

Report No.: MH/2018/10036 IC: 6369A-VLTWX0

Page: 1 of 23

# FCC CERTIFICATION REPORT Canada ISED ICES-003 TEST REPORT

Test Report No. : MH/2018/10036

**Applicant** : Huawei Technologies Co., Ltd.

**Address** : Administration Building, Headquarters of Huawei Technologies Co.,

> Ltd., Bantian, Longgang District, Shenzhen, 518129, China (For FCC) Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China (Peoples

Republic Of) (For IC)

Manufacturer : Huawei Technologies Co., Ltd.

**Address** : Administration Building, Headquarters of Huawei Technologies Co.,

> Ltd., Bantian, Longgang District, Shenzhen, 518129, China (For FCC) Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China (Peoples

Republic Of) (For IC)

**Equipment Under Test (EUT):** 

**Product Name** : HUAWEI MateBook **Brand Name** : HUAWEI; honor

: VLT-W10 Model No.

: VLT-W50; VLT-W60 Added Model(s)

**Standards** : FCC Part 15:2017, Subpart B, Class B

Canada ICES-003 Issue 6(June 2016), Class B

**Date of Receipt** : Jan. 08, 2018 **Date of Test** : Jan. 08 ~ 16, 2018

Date of Issue : Mar.08, 2018

Test Result: **PASS** 

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

#### Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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Tested By: Date: Mar.08, 2018

Bill Cheng (Engineer)

Date: Mar.08, 2018 Approved By:

> Tony Hsu (Assistant Supervisor)

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: QISVLT-WX0 Report No.: MH/2018/10036

Page: 2 of 23

## **Revision History**

Report Number	Revision	Description	Issue Date
MH/2018/10036	Rev.00	Initial creation of document	Mar.08, 2018

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Report No.: MH/2018/10036

Page: 3 of 23

## **Contents**

1. GENERAL INFORMATION	4
1.1 APPLICANT & MANUFACTURER INFORMATION	4
1.2 GENERAL DESCRIPTION OF EUT	4
1.3 DETAILS OF EUT	5
1.4 THE WORST CASE OF THE EUT	6
1.5 DESCRIPTION OF SUPPORT UNITS	7
1.6 OPERATION PROCEDURE	7
1.7 MODIFICATION LIST	7
1.8 TEST SET-UP CONFIGURATION	8
1.9 Accessories Cable List	8
1.10 MEASUREMENT PROCEDURE	9
1.11 STANDARDS APPLICABLE FOR TESTING	9
1.12 SUMMARY OF RESULTS	9
2. EMISSION	10
2.1 TEST RESULTS	10
2.2 FREQUENCY RANGE	10
2.3 LIMITS OF CONDUCTED AND RADIATED EMISSION	11
2.3.1 LIMITS OF CONDUCTED EMISSION	11
2.3.2 LIMITS OF RADIATED EMISSIONS	11
2.4.Test of Conducted Emission	13
2.4.1 TEST EQUIPMENTS	13
2.4.2 OPERATING ENVIRONMENT	14
2.4.3 MEASUREMENT LEVEL CALCULATION	14
2.4.4 MEASUREMENT DATA:	15
2.5 TEST OF RADIATED EMISSION	17
2.5.1 TEST EQUIPMENTS	17
2.5.2 OPERATING ENVIRONMENT	19
2.5.3 MEASUREMENT LEVEL CALCULATION	19
2.5.4 MEASUREMENT DATA	20

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IC: 6369A-VLTWX0 Page: 4 of 23

# 1. General Information

## 1.1 Applicant & Manufacturer Information

Applicant : Huawei Technologies Co., Ltd.

Address : Administration Building, Headquarters of Huawei Technologies

Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China

Report No.: MH/2018/10036

(For FCC)

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Manufacturer : Huawei Technologies Co., Ltd.

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Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China

(Peoples Republic Of) (For IC)

## 1.2 General Description of EUT

Product Name : HUAWEI MateBook

Brand Name : HUAWEI; honor

Model No. : VLT-W10

Added Model(s) : VLT-W50; VLT-W60

Model Difference: The marketing purposed

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Report No.: MH/2018/10036

Page: 5 of 23

#### 1.3 Details of EUT

Power Supply	AC100~240V			
Highest operate description	4 GHz			
AC Adapter	Huawei	HW-200325YYY (Y=0-9,A-Z or blank)		
Adapter Power Rating	I/P: 100-240VAC, 50/	•		
	O/P: 5VDC, 2A; 9VD0	C, 2A; 12VDC, 2A; 15VDC, 3A; 20VDC,		
	3.25A			
DC Power Cable Type	Shielded, 1.8m (Detac	chable) to Power Adapter		
Memory	on Board			
CPU	Intel	Up to 4GHz		
Main Board	Quanta	H96A		
Graphics	Integrated Graphic			
	NVIDIA N17S			
LCD Panel	BOE	TV14YYY-YYY(Y=0-9,A-Z or blank)		
	AUO	B14YYYYYY.Y(Y=0-9,A-Z or blank)		
	INNOLUX	N14YYYY-YYY(Y=0-9,A-Z or blank)		
WLAN + BT	Intel	8265HUW		
Storage	One PCIE/SATA Storage Device			
Battery	One re-chargeable battery pack			
Camera	One Camera optional			

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Report No.: MH/2018/10036

Page: 6 of 23

#### Pre-test Mode

Mode	CPU	LCD Panel	Main Board	Memory	SATA SSD / PCIE SSD	WLAN + BT	Battery	Graphics	AC Adapter
1	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SAMSUNG MZVLB512HAJQ-00000 (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
2	Intel Up to 4GHz	BOE TV14FHM-NH0	Quanta H96A	DDR4 8GB	LITEON CV8-8E128 (128GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
3	Intel Up to 4GHz	INNOLUX N140HCA-EAC	Quanta H96A	DDR4 16GB	LITEON CV8-8E256 (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
4	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	LITEON CV8-8E512 (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
5	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	MICRON MTFDDAV256TBN-1AR12ABYY (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
6	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	MICRON MTFDDAV512TBN-1AR12ABYY (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
7	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SAMSUNG MZNLN128HAHQ-00000 (128GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
8	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SAMSUNG MZNLN256HAJQ-00000 (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
9	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SAMSUNG MZNLN512HAJQ-00000 (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
10	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SANDISK SD9SN8W-128G-1027 (128GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
11	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SANDISK SD9SN8W-256G-1027 (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
12	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SANDISK SD9SN8W-512G-1027 (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
13	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	LITEON CA3-8D256 (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
14	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	LITEON CA3-8D512 (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
15	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	SAMSUNG MZVLW256HEHP-00000 (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
16	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	Toshiba KXG50ZNV256G (256GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0
17	Intel Up to 4GHz	AUO B140HAK03.0	Quanta H96A	DDR4 16GB	Toshiba KXG50ZNV512G (512GB)	Intel 8265HUW	Huawei HB4593R1ECW	NVIDIA N17S	Huawei HW-200325UP0

#### 1.4 The worst case of the EUT

EUT will be carried out in the worst case as followings:

Worst Case	
CE	Mode 1 (1920 x 1080 Resolution)
RE	Mode 1 (1920 x 1080 Resolution)

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IC: 6369A-VLTWX0 Page: 7 of 23

Report No.: MH/2018/10036

## 1.5 Description of Support Units

#### Mode 1:

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
Monitor (RE,HRE)	DELL	P2415Qb	CN-0GTTPW-74261-559- 0AUL
Monitor (CE)	ASUS	MX27U	H5LMRS055345
Mouse (10M,CE,HRE)	Logitech	M-U0026	1738HS05FGU8
Earphone (RE,HRE)	htc	N/A	N/A
Earphone (CE)	SONY	MDR-E9LP	N/A
HDD (10M,CE,HRE)	Transcend	StoreJet 25M3 1TB	D70559-1523
BT Speaker	Creative	MF8090	YFMF8090245R00855Y
AP	ZyXEL	NBG6503	S130F23003375
Notebook	DELL	Latitude E6440	3VGS162

## **Support Equipment Used in Tested Cable**

#### Mode 1:

Cable Type	Core	Length	Shielding/Non-shielding
HDMI	N/A	1.8m	Shielding
HDD USB	N/A	1m	Shielding
Mouse USB	N/A	1.8m	Shielding
Earphone	N/A	2m	Non-shielding

## 1.6 Operation Procedure

#### Mode 1:

- 1. Turn on the power of all equipment.
- 2. The EUT communicates with BT Speaker by Bluetooth radio.
- 3. The EUT communicates with Wireless AP by WIFI radio.
- 4. The EUT read(s)/write(s) disk through Win EMC test software.
- 5. The EUT displays H pattern through Win EMC test software.
- Executed AMCAP2 software to turn-on the CCD.
- 7. Setup the condition for test mode, and begin the test.

#### 1.7 Modification List

No modification was made by SGS Taiwan Electronics & Communication Laboratory.

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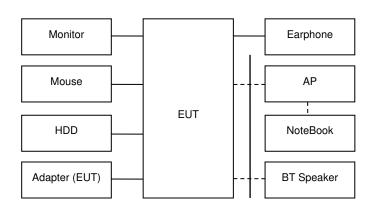
IC: 6369A-VLTWX0

Report No.: MH/2018/10036

Page: 8 of 23

## 1.8 Test Set-Up Configuration

Mode 1



#### 1.9 Accessories Cable List

See clause 1.3 of this report

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Report No.: MH/2018/10036

Page: 9 of 23

#### 1.10 Measurement Procedure

Conducted Emission Testing was performed according to ANSI C63.4:2014 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded room wall.

Radiated Emission Testing was performed according to ANSI C63.4:2014 at the 3/10m semi-anechoic chamber. The EUT was placed on a 0.8m high table along with the peripherals. The turn table was placed 10m distance from the antenna. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for production of maximum emission.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Maximum emission levels are then reported.

## 1.11 Standards Applicable for Testing

Tests to be carried out under FCC Part 15. Subpart B/CISPR 22

determined but direction in the state of the				
Test Standards	Status			
FCC Part 15, Subpart B	Applicable			
Deviation from Standard	No deviation			

#### 1.12 Summary of Results

Highest Emission					
Standard Test Type Result Phase/Pol. Frequency(MHz) Margin(dB)					
FCC Part 15 Subpart B	Conducted Emission	DACC	Line	0.1660	-21.62 (QP)
Class B	Conducted Emission	PASS	Neutral	0.1700	-21.34 (QP)
Canada ICES-003 Issue 6 (June 2016),Class B	Radiated Emission	PASS	Ver.	17983.000	-5.04 (peak)

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IC: 6369A-VLTWX0 Page: 10 of 23

Report No.: MH/2018/10036

## 2. EMISSION

#### 2.1 Test Results

	Results
Conducted Emission	Pass
Radiated Emission	Pass

### 2.2 Frequency Range

## FCC Part 15, Subpart B:

Conducted Emission : 150 kHz - 30 MHz Radiated Emission : See below table

Highest frequency generated or Upper frequency of measurement used in the device or on which the range (MHz)

device operates or tunes (MHz)

\_\_\_\_\_

Below 1.705 30 1.705 - 108 1000 108 - 500 2000 500 - 1000 5000

Above 1000 5th harmonic of the highest frequency or

40 GHz, whichever is lower

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Report No.: MH/2018/10036

Page: 11 of 23

#### 2.3 Limits of Conducted and Radiated Emission

## 2.3.1 Limits of Conducted Emission

## FCC Part 15, Subpart B/CISPR 22:

FREQUENCY	Class A	Class A (dBuV)		(dBuV)
(MHz)	Quasi - peak	Average	Quasi - peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified above.

#### 2.3.2 Limits of Radiated Emissions

## FCC Part 15, Subpart B Limit:

Detector Function : Quasi – Peak

FREQUENCY	Class A (at 10m)	Class B (at 3m)
(MHz)	dBuV/m	dBuV/m
30~88	39	40
88~216	43.5	43.5
216~960	46.44	46
Above 960	49.54	54

Detector Function : Peak , Average

FREQUENCY	Class A (dBi	uV/m) (at 3m)	Class B (dBuV/m) (at 3m		
(MHz)	Peak	Average	Peak	Average	
Above 1000-18000	79.3	59.3	73.9	53.9	

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IC: 6369A-VLTWX0

Report No.: MH/2018/10036

Page: 12 of 23

#### **CISPR 22 Limit:**

Detector Function : Quasi – Peak

FREQUENCY	Class A (at 10m)	Class B (at 10m)
(MHz)	dBuV/m	dBuV/m
30-230	40	30
230-1000	47	37

NOTE 1 The lower limit shall apply at the transition frequency.

NOTE 2 Additional provisions may be required for cases where interference occurs.

FREQUENCY	Class A (dB	uV/m) (at 3m)	Class B (dBuV/m) (at 3m)		
(GHz)	Average	Peak	Average	Peak	
1~3	56	76	50	70	
3~6	60	80	54	74	

NOTE The lower limit applies at the transition frequency.

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IC: 6369A-VLTWX0

Report No.: MH/2018/10036

Page: 13 of 23

#### 2.4.Test of Conducted Emission

## 2.4.1 Test Equipments

	SGS Conducte	ed_Emission HWA	YA Conducted Roo	om No.A_EMC	
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI 3	101311	2017/6/23	2018/6/22
Coaxial Cables	EMC Instruments Corp	EMCRG58-BM- BM-3000	160812	2017/8/12	2018/8/11
LISN	SCHWARZBECK	NSLK 8127	8127-648	2017/6/18	2018/6/17
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2017/8/12	2018/8/11
LISN	Schwarzbeck	NSLK 8128	NSLK8128-300	2017/9/4	2018/9/3
ISN	TESEQ	ISN T800	34384	2017/3/23	2018/3/22
ISN	TESEQ	ISN ST08	36271	2017/9/30	2018/9/29
RF Current Probe	SCHWARZBECK	SW 9605	SW 9605-138	2017/10/13	2018/10/12
Capacitive Voltage Probe	SCHWARZBECK	CVP 9222	9222-031	2017/10/13	2018/10/12
DC LISN	SCHWARZBECK	NNBM 8124	8124-564	2017/12/6	2018/12/5
DC LISN	SCHWARZBECK	NNBM 8124	8124-565	2017/12/6	2018/12/5
High Voltage Probe	SCHWARZBECK	TK 9420	TK 9420-5223	2017/3/8	2018/3/7
Universal Digital Radio Communication Tester	R&S	CMU 200	119988	2017/3/7	2018/3/6
Wideband Radio Communication Tester	R&S	CMW 500	152303	2017/2/23	2018/2/22
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	2017/12/29	2018/12/28
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

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Measurement Uncertainty of Conducted Emission

Expanded uncertainty Ulab(K=2) of conducted emission is 2.25 dB

Expanded uncertainty Ulab(K=2) of ISN conducted emission is 2.57 dB

Theory Valuse uncertainty Ucispr 16-4-2 :2011+A1\_2014 (K=2) of AC mains Conduciton Essission is 3.44dB Theory Valuse uncertainty Ucispr 16-4-2 :2011+A1 2014 (K=2) of ISN Conduciton Essission is 4.59dB

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IC: 6369A-VLTWX0

Report No.: MH/2018/10036

Page: 14 of 23

## 2.4.2 Operating Environment

Temperature: 18 degree C Humidity: 41 %RH

Atmospheric Pressure: 992 mBar

#### 2.4.3 Measurement Level Calculation

Factor = LISN insertion loss + Cable loss+ Pulse Limiter Insertion Loss Measurement Level = Reading Level + Factor Over (Margin) = Measurement Level - Limit

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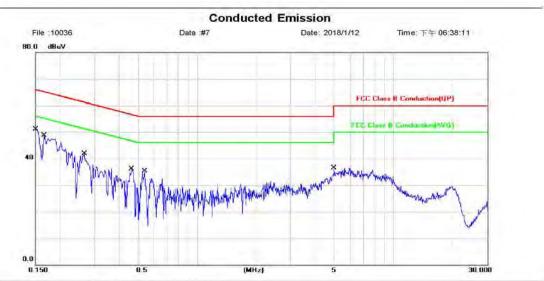
Report No.: MH/2018/10036

Page: 15 of 23

#### 2.4.4 Measurement Data:

Model No.: VLT-W10 Mode 1 L

Conduction Room Temperature: 18 °C Phase: L1 AC 120V/60Hz Humidity: 41 % Limit: FCC Class B Conduction(QP) Power: Mode: Mode 1 Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
- 1		0.1500	44.20	0.04	44.24	66.00	-21.76	QP	
2		0.1500	28.50	0.04	28.54	56.00	-27.46	AVG	
3	*	0.1660	43.50	0.04	43.54	65.16	-21.62	QP	
4		0.1660	26.20	0.04	26.24	55.16	-28.92	AVG	
5		0.2660	36.30	0.03	36.33	61.24	-24.91	QP	
6		0.2660	23.40	0.03	23.43	51.24	-27.81	AVG	
7		0.4660	32.80	0.04	32.84	56.58	-23.74	QP	
8		0.4660	24.30	0.04	24.34	46.58	-22.24	AVG	
9	1	0.5420	31.60	0.05	31.65	56.00	-24.35	QP	
10		0.5420	16.00	0.05	16.05	46.00	-29.95	AVG	
11		4.9940	30.30	0.41	30.71	56.00	-25.29	QP	
12		4.9940	20.50	0.41	20.91	46.00	-25.09	AVG	

\*: Maximum data x:Over limit I:over margin

File :10036\Data :#7

Page: 1

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Report No.: MH/2018/10036

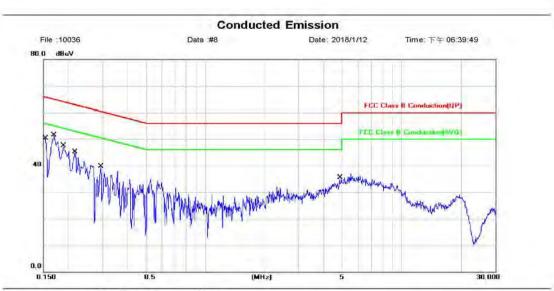
Page: 16 of 23

## Mode 1 N

Site Conduction Room Phase: N Temperature: 18 °C
Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 41 %

Mode: Mode 1

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.1540	43.80	0.12	43.92	65.78	-21.86	QP		
2		0.1540	27.20	0.12	27.32	55.78	-28.46	AVG		
3	*	0.1700	43.50	0.12	43.62	64.96	-21.34	QP		
4		0.1700	26.30	0.12	26.42	54.96	-28.54	AVG		
5		0.1900	41.30	0.11	41.41	64.04	-22.63	QP		
6		0.1900	27.00	0.11	27.11	54.04	-26.93	AVG		
7		0.2180	36.90	0.11	37.01	62.89	-25,88	QP		
8		0.2180	19.00	0.11	19.11	52.89	-33.78	AVG		
9		0.2940	31.80	0.11	31.91	60.41	-28.50	QP		
10		0.2940	15.60	0.11	15.71	50.41	-34.70	AVG		
11		4.8500	29.20	0.28	29.48	56.00	-26.52	QP		
12	i.	4.8500	20.20	0.28	20.48	46.00	-25.52	AVG		

\*:Maximum data x:Over limit I:over margin

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Page: 1

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IC: 6369A-VLTWX0

Report No.: MH/2018/10036

Page: 17 of 23

#### 2.5 Test of Radiated Emission

## 2.5.1 Test Equipments

#### **Below 1GHz**

	SGS	Radiated Below 10	GHz HWAYA 966A	EMC	
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
<b>EMI Test Receiver</b>	R&S	ESR 7	101459	2017/2/17	2018/2/16
Biconical Antenna	SCHWARZBECK	VULB 9168	9168-297	2017/5/26	2018/5/25
Pre Amplifier	EMC Instruments Corp.	EMC330	980180	2017/5/19	2018/5/18
Coaxial Cable	Huber+Suhner	RG 214/U	539808	2017/4/23	2018/4/22
Coaxial Cable	EMC Instruments	EMC8D-NM-NM- 6000	140922	2017/4/23	2018/4/22
Coaxial Cable	NA	BD	SAC-A-0.5M	2017/4/23	2018/4/22
Communication Tester	SCHWARZBECK	CMW500	152303	2017/2/23	2018/2/22
Communication Tester	Anritsu	MT8820C	6201465315	2017/12/29	2018/12/28
Communication Tester	R&S	CMU200	119988	2017/3/7	2018/3/6
Coaxial Cable	MF	MF-7802	N/A	N.C.R.	N.C.R.
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.
Site NSA	SGS	966 Chamber A	SAC-A	2018/1/12	2019/1/11
Test Software	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

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Measurement Uncertainty of Radiated Emission

Expanded uncertainty Ulab (k=2) of radiated emission measurement is 4.71 dB. (30-1000MHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission is 5.26 dB. ( $30MHz \sim 1000MHz$ )

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IC: 6369A-VLTWX0 Pa

Report No.: MH/2018/10036

Page: 18 of 23

#### **Above 1GHz**

SGS Radiated Above 1GHz HWAYA 966A EMC												
EQUIPMENT TYPE		Model Number	Serial Number	Calibration Date	Calibration Due							
Spectrum Analyzer	R&S	FSV 40	101419	2017/3/1	2018/2/28							
EMI Test Receiver	R&S	ESR 7	101459	2017/2/17	2018/2/16							
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2017/10/16	2018/10/15							
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2017/4/25	2018/4/24							
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2017/10/27	2018/10/26							
Coaxial Cable	JUNFLOW	MWX221- NMSNMS	J0778929	2017/4/23	2018/4/22							
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	2017/4/23	2018/4/22							
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2017/4/23	2018/4/22							
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2152/2	2017/6/5	2018/6/4							
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	2017/6/5	2018/6/4							
Universal Digital Radio Communication Tester	R&S	CMU 200	119988	2017/3/7	2018/3/6							
Wideband Radio Communication Tester	R&S	CMW 500	152303	2017/2/23	2018/2/22							
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	2017/12/29	2018/12/28							
Controller	MF	MF-7802	N.C.R.	N.C.R.	N.C.R.							
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.							
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.							
Site VSWR	SGS	966 Chamber A	SAC-A	2018/1/12	2019/1/11							
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.							

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Measurement Uncertainty of Radiated Emission

Expanded uncertainty (k=2) of radiated emission measurement is 5.05 dB. (1-6GHz)

Expanded uncertainty (k=2) of radiated emission measurement is 5.07 dB. (6-18GHz)

Expanded uncertainty Ulab (k=2) of radiated emission measurement is 5.19 dB. (18-26GHz)

Expanded uncertainty Ulab (k=2) of radiated emission measurement is 5.14 dB. (26-40GHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of Iradiated emission measurement is 5.18 dB.(1-6GHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of Iradiated emission measurement is 5.48 dB.(6-18GHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of Iradiated emission measurement is ---- dB.(18-26GHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of Iradiated emission measurement is --- dB.(26-40GHz)

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Report No.: MH/2018/10036

Page: 19 of 23

## 2.5.2 Operating Environment

Temperature: 19 degree C Humidity: 70 %RH

Atmospheric Pressure: 996 mBar

#### 2.5.3 Measurement Level Calculation

Correction Factor = Antenna Factor + Cable loss- Amplifier Gain Measurement Level = Reading Level + Correction Factor Over (Margin) = Measurement Level - Limit

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Report No.: MH/2018/10036

Page: 20 of 23

## 2.5.4 Measurement Data **Below 1GHz**

Model No.: VLT-W10 Mode 1 H

Site SGS 966 Chamber A

Limit: FCC Class B 3M Radiation

Note:

Mode: Mode 1

Polarization: Horizontal Power: AC 120V/60Hz

Temperature: 19 % Humidity: 70 %

Distance:

Radiated Emission File:10035 RE Data :#4 Date: 2018/1/17 Time: 下午 06:16:02 80.0 dBuV/m FCC Class B 3M Radiation 0.0 1000.00 MHz 224.00 321.00 418.00 515.00 612.00 709.00 127.00

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Annual Control
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
- 1		30.9700	34.88	-12.58	22.30	40.00	-17,70	QP	
2		116.3300	36.20	-14.70	21.50	43.50	-22.00	QP	
3		228.8500	41.35	-13.95	27.40	46.00	-18.60	QP	
4	*	262.8000	48.04	-12.24	35.80	46.00	-10.20	QP	
5		704.1500	29.02	-2.72	26.30	46.00	-19.70	QP	
6		788.5400	29.66	-1.26	28.40	46.00	-17.60	QP	

\*:Maximum data x:Over limit l:over margin

File :10035 RE\Data :#4

Page: 1

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Report No.: MH/2018/10036

Page: 21 of 23

## Mode 1 V

Site SGS 966 Chamber A Limit: FCC Class B 3M Radiation

Mode: Mode 1

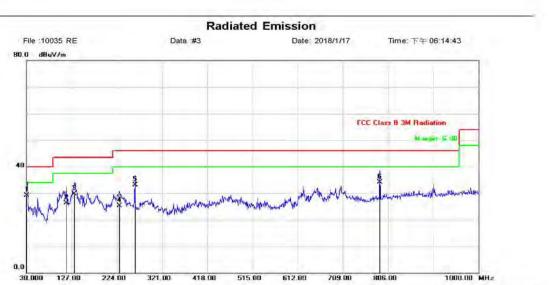
Note:

Polarization: Power:

AC 120V/60Hz

Distance:

Temperature: 19 °C Humidity: 70 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	30.9700	41.68	-12.58	29.10	40.00	-10.90	QP	
2	1	115.3600	41.17	-14.77	26.40	43.50	-17.10	QP	
3		132.8200	43.28	-13.48	29.80	43.50	-13.70	QP	
4	1 - 1	229.8200	39.21	-13.91	25.30	46.00	-20.70	QP	
5		262.8000	45.34	-12.24	33.10	46.00	-12.90	QP	
6		788.5400	35.46	-1.26	34.20	46.00	-11.80	QP	

\*: Maximum data x:Over limit l:over margin

File :10035 RE\Data :#3

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Report No.: MH/2018/10036

Page: 22 of 23

#### **Above 1GHz**

Model No.: VLT-W10 Mode 1 H

Distance

Site SGS 966 Chamber A

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Mode 1

Note:

Polarization: AC 120V/60Hz Power:

Horizontal

Temperature: 18 %

18000.00 MHZ

Humidity: 63 %

Radiated Emission Date: 2018/1/10 Time: 下午 11:40:51 File:10036 Data #2 100.0 dBuV/m FCC Class B 3M Radiation[1G-406][Pea

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2462.000	64.85	-14.59	50.26	74.00	-23.74	peak	
2		2462.000	53.30	-14.59	38.71	54.00	-15.29	AVG	
3		5692.000	59.42	-6.34	53.08	74.00	-20.92	peak	
4		5692.000	43.79	-6.34	37.45	54.00	-16.55	AVG	
5		8055.000	57.44	1.49	58.93	74.00	-15.07	peak	
6		8055.000	41.44	1.49	42.93	54.00	-11.07	AVG	
7		11591.000	55.75	6.18	61.93	74.00	-12.07	peak	
8		11591.000	38.36	6.18	44.54	54.00	-9.46	AVG	
9	1	13427.000	56.92	9.30	66.22	74.00	-7.78	peak	
10		13427.000	36.38	9.30	45.68	54.00	-8.32	AVG	
11	•	17949.000	49.30	19.32	68.62	74.00	-5.38	peak	
12		17949.000	28.53	19.32	47.85	54.00	-6.15	AVG	

9500 00

11200.00

12900.00

\*:Maximum data x:Over limit Lover margin

4400.00

File :10036\Data :#2

Page: 1

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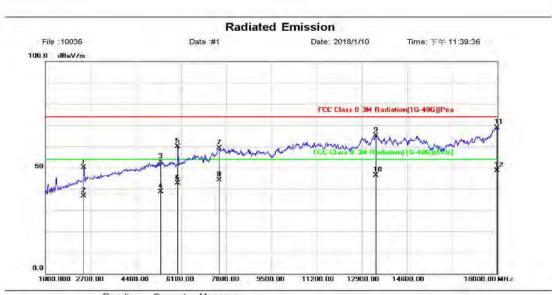
Report No.: MH/2018/10036

Page: 23 of 23

## Mode 1 V

Site SGS 966 Chamber A Polarization: Vertical Temperature: 18 ©
Limit: FCC Class B 3M Radiation(1G-40G)(Pea Power: AC 120V/60Hz Humidity: 63 %

Mode: Mode 1 Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2445.000	65.10	-14.93	50.17	74.00	-23.83	peak	
2		2445.000	51.52	-14.93	36.59	54.00	-17.41	AVG	
3		5335.000	59.60	-6.93	52.67	74.00	-21.33	peak	
4		5335.000	45.66	-6.93	38.73	54.00	-15.27	AVG	
5		5981.000	65.47	-5.65	59.82	74.00	-14.18	peak	
6		5981.000	48.21	-5.65	42.56	54.00	-11.44	AVG	
7		7528.000	58.22	0.93	59.15	74.00	-14.85	peak	
8		7528.000	43.26	0.93	44.19	54.00	-9.81	AVG	
9		13427.000	55.91	9.30	65.21	74.00	-8.79	peak	
10		13427.000	36.98	9.30	46.28	54.00	-7.72	AVG	
11	•	17983.000	49.06	19.90	68.96	74.00	-5.04	peak	
12		17983.000	28.63	19.90	48.53	54.00	-5.47	AVG	

\*:Maximum data x:Over limit !:over margin

File :10036\Data :#1

Page: 1

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