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Dates of Tests: Dec 09, 2019 ~ Dec 27, 2019  
 Test Report S/N: LR500112001A  
 Test Site : LTA CO., LTD.

## CERTIFICATION OF COMPLIANCE

FCC ID.

**2AVEQSKYLARK**

APPLICANT

**Alien Technology Asia**

<b>Equipment Class</b>	:	<b>Digital Transmission System (DTS) _LE,802.11</b>
<b>Manufacturing Description</b>	:	<b>PDA</b>
<b>Manufacturer</b>	:	<b>Wissenmeer</b>
<b>Model name</b>	:	<b>Skylark</b>
<b>Variant Model name</b>	:	<b>WMP201</b>
<b>Test Device Serial No.:</b>	:	<b>Identical prototype</b>
<b>Rule Part(s)</b>	:	<b>FCC Part 15.407 Subpart E ; ANSI C63.10 - 2013</b>
<b>Frequency Range</b>	:	<b>802.11 ac20 5725–5805 MHz</b>
<b>Max. Output Power</b>	:	<b>Max -8.65 dBm - Conducted</b>
<b>Data of issue</b>	:	<b>Dec 27, 2019</b>

This test report is issued under the authority of:

The test was supervised by:

Ja-Beom Koo, Manager

Eun-Hwan Jung, Test Engineer

This test result only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the test laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.



NVLAP LAB Code.: 200723-0

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## 1. General information

### **1-1 Test Performed**

Company name : LTA Co., Ltd.  
 Address : 243, Jubug-ri, Yangji-Myeon, Youngin-Si, Kyunggi-Do, Korea. 17159  
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 E-mail : [chahn@ltalab.com](mailto:chahn@ltalab.com)  
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 Facsimile : +82-31-323-6010

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the “General requirements for the competents of calibration and testing laboratory”.

### **1-2 Accredited agencies**

LTA Co., Ltd. is approved to perform EMC testing by the following agencies:

Agency	Country	Accreditation No.	Validity	Reference
NVLAP	U.S.A	200723-0	2020-09-30	ECT accredited Lab.
RRA	KOREA	KR0049	-	EMC accredited Lab.
FCC	U.S.A	649054	2021-04-11	FCC CAB
VCCI	JAPAN	C-4948,	2020-09-10	VCCI registration
VCCI	JAPAN	T-2416,	2020-09-10	VCCI registration
VCCI	JAPAN	R-4483(10 m),	2020-10-15	VCCI registration
VCCI	JAPAN	G-847	2021-12-13	VCCI registration
IC	CANADA	5799A-1	updating	IC filing
KOLAS	KOREA	NO.551	2021-08-20	KOLAS accredited Lab.

## 2. Information about test item

### 2-1 Client & Manufacturer

Client Company name : Alien Technology Asia  
 Address : RM# 908, 909, 1008, Star Valley, 99, Digital-ro, 9-gil, Gumcheon-gu,  
 Seoul, Korea  
 Tel / Fax : +82-70-7012-1363 / +82 -02-868-1710  
 Manufacturer : Wissenmeer  
 Address : #1023, 184, Gasan digital 2-ro, Geumcheon-gu, Seoul, Korea  
 Tel / Fax : +82-10-9009-7898 / -

### 2-2 Equipment Under Test (EUT)

Model name : Skylark  
 Serial number : Identical prototype  
 Date of receipt : Dec 09, 2019  
 EUT condition : Pre-production, not damaged  
 Antenna type : FPCB Antenna (Max Gain : -4.334 dBi)  
 Frequency Range : 802.11ac20 5725–5850 MHz  
 RF output power : Max -8.65 dBm – Conducted  
 Type of Modulation : BPSK, QPSK, 16-QAM, 64-QAM  
 Power Source : DC 3.7 V

### 2-3 Tested frequency

	LOW	MID	HIGH
Frequency (MHz) 802.11 ac20	5745	5785	5805

### 2-4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
Notebook	-	MS-1736	MSI

### 3. Test Report

#### 3.1 Summary of tests

FCC Part Section(s)	Parameter	Test Condition	Status (note 1)
15.407(a)(3)	26 dB Bandwidth	Conducted	C
15.407(a)(3)	Transmitter Peak Output Power		C
15.407(a)(3)	Peak power spectral density		C
15.407(b)(4)	Band Edge & Conducted Spurious emission		C
15.407(e)	6 dB Bandwidth		C
15.209	Transmitter emission	Radiated	C
15.207	AC Conducted Emissions	Conducted	N/A
15.203	Antenna requirement	-	C

N/A : This product is battery-enabled and excludes the test.

N/A1 : It is a product in a band that does not have DFS function.

The above equipment was tested by LTA Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 2 and Part 15.407. The test results of this report relate only to the tested sample identified in this report.

The tests were performed according to the method of measurements prescribed in KDB No.789033.

→ Antenna Requirement

Alien Technology Asia. FCC ID: 2AVEQSKYLARK unit complies with the requirement of §15.203.  
The antenna type is FPCB Antenna

### 3.2 Technical Characteristics Test

### 3.2.1 26 dB, 99% Bandwidth

## Procedure:

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section H)3)d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the 26-dB emission bandwidth to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section E). However, the 26-dB bandwidth must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 1 % to 5 % of the OBW

Span = 3 X RBW

Set VBW  $\geq$  3 X RBW

Set span = 1.5 times to 5.0 times the OBW.

Trace  $\equiv$  max hold

Detector function  $\equiv$  peak

### Measurement Data : Complies

(802.11 ac20)

Frequency (MHz)	Test Results		
	26 dB Bandwidth(MHz)	99 % Bandwidth(MHz)	Result
5745	24.226	18.495	Complies
5785	25.615	18.408	Complies
5805	24.226	18.234	Complies

- See next pages for actual measured spectrum plots.

### **Minimum Standard:**

## Measurement Setup

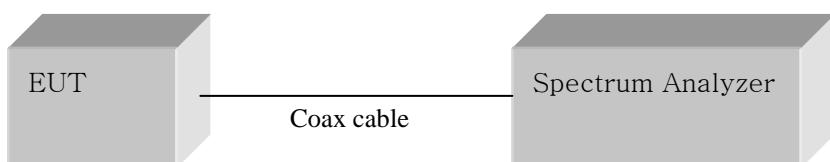
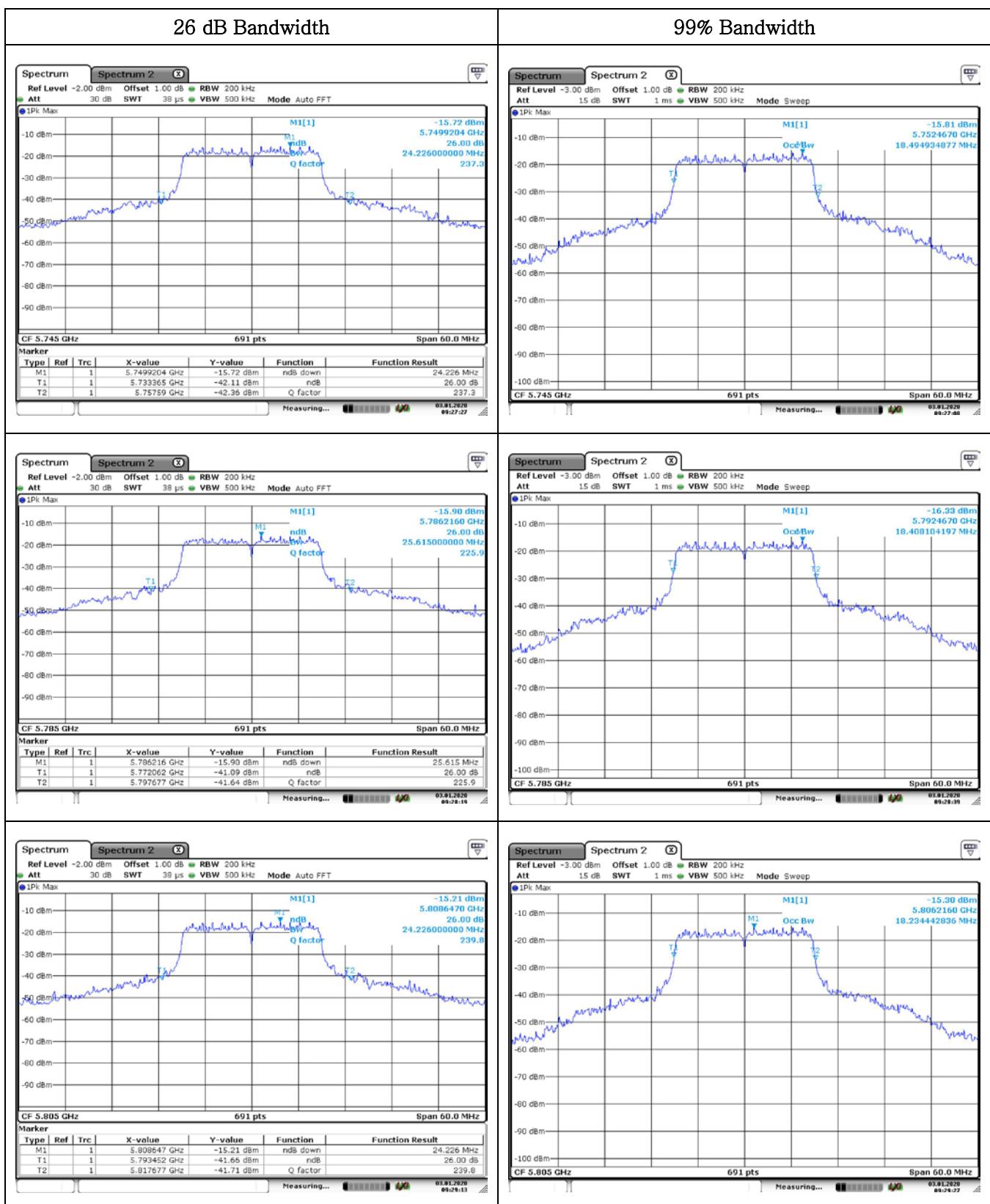


Figure 1: Measurement setup for the carrier frequency separation



### 3.2.2 Peak Output Power Measurement

#### Procedure:

Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Set RBW = 1 MHz. Span  $\geq$  3 X RBW

VBW = 3 X RBW Sweep = auto

Detector = RMS

#### Measurement Data : **Complies**

##### 802.11 ac20 Mode

Frequency (MHz)	Test Results	
	Measured data (dBm)	Result
5745	-9.04	Complies
5785	-8.77	Complies
5805	-8.65	Complies

#### ● Duty cycle

On time : 1.952 ms

Off time : 0.022 ms

Duty cycle =  $1.952/(1.952 + 0.022) * 100 = 98.89\%$

- See next pages for actual measured spectrum plots.

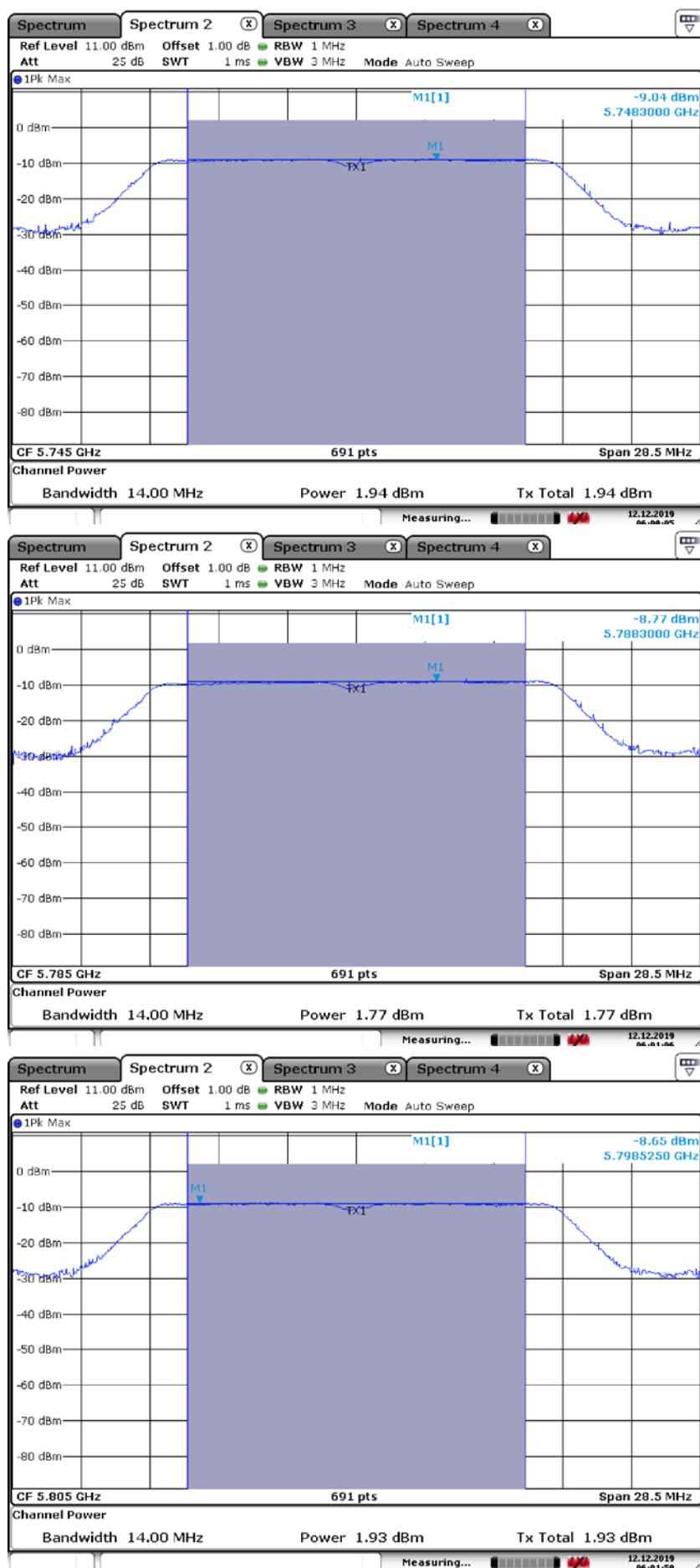
#### Minimum Standard:

Peak output power	$\leq$ 1 W(30 dBm)
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#### Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

## 802.11 ac20



### 3.2.3 Peak power spectral density

#### Procedure:

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance.

The spectrum analyzer is set to:

Set RBW = 1 MHz

VBW = 3 X RBW

Sweep = auto

Set detector = RMS

Trace = max hold

#### Measurement Data : **Complies**

##### 802.11 ac20 Mode

Frequency (MHz)	Test Results	
	dBm	Result
5745	1.94	Complies
5785	1.77	Complies
5805	1.93	Complies

- See next pages for actual measured spectrum plots.

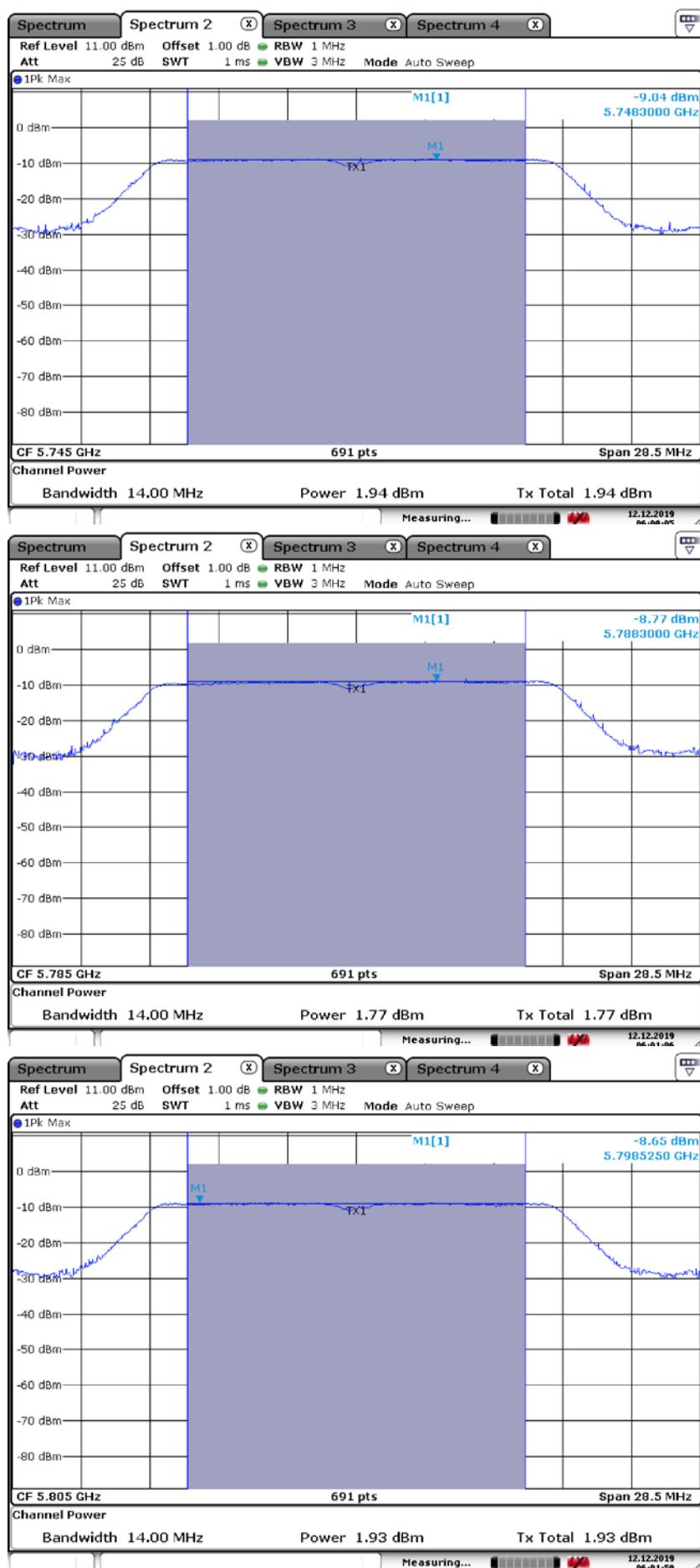
#### Minimum Standard:

Power Density	shall not exceed the lesser of 1 W or 17 dBm + 10 log B
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#### Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

## 802.11 ac20



### 3.2.4 6 dB Bandwidth

#### Procedure:

The bandwidth at 6 dB below the highest in-band spectral density was measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate frequencies.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 6 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is ( as close as possible to ) even with the reference marker level. The marker-delta reading at this point is the 6 dB bandwidth of the emission.

#### The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz

Span = 3 X RBW

VBW = 3 X RBW

Sweep = auto

Trace = max hold

Detector function = peak

#### Measurement Data : **Complies**

##### BLE Mode

Frequency (MHz)	Test Results	
	Measured Bandwidth (kHz)	Result
5745	18.379	Complies
5785	18.379	Complies
5805	18.321	Complies

- See next pages for actual measured spectrum plots.

#### Minimum Standard:

6 dB Bandwidth  $\geq$  500 kHz

#### Measurement Setup

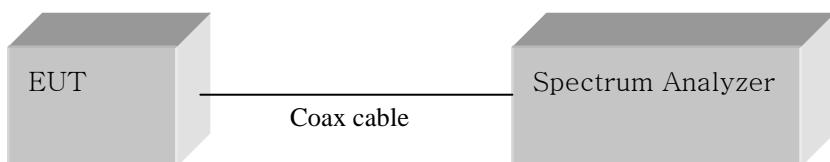
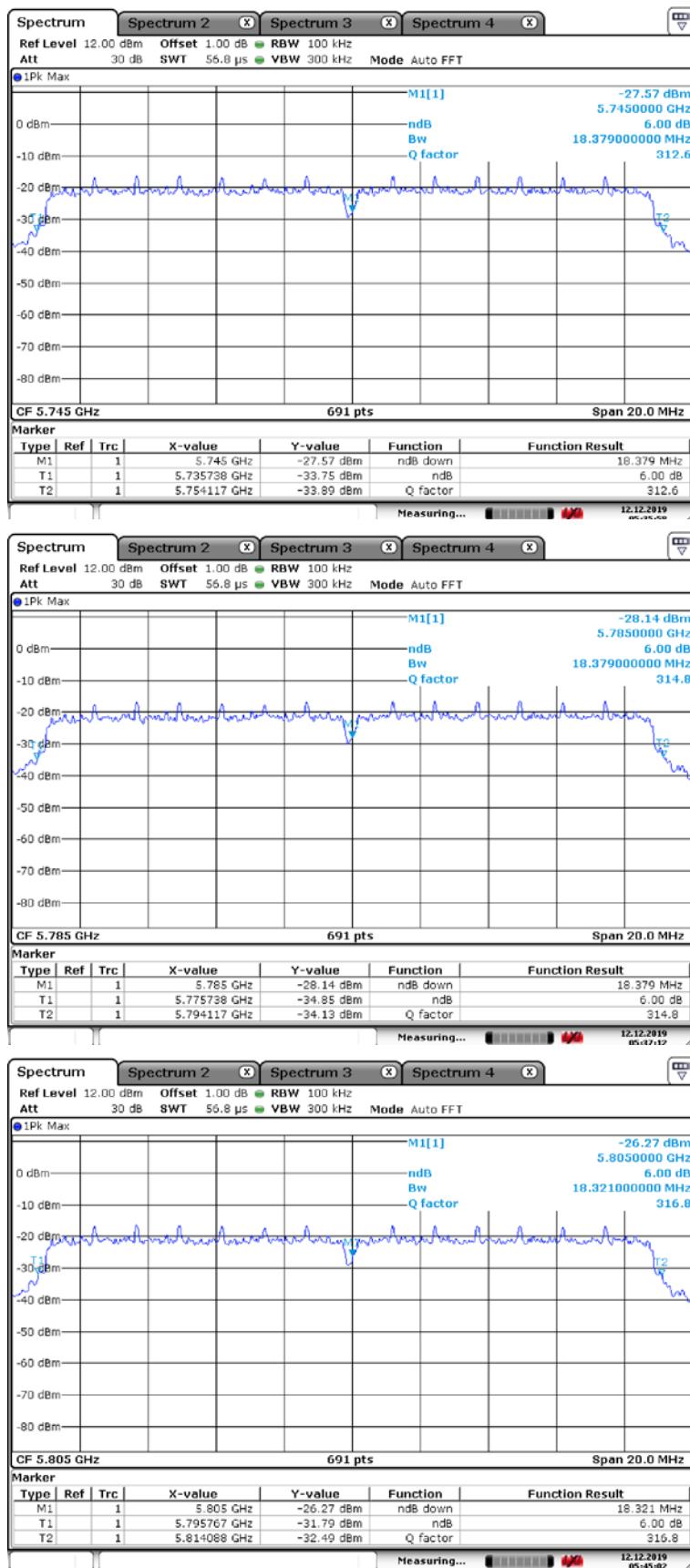


Figure 1: Measurement setup for the carrier frequency separation

## ac20(Low, Middle, High)



### 3.2.5 Band Edge

## Procedure:

For transmitters operating in the 5.725–5.825 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 EIRP of  $-17$  dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of  $-27$  dBm/MHz.

The spectrum analyzer is set to:

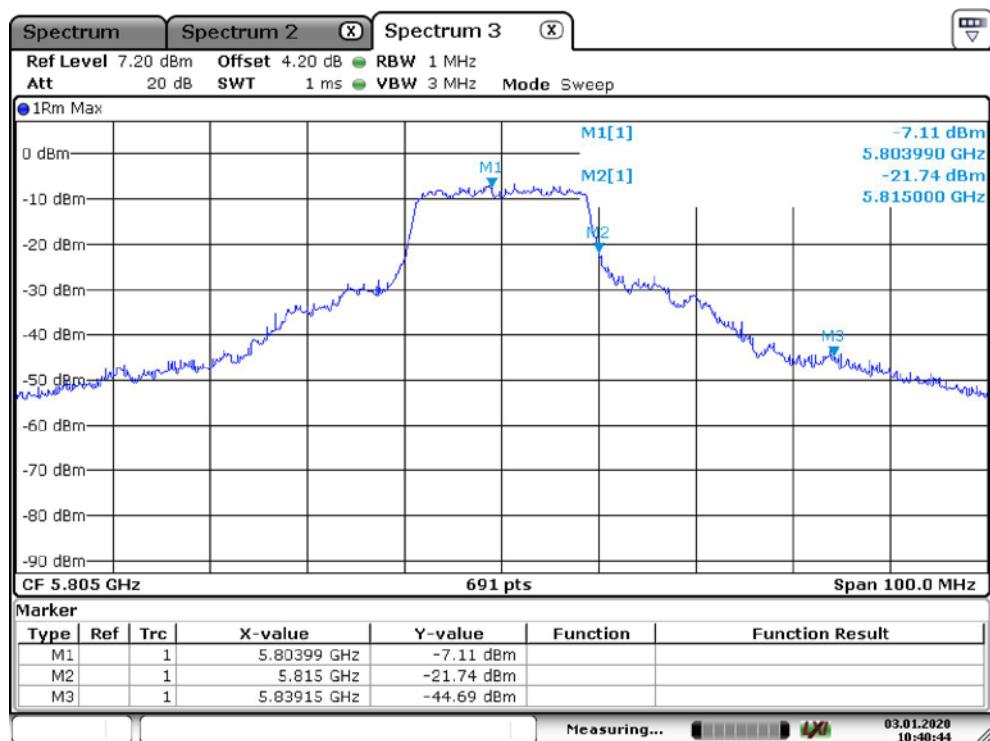
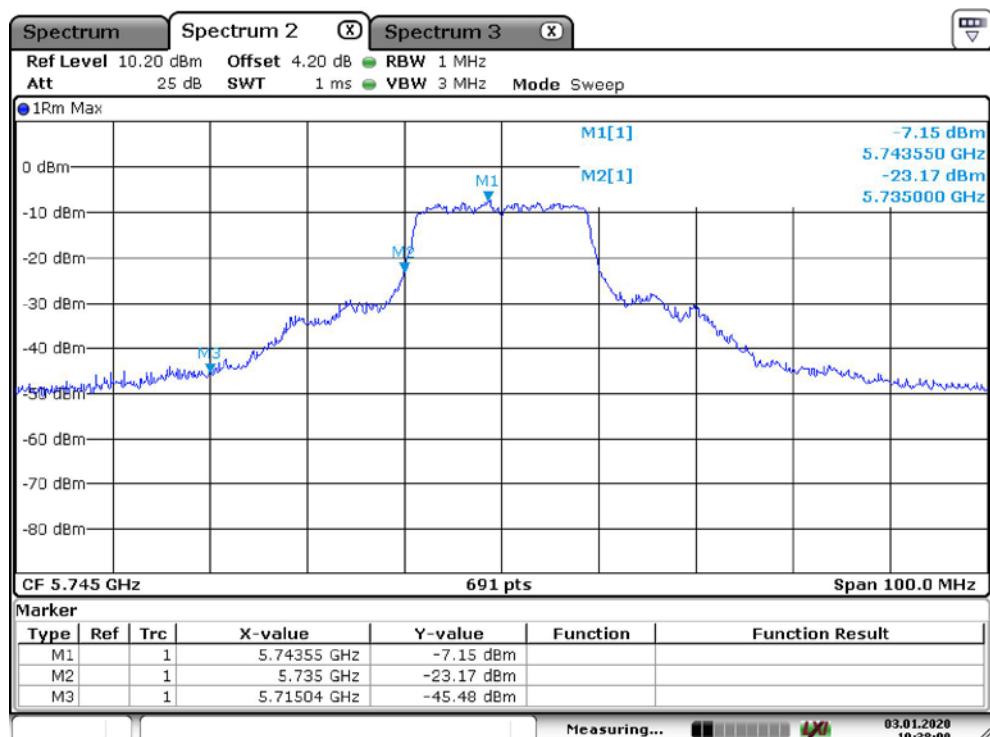
Center frequency = the highest, middle and the lowest channels

Sweep = auto

### **Measurement Data: Complies**

- See next pages for actual measured spectrum plots.

<b>Minimum Standard:</b>	$\leq -17 \text{ dBm/MHz}$
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802.11 ac20

### 3.2.6 Conducted Spurious Emissions

### **Procedure:**

The test follows KDB789033. The conducted spurious emissions were measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, set the marker on the peak of any spurious emission recorded.

The spectrum analyzer is set to:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions

RBW = 100 kHz Sweep = auto

VBW = 100 kHz      Detector function = peak

Trace = max hold

### Measurement Data: Complies

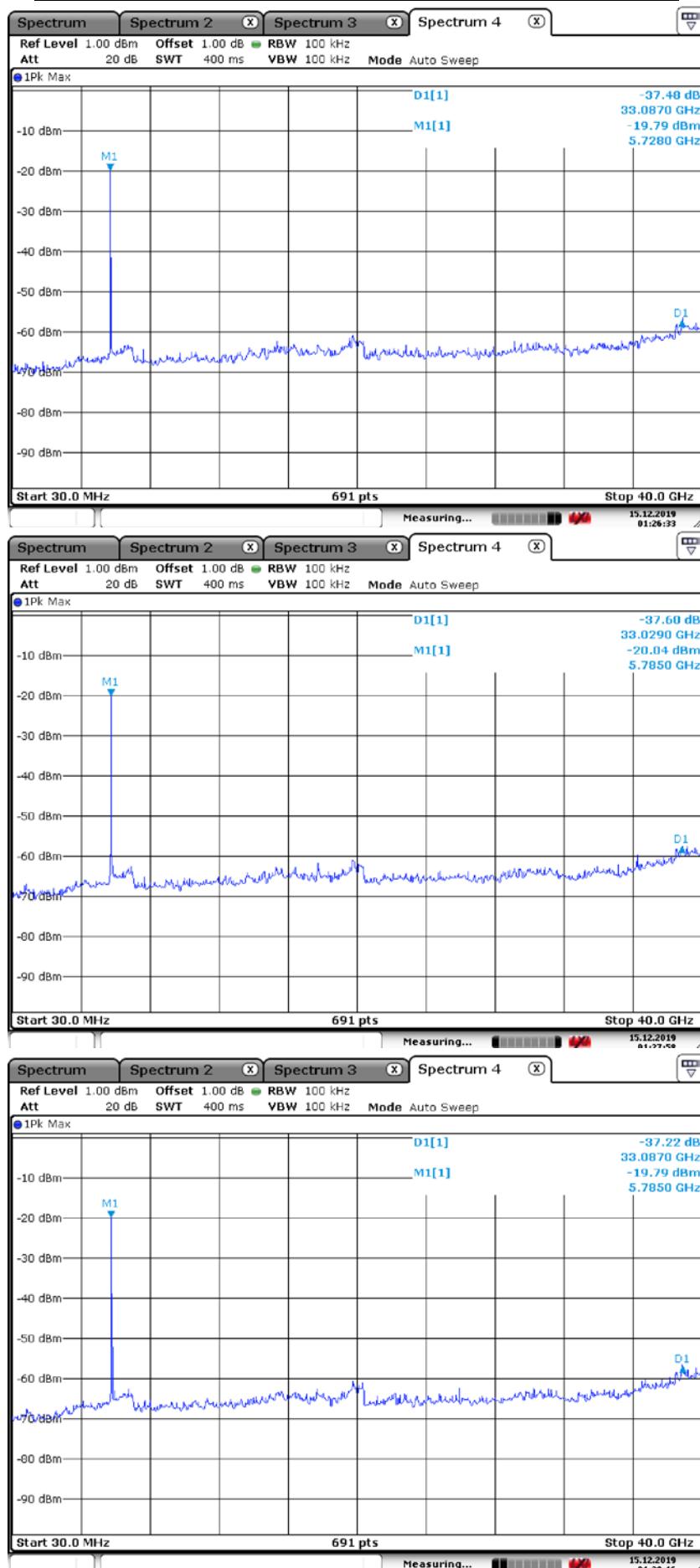
- All conducted emission in any 100 kHz bandwidth outside of the spread spectrum band was at least 27 dB lower than the highest inband spectral density. Therefore the applying equipment meets the requirement.
- See next pages for actual measured spectrum plots.

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<b>Minimum Standard:</b>	$\geq 27 \text{ dBc}$
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## Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

Unwanted Emission – 802.11 ac20 (Low,Middle,High)

### 3.2.7 Radiated Spurious Emissions

#### Procedure:

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defined in ANSI C63.10-2013.

The EUT is placed on a turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

#### The spectrum analyzer is set to:

Center frequency = the worst channel

Frequency Range = 9 kHz ~ 10<sup>th</sup> harmonic.

RBW = 120 kHz ( 30 MHz ~ 1 GHz)

VBW  $\geq$  RBW

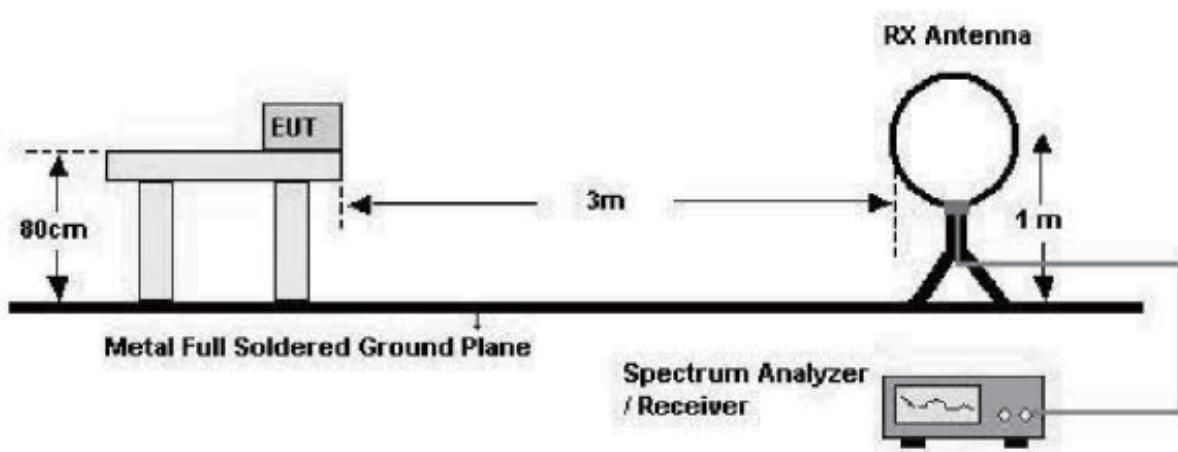
= 1 MHz ( 1 GHz ~ 10<sup>th</sup> harmonic )

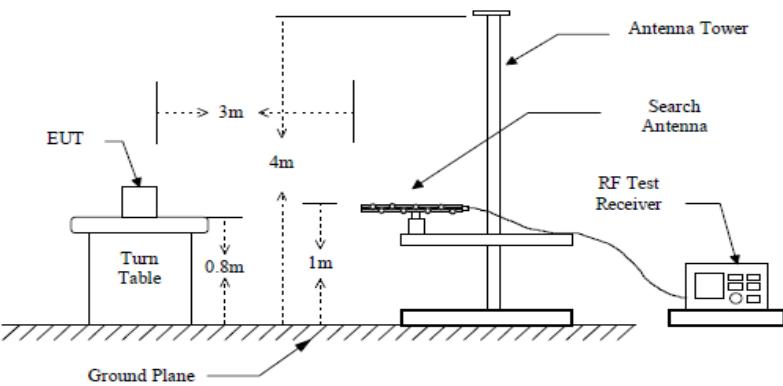
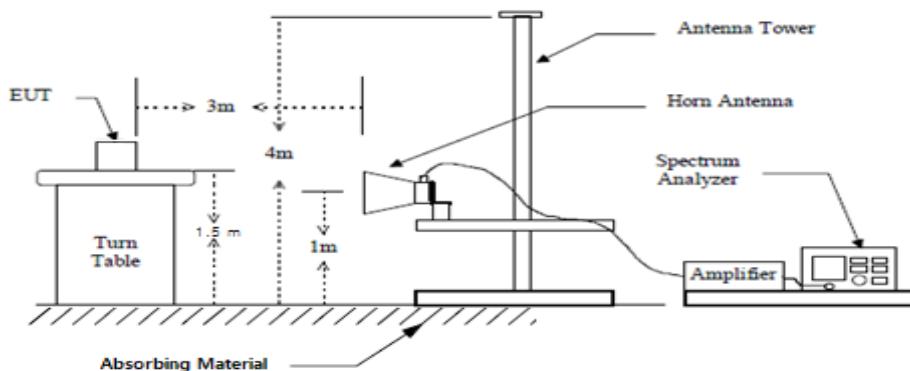
Trace = max hold

Detector function = peak

Sweep = auto

#### below 30 MHz



**below 1 GHz (30 MHz to 1 GHz)****above 1 GHz****Measurement Data: Complies**

- See next pages for actual measured data.
- No other emissions were detected at a level greater than 20 dB below limit include from 9 kHz to 30MHz.
- The test results for the worst of the various operating modes are presented in accordance with 6.3.4 of ANSI C63.10.
- Checked with a red circle is the fundamental frequency.

**Minimum Standard: FCC Part 15.209(a)**

<b>Frequency (MHz)</b>	<b>Limit (uV/m) @ 3 m</b>
0.009 ~ 0.490	2400/F(kHz) (@ 300 m)
0.490 ~ 1.705	24000/F(kHz) (@ 30 m)
1.705 ~ 30	30(@ 30 m)
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

\*\* Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

Radiated Emissions – WLAN 5 GHz mode

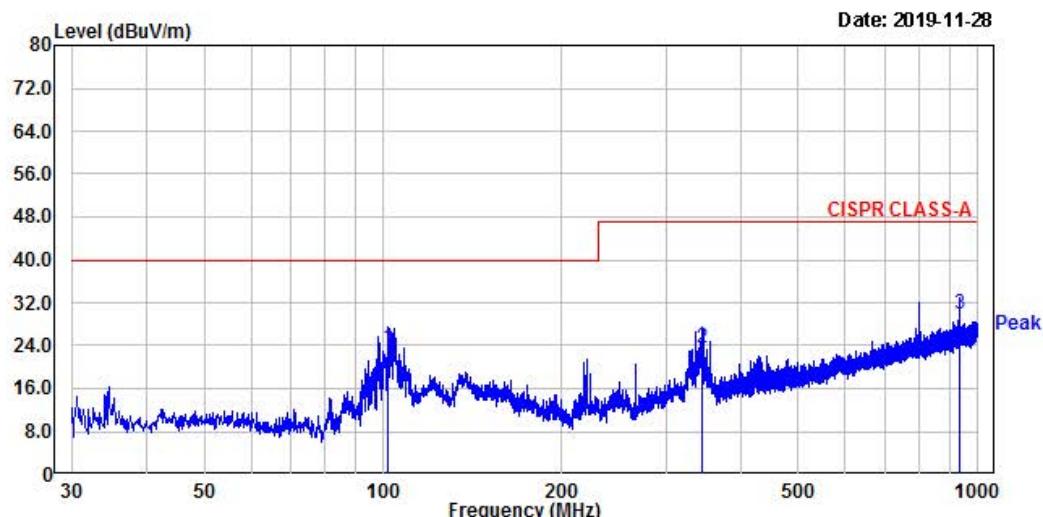
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Yongin-si, Gyeonggi-do, Korea  
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Fax : +82-31-3236010  
www.ltalab.com

EUT/Model No.: Skylark

Temp/Humi: 23 °C / 42 % R.H.

Test Mode : WLAN 5G

Tested by:



No.	Freq MHz	Reading dB $\mu$ V	C.F dB	Result dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB	Height cm	Angle deg	Polarity
1.	101.78	40.49	-16.96	23.53	40.00	16.47	215	21	horizontal
2.	345.01	33.32	-9.78	23.54	47.00	23.46	321	158	horizontal
3.	933.43	28.82	1.08	29.90	47.00	17.10	120	15	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



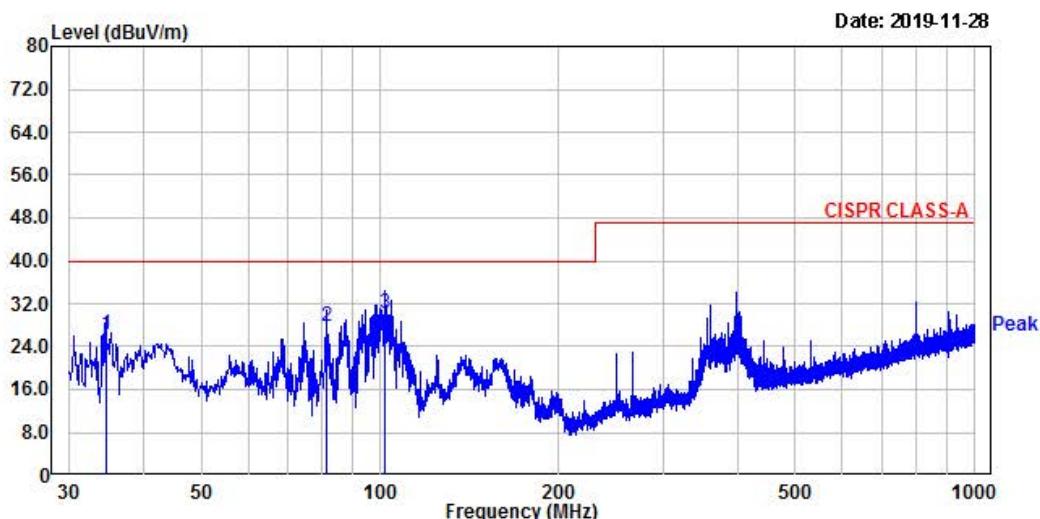
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EUT/Model No.: Skylark

Temp/Humi: 23 °C / 42 % R.H.

Test Mode : WLAN 5G

Tested by:



No.	Freq MHz	Reading dB $\mu$ V	C.F dB	Result QP dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB	Height cm	Angle deg	Polarity
1.	34.61	42.80	-16.61	26.19	40.00	13.81	132	156	vertical
2.	81.41	46.48	-18.78	27.70	40.00	12.30	103	156	vertical
3.	101.90	47.27	-16.94	30.33	40.00	9.67	151	189	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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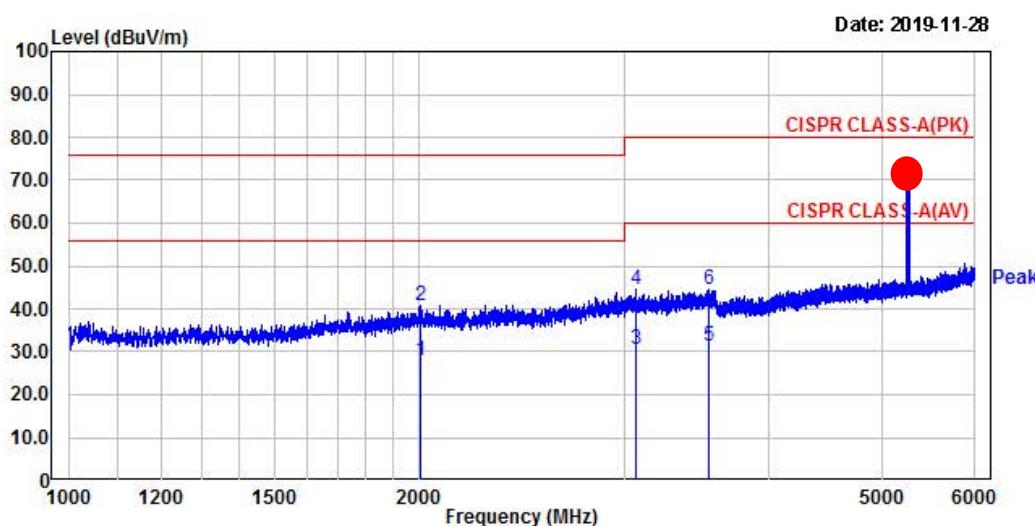
EUT/Model No.: Skylark

Temp/Humi: 23 °C / 42 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F	Result		Result		Limit		Limit		Margin	Margin	Height	Angle	Polarity
					PK	AV	PK	AV	PK	AV	PK	AV					
MHz	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB	cm	deg		
2.	2001.88	39.73	26.73	1.06	40.79	27.79	76.00	56.00	35.21	28.21	100	25	horizontal				
4.	3068.13	38.62	24.62	5.79	44.41	30.41	80.00	60.00	35.59	29.59	100	132	horizontal				
6.	3547.50	37.14	24.14	7.20	44.34	31.34	80.00	60.00	35.66	28.66	100	255	horizontal				

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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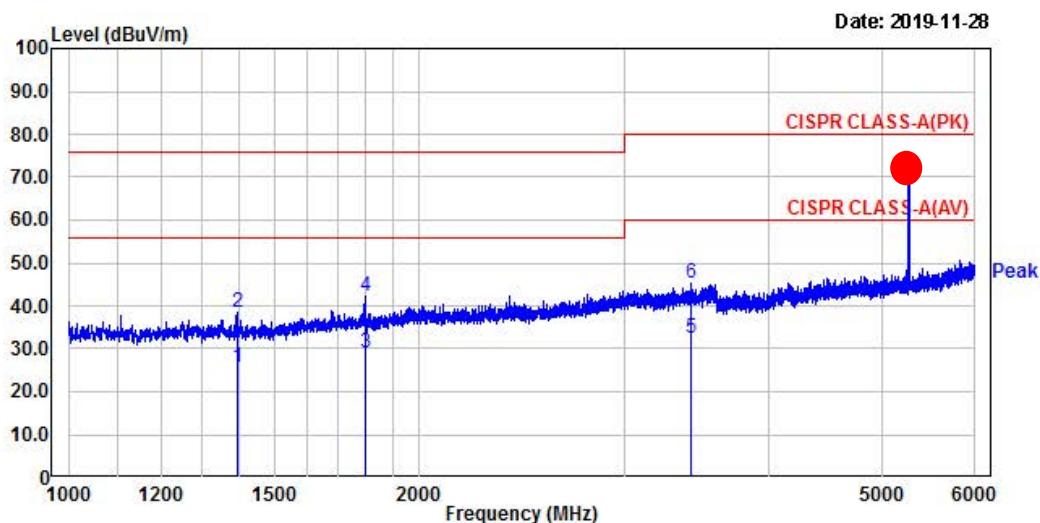
EUT/Model No.: Skylark

Temp/Humi: 23 °C / 42 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F	Result		Result		Limit		Limit		Margin	Margin	Height	Angle	Polarity
					PK	AV	PK	AV	PK	AV	PK	AV					
MHz	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB	cm	deg		
2.	1393.13	42.87	29.87	-4.48	38.47	25.47	76.00	56.00	37.53	30.53	100	289	vertical				
4.	1795.63	43.09	30.09	-0.92	42.17	29.17	76.00	56.00	33.83	26.83	100	123	vertical				
6.	3430.00	38.51	25.51	6.77	45.28	32.28	80.00	68.00	34.72	27.72	100	154	vertical				

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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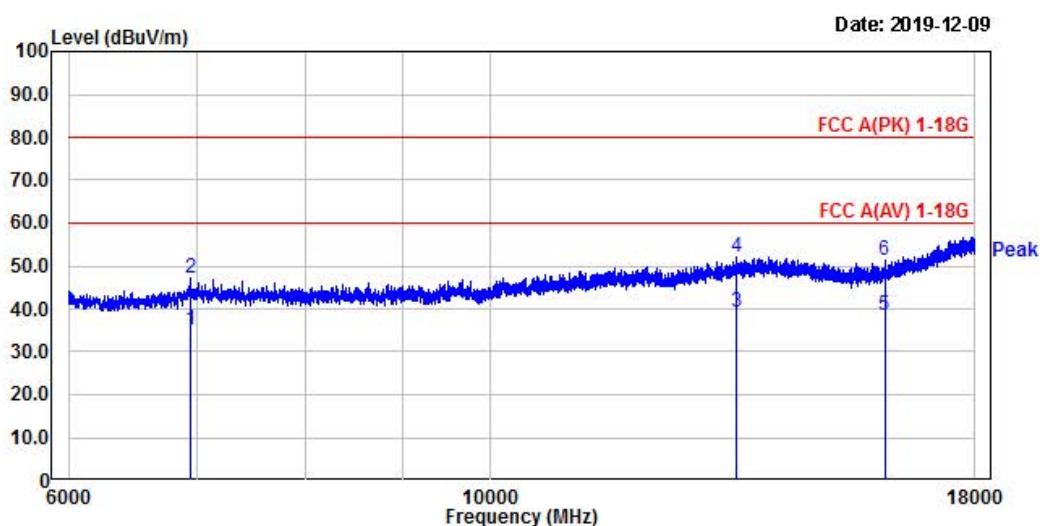
EUT/Model No.: Skylark

Temp/Humi: 22 'C / 41 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F	Result		Result		Limit		Margin		Margin	Height	Angle	Polarity
					PK	AV	PK	AV	PK	AV	PK	AV				
MHz	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB $\mu$ V	dB	dB	cm	deg				
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.	6948.00	38.00	26.00	9.27	47.27	35.27	88.00	60.00	32.73	24.73	100	208	horizontal			
4.	13485.00	35.39	22.39	16.79	52.18	39.18	88.00	60.00	27.82	20.82	100	162	horizontal			
6.	16144.50	36.03	23.03	15.39	51.42	38.42	88.00	60.00	28.58	21.58	100	354	horizontal			

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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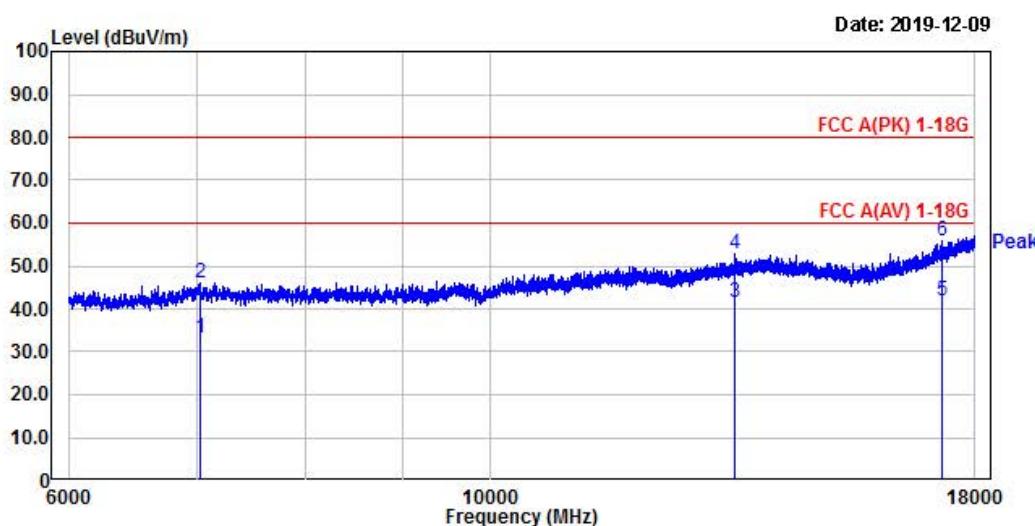
EUT/Model No.: Skylark

Temp/Humi: 22 'C / 41 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F	Result		Result		Limit		Limit		Margin	Margin	Height	Angle	Polarity
					PK	AV	PK	AV	PK	AV	PK	AV					
	MHz	dB $\mu$ V	dB $\mu$ V		dB	dB $\mu$ V		dB $\mu$ V	dB	dB $\mu$ V	dB	dB	cm	deg			
2.	7027.50	36.70	23.70	9.39	46.09	33.09	88.00	60.00	33.91	26.91	100	360	vertical				
4.	13471.50	35.92	24.92	16.76	52.68	41.68	88.00	60.00	27.32	18.32	100	235	vertical				
6.	17301.00	35.76	21.76	20.20	55.96	41.96	88.00	60.00	24.04	18.04	100	142	vertical				

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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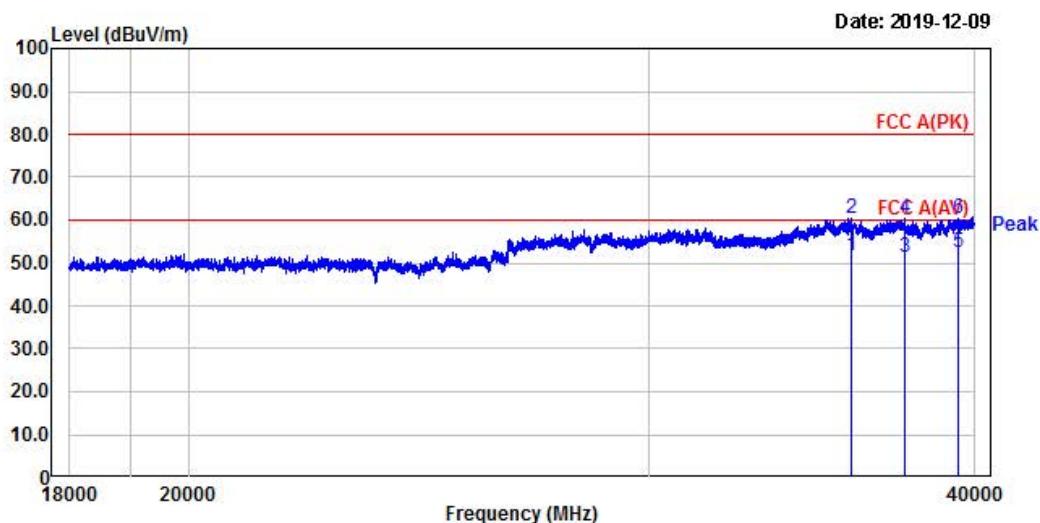
EUT/Model No.: Skylark

Temp/Humi: 22 'C / 41 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F		Result		Result		Limit		Limit		Margin		Margin		Height		Angle		Polarity	
				PK	AV	PK	AV	PK	AV	PK	AV	PK	AV	PK	AV	PK	AV	cm	deg				
2.	35883.25	37.20	28.20	23.32	60.52	51.52	80.00	60.00	19.48	8.48	100	50	horizontal										
4.	37629.50	36.53	27.53	23.66	60.19	51.19	80.00	60.00	19.81	8.81	100	7	horizontal										
6.	39447.25	36.40	28.40	23.88	60.28	52.28	80.00	60.00	19.72	7.72	100	96	horizontal										

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



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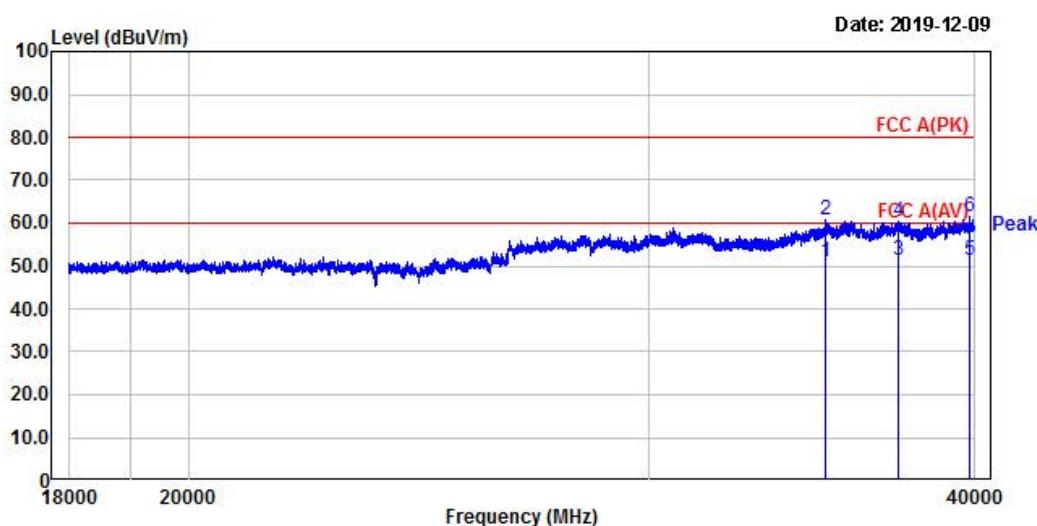
EUT/Model No.: Skylark

Temp/Humi: 22 'C / 41 % R.H.

Test Mode : WLAN 5G

Tested by:

Power :



No.	Freq	RD	RD	C.F		Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Polarity
				PK	AV									
	MHz	dB $\mu$ V	dB $\mu$ V	dB	dB $\mu$ V	dB	dB	cm	deg					
2.	35083.00	38.48	28.48	22.30	60.78	50.78	80.00	60.00	19.22	9.22	100	124	vertical	
4.	37420.50	36.51	27.51	23.74	60.25	51.25	80.00	60.00	19.75	8.75	100	155	vertical	
6.	39837.75	37.13	27.13	24.34	61.47	51.47	80.00	60.00	18.53	8.53	100	285	vertical	

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

### 3.2.8 AC Conducted Emissions

#### Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

**Minimum Standard: FCC Part 15.207(a) / EN 55022**

**Measurement Data: N/A**

#### Class B

Frequency Range	quasi-peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

\* Decreases with the logarithm of the frequency

**APPENDIX**  
**TEST EQUIPMENT USED FOR TESTS**

	<b>Use</b>	<b>Description</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Manufacturer</b>	<b>Interval</b>	<b>Next Cal. Date</b>
1	■	Signal Analyzer (9 kHz ~ 30 GHz)	FSV30	100757	R&S	1 year	2020-09-06
2	■	Signal Generator (~3.2 GHz)	8648C	3623A02597	HP	1 year	2020-03-20
3		SYNTHESIZED CW GENERATOR	83711B	US34490456	HP	1 year	2020-03-20
4		Attenuator (3 dB)	8491A	37822	HP	1 year	2020-09-06
5		Attenuator (10 dB)	8491A	63196	HP	1 year	2020-09-06
6	■	EMI Test Receiver (~7 GHz)	ESCI7	100722	R&S	1 year	2020-09-06
7		RF Amplifier (~1.3 GHz)	8447D OPT 010	2944A07684	HP	1 year	2020-09-06
8		RF Amplifier (1~26.5 GHz)	8449B	3008A02126	HP	1 year	2020-03-20
9	■	Horn Antenna (1~18 GHz)	3115	00114105	ETS	2 year	2020-08-04
10		DRG Horn (Small)	3116B	81109	ETS-Lindgren	2 year	2020-03-18
11		DRG Horn (Small)	3116B	133350	ETS-Lindgren	2 year	2020-03-18
12	■	TRILOG Antenna	VULB 9160	9160-3237	SCHWARZBECK	2 year	2021-03-20
13		Temp.Humidity Data Logger	SK-L200TH II A	00801	SATO	1 year	2020-03-20
14		Splitter (SMA)	ZFSC-2-2500	SF617800326	Mini-Circuits	-	-
15	■	DC Power Supply	6674A	3637A01657	Agilent	-	-
17	■	Power Meter	EPM-441A	GB32481702	HP	1 year	2020-03-20
18	■	Power Sensor	8481A	3318A94972	HP	1 year	2020-09-06
19		Audio Analyzer	8903B	3729A18901	HP	1 year	2020-09-06
20		Moduleation Analyzer	8901B	3749A05878	HP	1 year	2020-09-06
21		TEMP & HUMIDITY Chamber	YJ-500	LTAS06041	JinYoung Tech	1 year	2020-09-06
22		Stop Watch	HS-3	812Q08R	CASIO	2 year	2020-03-18
23		LISN	KNW-407	8-1430-1	Kyoritsu	1 year	2020-09-06
24		Two-Lime V-Network	ESH3-Z5	893045/017	R&S	1 year	2020-03-18
25		UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	106243	R&S	1 year	2020-03-18
26		Highpass Filter	WHKX1.5/15G-10SS	74	Wainwright Instruments	1 year	2020-03-18
27		Highpass Filter	WHKX3.0/18G-10SS	118	Wainwright Instruments	1 year	2020-03-18
28		OSP120 BASE UNIT	OSP120	101230	R&S	1 year	2020-03-18
29		Signal Generator(100 kHz ~ 40 GHz)	SMB100A03	177621	R&S	1 year	2020-03-18
30		Signal Analyzer (10 Hz ~ 40 GHz)	FSV40	101367	R&S	1 year	2020-03-18
31	■	Active Loop Antenna	FMZB 1519	1519-031	SCHWARZBECK	2 year	2021-02-26