



FUNDAMENTAL AND HARMONICS

DATA SHEETS

FCC 15.247 and RSS-247Vivint, Inc.
ZigBee Thermostat
Model: TH03Date: 10/09/2023
Lab: D
Tested By: Kyle Fujimoto**Harmonics - Low Channel**
Transmit Mode - Y-Axis - AC Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	40.06	V	73.97	-33.91	Peak	145.75	175.56	
4810.00	21.83	V	53.97	-32.14	Avg	145.75	175.56	
7215.00								Not in Restricted Band
7215.00								Done Via Conducted
9620.00								Not in Restricted Band
9620.00								Done Via Conducted
12025.00	60.58	V	73.97	-13.39	Peak	123.25	127.38	
12025.00	42.35	V	53.97	-11.62	Avg	123.25	127.38	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

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Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	44.39	H	73.97	-29.58	Peak	21.00	111.26	
4810.00	26.16	H	53.97	-27.81	Avg	21.00	111.26	
7215.00								Not in Restricted Band
7215.00								Done Via Conducted
9620.00								Not in Restricted Band
9620.00								Done Via Conducted
12025.00	60.30	H	73.97	-13.67	Peak	17.00	111.44	
12025.00	42.07	H	53.97	-11.90	Avg	17.00	111.44	
14430.00								No Emission Detected
16835.00								No Emission Detected
19240.00								No Emission Detected
21645.00								No Emission Detected
24050.00								No Emission Detected

FCC 15.247 and RSS-247Vivint, Inc.
ZigBee Thermostat
Model: TH03Date: 10/09/2023
Lab: D
Tested By: Kyle Fujimoto**Harmonics - Middle Channel**
Transmit Mode - Y-Axis - AC Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	45.36	V	73.97	-28.61	Peak	213.00	223.44	
4880.00	27.13	V	53.97	-26.84	Avg	213.00	223.44	
7320.00	52.03	V	73.97	-21.94	Peak	1.25	111.32	
7320.00	33.80	V	53.97	-20.17	Avg	1.25	111.32	
9760.00								Not in Restricted Band
9760.00								Done Via Conducted
12200.00	59.36	V	73.97	-14.61	Peak	160.25	127.56	
12200.00	41.13	V	53.97	-12.84	Avg	160.25	127.56	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

Date: 10/09/2023
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Tested By: Kyle Fujimoto

Harmonics - Middle Channel
Transmit Mode - Y-Axis - AC Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	42.45	H	73.97	-31.52	Peak	106.00	222.97	
4880.00	24.22	H	53.97	-29.75	Avg	106.00	222.97	
7320.00	52.95	H	73.97	-21.02	Peak	358.00	111.14	
7320.00	34.72	H	53.97	-19.25	Avg	358.00	111.14	
9760.00								Not in Restricted Band
9760.00								Done Via Conducted
12200.00	61.48	H	73.97	-12.49	Peak	31.00	127.50	
12200.00	43.25	H	53.97	-10.72	Avg	31.00	127.50	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

Date: 10/09/2023
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel
Transmit Mode - Y-Axis - AC Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	46.50	V	73.97	-27.47	Peak	340.00	127.50	
4960.00	28.27	V	53.97	-25.70	Avg	340.00	127.50	
7440.00	52.34	V	73.97	-21.63	Peak	338.75	111.32	
7440.00	34.11	V	53.97	-19.86	Avg	338.75	111.32	
9920.00								Not in Restricted Band
9920.00								Done Via Conducted
12400.00	55.64	V	73.97	-18.33	Peak	62.75	111.26	
12400.00	37.41	V	53.97	-16.56	Avg	62.75	111.26	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

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Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	43.24	H	73.97	-30.73	Peak	58.25	111.44	
4960.00	25.01	H	53.97	-28.96	Avg	58.25	111.44	
7440.00	53.45	H	73.97	-20.52	Peak	51.75	111.44	
7440.00	35.22	H	53.97	-18.75	Avg	51.75	111.44	
9920.00								Not in Restricted Band
9920.00								Done Via Conducted
12400.00	54.47	H	73.97	-19.50	Peak	25.50	175.44	
12400.00	36.24	H	53.97	-17.73	Avg	25.50	175.44	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected



FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
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Lab: D
Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

AC Mode

[illegible]

FCC 15.247 and RSS-247Vivint, Inc.
ZigBee Thermostat
Model: TH03Date: 10/11/2023
Lab: D
Tested By: Kyle Fujimoto**Harmonics - Low Channel****Transmit Mode - Y-Axis - Battery Power**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	39.32	V	73.97	-34.65	Peak	72.50	191.26	
4810.00	21.09	V	53.97	-32.88	Avg	72.50	191.26	
7215.00								Not in Restricted Band
7215.00								Done Via Conducted
9620.00								Not in Restricted Band
9620.00								Done Via Conducted
12025.00	47.93	V	73.97	-26.04	Peak	81.50	159.20	
12025.00	29.70	V	53.97	-24.27	Avg	81.50	159.20	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

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Transmit Mode - Y-Axis - Battery Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	42.01	H	73.97	-31.96	Peak	37.25	127.50	
4810.00	23.78	H	53.97	-30.19	Avg	37.25	127.50	
7215.00								Not in Restricted Band
7215.00								Done Via Conducted
9620.00								Not in Restricted Band
9620.00								Done Via Conducted
12025.00	48.93	H	73.97	-25.04	Peak	54.50	111.26	
12025.00	30.70	H	53.97	-23.27	Avg	54.50	111.26	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

Date: 10/11/2023
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel
Transmit Mode - Y-Axis - Battery Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	43.60	V	73.97	-30.37	Peak	330.50	127.26	
4880.00	25.37	V	53.97	-28.60	Avg	330.50	127.26	
7320.00	46.65	V	73.97	-27.32	Peak	342.50	111.32	
7320.00	28.42	V	53.97	-25.55	Avg	342.50	111.32	
9760.00								Not in Restricted Band
9760.00								Done Via Conducted
12200.00	49.89	V	73.97	-24.08	Peak	181.00	111.38	
12200.00	31.66	V	53.97	-22.31	Avg	181.00	111.38	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

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Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	43.80	H	73.97	-30.17	Peak	320.75	111.56	
4880.00	25.57	H	53.97	-28.40	Avg	320.75	111.56	
7320.00	45.96	H	73.97	-28.01	Peak	315.25	111.32	
7320.00	27.73	H	53.97	-26.24	Avg	315.25	111.32	
9760.00								Not in Restricted Band
9760.00								Done Via Conducted
12200.00	49.65	H	73.97	-24.32	Peak	23.75	159.74	
12200.00	31.42	H	53.97	-22.55	Avg	23.75	159.74	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

Date: 10/11/2023
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Tested By: Kyle Fujimoto

Harmonics - High Channel
Transmit Mode - Y-Axis - Battery Power

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	41.74	V	73.97	-32.23	Peak	326.00	143.14	
4960.00	23.51	V	53.97	-30.46	Avg	326.00	143.14	
7440.00	45.43	V	73.97	-28.54	Peak	323.25	207.14	
7440.00	27.20	V	53.97	-26.77	Avg	323.25	207.14	
9920.00								Not in Restricted Band
9920.00								Done Via Conducted
12400.00	49.20	V	73.97	-24.77	Peak	108.50	223.26	
12400.00	30.97	V	53.97	-23.00	Avg	108.50	223.26	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

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ZigBee Thermostat
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Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	40.88	H	73.97	-33.09	Peak	55.75	111.38	
4960.00	22.65	H	53.97	-31.32	Avg	55.75	111.38	
7440.00	46.19	H	73.97	-27.78	Peak	307.75	143.50	
7440.00	27.96	H	53.97	-26.01	Avg	307.75	143.50	
9920.00								Not in Restricted Band
9920.00								Done Via Conducted
12400.00	48.47	H	73.97	-25.50	Peak	331.50	223.56	
12400.00	30.24	H	53.97	-23.73	Avg	331.50	223.56	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected



FCC 15.247 and RSS-247

Vivint, Inc.

ZigBee Thermostat

Model: TH03

Date: 10/11/2023

Lab: D

Tested By: Kyle Fujimoto

Battery Power

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

[illegible]



***BAND EDGES
DATA SHEETS***



FCC 15.247 and RSS-247

Vivint, Inc.

ZigBee Thermostat

Model: TH03

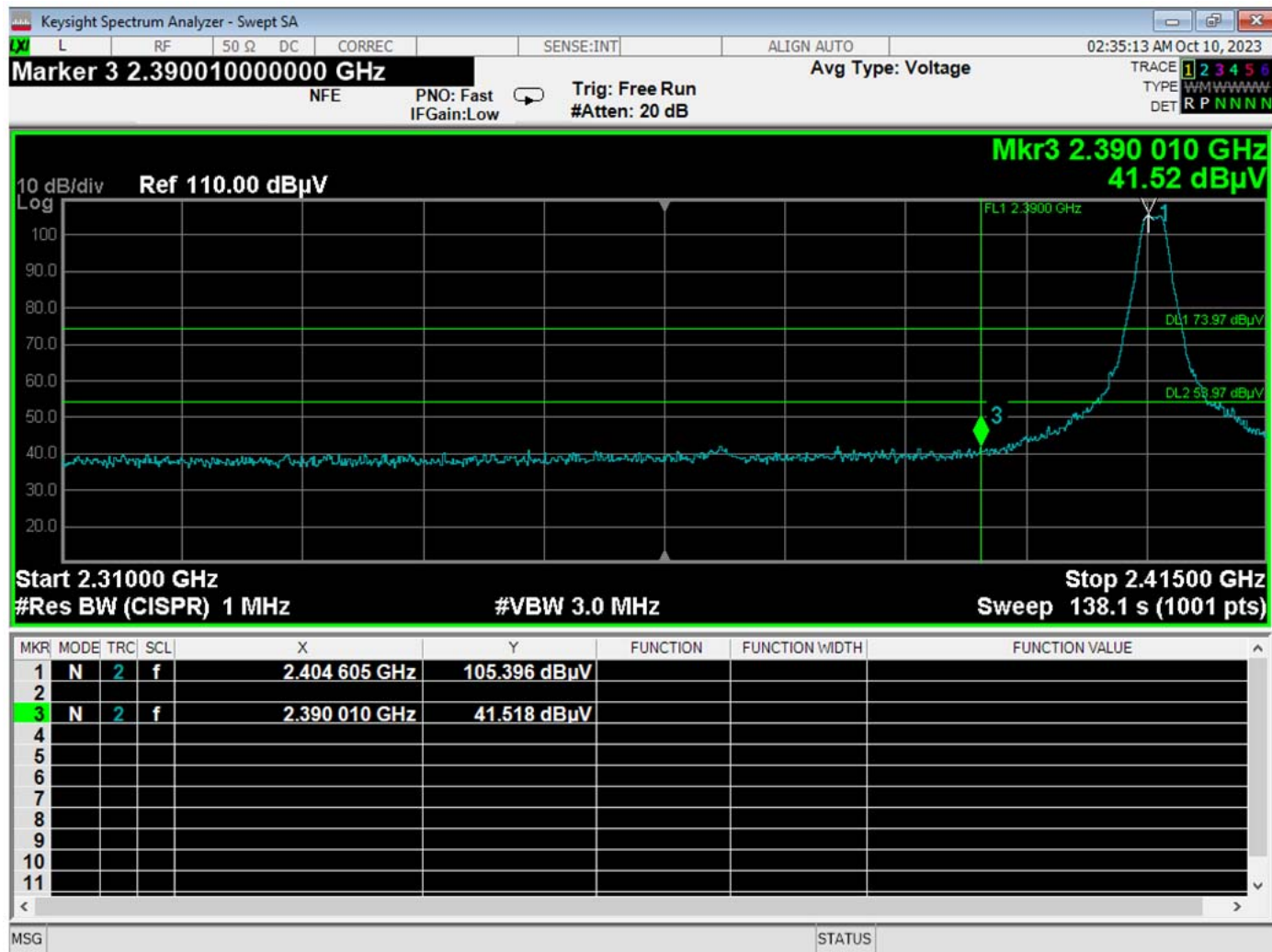
Date: 10/10/2023

Lab: D

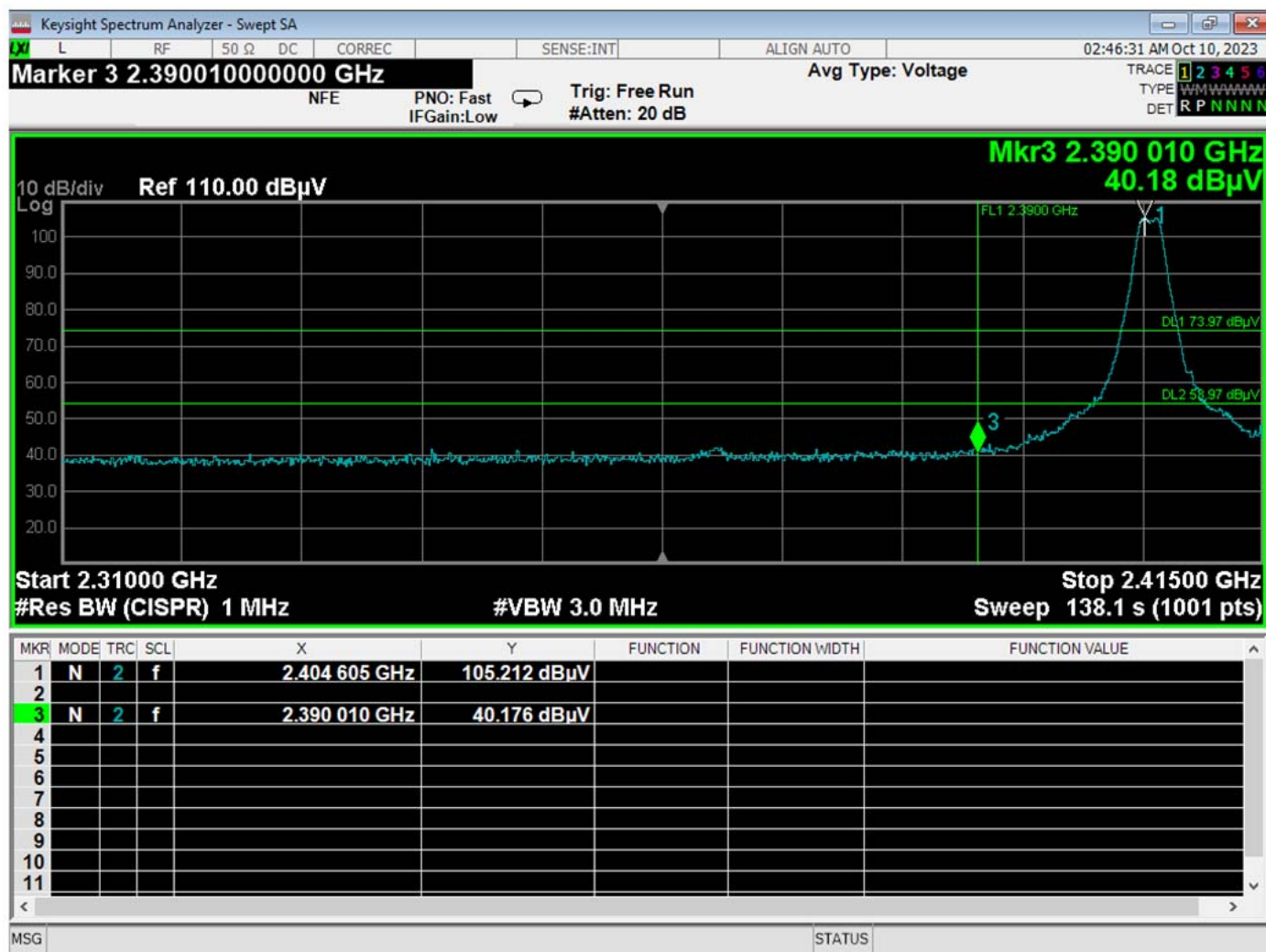
Tested By: Kyle Fujimoto

Band Edges - Low Channel - AC Power

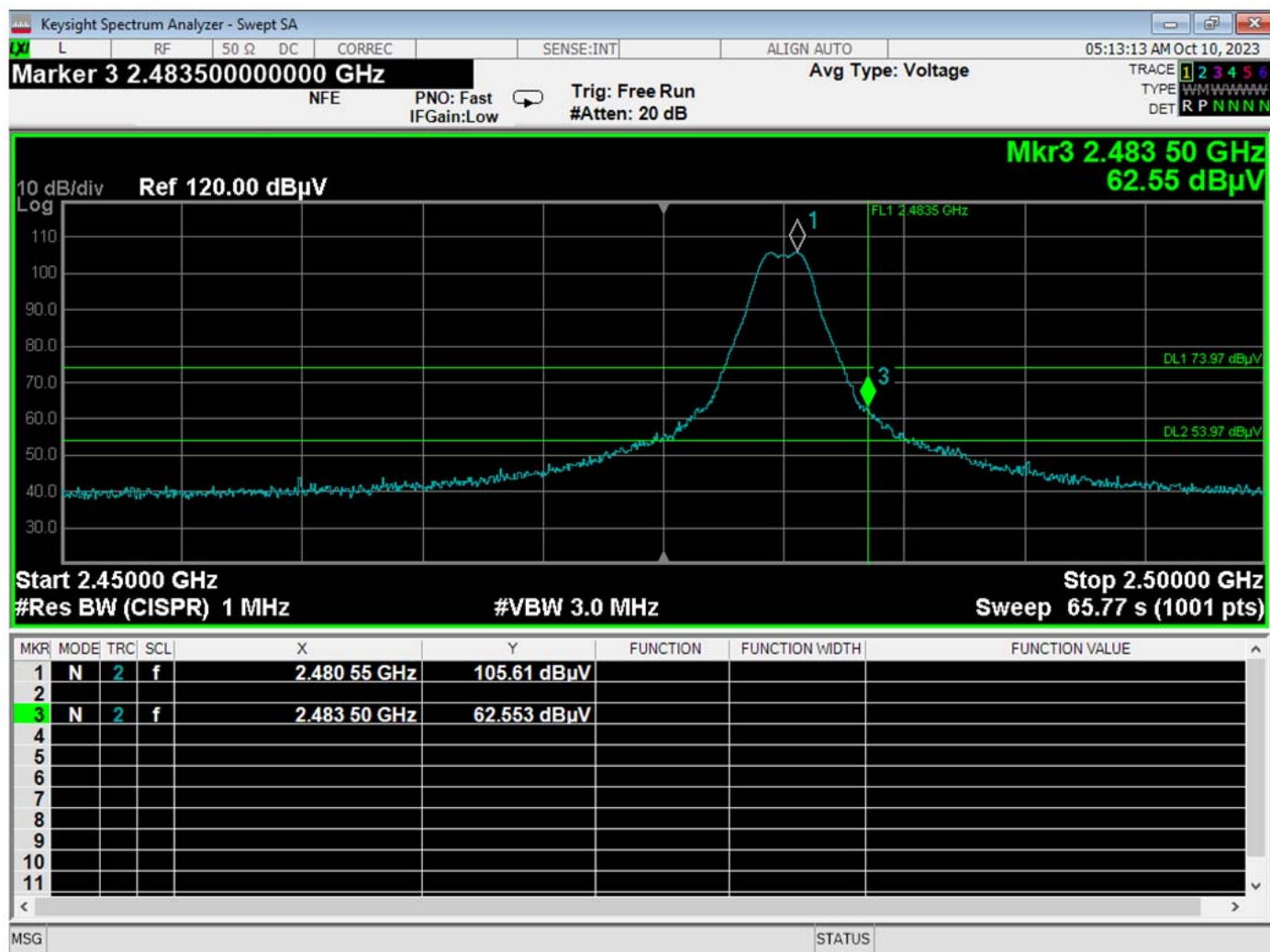
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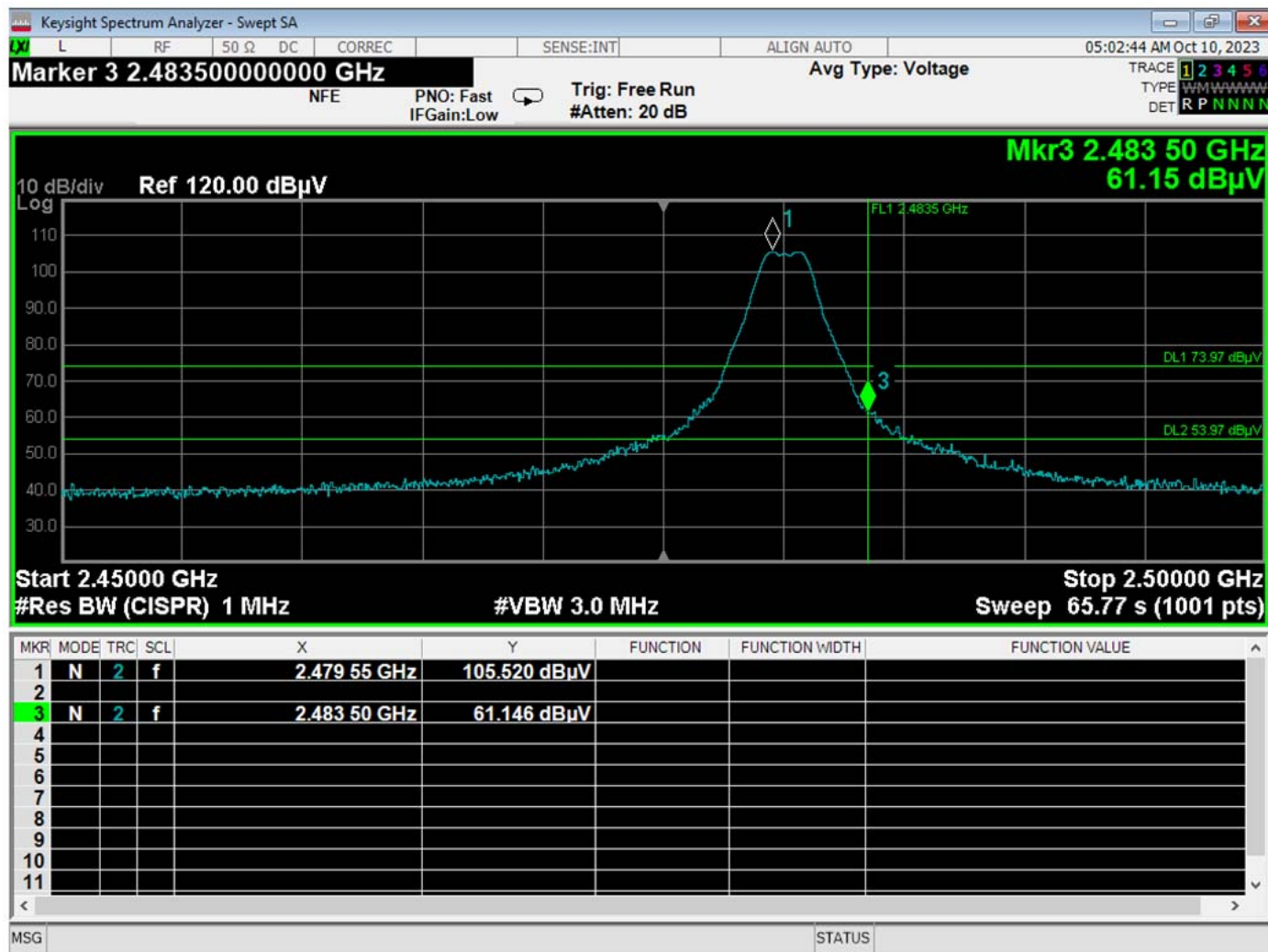
Band Edge – Low Channel – Vertical Polarization – AC Mode



Band Edge – Low Channel – Horizontal Polarization – AC Mode



Band Edge – High Channel – Vertical Polarization – AC Mode



Band Edge – High Channel – Horizontal Polarization – AC Mode



FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

Date: 10/12/2023
Lab: D
Tested By: Kyle Fujimoto

Band Edges - Low Channel - Battery Power

[illegible]



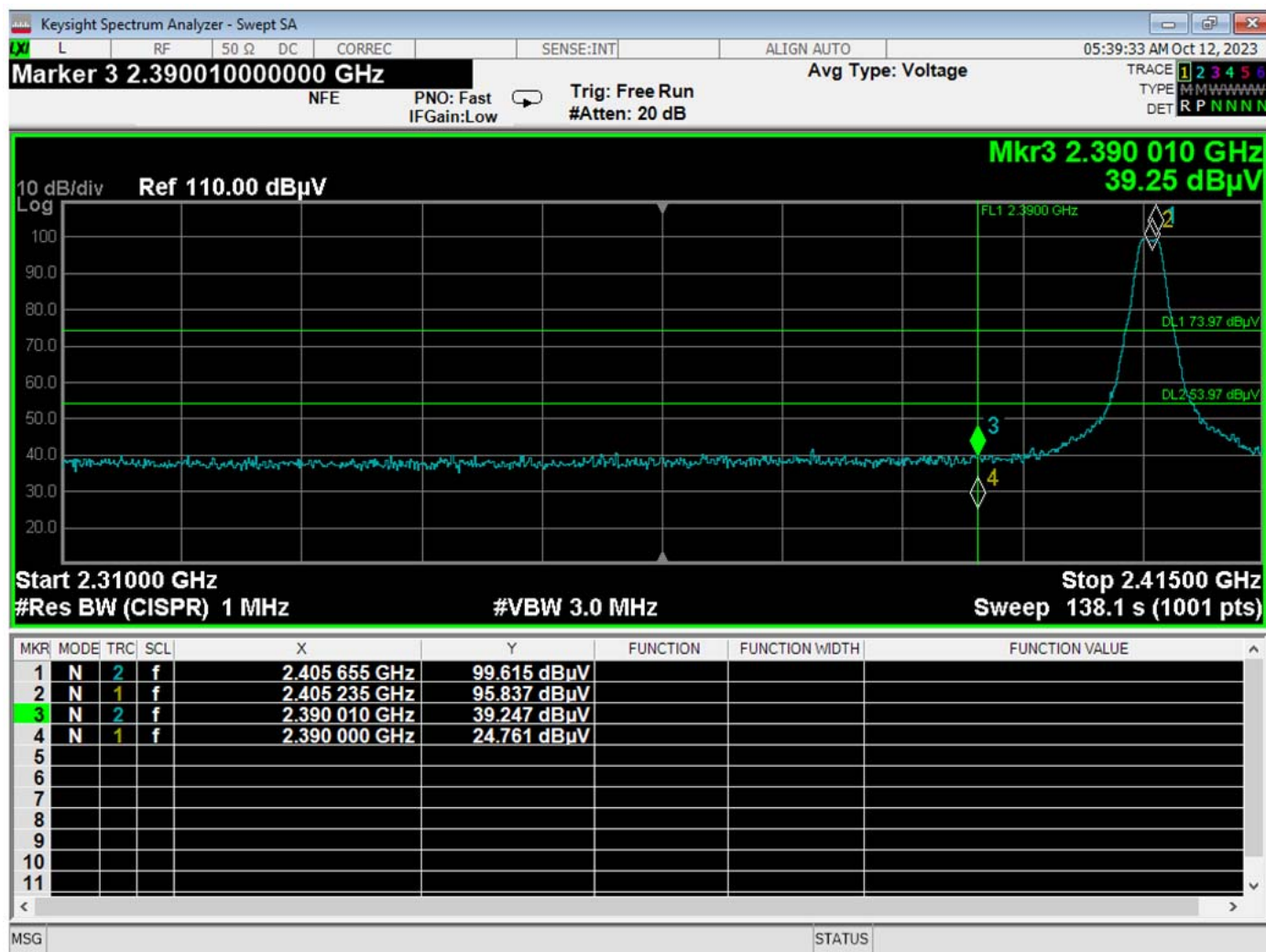
FCC 15.247 and RSS-247

Vivint, Inc.
ZigBee Thermostat
Model: TH03

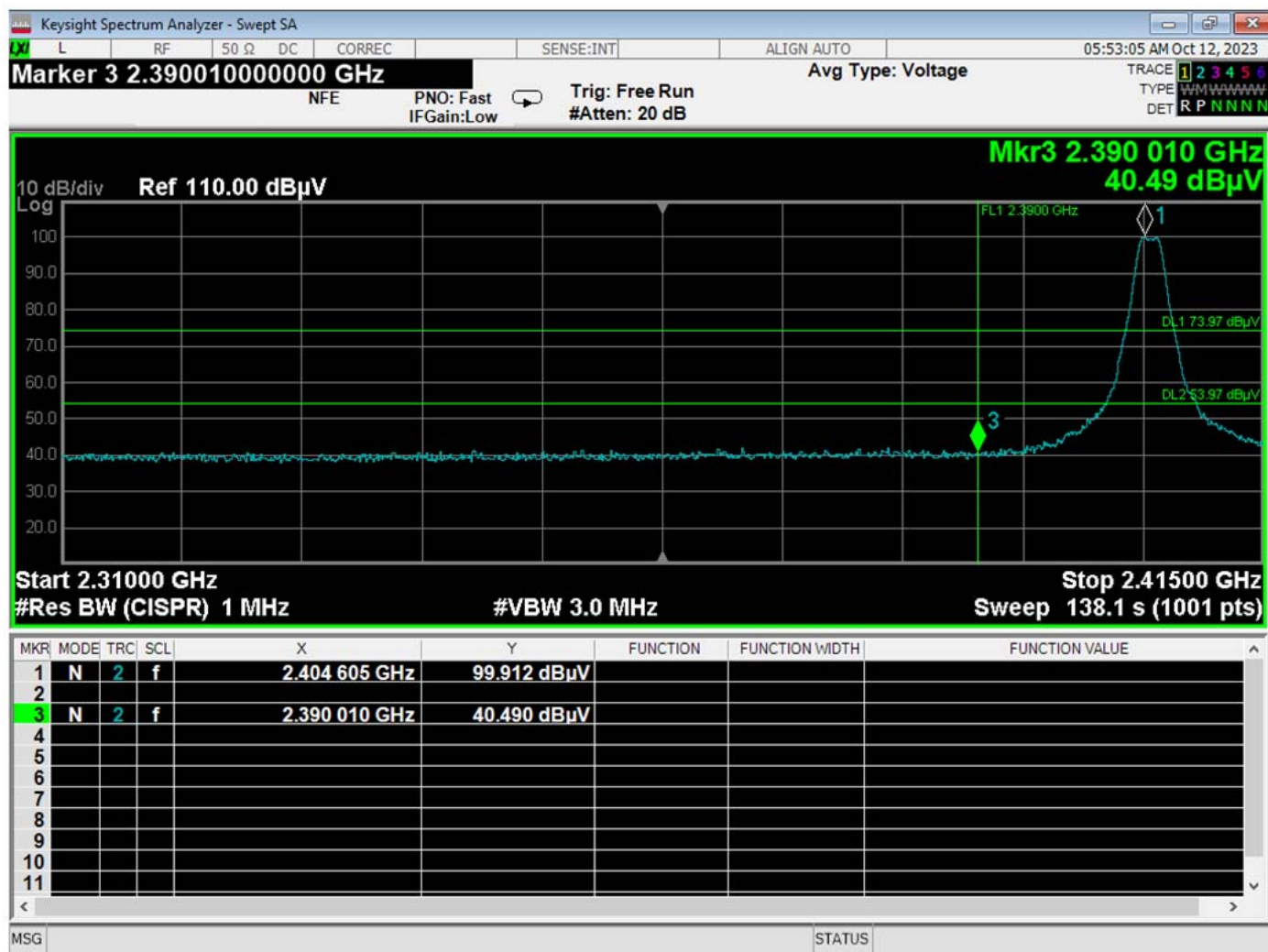
Date: 10/12/2023
Lab: D
Tested By: Kyle Fujimoto

Band Edges - High Channel - Battery Power

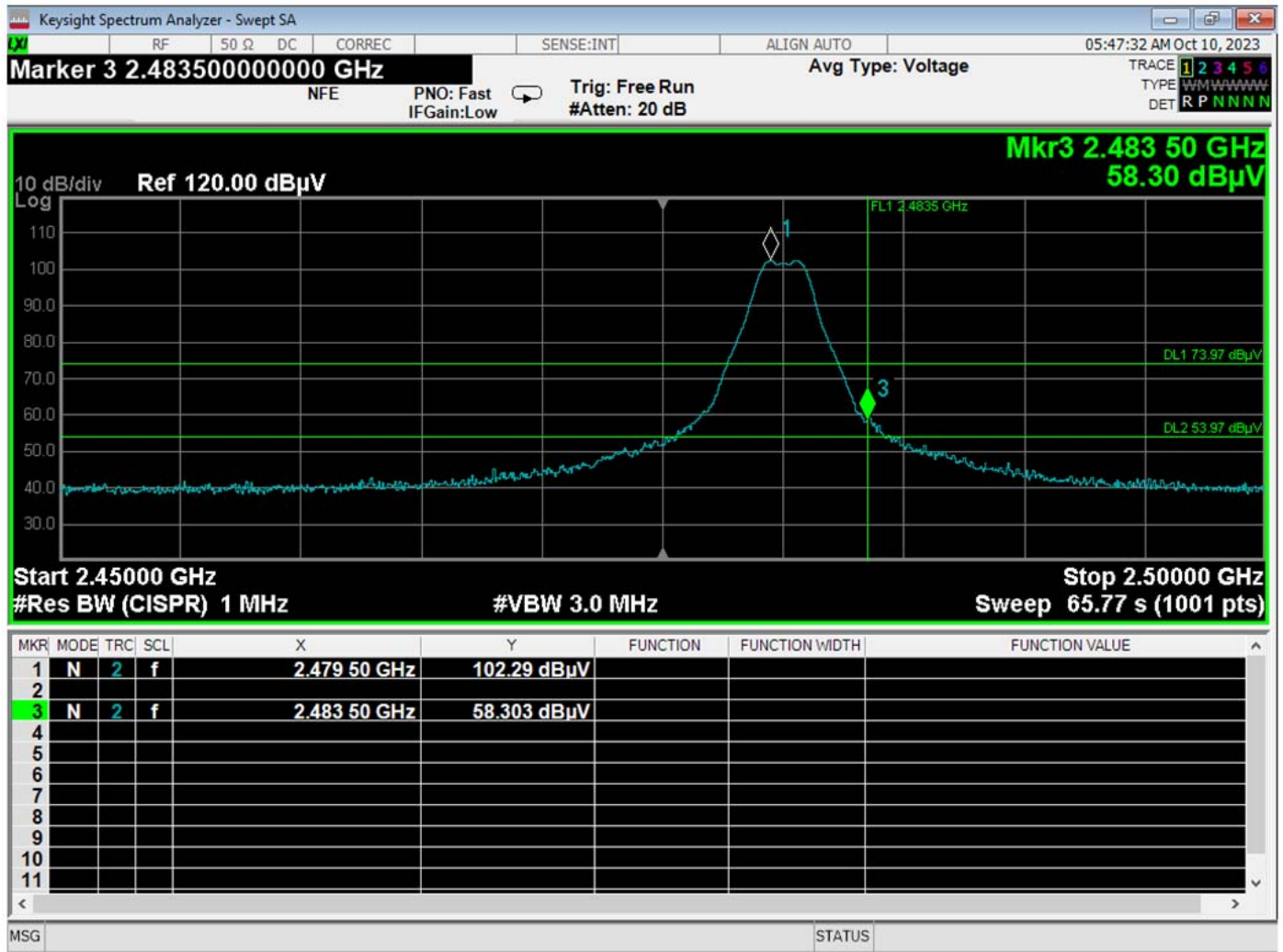
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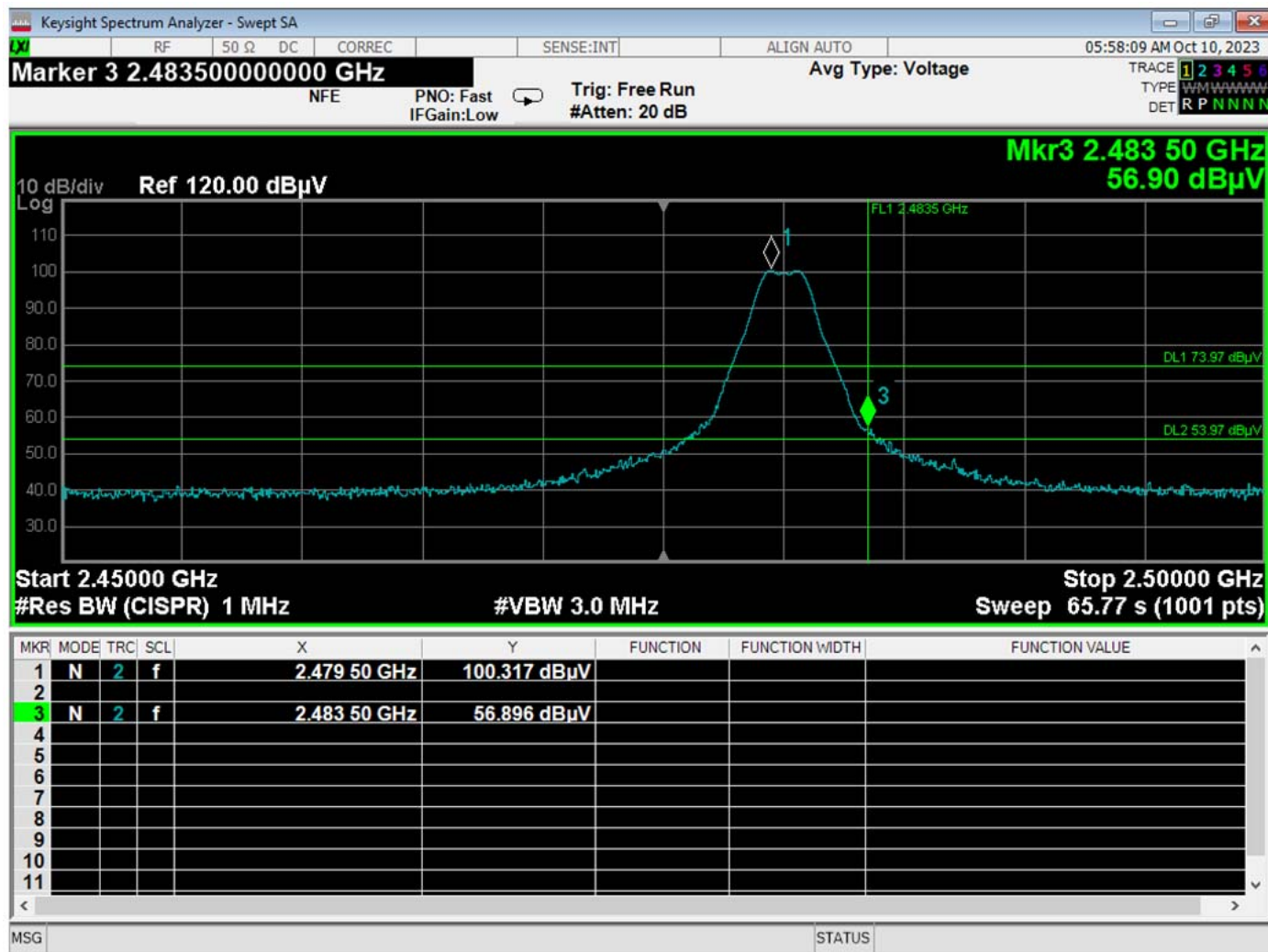
Band Edge – Low Channel – Vertical Polarization – Battery Power



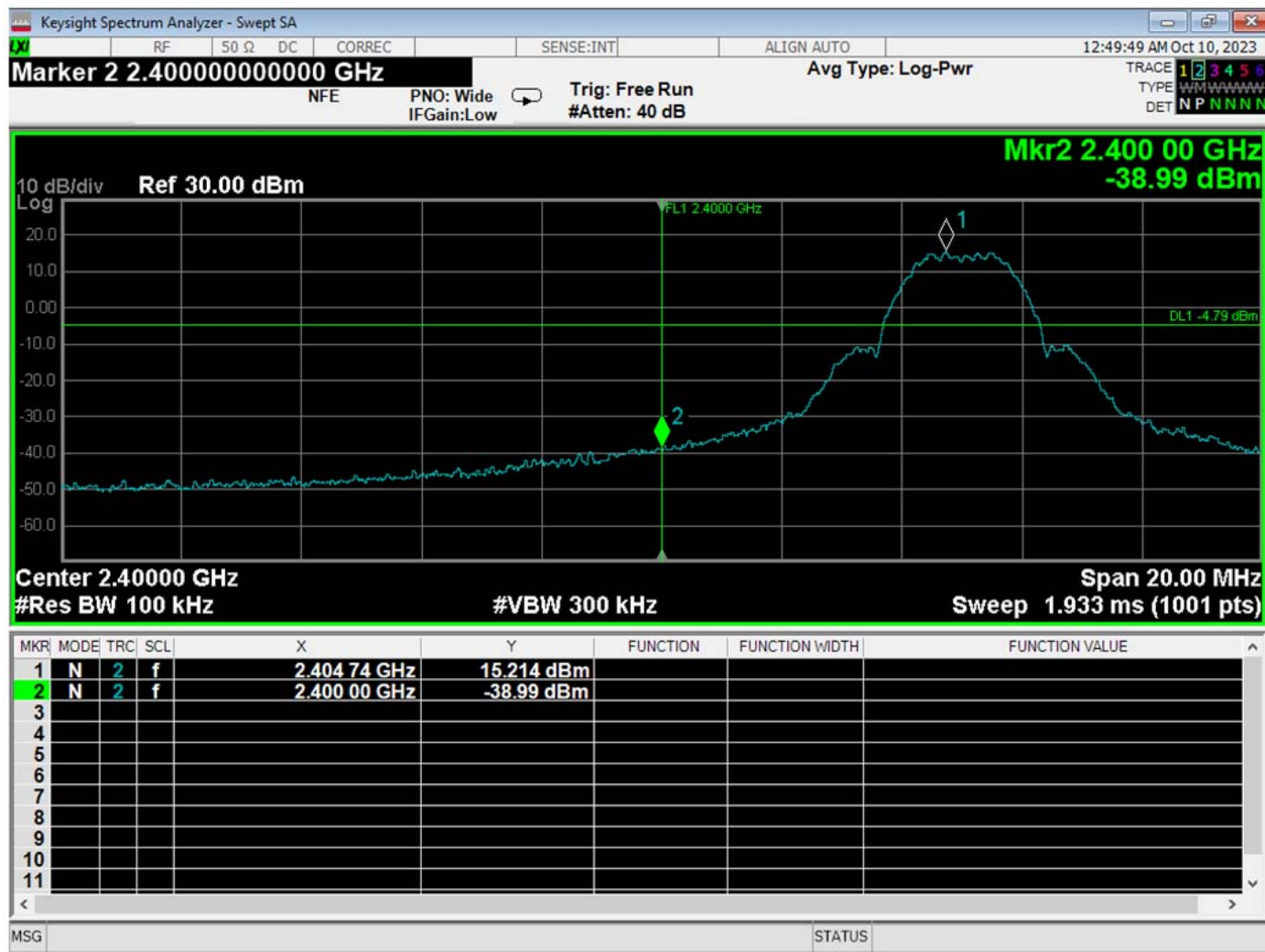
Band Edge – Low Channel – Vertical Polarization – Battery Power



Band Edge – High Channel – Vertical Polarization – Battery Power



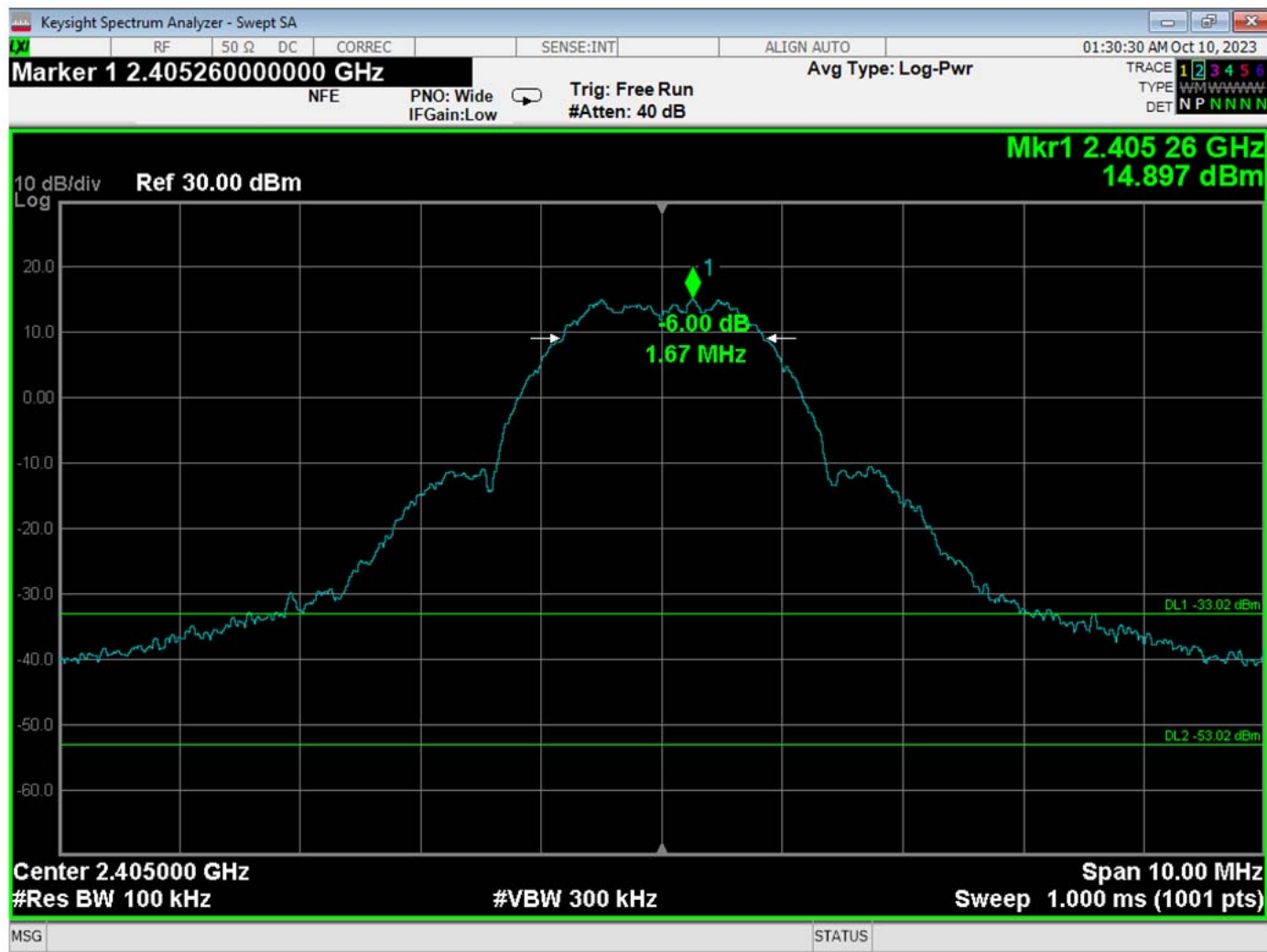
Band Edge – High Channel – Horizontal Polarization – Battery Power



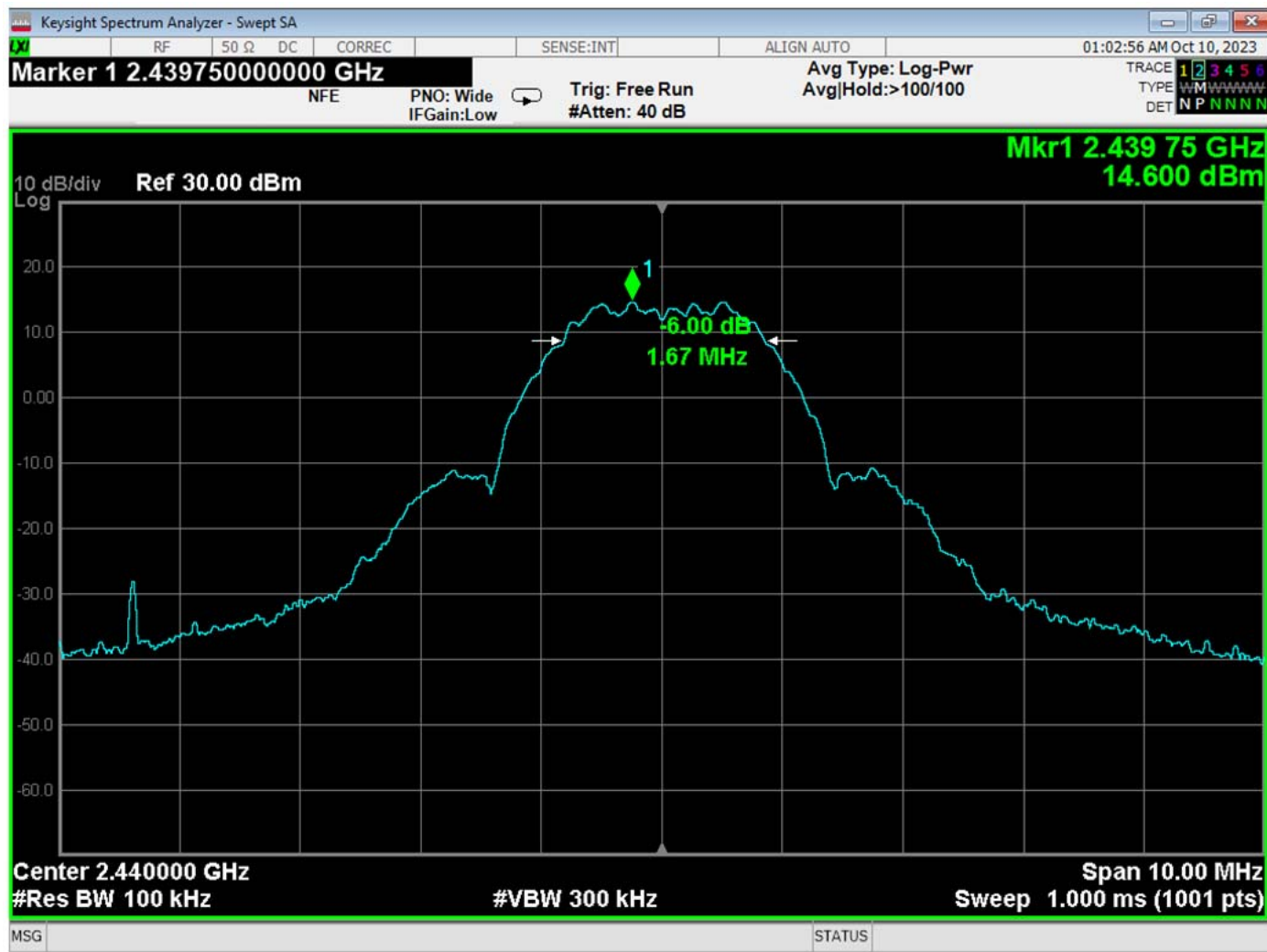
Band Edge – Low Channel – at 2400 MHz – Via Conducted Measurement



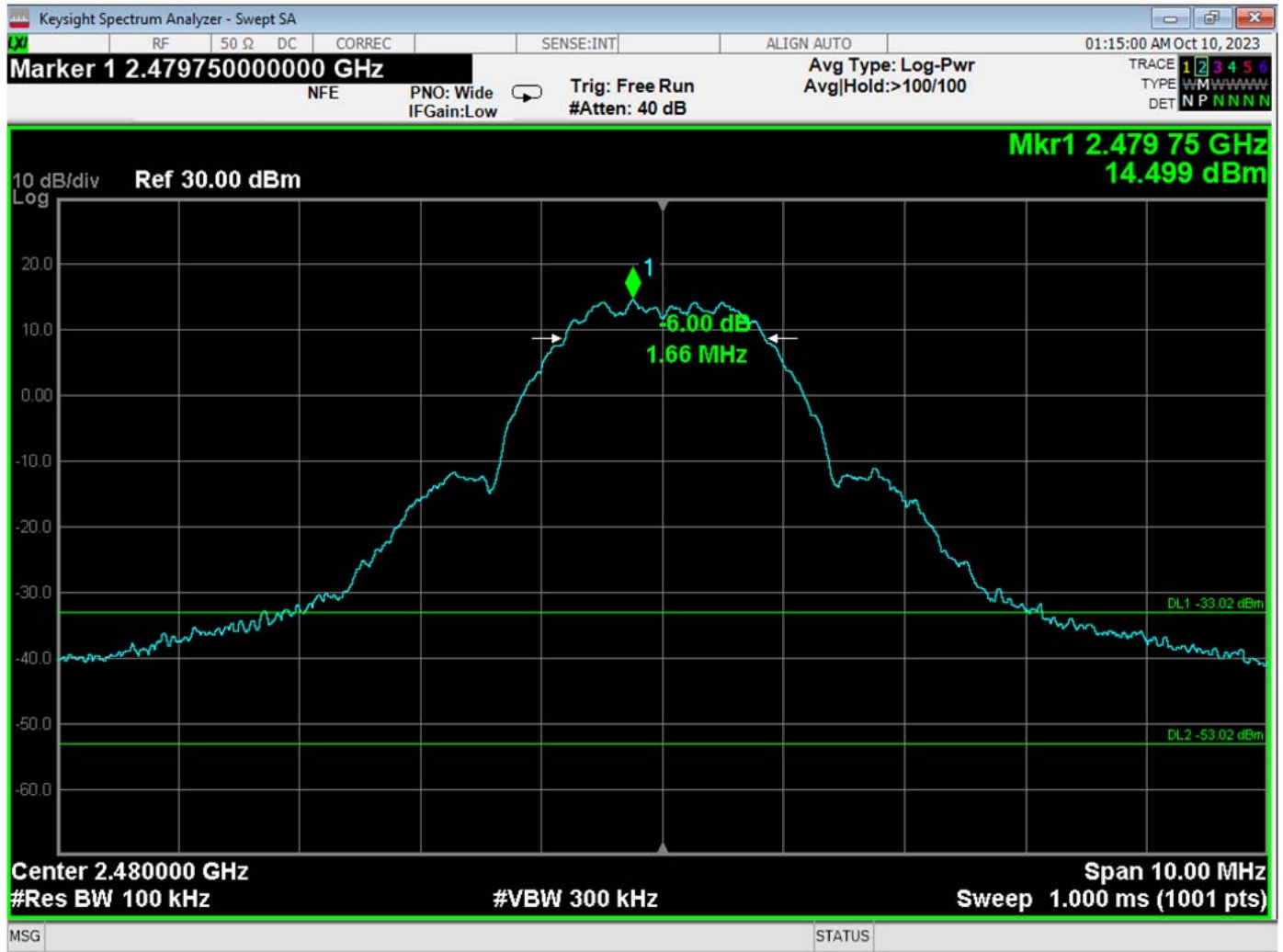
***-6 dB BANDWIDTH
DATA SHEETS***



-6 dB Bandwidth – Low Channel



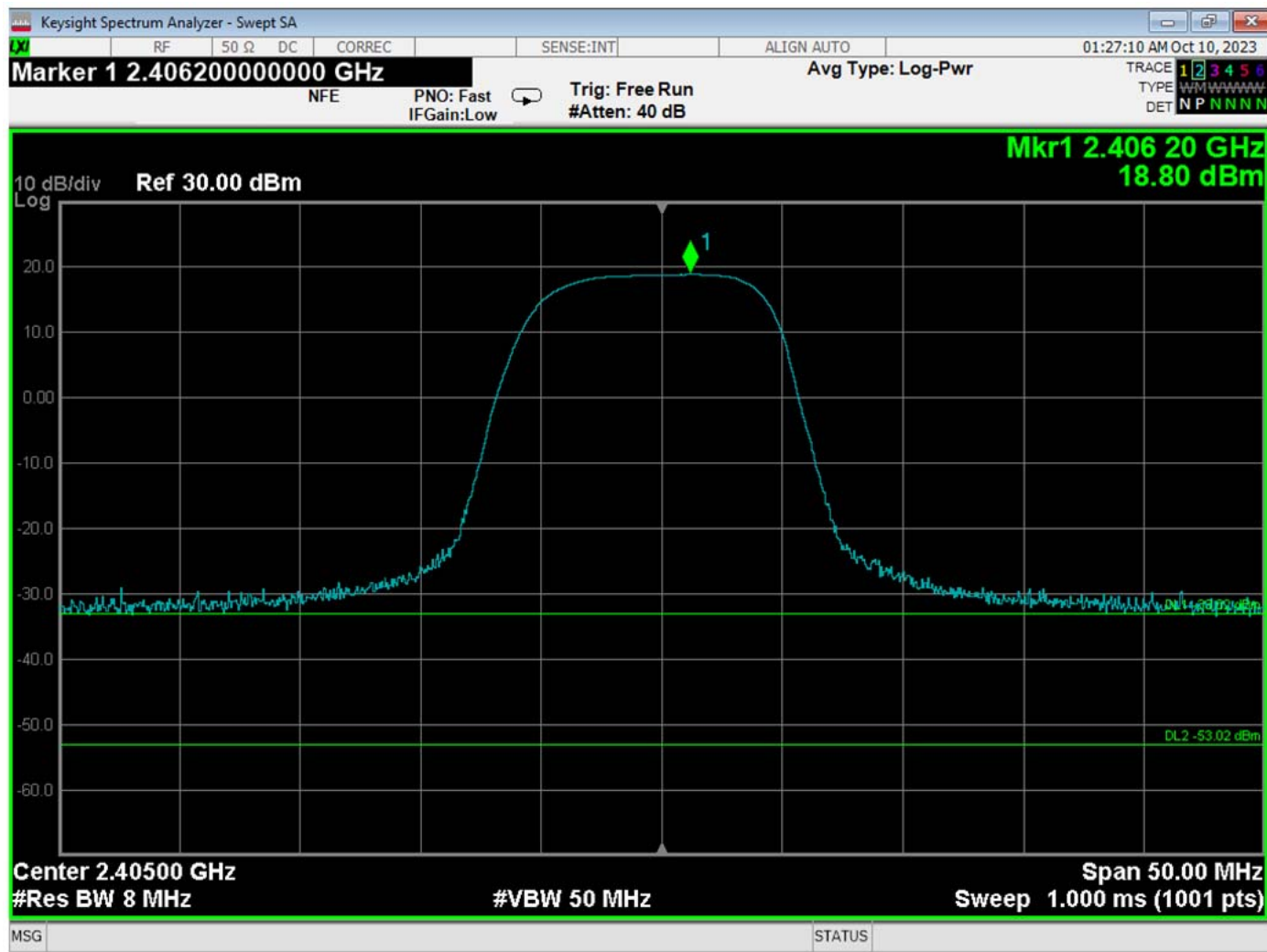
-6 dB Bandwidth – Middle Channel



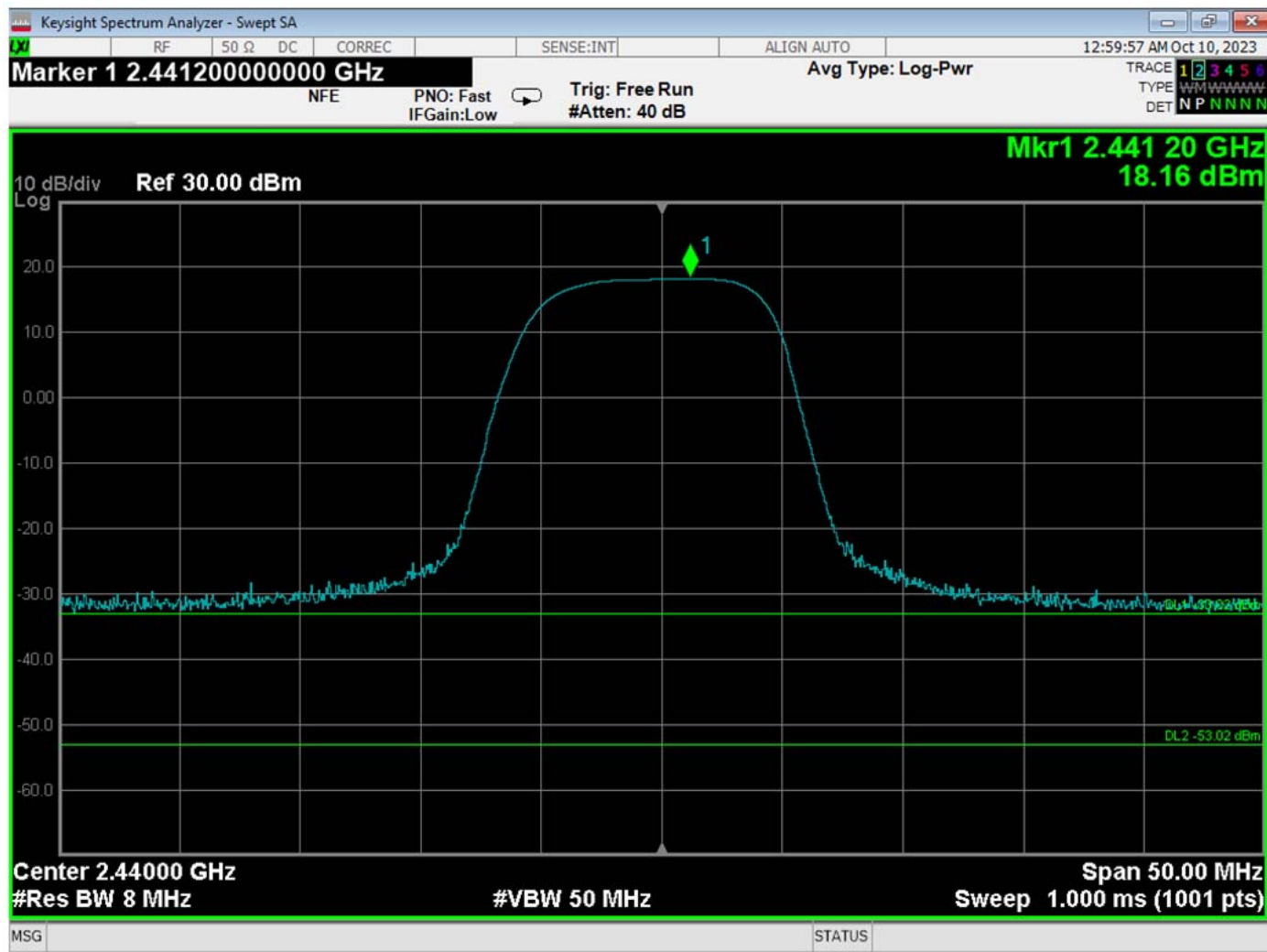
-6 dB Bandwidth – High Channel



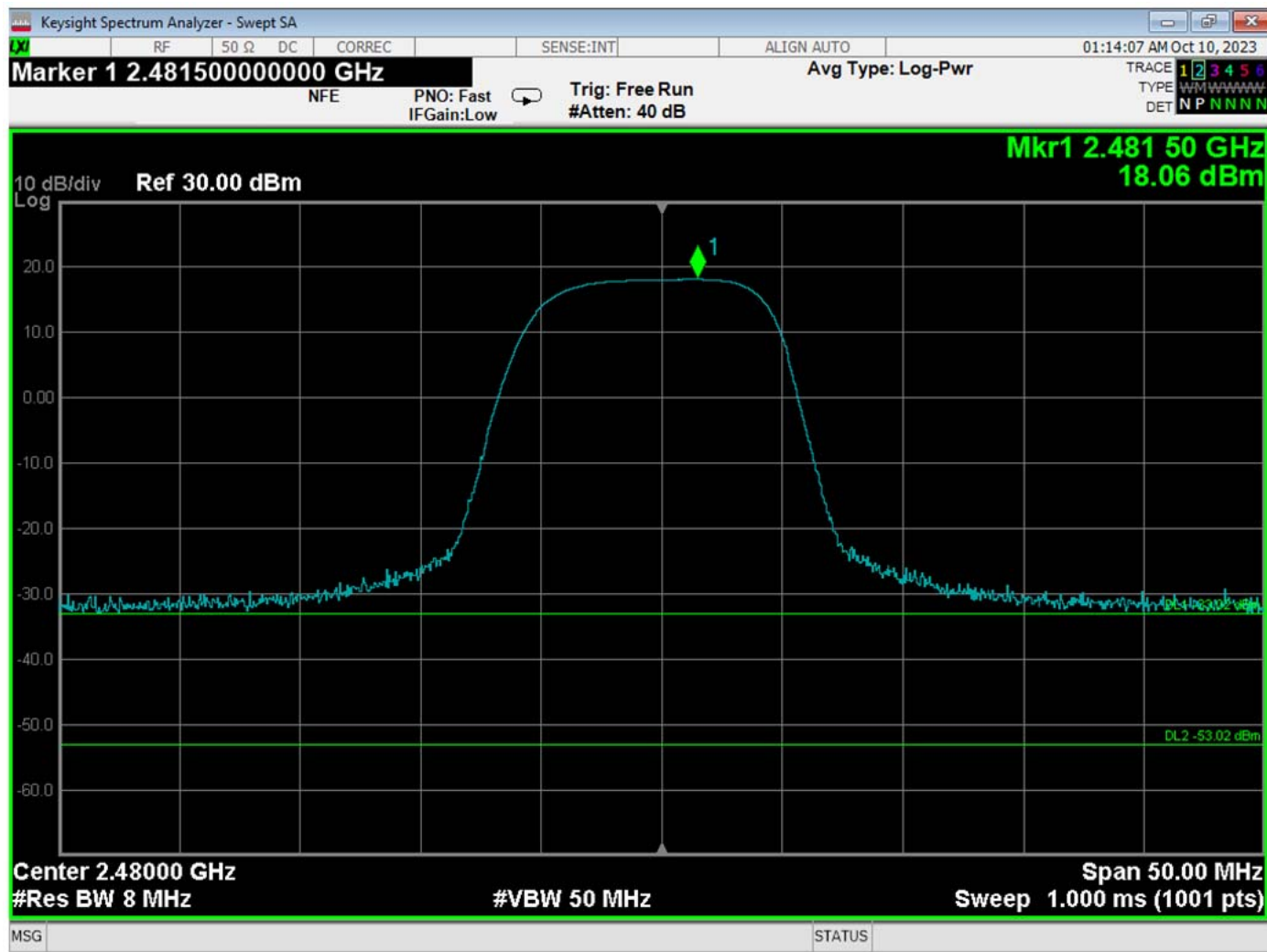
***PEAK POWER OUTPUT
DATA SHEETS***



Peak Power Output – Low Channel



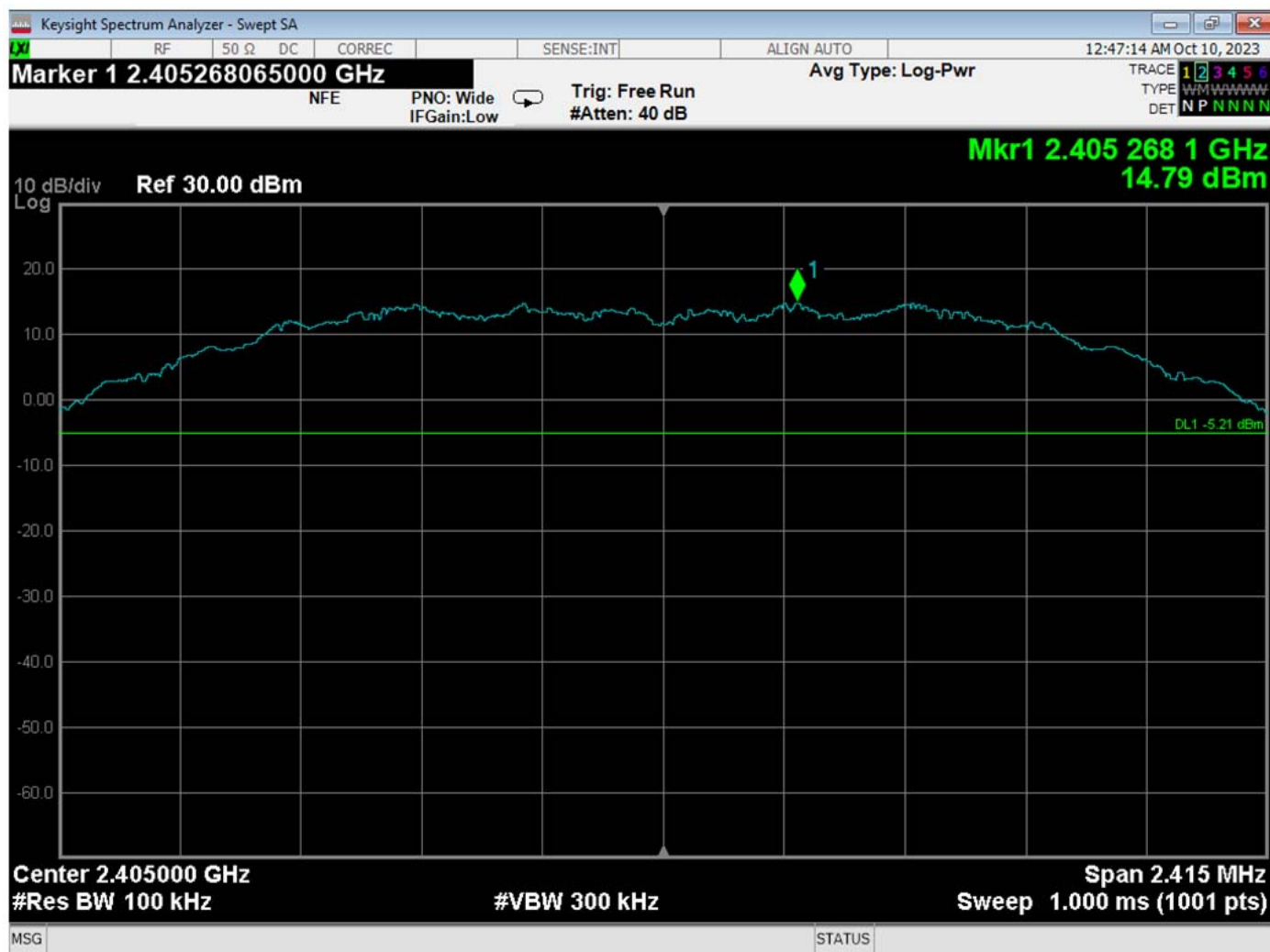
Peak Power Output – Middle Channel



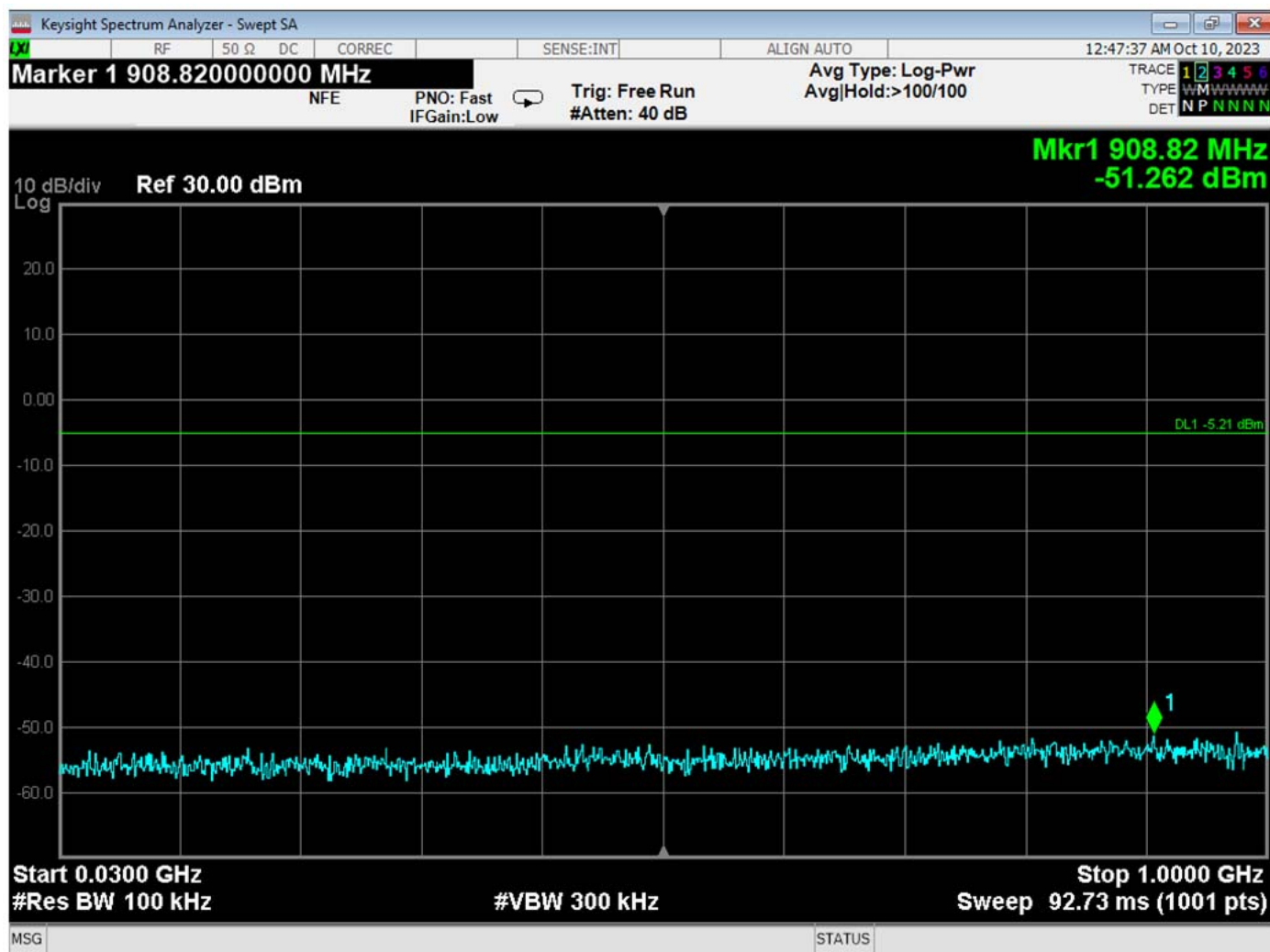
Peak Power Output – High Channel



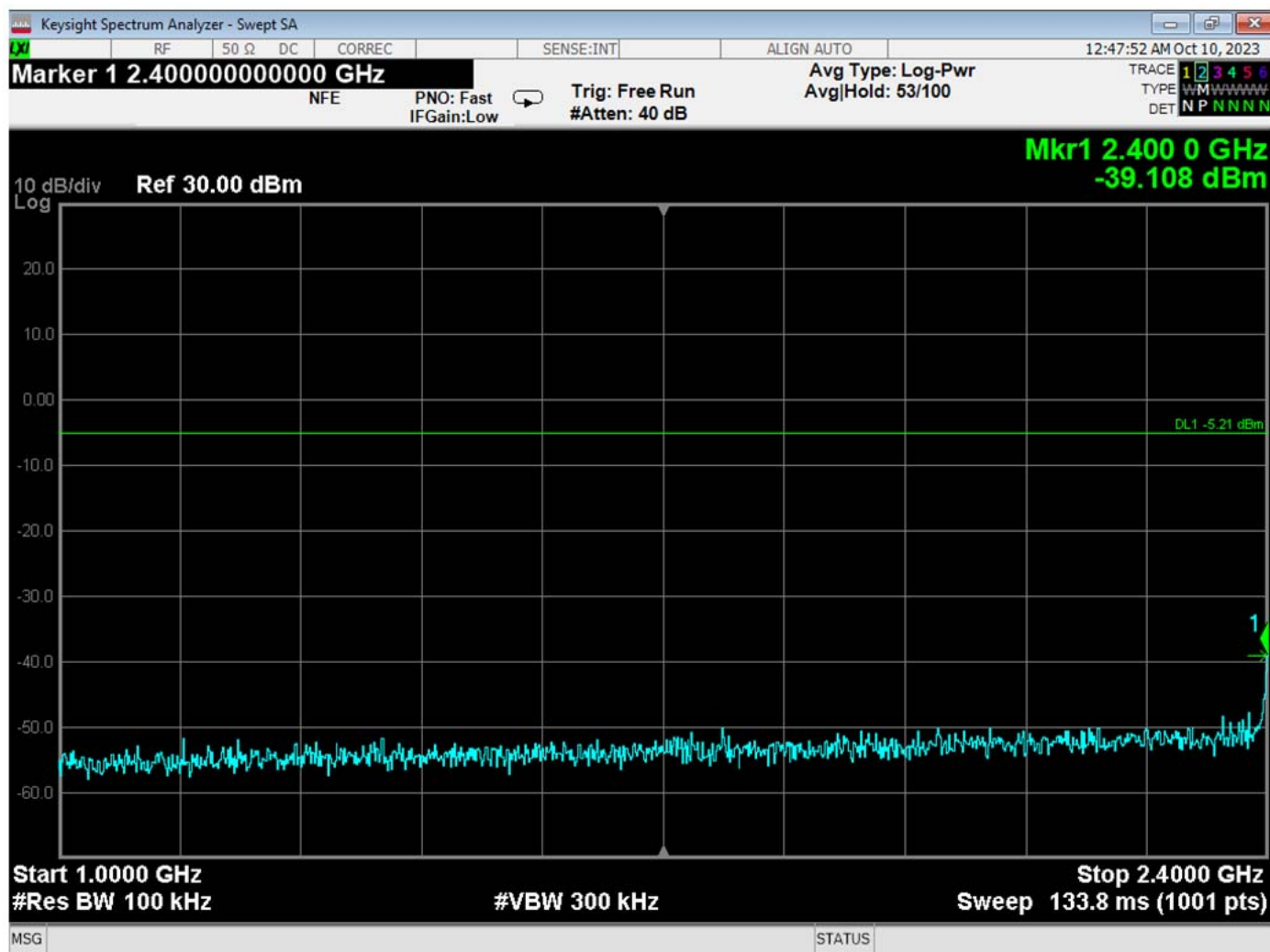
***RF ANTENNA CONDUCTED
DATA SHEETS***



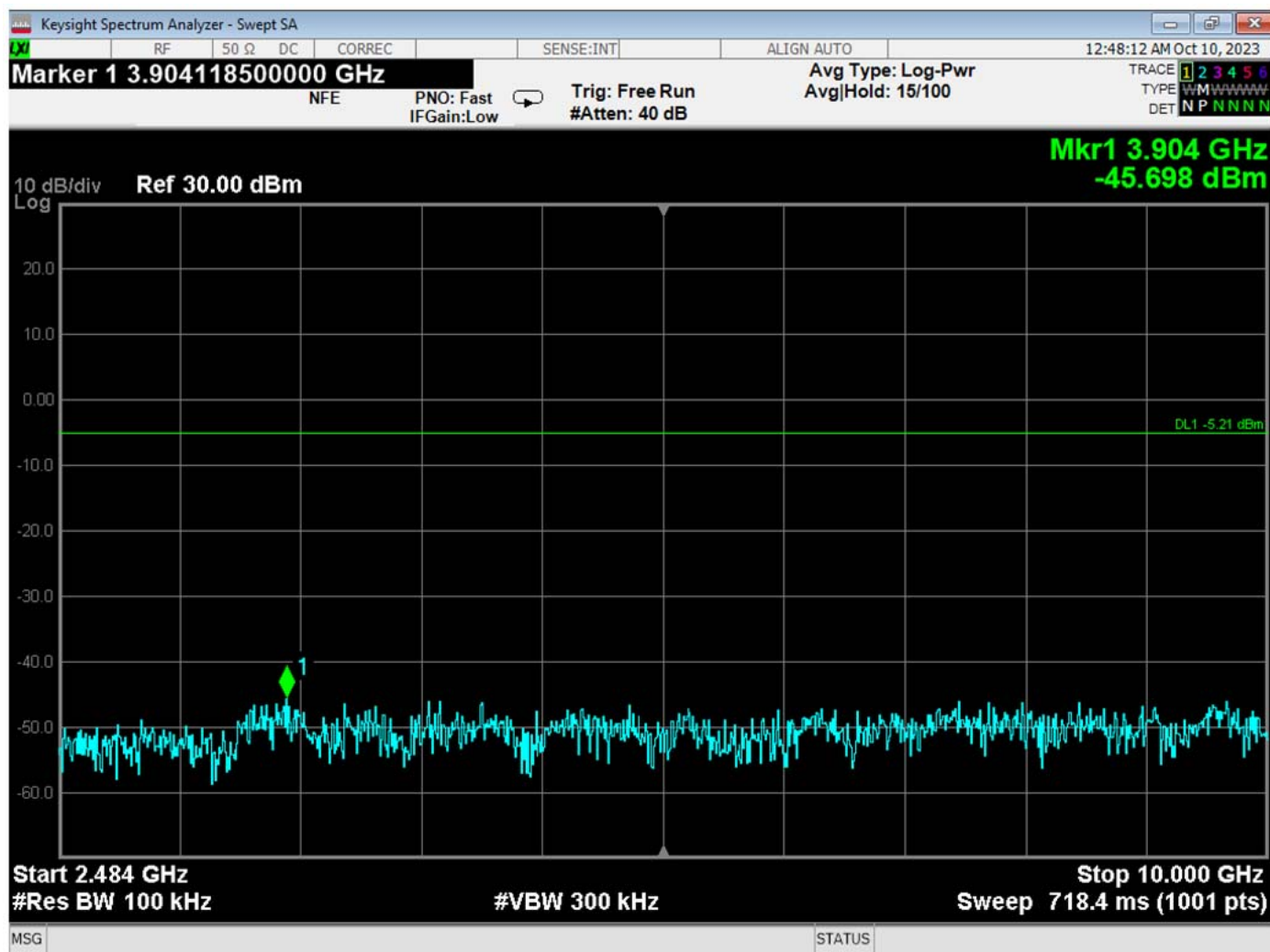
RF Antenna Conducted – Low Channel – Reference Level



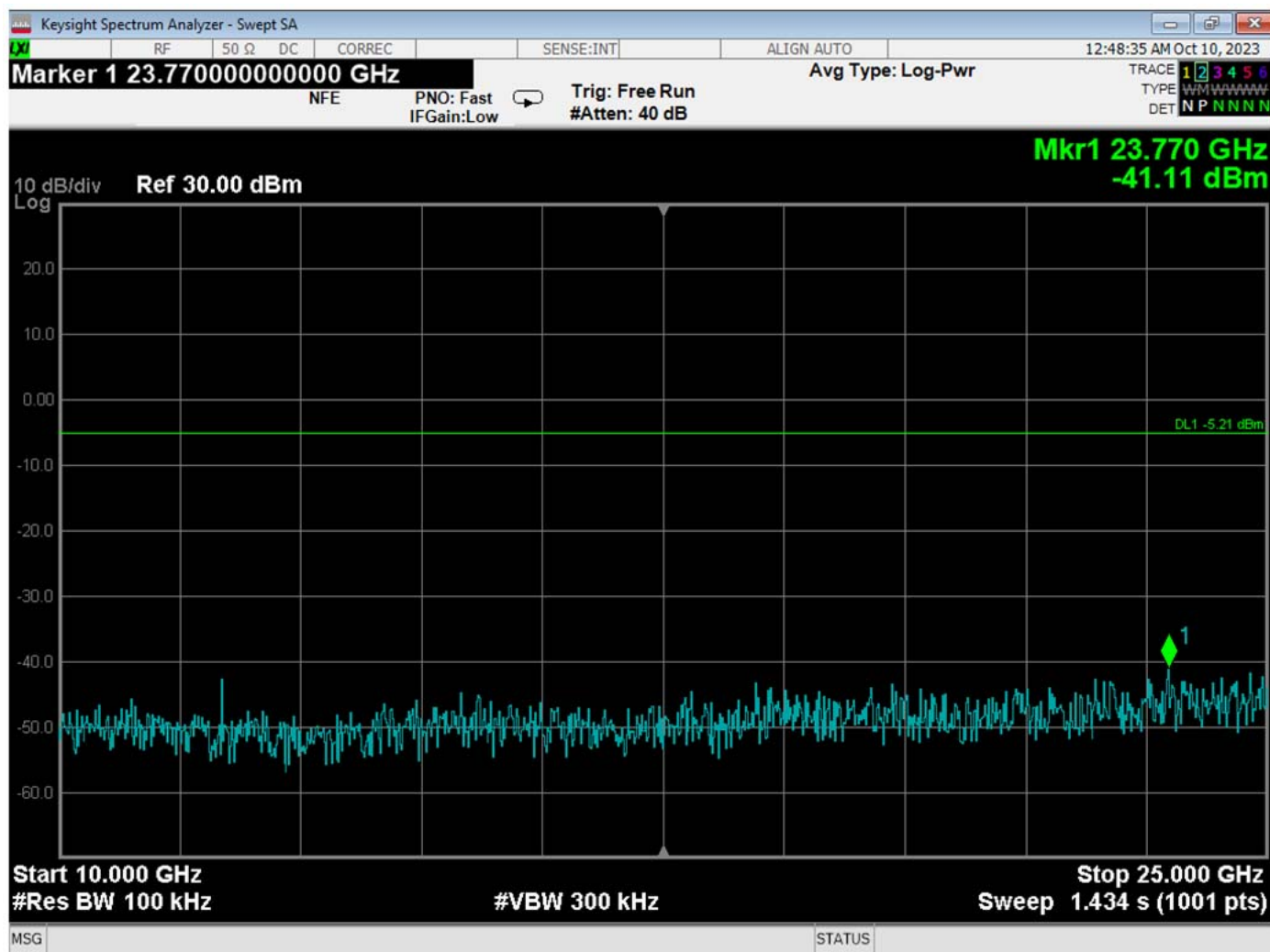
RF Antenna Conducted – Low Channel – 30 MHz to 1 GHz



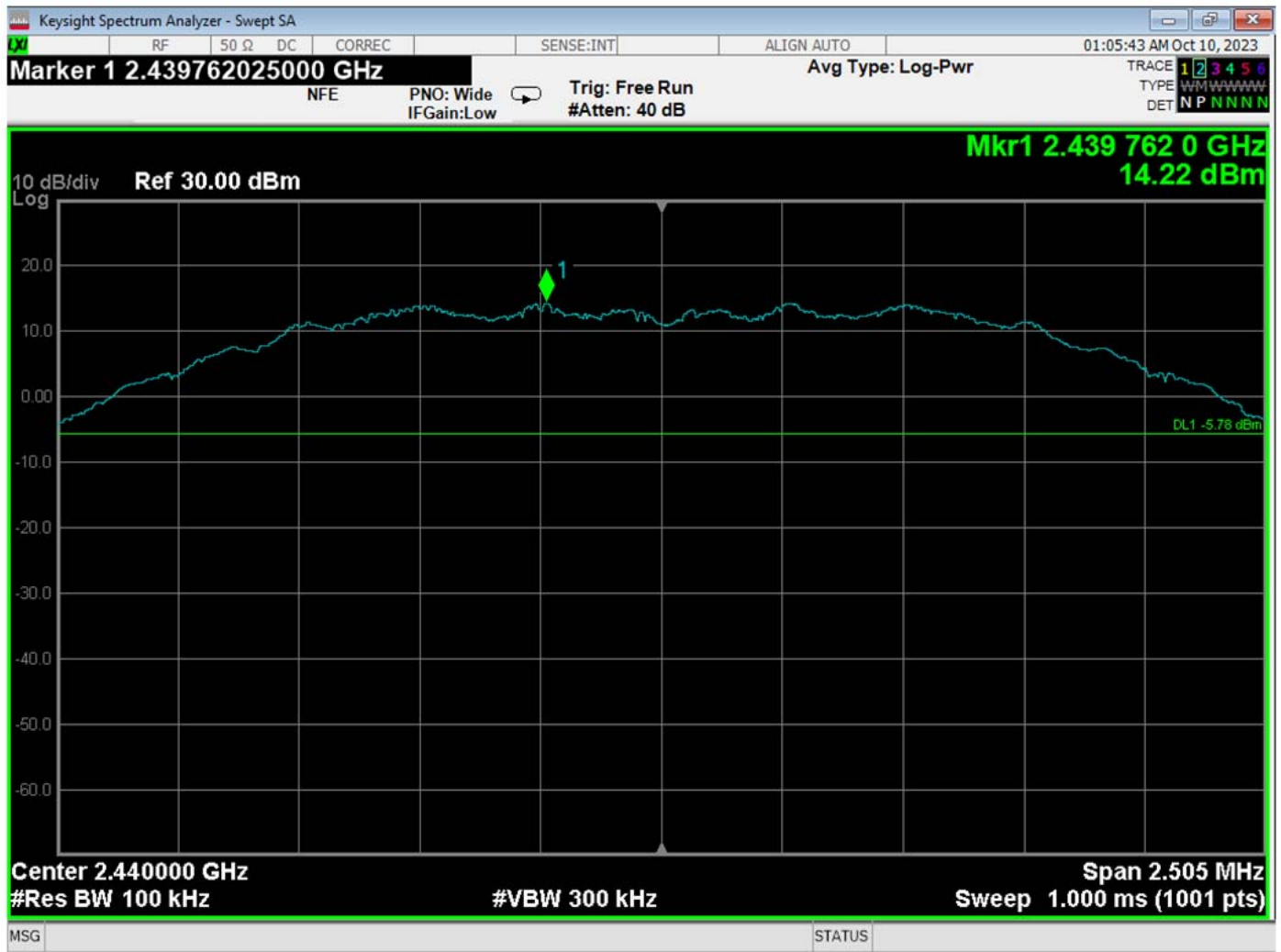
RF Antenna Conducted – Low Channel – 1 GHz to 2.4 GHz



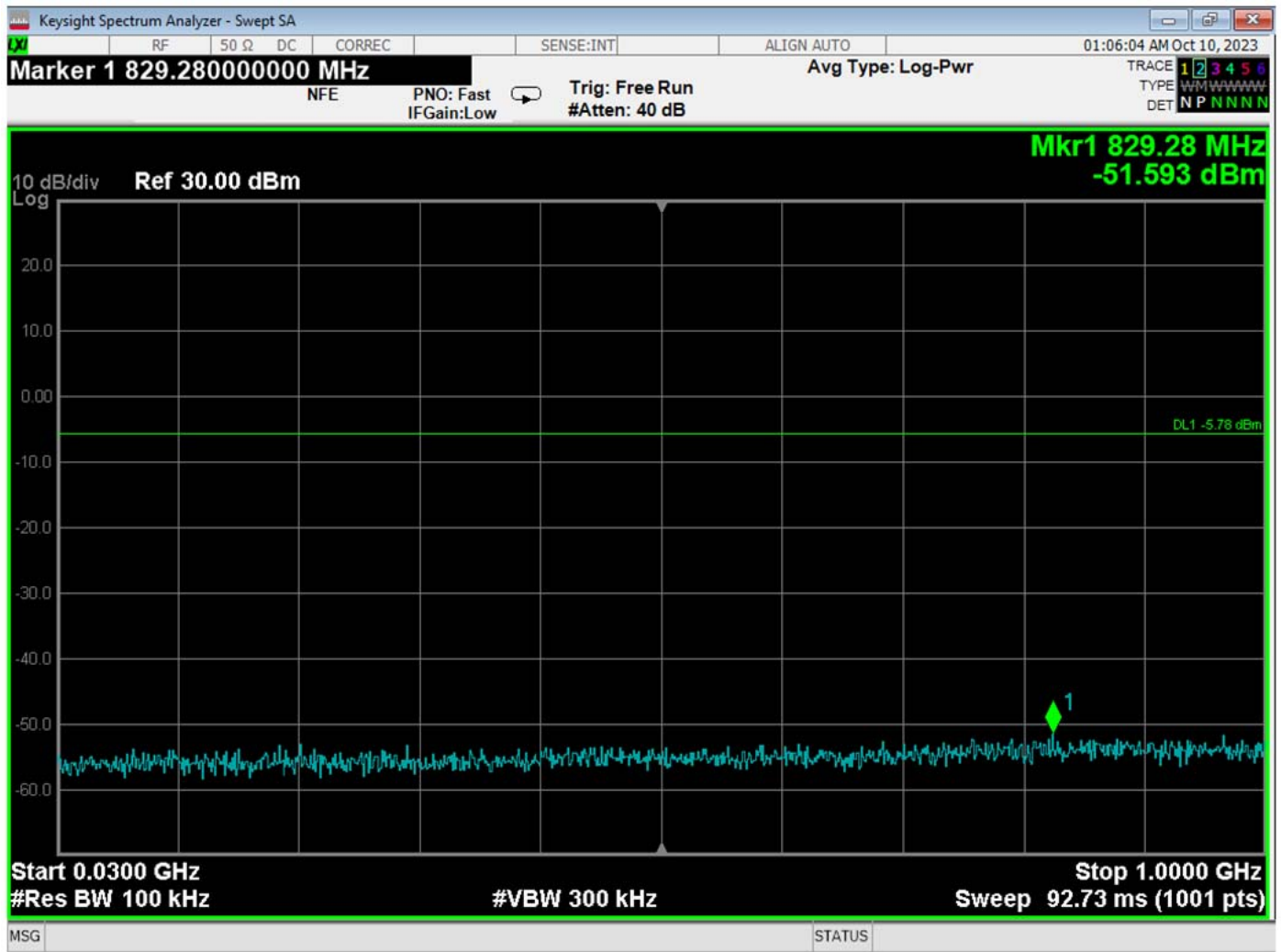
RF Antenna Conducted – Low Channel – 2.4835 MHz to 10 GHz



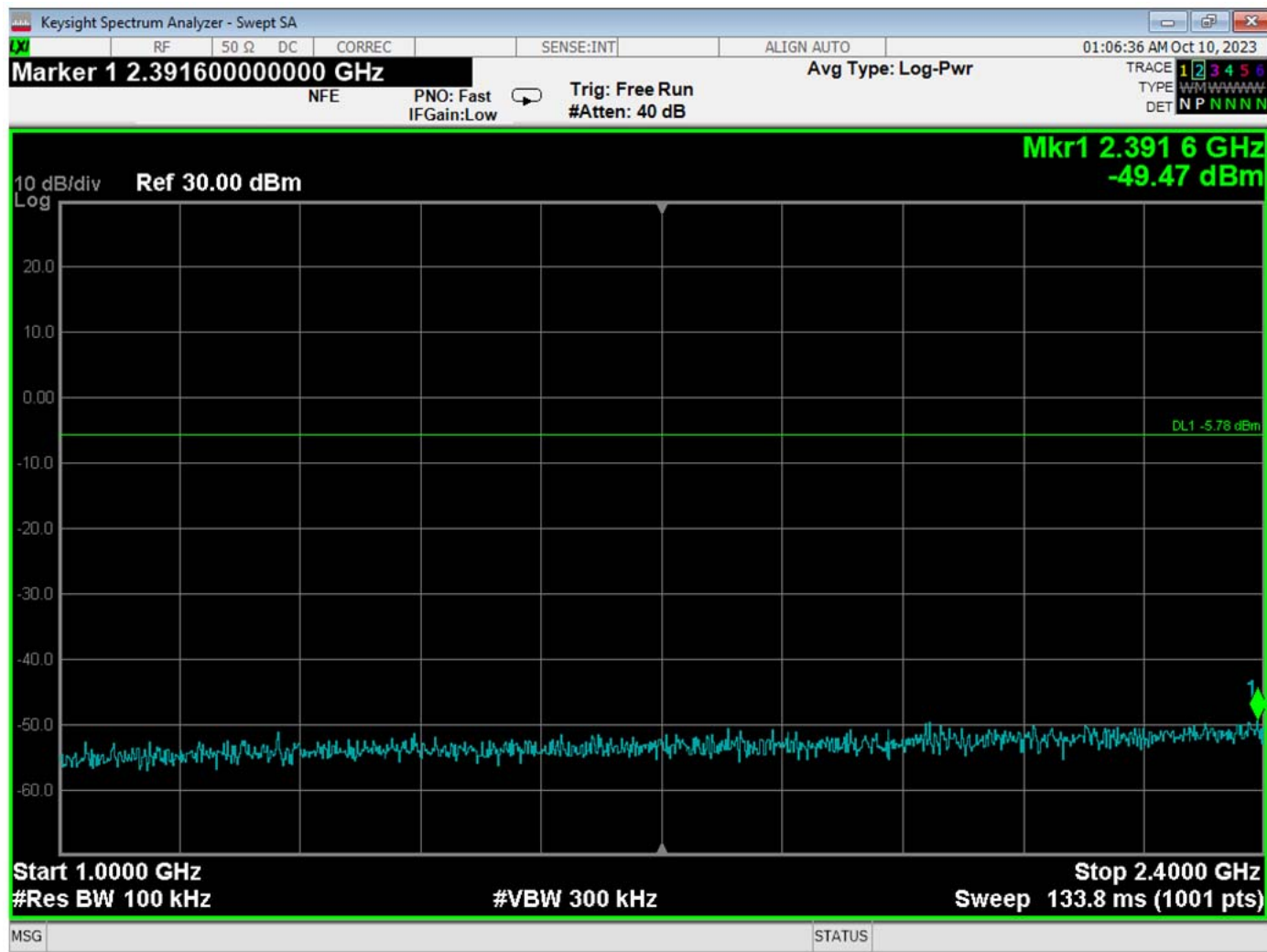
RF Antenna Conducted – Low Channel – 10 GHz to 25 GHz



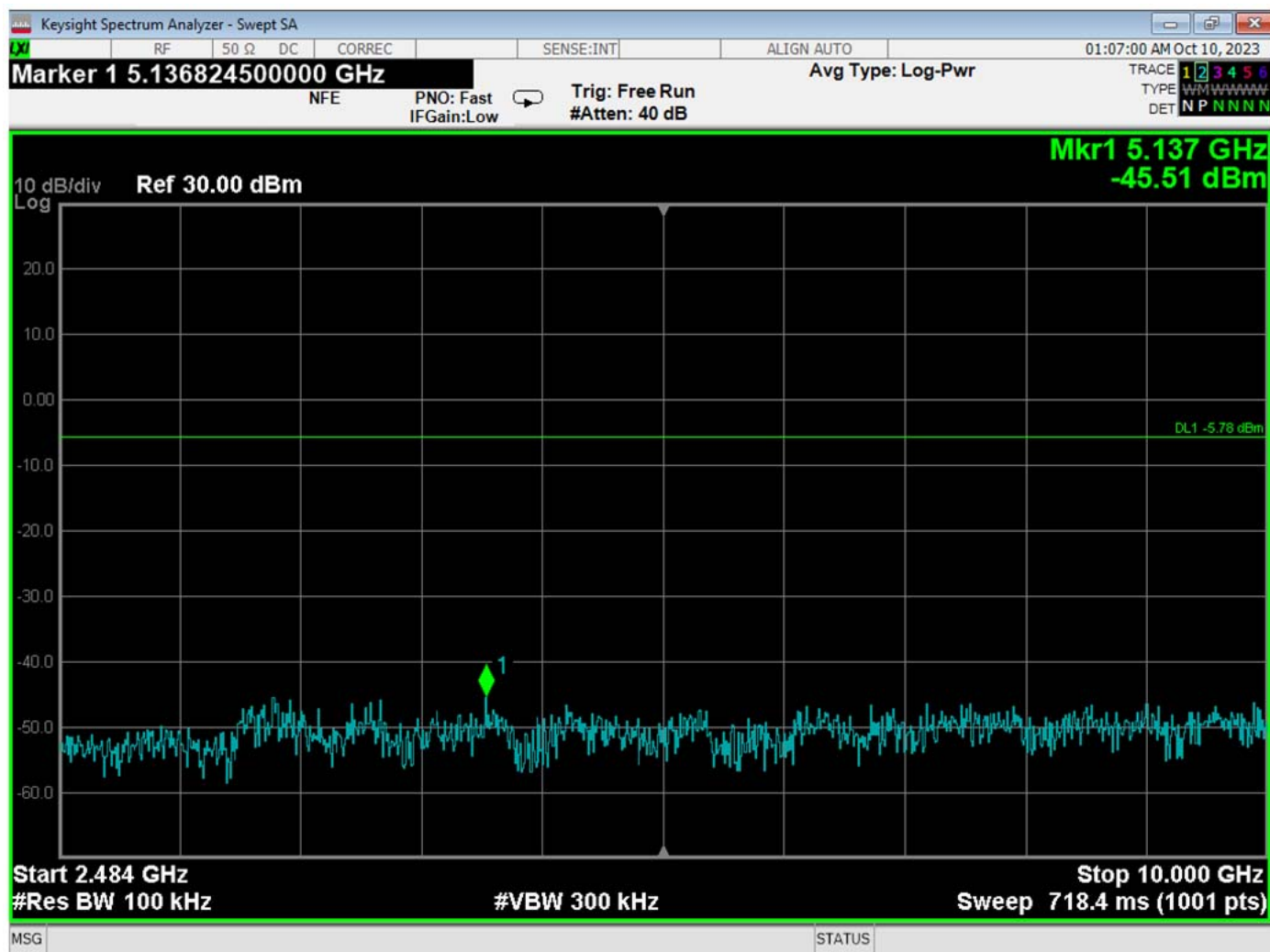
RF Antenna Conducted – Middle Channel – Reference Level



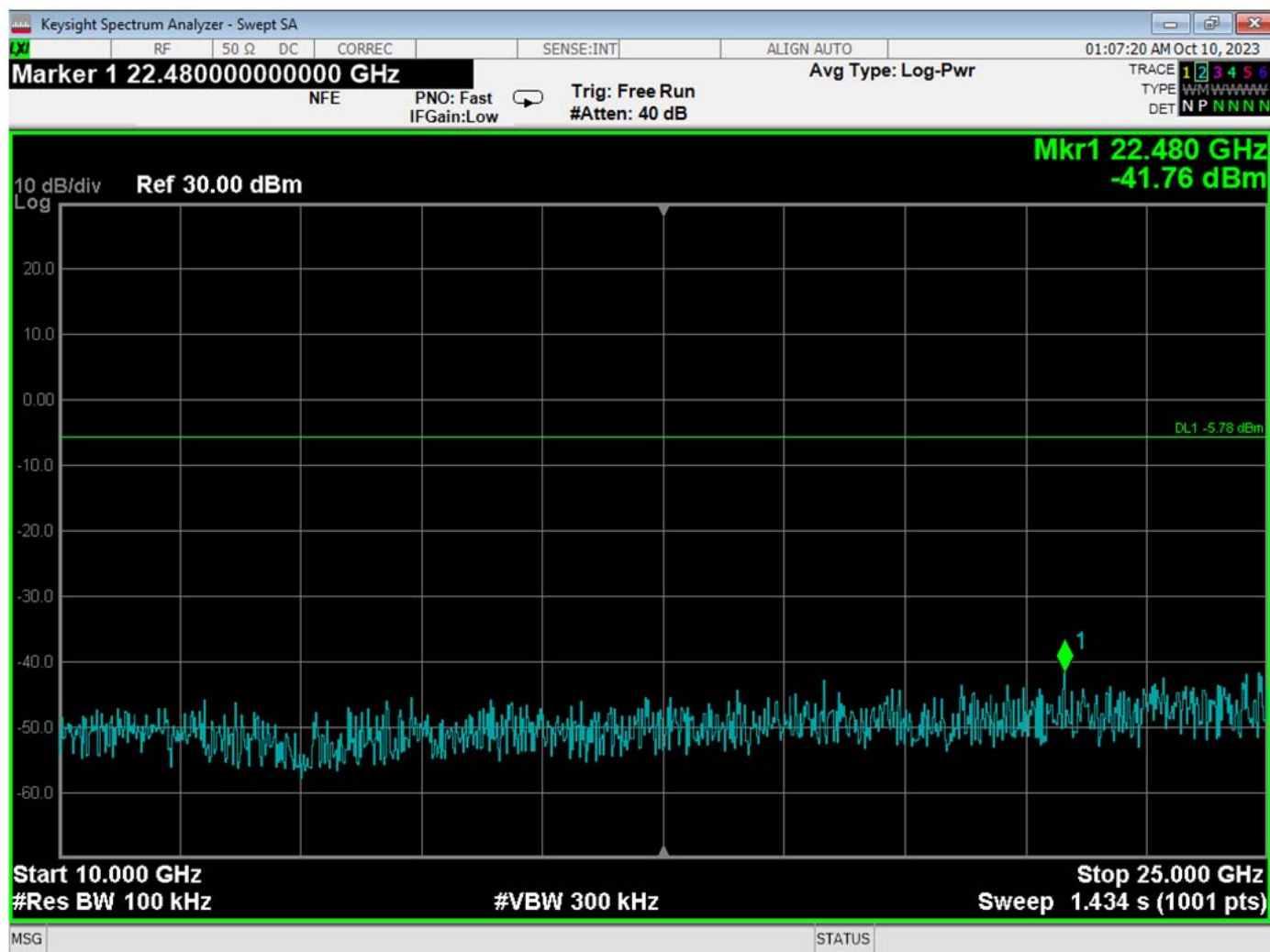
RF Antenna Conducted – Middle Channel – 30 MHz to 1 GHz



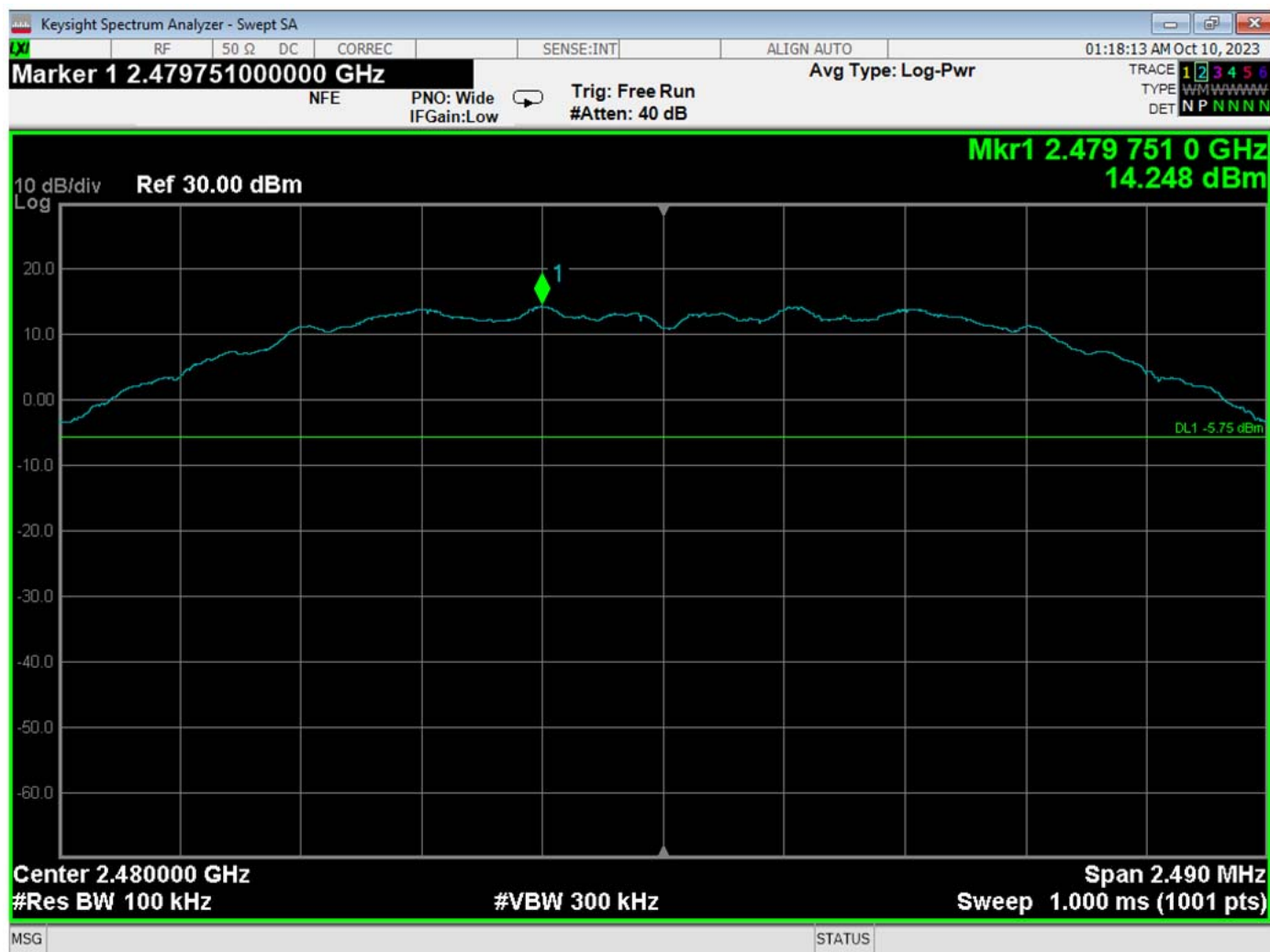
RF Antenna Conducted – Middle Channel – 1 GHz to 2.4 GHz



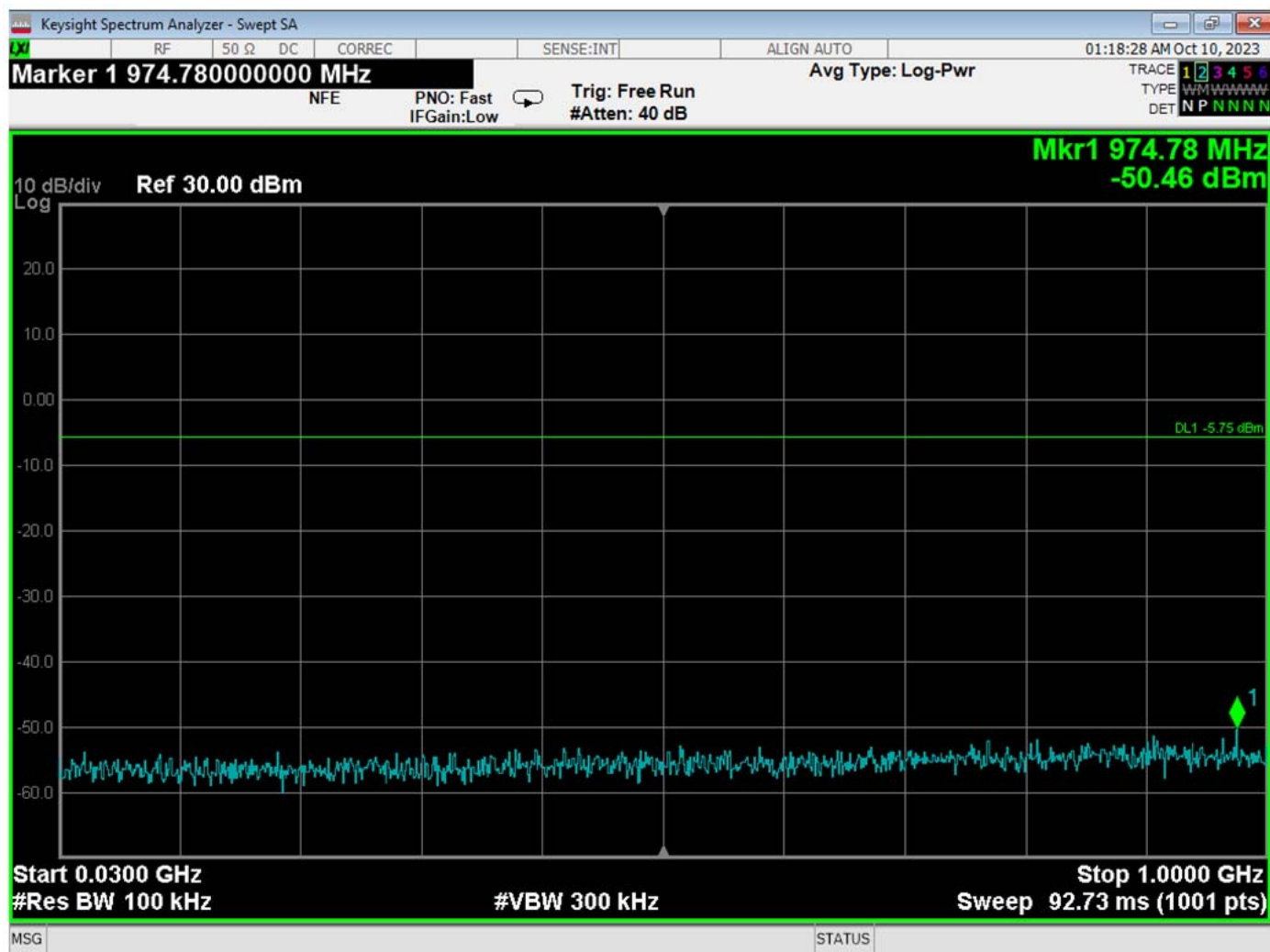
RF Antenna Conducted – Middle Channel – 2.4835 GHz to 10 GHz



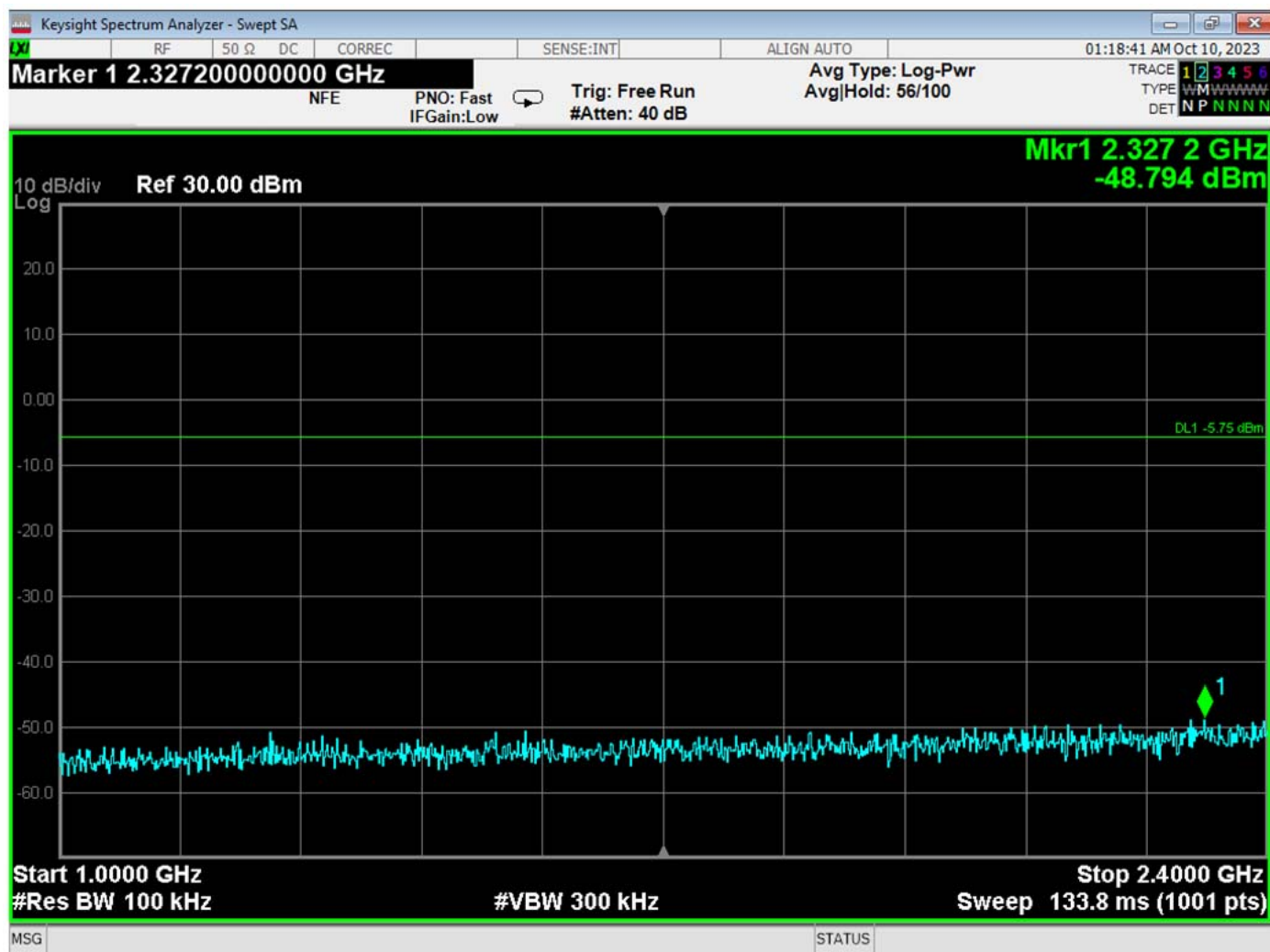
RF Antenna Conducted – Middle Channel – 10 GHz to 25 GHz



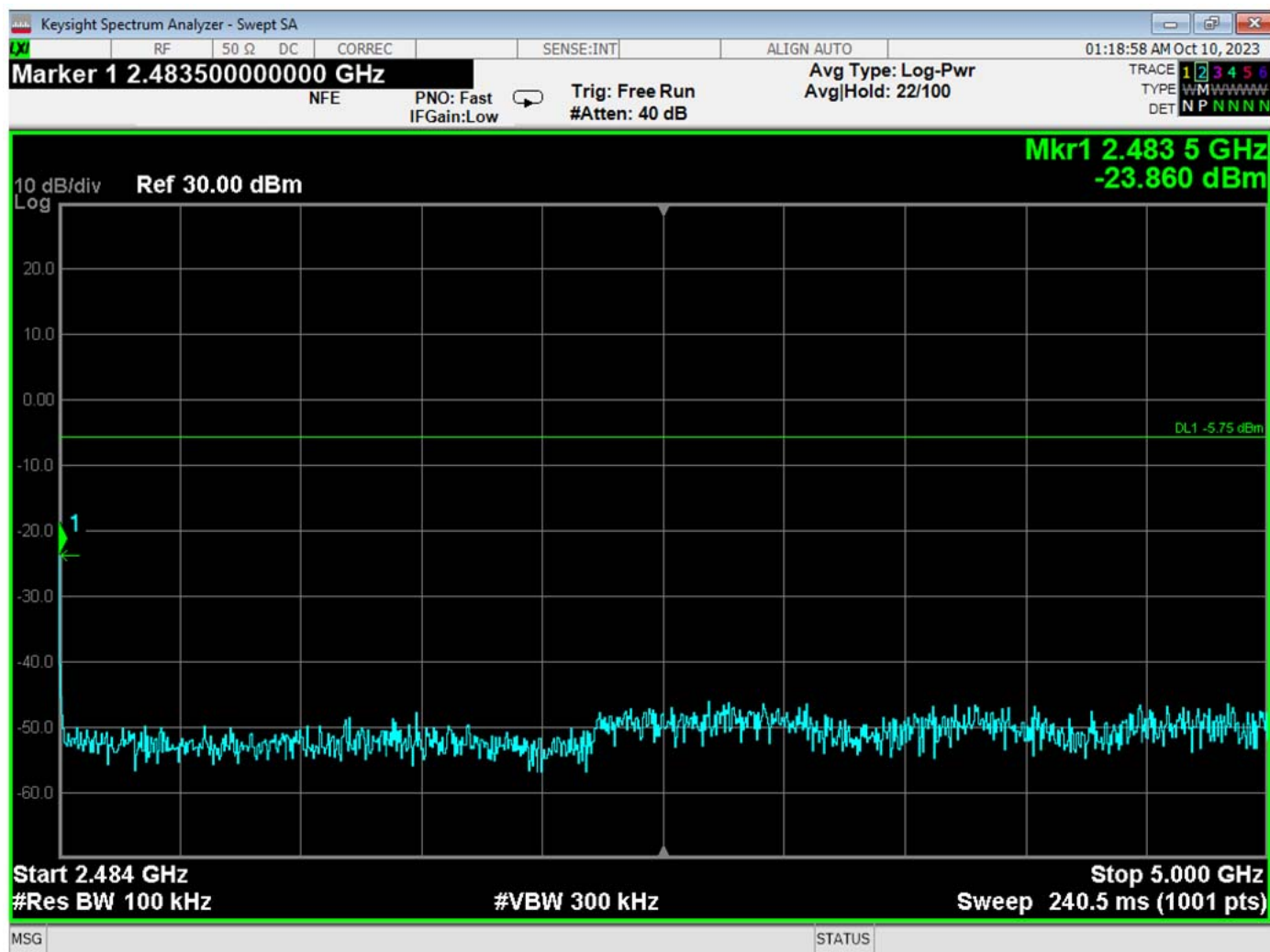
RF Antenna Conducted – High Channel – Reference Level



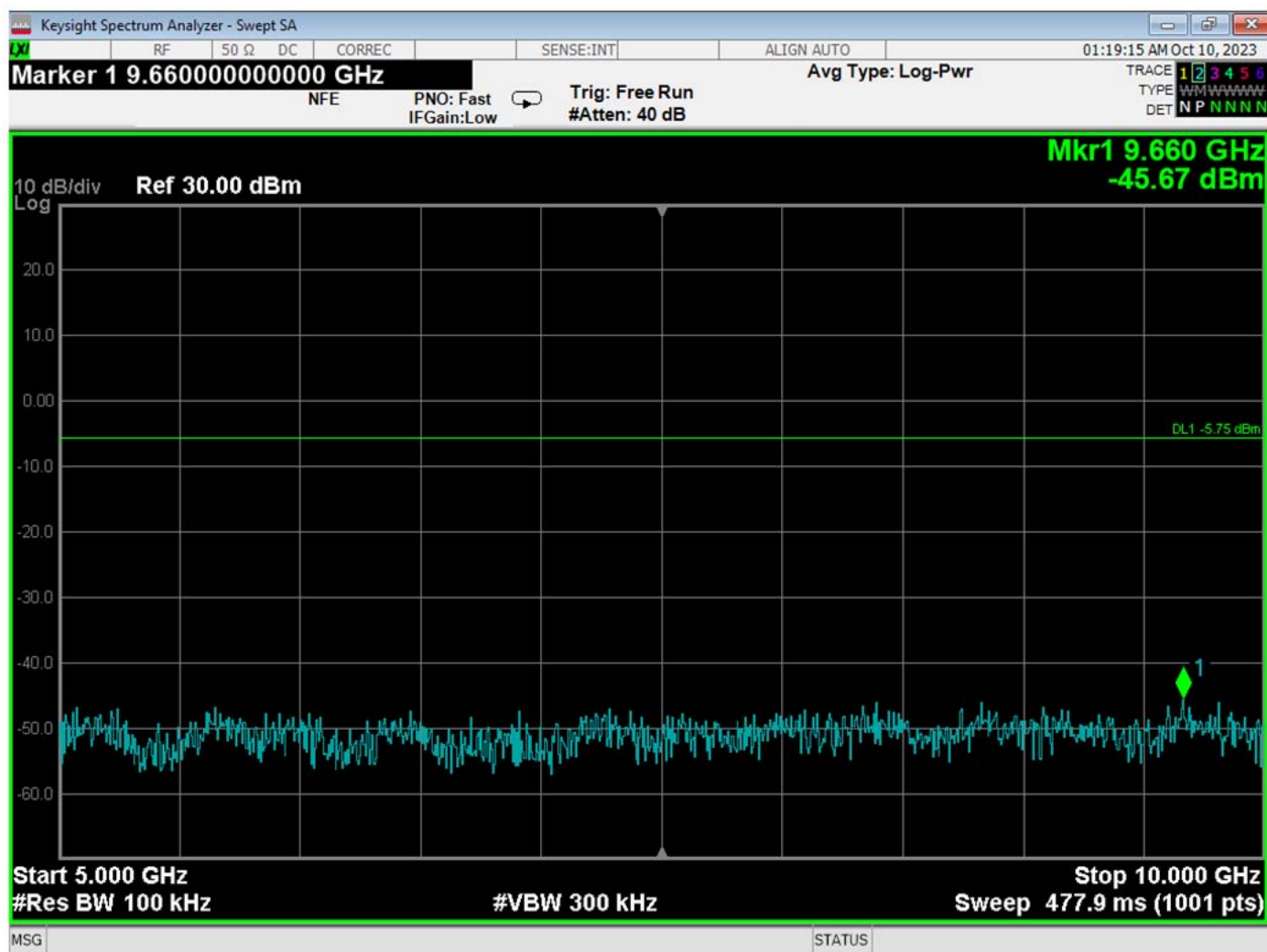
RF Antenna Conducted – High Channel – 30 MHz to 1 GHz



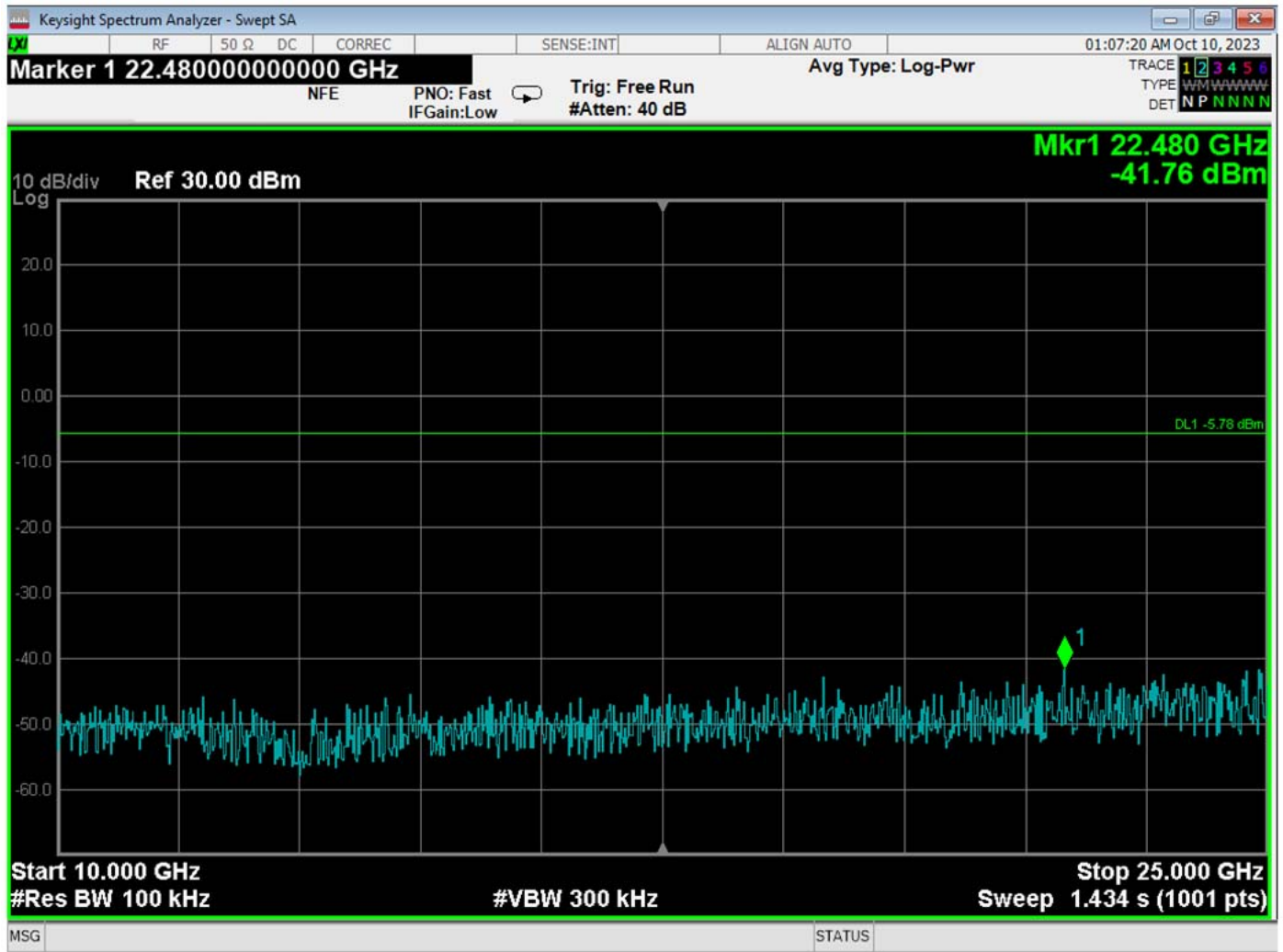
RF Antenna Conducted – High Channel – 1 GHz to 2.4 GHz



RF Antenna Conducted – High Channel – 2.4835 GHz to 5 GHz



RF Antenna Conducted – High Channel – 5 GHz to 10 GHz



RF Antenna Conducted – High Channel – 10 GHz to 25 GHz

VIVINT, INC.

ZIGBEE THERMOSTAT

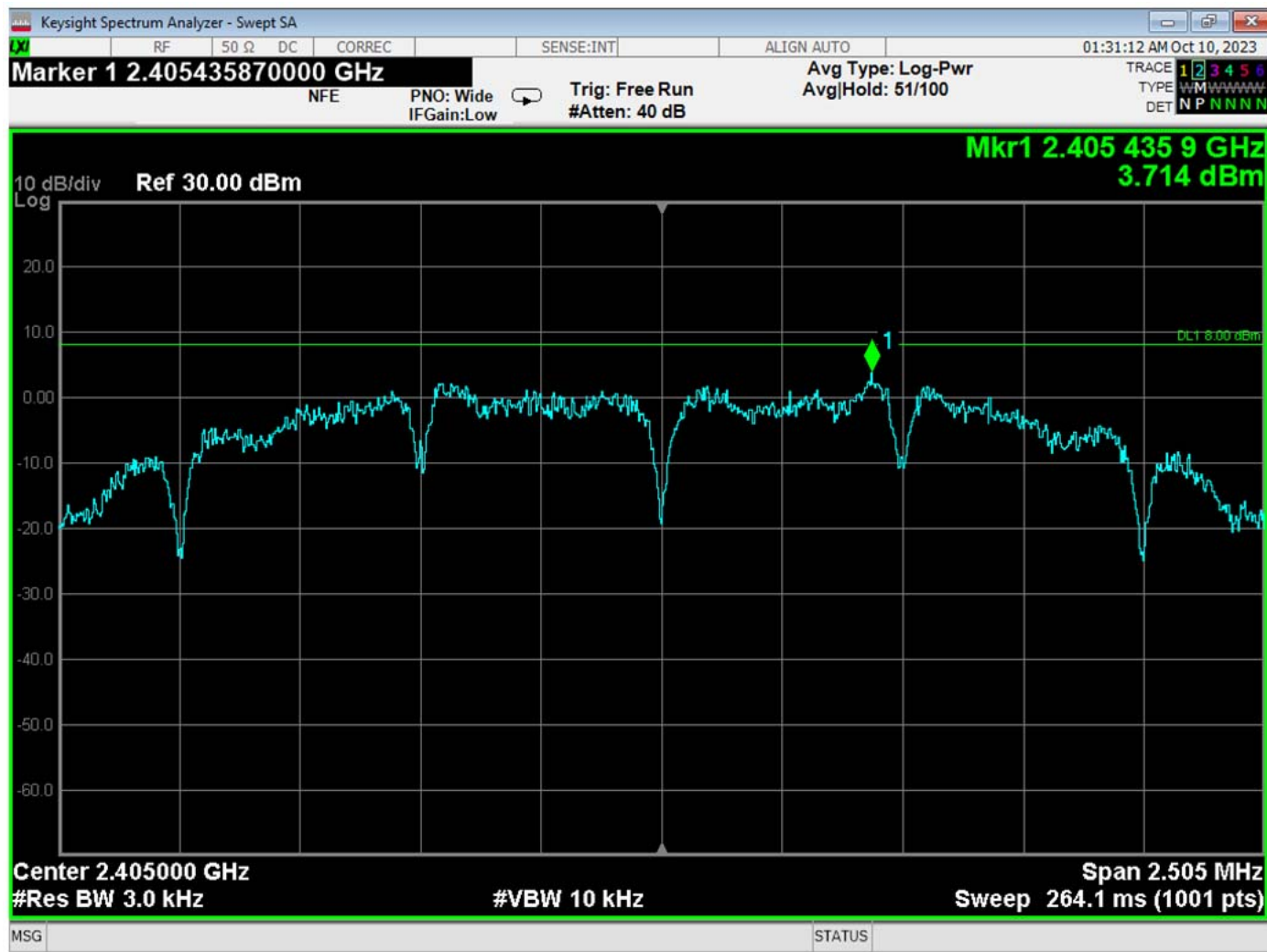
MODEL: TH03

EMISSIONS IN NON-RESTRICTED BANDS

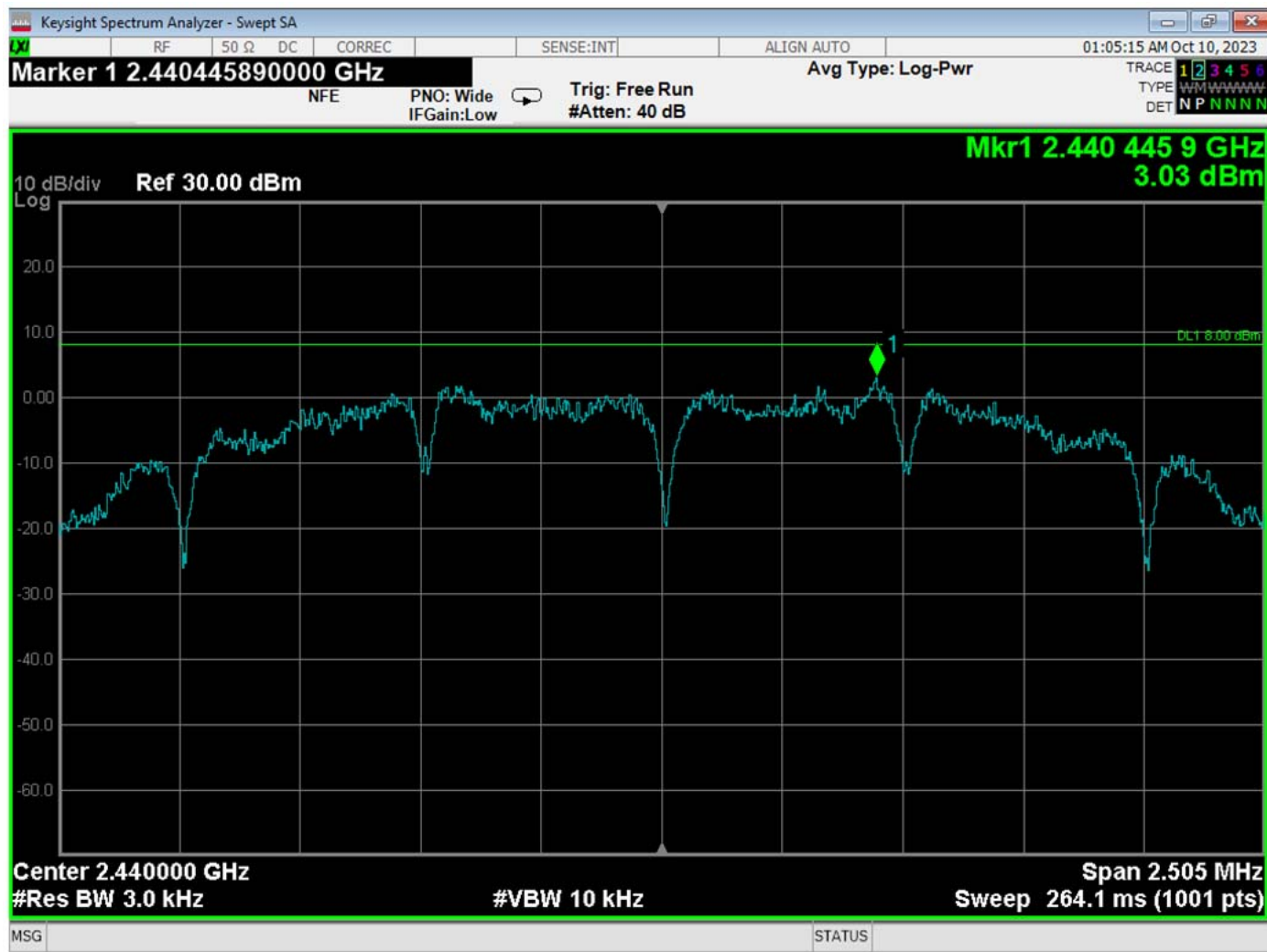
FREQUENCY (MHz)	LEVEL (dBm)	Limit* (dBm)	Margin (dB)
2391.60	-49.47	-5.78	-43.69
2400.00	-39.108	-5.21	-33.898
9660.00	-45.67	-5.75	-39.92



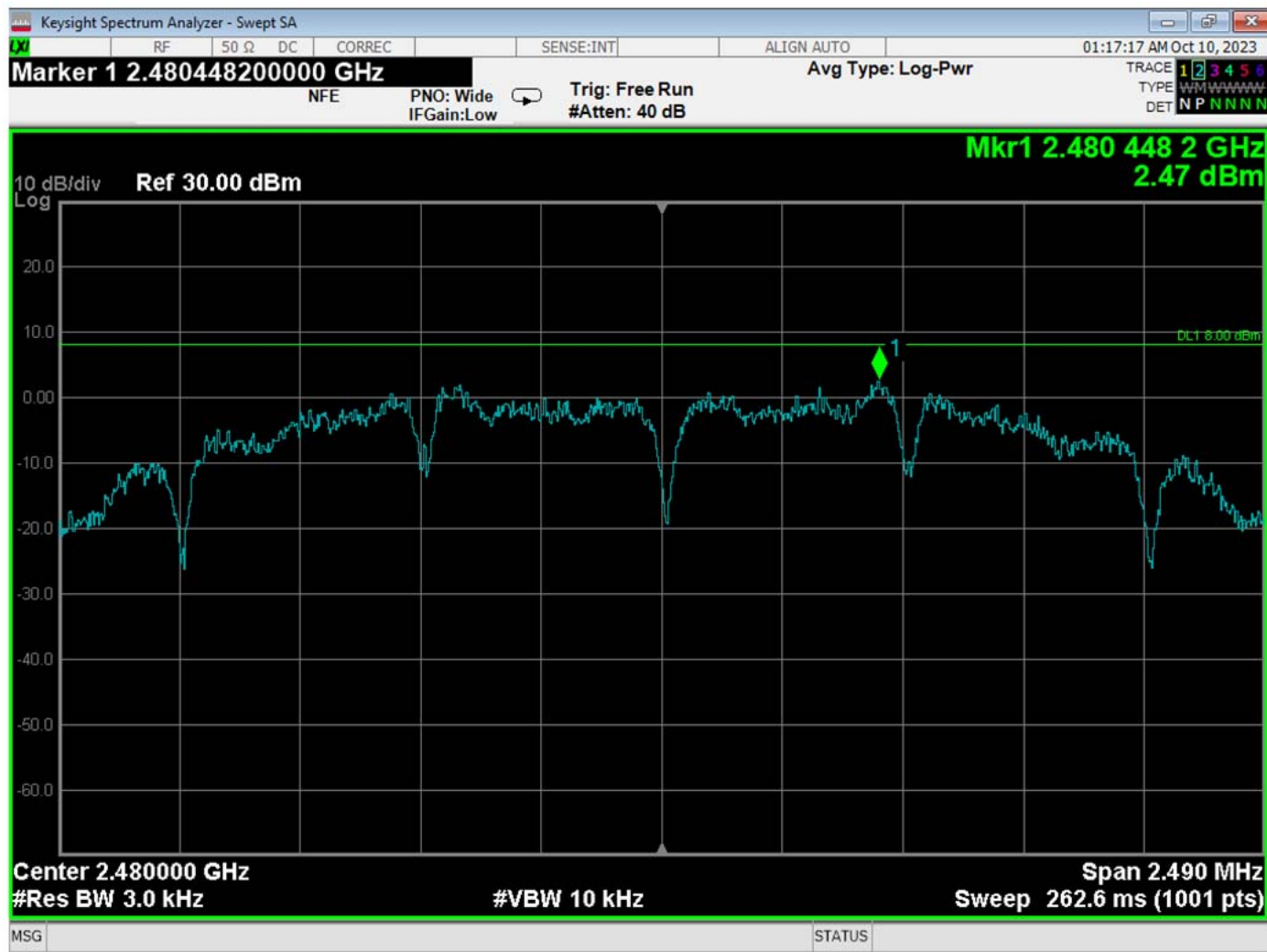
PEAK POWER SPECTRAL DENSITY DATA SHEETS



Peak Power Spectral Density – Low Channel



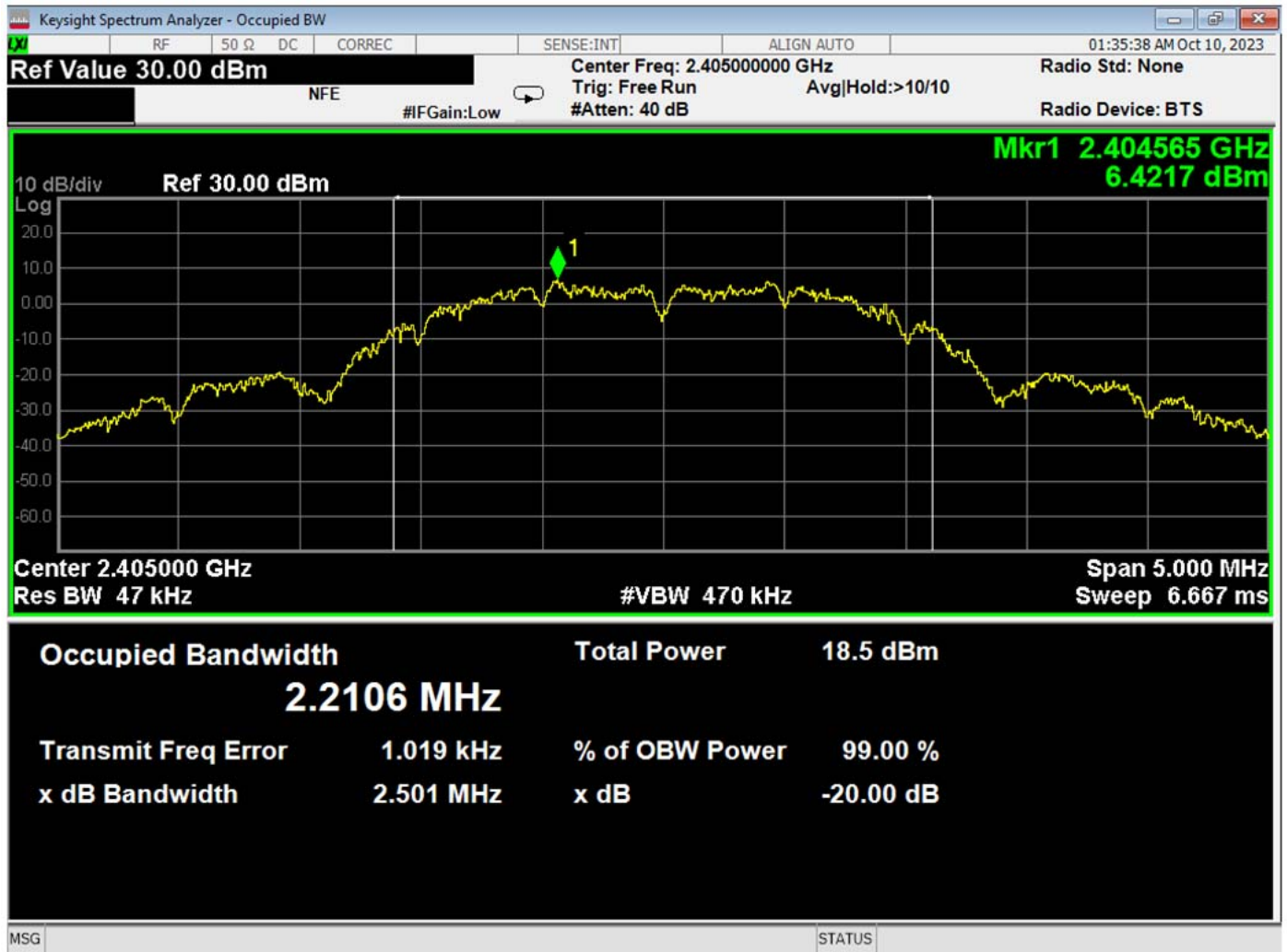
Peak Power Spectral Density – Middle Channel



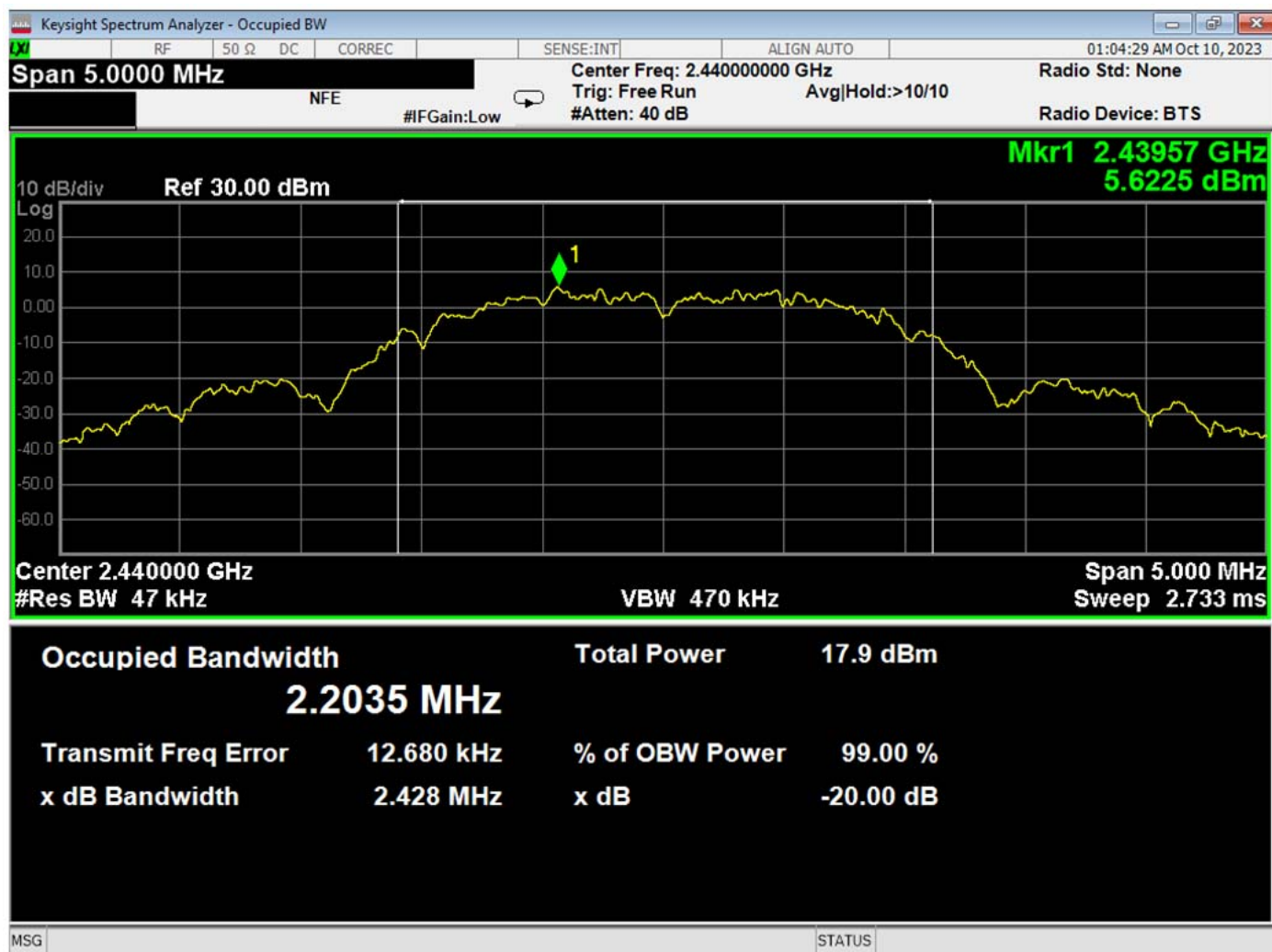
Peak Power Spectral Density – High Channel



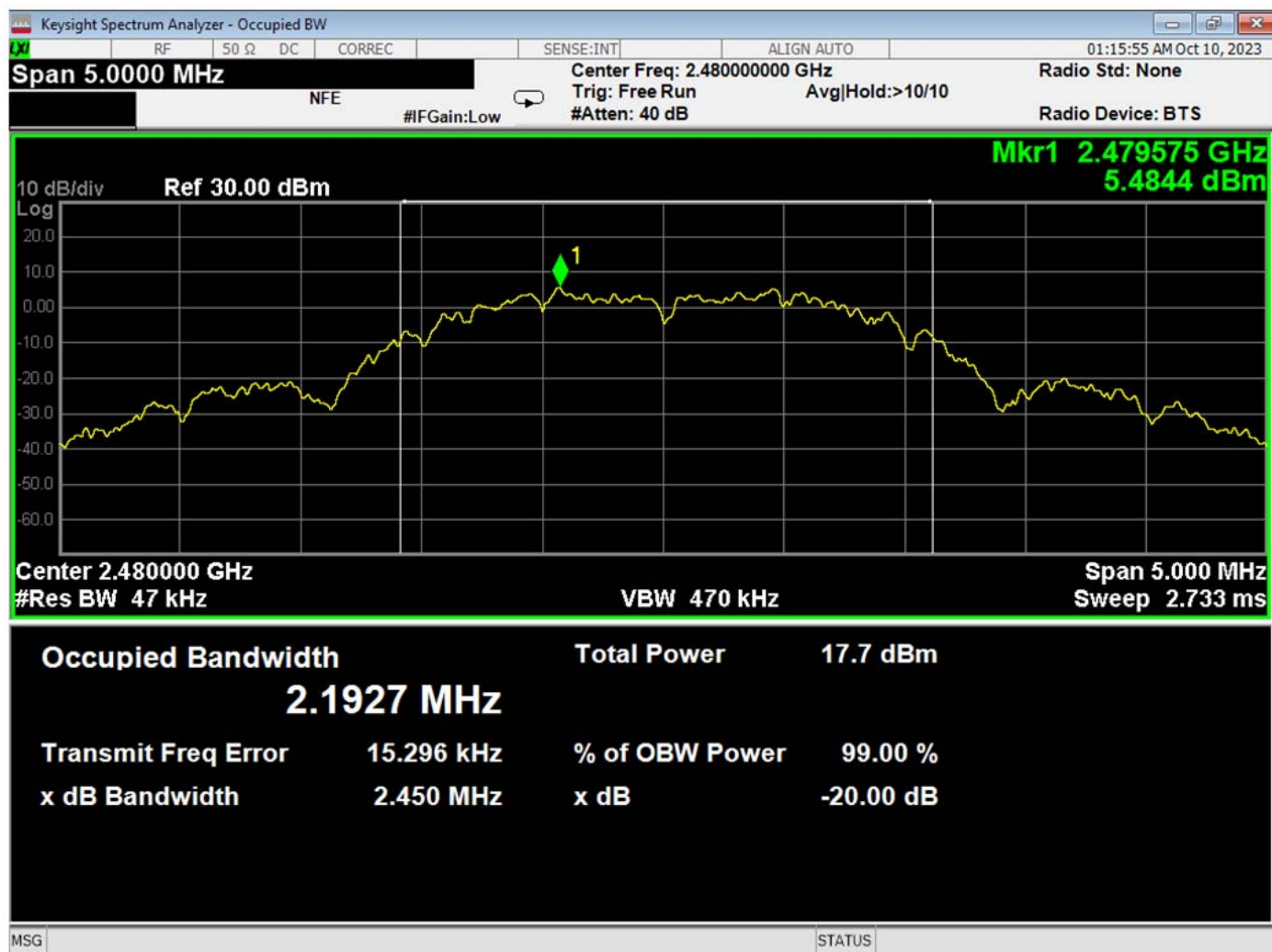
**99% BANDWIDTH
DATA SHEETS**



99% Bandwidth Plot – Low Channel



99% Bandwidth Plot – Middle Channel

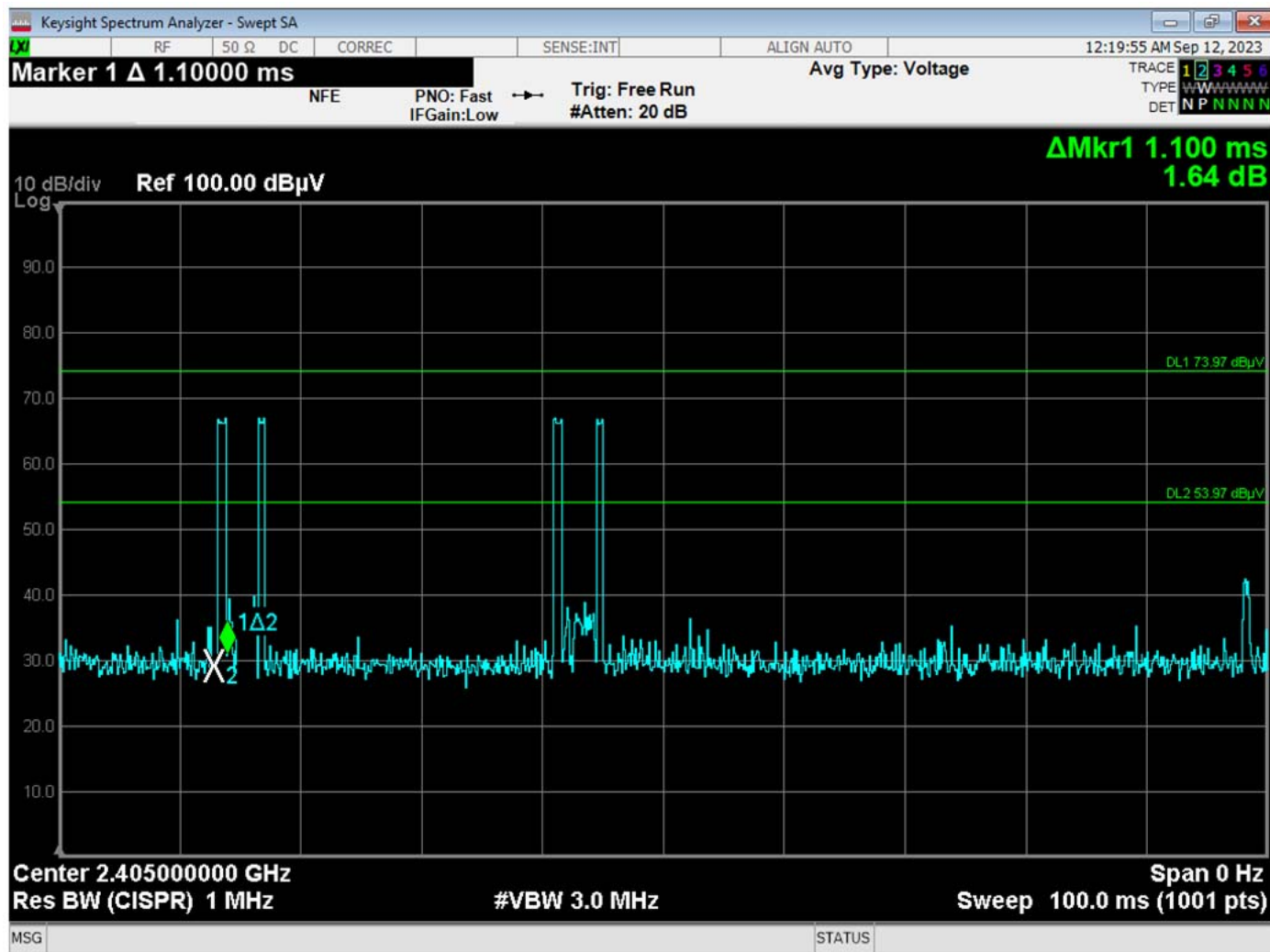


99% Bandwidth Plot – High Channel

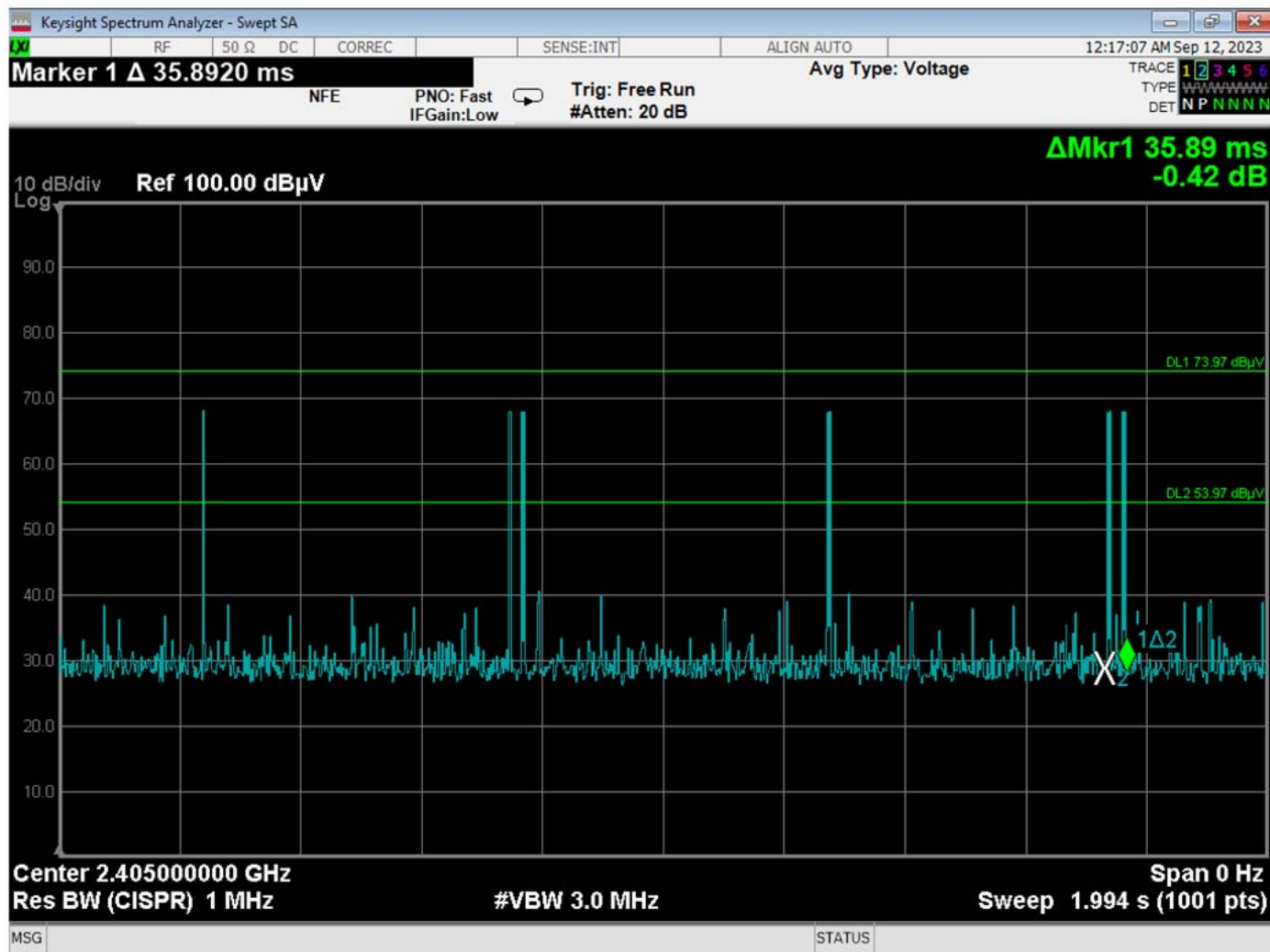


DUTY CYCLE

DATA SHEETS



Time of one pulse – 1.1 ms



Worst case of Pulse Train Repeating = 35.89 ms

Duty Cycle = 4.4 ms / 35.89 ms = 12.26%

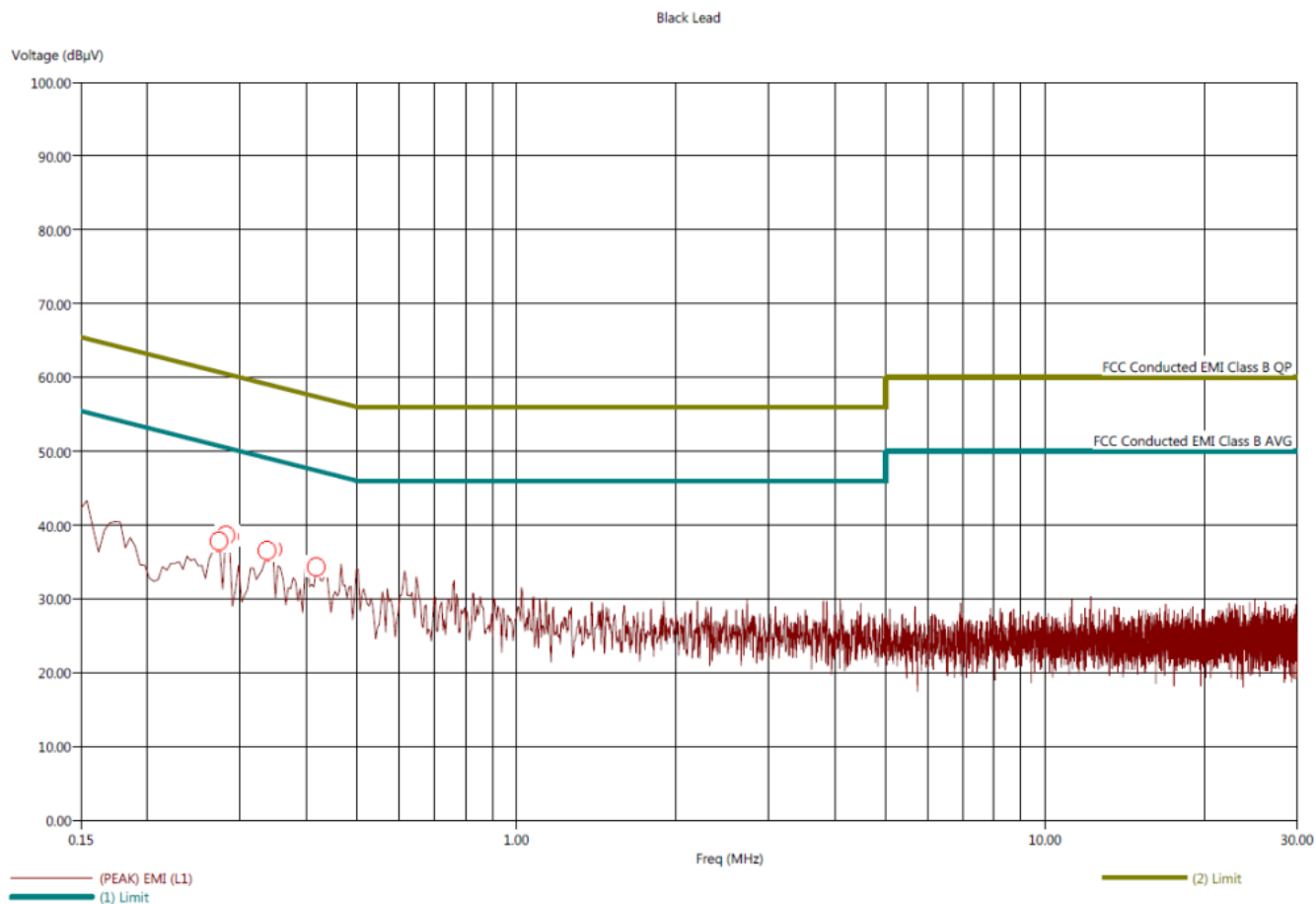
A Peak to Average Ratio of -18.23 dB can be used.



***CONDCUTED EMISSIONS
DATA SHEETS***

Title: Pre-Scan - FCC Class B - Black Lead
File: 1 - BL - Pre-Scan - 2405 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2405 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B1

12/6/2023 2:23:41 PM
Sequence: Preliminary Scan



Title: Final Scan - FCC Class B - Black Lead
File: 1 - BL - Final Scan - 2405 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2405 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B1

12/6/2023 2:25:07 PM
Sequence: Final Measurements

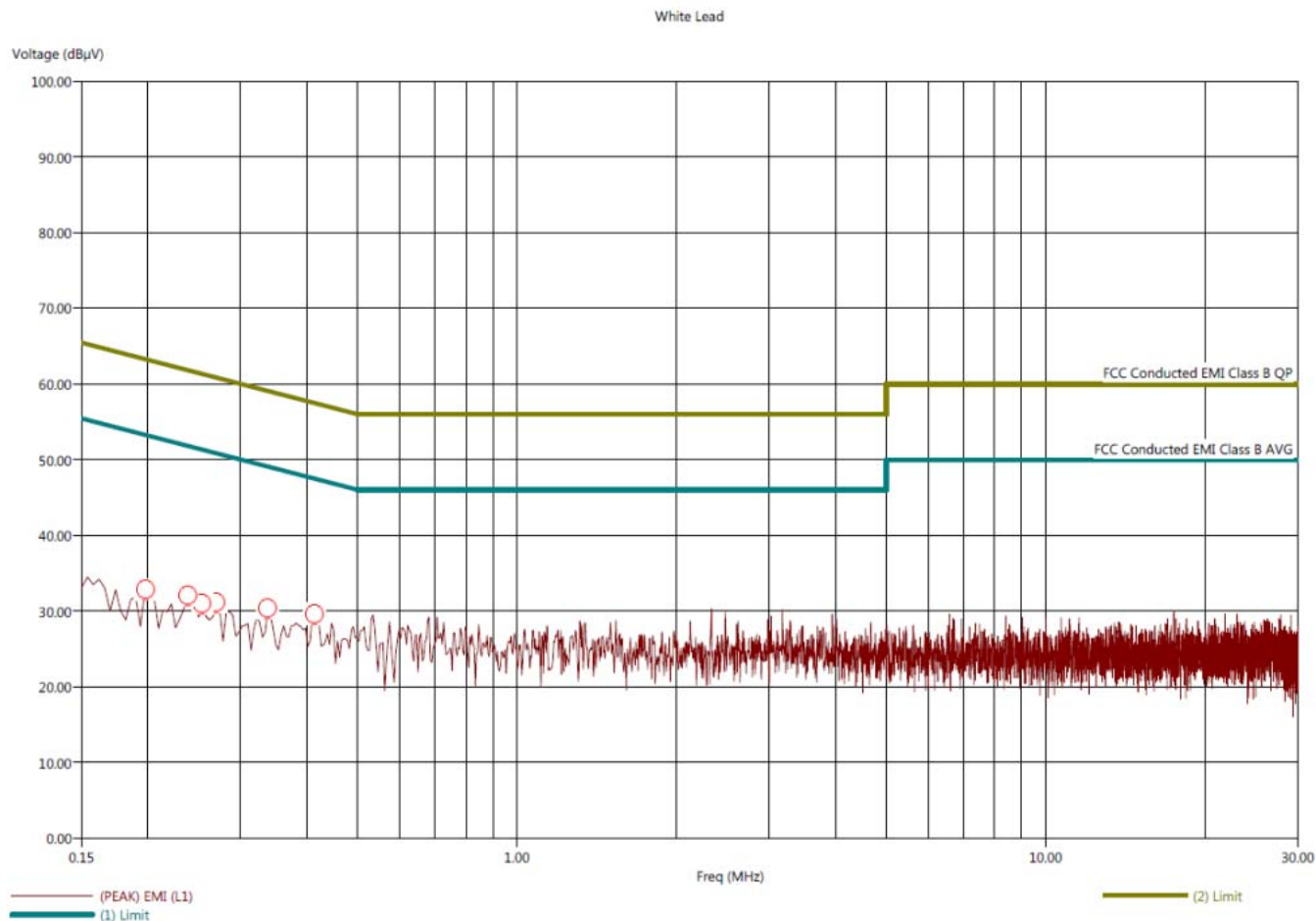
Black Lead - Average

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.274	40.43	28.46	-10.58	-22.55	51.00	0.32	0.05	10.10
0.282	39.34	27.73	-11.01	-22.62	50.35	0.33	0.04	10.10
0.286	40.73	27.66	-9.55	-22.62	50.28	0.33	0.04	10.10
0.338	38.99	26.24	-9.97	-22.72	48.97	0.36	0.04	10.10
0.346	40.54	26.45	-8.51	-22.60	49.05	0.35	0.04	10.10
0.418	36.76	24.54	-10.54	-22.76	47.30	0.39	0.03	10.10



Title: Pre-Scan - FCC Class B - White Lead
File: 1 - WL - Pre-Scan - 2405 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2405 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B1

12/6/2023 2:38:03 PM
Sequence: Preliminary Scan



Title: Final Scan - FCC Class B - White Lead
File: 1 - WL - Final Scan - 2405 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2405 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B1

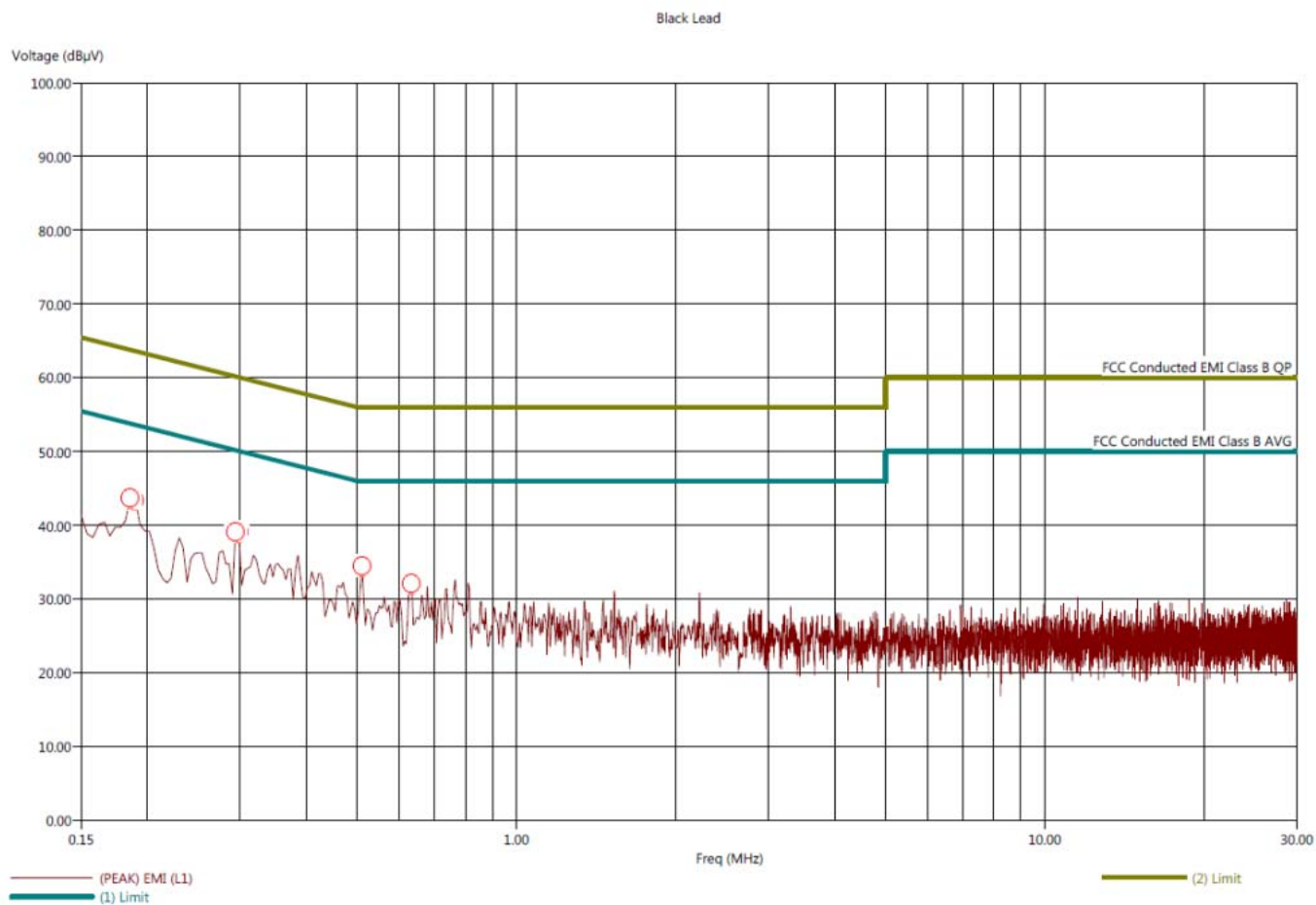
12/6/2023 2:39:22 PM
Sequence: Final Measurements

White Lead - Average									
Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)	
0.198	28.06	16.60	-25.42	-36.88	53.48	0.28	0.06	10.10	
0.238	29.68	16.68	-22.09	-35.09	51.77	0.31	0.06	10.10	
0.254	31.21	16.75	-19.95	-34.41	51.16	0.32	0.05	10.10	
0.270	29.69	15.79	-21.25	-35.15	50.95	0.32	0.05	10.10	
0.338	26.14	13.74	-22.79	-35.19	48.94	0.36	0.05	10.10	
0.414	25.25	13.11	-22.44	-34.58	47.70	0.38	0.04	10.10	



Title: Pre-Scan - FCC Class B - Black Lead
File: 1 - BL - Pre-Scan - 2440 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2440 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B2

12/6/2023 2:12:40 PM
Sequence: Preliminary Scan





Title: Final Scan - FCC Class B - Black Lead
File: 1 - BL - Final Scan - 2440 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2440 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B2

12/6/2023 2:13:47 PM
Sequence: Final Measurements

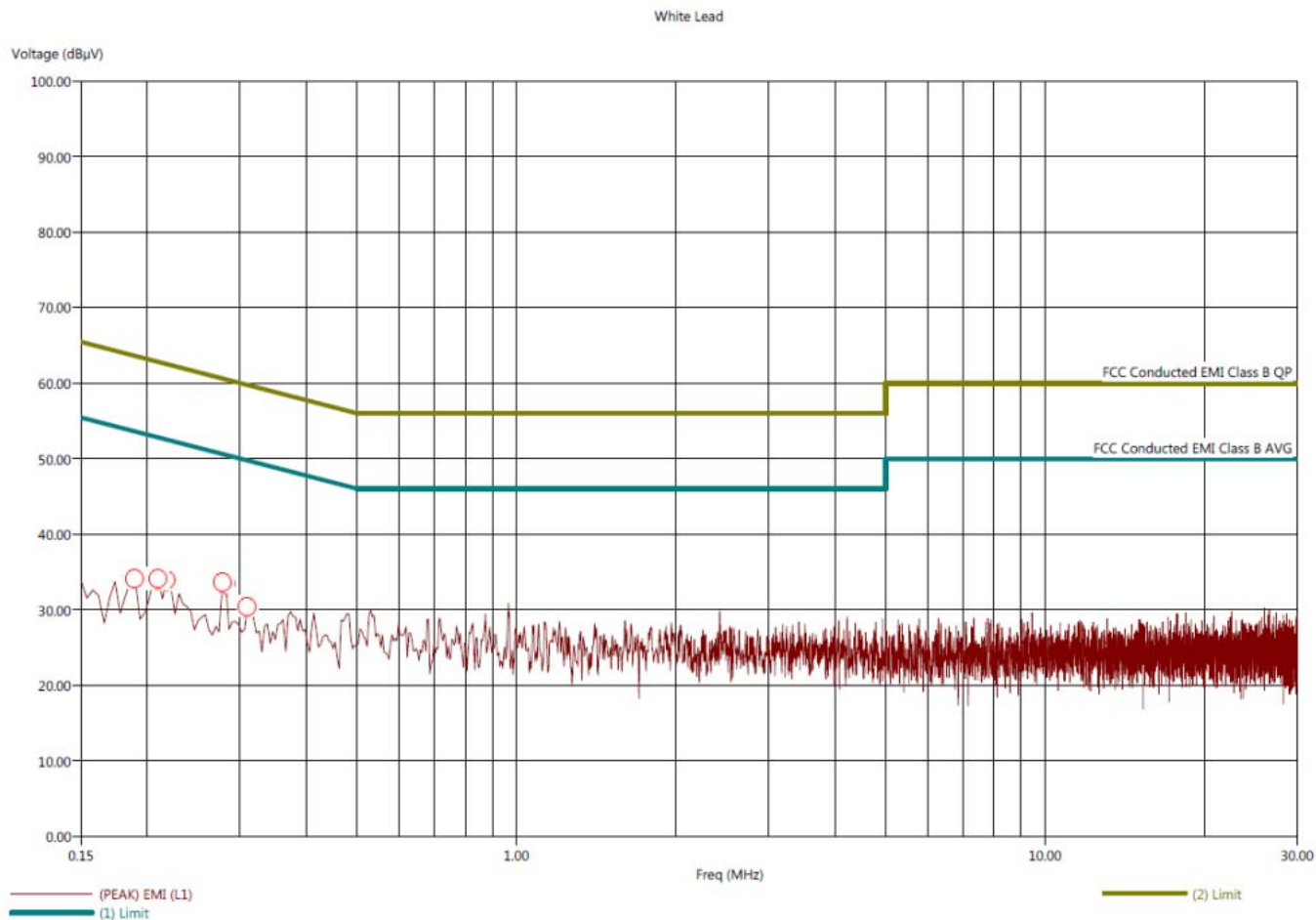
Black Lead - Average

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.186	45.61	31.53	-8.12	-22.20	53.72	0.28	0.07	10.10
0.190	45.68	31.18	-7.66	-22.16	53.34	0.28	0.06	10.10
0.294	45.56	27.73	-4.70	-22.53	50.26	0.33	0.04	10.10
0.298	42.15	27.35	-7.99	-22.79	50.13	0.34	0.04	10.10
0.510	38.16	23.59	-7.84	-22.41	46.00	0.41	0.03	10.10
0.634	35.64	21.40	-10.36	-24.60	46.00	0.38	0.03	10.10



Title: Pre-Scan - FCC Class B - White Lead
File: 1 - WL - Pre-Scan - 2440 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2440 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B2

12/6/2023 2:17:59 PM
Sequence: Preliminary Scan



Title: Final Scan - FCC Class B - White Lead
File: 1 - WL - Final Scan - 2440 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2440 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B2

12/6/2023 2:19:17 PM
Sequence: Final Measurements

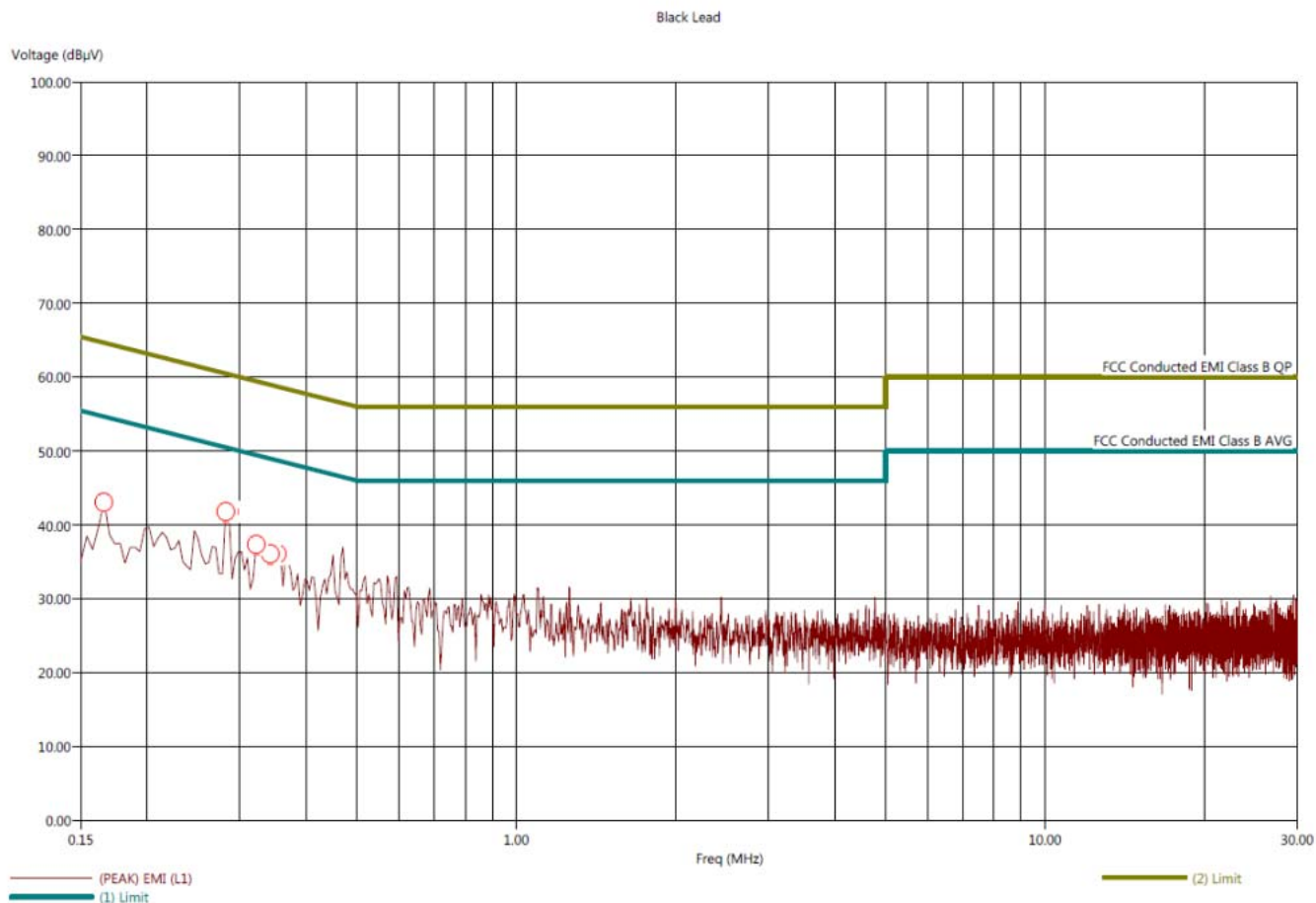
White Lead - Average

Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.190	28.41	16.48	-25.73	-37.66	54.14	0.28	0.07	10.10
0.210	27.23	16.85	-26.15	-36.53	53.38	0.28	0.06	10.10
0.218	29.23	18.39	-23.06	-33.90	52.30	0.30	0.06	10.10
0.278	27.40	16.44	-23.18	-34.14	50.58	0.33	0.05	10.10
0.282	27.08	16.34	-23.50	-34.24	50.58	0.33	0.05	10.10
0.310	23.98	13.37	-25.87	-36.48	49.85	0.34	0.05	10.10



Title: Pre-Scan - FCC Class B - Black Lead
File: 1 - BL - Pre-Scan - 2480 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2480 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B3

12/6/2023 2:44:43 PM
Sequence: Preliminary Scan



Title: Final Scan - FCC Class B - Black Lead
File: 1 - BL - Final Scan - 2480 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2480 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B3

12/6/2023 2:46:18 PM
Sequence: Final Measurements

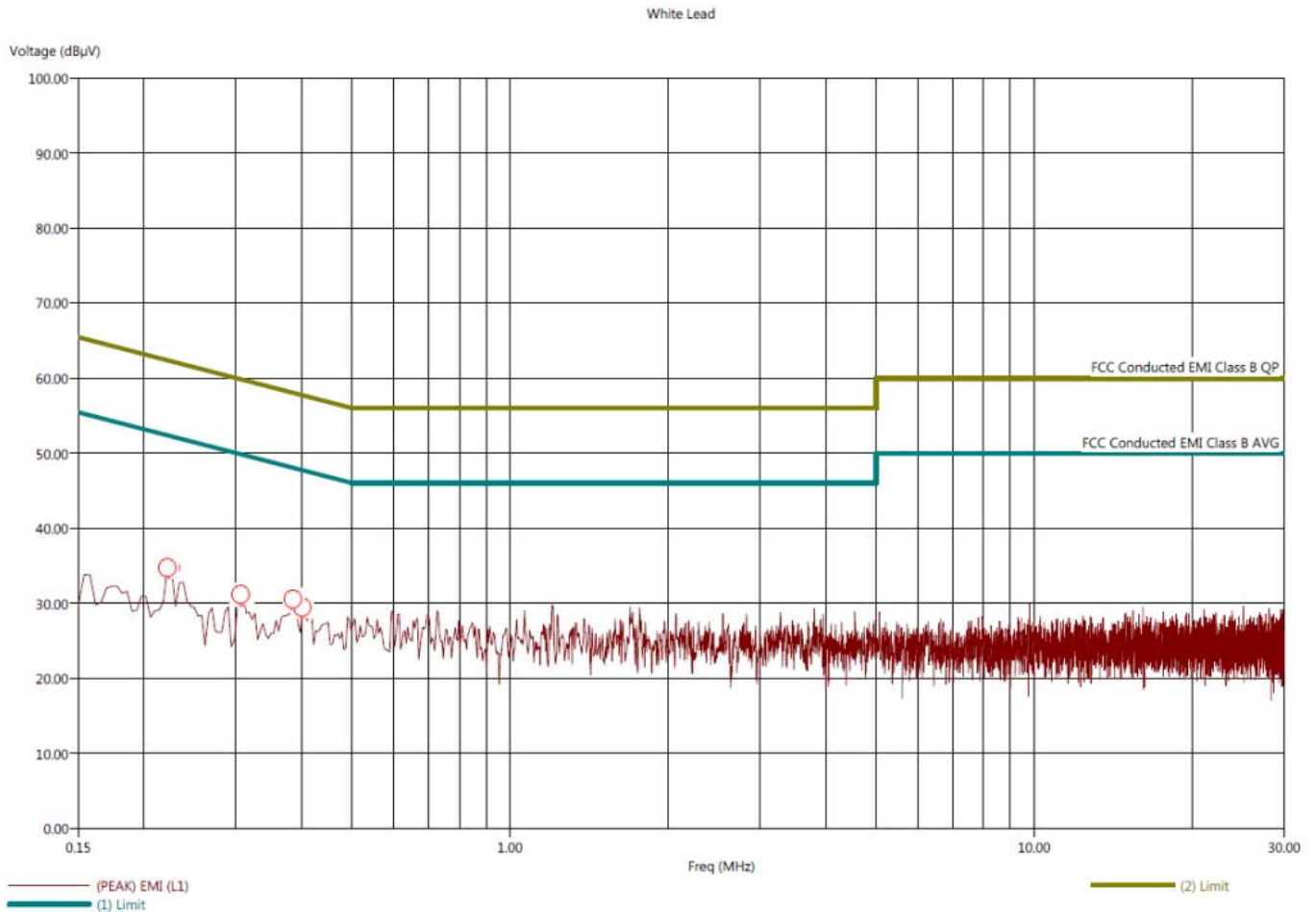
Black Lead - Average

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.166	46.31	32.49	-8.08	-21.90	54.38	0.28	0.08	10.10
0.282	41.82	27.60	-8.52	-22.74	50.35	0.33	0.04	10.10
0.286	40.80	27.95	-9.76	-22.61	50.56	0.33	0.04	10.10
0.322	39.70	26.52	-9.54	-22.72	49.24	0.35	0.04	10.10
0.342	39.37	26.37	-9.80	-22.80	49.17	0.35	0.04	10.10
0.354	39.85	26.36	-8.97	-22.46	48.82	0.36	0.04	10.10



Title: Pre-Scan - FCC Class B - White Lead
File: 1 - WL - Pre-Scan - 2480 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2480 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B3

12/6/2023 2:51:07 PM
Sequence: Preliminary Scan



Title: Final Scan - FCC Class B - White Lead
File: 1 - WL - Final Scan - 2480 MHz - 12-05-2023.set
Operator: Kyle Fujimoto
EUT Type: ZigBee Thermostat
EUT Condition: The EUT is continuously transmitting at 2480 MHz
Company: Vivint, Inc.
M/N: TH03
S/N: B3

12/6/2023 2:52:51 PM
Sequence: Final Measurements

White Lead - Average

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.222	28.31	17.03	-24.18	-35.46	52.49	0.29	0.06	10.10
0.226	27.81	16.15	-24.36	-36.02	52.16	0.30	0.06	10.10
0.306	27.18	16.48	-22.99	-33.69	50.17	0.33	0.05	10.10
0.310	23.88	13.30	-25.89	-36.47	49.77	0.34	0.05	10.10
0.386	25.30	13.86	-22.86	-34.30	48.16	0.37	0.05	10.10
0.402	22.43	12.46	-25.47	-35.44	47.90	0.38	0.04	10.10

