RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART E

INDUSTRY CANADA RSS-247

Test Standard	**FCC Part 15.407+ RSS-247 issue 2 and RSS-GEN issue 5**
Product name	**Tablet**
Brand name	**ICON/iFit**
Model No.	**MP27-ARGON2X-C**
Test Result	**Pass**
Statements of Conformity	**Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.**

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc.(Wugu Laboratory)

Approved by:

Dally Hong

Dally Hong
Sr. Engineer

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	January 13, 2022	Initial Issue	ALL	Doris Chu

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

FCC Applicant	Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan
IC Applicant	COMPAL ELECTRONICS INC. No. 581 & 581-1, Ruiguang Rd,, Neihu District Taipei R.O.C. 114 Taiwan
Manufacturer	Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan
Equipment	Tablet
Model No.	MP27-ARGON2X-C
Model Discrepancy	N/A
Trade Name	ICON/iFit
Received Date	November 30, 2021
Date of Test	December 28, 2021 ~ January 3, 2022
Power Operation	Power from DC 12V.
HW Version	LA-M101P
SW Version	Android 9
EUT Serial #	PP54D301711

Remark:

1. For more details, refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

1.2 EUT CHANNEL INFORMATION

Frequency Range	**UNII-1** IEEE 802.11a: 5180 ~ 5240 MHz IEEE 802.11n HT 20 MHz: 5180 ~ 5240 MHz **UNII-2a** IEEE 802.11a: 5260 ~ 5320 MHz IEEE 802.11n HT 20 MHz: 5260 ~ 5320 MHz **UNII-2c** IEEE 802.11a: 5500 ~ 5700 MHz IEEE 802.11n HT 20 MHz: 5500 ~ 5720 MHz **UNII-3** IEEE 802.11a: 5745 ~ 5825 MHz IEEE 802.11n HT 20 MHz: 5745 ~ 5825 MHz
Modulation Type	1. IEEE 802.11a mode: OFDM 2. IEEE 802.11n HT 20 MHz mode: OFDM

Remark:
Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	**Number of frequencies**	**Location in frequency range of operation**
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☐ PIFA ☒ PCB ☐ Dipole ☐ Coils
Antenna Gain	5150~5250: Gain: 0.17 dBi 5250~5350: Gain: 0.17 dBi 5470~5725: Gain: 0.91 dBi 5725~5850: Gain: 1.21 dBi
Antenna Connector	N/A

Remark:

1.The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203.

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 6dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30 MHz ~1 GHz (Horizontally)	+/- 3.91
3M Semi Anechoic Chamber / 30 MHz ~1 GHz (Vertically)	+/- 4.57
3M Semi Anechoic Chamber / 1 GHz ~ 6 GHz	+/- 5.20
3M Semi Anechoic Chamber / 6 GHz ~ 18 GHz	+/- 5.18
3M Semi Anechoic Chamber / 18 GHz ~ 40 GHz	+/- 3.68
3M Semi Anechoic Chamber / 40 GHz ~ 60 GHz	+/- 4.64
3M Semi Anechoic Chamber / 60 GHz ~ 75 GHz	+/- 4.64
3M Semi Anechoic Chamber / 75 GHz ~ 110 GHz	+/- 4.65
3M Semi Anechoic Chamber / 110 GHz ~ 170 GHz	+/- 4.69
3M Semi Anechoic Chamber / 170 GHz ~ 220 GHz	+/- 5.31
3M Semi Anechoic Chamber / 220 GHz ~ 325 GHz	+/- 5.73

Remark:
1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)

Test site	Test Engineer	Remark
AC Conduction Room	N/A	Not applicable, because EUT doesn't connect to AC Main Source direct.
Radiation	Ray Li, Tony Chao	-
RF Conducted	Lance Chen	-

Remark: The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
EXA Signal Analyzer	KEYSIGHT	N9010B	MY59071573	05/25/2021	05/24/2022
Power Meter	Anritsu	ML2487A	6K00003260	05/24/2021	05/23/2022
Power Seneor	Anritsu	MA2490A	32910	05/24/2021	05/23/2022
Coaxial Cable	Woken	WC12	CC003	06/28/2021	06/27/2022
Software	Radio Test Software Ver. 21				

Remark: Each piece of equipment is scheduled for calibration once a year.

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal Date**	**Cal Due**
Bilog Antenna	Sunol Sciences	JB3	A030105	07/19/2021	07/18/2022
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/24/2021	02/23/2022
Coaxial Cable	EMCI	EMC105	190914+1111	09/17/2021	09/16/2022
Coaxial Cable	Woken	J-1099	201709090004	12/21/2021	12/20/2022
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/06/2021	01/05/2022
High Pass Filters	MICRO TRONICS	HPM13195	003	02/08/2021	02/07/2022
Horn Antenna	ETS LINDGREN	3116	00026370	11/30/2021	11/29/2022
Horn Antenna	ETS LINDGREN	3117	00055165	07/29/2021	07/28/2022
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	12/05/2021	12/04/2022
Loop Ant	COM-POWER	AL-130	121051	04/07/2021	04/06/2022
Pre-Amplifier	EMEC	EM330	060609	02/24/2021	02/23/2022
Pre-Amplifier	HP	8449B	3008A00965	12/24/2021	12/23/2022
Pre-Amplifier	MITEQ	AMF-6F-18004000-37-8P	985646	09/08/2021	09/07/2022
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	12/06/2021	12/05/2022
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180419c				

Remark: Each piece of equipment is scheduled for calibration once a year.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment					
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**
	N/A				

Support Equipment					
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**
1	Adapter	WEIHAI POWER	HAS060123-EA	N/A	N/A

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.407, KDB 789033 D02, KDB 905462 D02, RSS-247 Issue 2 and RSS-GEN Issue 5.

2. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Chapter	Test Item	Result
15.203	RSS-Gen (6.8)	1.3	Antenna Requirement	Pass
15.407(b)	RSS-247(6.2.1.2) RSS-247(6.2.2.2) RSS-247(6.2.3.2) RSS-247(6.2.4.2)	4.1	Radiation Spurious Emission	Pass
15.407(a)	RSS-247(6.2.1.1) RSS-247(6.2.2.1) RSS-247(6.2.3.1) RSS-247(6.2.4.1)	4.2	Output Power Measurement	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE EUT CHANNEL NUMBER OF OPERATING CONDITION

<table>
<tr><td>Operation mode</td><td>1. IEEE 802.11a mode: 6Mbps
2. IEEE 802.11n HT 20 MHz mode: MCS8</td></tr>
<tr><td>Operating Frequency</td><td>
<table>
<tr><th></th><th>Mode</th><th>Frequency Range (MHz)</th></tr>
<tr><td rowspan="2">U-NII-1</td><td>IEEE 802.11a</td><td>5180, 5220, 5240</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5180, 5220, 5240</td></tr>
<tr><td rowspan="2">U-NII-2a</td><td>IEEE 802.11a</td><td>5260, 5280, 5320</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5260, 5280, 5320</td></tr>
<tr><td rowspan="2">U-NII-2c</td><td>IEEE 802.11a</td><td>5500, 5580, 5720</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5500, 5580, 5720</td></tr>
<tr><td rowspan="2">U-NII-3</td><td>IEEE 802.11a</td><td>5745, 5785, 5825</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5745, 5785, 5825</td></tr>
</table>
</td></tr>
</table>

Remark:
1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. For Canada the EUT Frequency Range 5600~5650MHz will be disabled.
3.The system support 802.11a/n HT20/n HT40/ac VHT20/40/80, the VHT20/VHT40 were reduced since the identical parameters with 802.11n HT20 and HT40.

3.2 THE WORST MODE OF MEASUREMENT

Radiated Emission Measurement Above 1G	
Test Condition	**Radiated Emission Above 1G**
Power supply Mode	**Mode 1: EUT power by DC 12V**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**
Worst Position	☐ **Placed in fixed position.** ☐ **Placed in fixed position at X-Plane (E2-Plane)** ☒ **Placed in fixed position at Y-Plane (E1-Plane)** ☐ **Placed in fixed position at Z-Plane (H-Plane)**

Radiated Emission Measurement Below 1G	
Test Condition	**Radiated Emission Below 1G**
Power supply Mode	**Mode 1: EUT power by DC 12V**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**

Remark:
1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Y-Plane) were recorded in this report

4. TEST RESULT

4.1 RADIATION SPURIOUS EMISSION

4.1.1 Test Limit

According to §15.407, §15.209 and §15.205,
According to RSS-247 section 6.2.1.2 and section 6.2.4.2

Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Above 30 MHz

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz (Note)

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Note: Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (m)
9-490 kHz Note	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector..

UNII-1 :

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

UNII-2a and 2c :

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only." Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

UNII-3:

For the band 5725-5850 MHz, emissions at frequencies from the band edges to 10 MHz above or below the band edges shall not exceed -17 dBm/MHz e.i.r.p.
For emissions at frequencies more than 10 MHz above or below the band edges, the emissions power shall not exceed -27 dBm/MHz

4.1.2 Test Procedure

Test method Refer as KDB 789033 D02.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)

5. The SA setting following：

(1) Below 1G：RBW = 100kHz, VBW ≥ 3*RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2) Above 1G：

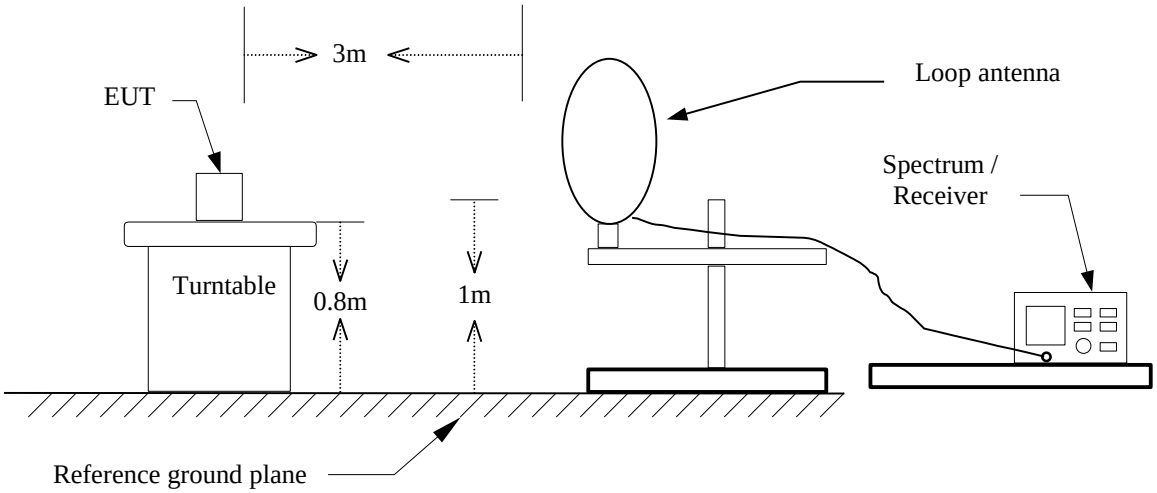
(2.1) For Peak measurement：RBW = 1MHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2.2) For Average measurement：RBW = 1MHz, VBW

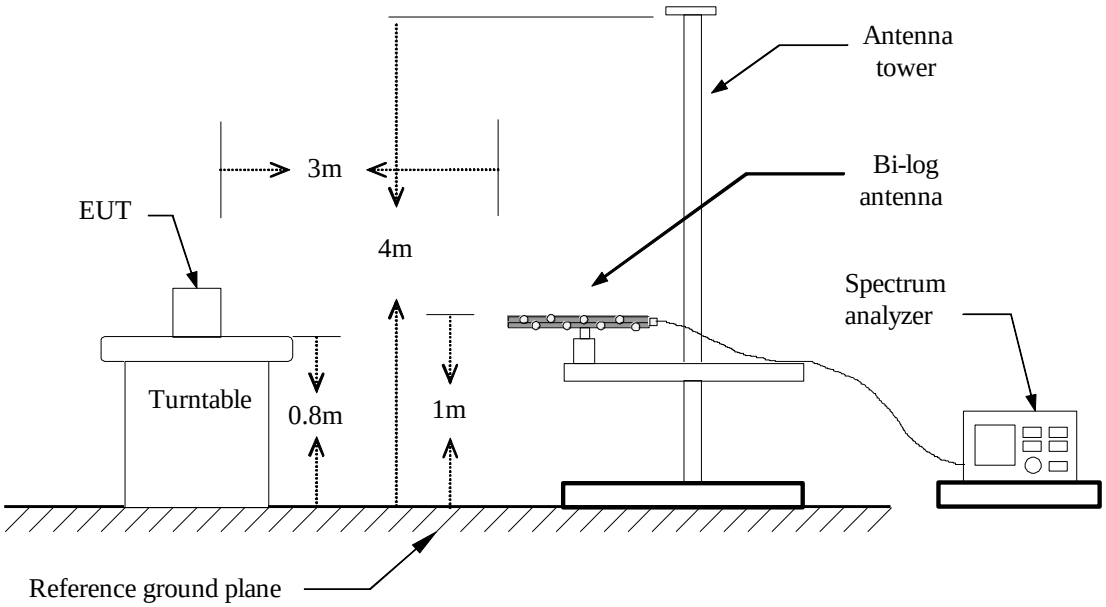
- If Duty Cycle ≥ 98%, VBW=10Hz.
- If Duty Cycle < 98%, VBW=1/T.

4.1.3 Test Setup

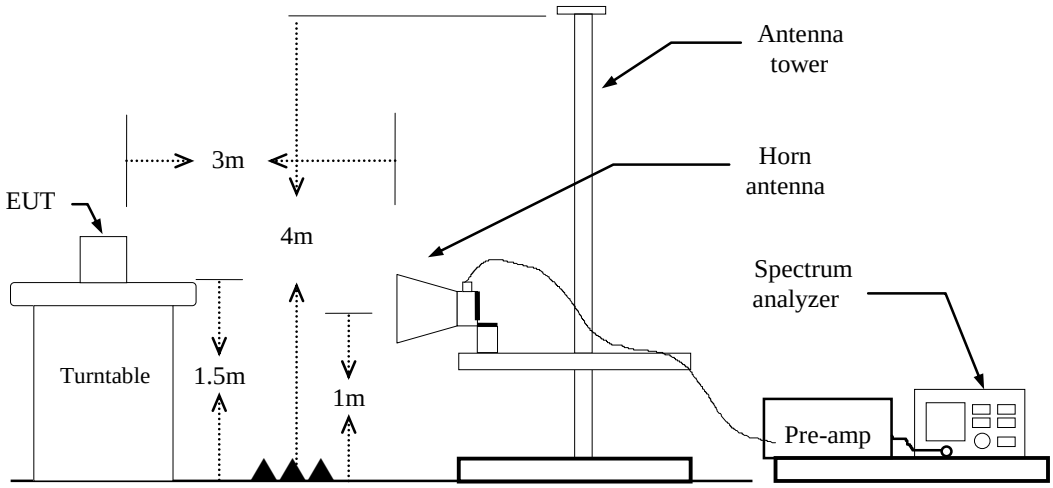
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

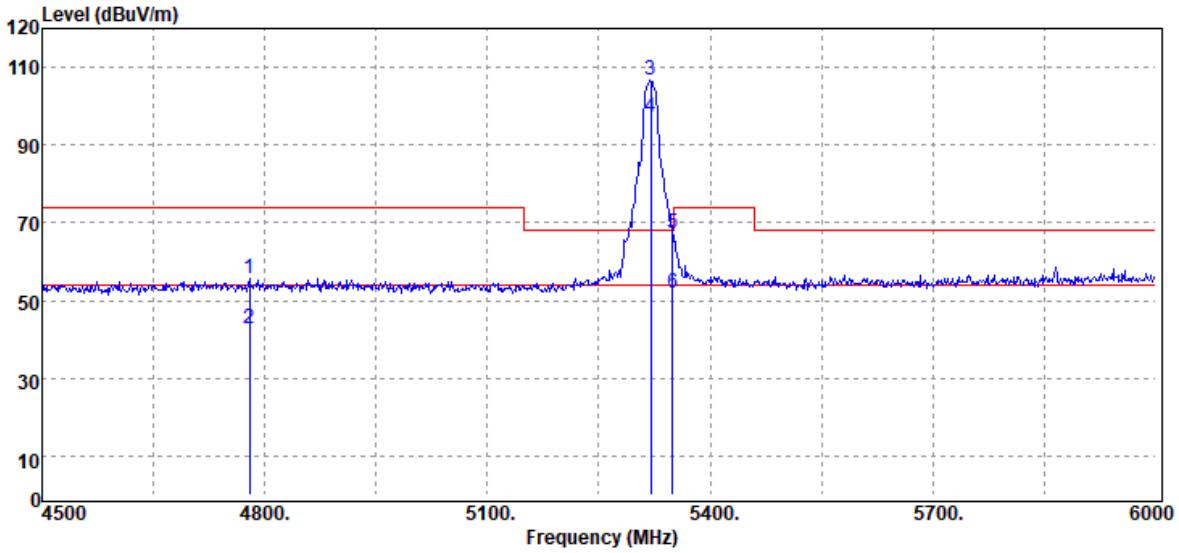


4.1.4 Test Result

Band Edge Test Data

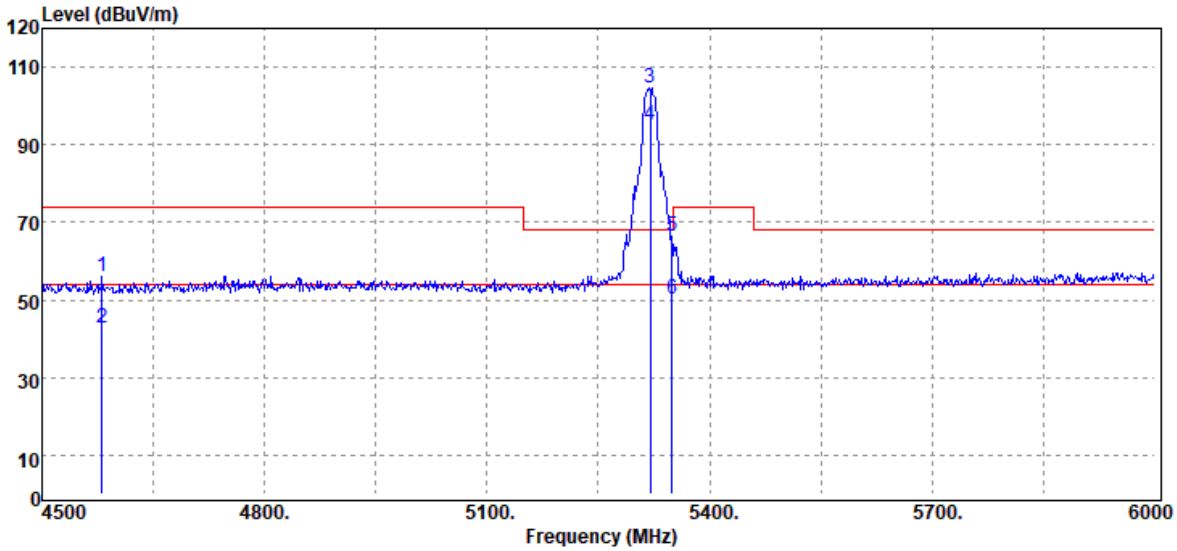
Test Data for UNII-2a

Test Mode	IEEE 802.11n 20 MHz / 5320MHz	Temp/Hum	21.6(℃)/ 64%RH
Test Item	Band Edge	Test Date	January 3, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



Frequency (MHz)	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
4779.00	Peak	37.12	18.46	55.58	74.00	-18.42
4779.00	Average	24.38	18.46	42.84	54.00	-11.16
5320.00	Peak	86.89	19.78	106.67	--	--
5320.00	Average	77.44	19.78	97.22	--	--
5349.00	Peak	47.48	19.79	67.27	68.20	-0.93
5349.00	Average	32.29	19.79	52.08	54.00	-1.92

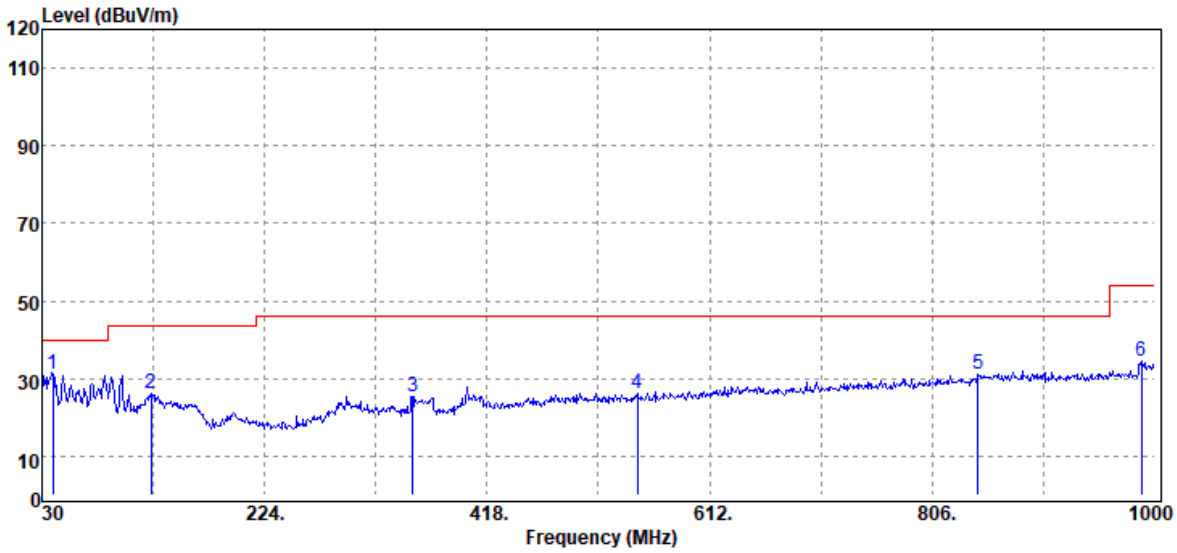
Test Mode	IEEE 802.11n 20 MHz / 5320MHz	Temp/Hum	21.6(℃)/ 64%RH
Test Item	Band Edge	Test Date	January 3, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



Frequency (MHz)	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
4581.00	Peak	38.02	18.22	56.24	74.00	-17.76
4581.00	Average	24.70	18.22	42.92	54.00	-11.08
5320.00	Peak	85.05	19.78	104.83	--	--
5320.00	Average	75.10	19.78	94.88	--	--
5349.00	Peak	46.55	19.79	66.34	68.20	-1.86
5349.00	Average	30.46	19.79	50.25	54.00	-3.75

Below 1G Test Data

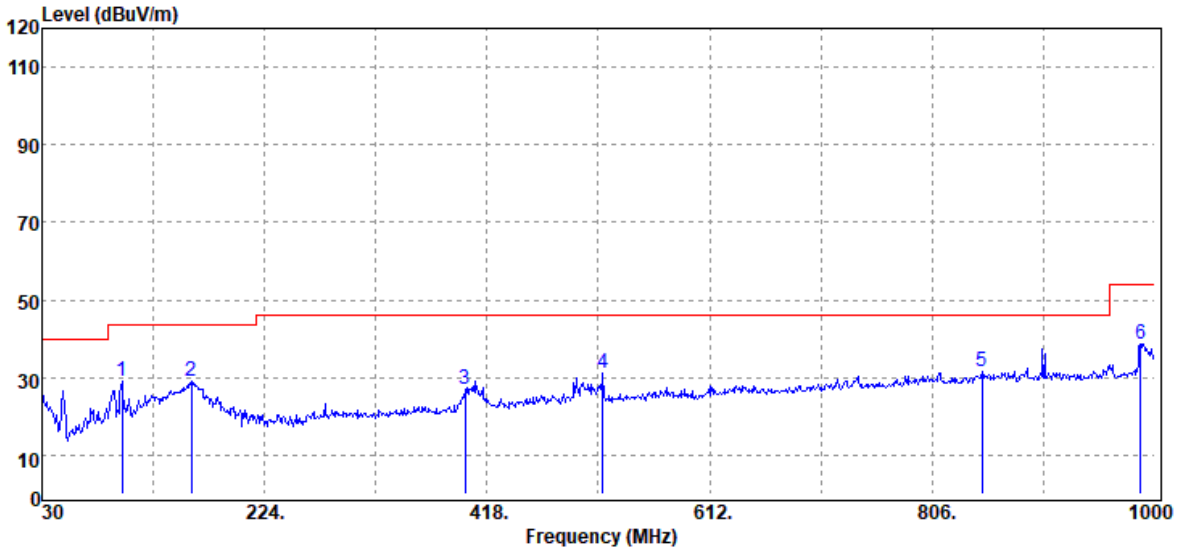
Test Mode	Mode 1	Temp/Hum	21.2(℃)/ 64%RH
Test Item	30MHz-1GHz	Test Date	December 28, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
39.70	Peak	40.53	-9.54	30.99	40.00	-9.01
125.06	Peak	35.31	-9.07	26.24	43.50	-17.26
353.01	Peak	32.90	-7.43	25.47	46.00	-20.53
548.95	Peak	28.98	-2.68	26.30	46.00	-19.70
845.77	Peak	29.00	2.24	31.24	46.00	-14.76
988.36	Peak	30.21	4.35	34.56	54.00	-19.44

Note: 1. No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)
2. For below 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit.

Test Mode	Mode 1	Temp/Hum	21.2(℃)/ 64%RH
Test Item	30MHz-1GHz	Test Date	December 28, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

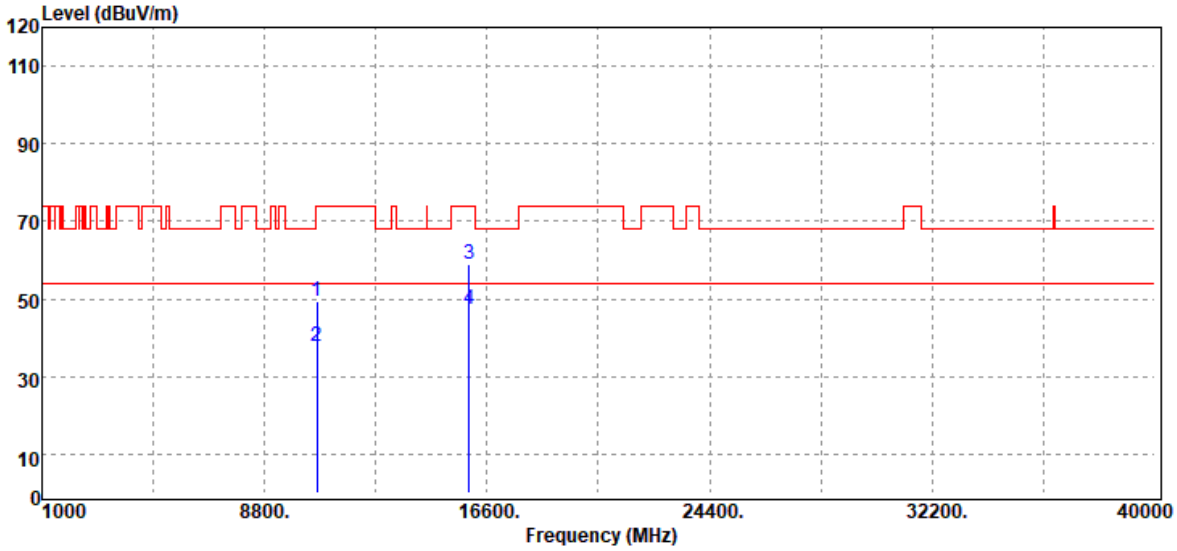


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
99.84	Peak	42.07	-12.88	29.19	43.50	-14.31
159.98	Peak	39.71	-10.50	29.21	43.50	-14.29
398.60	Peak	32.81	-6.00	26.81	46.00	-19.19
518.88	Peak	34.14	-3.18	30.96	46.00	-15.04
849.65	Peak	29.39	2.23	31.62	46.00	-14.38
987.39	Peak	34.42	4.29	38.71	54.00	-15.29

Note: 1. No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)
2. For below 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit.

Test Data for UNII-2a

Test Mode:	IEEE 802.11n 20 MHz / 5320MHz	Temp/Hum	21.2(℃)/ 64%RH
Test Item	Harmonic	Test Date	December 28, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak & Average		

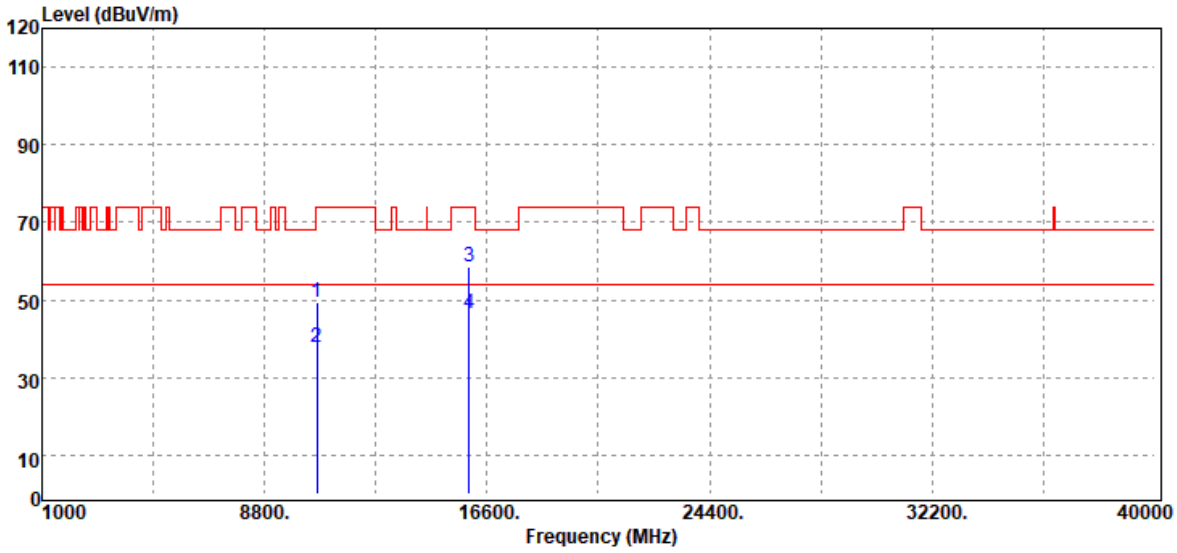


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
10640.00	Peak	31.08	18.37	49.45	74.00	-24.55
10640.00	Average	19.49	18.37	37.86	54.00	-16.14
15960.00	Peak	32.33	26.43	58.76	74.00	-15.24
15960.00	Average	20.93	26.43	47.36	54.00	-6.64
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Test Mode:	IEEE 802.11n 20 MHz / 5320MHz	Temp/Hum	21.2(℃)/ 64%RH
Test Item	Harmonic	Test Date	December 28, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak & Average		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
10640.00	Peak	31.07	18.37	49.44	74.00	-24.56
10640.00	Average	19.26	18.37	37.63	54.00	-16.37
15960.00	Peak	32.23	26.43	58.66	74.00	-15.34
15960.00	Average	20.28	26.43	46.71	54.00	-7.29
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

4.2 OUTPUT POWER MEASUREMENT

4.2.1 Test Limit

According to §15.407 (a)(1), 15.407(a)(2) and 15.407(a)(3), and RSS-247 section 6.2.1.1, section 6.2.2.1, section 6.2.3.1 and section 6.2.4.1

FCC:

UNII-1 :

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW(24 dBm), whichever power is less. B is the 99% emission bandwidth in megahertz, provided the maximum antenna gain does not exceed 6 dBi. 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.

UNII-2a and 2c:

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. and The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 Log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. 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.

UNII-3:

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, 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.

IC:

UNII-1 :

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

UNII-2a and 2c:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

UNII-2c (5470-5600 MHz and 5650-5725 MHz)

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

UNII-3:

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, 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.

UNII-1 Limit	☒ Antenna not exceed 6 dBi：24dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 24 – (DG – 6)]
UNII-2a Limit	☒ Antenna not exceed 6 dBi：24dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 24 – (DG – 6)]
UNII-2c Limit	☐ Antenna not exceed 6 dBi：24dBm ☒ Antenna with DG greater than 6 dBi： [Limit = 24 – (DG – 6)]
UNII-3 Limit	☐ Antenna not exceed 6 dBi：30dBm ☒ Antenna with DG greater than 6 dBi： [Limit = 30 – (DG – 6)]

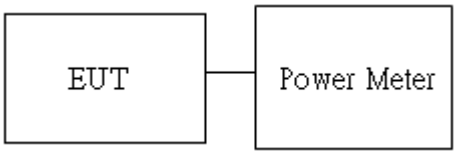
4.2.2 Test Procedure

Test method Refer as KDB 789033 D02, Section E.3.b for BW 20MHz and 40MHz, E.2.b for BW 80MHz.

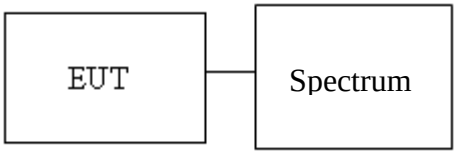
1. The EUT RF output connected to the power meter or spectrum by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Average output power. in the test report.

4.2.3 Test Setup

For BW 20MHz and 40MHz



For BW 80MHz



4.2.4 Test Result

Temperature: 21.2 ~ 22.8℃ **Test date:** December 28, 2021 ~ January 3, 2022

Humidity: 61 ~ 64% RH **Tested by:** Lance Chen

Report	Mode / Band	Cannel		Frequency (MHz)	GKR436415 / 2533B-436415		GKR436392 / 2533B-436392	
					Power Setting	AV Power	Power Setting	AV Power
NII	Band 2 HT20	Low	52	5260	20	19.54	20.5	18.66
		Mid	60	5300	20	19.53	20.5	18.86
		High	64	5320	20	19.85	20.5	18.91

4.3 TEST DATA RE-USE SUMMARY

Introduction Section:

The application re-uses data collected on a similar device. The subject device of this application (Model: MP27-ARGON2X-C, FCC ID: GKR436392, IC: 2533B-436392) is electrically identical to the reference device (Model: MP27-ARGON2-C, FCC ID: GKR436415, IC: 2533B-436415) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

Differences Brief Description:

The WLAN and Bluetooth hardware of this device are identical to the implementation in

FCC ID: GKR436392

IC: 2533B-436392

The Product Equality Declaration document includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.

Spot Check Verification Result Summary

Equipment Class	Reference FCC ID / IC No.	Folder Test	Report Title/ Section
DSS-NII	GKR436415 / 2533B-436415	T210730W08-RP4, T210730W08-RP5	All Section (Except for Radiation Spurious Emission below 1GHz)

Summery of the spot check for Unlicensed bands and Licensed bands

In order to confirm hardware similarity of the subject device with the reference device, we used same setting power to radiated emission measurement were performed on the subject device for the Band edge and Harmonic, the test result were similar with FCC ID: GKR436415 / IC: 2533B-436415.

WLAN-5GHz

Report	Test Item	Mode / CH.	Measured	GKR436415 / 2533B-436415			GKR436392 / 2533B-436392			Gap (dB)	
			Frequency (MHz)	Peak	Average	Ant. Pol.	Peak	Average	Ant. Pol.	Peak	Average
NII	Band edge	Band 2 HT20 / High	5350	69.86	53.4	V	67.27	52.08	V	2.59	1.32
	Emission 1G~40G	Band 2 HT20 / High	10640	47.99	38.84	V	49.45	37.86	V	-1.46	0.98
			15960	60.2	48.62	V	58.76	47.36	V	1.44	1.26

Report	Test Item	Mode / CH.	Ant. Pol.	Measured	GKR436415 / 2533B-436415		Measured	GKR436392 / 2533B-436392		Gap (dB)	
				Frequency (MHz)	Peak	Average	Frequency (MHz)	Peak	Average	Peak	Average
NII	LF	Band 1 / A / Mid	V	39.7	29.43	-	39.7	30.99	-	-1.56	-

- End of Test Report –