FCC - TEST REPORT

Report Number	:	**68.950.20.0012.01**	Date of Issue:	August 16, 2021
Model	:	D5CL,D6CL,D5CE,D6CE		
Product Type	:	Ultrasound Scanner		
Applicant	:	Guangzhou SonoHealth Medical Technologies Co., Ltd		
Address	:	Room 601, Building 3, No.7 Ruitai Road, Huangpu District, 510530 Guangzhou,PEOPLE'S REPUBLIC OF CHINA		
Production Factory	:	Guangzhou SonoHealth Medical Technologies Co., Ltd		
Address	:	Room 601, Building 3, No.7 Ruitai Road, Huangpu District, 510530 Guangzhou,PEOPLE'S REPUBLIC OF CHINA		
Test Result	:	■ **Positive** ☐ **Negative**		
Total pages including Appendices	:	**35**		

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1. Table of contents

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2. Details about the test laboratory

Details about the Test Laboratory

Test Site 1

Company name:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen City, 518052, P. R. China
FCC Registration Number:	514049
Telephone:	86 755 8828 6998
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3. Description of the Equipment under test

Product:	Ultrasound Scanner
Model no.:	D5CL, D6CL, D5CE, D6CE
FCC ID:	2AWWG004
Options and accessories:	NIL
Rating:	3.85VDC, 2800mAh (supplied by Internal Rechargeable Lithium Battery) or 5W supplied by Travel Charger QI Wireless Charger
RF Transmission Frequency:	5725-5850MHz
No. of Operated Channel:	5745MHz, 5765MHz, 5785MHz, 5805MHz, 5825MHz
Modulation:	OFDM
Antenna Type:	Internal Antenna
Antenna Gain:	2.4dBi
Description of the EUT:	The EUT supports Wi-Fi 5.8G 11N20 mode and wireless charging functions. The wireless changing function only is receiver.

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4. Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, 10-1-2019 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices

Test Method:
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices

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5. Summary of Test Results

Test Condition	Test Result		
	Pass	Fail	N/A
15.407 (e) Emission bandwidth	☒	☐	☐
15.407(a)(3) Maximum Conducted Output Power	☒	☐	☐
15.407(a)(3) Maximum Power Spectral Density	☒	☐	☐
15.407(b)(4) 15.407(b)(8) 15.407(b)(9) 15.407(b)(10) 15.407(b)(11) Unwanted Emissions	☒	☐	☐
15.407(b)(4) 15.407(b)(8) 15.407(b)(9) 15.407(b)(10) 15.407(b)(11) Band edge compliance	☒	☐	☐
15.407(g) Frequencies Stability	☒	☐	☐
15.407(h) Dynamic Frequency Selection (DFS). [a]	☐	☐	☒
15.203 Antenna Requirement	☒ See note 1	☐	☐

Remark: [a] The EUT doesn't support DFS function, the working frequency of EUT is 5725-5850MHz.
Note 1: The EUT uses an Internal antenna, which gain is 2.4dBi max. It is considered sufficiently to comply with the provisions of this section.

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6. General Remarks

Remarks
This submittal(s) (test report) is intended for FCC ID: 2AWWG004, complies with the FCC Part 15, Subpart E rules.

The differences of models as below:

D series product model difference table		
Model	D5CL、D6CL	D5CE、D6CE
Dimension	the host is the same, the probe part is different	
PCB	same	
Construction	the host is the same, the probe part is different	
Enclosure Material	same	
Schematic	same	
Components	same	
PCB Layouts	same	
Operation	same	
Software	same	
Power Supply	same	
Additional Information	convex probe + linear probe	convex probe + endocavity probe

So all the tests were applied on D6CL, other models were deemed to comply with rule requirements, it supports Wi-Fi 5.8G 11N20 mode and wireless charging functions. The working frequency of Wi-Fi is 5745MHz-5825MHz.The wireless charging function only is receiver.

This report is for 5745MHz-5825MHz of 5G Wi-Fi.

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SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

☐ - **Not** Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: May 26, 2020

Testing Start Date: May 28, 2020

Testing End Date: September 2, 2020

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Reviewed by:	Prepared by:	Tested by:
		
John Zhi	Moon Xiong	Louise Liu
Section Manager	Project Engineer	Test Engineer

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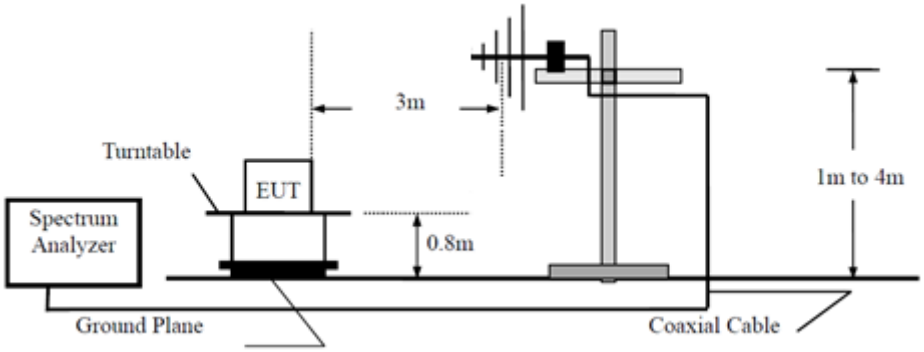
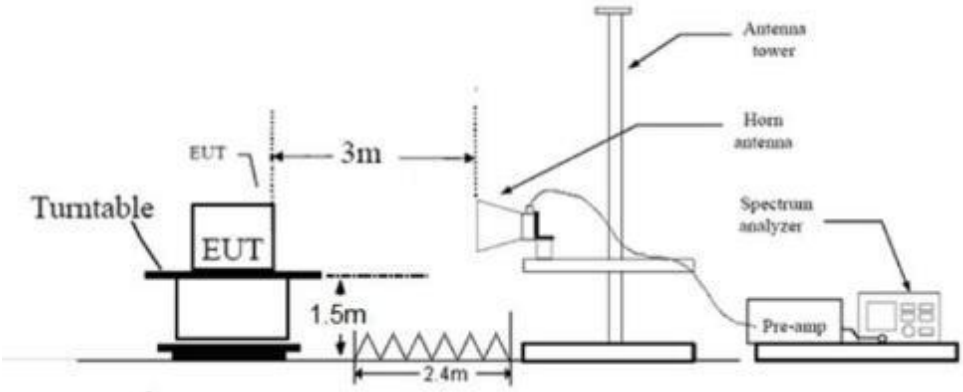
7. Test setups

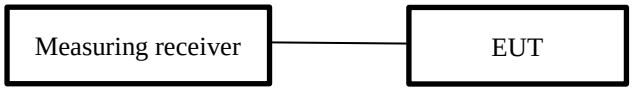
7.1 Below 1GHz



Above 1GHz



7.2 Conducted RF test setups



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8. Systems test configuration

The system was configured to channel:

Test Mode	Channel (MHz)		
802.11n HT20	5G Wi-Fi-Band 4		
	CH149 (5745MHz),	CH157(5785MHz)	CH165 (5825MHz)

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9. Technical Requirement

9.1 Emission bandwidth

The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

1、Test Method of 26dB Bandwidth

According to KDB789033 D02
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%.

Limit: No limit

2、Test Method of 6dB Bandwidth

According to KDB789033 D02
a) Set RBW = 100KHz
b) Set the video bandwidth (VBW) ≥ 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.

Limit: ≥500KHz

3、Test Method of 99% Bandwidth

According to KDB789033 D02
a) Set center frequency to the nominal EUT channel center frequency
b) Set span = 1.5 times to 5.0 times the OBW.
c) Set RBW = 1 % to 5 % of the OBW
d) Set VBW ≥ 3 · RBW
e) 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.
f) Use the 99 % power bandwidth function of the instrument (if available).
g) 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

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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.

Limit: No limit

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26dB Bandwidth Test result:

TestMode	Antenna	Channel (MHz)	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11N20SISO	Ant1	5745	21.120	5734.480	5755.600	---	PASS
		5785	21.080	5774.480	5795.560	---	PASS
		5825	21.160	5814.440	5835.600	---	PASS

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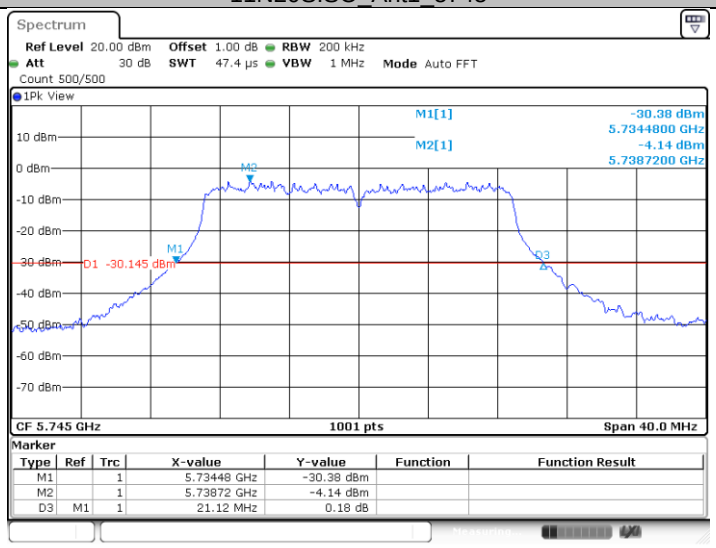
26dB Bandwidth Test Graphs

11N20SISO_Ant1_5745



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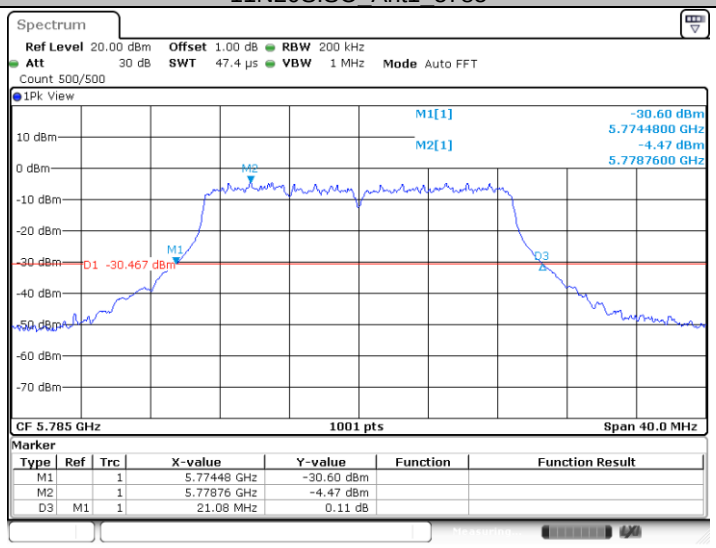

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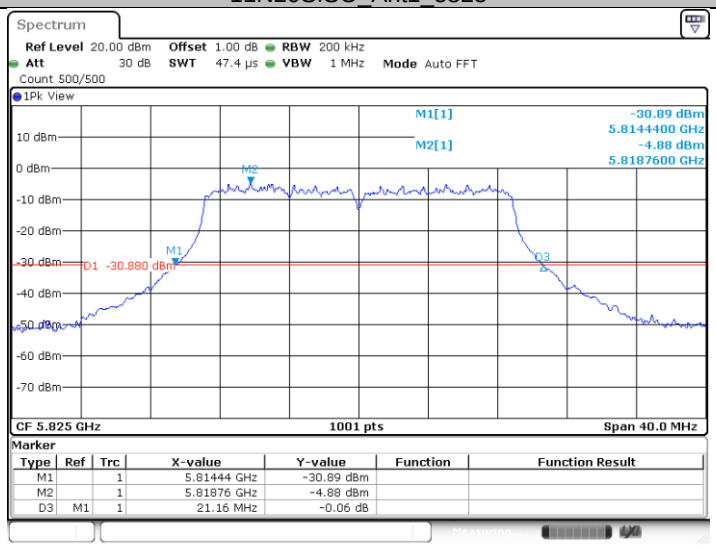

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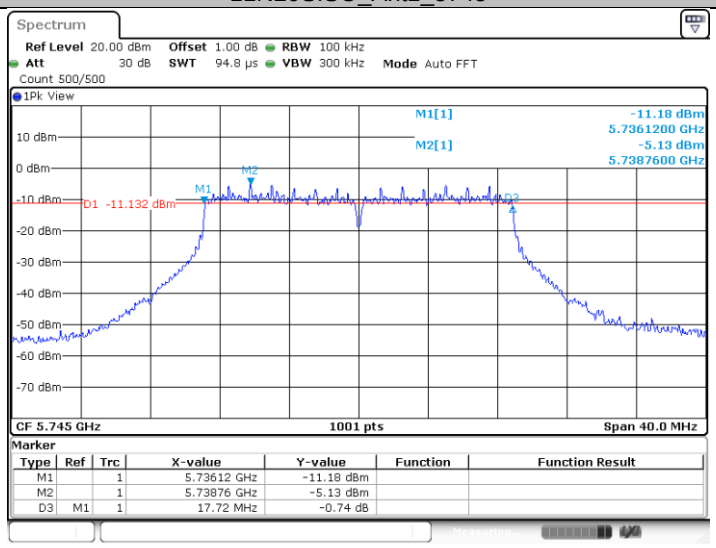
6dB Bandwidth Test Result

TestMode	Antenna	Channel [MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11N20SISO	Ant1	5745	17.720	5736.120	5753.840	0.5	PASS
		5785	17.720	5776.120	5793.840	0.5	PASS
		5825	17.720	5816.120	5833.840	0.5	PASS

6dB Bandwidth Test Graphs

11N20SISO_Ant1_5745



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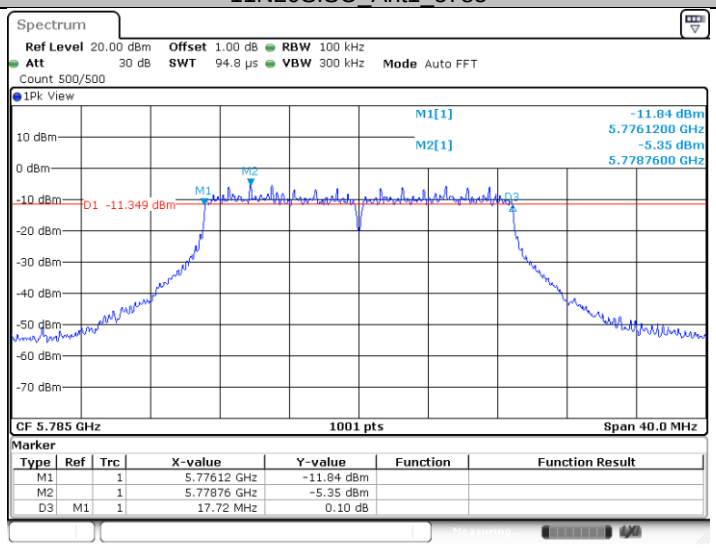

11N20SISO_Ant1_5825

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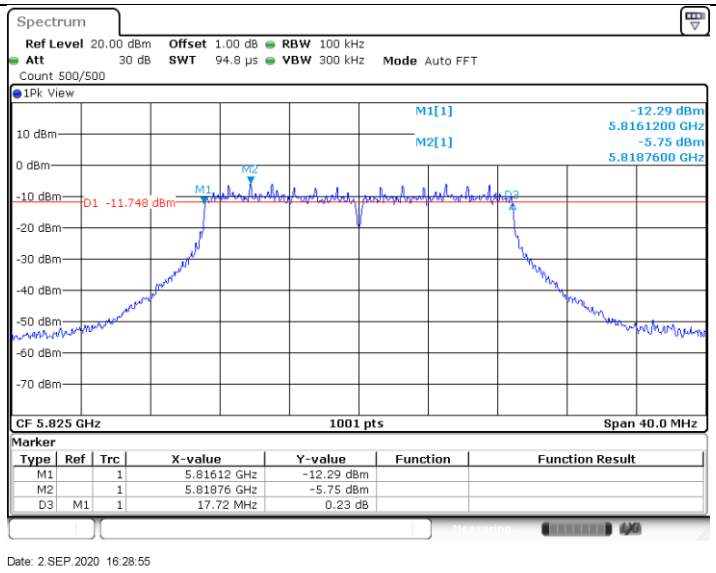

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9.2 Maximum conducted output power

Test Method
According to KDB789033 D02
The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

Limits: The maximum conducted output power over the frequency band of operation shall be 1W for 5.725-5.85GHz Band, provided the maximum antenna gain does not exceed 6dBi.

Test result as below table

802.11N20 modulation Test Result

Frequency (MHz)	Conducted Peak Output Power (dBm)	Limit (dBm)	Result
Low channel 5745MHz	7.048	30	Pass
Middle channel 5785MHz	7.496	30	Pass
High channel 5825MHz	6.100	30	Pass

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9.3 Maximum power spectral density

Test Method
According to KDB789033 D02
The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

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 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 ≥ 1/T, where T is defined in section II.B.I.a).

b) Set VBW ≥ 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.

Limit: The maximum power spectral density shall not exceed 30dBm for the 5.8GHz Band in any 1 megahertz band.

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Test Result

TestMode	Channel(MHz)	Result(dBm/500KHz)	Limit(dBm/500KHz)	Verdict
11N20SISO	5745	-0.28	<=30	PASS
	5785	-0.28	<=30	PASS
	5825	-0.45	<=30	PASS

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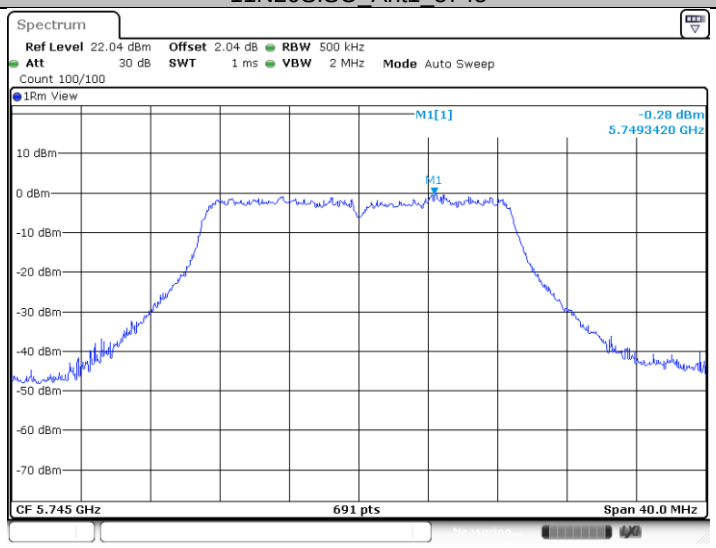
Test Graphs

11N20SISO_Ant1_5745



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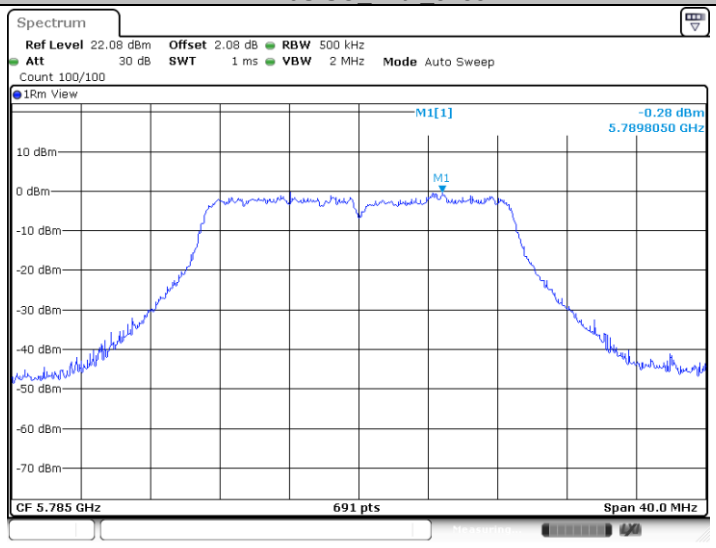

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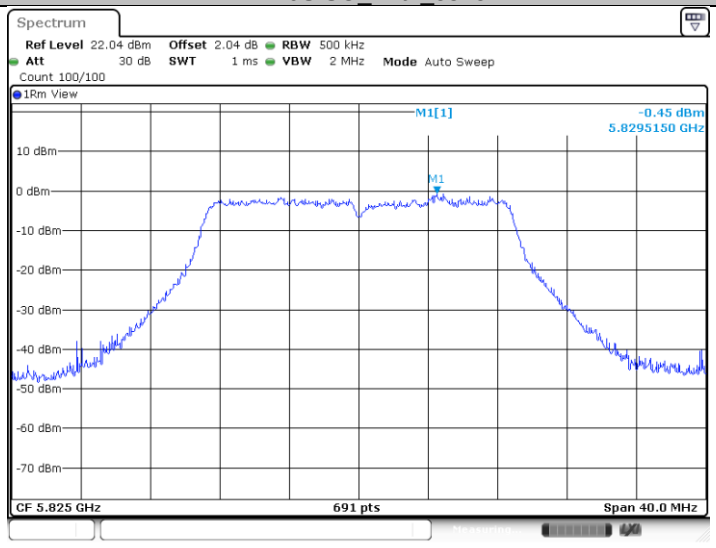

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9.4 Unwanted emissions

Test Method
Conducted Spurious Emission Test Method:
According to KBD789033 D02

1.The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2.For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.
a) Set RBW ≥ between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth)
b) Set VBW ≥ 3 RBW.

Limits:
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.

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Conducted Spurious Emission

Test result:

TestMode	Channel (MHz)	FreqRange(MHz)	Max. Fre(MHz)	Max. Level(dBm/MHz)	Limit(dBm/MHz)	Verdict
11N20SISO	5745	30~5650	30~5650	-51.55	<=-27	PASS
		5925~40000	5925~40000	-47.37	<=-27	PASS
	5785	30~5650	30~5650	-53.68	<=-27	PASS
		5925~40000	5925~40000	-47.32	<=-27	PASS
	5825	30~5650	30~5650	-53.55	<=-27	PASS
		5925~40000	5925~40000	-47.6	<=-27	PASS

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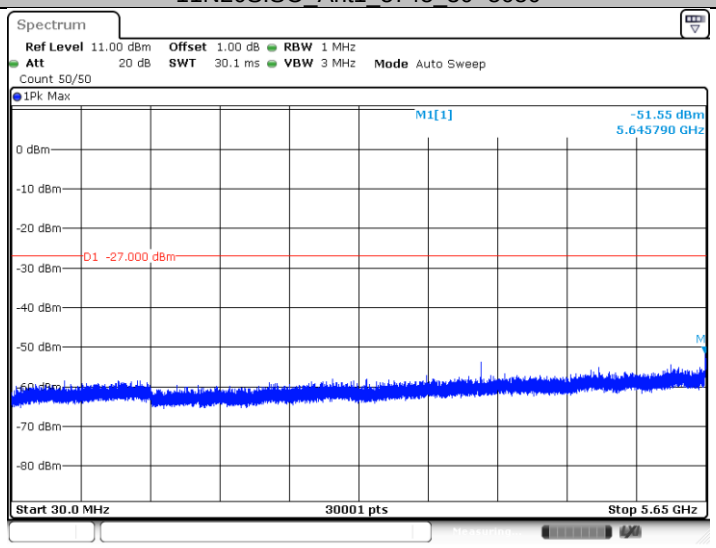
Test Graphs

11N20SISO_Ant1_5745_30~5650



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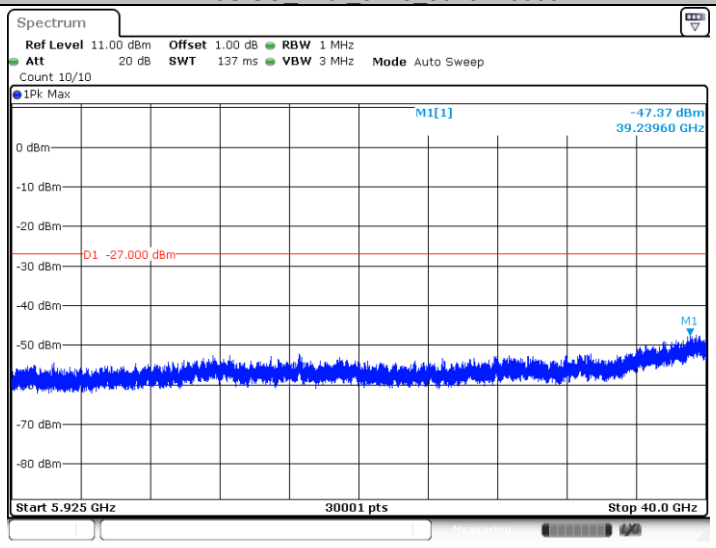
11N20SISO_Ant1_5745_5925~40000



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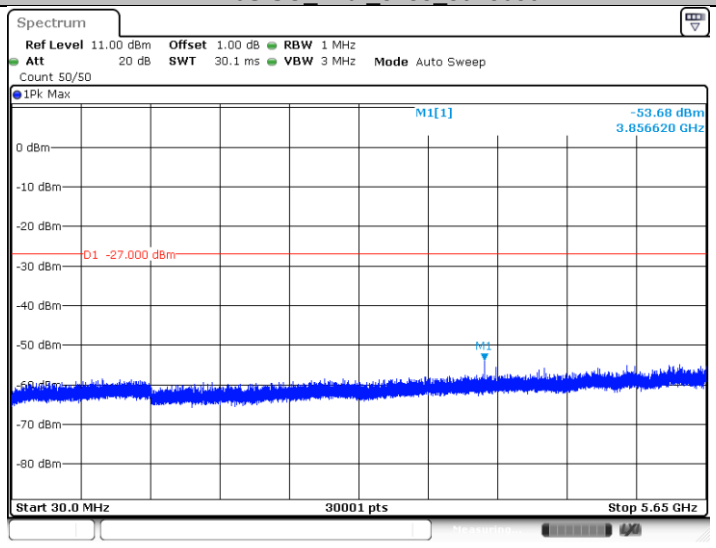

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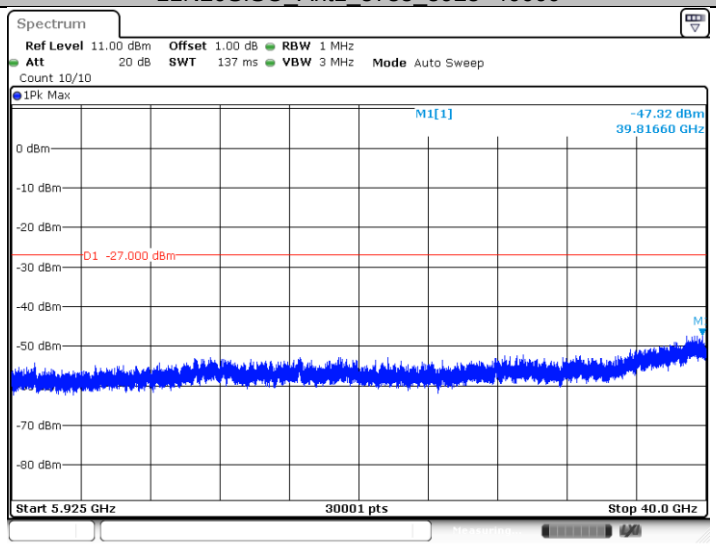
11N20SISO_Ant1_5785_5925~40000



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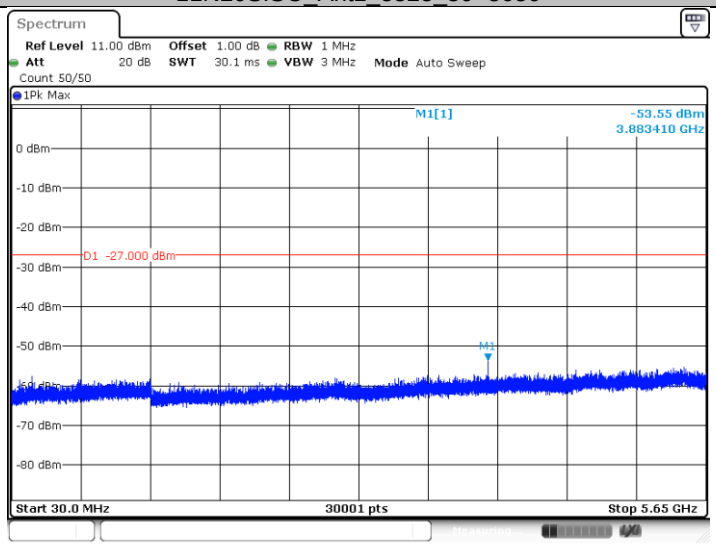

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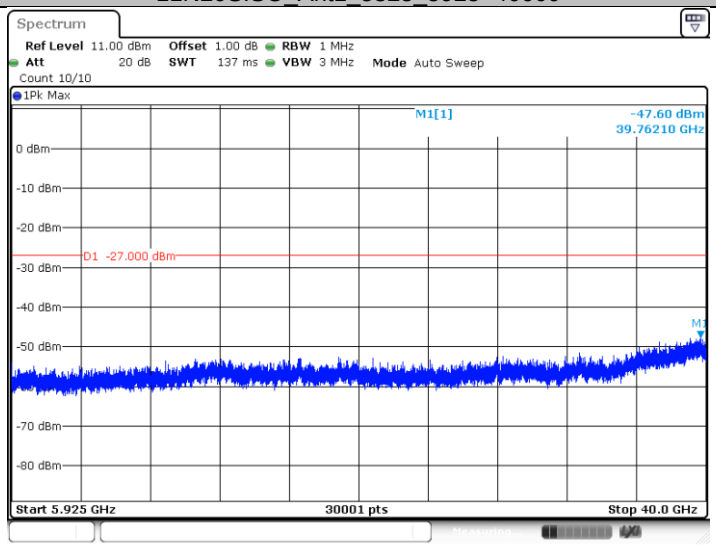

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Transmitting spurious emission test result as below (Radiated Mode):
Test Method

1. The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned
5. Use the following spectrum analyzer settings According to C63.10:
   For Below 1GHz
   Use the following spectrum analyzer settings:
   Span = wide enough to cMasterture the peak level of the in-band emission and all spurious
   RBW = 100 KHz to 120KHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.For Peak unwanted emissions
   For Above 1GHz:
   Span = wide enough to capture the peak level of the in-band emission and all spurious
   RBW = 1MHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.
   Procedures for Average Unwanted Emissions Measurements above 1000 MHz
   a) Follow the requirements in II.G.3. “General Requirements for Unwanted Emissions Measurements.”
   b) Average emission levels shall be measured using one of the following two methods. c) Method AD (Average Detection): Primary method
   (i) RBW = 1 MHz.
   (ii) VBW ≥ 3 MHz.
   (iii) Detector = power averaging (rms), if span/(# of points in sweep) ≤ RBW/2. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, the detector mode shall be set to peak. As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
   (v) Sweep time = auto.
   (vi) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, the number of traces shall be increased by a factor of 1/x, where x is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—rather than turning on and off with the transmit cycle, at least 100 traces shall be averaged.)
   (vii) If tests are performed with the EUT transmitting at a duty cycle less than 98%, a correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been

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measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
If power averaging (rms) mode was used in II.G.6.c)(iv), the correction factor is 10 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels. If linear voltage averaging mode was used in II.G.6.c)(iv), the correction factor is 20 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels. If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

Limit

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.
According to part 15.407b (8), Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.
According to part 15.407b (9), The provisions of §15.205 apply to intentional radiators operating under this section.

Note: According to C63.10, the Conversion Factors between E[dBµV/m] and EIRP[dBm] as below:

E[dBµV/m] = EIRP[dBm] + 95.2, for d = 3 meters.

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

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Transmitting spurious emission test result as below:

802.11N20 Modulation 5745MHz Test Result

Frequency Range	Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	MHz	dBuV/m		dBµV/m	dB		
30-1000	**600.036667**	**41.93**	Horizontal	**46.0**	**4.07**	QP	Pass
30-1000	**943.632222**	**41.37**	Vertical	**46.00**	**4.63**	QP	Pass
1000-40000	17622.906250	50.07	Horizontal	74.00	23.93	PK	Pass
1000-40000	15834.718750	47.46	Vertical	74.00	26.54	PK	Pass

802.11N20 Modulation 5785MHz Test Result

Frequency Range	Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	MHz	dBuV/m		dBµV/m	dB		
30-1000	--	--	Horizontal	--	--	QP	Pass
30-1000	--	--	Vertical	--	--	QP	Pass
1000-40000	15886.281250	47.31	Horizontal	74.00	26.69	PK	Pass
1000-40000	15859.468750	47.05	Vertical	74.00	26.95	PK	Pass

802.11N20 Modulation 5825MHz Test Result

Frequency Range	Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	MHz	dBuV/m		dBµV/m	dB		
30-1000	--	--	Horizontal	--	--	QP	Pass
30-1000	--	--	Vertical	--	--	QP	Pass
1000-40000	17732.218750	50.57	Horizontal	74.00	23.43	PK	Pass
1000-40000	15845.718750	48.92	Vertical	74.00	25.08	PK	Pass

Remark:

(1) Level= Reading Level + Correction Factor
(2) Below 1GHz: Correction Factor=Antenna Factor + Cable Loss
(3) Above1GHz: Correction Factor = Antenna Factor + Cable Loss- Amplifier Gain
(The Reading Level is recorded by software which is not shown in the sheet)
(4) "*" means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.
(5) We test all modes and only the worst case for each bandwidth recorded in the report.
(6) Testing is carried out with frequency rang 30MHz to 40GHz, which data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(7) The Low frequency, which start from 9KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

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9.5 Band Edge

Test Method
According to KBD789033 D02
The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

Limits:
For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Result:

TestMode	Antenna	ChName	Channel	FreqRange	Result	Limit	Verdict
11N20SISO	Ant1	Low	5745	5650~5700	-40.74	4.20	PASS
				5700~5720	-41.8	14.06	PASS
				5720~5725	-39.21	26.24	PASS
				5760~5650	-42.77	-27	PASS
		High	5825	5850~5855	-41.37	18.03	PASS
				5855~5875	-40.04	10.38	PASS
				5875~5925	-41.7	-18.51	PASS
				5925~5935	-42.17	-27	PASS

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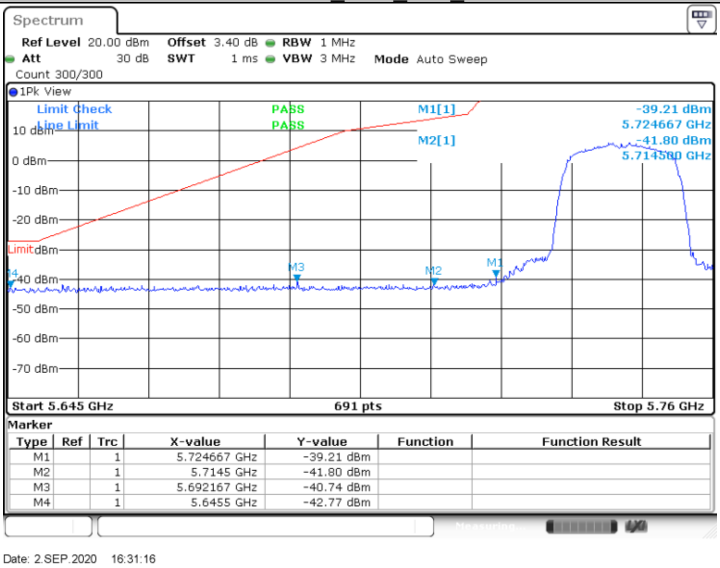
11N20SISO_Ant1_Low_5745



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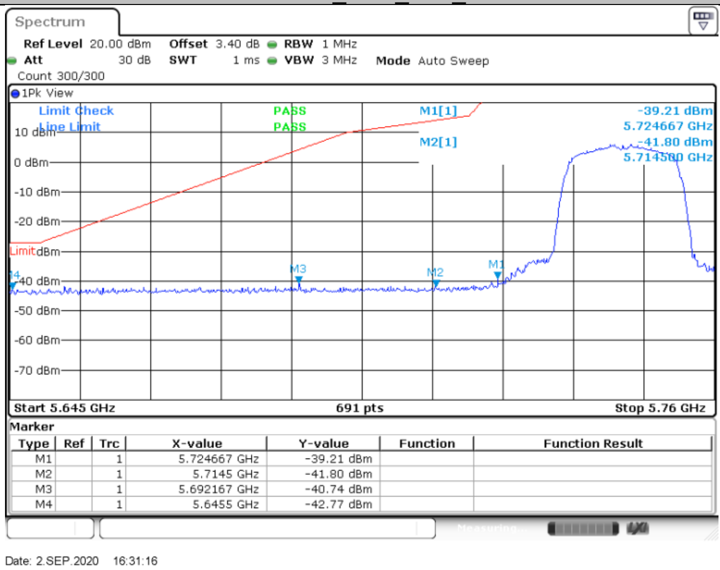

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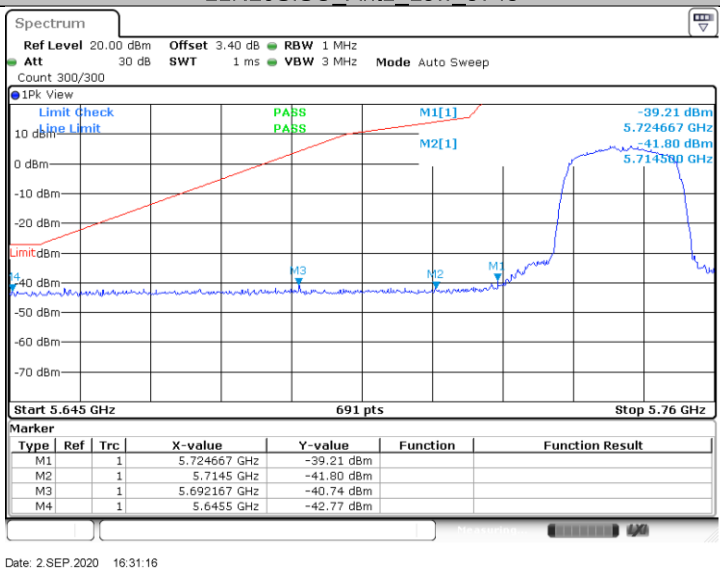

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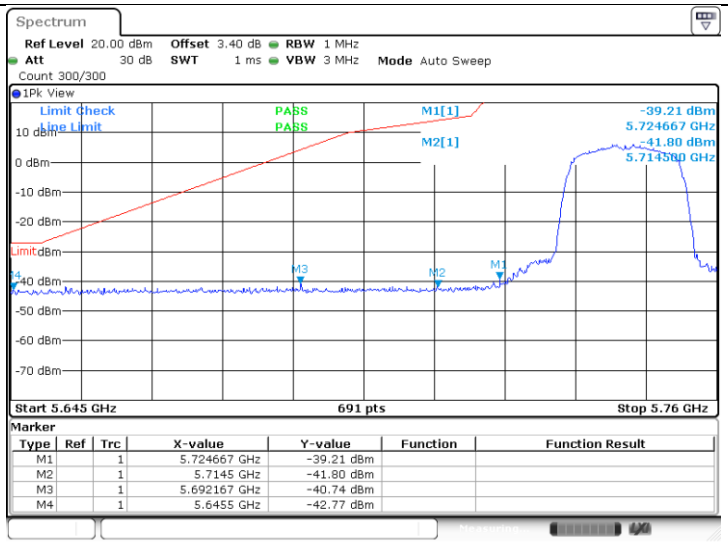

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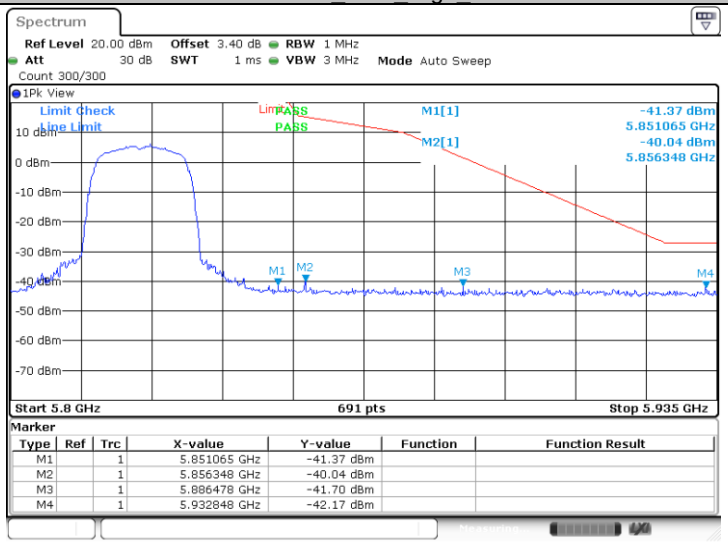

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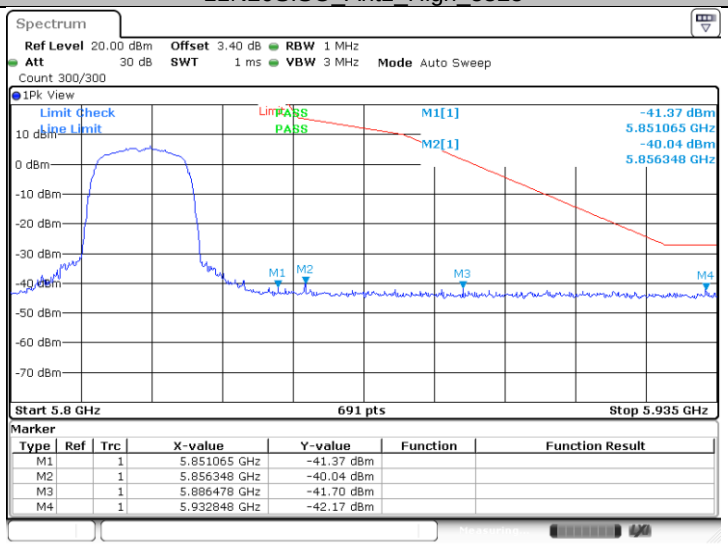

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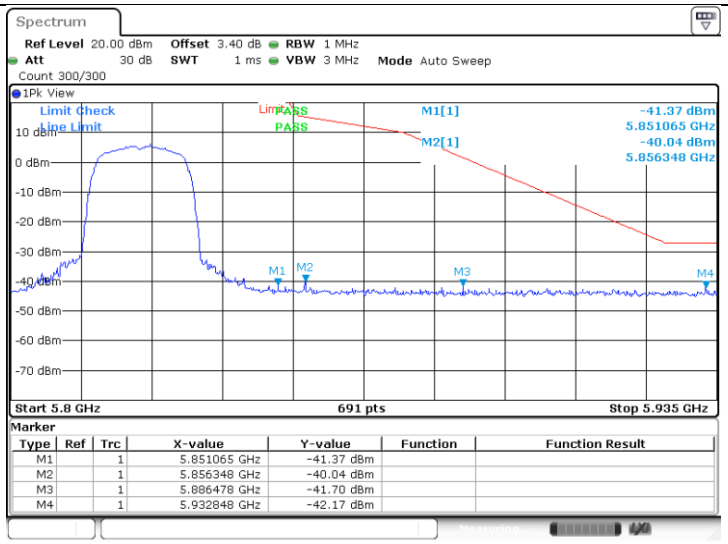

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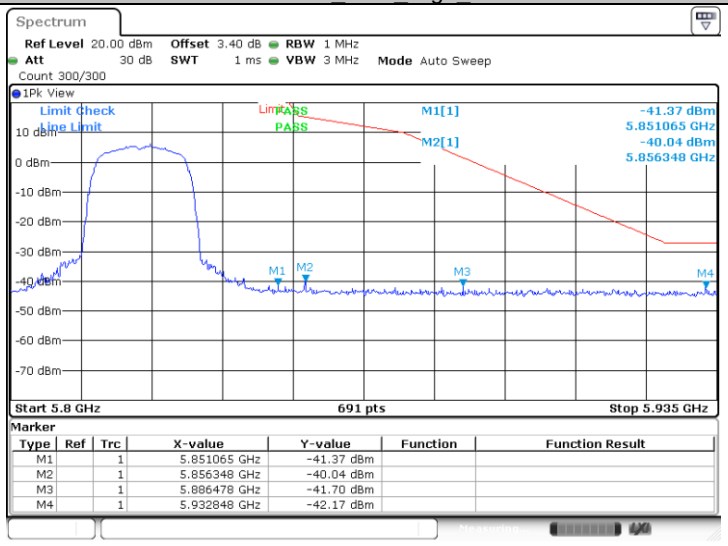

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9.6 Frequencies Stability

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2. Set Centre Frequency of the channel under test.
3. Set Detector PEAK
4. Set RBW: 10KHz, VBW: 3RBW
5. Set Span: Encompass the entire emissions bandwidth (EBW) of the signal.
6. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
Temperature is -20℃ to +50℃, normal Temperature is +20℃.

Manufacturers 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 users manual.

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 3.85VDC, HV is High Voltage: 4.43VDC, LV is Low Voltage: 3.27VDC, NT is normal Temperature: +20℃.

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Test result:

TestMode	Antenna	Channel (MHz)	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
11N20SISO	Ant1	5745	NV	NT	-33000	-5.744125	PASS
			LV	NT	-28000	-4.873803	PASS
			HV	NT	-25000	-4.35161	PASS
		5785	NV	NT	-31000	-5.358686	PASS
			LV	NT	-21000	-3.630078	PASS
			HV	NT	-20000	-3.457217	PASS
		5825	NV	NT	-20000	-3.433476	PASS
			LV	NT	-19000	-3.261803	PASS
			HV	NT	-19000	-3.261803	PASS

TestMode	Antenna	Channel (MHz)	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
11N20SISO	Ant1	5745	NV	-30	-23000	-4.003481	PASS
			NV	-20	-21000	-3.655352	PASS
			NV	-10	-20000	-3.481288	PASS
			NV	0	-19000	-3.307224	PASS
			NV	10	-18000	-3.133159	PASS
			NV	20	-17000	-2.959095	PASS
			NV	30	-16000	-2.78503	PASS
			NV	40	-14000	-2.436902	PASS
			NV	50	-12000	-2.088773	PASS
		5785	NV	-30	-20000	-3.457217	PASS
			NV	-20	-19000	-3.284356	PASS
			NV	-10	-19000	-3.284356	PASS
			NV	0	-19000	-3.284356	PASS
			NV	10	-18000	-3.111495	PASS
			NV	20	-18000	-3.111495	PASS
			NV	30	-18000	-3.111495	PASS
			NV	40	-18000	-3.111495	PASS
			NV	50	-18000	-3.111495	PASS
		5825	NV	-30	-19000	-3.261803	PASS
			NV	-20	-19000	-3.261803	PASS
			NV	-10	-19000	-3.261803	PASS
			NV	0	-19000	-3.261803	PASS
			NV	10	-19000	-3.261803	PASS
			NV	20	-19000	-3.261803	PASS
			NV	30	-19000	-3.261803	PASS
			NV	40	-19000	-3.261803	PASS
			NV	50	-19000	-3.261803	PASS

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10. Test Equipment List

Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2021-6-29
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	68-4-80-14-002	707	1	2021-8-4
Horn Antenna	Rohde & Schwarz	HF907	68-4-80-14-005	102294	1	2021-7-15
Wideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2021-8-5
Pre-amplifier	Rohde & Schwarz	SCU 18	68-4-29-14-001	102230	1	2021-6-21
Attenuator	Agilent	8491A	68-4-81-16-001	MY39264334	1	2021-6-21
3m Semi-anechoic chamber	TDK	9X6X6	68-4-90-14-001	----	3	2022-12-29
Test software	Rohde & Schwarz	EMC32	68-4-90-14-001-A10	Version9.15.00	N/A	N/A

TS8997 Test System

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Signal Generator	Rohde & Schwarz	SMB100A	68-4-48-14-001	108272	1	2021-6-21
Vector Signal Generator	Rohde & Schwarz	SMBV100A	68-4-48-18-001	262825	1	2021-6-21
Signal Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	1	2021-6-21
Vector Signal Generator	Rohde & Schwarz	SMU 200A	68-4-48-14-003	105324	1	2021-6-21
RF Switch Module	Rohde & Schwarz	OSP120/OSP-B157	68-4-93-14-003	101226/100851	1	2021-6-21
Power Splitter	Weinschel	1580	68-4-85-14-001	SC319	1	2021-7-7
10dB Attenuator	Weinschel	4M-10	68-4-81-14-003	43152	1	2021-7-16
10dB Attenuator	R&S	DNF	68-4-81-14-004	DNF-001	1	2021-6-21
10dB Attenuator	R&S	DNF	68-4-81-14-005	DNF-002	1	2021-6-21
10dB Attenuator	R&S	DNF	68-4-81-14-006	DNF-003	1	2021-6-21
10dB Attenuator	R&S	DNF	68-4-81-14-007	DNF-004	1	2021-6-21
Test software	Rohde & Schwarz	EMC32	68-4-48-14-003-A10	Version 10.38.00	N/A	N/A
Test software	Tonscend	System for BT/WIFI	68-4-74-14-006-A13	Version 2.5.77.0418	N/A	N/A

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11. System Measurement Uncertainly

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.63dB; Vertical: 4.61dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-18000MHz	Horizontal: 4.65dB; Vertical: 4.64dB;
Uncertainty for Radiated Spurious Emission 18000MHz-40000MHz	Horizontal: 4.51dB; Vertical: 4.50dB;
Uncertainty Evaluation for Power Spectral Density Conducted measurement	1.17dB
Uncertainty Evaluation for Spurious emissions Conducted measurement	1.43dB
Uncertainty for Conducted RF test with TS 8997	RF Power Conducted: 1.31dB Frequency test involved: 0.6×10-7 or 1%

THE END

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