



STAGE ONE

Three Yorkshire Roses

Audio Visual Proposal

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VERSION CONTROL

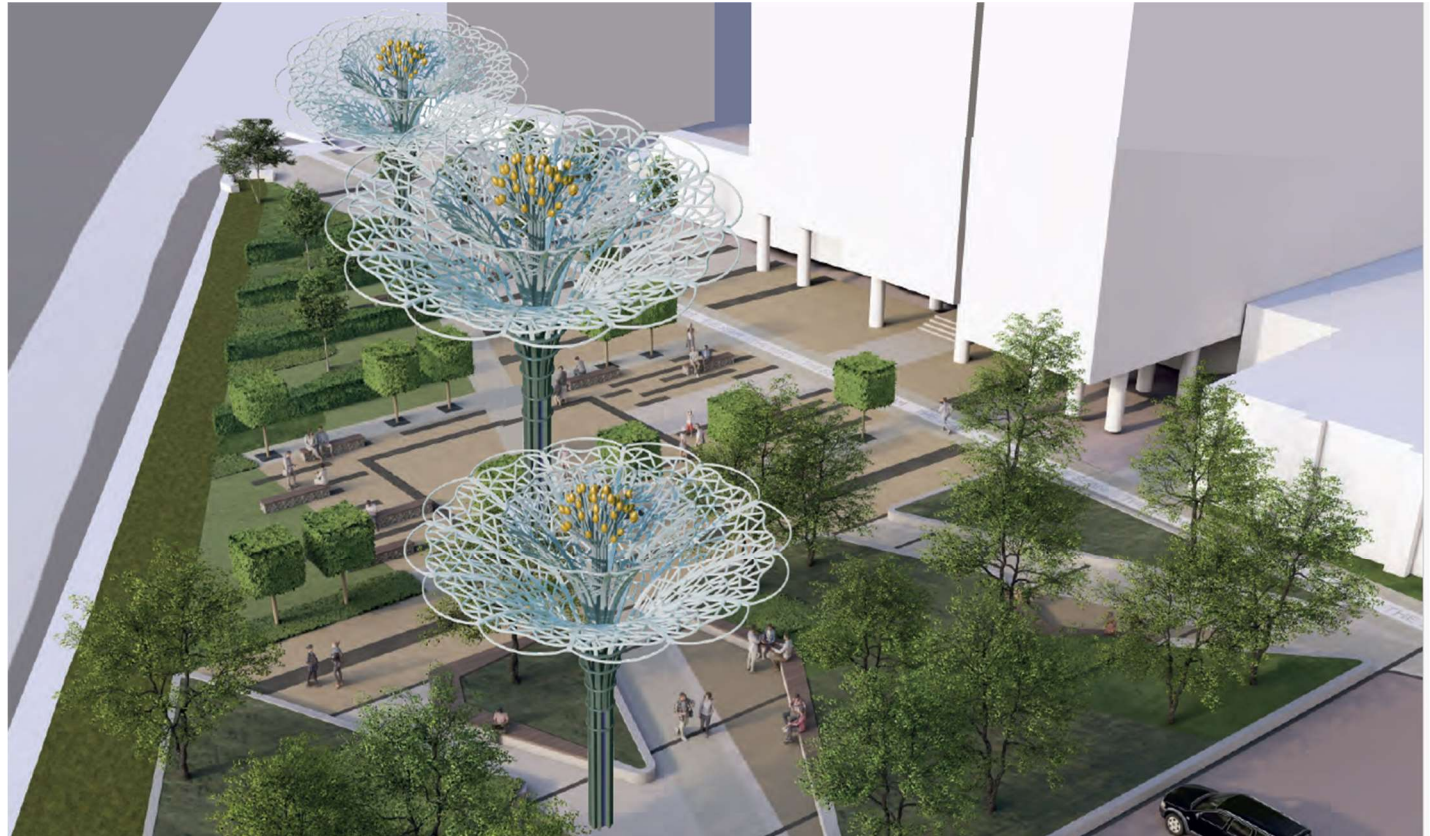
Rev. No.	Revision Description	Issue Date
01	Initial submission for review	11/04/2025

1. Introduction

Stage One has been commissioned to design the Three Yorkshire Roses installation. This is to be installed as a public artwork as part of a wider development on the Seam site in Barnsley. The project comprises of three structures, one will be 15m tall and two 12m tall, primarily made from galvanised steel with an industrial standard paint coating. Lighting and sound will be integrated throughout the structures as per BMBC specifications.

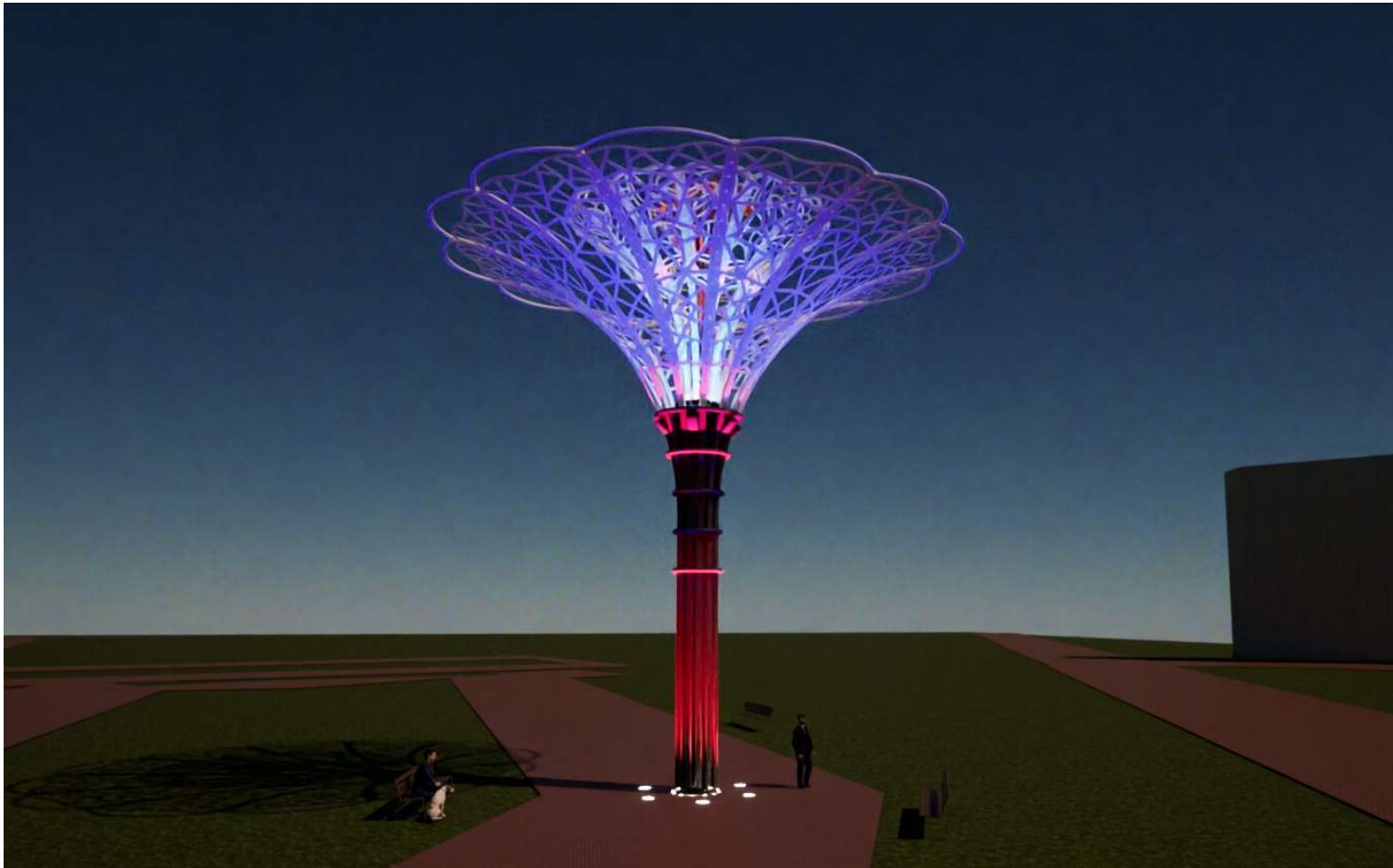
The lighting will be programmable and adaptable for events and different lighting states as per BMBC requirements. This will be accompanied by speakers mounted to the stems of the roses.

The system has been designed to showcase the sculptures and surrounding area whilst remaining as unobtrusive as possible.

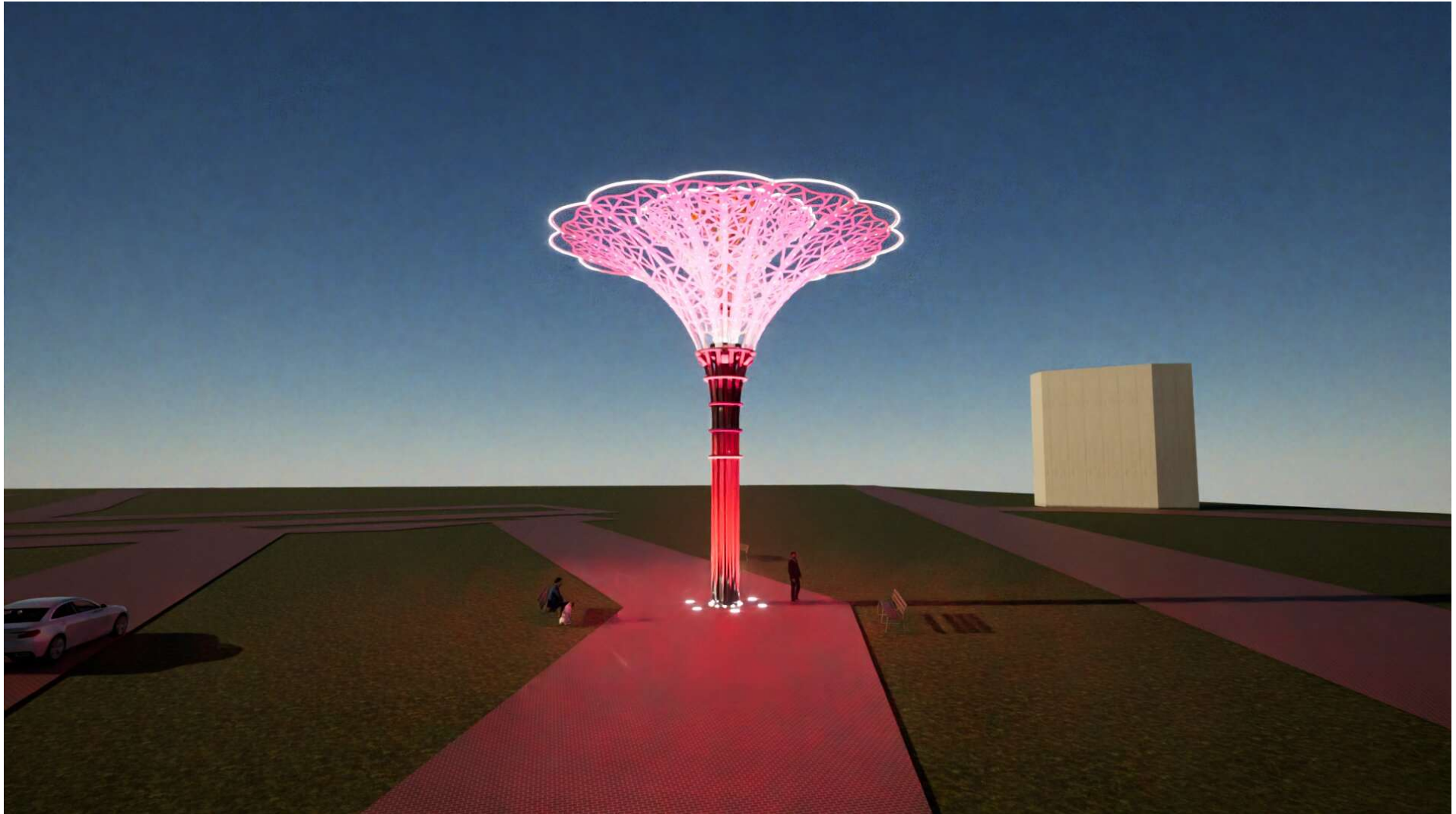


2. Renders

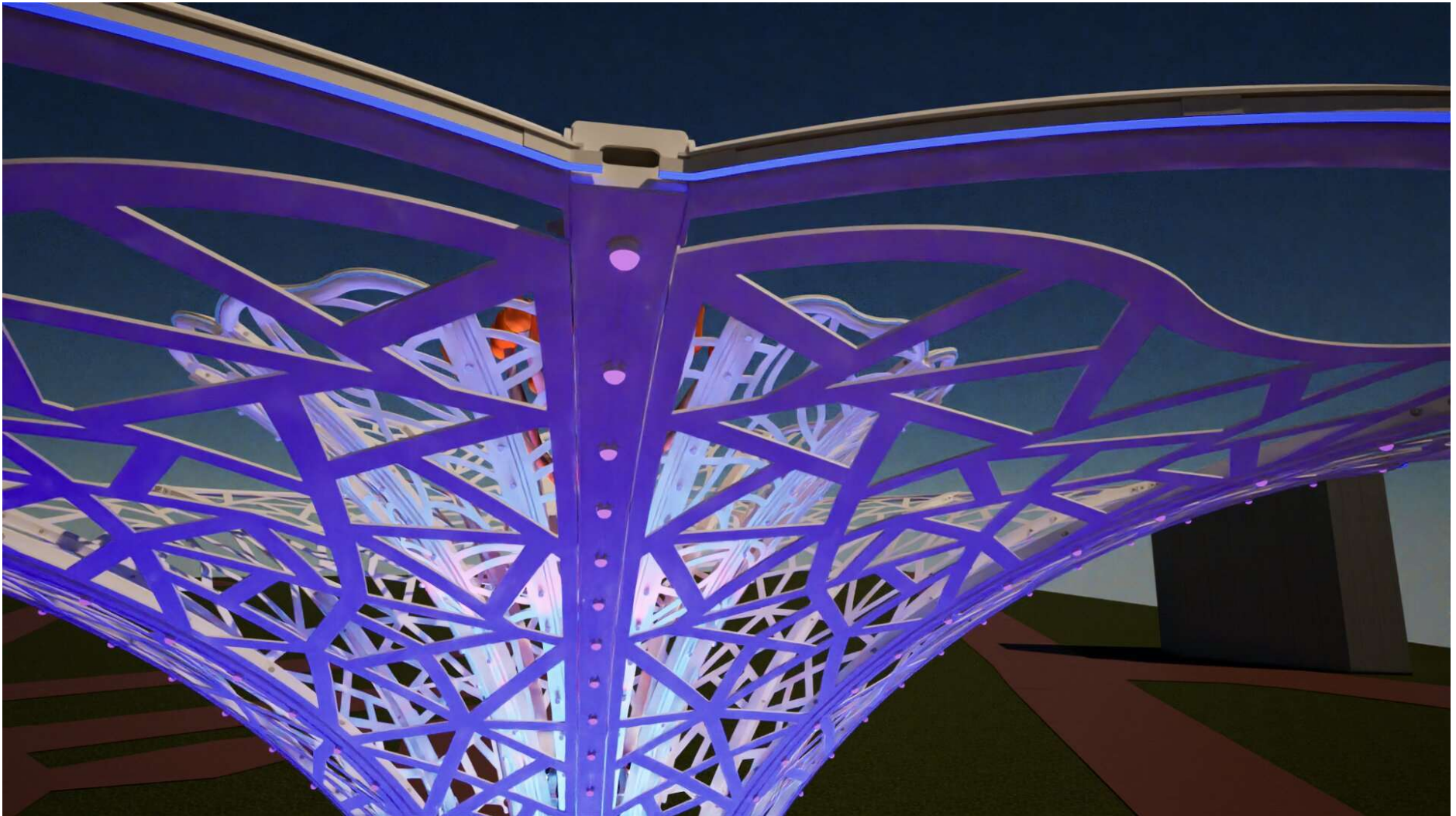
The following renders are provided to illustrate the lighting distribution of the proposed system. Lighting colours are for illustration purposes only and other colours are possible with the system proposed.



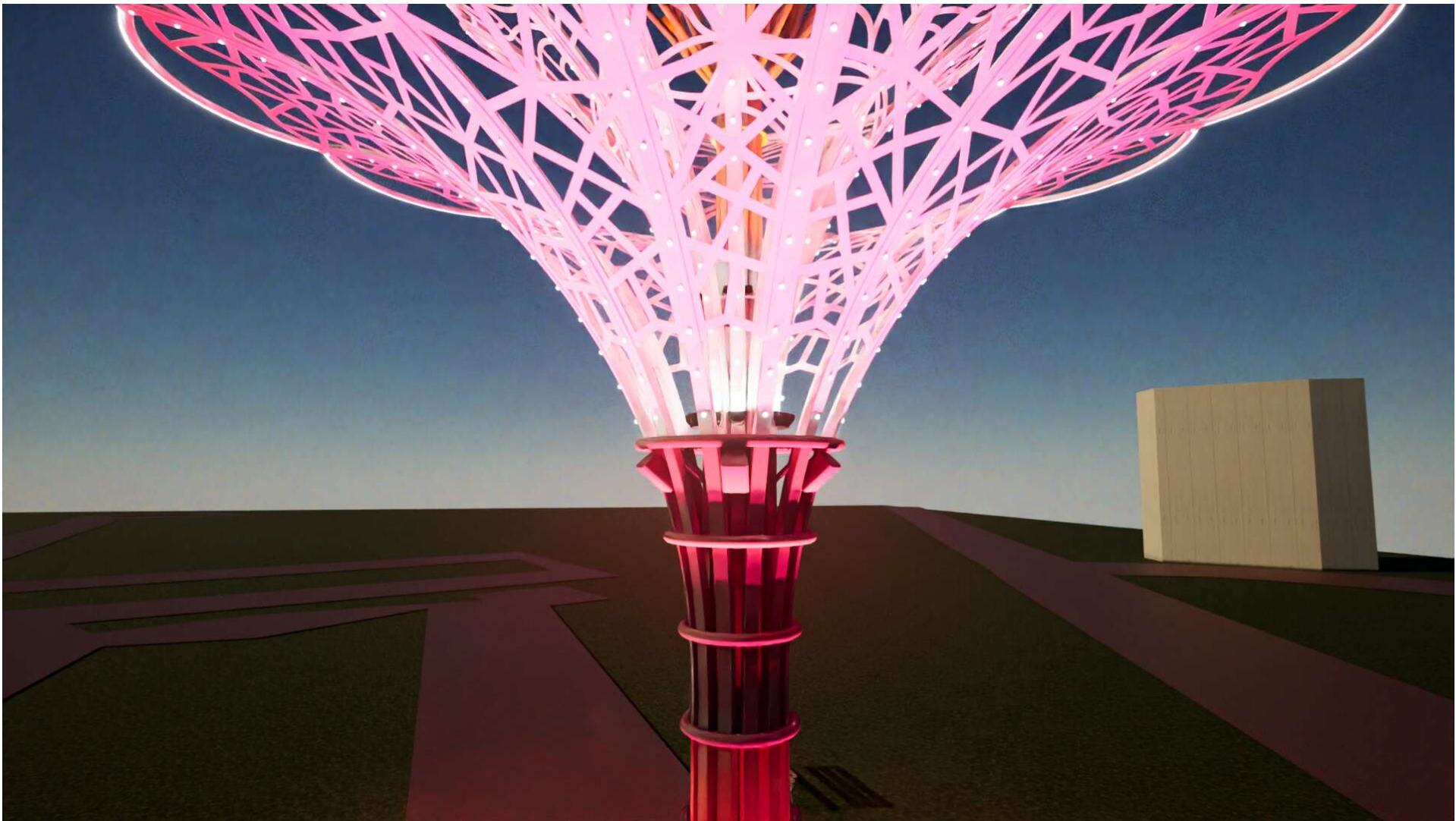
Render shows a red and purple lighting set up on the 15m rose. The simulation shows the structure at dusk.



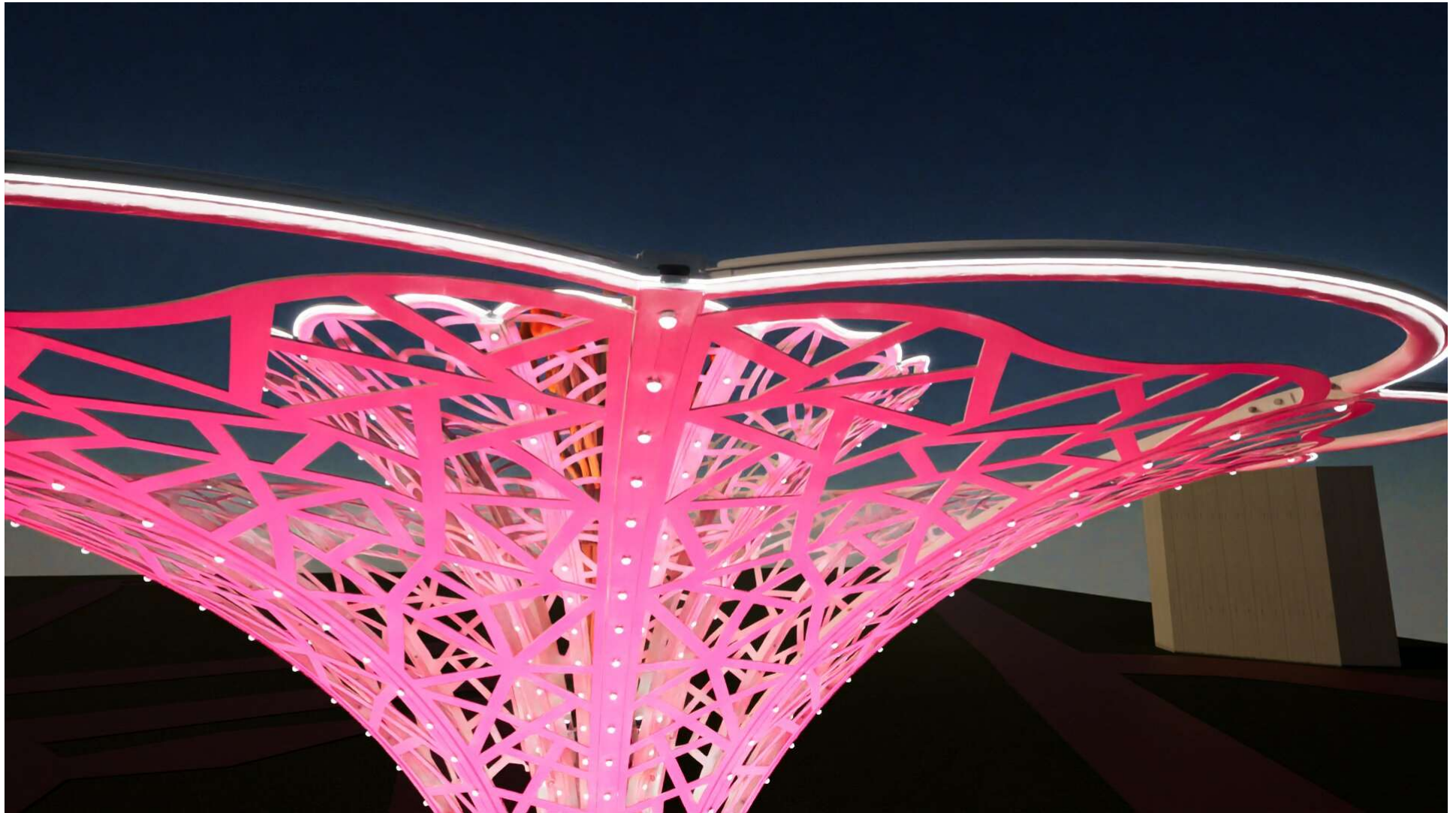
Render shows a red and pink lighting set up on the 15m rose. The simulation shows the structure at dusk.



Render shows a close up of the outer petals in a purple set up. The simulation shows the structure at dusk.



Render shows the knuckle and lower section of petals in a red and pink set up. The simulation shows the structure at dusk.



Render shows the outer petals in a red and pink set up. The simulation shows the structure in the evening.



Render shows the inner petals in a red and pink set up. The simulation shows the structure in the evening.

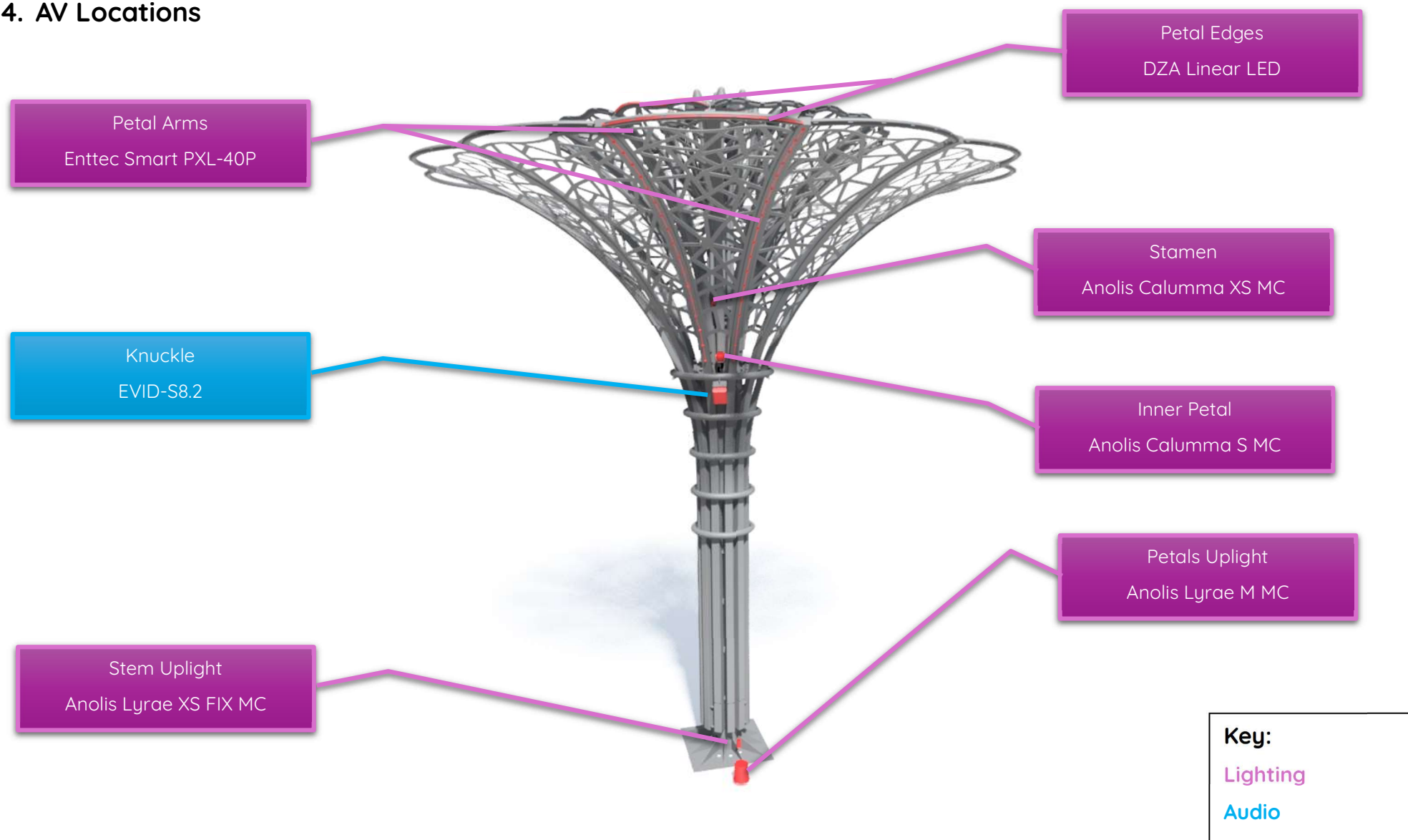


3. Flyovers

Please see flyover videos in *Appendix 3 Audio Visual* of the design submission *Project Plan*.



4. AV Locations





5. Visible Equipment

Lighting					
Location	Qty	Product & Appearance	Lifespan	Warranty	Control
Inside inner petals	36	Anolis Calumma XS MC 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	5 years back to base manufacturer's warranty	Each light can be individually controlled
Inside outer petals	36	Anolis Calumma S MC 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	5 years back to base manufacturer's warranty	Each light can be individually controlled



All petal arms (inner and outer petals)	1224	Enttec Smart PXL-40P 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	3 years back to base manufacturer's warranty	Each dot can be individually controlled.
Edges of all petals (inner and outer petals)	48	DZA Linear LED 	36,000 hours (Approx 4 years if on 24-hours a day)	3 years back to base manufacturer's warranty	Every 60mm can be individually controlled.



Base of structure - inner	36	Anolis Lyrae XS FIX MC 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	5 years back to base manufacturer's warranty	Each light can be individually controlled
Base of structure - outer	18	Anolis Lyrae M MC 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	5 years back to base manufacturer's warranty	Each light can be individually controlled



Audio					
Location	Qty	Product & Appearance	Lifespan	Warranty	Control
Top of knuckle	18	EVID-S8.2 – Custom RAL colour to match stem 	Lamp 90,000 hours (Approx 10 years if on 24-hours a day)	5 years back to base manufacturer's warranty	Each speaker can be individually controlled.



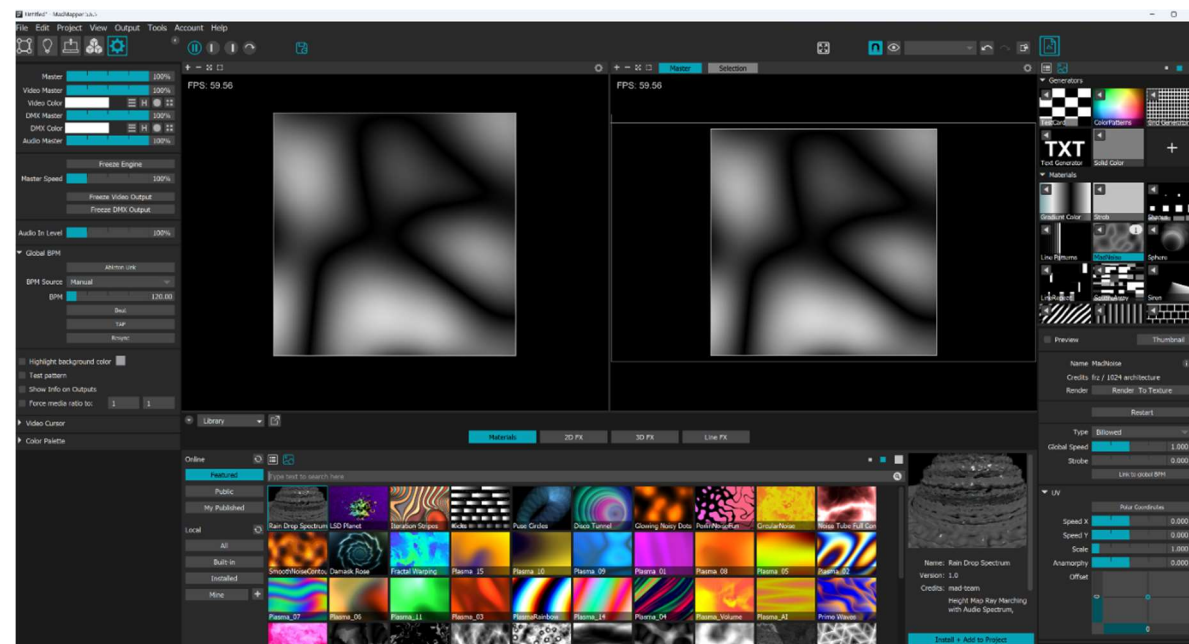
6. Lighting Control System - MadMapper

MadMapper is a professional video and multimedia mapping software. Multiple outputs and outputs to different screens are possible, as is the use of different input signals, such as NDI. It can control LED arrays or any number of DMX devices in real time, thanks to a powerful cueing system that makes triggering shows a breeze. This is a perpetual licence that will work on the purchased version indefinitely. Updated versions will be available but subject to a fee payable to MadMapper directly.

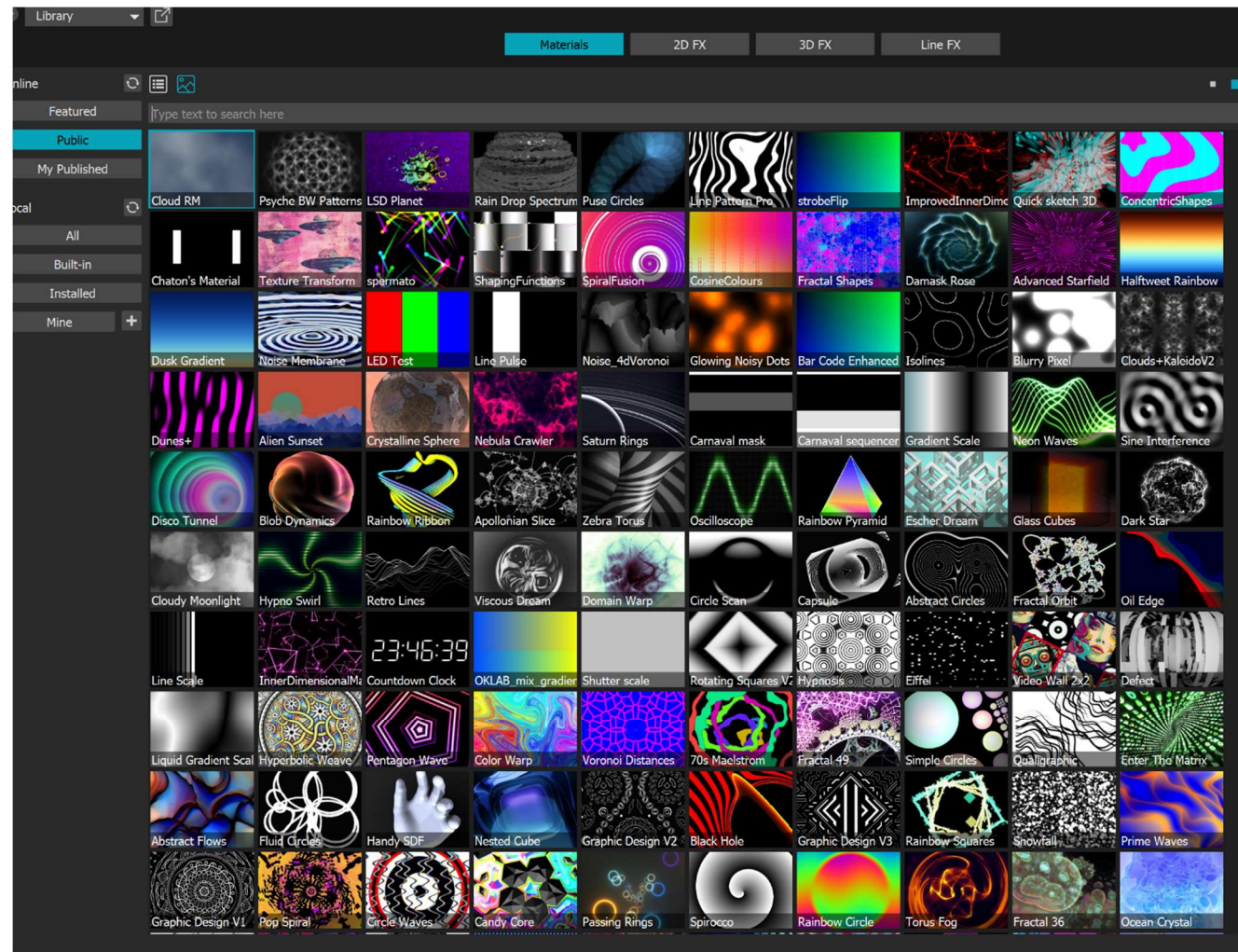
MadMapper is designed as a ready-to-use software package, easy to use for beginners, but it also includes features for experienced users who wish to benefit from advanced functionalities such as 3D calibration, space scanning, LED scanning, live shader editing, and much more. A customised programming screen will be provided for easy control of the roses. The roses will be provided with a single lighting state. Alternative states to be developed by BMBC.

It has been used on projects such as The Hive & ABBA Voyage. With custom screens and presets produced for both. This can also be applied to the Three Yorkshire Roses. It presents an easy to use page with presets but also allows for ‘under the hood’ programming for events and special occasions. A free demo version can be found here: <https://madmapper.com/madmapper/software>

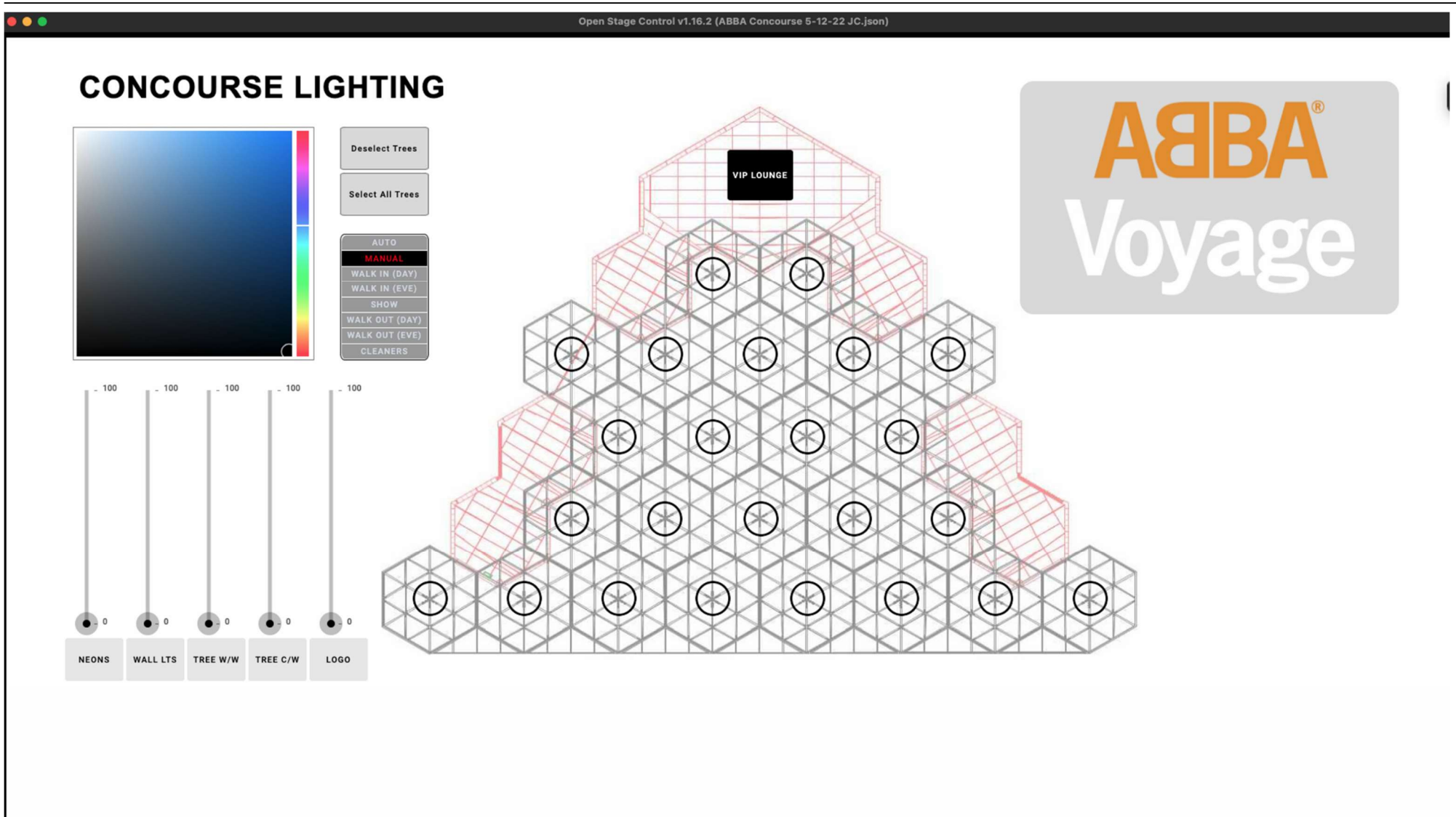
See Design Phase *Appendix 3 Audio Visual* in the *Project Plan* for more technical information.



MadMapper Effects Editor



MadMapper Effects Selection



Example custom screen produced for the ABBA Voyage lighting installation. A customised roses control screen similar to this will be provided.



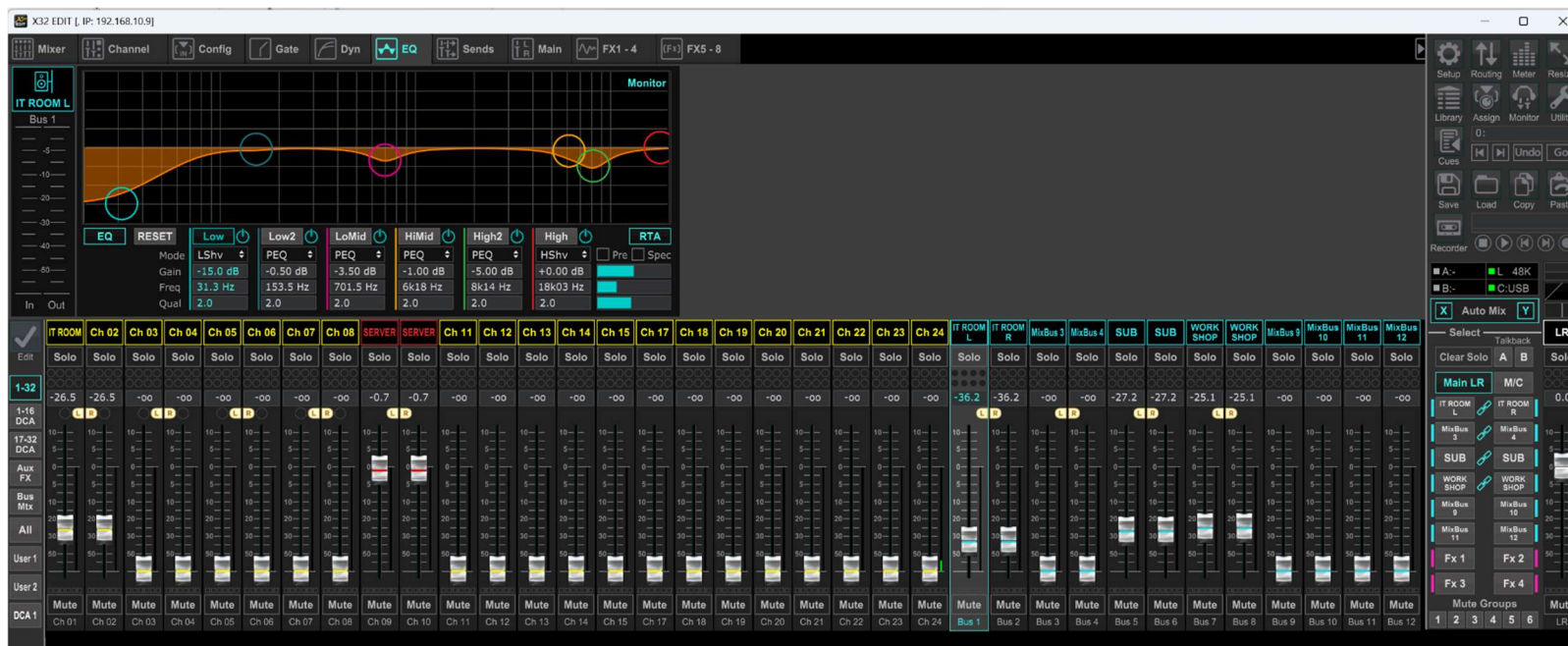
7. Audio Control System - Dante

Dante Virtual Soundcard is software that turns an PC or Mac into a Dante-enabled device, transmitting and receiving high-quality audio over an existing wired network connection.

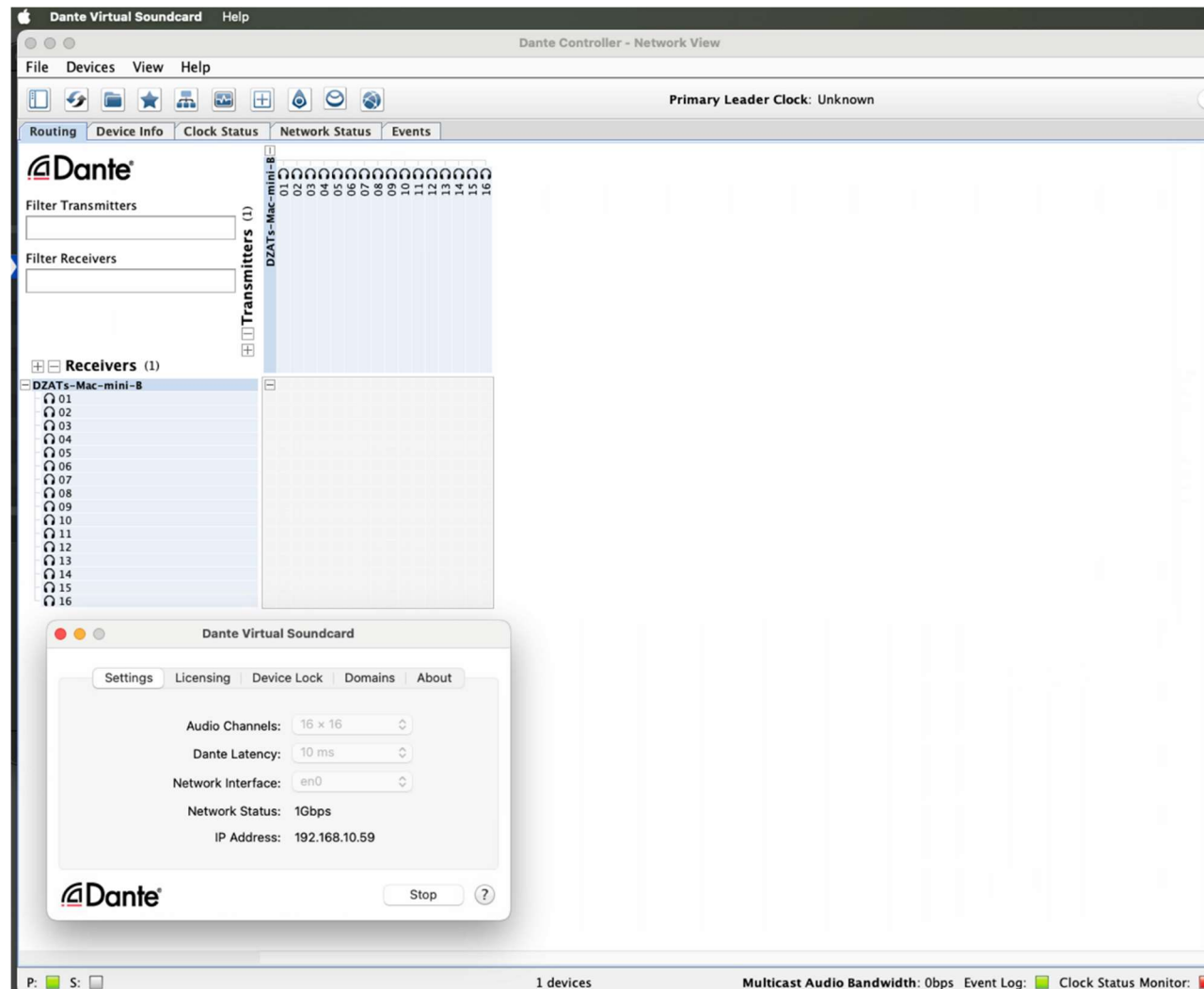
- **Native Compatibility:** Works as a Core Audio device on macOS.
- **Always Active:** Runs quietly in the background, ready for use when needed.
- **Simplified Setup:** No bulky cables or external devices—use an existing Ethernet port.

Dante allows for full control over the audio and allows fine EQ tuning and custom presets. It is widely used in the entertainment industry and remains a reliable and easy to learn system. Perfect for events as audio can be mixed real-time for events use if required. See Design Phase *Appendix 3 Audio Visual* for more technical information. A preset EQ will be provided. Addition setups and EQs can be developed and stored by BMBC.

This is a perpetual licence that will work on the purchased version indefinitely. Updated versions will be available but subject to a fee payable to Dante Audinate directly.



Dante Virtual Soundcard Pro EQ & Mix View



Dante Virtual Soundcard Pro Controller - Network View



8. BOM Summary

Below is a BOM summary. For detailed information CCT schedule & technical data sheets, please see the design phase *Appendix 3 Audio Visual* in the *Project Plan*.

Lighting

SPECIFIED FIXTURES - IN GROUND

- 36x Anolis Lyrae XS FIX MC 12degree - Anti Slip
- 18x Lyrae M MC RGBCW 45 degree optics
- 18x Mounting Sleeve for Lyrae M
- 18x Stainless Steel Round Flush trim for Lyrae M

SPECIFIED FIXTURES - IN ROSE

- 36x Calumma XS MC RGBCW 45 degree optic standard paint finish
- 36x Calumma S MC RGBCW 45 degree optics standard paint finish
- 3x E Box Remote

SPECIFIED FIXTURES - PIXEL DOTS

- 1224x Enttec Smart Pixel 40
- 9x Advatek A4S in custom containment with PSU

SPECIFIED FIXTURES - LED PIXEL NEON

- 12x Small Rose - 1590mm (26PixelsRGBW)
- 12x Small Rose - 2675mm (44PixelsRGBW)
- 12x Large Rose - 1784mm (29PixelsRGBW)
- 12x Large Rose - 3420mm (57PixelsRGBW)
- 9x Advatek A4S in custom containment with PSU



CONTROL

- 2x Main & Backup control computer
- 1x Head end equipment rack
- 1x Luminex 16T rack mounted switch
- 3x Luminex 10T Rose mounted switches

Audio

- 18x EVID s8.2T - Upgrade IP functions (Loudspeaker) Outdoor specification - RAL Colour finish - Intelligent bracing
- 3x IPX 10:8 Amplifier
- 1x 1 Dante Virtual Soundcard - PRO

Small Rose BOM

Item	Fitting	Location	QTY	Length	Total Length	Pixel Count	Pixel Total	Wattage Each	Wattage total	Beam Angle
A	Anolis Calumma XS MC	Inner Stamen	12			1	12	10	120	45
B	Enttec Smart PXL-40P	Inner canopy	204			1	204	1.8	367.2	180
C	DZA Linear LED	Inner Rosette	12	1590	19080	26	312	47.7	572.4	180
D	Anolis Calumma S MC	Middle Petal	12			1	12	30	360	45
E	Enttec Smart PXL-40P	Outer canopy	204			1	204	1.8	367.2	180
F	DZA Linear LED	Outer Rosette	12	2675	32100	44	528	80.25	963	180
G	Anolis Lyrae XS FIX MC	Inground closer to stem	12			1	12	10	120	12
H	Anolis Lyrae M MC	Inground	6			1	6	60	360	45
I	EBOX REMOTE	Stem Base	1							
J	WISKA Joint BoxWK407	TOP platform	36							
H	WISKA Joint BoxWK1210	Stem Base	3							
I	Consumer Unit Enclosure	Stem Base	1							
J	MEANWELL PSU 320-24	Stem Base	3							
K	MEANWELL PSU 600-24	Stem Base	3							
L	Pixel Control Enclosure	Stem Base	1							
M	Data Distribution Enclosure	Stem Base	1							
N	Incoming Supply Isolator	Stem Base	1							
O	EVID-S8.2 Speakers	TOP Platform	6							
P	Fiber Media Converter	Stem Base	1							
Q	DMX interface	Stem Base	1							

Small Rose CCT Schedule

Cir cui ts	MCB	Fitting	Location	QTY	Length	Total Length	Pixel Count	Pixel Total	Wattage Each	Wattage total	Bea m Angl e	TOTAL WATTAG E
1	C10	EBOX REMOTE	LV Supply in Stem									
		Anolis Calumma XS MC	Inner Stamen	12			1	12	10	120	45	
		Anolis Lyrae XS FIX MC	Inground closer to stem	12			1	12	10	120	12	240
2	C10	Anolis Calumma S MC	Middle Petal	12			1	12	30	360	45	360
3	C10	LV Supply 1										
		Enttec Smart PXL-40P	Inner canopy 1-4	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 1-4	4	1590	6360	26	104	47.7	190.8	180	
		Enttec Smart PXL-40P	Outer canopy 1-4	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 1-4	4	2675	10700	44	176	80.25	321	180	756.6
4	C10	LV Supply 2										
		Enttec Smart PXL-40P	Inner canopy 5-8	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 5-8	4	1590	6360	26	104	47.7	190.8	180	
		Enttec Smart PXL-40P	Outer canopy 5-8	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 5-8	4	2675	10700	44	176	80.25	321	180	756.6
5	C10	LV Supply 3										
		Enttec Smart PXL-40P	Inner canopy 9-12	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 9-12	4	1590	6360	26	104	47.7	190.8	180	
		Enttec Smart PXL-40P	Outer canopy 9-12	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 9-12	4	2675	10700	44	176	80.25	321	180	756.6
6	C10	Anolis Lyrae M MC	Inground	6			1	6	60	360	45	360
7	C10	Control Circuits		1								
8		Spare										
								1290		3229.8		

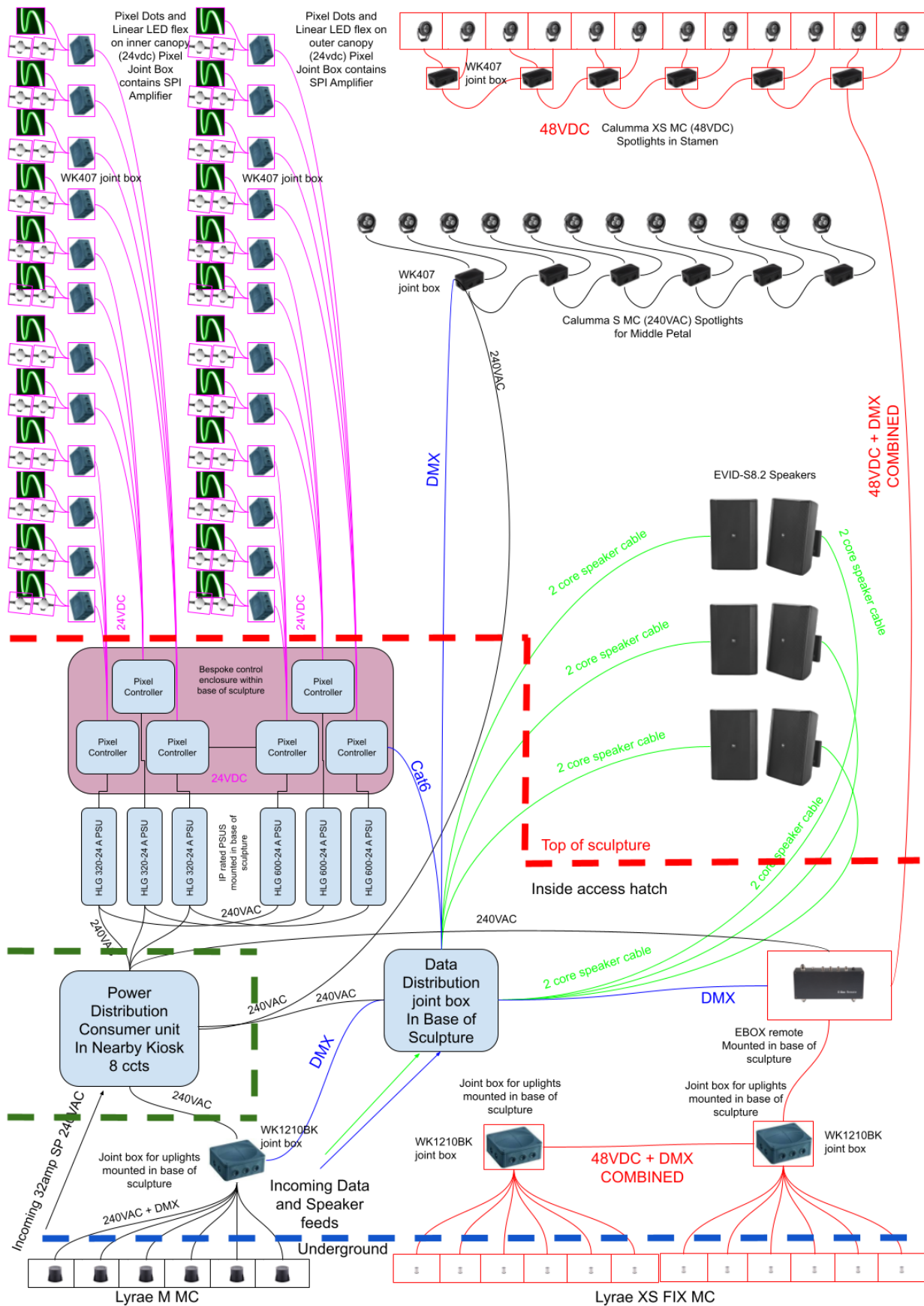
Large Rose BOM

Item	Fitting	Location	QTY	Length	Total Length	Pixel Count	Pixel Total	Wattage Each	Wattage total	Beam Angle
A	Anolis Calumma XS MC	Inner Stamen	12			1	12	10	120	45
B	Enttec Smart PXL-40P	Inner canopy	204			1	204	1.8	367.2	180
C	DZA Linear LED	Inner Rosette	12	1784	21408	29	348	53.52	642.24	180
D	Anolis Calumma S MC	Middle Petal	12			1	12	30	360	45
E	Enttec Smart PXL-40P	Outer canopy	204			1	204	1.8	367.2	180
F	DZA Linear LED	Outer Rosette	12	3420	41040	57	684	102.6	1231.2	180
G	Anolis Lyrae XS FIX MC	Inground closer to stem	12			1	12	10	120	12
H	Anolis Lyrae M MC	Inground	6			1	6	60	360	45
I	EBOX REMOTE	Stem Base	1							
J	WISKA Joint BoxWK407	TOP platform	36							
H	WISKA Joint BoxWK1210	Stem Base	3							
I	Consumer Unit Enclosure	Stem Base	1							
J	MEANWELL PSU 320-24	Stem Base	3							
K	MEANWELL PSU 600-24	Stem Base	3							
L	Pixel Control Enclosure	Stem Base	1							
M	Data Distribution Enclosure	Stem Base	1							
N	Incoming Supply Isolator	Stem Base	1							
O	EVID-S8.2 Speakers	TOP Platform	6							
P	Fiber Media Converter	Stem Base	1							
Q	DMX interface	Stem Base	1							

Large Rose CCT Schedule

Circuits	MCB	Fitting	Location	QTY	Length	Total Length	Pixel Count	Pixel Total	Wattage Each	Wattage total	Beam Angle	TOTAL WATTAGE
1	C10	EBOX REMOTE	LV Supply in Stem									
		Anolis Calumma XS MC	Inner Stamen	12			1	12	10	120	45	
		Anolis Lyrae XS FIX MC	Inground closer to stem	12			1	12	10	120	12	240
2	C10	Anolis Calumma S MC	Middle Petal	12			1	12	30	360	45	360
3	C10	LV Supply 1										
		Enttec Smart PXL-40P	Inner canopy 1-4	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 1-4	4	1784	7136	29	116	53.52	214.08	180	
		Enttec Smart PXL-40P	Outer canopy 1-4	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 1-4	4	3420	13680	57	228	102.6	410.4	180	869.28
4	C10	LV Supply 2										
		Enttec Smart PXL-40P	Inner canopy 5-8	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 5-8	4	1784	7136	29	116	53.52	214.08	180	
		Enttec Smart PXL-40P	Outer canopy 5-8	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 5-8	4	3420	13680	57	228	102.6	410.4	180	869.28
5	C10	LV Supply 3										
		Enttec Smart PXL-40P	Inner canopy 9-12	68			1	68	1.8	122.4	180	
		Linear LED	Inner Rosette 9-12	4	1784	7136	29	116	53.52	214.08	180	
		Enttec Smart PXL-40P	Outer canopy 9-12	68			1	68	1.8	122.4	180	
		Linear LED	Outer Rosette 9-12	4	3420	13680	57	228	102.6	410.4	180	869.28
6	C10	Anolis Lyrae M MC	Inground	6			1	6	60	360	45	360
7	C10	Control Circuits		1								
8		Spare										
								1482		3567.84		

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