

Figure 65 Fundamental: 5.935 GHz ,20 MHz, band 4

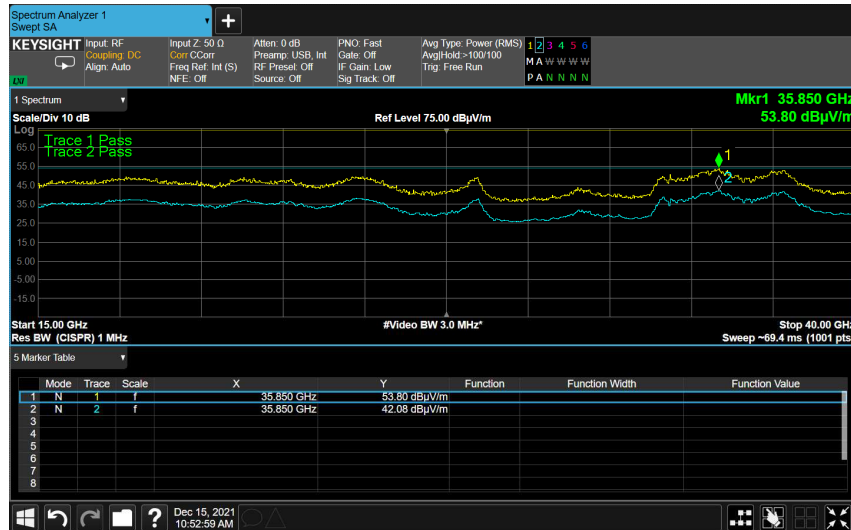


Figure 66 Fundamental: 5.935 GHz ,20 MHz, band 5

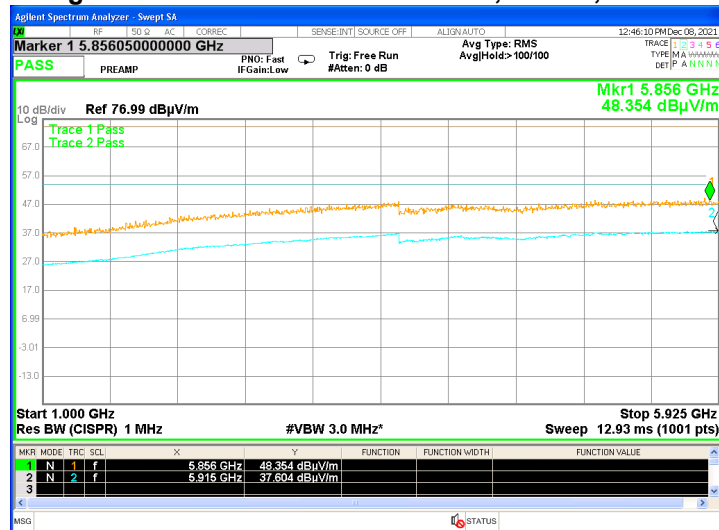


Figure 67 Fundamental: 6.175GHz ,20 MHz, band 1

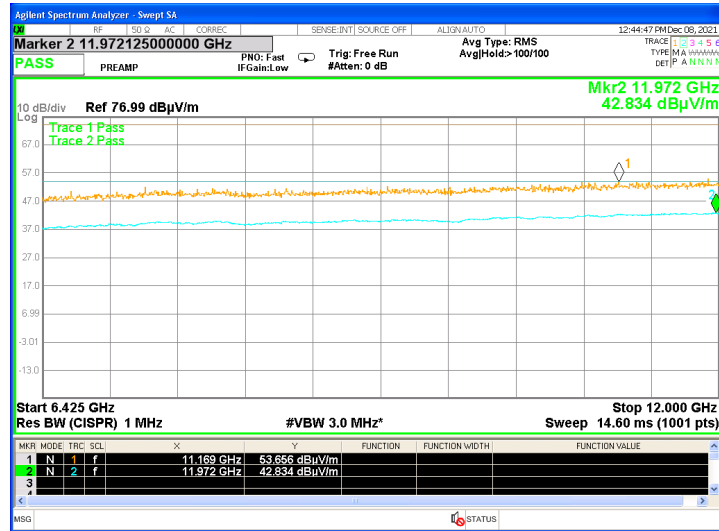


Figure 68 Fundamental: 6.175GHz ,20 MHz, band 2

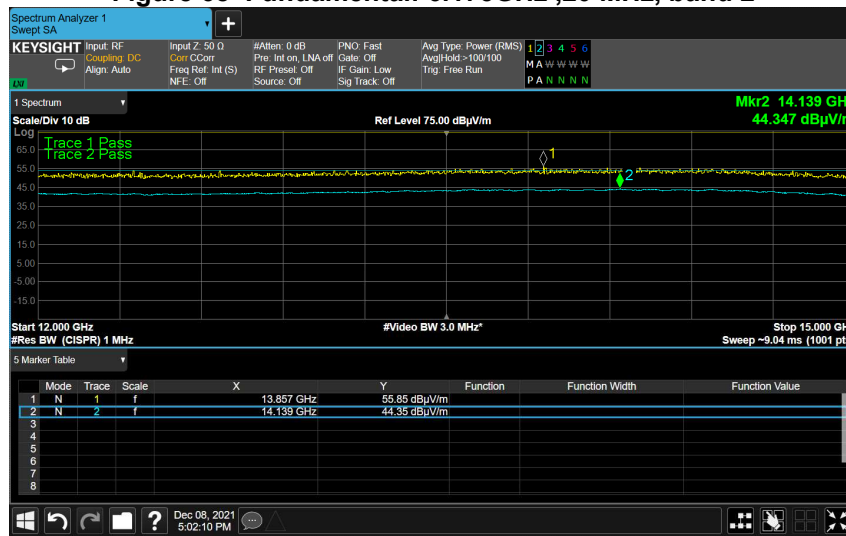


Figure 69 Fundamental: 6.175GHz ,20 MHz, band 3

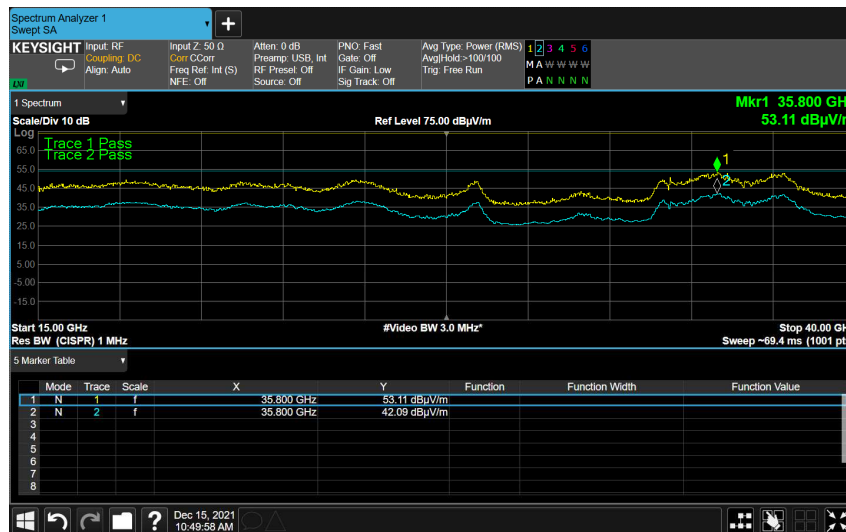


Figure 70 Fundamental: 6.175GHz ,20 MHz, band4



Figure 71 Fundamental: 6.415GHz ,20 MHz, band 1

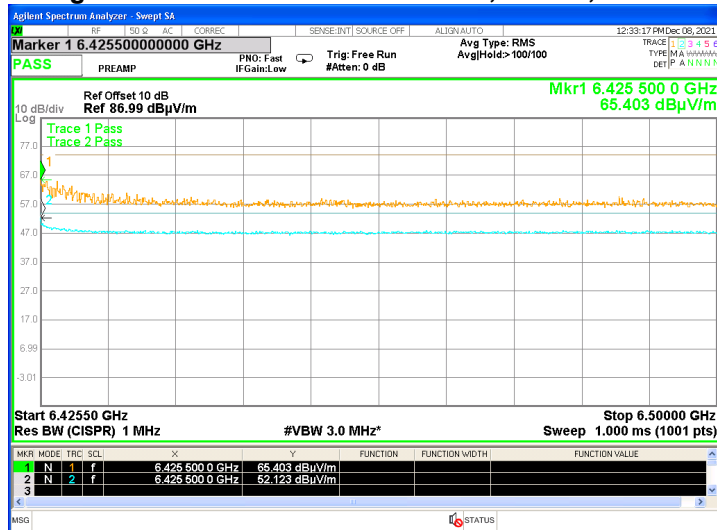


Figure 72 Fundamental: 6.415GHz ,20 MHz, band 2

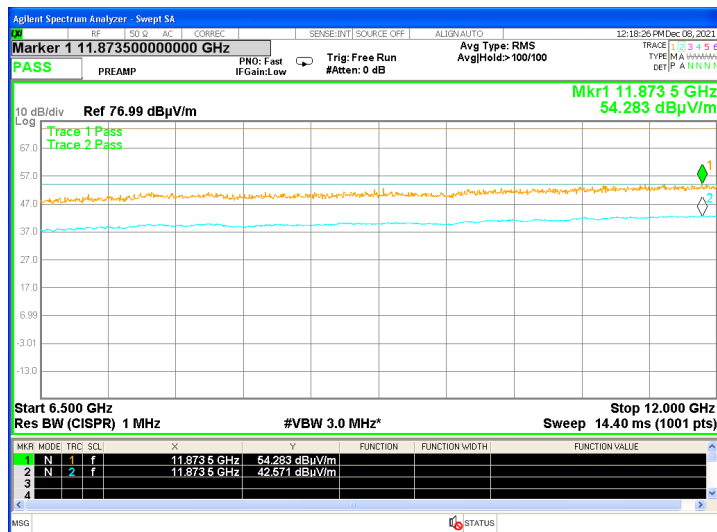


Figure 73 Fundamental: 6.415GHz ,20 MHz, band 3

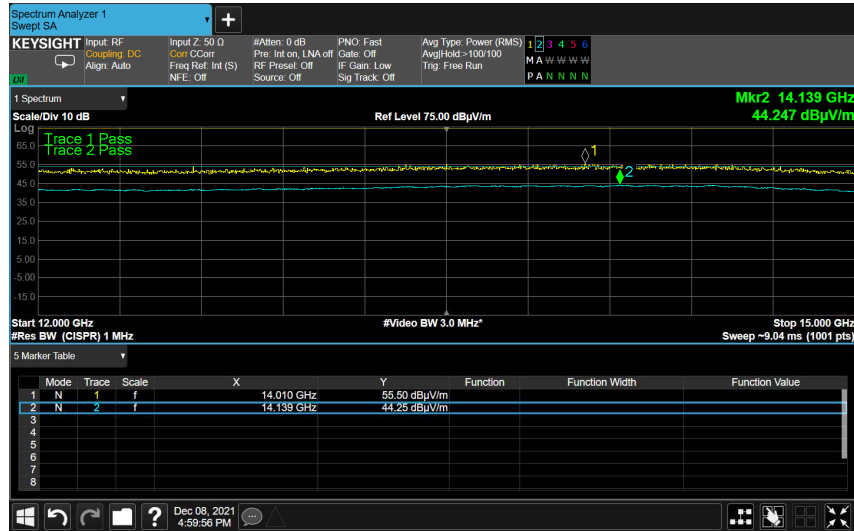


Figure 74 Fundamental: 6.415GHz ,20 MHz, band 4

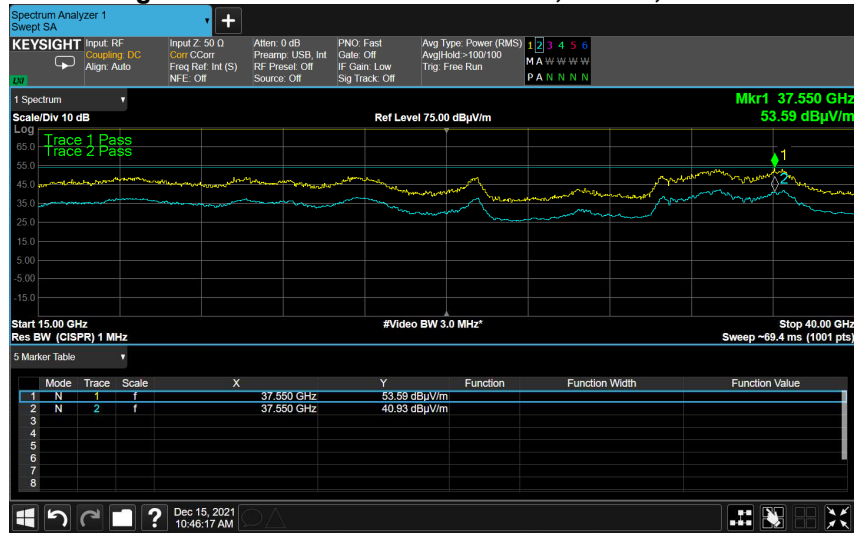


Figure 75 Fundamental: 6.415GHz ,20 MHz, band 5

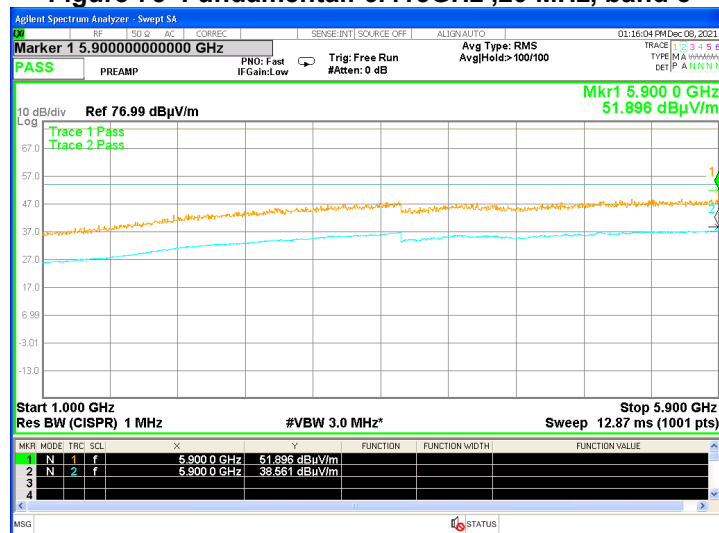


Figure 76 Fundamental: 5.945GHz ,40 MHz, band 1

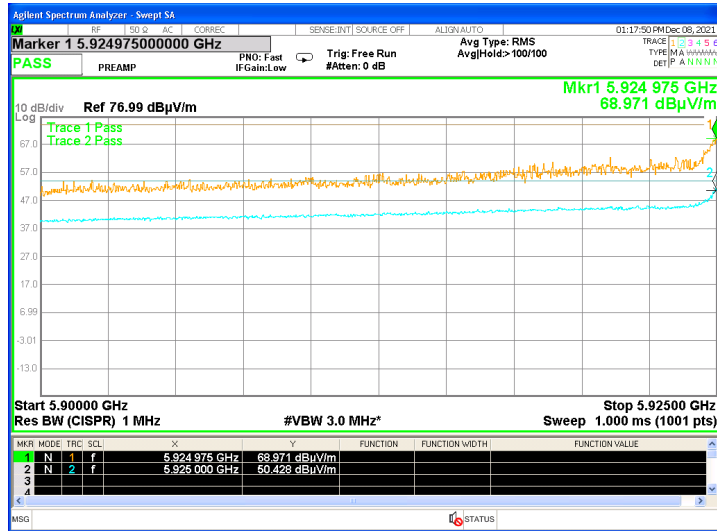


Figure 77 Fundamental: 5.945GHz ,40 MHz, band 2

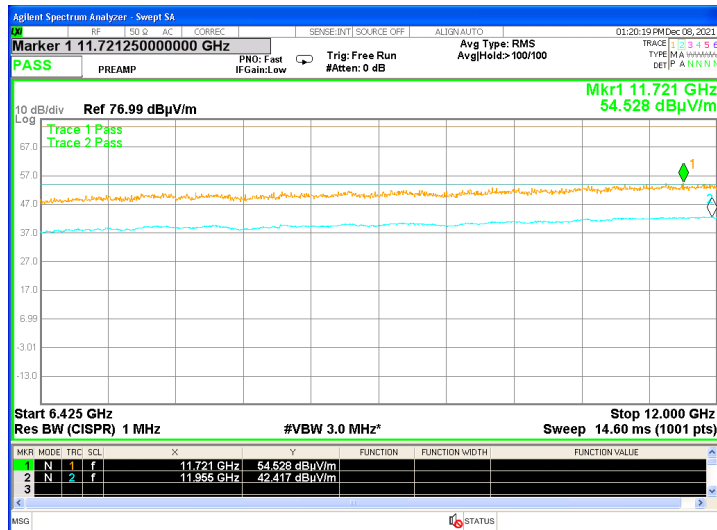


Figure 78 Fundamental: 5.945GHz ,40 MHz, band 3

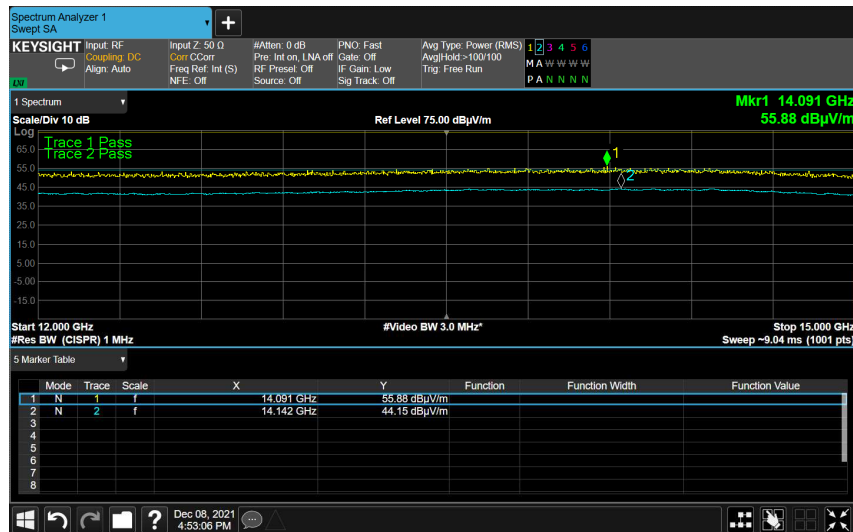


Figure 79 Fundamental: 5.945GHz ,40 MHz, band 4

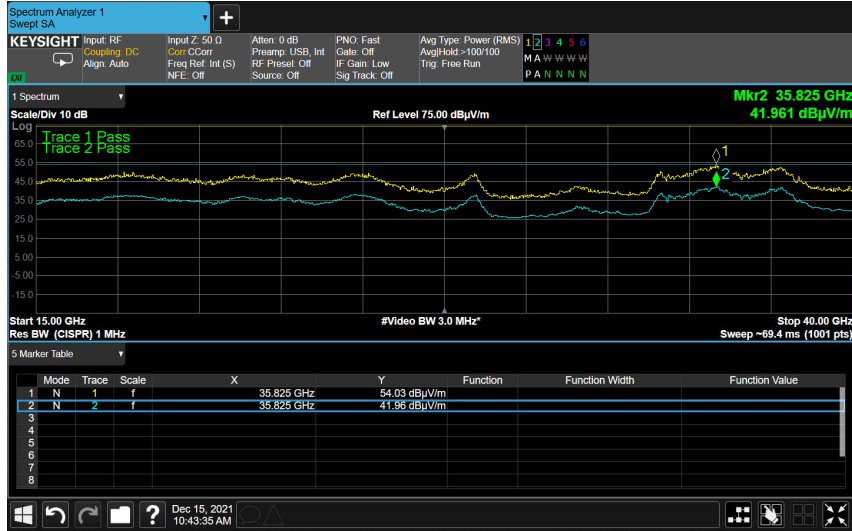


Figure 80 Fundamental: 5.945GHz ,40 MHz, band 4

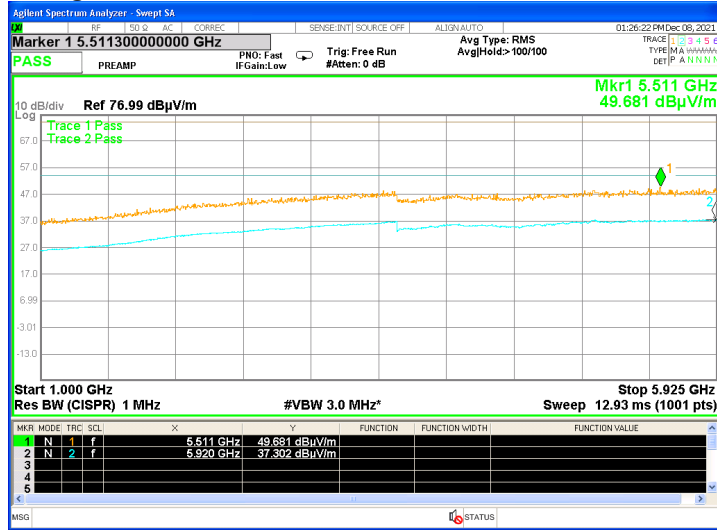


Figure 81 Fundamental: 6.185GHz ,40 MHz, band 1

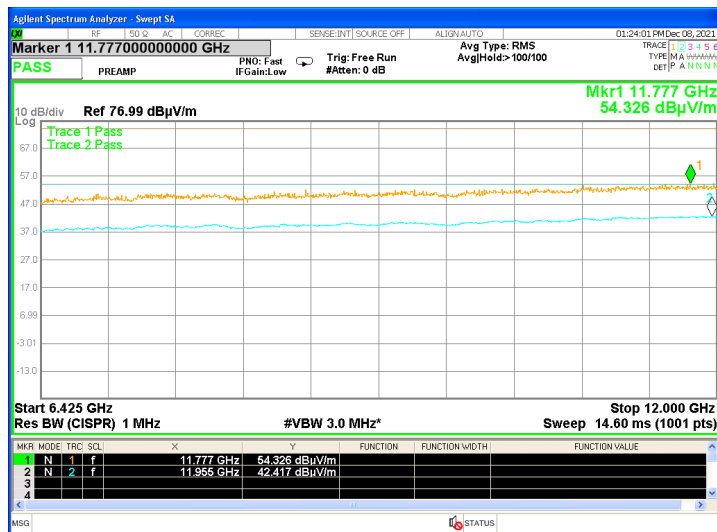


Figure 82 Fundamental: 6.185GHz ,40 MHz, band 2

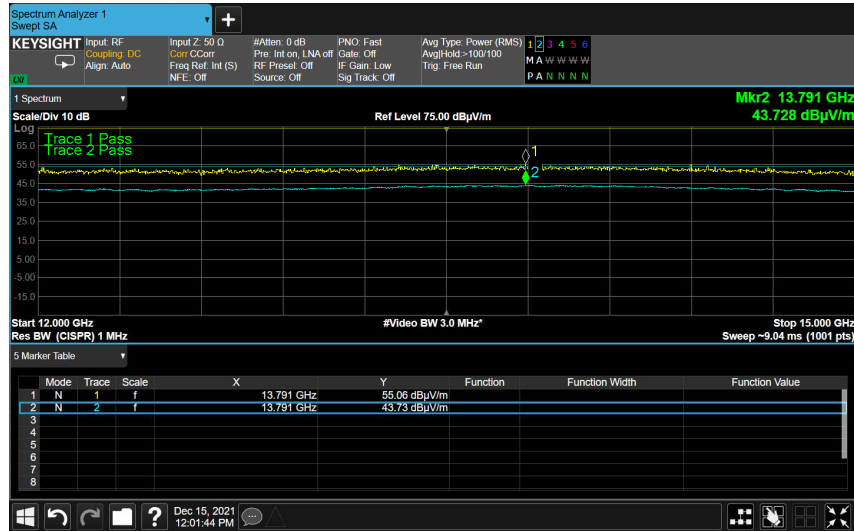


Figure 83 Fundamental: 6.185GHz ,40 MHz, band 3

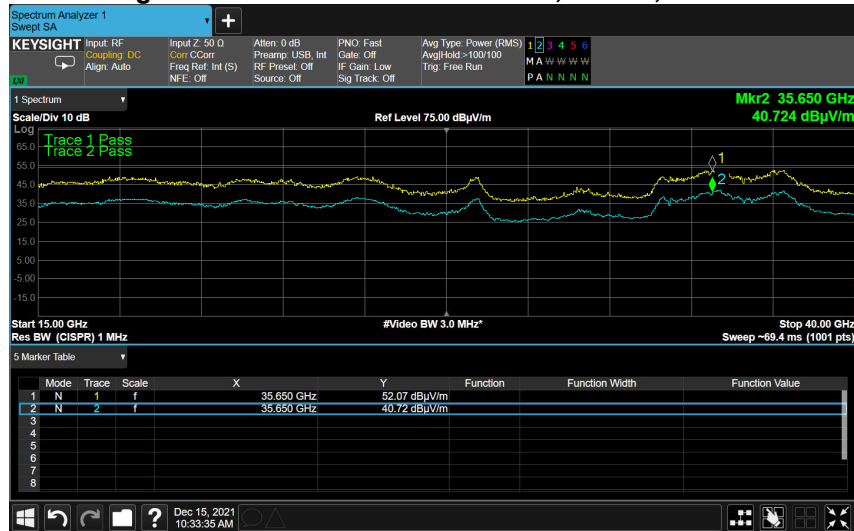


Figure 84 Fundamental: 6.185GHz ,40 MHz, band 4

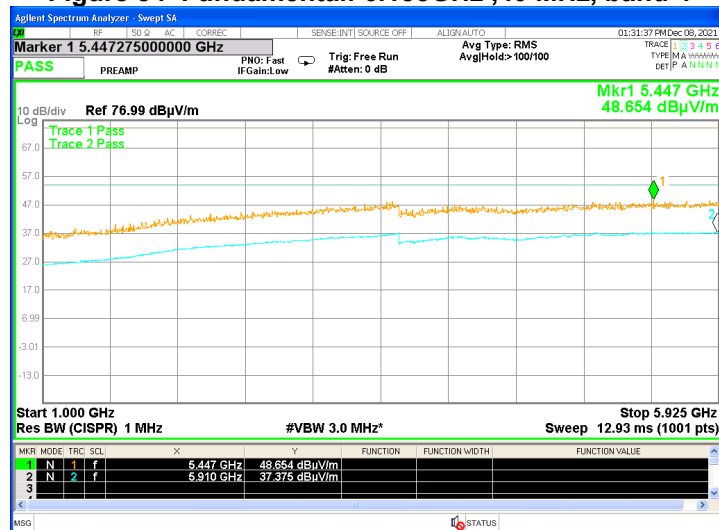


Figure 85 Fundamental: 6.405GHz ,40 MHz, band 1

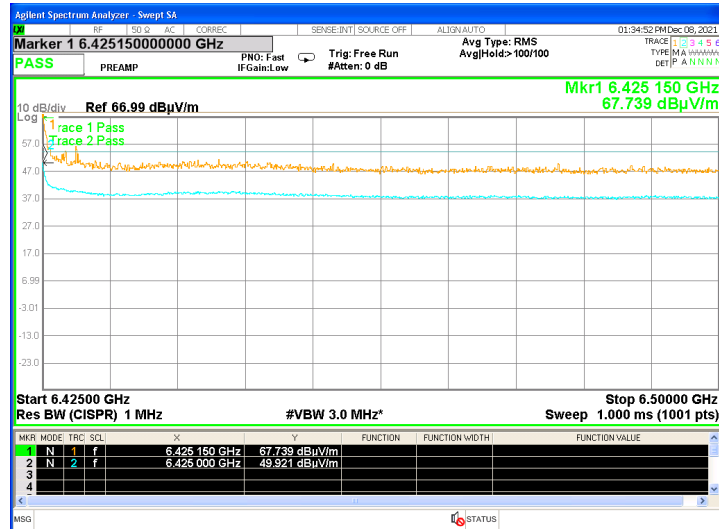


Figure 86 Fundamental: 6.405GHz ,40 MHz, band 2

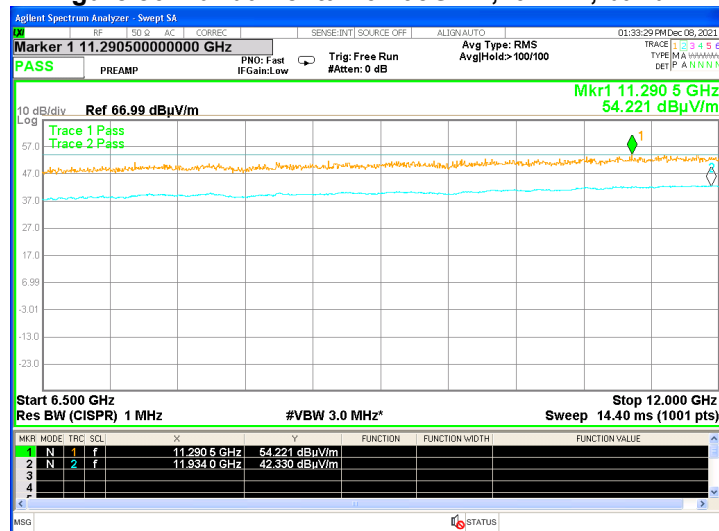


Figure 87 Fundamental: 6.405GHz ,40 MHz, band 3

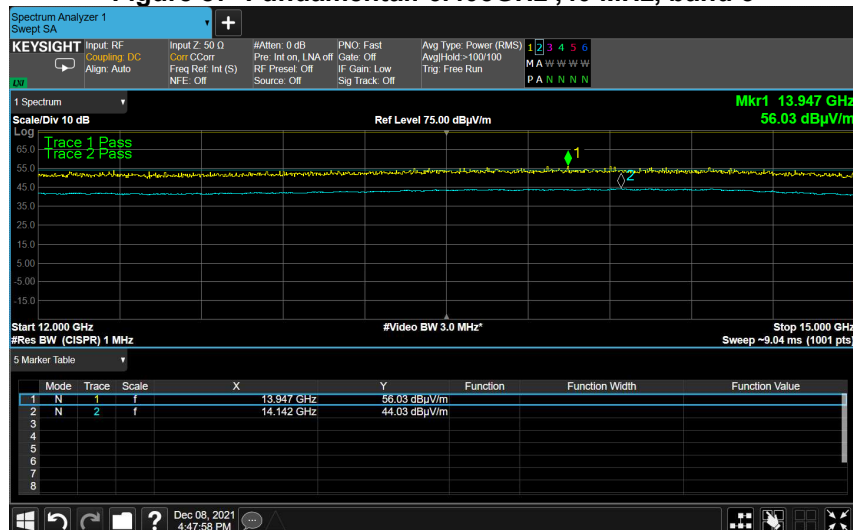


Figure 88 Fundamental: 6.405GHz ,40 MHz, band 4



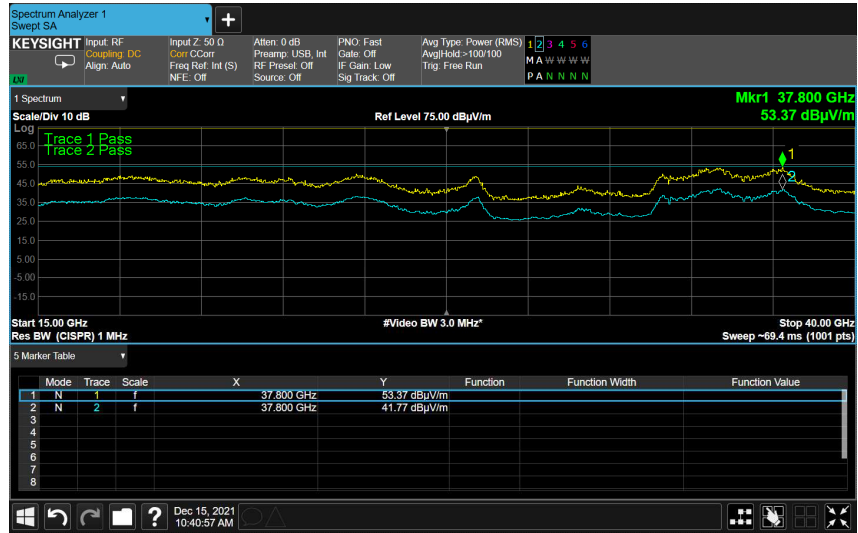
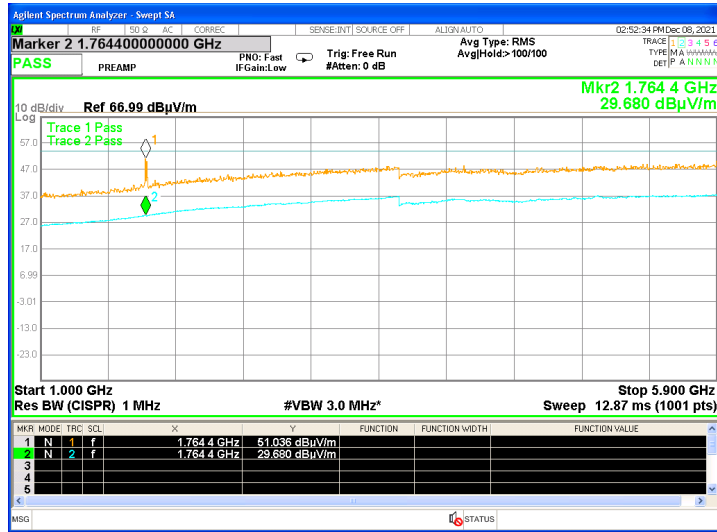


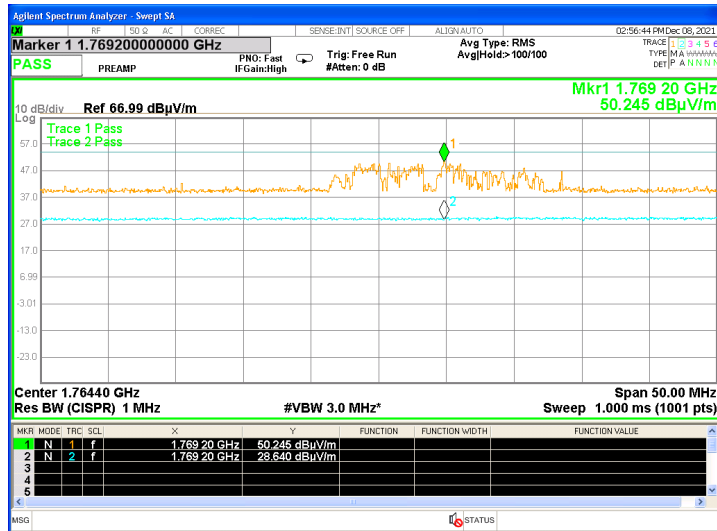
Figure 89 Fundamental: 6.405GHz ,40 MHz, band 5



**4Tx mode**



**Figure 90 Fundamental: 5.935GHz ,20 MHz, band 1**



**Figure 91 Fundamental: 5.935GHz ,20 MHz, band 2**

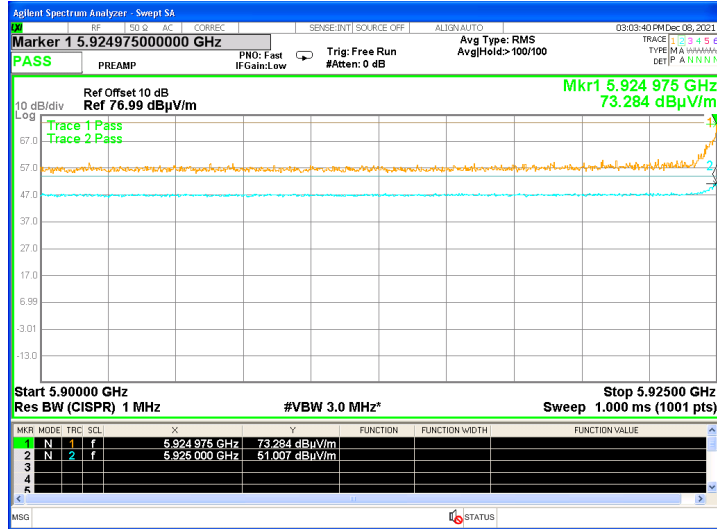


Figure 92 Fundamental: 5.935GHz ,20 MHz, band 3

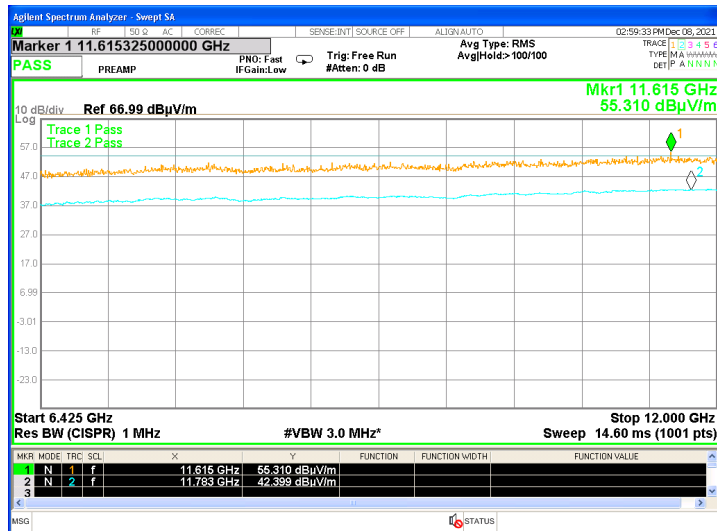


Figure 93 Fundamental: 5.935GHz ,20 MHz, band 4

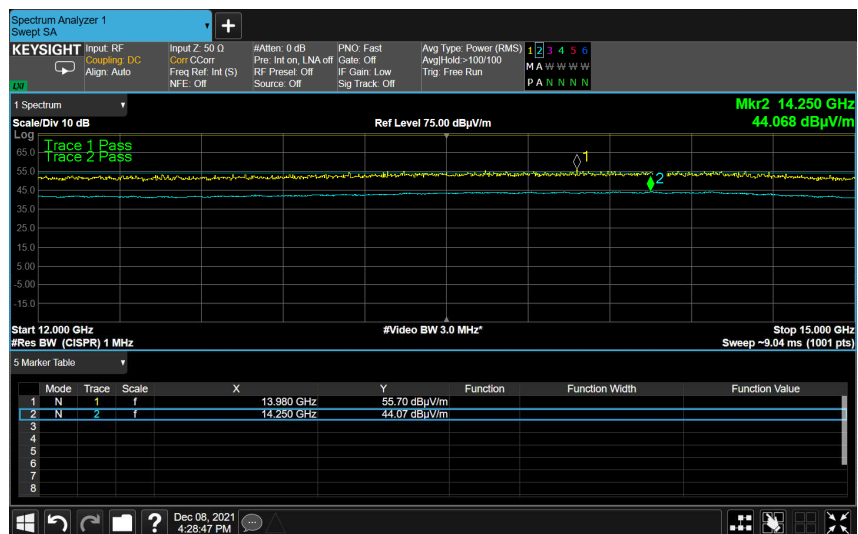


Figure 94 Fundamental: 5.935GHz ,20 MHz, band 5

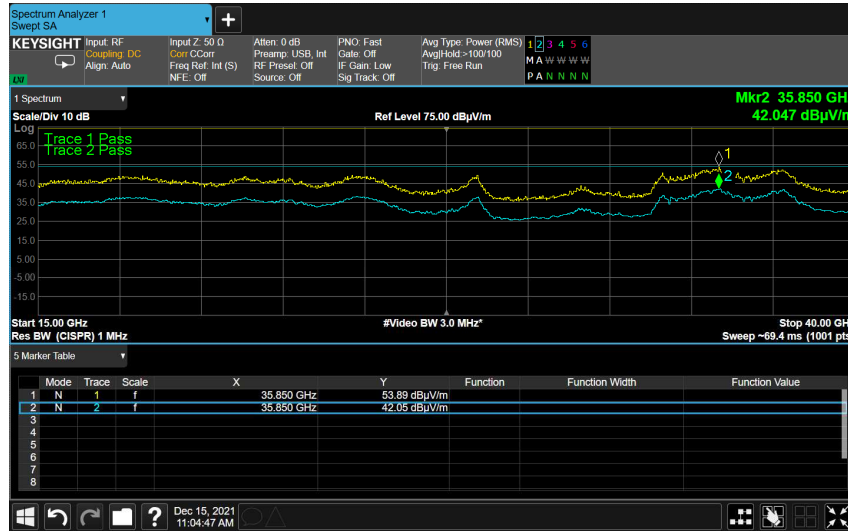


Figure 95 Fundamental: 5.935GHz ,20 MHz, band 6

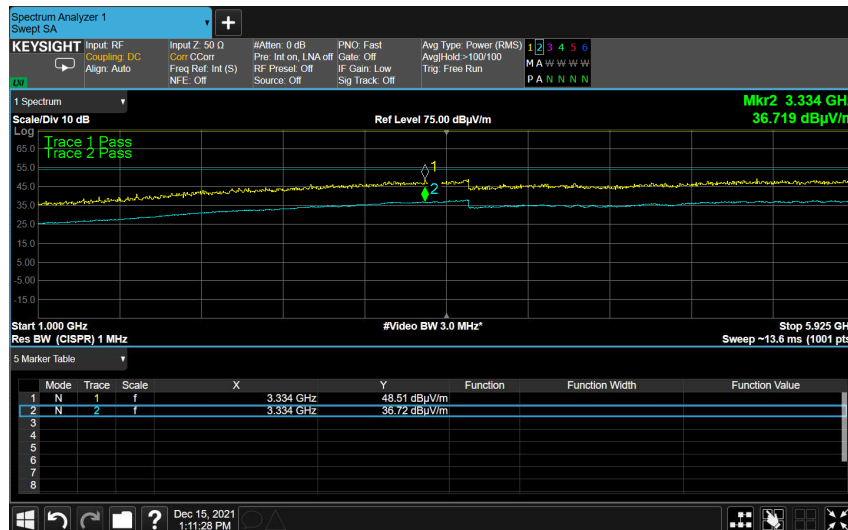


Figure 96 Fundamental: 6.175GHz ,20 MHz, band 1

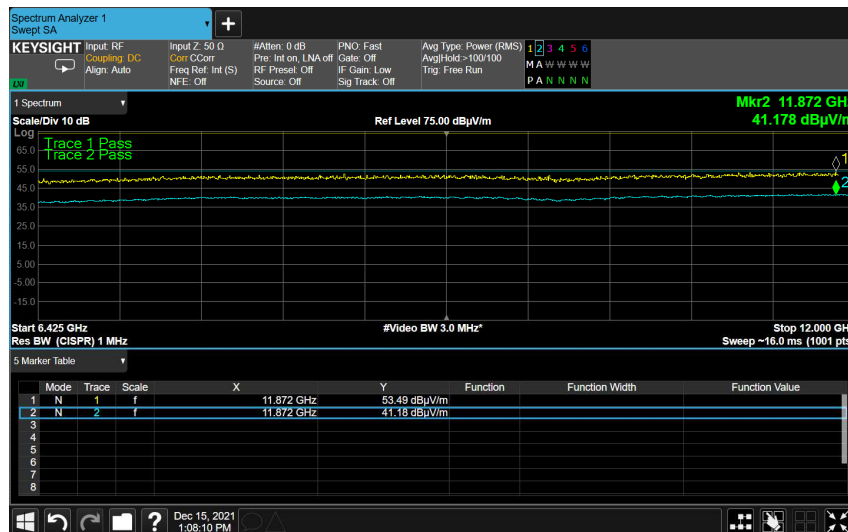


Figure 97 Fundamental: 6.175GHz ,20 MHz, band 2

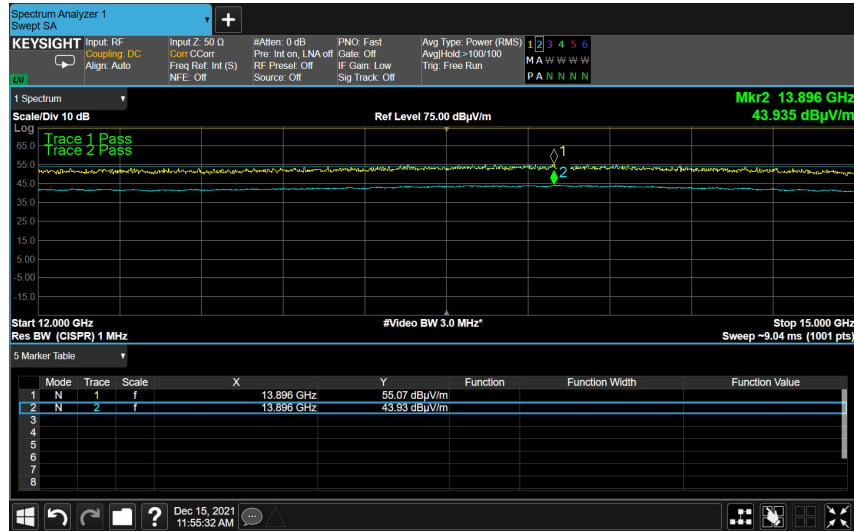


Figure 98 Fundamental: 6.175GHz ,20 MHz, band 3

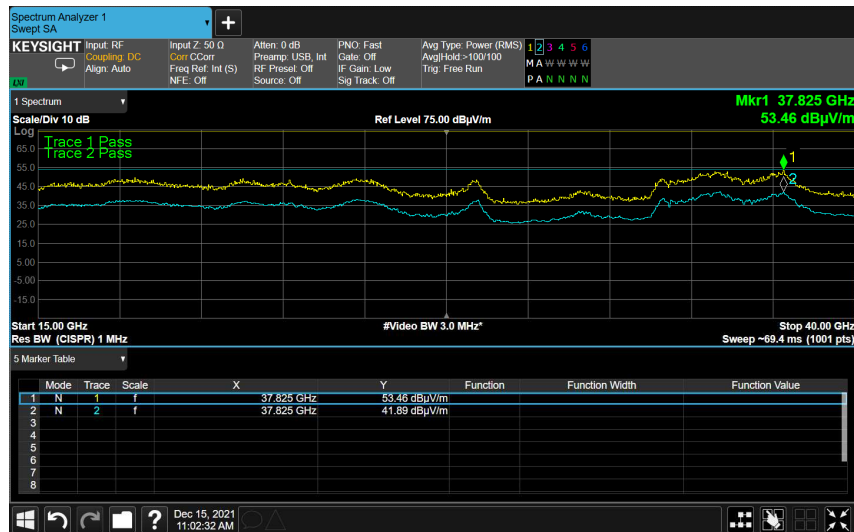


Figure 99 Fundamental: 6.175GHz ,20 MHz, band 4

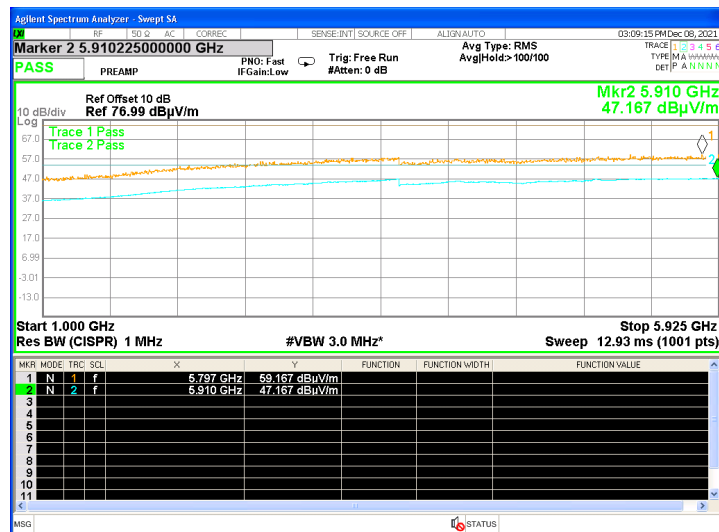


Figure 100 Fundamental: 6.415GHz ,20 MHz, band 1

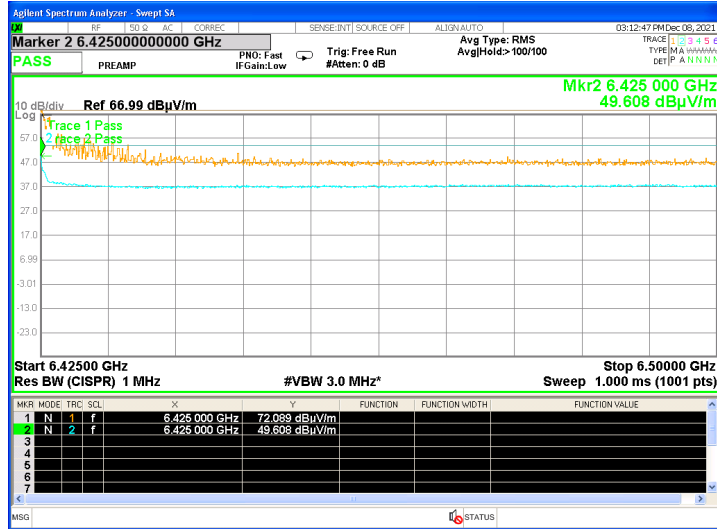


Figure 101 Fundamental: 6.415GHz ,20 MHz, band 2

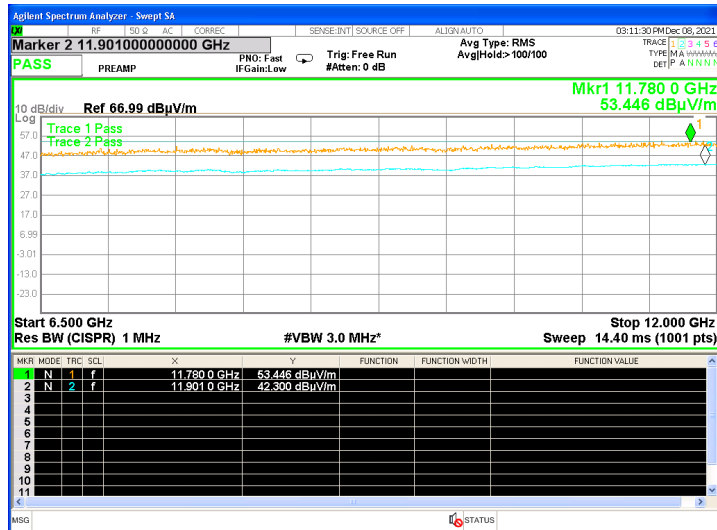


Figure 102 Fundamental: 6.415GHz ,20 MHz, band 3

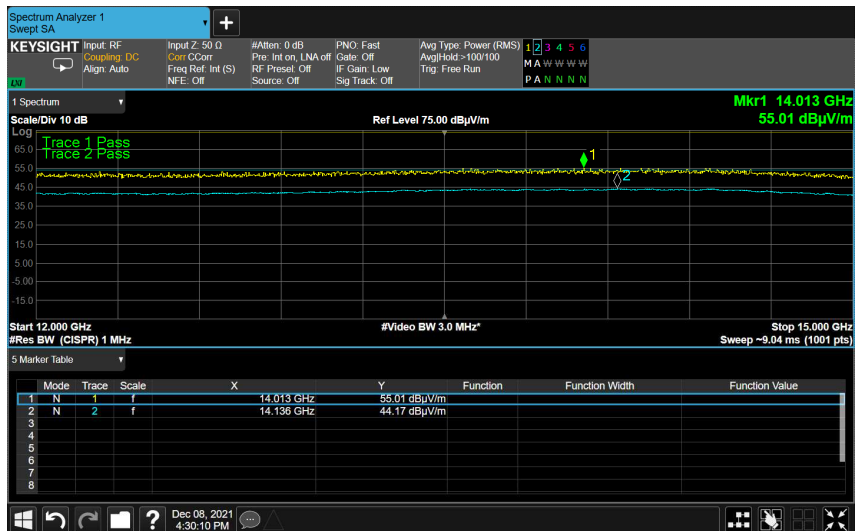


Figure 103 Fundamental: 6.415GHz ,20 MHz, band 4

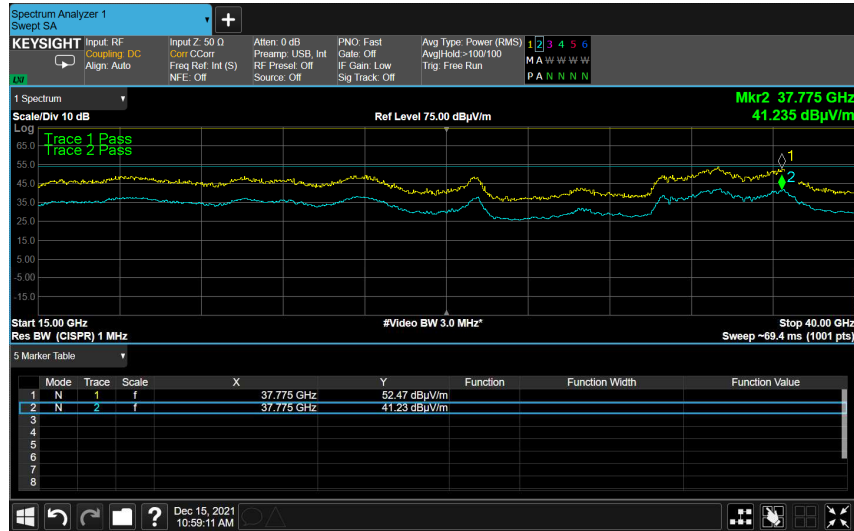


Figure 104 Fundamental: 6.415GHz ,20 MHz, band 5

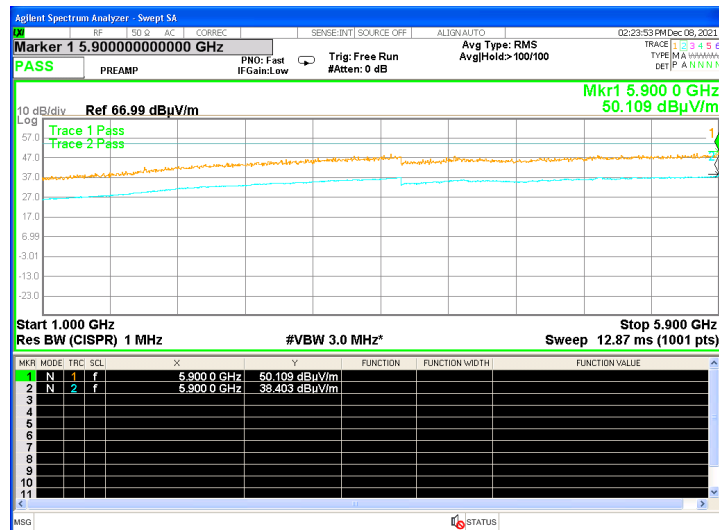


Figure 105 Fundamental: 5.945GHz ,40 MHz, band 1

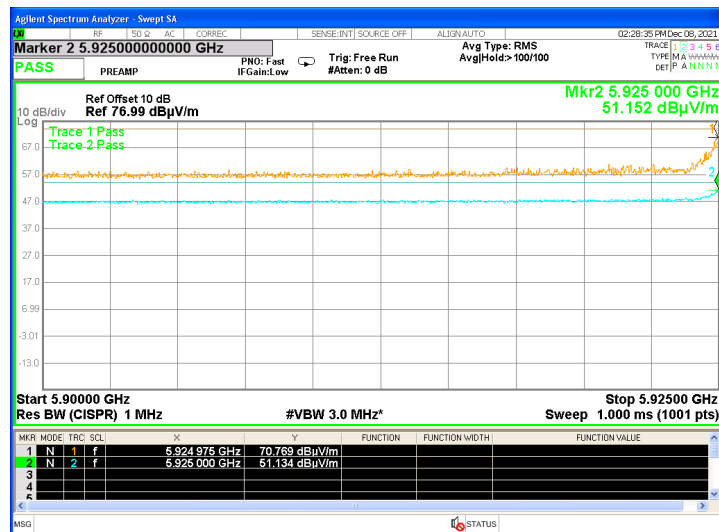


Figure 106 Fundamental: 5.945GHz ,40 MHz, band 2

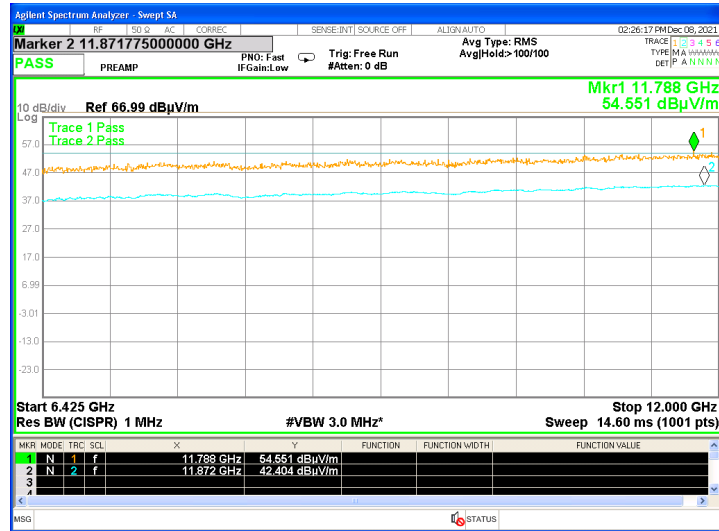


Figure 107 Fundamental: 5.945GHz ,40 MHz, band 3

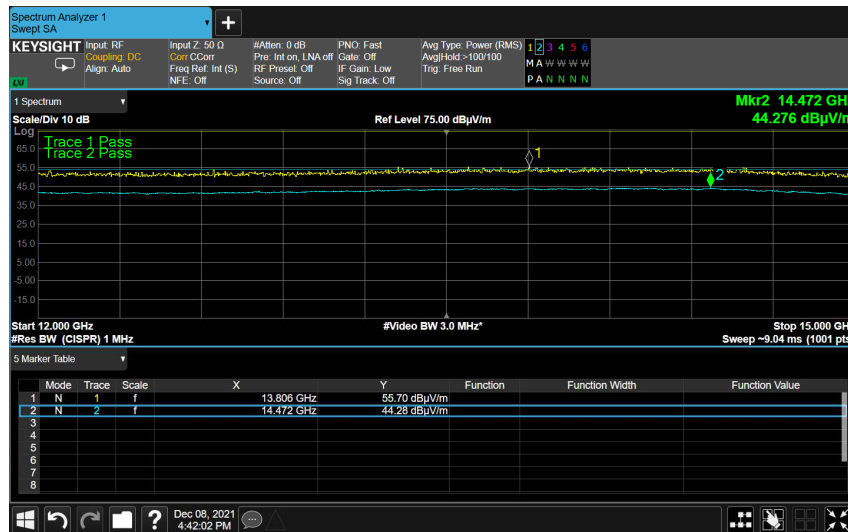


Figure 108 Fundamental: 5.945GHz ,40 MHz, band 4

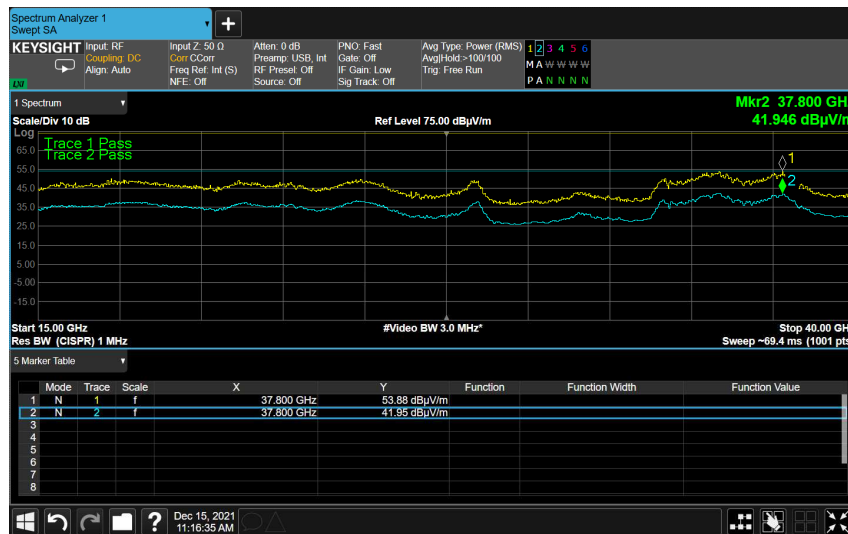


Figure 109 Fundamental: 5.945GHz ,40 MHz, band 5



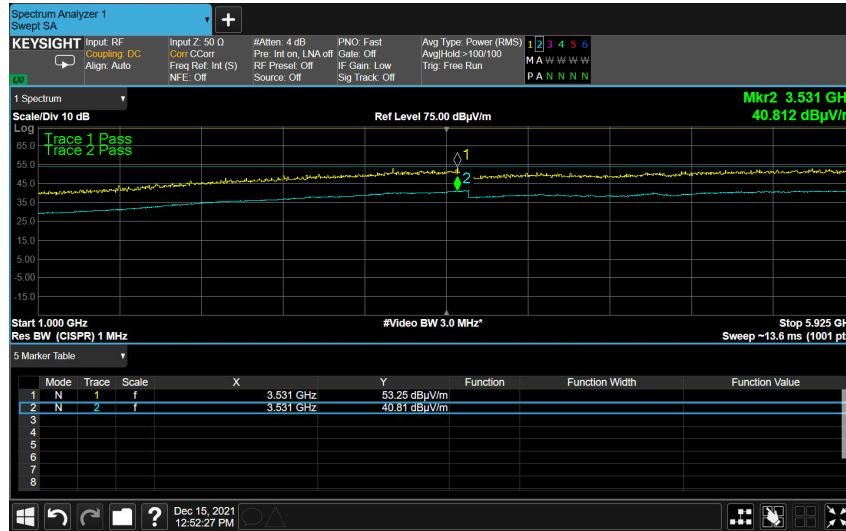


Figure 110 Fundamental: 6.185GHz ,40 MHz, band 1

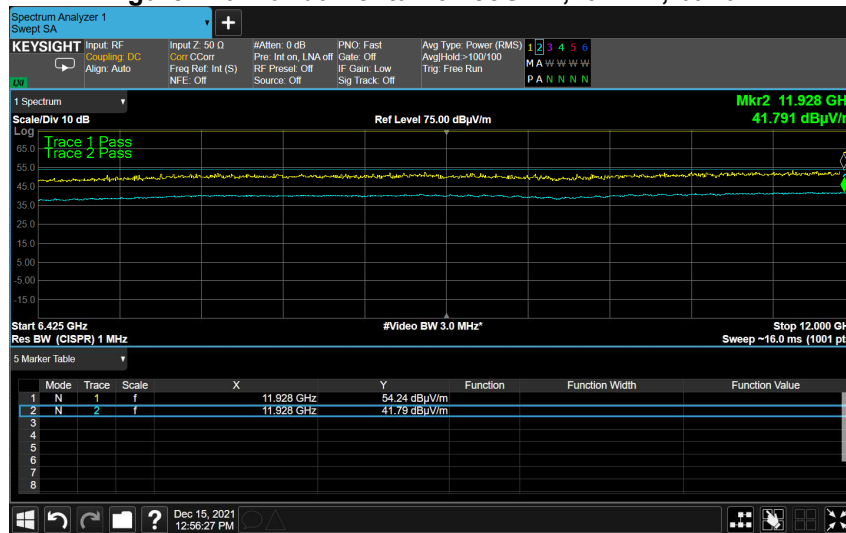


Figure 111 Fundamental: 6.185GHz ,40 MHz, band 2



Figure 112 Fundamental: 6.185GHz ,40 MHz, band 3

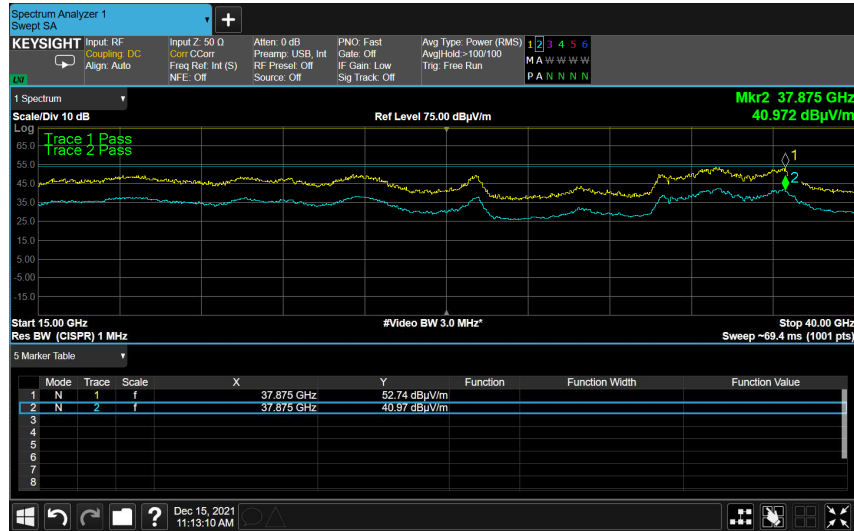


Figure 113 Fundamental: 6.185GHz ,40 MHz, band 4

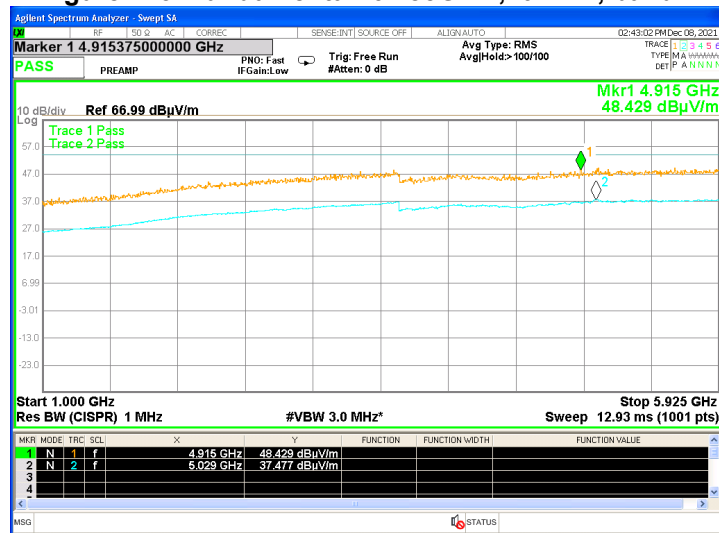


Figure 114 Fundamental: 6.405GHz ,40 MHz, band 1

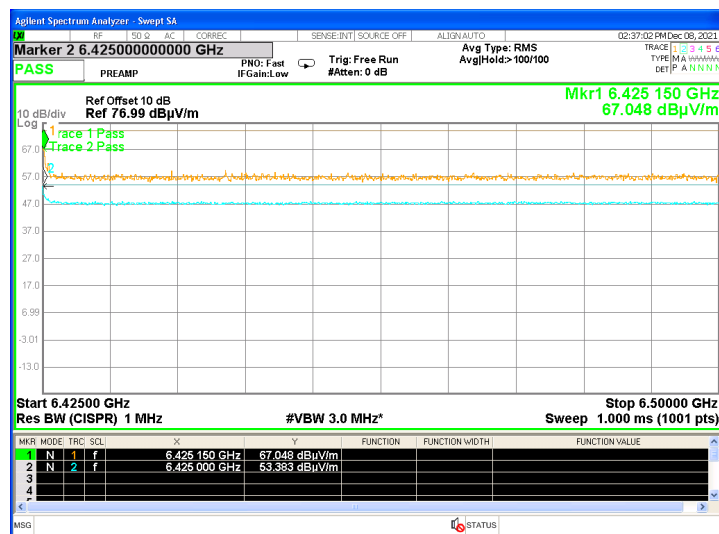


Figure 115 Fundamental: 6.405GHz ,40 MHz, band 2

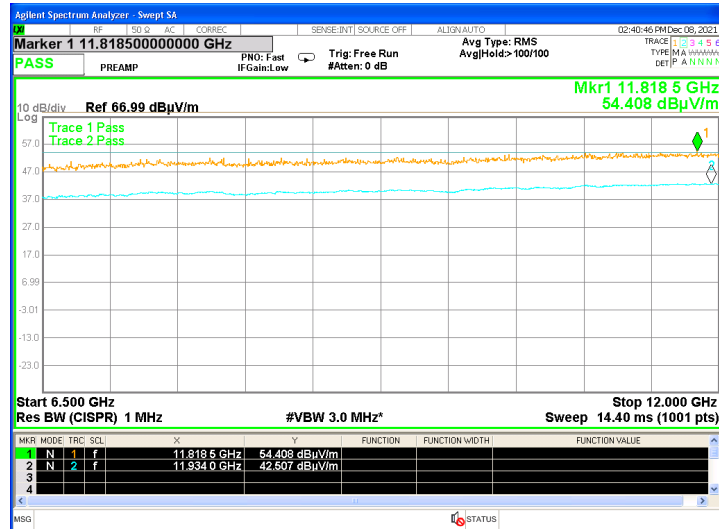


Figure 116 Fundamental: 6.405GHz ,40 MHz, band 3

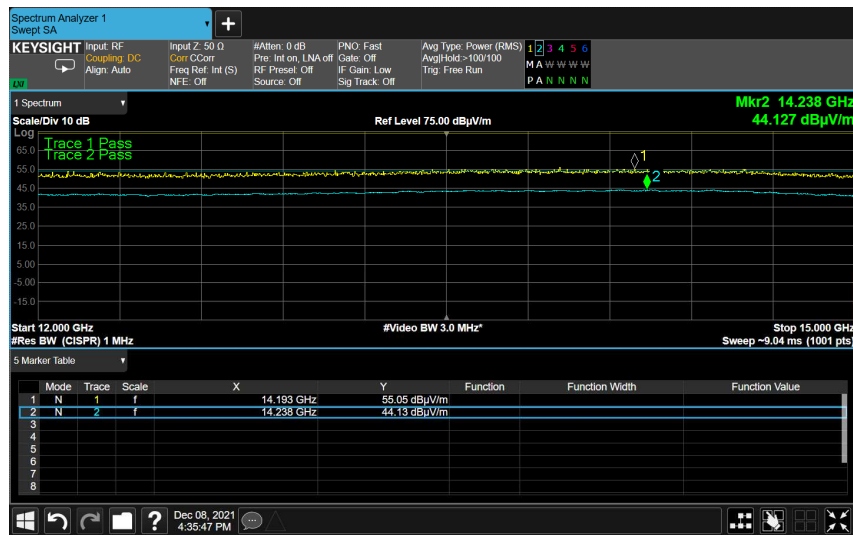


Figure 117 Fundamental: 6.405GHz ,40 MHz, band 4

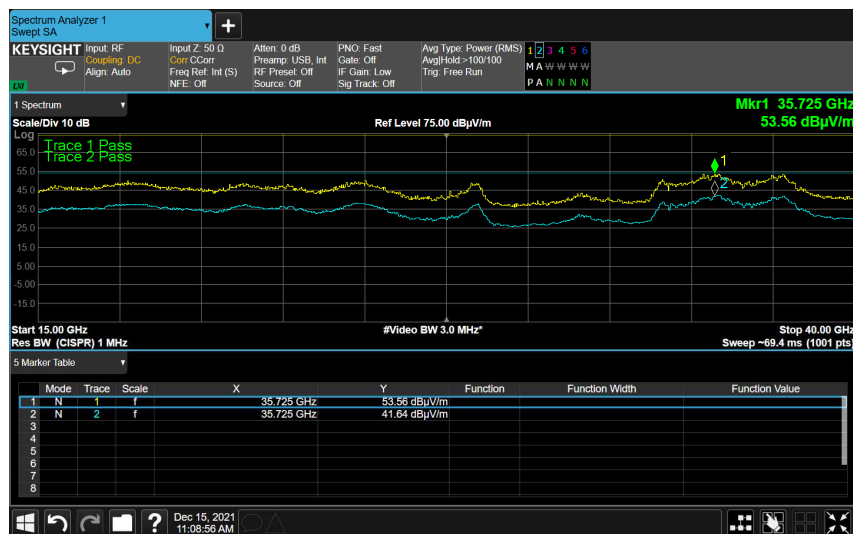


Figure 118 Fundamental: 6.405GHz ,40 MHz, band 5



## 8.5 Test Instrumentation Used, Emissions in Non-Restricted Frequency Bands

Instrument	Manufacturer	Model	Serial No.	Last Calibration Date	Next Calibration Due
EMI Receiver	R&S	ESCI7	100724	March 9, 2020	March 31, 2021
EMI Receiver	HP	8542E	3906A00276	March 11, 2020	March 31, 2021
RF Filter Section	HP	85420E	3705A00248	March 11, 2020	March 31, 2021
EMC Analyzer	HP	8593 EM	3826A00265	March 9, 2020	March 31, 2021
Active Loop Antenna	EMCO	6502	9506-2950	February 5, 2019	February 28, 2023
Biconical Antenna	EMCO	3110B	9912-3337	May 21, 2019	May 31, 2021
Log Periodic Antenna	EMCO	3146	9505-4081	May 31, 2018	May 31, 2021
RF Cable Oats	EIM	RG214-11N(X2)		August 4, 2020	August 31, 2021
Antenna Mast	ETS	2070-2	9608-1497	NCR	NCR
Turntable	ETS	2087	-	NCR	NCR
Mast & Table Controller	ETS/EMCO	2090	9608-1456	NCR	NCR
RECEIVER EMI MXE 20Hz-26.5 GHz	Keysight Technologies (AGILENT)	N9038A	6501147	10/21	10/22
EMI RECEIVER 3 Hz-44 GHz	Keysight Technologies	PXE N9048B	MY59500021	11/21	12/21
PREAMPLIFIER USB 2 - 40 GHz	Keysight Technologies	U7227F	6503045	12/20	12/21
Double Ridged Waveguide Antenna 1-18 GHz	EMCO	3115	0143138	07/21	07/23
Antenna Broad-Band Horn; 14 - 40 GHz	SCHWARBECK MESS-ELEKTRONIK	BBHA 9170	5854	07/21	07/23
CABLE RF 0.5 TO 40 GHz	EMERSON / Semflex	X116LCS X10079	605340	09/21	09/22



<b>Instrument</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Last Calibration Date</b>	<b>Next Calibration Due</b>
Antenna MiniMast up to 1 GHz	ETS LINDGREN	--	2175	N/A	N/A
Metallic turntable	ETS LINDGREN	--	2188	N/A	N/A
Multi-Device Controller	ETS LINDGREN	--	2090	N/A	N/A

**Figure 119 Test Equipment Used**

## 8.6 Field Strength Calculation

The field strength is calculated directly by the EMI Receiver software, and a "Correction Factors", using the following equation:

$$FS = RA + AF + CF$$

FS: Field Strength [dB $\mu$ v/m]

RA: Receiver Amplitude [dB $\mu$ v]

AF: Receiving Antenna Correction Factor [dB/m]

CF: Cable Attenuation Factor [dB]

Example: FS = 30.7 dB $\mu$ V (RA) + 14.0 dB (AF) + 0.9 dB (CF) = 45.6 dB $\mu$ V

No external pre-amplifiers are used.

## 9. 99% Occupied Bandwidth

### 9.1 Test Specification

FCC, Part 2, Sub part J, Section 2.1049  
FCC Part 15, Subpart E, Section 15.407(a)(10)  
RSS 248 Issue 1 November 19, 2021, Section 4.4

### 9.2 Test Procedure

(Temperature (22°C)/ Humidity (56%RH))

The E.U.T. operation mode and test set-up are as described in Section 2 of this report. The E.U.T. antenna terminal was connected to the Spectrum Analyzer through an external attenuator and an appropriate coaxial cable (total loss= 31.0dB). Special attention was taken to prevent Spectrum Analyzer RF input overload.

The RBW set to range of 1%-5% of the OBW.

### 9.3 FCC and IC Test Limit

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

### 9.4 Test Results

BW	Operation Frequency	Reading
(MHz)	(MHz)	(MHz)
20.0	5935.0	17.9
	6175.0	17.9
	6415.0	17.9
40.0	5945.0	37.6
	6185.0	37.5
	6405.0	37.5

Figure 120. Bandwidth Test Results, 2TX mode

BW	Operation Frequency	Reading
(MHz)	(MHz)	(MHz)
20.0	5935.0	17.8
	6175.0	17.9
	6415.0	17.9
40.0	5945.0	37.5
	6185.0	37.5
	6405.0	37.5

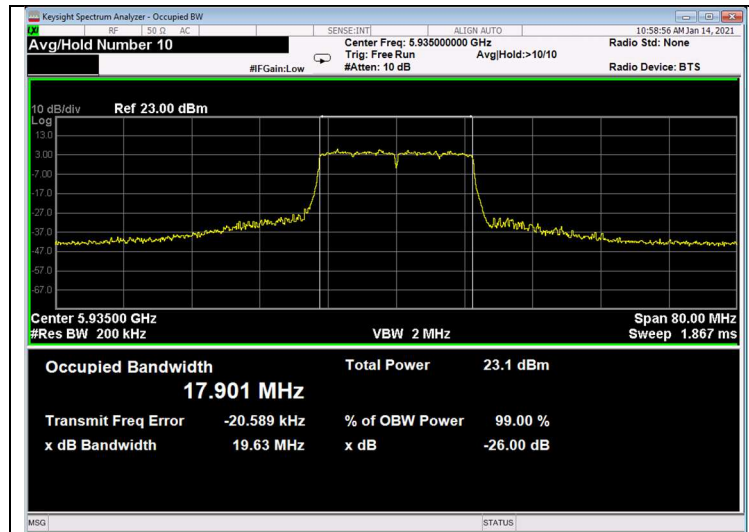
Figure 121. Bandwidth Test Results, 4TX mode

JUDGEMENT: Passed

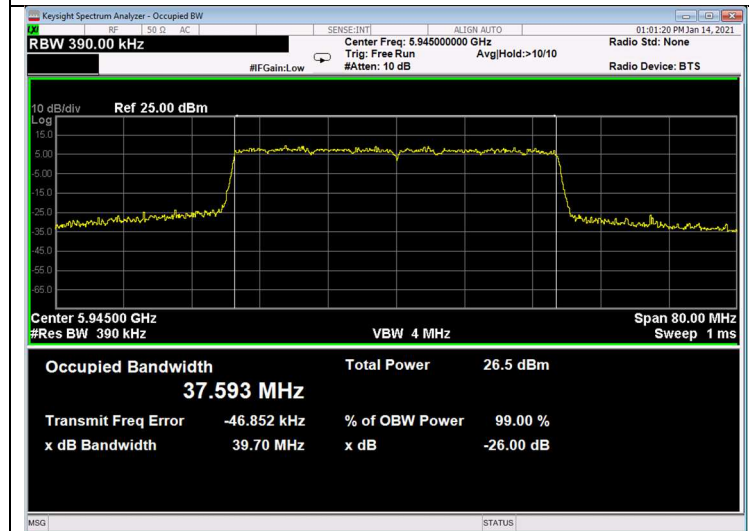
See additional information in *Figure 122 to Figure 133*.



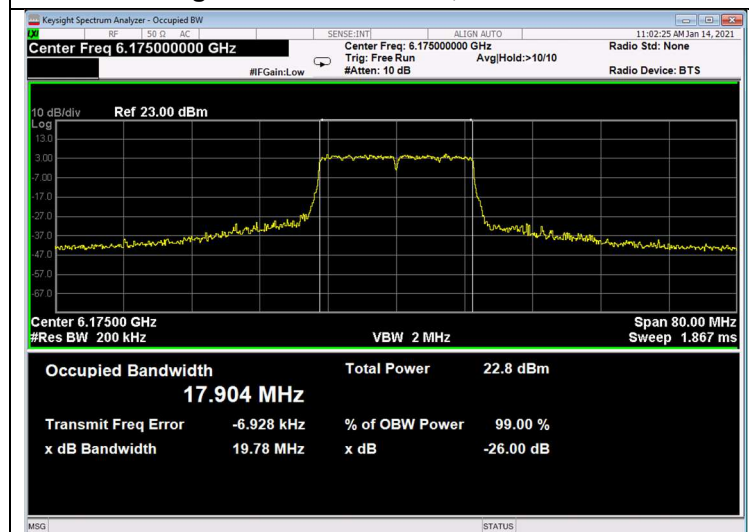
**2TX mode:**



**Figure 122. 5935.0MHz, 20MHz BW**



**Figure 123. 5945.0MHz, 40MHz BW**



**Figure 124. 6175.0MHz, 20MHz BW**

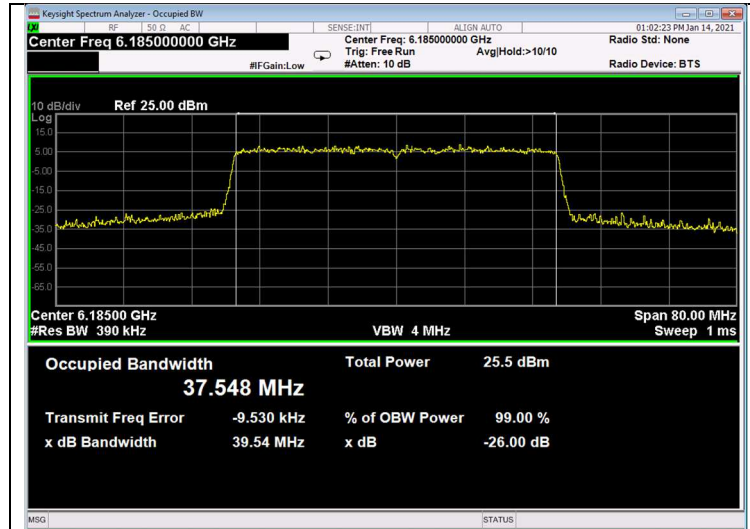


Figure 125. 6185.0MHz, 40MHz BW

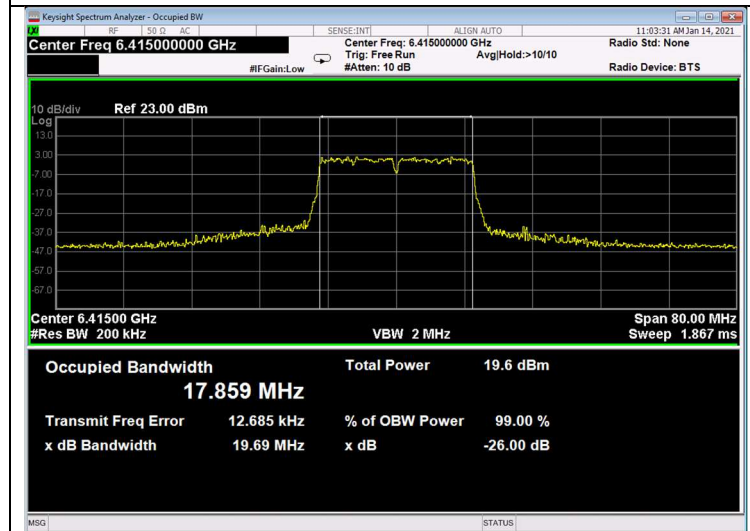


Figure 126. 6415.0MHz, 20MHz BW

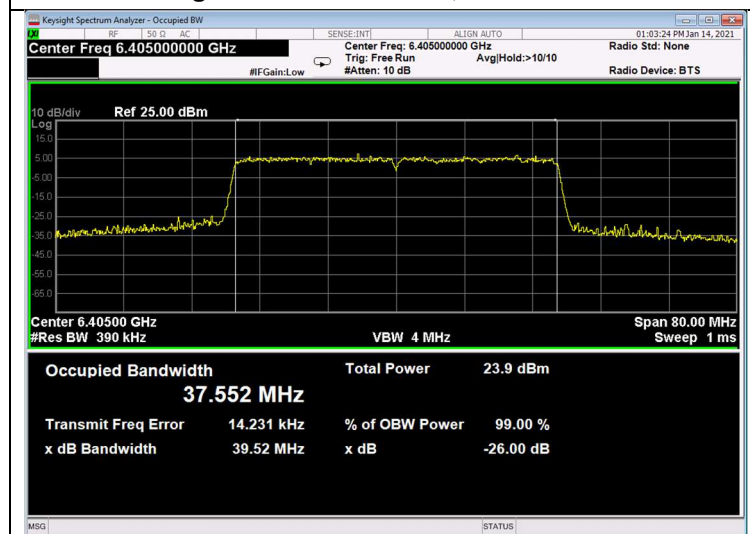
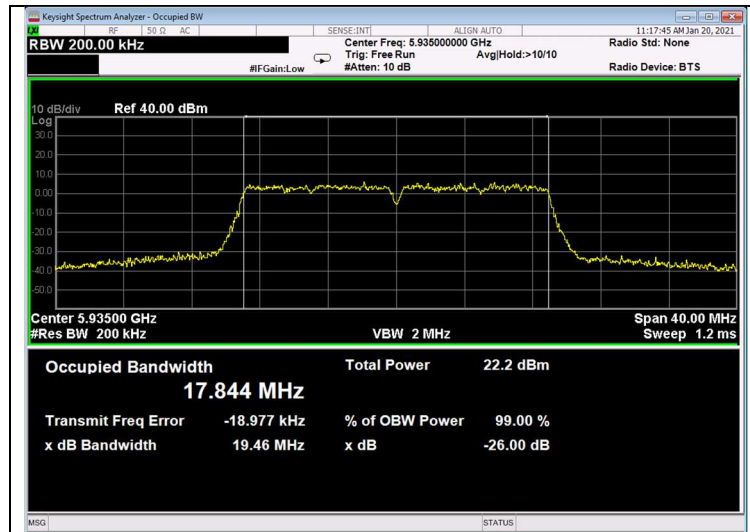


Figure 127. 6405.0MHz, 40MHz BW

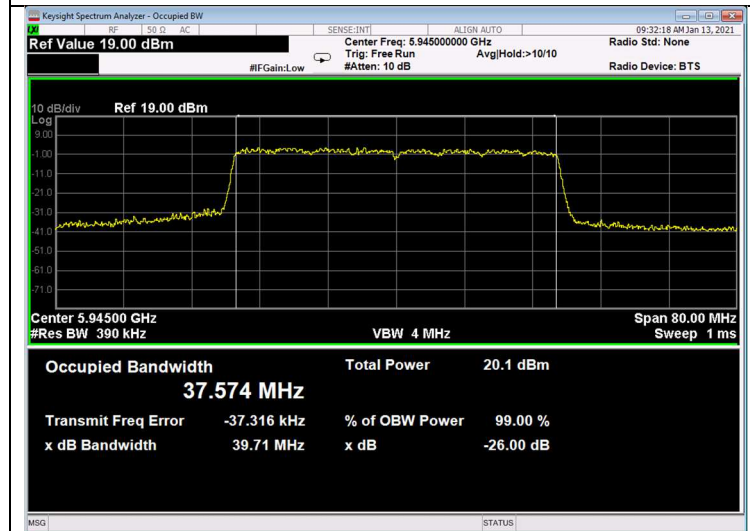




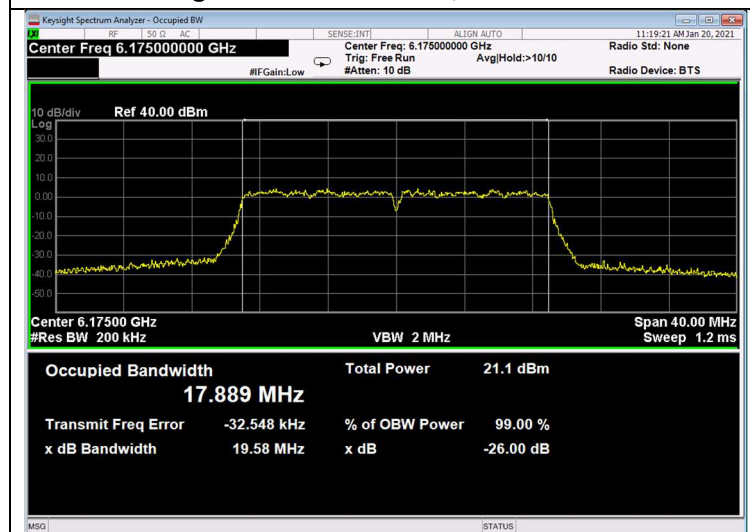
**4TX mode:**



**Figure 128. 5935.0MHz, 20MHz BW**



**Figure 129. 5945.0MHz, 40MHz BW**



**Figure 130. 6175.0MHz, 20MHz BW**