

Prüfbericht-Nr.: <i>Test Report No.:</i>	50080611 001	Auftrags-Nr.: <i>Order No.:</i>	164090091	Seite 1 von 107 <i>Page 1 of 107</i>
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	07.04.2017	
Auftraggeber: <i>Client:</i>	Lightcomm Technology Co., Ltd. RM 1808 18F, FO TAN INDUSTRIAL CENTRE, NOS. 26-28 AU PUI WAN STREET, FO TAN SHATIN NEW TERRITORIES, HONGKONG			
Prüfgegenstand: <i>Test item:</i>	Insignia Flex Android 10" Tablet			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	NS-P10A8100, NS-P10A8100-C, xxxxxxxP10Axxxxxxxx, MID1023-MA			
Auftrags-Inhalt: <i>Order content:</i>	FCC/IC Certification			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 RSS-247 Issue 1 May 2015 RSS-Gen Issue 4 November 2014			
Wareneingangsdatum: <i>Date of receipt:</i>	09.04.2017			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000526117-004 ~ 008			
Prüfzeitraum: <i>Testing period:</i>	12.04.2017 - 09.05.2017			
Ort der Prüfung: <i>Place of testing:</i>	Shenzhen EMTEK Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by: 09.06.2017 Andy Yan/Project Manager Datum Name / Stellung Date Name / Position	kontrolliert von / reviewed by: 09.06.2017 Owen Tian/Technical Certifier Datum Name / Stellung Date Name / Position			
Sonstiges / Other: FCC ID: XMF-P10A8100 IC: 20064-P10A8100				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) Legend: P(ass) = passed a.m. test specification(s)	1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft F(all) = entspricht nicht o.g. Prüfgrundlage(n) F(all) = failed a.m. test specification(s) N/A = nicht anwendbar N/T = nicht getestet 4 = sufficient 5 = poor N/A = not applicable N/T = not tested			
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p>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.</p>				

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 PEAK OUTPUT POWER

RESULT: Pass

5.1.3 20dB BANDWIDTH AND 99% BANDWIDTH

RESULT: Pass

5.1.4 6dB BANDWIDTH AND 99% BANDWIDTH

RESULT: Pass

5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100kHz BANDWIDTH

RESULT: Pass

5.1.6 POWER SPECTRAL DENSITY

RESULT: Pass

5.1.7 SPURIOUS EMISSION

RESULT: Pass

5.1.8 FREQUENCY SEPARATION

RESULT: Pass

5.1.9 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.10 TIME OF OCCUPANCY

RESULT: Pass

5.1.11 CONDUCTED EMISSIONS

RESULT: Pass

Contents

1. GENERAL REMARKS	4
1.1 COMPLEMENTARY MATERIALS	4
2. TEST SITES	4
2.1 TEST FACILITIES	4
2.2 LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3 TRACEABILITY	6
2.4 CALIBRATION	6
2.5 MEASUREMENT UNCERTAINTY.....	6
2.6 LOCATION OF ORIGINAL DATA.....	6
2.7 STATUS OF FACILITY USED FOR TESTING.....	7
3. GENERAL PRODUCT INFORMATION	8
3.1 PRODUCT FUNCTION AND INTENDED USE.....	8
3.2 RATINGS AND SYSTEM DETAILS	8
3.3 INDEPENDENT OPERATION MODES	10
3.4 NOISE GENERATING AND NOISE SUPPRESSING PARTS	10
3.5 SUBMITTED DOCUMENTS	10
4. TEST SET-UP AND OPERATION MODES	11
4.1 PRINCIPLE OF CONFIGURATION SELECTION.....	11
4.2 TEST OPERATION AND TEST SOFTWARE	11
4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	11
4.4 COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	11
4.5 TEST SETUP DIAGRAM	12
5. TEST RESULTS	14
5.1 TRANSMITTER REQUIREMENT & TEST SUITES	14
5.1.1 Antenna Requirement	14
5.1.2 Peak Output Power	15
5.1.3 20dB Bandwidth and 99% Bandwidth	16
5.1.4 6dB Bandwidth and 99% Bandwidth	17
5.1.5 Conducted Spurious Emissions measured in 100kHz Bandwidth	18
5.1.6 Power spectral density	31
5.1.7 Spurious Emission	32
5.1.8 Frequency Separation	99
5.1.9 Number of hopping frequency	100
5.1.10 Time of Occupancy	101
5.1.11 Conducted emissions	102
6. PHOTOGRAPHS OF THE TEST SET-UP	105
7. LIST OF TABLES	107
8. LIST OF PHOTOGRAPHS	107

Prüfbericht - Nr.: 50080611 001
Test Report No.

Seite 4 von 107
Page 4 of 107

1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

Shenzhen EMTEK Co., Ltd.

(FCC Registration No.: 709623)
(Test site Industry Canada No.: 4480A-2)

Bldg 69, Majialong Industry Zone, Nanshan District,
Shenzhen, Guangdong, P.R. China

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

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Transmitter spurious emissions				
EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	2017-05-16
Loop Antenna	Schwarzbeck	FMZB 1519	1519-012	2017-05-16
Cable	H+B	3M SF104-26.5	295838/4	2017-05-28
Cable	H+B	6M SF104-26.5	295840/4	2017-05-28
Pre-Amplifier	HP	8447F	2944A07999	2017-05-16
Bilog Antenna	Schwarzbeck	VULB9163	142	2017-05-28
Cable	Schwarzbeck	AK9513	ACRX1	2017-05-16
Cable	Rosenberger	N/A	FP2RX2	2017-05-16
Cable	Schwarzbeck	AK9513	CRPX1	2017-05-28
Cable	Schwarzbeck	AK9513	CRRX2	2017-05-28
Pre-Amplifier	A.H.	PAM-0126	1415261	2017-05-16
Horn Antenna	Schwarzbeck	BBHA 9120	707	2017-05-28
Pre-Amplifier	A.H.	PAM-0126	1415261	2017-05-16
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91703 99	2017-05-16
EMI Test Receiver	Rohde & Schwarz	FSV40	132.1- 3008K39- 100967-AP	2017-05-16
Pre-Amplifier	Lunar EM	LNA26G40-40	J101313102 8001	2017-05-16
Horn Antenna	AHS/USA	SAS-573	184	2017-05-16
Cable	H+B	0.5M SF104- 26.5	289147/4	2017-05-16
Cable	H+B	3M SF104-26.5	295838/4	2017-05-16
Cable	H+B	6M SF104-26.5	295840/4	2017-05-16
Radio Spectrum Test				
EMI Test Receiver	Rohde & Schwarz	ESCI	101045	2017-05-16
Vector Signal Generater	Agilent	N5182B	My53050553	2017-05-28
Analog Signal Generator	Agilent	N5171B	My53050878	2017-05-28
Signal Analyzer	Agilent	N9010A	My53470879	2017-05-28
Power Meter	Agilent	PS-X10-100	N/A	2017-05-28
Temp. / Humidity Chamber	Kingson	THS-M1	242	2017-05-28
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	828985/018	2017-05-16
L.I.S.N.	Schwarzbeck	NNLK8129	8129203	2017-05-16
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100006	2017-05-16
Voltage Probe	Rohde & Schwarz	TK9416	N/A	2017-05-16
I.S.N	Rohde & Schwarz	ENY22	1109.9508.02	2017-05-16
50Ω Coaxial Switch	Anritsu	MP59B	M20531	2017-05-16

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, 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 basis using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-5}$
Maximum Peak Output Power Test	$\pm 1.0 \text{dB}$
Conducted Emissions Test	$\pm 2.0 \text{dB}$
Radiated Emission Test	$\pm 2.0 \text{dB}$
Power Density	$\pm 2.0 \text{dB}$
Occupied Bandwidth Test	$\pm 1.0 \text{dB}$
Band Edge Test	$\pm 3 \text{dB}$
All emission, radiated	$\pm 3 \text{dB}$
Antenna Port Emission	$\pm 3 \text{dB}$
Temperature	$\pm 0.5^\circ\text{C}$
Humidity	$\pm 3\%$

2.6 Location of Original Data

The original copies of all test data taken during actual testing were retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

Prüfbericht - Nr.: 50080611 001
Test Report No.

Seite 7 von 107
Page 7 of 107

2.7 Status of Facility Used for Testing

Shenzhen EMTEK Co., Ltd. test facility located at Bldg 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUTs are Android 10" tablet with Wi-Fi, Bluetooth function.
 All models are identical except the model name.
 For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of Bluetooth (BDR & EDR mode)

Technical Specification	Value
Kind of Equipment	Insignia Flex Android 10" Tablet
Type Designation	NS-P10A8100, NS-P10A8100-C, xxxxxxP10Axxxxxxxx, MID1023-MA
FCC ID	XMF-P10A8100
IC	20064-P10A8100
Operating Frequency band	2402 – 2480MHz
Channel separation	1MHz
Extreme Temperature Range	0~+40°C
Operation Voltage	DC 5V (via AC/DC adapter)
Modulation	FHSS, GFSK, 8DPSK, π/4DQPSK
Bluetooth version	4.0, Dual Mode
Antenna Gain	-0.65dBi

Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode)

RF Channel	Frequency (MHz)						
0	2402.00	21	2423.00	42	2444.00	63	2465.00
1	2403.00	22	2424.00	43	2445.00	64	2466.00
2	2404.00	23	2425.00	44	2446.00	65	2467.00
3	2405.00	24	2426.00	45	2447.00	66	2468.00
4	2406.00	25	2427.00	46	2448.00	67	2469.00
5	2407.00	26	2428.00	47	2449.00	68	2470.00
6	2408.00	27	2429.00	48	2450.00	69	2471.00
7	2409.00	28	2430.00	49	2451.00	70	2472.00
8	2410.00	29	2431.00	50	2452.00	71	2473.00
9	2411.00	30	2432.00	51	2453.00	72	2474.00
10	2412.00	31	2433.00	52	2454.00	73	2475.00
11	2413.00	32	2434.00	53	2455.00	74	2476.00

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 9 von 107
Page 9 of 107

12	2414.00	33	2435.00	54	2456.00	75	2477.00
13	2415.00	34	2436.00	55	2457.00	76	2478.00
14	2416.00	35	2437.00	56	2458.00	77	2479.00
15	2417.00	36	2438.00	57	2459.00	78	2480.00
16	2418.00	37	2439.00	58	2460.00		
17	2419.00	38	2440.00	59	2461.00		
18	2420.00	39	2441.00	60	2462.00		
19	2421.00	40	2442.00	61	2463.00		
20	2422.00	41	2443.00	62	2464.00		

Table 5: Technical Specification of Bluetooth (Low Energy mode)

Technical Specification	Value
Kind of Equipment	Insignia Flex Android 10" Tablet
Type Designation	NS-P10A8100, NS-P10A8100-C, xxxxxxxP10A81xxxxxx, MID1023-MA
FCC ID	XMF-P10A8100
IC	21722-PWALYIT
Operating Frequency band	2402 – 2480MHz
Channel separation	2MHz
Extreme Temperature Range	0~+40°C
Operation Voltage	DC 5V (via AC/DC adapter)
Modulation	GFSK
Bluetooth version	4.0, Dual Mode
Antenna Gain	-0.65dBi

Table 6: RF channel and frequency of Bluetooth (Low Energy mode)

RF Channel	Frequency (MHz)						
0	2402.00	11	2424.00	22	2446.00	33	2468.00
1	2404.00	12	2426.00	23	2448.00	34	2470.00
2	2406.00	13	2428.00	24	2450.00	35	2472.00
3	2408.00	14	2430.00	25	2452.00	36	2474.00
4	2410.00	15	2432.00	26	2454.00	37	2476.00
5	2412.00	16	2434.00	27	2456.00	38	2478.00
6	2414.00	17	2436.00	28	2458.00	39	2480.00
7	2416.00	18	2438.00	29	2460.00		
8	2418.00	19	2440.00	30	2462.00		
9	2420.00	20	2442.00	31	2464.00		
10	2422.00	21	2444.00	32	2466.00		

3.3 Independent Operation Modes

The basic operation modes are:

- A. On
 - 1. Bluetooth mode (BDR & EDR mode)
 - a. Transmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - b. Receiving
 - 2. Bluetooth mode (Low Energy mode)
 - a. Transmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - b. Receiving
- B. Standby
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power 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 C63.10: 2013.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	Rating
AC/DC Adapter	Dongguan Aohai Power Technology Co., Ltd	A88-502000	Input: AC 100-240V, 50/60Hz, 0.35A; Output: DC 5V, 2.0A

The EUT was tested with following cables:

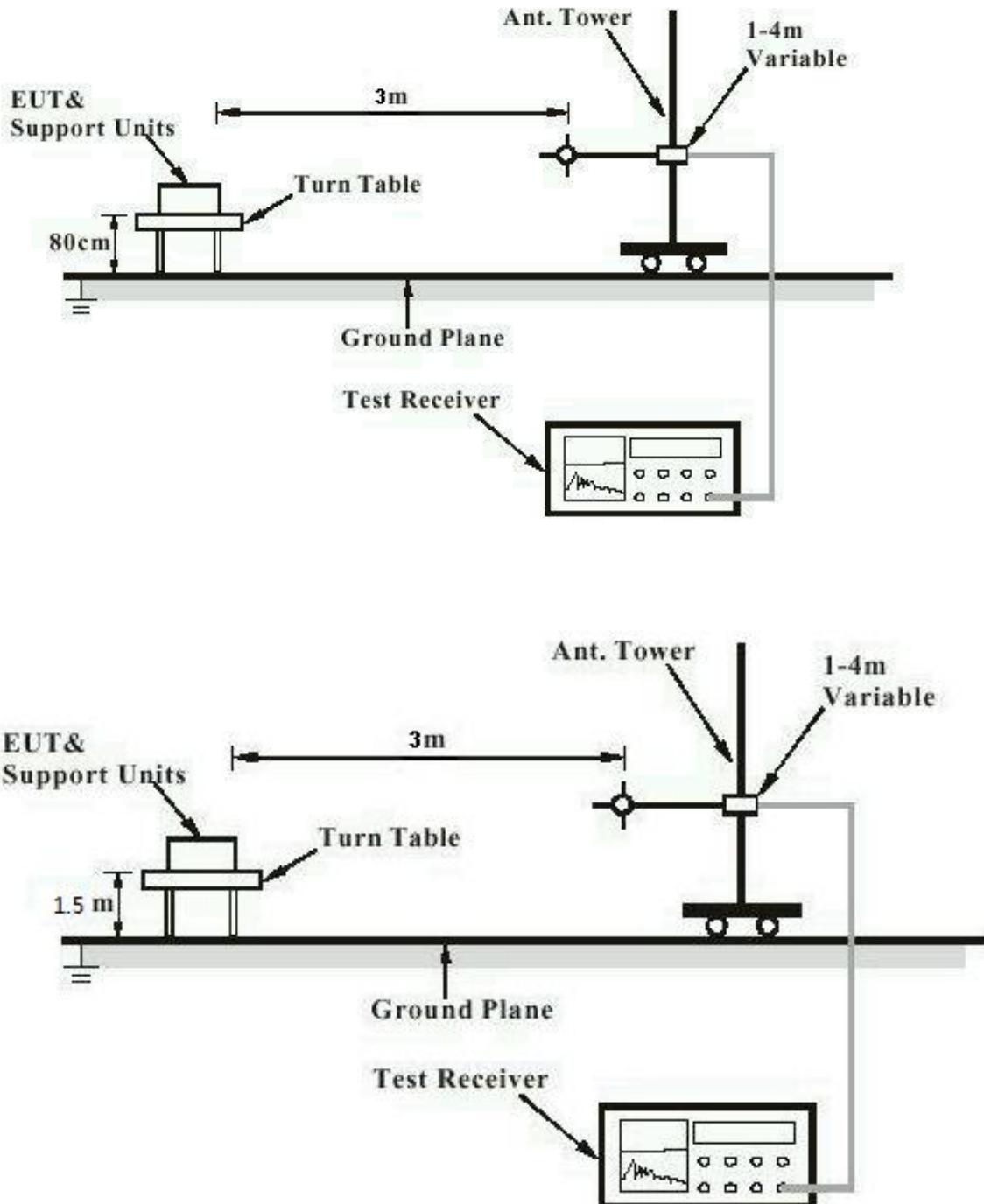
Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
AC Mains of adapter	2 cores, non-shielded port, 3m	AC Power Input
DC input port (USB port)	2 cores, non-shielded port, 1m	DC Power Input

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



Prüfbericht - Nr.: 50080611 001
Test Report No.

Seite 13 von 107
Page 13 of 107

Diagram of Measurement Equipment Configuration for Conduction Measurement

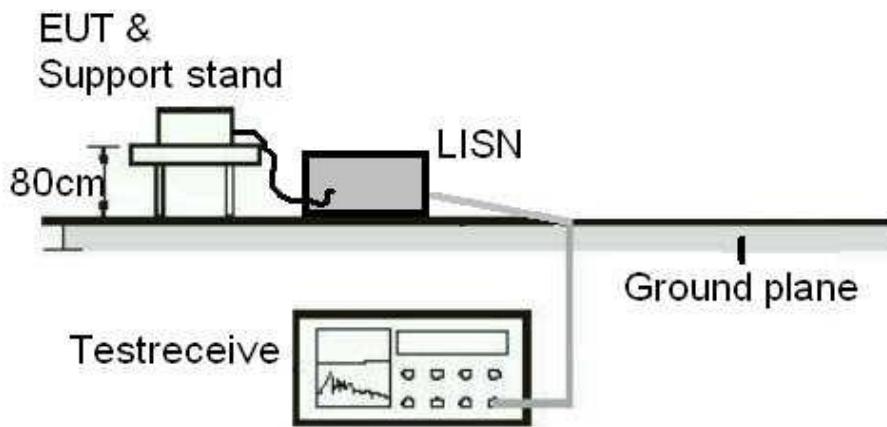
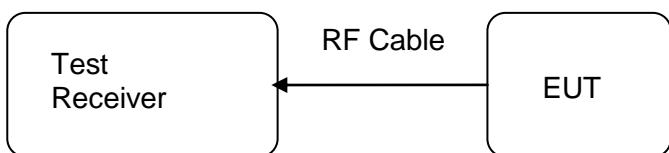


Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: Pass

Test standard	:	Part 15.203 RSS-Gen Clause 8.3
Limit	:	The use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is -0.65dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 15 von 107
Page 15 of 107

5.1.2 Peak Output Power

RESULT:
Pass

Test date	:	2017-04-13
Test standard	:	FCC Part 15.247(b)(1) FCC Part 15.247(b)(3) RSS-247 clause 5.4(2) RSS-247 clause 5.4(4)
Basic standard	:	ANSI C63.10: 2013 Clause 9.1 of KDB 558074 v03r01
Limit	:	1W
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a, A.2.a
Ambient temperature	:	25°C
Relative humidity	:	50%
Atmospheric pressure	:	101kPa

Table 7: Test result of Peak Output Power of Bluetooth (BDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power	Limit
		(dBm)	(dBm)
Low Channel	2402	3.847	30
Middle Channel	2441	4.108	30
High Channel	2480	4.547	30

Table 8: Test result of Peak Output Power of Bluetooth (EDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power	Limit
		(dBm)	(dBm)
Low Channel	2402	3.732	30
Middle Channel	2441	4.214	30
High Channel	2480	4.723	30

Table 9: Test result of Peak Output Power of Bluetooth (Low Energy mode)

Channel	Channel Frequency (MHz)	Peak Output Power	Limit
		(dBm)	(dBm)
Low Channel	2402	-3.893	30
Middle Channel	2440	-3.231	30
High Channel	2480	-3.126	30

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 16 von 107
Page 16 of 107

5.1.3 20dB Bandwidth and 99% Bandwidth

RESULT:
Pass

Date of testing	:	2017-04-12
Test standard	:	FCC Part 15.247(a)(1) RSS-247 clause 5.1(2) RSS-Gen clause 6.6
Basic standard	:	ANSI C63.10: 2013 Clause 8 of KDB 558074 v03r01
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25°C
Relative humidity	:	50%
Atmospheric pressure	:	101kPa

Table 10: Test result of 20dB and 99% Bandwidth of BDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	0.946	0.877
Mid Channel	2441	0.948	0.878
High Channel	2480	0.948	0.879

Table 11: Test result of 20dB and 99% Bandwidth of EDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	1.241	1.138
Mid Channel	2441	1.242	1.144
High Channel	2480	1.254	1.142

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 17 von 107
Page 17 of 107

5.1.4 6dB Bandwidth and 99% Bandwidth

RESULT:
Pass

Date of testing	:	2017-04-13
Test standard	:	FCC Part 15.247(a)(2) RSS-247 clause 5.2(1) RSS-Gen clause 6.6
Basic standard	:	ANSI C63.10: 2013 Clause 8 of KDB 558074 v03r01
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.2.a
Ambient temperature	:	25°C
Relative humidity	:	50%
Atmospheric pressure	:	101kPa

Table 12: Test result of 6dB Bandwidth and 99% Bandwidth of Bluetooth, Low Energy mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit of 6dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	0.714	≥0.5	1.131
Mid Channel	2440	0.713	≥0.5	1.130
High Channel	2480	0.712	≥0.5	1.132

Prüfbericht - Nr.: 50080611 001
Test Report No.

Seite 18 von 107
Page 18 of 107

5.1.5 Conducted Spurious Emissions measured in 100kHz Bandwidth

RESULT:

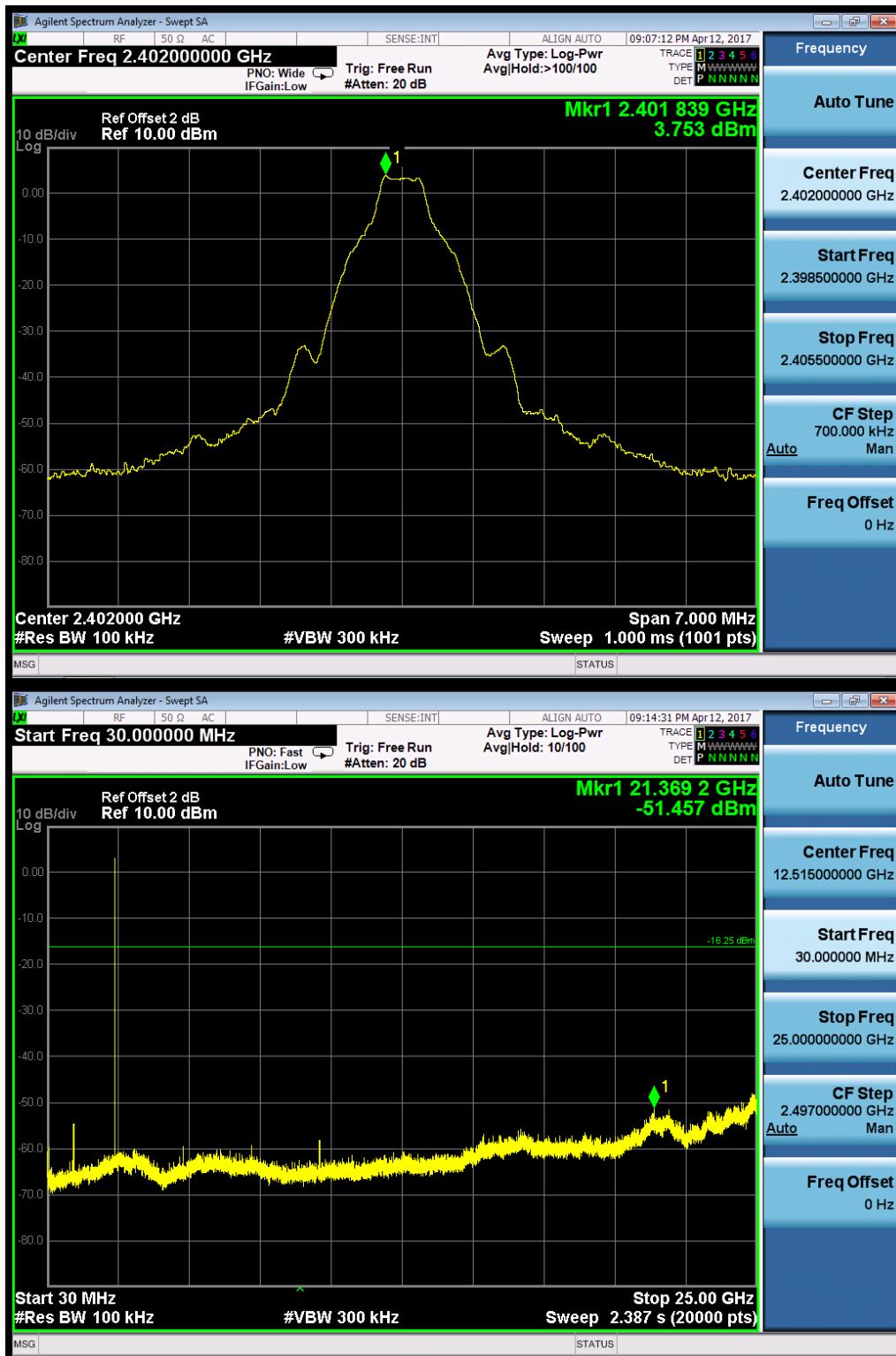
Pass

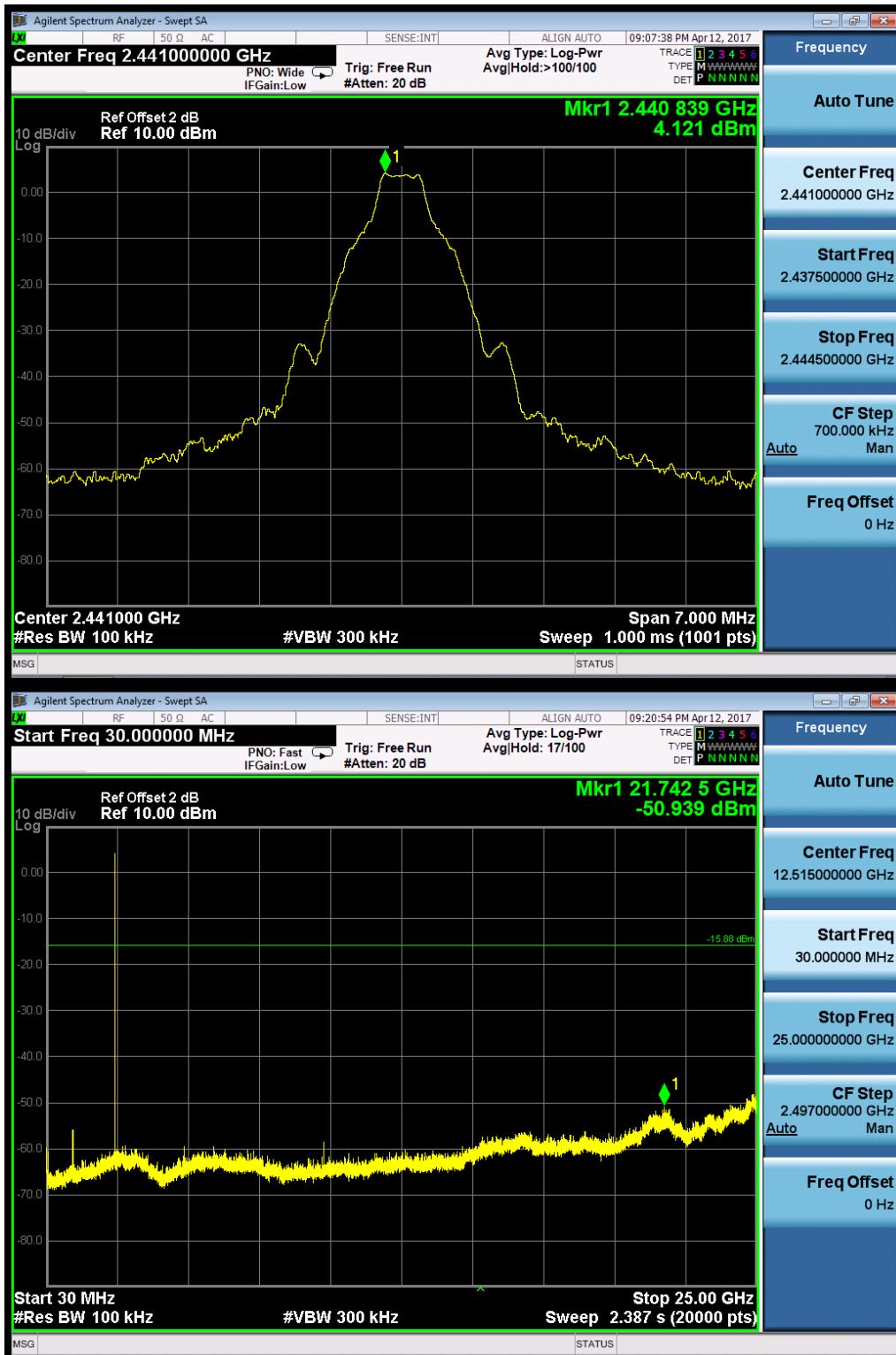
Date of testing	:	2017-04-13
Test standard	:	FCC part 15.247(d) RSS-247 clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);
Kind of test site	:	Shield room

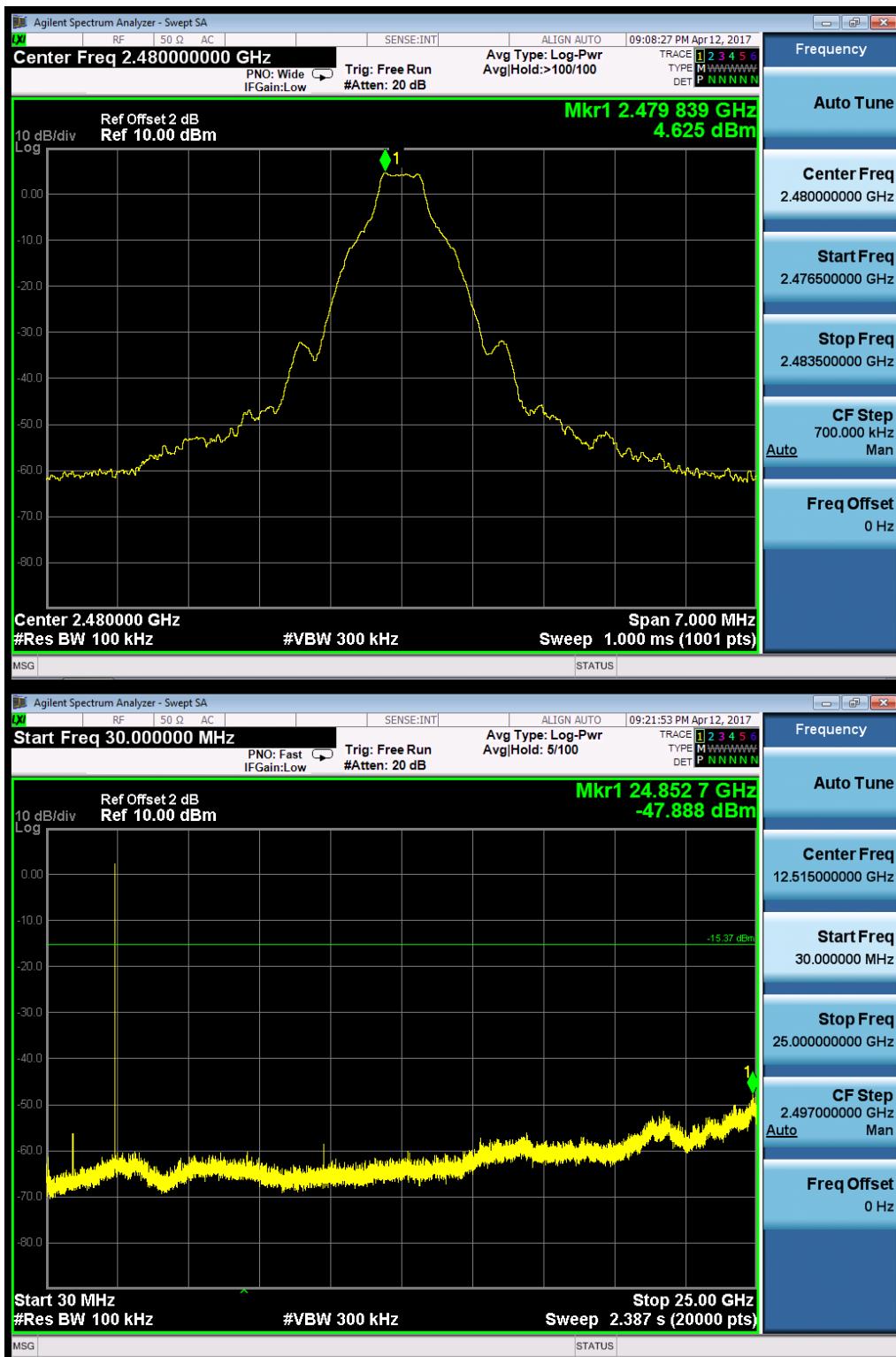
Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A.1.a, A.2.a
Ambient temperature	:	25°C
Relative humidity	:	50%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 19 von 107
Page 19 of 107
**Test Plot of Conducted spurious emissions measured in
100kHz Bandwidth of BDR mode**
Low Channel


Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 20 von 107
Page 20 of 107
Middle Channel


Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 21 von 107
Page 21 of 107
High Channel


Prüfbericht - Nr.: 50080611 001

Test Report No.

Seite 22 von 107
 Page 22 of 107

Band Edge



Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 23 von 107
Page 23 of 107
**Test Plot of Conducted spurious emissions measured in
100kHz Bandwidth of EDR mode**
Low Channel


Prüfbericht - Nr.: 50080611 001

Test Report No.

Seite 24 von 107
 Page 24 of 107

Middle Channel



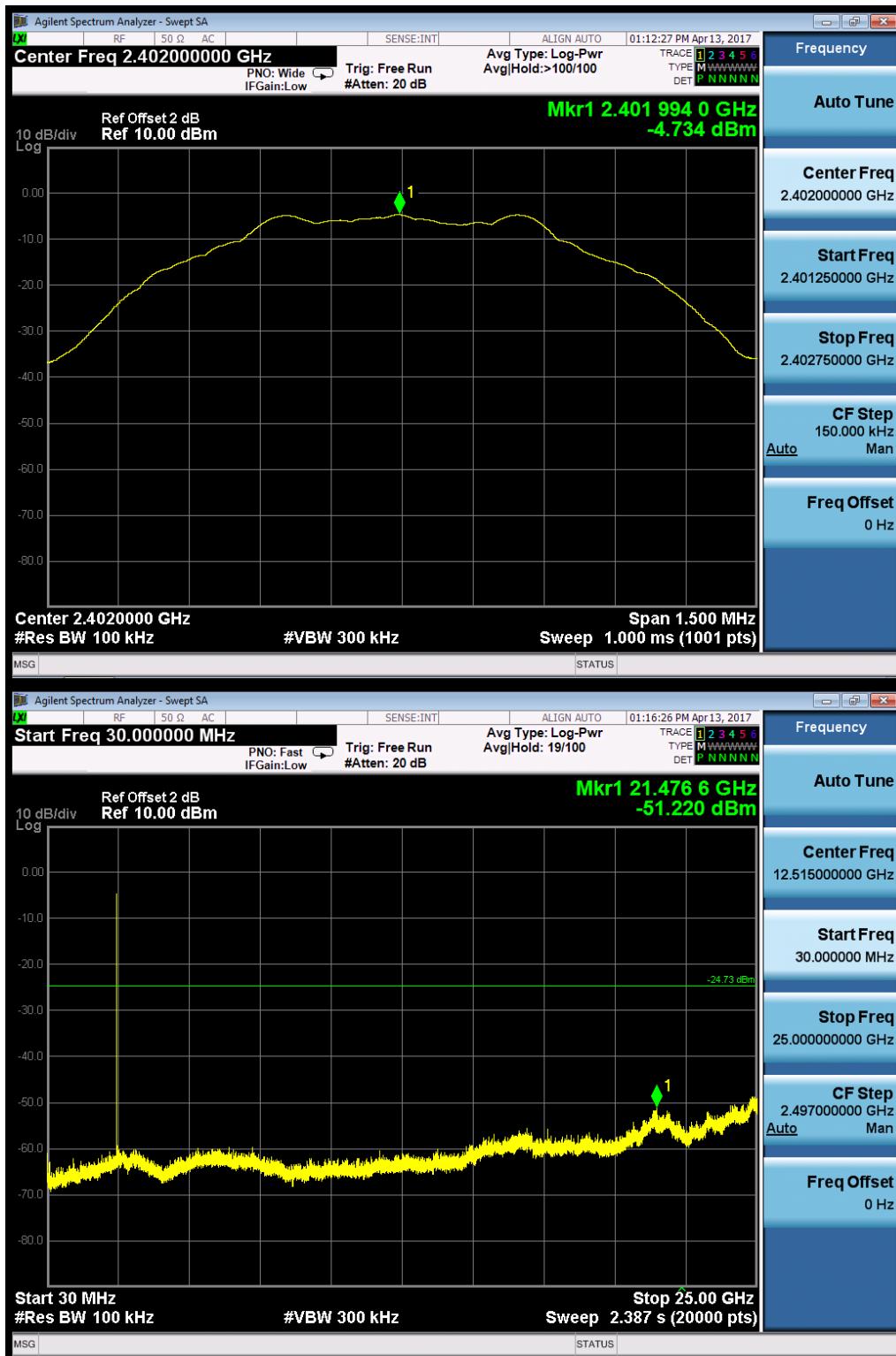
Produkte
Products
Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 25 von 107
Page 25 of 107
High Channel


Produkte
Products
Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 26 von 107
Page 26 of 107
Band Edge


Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 27 von 107
Page 27 of 107

Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of Low Energy mode

Low Channel

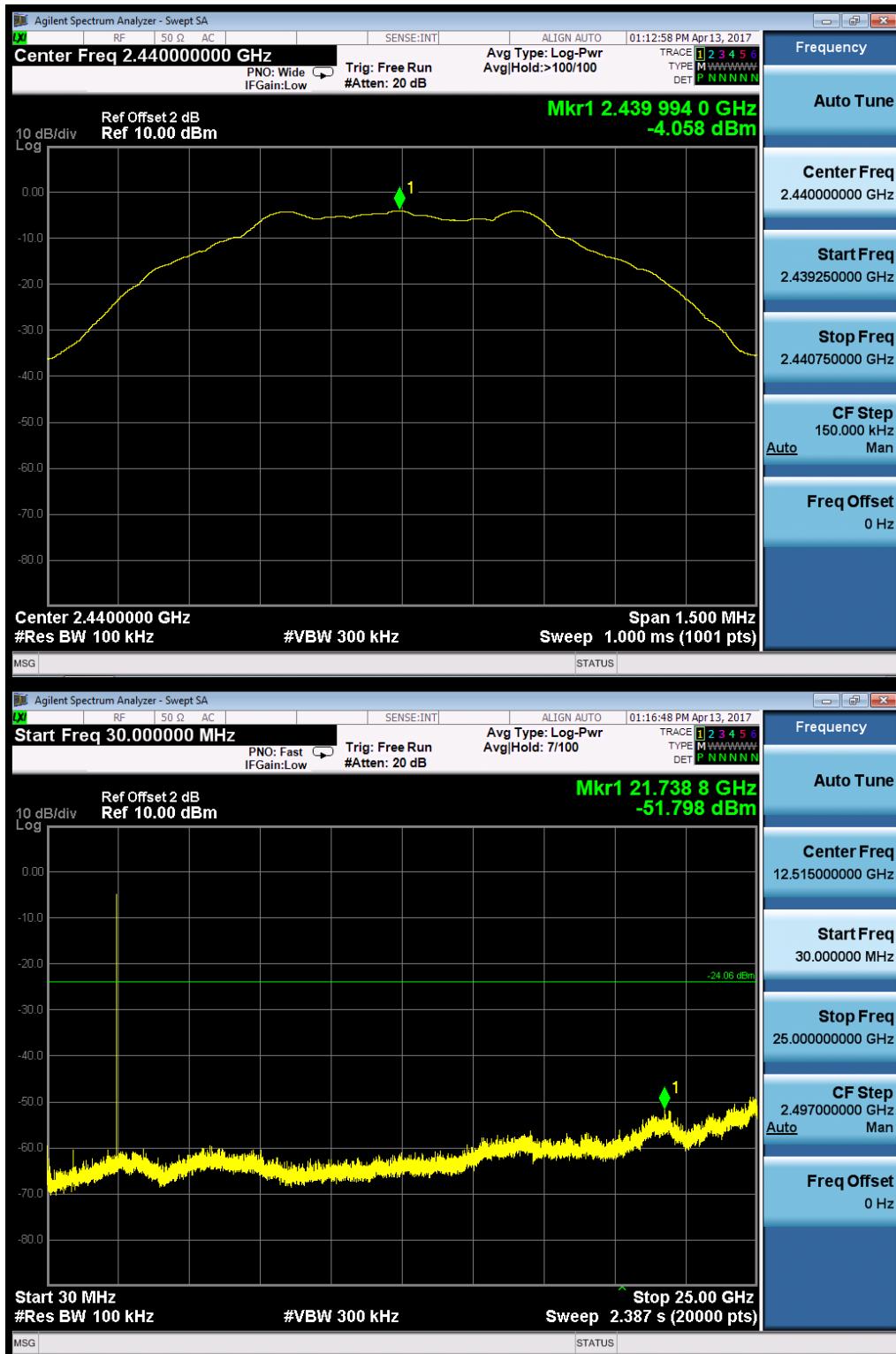


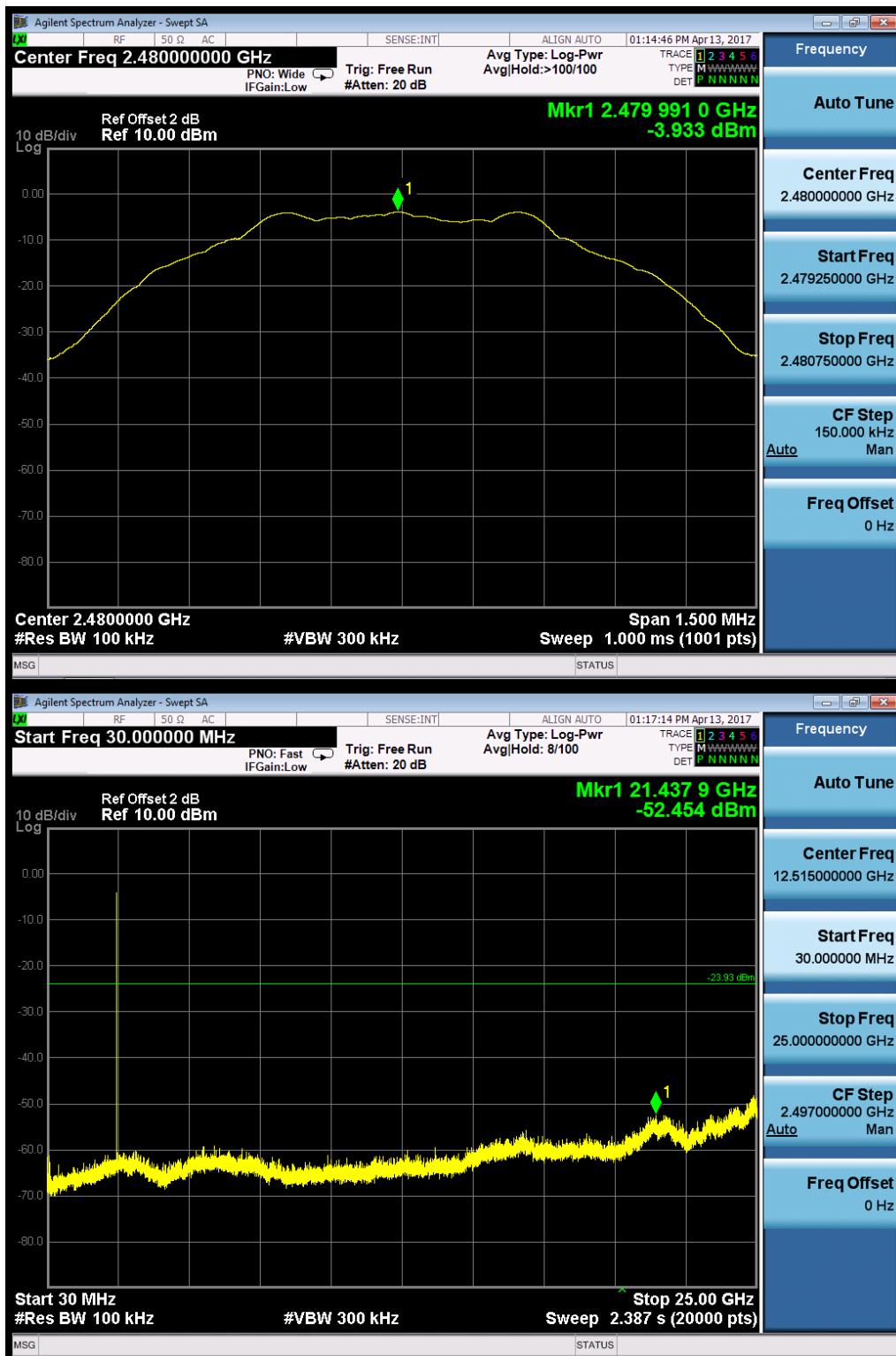
Prüfbericht - Nr.: 50080611 001

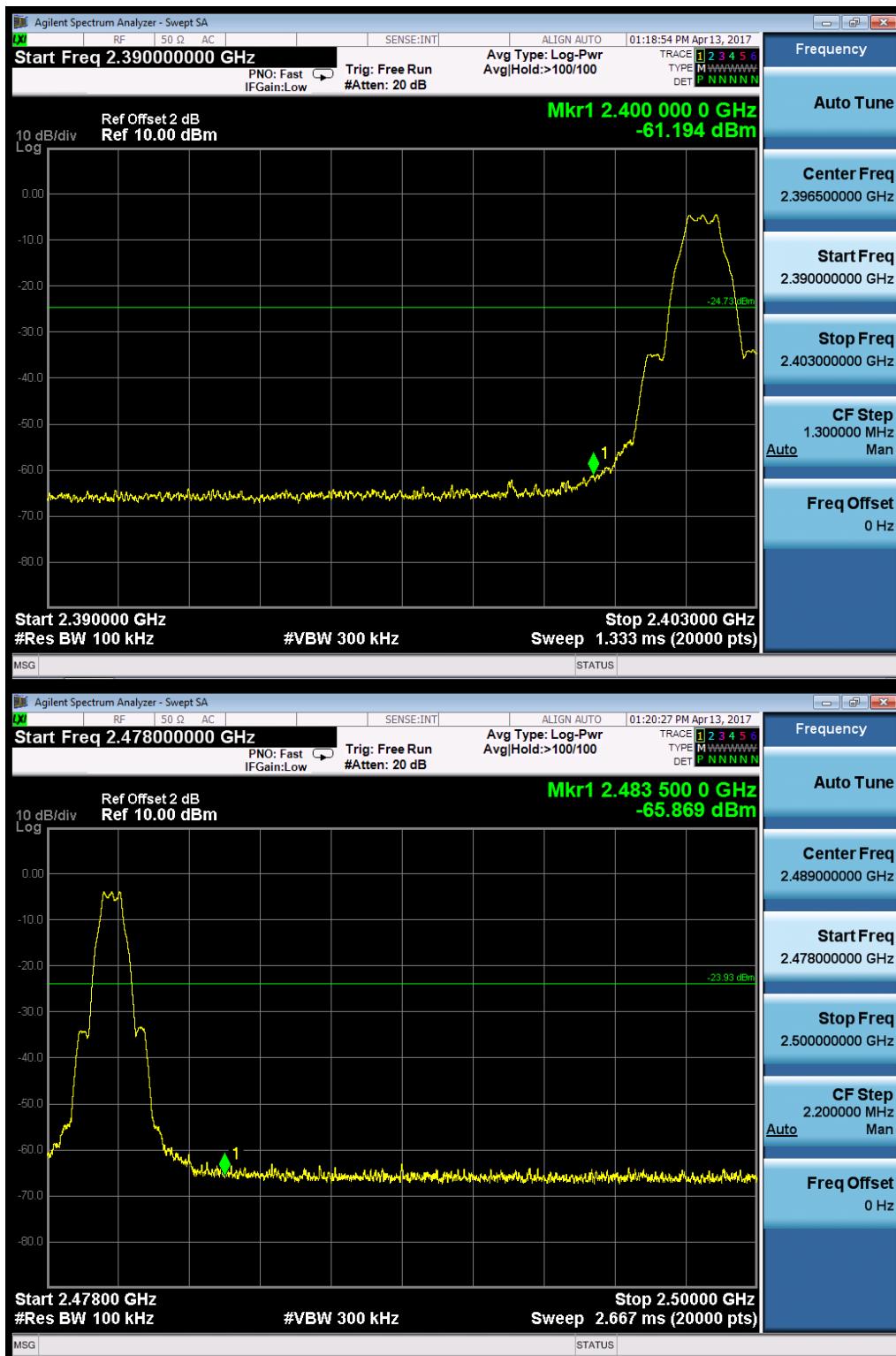
Test Report No.

Seite 28 von 107
 Page 28 of 107

Middle Channel



Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 29 von 107
Page 29 of 107
High Channel


Produkte
Products
Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 30 von 107
Page 30 of 107
Band Edge


Prüfbericht - Nr.: 50080611 001
*Test Report No.*Seite 31 von 107
Page 31 of 107**5.1.6 Power spectral density****RESULT:****Pass**

Date of testing : 2017-04-13
Test standard : FCC part 15.247(e)
Basic standard : RSS-247 clause 5.2(2)
Basic standard : ANSI C63.10: 2013
Limit : Clause 10 of KDB 558074 v03r01
Kind of test site : 8dBm/3kHz
Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
Operation mode : A.2.a
Ambient temperature : 25°C
Relative humidity : 50%
Atmospheric pressure : 101kPa

Table 13: Test result of power spectral density

Mode	Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Conclusion
Bluetooth LE mode	2402	-19.166	8	Pass
	2440	-18.657	8	Pass
	2480	-18.408	8	Pass

Prüfbericht - Nr.: **50080611 001**
Test Report No.

Seite 32 von 107
Page 32 of 107

5.1.7 Spurious Emission

RESULT:

Pass

Date of testing	:	2017-04-20 to 2017-04-22
Test standard	:	FCC part 15.247(d) RSS-Gen
Basic standard	:	ANSI C63.10: 2013 Clause 11 of KDB 558074 v03r01
Limits	:	FCC part 15.209(a)
Kind of test site	:	3m Semi-Anechoic Chamber & Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A.1.a, A.2.a
Ambient temperature	:	24°C
Relative humidity	:	53%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 33 von 107
Page 33 of 107

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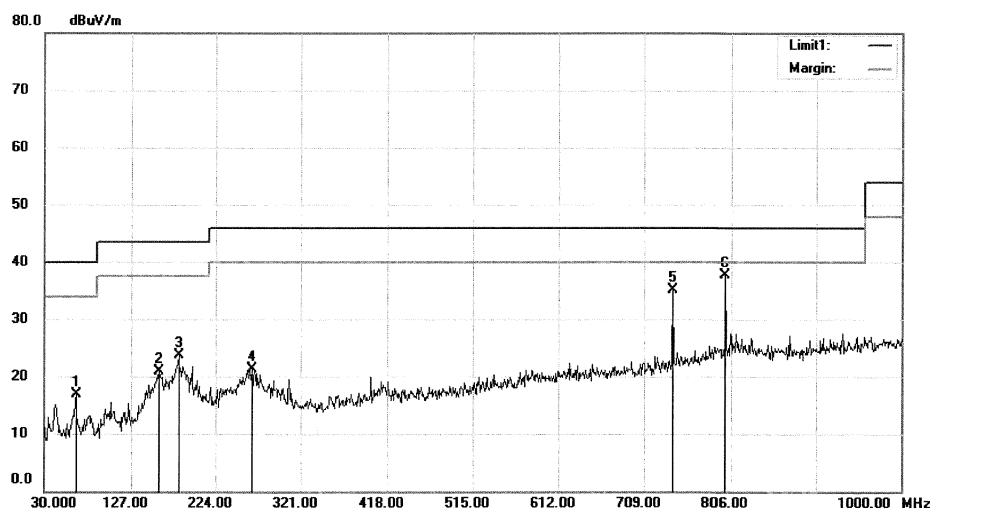

Access to the World
Radiated Emission Measurement

File :TUV

Data #:2257

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:GFSK 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		64.9200	34.58	-17.74	16.84	40.00	-23.16	QP		
2		159.0100	39.35	-18.43	20.92	43.50	-22.58	QP		
3		181.3200	40.47	-16.83	23.64	43.50	-19.86	QP		
4		265.7100	34.42	-13.10	21.32	46.00	-24.68	QP		
5		741.9800	38.37	-3.17	35.20	46.00	-10.80	QP		
6	*	799.2100	39.64	-2.03	37.61	46.00	-8.39	QP		

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

Operator: KK

File :TUV\Data .#2257

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 34 von 107
Page 34 of 107

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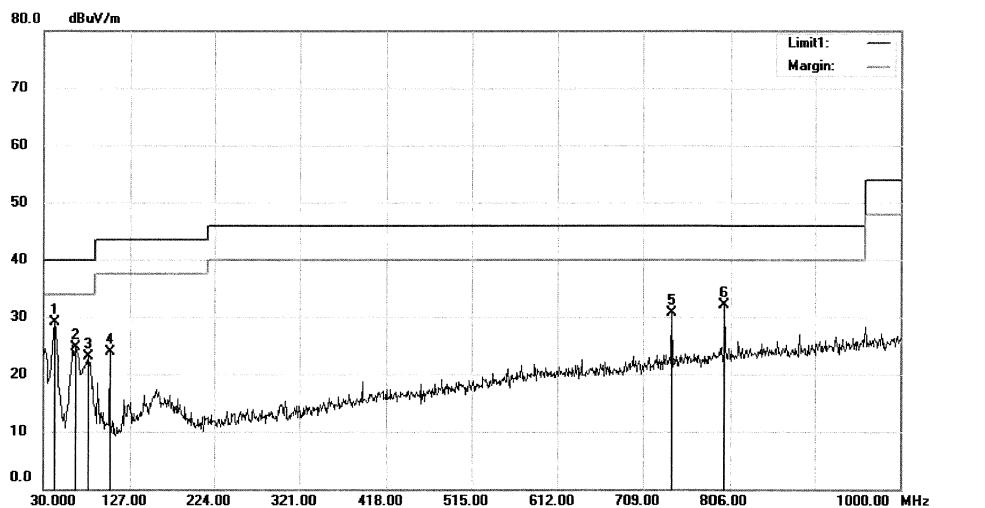
Radiated Emission Measurement

File : TUV

Data #2258

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:GFSK 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	42.6100	43.95	-14.94	29.01	40.00	-10.99	QP		
2		64.9200	42.38	-17.74	24.64	40.00	-15.36	QP		
3		79.4700	42.76	-19.66	23.10	40.00	-16.90	QP		
4		103.7200	39.27	-15.28	23.99	43.50	-19.51	QP		
5		741.9800	33.95	-3.17	30.78	46.00	-15.22	QP		
6		799.2100	34.07	-2.03	32.04	46.00	-13.96	QP		

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

Operator: KK

File : TUV\Data #2258

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 35 von 107
Page 35 of 107

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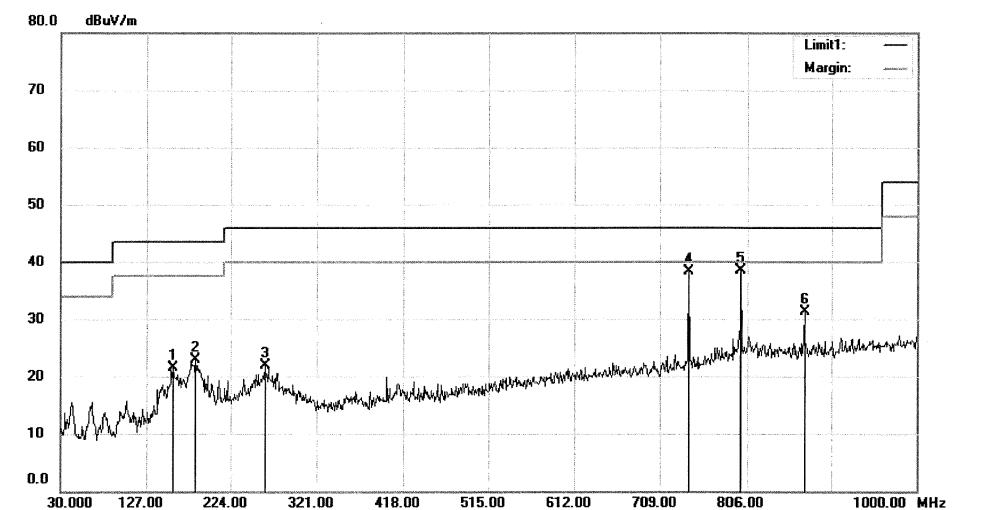
Radiated Emission Measurement

File : TUV

Data #2259

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:GFSK 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		157.0700	39.99	-18.58	21.41	43.50	-22.09	QP		
2		183.2600	39.70	-16.84	22.86	43.50	-20.64	QP		
3		262.8000	34.99	-13.11	21.88	46.00	-24.12	QP		
4		741.9800	41.52	-3.17	38.35	46.00	-7.65	QP		
5	*	799.2100	40.59	-2.03	38.56	46.00	-7.44	QP		
6		871.9600	32.48	-1.26	31.22	46.00	-14.78	QP		

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

Operator: KK

File : TUV\Data #2259

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 36 von 107
Page 36 of 107

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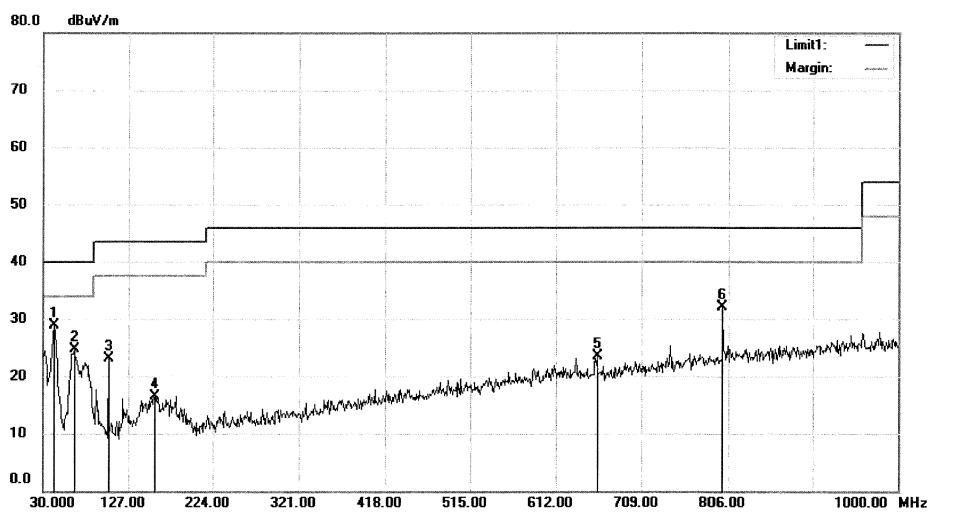

Access to the World
Radiated Emission Measurement

File : TUV

Data #: 2260

Date: 2017/04/22

Time:



Site: 3m Chamber #3

 Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode: GFSK 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	43.94	-15.03	28.91	40.00	-11.09	QP		
2		64.9200	42.44	-17.74	24.70	40.00	-15.30	QP		
3		103.7200	38.44	-15.28	23.16	43.50	-20.34	QP		
4		157.0700	35.01	-18.58	16.43	43.50	-27.07	QP		
5		658.5600	28.03	-4.43	23.60	46.00	-22.40	QP		
6		799.2100	34.21	-2.03	32.18	46.00	-13.82	QP		

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

Operator: KK

File : TUV\Data :#2260

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 37 von 107
Page 37 of 107

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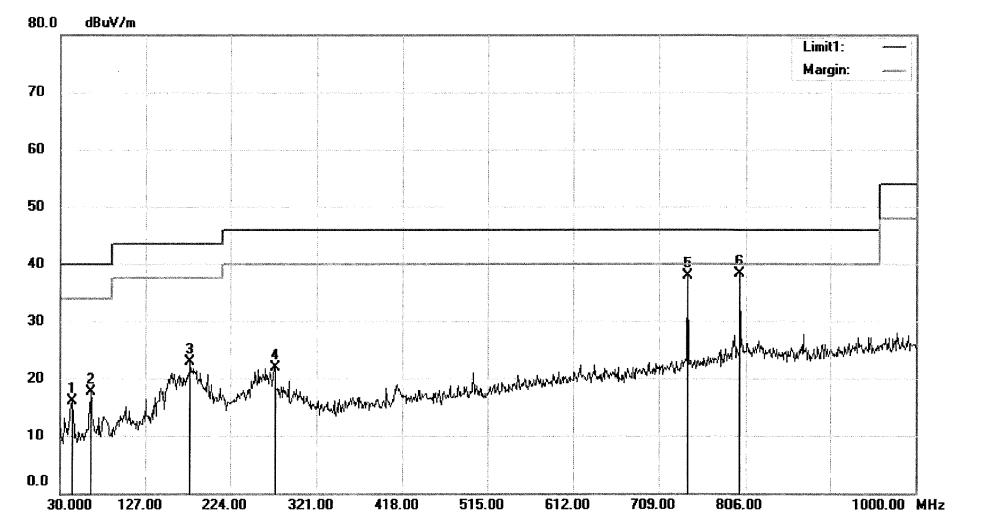

Radiated Emission Measurement

File :TUV

Data #2261

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:GFSK 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		43.5800	30.96	-14.92	16.04	40.00	-23.96	QP		
2		63.9500	35.08	-17.33	17.75	40.00	-22.25	QP		
3		178.4100	39.89	-17.05	22.84	43.50	-20.66	QP		
4		274.4400	35.05	-13.07	21.98	46.00	-24.02	QP		
5		741.9800	40.99	-3.17	37.82	46.00	-8.18	QP		
6	*	799.2100	40.43	-2.03	38.40	46.00	-7.60	QP		

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

Operator: KK

File :TUV\Data #2261

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 38 von 107
Page 38 of 107

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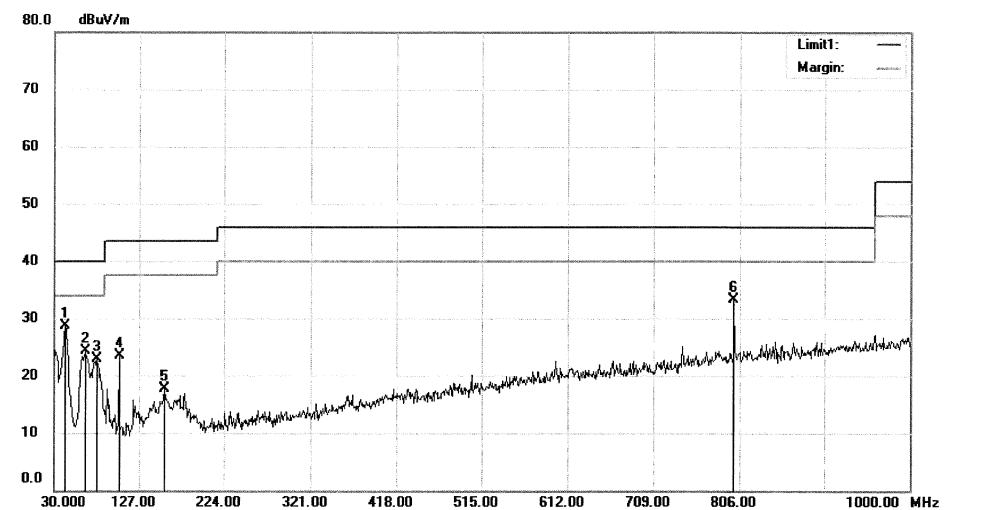
Radiated Emission Measurement

File :TUV

Data #:2262

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:GFSK 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	43.83	-15.03	28.80	40.00	-11.20	QP		
2		65.8900	42.47	-18.15	24.32	40.00	-15.68	QP		
3		78.5000	42.70	-19.87	22.83	40.00	-17.17	QP		
4		103.7200	38.76	-15.28	23.48	43.50	-20.02	QP		
5		156.1000	36.26	-18.65	17.61	43.50	-25.89	QP		
6		799.2100	35.28	-2.03	33.25	46.00	-12.75	QP		

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

Operator: KK

File :TUV\Data #:2262

Page: 1

Prüfbericht - Nr.: 50080611 001

Test Report No.

Seite 39 von 107
 Page 39 of 107

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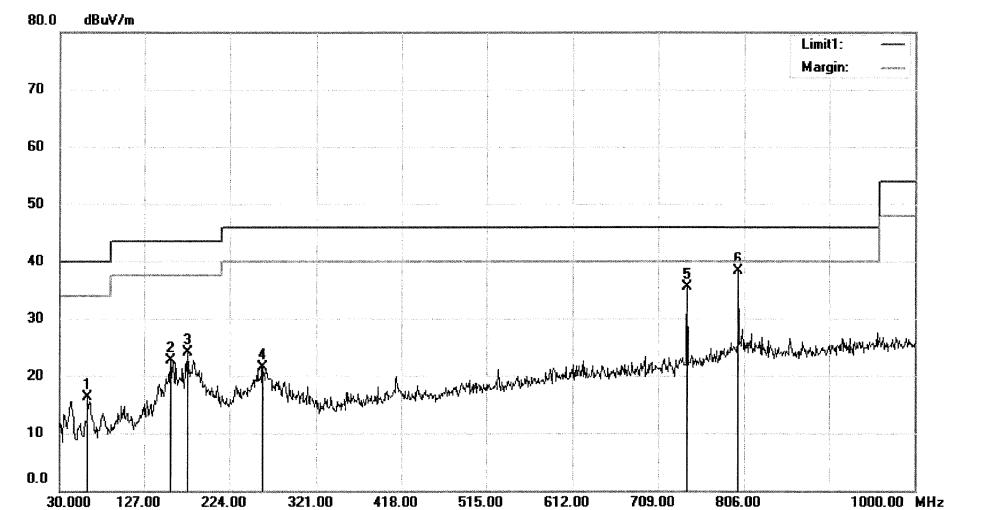
Radiated Emission Measurement

File : TUV

Data #: 2267

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:8DPSK 2402

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Detector	Table Height cm	Table Degree degree	Comment
1	62.0100	32.93	-16.53	16.40	40.00	-23.60	QP				
2	157.0700	41.19	-18.58	22.61	43.50	-20.89	QP				
3	176.4700	41.41	-17.34	24.07	43.50	-19.43	QP				
4	260.8600	34.71	-13.11	21.60	46.00	-24.40	QP				
5	741.9800	38.75	-3.17	35.58	46.00	-10.42	QP				
6 *	799.2100	40.24	-2.03	38.21	46.00	-7.79	QP				

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

Operator: KK

File : TUV\Data :\#2267

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 40 von 107
Page 40 of 107

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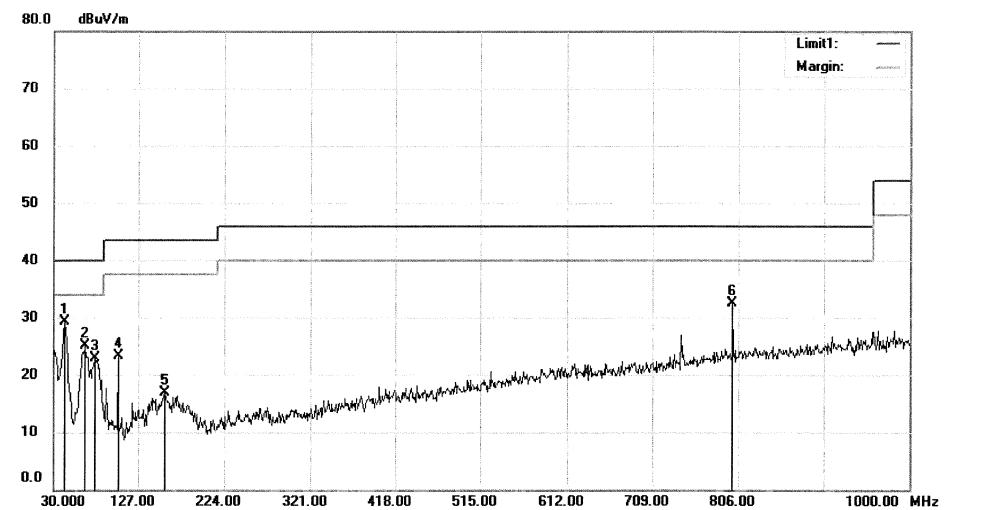

Access to the World
Radiated Emission Measurement

File : TUV

Data #2268

Date: 2017/04/22

Time:



Site 3m Chamber #3

 Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:8DPSK 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	44.28	-15.03	29.25	40.00	-10.75	QP		
2		65.8900	43.34	-18.15	25.19	40.00	-14.81	QP		
3		76.5600	43.20	-20.32	22.88	40.00	-17.12	QP		
4		103.7200	38.55	-15.28	23.27	43.50	-20.23	QP		
5		157.0700	35.56	-18.58	16.98	43.50	-26.52	QP		
6		799.2100	34.59	-2.03	32.56	46.00	-13.44	QP		

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

Operator: KK

File : TUV\Data #2268

Page: 1

Prüfbericht - Nr.: 50080611 001

Test Report No.

Seite 41 von 107
 Page 41 of 107

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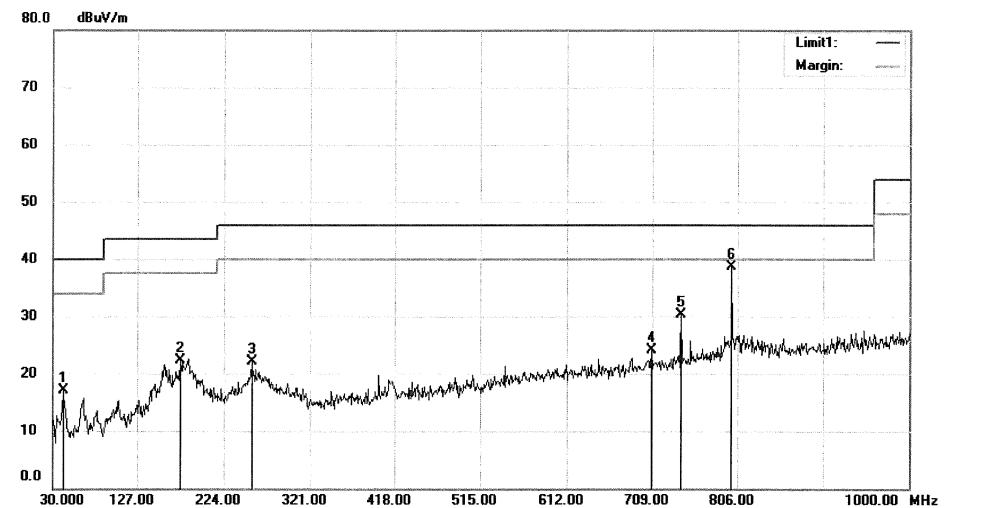
Radiated Emission Measurement

File :TUV

Data :#2265

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:8DPSK 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		41.6400	32.12	-15.03	17.09	40.00	-22.91	QP		
2		175.5000	39.73	-17.48	22.25	43.50	-21.25	QP		
3		255.0400	35.49	-13.36	22.13	46.00	-23.87	QP		
4		708.0300	28.02	-3.83	24.19	46.00	-21.81	QP		
5		741.9800	33.44	-3.17	30.27	46.00	-15.73	QP		
6	*	799.2100	40.66	-2.03	38.63	46.00	-7.37	QP		

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

Operator: KK

File :TUV\Data :#2265

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 42 von 107
Page 42 of 107

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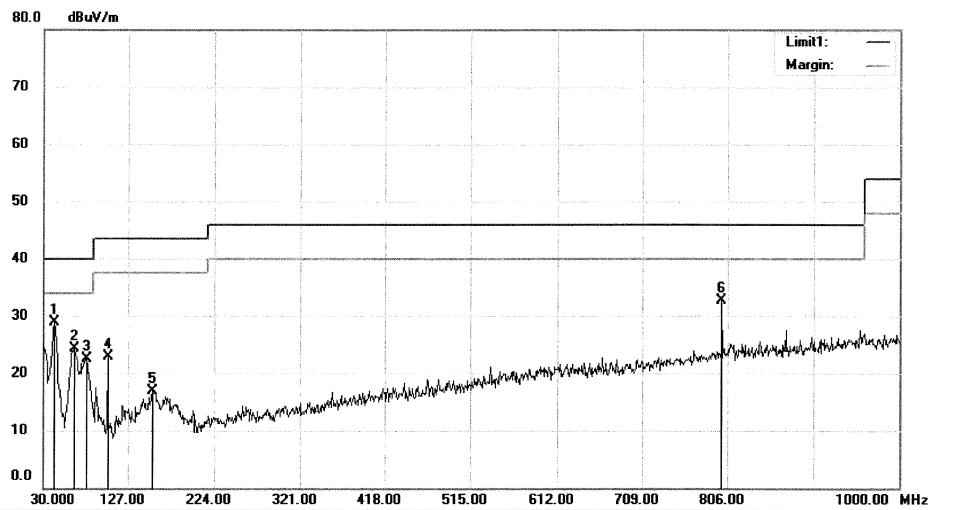
Radiated Emission Measurement

File :TUV

Data :#2266

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:8DPSK 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	43.95	-15.03	28.92	40.00	-11.08	QP		
2		65.8900	42.55	-18.15	24.40	40.00	-15.60	QP		
3		79.4700	42.17	-19.66	22.51	40.00	-17.49	QP		
4		103.7200	38.14	-15.28	22.86	43.50	-20.64	QP		
5		154.1600	35.73	-18.80	16.93	43.50	-26.57	QP		
6		799.2100	34.79	-2.03	32.76	46.00	-13.24	QP		

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

Operator: KK

File :TUV\Data :#2266

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 43 von 107
Page 43 of 107

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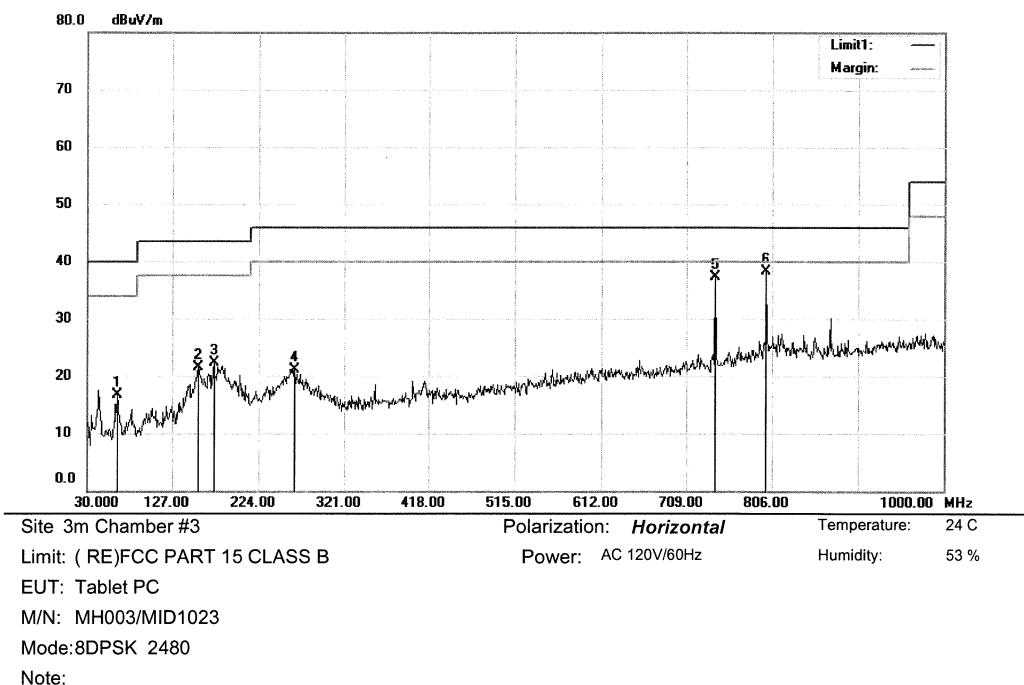

Access to the World
Radiated Emission Measurement

File :TUV

Data #2263

Date: 2017/04/22

Time:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		63.9500	34.05	-17.33	16.72	40.00	-23.28	QP		
2		156.1000	40.10	-18.65	21.45	43.50	-22.05	QP		
3		173.5600	40.09	-17.76	22.33	43.50	-21.17	QP		
4		264.7400	34.28	-13.10	21.18	46.00	-24.82	QP		
5		741.9800	40.57	-3.17	37.40	46.00	-8.60	QP		
6	*	799.2100	40.41	-2.03	38.38	46.00	-7.62	QP		

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

Operator: KK

File :TUV\Data #2263

Page: 1

Prüfbericht - Nr.: 50080611 001
Test Report No.
Seite 44 von 107
Page 44 of 107

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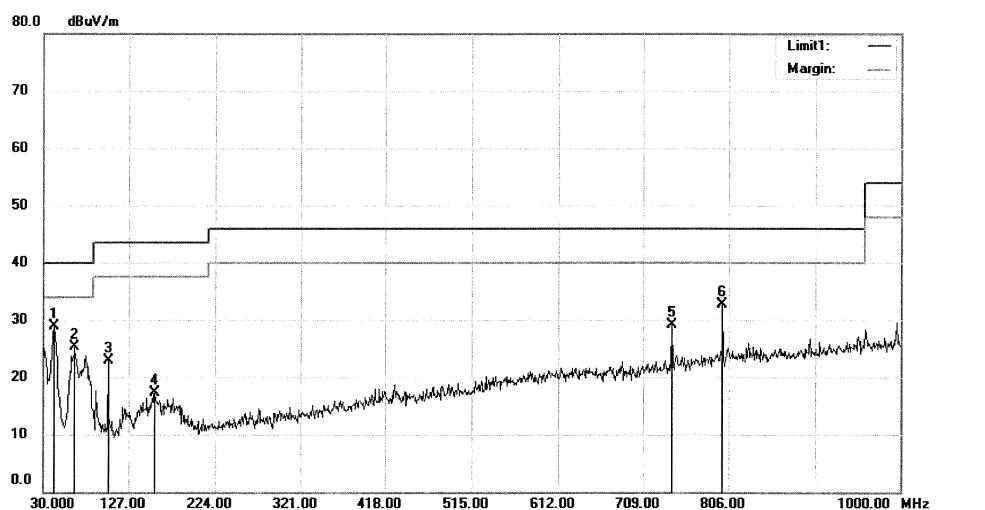

Access to the World
Radiated Emission Measurement

File : TUV

Data #: 2264

Date: 2017/04/22

Time:



Site: 3m Chamber #3

Polarization: Vertical

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode: 8DPSK 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	43.92	-15.03	28.89	40.00	-11.11	QP		
2		65.8900	43.45	-18.15	25.30	40.00	-14.70	QP		
3		103.7200	38.17	-15.28	22.89	43.50	-20.61	QP		
4		156.1000	35.95	-18.65	17.30	43.50	-26.20	QP		
5		741.9800	32.29	-3.17	29.12	46.00	-16.88	QP		
6		799.2100	34.82	-2.03	32.79	46.00	-13.21	QP		

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

Operator: KK

File : TUV\Data :\#2264

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 45 von 107
Page 45 of 107

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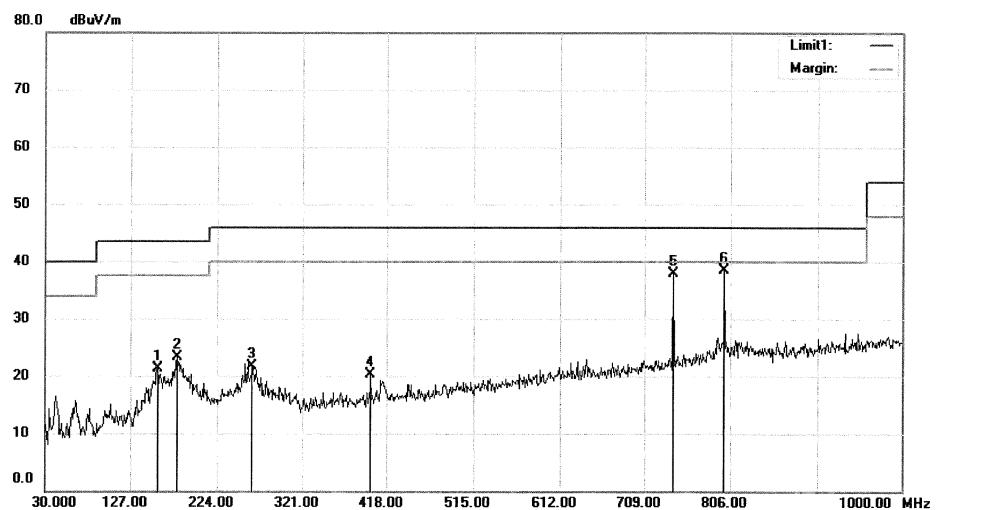
Radiated Emission Measurement

File :TUV

Data #2269

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:BLE 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		157.0700	39.84	-18.58	21.26	43.50	-22.24	QP		
2		179.3800	40.19	-16.92	23.27	43.50	-20.23	QP		
3		263.7700	34.79	-13.10	21.69	46.00	-24.31	QP		
4		399.5700	29.65	-9.26	20.39	46.00	-25.61	QP		
5		741.9800	41.12	-3.17	37.95	46.00	-8.05	QP		
6	*	799.2100	40.54	-2.03	38.51	46.00	-7.49	QP		

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

Operator: KK

File :TUV\Data #2269

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 46 von 107
Page 46 of 107

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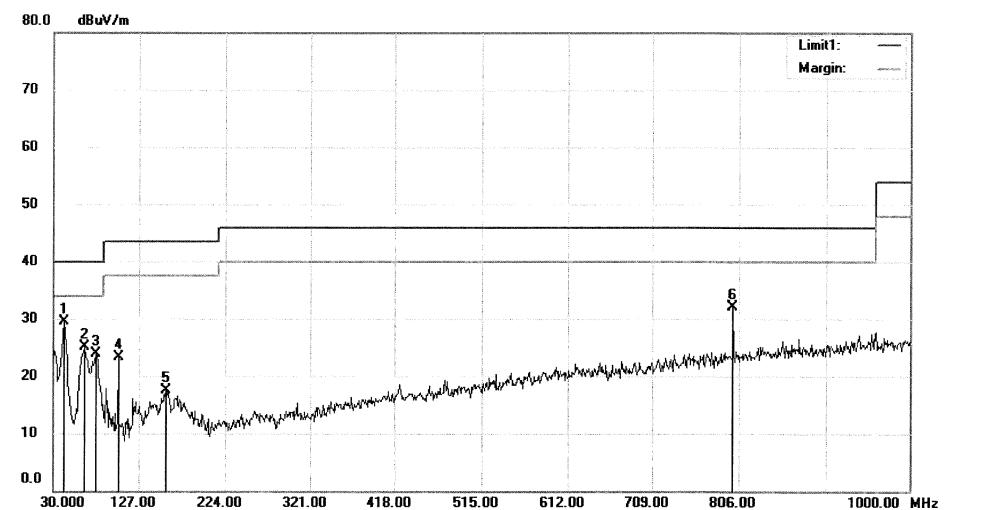
Radiated Emission Measurement

File : TUV

Data #: 2270

Date: 2017/04/22

Time:



Site: 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode: BLE 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	42.6100	44.48	-14.94	29.54	40.00	-10.46	QP		
2		65.8900	43.20	-18.15	25.05	40.00	-14.95	QP		
3		78.5000	43.78	-19.87	23.91	40.00	-16.09	QP		
4		103.7200	38.53	-15.28	23.25	43.50	-20.25	QP		
5		157.0700	36.08	-18.58	17.50	43.50	-26.00	QP		
6		799.2100	34.06	-2.03	32.03	46.00	-13.97	QP		

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

Operator: KK

File : TUV\Data :#2270

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 47 von 107
Page 47 of 107

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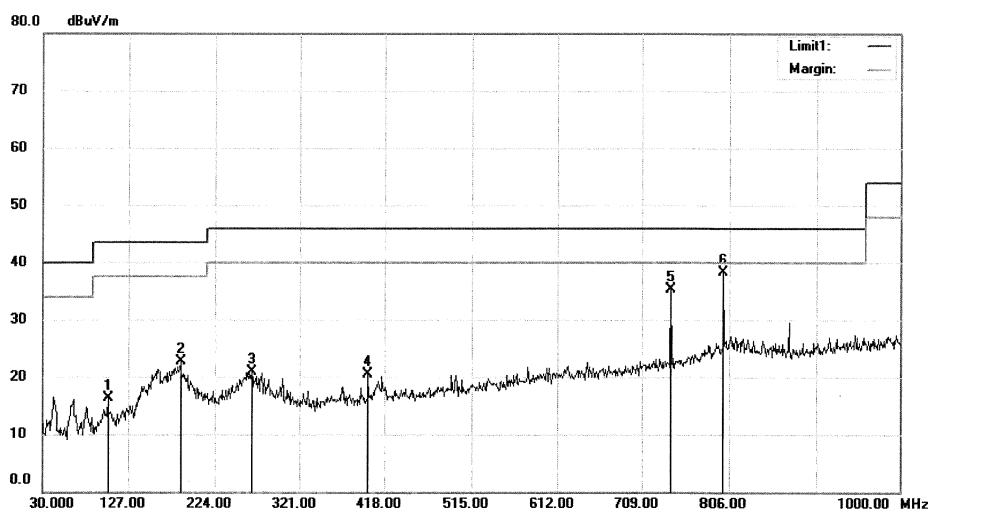

Access to the World
Radiated Emission Measurement

File :TUV

Data #:2272

Date: 2017/04/22

Time:



Site 3m Chamber #3

 Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:BLE 2440

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		103.7200	31.67	-15.28	16.39	43.50	-27.11	QP		
2		185.2000	39.60	-16.84	22.76	43.50	-20.74	QP		
3		265.7100	33.95	-13.10	20.85	46.00	-25.15	QP		
4		399.5700	29.83	-9.26	20.57	46.00	-25.43	QP		
5		741.9800	38.50	-3.17	35.33	46.00	-10.67	QP		
6	*	799.2100	40.38	-2.03	38.35	46.00	-7.65	QP		

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

Operator: KK

File :TUV\Data :#2272

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 48 von 107
Page 48 of 107

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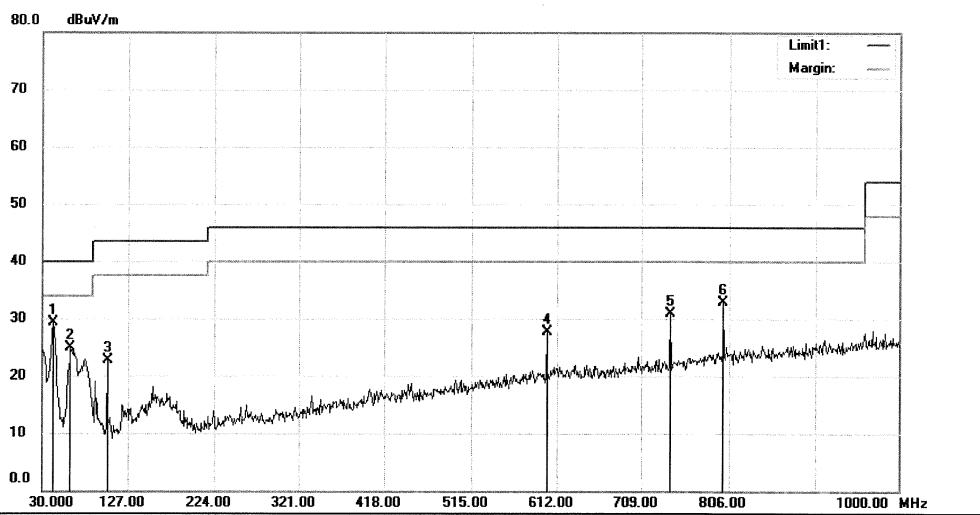
Radiated Emission Measurement

File :TUV

Data #:2271

Date: 2017/04/22

Time:



Site: 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:BLE 2440

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Over Detector	Antenna Height cm	Table Degree	Comment
1	*	41.6400	44.33	-15.03	29.30	40.00	-10.70	peak		
2		62.0100	41.42	-16.53	24.89	40.00	-15.11	peak		
3		103.7200	38.08	-15.28	22.80	43.50	-20.70	peak		
4		600.3600	32.69	-5.05	27.64	46.00	-18.36	peak		
5		741.9800	34.02	-3.17	30.85	46.00	-15.15	peak		
6		799.2100	34.94	-2.03	32.91	46.00	-13.09	peak		

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

Operator: KK

File :TUV\Data .#2271

Page: 1

Prüfbericht - Nr.: 50080611 001

Test Report No.

Seite 49 von 107
 Page 49 of 107

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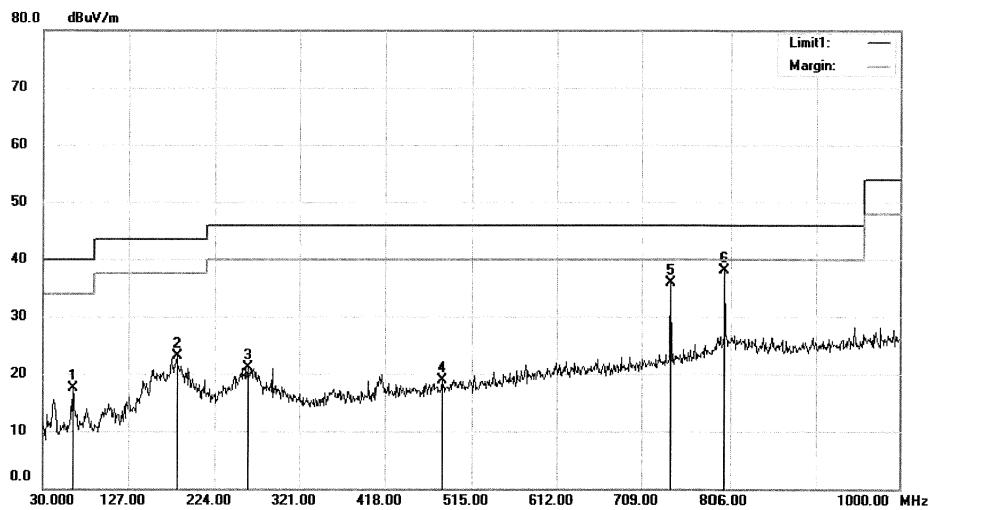
Radiated Emission Measurement

File :TUV

Data #:2274

Date: 2017/04/22

Time:



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:BLE 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		63.9500	34.77	-17.33	17.44	40.00	-22.56	QP		
2		181.3200	39.91	-16.83	23.08	43.50	-20.42	QP		
3		261.8300	34.17	-13.11	21.06	46.00	-24.94	QP		
4		482.0200	26.70	-7.73	18.97	46.00	-27.03	QP		
5		741.9800	39.02	-3.17	35.85	46.00	-10.15	QP		
6	*	799.2100	40.16	-2.03	38.13	46.00	-7.87	QP		

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

Operator: KK

File :TUV\Data #:2274

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 50 von 107
Page 50 of 107

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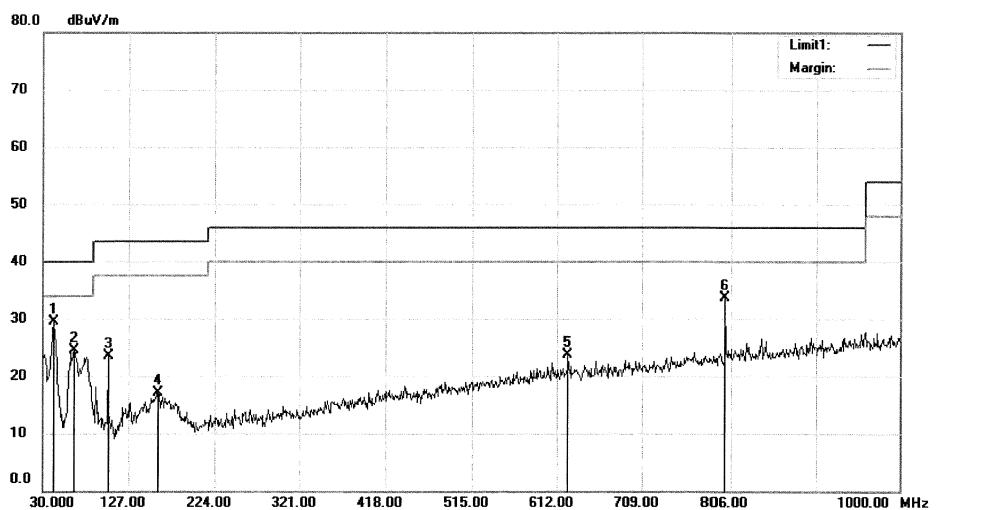
Radiated Emission Measurement

File : TUV

Data #2273

Date: 2017/04/22

Time:



Site: 3m Chamber #3

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MH003/MID1023

Mode:BLE 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	41.6400	44.47	-15.03	29.44	40.00	-10.56	QP		
2		64.9200	42.29	-17.74	24.55	40.00	-15.45	QP		
3		103.7200	38.74	-15.28	23.46	43.50	-20.04	QP		
4		159.9800	35.49	-18.35	17.14	43.50	-26.36	QP		
5		624.6100	28.44	-4.79	23.65	46.00	-22.35	QP		
6		799.2100	35.66	-2.03	33.63	46.00	-12.37	QP		

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

Operator: KK

File : TUV\Data #2273

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 51 von 107
Page 51 of 107

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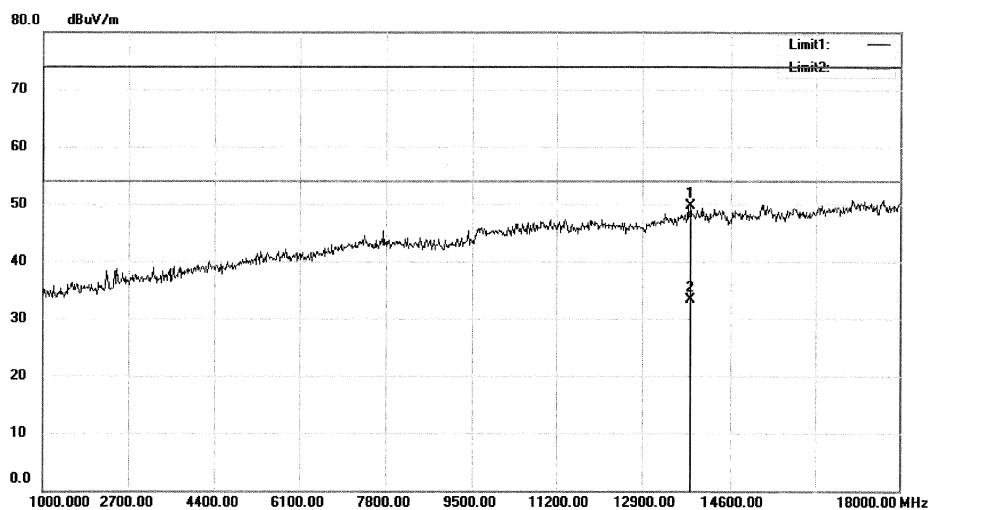

Access to the World
Radiated Emission Measurement

File : TUV

Data : #2579

Date: 2017/04/20

Time:



Site 3m Chamber #1

 Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15C

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MHK003/MID1023

Mode:GFSK 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		13835.00	55.71	-6.09	49.62	74.00	-24.38	peak	0	
2 *		13835.00	39.35	-6.09	33.26	54.00	-20.74	AVG	0	

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

Operator: KK

File : TUV\Data :#2579

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 52 von 107
Page 52 of 107

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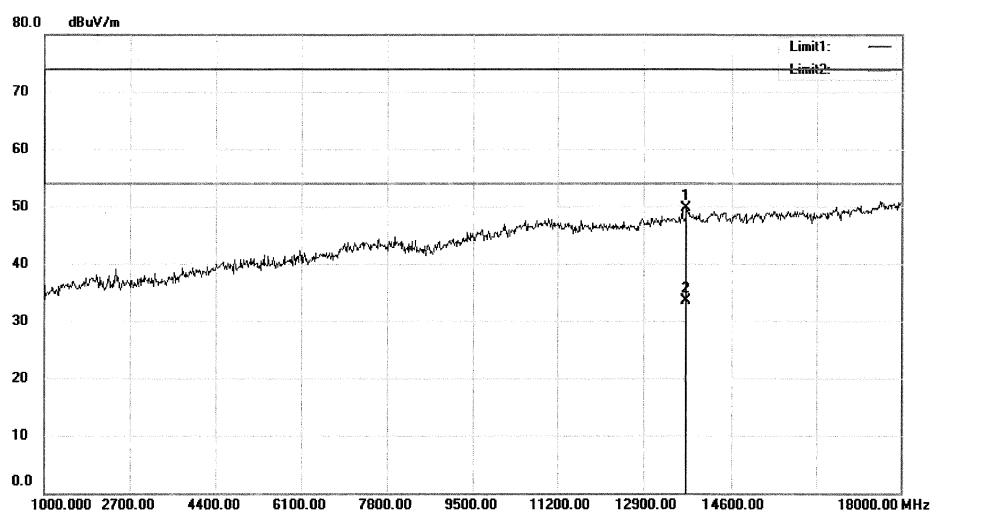

Access to the World
Radiated Emission Measurement

File : TUV

Data #2580

Date: 2017/04/20

Time:



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 24 C

Limit: (RE)FCC PART 15C

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MHK003/MID1023

Mode:GFSK 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		13733.00	56.25	-6.57	49.68	74.00	-24.32	peak	0		
2 *		13733.00	39.99	-6.57	33.42	54.00	-20.58	AVG	0		

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

Operator: KK

File : TUV\Data #2580

Page: 1

Prüfbericht - Nr.: **50080611 001**
Test Report No.
Seite 53 von 107
Page 53 of 107

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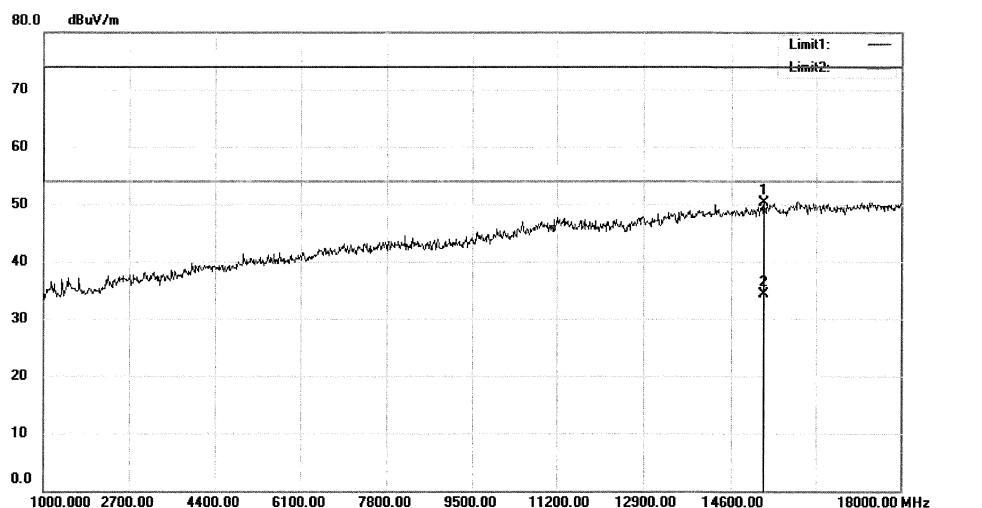

Radiated Emission Measurement

File : TUV

Data #: 2581

Date: 2017/04/20

Time:



Site: 3m Chamber #1

Polarization: **Horizontal**

Temperature: 24 C

Limit: (RE)FCC PART 15C

Power: AC 120V/60Hz

Humidity: 53 %

EUT: Tablet PC

M/N: MHK003/MID1023

Mode: GFSK 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		15246.00	57.46	-7.07	50.39	74.00	-23.61	peak	0		
2 *		15246.00	41.30	-7.07	34.23	54.00	-19.77	AVG	0		

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

Operator: KK

File : TUV Data #: 2581

Page: 1