

FCC Test Report

Report No.: AGC02931221205FE01

FCC ID : POD-ADB10W

APPLICATION PURPOSE: Original Equipment

PRODUCT DESIGNATION: Two Way Radio

BRAND NAME : TYT

MODEL NAME : TH-UV99, TH-UV58, TH-UV98PLUS, TH-446

APPLICANT: TYT ELECTRONICS CO., LTD

DATE OF ISSUE : Nov. 16, 2023

STANDARD(S) : FCC Part 15 Subpart B

REPORT VERSION: V 1.0

Attestation of Global Conference (Shenzhen) Co., Ltd



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Report Revise Record

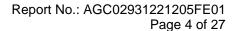
Report Version	ort Version Revise Time Issued Date		Valid Version	Notes	
V1.0 / Nov. 1		Nov. 16, 2023	Valid	Initial Release	



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APPENDIX II: PHOTOGRAPHS OF TEST EUT. Any report naving not been signed by authorized approver, or naving been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspects Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test of the test of the report apply only to the tested sample.	results

Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.





1. GENERAL INFORMATION

Applicant	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Manufacturer	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Factory	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Product Designation	Two Way Radio
Brand Name	TYT
Test Model	TH-UV99
Series Model(s)	TH-UV58, TH-UV98PLUS,TH-446
Difference Description	Same PCB motherboard and electrical specifications, different model name, housing line design, key printing symbols & fonts, and model name TH-446 does not use number buttons
Date of receipt of test item	Nov. 14, 2023
Date of Test	Nov. 14, 2023~Nov. 16, 2023
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCTR-ER-FCC-SDOC V1.0

The above equipment was tested by Attestation Of Global Compliance (Shenzhen) Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2014. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements. The test results of this report relate only to the tested sample identified in this report.

Prepared By	Bibo zhang			
	Bibo Zhang (Project Engineer)	Nov. 16, 2023		
Reviewed By	Calvin Lin			
	Calvin Liu (Reviewer)	Nov. 16, 2023		
Approved By	Max Zhang			
	Max Zhang Authorized Officer	Nov. 16, 2023		



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2. PRODUCT INFORMATION

2.1 PRODUCT TECHNICAL DESCRIPTION

Housing Type	Plastic and metal		
RX Frequency Range	136-174MHz, 400-480MHz (Scanning Receiver)		
Equipment Type	Table-Top		
Hardware Version	V1.0		
Software Version	V1.01		
Power Supply	DC 7.4V 2800mAh by battery of DC 5.0V by adapter		

I/O Port Information (⊠Applicable □Not Applicable)						
I/O Port of EUT						
I/O Port Type	Cable	Tested with				
Antenna Port	1	N/A	1			
Earphone Port	1	N/A	1			

2.2 AUXILIARY SURROUNDING DESCRIPTION

The Following Peripheral Devices And Interface Cables Were Connected During The Measurement:

☐ Test Accessories Come From The Laboratory☐ Test Accessories Come From The Manufacturer

Equipment Manufacturer Model N		Model Name	Specification	Data Cable	Power Cable
Charger N/A		UV99	Input: DC 5V 2A Output: DC 9.3V 0.85A	N/A	N/A
Adapter ELECTRONICS 1		1A10W-0510	Input: AC100-240V 50/60Hz 0.3A Output: DC 5V 2A	N/A	N/A
Battery	TYT ELECTRONICS CO., LTD	BATT-99-XL	DC 7.4V 2800mAh	N/A	N/A
USB Cable	N/A	N/A	N/A	N/A	0.6m Unshielded
Back Clip	N/A	N/A	N/A	N/A	N/A



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2.3 TEST METHODOLOGY

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 15	Radio Frequency Devices
2	ANSI C63.4-2014	American National Standard for Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

2.4 DESCRIPTION OF TEST MODES

No.	Test Mode	Remark
1	Scanning mode	Worst
2	Scanning stopped/Receiving at low channel of 136 MHz to 174 MHz	
3	Scanning stopped/Receiving at middle channel of 136 MHz to 174 MHz	
4	Scanning stopped/Receiving at high channel of 136 MHz to 174 MHz	
5	Scanning stopped/Receiving at low channel of 400 MHz to 480 MHz	
6	Scanning stopped/Receiving at middle channel of 400 MHz to 480 MHz	
7	Scanning stopped/Receiving at high channel of 400 MHz to 480 MHz	

Note: Only the result of the worst case was recorded in the report.



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3. TEST ENVIRONMENT

3.1 ADDRESS OF THE TEST LABORATORY

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842 (CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



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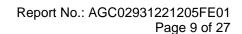
3.3 ENVIRONMENTAL CONDITIONS

	NORMAL CONDITIONS		
Temperature range (℃)	15 - 35		
Relative humidty range	20 % - 75 %		
Pressure range (kPa)	86 - 106		

3.4 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Item	Measurement Uncertainty		
Uncertainty of Conducted Emission	$U_c = \pm 2.9 \text{ dB}$		
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 3.9 \text{ dB}$		
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.9 \text{ dB}$		





3.5 LIST OF EQUIPMENTS USED

• Ra	Radiated Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)	
	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	10096	2023/02/18	2024/02/17	
\boxtimes	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2023/06/03	2024/06/02	
\boxtimes	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2023/05/11	2025/05/10	
\boxtimes	AGC-EM-E029	Horn Antenna	ETS	3117	00034609	2023/03/23	2024/03/22	
\boxtimes	AGC-EM-E096	Pre-amplifier	ETS	3117-PA	00246148	2022/08/04	2024/08/03	
	AGC-EM-S003	Test Software	FARA	V.RA-03A	N/A	N/A	N/A	
\boxtimes	AGC-EM-S004	Test Software	Tonscend	4.0.0.0	N/A	N/A	N/A	

• C	onducted Emiss	sion					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
\boxtimes	AGC-EM-E045	EMI Test Receiver	R&S	ESPI	101206	2023/06/03	2024/06/02
\boxtimes	AGC-EM-E023	AMN	R&S	100086	ESH2-Z5	2023/06/03	2024/06/02
\boxtimes	AGC-EM-S001	Test Software	R&S	ES-K1 (Ver.V1.71)	N/A	N/A	N/A

• RF	F Conducted M	easurement					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
	AGC-EM-E002	RF Communication Test Set	HP	8920B	US35010161	2023/06/02	2024/06/01
\boxtimes	AGC-ER-E086	Spectrum Analyzer	KEYSIGHT	N9020A	MY53300860	2023/06/01	2024/05/31
\boxtimes	AGC-EM-A007	30dB Attenuator	N/A	58-30-33	N/A	2023/06/01	2024/05/31



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4. SUMMARY OF TEST RESULTS

Item	FCC Rules	Description Of Test	Class/Severity	Result
1	§15.107	Radiated Emission	Class B	Pass
2	§15.109	Conducted Emission	Class B	Pass
3	§15.111	Antenna Conducted Power for Receivers	/	Pass
4	§15.121(b)	Scanning receivers and frequency converters used with scanning receivers	/	Pass



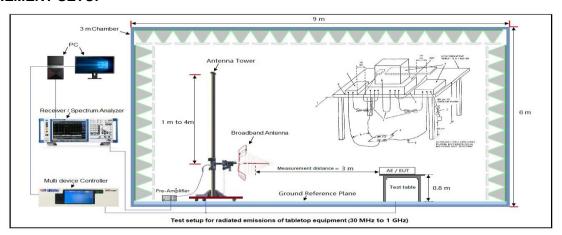
5. RADIATED EMISSION MEASUREMENTS

5.1 PROVISIONS APPLICABLE

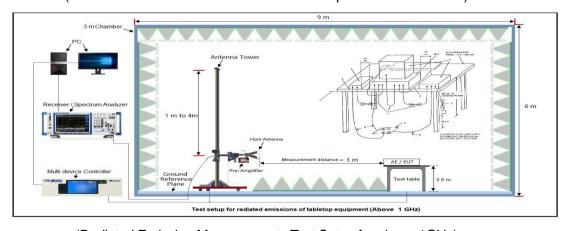
FCC CFR Title 47 Part 15 Subpart B Section 15.109:

Frequency Range	Class B Limit (dBuV/m @3m)	Class A Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	50.00	Quasi-peak
88MHz-216MHz	43.50	53.50	Quasi-peak
216MHz-960MHz	46.00	56.00	Quasi-peak
960MHz-1GHz	54.00	64.00	Quasi-peak
Above 1GHz	54.00	60.00	Average
Above 1GHz	74.00	80.00	Peak

5.2 MEASUREMENT SETUP



(Radiated Emission Measurements Test Setup for 30MHz to 1GHz)



(Radiated Emission Measurements Test Setup for above 1GHz)



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5.3 MEASUREMENT PROCEDURE

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.4.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4. The EUT received power by AC 120V/60Hz.
- 5. The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6. The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7. The test mode(s) were scanned during the test:
- 8. Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented. For emissions below 1GHz, use 120KHz RBW and VBW>=3RBW for QP reading.
- For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 10. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 11. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 12. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 13. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.
- 14. The test data of the worst case condition (mode 1) was reported on the following Data page.



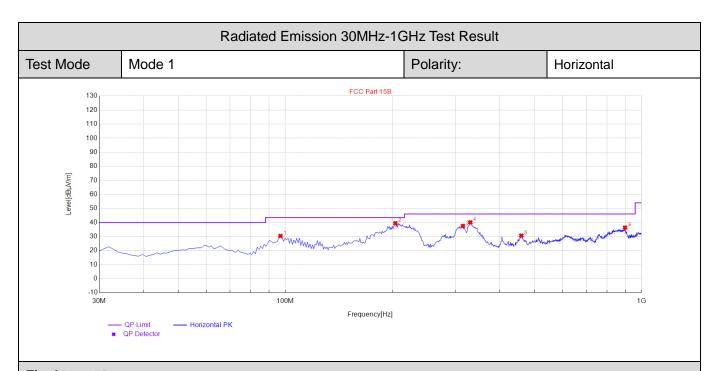
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During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurment
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
Above I GHZ	1MHz	10 Hz	/	Ave.



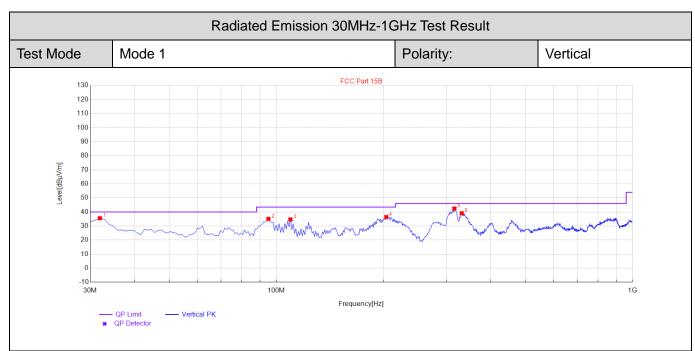
5.4 MEASUREMENT RESULT



Final	Data List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	96.93	30.39	16.15	43.50	13.11	100	1	Horizontal
2	203.63	39.52	11.53	43.50	3.98	100	98	Horizontal
3	315.18	37.54	15.41	46.00	8.46	100	264	Horizontal
4	330.7	40.12	15.57	46.00	5.88	100	94	Horizontal
5	459.71	30.70	24.69	46.00	15.30	100	175	Horizontal
6	899.12	36.40	30.26	46.00	9.60	100	276	Horizontal

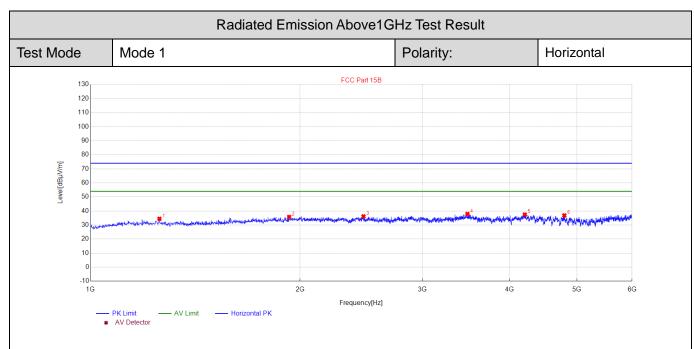
RESULT: PASS





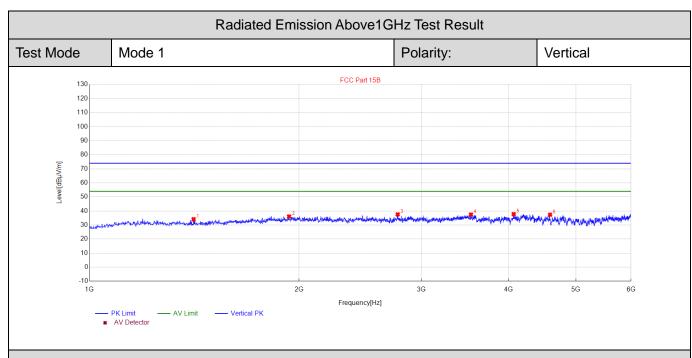
Final	Data List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	35.55	12.71	40.00	4.45	100	100	Vertical
2	94.99	35.10	15.56	43.50	8.40	100	3	Vertical
3	109.54	34.73	16.57	43.50	8.77	100	39	Vertical
4	203.63	36.41	11.53	43.50	7.09	100	31	Vertical
5	316.15	42.43	15.54	46.00	3.57	100	2	Vertical
6	331.67	39.07	15.53	46.00	6.93	100	173	Vertical





Final	Data List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1256.0512	34.44	-17.93	74.00	39.56	100	10	Horizontal
2	1929.1858	35.75	-13.99	74.00	38.25	100	10	Horizontal
3	2467.2935	36.16	-12.28	74.00	37.84	100	280	Horizontal
4	3480.4961	37.89	-10.69	74.00	36.11	100	210	Horizontal
5	4207.6415	37.44	-9.10	74.00	36.56	100	130	Horizontal
6	4795.7592	36.85	-7.81	74.00	37.15	100	70	Horizontal





Final	Data List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1411.0822	34.12	-17.68	74.00	39.88	100	350	Vertical
2	1935.187	36.07	-13.95	74.00	37.93	100	70	Vertical
3	2772.3545	37.58	-12.07	74.00	36.42	100	310	Vertical
4	3532.5065	37.46	-10.60	74.00	36.54	100	350	Vertical
5	4069.6139	37.74	-9.68	74.00	36.26	100	320	Vertical
6	4589.7179	37.37	-7.86	74.00	36.63	100	160	Vertical

Note:

- 1. Factor=Antenna Factor + Cable loss Amplifier gain, Margin= Limit-Measurement.
- 2. The "Factor" value can be calculated automatically by software of measurement system.



6. CONDUCTED EMISSION MEASUREMENTS

6.1 PROVISIONS APPLICABLE

FCC CFR Title 47 Part 15 Subpart B Section 15.107:

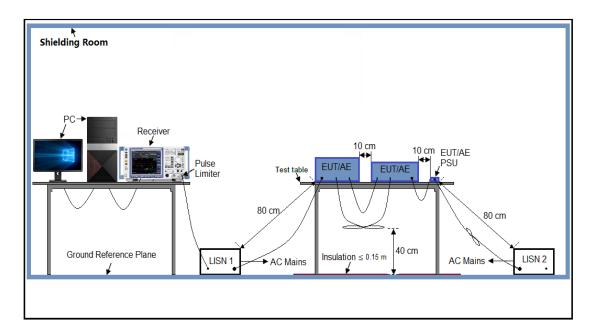
For Class B Limits:

Francisco	Maximum RF Line Voltage				
Frequency	Q.P. (dBµV)	Average (dBµV)			
150kHz~500kHz	66-56	56-46			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

For Class A Limits:

Fraguency	Maximum RF	Line Voltage
Frequency	Q.P. (dBµV)	Average (dBµV)
150kHz~500kHz	79	66
500kHz~30MHz	73	60

6.2 MEASUREMENT SETUP





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6.3 MEASUREMENT PROCEDURE

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.4.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4. The EUT received AC 120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5. All support equipments received AC power from a second LISN, if any.
- 6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test data of the worst case condition (Mode 1) was reported on the following Data page.



6.4 MEASUREMENT RESULT

Mode	Mode 1		LISN lir	ne	Hot Side
80 p -	el [dBµ∨]				
60 50 [/] ×	7				
30 20 10	programmer.	Wrater - was			
-10 -10 15	0k 300k 40	0k 600k 800k 1M	2M 3M 4M 5 Frequency [Hz]	5M 6M 8M 10M	20M 30M

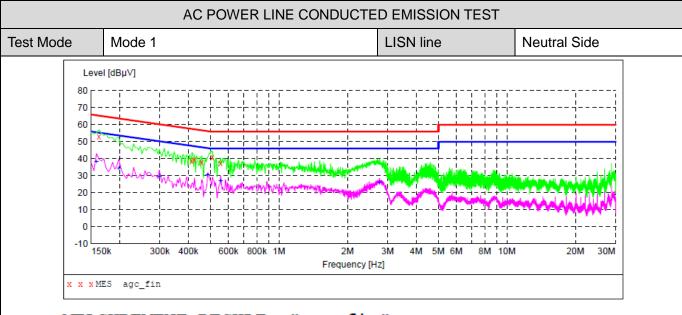
MEASUREMENT RESULT: "agc fin"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.162000	51.40	6.1	65	14.0	OP	L1
0.494000	38.10	6.1	56	18.0	QP	L1
1.562000	35.20	6.2	56	20.8	QP	L1
2.546000	30.40	6.3	56	25.6	QP	L1
2.750000	35.00	6.3	56	21.0	QP	L1
4.758000	30.20	6.3	56	25.8	QP	L1

MEASUREMENT RESULT: "agc_fin2"

Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line
0.166000	36.60	6.1	55	18.6	AV	L1
0.486000	27.20	6.1	46	19.0	AV	L1
1.466000	23.10	6.2	46	22.9	AV	L1
1.562000	22.30	6.2	46	23.7	AV	L1
1.786000	24.30	6.2	46	21.7	AV	L1
2.806000	26.10	6.3	46	19.9	AV	L1





MEASUREMENT RESULT: "agc_fin"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.162000	53.00	6.1	65	12.4	QP	N
0.414000	38.90	6.1	58	18.7	QP	N
0.426000	39.80	6.1	57	17.5	QP	N
0.458000	37.90	6.1	57	18.8	QP	N
0.510000	40.90	6.2	56	15.1	QP	N
0.554000	37.60	6.2	56	18.4	QP	N

MEASUREMENT RESULT: "agc fin2"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.158000 0.198000 0.298000 0.486000	38.50 34.50 29.80 30.50	6.1 6.1 6.1	56 54 50 46	17.1 19.2 20.5 15.7	AV	N N N N
0.554000 2.758000	27.10 26.20	6.2	46 46	18.9 19.8	AV AV	N N

RESULT: PASS

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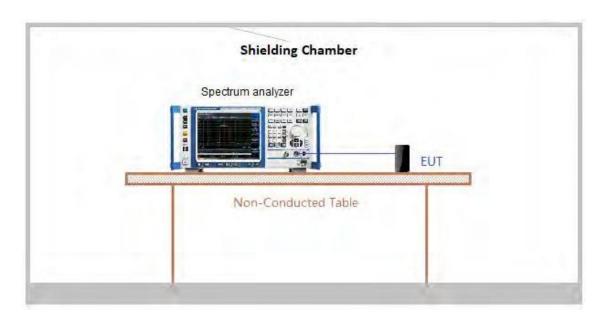
7. ANTENNA CONDUCTED POWER FOR RECEIVERS

7.1 PROVISIONS APPLICABLE

The antenna conducted power of the receiver as defined in §15.111 shall not exceed the values given in the following tables

Frequency Range	9 KHz to 2GHz		
Limit	2.0 nW (-57 dBm)		

7.2 MEASUREMENT SETUP

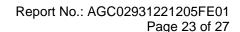


7.3 MEASUREMENT PROCEDURE

- 1. The receiver antenna terminal connected to a spectrum analyzer.
- 2. Receiver set as follow:

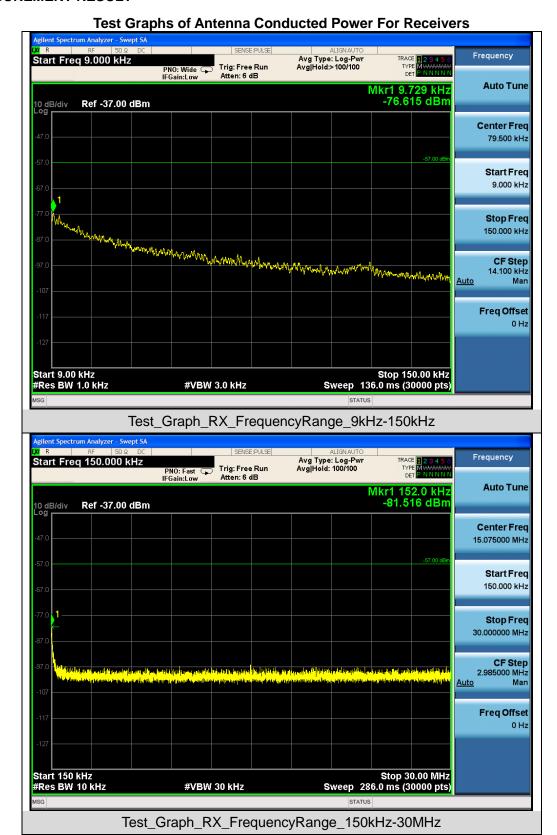
Frequency range	RBW (kHz)	VBW (kHz)	
9 kHz ~ 150 kHz	1	3	
150 kHz ~ 30 MHz	10	30	
30 MHz ~ 1000 MHz	100	300	
1000 MHz ~ 3000 MHz	1000	3000	

3. The test data of the worst case condition (mode 1) was reported on the following Data page.

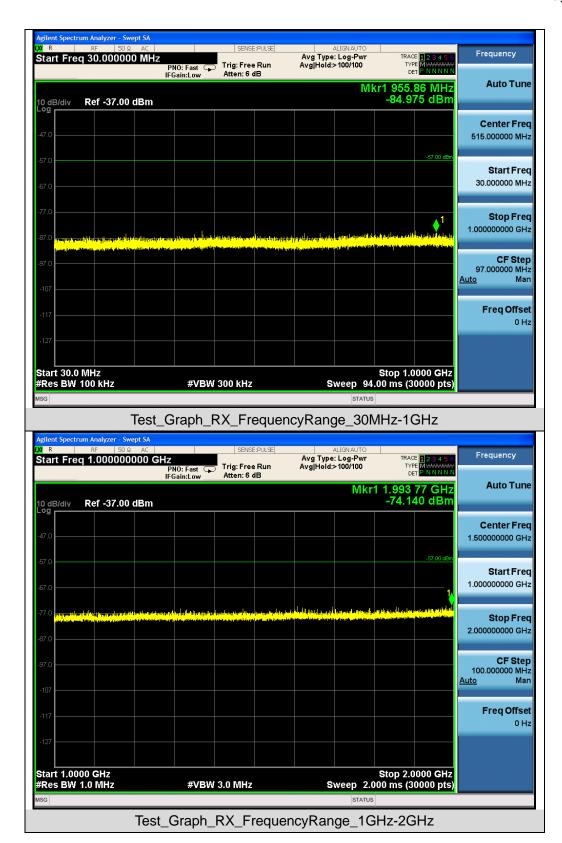




7.4 MEASUREMENT RESULT







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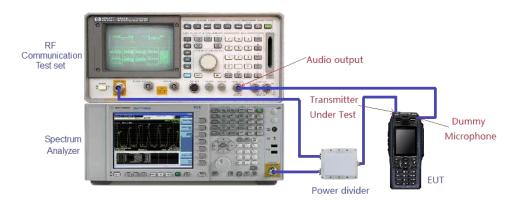


8. SCANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH SCANNING RECEIVERS

8.1 PROVISIONS APPLICABLE

Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

8.2 MEASUREMENT SETUP



8.3 MEASUREMENT PROCEDURE

- 1) Connected the EUT as shown in the above block diagram.
- 2) Apply a RF signal to the receiver input port at lowest, middle and highest channel frequencies of receiver operation band.
- 3) Adjust the audio output level of the receiver to it's rated value with the distortion less than 10%.
- 4) Adjust the RF Signal Generator Output Power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB. This output level of the RF SG at each channel frequency is the sensitivity of the receiver.
- Select the lowest or worse-case sensitivity level for all of the bands as the reference sensitivity.
- 6) Adjust the RF Signal Generator output to a level of +60 dB above the reference sensitivity obtained in step 5) and its frequency to the frequency points in the cellular band.
- 7) Set the Receiver squelch to threshold, the signal required to open the squelch must be lower than the reference sensitivity level.
- 8) Set the receiver in a scanning mode and allow it to scan through it's complete receiving range.
- 9) If the receiver unsquelched or stopped on any frequency, receiving at this frequency, then adjust the signal generator output level until 12 dB SINAD is produced, this level is the spurious value and the difference between the reference sensitivity and the spurious value is the rejection ratio and must be at least 38dB.
- 10) Repeat above procedure at the frequencies 824.5, 836.0, and 848.5 MHz for the mobile band, and 869.1, 881.5, and 893.5MHz for the cellular base band.



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8.4 MEASUREMENT RESULT

Scanning Frequency Band (MHz)	Test Frequency of Cellular Band (MHz)	Spurious Value of Cellular Frequency (dBm)	Reference Sensitivity (dBm)	Measurement Result (dB)	Limit (dB)
136-174	824.5/836.0/848.5	>-42	-107	<-65	<-38
136-174	869.1/881.5/893.5	>-42	-107	<-65	<-38
400-480	824.5/836.0/848.5	>-43	-107	<-64	<-38
400-480	869.1/881.5/893.5	>-43	-107	<-64	<-38

Note:

- 1. Measurement Result = Rejection Ratio
- 2. Reference Sensitivity is the recorded value when the signal-to-noise ratio is 12dB.
- 3. Measurement Result = Reference Sensitivity- Spurious Value.



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APPENDIX I: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC02931221205AP01

APPENDIX II: PHOTOGRAPHS OF TEST EUT

Refer to the Report No.: AGC02931221205AP02

----END OF REPORT----



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- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.