

Prüfbericht-Nr.: Auftrags-Nr.: 17044019 001 164022420 Seite 1 von 96 Test Report No.: Order No.: Page 1 of 96 Kunden-Referenz-Nr.: Auftragsdatum: N/A 28.09.2014 Client Reference No.: Order date: Compupal Group Corporation Auftraggeber: No.1555 Jiashan Avenue, Jiashan, Zhejiang 314113, China Client. Prüfgegenstand: **BLUETOOTH SPEAKER** Test item: Bezeichnung / Typ-Nr.: MG-BTS01, MG-BTS01-BK, MG-BTS01-W, MG-BTS01-BU Identification / Type No.: Auftrags-Inhalt: **FCC Certification** Order content. CFR47 FCC Part 15: Subpart C Section 15.247 Prüfgrundlage: Test specification: CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 Wareneingangsdatum: 14,10,2014 Date of receipt: Prüfmuster-Nr.: A000111095-004, A000111095-005 Test sample No.: Prüfzeitraum: 16.10.2014 - 22.10.2014 Testing period: Ort der Prüfung: Accurate Technology Co., Ltd. Place of testing: Prüflaboratorium: TÜV Rheinland (Shenzhen) Co., Ltd. Testing laboratory. Prüfergebnis*: **Pass** Test result*: kontrolliert von I reviewed by: geprüft von I tested by: 92 Owen Tian/Project Manager 10.12.2014 Sam Lin/Technical Certicier 10.12.2014 Datum Name / Stellung Unterschrift Datum Name / Stellung Unterschrift Name / Position Date Name / Position Date Signature Signature Sonstiges I Other. Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt Condition of the test item at delivery: Test item complete and undamaged * Legende: 1 = sehr gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft 2 = gut

F(ail) = failed a.m. test specification(s) 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.

3 = satisfactory

P(ass) = entspricht o.g. Prüfgrundlage(n)

P(ass) = passed a.m. test specification(s)

2 = good

1 = very good

Legend:

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.

F(ai!) = entspricht nicht o.g. Prüfgrundlage(n)

N/A = nicht anwendbar

N/A = not applicable

4 = sufficient

N/T = nicht getestet

N/T = not tested

5 = poor



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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

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1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

(FCC Registration No.: 752051)

F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, P.R. China

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

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2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Туре	S/N	Calibrated until		
Transmitter spurious emissions	& Receiver spurio	ous emissions				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2015-01-11		
Test Receiver	Rohde&Schwarz	ESCS30	100307	2015-01-11		
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2015-01-11		
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2015-01-11		
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2015-01-11		
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2015-01-11		
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	2015-01-11		
Temp. & Humid. Chamber	Gongwen	HSD-500	0109	2015-01-11		
Radio Spectrum Test						
EMI Test Receiver	Rohde&Schwarz	ESPI-3	100396/003	2015-01-11		
Spectrum Analyzer	Rohde & Schwarz	FSV40	101495	2015-06-11		
Temp. & Humid. Chamber	Gongwen	HSD-500	0109	2015-01-11		
Conducted Emission						
Test Receiver	Rohde&Schwarz	ESCS30	100307	2015-01-11		
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2015-01-11		
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100815	2015-01-11		
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	2015-01-11		

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 basics using in house standards or comparisons.

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2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Parameter	Uncertainty
Radio Spectrum	< ± 0.60 dB
Radiated emission of transmitter, valid up to 26.5 GHz	< ± 4.42 dB
Conducted Emission	< ± 2.23 dB
Radiated Emission	< ± 4.42 dB

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.

2.7 Status of Facility Used for Testing

Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan, Shenzhen, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

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3. General Product Information

3.1 Product Function and Intended Use

The EUTs are portable Bluetooth speaker.
These models are identical except the color.
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	BLUETOOTH SPEAKER
Type Designation	MG-BTS01, MG-BTS01-BK, MG-BTS01-W, MG-BTS01-BU
FCC ID	Z5YMG-BTS01
Operating Frequency band	2402 – 2480MHz
Channel separation	1MHz
Extreme Temperature Range	-20~+60°C
Operation Voltage	DC 3.7V (via built in battery)
	DC 5V (via USB port)
Modulation	FHSS (GFSK, 8DPSK, π/4DQPSK)
Bluetooth version	4.0, Dual Mode
Antenna Gain	-2dBi

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

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	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



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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 (LE mode)

Technical Specification	Value
Kind of Equipment	BLUETOOTH SPEAKER
Type Designation	MG-BTS01, MG-BTS01-BK, MG-BTS01-W, MG-BTS01-BU
FCC ID	Z5YMG-BTS01
Operating Frequency band	2402 – 2480MHz
Channel separation	2MHz
Extreme Temperature Range	-20~+60°C
Operation Voltage	DC 3.7V (via built in battery)
Kind of Equipment	BLUETOOTH SPEAKER
Modulation	GFSK
Bluetooth version	4.0, Dual Mode
Antenna Gain	-2dBi

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

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	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		

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3.3 Independent Operation Modes

The basic operation modes are:

A. On

- 1. Bluetooth mode (BDR & EDR mode)
 - a. Tansmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - b. Receiving
- 2. Bluetooth mode (LE mode)
 - a. Tansmitting
 - 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



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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 C63.4: 2003.

According to clause 3.1, all tests were applied on model MG-BTS01 only.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N	Rating
Notebook PC	Lenovo	4290-RT8	R9-FW93G	N/A

The EUT was tested with following cables:

Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
Micro USB port	4 cores, non-shielded port, 3m	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.



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4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

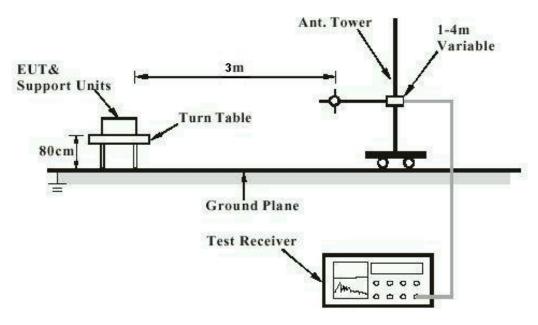
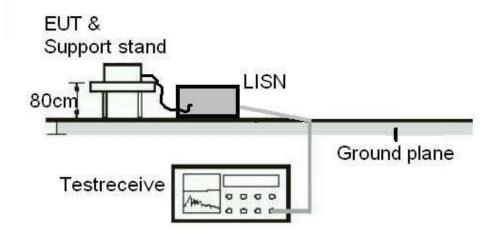


Diagram of Measurement Equipment Configuration for Conduction Measurement





Products Prüfbericht - Nr.: 17044019 001 Seite 12 von 96 Page 12 of 96 Test Report No. **Diagram of Measurement Equipment Configuration for Transmitter Measurement** RF Cable Test EUT Receiver



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5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: Pass

Test standard : FCC Part 15.247(b)(4) and Part 15.203

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 0dBi, 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.

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5.1.2 Peak Output Power

RESULT: Pass

2014-10-22 Test date

FCC Part 15.247(b)(1) Test standard

FCC Part 15.247(b)(3)

Basic standard : ANSI C63.4: 2003

Clause 9.1 of KDB 558074 v03r01

125mW, 1W Limit Kind of test site : Shielded room

Test setup

Low/ Middle/ High

A.1.a, A.2.a

Ambient temperature : Relative humidity
Atmospheric proc **25**℃ 52% 101kPa

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

Channel	Channel Frequency	Peak Output Power	Limit
Chamilei	(MHz)	(dBm)	(dBm)
Low Channel	2402	2.41	21
Middle Channel	2441	4.74	21
High Channel	2480	5.43	21

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

Channel	Channel Frequency	Peak Output Power	Limit
Chamilei	(MHz)	(dBm)	(dBm)
Low Channel	2402	0.96	21
Middle Channel	2441	3.72	21
High Channel	2480	4.55	21

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

Channel	Channel Frequency Peak Output Pow		Limit
Channel	(MHz)	(dBm)	(dBm)
Low Channel	2402	3.82	30
Middle Channel	2440	4.43	30
High Channel	2480	4.64	30



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5.1.3 20dB Bandwidth and 99% Bandwidth

RESULT: Pass

Date of testing 2014-10-16

Test standard FCC Part 15.247(a)(1) Basic standard ANSI C63.4: 2003

Clause 8 of KDB 558074 v03r01

Kind of test site Shielded room

Test setup

Test Channel Low/ Middle/ High

Operation Mode : Ambient temperature : A.1.a **25**℃ Relative humidity 52% Atmospheric pressure : 101kPa

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

Channal	Channel	20dB Bandwidth	99% Bandwidth
Channel	Frequency (MHz)	(MHz)	(MHz)
Low Channel	2402	0.9335	0.9378
Mid Channel	2441	0.9335	0.9378
High Channel	2480	0.9335	0.9421

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

Channel	Channel	20dB Bandwidth	99% Bandwidth
Chamilei	Frequency (MHz)	(MHz)	(MHz)
Low Channel	2402	1.2070	1.1939
Mid Channel	2441	1.2069	1.1896
High Channel	2480	1.2070	1.1983



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5.1.4 6dB Bandwidth and 99% Bandwidth

RESULT: Pass

Date of testing 2014-10-22

FCC Part 15.247(a)(2) Test standard Basic standard ANSI C63.4: 2003

Clause 8 of KDB 558074 v03r01

Kind of test site Shielded room

Test setup

Low/ Middle/ High

Operation Mode : Ambient temperature : Relative humidity : Atmospheric : A.2.a **25**℃ 52% Atmospheric pressure : 101kPa

Table 12: Test result of 6dB & 99% Bandwidth of Bluetooth, LE mode

Channel	Channel	6dB Bandwidth	99% Bandwidth
	Frequency (MHz)	(MHz)	(MHz)
Low Channel	2402	0.5557	1.0376
Mid Channel	2440	0.5731	1.0376
High Channel	2480	0.5774	1.0333



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5.1.5 Conducted Spurious Emissions measured in 100kHz Bandwidth

RESULT: Pass

2014-10-22 Date of testing

Test standard FCC part 15.247(d) Basic standard ANSI C63.4: 2003

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

A.1.a, A.2.a

Operation mode :
Ambient temperature :
Relative humidity :
Atmospheric pressure : **25**℃ 52% 101kPa

For details refer to following test plot.

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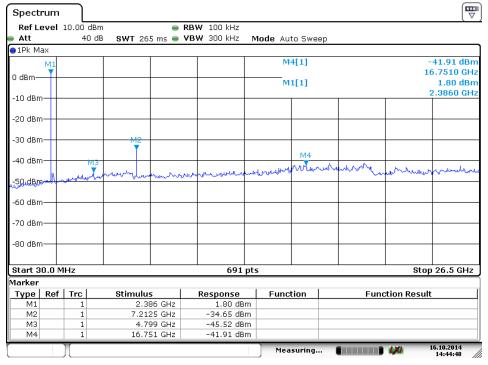
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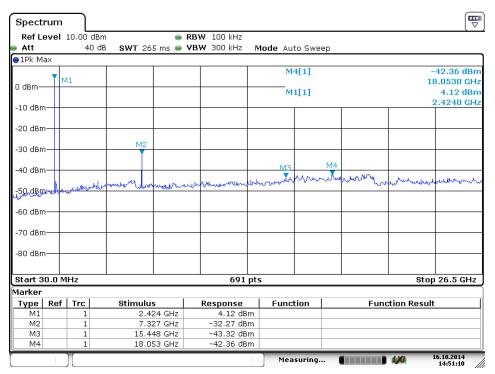
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of BDR mode

Low Channel



Date: 16.OCT.2014 14:44:49

Middle Channel



Date: 16.OCT.2014 14:51:10

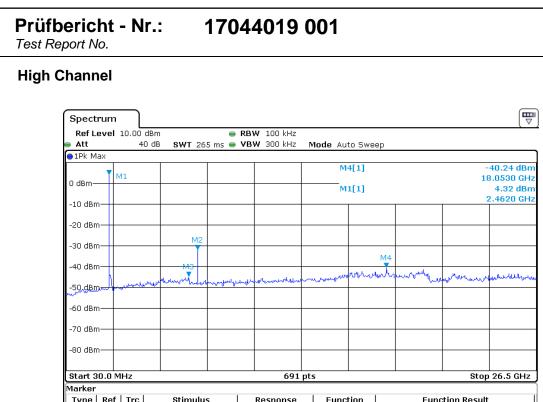


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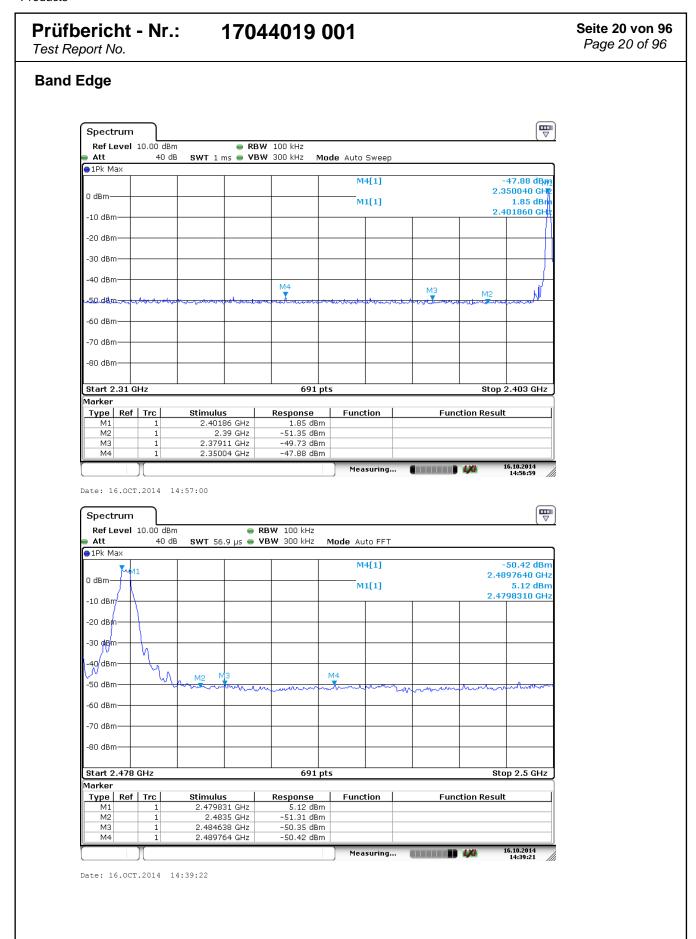
Products



Date: 16.OCT.2014 14:51:36



Products



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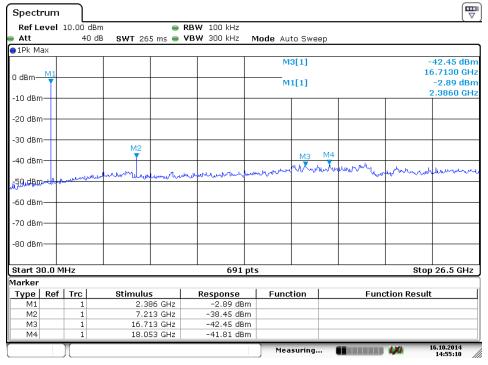
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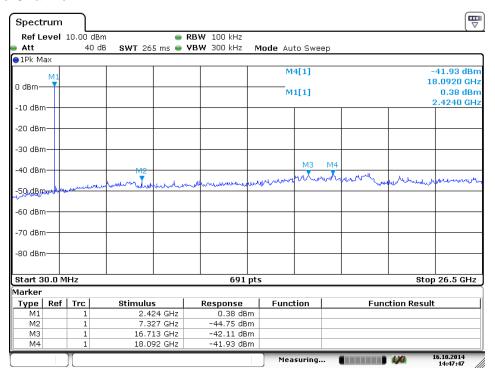
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of EDR mode

Low Channel



Date: 16.0CT.2014 14:55:10

Middle Channel



Date: 16.OCT.2014 14:47:47



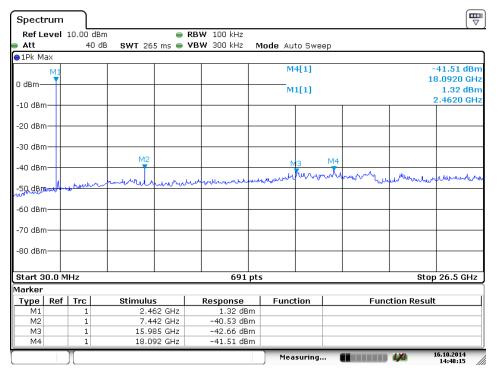
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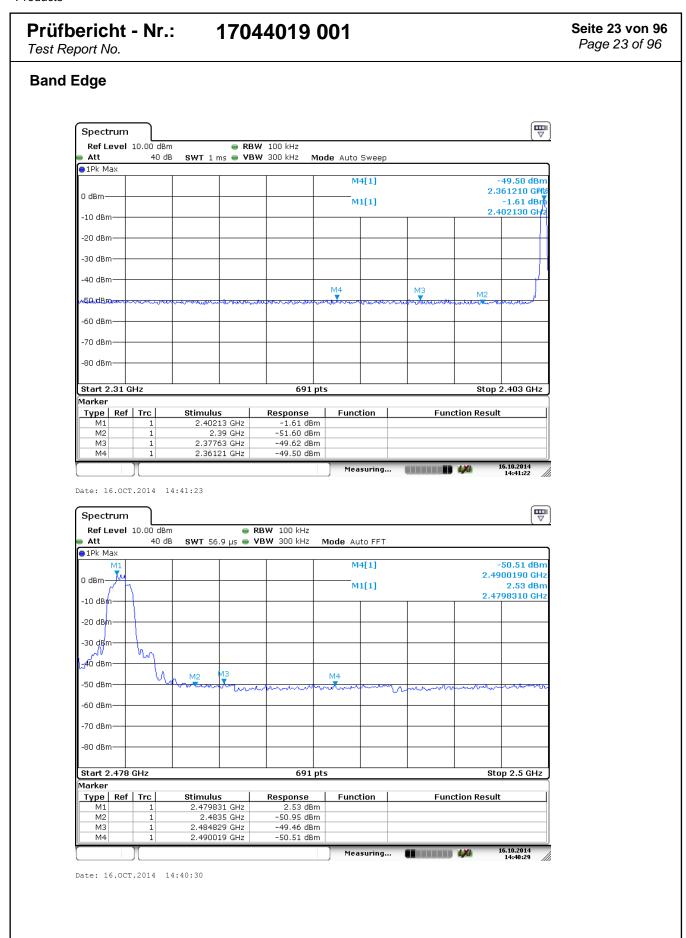
High Channel



Date: 16.OCT.2014 14:48:15



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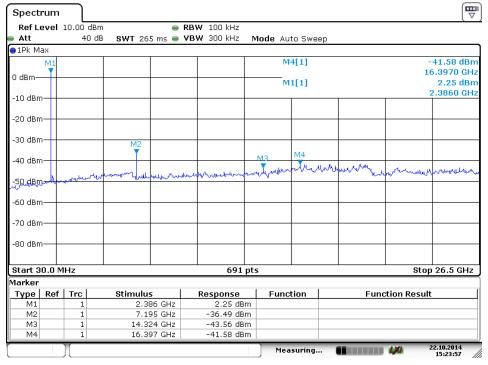
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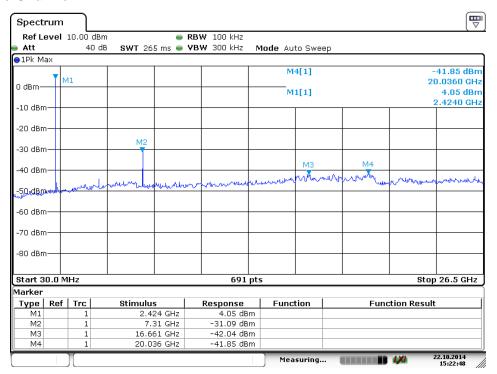
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of LE mode

Low Channel



Date: 22.OCT.2014 15:23:57

Middle Channel



Date: 22.OCT.2014 15:22:48



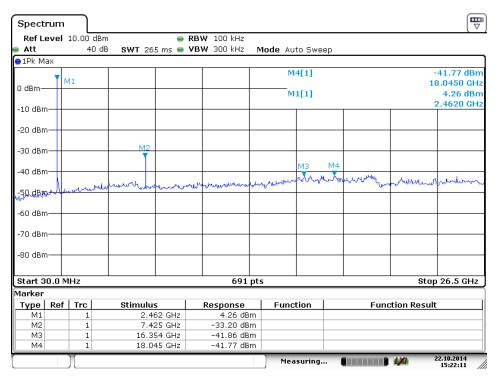
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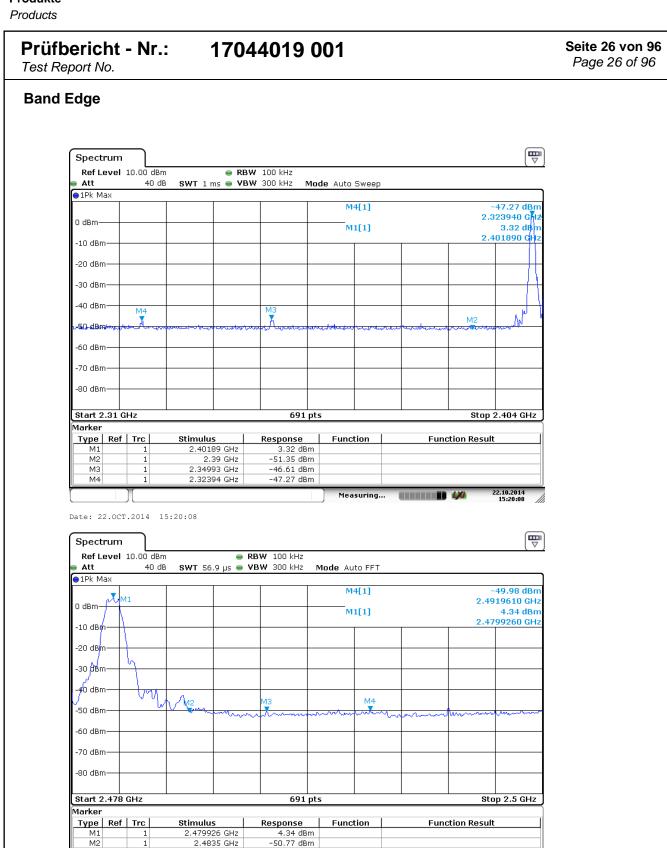
High Channel

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Date: 22.OCT.2014 15:22:11





Date: 22.OCT.2014 15:21:15

М4

2.4835 GHz 2.487122 GHz

2.491961 GHz

-50.43 dBm

-49.98 dBm

4,44



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5.1.6 Power spectral density

RESULT: Pass

2014-10-22 Date of testing

. est standard Basic standard FCC part 15.247(e) ANSI C63.4: 2003

Clause 10 of KDB 558074 v03r01

Limit 8dBm/3kHz Kind of test site Shield room

Test setup

Low/ Middle/ High

Test Channel : Operation mode : Ambient temperature : A.2.a **25**℃ Relative humidity 52% 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	-12.03	8	Pass
	2440	-11.28	8	Pass
	2480	-10.96	8	Pass



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5.1.7 Spurious Emission

RESULT: Pass

2014-10-22 Date of testing

Date of testing
Test standard
Basic standard FCC part 15.247(d) ANSI C63.4: 2003

Clause 11 of KDB 558074 v03r01

Limits FCC part 15.209(a)

3m Semi-Anechoic Chamber Kind of test site

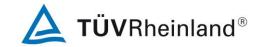
Test setup

Low/ Middle/ High

A.1.a, A.2.a

Test Channel :
Operation mode :
Ambient temperature :
Relative humidity : **23**℃ 48% Atmospheric pressure : 101kPa

For details refer to following test plot.



Products

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Test Report No.

Test Plot of Spurious Emission of transmitting

ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2402MHz
Test Site: Tshielding Room
Operator: LAN

Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"

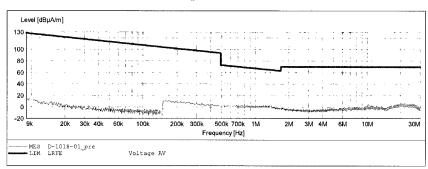
 Short Description:
 Stop
 StB_STD_VTERM2 1.70

 Start
 Stop
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 QuasiPeak 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 IF Bandw. 200 Hz 9 kHz 1516M





Products

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Test Report No.

ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2014-10-18 /

_SUB_STD_VTERM2 1.70

Detector Meas. Time z QuasiPeak 1.0 s TF Transducer Bandw.

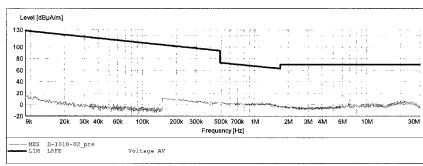
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Step
 Step
 Step
 Detector
 Meas.

 Start
 Stop
 Step
 Detector
 Meas.

 Frequency
 Frequency
 Width
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 1516M 200 Hz





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01

Manufacturer: Compupal (Group) Corporation

Operating Condition: TX 2402MHz

Test Site: 1#Shielding Room

Operator: LAN

Test Specification: DC 3.7V

Comment: Z

Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"

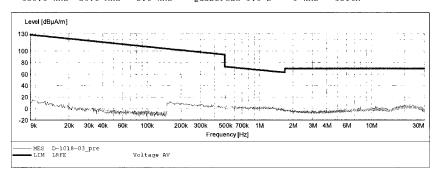
 Short Description:
 SUB_STD_VTERM2 1.70

 Start
 Stop
 Detector Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 _SUB_STD_VTERM2 1.70 IF Transducer Bandw. 200 Hz 1516M 9 kHz





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2441MHz
Test Site: 1#Shielding Room

Test Site: 1#Shield
Operator: LAN
Test Specification: DC 3.7V

Comment: X
Start of Test: 2014-10-18 /

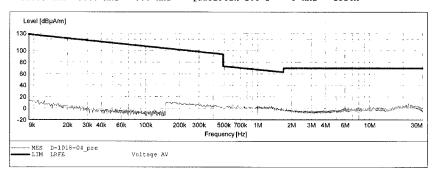
 SCAN TABLE: "LIFRE Fin"

 Short Description:
 Start
 Stop
 Step
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 IF Transducer Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2441MHz
Test Site: 1#Shielding Room
Operator: LAN

Test Specification: DC 3.7V
Comment: Y
Start of Test: 2014-10-18 /

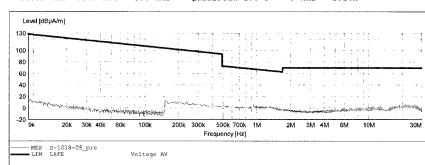
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Stop
 Step
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 IF Bandw. 200 Hz 9 kHz 1516M 1516M





Products

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Test Report No.

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2441MHz
Test Site: 1#Shielding Room
LAN
Test Specification CAP

Operator: LAN
Test Specification: DC 3.7V

Comment: Z Start of Test: 2014-10-18 /

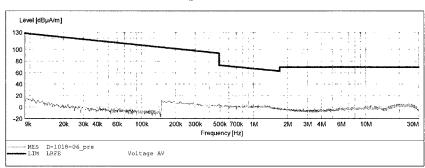
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Stop
 Step
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X

Comment:

Start of Test: 2014-10-18 /

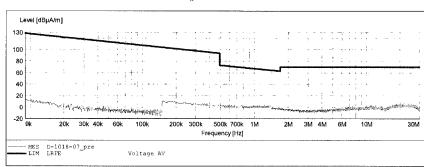
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Start Stop
 Step
 Detector
 Meas.

 Start Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 1516M 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT:

Manufacturer:

Compupal (Group) Corporation
Operating Condition: TX 2480MHz
Test Site:

Operator:

LAN
Test Specification:
DC 3.7V
Comment:
Y
Start of Test:

V 2014-10-18 /

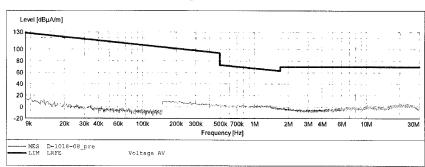
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Stop
 Step
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"
 SUB_STD_VTERM2 1.70

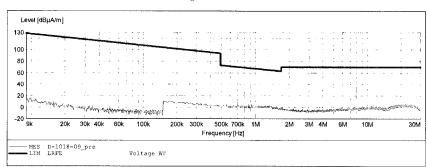
 Short Description:
 Step
 Detector Meas.

 Start
 Step
 Detector Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1148 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz

256.0100

263.7700

2

54.31

51.05

-12.82

-12.62

41.49

38.43

Model: MG-BTS01

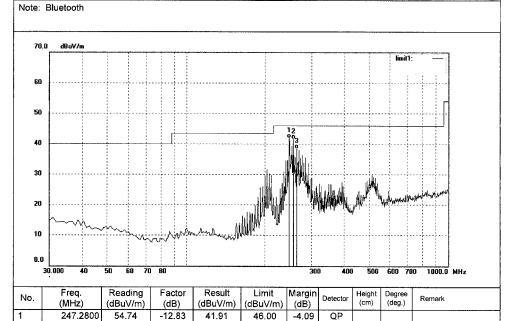
Manufacturer: Compupal (Group) Corporation

Polarization: Horizontal Power Source: DC 3.7V Date: 2014/10/17

Time:

Engineer Signature: PEI

Distance: 3m



46.00

46.00

-4.51

-7.57

QP

QP



Products

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Test Report No.



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1149

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B

Mode: TX 2402MHz Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

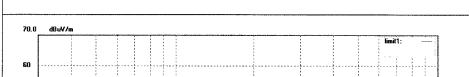
Polarization: Vertical Power Source: DC 3.7V

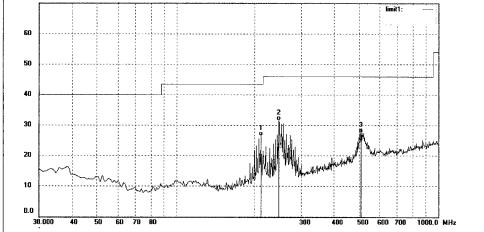
Date: 2014/10/17

Time:

Engineer Signature: PEI

Distance: 3m





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	211.3899	40.51	-13.96	26.55	43.50	-16.95	QP			
2	247.2800	44.48	-12.83	31.65	46.00	-14.35	QP			
3	508.2099	35.37	-7.88	27.49	46.00	-18.51	QP			



Products

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17044019 001

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Test Report No.



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1151

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

256.0099

271.5298

52.94

51.07

-12.82

-12.29

40.12

38.78

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2441MHz

Mode: TX 2441MHz Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

Polarization: Horizontal Power Source: DC 3.7V Date: 2014/10/17

Time: Engineer Signature: PEI

Distance: 3m

OP

QP

-5.88

-7.22

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60	 							ļ								
50	 						*********									
40								12	3							
30	 						ا			المانان		M.			الماد ا	
20	 										h Nadam	Made	h-Mahh	Arthur Marie		
10	 <u> </u>	بال <u>ر</u>	**************************************	ا نت ۸	Arww	warmen war	CONTINUE.	"	+ :							
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10	 		34000	Λ	Arvivol	Not my had	≿≫(Mhaini,∵-									

46.00

46.00



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 2014/10/17

Distance: 3m

Time:

Power Source: DC 3.7V

Engineer Signature: PEI

Job No.: LAN2014 #1150

Standard: FCC Class B 3M Radiated

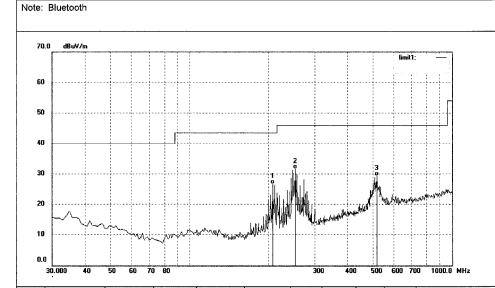
Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2441MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation



N	lo.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1		207.5098	40.68	-14.07	26.61	43.50	-16.89	QP			
2		252.1298	44.34	-12.81	31.53	46.00	-14.47	QP			
3		515.9699	37.07	-7.79	29.28	46.00	-16.72	QP			



Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Produkte

Products

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Job No.: LAN2014 #1152

Test item: Radiation Test

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Horizontal Power Source: DC 3.7V Date: 2014/10/17

Time:

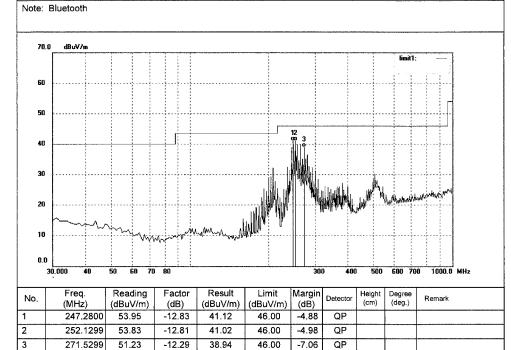
EUT: Hipper-B Engineer Signature: PEI Mode:

TX 2480MHz Distance: 3m

MG-BTS01 Manufacturer: Compupal (Group) Corporation

Standard: FCC Class B 3M Radiated

Temp.(C)/Hum.(%) 23 C / 48 %





Products

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Test Report No.



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1153

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

Model: MG-BTS01

252.1299

46.14

-12.81

33.33

Manufacturer: Compupal (Group) Corporation

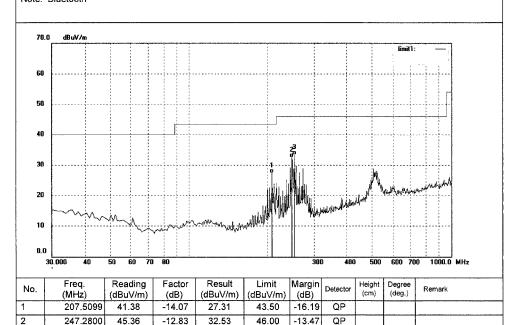
Note: Bluetooth

Polarization: Vertical Power Source: DC 3.7V

Date: 2014/10/17 Time:

Engineer Signature: PEI

Distance: 3m



46.00

-12.67

QP



Products

Test Report No.

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

LAN2014 #1107

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B TX 2402MHz

4804.012

3

42.07

-0.30

41.77

Mode: Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

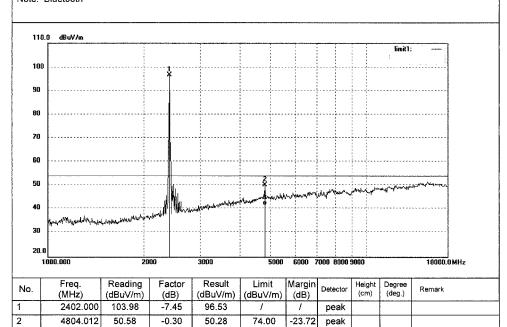
Note: Bluetooth

Polarization: Horizontal Power Source: DC 3.7V

Date: 14/10/16/ Time:

Engineer Signature: PEI

Distance: 3m



54.00

-12.23

AVG



Site: 2# Chamber

Tel:+86-0755-26503290 Fax:+86-0755-26503396

Produkte

Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Vertical Power Source: DC 3.7V

Date: 14/10/16/

Time:

EUT: Hipper-B Engineer Signature: PEI

TX 2402MHz Distance: 3m Mode:

Model: MG-BTS01

Job No.: LAN2014 #1108

Test item: Radiation Test

Standard: FCC Class B 3M Radiated

Temp.(C)/Hum.(%) 23 C / 48 %

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

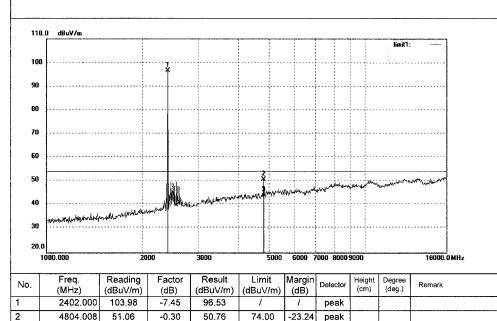
3

4804.008

43.55

-0.30

43.25



74.00

54.00

-23.24

-10.75

peak

AVG



Products

Prüfbericht - Nr.:

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1112

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B

Mode: TX 2441MHz MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

Polarization: Horizontal Power Source: DC 3.7V

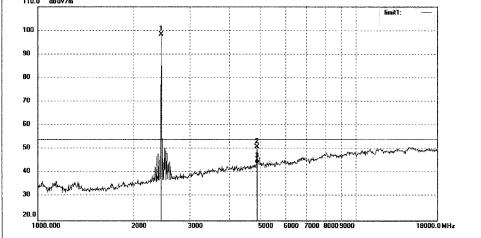
Date: 14/10/16/

Time:

Engineer Signature: PEI

Distance: 3m





	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
Γ	1	2441.000	105.85	-7.35	98.50	1	1	peak			
	2	4882.031	50.70	0.14	50.84	74.00	-23.16	peak			
	3	4882.031	43.78	0.14	43.92	54.00	-10.08	AVG			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1113

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2441MHz

4882.011

4882.011

2

50.75

42.55

0.14

0.14

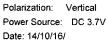
50.89

42.69

MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

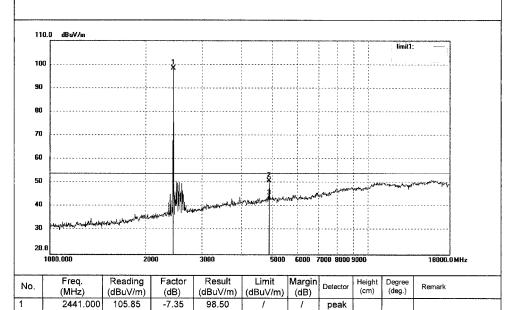


Date: 14/10/16/

Time:

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-23.11

-11.31 AVG

peak



Products

Prüfbericht - Nr.:

Test Report No.

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1115

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

1

2

2480.000

4960.034

4960.034

105.91

50.26

38.98

-7.37

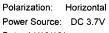
0.52

0.52

98.54

50.78

39.50



Date: 14/10/16/

Time:

peak

peak

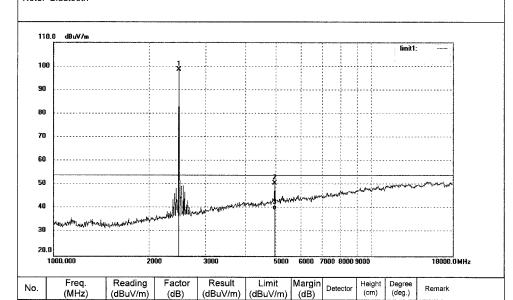
AVG

-23.22

-14.50

Engineer Signature: PEI

Distance: 3m



74.00

54.00



Site: 2# Chamber

Tel:+86-0755-26503290 Fax:+86-0755-26503396

Produkte

Products

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Test Report No.



Job No.: LAN2014 #1114

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Vertical Power Source: DC 3.7V

Date: 14/10/16/

Time:

Engineer Signature: PEI

Distance: 3m

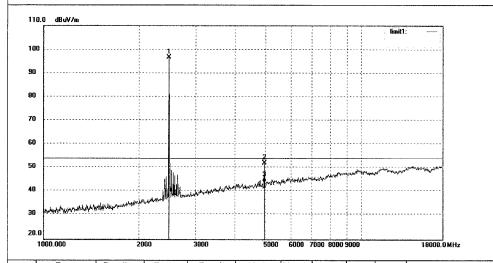
Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2480.000	103.91	-7.37	96.54	1	/	peak				
2	4960.027	51.45	0.52	51.97	74.00	-22.03	peak				
3	4960.027	43.33	0.52	43.85	54.00	-10.15	AVG				



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014#1174 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B TX 2402MHz Mode: Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

2

24934.254

20.63

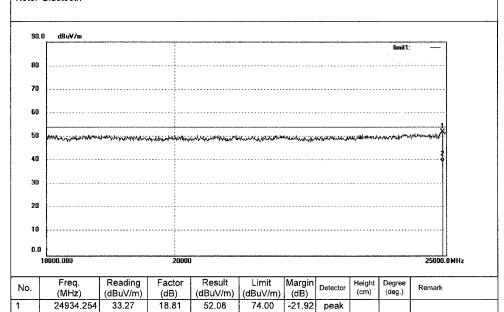
18.81

39.44

Polarization: Horizontal Power Source: DC 3.7V Date: 2014-10-22

Time:

Engineer Signature: PEI Distance: 3m



54.00

-14.56

AVG



Products

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(ATC)®

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 2014-10-22

Distance: 3m

Power Source: DC 3.7V

Engineer Signature: PEI

Job No.: LAN2014 #1175

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B

24166.614

21.24

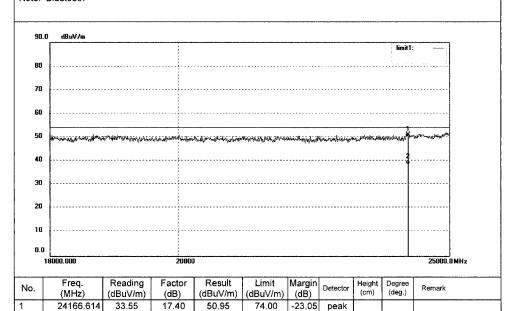
17.40

38.64

Mode: TX 2402MHz Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth



54.00

-15.36

AVG



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1177 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

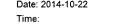
Temp.(C)/Hum.(%) 23 C / 48 % EUT:

Hipper-B Mode: TX 2441MHz Model: MG-BTS01

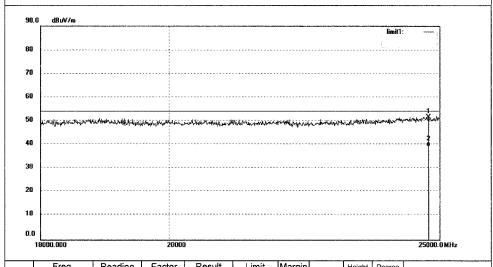
Manufacturer: Compupal (Group) Corporation

Note: Bluetooth





Engineer S	Signature:	PEI
Distance:	3m	





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1176

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2441MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth

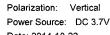
2

24390.376

20.17

17.94

38.11

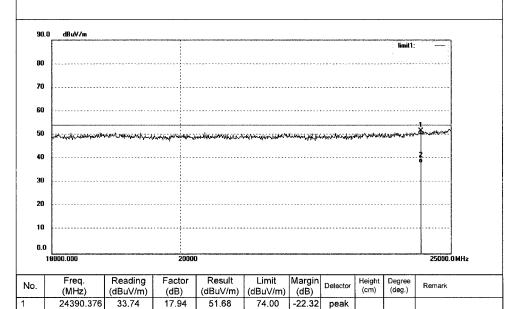


Date: 2014-10-22

Engineer Signature: PEI

Distance: 3m

Time:



54.00

-15.89

AVG



Products

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MTR

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1178

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

24876.868

24876.868

2

32.78

19.05

18.73

18.73

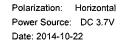
51.51

37.78

Model: MG-BTS01

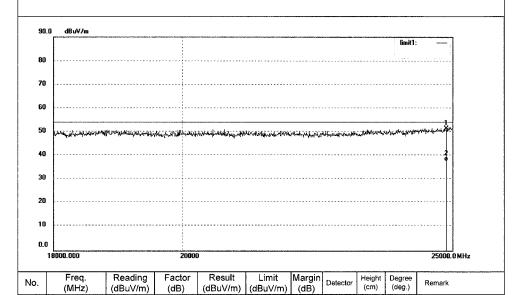
Manufacturer: Compupal (Group) Corporation

Note: Bluetooth



Time: Engineer Signature: PEI

Distance: 3m



74.00

54.00

-22.49

-16.22

AVG



Products

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Test Report No.



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1179

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

24438.594

20.45

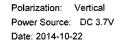
18.05

38.50

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

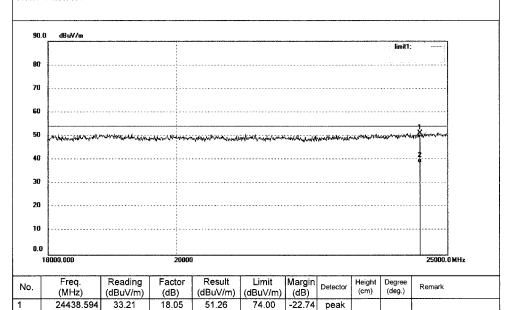
Note: Bluetooth



Engineer Signature: PEI

Distance: 3m

Time:



54.00

-15.50

AVĢ



Products

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ACCURATE TECHNOLOGY CO., LTD.

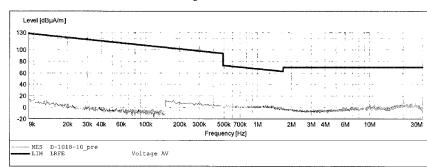
FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
Operator: LAN

Operator: LAN
Test Specification: DC 3.7V

Comment: X
Start of Test: 2014-10-18 /

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas.
Frequency Frequency Width Time
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s Transducer Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
LAN

Operator: LAN
Test Specification: DC 3.7V Comment: Y
Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"

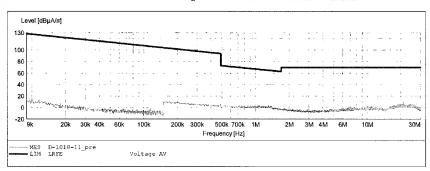
 Short Description:
 Step
 Detector Meas.

 Start
 Step
 Detector Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 Transducer Bandw. 200 Hz 1516M 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification

Operator: LAN
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2014-10-18 /

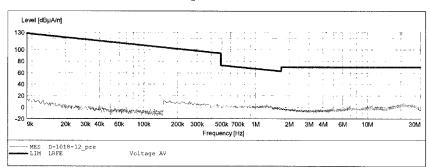
 SCAN TABLE: "LFRE Fir"
 SUB_STD_VTERM2 1.70

 Short Description:
 Stop
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 _SUB_STD_VTERM2 1.70 Transducer Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Compupal (Group) Corporation
Operating Condition: TX 2440MHz
Test Site: #Shielding Room
Operator: LAN

Operator: LAN
Test Specification: DC 3.7V Comment: X Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"

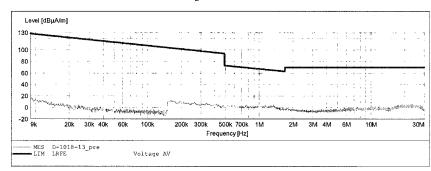
 Short Description:
 Stop
 SUB_STD_VTERM2 1.70

 Start
 Stop
 Step
 Detector Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 _SUB_STD_VTERM2 1.70 Transducer Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2440WHz
Test Site: #\$Shielding Room
Operator: LAN

Test Specification: DC 3.7V
Comment: Y
Start of Test: 2014-10-18 /

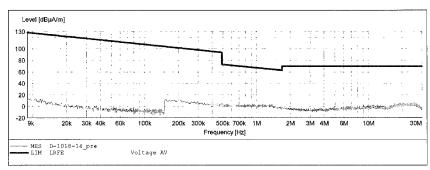
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Step
 Detector Meas:
 1.70

 Start
 Step
 Detector Meas:
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2440MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2014-10-18 /

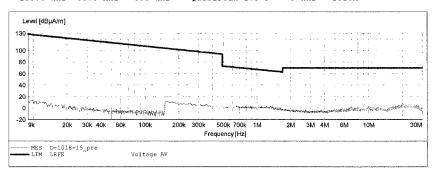
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Stop
 Step
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 IF Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Compupal (Group) Corporation
Operating Condition: TX 2480WHz
Test Site: 1#Shielding Room
LAN

Operator: LAN
Test Specification: DC 3.7V Comment: X Start of Test: 2014-10-18 /

 SCAN TABLE: "LFRE Fin"

 Short Description:
 SUB_STD_VTERM2 1.7

 Start
 Stop

 Frequency
 Step

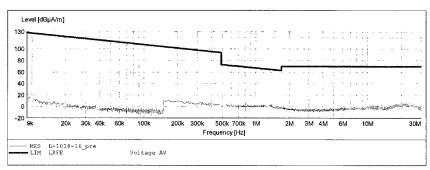
 Frequency
 Width

 9.0 kHz
 150.0 kHz

 150.0 kHz
 30.0 MHz

 5.0 kHz
 QuasiPeak

 QuasiPeak
 1.0 s
 _SUB_STD_VTERM2 1.70 Detector Meas. Transducer Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT:

Manufacturer:
Compupal (Group) Corporation
Operating Condition: TX 2480MHz
Test Site:
Operator:
LAN
Test Specification: DC 3.7V
Comment:
Start of Test:

Hipper-B M/N:MG-BTS01
Compupal (Group) Corporation
DC 3.7V
2480MHz
1#Shielding Room
DC 3.7V
Comment:
Y
2014-10-18 /

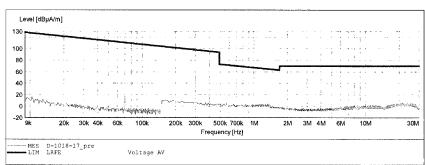
 SCAN TABLE: "LFRE Fin"

 Short Description:
 Stop
 Stop
 Detector
 Meas.

 Start
 Stop
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

FCC Class B 3M Radiated

EUT: Hipper-B M/N:MG-BTS01
Manufacturer: Compupal (Group) Corporation
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification

Operator: LAN
Test Specification: DC 3.7V Comment: Z
Start of Test: 2014-10-18 /

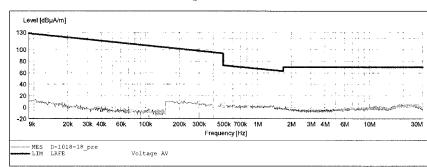
 SCAN TABLE: "LFRE Fin"
 SUB_STD_VTERM2 1.70

 Start
 Stop
 Step
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak
 1.0 s

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak
 1.0 s
 Bandw. 200 Hz 9 kHz 1516M





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1155

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

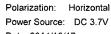
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

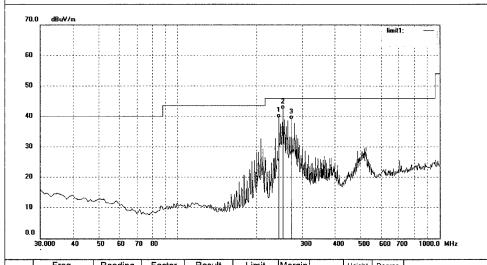
Note: Bluetooth 4.0



Date: 2014/10/17 Time:

Engineer Signature: PEI

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	243.4000	52.40	-12.87	39.53	46.00	-6.47	QP			
2	252.1299	55.02	-12.81	42.21	46.00	-3.79	QP			
3	271.5298	51.30	-12.29	39.01	46.00	-6.99	QP			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Polarization: Vertical

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Power Source: DC 3.7V

Engineer Signature: PEI

Date: 2014/10/17

Distance: 3m

Time:

Job No.: LAN2014 #1154 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

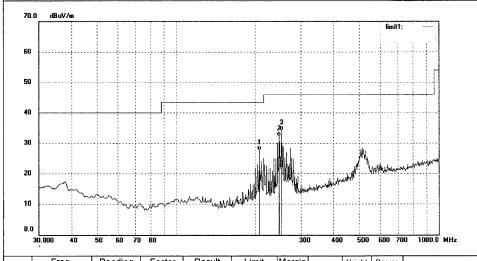
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B TX 2402MHz Mode:

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	207.5099	41.73	-14.07	27.66	43.50	-15.84	QP			
2	247.2800	45.11	-12.83	32.28	46.00	-13.72	QP			
3	252.1299	47.03	-12.81	34.22	46.00	-11.78	QP			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

LAN2014 #1156

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz

Model: MG-BTS01

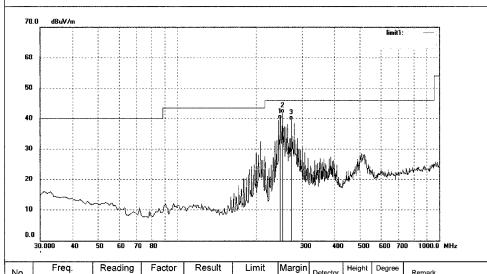
Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



Time:

Engineer Signature: PEI Distance: 3m





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1157

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

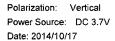
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz

Model: MG-BTS01

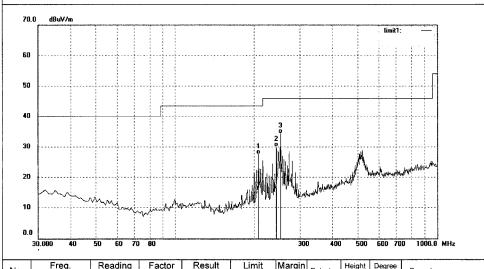
Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



Time:

Engineer Signature: PEI Distance: 3m





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1159

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B

TX 2480MHz Mode: Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0

2

3

252.1300

271,5299

54.82

51.77

-12.81

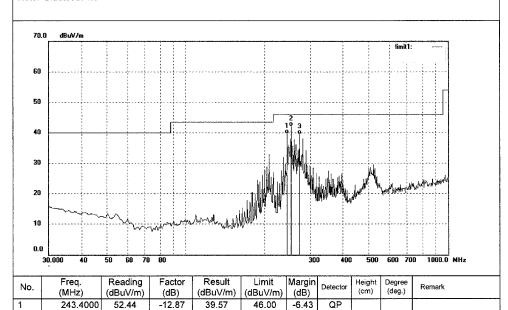
-12.29

42.01

39.48



Engineer Signature: PEI Distance: 3m



46.00

46.00

-3.99

-6.52

QP

QP



Products

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(ATC)

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 2014/10/17

Distance: 3m

Time:

Power Source: DC 3.7V

Engineer Signature: PEI

Job No.: LAN2014 #1158

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

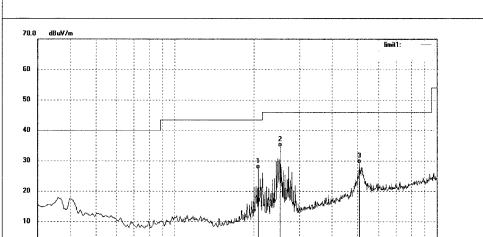
Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

50

60 70

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	207.5099	41.39	-14.07	27.32	43.50	-16.18	QP			
2	252.1299	47.33	-12.81	34.52	46.00	-11.48	QP			
3	508.2099	37.10	-7.88	29.22	46.00	-16.78	QP			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1164 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz

MG-BTS01

2

Manufacturer: Compupal (Group) Corporation

51.03

42.97

-0.30

-0.30

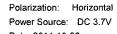
50.73

42.67

4804.010

4804.010

Note: Bluetooth 4.0

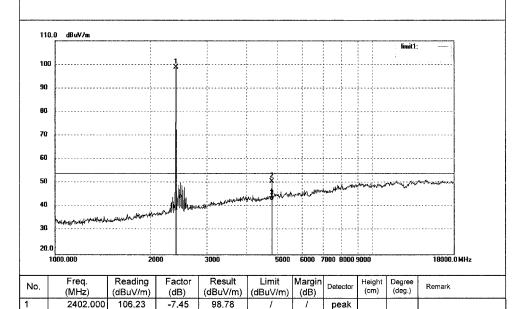


Date: 2014-10-22

Time:

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-23.27

-11.33

peak

AVG



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

 Keyuan Rd, en,P.R.China
 Tel:+86-0755-26503290

 Folarization:
 Vertical

Site: 2# Chamber

Job No.: LAN2014 #1165
Standard: FCC Class B 3M Radiated
Test item: Radiation Test

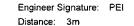
Temp.(C)/Hum.(%) 23 C / 48 % EUT: Hipper-B

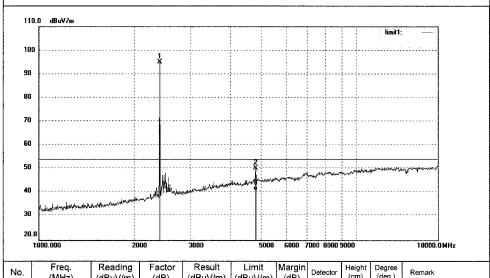
EUT: Hipper-B Mode: TX 2402MHz Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0







	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
	1	2402.000	102.56	-7.45	95.11	1	1	peak			
į	2	4804.021	50.63	-0.30	50.33	74.00	-23.67	peak			
	3	4804.021	41.04	-0.30	40.74	54.00	-13.26	AVG			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1167 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz Model: MG-BTS01

Model: WG-B1SU1

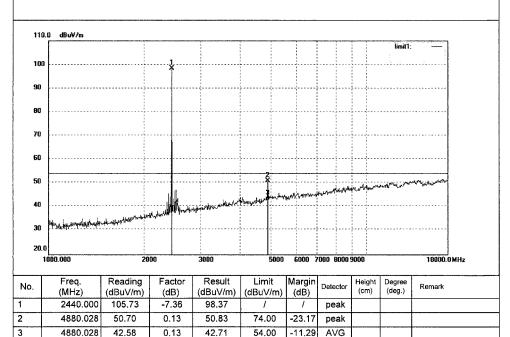
Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



Polarization: Horizontal

Power Source: DC 3.7V





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 2014-10-22

Distance: 3m

Time:

Power Source: DC 3.7V

Engineer Signature: PEI

Job No.: LAN2014 #1166 Standard: FCC Class B 3M Radiated

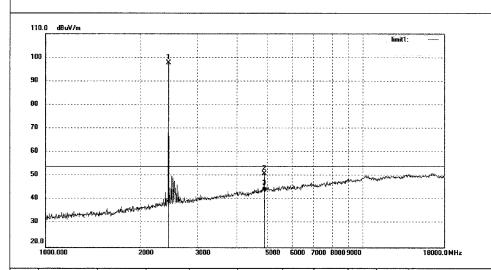
Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz

MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	105.04	-7.36	97.68	1	/	peak			
2	4880.033	50.72	0.13	50.85	74.00	-23.15	peak			
3	4880.033	43.51	0.13	43.64	54.00	-10.36	AVG			



Site: 2# Chamber

Tel:+86-0755-26503290

Produkte

Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

en,P.R.China Fax:+86-0755-26503396

Polarization: Horizontal

Power Source: DC 3.7V

Job No.:LAN2014 #1168Polarization:HorizontalStandard:FCC Class B 3M RadiatedPower Source:DC 3.7VTest item:Radiation TestDate: 2014-10-22

Temp.(C)/Hum.(%) 23 C / 48 %

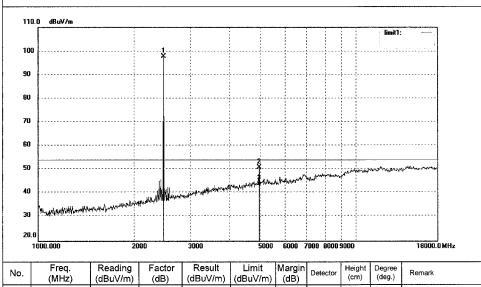
 EUT:
 Hipper-B
 Engineer Signature:
 PEI

 Mode:
 TX 2480MHz
 Distance:
 3m

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	105.14	-7.37	97.77	1	1	peak			
2	4960.037	50.36	0.52	50.88	74.00	-23.12	peak			
3	4960.037	42,67	0.52	43.19	54.00	-10.81	AVG			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1169

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz

MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0

4960.028

4960.028

2

50.26

43.05

0.52

0.52

50.78

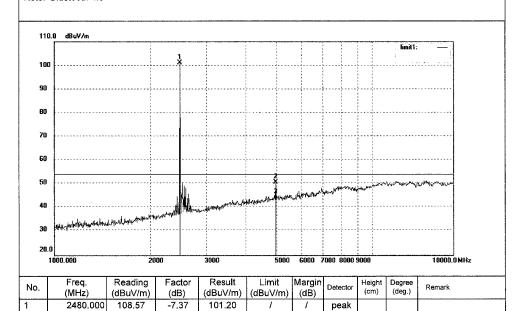
43.57



Date: 2014-10-22 Time:

Engineer Signature: PEI

Distance: 3m



74 00

54.00

peak

AVG

-23.22

-10.43



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1181

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz

Model: MG-BTS01

24591.914

24591.914

33.40

20.15

18.33

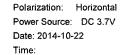
18.33

51.73

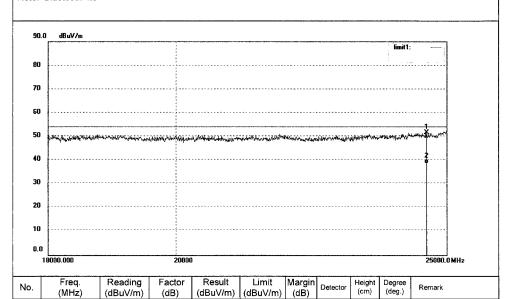
38.48

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0



Engineer Signature: PEI
Distance: 3m



74.00

54.00

-22.27

-15.52



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1180

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0

24697.371

24697.371

32.80

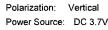
18.99

18.48

18.48

51.28

37.47

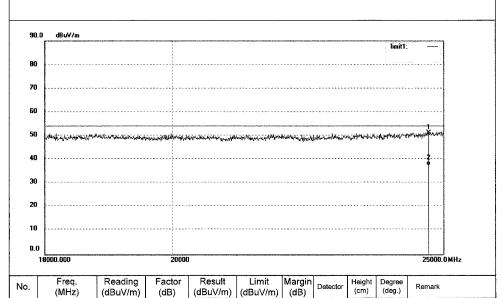


Date: 2014-10-22

Time:

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-22.72

-16.53



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Horizontal

Power Source: DC 3.7V

Engineer Signature: PEI

Date: 2014-10-22

Distance: 3m

Time:

Job No.: LAN2014 #1182

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz

MG-BTS01

Manufacturer: Compupal (Group) Corporation

(MHz)

24519.170

24519.170

(dBuV/m)

33.19

19.87

(dB)

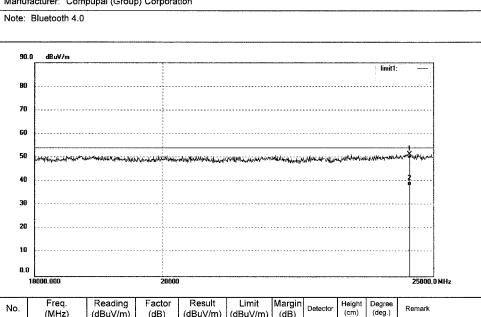
18.23

18.23

(dBuV/m)

51.42

38.10



(dBuV/m)

74.00

54.00

(dB)

-22.58

-15.90

peak



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1183

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2440MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0

2

24414.474

20.39

17.99

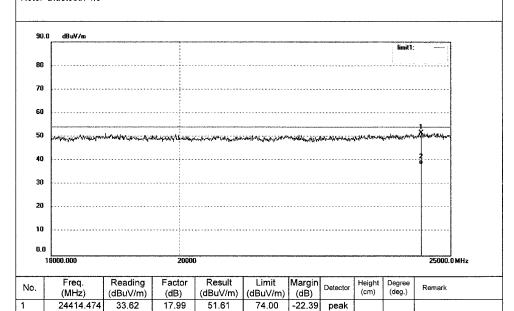
38.38

Polarization: Vertical Power Source: DC 3.7V Date: 2014-10-22

Time:

Engineer Signature: PEI

Distance: 3m



54.00

-15.62



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1185 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Hipper-B

Mode: TX 2480MHz Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note: Bluetooth 4.0

24446.640

20.31

18.07

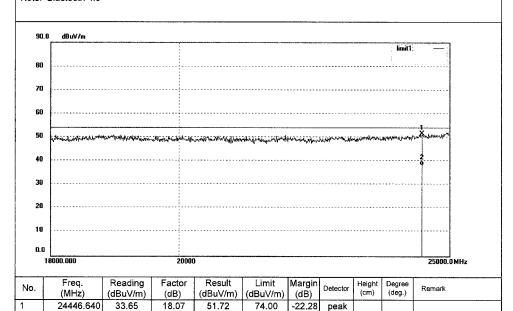
38.38

Polarization: Horizontal Power Source: DC 3.7V

Date: 2014-10-22 Time:

Engineer Signature: PEI

Distance: 3m



54.00

-15.62



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 2014-10-22

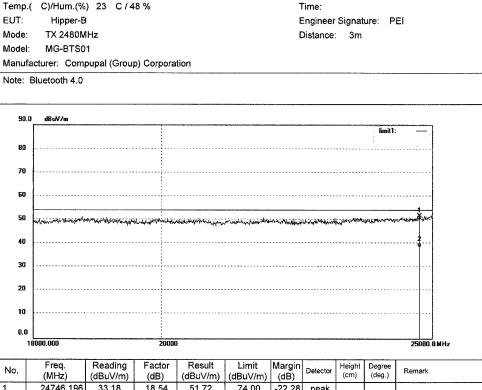
Power Source: DC 3.7V

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

Model:





Products

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Test Report No.

Test Plot of Frequency Band Edge



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Engineer Signature: PEI

Distance: 3m

Job No.: LAN2014 #1111 Polarization: Horizontal Standard: FCC (Band Edge) Power Source: DC 3.7V

Test item: Radiation Test Date: 14/10/16/
Temp.(C)/Hum.(%) 23 C / 48 % Time:

EUT: Hipper-B Mode: TX 2402MHz Model: MG-BTS01

2350.080

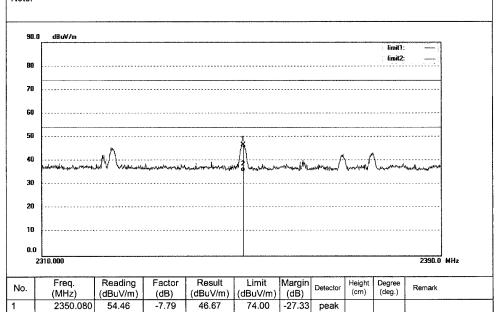
43.28

-7.79

35.49

Manufacturer: Compupal (Group) Corporation

Note:



54.00

-18.51



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 14/10/16/

Distance: 3m

Time:

Power Source: DC 3.7V

Engineer Signature: PEI

Job No.: LAN2014 #1109

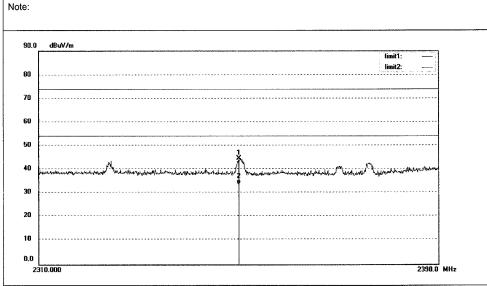
Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B

Mode: TX 2402MHz Model: MG-BTS01



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2349.680	52.51	-7.79	44.72	74.00	-29.28	peak			
2	2349.680	41.67	-7.79	33.88	54.00	-20.12	AVG			



Site: 2# Chamber

Tel:+86-0755-26503290 Fax:+86-0755-26503396

Produkte

Products

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Test Report No.



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Job No.:LAN2014 #1117Polarization:HorizontalStandard:FCC (Band Edge)Power Source:DC 3.7V

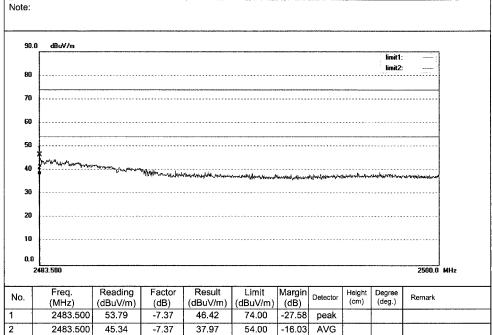
 Test item:
 Radiation Test
 Date: 14/10/16/

 Temp.(
 C)/Hum.(%)
 23
 C / 48 %
 Time:

EUT: Hipper-B Engineer Signature: PEI

Mode: TX 2480MHz Distance: 3m

Model: MG-BTS01





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Date: 14/10/16/

Distance: 3m

Time:

Power Source: DC 3.7V

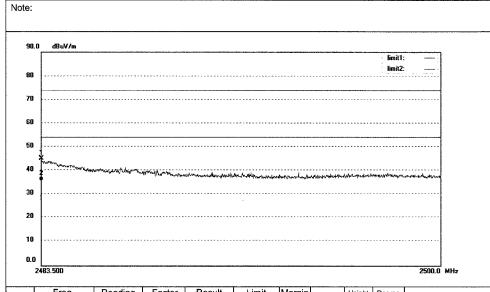
Engineer Signature: PEI

Job No.: LAN2014 #1119 Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Hipper-B

Mode: TX 2480MHz Model: MG-BTS01



	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
L	1	2483.500	52.51	-7.37	45.14	74.00	-28.86	peak			
ſ	2	2483.500	43.08	-7.37	35.71	54.00	-18.29	AVG			



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Time:

Engineer Signature: PEI

Distance: 3m

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.:LAN2014 #1171Polarization:HorizontalStandard:FCC (Band Edge)Power Source:DC 3.7VTest item:Radiation TestDate: 2014-10-22

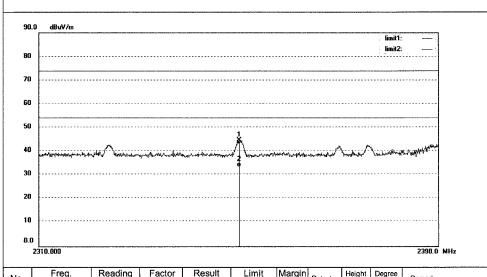
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B
Mode: TX 2402MHz

Model: MG-BTS01

Manufacturer: Compupal (Group) Corporation

Note:





Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1170 Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2402MHz Model: MG-BTS01

2350.080

2350.080

51.98

40.57

-7.79

-7.79

44.19

32.78

Manufacturer: Compupal (Group) Corporation

Polarization: Vertical Power Source: DC 3.7V

Date: 2014-10-22

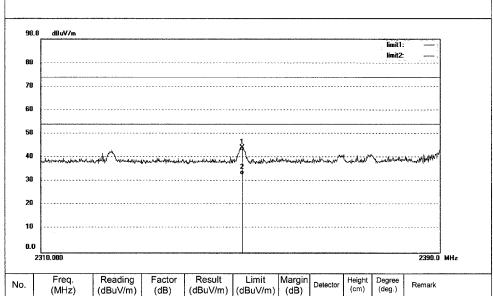
Time:

Engineer Signature: PEI

Distance: 3m

Note:

variational Compapar (Croap) Corporation



74.00

54.00

-29.81

-21.22 AVG

peak



Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC (Band Edge) Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Hipper-B Mode: TX 2480MHz Model:

MG-BTS01

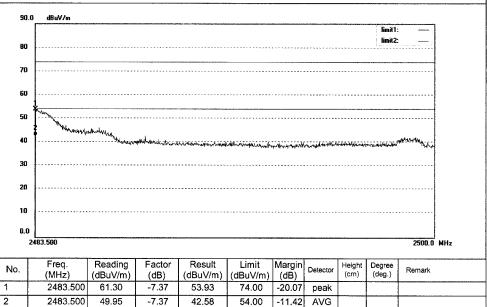
Polarization: Horizontal Power Source: DC 3.7V Date: 2014-10-22 Time:

Engineer Signature: PEI

Distance: 3m

Note:







Products

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LAN2014 #1173 Standard: FCC (Band Edge) Test item: Radiation Test

Date: 2014-10-22

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Hipper-B

Time:

Mode: TX 2480MHz Engineer Signature: PEI

Polarization: Vertical

Power Source: DC 3.7V

Distance: 3m

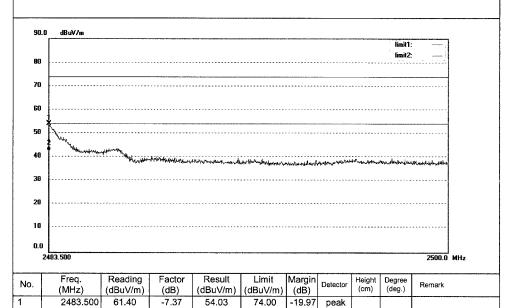
Model: MG-BTS01

2483.500

50.02

Manufacturer: Compupal (Group) Corporation

Note:



54.00

-11.35

AVG

42.65

-7.37



Products

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5.1.8 Frequency Separation

RESULT: Pass

Date of testing : 2014-10-16

Test standard : FCC part 15.247(a)(1)
Basic standard : ANSI C63.4: 2003

Limit : ≥ 25kHz or two-thirds of 20dB bandwidth,

whichever is greater

Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High

Table 14: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1.002	≥ 25kHz or two- thirds of 20dB	Pass
Adjacency Channel	2403	1.002	bandwidth	rass
Mid Channel	2441	1.002	≥ 25kHz or two- thirds of 20dB	Pass
Adjacency Channel	2442	1.002	bandwidth	F488
High Channel	2479	1 000	≥ 25kHz or two- thirds of 20dB	Pass
Adjacency Channel	2480	1.002	bandwidth	



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5.1.9 Number of hopping frequency

RESULT: Pass

Test setup

Low/ Middle/ High

Test Channel :
Operation Mode :
Ambient temperature :
Relative humidity : A.1.a **25**℃ 52% Atmospheric pressure : 101kPa

Table 15: Test result of Number of hopping frequency

Frequency Range	Frequency Range Measured Quantity of Hopping Channel		Result	
2402 to 2480MHz	79	≥15	Pass	



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5.1.10 Time of Occupancy

RESULT: Pass

2014-10-16

r est standard
Basic standard
Limits FCC part 15.247(a)(1)(iii)

ANSI C63.4: 2003

0.4s

Kind of test site Shield room

Test setup

Low/ Middle/ High

Test Channel : Operation Mode : Ambient temperature : Relative humidity : A.1.a **25**℃ 52% Atmospheric pressure : 101kPa

Table 16: Test result of Time of Occupancy

Mode	Packet Type	Channel Frequency (MHz)	Packet Duration [ms]	Number of Hops per Channel	Dwell Time (ms)	Limit [ms]
		2402	0.426	322	137.172	400
	DH1	2441	0.435	322	140.070	400
		2480	0.449	323	145.027	400
		2402	1.710	166	283.860	400
BDR	DH3	2441	1.710	165	282.160	400
		2480	1.710	165	282.160	400
	DH5	2402	2.978	113	336.514	400
		2441	2.957	112	331.184	400
		2480	2.978	113	336.514	400
	DH1	2402	0.449	322	144.578	400
		2441	0.449	323	145.027	400
		2480	0.449	322	144.578	400
		2402	1.725	165	284.625	400
EDR	DH3	2441	1.725	165	284.625	400
		2480	1.725	166	286.350	400
		2402	2.978	112	333.536	400
	DH5	2441	3.000	112	336.000	400
		2480	2.978	111	330.558	400

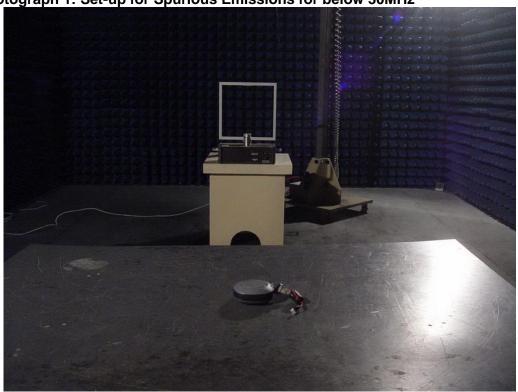


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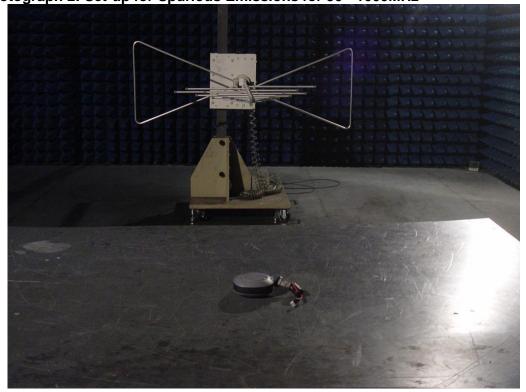
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6. Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions for below 30MHz



Photograph 2: Set-up for Spurious Emissions for 30 - 1000MHz



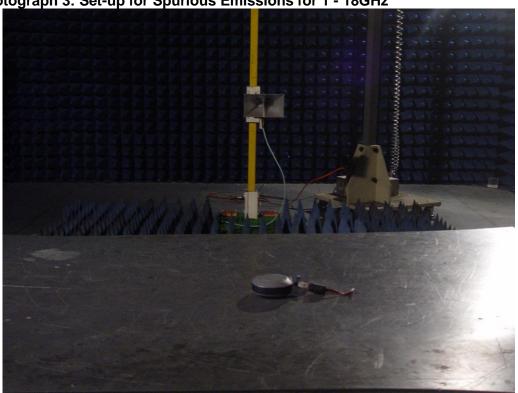


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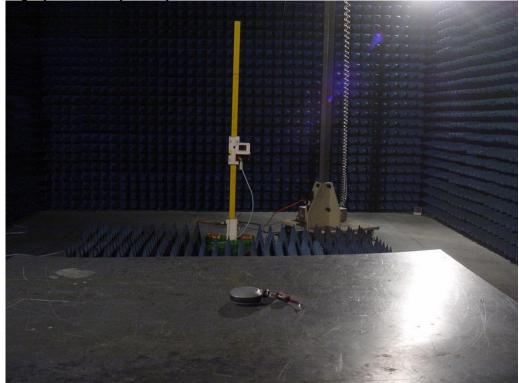
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Photograph 3: Set-up for Spurious Emissions for 1 - 18GHz



Photograph 4: Set-up for Spurious Emissions for 18 - 26.5GHz





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