



NTEK 北测

FCC RADIO TEST REPORT FCC ID:2A8WC-MGP01

Product: Remote control Trade Mark: N/A Model No.: MGP01 Family Model: N/A Report No.: S22072603212002 Issue Date: Sep 20, 2022

Prepared for

GDU-Tech Co., Ltd.

Building 2, No.5, Huanglongshan South Road, Donghu New Technology Development Zone, Wuhan 430074, China

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name:	GDU-Tech Co., Ltd.
	Building 2, No.5, Huanglongshan South Road, Donghu New Technology Development Zone, Wuhan 430074, China
Manufacturer's Name	GDU-Tech Co., Ltd.
	Building 2, No.5, Huanglongshan South Road, Donghu New Technology Development Zone, Wuhan 430074, China
Product description	
Product name:	Remote control
Model and/or type reference:	MGP01
Family Model:	N/A
Test Sample Number	S220726032007
Standards	FCC Part15.407
	ANSI C63.10-2013 KDB 789033 D02 General UNII Test Procedures New Rules v02r01 FCC KDB 662911 D01 Multiple Transmitter Output v02r01
	een tested by NTEK, and the test results show that the equipment under e FCC requirements. And it is applicable only to the tested sample
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Date of Test	
Date (s) of performance of tests	Jul 26, 2022 ~Sep 20, 2022
Date of Issue	Sep 20, 2022
Test Result	Pass
Testing Enginee	r : <u>Muhti Lee</u> (Mukzi Lee)
Authorized Sign	atory :







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Revision History

Report No.	Version	Description	Issued Date
S22072603212002	Rev.01	Initial issue of report	Sep 20, 2022





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.209(a), 15.407 (b)(1) 15.407 (b)(4) 15.407 (b)(9) 15.407 (b)(10)	Spurious Radiated Emissions	PASS	
15.407 (a)(1) 15.407 (a)(3)	26 dB and 99% Emission Bandwidth	PASS	
15.407(e)	Minimum 6 dB bandwidth	PASS	
15.407 (a)(1) 15.407 (a)(3)	Maximum Conducted Output Power	PASS	
15.407(b)(1) 15.407(b)(4)	Band Edge	PASS	
15.407 (a)(1) 15.407 (a)(3)	Power Spectral Density	PASS	
15.407(b)	Spurious Emissions at Antenna Terminals	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

(2) This device operates with a duty cycle greater than 99%



1.1 FACILITIES AND ACCREDITATIONS

FACILITIES

All measurement facilities used to collect the measurement data are located at 1/F, Building E, Fenda Science Park Sanwei, Xixiang, Bao'an District Shenzhen, Guangdong, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

Certificate #4298.01

LABORATORY ACCREDITATIONS AND LISTINGS

Site Description		
CNAS-Lab.	:	The Certificate Registration Number is L5516.
IC-Registration		The Certificate Registration Number is 9270A.
		CAB identifier:CN0074
FCC- Accredited		Test Firm Registration Number: 463705.
		Designation Number: CN1184
A2LA-Lab.		The Certificate Registration Number is 4298.01
Name of Firm	:	Shenzhen NTEK Testing Technology Co., Ltd.
Site Location	:	1/F, Building E, Fenda Science Park Sanwei, Xixiang, Bao'an District
		Shenzhen, Guangdong, China

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y\pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	±2.80dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(9KHz~30MHz)	±6dB
5	All emissions, radiated(30MHz~1GHz)	±2.64dB
6	All emissions, radiated(1GHz~6GHz)	±2.40dB
7	All emissions, radiated(>6GHz)	±2.52dB
8	Temperature	±0.5°C
9	Humidity	±2%



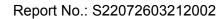


2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Remote control		
Trade Mark	N/A		
Model Name	MGP01		
Family Model	N/A		
Model Difference	N/A		
FCC ID	2A8WC-MGP01		
Product Description	Mode Supported Modulation Operating Frequency Range Function: Smart system Antenna Type Antenna Gain Based on the applie	⊠10M/20M/40M BPSK,QPSK,16QAM,64QAM Please see Note 2 □Outdoor AP □Indoor AP □Fixed P2P ⊠Client □SISO for 10M/20M/40M ⊠MIMO for 10M/20M/40M PCB Antenna 4.62 dBi cation, features, or specification exhibited in User's Manual, Technical specification, please refer to the User's Manual.	
Adapter	N/A		
Battery	DC 7.4V, 4600mAh		
Power Rating	DC 7.4V from battery or DC 26.4V from adapter		
Connecting I/O Port(s)	Please refer to the User's Manual		
Hardware Version	N/A		
Software Version	N/A		





Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

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2. Number Of Channel List

	Channel	Frequency
	01	5740
	02	5760
10M/20M	03	5780
	04	5800
	05	5820
40M	02	5760
	03	5780
	04	5800
	05	5820



2.2 DESCRIPTION OF TEST MODES

ac-M

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To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Normal Link Mode
Mode 2	BPSK 10M CH01/03/05
Mode 3	BPSK 20M CH01/03/05
Mode 4	BPSK 40M CH02/03/05

For Radiated Emission				
Final Test Mode	Description			
Mode 2	BPSK 10M CH01/03/05			
Mode 3	BPSK 20M CH01/03/05			
Mode 4	BPSK 40M CH02/03/05			

For AC Conducted Emission				
Final Test Mode	Description			
Mode 1 Normal Link Mode				

For Conducted Test Cases					
Final Test Mode	Description				
Mode 2	BPSK 10M CH01/03/05				
Mode 3	BPSK 20M CH01/03/05				
Mode 4	BPSK 40M CH02/03/05				

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported





This EUT has two antennas, and different modes support different transmit mode what describe as following:

Mode	Tx/Rx
10M/20M/40M	2TX, 2RX

For 5GHz band has MIMO mode, Antenna 1,2 are simultaneous transmissions, each with the same directional gain.

For power spectral density (PSD) measurements: Directional gain=G_{ANT} + Array Gain=4.62dBi + 3.01 = 7.63dBi. For power measurements: Directional gain=G_{ANT} + Array Gain=4.62dBi + 0 = 4.62dBi.

Note: G_{ANT} means antenna gain for the same gain in dBi.

For power spectral density (PSD) measurements: Array Gain = $10\log(N_{ANT}/N_{ss})dB$.

Array Gain = 0 dB (i.e., no array gain) for $N_{dNT} \le 4$; Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{dNT} ; Array Gain = 5 log(N_{dNT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths

with $N_{ANT} \ge 5$. For power measurements:

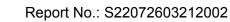
 N_{ANT} = number of transmit antennas and

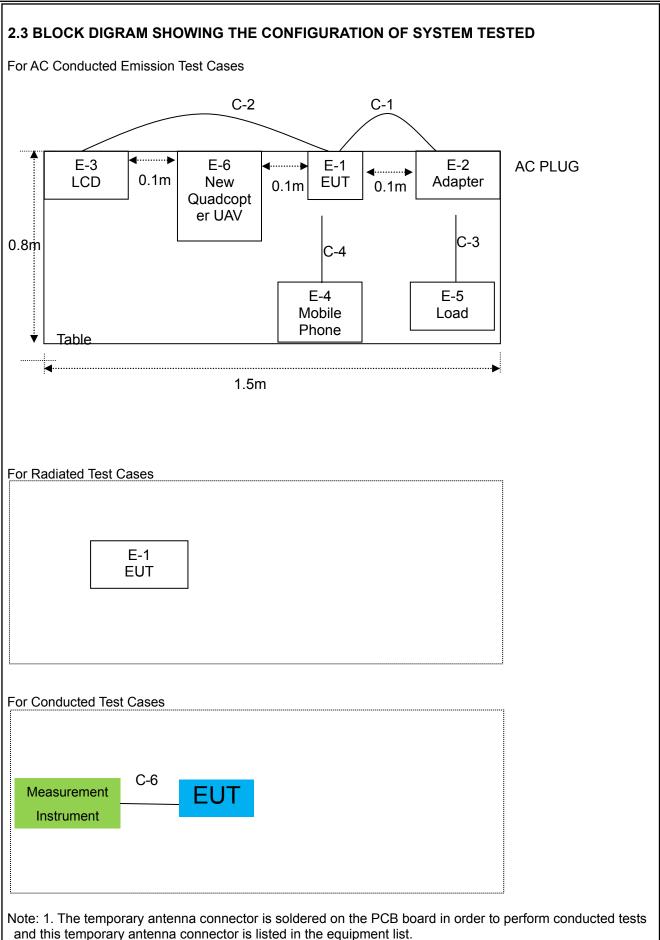
 N_{SS} = number of spatial streams. (Assume $N_{SS} = 1$ unless you have specific information to the contrary.)



AC-MR

Certificate #4298.01







2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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Item	Equipment	Model/Type No.	Series No.	Note
E-1	Remote control	N/A	MGP01	N/A
E-2	CHARGER	N/A	CPD-BC12	N/A
E-3	LCD	PHILIPS	241P6V	UHBA1724011720C24
E-4	Mobile Phone	Redmi	Redmi K30 5G	N/A
E-5	Load	N/A	N/A	N/A
E-6	New Quadcopter UAV	N/A	S400	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	Power Cable	NO	NO	40cm
C-2	HDMI Cable	YES	YES	120cm
C-3	USB Cable	NO	NO	80cm
C-4	USB Cable	YES	NO	80cm

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in $\[\]$ Length $\[\]$ column.
- (3) During the battery power test, the battery is fully charged.

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2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

		rest equipment					Calibrati
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2022.04.01	2023.03.31	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2022.04.01	2023.03.31	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2022.06.16	2023.06.15	1 year
4	Test Receiver	R&S	ESPI7	101318	2022.04.06	2023.04.05	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2022.03.30	2023.03.29	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
7	Horn Antenna	EM	EM-AH-1018 0	2011071402	2022.03.31	2023.03.30	1 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2021.11.07	2022.11.06	1 year
9	Amplifier	EMC	EMC051835 SE	980246	2022.06.17	2023.06.16	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2021.11.07	2022.11.06	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2022.06.16	2023.06.15	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2022.06.17	2025.06.16	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2022.06.17	2025.06.16	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2022.06.17	2025.06.16	3 year
15	Filter	TRILTHIC	2400MHz	29	2021.11.07	2022.11.06	1 year
16	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list





AC Conduction Test equipment

r	AC Conduction Test equipment							
	Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
	1	Test Receiver	R&S	ESCI	101160	2022.04.06	2023.04.05	1 year
	2	LISN	R&S	ENV216	101313	2022.04.06	2023.04.05	1 year
	3	LISN	SCHWARZBE CK	NNLK 8129	8129245	2022.04.06	2023.04.05	1 year
	4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2020.05.11	2023.05.10	3 year
	5	Test Cable (9KHz-30MH z)	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
	6	Test Cable (9KHz-30MH z)	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
	7	Test Cable (9KHz-30MH z)	N/A	C03	N/A	2020.05.11	2023.05.10	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& Aux Equipment which is scheduled for calibration every 3 years.



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 APPLICABLE STANDARD

According to FCC Part 15.207(a)

3.1.2 CONFORMANCE LIMIT

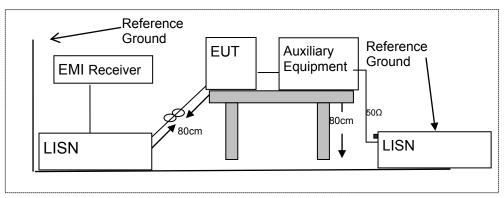
	Conducted Emission Limit		
Frequency(MHz)	Quasi-peak	Average	
0.15-0.5	66-56*	56-46*	
0.5-5.0	56	46	
5.0-30.0	60	50	

Note: 1. *Decreases with the logarithm of the frequency

2. The lower limit shall apply at the transition frequencies

3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3.1.3 TEST CONFIGURATION



3.1.4 TEST PROCEDURE

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support
 equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for
 the measuring instrument.
- 4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item -EUT Test Photos.





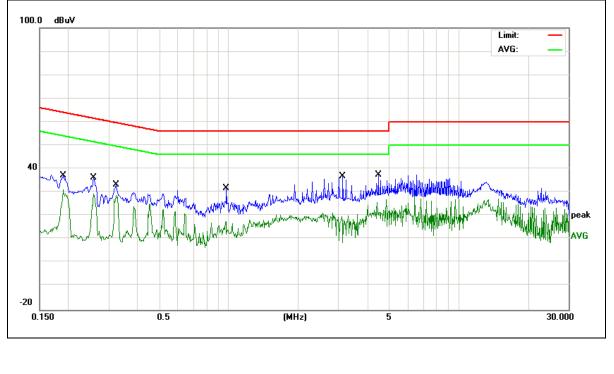
EUT :	Remote control	Model Name. :	MGP01
Temperature :	23.5 ℃	Relative Humidity :	45%
Pressure :	1010hPa	Phase :	L
Test vollage .	DC 26.4V from Adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency	Reading Level	Correct Factor	Measure-me nt	Limits	Margin	Remar
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	k
0.1900	27.48	9.61	37.09	64.03	-26.94	QP
0.1900	20.40	9.61	30.01	54.03	-24.02	AVG
0.2580	26.73	9.63	36.36	61.49	-25.13	QP
0.2580	19.62	9.63	29.25	51.49	-22.24	AVG
0.3220	23.56	9.64	33.20	59.65	-26.45	QP
0.3220	18.42	9.64	28.06	49.65	-21.59	AVG
0.9737	22.08	9.68	31.76	56.00	-24.24	QP
0.9737	2.59	9.68	12.27	46.00	-33.73	AVG
3.1259	27.11	9.73	36.84	56.00	-19.16	QP
3.1259	-1.11	9.73	8.62	46.00	-37.38	AVG
4.4659	27.78	9.76	37.54	56.00	-18.46	QP
4.4659	11.56	9.76	21.32	46.00	-24.68	AVG

Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.







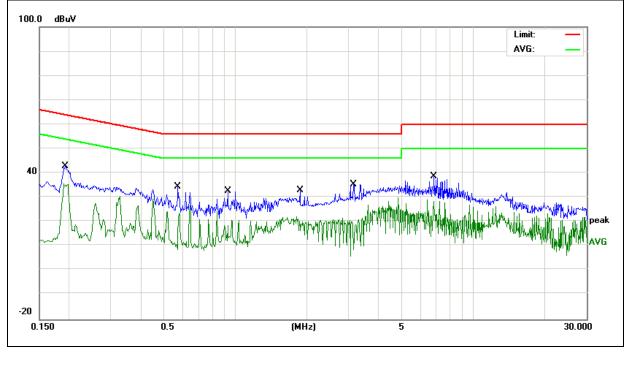
EUT :	Remote control	Model Name. :	MGP01
Temperature :	23 .5 ℃	Relative Humidity :	45%
Pressure :	1010hPa	Phase :	Ν
Test vollage .	DC 26.4V from Adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency	Reading Level	Correct Factor	Measure-me nt	Limits	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1922	33.21	9.63	42.84	63.94	-21.10	QP
0.1922	25.57	9.63	35.20	53.94	-18.74	AVG
0.5735	24.92	9.67	34.59	56.00	-21.41	QP
0.5735	5.09	9.67	14.76	46.00	-31.24	AVG
0.9300	22.89	9.69	32.58	56.00	-23.42	QP
0.9300	4.25	9.69	13.94	46.00	-32.06	AVG
1.8740	23.24	9.67	32.91	56.00	-23.09	QP
1.8740	9.34	9.67	19.01	46.00	-26.99	AVG
3.1499	25.62	9.69	35.31	56.00	-20.69	QP
3.1499	-1.10	9.69	8.59	46.00	-37.41	AVG
6.8418	28.85	9.82	38.67	60.00	-21.33	QP
6.8418	18.29	9.82	28.11	50.00	-21.89	AVG

Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(b)(9) and 15.209

3.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b) (9): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)). According to FCC Part15.205. Restricted bands

MHz	MHz	MHz	GHz				
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15				
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46				
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75				
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5				
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2				
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5				
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7				
6.26775-6.26825	123-138	2200-2300	14.47-14.5				
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2				
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4				
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12				
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0				
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8				
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5				
12.57675-12.57725	322-335.4	3600-4400	(2)				
13.36-13.41							

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	24000/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

	Class B (dBuV/m) (at 3M)		
Frequency(MHz)	PEAK	AVERAGE	
Above 1000	74	54	

Remark :1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

3.2.3 MEASURING INSTRUMENTS

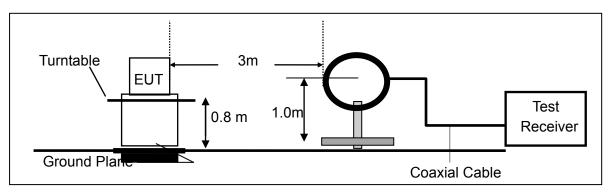
The Measuring equipment is listed in the section 6.3 of this test report.



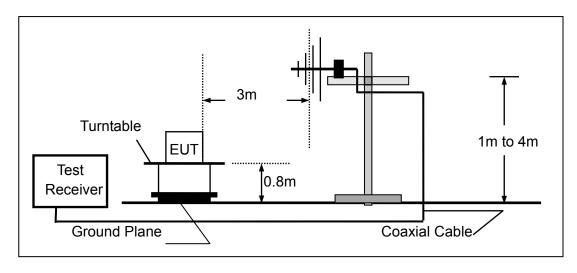


3.2.4 TEST CONFIGURATION

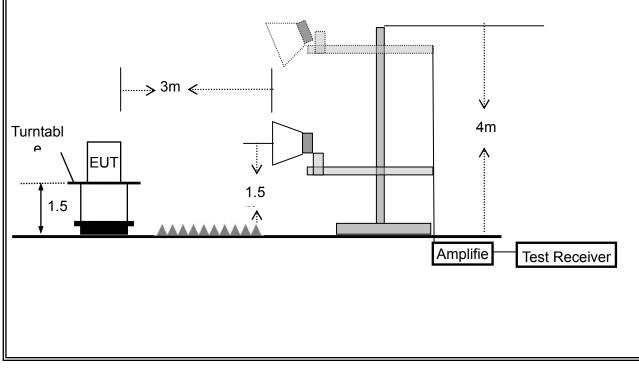
(a)For radiated emissions below 30MHz



(b)For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz





3.2.5 TEST PROCEDURE

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The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.
 - Note:

Both horizontal and vertical antenna polarities were tested

and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
About 1000	Peak	1 MHz	1 MHz
Above 1000	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*lg(100 [kHz]/narrower RBW [kHz]). , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.



3.2.6 TEST RESULTS (9KHZ - 30 MHZ)

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure:	1010 hPa	Test Voltage :	DC 7.4V
Test Mode :	ТХ	Polarization :	

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Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				N/A
				N/A

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.





3.2.7 TEST RESULTS (30MHZ - 1GHZ)

	1]
EUT :	Remote control	Model Name :	MGP01
Temperature :	25.2	Relative Humidity :	55%
Pressure :	1010 hPa	Test Voltage :	DC 7.4V
Test Mode :	TX- 40M BPSK mode(CH02)		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	30.8535	10.81	24.08	34.89	40.00	-5.11	QP
V	32.8637	8.95	22.37	31.32	40.00	-8.68	QP
V	121.1230	15.50	17.87	33.37	43.50	-10.13	QP
V	210.0482	17.72	15.45	33.17	43.50	-10.33	QP
V	804.6028	6.56	30.39	36.95	46.00	-9.05	QP
V	912.8618	7.24	31.53	38.77	46.00	-7.23	QP

Remark:

Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit





Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	rtoniarit
Н	30.9618	7.67	23.97	31.64	40.00	-8.36	QP
Н	78.6888	15.36	13.45	28.81	40.00	-11.19	QP
Н	82.0704	15.27	14.04	29.31	40.00	-10.69	QP
Η	127.2176	17.95	17.74	35.69	43.50	-7.81	QP
Н	270.3747	18.50	20.63	39.13	46.00	-6.87	QP
Η	922.5157	4.41	31.56	35.97	46.00	-10.03	QP
72.0	dBu∀/m					Limit: Margin:	
32 <mark>1</mark>		2.3 1.4	4 Margar	5 Mar Market Market Market		Madana a Parte	B B C C C C C C C C C C C C C C C C C C
-8							

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3.2.8 TEST RESULTS (1GHz-18GHz)

EUT :	F	Remote cont	rol		Model Na	me. :	MGP01		
					Relative Humidity :		48%		
Pressure : 1010 hPa			Test Voltage			DC 7.4V			
Test Mode		X- 40M BPSK mode				ge .	007.40		
Test Mode	•		or mode						
Polar	Frequen	cy Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
(H/V)	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
			Low Cha	nnel (5760	MHz)10M-G	SFSK			
Vertical	5122.7	5 64.02	5.94	35.40	44.00	61.36	74.00	-12.64	Pk
Vertical	5122.9	0 45.65	5.94	35.40	44.00	42.99	54.00	-11.01	AV
Vertical	11491.0	5 60.39	8.46	39.75	44.50	64.10	74.00	-9.90	Pk
Vertical	11491.1	1 43.76	8.46	39.75	44.50	47.47	54.00	-6.53	AV
Vertical	17236.0	1 52.26	10.12	38.80	44.10	57.08	68.20	-11.12	Pk
Horizontal	5167.0 [°]	7 59.93	5.94	35.18	44.00	57.05	68.20	-11.15	Pk
Horizontal	11490.8	9 59.26	8.46	38.71	44.50	61.93	74.00	-12.07	Pk
Horizontal	11490.9	2 42.77	8.46	38.71	44.50	45.44	54.00	-8.56	AV
Horizontal	17235.8	51.75	10.12	38.38	44.10	56.15	68.20	-12.05	Pk
			middle Ch	annel (5780	0 MHz)10M-	GFSK	_		
Vertical	5433.6	62.89	6.48	36.35	44.05	61.67	74.00	-12.33	Pk
Vertical	5433.8	0 43.20	6.48	36.35	44.05	41.98	54.00	-12.02	AV
Vertical	11570.8	5 60.89	8.47	37.88	44.51	62.73	74.00	-11.27	Pk
Vertical	11570.9	7 43.50	8.47	37.88	44.51	45.34	54.00	-8.66	AV
Vertical	17356.2	56.03	10.12	38.80	44.10	60.85	68.20	-7.35	Pk
Horizontal	4866.9	60.21	6.48	36.37	44.05	59.01	74.00	-14.99	Pk
Horizontal	4866.8	8 43.17	6.48	36.37	44.05	41.97	54.00	-12.03	AV
Horizontal	11570.5	5 63.10	8.47	38.64	44.50	65.71	74.00	-8.29	Pk
Horizontal	11570.8	4 44.25	8.47	38.64	44.50	46.86	54.00	-7.14	AV
Horizontal	17355.8	2 56.72	10.12	38.38	44.10	61.12	68.20	-7.08	Pk
			High Cha	nnel (5820	MHz)10M-0	GFSK			
Vertical	5243.6	62.12	7.10	37.24	43.50	62.96	68.20	-5.24	Pk
Vertical	11651.6	6 61.94	8.46	37.68	44.50	63.58	74.00	-10.42	Pk
Vertical	11651.6	0 43.08	8.46	37.68	44.50	44.72	54.00	-9.28	AV
Vertical	17473.1	3 60.74	10.12	38.80	44.10	65.56	68.20	-2.64	Pk
Vertical	17473.0	60.77	10.12	38.80	44.10	65.59	68.20	-2.61	Pk
Horizontal	5284.5	1 60.31	7.10	37.24	43.50	61.15	68.20	-7.05	Pk
Horizontal	11651.9	3 60.32	8.46	38.57	44.50	62.85	74.00	-11.15	Pk
Horizontal	11652.0	7 41.87	8.46	38.57	44.50	44.40	54.00	-9.60	AV
Horizontal	17473.8	58.18	10.12	38.38	44.10	62.58	68.20	-5.62	Pk
Horizontal	17473.8	6 58.28	10.12	38.38	44.10	62.68	68.20	-5.52	Pk

Note: "40M BPSK" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record. The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value

has no need to be reported.

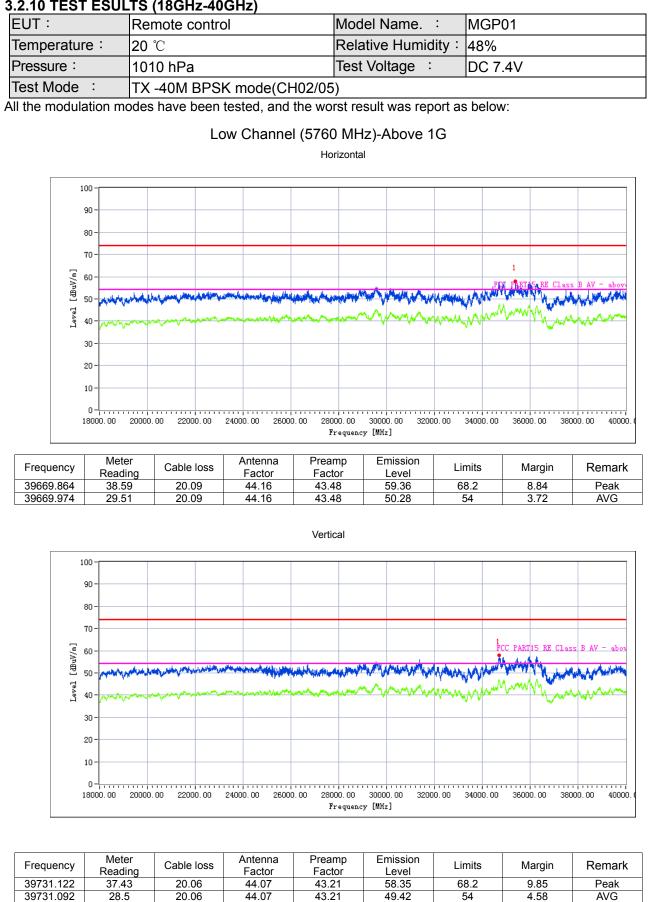
Emission level (dBuV/m) = 20 log Emission level (uV/m). Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



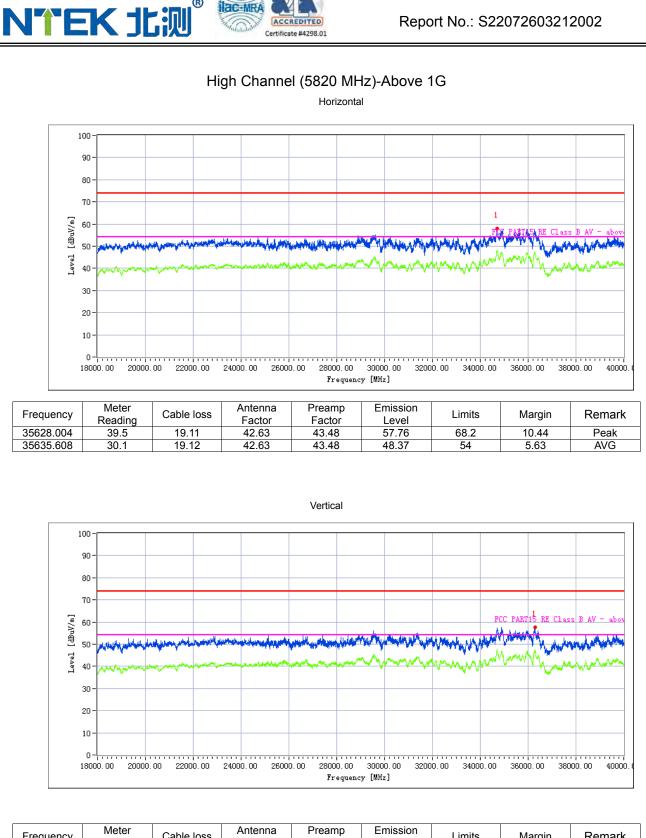


3.2.10 TEST ESULTS (18GHz-40GHz)

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Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39821.423	38.53	20.1	44.1	43.22	59.51	68.2	8.69	Peak
39821.423	29.26	20.1	44.1	43.22	50.24	54	3.76	AVG





3.2.11 SPURIOUS EMISSION IN RESTRICTED BAND 4.5GHZ~5.150 GHZ& 5.350GHZ~5460GHZ

EUT :	Remote control	Model Name. :	MGP01
Temperature :	20 ℃	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 7.4V
Test Mode :	TX -40M BPSK		

All the modulation modes have been tested, The report just record the worst data mode.

Polar	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
(H/V)	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
	Low Channel (5760 MHz)10M-Above 1G								
Vertical	5460	68.15	5.61	35.40	44.00	65.16	74.00	-8.84	Pk
Vertical	5460	51.27	5.76	35.40	44.00	48.43	54.00	-5.57	AV
Horizontal	5460	63.10	5.78	35.18	44.00	60.06	74.00	-13.94	Pk
Horizontal	5460	48.17	5.66	35.18	44.00	45.01	54.00	-8.99	AV

Note: (1) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor

(2) "40M BPSK" mode is the worst mode. When PK value is lower than the Average value limit, average don't record.



4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(a)

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For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in

maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

(3)For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



4.2 TEST PROCEDURE

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For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW \geq 1/T, where T is defined in section II.B.I.a).

- b) Set VBW \geq 3 RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add

10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add
 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.



4.6 TEST RESULTS

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1015 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2/3/4		

For 5G band, Directional gain=7.63 dBi 7.63dBi>6.0 dBi, so MIMO power spectral density limit=28.37dBm / 1MHz;

Test data reference attachment.

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5. 26DB & 99% EMISSION BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

5.2 TEST PROCEDURE

a) Set RBW = approximately 1% of the emission bandwidth.

b) Set the VBW > RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

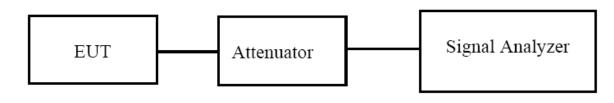
The following procedure shall be used for measuring (99 %) power bandwidth:

- 1. Set center frequency to the nominal EUT channel center frequency.
- 2. Set span = 1.5 times to 5.0 times the OBW.
- 3. Set RBW = 1 % to 5 % of the OBW
- 4. Set VBW \ge 3 \cdot RBW

5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

6. Use the 99 % power bandwidth function of the instrument (if available).

7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.





5.3 EUT OPERATION CONDITIONS

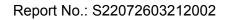
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.4 TEST RESULTS

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2/3/4		

Test data reference attachment.





6. MINIMUM 6 DB BANDWIDTH

6.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(e)

(e) Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

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6.2 TEST PROCEDURE

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) \ge 3 × RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.





6.6 TEST RESULTS

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2/3/4		

Test data reference attachment.





7. MAXIMUM CONDUCTED OUTPUT POWER

7.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conduced output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	0.25W
5725~5850	1W

7.2 TEST PROCEDURE

• Method PM is Measurement using an RF average power meter. The procedure for this method is as follows:

a) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:

1) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.

2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.

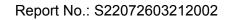
3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

b) If the transmitter does not transmit continuously, measure the duty cycle D of the transmitter output signal as described in 12.2.

c) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.

d) Adjust the measurement in dBm by adding [10 log (1 / D)], where D is the duty cycle {e.g., [10 log (1 / 0.25)], if the duty cycle is 25%}.

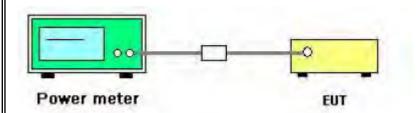




7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

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7.5 TEST RESULTS

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2/3/4		

ED

For 5G band. Directional gain=4.62dBi; 6.0dBi>4.62dBi, so conducted power limit= 30.00dBm.

Test data reference attachment.



8. OUT OF BAND EMISSIONS

8.1 APPLICABLE STANDARD

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(9) (10) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

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(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.725-5.85 GHz band: For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

8.2 TEST PROCEDURE

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.

8.3 DEVIATION FROM STANDARD

No deviation.

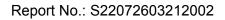
8.4 TEST SETUP

EUT		SPECTRUM
	Att	ANALYZER

8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



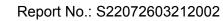


8.6 TEST RESULTS

EUT :	Remote control	Model Name :	MGP01
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2/3/4		

ACCREDITED Certificate #4298.01

Test data reference attachment.







9.1 LIMIT

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

9.2 TEST PROCEDURES

1. The transmitter output (antenna port) was connected to the spectrum analyzer.

2. EUT have transmitted absence of modulation signal and fixed channelize.

3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.

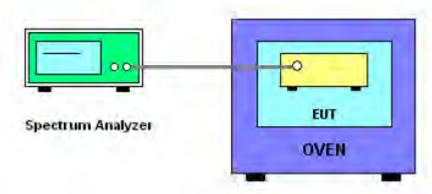
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.

5. fc is declaring of channel frequency. Then the frequency error formula is $(fc-f)/fc \times 10_6$ ppm and the limit is less than ±20ppm (IEEE 802.11nspecification).

6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value

7. Extreme temperature is -20°C~70°C.

9.3 TEST SETUP LAYOUT

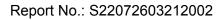


9.4 EUT OPERATION DURING TEST

1. The EUT was programmed to be in continuously un-modulation transmitting mode.

2. The has two antennas, and the worst data is Antenna 1, only shown Antenna 1 Plot.





9.5 TEST RESULTS

EUT :	Remote control	Model Name. :	MGP01
Temperature :	25 ℃	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 7.4V
Test Mode :	Mode2		

ED Certificate #4298.01

ACCREDI

1(2) Represent the value of antenna 1 and 2, the worst data is Antenna 1 user40M MIMO mode, only shown Antenna 1 10M BPSK mode data.

Voltage vs. Frequency Stability

			Reference Frequency: 5760MHz			
тсет					Max.	Max.
TEST CONDITIONS				fc	Deviation	Deviation
					(MHz)	(ppm)
	V nom (V)	7.40	5760.0093	5760	0.00930	-1.6146
20	V max (V)	6.29	5760.0258	5760	0.02580	-4.4792
	V min (V)	8.51	5760.0233	5760	0.02330	-4.0451
Limits			Within 5745-5850MHz			
Result				Comp	lies	
		20 V max (V) V min (V) Limits	V nom (V) 7.40 20 V max (V) 6.29 V min (V) 8.51 Limits	TEST CONDITIONS f 20 V nom (V) 7.40 5760.0093 20 V max (V) 6.29 5760.0258 V min (V) 8.51 5760.0233 Limits	TEST CONDITIONS f fc 20 V nom (V) 7.40 5760.0093 5760 20 V max (V) 6.29 5760.0258 5760 V min (V) 8.51 5760.0233 5760 Limits Within 5745	TEST CONDITIONS f Max. f fc Deviation (MHz) 20 V nom (V) 7.40 5760.0093 5760 0.00930 20 V max (V) 6.29 5760.0258 5760 0.02580 V min (V) 8.51 5760.0233 5760 0.02330 Limits

Temperature vs. Frequency Stability

				Reference Frequency: 5760MHz			
- т		ONDITIONS				Max.	Max.
·				f	fc	Deviation	Deviation
						(MHz)	(ppm)
		T (°C)	-20	5760.0186	5760	0.01860	-3.2292
		T (°C)	-10	5760.0196	5760	0.01960	-3.4028
		T (°C)	0	5760.0134	5760	0.01340	-2.3264
	7.60	T (°C)	10	5760.0209	5760	0.02090	-3.6285
V nom (V)		T (°C)	20	5760.0312	5760	0.03120	-5.4167
V nom (V)		T (°C)	30	5760.0226	5760	0.02260	-3.9236
		T (°C)	40	5760.0311	5760	0.03110	-5.3993
		T (°C)	50	5760.0012	5760	0.00120	-0.2083
		T (°C)	60	5760.0104	5760	0.01040	-1.8056
		T (°C)	70	5760.0214	5760	0.02140	-3.7153
	Limits			Within 5745-5850MHz			
	F	Result		Complies			





Voltage vs. Frequency Stability

	_				Reference Frequency: 5780MHz			
	тсет					Max.	Max.	
	TEST CONDITIONS				fc	Deviation	Deviation	
						(MHz)	(ppm)	
Thom		V nom (V)	7.40	5780.0107	5780	0.01070	-1.8512	
T nom	20	V max (V)	6.29	5780.0343	5780	0.03430	-5.9343	
(°C)		V min (V)	8.51	5780.0264	5780	0.02640	-4.5675	
	Limits			Within 5745-5850MHz				
	Result			Complies				

Temperature vs. Frequency Stability

emperature vs. I	Freque	ncy Stability		1			
				Reference Frequency: 5780MHz			
		ONDITIONS				Max.	Max.
1	231 0			f	fc	Deviation	Deviation
						(MHz)	(ppm)
		T (°C)	-20	5780.0145	5780	0.01450	-2.5087
		T (°C)	-10	5780.0058	5780	0.00580	-1.0035
		T (°C)	0	5780.0036	5780	0.00360	-0.6228
		T (°C)	10	5780.0000	5780	0.00000	0.0000
V nom (V)	7 40	T (°C)	20	5780.0133	5780	0.01330	-2.3010
V HOITI (V)	7.40	T (°C)	30	5780.0024	5780	0.00240	-0.4152
		T (°C)	40	5780.0097	5780	0.00970	-1.6782
		T (°C)	50	5780.0027	5780	0.00270	-0.4671
		T (°C)	60	5780.0128	5780	0.01280	-2.2145
		T (°C)	70	5780.0005	5780	0.00050	-0.0865
	Limits			Within 5745-5850MHz			
	R	lesult			Com	plies	





Voltage vs. Frequency Stability

					Reference Frequency: 5820MHz			
	тсет					Max.	Max.	
	TEST CONDITIONS				fc	Deviation	Deviation	
						(MHz)	(ppm)	
Thom		V nom (V)	7.40	5820.0237	5820	0.02370	-4.0722	
T nom	20	V max (V)	6.29	5820.0163	5820	0.01630	-2.8007	
(°C)		V min (V)	8.51	5820.0207	5820	0.02070	-3.5567	
	Limits			Within 5745-5850MHz				
	Result			Complies				

Temperature vs. Frequency Stability

				Reference Frequency: 5820MHz			
- -		ONDITIONS				Max.	Max.
'	231 0			f	fc	Deviation	Deviation
						(MHz)	(ppm)
		T (°C)	-20	5820.0162	5820	0.01620	-2.7835
		T (°C)	-10	5820.0146	5820	0.01460	-2.5086
	7.40	T (°C)	0	5820.0069	5820	0.00690	-1.1856
		T (°C)	10	5820.0160	5820	0.01600	-2.7491
V nom (V)		T (°C)	20	5820.0015	5820	0.00150	-0.2577
V HOIH (V)		T (°C)	30	5820.0057	5820	0.00570	-0.9794
		T (°C)	40	5820.0221	5820	0.02210	-3.7973
		T (°C)	50	5820.0019	5820	0.00190	-0.3265
		T (°C)	60	5820.0145	5820	0.01450	-2.4914
		T (°C)	70	5820.0091	5820	0.00910	-1.5636
	Limits			Within 5745-5850MHz			
	R	lesult			Com	plies	



10. ANTENNA REQUIREMENT

10.1 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 party shall be used with the device.

10.2 EUT ANTENNA

The EUT antenna is permanent attached Antenna: PCB Antenna (Gain:4.62 dBi), It comply with the standard requirement.



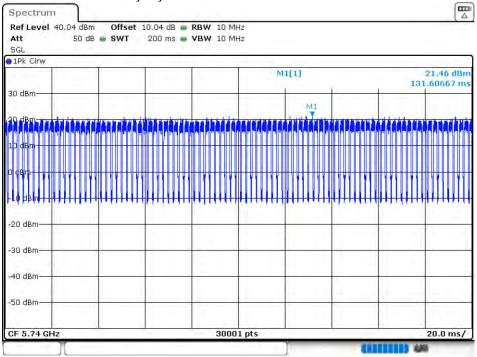


11. TEST RESULT

11.0 DUTY CYCLE

• •					
Antenna	Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
Ant 1	NVNT	10M	5740	73.32	1.35
Ant 1	NVNT	10M	5780	74.84	1.26
Ant 1	NVNT	10M	5820	73.32	1.35
Ant 2	NVNT	10M	5740	73.28	1.35
Ant 2	NVNT	10M	5780	73.63	1.33
Ant 2	NVNT	10M	5820	73.3	1.35
Ant 1	NVNT	20M	5740	73.32	1.35
Ant 1	NVNT	20M	5780	73.27	1.35
Ant 1	NVNT	20M	5820	73.31	1.35
Ant 2	NVNT	20M	5740	73.32	1.35
Ant 2	NVNT	20M	5780	73.31	1.35
Ant 2	NVNT	20M	5820	73.28	1.35
Ant 1	NVNT	40M	5760	57.97	2.37
Ant 1	NVNT	40M	5780	58.04	2.36
Ant 1	NVNT	40M	5820	58	2.37
Ant 2	NVNT	40M	5760	57.94	2.37
Ant 2	NVNT	40M	5780	58.04	2.36
Ant 2	NVNT	40M	5820	57.91	2.37
	Ant 1 Ant 1 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 1 Ant 1 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 1 Ant 1 Ant 1 Ant 1 Ant 1 Ant 2 Ant 1 Ant 1 Ant 1 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 2 Ant 1 Ant 1 Ant 1 Ant 1 Ant 2 Ant 2	Ant 1NVNTAnt 1NVNTAnt 1NVNTAnt 2NVNTAnt 2NVNTAnt 2NVNTAnt 1NVNTAnt 1NVNTAnt 1NVNTAnt 1NVNTAnt 2NVNTAnt 1NVNTAnt 1NVNTAnt 2NVNTAnt 1NVNTAnt 2NVNTAnt 1NVNTAnt 1NVNTAnt 1NVNTAnt 1NVNTAnt 1NVNTAnt 2NVNTAnt 2NVNTAnt 2NVNTAnt 2NVNT	Ant 1 NVNT 10M Ant 1 NVNT 10M Ant 1 NVNT 10M Ant 1 NVNT 10M Ant 2 NVNT 20M Ant 1 NVNT 20M Ant 1 NVNT 20M Ant 1 NVNT 20M Ant 2 NVNT 40M Ant 1 NVNT 40M Ant 1 NVNT 40M Ant 2 NVNT 40M Ant 2 NVNT 40M	Ant 1 NVNT 10M 5740 Ant 1 NVNT 10M 5780 Ant 1 NVNT 10M 5780 Ant 1 NVNT 10M 5820 Ant 2 NVNT 10M 5740 Ant 2 NVNT 10M 5780 Ant 2 NVNT 10M 5780 Ant 2 NVNT 10M 5780 Ant 1 NVNT 20M 5740 Ant 1 NVNT 20M 5780 Ant 1 NVNT 20M 5740 Ant 1 NVNT 20M 5780 Ant 2 NVNT 20M 5780 Ant 2 NVNT 20M 5780 Ant 2 NVNT 20M 5780 Ant 1 NVNT 40M 5760 Ant 1 NVNT 40M 5820 Ant 1 NVNT 40M 5760 Ant 1 NVNT 40M 5760	Ant 1NVNT10M574073.32Ant 1NVNT10M578074.84Ant 1NVNT10M578073.32Ant 2NVNT10M582073.32Ant 2NVNT10M574073.63Ant 2NVNT10M578073.63Ant 2NVNT10M578073.32Ant 1NVNT20M574073.32Ant 1NVNT20M578073.27Ant 1NVNT20M578073.31Ant 1NVNT20M578073.31Ant 2NVNT20M578073.32Ant 1NVNT20M578073.31Ant 2NVNT20M578073.28Ant 2NVNT20M582073.28Ant 1NVNT40M576057.97Ant 1NVNT40M578058.04Ant 1NVNT40M576057.94Ant 2NVNT40M578058.04Ant 2NVNT40M578058.04

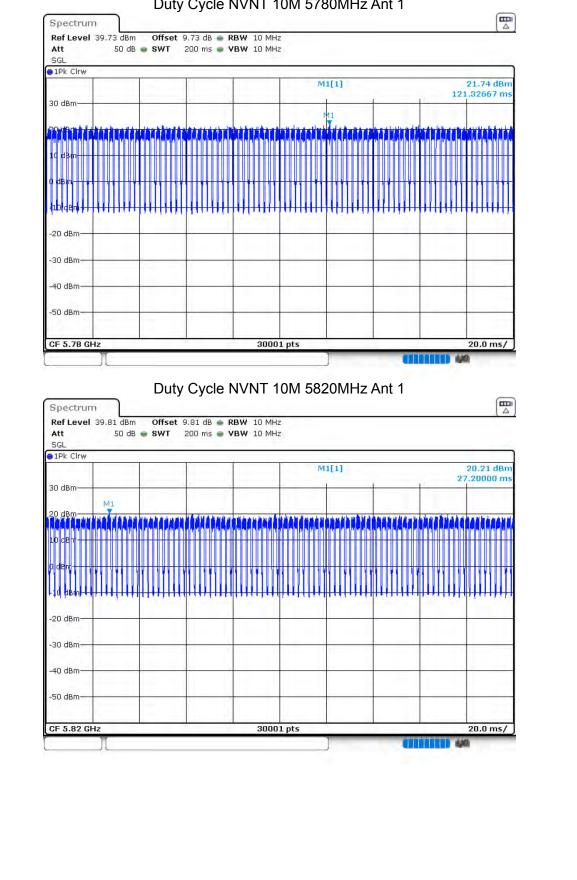








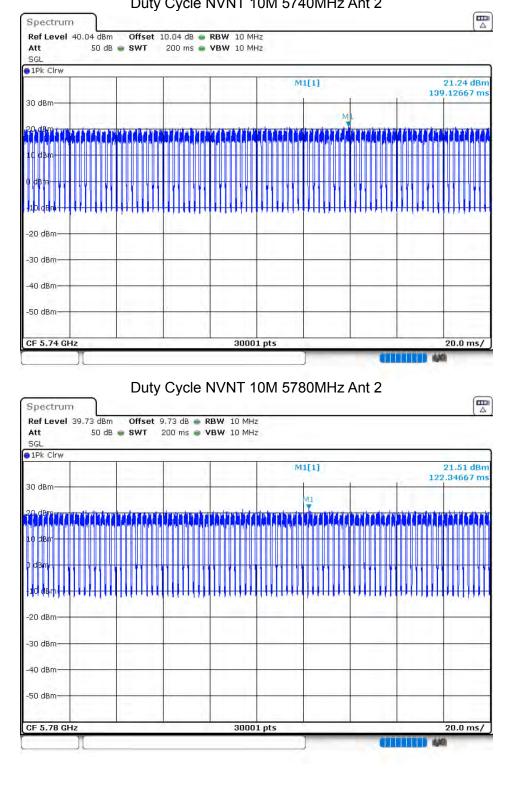






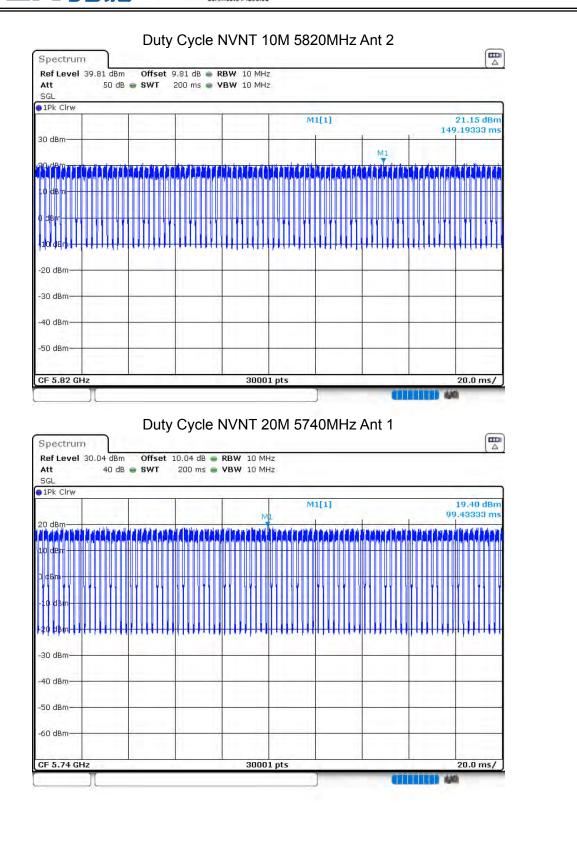






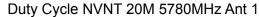


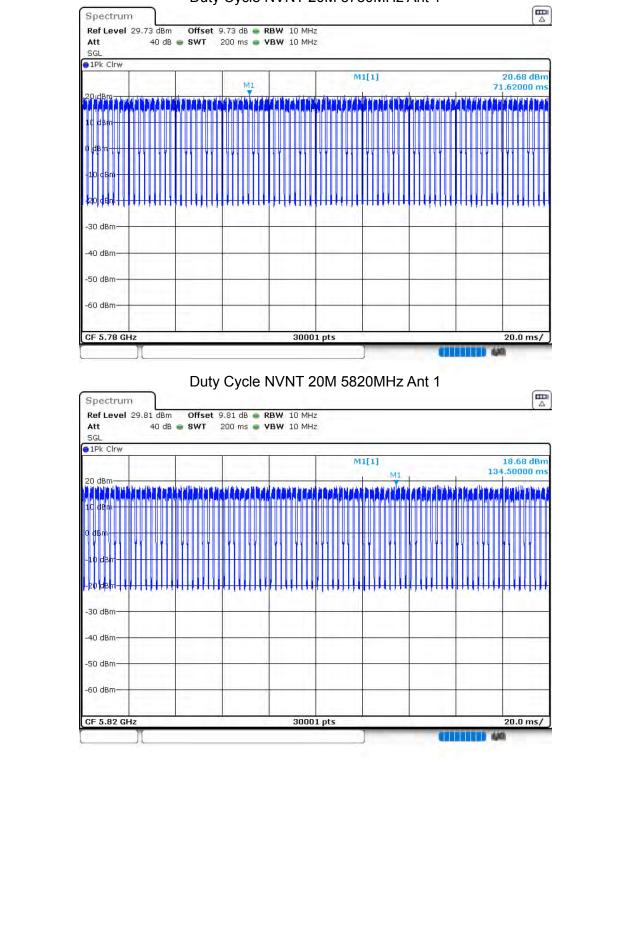








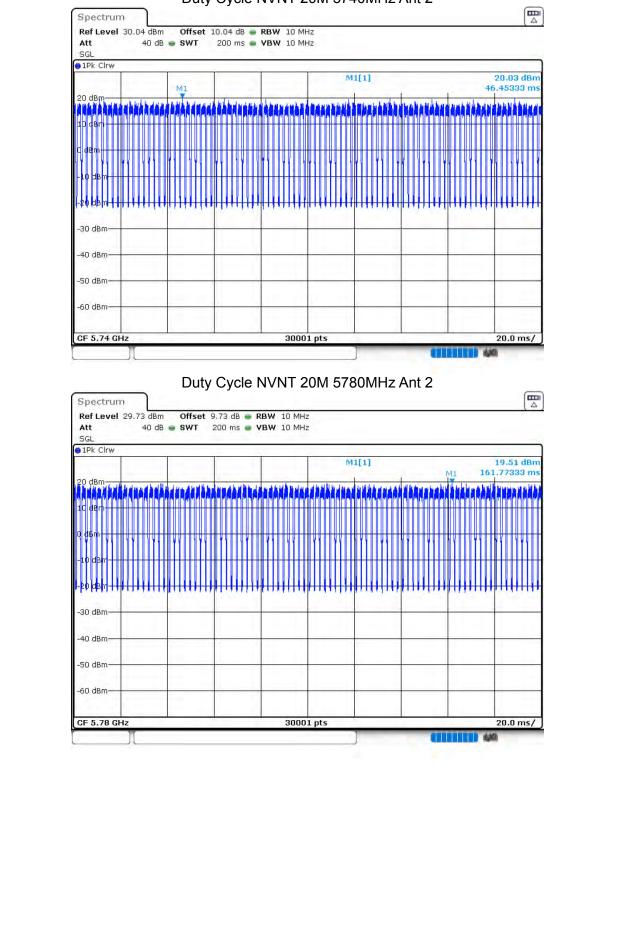








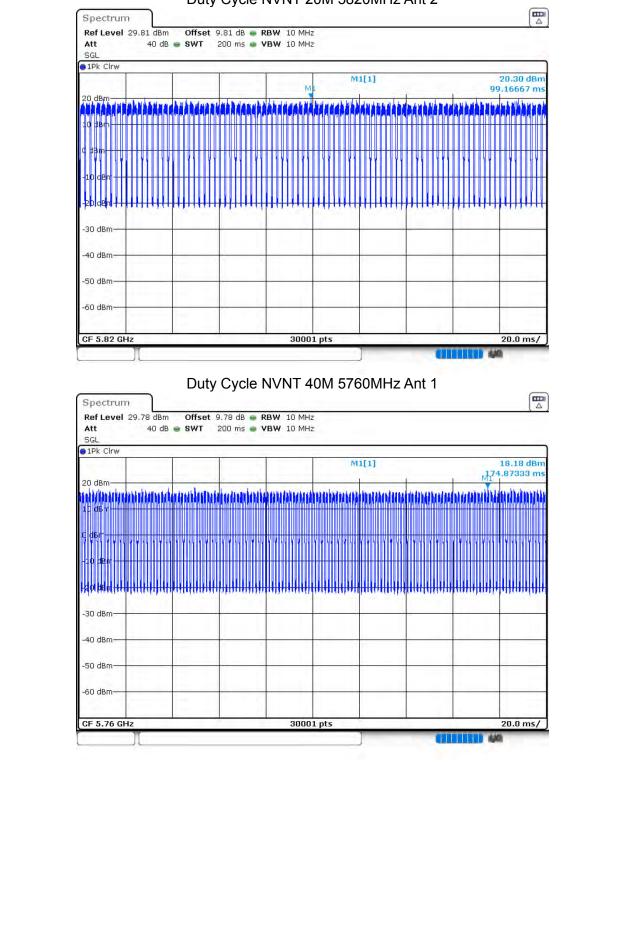






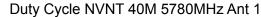


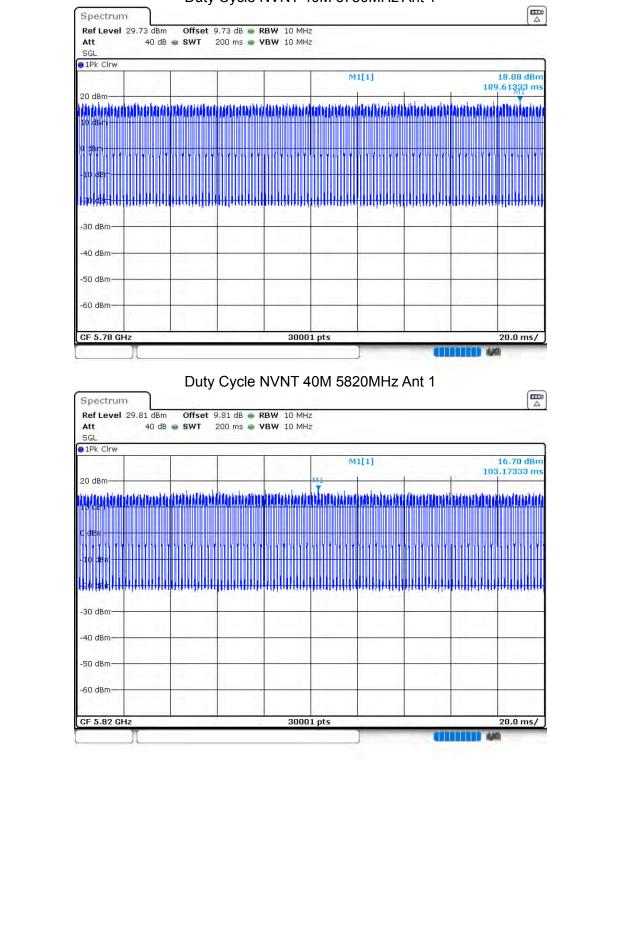








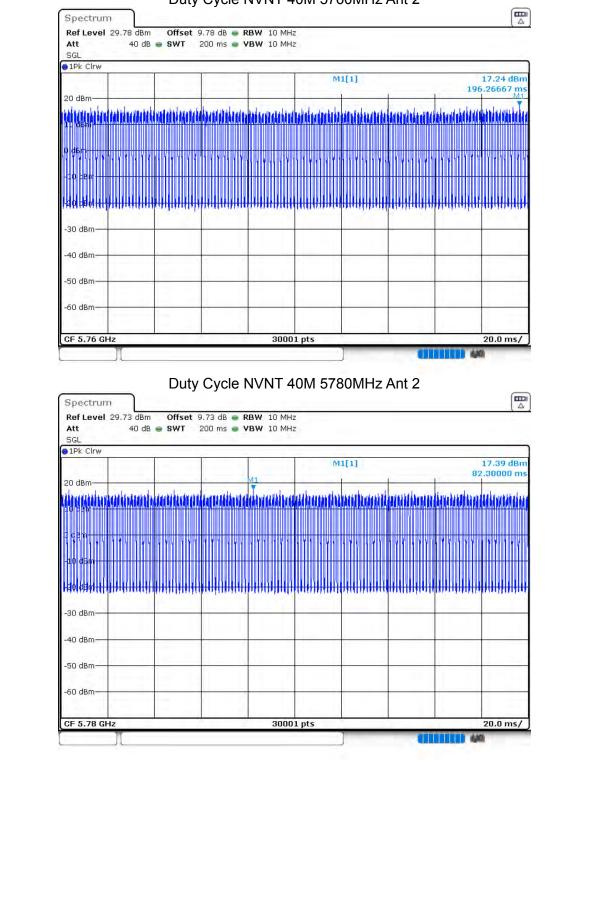








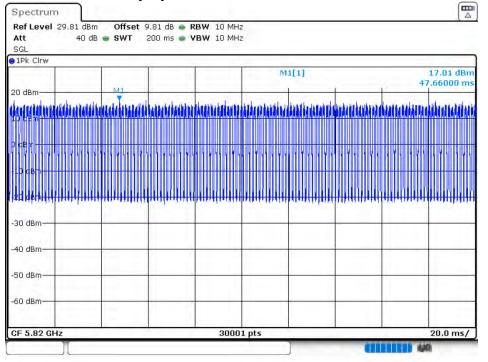
















11.2 MAXIMUM CONDUCTED OUTPUT POWER									
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	MIMO Power (dBm)	Limit (dBm)	Verdict
NVNT	10M	5740	Ant 1	9.39	1.35	10.74	13.66	30	Pass
NVNT	10M	5740	Ant 2	9.21	1.35	10.56	13.00	30	Pass
NVNT	10M	5780	Ant 1	10.08	1.26	11.34	14.04	30	Pass
NVNT	10M	5780	Ant 2	9.37	1.33	10.7	14.04	30	Pass
NVNT	10M	5820	Ant 1	8.14	1.35	9.49	12.07	30	Pass
NVNT	10M	5820	Ant 2	9.57	1.35	10.92	13.27	30	Pass
NVNT	20M	5740	Ant 1	8.91	1.35	10.26	13.34	30	Pass
NVNT	20M	5740	Ant 2	9.04	1.35	10.39	13.34	30	Pass
NVNT	20M	5780	Ant 1	10.08	1.35	11.43	12.06	30	Pass
NVNT	20M	5780	Ant 2	9.06	1.35	10.41	13.96	30	Pass
NVNT	20M	5820	Ant 1	8.24	1.35	9.59	12 15	30	Pass
NVNT	20M	5820	Ant 2	9.28	1.35	10.63	13.15	30	Pass
NVNT	40M	5760	Ant 1	9.86	2.37	12.23	14.59	30	Pass
NVNT	40M	5760	Ant 2	8.44	2.37	10.81	14.59	30	Pass
NVNT	40M	5780	Ant 1	9.58	2.36	11.94	14.27	30	Pass
NVNT	40M	5780	Ant 2	8.32	2.36	10.68	14.37	30	Pass
NVNT	40M	5820	Ant 1	8.04	2.37	10.41	10 70	30	Pass
NVNT	40M	5820	Ant 2	8.64	2.37	11.01	13.73	30	Pass

Report No.: S22072603212002

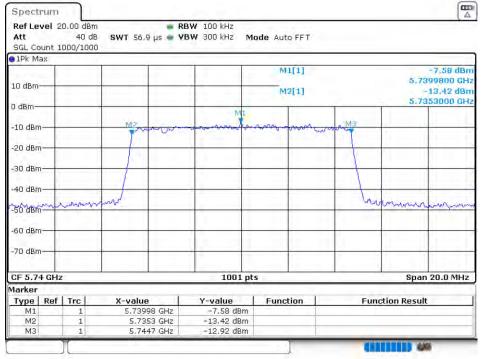


11.3 -6DB EMISSION BANDWIDTH

1.3 -ODD EIVI	1221014 6	SANDWIDIH				
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	10M	5740	Ant 1	9.4	0.5	Pass
NVNT	10M	5780	Ant 1	9.34	0.5	Pass
NVNT	10M	5820	Ant 1	9.22	0.5	Pass
NVNT	10M	5740	Ant 2	9.32	0.5	Pass
NVNT	10M	5780	Ant 2	9.3	0.5	Pass
NVNT	10M	5820	Ant 2	9.36	0.5	Pass
NVNT	20M	5740	Ant 1	15.16	0.5	Pass
NVNT	20M	5780	Ant 1	17.28	0.5	Pass
NVNT	20M	5820	Ant 1	17.36	0.5	Pass
NVNT	20M	5740	Ant 2	16.56	0.5	Pass
NVNT	20M	5780	Ant 2	16.12	0.5	Pass
NVNT	20M	5820	Ant 2	17.6	0.5	Pass
NVNT	40M	5760	Ant 1	33.36	0.5	Pass
NVNT	40M	5780	Ant 1	30	0.5	Pass
NVNT	40M	5820	Ant 1	32.96	0.5	Pass
NVNT	40M	5760	Ant 2	28.8	0.5	Pass
NVNT	40M	5780	Ant 2	17.6	0.5	Pass
NVNT	40M	5820	Ant 2	29.2	0.5	Pass

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EBW NVNT 10M 5740MHz Ant 1





40 dBm

-60 dBm--60 dBm--70 dBm-

CF 5.82 GHz

Type | Ref | Trc |

/arker

M1 M2

МЗ

Annal

1

X-value

5.82 GHz 5.81538 GHz 5.8246 GHz



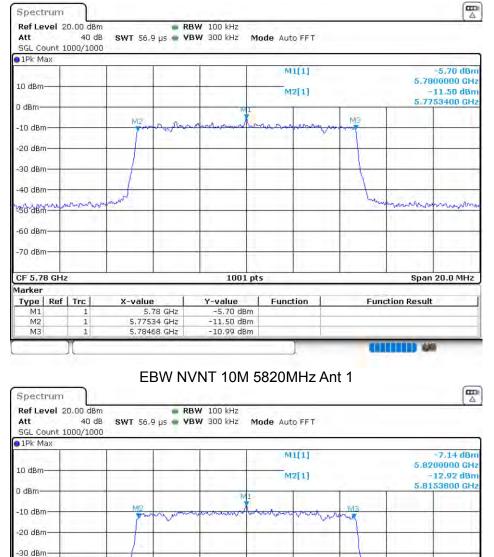
LA.

Function Result

aman

Span 20.0 MHz

EBW NVNT 10M 5780MHz Ant 1



1001 pts

Y-value -7.14 dBm -12.92 dBm

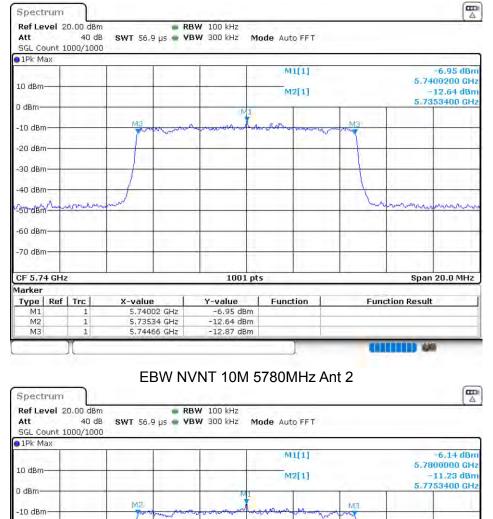
-13.02 dBm

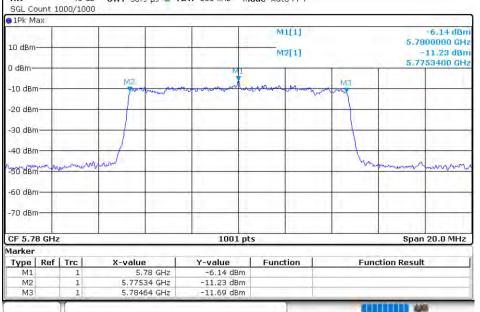
Function





EBW NVNT 10M 5740MHz Ant 2

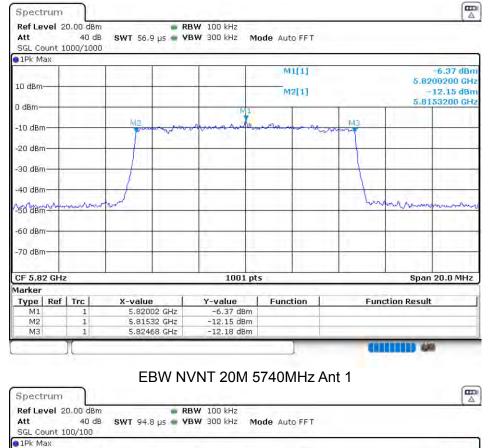








EBW NVNT 10M 5820MHz Ant 2

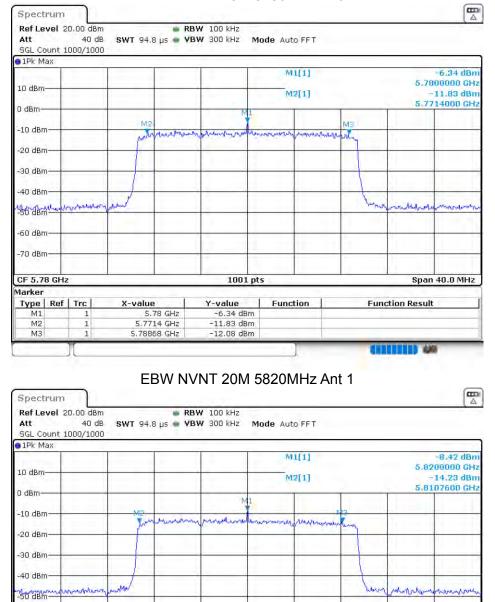


1Pk Max								
10 dBm				M1[1] M2[1]		-8.02 dB) 5.7400000 GH -13.80 dB) 5.7340400 GH		
0 dBm			M1					
-10 dBm	_	M2	approximate	Anna A description of the	MR.			
-20 dBm	-	markey and	March warnes	Almake an Alexand R.C.	Marriel			
-30 dBm			_		_			
-40 dBm					-	((
150 d8mm	and and the same	guestic			having	- Caller and the caller		
-60 dBm	_							
-70 dBm			-					
CF 5.74 GH	z		1001 p	ts		Span 40.0 MHz		
Marker								
	Trc	X-value	Y-value	Function	Function Result			
M1	1	5.74 GHz	-8.02 dBm					
M2 M3	1	5.73404 GHz 5.7492 GHz	-13.80 dBm -13.33 dBm					
- MART	1w1	Service alle	20100 0011					





EBW NVNT 20M 5780MHz Ant 1



1001 pts

Y-value

-8.42 dBm

-14.23 dBm

-13.98 dBm

Function

-60 dBm -70 dBm

/arker

M1 M2

МЗ

CF 5.82 GHz

Type | Ref | Trc |

1

X-value

5.82 GHz

5.81076 GHz 5.82812 GHz Span 40.0 MHz

Function Result





EBW NVNT 20M 5740MHz Ant 2



Function

Y-value

-7.01 dBm

-12.65 dBm

-12.98 dBm

Function Result

Type | Ref | Trc |

1

M1 M2

МЗ

X-value

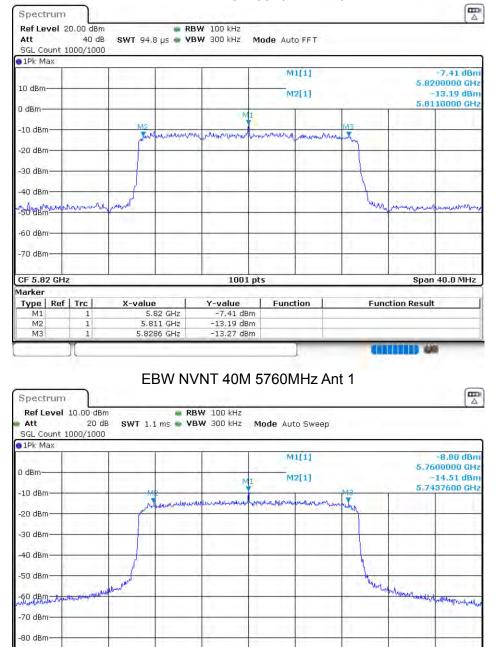
5.78 GHz

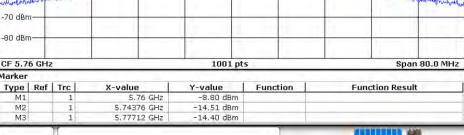
5.77192 GHz 5.78804 GHz





EBW NVNT 20M 5820MHz Ant 2

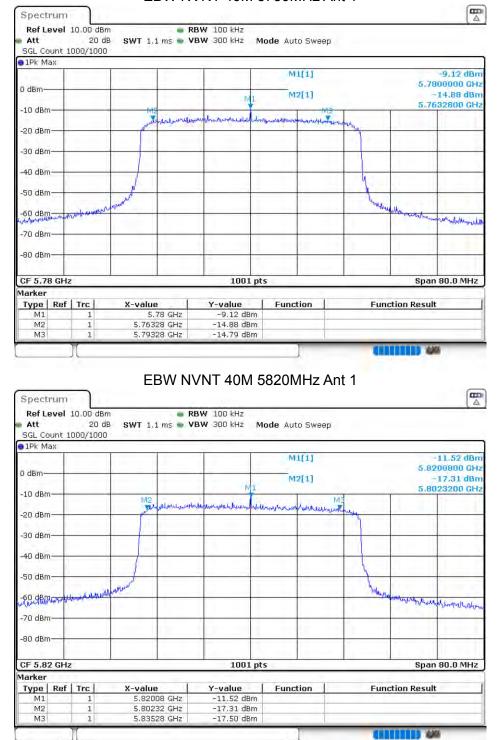








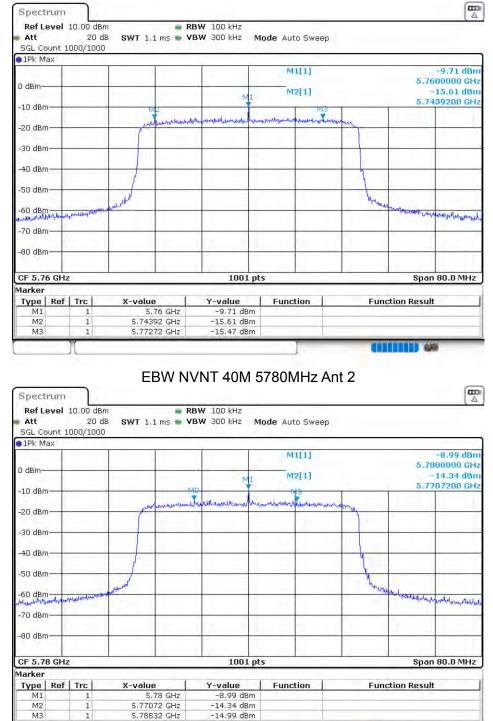
EBW NVNT 40M 5780MHz Ant 1







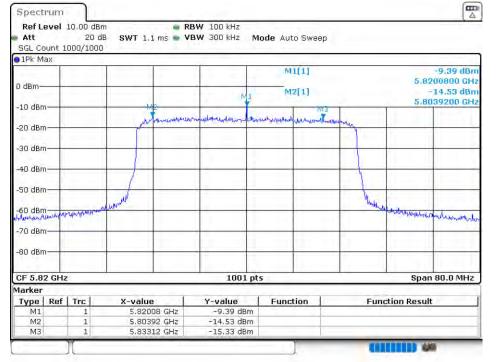
EBW NVNT 40M 5760MHz Ant 2







EBW NVNT 40M 5820MHz Ant 2







11.4 OCCUPIED CHANNEL BANDWIDTH

1.4 00001 1						
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	10M	5740	Ant 1	9.4106	10.02	Pass
NVNT	10M	5780	Ant 1	9.3506	9.88	Pass
NVNT	10M	5820	Ant 1	9.3307	9.98	Pass
NVNT	10M	5740	Ant 2	9.4106	9.92	Pass
NVNT	10M	5780	Ant 2	9.3706	10	Pass
NVNT	10M	5820	Ant 2	9.3506	9.98	Pass
NVNT	20M	5740	Ant 1	18.9411	19.4	Pass
NVNT	20M	5780	Ant 1	18.9411	19.4	Pass
NVNT	20M	5820	Ant 1	18.9011	19.64	Pass
NVNT	20M	5740	Ant 2	19.021	19.52	Pass
NVNT	20M	5780	Ant 2	18.9411	19.52	Pass
NVNT	20M	5820	Ant 2	18.981	19.36	Pass
NVNT	40M	5760	Ant 1	36.9231	38.88	Pass
NVNT	40M	5780	Ant 1	36.8432	39.04	Pass
NVNT	40M	5820	Ant 1	37.003	38.96	Pass
NVNT	40M	5760	Ant 2	36.9231	39.04	Pass
NVNT	40M	5780	Ant 2	36.9231	39.2	Pass
NVNT	40M	5820	Ant 2	36.9231	39.44	Pass

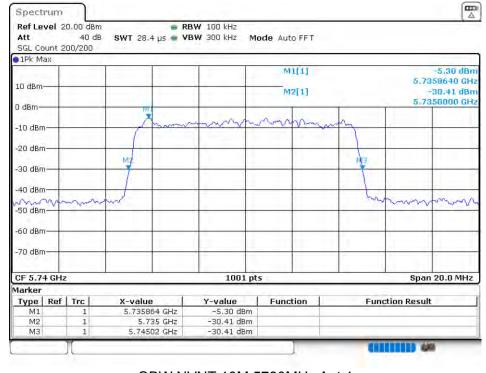


OBW NVNT 10M 5740MHz Ant 1



-26 dB BW NVNT 10M 5740MHz Ant 1

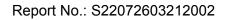
ACCREDITED Certificate #4298.01





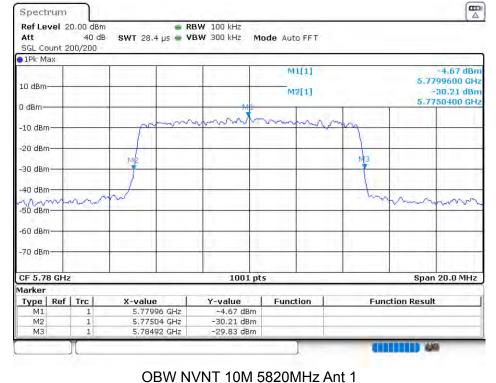
OBW NVNT 10M 5780MHz Ant 1

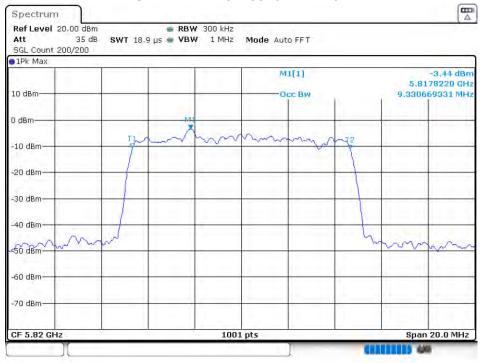




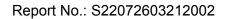
-26 dB BW NVNT 10M 5780MHz Ant 1

ACCREDITED Certificate #4298.01



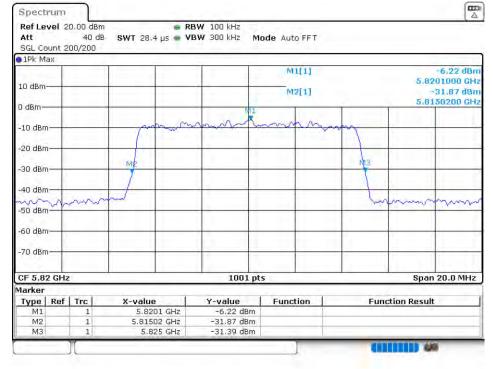




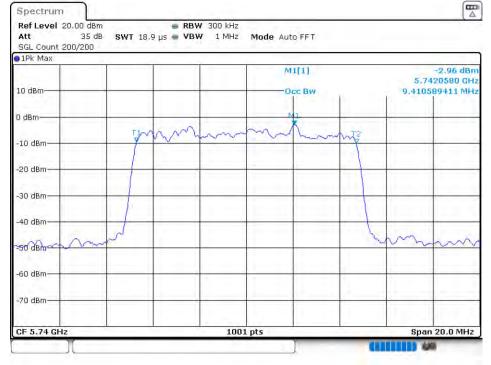


-26 dB BW NVNT 10M 5820MHz Ant 1

ACCREDITED Certificate #4298.01



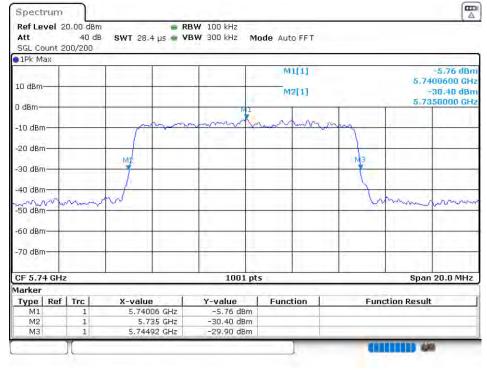
OBW NVNT 10M 5740MHz Ant 2

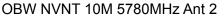


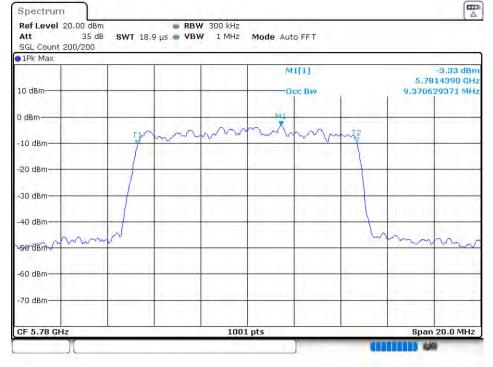


-26 dB BW NVNT 10M 5740MHz Ant 2

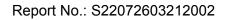
ACCREDITED Certificate #4298.01



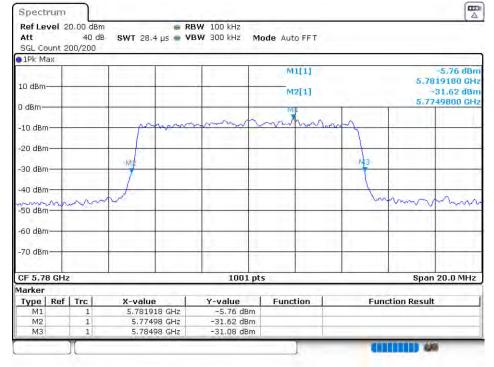


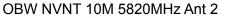


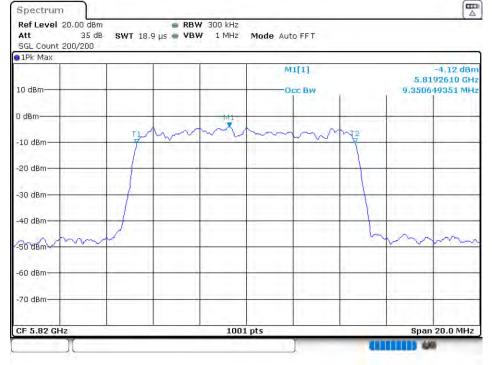




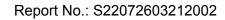
-26 dB BW NVNT 10M 5780MHz Ant 2



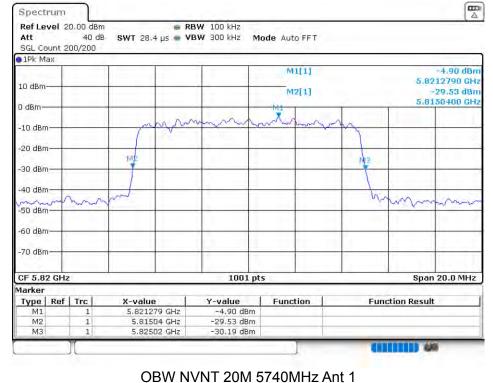


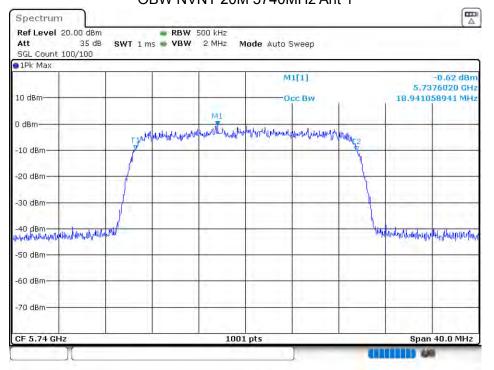






-26 dB BW NVNT 10M 5820MHz Ant 2

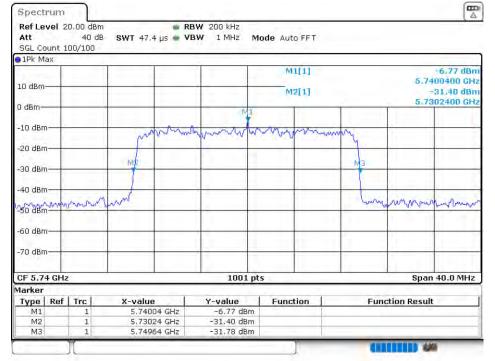




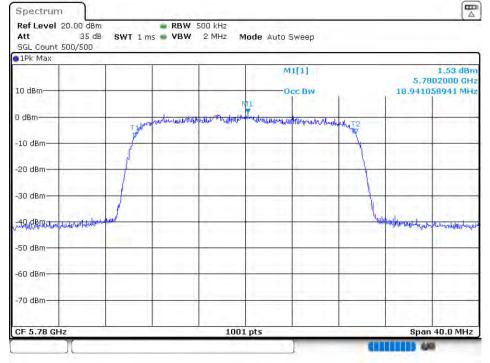


-26 dB BW NVNT 20M 5740MHz Ant 1

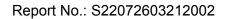
ACCREDITED Certificate #4298.01



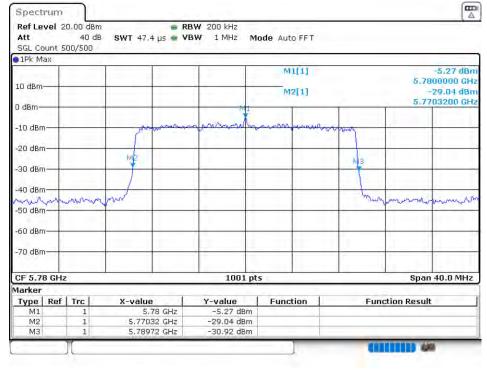
OBW NVNT 20M 5780MHz Ant 1



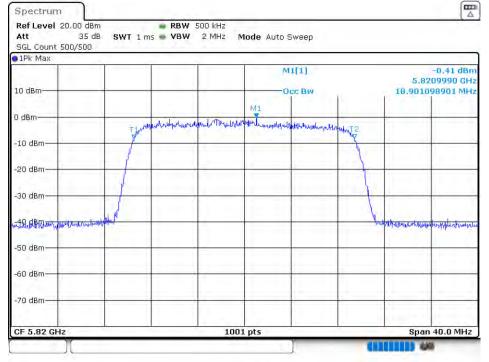




-26 dB BW NVNT 20M 5780MHz Ant 1



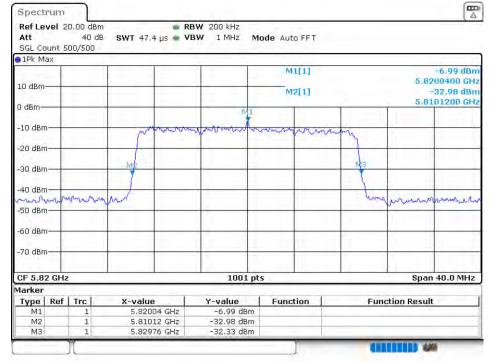




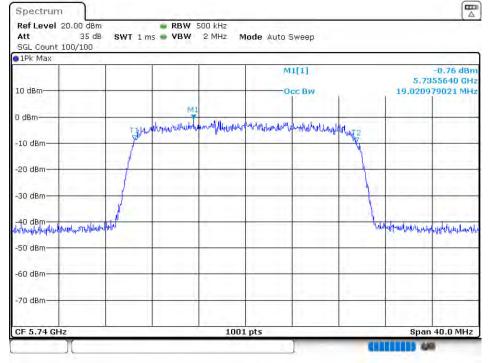


-26 dB BW NVNT 20M 5820MHz Ant 1

ACCREDITED Certificate #4298.01

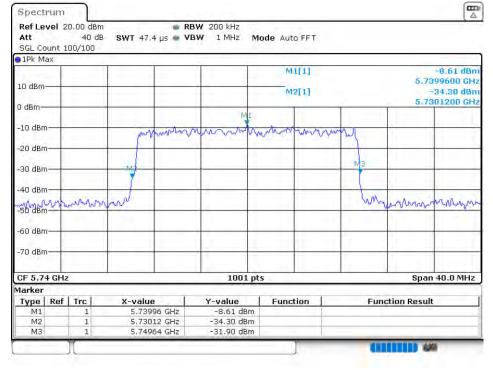


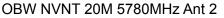
OBW NVNT 20M 5740MHz Ant 2

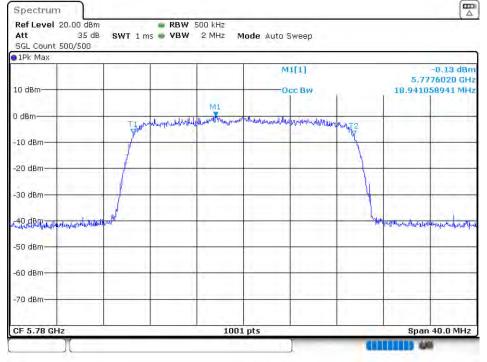




-26 dB BW NVNT 20M 5740MHz Ant 2

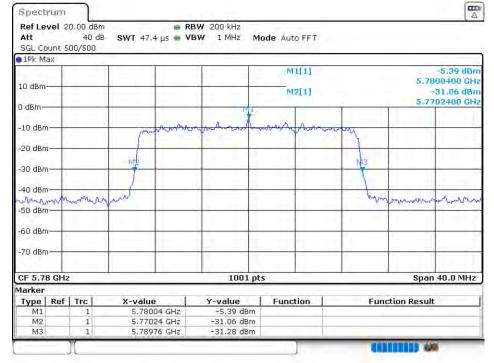


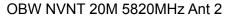


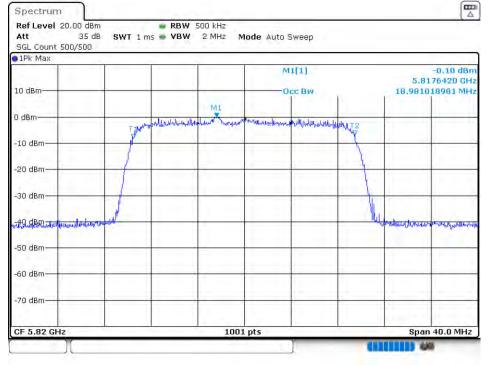




-26 dB BW NVNT 20M 5780MHz Ant 2



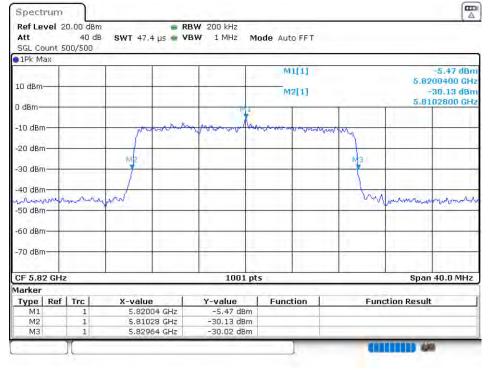






-26 dB BW NVNT 20M 5820MHz Ant 2

ACCREDITED Certificate #4298.01



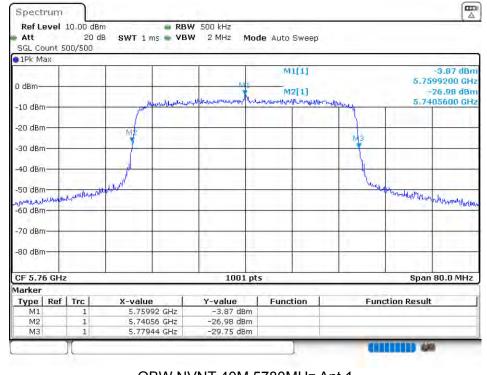
OBW NVNT 40M 5760MHz Ant 1

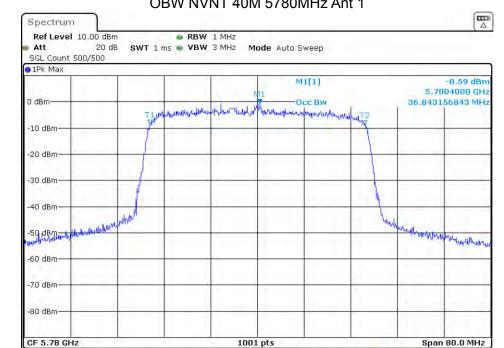




-26 dB BW NVNT 40M 5760MHz Ant 1

ACCREDITED Certificate #4298.01



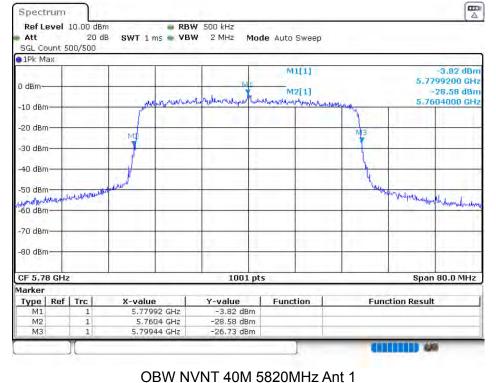


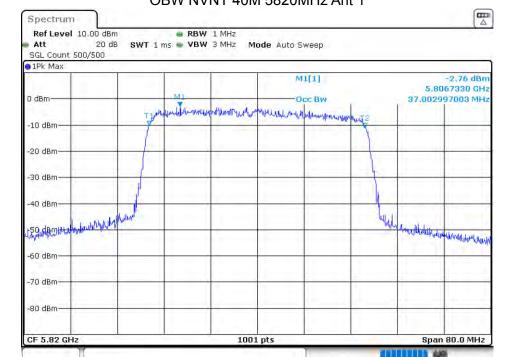
OBW NVNT 40M 5780MHz Ant 1

100



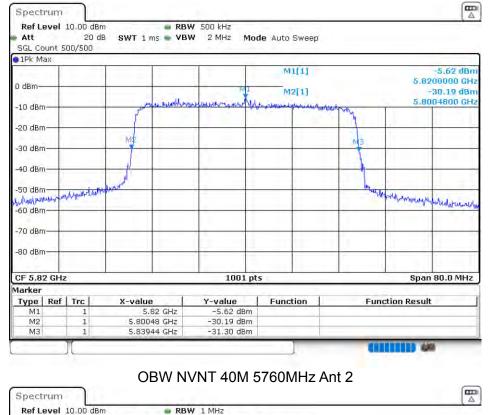
-26 dB BW NVNT 40M 5780MHz Ant 1





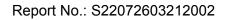


-26 dB BW NVNT 40M 5820MHz Ant 1

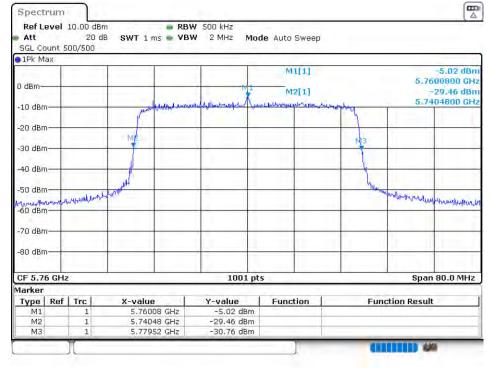




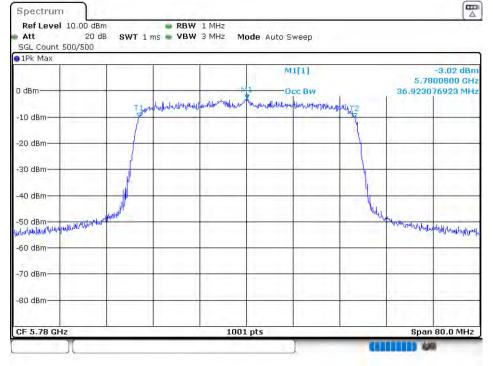




-26 dB BW NVNT 40M 5760MHz Ant 2



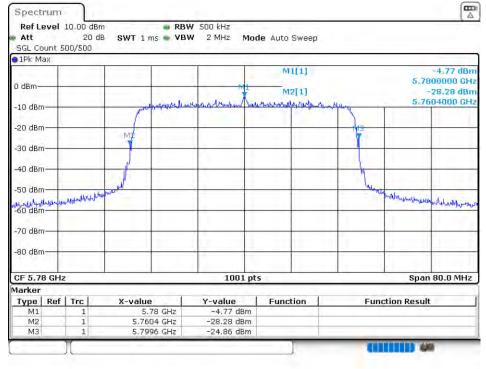




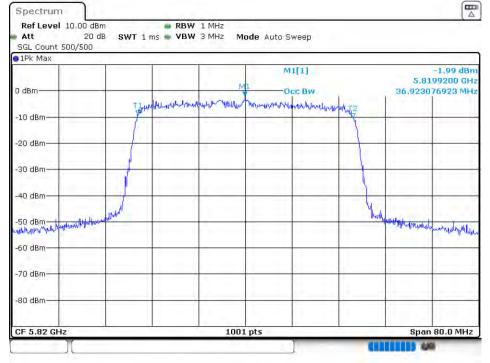


-26 dB BW NVNT 40M 5780MHz Ant 2

ACCREDITED Certificate #4298.01

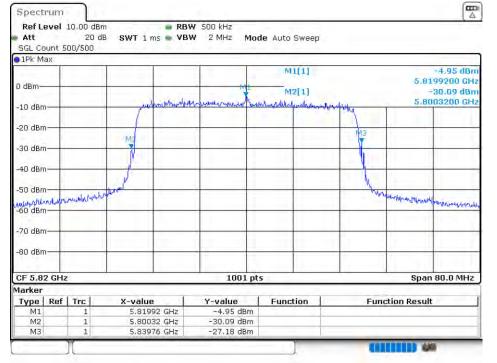


OBW NVNT 40M 5820MHz Ant 2





-26 dB BW NVNT 40M 5820MHz Ant 2





11.5 MAXIMUM POWER SPECTRAL DENSITY LEVEL

			IKAL DENG							
Condition	Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	MIMO PSD (dBm)	Limit (dBm)	Verdict
NVNT	NVNT	10M	5740	Ant 1	-8.231	1.35	-6.881	-4.06	28.37	Pass
NVNT	NVNT	10M	5740	Ant 2	-8.624	1.35	-7.274	-4.00	20.37	F 855
NVNT	NVNT	10M	5780	Ant 1	-5.883	1.26	-4.623	2 17	28.37	Dooo
NVNT	NVNT	10M	5780	Ant 2	-9.979	1.33	-8.649	-3.17	20.37	Pass
NVNT	NVNT	10M	5820	Ant 1	-7.776	1.35	-6.426	-4.21	28.37	Pass
NVNT	NVNT	10M	5820	Ant 2	-9.548	1.35	-8.198	-4.21	20.37	Pass
NVNT	NVNT	20M	5740	Ant 1	-9.581	1.35	-8.231	-6.07	20.27	Pass
NVNT	NVNT	20M	5740	Ant 2	-11.479	1.35	-10.129	-0.07	28.37	Pass
NVNT	NVNT	20M	5780	Ant 1	-8.2	1.35	-6.85	- 4.38	28.37	7 Pass
NVNT	NVNT	20M	5780	Ant 2	-9.369	1.35	-8.019	-4.30	20.37	F d 5 5
NVNT	NVNT	20M	5820	Ant 1	-10.558	1.35	-9.208	E 41	28.37	Pass
NVNT	NVNT	20M	5820	Ant 2	-9.099	1.35	-7.749	-5.41	20.37	Pass
NVNT	NVNT	40M	5760	Ant 1	-20.833	2.37	-18.463	-15.45	28.37	Pass
NVNT	NVNT	40M	5760	Ant 2	-20.834	2.37	-18.464	-15.45	20.37	F d 5 5
NVNT	NVNT	40M	5780	Ant 1	-21.133	2.36	-18.773	-14.91	28.37	Dooo
NVNT	NVNT	40M	5780	Ant 2	-19.566	2.36	-17.206	-14.91	20.37	Pass
NVNT	NVNT	40M	5820	Ant 1	-21.572	2.37	-19.202	-15.30	28.37	Doos
NVNT	NVNT	40M	5820	Ant 2	-19.934	2.37	-17.564	-10.50	20.37	Pass

PSD NVNT 10M 5740MHz Ant 1







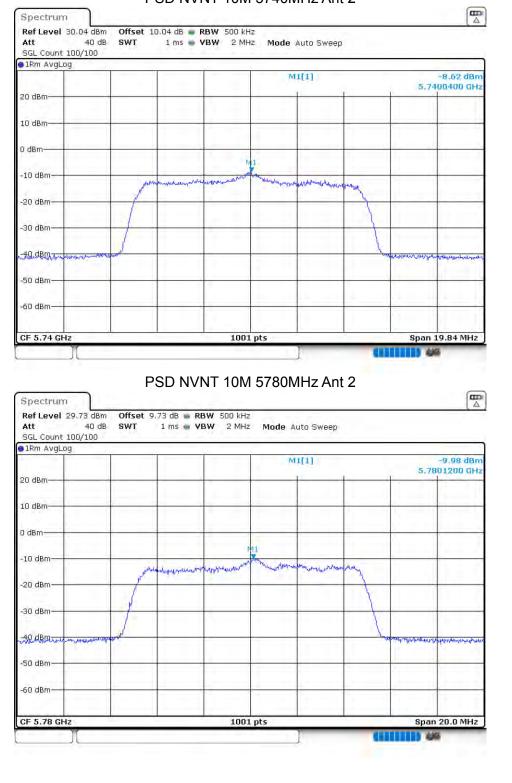
PSD NVNT 10M 5780MHz Ant 1







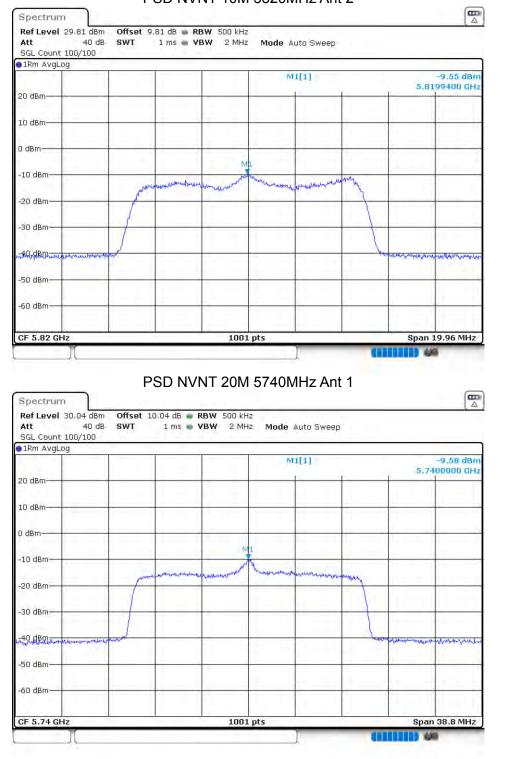
PSD NVNT 10M 5740MHz Ant 2







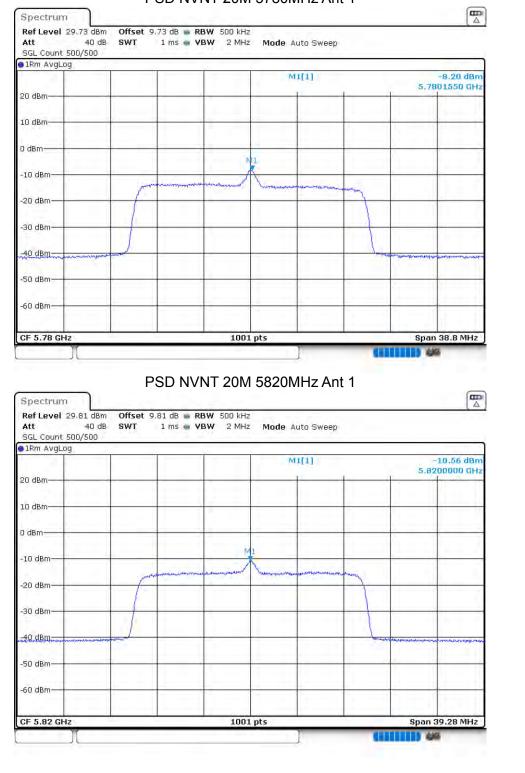
PSD NVNT 10M 5820MHz Ant 2







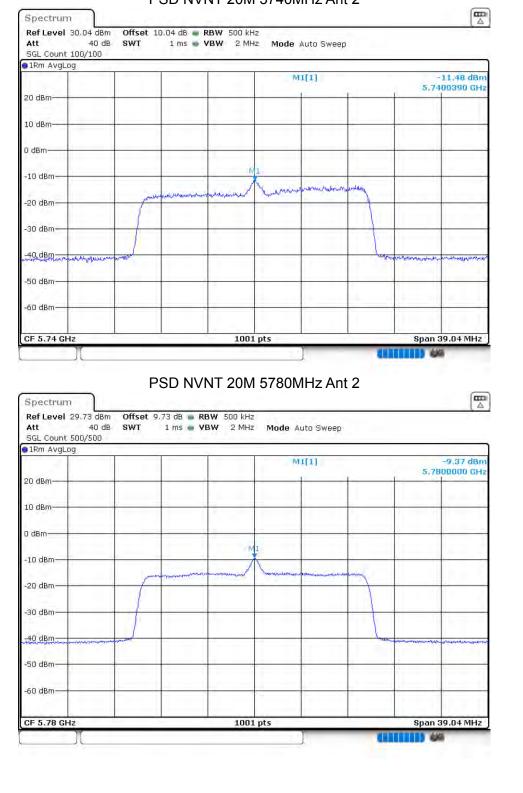
PSD NVNT 20M 5780MHz Ant 1







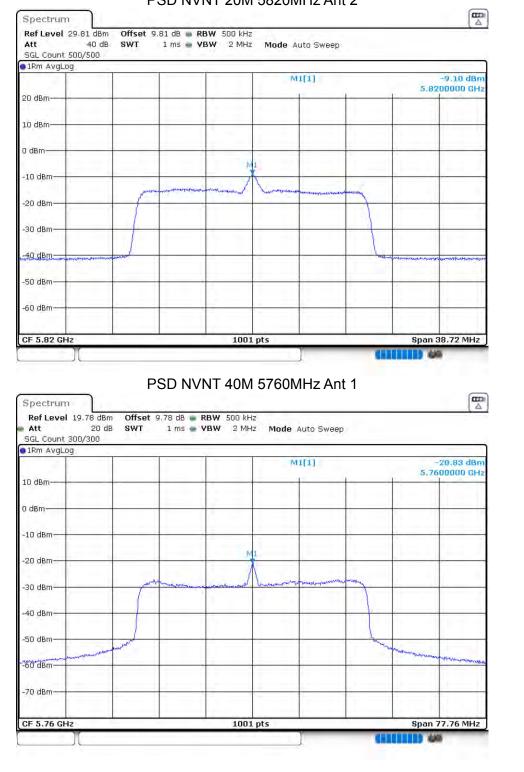
PSD NVNT 20M 5740MHz Ant 2







PSD NVNT 20M 5820MHz Ant 2







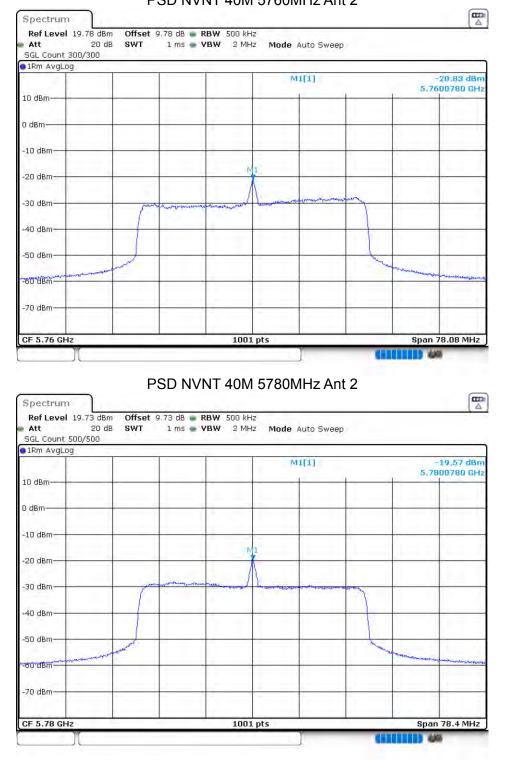
PSD NVNT 40M 5780MHz Ant 1







PSD NVNT 40M 5760MHz Ant 2







PSD NVNT 40M 5820MHz Ant 2

SGL Count 50D/500 1Rm AvgLog						
			M1[1]	S. 19	-19,93 dBm 5.8200790 GH	
10 dBm			1			
0 dBm						
-10 dBm				-		
20 dBm-		MI				
-30 dBm	production					
40 dBm	-					
-50 dBm						
60 dBm		-			and the second sec	
-70 dBm		-				
CF 5.82 GHz		1001 p			Span 78.88 MH	

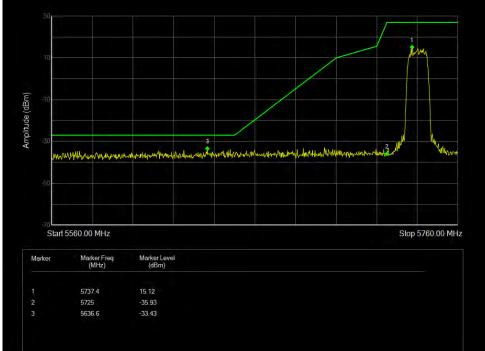


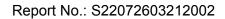


11.6 BAND EDGE

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	10M	5740	Ant 1	-33.43	-27	Pass
NVNT	10M	5820	Ant 1	-33.32	-27	Pass
NVNT	10M	5740	Ant 2	-33.52	-27	Pass
NVNT	10M	5820	Ant 2	-32.24	-27	Pass
NVNT	20M	5740	Ant 1	-34.42	-27	Pass
NVNT	20M	5820	Ant 1	-32.43	-27	Pass
NVNT	20M	5740	Ant 2	-32.69	-27	Pass
NVNT	20M	5820	Ant 2	-31.64	-27	Pass
NVNT	40M	5760	Ant 1	-34.25	-27	Pass
NVNT	40M	5820	Ant 1	-32.81	-27	Pass
NVNT	40M	5760	Ant 2	-33.13	-27	Pass
NVNT	40M	5820	Ant 2	-32.61	-27	Pass
	NVNT NVNT NVNT NVNT NVNT NVNT NVNT NVNT	NVNT 10M NVNT 10M NVNT 10M NVNT 10M NVNT 20M NVNT 20M NVNT 20M NVNT 20M NVNT 20M NVNT 20M NVNT 40M NVNT 40M NVNT 40M	NVNT 10M 5740 NVNT 10M 5820 NVNT 10M 5820 NVNT 10M 5740 NVNT 10M 5740 NVNT 20M 5740 NVNT 20M 5740 NVNT 20M 5820 NVNT 20M 5820 NVNT 20M 5740 NVNT 20M 5740 NVNT 20M 5820 NVNT 40M 5760 NVNT 40M 5760 NVNT 40M 5760	NVNT 10M 5740 Ant 1 NVNT 10M 5820 Ant 1 NVNT 10M 5820 Ant 1 NVNT 10M 5740 Ant 2 NVNT 10M 5740 Ant 2 NVNT 10M 5820 Ant 1 NVNT 20M 5740 Ant 1 NVNT 20M 5740 Ant 1 NVNT 20M 5820 Ant 1 NVNT 20M 5740 Ant 2 NVNT 20M 5740 Ant 2 NVNT 20M 5740 Ant 2 NVNT 20M 5820 Ant 1 NVNT 40M 5760 Ant 1 NVNT 40M 5820 Ant 1 NVNT 40M 5760 Ant 2	NVNT10M5740Ant 1-33.43NVNT10M5820Ant 1-33.32NVNT10M5740Ant 2-33.52NVNT10M5740Ant 2-32.24NVNT10M5820Ant 1-34.42NVNT20M5740Ant 1-32.43NVNT20M5740Ant 2-32.69NVNT20M5740Ant 2-32.69NVNT20M5820Ant 2-31.64NVNT20M5760Ant 1-34.25NVNT40M5760Ant 1-32.81NVNT40M5760Ant 2-33.13	NVNT 10M 5740 Ant 1 -33.43 -27 NVNT 10M 5820 Ant 1 -33.32 -27 NVNT 10M 5740 Ant 2 -33.32 -27 NVNT 10M 5740 Ant 2 -33.52 -27 NVNT 10M 5740 Ant 2 -32.24 -27 NVNT 10M 5820 Ant 1 -34.42 -27 NVNT 20M 5740 Ant 1 -32.43 -27 NVNT 20M 5740 Ant 1 -32.43 -27 NVNT 20M 5740 Ant 2 -32.69 -27 NVNT 20M 5740 Ant 2 -31.64 -27 NVNT 20M 5820 Ant 1 -34.25 -27 NVNT 40M 5760 Ant 1 -32.81 -27 NVNT 40M 5760 Ant 2 -33.13 -27

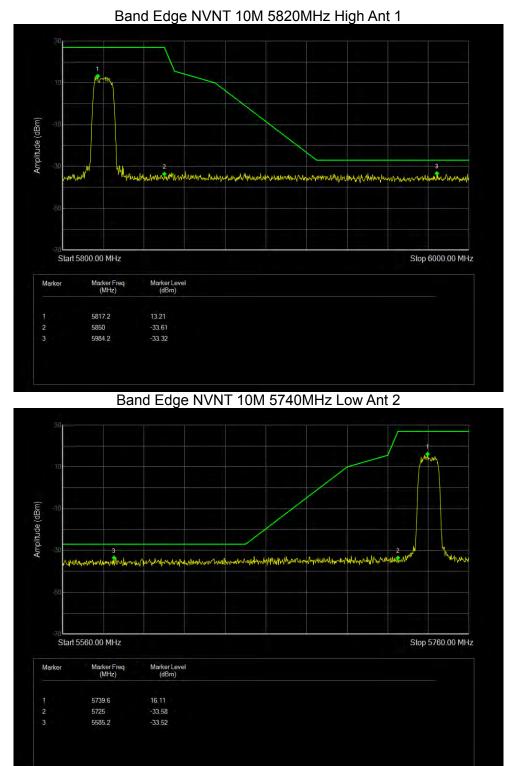


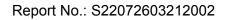






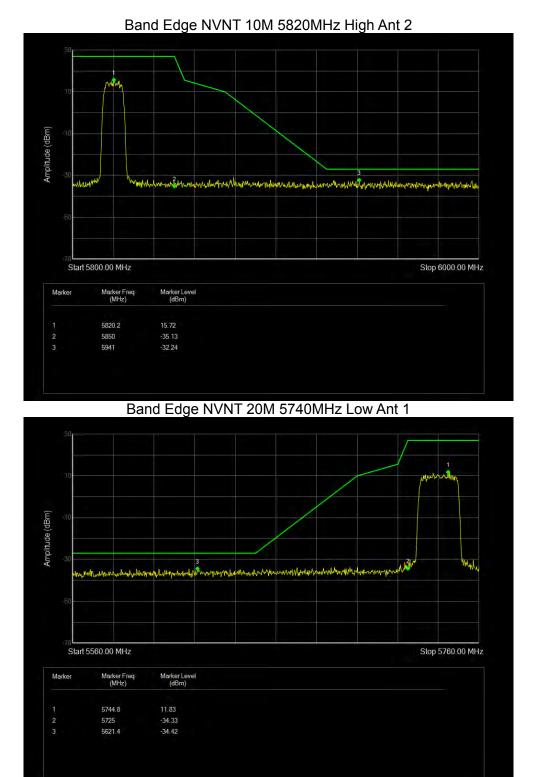


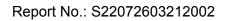






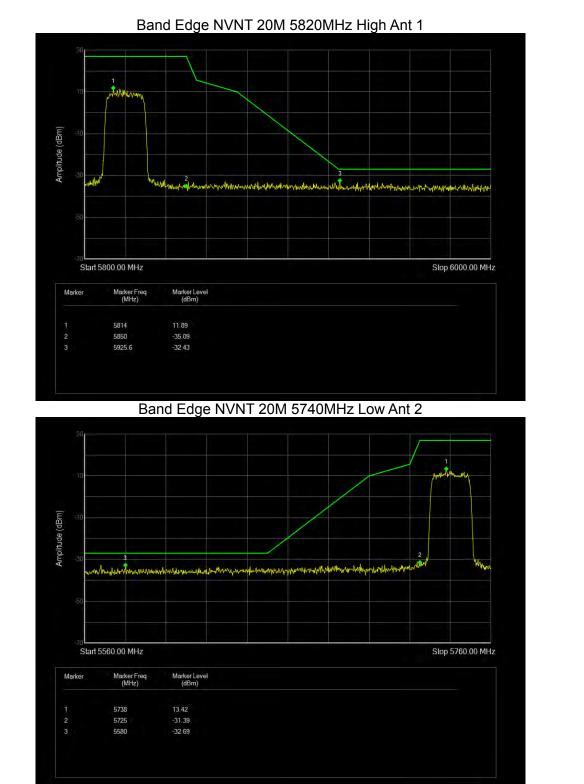


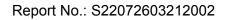






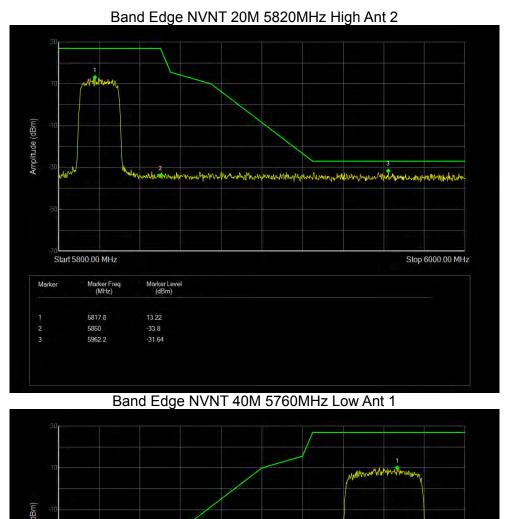


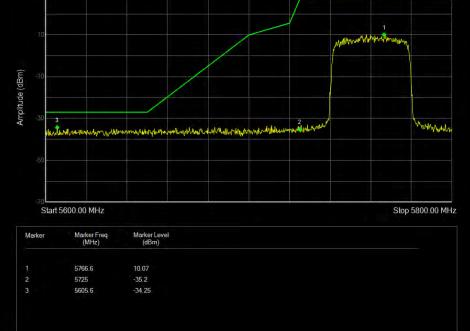


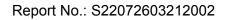




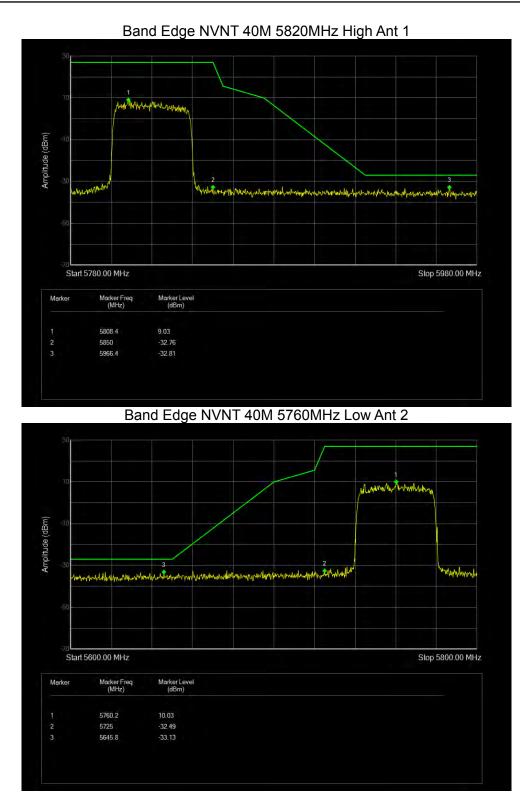


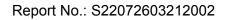






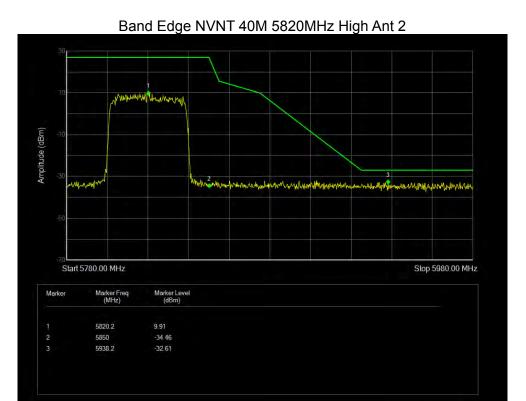












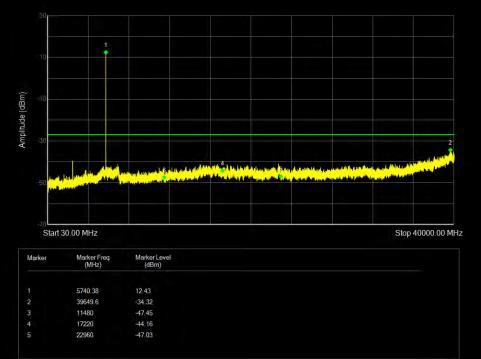




11.7 CONDUCTED RF SPURIOUS EMISSION

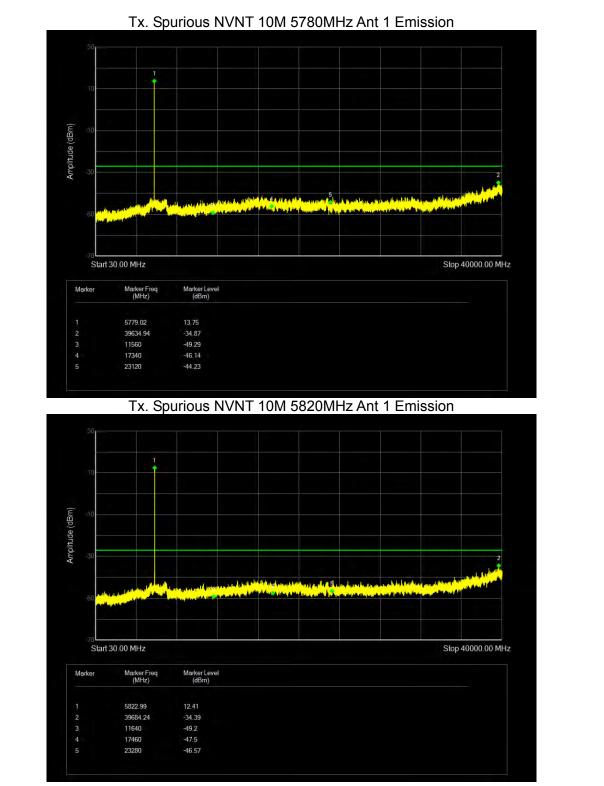
CONDOUL						
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	10M	5740	Ant 1	-34.32	-27	Pass
NVNT	10M	5780	Ant 1	-34.87	-27	Pass
NVNT	10M	5820	Ant 1	-34.39	-27	Pass
NVNT	10M	5740	Ant 2	-33.85	-27	Pass
NVNT	10M	5780	Ant 2	-33.94	-27	Pass
NVNT	10M	5820	Ant 2	-33.45	-27	Pass
NVNT	20M	5740	Ant 1	-34.91	-27	Pass
NVNT	20M	5780	Ant 1	-34.4	-27	Pass
NVNT	20M	5820	Ant 1	-34.61	-27	Pass
NVNT	20M	5740	Ant 2	-34.38	-27	Pass
NVNT	20M	5780	Ant 2	-33.94	-27	Pass
NVNT	20M	5820	Ant 2	-31.55	-27	Pass
NVNT	40M	5760	Ant 1	-34.92	-27	Pass
NVNT	40M	5780	Ant 1	-34.61	-27	Pass
NVNT	40M	5820	Ant 1	-34.86	-27	Pass
NVNT	40M	5760	Ant 2	-34.05	-27	Pass
NVNT	40M	5780	Ant 2	-33.09	-27	Pass
NVNT	40M	5820	Ant 2	-33.93	-27	Pass
	Condition NVNT NVNT NVNT NVNT NVNT NVNT NVNT NVN	ConditionModeNVNT10MNVNT10MNVNT10MNVNT10MNVNT10MNVNT10MNVNT20MNVNT20MNVNT20MNVNT20MNVNT20MNVNT20MNVNT20MNVNT20MNVNT20MNVNT40MNVNT40MNVNT40MNVNT40MNVNT40MNVNT40MNVNT40MNVNT40M	NVNT 10M 5740 NVNT 10M 5780 NVNT 10M 5780 NVNT 10M 5820 NVNT 10M 5740 NVNT 10M 5780 NVNT 10M 5780 NVNT 10M 5780 NVNT 20M 5740 NVNT 20M 5780 NVNT 40M 5760 NVNT 40M 5760 NVNT 40M 5780	Condition Mode Frequency (MHz) Antenna NVNT 10M 5740 Ant 1 NVNT 10M 5780 Ant 1 NVNT 10M 5780 Ant 1 NVNT 10M 5820 Ant 1 NVNT 10M 5820 Ant 2 NVNT 10M 5740 Ant 2 NVNT 10M 5780 Ant 2 NVNT 10M 5780 Ant 2 NVNT 10M 5820 Ant 1 NVNT 20M 5740 Ant 1 NVNT 20M 5780 Ant 1 NVNT 20M 5780 Ant 2 NVNT 40M 5780 Ant 1 NVNT 40M 5760 Ant 1	ConditionModeFrequency (MHz)AntennaMax Value (dBc)NVNT10M5740Ant 1-34.32NVNT10M5780Ant 1-34.87NVNT10M5820Ant 1-34.39NVNT10M5740Ant 2-33.85NVNT10M5780Ant 2-33.94NVNT10M5780Ant 2-33.94NVNT10M5820Ant 1-34.91NVNT20M5740Ant 1-34.91NVNT20M5780Ant 1-34.61NVNT20M5780Ant 2-33.94NVNT20M5780Ant 2-34.38NVNT20M5780Ant 2-34.38NVNT20M5780Ant 2-34.38NVNT20M5780Ant 1-34.61NVNT40M5760Ant 1-34.92NVNT40M5780Ant 1-34.86NVNT40M5780Ant 2-33.09	ConditionModeFrequency (MHz)AntennaMax Value (dBc)Limit (dBc)NVNT10M5740Ant 1-34.32-27NVNT10M5780Ant 1-34.87-27NVNT10M5820Ant 1-34.39-27NVNT10M5740Ant 2-33.85-27NVNT10M5780Ant 2-33.94-27NVNT10M5780Ant 2-33.45-27NVNT10M5820Ant 1-34.91-27NVNT20M5740Ant 1-34.91-27NVNT20M5780Ant 1-34.61-27NVNT20M5780Ant 1-34.61-27NVNT20M5780Ant 2-33.94-27NVNT20M5780Ant 1-34.61-27NVNT20M5780Ant 2-33.94-27NVNT20M5780Ant 2-31.55-27NVNT20M5780Ant 2-31.55-27NVNT40M5760Ant 1-34.86-27NVNT40M5780Ant 1-34.86-27NVNT40M5760Ant 2-33.09-27NVNT40M5780Ant 2-33.09-27NVNT40M5780Ant 2-33.09-27

Tx. Spurious NVNT 10M 5740MHz Ant 1 Emission



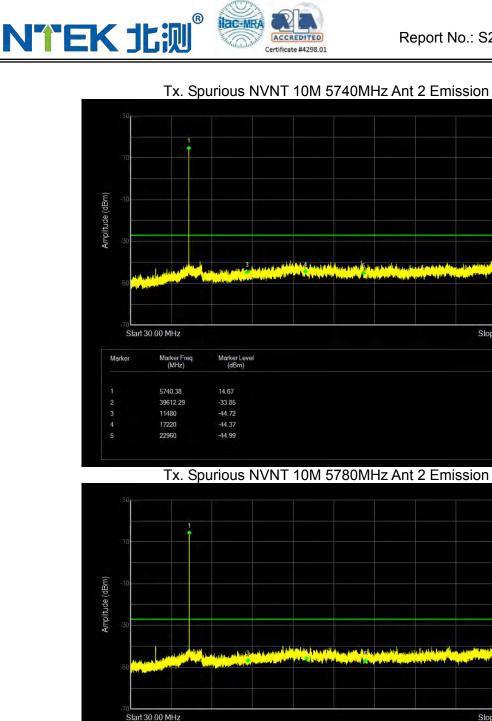






Stop 40000.00 MHz

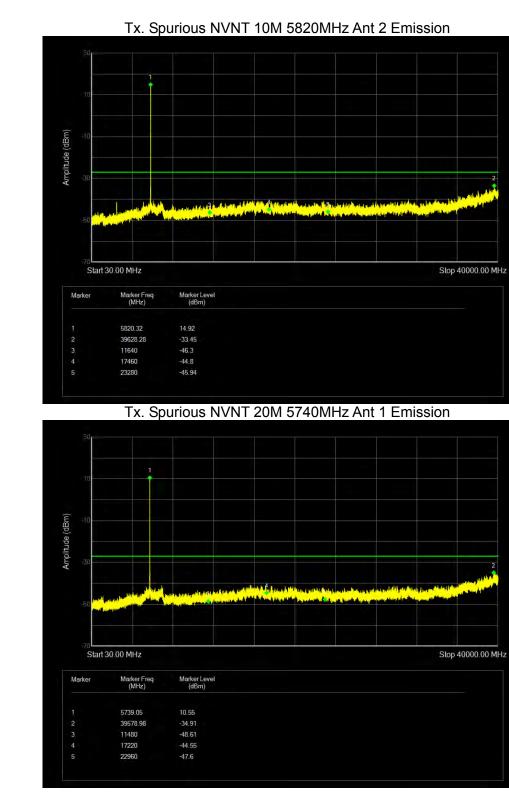




(dBm)	Marker Freq Marker Level (MHz) (dBm)	
14.37	5779.02 14.37	
33.94	39676.24 -33.94	
46.8	11560 -46.8	
45.83	17340 -45.83	
46.94	23120 -46.94	

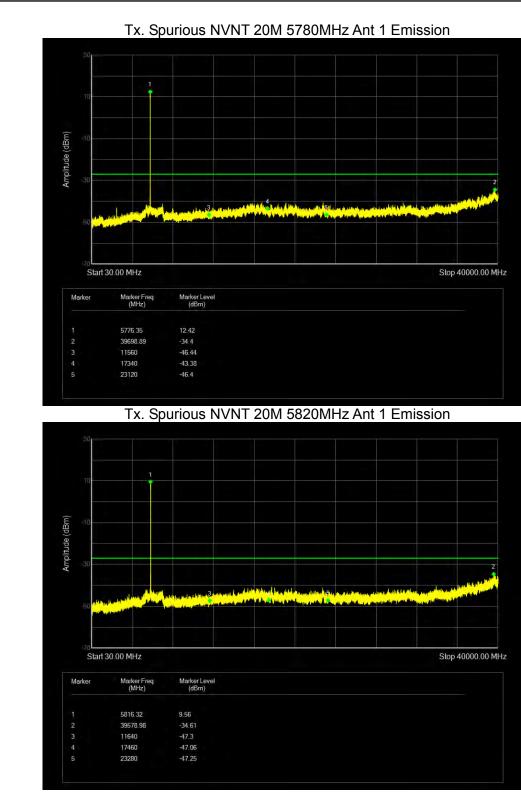


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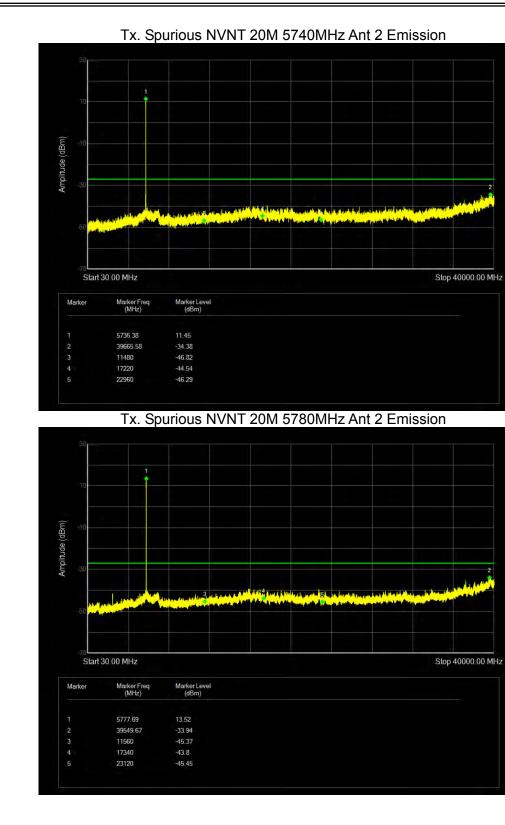




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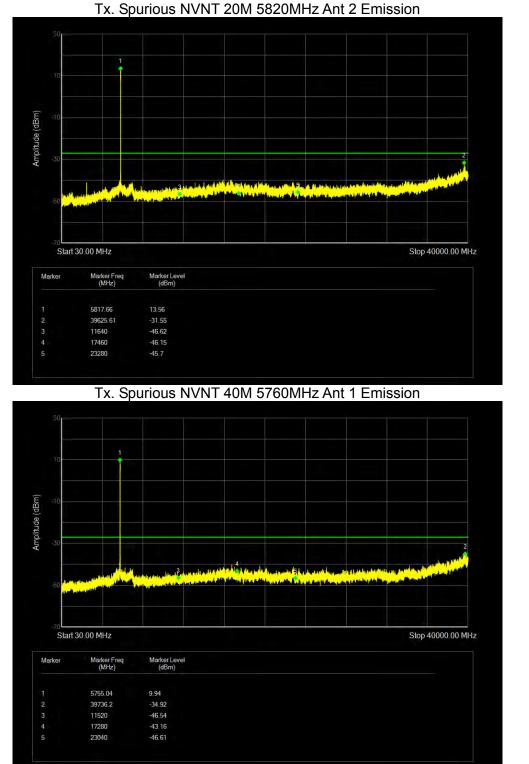






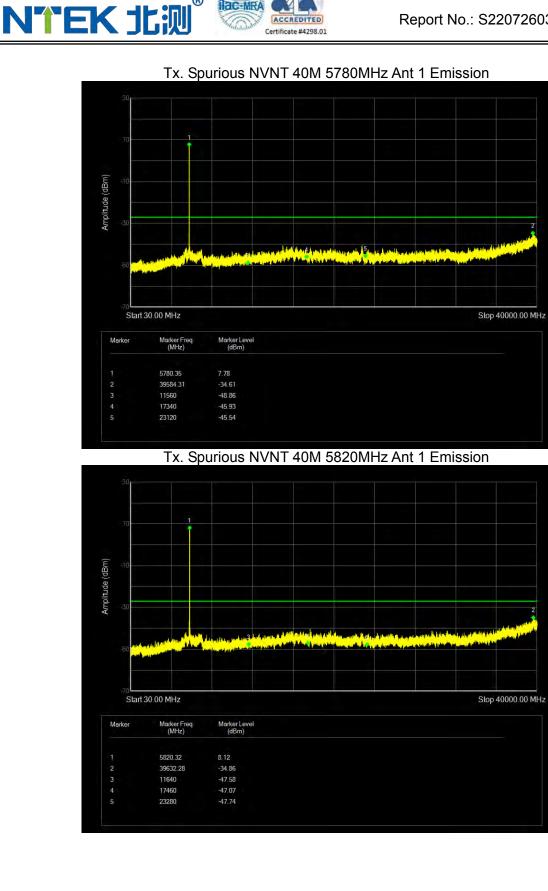




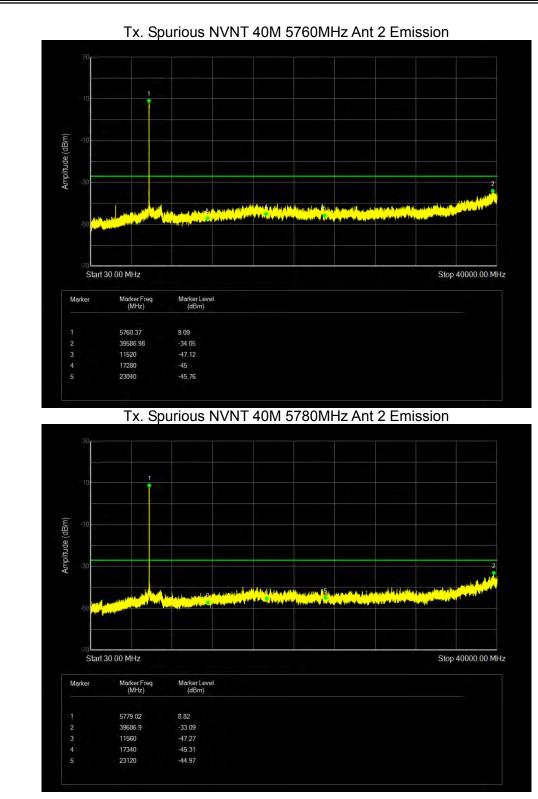




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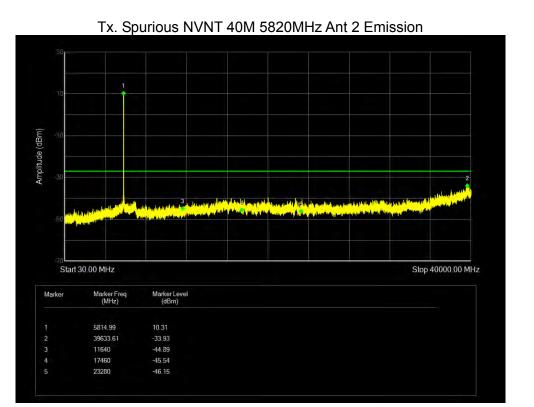












END OF REPORT