-As-You-Go):

- 100 credits: $10 ($0.10/credit)
- 500 credits: $40 ($0.08/credit) - 20% savings
- 1,000 credits: $70 ($0.07/credit) - 30% savings
- 5,000 credits: $300 ($0.06/credit) - 40% savings
- 25,000 credits: $1,250 ($0.05/credit) - 50% savings

Fair Use Policy: Professional/Team/Enterprise plans have "unlimited" generations with fair use up to 10,000/month.

---

25. Support & Resources

25.1 Support Channels

By Plan:

- **Free**: Community forums, knowledge base, email (72h)
- **Professional**: + Priority forums, live chat, email (24h)
- **Team**: + Team onboarding, email (12h)
- **Enterprise**: + 24/7 support (1h), phone, account manager

Support Center:

- Searchable help portal
- 328 written guides
- 147 video tutorials
- Getting started guides
- Troubleshooting articles

LUMO Academy:

- Free courses (Beginner, Intermediate, Advanced)
- Certifications available
- Monthly webinars
- Design challenges
- Community Discord (15,000+ members)

Contact:

- Live Chat: support@lumotechnology.com/chat
- Email: support@lumotechnology.com
- Phone (Enterprise): +1-888-LUMO-PRO
- Status Page: status.lumotechnology.com

25.2 Learning Resources

Educational Content:

- Interactive tutorials
- Sample projects
- Template library
- Sample BrandKits
- Best practices blog
- Case studies
- Expert interviews
- User showcase gallery

26. Roadmap & Future Features

26.1 Product Roadmap

Q4 2025:

- Advanced animation tools
- Video generation capabilities
- Real-time ray tracing
- Enhanced mobile apps
- API v2 with webhooks

Q1 2026:

- AI-powered design suggestions
- Automated brand guideline generation
- Multi-language support (10+ languages)
- Advanced 3D editing
- VR/AR design preview
- Plugin marketplace

Q2 2026:

- Generative design variations
- Style transfer improvements
- 500+ material library
- Collaborative 3D modeling
- Custom AI model training (Enterprise)

Long-Term Vision:

- Full design-to-production pipeline
- Manufacturing integration
- Supplier network
- Cost estimation
- Sustainability metrics
- Global collaboration platform

---

27. Legal & Terms

27.1 Intellectual Property

Your Rights:

- You own all your designs
- Your sketches remain yours
- Generated renders are yours
- BrandKits are your property
- No rights claimed by LUMO
- Commercial use allowed
- Full copyright to outputs

27.2 Data & Privacy

AI Training:

- Your data NOT used for training (default)
- Opt-in only for improvements
- Enterprise: Complete isolation
- Transparent data practices

Privacy Policy:

- GDPR/CCPA compliant
- Data portability guaranteed
- Right to deletion honored
- No selling of user data
- Clear data practices

27.3 Usage Terms

Acceptable Use:

- Comply with acceptable use policy
- No illegal content
- No copyright infringement
- No harmful/offensive content
- Fair use guidelines
- Export restrictions compliance

Liability:

- Service provided "as-is"
- 99.9% uptime SLA (paid plans)
- No liability for user content
- Professional insurance maintained

- Dispute resolution process

GETTING STARTED

Your LUMO Journey in 5 Steps

STEP 1: Sign Up

- Visit www.lumotechnology.com
- Create free account
- Verify email
- Complete profile
- Choose plan (or start free)

STEP 2: Complete Onboarding

- Interactive tutorial (10 minutes)
- Sample project walkthrough
- BrandKit introduction
- First render generation
- Export your first design

STEP 3: Set Up Your BrandKit

- Create your first BrandKit
- Upload 25+ brand images
- Define brand colors
- Set material library
- Train AI (5 minutes)
- Test with sample sketches

STEP 4: Create Your First Project

- Start new project
- Import or sketch design
- Apply BrandKit
- Generate renders

- Refine and iterate
- Export finals

STEP 5: Collaborate with Your Team

- Invite team members
- Share workspace
- Review together
- Comment and provide feedback
- Approve and export
- Deliver to clients

Available Resources

Getting Started:

- 15-minute video tutorial
- Interactive demos
- Template library
- Sample BrandKits
- Community support
- Weekly live onboarding sessions

Ongoing Support:

- Help documentation (328 articles)
- Video library (147 tutorials)
- LUMO Academy courses
- Community Discord
- Monthly webinars
- Expert office hours

CONCLUSION

Why Choose LUMO

Revolutionary BrandKit System

LUMO's BrandKit AI is the industry's most advanced brand consistency system. It doesn't just apply filters—it understands your brand's DNA at a fundamental level and ensures every design maintains perfect brand alignment.

Professional Quality

From draft concepts to 8K publication-ready renders, LUMO delivers professional quality at every stage. Trusted by Fortune 500 companies, leading design agencies, and independent creators worldwide.

Complete Workflow Solution

LUMO isn't just a rendering tool—it's a complete design-to-delivery platform. Sketch, render, collaborate, manage brands, export production files, and deliver to clients all in one place.

Enterprise Ready

Built for demanding professional environments with enterprise security, compliance certifications, unlimited scalability, and dedicated support.

Continuous Innovation

Backed by ongoing development, regular updates, new features, and a commitment to staying at the forefront of AI-powered design technology.

Transform Your Design Workflow Today

Free Trial: 14 days, no credit card required
Free Plan: Always available for learning and exploration
Professional Plans: Starting at $49/month
Enterprise: Custom solutions for any scale

Contact Information

Website: www.lumotechnology.com
Email: hello@lumotechnology.com
Sales: sales@lumotechnology.com
Support: support@lumotechnology.com
Phone: +1-888-LUMO-PRO

Social Media:

- Twitter: @bylumotech
- Instagram: @bylumotech
- LinkedIn: LUMO Technologies
- YouTube: LUMO
- Discord: discord.gg/lumo

APPENDICES

Appendix A: Keyboard Shortcuts

Essential Shortcuts:

- [B] Brush Tool
- [E] Eraser Tool
- [M] Move/Transform Tool
- [T] Skew Tool
- [G] Selection Tools
- [I] Box Shape Tool
- [O] Ellipse Tool
- [L] Line Tool

- [Y] Symmetry Tool
- [K] Paint Bucket Tool
- [Space + Drag] Pan Canvas
- [Ctrl + Scroll] Zoom
- [Ctrl + Z] Undo
- [Ctrl + Shift + Z] Redo
- [Ctrl + 0] Fit to Screen
- [Shift] Constrain Proportions
- [Alt] Eyedropper (when drawing)

Appendix B: Glossary of Terms

BrandKit: Intelligent AI system that learns and enforces brand consistency

Brand DNA: The core visual characteristics that define a brand's identity

Custom Palette: Specialized rendering style that controls how brand renders visually

Drawing Influence: Slider controlling how closely AI follows sketch (0-100%)

Brand Score: Numerical rating (0-100%) indicating brand compliance

ΔE (Delta E): Industry-standard color difference measurement (lower = more accurate)

CMF: Color, Material, Finish - design development approach

Inpainting: Editing specific regions of a render

Generation: Process of creating a render from sketch

Credits: Currency used for pay-as-you-go operations

Workbench: Infinite canvas workspace for collaboration

3D Generation: Converting 2D renders into 3D models

AR Export: Exporting for augmented reality viewing

Appendix C: File Format Specifications

Supported Import Formats:

- Images: JPEG, PNG, TIFF, PSD, AI, SVG, PDF, WebP, BMP, GIF, HEIC, RAW
- 3D Models: GLB, GLTF, OBJ, FBX, STL, USDZ, Collada, 3DS, STEP, IGES
- Sketches: All image formats + automatic cleaning

Supported Export Formats:

- Images: PNG, JPEG, TIFF, WebP, PSD, LUMO Native
- 3D: GLB, GLTF, OBJ, FBX, STL, USDZ
- Documents: PDF, PowerPoint, Keynote, CSV, JSON, XML
- Animation: MP4, GIF, WebM, PNG sequence

Appendix D: BrandKit Training Best Practices

Image Selection:

1. Use 60-100 images for comprehensive training
2. Include multiple angles of products
3. Maintain consistent quality (4K preferred)
4. Show variety of contexts and applications
5. Include close-ups of materials and details
6. Avoid inspiration boards from other brands
7. Use actual brand output, not concepts

Training Tips:

- Include 6 standard views for 3D understanding
- Simple white backgrounds for ideation palettes
- Diverse lighting for versatile training
- High-resolution, uncompressed images
- Complete products in frame
- Consistent brand representation

Common Mistakes:

- Too few images (quality suffers)
- Mixed brand styles (confuses AI)

- Low-resolution images
- Cropped too closely
- Inconsistent lighting
- Non-brand inspiration mixed in

Appendix E: API Documentation Summary

RESTful API Endpoints:

- `POST /api/v1/generate` - Generate render
- `POST /api/v1/brandkit/create` - Create BrandKit
- `GET /api/v1/brandkit/{id}` - Get BrandKit
- `POST /api/v1/3d/generate` - Generate 3D
- `GET /api/v1/projects` - List projects
- Full documentation: docs.lumo.technology/api

Authentication: API Key authentication via header

Rate Limits:

- 1000 requests/hour
- 100 generations/hour
- Burst: 50 requests/minute

SDKs Available:

- Python
- JavaScript
- Node.js
- Java

LUM○

Approved by:

Role	Name	Signature	Date
Product Manager			
Lead Developer			
Lead Designer			
QA Lead			
Legal Counsel			
CEO	Nicholas Trajeco		27 October 2025