

TEST REPORT

Applicant: CoreTigo Ltd

Address of Applicant: Giborey Israel 5, Poleg, Natanya, Israel 4250405

Manufacturer: CoreTigo Ltd

Address of Manufacturer: Giborey Israel 5, Poleg, Natanya, Israel 4250405

Equipment Under Test (EUT)

Product Name: TigoMaster IO-Link Wireless Master

Model No.: CT241-0004t2-01

HVIN: 3.0

Trade Mark: TigoMaster IO-Link Wireless Master

FCC ID: 2ATSM-COR2TH

IC: 26463-COR2TH

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247
RSS-247 Issue 2
RSS-Gen Issue 5

Date of sample receipt: June 01, 2021



Date of Test: June 01, 2021-June 11, 2021

Date of report issued: June 15, 2021

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Robinson Lo

Laboratory Manager

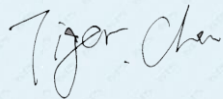
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2 Version

Version No.	Date	Description
00	June 15, 2021	Original

Prepared By:



Date:

June 15, 2021

Project Engineer

Check By:



Reviewer

Date:

June 15, 2021

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c) RSS-Gen Section 6.8	Pass
AC Power Line Conducted Emission	15.207 RSS-Gen Section 8.8	Pass
Conducted Output Power	15.247 (b)(3) RSS-247 Section 5.4(d)	Pass
Channel Bandwidth	15.247 (a)(2) RSS-247 Section 5.2(a)	Pass
99% Occupy Bandwidth	RSS-Gen Section 6.7	Pass
Power Spectral Density	15.247 (e) RSS-247 Section 5.2(b)	Pass
Band Edge	15.247(d) RSS-247 Section 5.5	Pass
Spurious Emission	15.205/15.209 RSS-247 Section 5.5 RSS-Gen Section 8.9 8.10	Pass
Frequency stability	RSS-Gen Section 6.11& Section 8.11	Pass

Remarks:

1. Pass: The EUT complies with the essential requirements in the standard.
2. Test according to ANSI C63.10:2013 and RSS-Gen.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	TigoMaster IO-Link Wireless Master
Model No.:	CT241-0004t2-01
Series:	CT241-0003t2-02, CT241-0008t2-01, CT241-0004t2-01
Hardware Version:	Rev3
Software Version:	V06.03.0092
Test sample(s) ID:	GTS202105000199-1
Sample(s) Status	Engineered sample
Operation Frequency:	2401MHz~2480MHz
Channel numbers:	80
Channel separation:	1MHz
Modulation technology:	GFSK
Antenna Type:	External Antenna
Antenna gain:	ANT 1&ANT 2&ANT 3: 1.6dBi(declare by applicant)
Power supply:	DC 18-32V

Remark: All 3 antennas transmitters were work in asynchronous status.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2401 MHz	21	2421 MHz	41	2441 MHz	61	2461 MHz
2	2402 MHz	22	2422 MHz	42	2442 MHz	62	2462 MHz
3	2403 MHz	23	2423 MHz	43	2443 MHz	63	2463 MHz
4	2404 MHz	24	2424 MHz	44	2444 MHz	64	2464 MHz
5	2405 MHz	25	2425 MHz	45	2445 MHz	65	2465 MHz
6	2406 MHz	26	2426 MHz	46	2446 MHz	66	2466 MHz
7	2407 MHz	27	2427 MHz	47	2447 MHz	67	2467 MHz
8	2408 MHz	28	2428 MHz	48	2448 MHz	68	2468 MHz
9	2409 MHz	29	2427 MHz	49	2449 MHz	69	2469 MHz
10	2410 MHz	30	2430 MHz	50	2450 MHz	70	2470 MHz
11	2411 MHz	31	2431 MHz	51	2451 MHz	71	2471 MHz
12	2412 MHz	32	2432 MHz	52	2452 MHz	72	2472 MHz
13	2413 MHz	33	2431 MHz	53	2453 MHz	73	2473 MHz
14	2414 MHz	34	2434 MHz	54	2454 MHz	74	2474 MHz
15	2415 MHz	35	2435 MHz	55	2455 MHz	75	2475 MHz
16	2416 MHz	36	2436 MHz	56	2456 MHz	76	2476 MHz
17	2417 MHz	37	2437 MHz	57	2457 MHz	77	2477 MHz
18	2418 MHz	38	2438 MHz	58	2458 MHz	78	2478 MHz
19	2419 MHz	39	2439 MHz	59	2459 MHz	79	2479 MHz
20	2420 MHz	40	2440 MHz	60	2460 MHz	80	2480 MHz

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2401MHz
The middle channel	2440MHz
The Highest channel	2480MHz

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
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5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
SAIL	DC POWER SUPPLY	46B24L	7J3116161 2491
Lenovo	Notebook PC	E40-80	N/A

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

<p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none"> ● FCC —Registration No.: 381383 Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383. ● IC —Registration No.: 9079A The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A ● NVLAP (LAB CODE:600179-0) Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.7 Test Location

All tests were performed at:
<p>Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960</p>

5.8 Additional instructions

Test Software	Test command provide by manufacturer.
Power level setup	Default

6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 02 2020	July. 01 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 25 2020	June. 24 2021
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 25 2020	June. 24 2021
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 25 2020	June. 24 2021
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 25 2020	June. 24 2021
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 25 2020	June. 24 2021
9	Coaxial Cable	GTS	N/A	GTS211	June. 25 2020	June. 24 2021
10	Coaxial cable	GTS	N/A	GTS210	June. 25 2020	June. 24 2021
11	Coaxial Cable	GTS	N/A	GTS212	June. 25 2020	June. 24 2021
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 25 2020	June. 24 2021
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 25 2020	June. 24 2021
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 25 2020	June. 24 2021
15	Band filter	Amindeon	82346	GTS219	June. 25 2020	June. 24 2021
16	Power Meter	Anritsu	ML2495A	GTS540	June. 25 2020	June. 24 2021
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 25 2020	June. 24 2021
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 25 2020	June. 24 2021
19	Splitter	Agilent	11636B	GTS237	June. 25 2020	June. 24 2021
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 25 2020	June. 24 2021
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 18 2020	Oct. 17 2021
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 18 2020	Oct. 17 2021
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 18 2020	Oct. 17 2021
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 25 2020	June. 24 2021

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 25 2020	June. 24 2021
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 25 2020	June. 24 2021
4	ENV216 2-L-V-NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	June. 25 2020	June. 24 2021
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 25 2020	June. 24 2021
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	June. 25 2020	June. 24 2021
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 25 2020	June. 24 2021

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 25 2020	June. 24 2021
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 25 2020	June. 24 2021
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 25 2020	June. 24 2021
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 25 2020	June. 24 2021
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 25 2020	June. 24 2021
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 25 2020	June. 24 2021
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 25 2020	June. 24 2021
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 25 2020	June. 24 2021

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 25 2020	June. 24 2021
2	Barometer	ChangChun	DYM3	GTS255	June. 25 2020	June. 24 2021

7 Test results and Measurement Data

7.1 Antenna requirement

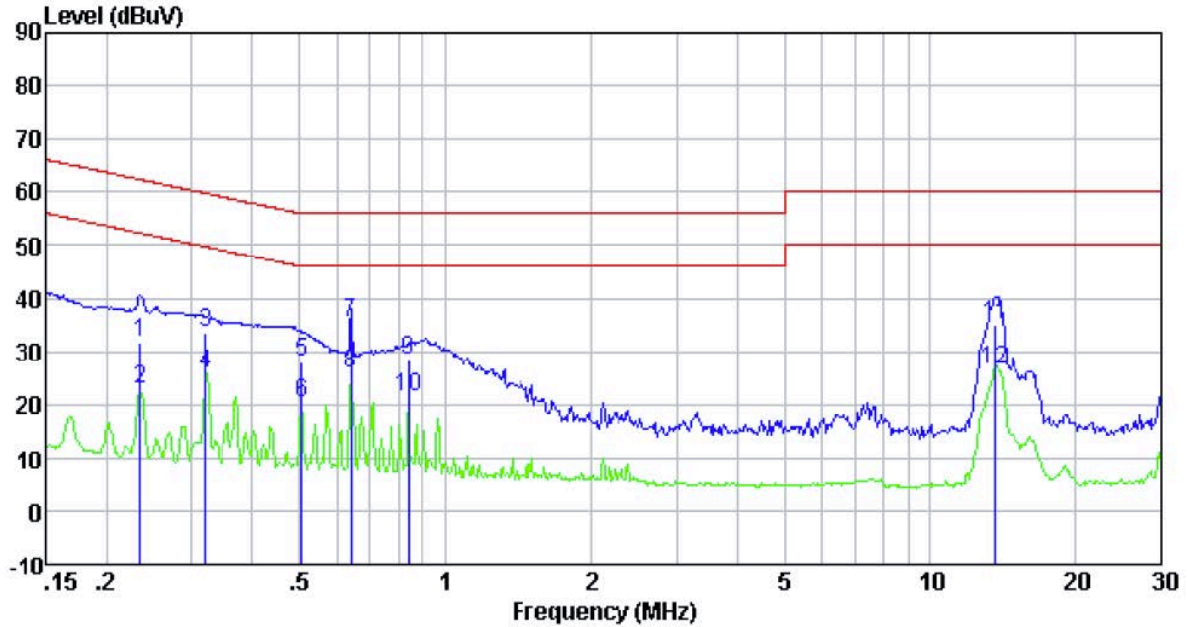
Standard requirement:	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement:</p> <p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>15.247(c) (1)(i) requirement:</p> <p>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.</p>	
Standard requirement:	RSS-Gen Section 6.8
<p>A transmitter can only be sold or operated with antennas with which it was approved.</p> <p>When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on measurement or on data from the antenna manufacturer. For transmitters of RF output power of 10 milliwatts or less, only the portion of the antenna gain that is in excess of 6 dBi (6 dB above isotropic gain) shall be added to the measured RF output power to demonstrate compliance with the radiated power limits specified in the applicable standard. For transmitters of output power greater than 10 milliwatts, the total antenna gain shall be added to the measured RF output power to demonstrate compliance to the specified radiated power</p>	
E.U.T Antenna:	
<p><i>The antenna is External antenna, the best case gain of the antenna is 1.6dBi, reference to the appendix II for details.</i></p>	

7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207 RSS-Gen Section 8.8				
Test Method:	ANSI C63.10:2013 and RSS-Gen				
Test Frequency Range:	150KHz to 30MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto				
Limit:	Frequency range (MHz)		Limit (dBuV)		
			Quasi-peak	Average	
	0.15-0.5		66 to 56*	56 to 46*	
	0.5-5		56	46	
5-30		60	50		
* Decreases with the logarithm of the frequency.					
Test setup:	<p>Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>				
Test procedure:	<ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement. 				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.2 for details				
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.: 1012mbar
Test results:	Pass				

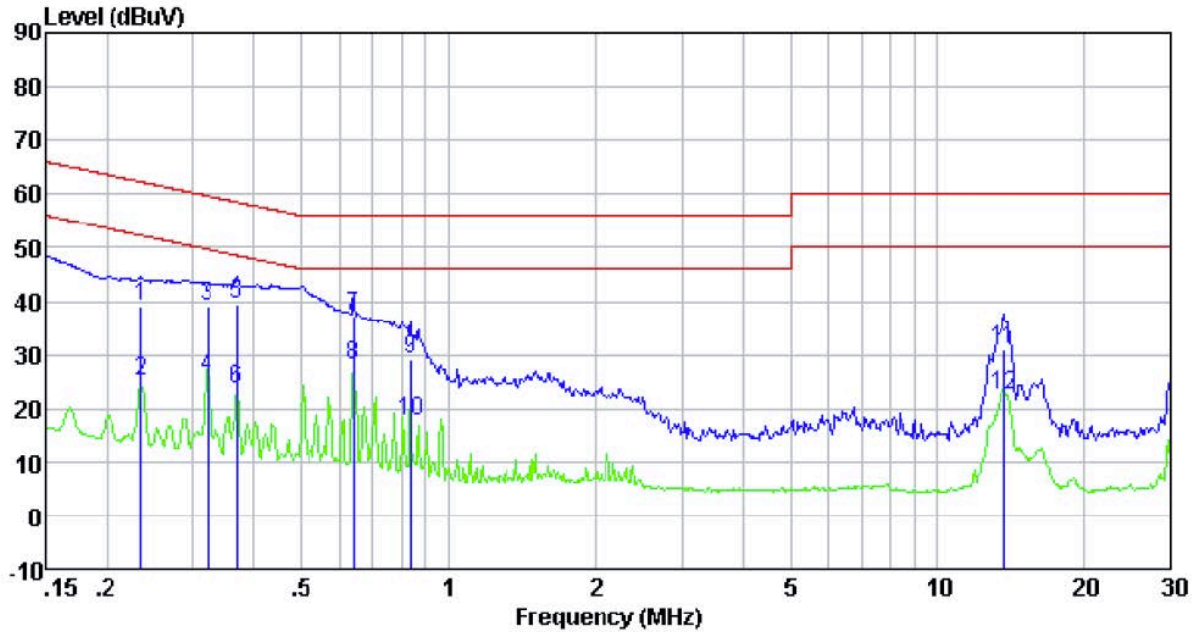
Measurement data

Line:



Freq MHz	Reading level d μ V	LISM/ISN factor dB	Cable loss dB	Level d μ V	Limit level d μ V	Over limit dB	Remark
0.24	11.05	20.40	0.11	31.56	62.26	-30.70	QP
0.24	2.20	20.40	0.11	22.71	52.26	-29.55	Average
0.32	13.16	20.39	0.10	33.65	59.71	-26.06	QP
0.32	5.38	20.39	0.10	25.87	49.71	-23.84	Average
0.50	7.50	20.31	0.11	27.92	56.00	-28.08	QP
0.50	-0.16	20.31	0.11	20.26	46.00	-25.74	Average
0.64	15.04	20.27	0.12	35.43	56.00	-20.57	QP
0.64	5.30	20.27	0.12	25.69	46.00	-20.31	Average
0.84	8.06	20.23	0.14	28.43	56.00	-27.57	QP
0.84	0.94	20.23	0.14	21.31	46.00	-24.69	Average
13.62	14.54	20.20	0.21	34.95	60.00	-25.05	QP
13.62	6.22	20.20	0.21	26.63	50.00	-23.37	Average

Neutral:

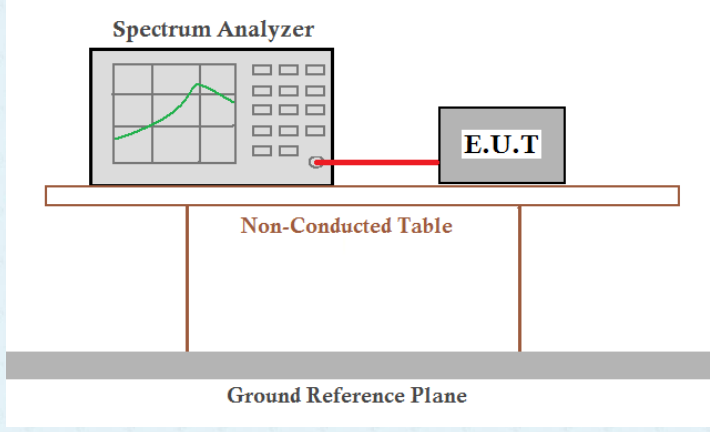


Freq MHz	Reading level dB μ V	LISN/ISN factor dB	Cable loss dB	Level dB μ V	Limit level dB μ V	Over limit dB	Remark
0.24	18.50	20.40	0.11	39.01	62.26	-23.25	QP
0.24	4.38	20.40	0.11	24.89	52.26	-27.37	Average
0.32	18.42	20.39	0.10	38.91	59.66	-20.75	QP
0.32	5.34	20.39	0.10	25.83	49.66	-23.83	Average
0.37	19.12	20.37	0.10	39.59	58.52	-18.93	QP
0.37	3.16	20.37	0.10	23.63	48.52	-24.89	Average
0.64	17.02	20.27	0.12	37.41	56.00	-18.59	QP
0.64	7.51	20.27	0.12	27.90	46.00	-18.10	Average
0.84	8.85	20.23	0.14	29.22	56.00	-26.78	QP
0.84	-2.63	20.23	0.14	17.74	46.00	-28.26	Average
13.70	10.60	20.20	0.21	31.01	60.00	-28.99	QP
13.70	2.21	20.20	0.21	22.62	50.00	-27.38	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

7.3 Conducted Output Power

Test Requirement:	FCC Part15 C Section 15.247 (b)(3) RSS-247 Section 5.4(d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02 and RSS-Gen
Limit:	30dBm 36dBm(4W for e.i.r.p)
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

Note: eirp=output power +antenna gain 1.6dBi

ANT 1:

Frequency (MHz)	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
2401	9.29	30	PASS
2440	8.87	30	PASS
2480	8.42	30	PASS

Frequency (MHz)	e.i.r.p (dBm)	Limits (dBm)	Verdict
2401	10.89	36	PASS
2440	10.47	36	PASS
2480	10.02	36	PASS

ANT 2:

Frequency (MHz)	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
2401	9.52	30	PASS
2440	9.00	30	PASS
2480	8.55	30	PASS

Frequency (MHz)	e.i.r.p (dBm)	Limits (dBm)	Verdict
2401	11.12	36	PASS
2440	10.60	36	PASS
2480	10.15	36	PASS

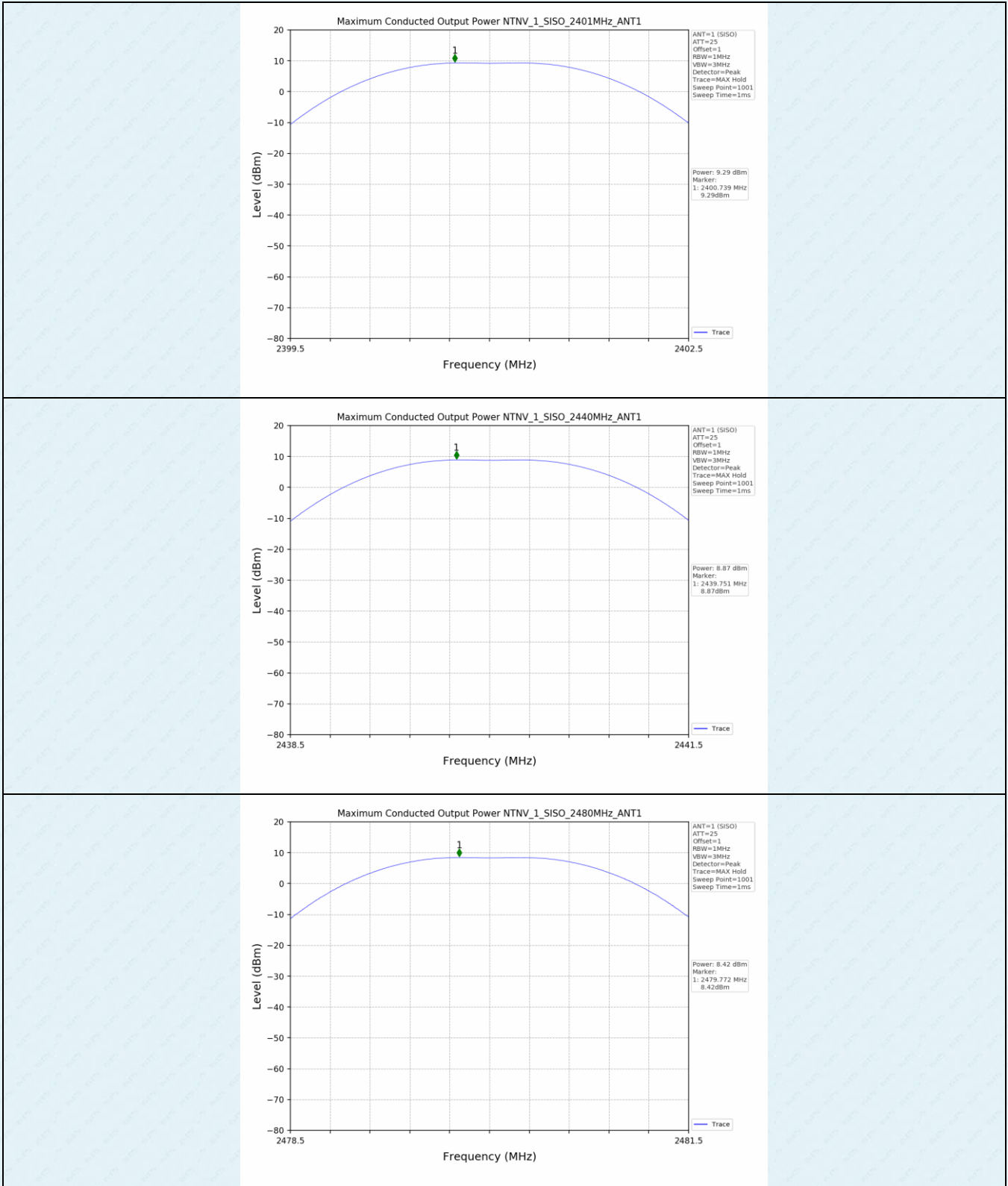
ANT 3:

Frequency (MHz)	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
2401	9.07	30	PASS
2440	8.54	30	PASS
2480	8.06	30	PASS

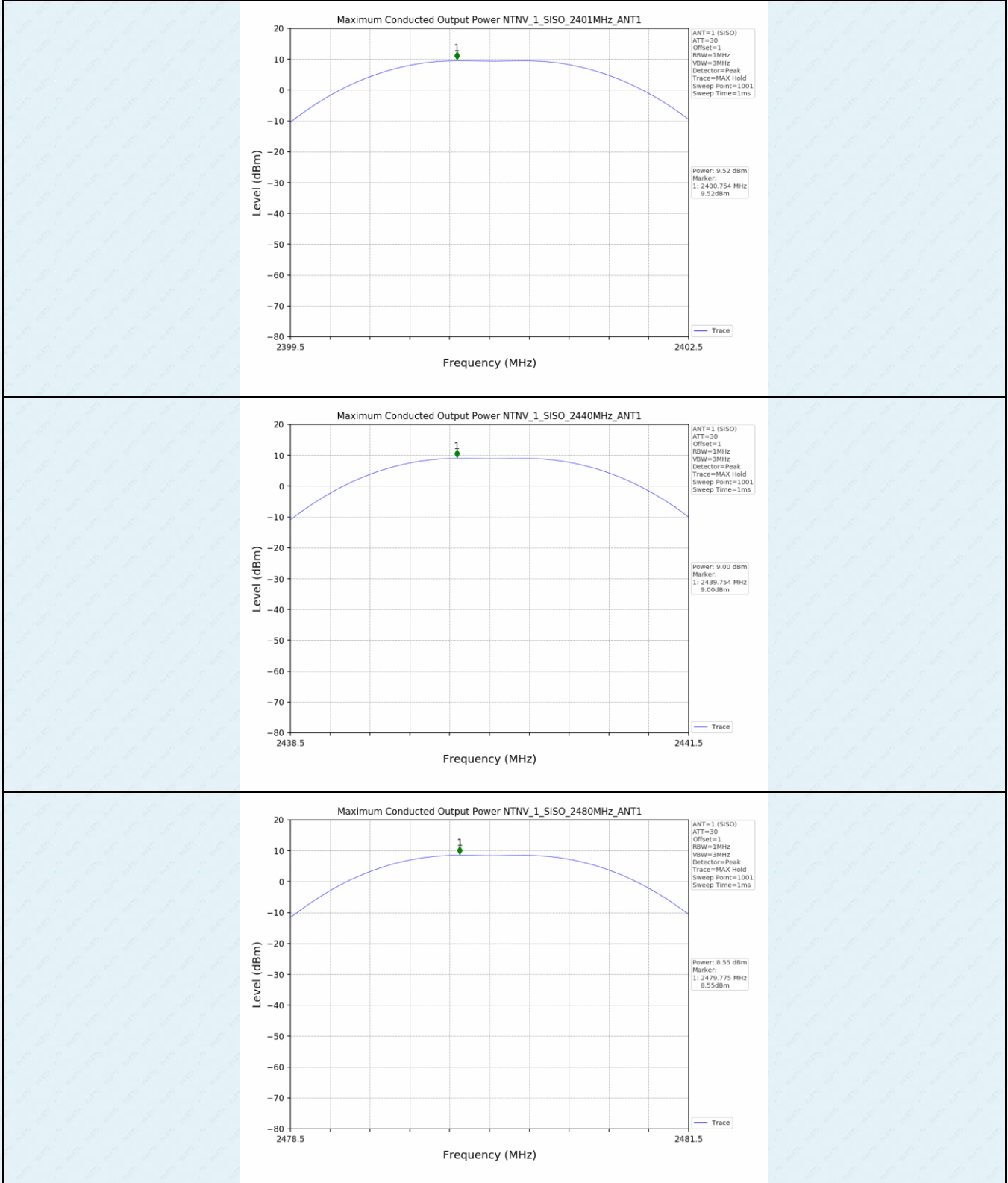
Frequency (MHz)	e.i.r.p (dBm)	Limits (dBm)	Verdict
2401	10.67	36	PASS
2440	10.14	36	PASS
2480	9.66	36	PASS

Test plot as follows:

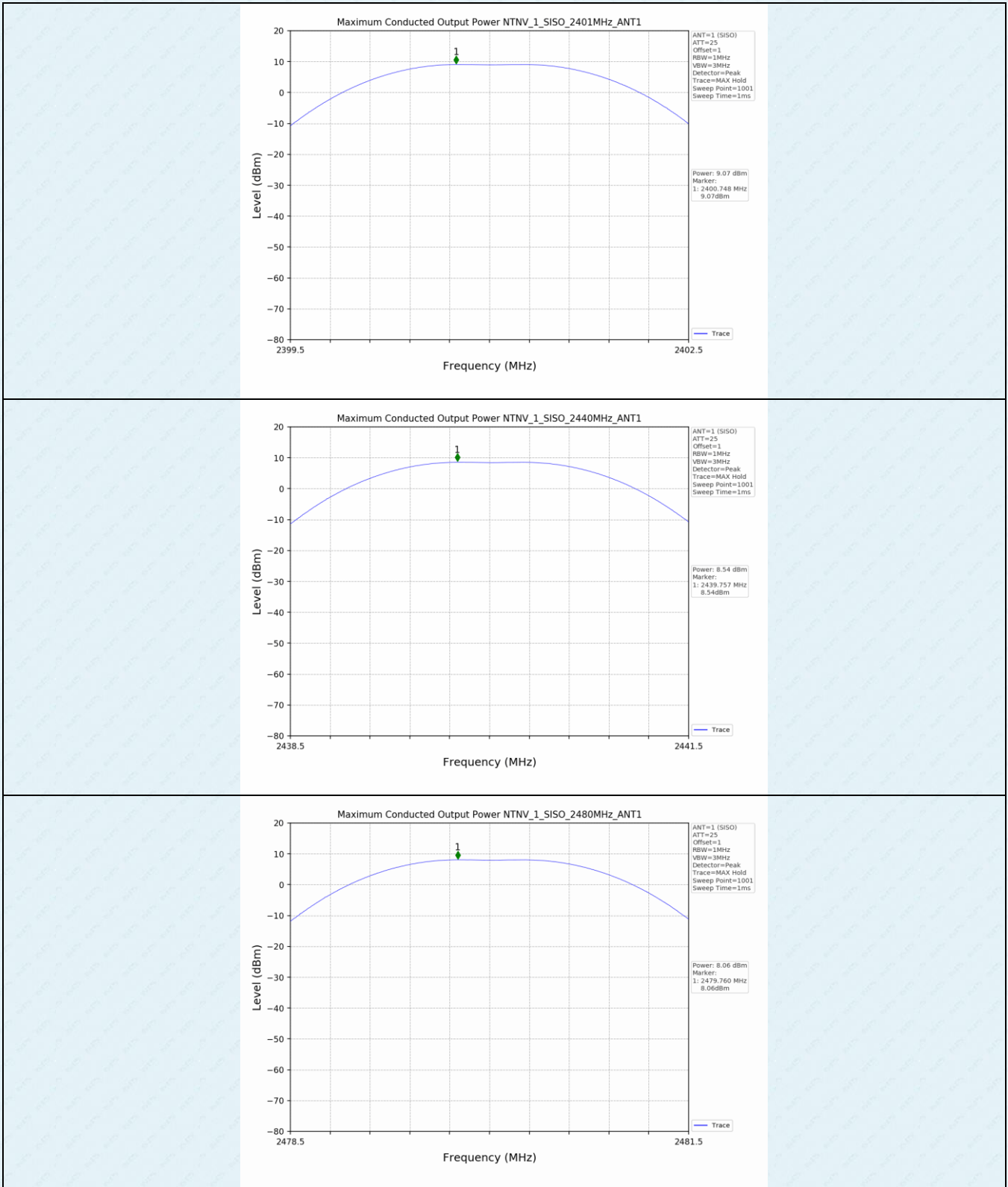
ANT 1:



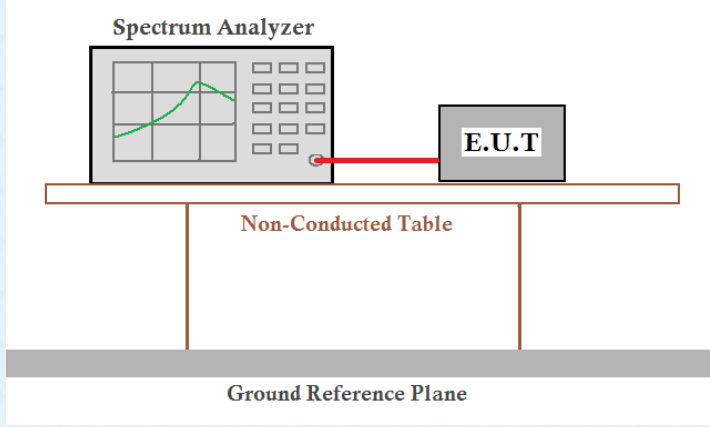
ANT 2:



ANT 3:



7.4 Channel Bandwidth & 99% Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2) & RSS-247 Section 5.2(a)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02 and RSS-Gen
Limit:	>500KHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

ANT 1:

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
1	2401	SISO	1	0.675	≥0.5	PASS
	2440	SISO	1	0.674	≥0.5	PASS
	2480	SISO	1	0.667	≥0.5	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
1	2401	SISO	1	1.024	Only for Report Use
	2440	SISO	1	1.020	Only for Report Use
	2480	SISO	1	1.019	Only for Report Use

ANT 2:

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
1	2401	SISO	2	0.688	≥0.5	PASS
	2440	SISO	2	0.701	≥0.5	PASS
	2480	SISO	2	0.686	≥0.5	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
1	2401	SISO	2	1.027	Only for Report Use
	2440	SISO	2	1.025	Only for Report Use
	2480	SISO	2	1.026	Only for Report Use

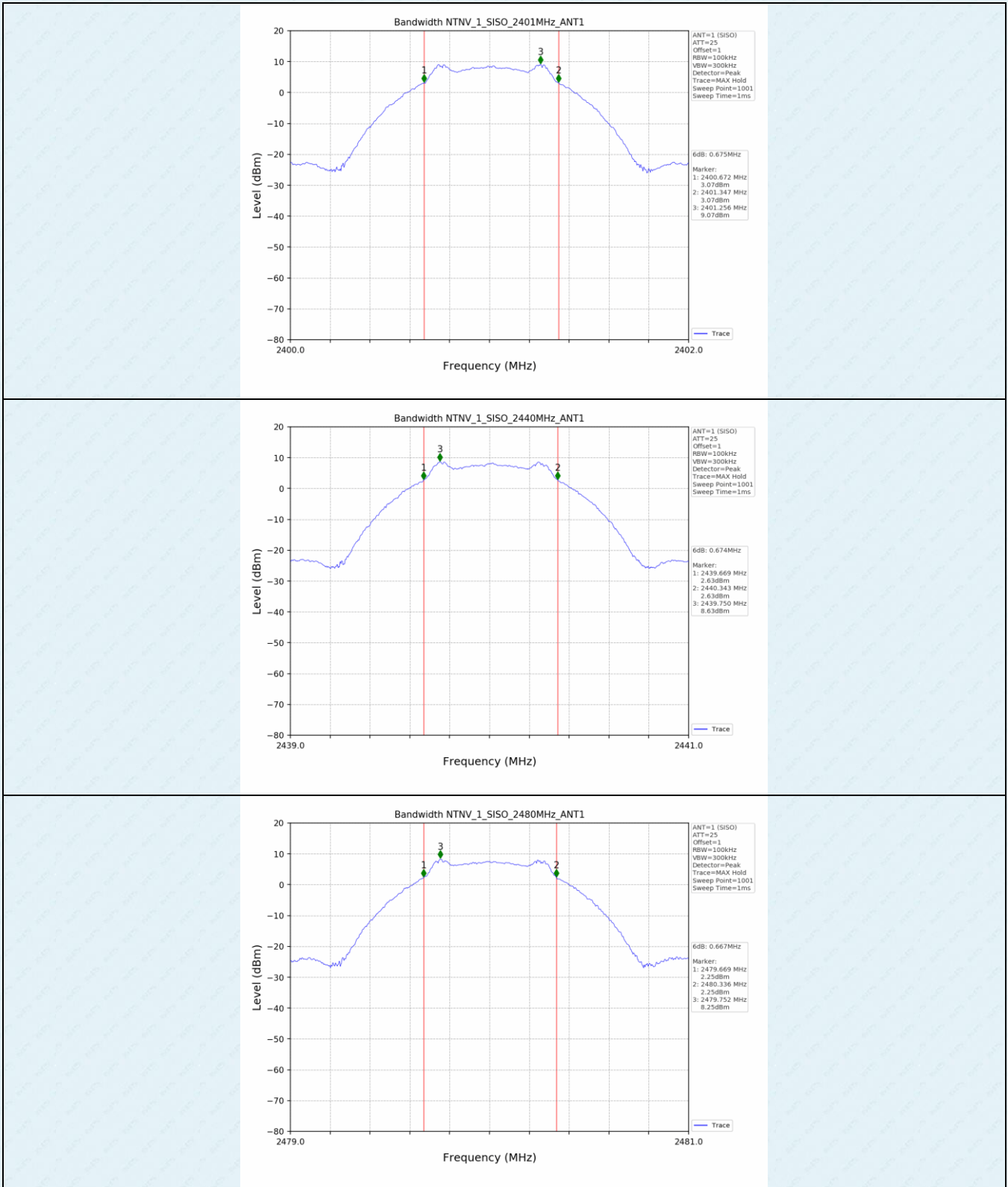
ANT 3:

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
1	2401	SISO	3	0.677	≥0.5	PASS
	2440	SISO	3	0.671	≥0.5	PASS
	2480	SISO	3	0.669	≥0.5	PASS

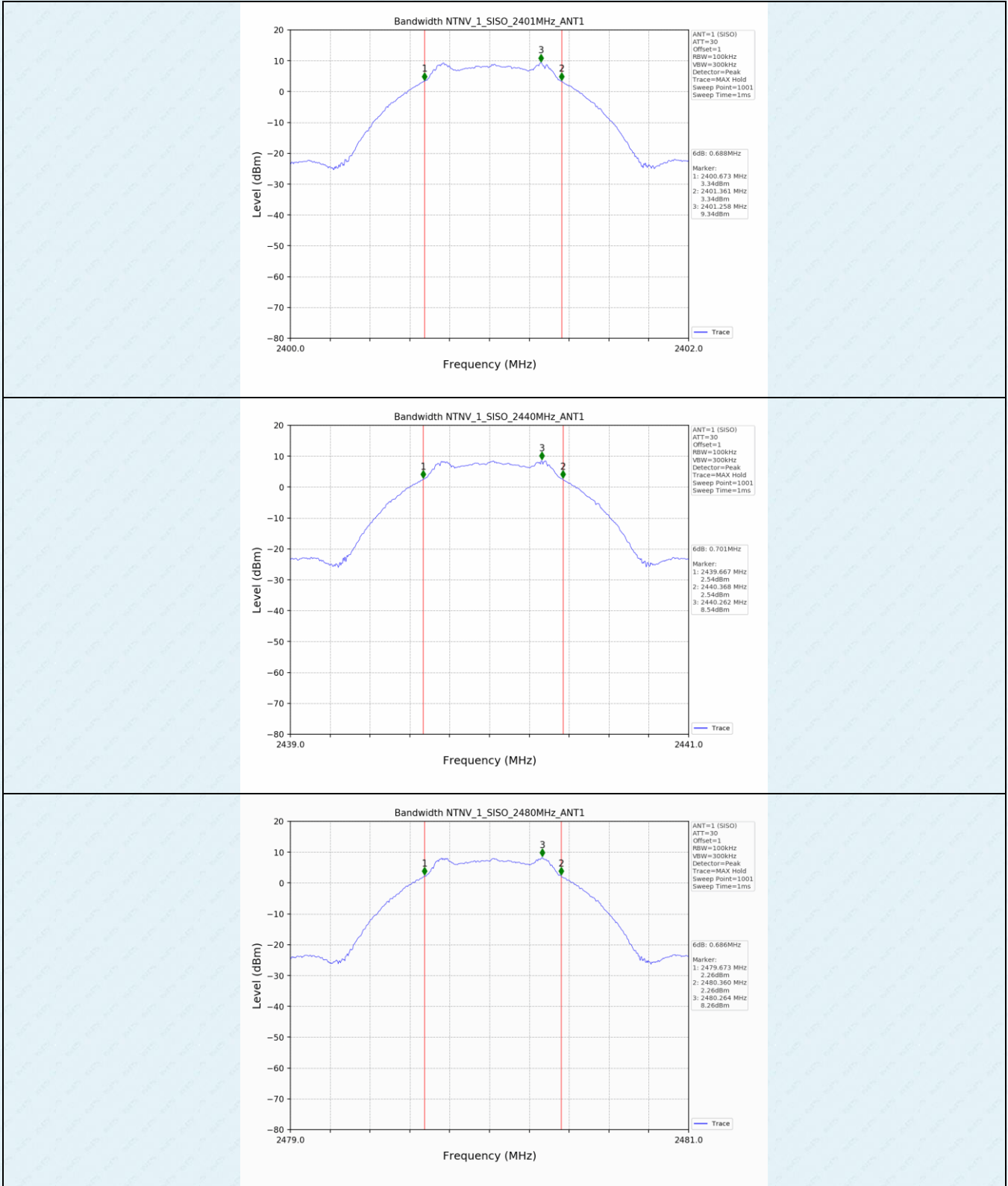
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
1	2401	SISO	3	1.025	Only for Report Use
	2440	SISO	3	1.021	Only for Report Use
	2480	SISO	3	1.021	Only for Report Use

Test plot as follows:

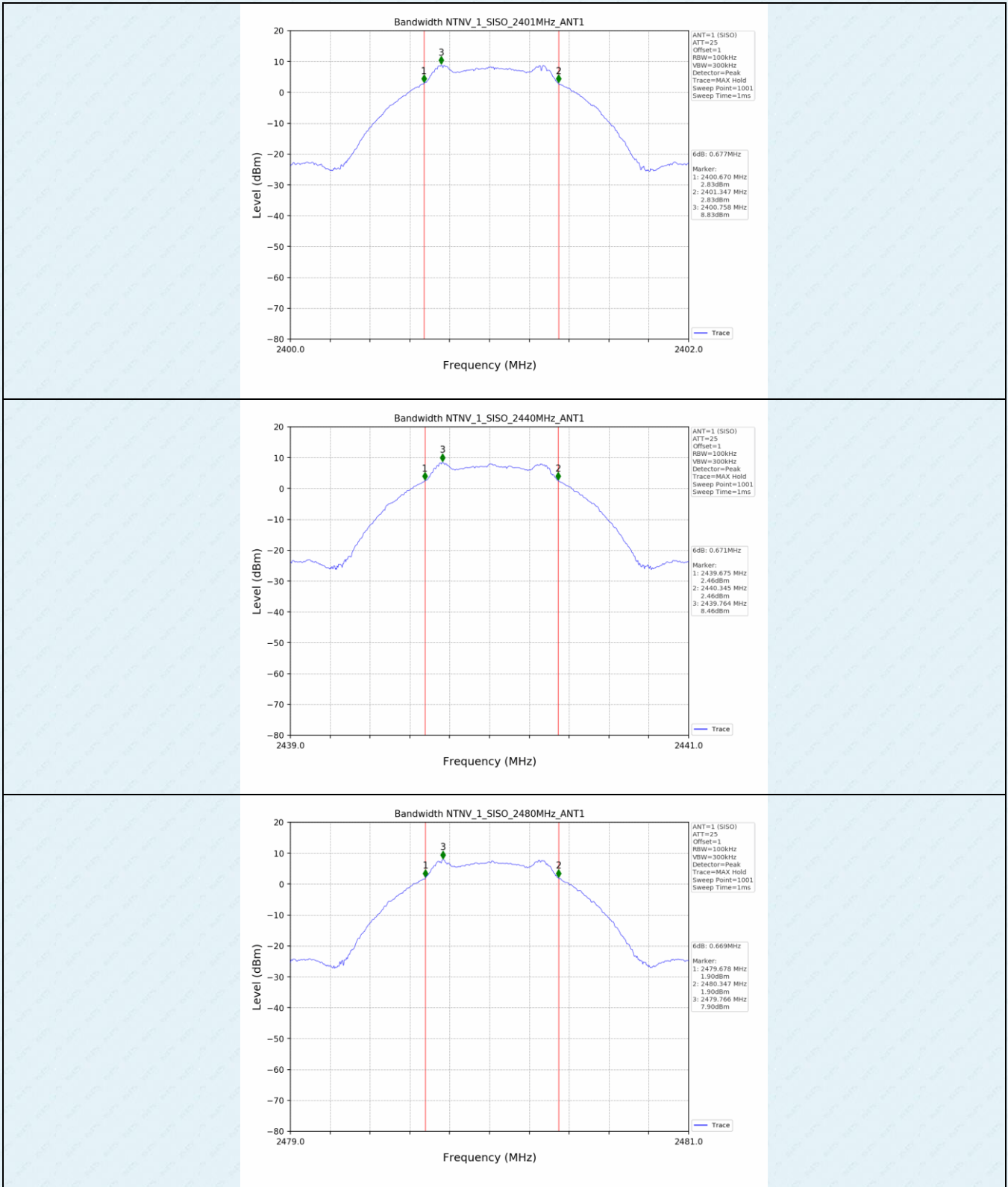
6dB Bandwidth
ANT 1:



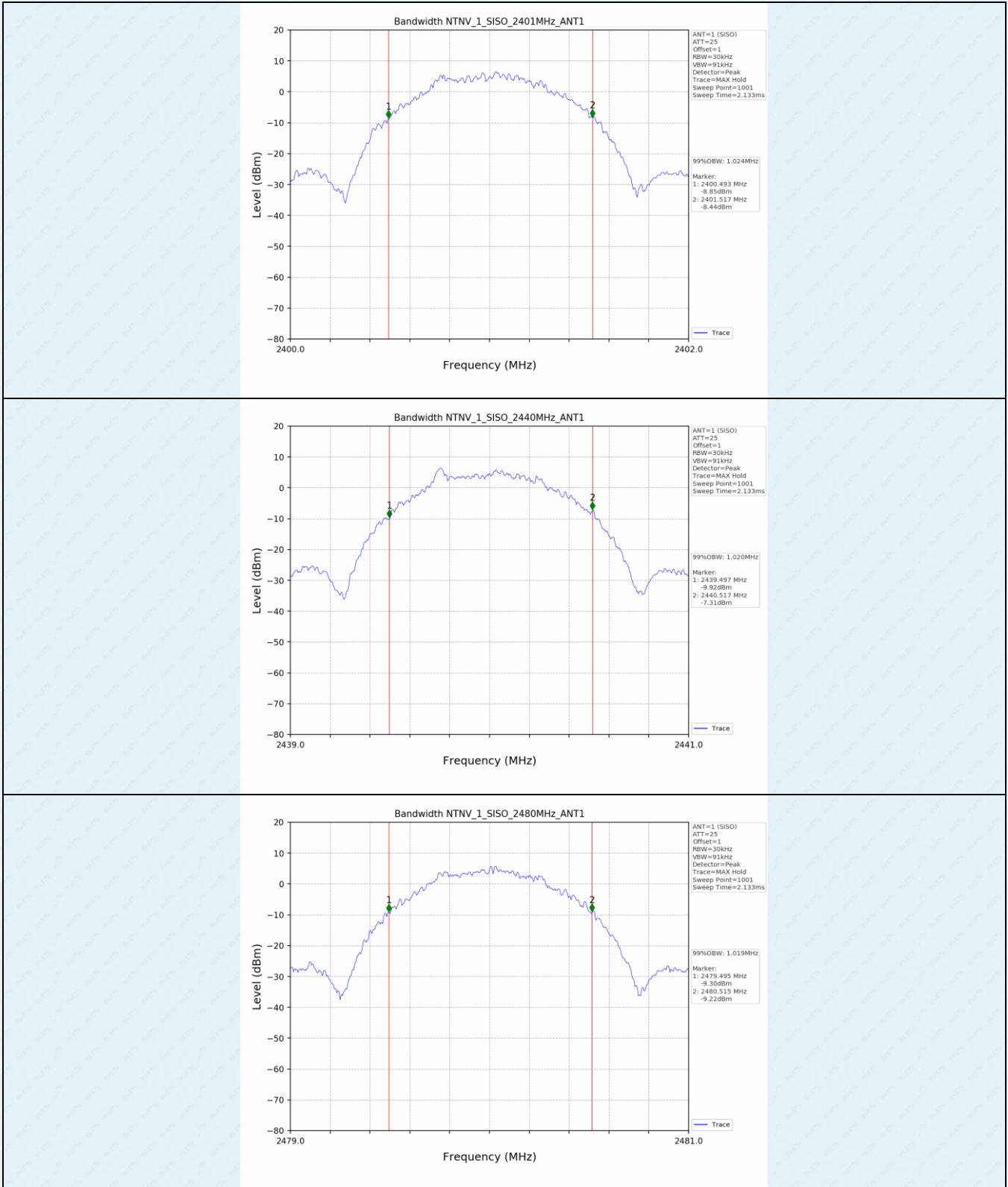
ANT 2:



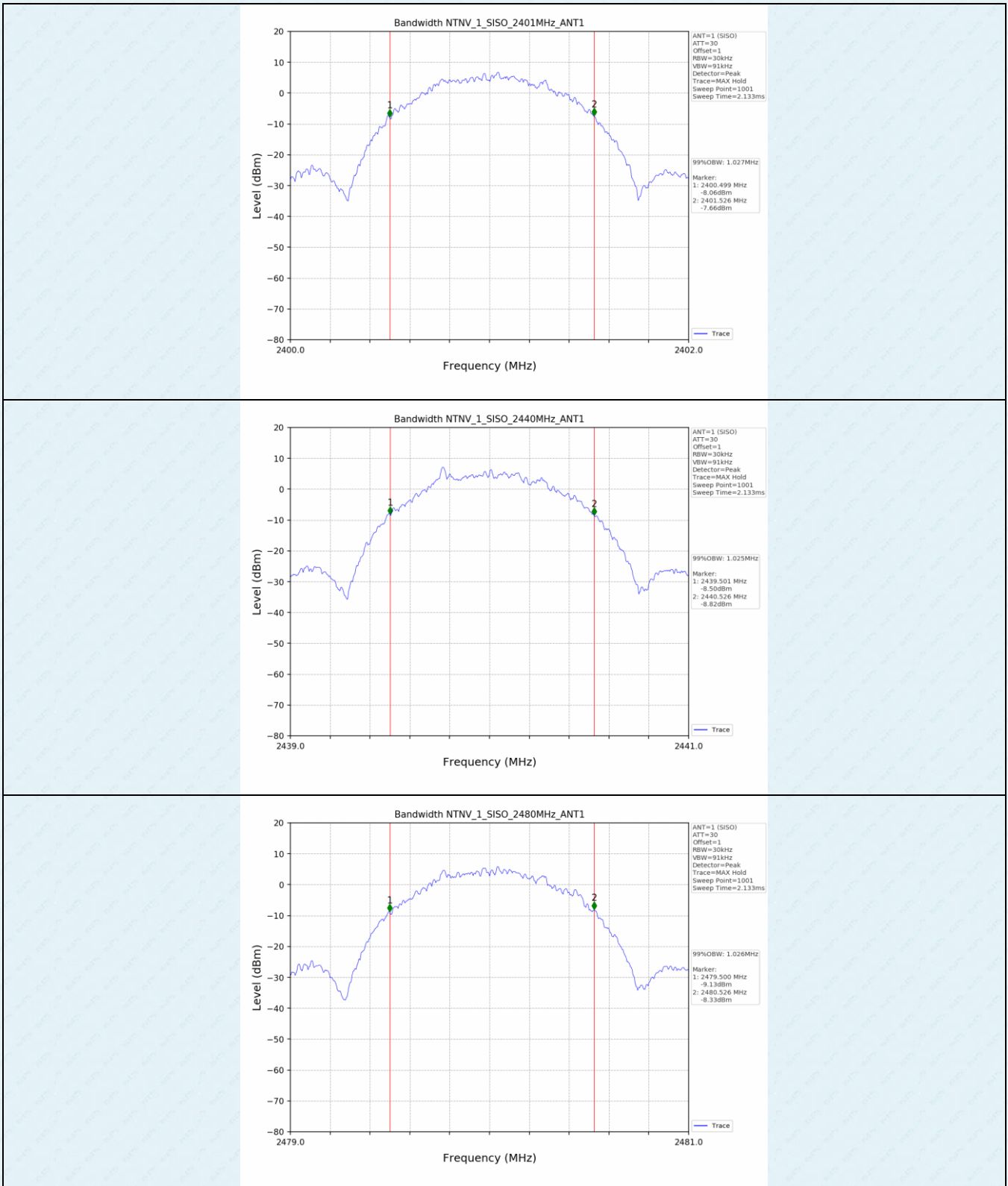
ANT 3:



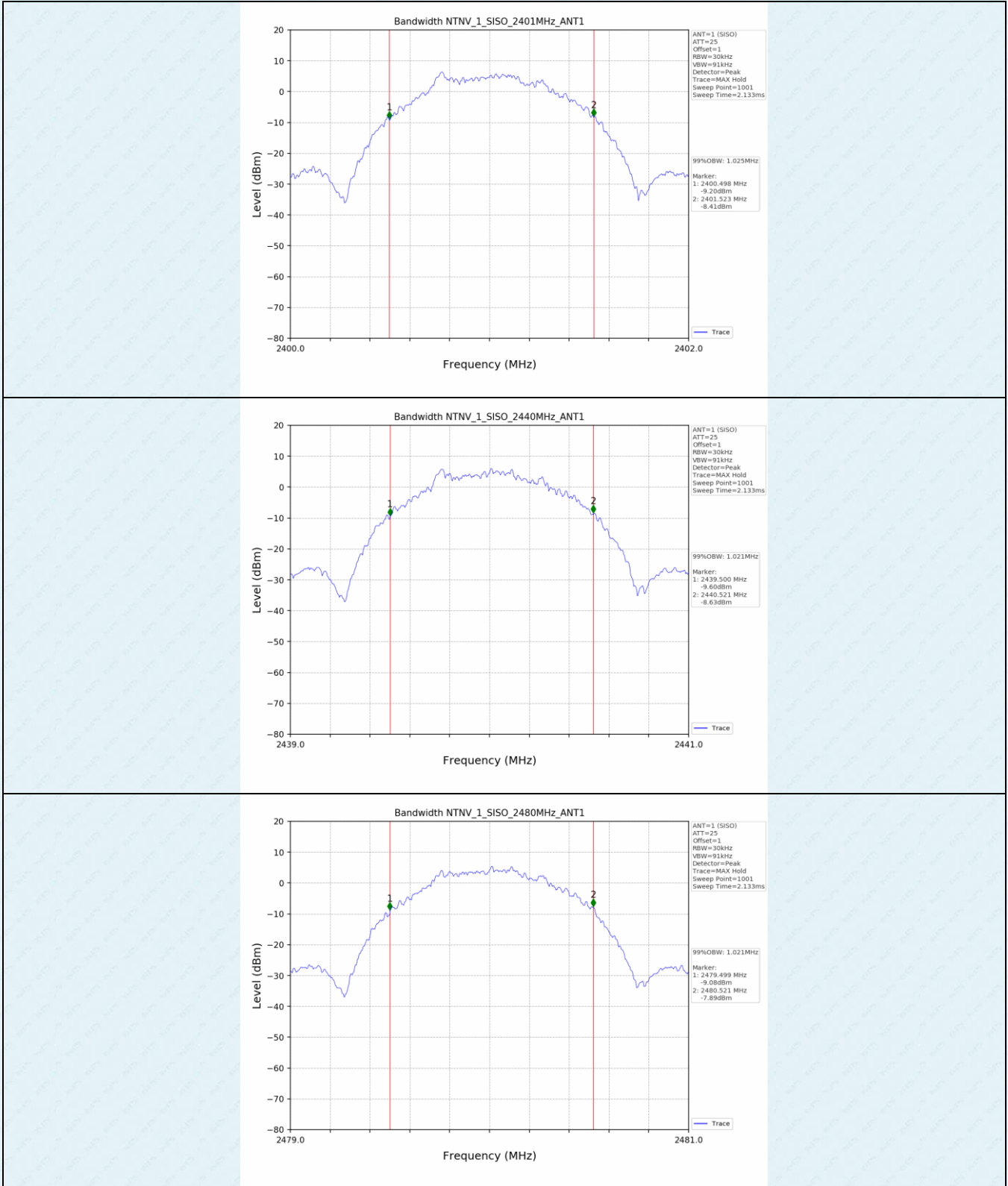
99% Occupied Bandwidth ANT 1:



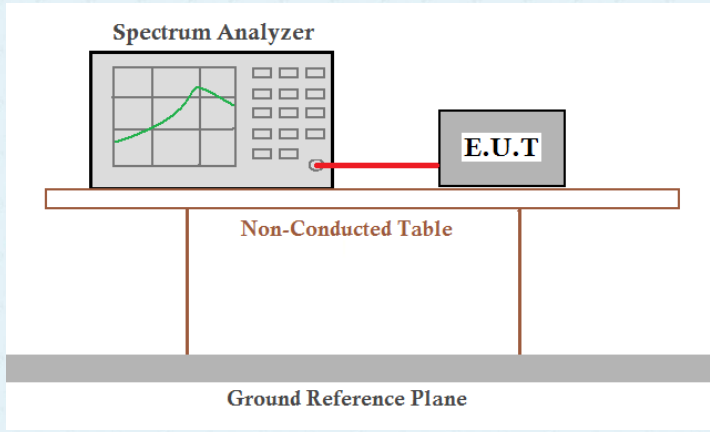
ANT 2:



ANT 3:



7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e) RSS-247 Section 5.2(b)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02 and RSS-Gen
Limit:	8dBm/3kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

ANT 1:

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
1	2401	SISO	-0.93	≤8	PASS
	2440	SISO	-0.68	≤8	PASS
	2480	SISO	-2.78	≤8	PASS

ANT 2:

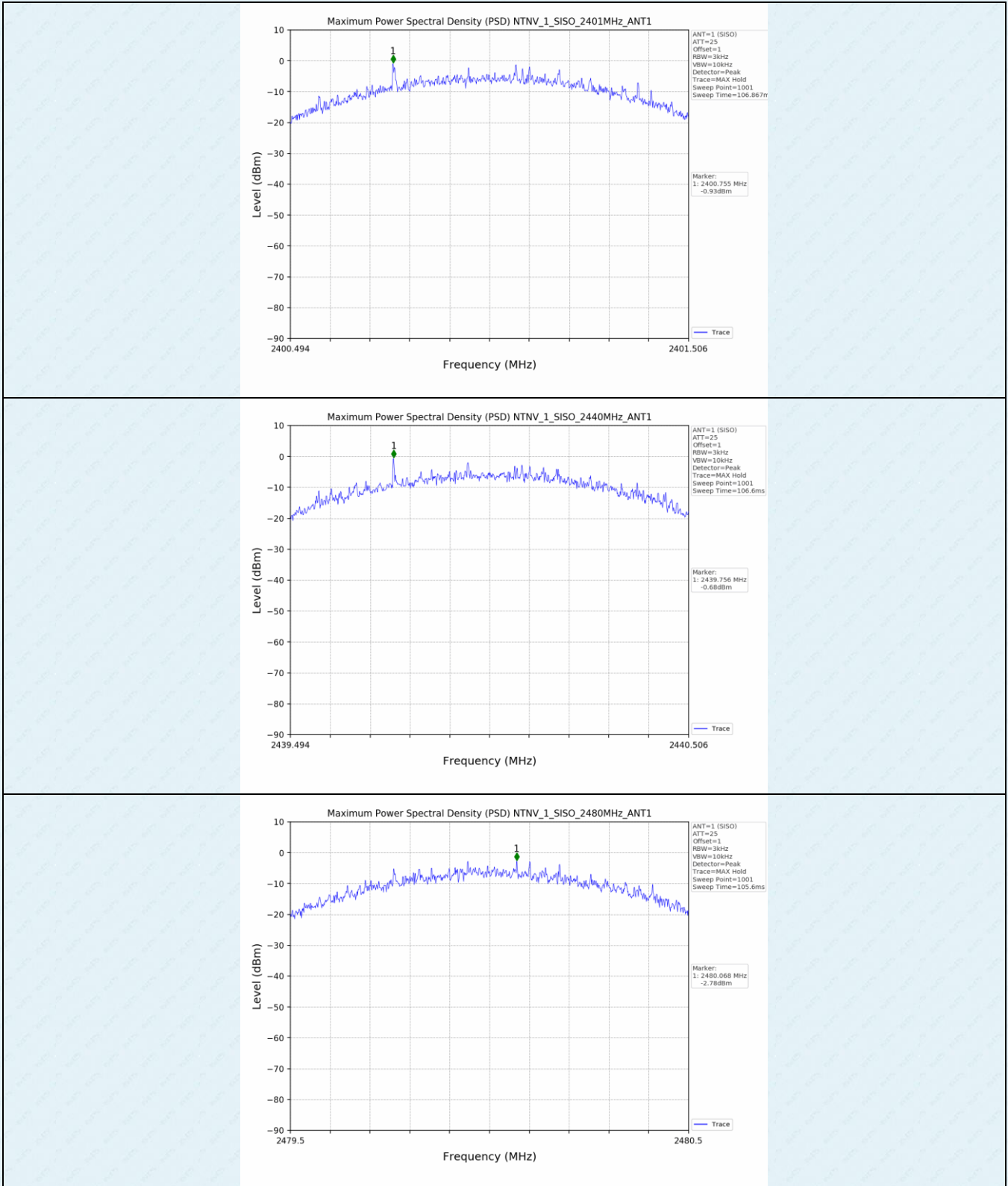
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
1	2401	SISO	-1.16	≤8	PASS
	2440	SISO	-1.75	≤8	PASS
	2480	SISO	-1.21	≤8	PASS

ANT 3:

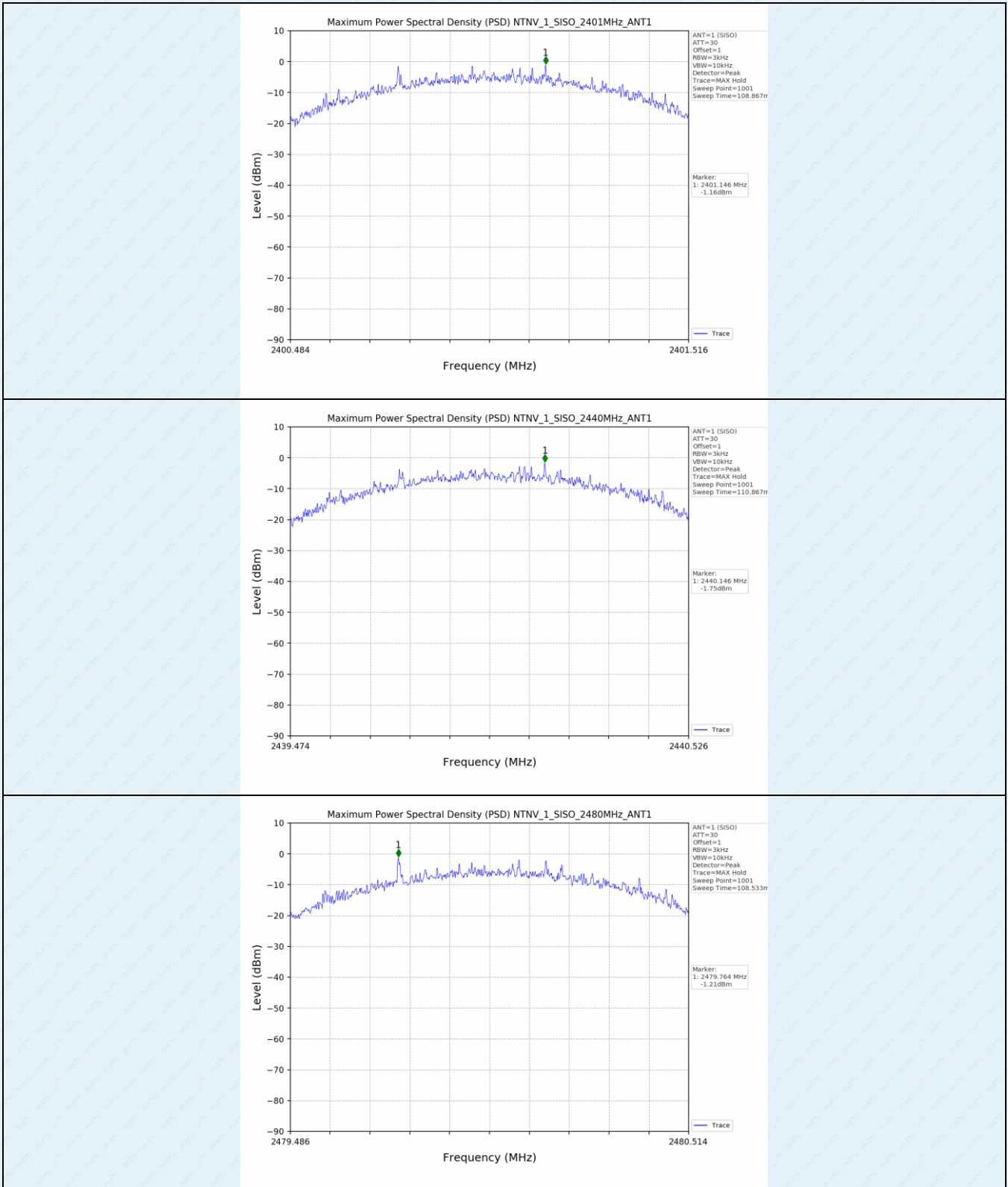
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
1	2401	SISO	-0.37	≤8	PASS
	2440	SISO	-1.15	≤8	PASS
	2480	SISO	-2.53	≤8	PASS

Test plot as follows:

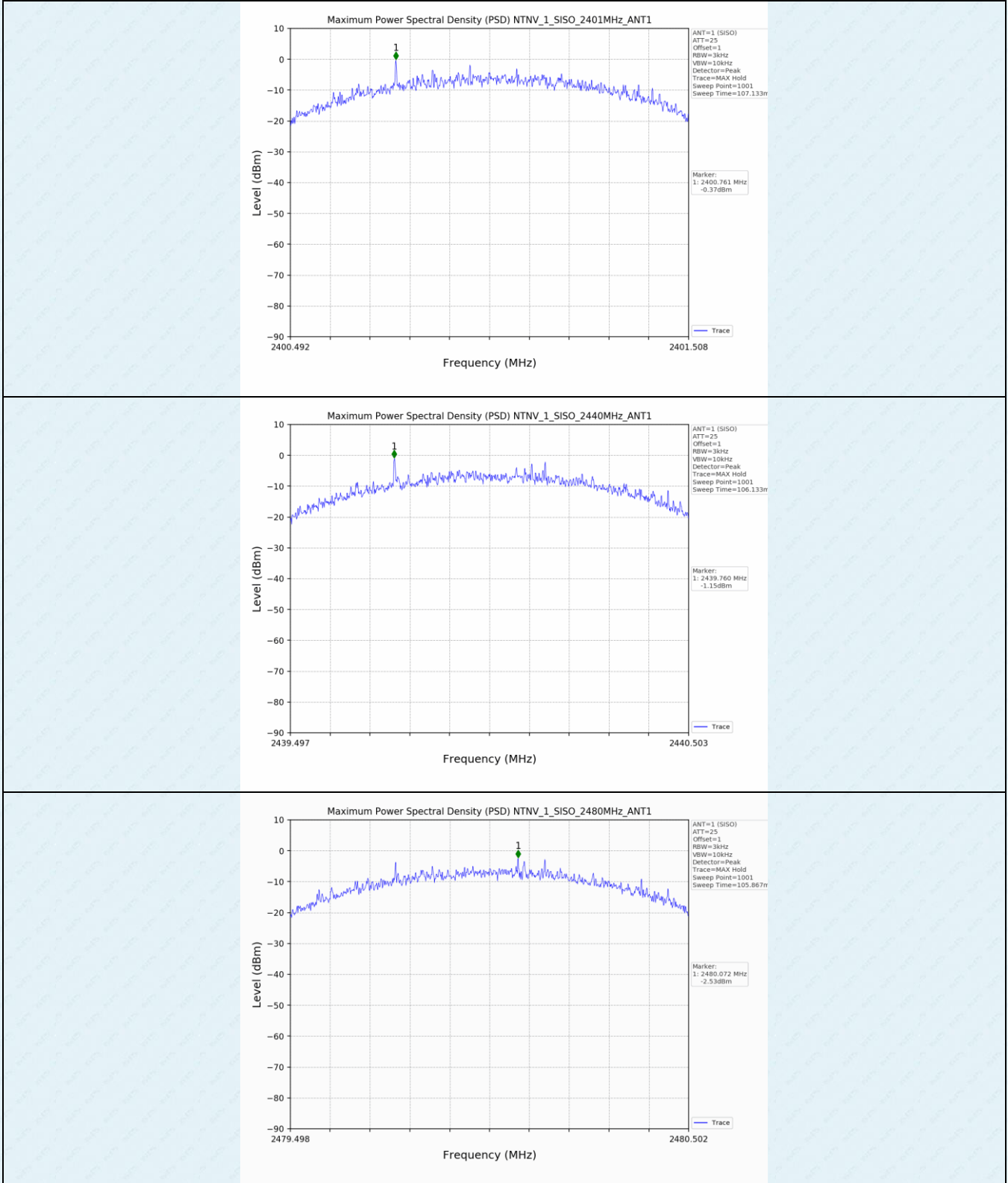
ANT 1:



ANT 2:

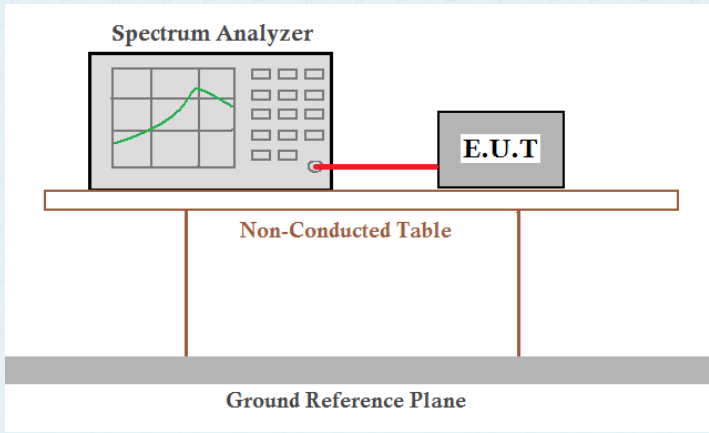


ANT 3:



7.6 Spurious Emission in Non-restricted & restricted Bands

7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d) RSS-247 Section 5.5
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02 & RSS-Gen
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two legs and sits on a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

ANT 1:

Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
1	2401	SISO	1	Refer to test graph	-10.78	PASS
	2440	SISO	1	Refer to test graph	-10.78	PASS
	2480	SISO	1	Refer to test graph	-10.78	PASS

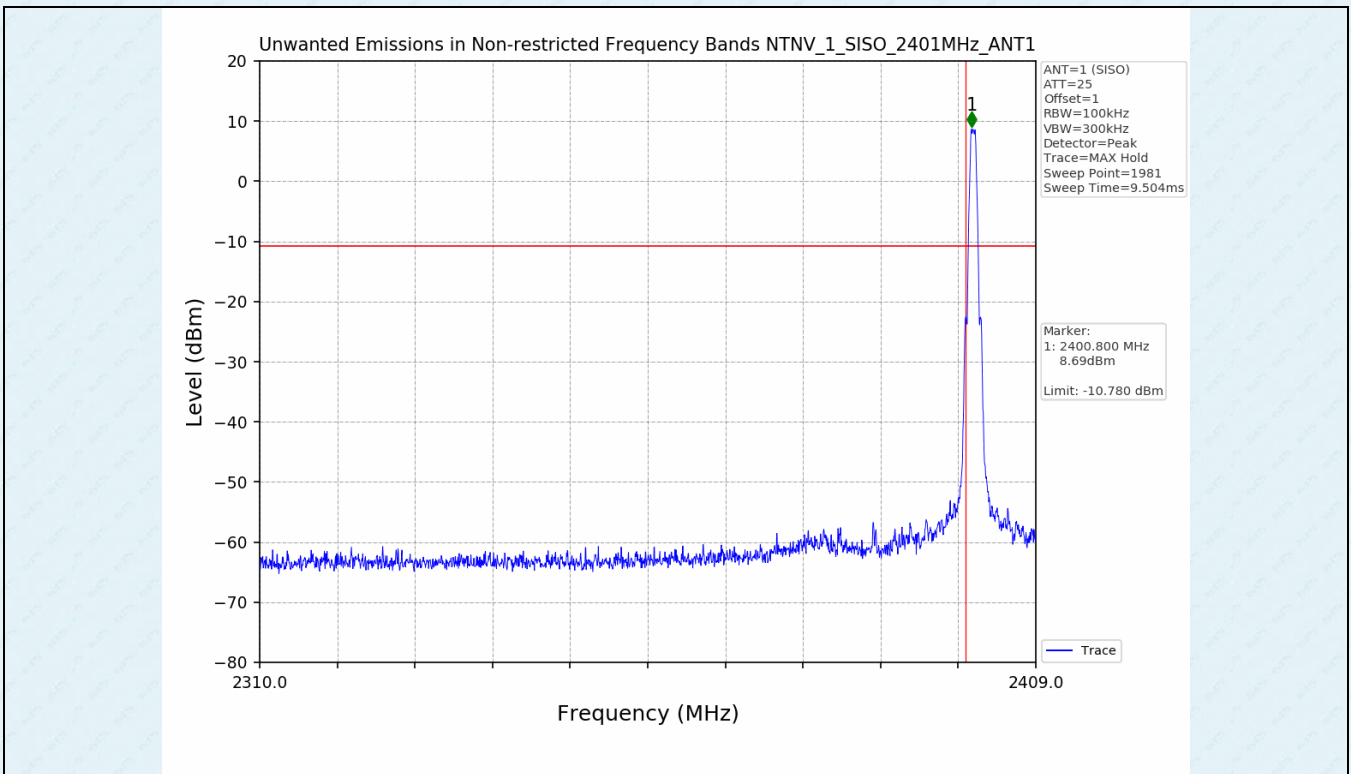
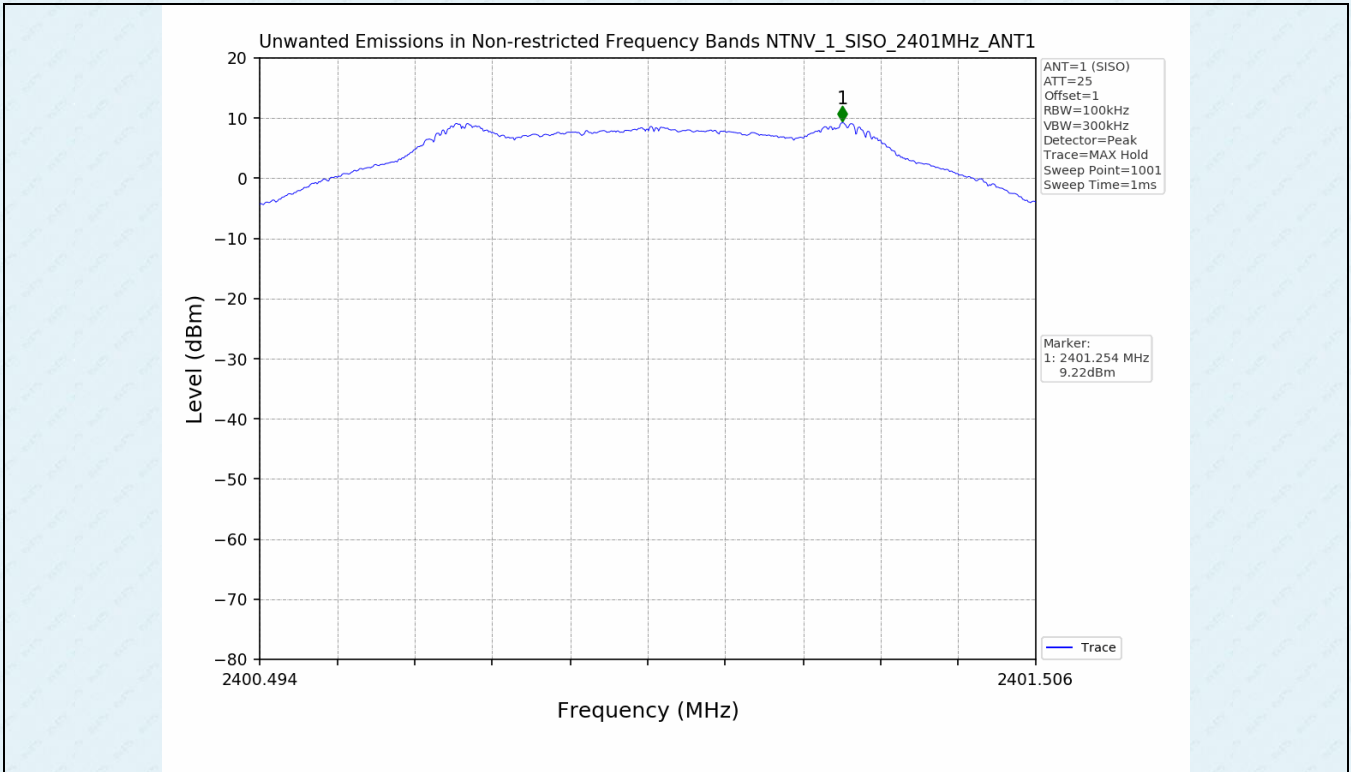
ANT 2:

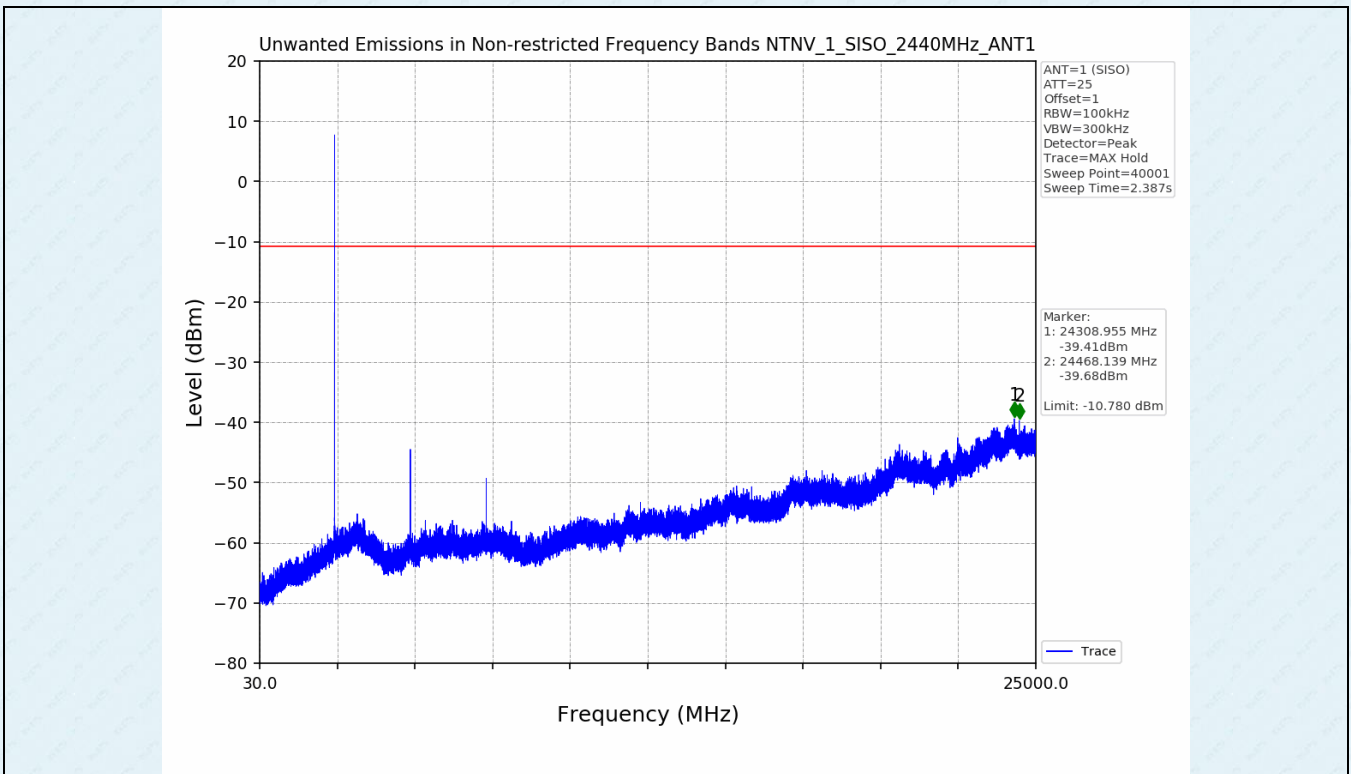
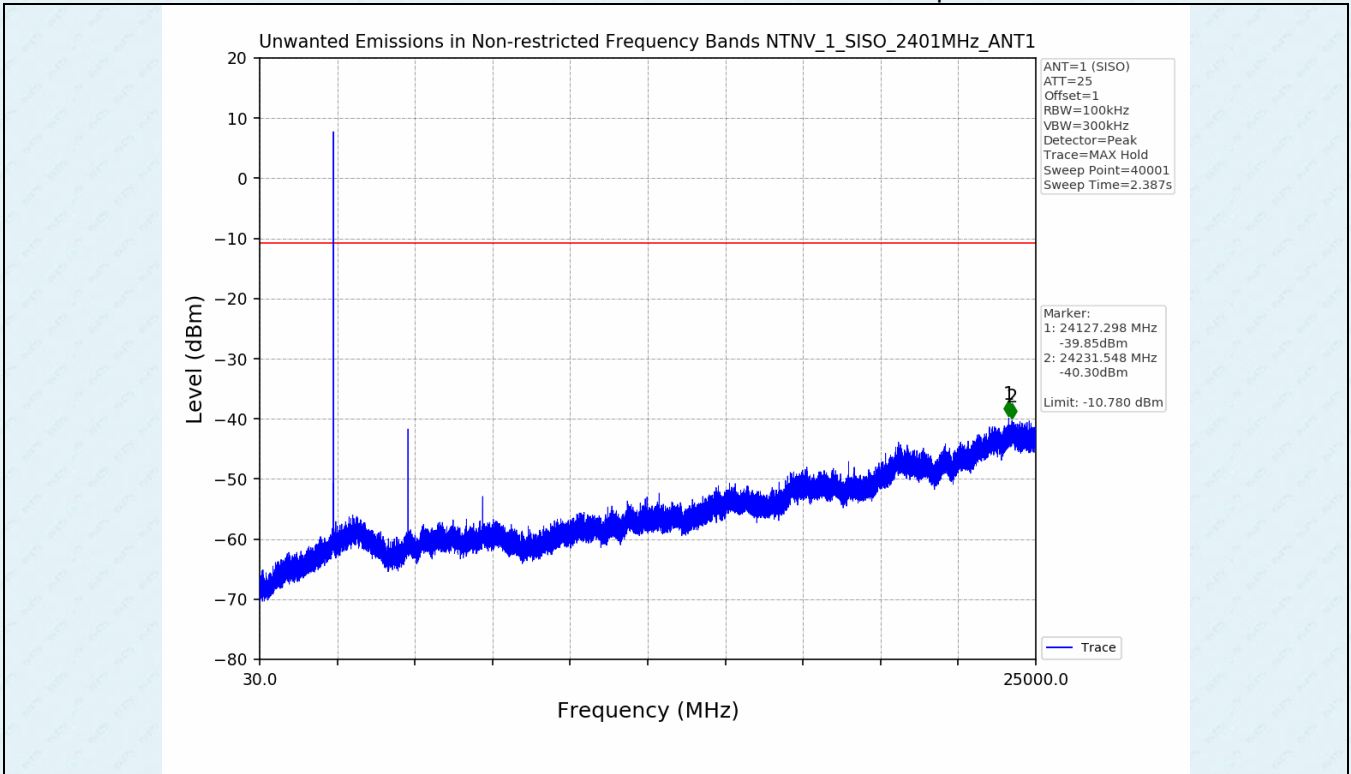
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
1	2401	SISO	2	Refer to test graph	-10.77	PASS
	2440	SISO	2	Refer to test graph	-10.77	PASS
	2480	SISO	2	Refer to test graph	-10.77	PASS

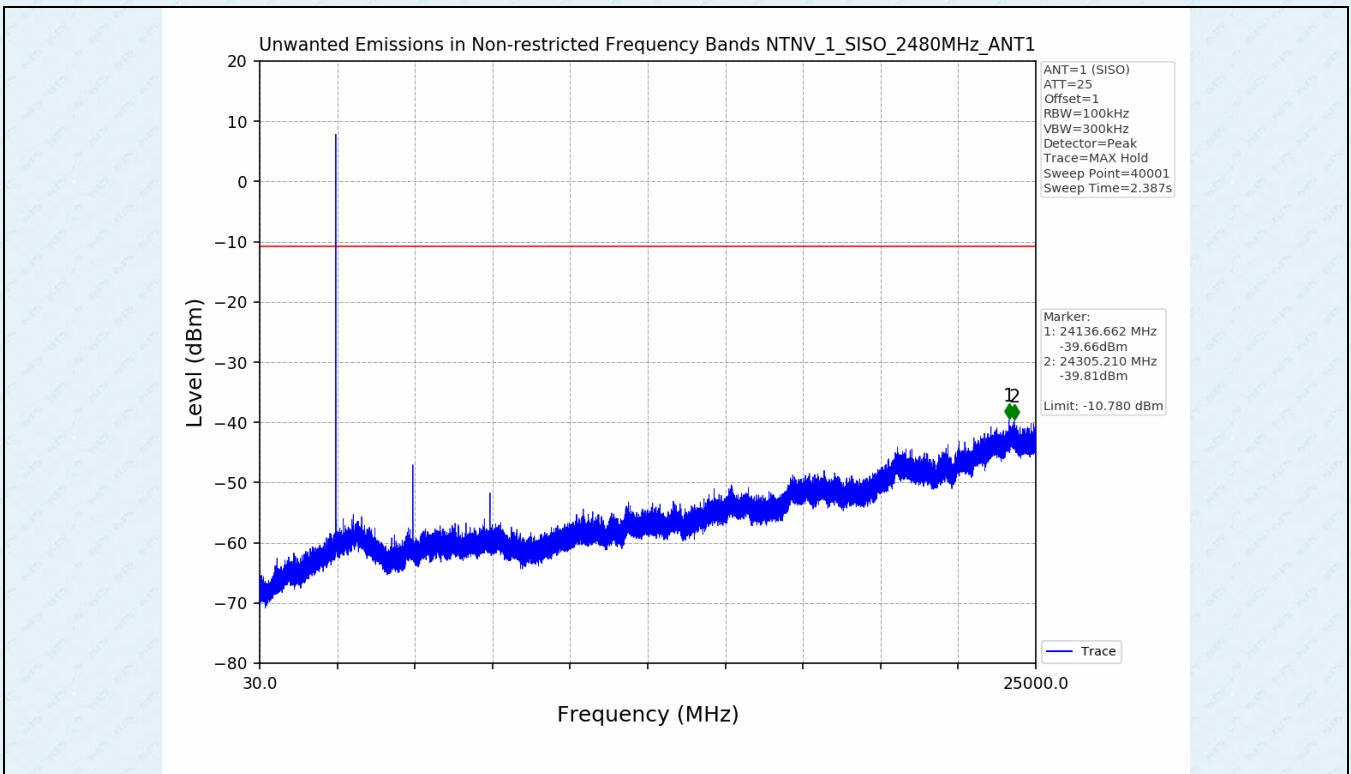
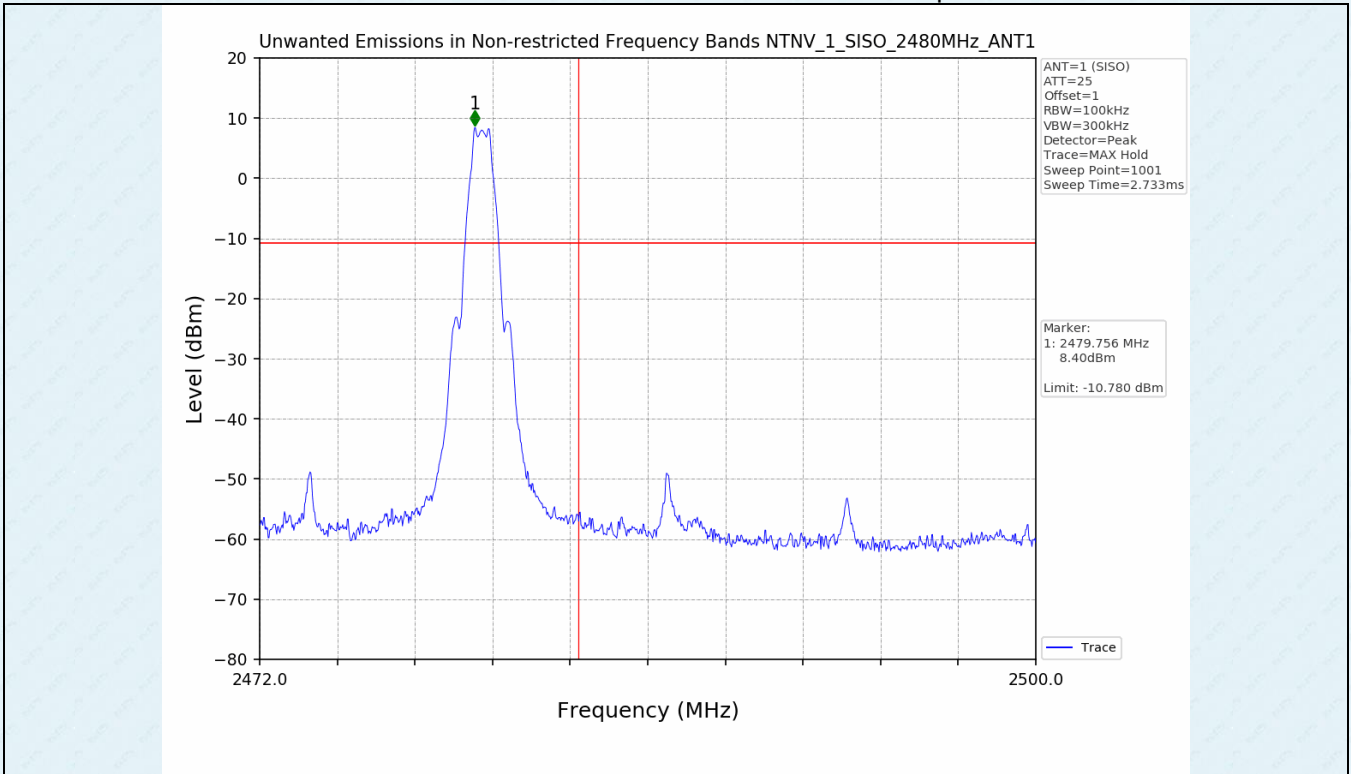
ANT 3:

Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
1	2401	SISO	3	Refer to test graph	-11.06	PASS
	2440	SISO	3	Refer to test graph	-11.06	PASS
	2480	SISO	3	Refer to test graph	-11.06	PASS

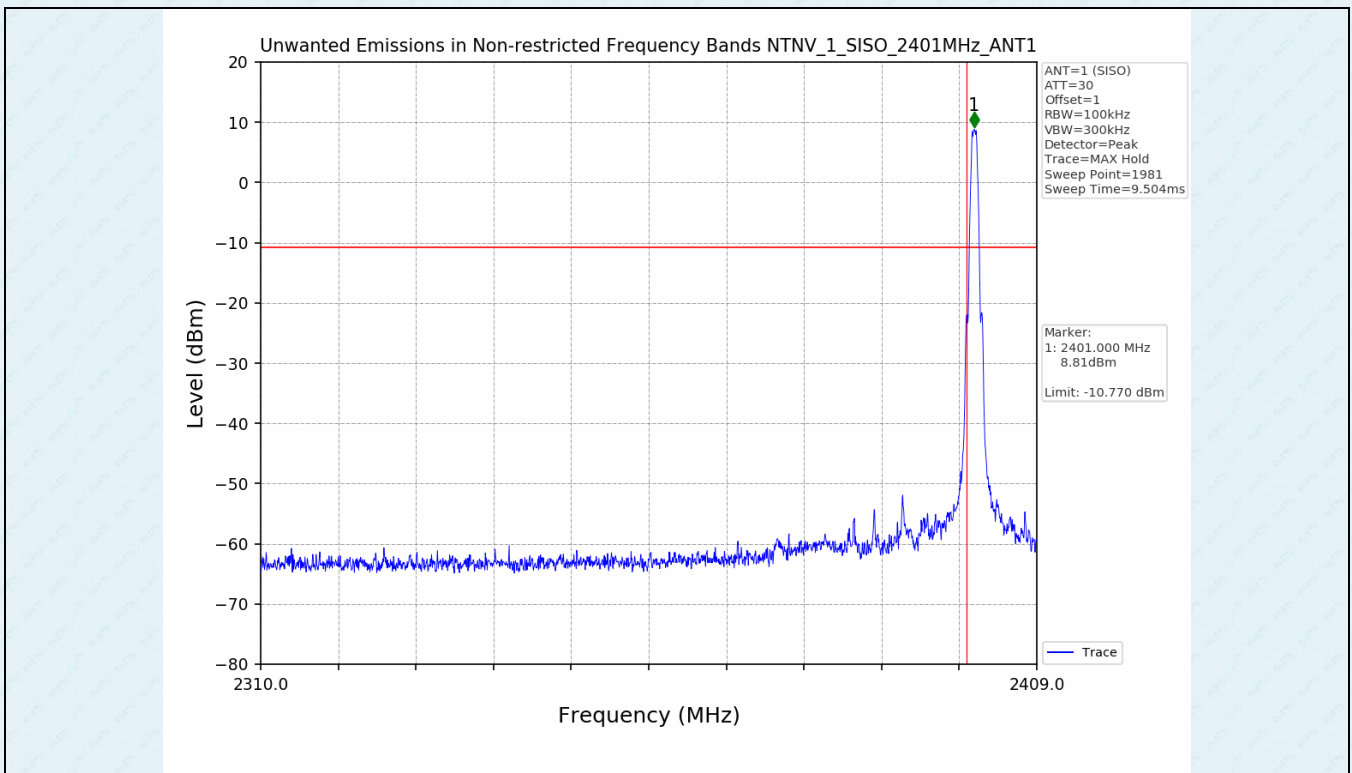
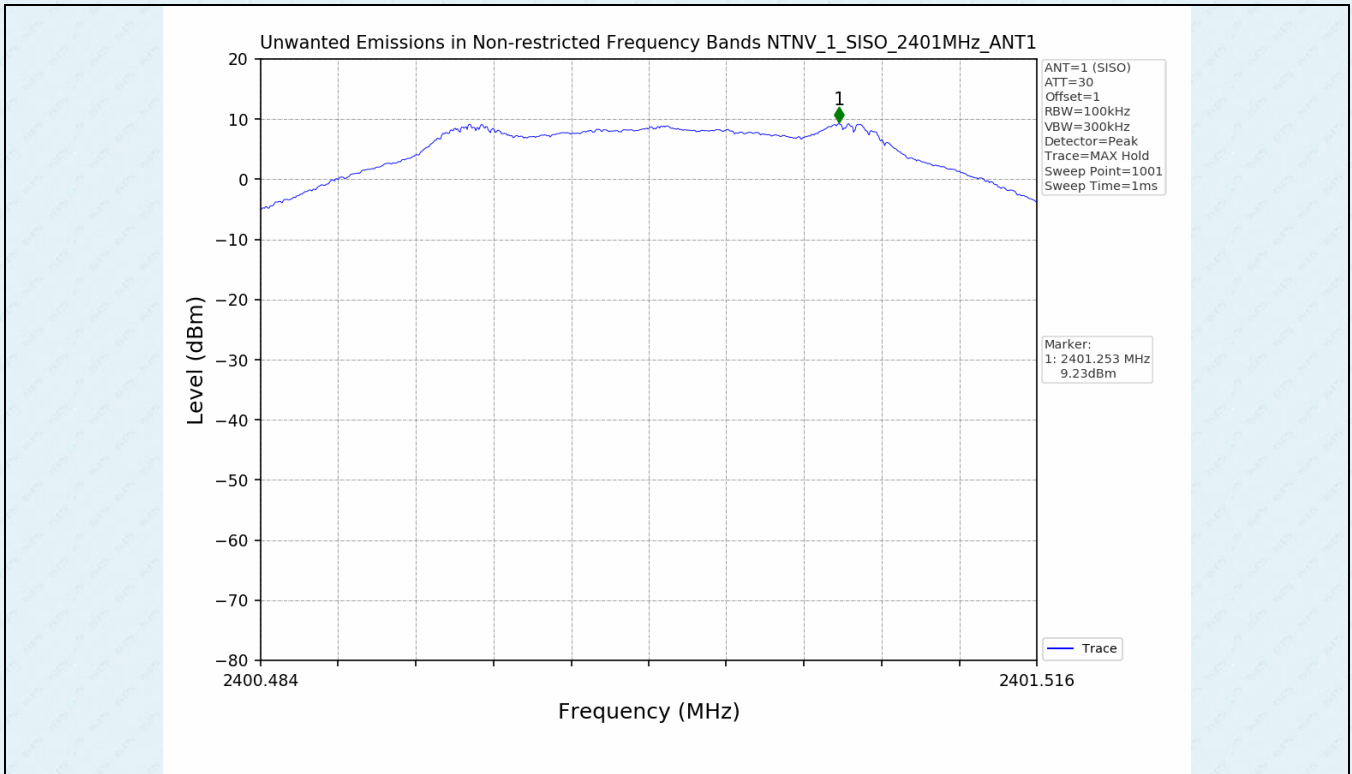
Test plot as follows:
ANT 1:

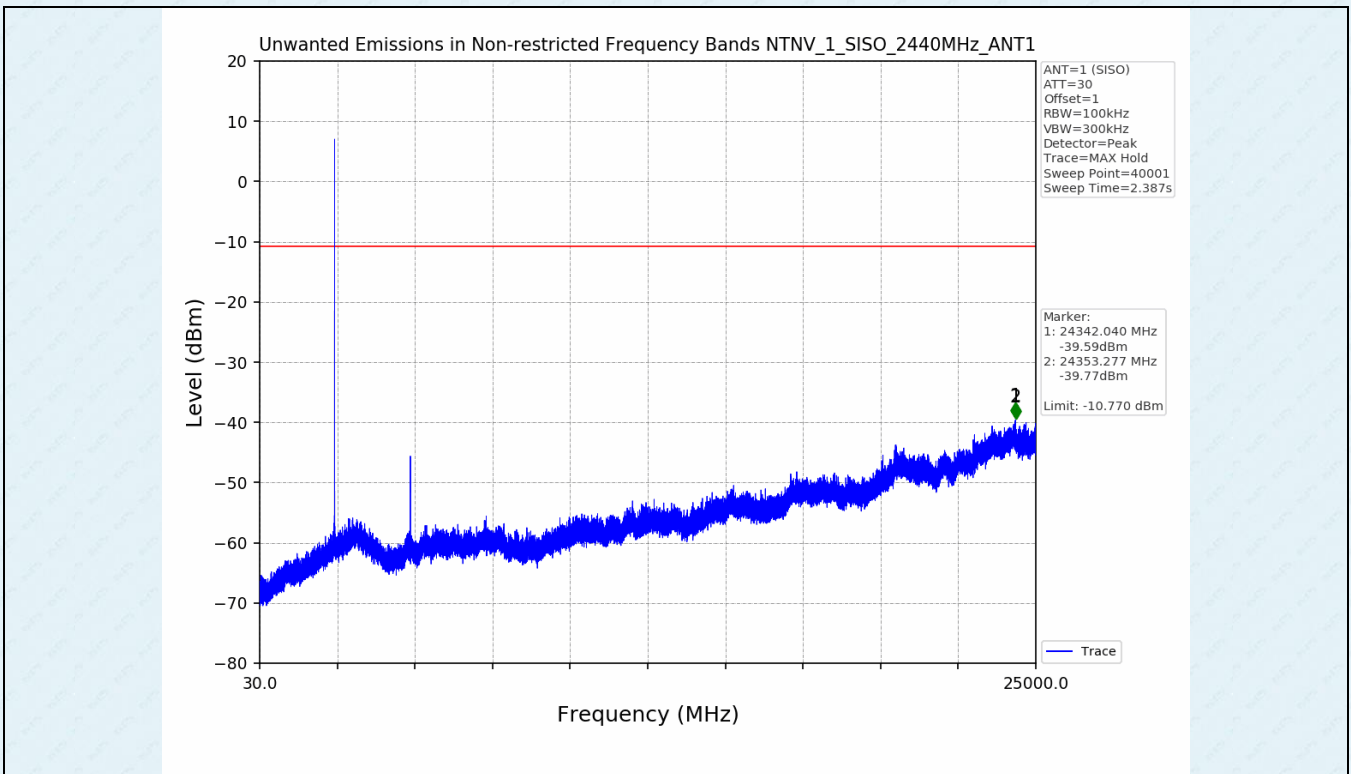
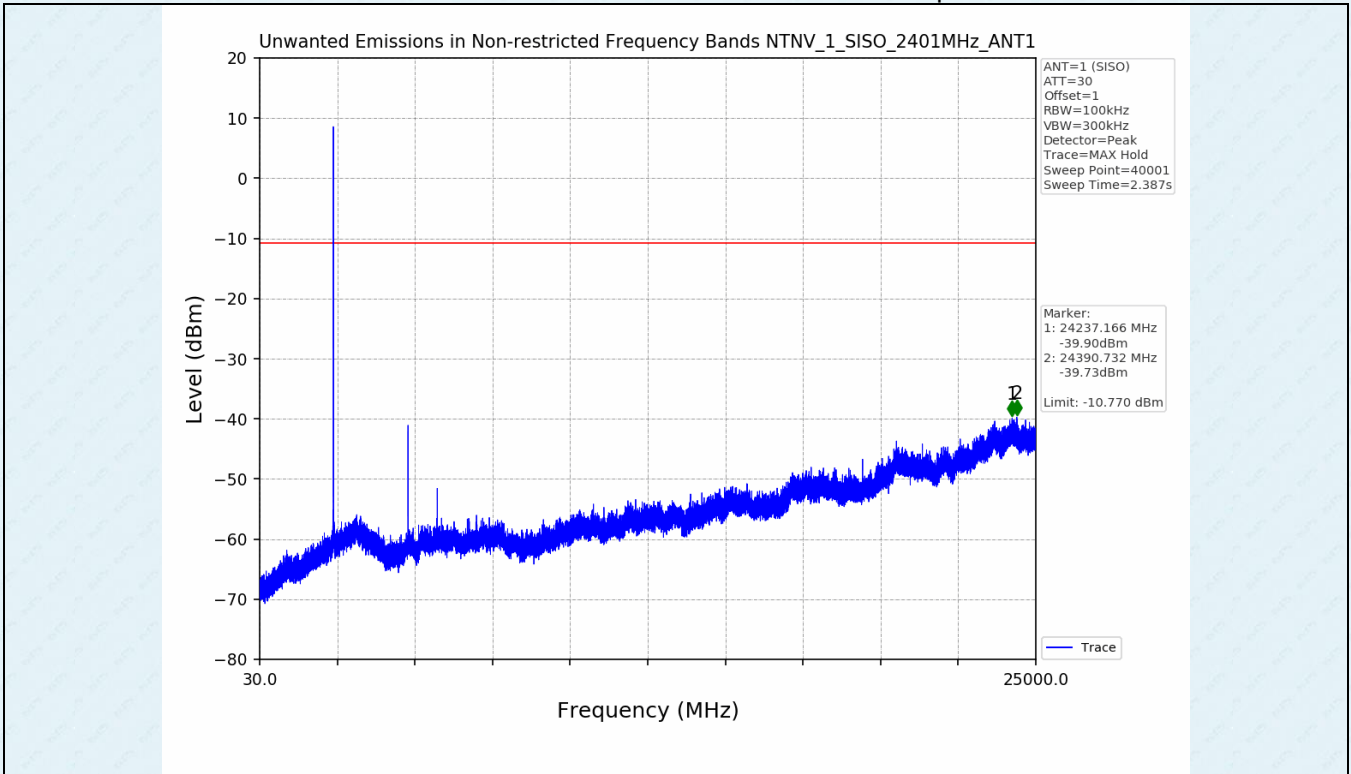


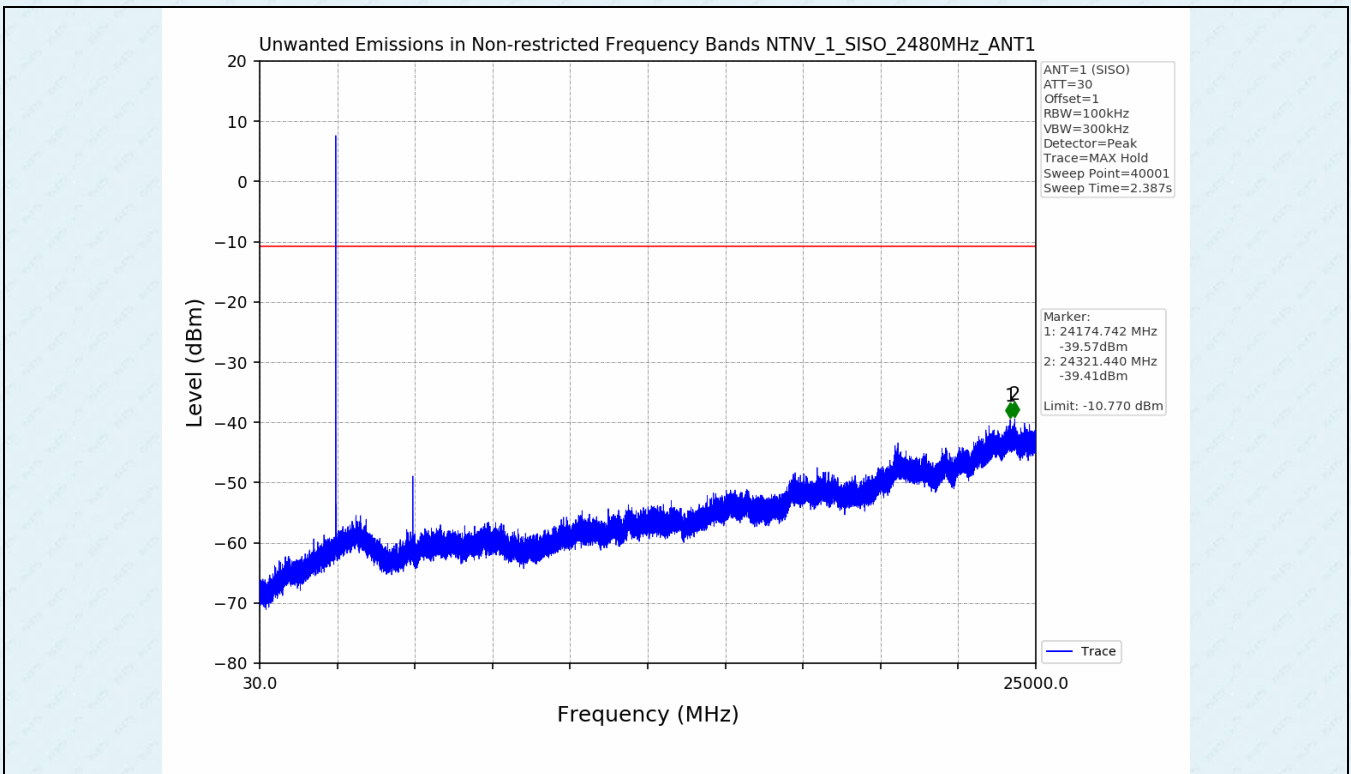
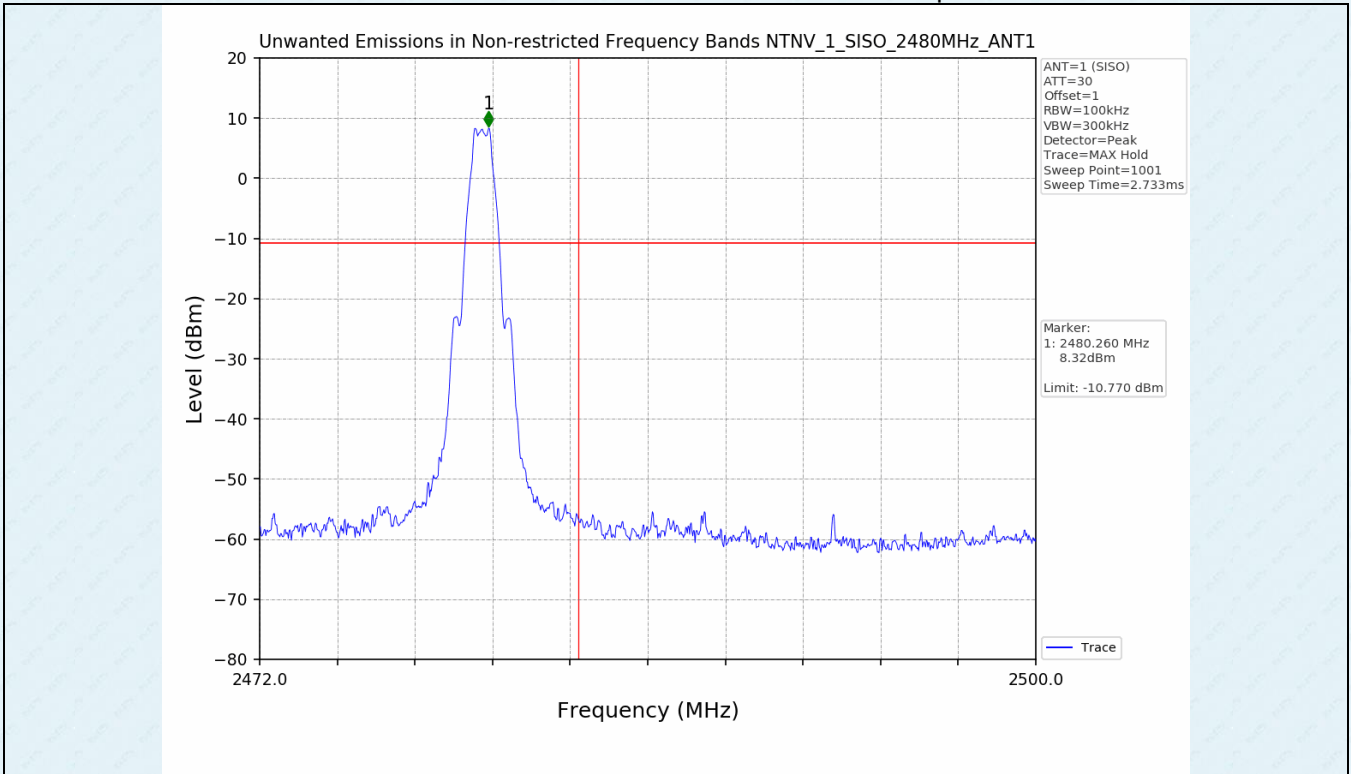




ANT 2:







ANT 3:

