

---

# **3D Systems Corporation**

## **NextDent 300**

**FCC 15.225.2025**

**RSS-210 Issue 11:2024**

**RSS-Gen:5:2018+A1:2019+A2:2021**

**13.56 MHz Radio**



**Certificate #2569.01**

---

Issue Date: July 29, 2025

Tests Conducted by:

ElectroMagnetic Investigations, LLC

8531 NE Cornell Road, Suite 600, Hillsboro, Oregon 97124, USA  
Tele (503) 466-1160 [support@emicomply.com](mailto:support@emicomply.com)

---

<b>Certificate of Test .....</b>	<b>3</b>
Revision History	4
Authorizations	4
Device Under Test Information	6
Device Under Test Selection Justification	8
<b>Field Strength of Fundamental .....</b>	<b>9</b>
<b>Field Strength of Spurious Emissions (Less Than 30 MHz) .....</b>	<b>28</b>
<b>Field Strength of Spurious Emissions (Greater Than 30 MHz).....</b>	<b>33</b>
<b>Duty Cycle Information.....</b>	<b>38</b>

# Certificate of Test

Report Number: 3DS20250726-01

Issue Date: July 29, 2025

Last Date of Test: July 29, 2025

Test Item: NextDent 300

Serial Number: Di-319

## Radio Equipment Testing

### Standards

Specification	Test Method
FCC 15.225:2025	ANSI C63.10:2020
RSS-210 Issue 11:2024	
RSS-Gen Issue 5:2018+A1:2019+A2:2021	

### Guidance

KDB 174176
Notice 2020 DRS0023

## Results:

Test Description	Result	FCC Sections	RSS Sections	ANSI C63.10 Sections	Comments
Field Strength of Fundamental	Pass	15.225(a)-(c)	RSS-210 B.6 (a)(i-iv)	6.4	
Field Strength of Spurious Emissions (Less Than 30 MHz)	Pass	15.215 ( d ), 15.209	RSS-210 B.6 (a)(iv)	6.4	
Field Strength of Spurious Emissions (Greater Than 30 MHz)	Pass	15.215 ( d ), 15.209	RSS-210 B.6 (a)(iv)	6.5	

- The Equipment was tested in the configuration and modes of operation provided by the client. Test levels were specified by the client within the test plan. Any additional tests not reported herein are the responsibility of the client as the overall product compliance is the responsibility of the client.
- This report may only be reproduced in its entirety. To reproduce this report in part, specific written permission must be obtained from ElectroMagnetic Investigations.
- The results presented in this test report pertain only to the test items described within this report.
- Specific test descriptions can be found in the specific individual section of the test report.

### Deviations to the Test Standard

No Deviations were made to the standard test methods

Approved By: Henry Benitez, President of ElectroMagnetic Investigations, LLC



---

## Revision History

Version	Date Issued	Description of Revision

## Authorizations

**FCC:** The 3-meter Semi-Anechoic Chamber and Conducted Emissions facilities are fully described in reports filed with the Federal Communications Commission. Corresponding letters of acceptance are maintained in our files.

**Industry Canada:** Accepted by Industry Canada for performance of radiated emissions measurements.

**American Association of Lab Accreditations (A2LA):** ElectroMagnetic Investigations is accredited to perform the tests contained within this report to the standards listed.



Certificate #2569.01

---

**Report Approved By:**



Signature

29JUL2025  
Date

Ryan Benitez  
Name

**Report Written By:**



Signature

29JUL2025  
Date

Henry Benitez  
Name

**Testing Performed By:**



Signature

29JUL2025  
Date

Ryan Benitez  
Name

Signature

Date

Name

Signature

Date

Name

---

## Testing requested by:

Company Name:	3D Systems Corporation
Company Address:	26600 SW Parkway Ave., Suite 300, Dock 61
City, State Zip:	Wilsonville OR 97070, USA
Test Requested By:	Mufeed Yacoub
Model:	NextDent 300
First Date of Test:	2025/07/15
Last Date of Test:	2025/07/29
Date Samples Received:	2025/07/15
Equipment Design Stage:	Production
Equipment Condition:	Good

## Device Under Test Information

Device Under Test	NextDent 300
Functional Description of DUT	3D Printer
I/O Ports	Ethernet
Modes of Operation	Single Radio, Sequencing
Power Supply Voltage, Frequency	120 V 60 Hz

## Settings for all tests in this report

Modulation Type	13.56 MHz RFID, OOK
Protocol	ISO 15693
Data Rate	26.48 kbps
Power Setting (mA)	200

---

## **Modifications:**

**Fixed routing of RJ45 cable to be as intended for production units.**

---

## Device Under Test Selection Justification

- 3D Systems Corporation certifies that the product tested is a representative sample of units to be sold.

I, Mufeed Yacoub, representative for 3D Systems Corporation verify that the product tested is representative of units to be sold.



---

(Signature)



---

## Field Strength of Fundamental

### Test Description

The measurement of the fundamental carrier of the EUT was maximized by rotating the EUT on a turntable, adjusting the position of the EUT and antenna in three orthogonal axes, and adjusting the measurement antenna height and polarization as per ANSI C63.10. A calibrated active loop antenna was maintained 1 meter above the ground plane during testing in a semi-anechoic test chamber.

Measurements were made with the required detectors and specified on the data sheets for each individual point using Quasi-Peak detection.

### Test Measurement uncertainties (k=2):

At 3m measured with:

Loop Antenna (9 kHz – 30 MHz)..... ±5.15 dB

### Sample radiated emissions field strength measurement:

RF Reading from Spectrum Analyzer (dBuV) + Cable Loss Factor (dB) + Antenna Factor (dB) – Pre-Amplifier Amplification (dB) = Final Radiated Emission Level (dBuV/m).

Measurement uncertainty is not applied to pass/fail criteria.

---

## Test Equipment

Description	Manufacturer	Model	Serial Number	Last Cal.	Cal. Due
Receiver	Agilent	E4440A	US40420326	2025-06-18	2026-06-18
Loop Antenna	Com-Power	AL-130R	10160054	2022-11-16	2027-11-16
Software	ETS-Linsgren	Tile 7.6.0.14	N/A	N/A	N/A

## Frequency Range Investigated

12-16 MHz

## AC Power

120 VAC/60 Hz

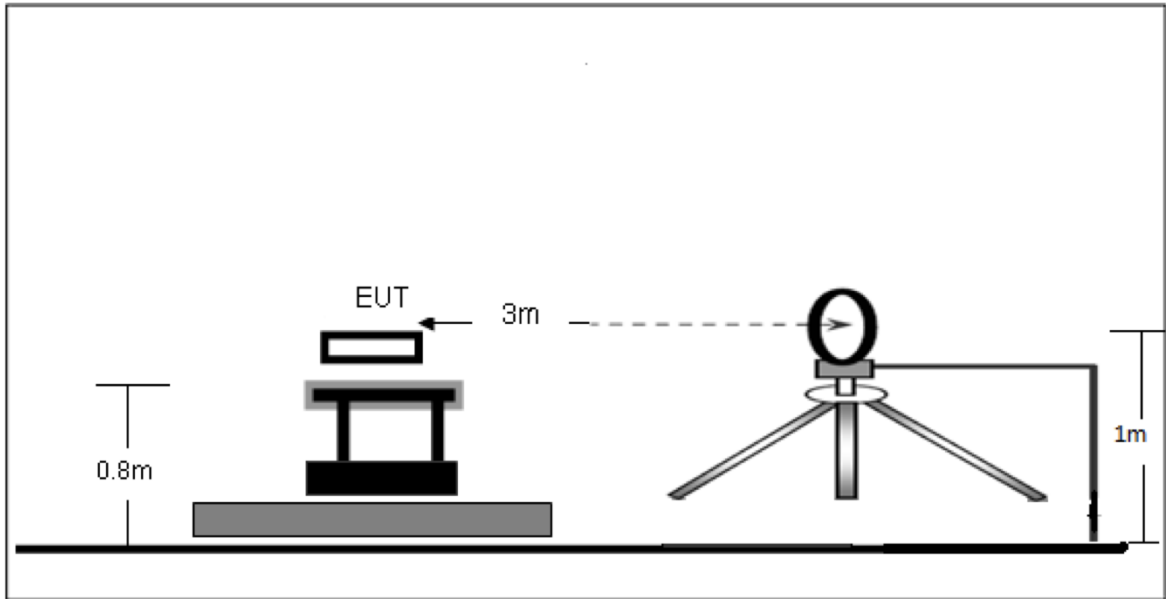
## Configurations Investigated

EUT door open

## Modes Investigated

With RFID Tags  
Without RFID Tags

## Block Diagram

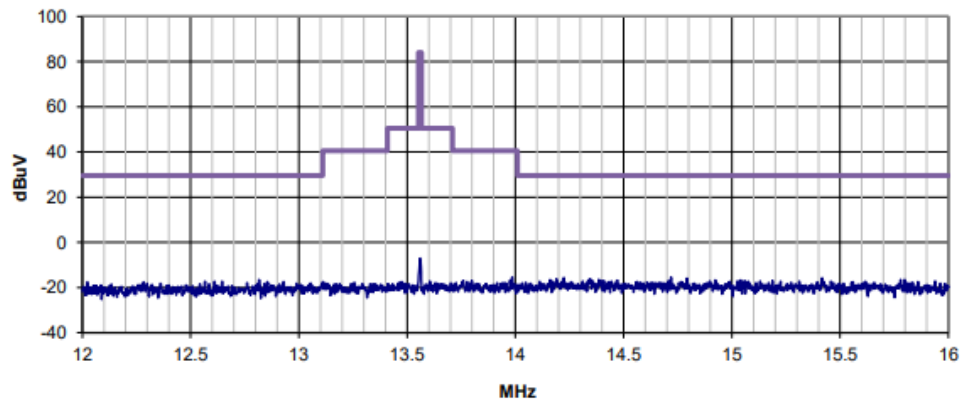




## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



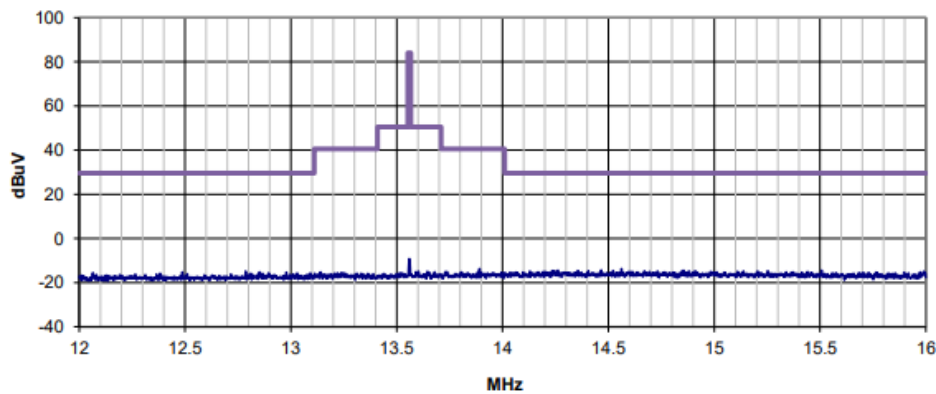
COMMENTS						SIGNATURE		
Tags Off; Radio 0; Unit door open;						<i>Ryan Benitez</i>		
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.78	-16.12	-16.45	-25.96	40	29.54	23°/99cm	Par GND	45.99
14.45	-13.73	-14.44	-26.16	40	29.54	0°/99cm	Par GND	43.98
14.63	-7.19	-7.19	-26.18	40	29.54	0°/100cm	Par GND	36.73
14.78	-7.21	-7.21	-26.20	40	29.54	0°/100cm	Par GND	36.75
12.96	-15.56	-16.19	-25.98	40	29.54	157°/99cm	Perp EUT	45.73
13.56	-5.88	-7.06	-26.05	40	84.00	293°/99cm	Perp EUT	91.06
14.25	-7.14	-7.14	-26.14	40	29.54	203°/99cm	Perp EUT	36.68
14.63	-7.19	-7.19	-26.18	40	29.54	203°/99cm	Perp EUT	36.73
12.1	-16.23	-16.23	-25.88	40	29.54	131°/99cm	Par EUT	45.77
12.87	-15.74	-16.32	-25.97	40	29.54	0°/99cm	Par EUT	45.86
13.56	-5.89	-5.89	-26.05	40	84.00	0°/99cm	Par EUT	89.89
14.30	-5.98	-5.98	-26.14	40	29.54	292°/99cm	Par EUT	35.52



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/29/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS	SIGNATURE
Tags On; Radio 0; Unit door open;	<i>Ryan Benitez</i>

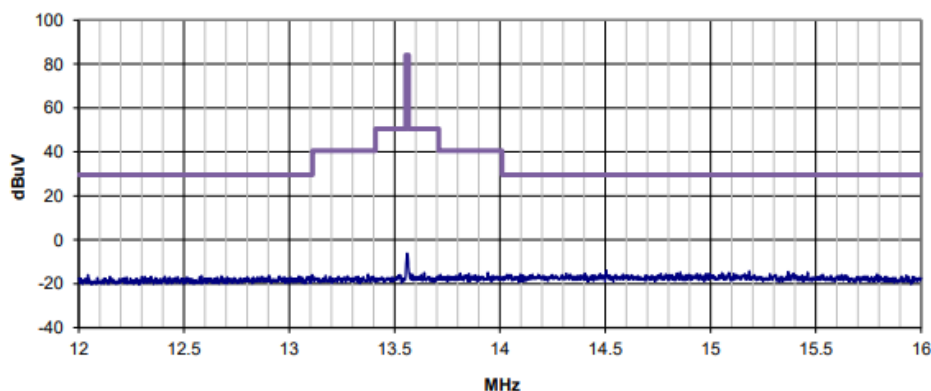
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.96	-16.43	-16.22	-25.98	40	29.54	158°/100 cm	Par GND	45.76
13.21	-15.50	-14.43	-26.01	40	40.50	66°/100 cm	Par GND	54.93
13.56	-15.86	-14.47	-26.05	40	84.00	315°/100 cm	Par GND	98.47
13.78	-14.63	-14.17	-26.08	40	40.50	302°/100 cm	Par GND	54.67
14.04	-15.48	-14.21	-26.11	40	29.54	112°/100 cm	Par GND	43.75
12.71	-15.88	-15.79	-25.95	40	29.54	292°/100 cm	Par EUT	45.33
13.13	-15.45	-15.44	-26.00	40	40.50	292°/100 cm	Par EUT	55.94
13.56	-14.89	-15.48	-26.05	40	84.00	292°/100 cm	Par EUT	99.48
13.66	-15.02	-14.17	-26.07	40	50.47	0°/100 cm	Par EUT	64.64
14.01	-14.70	-14.22	-26.11	40	29.54	304°/100 cm	Par EUT	43.76
12.77	-15.58	-16.04	-25.96	40	29.54	0°/100 cm	Perp EUT	45.58
13.37	-15.06	-15.52	-26.03	40	40.50	68°/100 cm	Perp EUT	56.02
13.56	-14.85	-15.18	-26.05	40	84.00	315°/100 cm	Perp EUT	99.18
14.12	-14.04	-13.69	-26.12	40	29.54	293°/100 cm	Perp EUT	43.23
14.14	-14.35	-15.04	-26.12	40	29.54	308°/100 cm	Perp EUT	44.58



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



### COMMENTS

### SIGNATURE

Tags Off; Radio 1; Unit door open;

*Ryan Benitez*

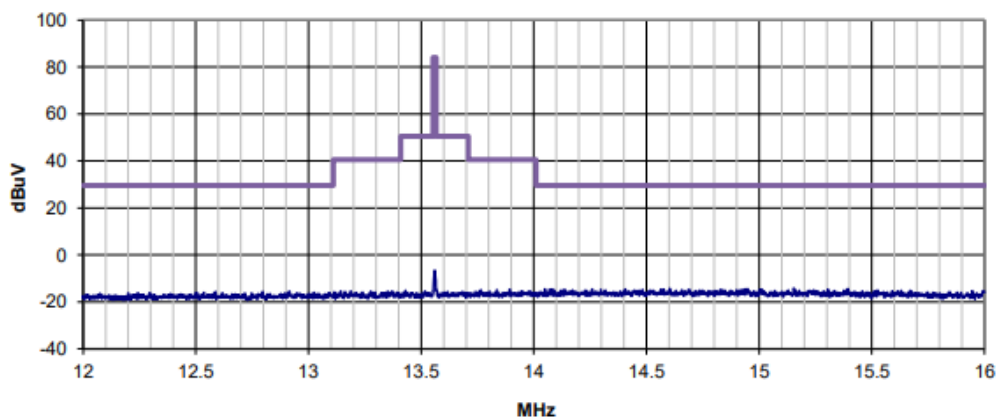
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-9.86	-10.74	-26.05	40	84.00	0°/102cm	Par GND	94.74
13.97	-10.79	-10.79	-26.10	40	40.50	293°/102cm	Par GND	51.29
14.20	-10.81	-10.81	-26.13	40	29.54	312°/102cm	Par GND	40.35
14.74	-10.88	-10.88	-26.20	40	29.54	266°/102cm	Par GND	40.42
13.56	-4.11	-4.11	-26.05	40	84.00	283°/102cm	Perp EUT	88.11
13.80	-4.14	-4.14	-26.08	40	40.50	112°/102cm	Perp EUT	44.64
14.43	-4.22	-4.22	-26.16	40	29.54	248°/102cm	Perp EUT	33.76
14.92	-4.28	-4.28	-26.22	40	29.54	248°/102cm	Perp EUT	33.82
13.56	-5.15	-5.86	-26.05	40	84	0°/102cm	Par EUT	89.86
13.93	-5.91	-5.91	-26.1	40	40.5	52°/102cm	Par EUT	46.41
14.54	-5.98	-5.98	-26.17	40	29.54	293°/102cm	Par EUT	35.52
14.71	-6.00	-6.00	-26.19	40	29.54	316°/102cm	Par EUT	35.54



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



### COMMENTS

### SIGNATURE

Tags On; Radio 1; Unit door open;

*Ryan Benitez*

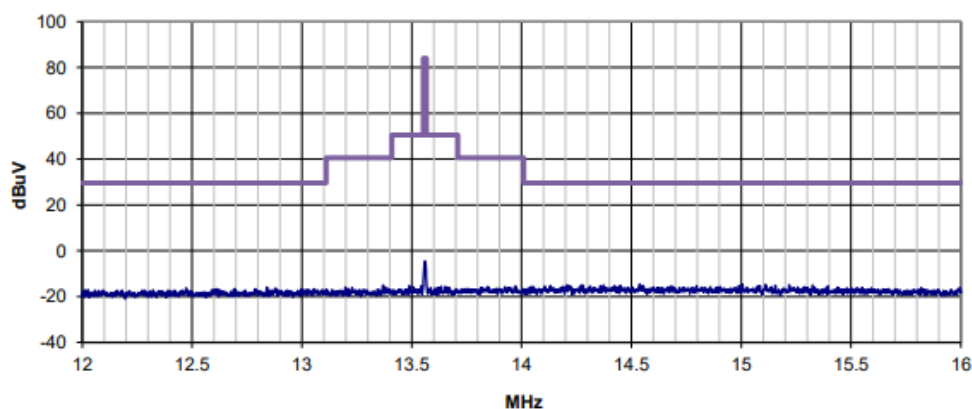
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-5.88	-5.88	-26.05	40	84.00	302°/102cm	Perp EUT	89.88
14.00	-5.93	-5.93	-26.11	40	40.50	68°/102cm	Perp EUT	46.43
14.58	-6.00	-6.00	-26.18	40	29.54	23°/102cm	Perp EUT	35.54
14.70	-6.02	-6.02	-26.19	40	29.54	299°/102cm	Perp EUT	35.56
13.56	-11.50	-15.61	-26.05	40	84.00	248°/102cm	Par EUT	99.61
13.84	-14.71	-14.71	-26.09	40	40.50	248°/102cm	Par EUT	55.21
14.16	-14.72	-14.75	-26.13	40	29.54	292°/102cm	Par EUT	44.29
14.25	-14.33	-14.64	-26.14	40	29.54	112°/102cm	Par EUT	44.18
13.53	-14.97	-15.45	-26.05	40	50.47	1°/102cm	Par GND	65.92
14.03	-14.79	-14.88	-26.11	40	29.54	118°/102cm	Par GND	44.42
14.40	-14.10	-14.10	-26.16	40	29.54	7°/102cm	Par GND	43.64
15.31	-14.17	-14.17	-26.23	40	29.54	202°/102cm	Par GND	43.71



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS							SIGNATURE	
Tags Off; Radio 2; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Peak Limit (dBuV)	QP Limit (dBuV)	Turntable (deg)/Height (cm)	Peak Margin (dB)	QP Margin (dB)
12.60	-15.56	-16.22	-25.94	40	29.54	315°/102cm	Perp EUT	45.76
13.56	-4.20	-4.20	-26.05	40	84.00	0°/102cm	Perp EUT	88.20
13.88	-4.24	-4.24	-26.09	40	40.50	203°/102cm	Perp EUT	44.74
14.64	-4.34	-4.34	-26.19	40	29.54	113°/102cm	Perp EUT	33.88
13.56	-2.36	-2.36	-26.05	40	84.00	293°/102cm	Par EUT	86.36
14.27	-2.45	-2.45	-26.14	40	29.54	271°/102cm	Par EUT	31.99
14.69	-2.50	-2.50	-26.19	40	29.54	68°/102cm	Par EUT	32.04
15.12	-2.54	-2.54	-26.23	40	29.54	244°/102cm	Par EUT	32.08
12.69	-15.56	-15.56	-25.95	40	29.54	113°/102cm	Par GND	45.1
13.7	-13.71	-13.71	-26.07	40	50.47	293°/102cm	Par GND	64.18
14.24	-13.78	-13.78	-26.14	40	29.54	158°/102cm	Par GND	43.32
14.34	-13.79	-13.79	-26.15	40	29.54	68°/102cm	Par GND	43.33

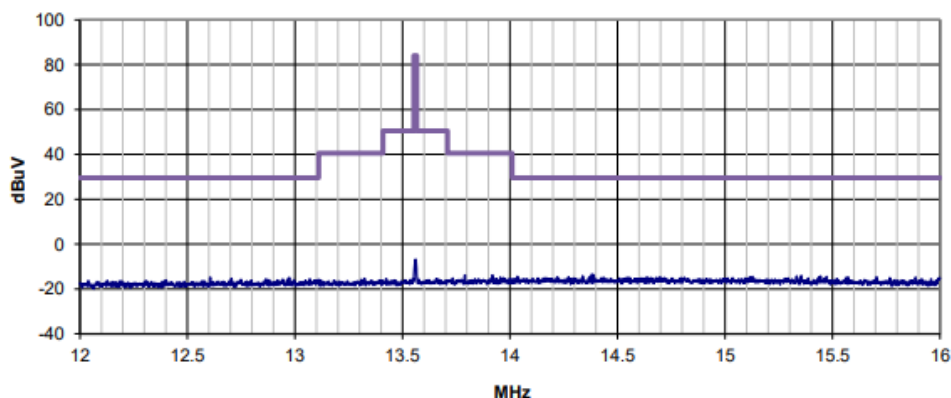




## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



### COMMENTS

### SIGNATURE

Tags On; Radio 2; Unit door open;

*Ryan Benitez*

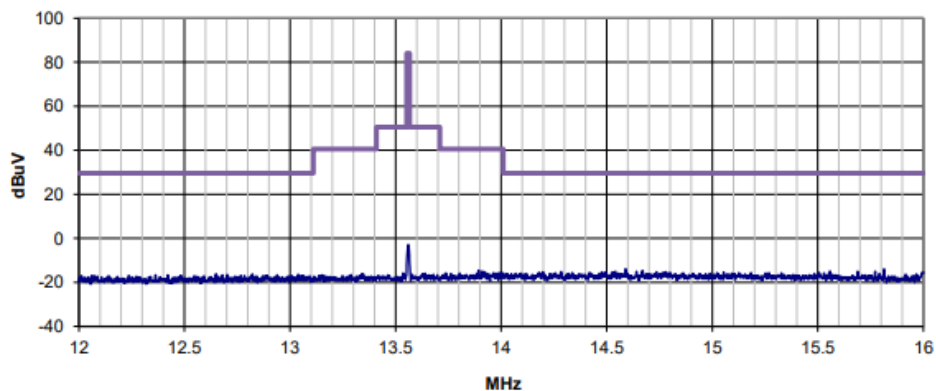
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.52	-15.76	-16.05	-25.93	40	29.54	292°/102cm	Par GND	45.59
13.56	-9.61	-15.27	-26.05	40	84.00	315°/102cm	Par GND	99.27
14.33	-14.63	-14.63	-26.15	40	29.54	258°/102cm	Par GND	44.17
14.85	-14.09	-14.09	-26.21	40	29.54	195°/102cm	Par GND	43.63
13.56	-14.62	-14.62	-26.05	40	84.00	37°/102cm	Par EUT	98.62
13.84	-14.32	-14.65	-26.09	40	40.50	68°/102cm	Par EUT	55.15
14.58	-13.97	-14.74	-26.18	40	29.54	154°/102cm	Par EUT	44.28
14.62	-13.95	-14.75	-26.18	40	29.54	281°/102cm	Par EUT	44.29
13.73	-15.44	-15.57	-26.08	40	40.50	157°/102cm	Perp EUT	56.07
13.95	-14.56	-15.16	-26.10	40	40.50	158°/102cm	Perp EUT	55.66
14.26	-14.77	-15.14	-26.14	40	29.54	113°/102cm	Perp EUT	44.68
14.75	-14.21	-14.40	-26.20	40	29.54	248°/102cm	Perp EUT	43.94



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS	SIGNATURE
Tags Off; Radio 3; Unit door open;	<i>Ryan Benitez</i>

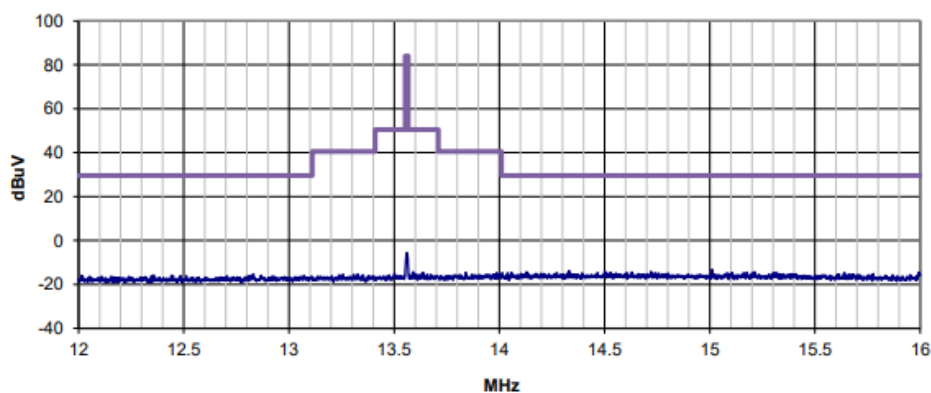
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.57	-14.27	-14.96	-26.06	40	50.47	78°/102cm	Par GND	65.43
13.75	-14.00	-14.00	-26.08	40	40.50	-1°/102cm	Par GND	54.50
14.22	-14.06	-14.06	-26.13	40	29.54	113°/102cm	Par GND	43.60
14.75	-14.13	-14.13	-26.20	40	29.54	293°/102cm	Par GND	43.67
13.56	-2.47	-2.90	-26.05	40	84.00	68°/102cm	Par EUT	86.90
14.13	-2.97	-2.97	-26.12	40	29.54	202°/102cm	Par EUT	32.51
14.36	-3.00	-3.00	-26.15	40	29.54	214°/102cm	Par EUT	32.54
14.52	-3.02	-3.02	-26.17	40	29.54	134°/102cm	Par EUT	32.56
13.56	-3.85	-4.11	-26.05	40	84	3°/102cm	Perp EUT	88.11
13.7	-4.13	-4.13	-26.07	40	50.47	23°/102cm	Perp EUT	54.6
14.28	-4.20	-4.20	-26.14	40	29.54	158°/102cm	Perp EUT	33.74
14.56	-4.23	-4.23	-26.18	40	29.54	214°/102cm	Perp EUT	33.77



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



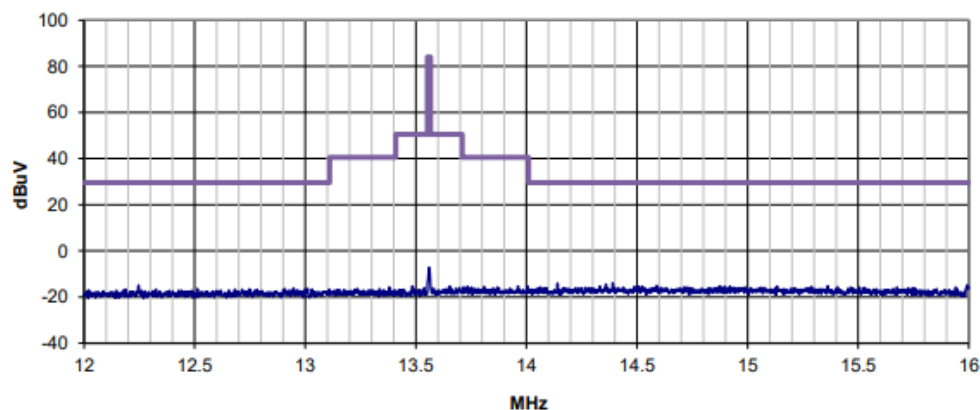
COMMENTS					SIGNATURE			
Tags On; Radio 3; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-7.79	-14.55	-26.05	40	84.00	248°/102cm	Perp EUT	98.55
13.99	-14.60	-14.60	-26.11	40	40.50	158°/102cm	Perp EUT	55.10
14.51	-14.50	-14.66	-26.17	40	29.54	158°/102cm	Perp EUT	44.20
14.87	-14.71	-14.71	-26.21	40	29.54	203°/102cm	Perp EUT	44.25
12.90	-15.92	-15.92	-25.97	40	29.54	303°/102cm	Par EUT	45.46
13.68	-15.13	-15.13	-26.07	40	50.47	307°/102cm	Par EUT	65.60
13.89	-14.74	-14.88	-26.09	40	40.50	68°/102cm	Par EUT	55.38
14.62	-14.47	-14.59	-26.18	40	29.54	158°/102cm	Par EUT	44.13
13.63	-14.72	-15.59	-26.06	40	50.47	68°/102cm	Par GND	66.06
14.03	-14.58	-14.58	-26.11	40	29.54	154°/102cm	Par GND	44.12
14.08	-14.07	-14.07	-26.12	40	29.54	271°/102cm	Par GND	43.61
14.55	-14.13	-14.13	-26.17	40	29.54	177°/102cm	Par GND	43.67



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards: FCC Part 15 Subpart C Intentional Radiators			
N/A			
Test Standard: FCC 15.225			
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



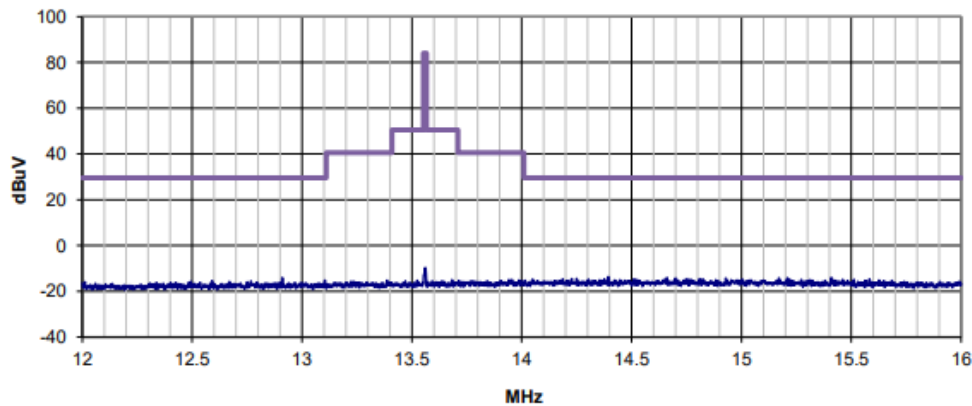
COMMENTS						SIGNATURE		
Tags Off; Radio 4; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-7.81	-8.18	-26.05	40	84.00	-1°/102cm	Perp EUT	92.18
13.94	-8.22	-8.22	-26.10	40	40.50	68°/102cm	Perp EUT	48.72
14.68	-8.31	-8.31	-26.19	40	29.54	47°/102cm	Perp EUT	37.85
15.00	-8.35	-8.35	-26.23	40	29.54	68°/102cm	Perp EUT	37.89
13.56	-6.40	-6.73	-26.05	40	84.00	293°/102cm	Par EUT	90.73
14.20	-6.81	-6.81	-26.13	40	29.54	68°/102cm	Par EUT	36.35
14.66	-6.87	-6.87	-26.19	40	29.54	68°/102cm	Par EUT	36.41
15.07	-6.91	-6.91	-26.23	40	29.54	112°/102cm	Par EUT	36.45
12.32	-15.62	-16.2	-25.9	40	29.54	158°/102cm	Par GND	45.74
13.56	-9.94	-11.13	-26.05	40	84	302°/102cm	Par GND	95.13
13.98	-11.18	-11.18	-26.11	40	40.50	293°/102cm	Par GND	51.68
14.53	-11.25	-11.25	-26.17	40	29.54	158°/102cm	Par GND	40.79



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/28/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS						SIGNATURE		
Tags On; Radio 4; Unit door open;						<i>Ryan Benitez</i>		
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.42	-16.57	-15.48	-25.92	40	29.54	315°/100 cm	Par EUT	45.02
13.07	-16.10	-15.56	-26.00	40	29.54	112°/100 cm	Par EUT	45.10
13.41	-16.16	-15.60	-26.04	40	50.47	0°/100 cm	Par EUT	66.07
13.56	-15.28	-13.65	-26.05	40	84.00	293°/100 cm	Par EUT	97.65
14.32	-13.55	-13.75	-26.15	40	29.54	185°/100 cm	Par EUT	43.29
12.34	-15.88	-16.55	-25.91	40	29.54	315°/100 cm	Perp EUT	46.09
13.05	-15.67	-16.43	-25.99	40	29.54	158°/100 cm	Perp EUT	45.97
13.56	-16.04	-16.07	-26.05	40	84.00	68°/100 cm	Perp EUT	100.07
13.81	-14.54	-9.97	-26.08	40	40.50	113°/100 cm	Perp EUT	50.47
14.60	-15.26	-10.07	-26.18	40	29.54	141°/100 cm	Perp EUT	39.61
12.04	-15.96	-16.68	-25.87	40	29.54	203°/100 cm	Par GND	46.22
12.36	-16.23	-15.68	-25.91	40	29.54	2°/100 cm	Par GND	45.22
13.35	-14.97	-15.19	-26.03	40	40.50	100°/100 cm	Par GND	55.69
14.30	-14.07	-14.82	-26.14	40	29.54	209°/100 cm	Par GND	44.36
14.73	-14.42	-14.78	-26.20	40	29.54	293°/100 cm	Par GND	44.32

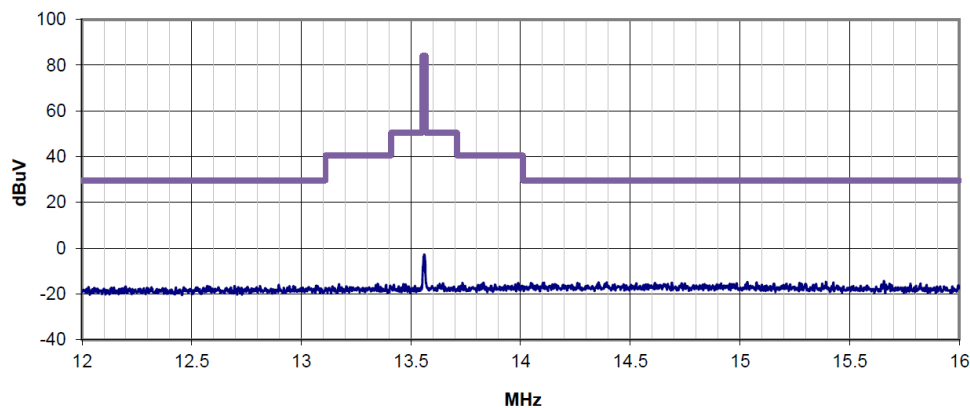



## RADIATED EMISSIONS DATA SHEET

Revision 11

6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	1



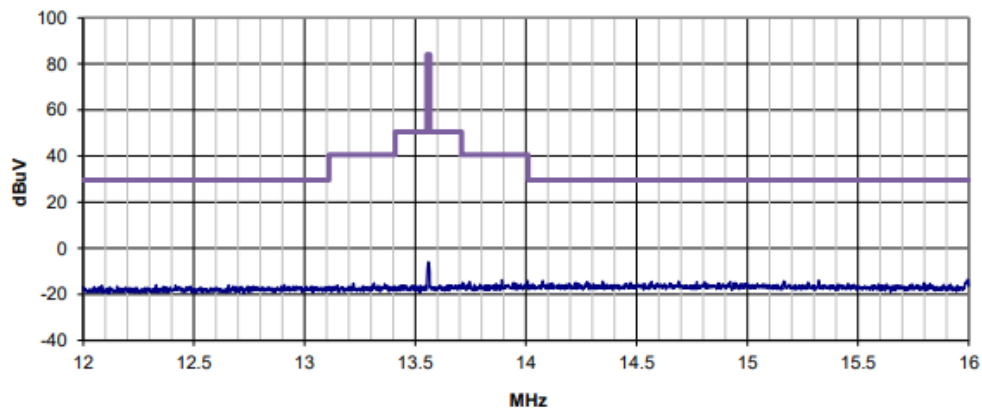
COMMENTS						SIGNATURE		
Tags Off; Radio 5; Unit door open;								
Par GND								
Freq (MHz)	Peak (dBμV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-5.82	-5.82	-26.05	40	84.00	68°/102cm	Par GND	89.82
13.95	-5.87	-5.87	-26.10	40	40.50	59°/102cm	Par GND	46.37
13.95	-5.87	-5.87	-26.10	40	40.50	2°/102cm	Par GND	46.37
14.85	-5.98	-5.98	-26.21	40	29.54	302°/102cm	Par GND	35.52
13.19	-15.28	-16.11	-26.01	40	40.50	52°/102cm	Par EUT	56.61
13.74	-2.58	-2.58	-26.08	40	40.50	68°/102cm	Par EUT	43.08
14.14	-2.62	-2.62	-26.12	40	29.54	165°/102cm	Par EUT	32.16
14.66	-2.69	-2.69	-26.19	40	29.54	158°/102cm	Par EUT	32.23
13.56	-3.79	-4.24	-26.05	40	84	-1°/102cm	Perp EUT	88.24
13.98	-4.29	-4.29	-26.11	40	40.5	245°/102cm	Perp EUT	44.79
14.21	-4.32	-4.32	-26.13	40	29.54	230°/102cm	Perp EUT	33.86
14.63	-4.37	-4.37	-26.18	40	29.54	68°/102cm	Perp EUT	33.91



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/28/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS						SIGNATURE		
Tags On; Radio 5; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.48	-15.92	-15.83	-25.92	40	29.54	158°/100 cm	Par GND	45.37
13.04	-15.91	-15.90	-25.99	40	29.54	68°/100 cm	Par GND	45.44
13.18	-15.49	-15.47	-26.01	40	40.50	0°/100 cm	Par GND	55.97
13.56	-9.95	-15.51	-26.05	40	84.00	293°/100 cm	Par GND	99.51
14.17	-15.18	-14.74	-26.13	40	29.54	113°/100 cm	Par GND	44.28
12.39	-15.22	-16.96	-25.91	40	29.54	23°/100 cm	Par EUT	46.50
13.14	-15.42	-16.65	-26.00	40	40.50	315°/100 cm	Par EUT	57.15
13.56	-15.51	-4.34	-26.05	40	84.00	277°/100 cm	Par EUT	88.34
13.97	-15.15	-4.36	-26.10	40	40.50	181°/100 cm	Par EUT	44.86
14.56	-15.43	-4.43	-26.18	40	29.54	315°/100 cm	Par EUT	33.97
12.51	-15.97	-16.96	-25.93	40	29.54	293°/100 cm	Perp EUT	46.50
13.08	-15.74	-16.31	-26.00	40	29.54	306°/100 cm	Perp EUT	45.85
13.14	-15.23	-16.32	-26.00	40	40.50	248°/100 cm	Perp EUT	56.82
13.56	-7.60	-14.90	-26.05	40	84.00	0°/100 cm	Perp EUT	98.90
13.98	-15.36	-14.95	-26.11	40	40.50	311°/100 cm	Perp EUT	55.45

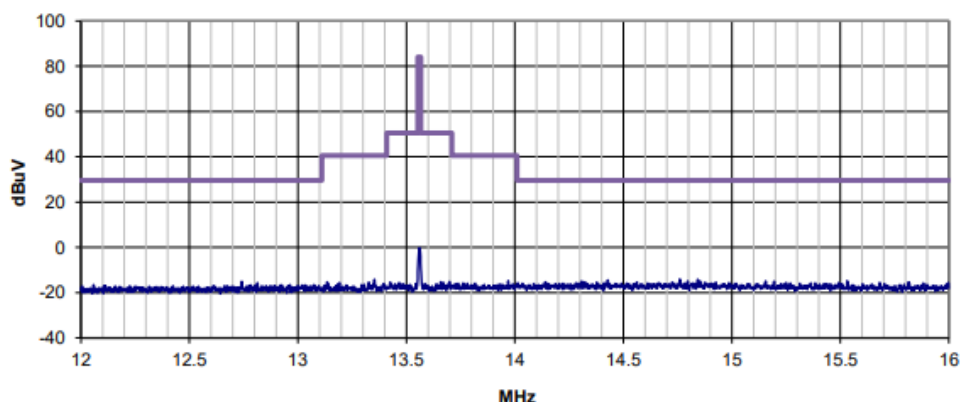




## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



COMMENTS						SIGNATURE		
Tags Off; Radio 6; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
13.56	-0.96	-0.96	-26.05	40	84.00	0°/102cm	Perp EUT	84.96
13.56	-0.96	-0.96	-26.05	40	84.00	1°/102cm	Perp EUT	84.96
14.36	-1.06	-1.06	-26.15	40	29.54	303°/102cm	Perp EUT	30.60
14.45	-1.07	-1.07	-26.16	40	29.54	201°/102cm	Perp EUT	30.61
12.76	-15.36	-15.36	-25.96	40	29.54	315°/102cm	Par EUT	44.90
13.56	1.61	1.61	-26.05	40	84.00	299°/102cm	Par EUT	82.39
14.48	1.50	1.50	-26.17	40	29.54	68°/102cm	Par EUT	28.04
14.95	1.44	1.44	-26.22	40	29.54	97°/102cm	Par EUT	28.1
12.5	-15.3	-16.03	-25.93	40	29.54	315°/102cm	Par GND	45.57
13.56	-2.83	-3.03	-26.05	40	84	300°/102cm	Par GND	87.03
14.12	-3.10	-3.10	-26.12	40	29.54	315°/102cm	Par GND	32.64
14.51	-3.15	-3.15	-26.17	40	29.54	75°/102cm	Par GND	32.69

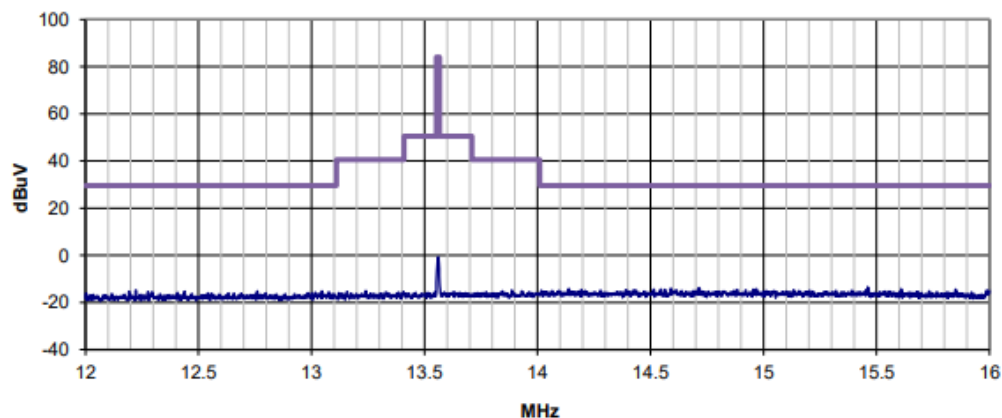




## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/29/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	1



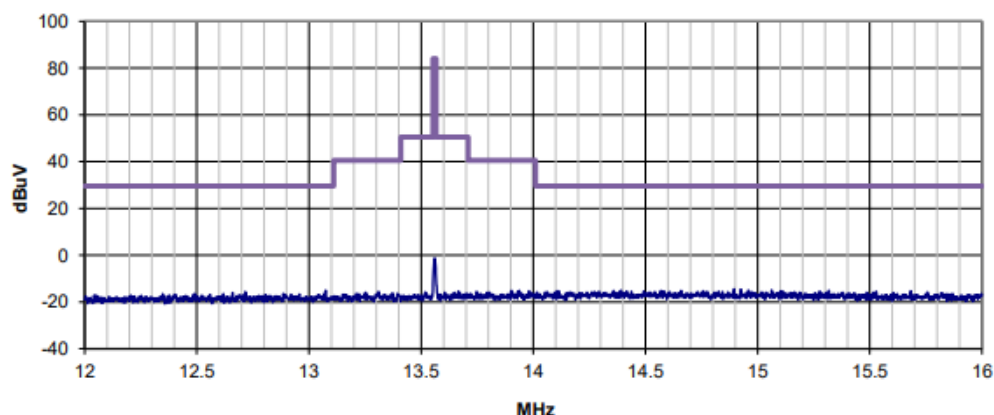
COMMENTS						SIGNATURE		
Tags On; Radio 6; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.41	-15.47	-15.92	-25.91	40	29.54	274°/100 cm	Perp EUT	45.46
13.01	-15.35	-15.76	-25.99	40	29.54	248°/100 cm	Perp EUT	45.30
13.56	-14.46	-14.15	-26.05	40	84.00	8°/100 cm	Perp EUT	98.15
13.94	-14.72	-14.18	-26.10	40	40.50	0°/100 cm	Perp EUT	54.68
14.31	-14.89	-14.22	-26.15	40	29.54	202°/100 cm	Perp EUT	43.76
12.95	-16.26	-16.25	-25.98	40	29.54	68°/100 cm	Par EUT	45.79
13.56	-15.40	-14.13	-26.05	40	84.00	316°/100 cm	Par EUT	98.13
14.09	-15.06	-13.50	-26.12	40	29.54	293°/100 cm	Par EUT	43.04
14.59	-14.92	-13.56	-26.18	40	29.54	113°/100 cm	Par EUT	43.1
14.91	-14.14	-13.60	-26.22	40	29.54	113°/100 cm	Par EUT	43.14
12.27	-16.11	-15.31	-25.90	40	29.54	183°/100 cm	Par GND	44.85
12.83	-15.21	-15.37	-25.97	40	29.54	0°/100 cm	Par GND	44.91
13.23	-15.42	-15.42	-26.01	40	40.50	302°/100 cm	Par GND	55.92
13.37	-14.83	-14.58	-26.03	40	40.50	306°/100 cm	Par GND	55.08
14.44	-14.03	-14.71	-26.16	40	29.54	113°/100 cm	Par GND	44.25



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/22/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.225		
TEST RESULTS	TEST TYPE	DISTANCE (meters)	RUN #
Pass	Compliance	3	1



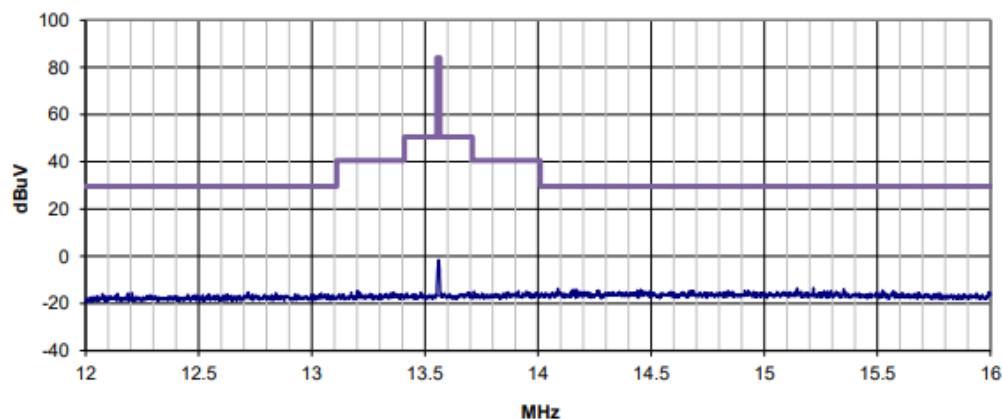
COMMENTS						SIGNATURE		
Tags Off; Radio 7; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg)/Height (cm)	Orientation	QP Margin (dB)
13.56	-4.76	-4.76	-26.05	40	84.00	68°/102cm	Par GND	88.76
13.86	-4.80	-4.80	-26.09	40	40.50	231°/102cm	Par GND	45.30
14.61	-4.89	-4.89	-26.18	40	29.54	315°/102cm	Par GND	34.43
14.93	-4.93	-4.93	-26.22	40	29.54	203°/102cm	Par GND	34.47
13.56	-0.76	-1.01	-26.05	40	84.00	33°/102cm	Par EUT	85.01
13.83	-1.05	-1.05	-26.09	40	40.50	236°/102cm	Par EUT	41.55
14.53	-1.13	-1.13	-26.17	40	29.54	112°/102cm	Par EUT	30.67
14.72	-1.16	-1.16	-26.2	40	29.54	-1°/102cm	Par EUT	30.7
12.87	-15.62	-15.62	-25.97	40	29.54	113°/102cm	Perp EUT	45.16
13.1	-15.02	-15.65	-26	40	29.54	293°/102cm	Perp EUT	45.19
13.56	-2.68	-2.68	-26.05	40	84.00	-1°/102cm	Perp EUT	86.68
14.25	-2.76	-2.76	-26.14	40	29.54	22°/102cm	Perp EUT	32.30



## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/29/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	DI-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards: FCC Part 15 Subpart C Intentional Radiators			
N/A			
Test Standard: FCC 15.225			
TEST RESULTS		TEST TYPE	
Pass		Compliance	
		DISTANCE (meters)	
		3	
		RUN #	
		1	



COMMENTS						SIGNATURE		
Tags On; Radio 7; Unit door open;								
Freq (MHz)	Peak (dBuV)	QP (dBuV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBuV)	Turntable (deg) / Height (cm)	Orientation	QP Margin (dB)
12.94	-15.17	-15.80	-25.98	40	29.54	112°/100 cm	Par GND	45.34
13.27	-15.72	-15.84	-26.02	40	40.50	22°/100 cm	Par GND	56.34
13.56	-14.71	-15.34	-26.05	40	84.00	158°/100 cm	Par GND	99.34
14.21	-14.75	-15.17	-26.13	40	29.54	68°/100 cm	Par GND	44.71
14.35	-14.36	-14.08	-26.15	40	29.54	256°/100 cm	Par GND	43.62
12.97	-28.03	-27.47	-37.48	40	29.54	308°/100 cm	Par EUT	57.01
13.56	-26.84	-27.51	-37.55	40	84.00	293°/100 cm	Par EUT	111.51
13.77	-26.54	-27.15	-37.58	40	40.50	68°/100 cm	Par EUT	67.65
14.09	-26.27	-26.04	-37.62	40	29.54	-1°/100 cm	Par EUT	55.58
14.38	-26.03	-26.07	-37.65	40	29.54	23°/100 cm	Par EUT	55.61
12.81	-15.65	-16.17	-25.96	40	29.54	315°/100 cm	Perp EUT	45.71
13.22	-16.05	-15.78	-26.01	40	40.50	248°/100 cm	Perp EUT	56.28
13.56	-15.36	-15.24	-26.05	40	84.00	23°/100 cm	Perp EUT	99.24
14.30	-14.79	-14.80	-26.15	40	29.54	315°/100 cm	Perp EUT	44.34
14.79	-14.44	-14.86	-26.20	40	29.54	292°/100 cm	Perp EUT	44.40

---

## Field Strength of Spurious Emissions (Less Than 30 MHz)

### Test Description

Testing was done for both configurations: Tags on sequencing with open EUT door and Tags off sequencing with open EUT door.

A calibrated active loop antenna was maintained 1 meter above the ground plane during testing in a semi-anechoic test chamber. Testing was done as per ANSI C63.10 with the active loop antenna in three orthogonal directions while evaluating the EUT on a turntable for 360-degree rotation.

Measurements were made with the required detectors and specified on the data sheets for each individual point using Quasi-Peak detection.

### Test Measurement uncertainties (k=2):

At 3m measured with:

Loop Antenna (9 kHz – 30 MHz)..... ±5.15 dB

### Sample radiated emissions field strength measurement:

RF Reading from Spectrum Analyzer (dBuV) + Cable Loss Factor (dB) + Antenna Factor (dB) – Pre-Amplifier Amplification (dB) = Final Radiated Emission Level (dBuV/m).

Measurement uncertainty is not applied to pass/fail criteria.

---

## Test Equipment

Description	Manufacturer	Model	Serial Number	Last Cal.	Cal. Due
Receiver	Agilent	E4440A	US40420326	2025-06-18	2026-06-18
Loop Antenna	Com-Power	AL-130R	10160054	2022-11-16	2027-11-16
Software	ETS-Linsgren	Tile 7.6.0.14	N/A	N/A	N/A

## Frequency Range Investigated

9 kHz to 30 MHz

## AC Power

120 VAC/60 Hz

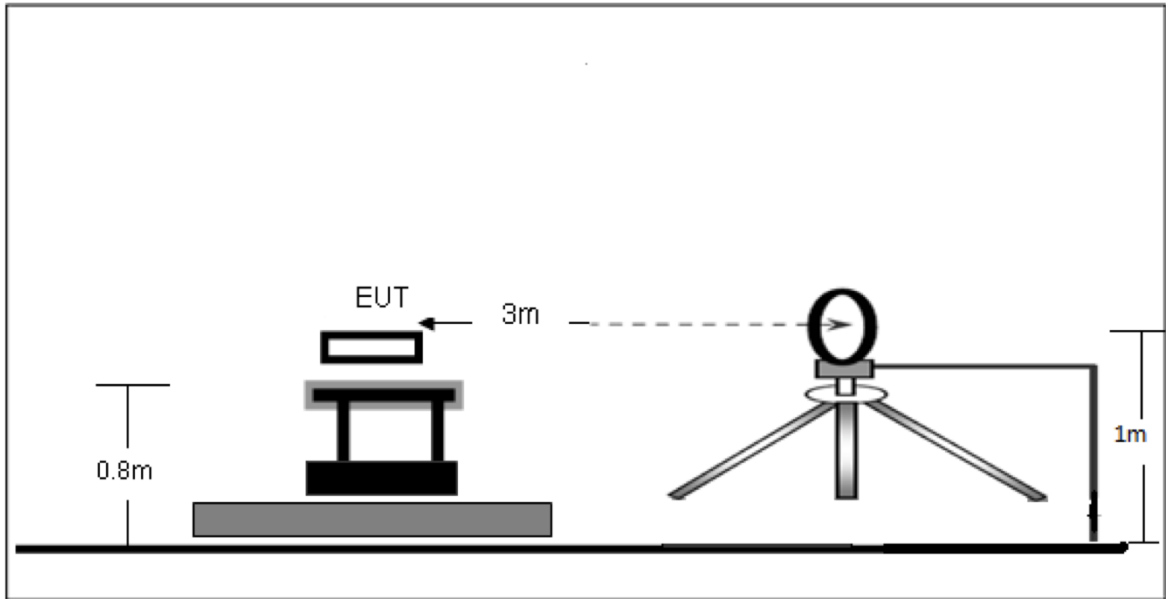
## Configurations Investigated

EUT door open

## Modes Investigated

Sequencing with RFID Tags  
Sequencing without RFID Tags

## Block Diagram

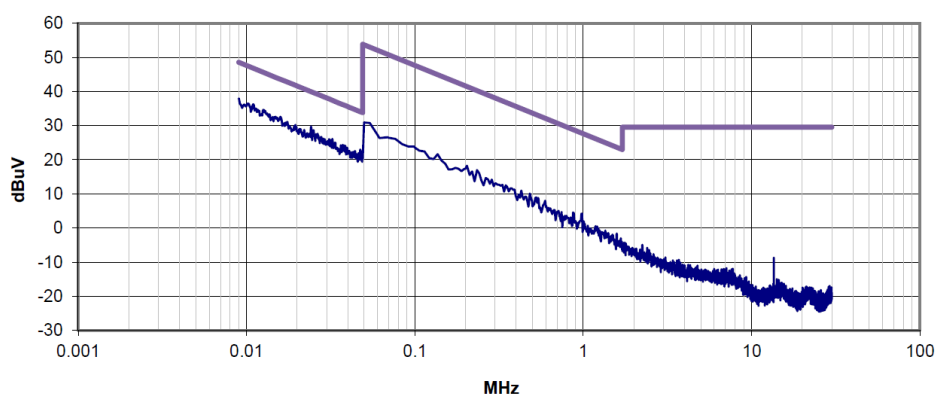





# RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/23/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.209		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	1



COMMENTS					SIGNATURE			
Tags On sequencing; Unit door open;								
Perp EUT								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.56	-4.45	-10.68	-26.05	40	29.54	0°/100cm		40.22
27.31	-13.25	-13.25	-23.57	40	29.54	0°/100cm		42.79
Par EUT								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.57	-3.87	-3.87	-26.05	40	29.54	0°/100cm		33.41
27.31	-6.44	-6.44	-23.57	40	29.54	0°/100cm		35.98
Par GND								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.60	-20.50	-20.50	-26.05	40	29.54	0°/100cm		50.04
26.88	-21.58	-23.33	-23.57	40	29.54	0°/100cm		52.87

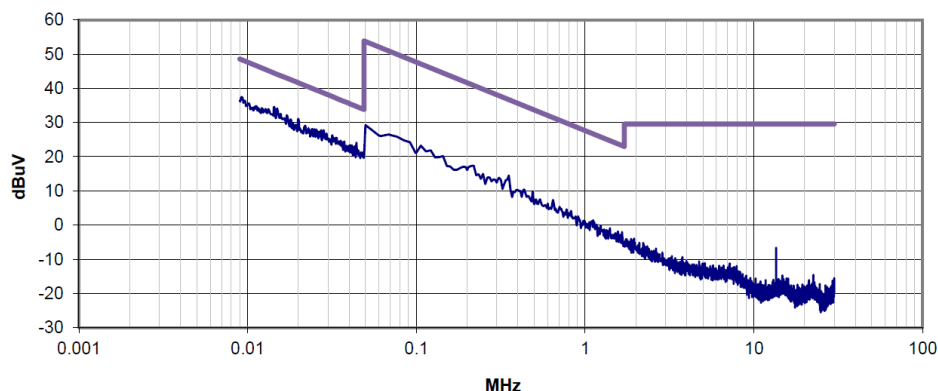



## RADIATED EMISSIONS DATA SHEET

Revision 11

6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/23/2025
DUT:	NextDent 300	Temperature (°C):	27
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC 15.209		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	1



COMMENTS						SIGNATURE		
Tags Off sequencing; Unit door open;								
Perp EUT								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.56	-0.74	-1.08	-26.05	40	29.54	0°/100cm		30.62
27.48	-3.68	-3.68	-23.57	40	29.54	0°/100cm		33.22
Par EUT								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.56	-0.32	-0.32	-26.05	40	29.54	0°/100cm		29.86
27.20	-2.87	-2.87	-23.57	40	29.54	0°/100cm		32.41
Par GND								
Freq (MHz)	Peak (dBmV)	QP (dBμV)	Factors (dB)	Distance Factor (dB)	QP Limit (dBμV)	Turntable (deg) / Height (cm)		QP Margin (dB)
13.56	-7.87	-8.04	-26.05	40	29.54	0°/100cm		37.58
26.91	-10.54	-10.54	-23.57	40	29.54	0°/100cm		40.08



---

## Field Strength of Spurious Emissions (Greater Than 30 MHz)

### Test Description

The client provided the test modes, configurations, and operational settings for the DUT and any supporting equipment.

The DUT and the AE that is designated to be placed in the measurement area were placed on a non-conducting tabletop as per ANSI C63.10. The measurement antenna was then placed 3 m from the closest approach of the DUT/AE system. Any AE that had to be placed outside the measurement area was set up either outside of the chamber or under the floor, depending on size and convenience.

The DUT and the AE were operated in the modes specified by the client while the emissions were measured.

To measure the emissions at the frequency range specified in this report, a preliminary scan was performed with a linearly polarized antenna while the turntable was rotated 360 degrees and the antenna mast was raised from 1 meter height to 4 meters in height in both a horizontal polarization and a vertical polarization. Any emissions that were found to be within 6 dB of the specified limit were then maximized to find the level that was recorded.

### Test Measurement uncertainties (k=2):

Radiated Field strength at 3m measured with:

Hybrid Antenna (30 MHz – 1 GHz)..... ±5.48 dB

### Sample radiated emissions field strength measurement:

RF Reading from Spectrum Analyzer (dBuV) + Cable Loss Factor (dB) + Antenna Factor (dB) – Pre-Amplifier Amplification (dB) = Final Radiated Emission Level (dBuV/m).

Measurement uncertainty is not applied to pass/fail criteria.

---

## Test Equipment

Description	Manufacturer	Model	Serial Number	Last Cal.	Cal. Due
Receiver	Agilent	E4440A	US40420326	2025-06-18	2026-06-18
CombiLog Antenna	Com-Power	AC-220	10030003	2024-02-23	2026-02-23
Software	ETS-Linsgren	Tile 7.6.0.14	N/A	N/A	N/A

## Frequency Range Investigated

30 MHz to 1000 MHz

## AC Power

120 VAC/60 Hz

## Configurations Investigated

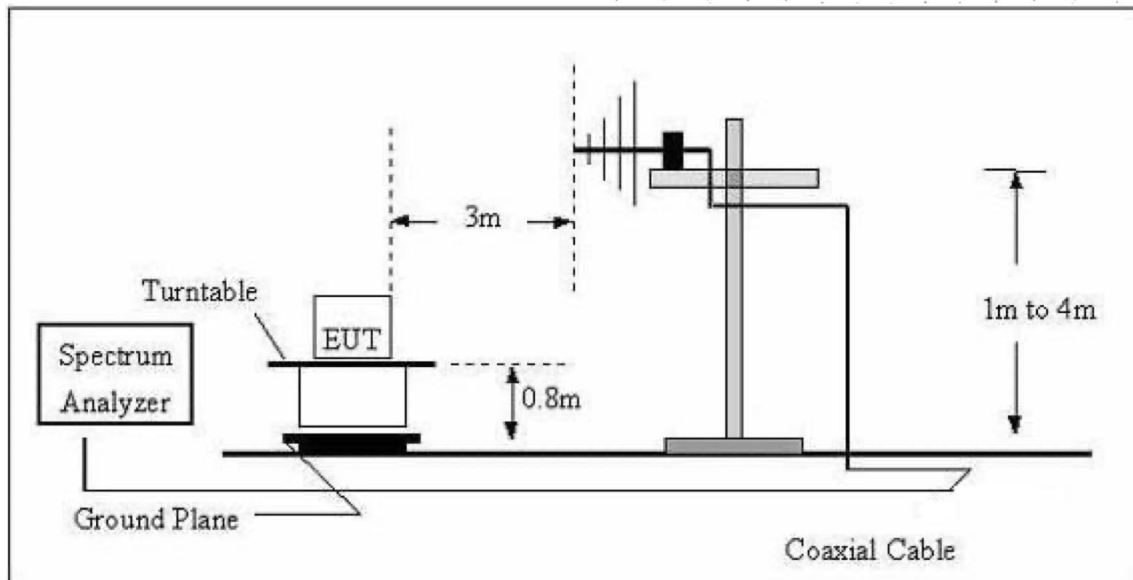
EUT door open

## Modes Investigated

Sequencing with RFID Tags

Sequencing without RFID Tags

## Block Diagram

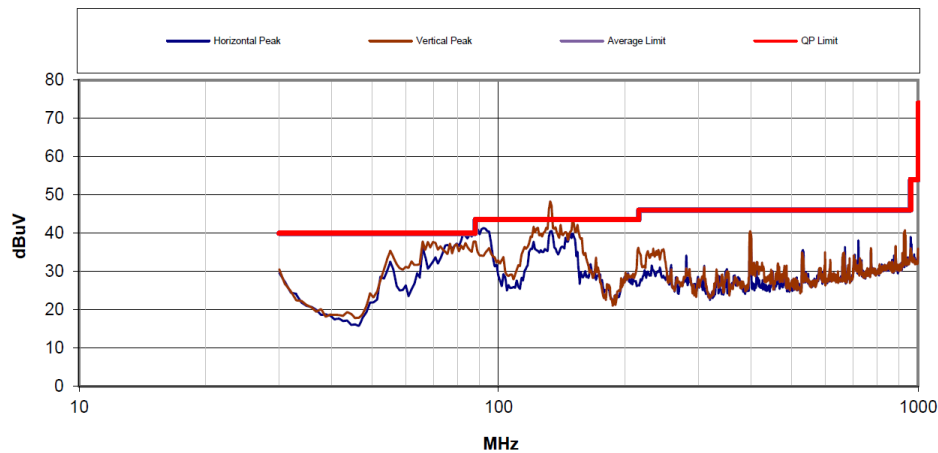





## RADIATED EMISSIONS DATA SHEET

Revision 11  
6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/18/2025
DUT:	NextDent 300	Temperature (°C):	28
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC Part 15.209		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	13



COMMENTS						SIGNATURE		
Production representative; product door open; Tags Off; 8 RFID radios sequentially polling								
Horizontal								
Freq (MHz)	Peak (dBμV)	QP (dBμV)	Factors (dB)	Peak Limit (dBμV)	QP Limit (dBμV)	Turntable (deg) / Height (cm)	Peak Margin (dB)	QP Margin (dB)
30.13	28.61	23.04	23.41	40.00	40.00	315°/325cm	11.39	16.96
92.18	41.22	36.30	14.18	43.52	43.52	315°/400cm	2.30	7.22
134.05	38.83	32.43	17.19	43.52	43.52	127°/400cm	4.69	11.09
396.40	38.67	34.07	22.55	46.02	46.02	316°/100cm	7.35	11.95
721.01	37.47	36.34	29.95	46.02	46.02	316°/175cm	8.55	9.68
960.01	40.81	36.89	34.18	53.98	53.98	315°/126cm	13.17	17.09
Vertical								
Freq (MHz)	Peak (dBμV)	QP (dBμV)	Factors (dB)	Peak Limit (dBμV)	QP Limit (dBμV)	Turntable (deg) / Height (cm)	Peak Margin (dB)	QP Margin (dB)
30.02	28.96	23.43	23.45	40.00	40.00	0°/325cm	11.04	16.57
132.66	49.74	43.37	17.26	43.52	43.52	179°/100cm	-6.22	0.15
215.25	37.13	32.79	15.01	43.52	43.52	0°/100cm	6.39	10.73
397.38	40.84	37.01	22.61	46.02	46.02	0°/100cm	5.18	9.01
931.17	40.81	35.79	33.01	46.02	46.02	0°/100cm	5.21	10.23

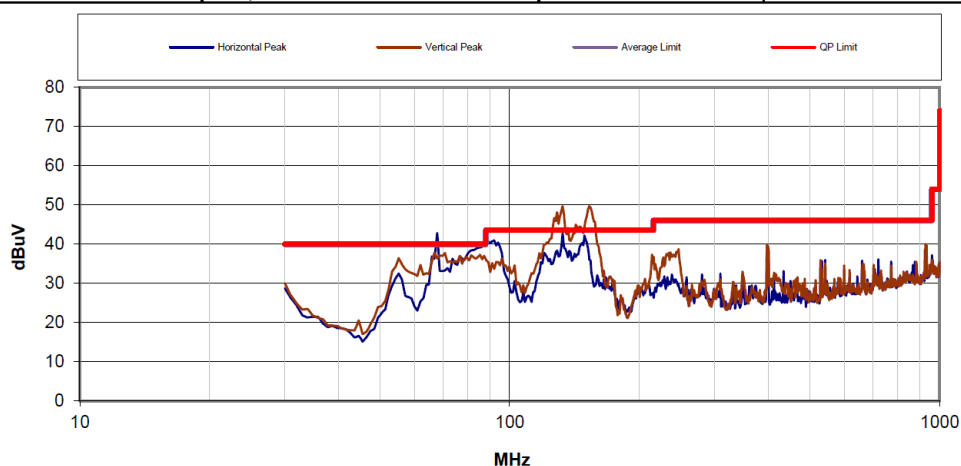


## RADIATED EMISSIONS DATA SHEET

Revision 11

6/30/2021

Customer:	3D Systems Corporation	Job Reference#:	3DS20250714-01
Contact:	Mufeed Yacoub	Date:	7/18/2025
DUT:	NextDent 300	Temperature (°C):	28
Serial Number:	Di-319	Relative Humidity (%):	30
Voltage/Freq:	120 V 60 Hz	Barometric Pressure:	30
Tested by:	Ryan Benitez	Location:	Hillsboro
Product Standards:	FCC Part 15 Subpart C Intentional Radiators		
	N/A		
Test Standard:	FCC Part 15.209		
<b>TEST RESULTS</b>	<b>TEST TYPE</b>	<b>DISTANCE (meters)</b>	<b>RUN #</b>
Pass	Compliance	3	14

**COMMENTS**

Production representative; product door open; Tags On; 8 RFID radios sequentially polling tags;

**SIGNATURE****Horizontal**

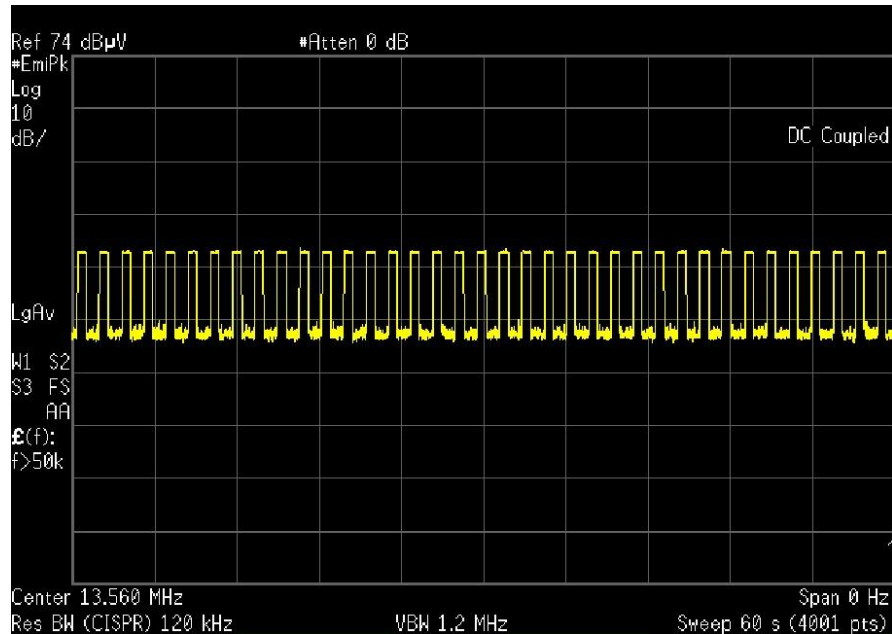
Freq (MHz)	Peak (dBμV)	QP (dBμV)	Factors (dB)	Peak Limit (dBμV)	QP Limit (dBμV)	Turntable (deg) / Height (cm)	Peak Margin (dB)	QP Margin (dB)
30.05	30.32	23.30	23.44	40.00	40.00	262°/325cm	9.68	16.70
67.74	33.14	33.14	11.23	40.00	40.00	247°/375cm	6.86	6.86
133.23	43.75	38.32	17.27	43.52	43.52	140°/400cm	-0.23	5.20
397.35	37.78	34.53	22.61	46.02	46.02	315°/100cm	8.24	11.49
959.99	38.56	35.79	34.18	46.02	46.02	0°/99cm	7.46	10.23

**Vertical**

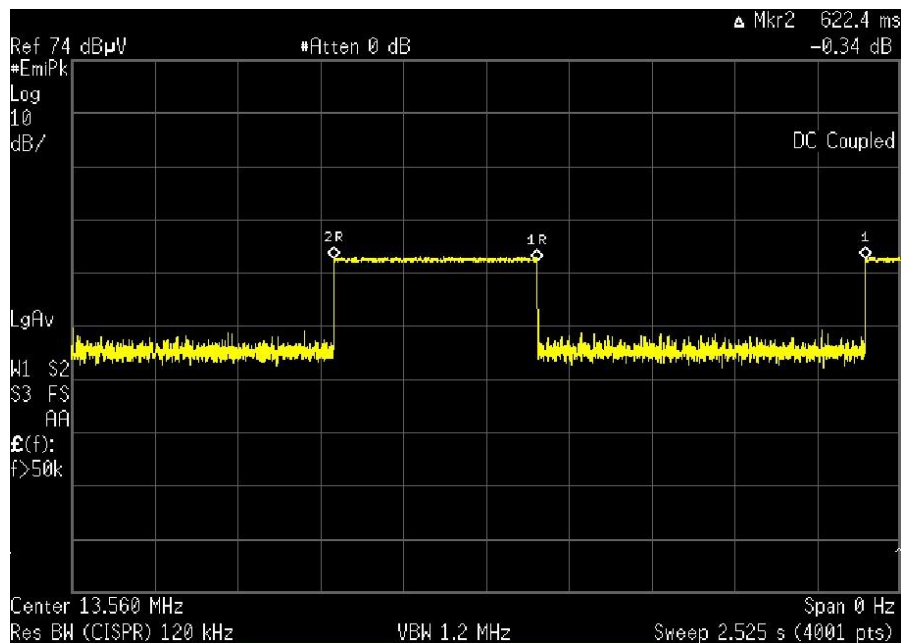
Freq (MHz)	Peak (dBμV)	QP (dBμV)	Factors (dB)	Peak Limit (dBμV)	QP Limit (dBμV)	Turntable (deg) / Height (cm)	Peak Margin (dB)	QP Margin (dB)
30.09	29.66	23.34	23.42	40.00	40.00	-1°/282cm	10.34	16.66
66.49	35.60	31.24	11.10	40.00	40.00	315°/102cm	4.40	8.76
153.27	48.27	43.27	16.41	43.52	43.52	0°/103cm	-4.75	0.25
246.92	40.14	35.24	18.16	46.02	46.02	37°/103cm	5.88	10.78
397.28	41.62	36.93	22.61	46.02	46.02	-1°/131cm	4.40	9.09
926.98	41.24	36.74	32.79	46.02	46.02	-1°/100cm	4.78	9.28

## Duty Cycle Information

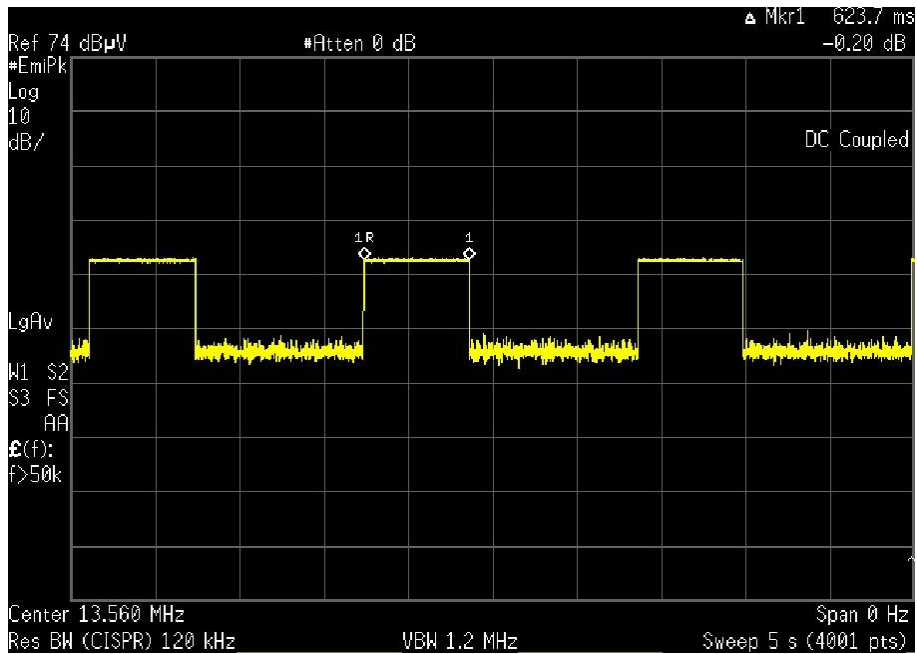
Note: Signal On long enough for quasi-peak measurements.



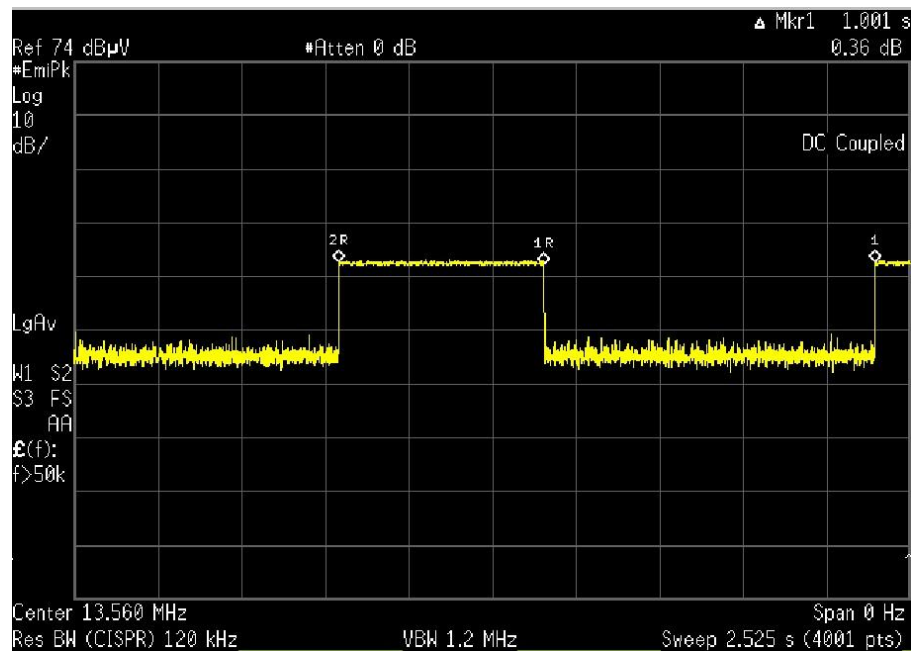
CH0\_1min



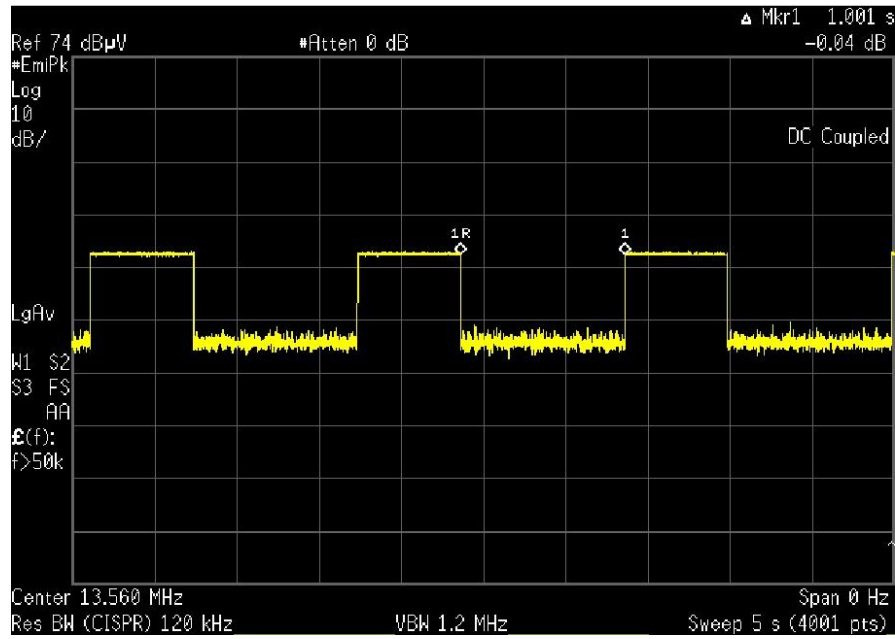
CH0\_ON\_Time\_2.5sec



**CH0\_ON\_Time\_5sec**



**CH0\_Time\_Between\_2.5sec**



CH0\_Time\_Between\_5sec



---

# End of Test Report