

Prüfbericht-Nr.: Test report No.:	50084	4596 001	Auftrags-Nr.: Order No.:	164088664	Seite 1 von 16 Page 1 of 16					
Kunden-Refere Client reference			Auftragsdatum: Order date.:	22.03.2017	4					
Auftraggeber: Client:	RM 1	comm Technology Co 808 18/F, FO TAN INDI ET, FO TAN SHATIN N	JSTRIAL CENTRE,	NOS. 26-28 AU PU HONG KONG	JI WAN					
Prüfgegenstand Test item:	t: Table	Tablet PC								
Bezeichnung / 7	/pe No.: be 0~	006-L, DL7006, MID700 9, A~Z)	06A-L, DL7006-KB, [DL7006KB, DL70X	XXXXX (X can					
		LAND)								
Auftrags-Inhalt: Order content:	FCC a	approval								
Prüfgrundlage: Test specification		7 FCC Part 15: Subpar 7 FCC Part 15: Subpar								
Wareneingangs Date of receipt:	datum: 03.04	2017								
Prüfmuster-Nr.: Test sample No.		520683-001								
Prüfzeitraum: Testing period:	07.04	2017 - 01.06.2017		Refer to photo documents						
Ort der Prüfung Place of testing:		ZHEN ALPHA PRODUCT NG CO., LTD.	Re							
Prüflaboratorium Testing laborator		Rheinland (Shenzhen) td.								
Prüfergebnis*: Test result*:	Pass									
geprüft von / te:	sted by:		kontrolliert von	I reviewed by:						
		Y		1	195					
01.06.2017	Andy Yan	Project Manager	01.06.2017	Owen Tian / Tech	nical Certifier					
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date	Name/Stellung Name/Position	Unterschrift Signature					
Sonstiges / Other	ər:									
FCC ID: XMF-MID:	7006									
For model difference		to clause 3.1								
Zustand des Pri		bei Anlieferung:		ständig und unbeso lete and undamage	•					
Legende: 1 = sehr gut P(ass) = en	t 2 = gut tspricht o.g. Prüfgrundla	3 = befriedigend ge(n) F(ail) = entspricht nich		4 = ausreichend N/A = nicht anwendbar	5 = mangelhalt N/T = nicht getestet					
Legend: 1 = very god P(ass) = pa	od 2 = good ssed a.m. test specificati	3 = satisfactory ions(s) F(ail) = failed a.m. test	specifications(s)	4 = sufficient N/A = not applicable	5 = poor N/T = not tested					
		nur auf das o.g. Prüfmus	<u> </u>							
		erden. Dieser Bericht be								

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.



Products

Test Report No.

Prüfbericht - Nr.: 50084596 001

Seite 2 von 16 Page 2 of 16

Test Summary

5.1.1 CONDUCTED EMISSION

RESULT: Pass

5.1.2 RADIATED EMISSION

RESULT: Pass



Products

Prüfbericht - Nr.: 50084596 001

Test Report No.

Seite 3 von 16 Page 3 of 16

Contents

1	GENERAL REMARKS4
1.1	COMPLEMENTARY MATERIALS4
2	TEST SITES4
2.1	TEST FACILITIES4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS5
2.3	TRACEABILITY6
2.4	CALIBRATION6
2.5	MEASUREMENT UNCERTAINTY6
2.6	LOCATION OF ORIGINAL DATA6
2.7	STATUS OF FACILITY USED FOR TESTING6
3	GENERAL PRODUCT INFORMATION7
3.1	PRODUCT FUNCTION AND INTENDED USE7
3.2	RATINGS AND SYSTEM DETAILS7
3.3	INDEPENDENT OPERATION MODES8
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS8
3.5	SUBMITTED DOCUMENTS8
4	TEST SET-UP AND OPERATION MODES9
4.1	PRINCIPLE OF CONFIGURATION SELECTION9
4.2	TEST OPERATION AND TEST SOFTWARE9
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE9
4.5	TEST SETUP DIAGRAM10
5	TEST RESULTS
5.1 <i>5.1.</i> <i>5.1.</i>	
6	PHOTOGRAPHS OF THE TEST SET-UP
7	LIST OF TABLES
8	LIST OF PHOTOGRAPHS16

Products

Prüfbericht - Nr.: 50084596 001

Seite 4 von 16 Page 4 of 16

Test Report No.

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Radiated Emission and Conducted Emission for Part 15B

2 Test Sites

2.1 Test Facilities

SHENZHEN ALPHA PRODUCT TESTING CO., LTD.

Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen City, Guangdong Province, P.R. China

FCC Registration No.: 203110

The tests at the test sites have been conducted under the supervision of a TÜV engineer.



Products

Prüfbericht - Nr.: 50084596 001

Test Report No.

Seite 5 von 16 Page 5 of 16

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

SHENZHEN ALPHA PRODUCT TESTING CO., LTD.

Conducted Emission	on									
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until						
Test Receiver	ROHDE&SCHWARZ	ESCI	101165	2017.09.28						
L.I.S.N.	SCHWARZBECK	NSLK8126	8126-466	2017.09.28						
L.I.S.N.	ROHDE&SCHWARZ	ENV216	101043	2017.09.28						
Pulse Limiter	SCHWARZBECK	9516F	9618	2017.09.28						
Radiated Emission	Radiated Emission									
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until						
Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2018.09.28						
Bilog Antenna	SCHWARZBECK	VULB 9168	9168#627	2018.09.29						
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	2018.09.29						
PreAmplifier	Agilent	8449B	3008A02664	2017.09.28						
Test Receiver	ROHDE&SCHWARZ	ESR	1316.3003K03- 102082-Wa	2017.09.28						
Spectrum analyzer	Agilent	E4407B	MY49510055	2017.09.28						



Products

Products

 Prüfbericht - Nr.:
 50084596 001
 Seite 6 von 16

 Test Report No.
 Page 6 of 16

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Item	Extended Uncertainty
Conducted Emission	± 2.74 dB
Radiated Emission(30MHz – 1GHz)	± 3.80 dB
Radiated Emission(1GHz – 18GHz)	± 4.16dB
Temperature	± 0.5 ℃
Humidity	± 3.0 %

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The SHENZHEN ALPHA PRODUCT TESTING CO., LTD. Test facility located at Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen City, Guangdong Province, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.



Produkte Products

 Prüfbericht - Nr.:
 50084596 001
 Seite 7 von 16

 Test Report No.
 Page 7 of 16

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a 'Tablet PC' device. It supports Bluetooth 4.2 (Dual mode) and Wi-Fi 802.11 a/b/g/n wireless technology. This report is only for JBC. Other functions are reported in the related reports.

Model difference description:

All the models in this reports are identical in the PCBA, Drivers, Enclosure etc. electronic aspects, the detail as below.

Model No.	Detail
MID7006A-L,	Excepting with Micro USB Port to connect the keyboard, with DC jack. All
DL7006-KB	other electronic aspects are identical with the models.
MID7006-L,	Excepting without Micro USB Port to connect the keyboard, without DC
DL7006, DL70XXXXXX	jack. All other electronic aspects are identical with the other models.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment	Tablet PC
Type Designation	MID7006A-L, DL7006-KB, MID7006-L, DL7006, DL70XXXXXX
Trade Mark	DIGILAND
FCC ID	XMF-MID7006
Operating Frequency	
Operating Temperature Range	0°C ~ 40 °C
Operating Voltage	DC 3.7V
Testing Voltage	DC 3.7V and charged with AC/DC adapter (AC/DC adapter with 120V/60Hz input)
Adapter	TEKA006-0501500UKC Input: AC100~240V 50/60Hz 0.3A, Output: DC 5V/1.5A
Highest internal source	1.3GHZ



Products

 Prüfbericht - Nr.:
 50084596 001
 Seite 8 von 16

 Test Report No.
 Page 8 of 16

3.3 Independent Operation Modes

The basic operation modes are:

- A. Date Transfer,
- B. Running with full system, (with Adapter+Keyboard)

Note: Running with full system including Playing Video, Camera Recording etc. Only the worst cases data reported.

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Block Diagram
- ID Label and Location Info
- User Manual
- Photo Document

- Photo Document
- Schematics
- Block Diagram



Produkte Products

Prüfbericht - Nr.: 50084596 001 Seite 9 von 16 Page 9 of 16 Test Report No.

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model MID7006A-L in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N		
Personal Computer	ACER	ASPIRE M1830	PTSF90C00305005CAC3000		
Monitor	ACER	G205HV	SNID:10306738385		
USB Keyboard	ACER	SK-9625	KBUSB1580500037E0100		
USB Mouse	ACER	MS.11200.014	M-UAY-ACR2		
Printer	HP	HP1020	CNCJ410726		
Adapter	TEKA	TEKA006-0501500UKC Input: AC100~240V 50/60Hz 0.3A, Output: DC 5V/1.5A			

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.



Prüfbericht - Nr.: 50084596 001

Test Report No.

Seite 10 von 16 Page 10 of 16

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

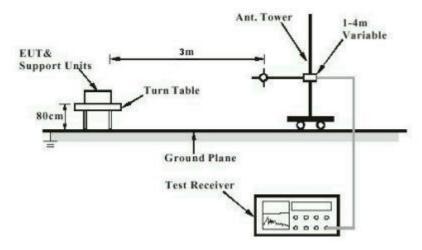
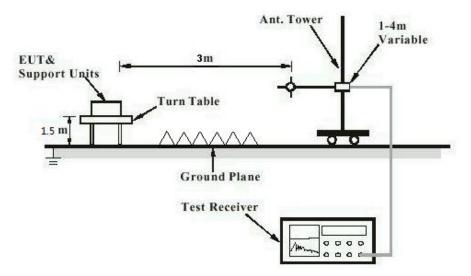


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)





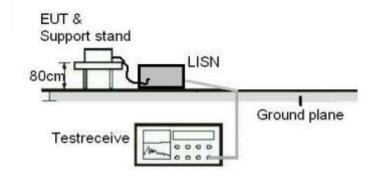
Products

Prüfbericht - Nr.: 50084596 001

Seite 11 von 16 Page 11 of 16

Test Report No.

Diagram of Measurement Configuration for Mains Conduction Measurement





Produkte Products

 Prüfbericht - Nr.:
 50084596 001
 Seite 12 von 16

 Test Report No.
 Page 12 of 16

5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Conducted Emission

RESULT: Pass

Test Specification

Test standard : FCC Part 15.107(a)
Basic standard : ANSI C63.4: 2014
Frequency range : 0.15 – 30MHz

Limits : FCC Part 15.107(a)

Kind of test site : Shielded Room

Test Setup

Date of testing : 07.04.2017 – 06.05.2017

Atmospheric pressure :

For the measurement records, refer to the Appendix A.



Products

 Prüfbericht - Nr.:
 50084596 001
 Seite 13 von 16

 Test Report No.
 Page 13 of 16

5.1.2 Radiated Emission

RESULT: Pass

Test Specification

Test standard : FCC Part 15.109(a)
Basic standard : ANSI C63.4: 2014
Frequency range : 30 - 6000MHz

Classification : Class B

Limits : FCC Part 15.109(a)

Kind of test site : 3m Semi-anechoic Chamber

Test Setup

Date of testing : 08.04.2017 – 01.06.2017

Atmospheric pressure :

For the measurement records, refer to the Appendix A.





Prüfbericht - Nr.: 50084596 001

Test Report No.

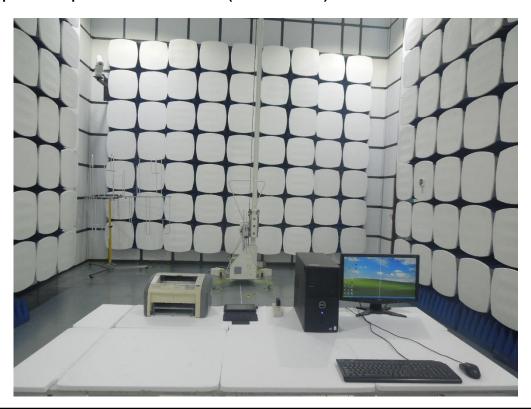
Seite 14 von 16 Page 14 of 16

6 Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Emission



Photograph 2: Set-up for Radiated Emission (30MHz ~ 1GHz)





Products

Prüfbericht - Nr.: 50084596 001

Test Report No.

Seite 15 von 16 Page 15 of 16

Photograph 3: Set-up for Radiated Emission (above 1GHz)





Products		
Prüfbericht - Nr.: Test Report No.	50084596 001	Seite 16 von 16 Page 16 of 16
7 List of Tables	5	
Table 2: Technical Specific	easurement Equipmentation of EUTs and Auxiliary Equipment	7
8 List of Photo	graphs	
Photograph 2: Set-up for R	onducted Emissionadiated Emission (30MHz ~ 1GHz)adiated Emission (1GHz ~ 6GHz)	14

Appendix A 50084596 001



Produkte Products

Page 1 of 7



Test Results of Conducted Emission and Radiated Emission

Appendix A 50084596 001



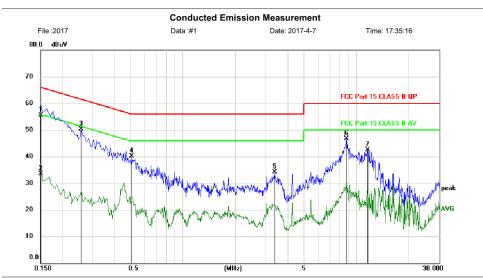
Produkte Products

Page 2 of 7

Only the worst case mode showed

Appendix A.1: Test Plots of Conducted Emission (MID7006A-L with DC IN)

Temperature: Site LAB Phase: L1 23.6 Limit: FCC Part 15 CLASS B QP AC 120V/60Hz Humidity: 54 % Power: EUT: MID M/N: Mode: Charging and Data transmitting and play Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margir	1	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	45.71	9.73	55.44	66.00	-10.56	QP	
2		0.1500	23.73	9.73	33.46	56.00	-22.54	AVG	
3		0.2580	40.62	9.76	50.38	61.50	-11.12	peak	
4		0.5055	30.36	9.78	40.14	56.00	-15.86	peak	
5		3.3675	24.12	10.07	34.19	56.00	-21.81	peak	
6		8.7450	36.39	10.31	46.70	60.00	-13.30	peak	
7		11.5890	32.14	10.35	42.49	60.00	-17.51	peak	

(Reference Only

E:\EZ-EMC\Test Report\H\Hengchen\2017.d

Page: 1

Engineer Signature:

^{*:}Maximum data x:Over limit !:over margin Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Appendix A 50084596 001



Produkte Products

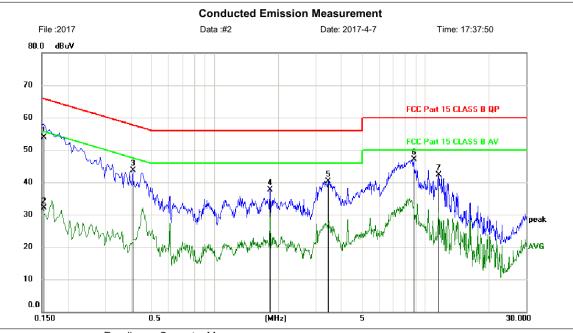
Page 3 of 7

Site LAB Phase: Temperature: 23.6 N Limit: FCC Part 15 CLASS B QP Power: AC 120V/60Hz Humidity:

EUT: MID M/N:

Mode: Charging and Data transmitting and play

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margir	1	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1545	44.17	9.73	53.90	65.75	-11.85	QP	
2		0.1545	22.30	9.73	32.03	55.75	-23.72	AVG	
3		0.4065	34.00	9.77	43.77	57.72	-13.95	peak	
4		1.8240	27.81	9.91	37.72	56.00	-18.28	peak	
5		3.4395	30.32	10.08	40.40	56.00	-15.60	peak	
6		8.8035	36.76	10.31	47.07	60.00	-12.93	peak	
7		11.5440	31.99	10.35	42.34	60.00	-17.66	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Page 4 of 7



Appendix A.2: Test Plots of Radiated Emission (MID7006A-L with DC IN)

Site LAB

Limit: FCC Part15 Class B Radiation

EUT: M/N:

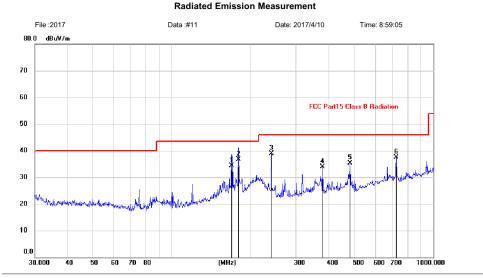
Mode: Charging and Data transmitting

Note:

Polarization: Horizontal Humidity: Power: AC 120V/60Hz Distance:

Temperature:

23.5



	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
_	1		169.5990	20.51	13.80	34.31	43.50	-9.19	QP			
_	2	*	180.0165	24.63	12.15	36.78	43.50	-6.72	QP			
	3		240.8303	26.85	11.99	38.84	46.00	-7.16	peak			
	4		378.5842	18.59	15.36	33.95	46.00	-12.05	peak			
	5		480.5276	18.25	17.08	35.33	46.00	-10.67	peak			-
	6		724.2610	16.17	21.24	37.41	46.00	-8.59	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Appendix A 50084596 001



23.5

Produkte Products

Page 5 of 7

Limit: FCC Part15 Class B Radiation

EUT: M/N:

Site LAB

Mode: Charging and Data transmitting

Note:

Polarization: Vertical

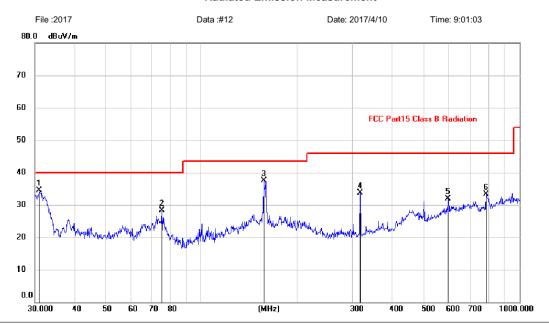
AC 120V/60Hz

Temperature:

Humidity: 51 %

Power: Distance:

Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	30.9619	21.16	13.35	34.51	40.00	-5.49	peak			
2		75.4464	18.25	10.15	28.40	40.00	-11.60	peak			
3		157.5588	22.85	14.57	37.42	43.50	-6.08	peak			
4		316.5890	19.95	13.79	33.74	46.00	-12.26	peak			
5		597.2234	12.66	19.24	31.90	46.00	-14.10	peak			
6		787.8513	11.25	21.98	33.23	46.00	-12.77	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Appendix A 50084596 001



Produkte Products

Page 6 of 7

Limit: FCC Part 15_Above 1G_Peak

EUT: 平板 有 DC in port

M/N:

Site LAB

Mode: Charging and data transmitting

Note:

Vertical Polarization: DC 5V

Temperature: 23.5

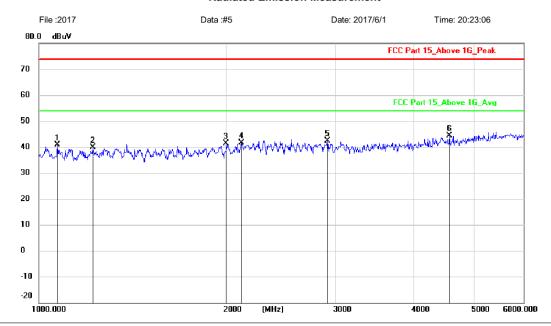
Humidity:

51 %

Radiated Emission Measurement

Power:

Distance: 3m



No	. Mł	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		1070.531	49.41	-8.59	40.82	74.00	-33.18	peak			
2		1220.285	48.04	-8.06	39.98	74.00	-34.02	peak			
3		2001.917	46.72	-5.42	41.30	74.00	-32.70	peak			
4		2112.584	45.66	-4.02	41.64	74.00	-32.36	peak			
5		2907.123	44.89	-2.58	42.31	74.00	-31.69	peak			
6	*	4568.292	42.62	1.88	44.50	74.00	-29.50	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Appendix A 50084596 001



Produkte

Products Page 7 of 7

Site LAB

EUT: 平板 有 DC in port

M/N:

Mode: Charging and data transmitting

Limit: FCC Part 15_Above 1G_Peak

Note:

Polarization: Horizontal

Power: DC 5V

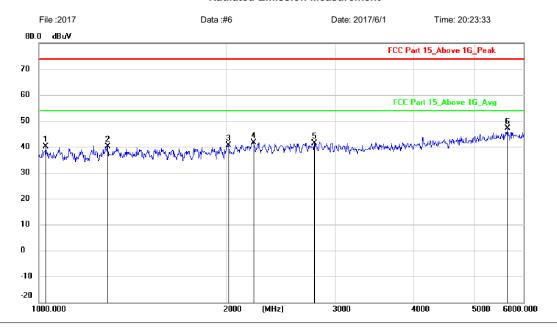
Distance: 3m

Temperature:

Humidity: 51 %

23.5

Radiated Emission Measurement



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		1027.268	48.67	-8.62	40.05	74.00	-33.95	peak			
2		1290.055	47.47	-7.42	40.05	74.00	-33.95	peak			
3		2016.330	45.79	-5.23	40.56	74.00	-33.44	peak			
4		2213.431	45.03	-3.33	41.70	74.00	-32.30	peak			
5		2774.670	44.28	-2.85	41.43	74.00	-32.57	peak			_
6	*	5665.334	42.38	4.81	47.19	74.00	-26.81	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.