

# Audio Calibration Report



Client: Dr Bob Jones

Description: A family based entertainment mecca

Project Address: 123 Maple Acres, Mytown, PA 55555

System Configuration: 7.4.4

AVR/Processor: Denon AVR-X8500

Main Speakers: 7

Subwoofers: 4

Height Speakers: 4

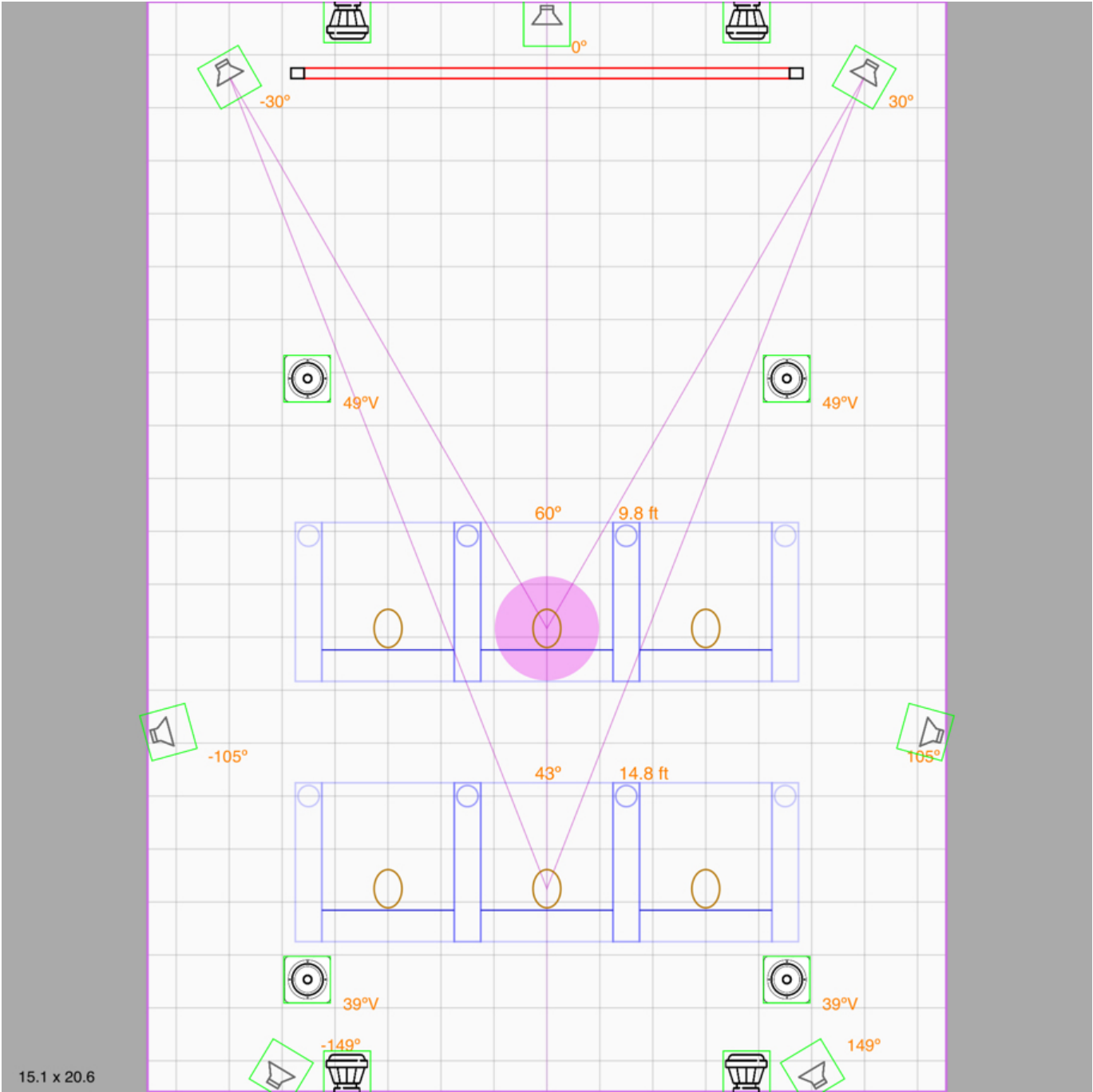
Sound Analyzer: AudioTools LARSA/ETC/FFT/RTA

Microphone(s):

HAA PowerCal  
HAA:

# System Report

Review Report : Review of Results

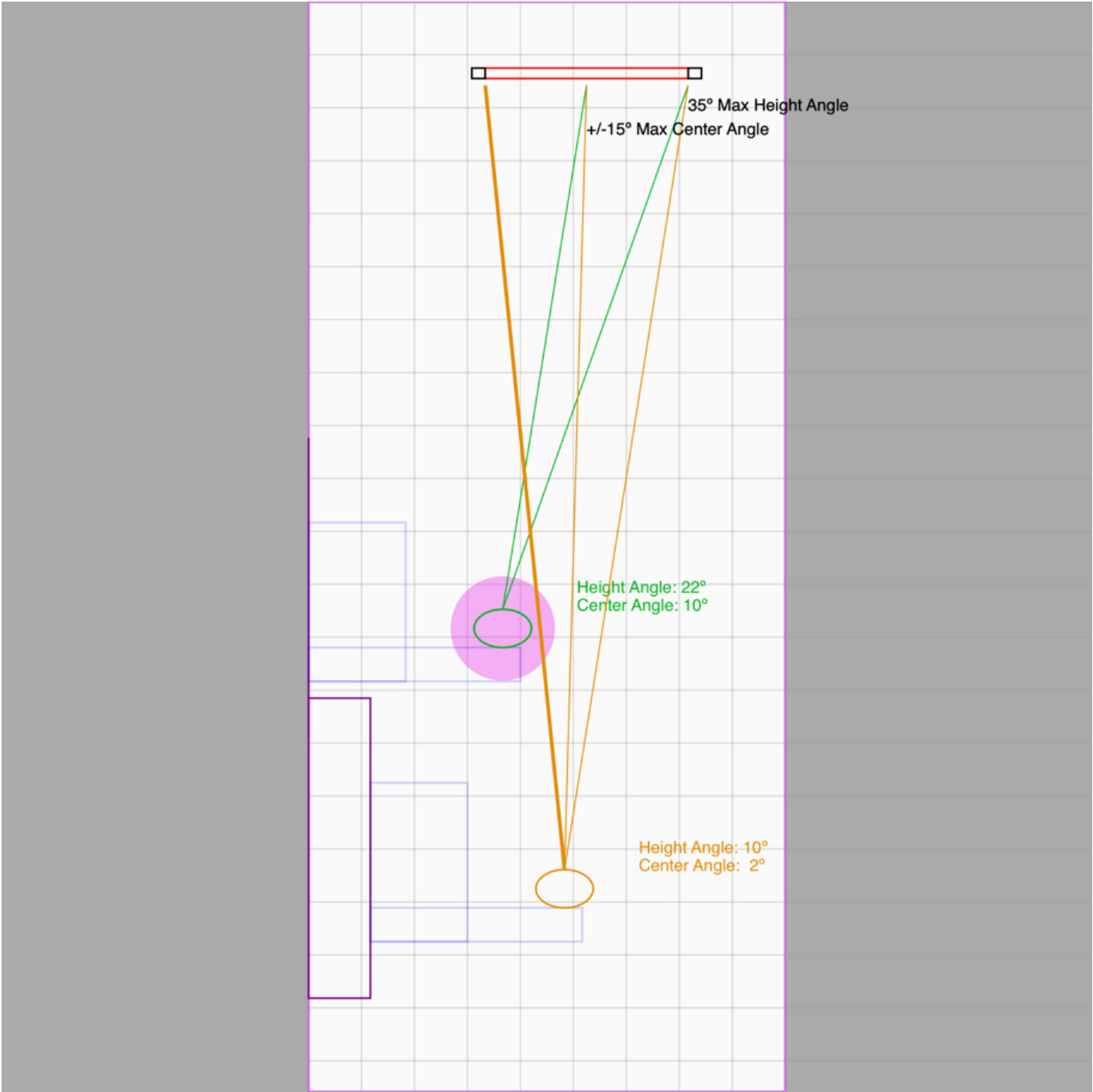


# System Report

Listening : Smoothness (initial)	Fair	
Listening : Focus (initial)	Good	
Listening : Envelopment (initial)	Good	
Listening : Dynamics (initial)	Good	
Listening : Clarity (initial)	Fair	
Listening : Consistency (initial)	Fair	
Listening : Smoothness (final)	Excellent	
Listening : Focus (final)	Excellent	
Listening : Envelopment (final)	Excellent	
Listening : Dynamics (final)	Excellent	
Listening : Clarity (final)	Excellent	
Listening : Consistency (final)	Excellent	
AVR/Processor : EQ/Tone/Post-Processing Set	Complete	
AVR/Processor : Speaker Configuration Set	Complete	
AVR/Processor : Bass Management Set	Complete	
AVR/Processor : Speaker Connections Checked	Complete	
Speakers : Integrity Checked	Complete	
Room : Vibration Test	Complete	We found two small rattles in the side panels. We were able to eliminate them by adding caulk behind the panels.
Listeners : MLP Position Review	Complete	
Listeners : Secondary Positions Review	Complete	The rear row is a little closer to the back wall than I'd like. We were able to improve that by equalization.
Subwoofer(s) : Position Review	Complete	

# System Report

Screen : Review





# System Report

Speakers : Surround Speakers Position Review    Complete

Speakers : Height Speakers Position Review    Complete

# System Report

## Speakers : Sound Level Capability Review

The ceiling speakers power rating is exceeded but this is taken into account during calibration.

Speaker	Sensitivity	Rating	Amp Power	Distance	SPL
Left	91dB	200W	190W	12.7ft	102.0dB
Center	91dB	200W	190W	12.2ft	102.4dB
Right	91dB	200W	190W	12.7ft	102.0dB
Right Side	91dB	200W	190W	8.5ft	105.5dB
Right Back	91dB	200W	190W	10.6ft	103.6dB
Left Back	91dB	200W	190W	10.6ft	103.6dB
Left Side	91dB	200W	190W	8.5ft	105.5dB
Top Left Front	86dB	125W	190W	10.5ft	96.9dB*
Top Right Front	86dB	125W	190W	10.5ft	96.9dB*
Top Right Back	86dB	125W	190W	11.5ft	96.1dB*
Top Left Back	86dB	125W	190W	11.5ft	96.1dB*
Sub 1	89dB	150W	150W	12.1ft	99.4dB
Sub 2	89dB	150W	150W	12.1ft	99.4dB
Sub 3	89dB	150W	150W	9.3ft	101.7dB

\* Loudspeaker power rating exceeded

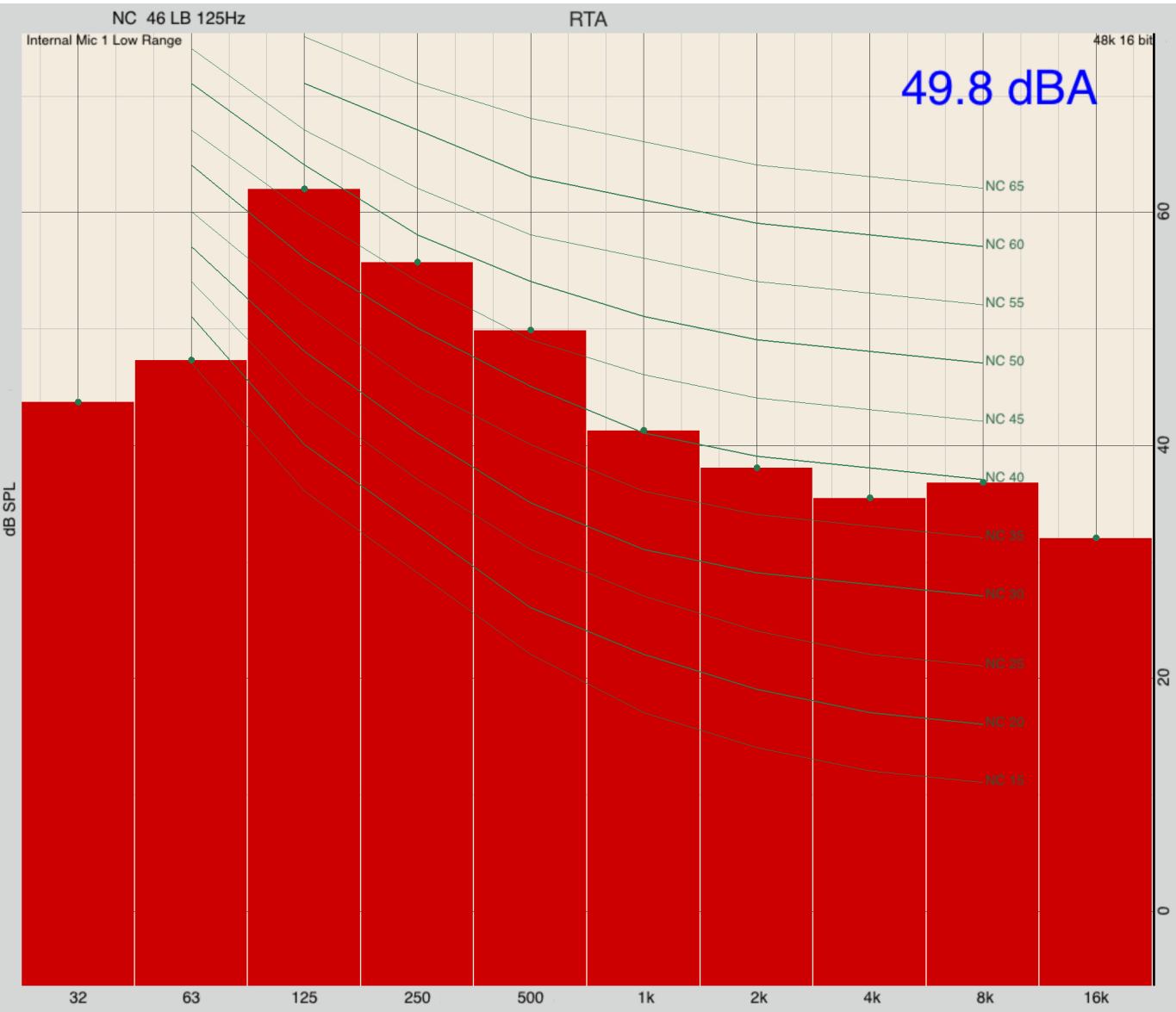
# System Report

Acoustics : Front Wall Review	Complete
Acoustics : Rear Wall Review	Complete
Acoustics : Side Walls Review	Complete
Acoustics : Ceiling Review	Complete
Acoustics : Floor Review	Complete

# System Report

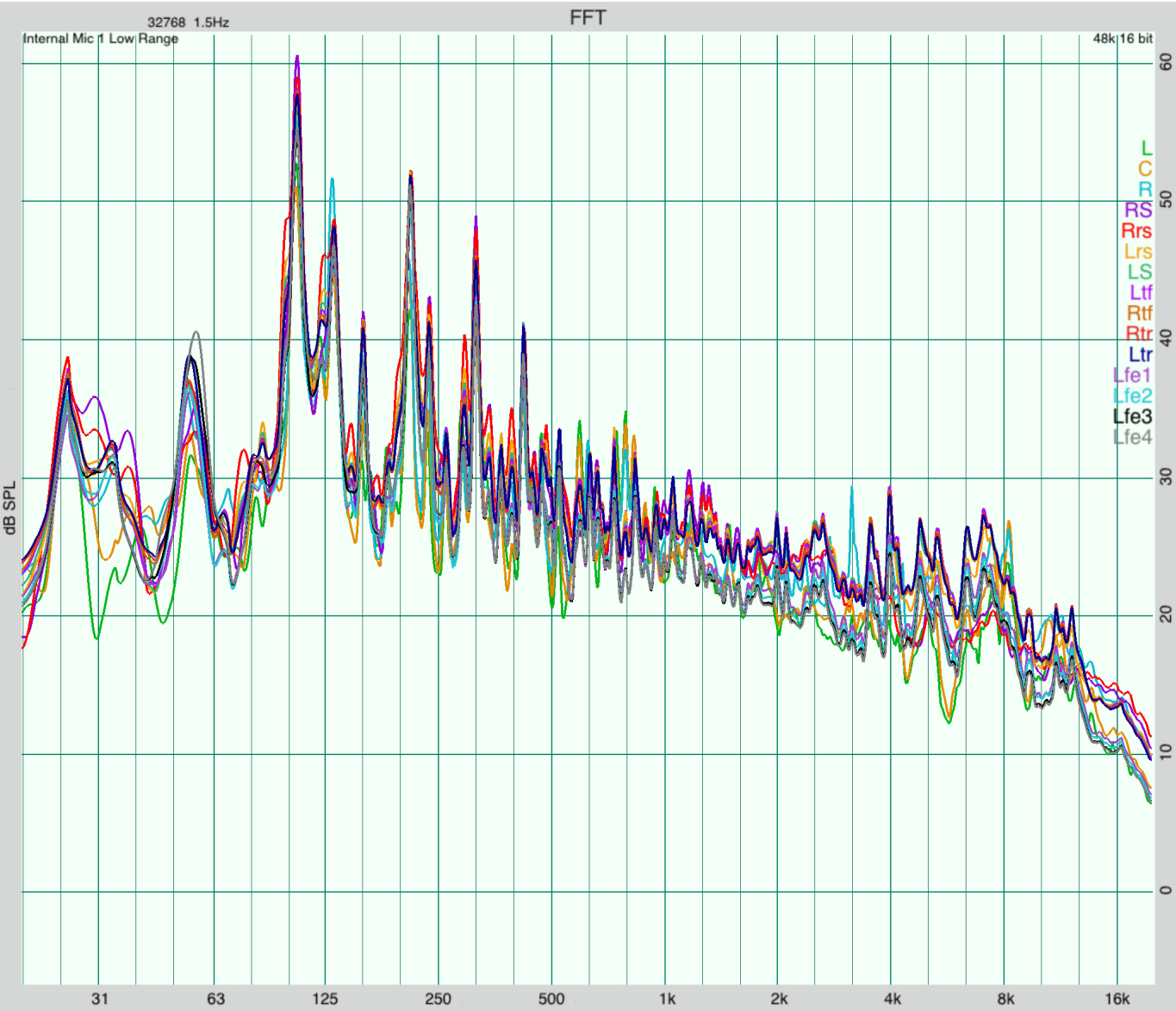
Measurement : Ambient Noise

NC 46 LB 125Hz



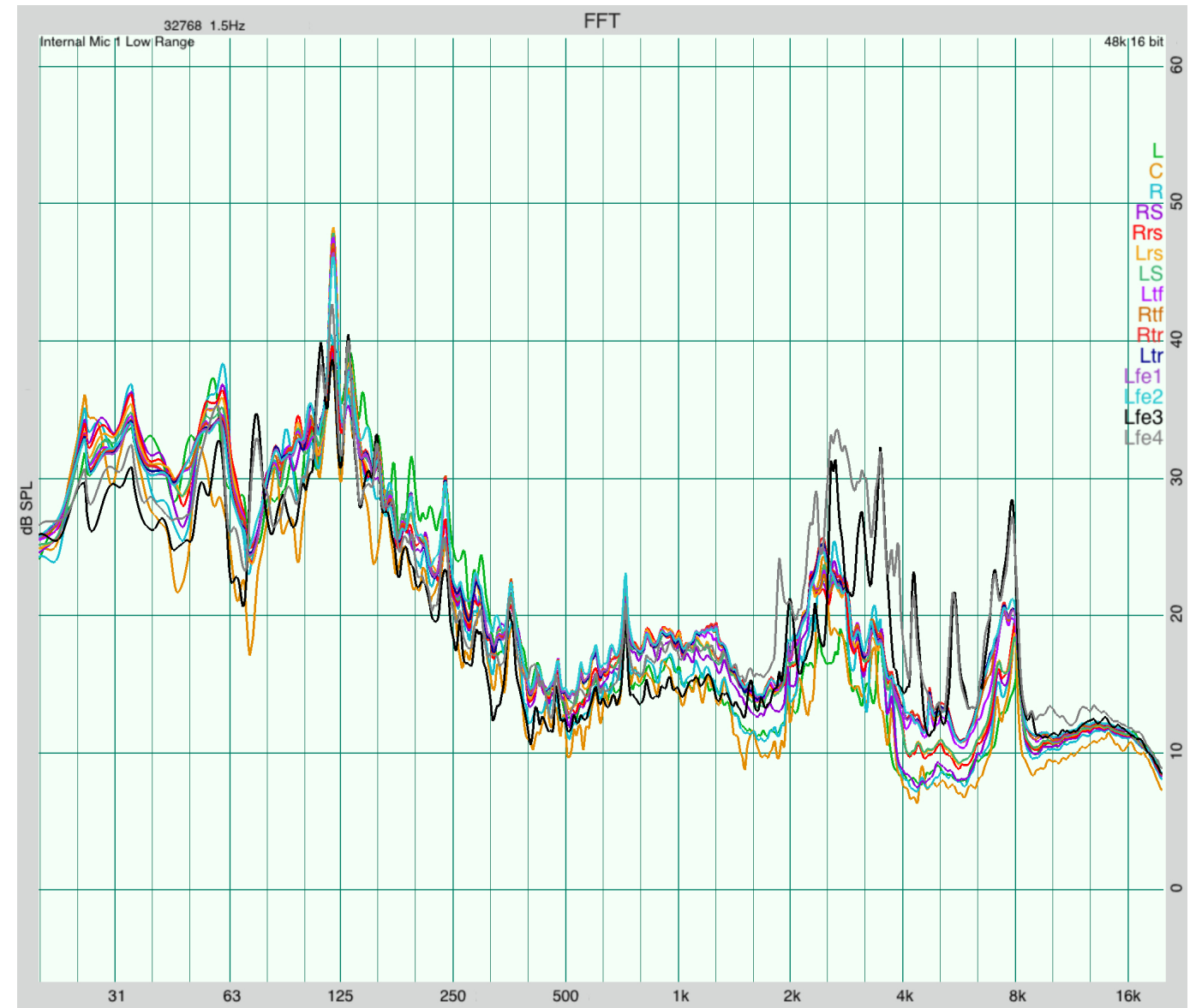
# System Report

Speakers : Near Field Response



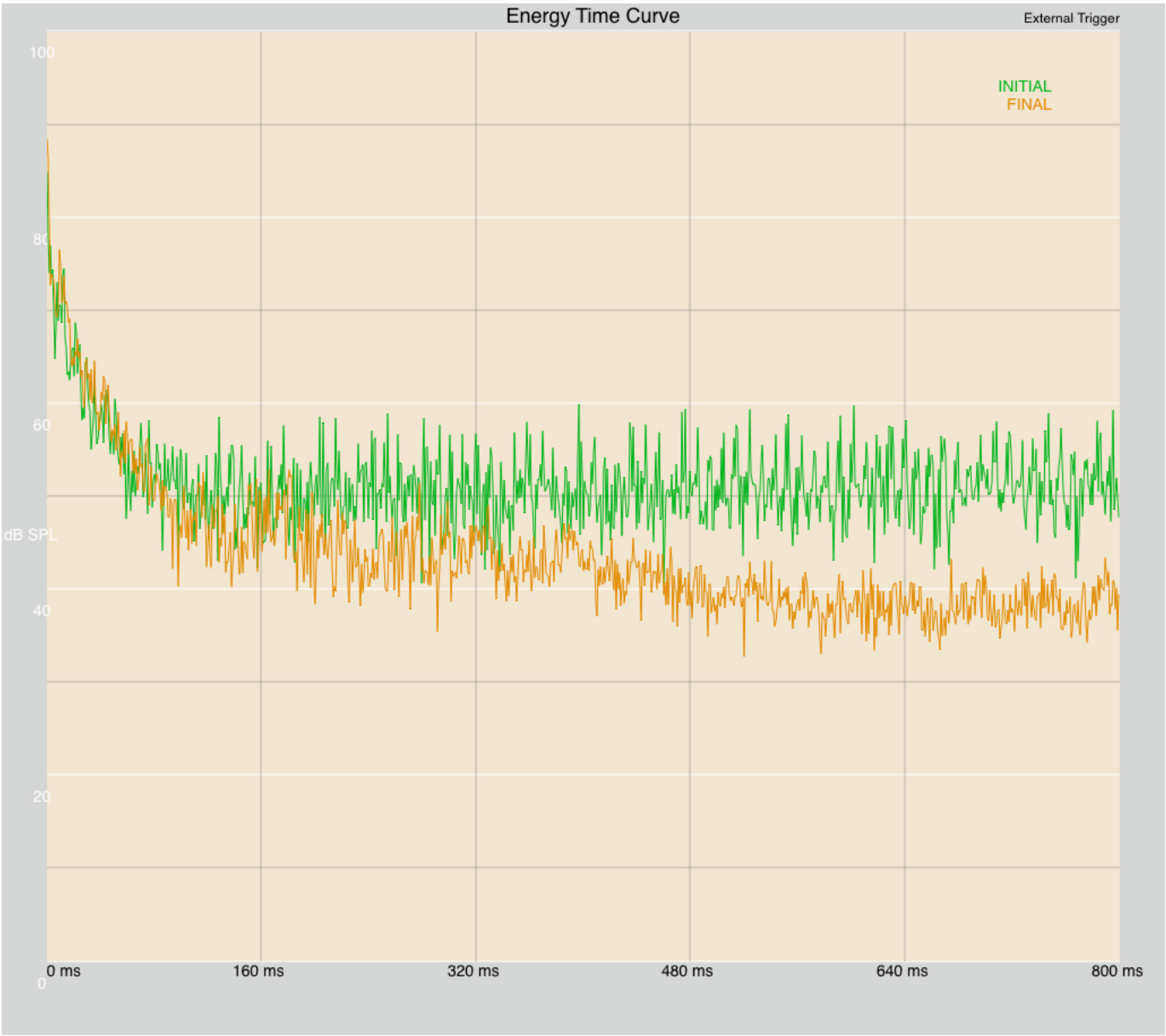
# System Report

Speakers : Speaker MLP Response/EQ



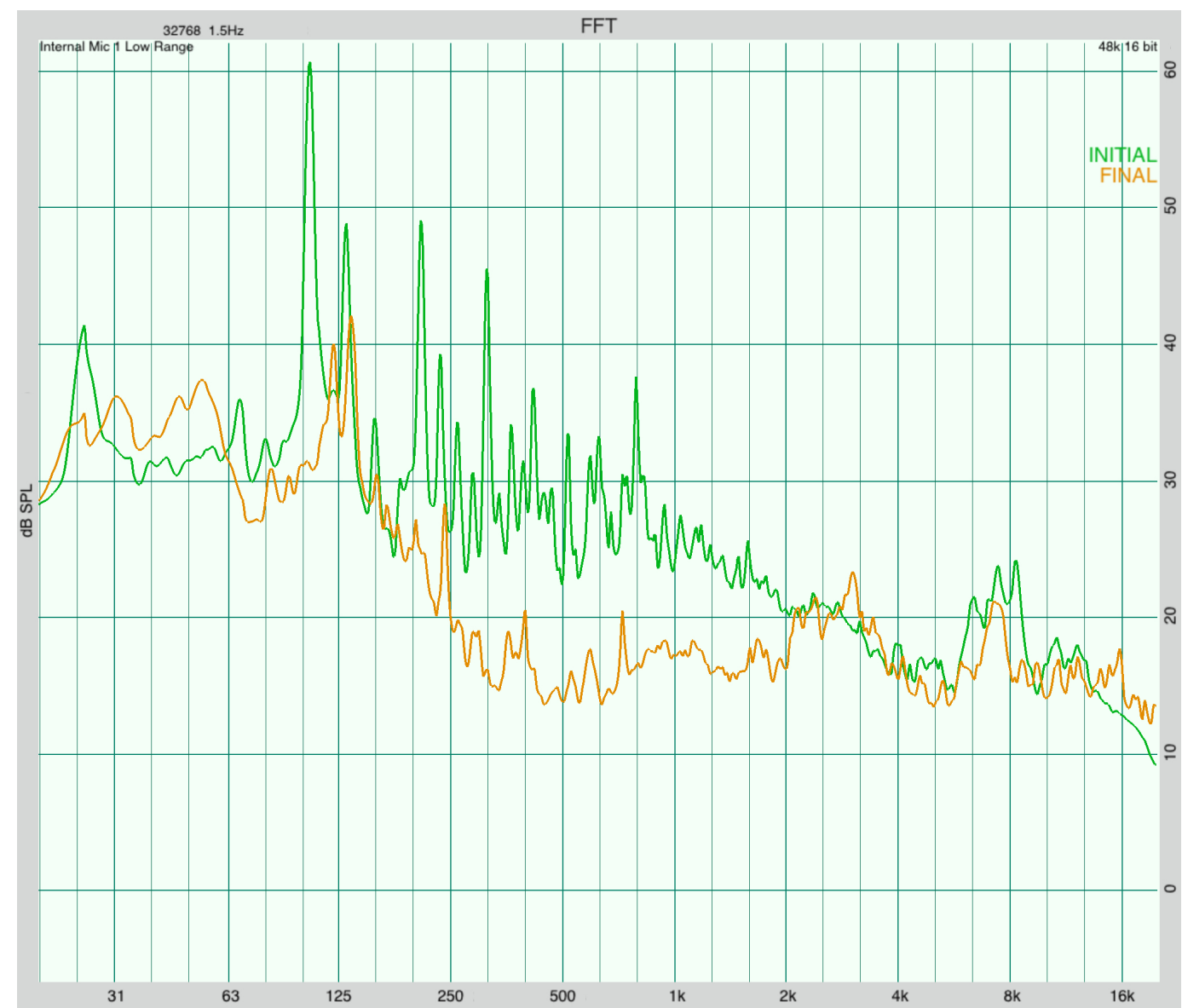
# System Report

Measurement : Reverberation Time (RT)



# System Report

Measurement : System MLP Frequency Response





# System Report

Final Word : Summary/Recommendations

Great system, responded well to calibration. We set the reference level a bit lower given the speakers max SPL levels, but the system performed well at satisfying loud sound levels, no problem there.