

## APPENDIX REV 1

WIR127472

FCC15.231 Data

## Report Status Sheet

Revision	Report Date	Reason for Revision
∅	July 10, 2023	Initial Issue.
1	July 20, 2023	Updated Fundamental Field Strength - Test Results, Vertical table.

**§ 15.203      Antenna Requirement**

\* No data or photographs available.

## § 15.207(a) Conducted Emissions Limits

Conducted Emissions Datasheet						
METrak Number	127472	Test Specification	FCC Part 15, Subpart B, Section 15.107; ICES-003, Section 3.2.1			
Customer	Lutron Electronics	Equipment Class	Class B			
EUT Name	Caseta Bridge	Engineer	Donald Salguero			
Model/Part Number	L-BDG2	Test Date(s)	6/23/2023			
Serial Number	6820195	Temperature	20.2°C			
Mode of Operation	Active	Relative Humidity	42%			
Notes:						
Start Frequency	150 kHz		Stop Frequency	30 MHz		
Line Under Test	Line					
Frequency	Quasi-Peak Measurement	Correction Factor	Corrected Measurement	Quasi-Peak Limit	Margin	Result
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail
0.175	31.52	10.41	41.93	65.28	-23.36	PASS
0.213	31.14	10.28	41.42	64.21	-22.79	PASS
0.246	32.66	10.22	42.88	63.26	-20.38	PASS
0.279	34.3	10.17	44.47	62.3	-17.83	PASS
0.313	35.81	10.14	45.94	61.35	-15.41	PASS
0.346	30.88	10.12	40.99	60.4	-19.41	PASS
Frequency	Average Measurement	Correction Factor	Corrected Measurement	Average Limit	Margin	Result
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail
0.246	24.07	10.22	34.29	53.26	-18.968	PASS
0.279	26.28	10.17	36.45	52.3	-15.856	PASS
0.317	26.79	10.14	36.93	51.23	-14.304	PASS
0.35	22.4	10.11	32.51	50.28	-17.767	PASS
0.947	20.85	10.03	30.88	46	-15.124	PASS
12.799	21.06	10.23	31.29	50	-18.71	PASS

Figure 1: CE Data [120V60Hz, Line]

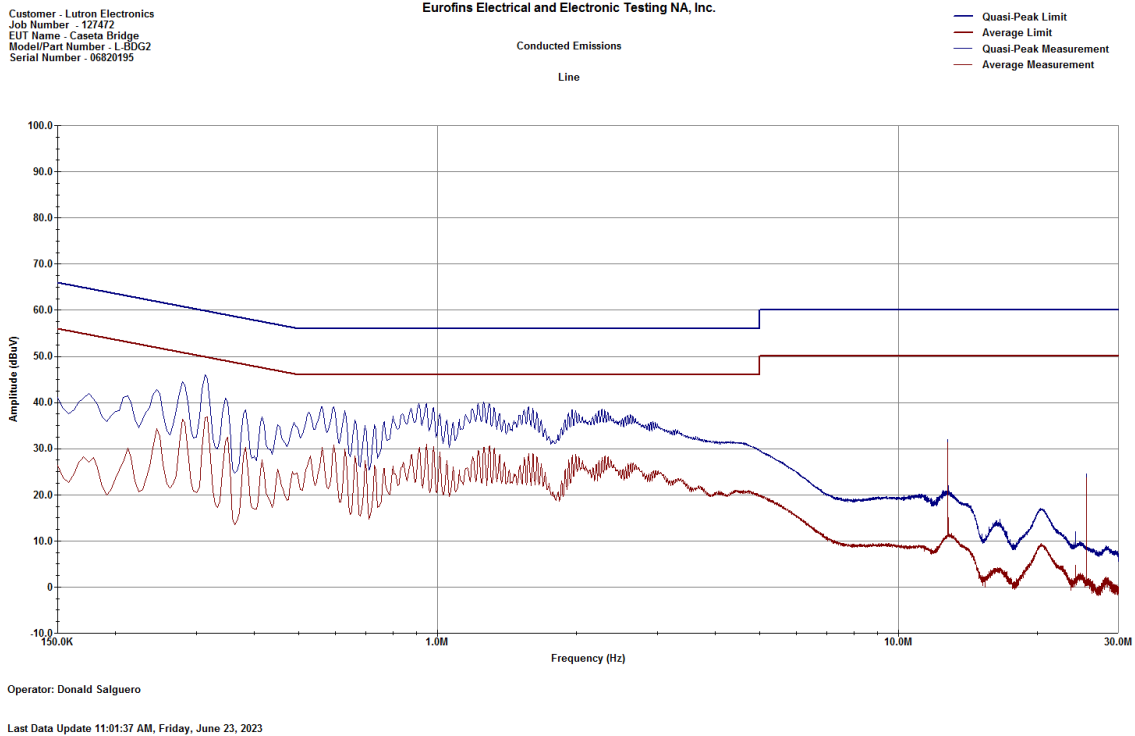


Figure 2: CE Prescan [120V60Hz, Line]

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Conducted Emissions Datasheet						
METrak Number	127472		Test Specification	FCC Part 15, Subpart B, Section 15.107; ICES-003, Section 3.2.1		
Customer	Lutron Electronics		Equipment Class	Class B		
EUT Name	Caseta Bridge		Engineer	Donald Salguero		
Model/Part Number	L-BDG2		Test Date(s)	6/23/2023		
Serial Number	6820195		Temperature	20.2°C		
Mode of Operation	Active		Relative Humidity	42%		
Notes:						
Start Frequency	150 kHz		Stop Frequency	30 MHz		
Line Under Test	Neutral					
Frequency	Quasi-Peak Measurement	Correction Factor	Corrected Measurement	Quasi-Peak Limit	Margin	Result
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail
0.15	31.49	10.51	42	66	-24.001	PASS
0.175	31.84	10.39	42.23	65.28	-23.056	PASS
0.213	29.9	10.27	40.17	64.21	-24.045	PASS
0.246	30.16	10.22	40.38	63.26	-22.882	PASS
0.283	31.31	10.16	41.47	62.19	-20.712	PASS
0.317	31.58	10.13	41.71	61.23	-19.524	PASS
Frequency	Average Measurement	Correction Factor	Corrected Measurement	Average Limit	Margin	Result
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail
0.246	17.22	10.22	27.44	53.26	-25.819	PASS
0.283	19.5	10.16	29.67	52.19	-22.519	PASS
0.317	18.54	10.13	28.67	51.23	-22.563	PASS
0.35	16.22	10.11	26.34	50.28	-23.943	PASS
1.297	15.13	10.03	25.16	46	-20.844	PASS
12.799	20.8	10.23	31.02	50	-18.975	PASS

Figure 3: CE Data [120V60Hz, Neutral]

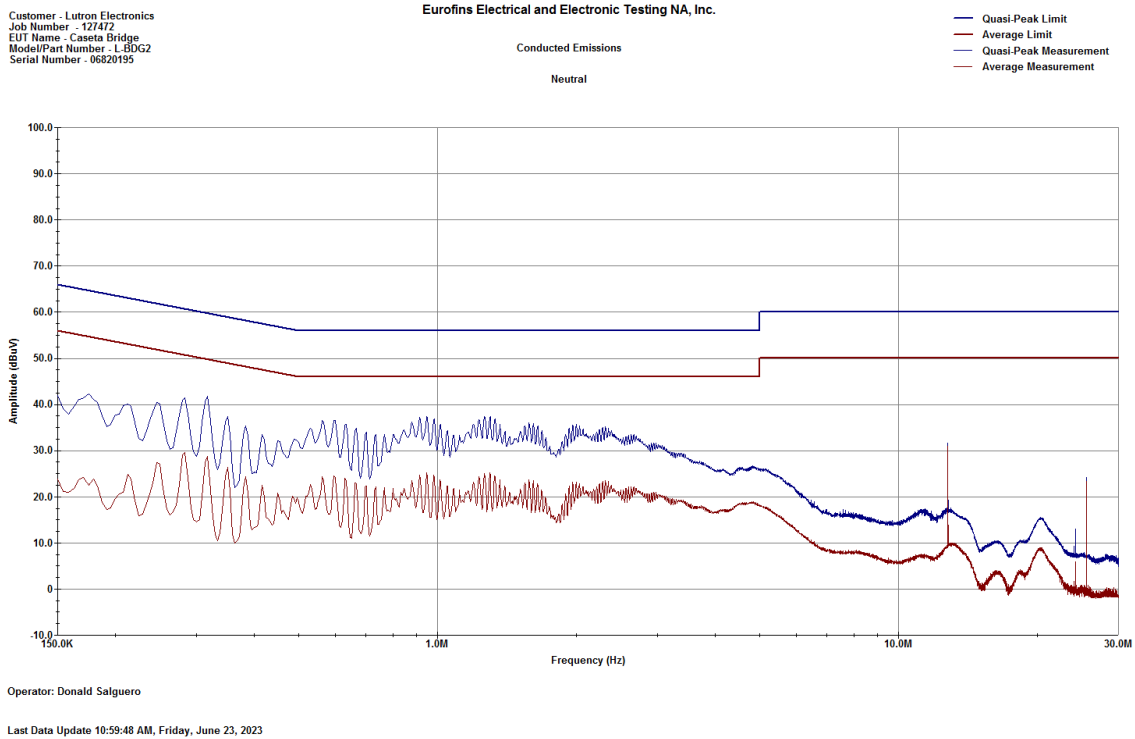


Figure 4: CE Prescan [120V60Hz, Neutral]



**Figure 5: CE Setup [Rear]**



**Figure 6: CE Setup**

§ 15.231 (a) Periodic Operation Requirements

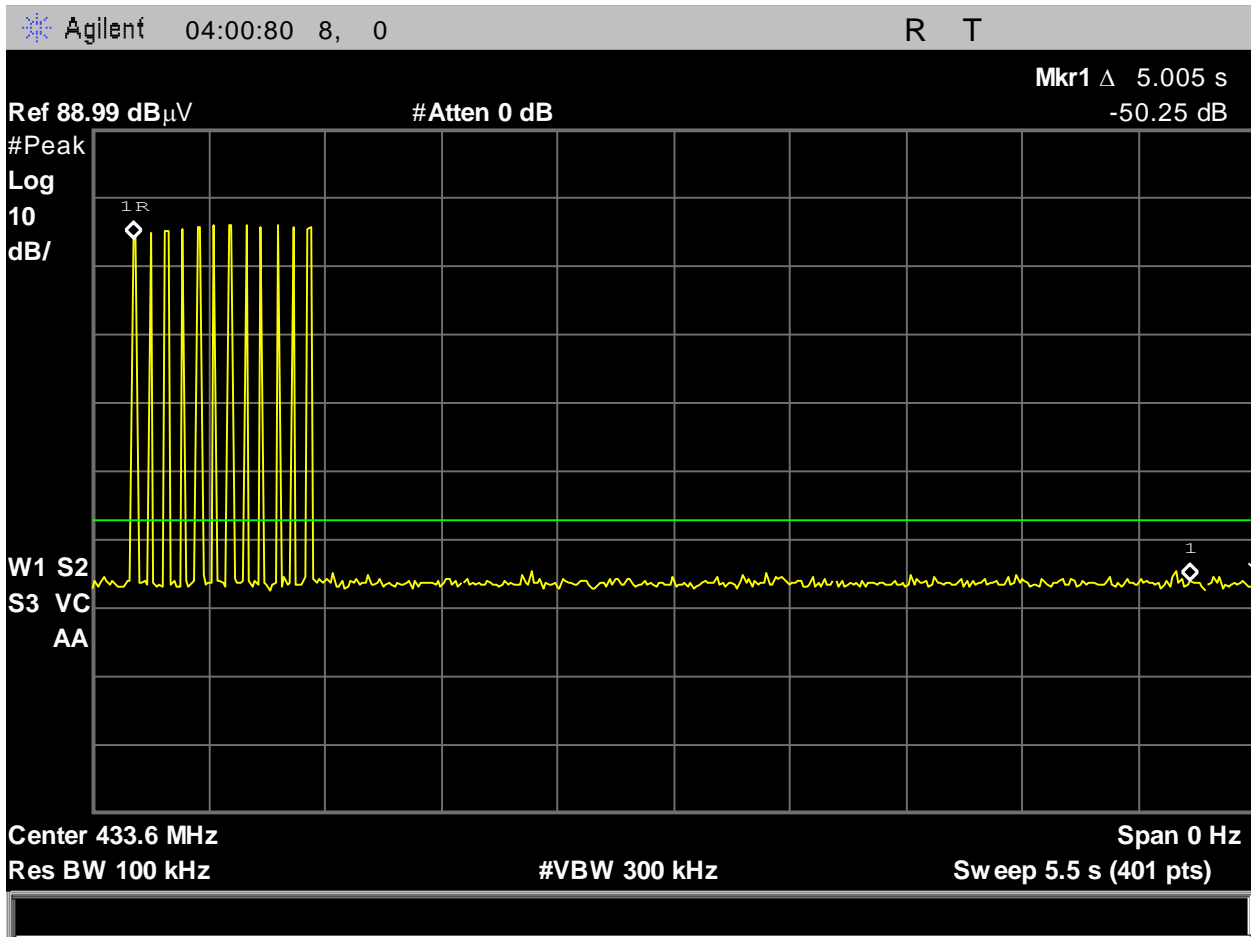


Figure 7: 5s shutdown



### § 15.231(b) Field Strength of Fundamental and Harmonics

Frequency (MHz)	Peak Measured Field Strength (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Corrected Peak Field Strength (dBuV/m)	DCCF (dB)	Average Field Strength (dBuV/m)	Limit (dBuV/m)	Margin (dB)
431.5	74.44	21	2.74	98.18	-20	78.18	80.75	-2.57
433.6	74.55	21.1	2.74	98.39	-20	78.39	80.81	-2.42
436.6	74.92	21.3	2.74	98.96	-20	78.96	80.91	-1.95

Figure 8: Fundamental Field Strength - Test Results, Horizontal

Frequency (MHz)	Peak Measured Field Strength (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Corrected Peak Field Strength (dBuV/m)	DCCF (dB)	Average Field Strength (dBuV/m)	Limit (dBuV/m)	Margin (dB)
431.5	76.11	20.8	2.74	99.65	-20	79.65	80.75	-1.1
433.6	76.76	20.8	2.74	100.3	-20	80.3	80.81	-0.51
436.6	77.03	21	2.74	100.77	-20	80.77	80.91	-0.14

Figure 9: Fundamental Field Strength - Test Results, Vertical

TX Channel	Frequency (MHz)	Peak Measured Field Strength (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Corrected Peak Field Strength (dBuV/m)	DCCF (dB)	Average Field Strength (dBuV/m)	Limit (dBuV/m)	Margin (dB)
431.5 MHz	862.975	25.56	26.9	3.44	55.90	-20	35.90	60.74	-24.84
433.6 MHz	867.18	26.28	27	3.44	56.72	-20	36.72	60.81	-24.09
436.6 MHz	873.18	26.16	26.9	3.39	56.45	-20	36.45	60.91	-24.46

Figure 10: Harmonics Field Strength - Test Results, Horizontal

TX Channel	Frequency (MHz)	Peak Measured Field Strength (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Corrected Peak Field Strength (dBuV/m)	DCCF (dB)	Average Field Strength (dBuV/m)	Limit (dBuV/m)	Margin (dB)
431.5 MHz	862.9775	28.96	26.1	3.44	58.50	-20	38.50	60.74	-22.24
433.6 MHz	867.18	33.43	26.1	3.44	62.97	-20	42.97	60.81	-17.84
436.6 MHz	873.18	33.75	26.2	3.39	63.34	-20	43.34	60.91	-17.57

Figure 11: Harmonics Field Strength - Test Results, Vertical



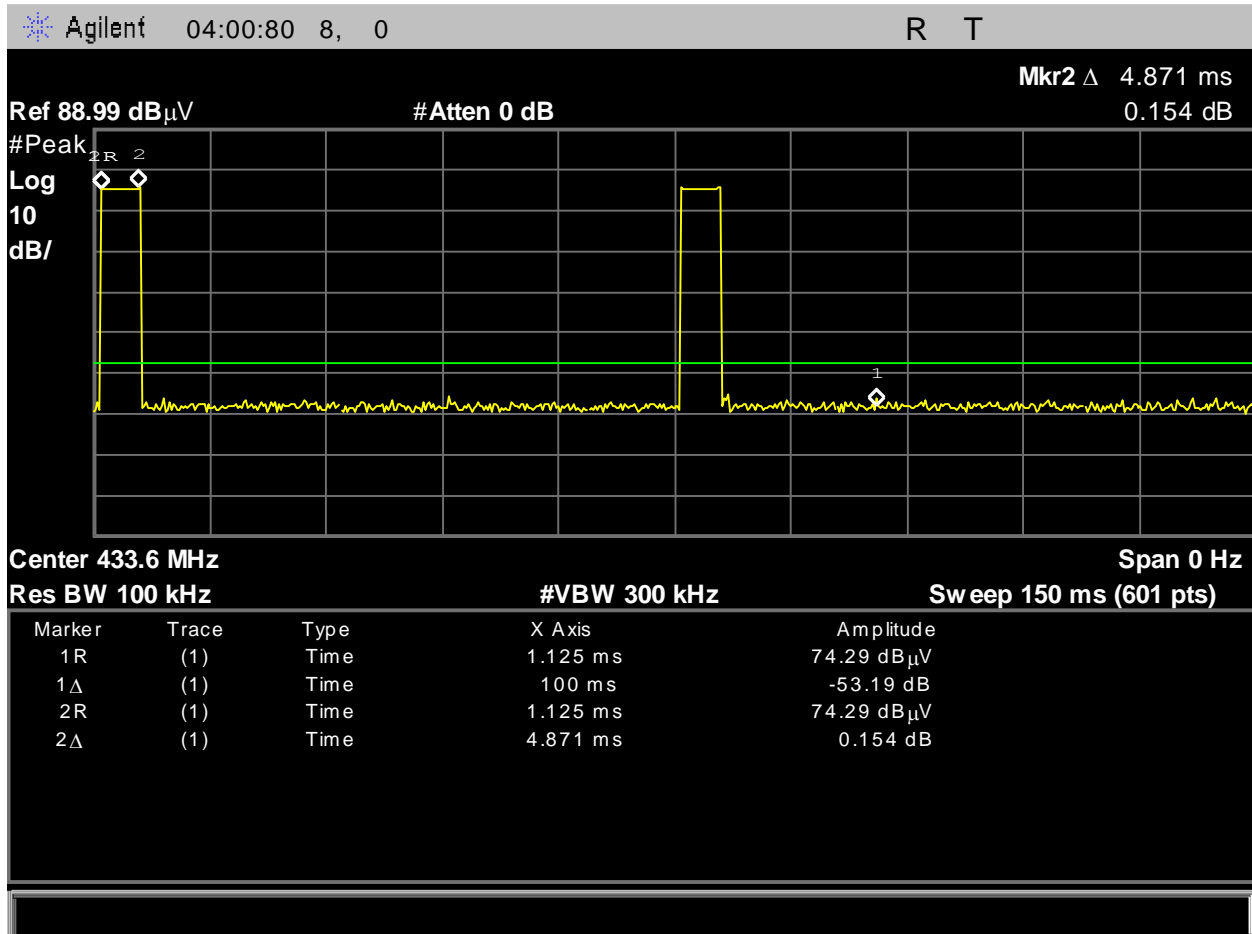


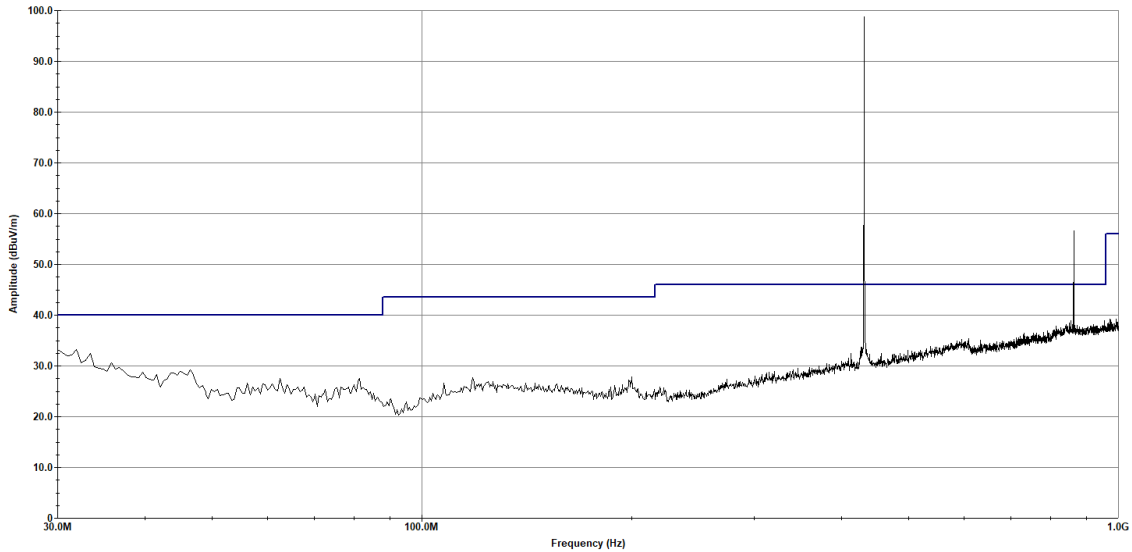
Figure 12: Duty Cycle

Customer - Lutron Electronics  
Job Number - 127472  
EUT Name - Caseta Bridge  
TX Channel - 431.5 MHz

Eurofins Electrical and Electronic Testing NA, Inc.

Radiated Emissions  
Horizontal Polarization

— Test Limit - Quasi-Peak  
— Measured - Peak  
× Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 01:49:47 PM, Thursday, June 22, 2023

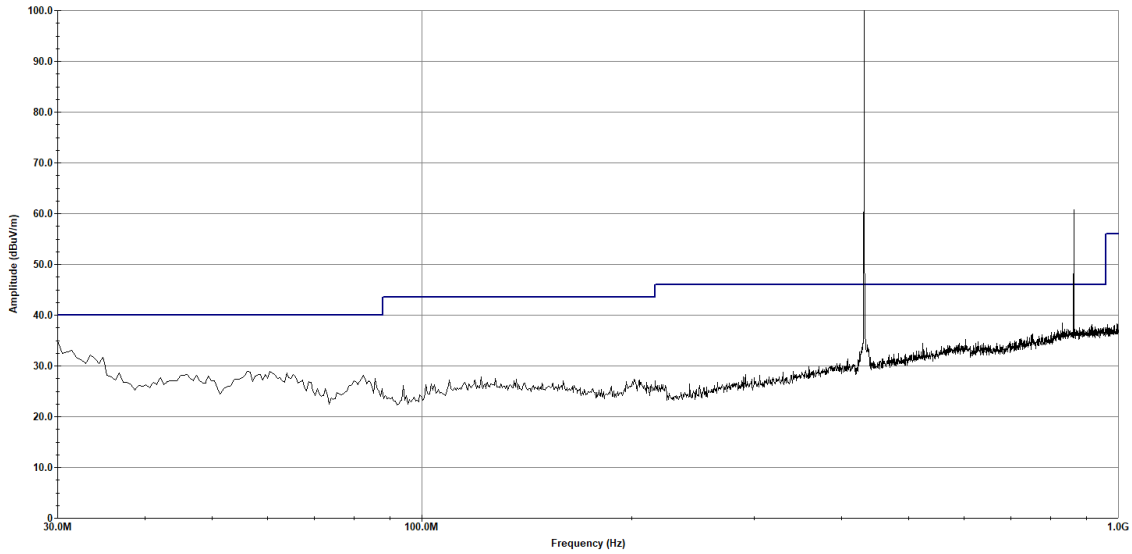
Figure 13: Radiated Spurious Emissions - Low Channel, 30-1000 MHz, Horizontal

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Channel - 431.5 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Vertical Polarization

— Test Limit - Quasi-Peak  
 — Measured - Peak  
 × Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 01:43:32 PM, Thursday, June 22, 2023

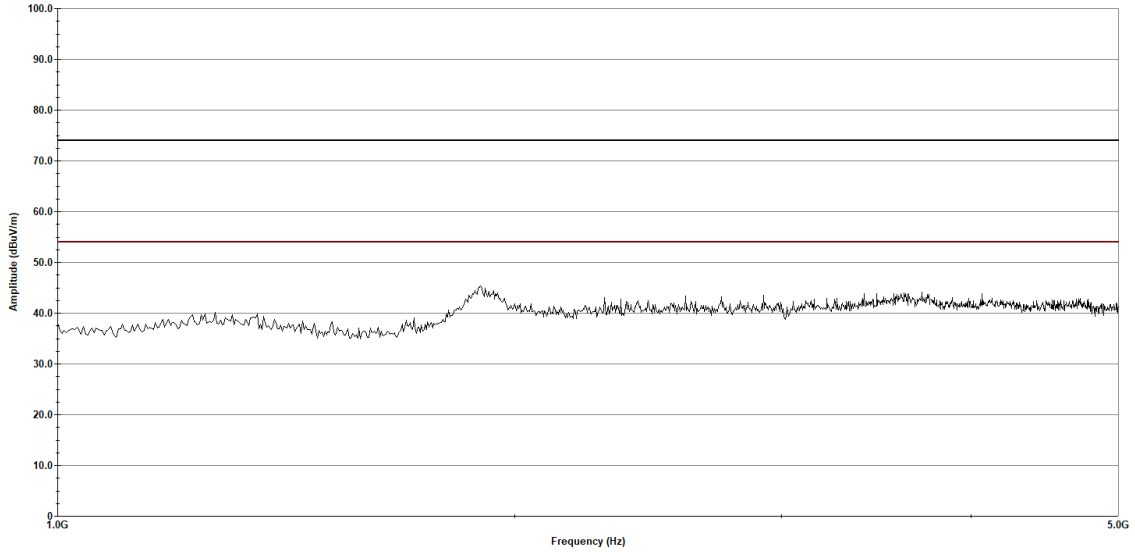
**Figure 14: Radiated Spurious Emissions - Low Channel, 30-1000 MHz, Vertical**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Frequency - 431.5 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Horizontal Polarization

— Test Limit - Peak  
 — Test Limit - Average  
 — Measured - Peak  
 × Measured - Average



Operator: Donald Salguero

Last Data Update 10:23:30 AM, Friday, June 23, 2023

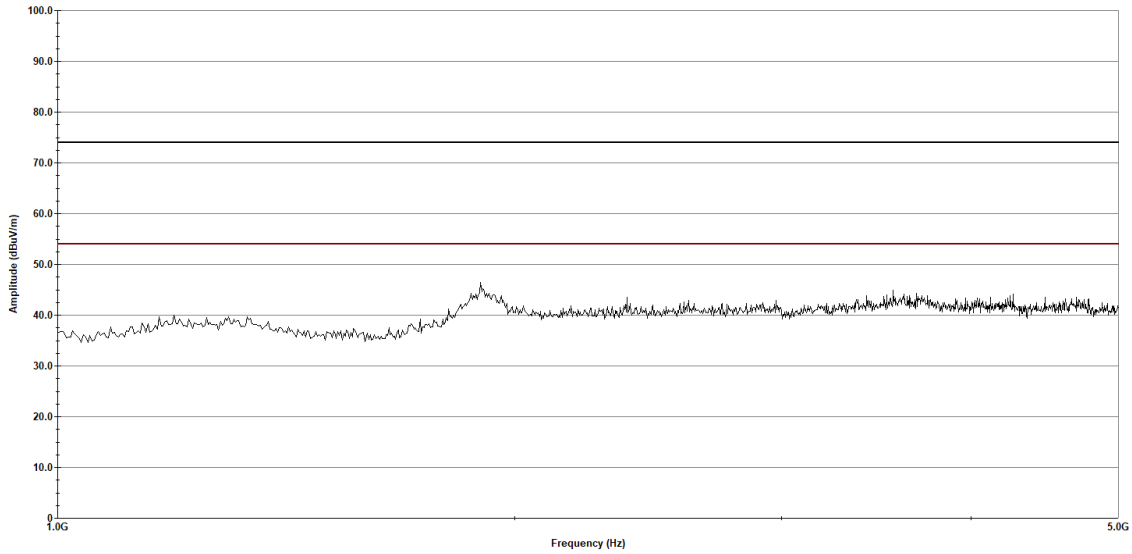
**Figure 15: Radiated Spurious Emissions - Low Channel, 1-5 GHz, Horizontal**

Customer - Lutron Electronics  
Job Number - 127472  
EUT Name - Caseta Bridge  
TX Frequency - 431.5 MHz

Eurofins Electrical and Electronic Testing NA, Inc.

Radiated Emissions  
Vertical Polarization

— Test Limit - Peak  
— Test Limit - Average  
— Measured - Peak  
× Measured - Average



Operator: Donald Salguero

Last Data Update 10:28:53 AM, Friday, June 23, 2023

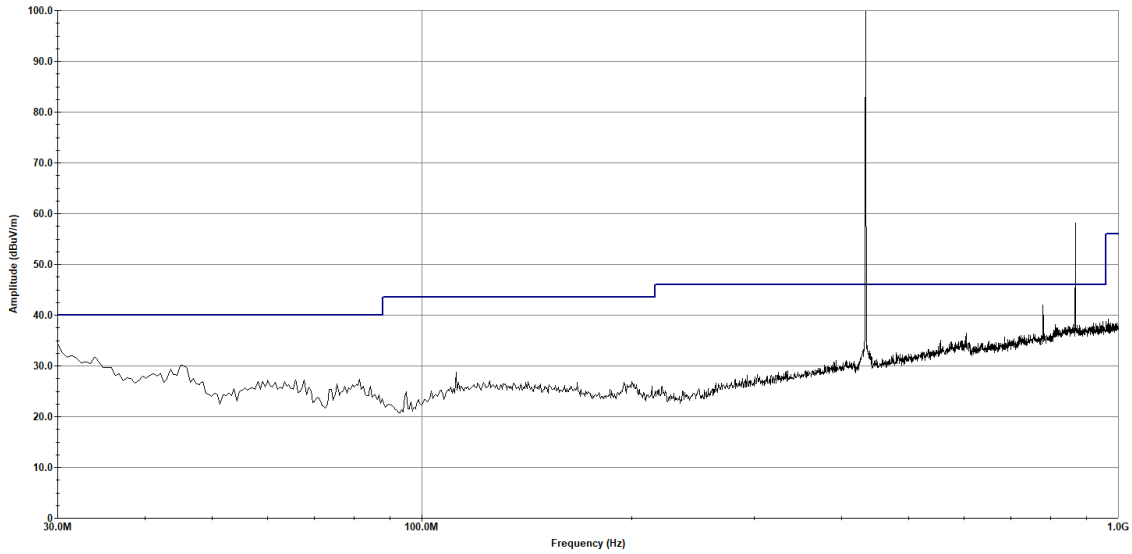
Figure 16: Radiated Spurious Emissions - Low Channel, 1-5 GHz, Vertical

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Channel - 433.6 MHz

Eurofins Electrical and Electronic Testing NA, Inc.

Radiated Emissions  
 Horizontal Polarization

— Test Limit - Quasi-Peak  
 — Measured - Peak  
 × Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 02:13:01 PM, Thursday, June 22, 2023

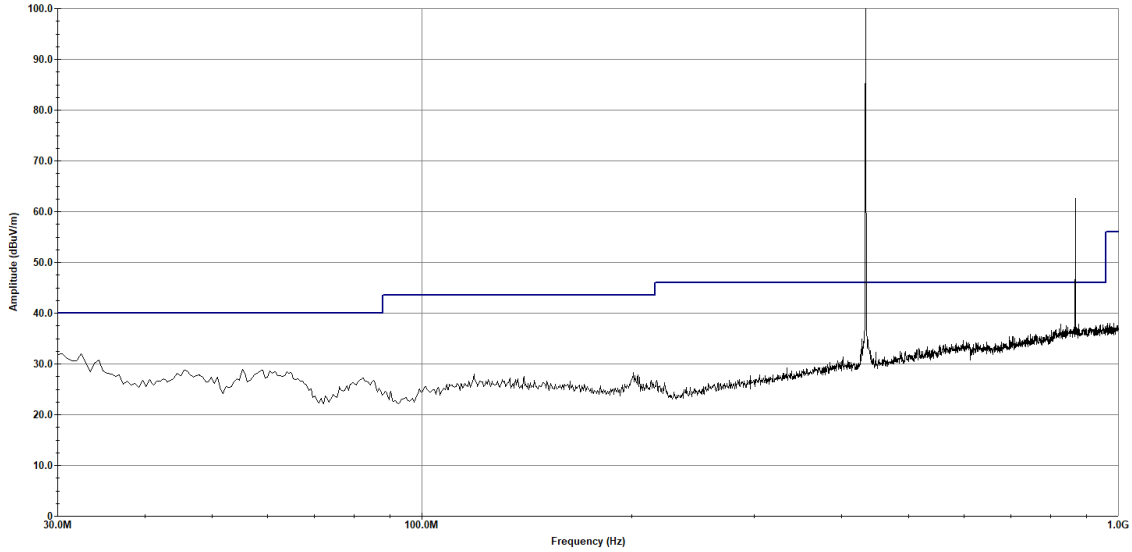
**Figure 17: Radiated Spurious Emissions - Mid Channel, 30-1000 MHz, Horizontal**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Channel - 433.6 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Vertical Polarization

— Test Limit - Quasi-Peak  
 — Measured - Peak  
 × Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 02:18:13 PM, Thursday, June 22, 2023

**Figure 18: Radiated Spurious Emissions - Mid Channel, 30-1000 MHz, Vertical**

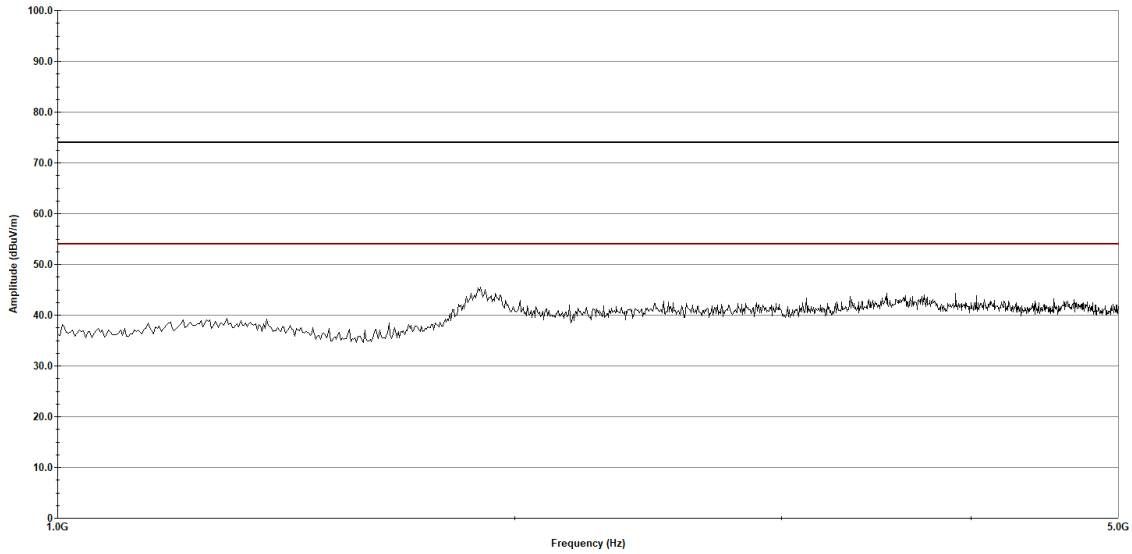


Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Frequency - 433.6 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Horizontal Polarization

— Test Limit - Peak  
 — Test Limit - Average  
 — Measured - Peak  
 × Measured - Average



Operator: Donald Salguero

Last Data Update 10:11:01 AM, Friday, June 23, 2023

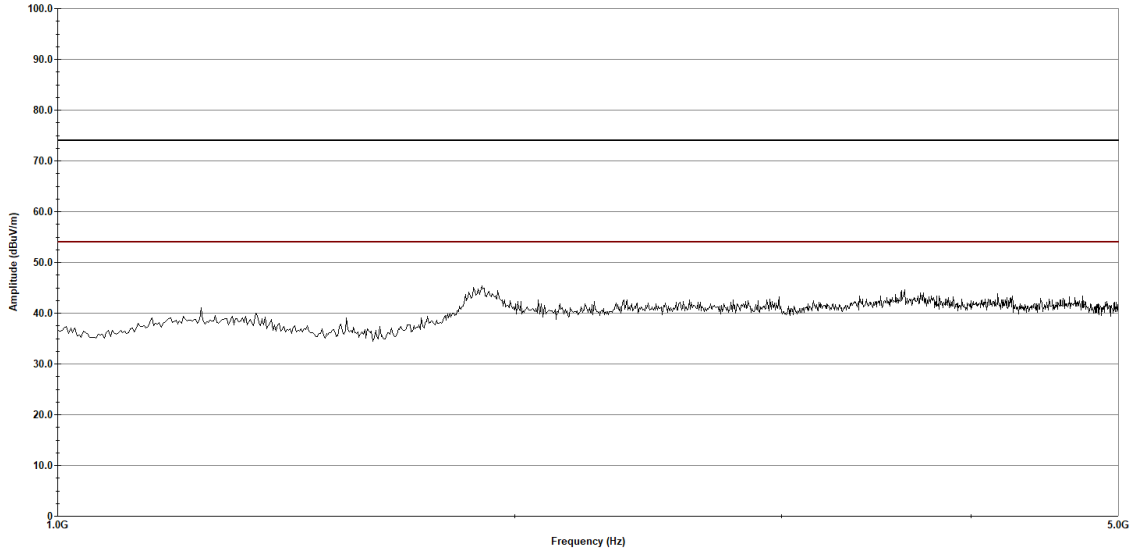
**Figure 19: Radiated Spurious Emissions - Mid Channel, 1-5 GHz, Horizontal**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Frequency - 433.6 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Vertical Polarization

— Test Limit - Peak  
 — Test Limit - Average  
 — Measured - Peak  
 × Measured - Average



Operator: Donald Salguero

Last Data Update 10:16:05 AM, Friday, June 23, 2023

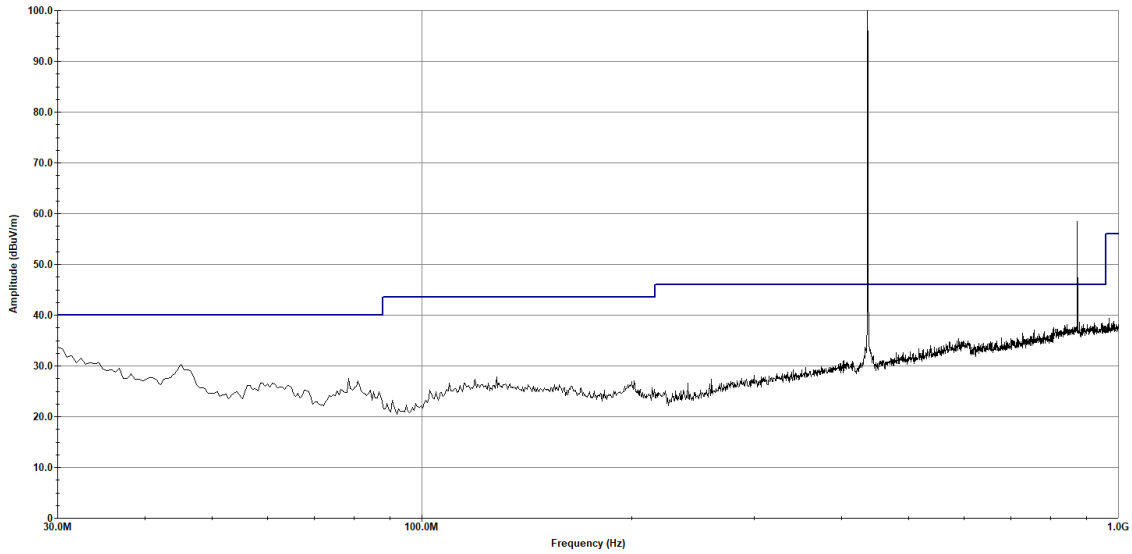
**Figure 20: Radiated Spurious Emissions - Mid Channel, 1-5 GHz, Vertical**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Channel - 435.6 MHz

Eurofins Electrical and Electronic Testing NA, Inc.

Radiated Emissions  
 Horizontal Polarization

— Test Limit - Quasi-Peak  
 — Measured - Peak  
 × Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 02:35:57 PM, Thursday, June 22, 2023

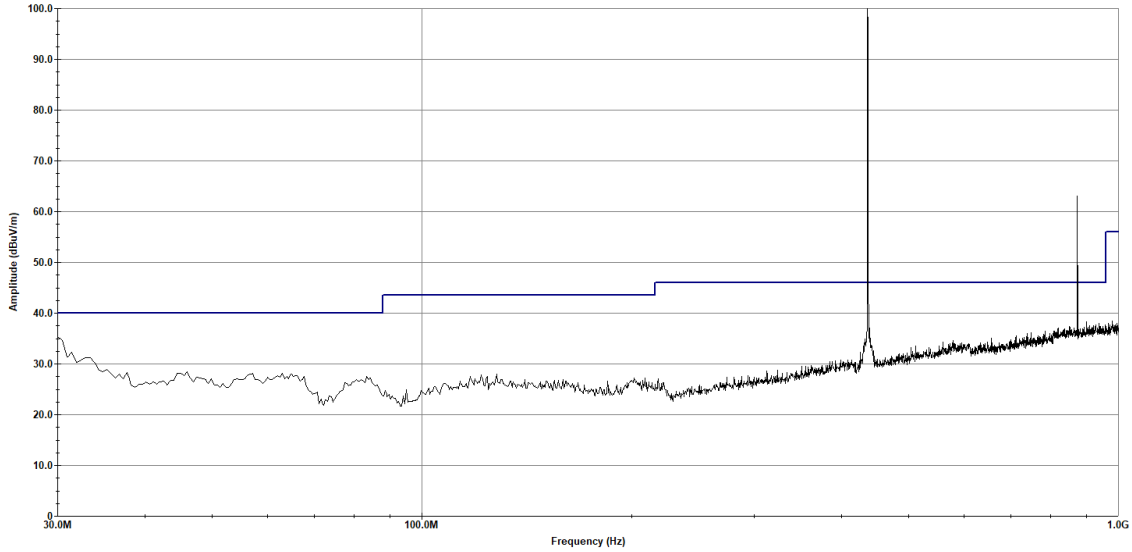
**Figure 21: Radiated Spurious Emissions - High Channel, 30-1000 MHz, Horizontal**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Channel - 435.5 MHz

Eurofins Electrical and Electronic Testing NA, Inc.

Radiated Emissions  
 Vertical Polarization

— Test Limit - Quasi-Peak  
 — Measured - Peak  
 × Measured - Quasi-Peak



Operator: Donald Salguero

Last Data Update 02:41:50 PM, Thursday, June 22, 2023

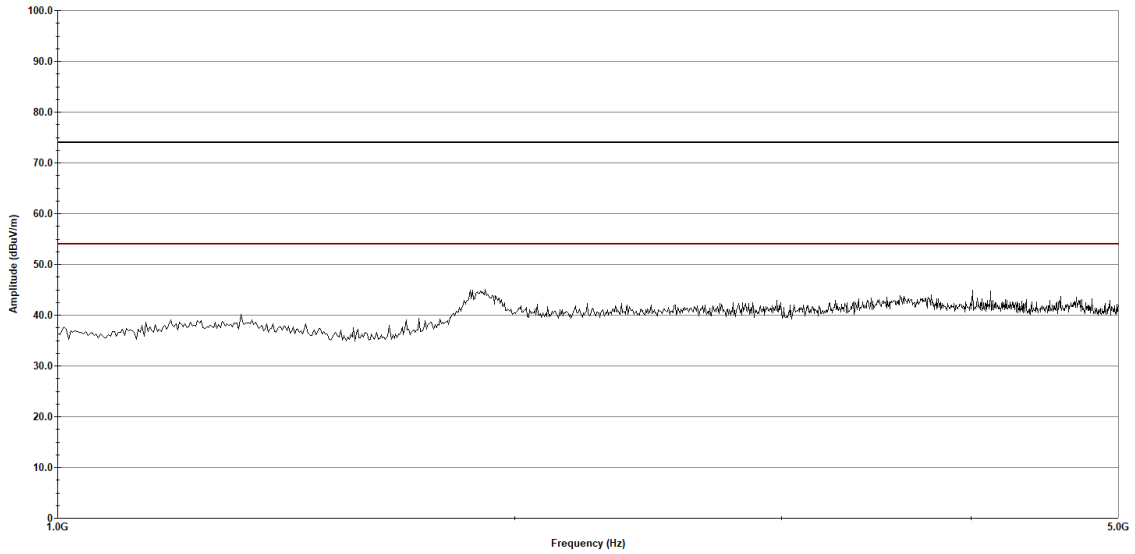
**Figure 22: Radiated Spurious Emissions - High Channel, 30-1000 MHz, Vertical**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Frequency - 435.6 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Horizontal Polarization

— Test Limit - Peak  
 — Test Limit - Average  
 — Measured - Peak  
 × Measured - Average



Operator: Donald Salguero

Last Data Update 10:36:20 AM, Friday, June 23, 2023

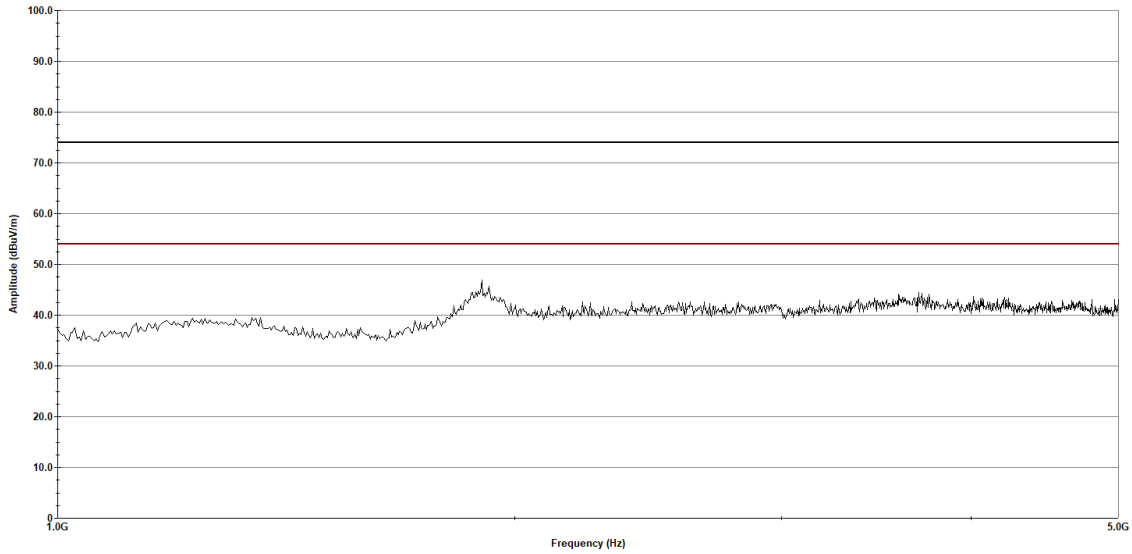
**Figure 23: Radiated Spurious Emissions - High Channel, 1-5 GHz, Horizontal**

Customer - Lutron Electronics  
 Job Number - 127472  
 EUT Name - Caseta Bridge  
 TX Frequency - 435.6 MHz

**Eurofins Electrical and Electronic Testing NA, Inc.**

Radiated Emissions  
 Vertical Polarization

— Test Limit - Peak  
 — Test Limit - Average  
 — Measured - Peak  
 × Measured - Average



Operator: Donald Salguero

Last Data Update 10:41:30 AM, Friday, June 23, 2023

**Figure 24: Radiated Spurious Emissions - High Channel, 1-5 GHz, Vertical**

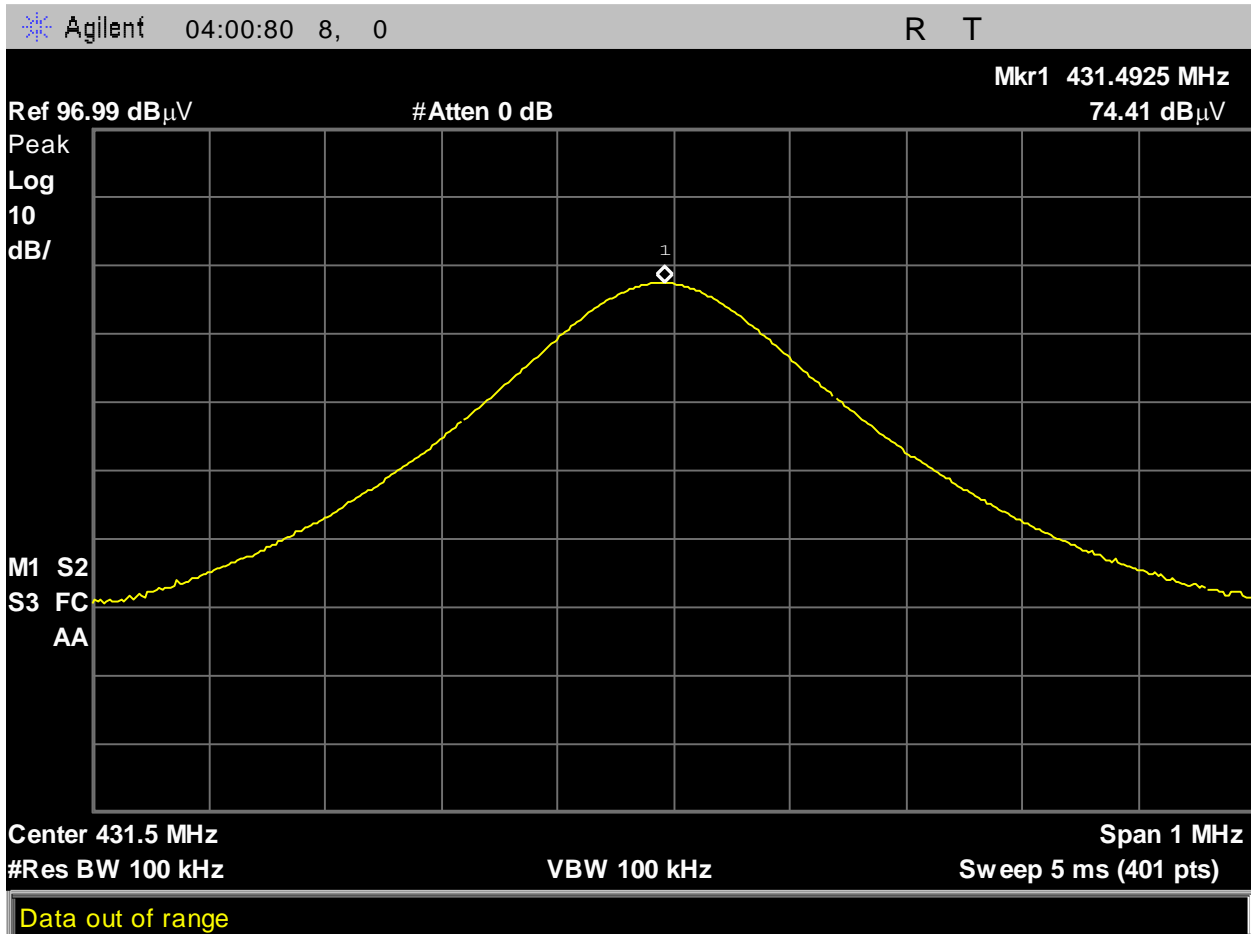


Figure 25: Uncorrected Field Strength\_431.5MHz\_H\_final



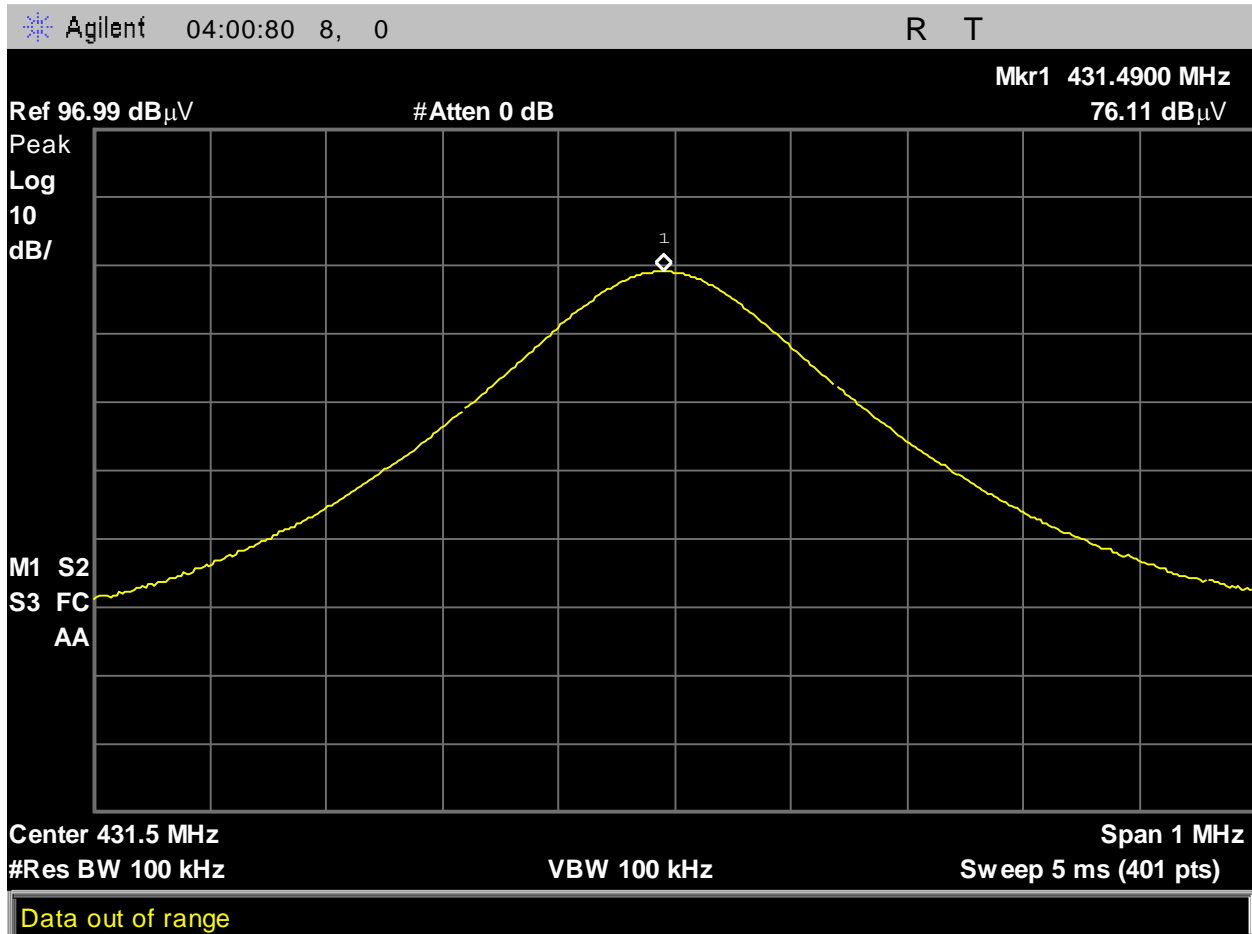


Figure 26: Uncorrected Field Strength\_431.5MHz\_V\_final

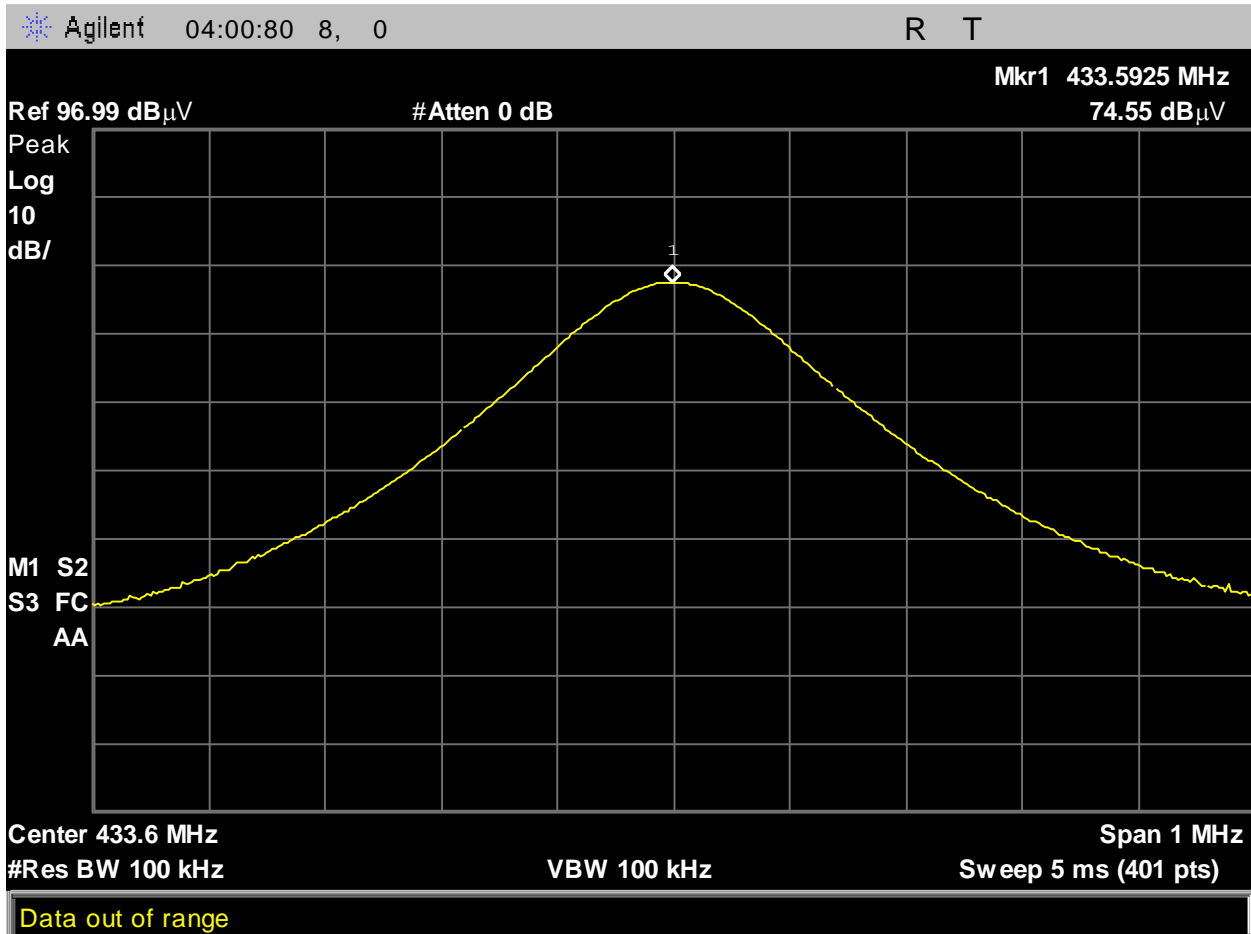


Figure 27: Uncorrected Field Strength\_433.6MHz\_H\_final

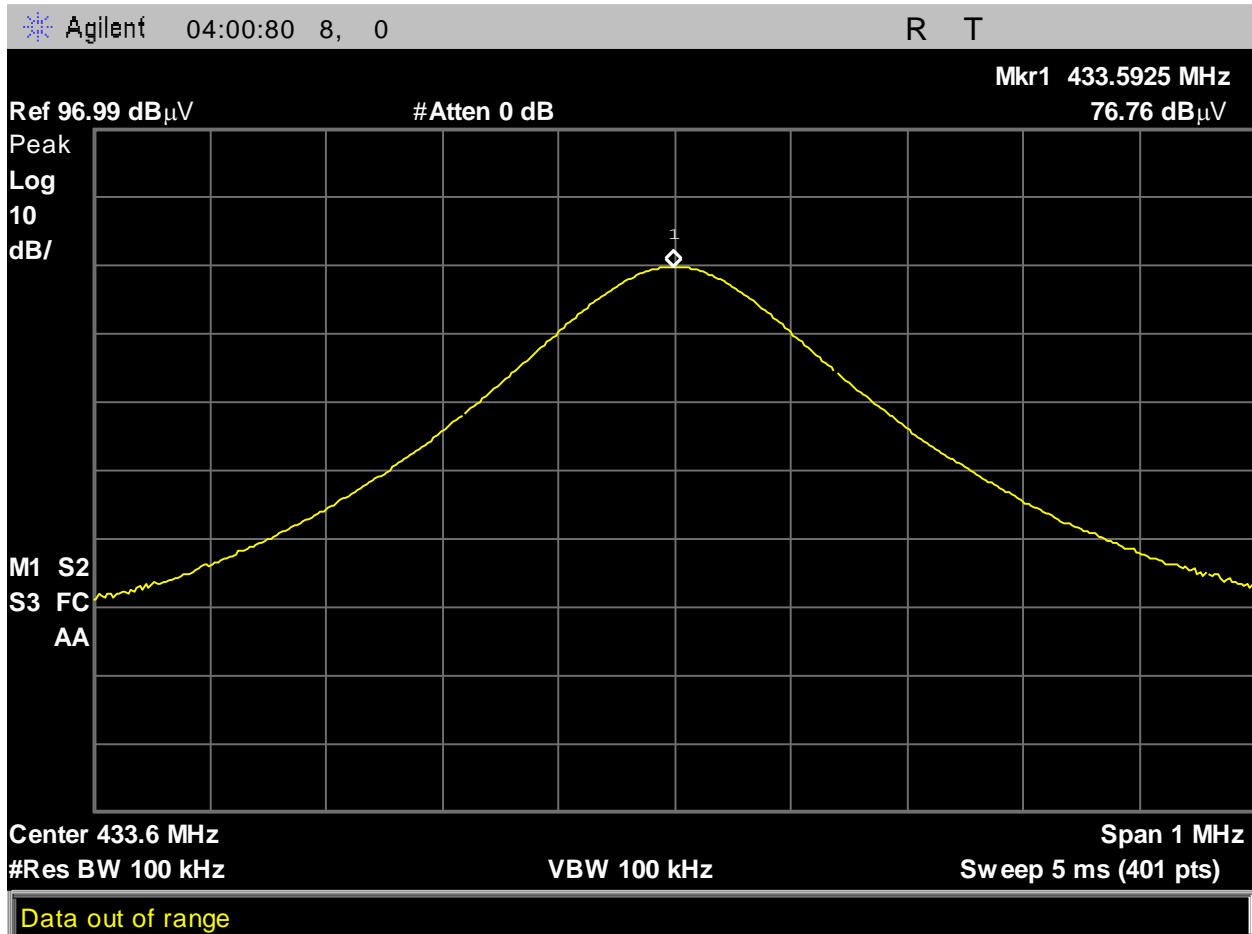


Figure 28: Uncorrected Field Strength\_433.6MHz\_V\_final

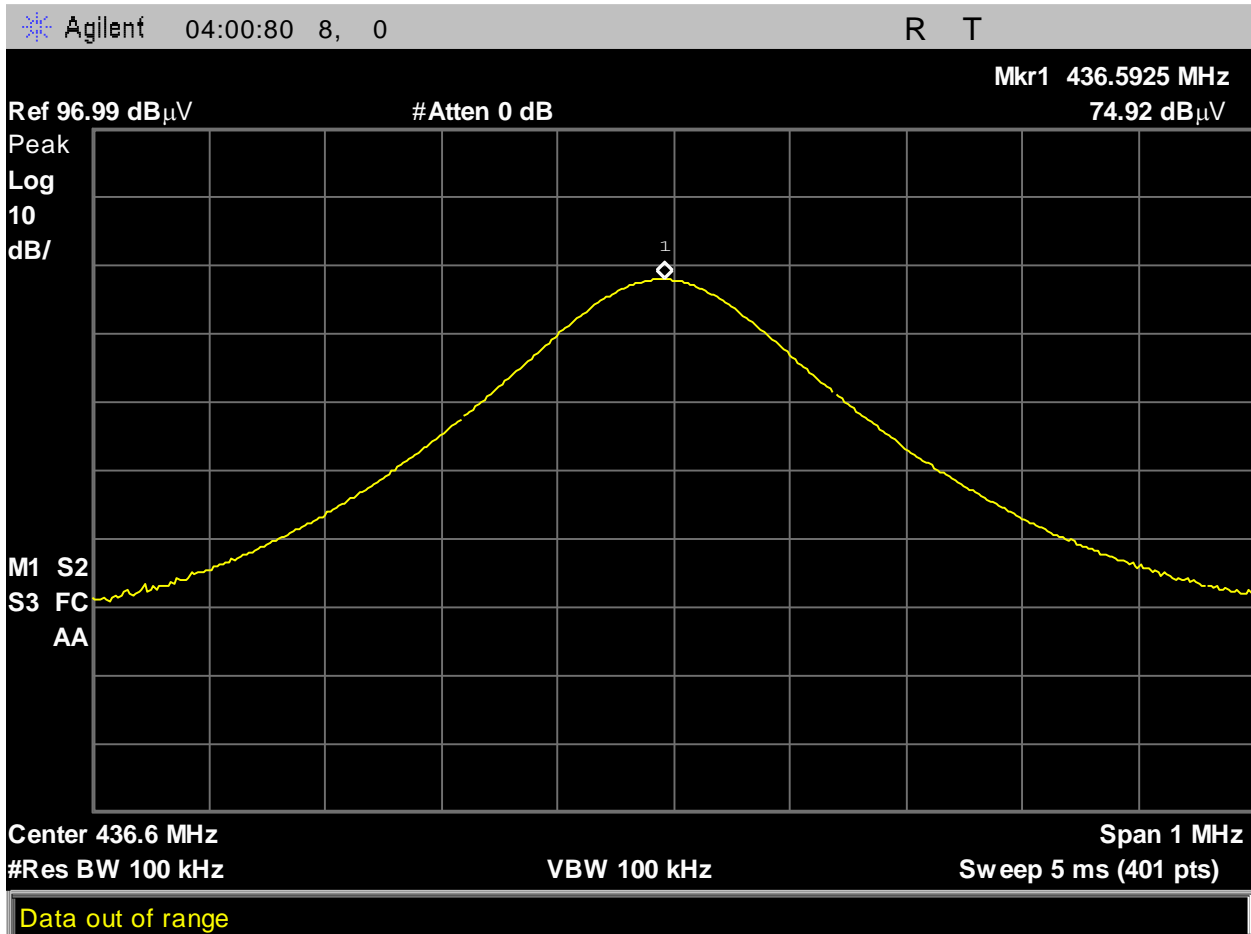


Figure 29: Uncorrected Field Strength\_436.6MHz\_H\_final

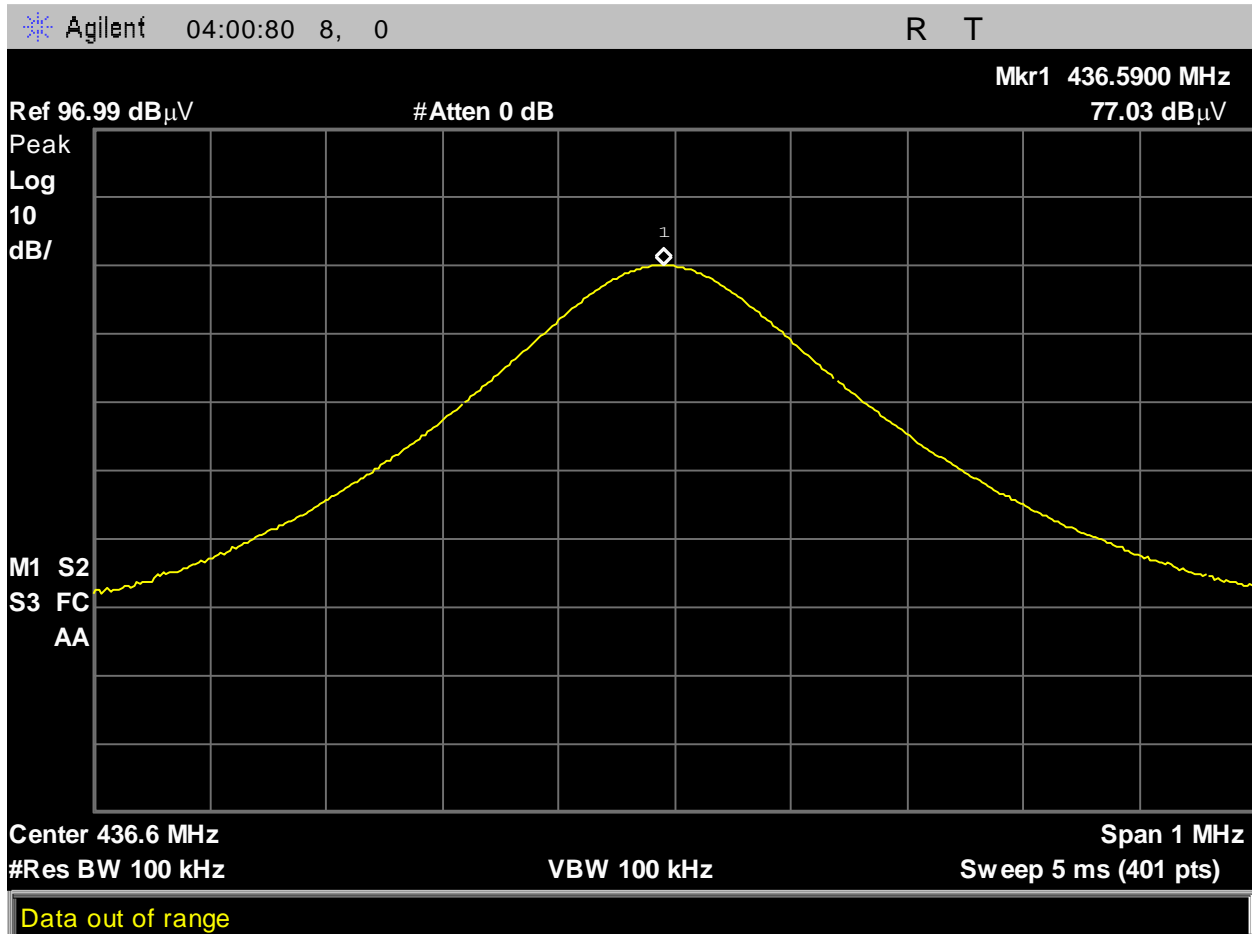


Figure 30: Uncorrected Field Strength\_436.6MHz\_V\_final

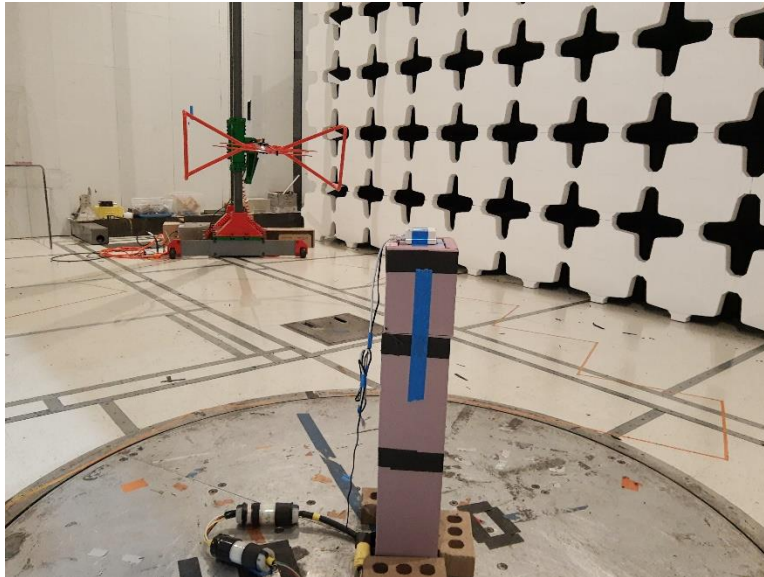


Figure 31: RE Setup [30MHz - 1GHz, Rear]

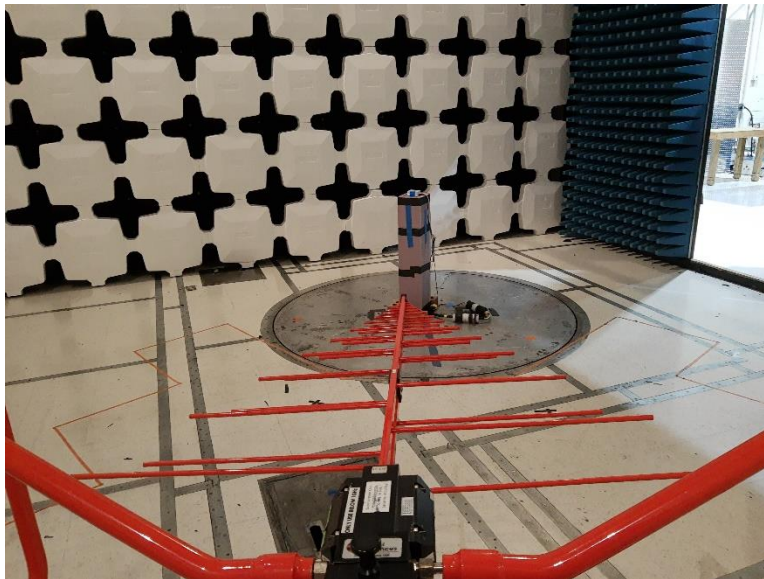


Figure 32: RE Setup [30MHz - 1GHz]



Figure 33: RE Setup [1GHz - 5GHz, Rear]

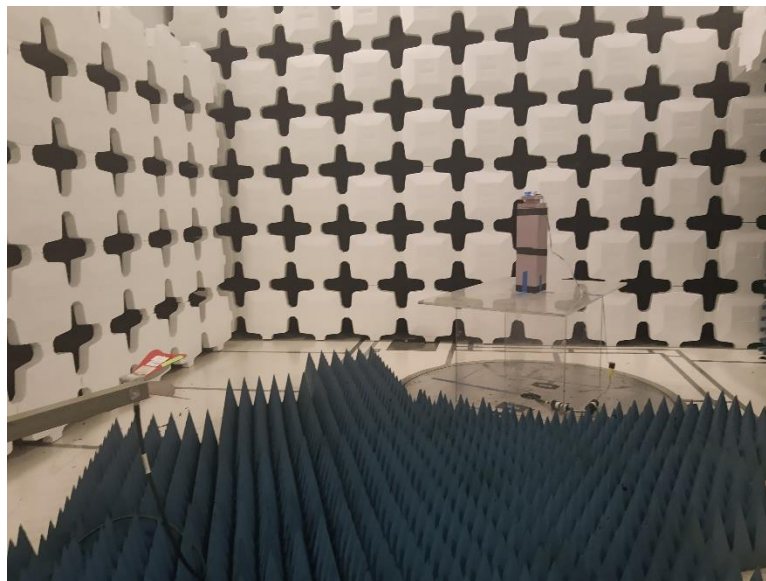


Figure 34: RE Setup [1GHz - 5GHz]



§ 15.231(c) 20 dB Bandwidth

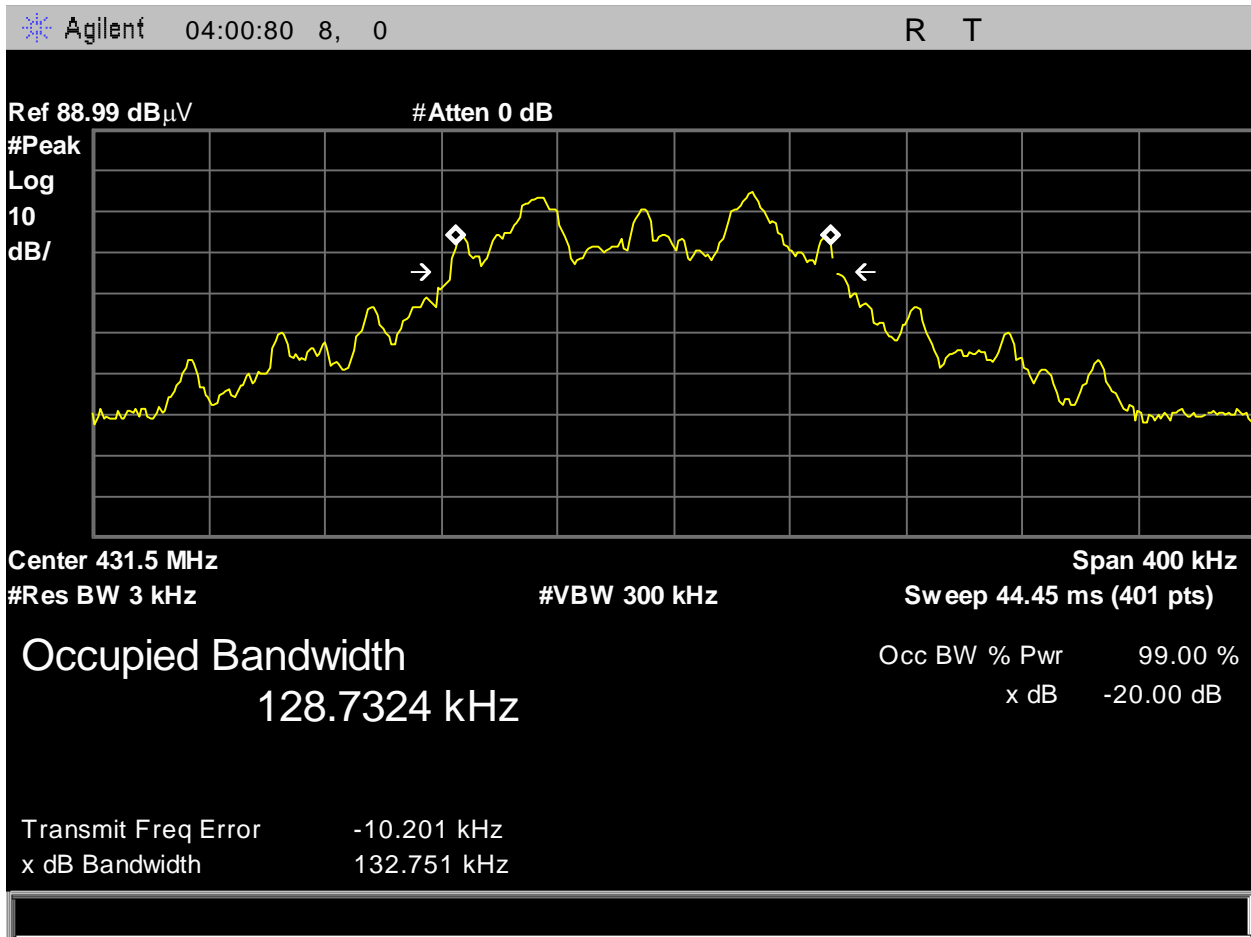


Figure 35: OBW 431.5 MHz

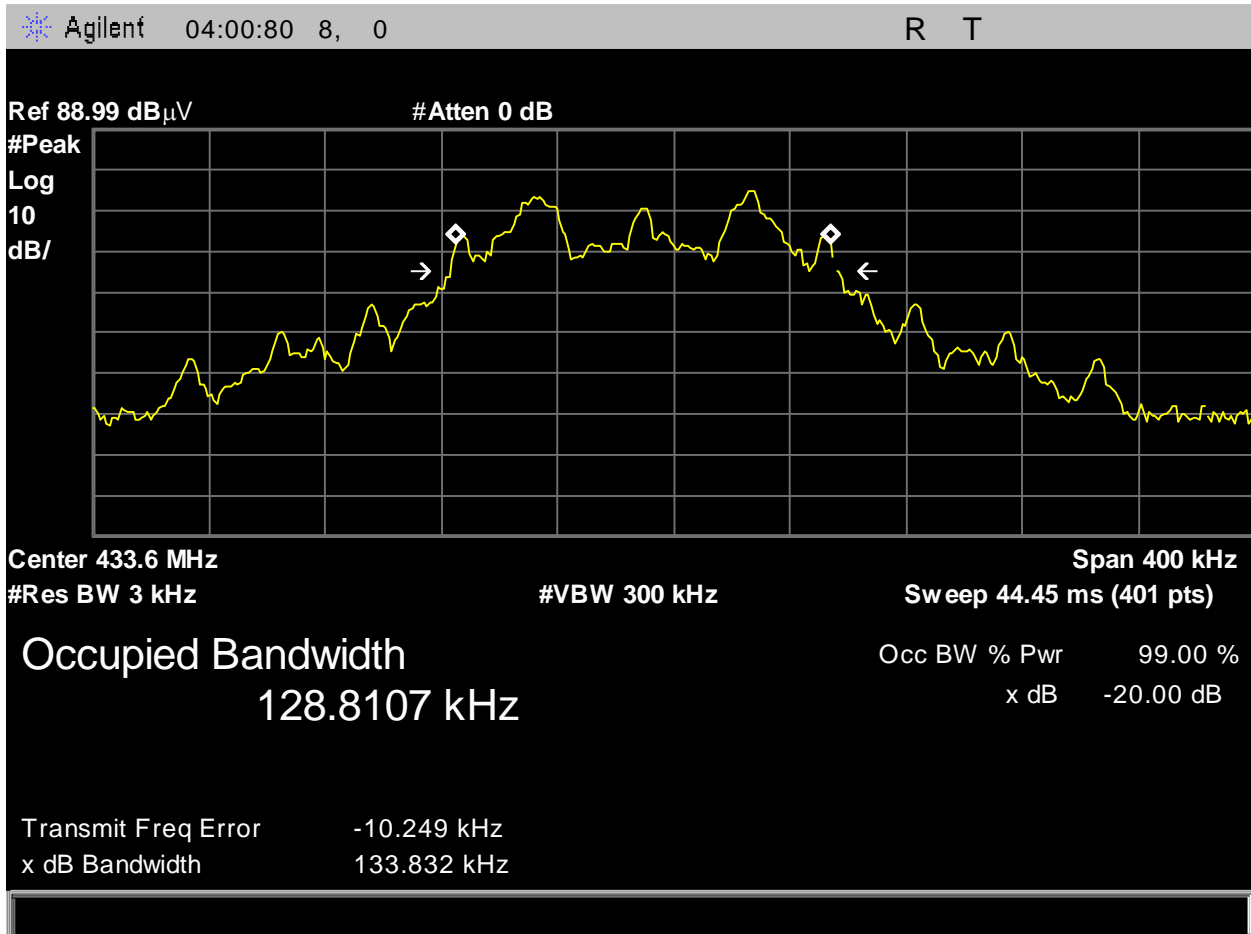


Figure 36: OBW 433.6 MHz

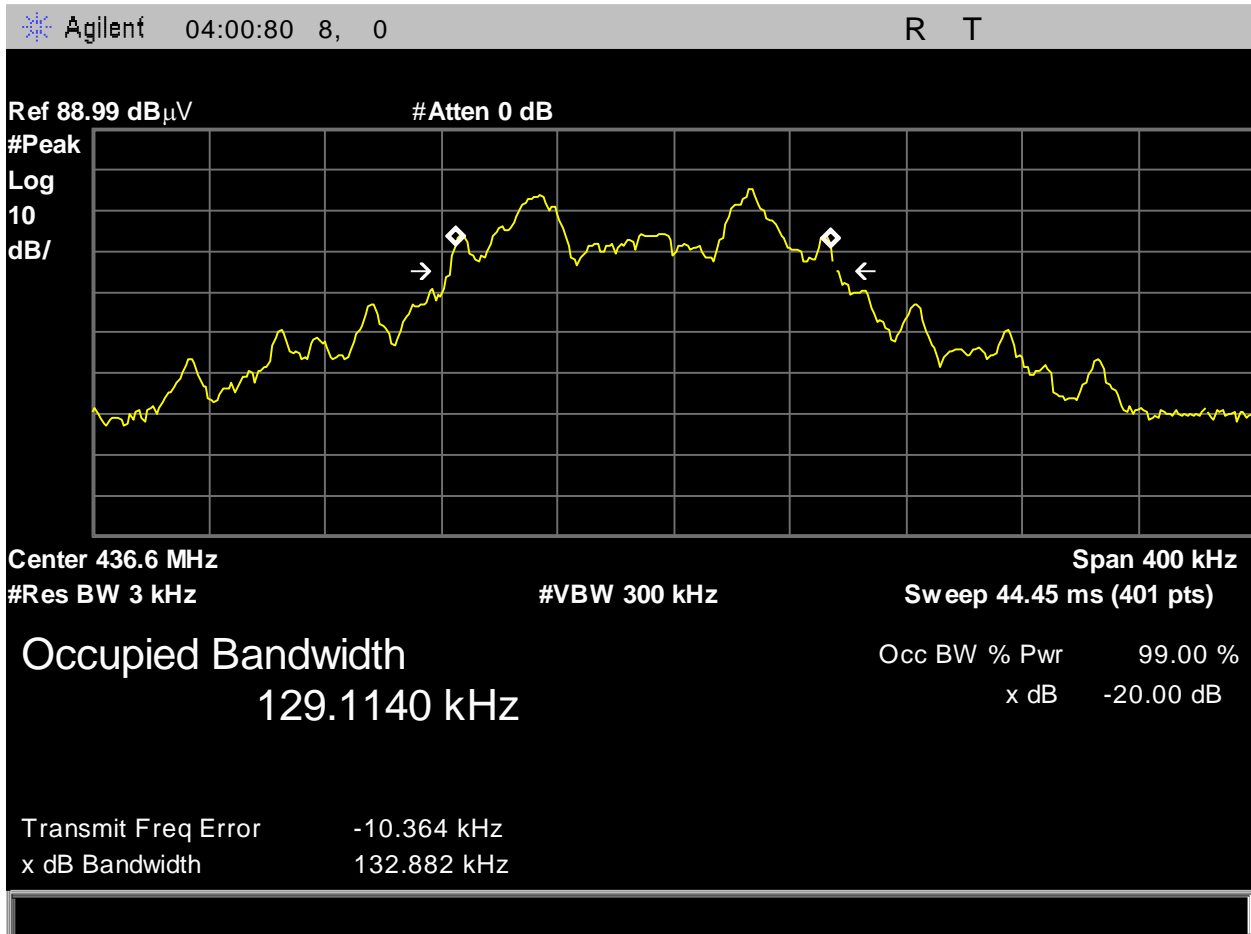


Figure 37: OBW 436.6 MHz