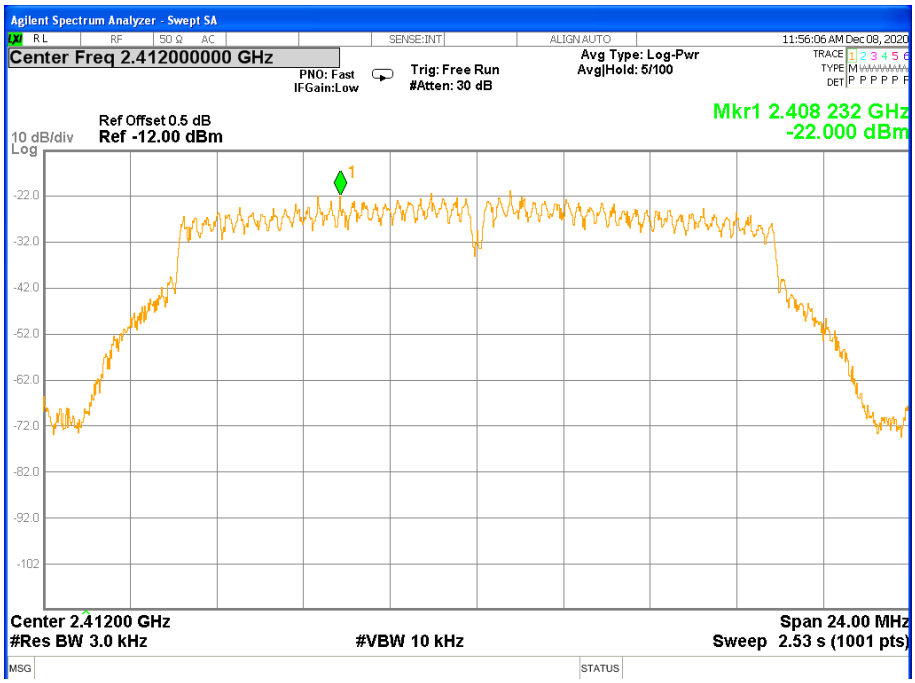
Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX g Mode /CH01, CH06, CH11

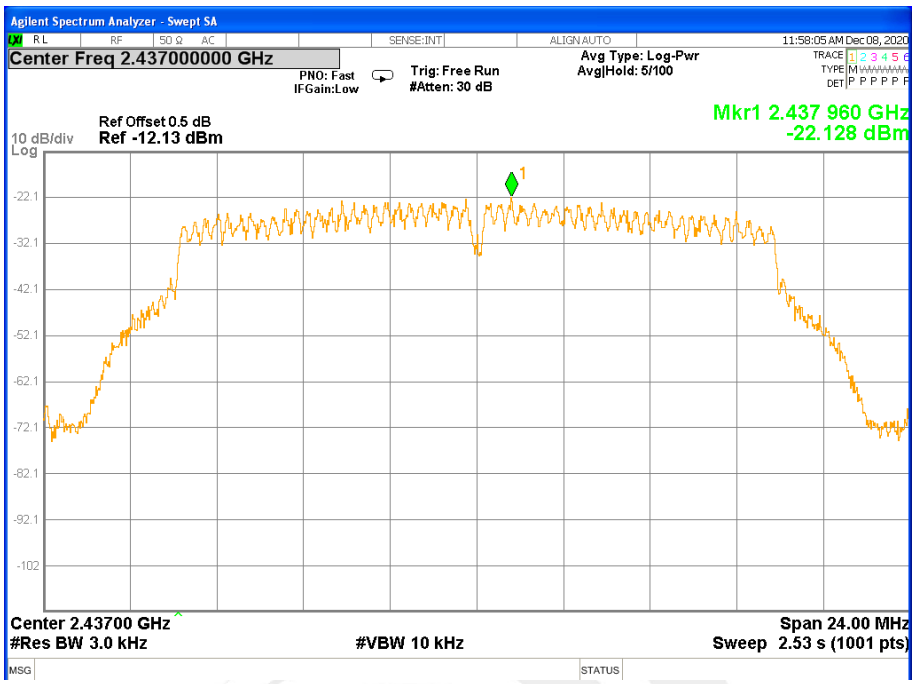
Frequency	Power Density			Limit	Result
	ANT 1 (dBm)	ANT 2 (dBm)	TOTAL (dBm)	(dBm/3KHz)	
2412	-22.00	-22.76	--	8	PASS
2437	-22.13	-24.28	--	8	PASS
2462	-21.83	-23.64	--	8	PASS

Test plots for ANT 1

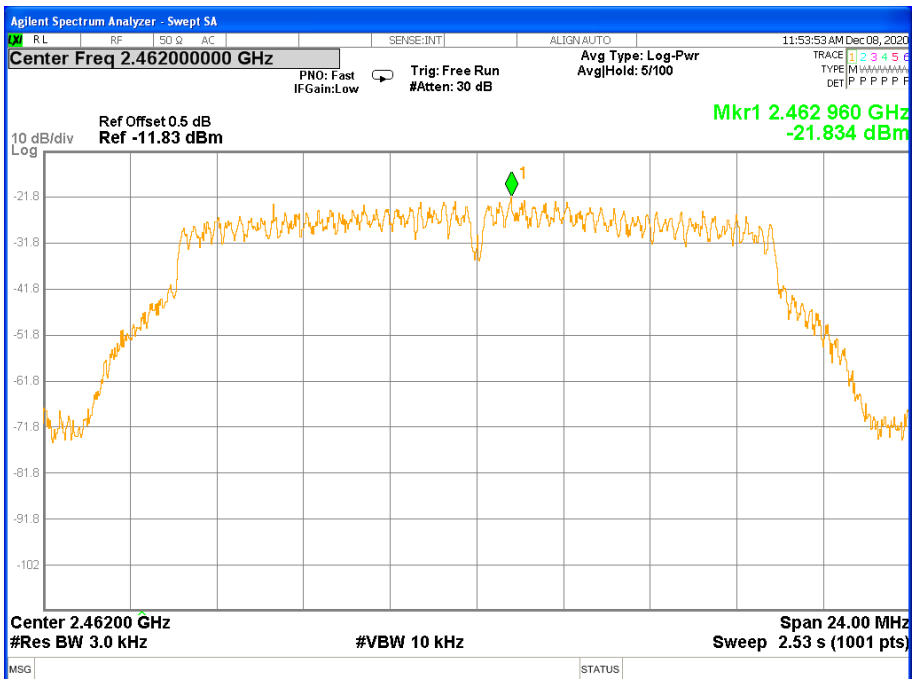
TX CH01



TX CH06

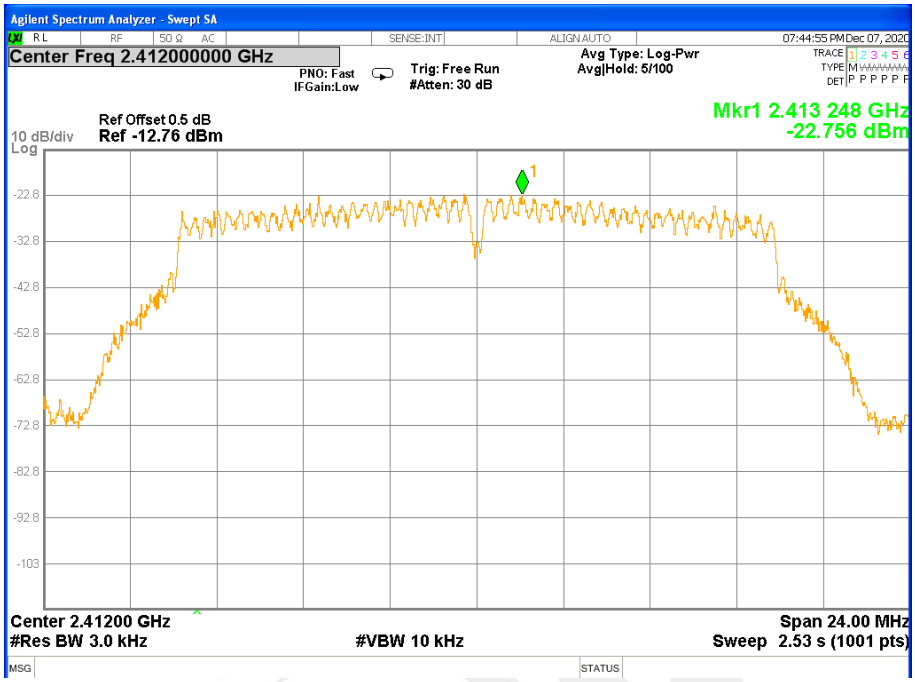


TX CH11

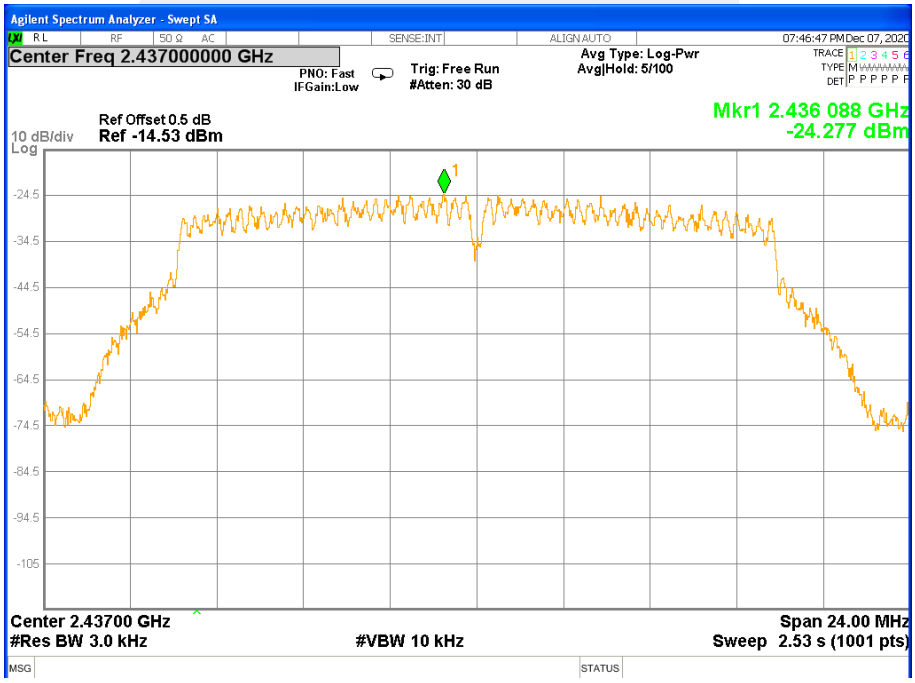


Test plots for ANT 2

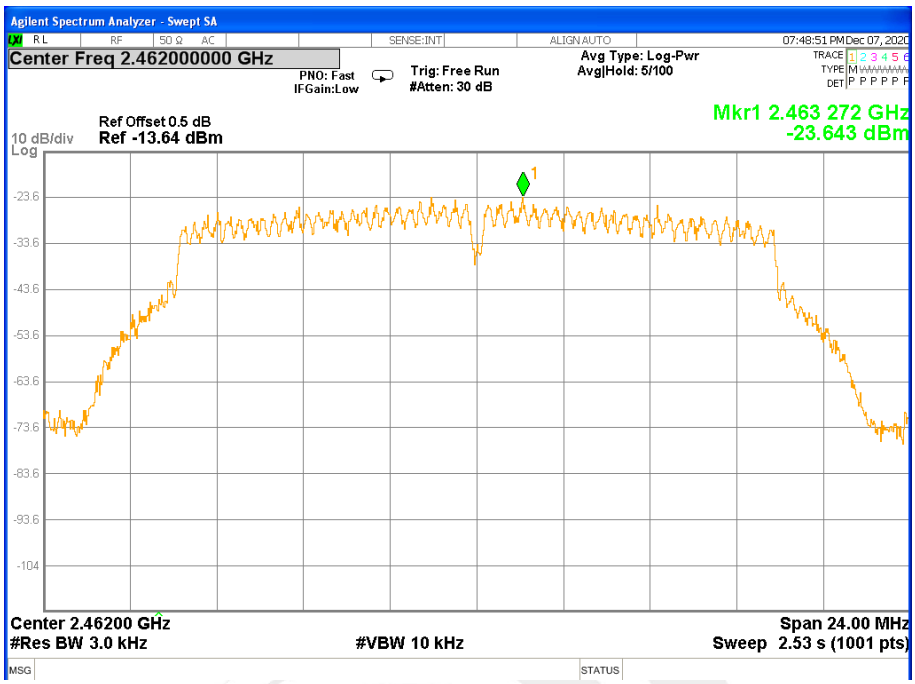
TX CH01



TX CH06



TX CH11

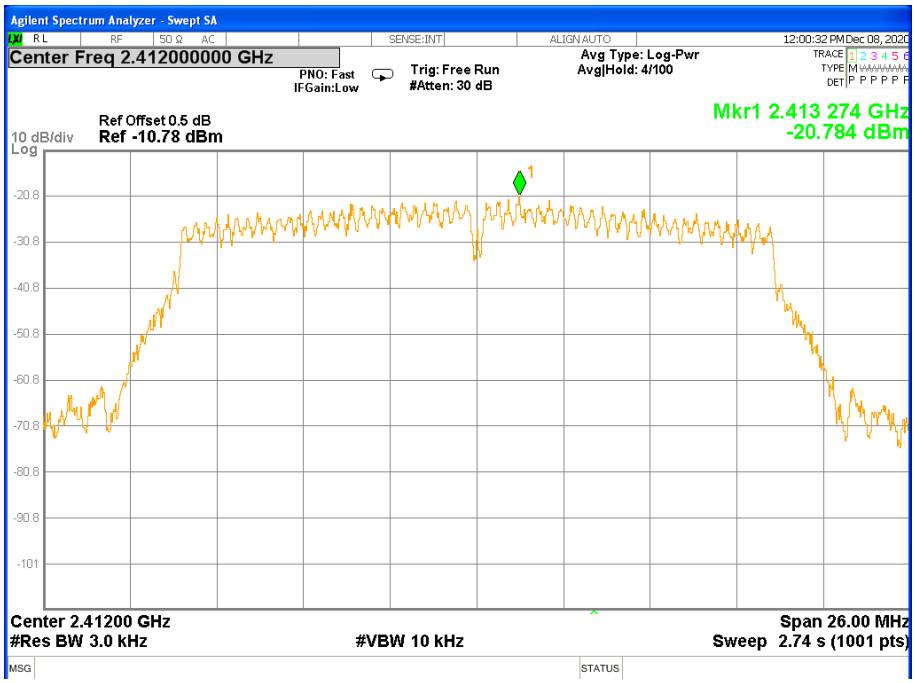

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 5/100
07:48:51 PM Dec 07, 2020
Ref Offset 0.5 dB
10 dB/div
Ref -13.64 dBm
Mkr1 2.463 272 GHz
-23.643 dBm
Center 2.46200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 24.00 MHz
Sweep 2.53 s (1001 pts)

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX n Mode(20M) /CH01, CH06, CH11

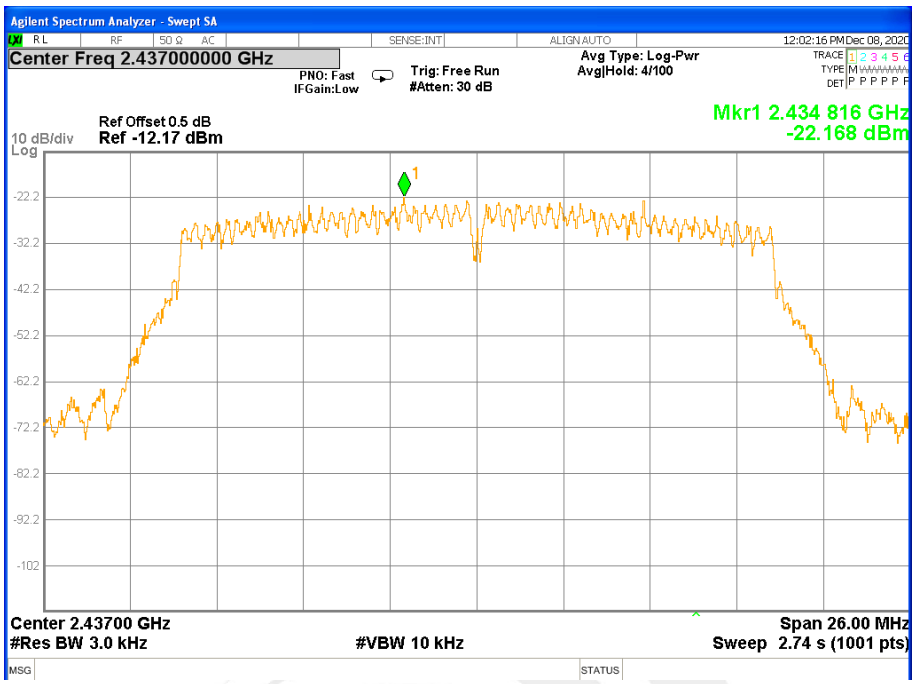
Frequency	Power Density			Limit	Result
	ANT 1 (dBm)	ANT 2 (dBm)	TOTAL (dBm)	(dBm/3KHz)	
2412	-20.78	-21.69	-18.20	5.99	PASS
2437	-22.17	-23.71	-19.86	5.99	PASS
2462	-20.53	-23.29	-18.68	5.99	PASS

Test plots for ANT 1

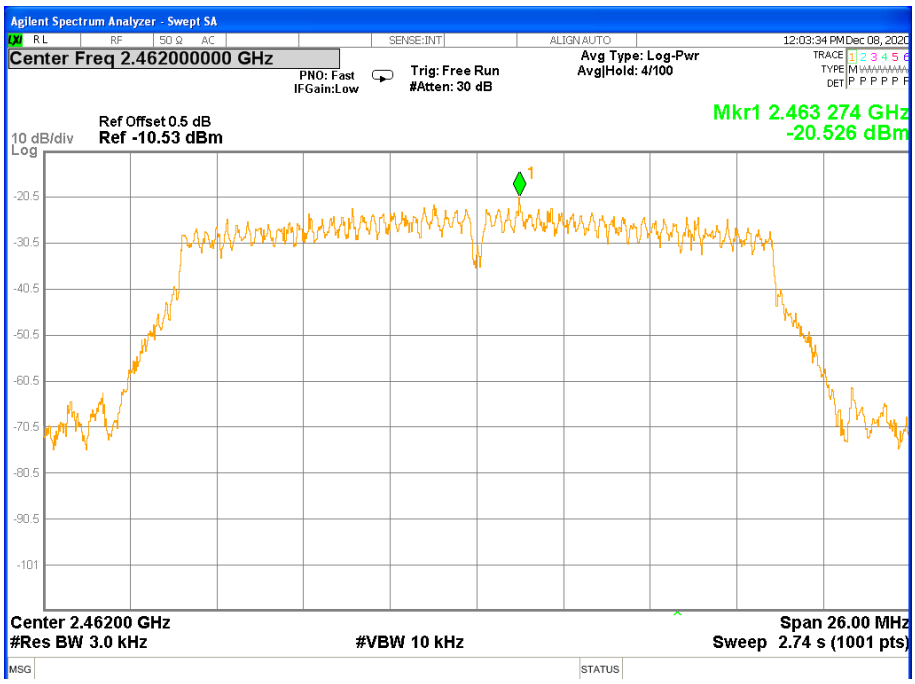
TX CH01



TX CH06

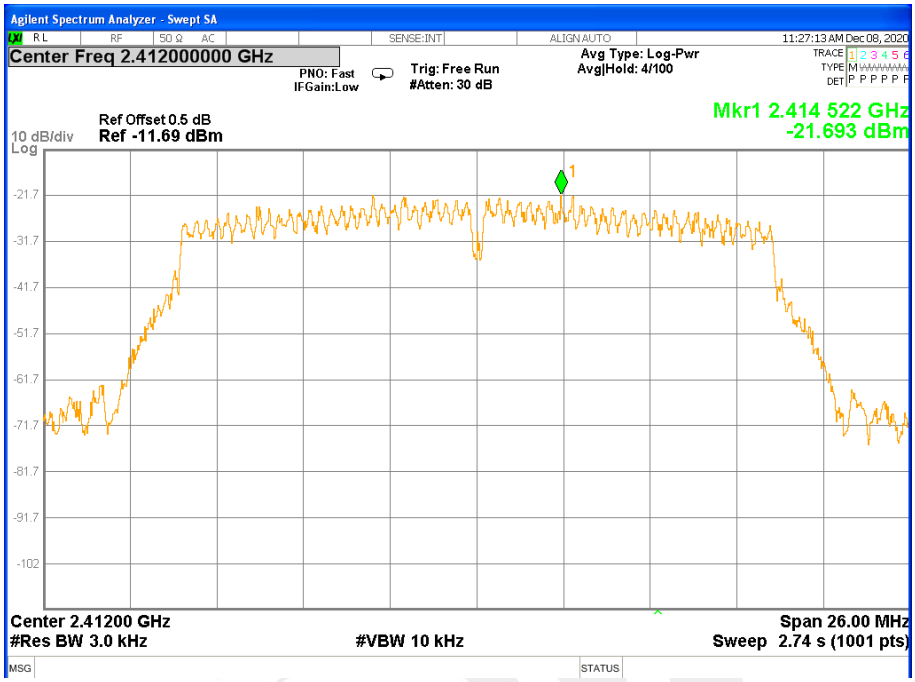


TX CH11

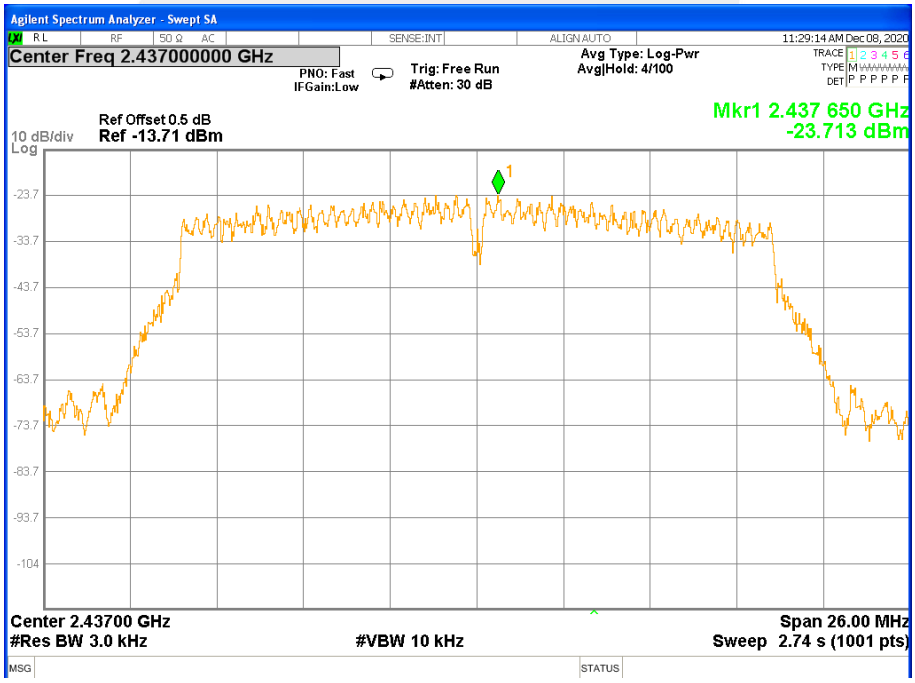


Test plots for ANT 2

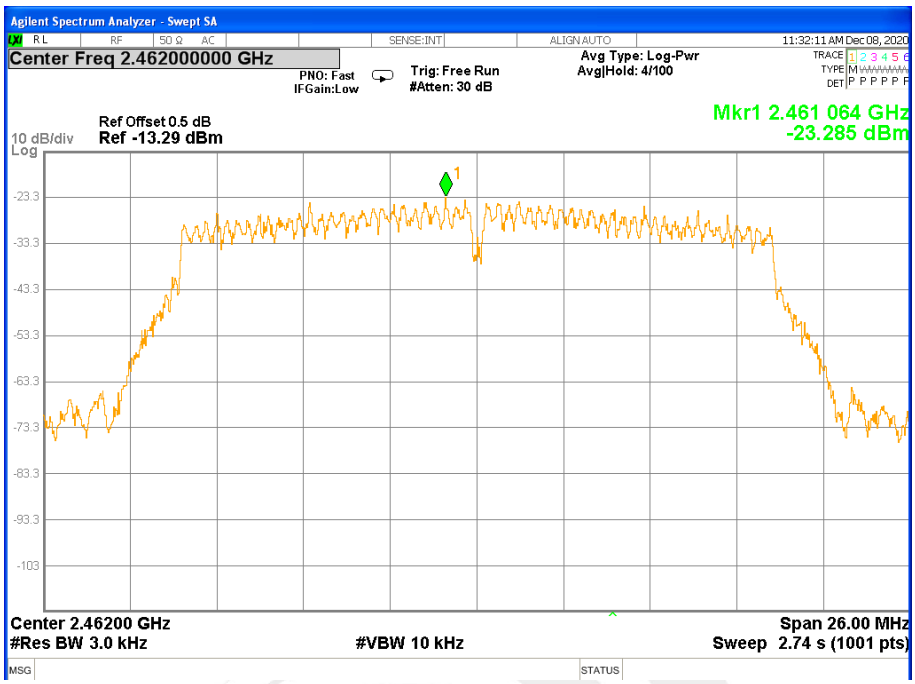
TX CH01



TX CH06



TX CH11

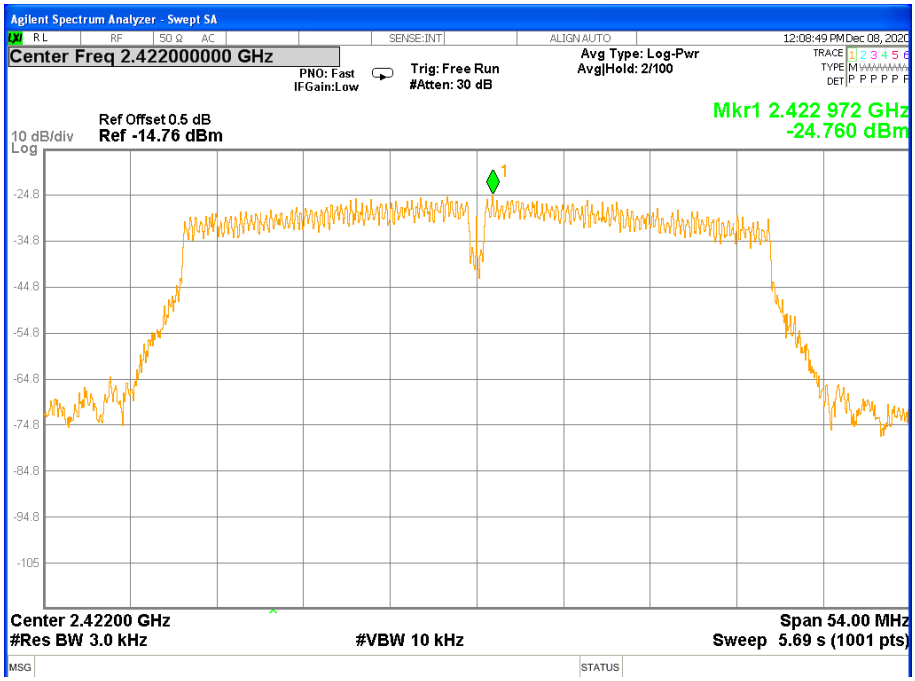

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
11:32:11 AM Dec 08, 2020
Ref Offset 0.5 dB
10 dB/div
Log
Ref -13.29 dBm
Mkr1 2.461 064 GHz
-23.285 dBm
-23.3
-33.3
-43.3
-53.3
-63.3
-73.3
-83.3
-93.3
-103
Center 2.46200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 26.00 MHz
Sweep 2.74 s (1001 pts)

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX n Mode(40M) /CH03, CH06, CH09

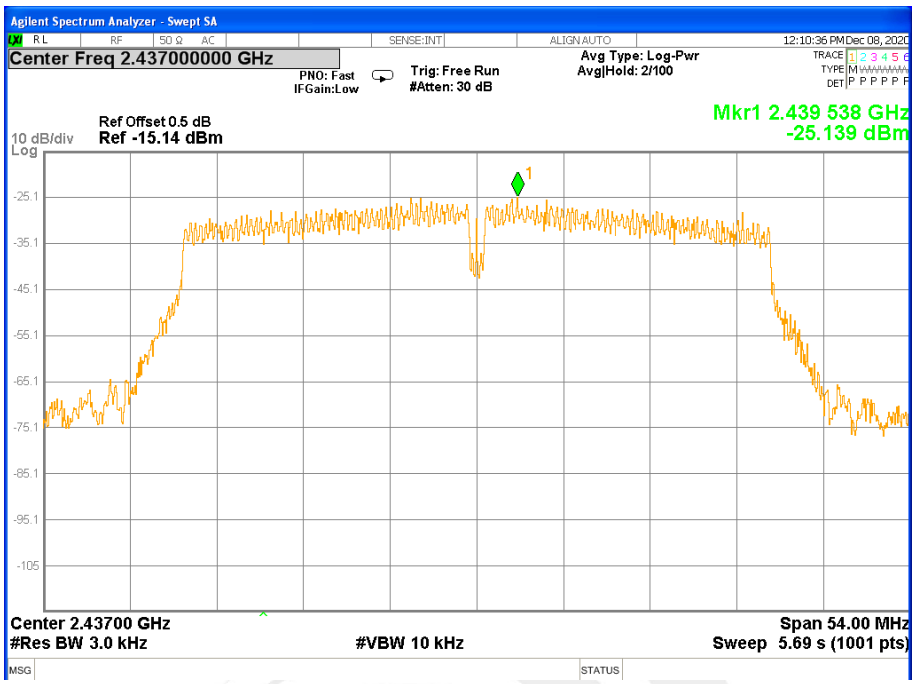
Frequency	Power Density			Limit	Result
	ANT 1 (dBm)	ANT 2 (dBm)	TOTAL (dBm)	(dBm/3KHz)	
2422	-24.76	-25.70	-22.19	5.99	PASS
2437	-25.14	-27.09	-23.00	5.99	PASS
2452	-25.19	-27.19	-23.07	5.99	PASS

Test plots for ANT 1

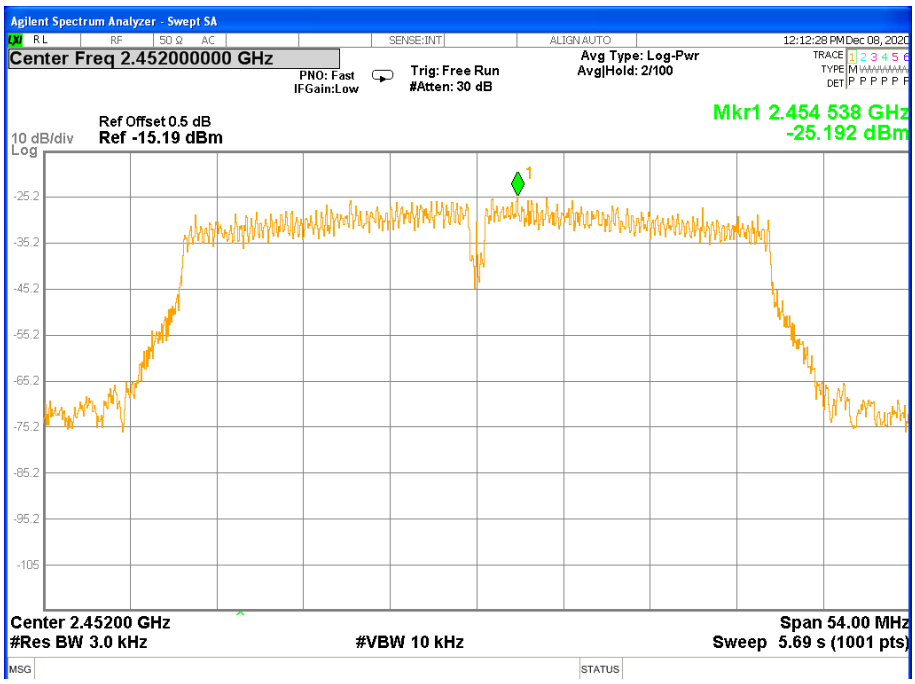
TX CH03



TX CH06

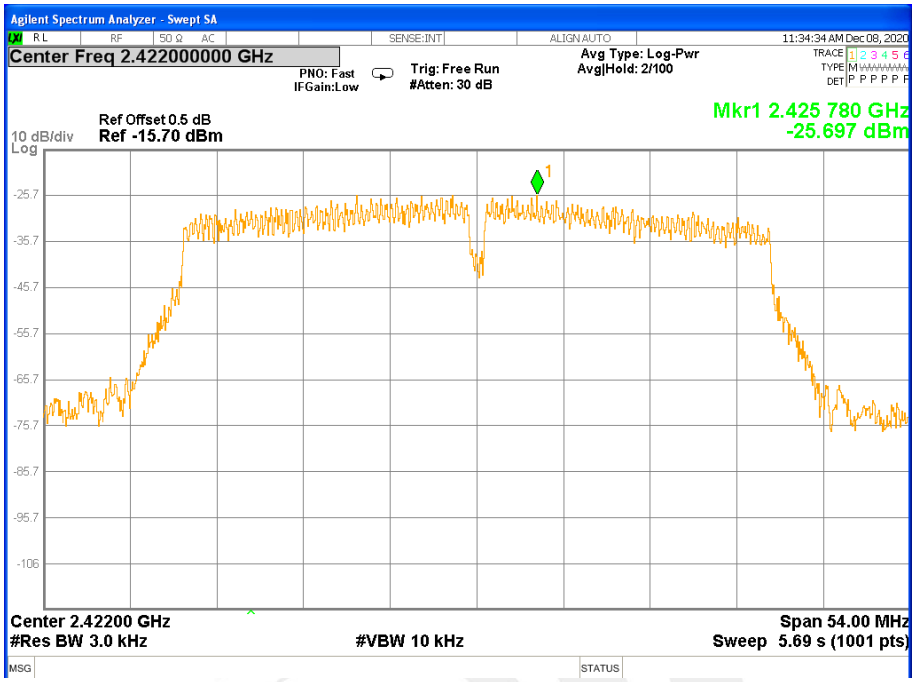


TX CH09

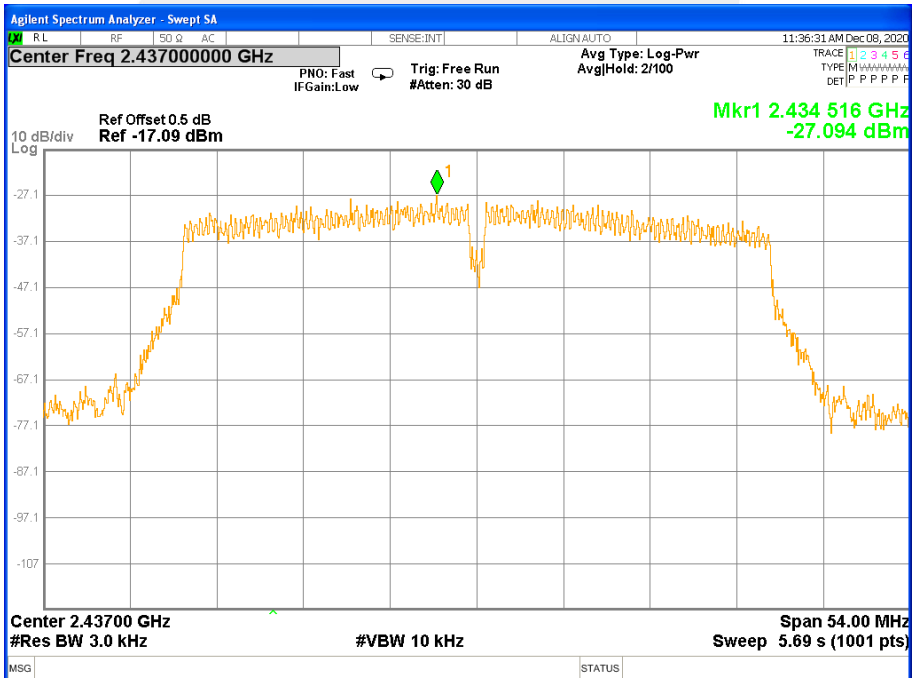


Test plots for ANT 2

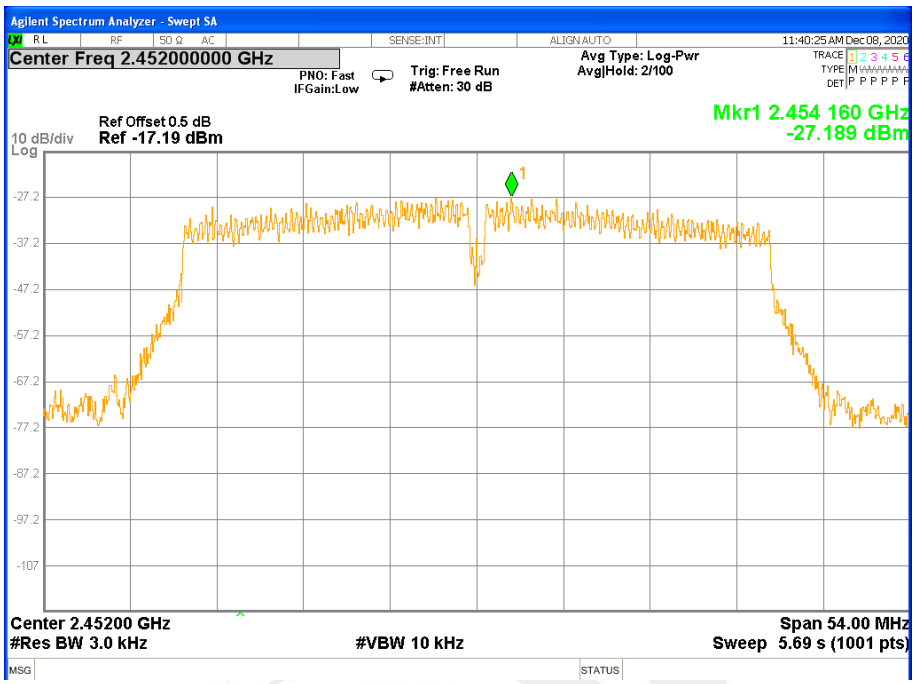
TX CH03



TX CH06



TX CH09


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
11:40:25 AM Dec 08, 2020
Mkr1 2.454 160 GHz
-27.189 dBm
Ref Offset 0.5 dB
10 dB/div
Ref -17.19 dBm
Log
-27.2
-37.2
-47.2
-57.2
-67.2
-77.2
-87.2
-97.2
-107
Center 2.45200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 54.00 MHz
Sweep 5.69 s (1001 pts)

6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	≥500KHz (6dB bandwidth)	2400-2483.5	PASS

6.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW≥3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be≥6 dB.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP

6.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

6.6 TEST RESULTS

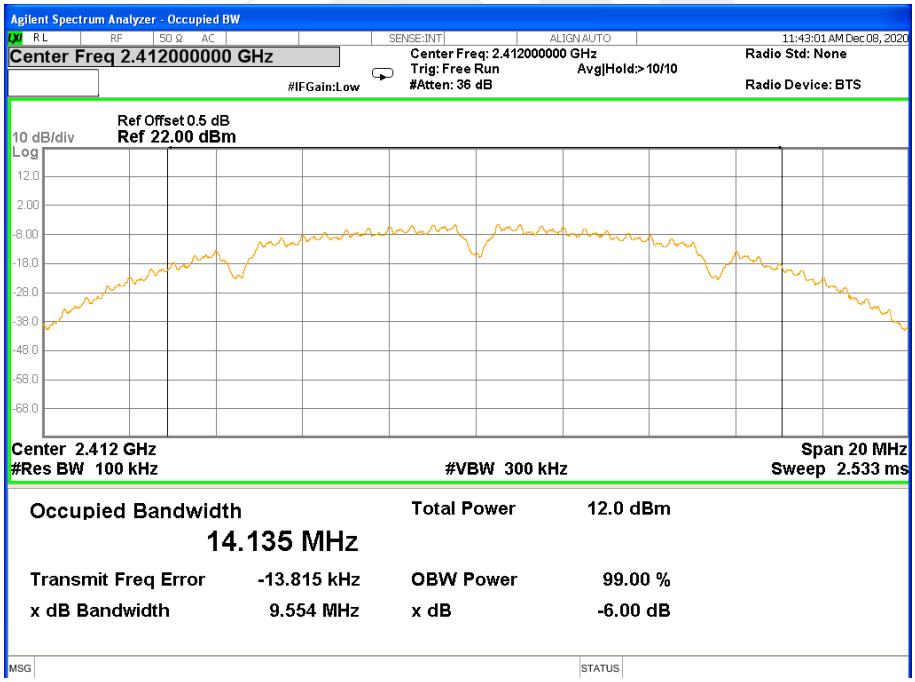
Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX b Mode /CH01, CH06, CH11

Remark: PEAK DETECTOR IS USED

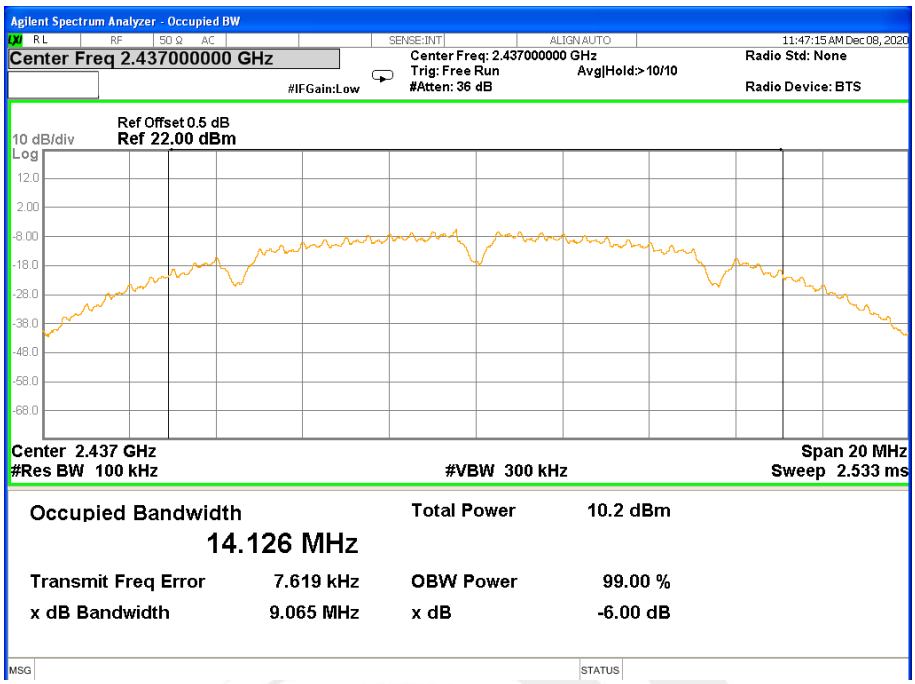
Frequency	ANT 1 6dB Bandwidth	ANT 2 6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(KHz)	
2412 MHz	9.554	9.537	≥500KHz	PASS
2437 MHz	9.065	9.556	≥500KHz	PASS
2462 MHz	9.559	9.559	≥500KHz	PASS

ANT 1

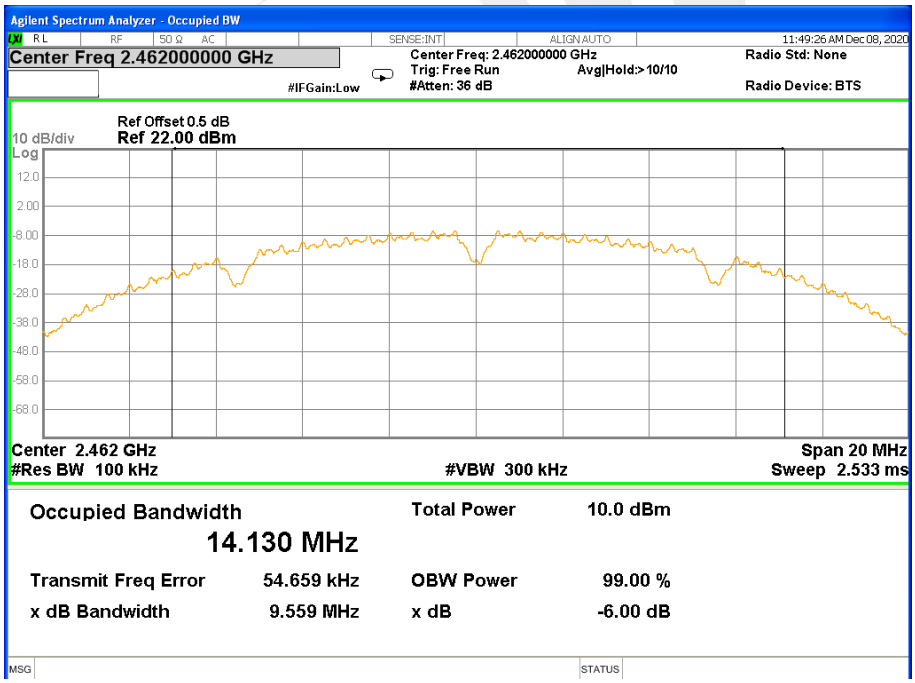
TX CH 01



TX CH 06

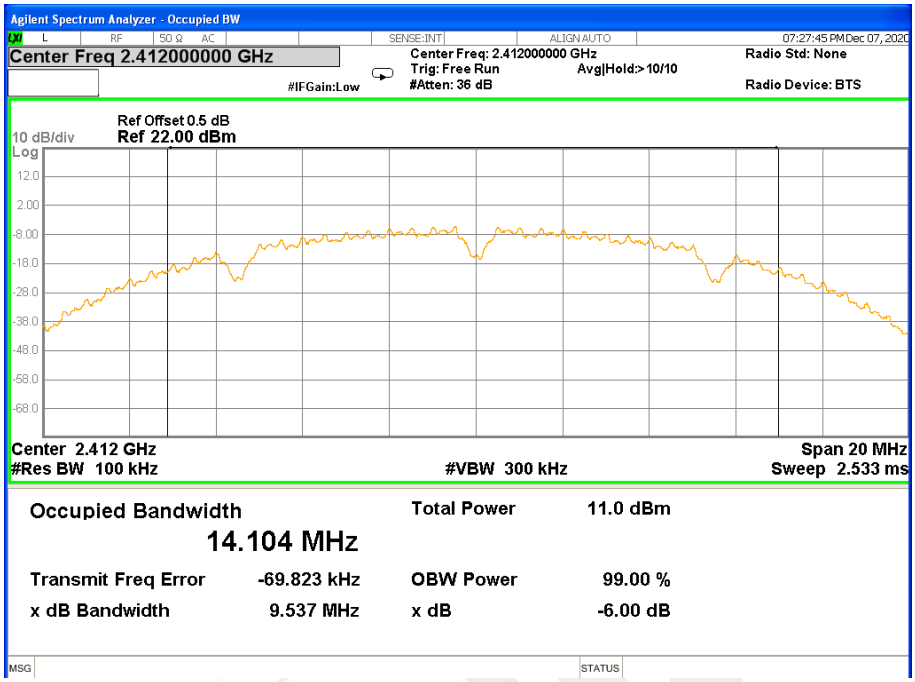


TX CH 11

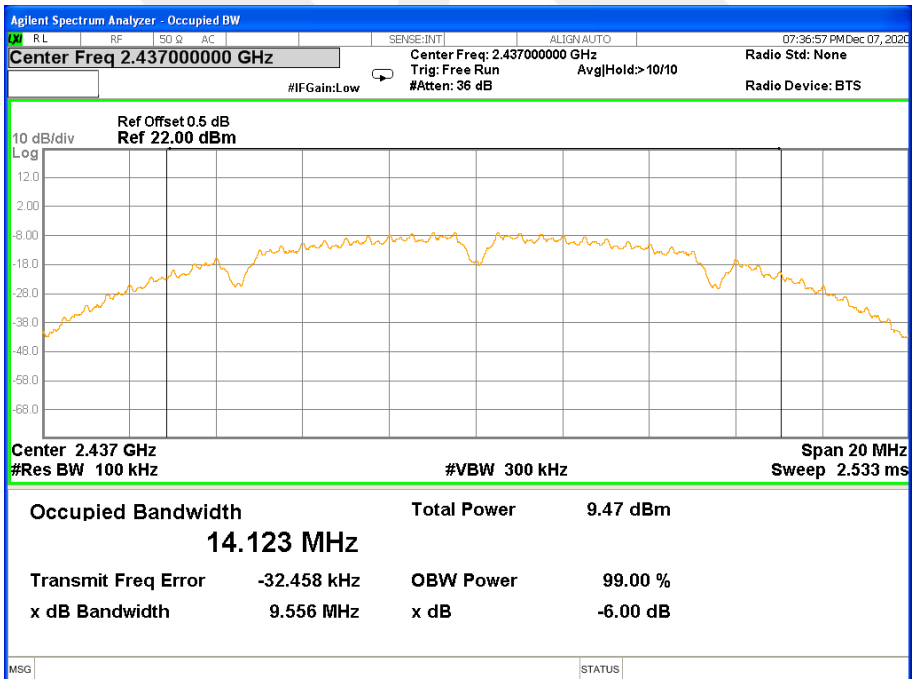


ANT 2

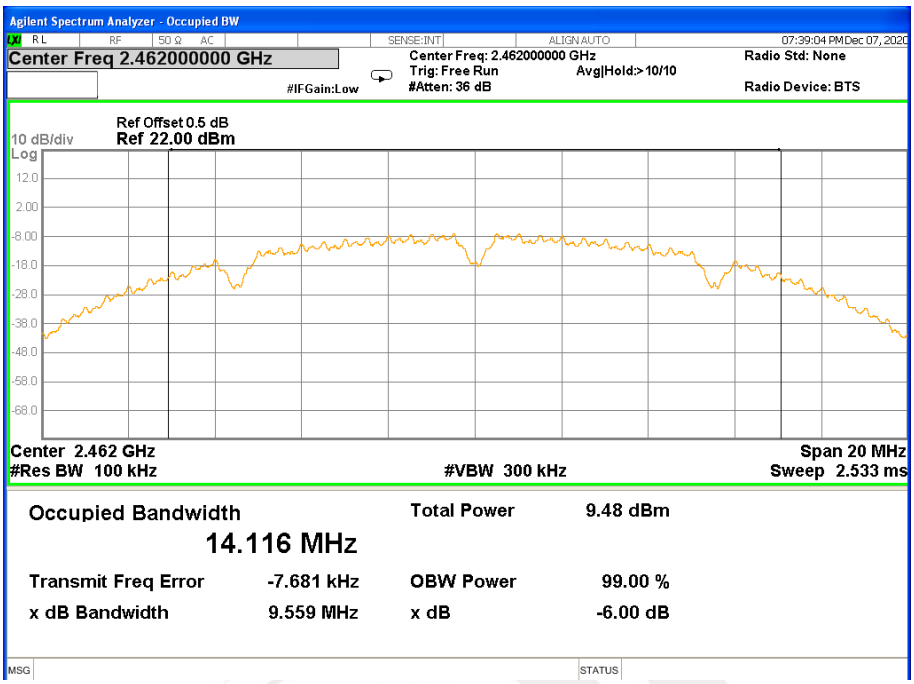
TX CH 01



TX CH 06



TX CH 11

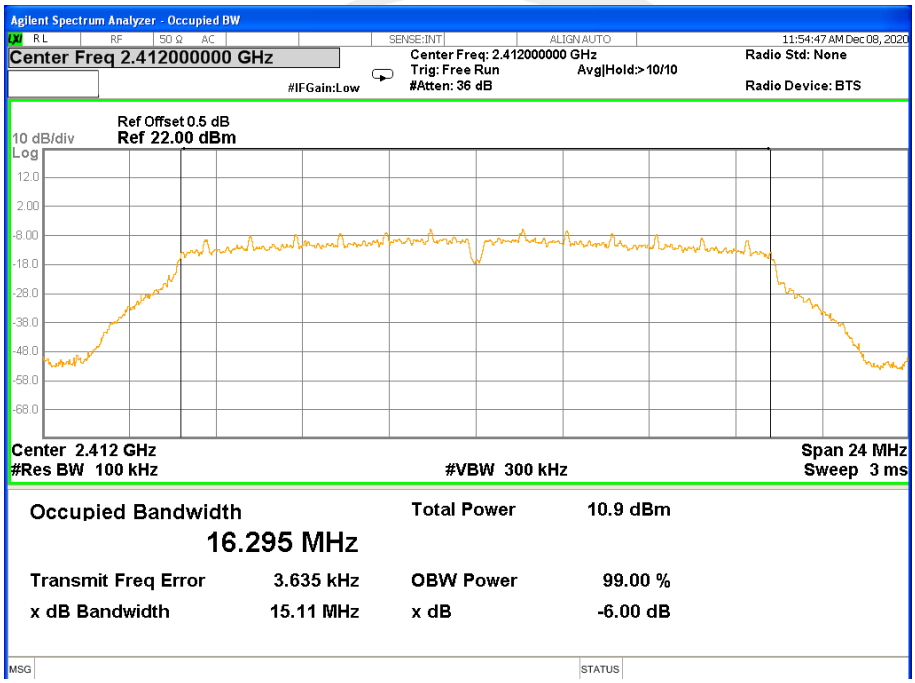

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 36 dB
Avg|Hold:>10/10
Radio Std: None
Radio Device: BTS
#IFGain:Low
Ref Offset 0.5 dB
10 dB/div
Ref 22.00 dBm
Log
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 2.462 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 20 MHz
Sweep 2.533 ms
Occupied Bandwidth
14.116 MHz
Total Power 9.48 dBm
Transmit Freq Error -7.681 kHz
OBW Power 99.00 %
x dB Bandwidth 9.559 MHz
x dB -6.00 dB
MSG
STATUS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX g Mode /CH01, CH06, CH11

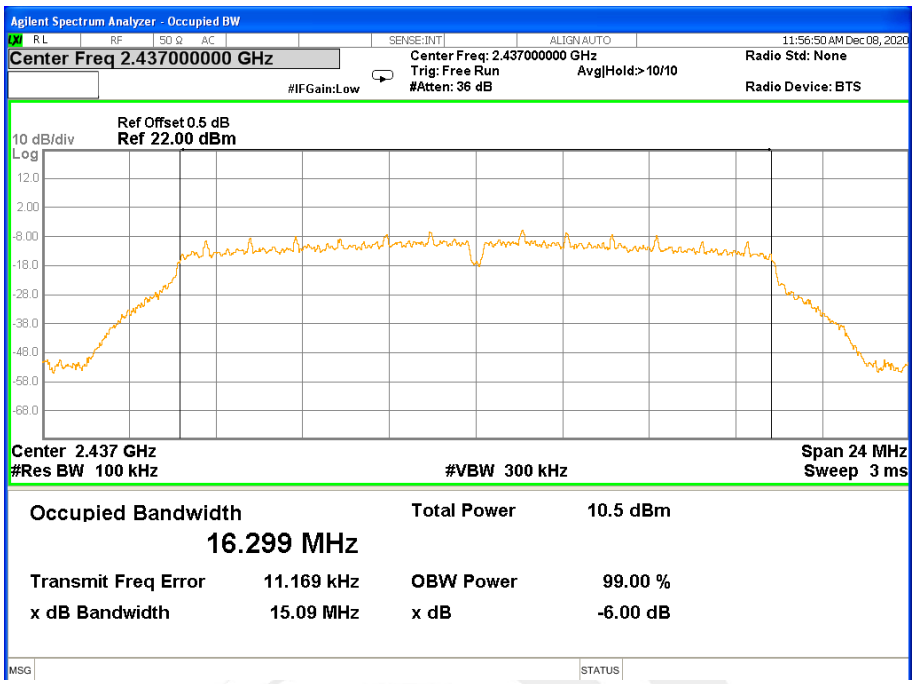
Frequency	ANT 1 6dB Bandwidth	ANT 2 6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(KHz)	
2412 MHz	15.11	15.10	≥500KHz	PASS
2437 MHz	15.09	15.07	≥500KHz	PASS
2462 MHz	15.09	15.10	≥500KHz	PASS

ANT 1

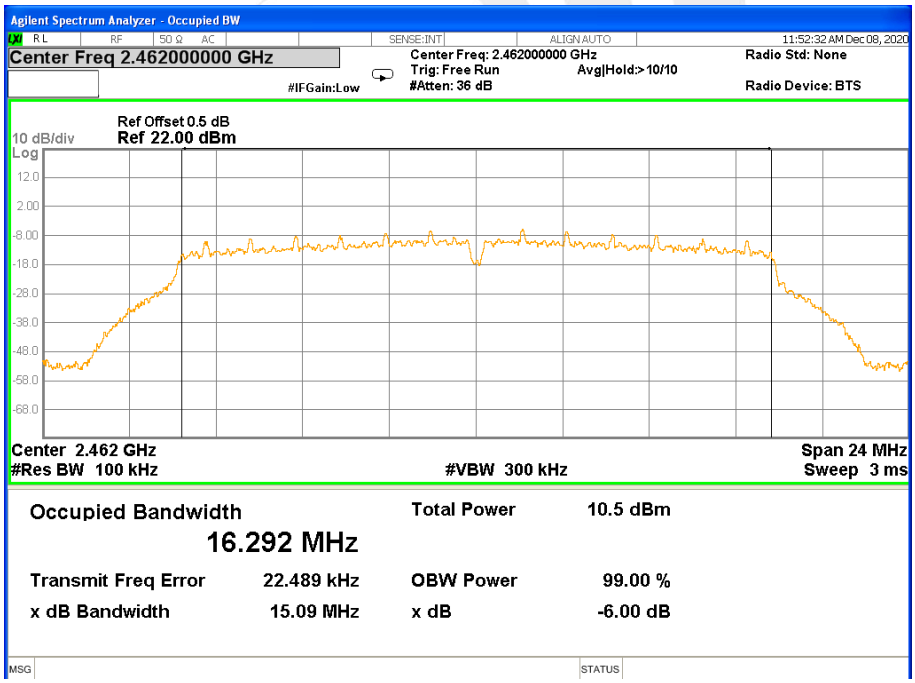
TX CH 01



TX CH 06

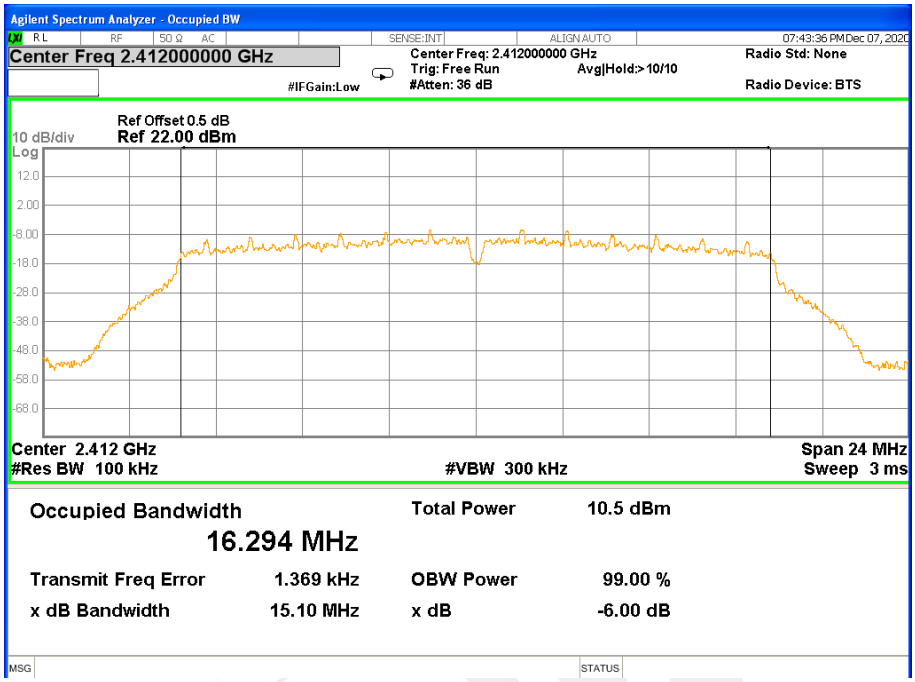


TX CH 11

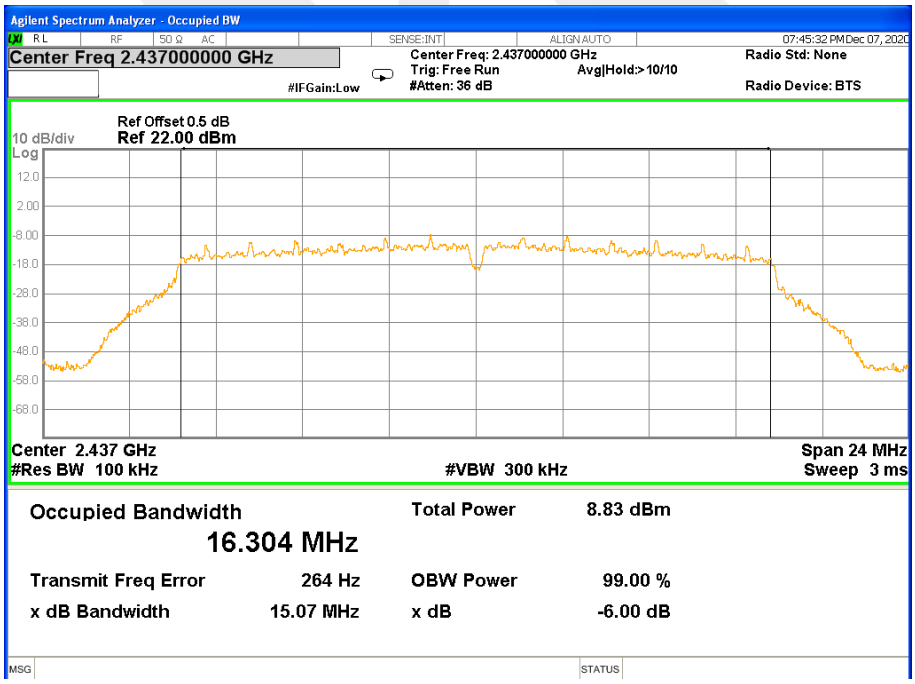


ANT 2

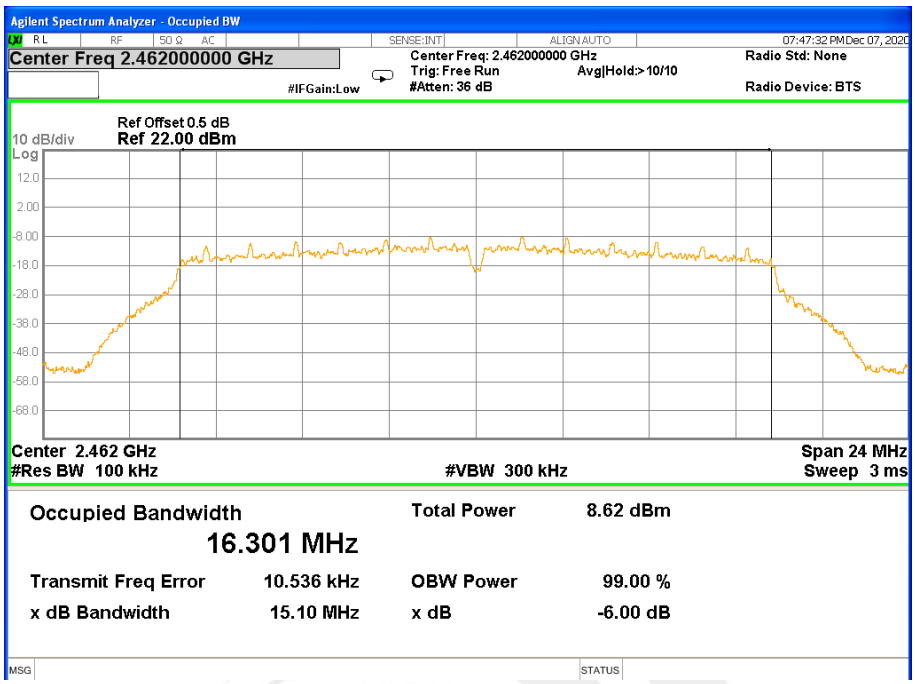
TX CH 01



TX CH 06



TX CH 11

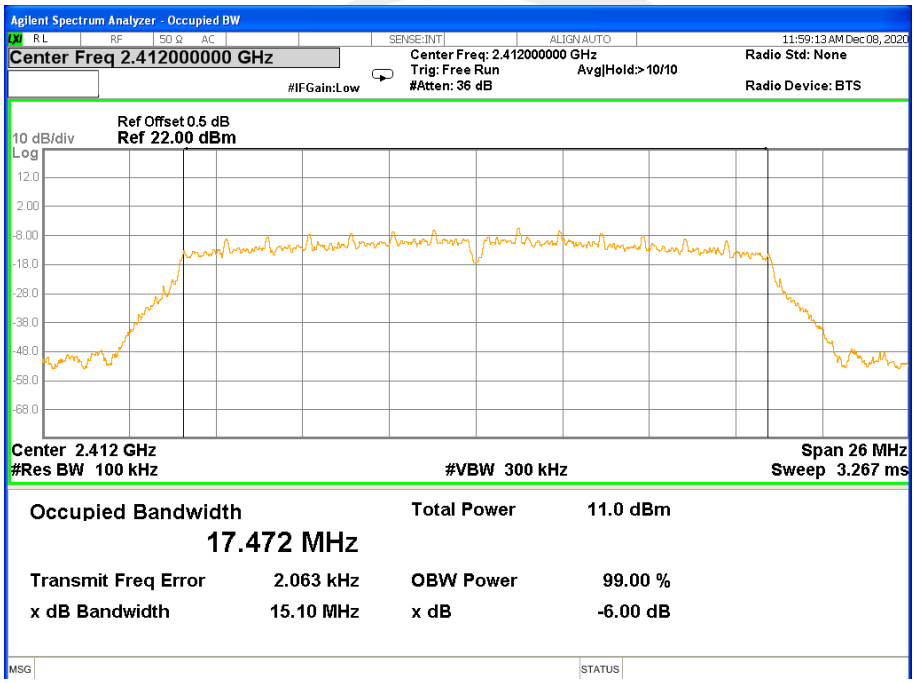

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 36 dB
Avg|Hold:>10/10
Radio Std: None
Radio Device: BTS
#IFGain:Low
Ref Offset 0.5 dB
10 dB/div
Ref 22.00 dBm
Log
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 2.462 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 24 MHz
Sweep 3 ms
Occupied Bandwidth
16.301 MHz
Total Power 8.62 dBm
Transmit Freq Error 10.536 kHz
OBW Power 99.00 %
x dB Bandwidth 15.10 MHz
x dB -6.00 dB
MSG
STATUS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX n Mode(20M) /CH01, CH06, CH11

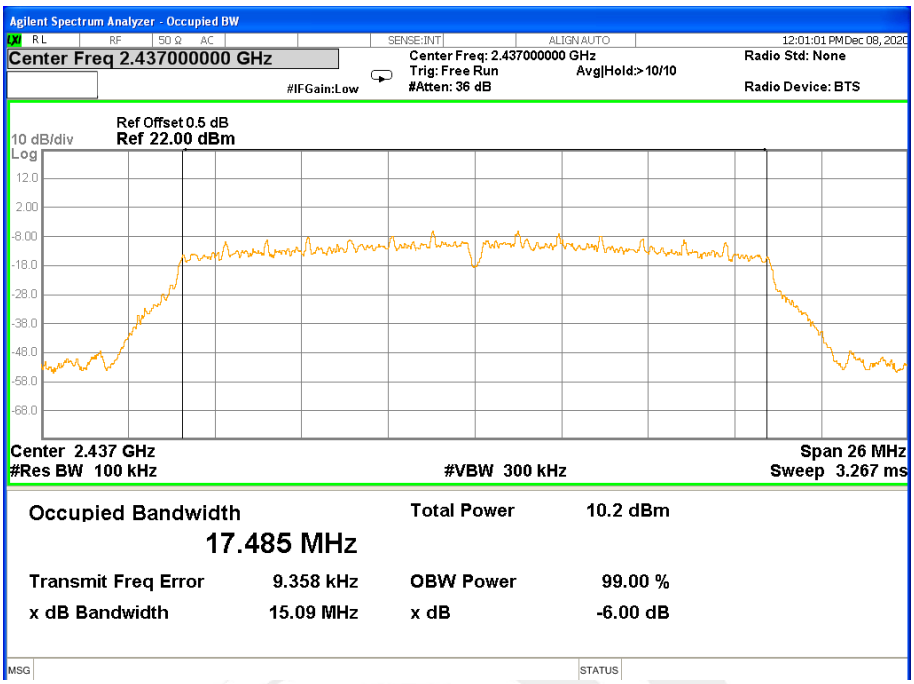
Frequency	ANT 1 6dB Bandwidth	ANT 2 6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(KHz)	
2412 MHz	15.10	15.10	≥500KHz	PASS
2437 MHz	15.09	15.07	≥500KHz	PASS
2462 MHz	15.09	15.09	≥500KHz	PASS

ANT 1

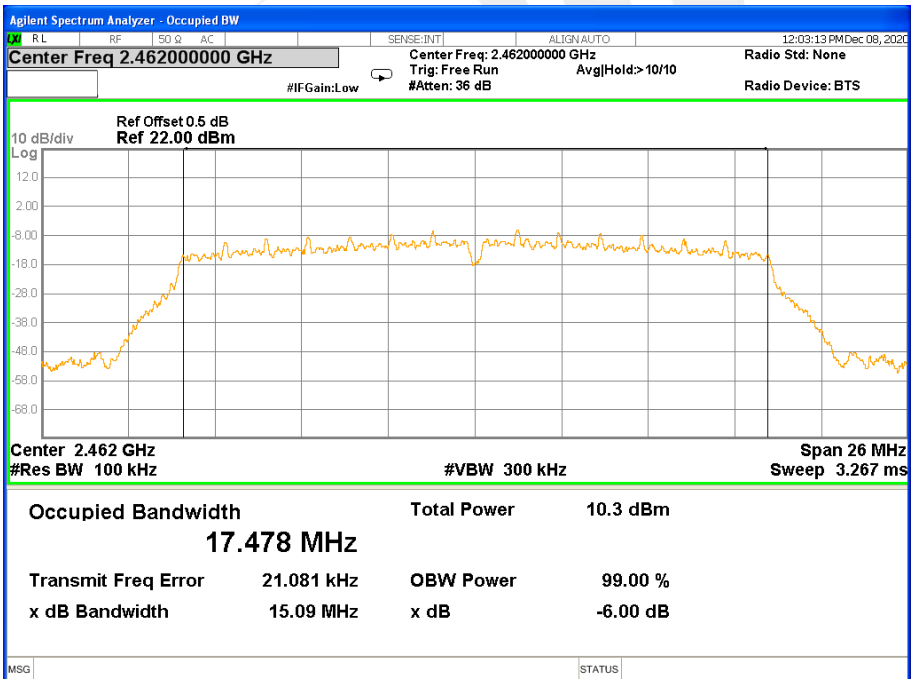
TX CH 01



TX CH 06

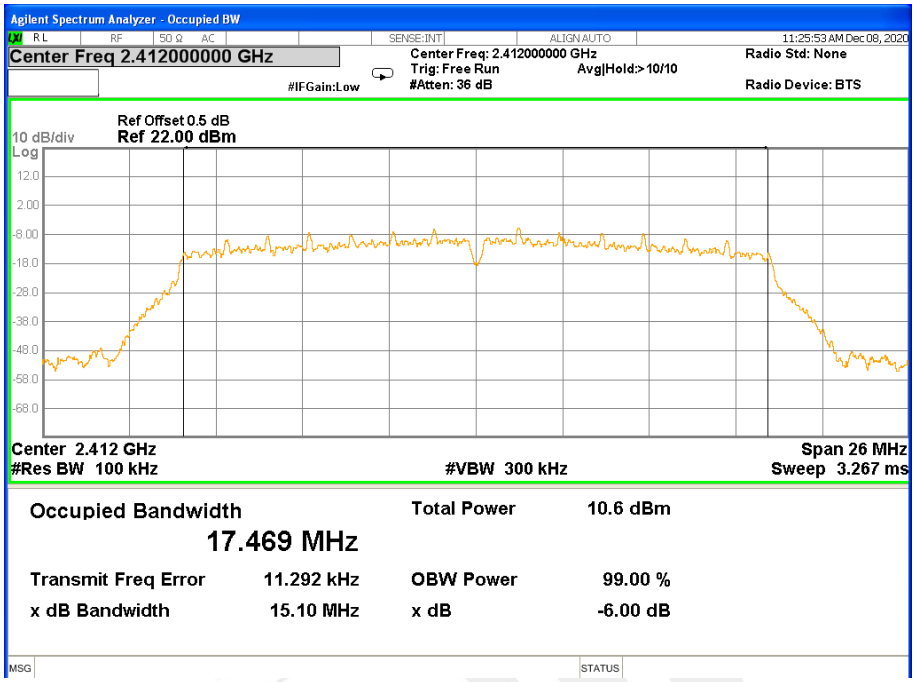


TX CH 11



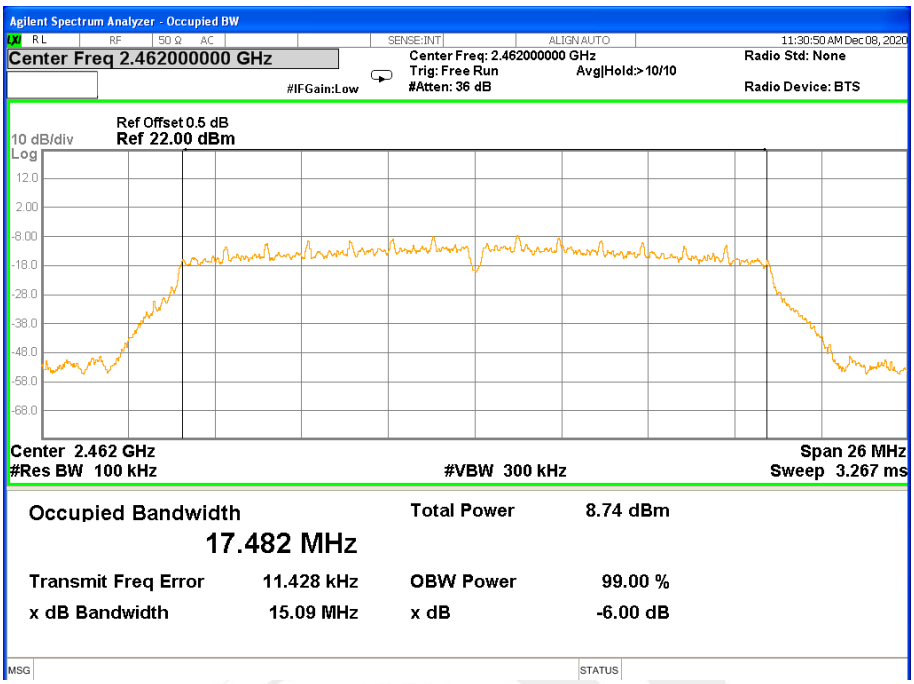
ANT 2

TX CH 01



TX CH 06

TX CH 11

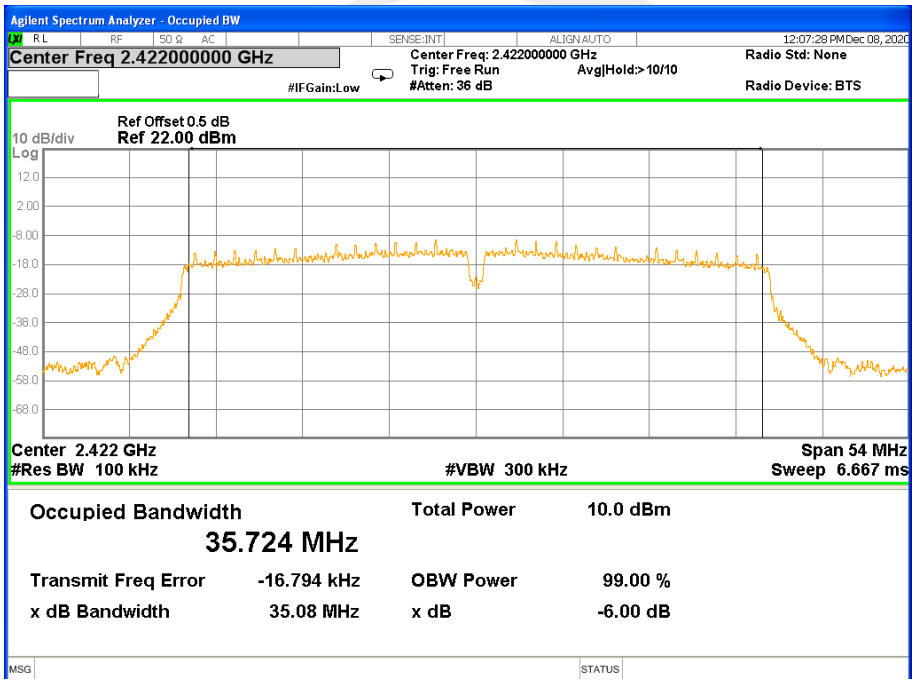

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 36 dB
Avg|Hold:>10/10
Radio Std: None
Radio Device: BTS
#IFGain:Low
Ref Offset 0.5 dB
10 dB/div
Ref 22.00 dBm
Log
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 2.462 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26 MHz
Sweep 3.267 ms
Occupied Bandwidth
17.482 MHz
Total Power 8.74 dBm
Transmit Freq Error 11.428 kHz
OBW Power 99.00 %
x dB Bandwidth 15.09 MHz
x dB -6.00 dB
MSG
STATUS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz	Test Mode:	TX n Mode(40M) /CH03, CH06, CH09

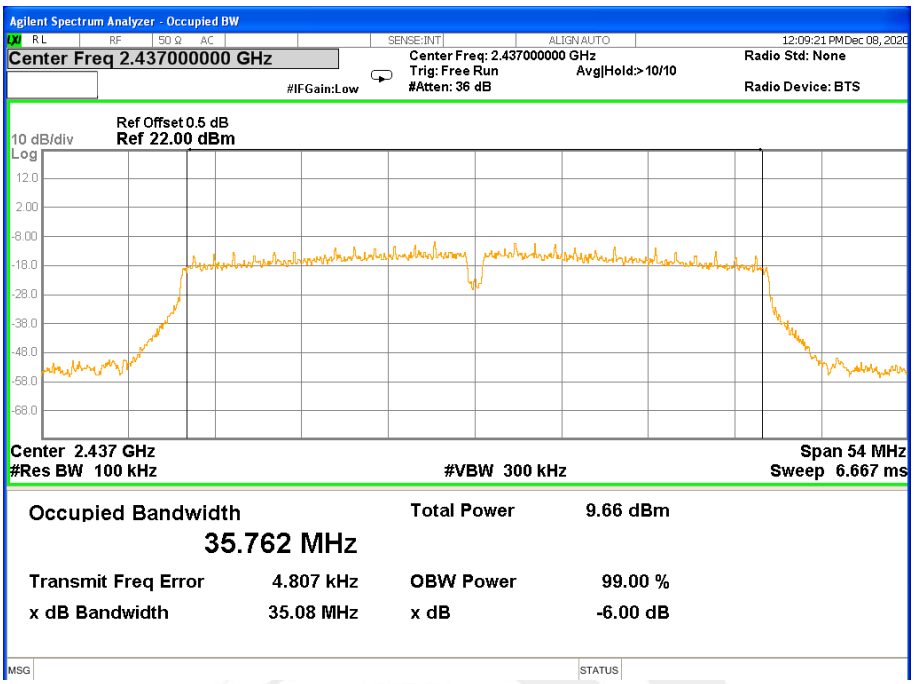
Frequency	ANT 1 6dB Bandwidth	ANT 2 6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(KHz)	
2422 MHz	35.08	33.83	≥500KHz	PASS
2437 MHz	35.08	35.07	≥500KHz	PASS
2452 MHz	35.07	35.02	≥500KHz	PASS

ANT 1

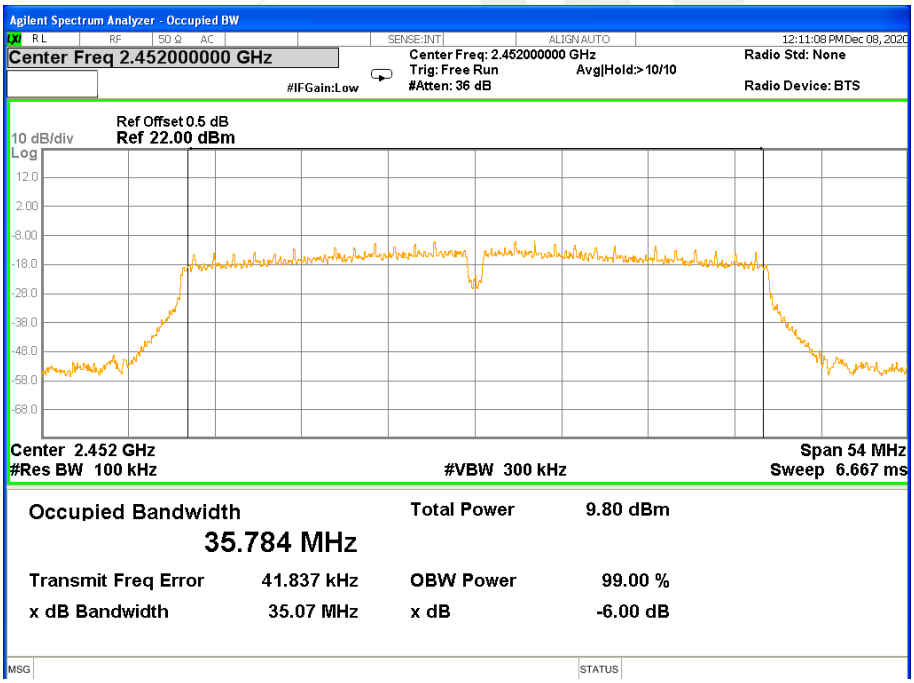
TX CH 03



TX CH 06

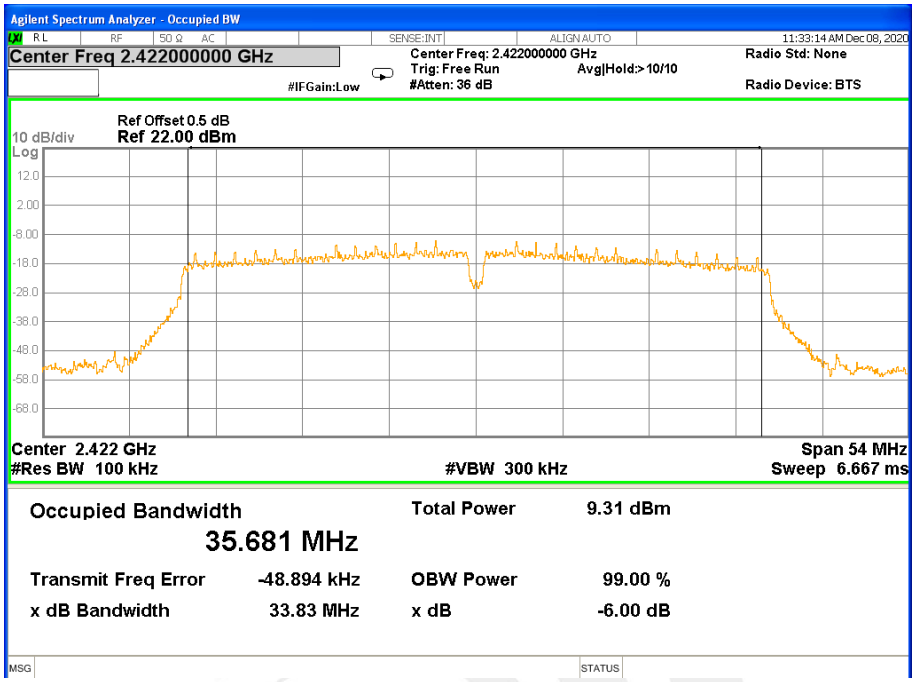


TX CH 09

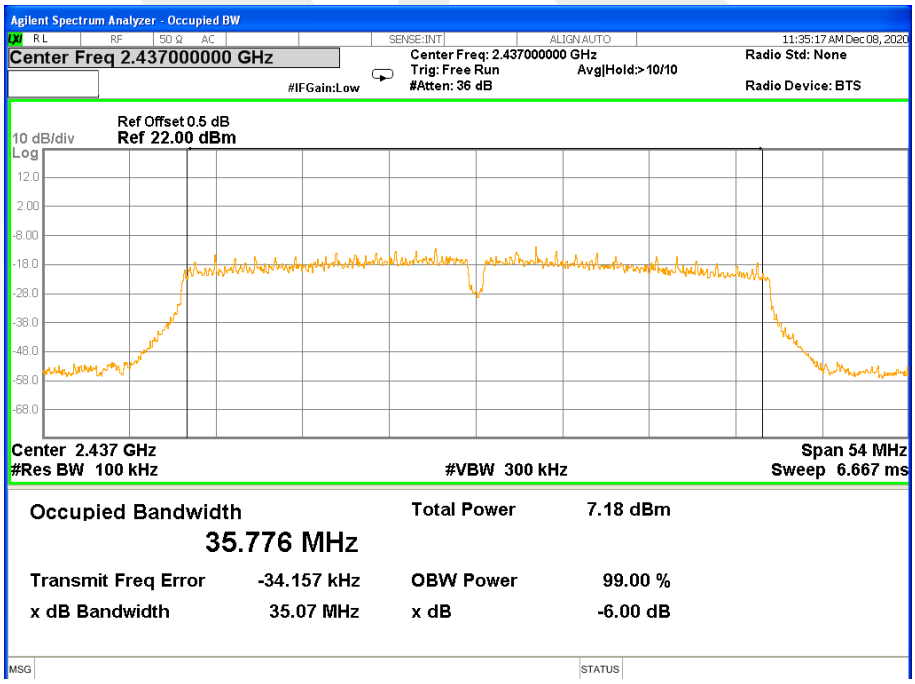


ANT 2

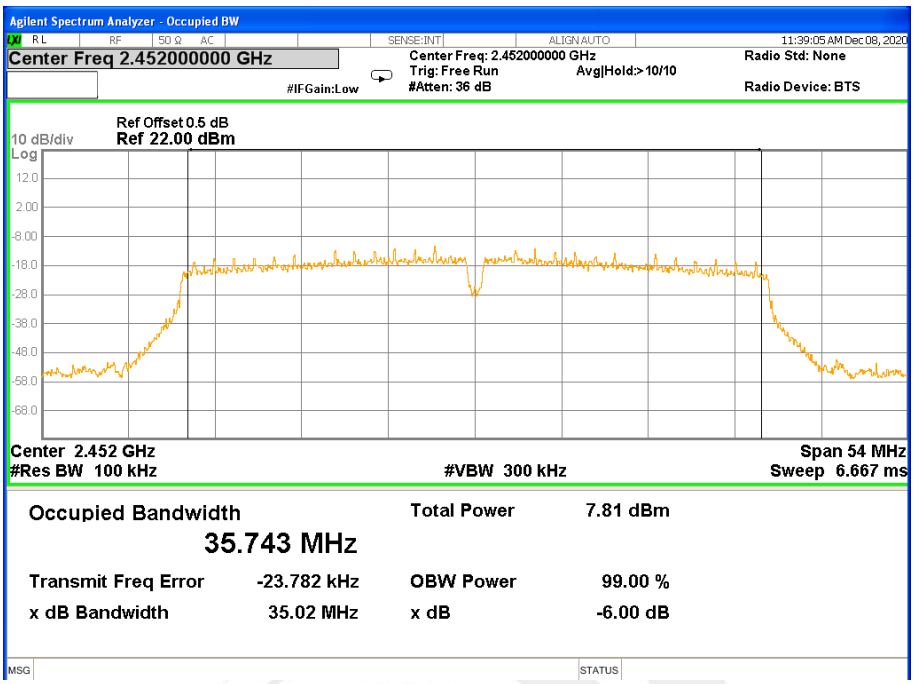
TX CH 03



TX CH 06



TX CH 09


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.452000000 GHz
Center Freq: 2.452000000 GHz
Trig: Free Run
#Atten: 36 dB
Avg|Hold:>10/10
Radio Std: None
Radio Device: BTS
#IFGain:Low
11:39:05 AM Dec 08, 2020
Ref Offset 0.5 dB
10 dB/div
Ref 22.00 dBm
Log
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 2.452 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 54 MHz
Sweep 6.667 ms
Occupied Bandwidth
35.743 MHz
Total Power 7.81 dBm
Transmit Freq Error -23.782 kHz
OBW Power 99.00 %
x dB Bandwidth 35.02 MHz
x dB -6.00 dB
MSG
STATUS

7. PEAK OUTPUT POWER TEST

7.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

7.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

RBW ≥ DTS bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

a) Set the RBW ≥ DTS bandwidth.
b) Set VBW ≥ [3 × RBW].
c) Set span ≥ [3 × RBW].
d) Sweep time = auto couple.
e) Detector = peak.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

a) Set the RBW = 1 MHz.
b) Set the VBW ≥ [3 × RBW].
c) Set the span ≥ [1.5 × DTS bandwidth].
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

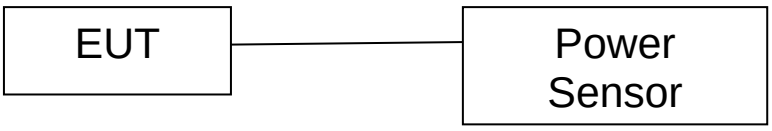
PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

7.6 TEST RESULTS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	AC 120V/60Hz		

TX 802.11b Mode								
Test Channe	Frequency	PK Power ANT 1	PK Power ANT 2	PK Power ANT 1+ANT 2	AV Power ANT 1	AV Power ANT 2	AV Power ANT 1+ANT 2	LIMIT
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm
CH01	2412	14.24	13.83	--	12.43	11.85	--	30
CH06	2437	14.27	13.80	--	12.44	11.84	--	30
CH11	2462	14.33	13.77	--	12.45	11.84	--	30

TX 802.11g Mode								
Test Channe	Frequency	PK Power ANT 1	PK Power ANT 2	PK Power ANT 1+ANT 2	AV Power ANT 1	AV Power ANT 2	AV Power ANT 1+ANT 2	LIMIT
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm
CH01	2412	11.75	12.08	--	1.64	1.76	--	30
CH06	2437	11.72	12.10	--	1.60	1.76	--	30
CH11	2462	11.88	12.10	--	1.80	1.74	--	30

TX 802.11n20 Mode								
Test Channe	Frequency	PK Power ANT 1	PK Power ANT 2	PK Power ANT 1+ANT 2	AV Power ANT 1	AV Power ANT 2	AV Power ANT 1+ANT 2	LIMIT
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm
CH01	2412	11.91	11.87	14.90	1.75	1.69	4.73	27.99
CH06	2437	11.84	11.79	14.83	1.71	1.64	4.69	27.99
CH11	2462	11.89	11.80	14.86	1.71	1.64	4.69	27.99

TX 802.11n40 Mode								
Test Channe	Frequency	PK Power ANT 1	PK Power ANT 2	PK Power ANT 1+ANT 2	AV Power ANT 1	AV Power ANT 2	AV Power ANT 1+ANT 2	LIMIT
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm
CH03	2422	11.50	11.49	14.51	0.69	0.73	3.72	27.99
CH06	2437	11.42	11.48	14.46	0.74	0.74	3.75	27.99
CH09	2452	11.48	11.52	14.51	0.74	0.76	3.76	27.99

Note: The MIMO antenna gain is 8.01dBi, which is greater 6dBi, and the MIMO mode limit will be reduced by 2.01dBi.

8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible partyshall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is Integral Antenna. It comply with the standard requirement.

APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

※※※※※END OF THE REPORT※※※※※