



Neutron Engineering Inc.

FCC Radio TEST Report

FCC ID: YGWLH-918C

This report concerns (check one): ☒ Original Grant ☐ Class II Change

Issued Date : Sep. 15, 2010
Project No. : 1008C297
Equipment : Triple Technology Detector
Model Name : LH-918C
Applicant : Longhorn Security Technology Co.,Ltd
Address : New and High Technology Industrial Park,
Guangming Shenzhen
Manufacturer : Longhorn Security Technology Co.,Ltd
Address : The 4th Building, 1st floor of the 5th Building, New
and High Technology Industrial Park, Guangming,
Wan Dai Heng Guangming, shenzhen, China

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Aug. 24, 2010

Date of Test:

Aug. 24, 2010 ~ Sep. 14, 2010

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Declaration

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.



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1. CERTIFICATION

Equipment: Triple Technology Detector

Brand Name :  **Longhorn**

Model Name.: LH-918C

Applicant: Longhorn Security Technology Co.,Ltd

Factory: Longhorn Security Technology Co.,Ltd

Address: The 4th Building, 1st floor of the 5th Building, New and High Technology Industrial Park, Guangming, Wan Dai Heng Guangming, shenzhen, China

Date of Test: Aug. 24, 2010 ~ Sep. 14, 2010

Test Item: ENGINEERING SAMPLE

Standards: FCC Part15, Subpart C(15.245)/ ANSI C63.4 : 2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1008C297) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).



2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.245)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	N/A	Note(1)
15.209	Radiated Emission	PASS	
FCC Part 15 Subpart C Paragraph 15.245 Limit	Field Strength of Fundamental/emissions	PASS	
15.245(b)(3)	Band Edge Test	PASS	Note(2)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the Radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).



2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C03/CB03** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China. 523792
Neutron's test firm number is 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
DG-C03	CISPR	150 KHz ~ 30MHz	1.94	


B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)	NOTE
CB03	CISPR	30MHz ~ 200MHz	V	2.48	
		30MHz ~ 200MHz	H	2.16	
		200MHz ~ 1,000MHz	V	2.50	
		200MHz ~ 1,000MHz	H	2.66	



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Triple Technology Detector	
Brand Name	 Longhorn	
Model Name.	LH-918C	
OEM Brand/Model Name	N/A	
Model Difference	N/A	
Product Description	Product Type	Stand-alone
	Operation Frequency:	10525.00MHz
	Number Of Channel	1CH .Please see Note 2.
	Antenna Designation:	Integral antenna
	Antenna Gain(Peak)	1.0 dBi
	Output Power:	80.59 dBuv/m (AV MAX)
	More details of EUT technical specification. Please refer to the User's Manual.	
Channel List	Please refer to the Note 2.	
Power Source	DC Voltage supplied	
Power Rating	DC 12V 38mA MAX	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel	Frequency (MHz)
01	10525

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Microwave Antenna Note(4)	N/A	1.0dBi

4. Plane antenna with high frequency oscillator GaAs:FET



3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

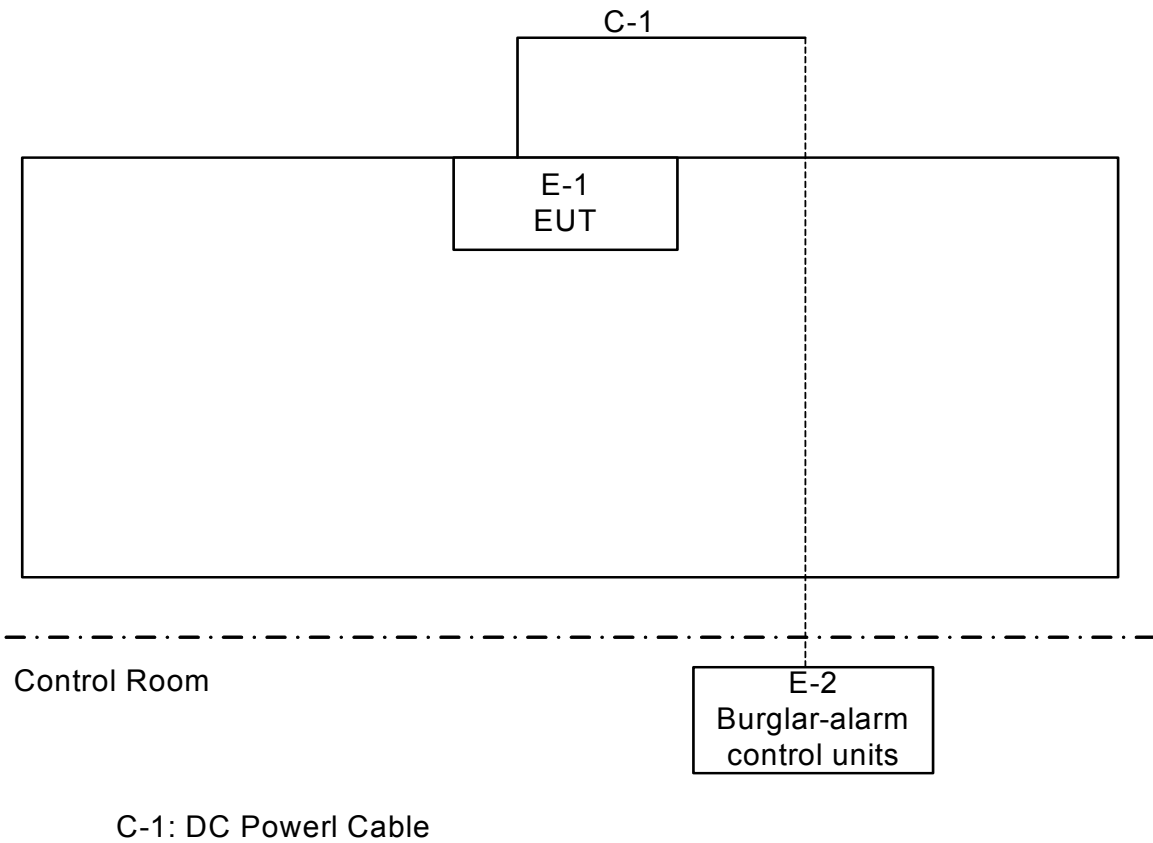
Pretest Mode	Description
Mode 1	TX

For Conducted Test	
Final Test Mode	Description
	" N/A " denotes test is not applicable in this Test Report

For Radiated Test	
Final Test Mode	Description
Mode 1	TX



3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED





3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Triple Technology Detector	 Longhorn	LH-918C	YGWLH-918C	N/A	EUT
E-2	burglar-alarm control units	Longhorn	LHD7000	N/A	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10M	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in 『Length』 column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	May.26.2011
2	LISN	Rolf Heine	NNB-2-16Z	99044	May.26.2011
3	50Ω Terminator	SHX	TF2-3G-A	08122901	May.26.2011
4	Transient Limiter	Agilent	11947A	3107A03668	May.26.2011
5	Test Cable	N/A	C-06_C03	N/A	Nov.16.2010
6	EMI TEST RECEIVER	R&S	ESCS30	8333641017	May.26.2011

Remark: " N/A" denotes No Model Name. , Serial No. or No Calibration specified.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

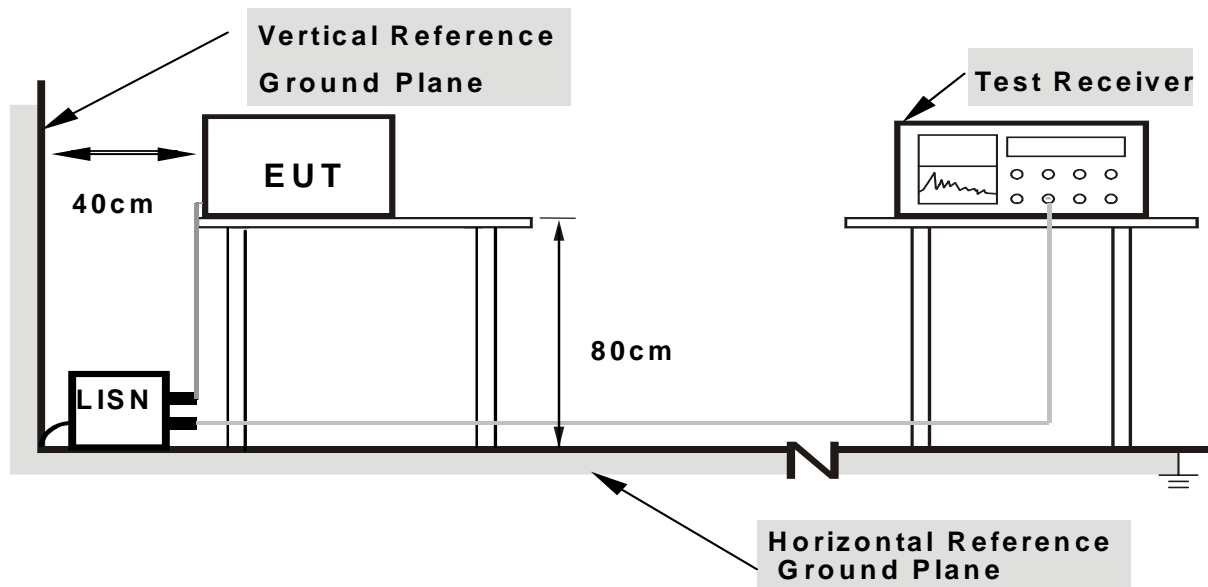
4.1.3 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting



4.1.7 TEST RESULTS

EUT :	Triple Technology Detector	Model Name :	LH-918C
Temperature :	--	Relative Humidity :	--
Pressure :	--	Test Power :	--
Test Mode :	" N/A" denotes test is not applicable in this Test Report.		

Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of Note. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.
- (3) " N/A" denotes test is not applicable in this Test Report.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (FCC 15.209)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

FCC Part15 (15.245) , Subpart C	
Fundamental Frequency (MHz)	Field Strength of Fundamental (3m)
10500-10550	2500 mV/m (128dBuV)
	Field Strength of Harmonics (3m)
	Harmonic emissions in the restricted bands at and above 17.7 GHz: 7.5mV/m
	Harmonic emissions in the non-restricted bands: 25mV/m (88dBuV)

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).



4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Triple Loop Antenna	R&S	HFH2-Z2	830749/020	May.27.2011
2	Bi-log Antenna	Schwarbeck	VULB9160	9160-3232	May.26.2011
3	Amplifier	HP	8447D	2944A09673	May.26.2011
4	Test Receiver	R&S	ESCI	100895	May.26.2011
5	Test Cable	N/A	C-01_CB03	N/A	Jul.05.2011
6	Controller	CT	SC100	N/A	N/A
7	Horn Antenna	ETS	3115	00075789	May.12.2011
8	Amplifier	Agilent	8449B	3008A02274	May.26.2011
9	Spectrum	Agilent	E4408B	US39240143	Nov.16.2010
10	Test Cable	HUBER+SUHNER	CB03 High Fre	N/A	May.03.2011
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170340	Dec.16.2010
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	May.27.2011
14	Amplifier	EMC	EMC2654045	980039	Aug.12.2011

Remark: " N/A" denotes No Model Name. / Serial No. and No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, Average=PK-dycty cycle

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP



DUTY CYCLE: TX 10525MHz

Dwell time=ON/ON+OFF

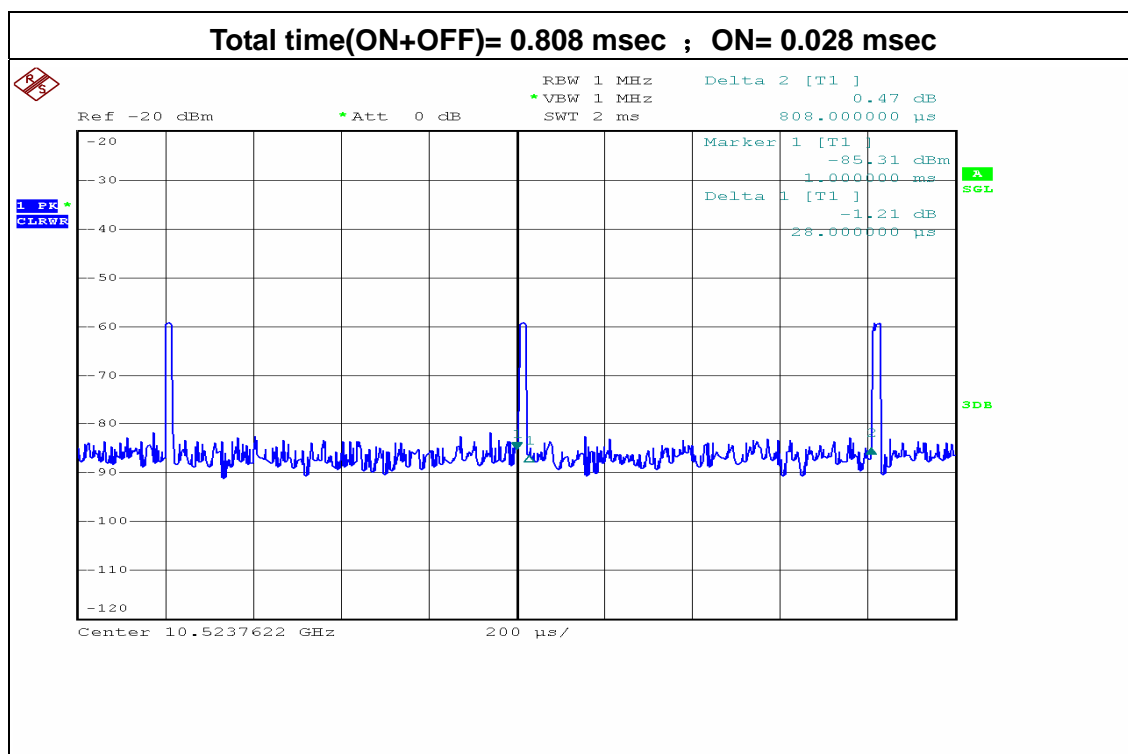
ON: 0.028msec

ON+OFF: (total time):0.808msec

Dwell time: 3.47%

AV=PK+20 log(Dwell time)

AV=PK-29.205





4.2.3 TEST PROCEDURE

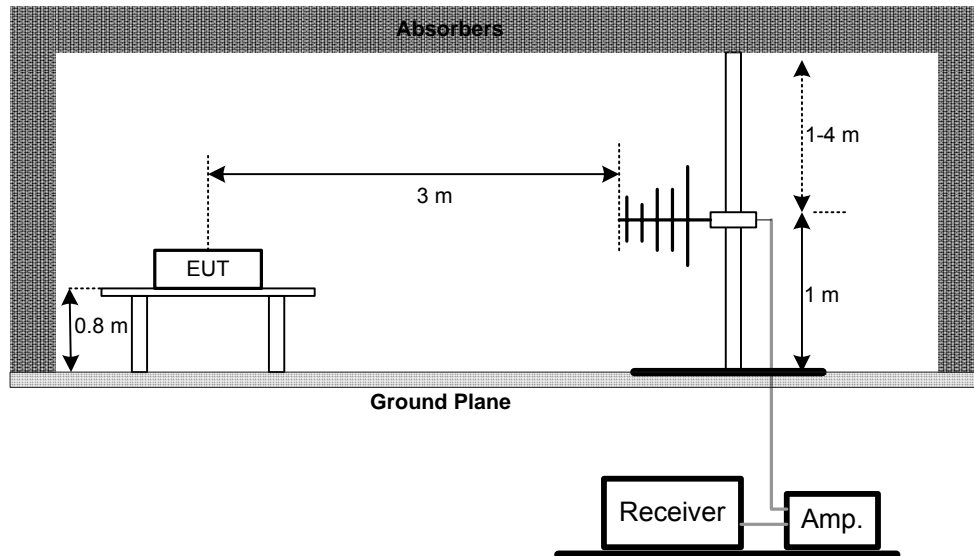
- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

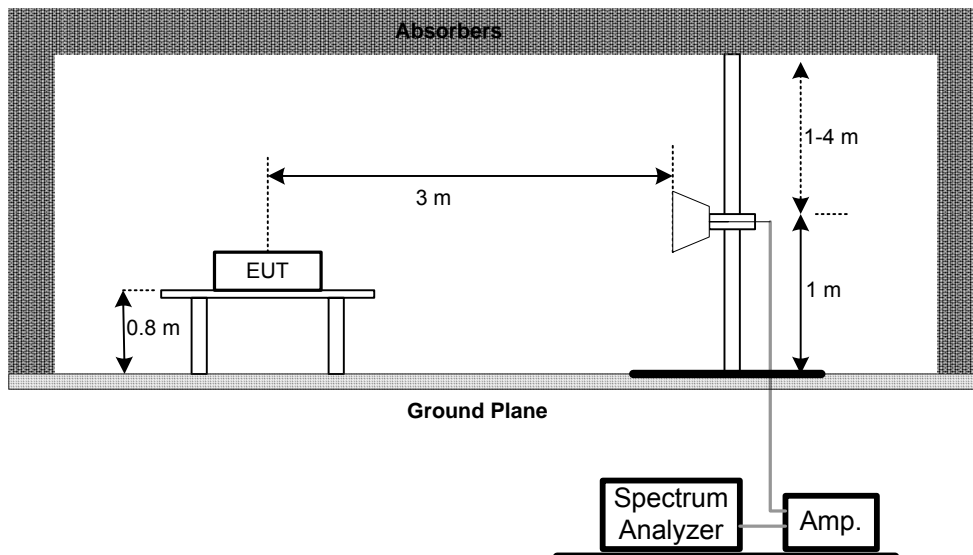
No deviation

4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



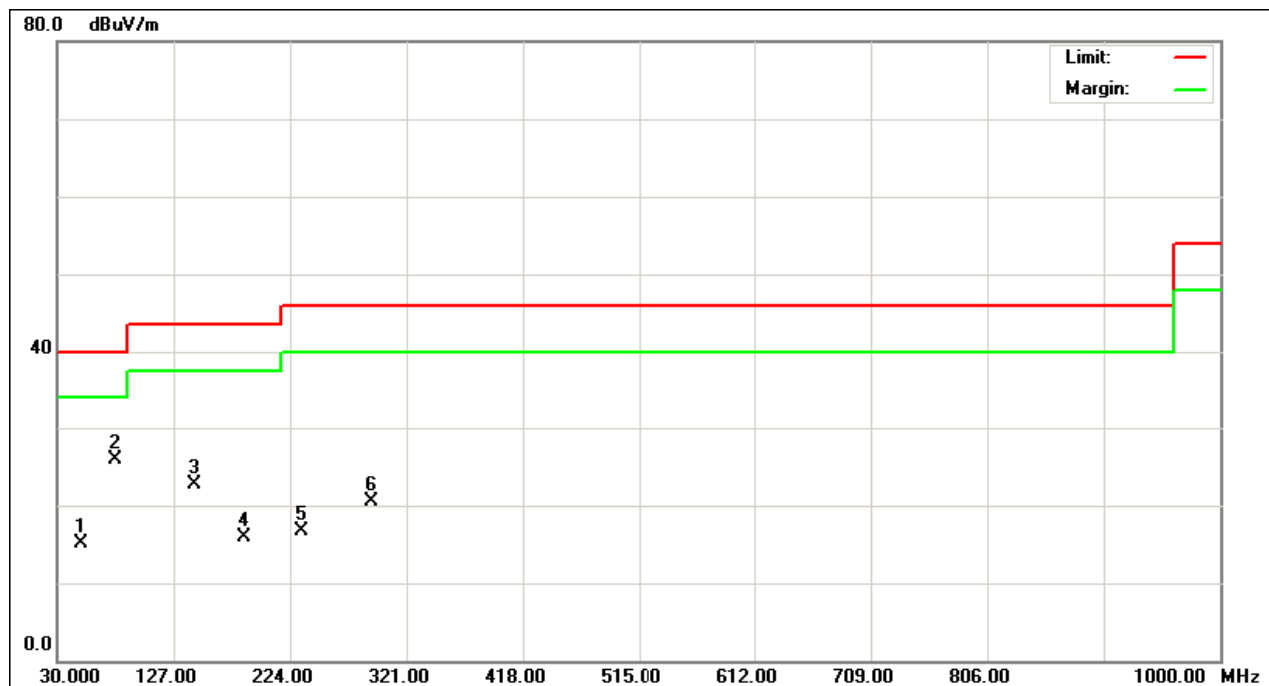
4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHz)

EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	23°C	Relative Humidity :	58 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX Mode --10525MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
47.00	V	32.24	-17.09	15.15	40.00	- 24.85	
76.10	V	44.81	-18.87	25.94	40.00	- 14.06	
141.60	V	40.44	-17.70	22.74	43.50	- 20.76	
185.20	V	32.67	-16.81	15.86	43.50	- 27.64	
233.70	V	32.21	-15.45	16.76	46.00	- 29.24	
291.90	V	32.65	-12.06	20.59	46.00	- 25.41	

Remark :

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform .
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency . “F” denotes fundamental frequency; “ H” denotes spurious frequency. “E” denotes band edge frequency.
- (3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission .
- (4) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



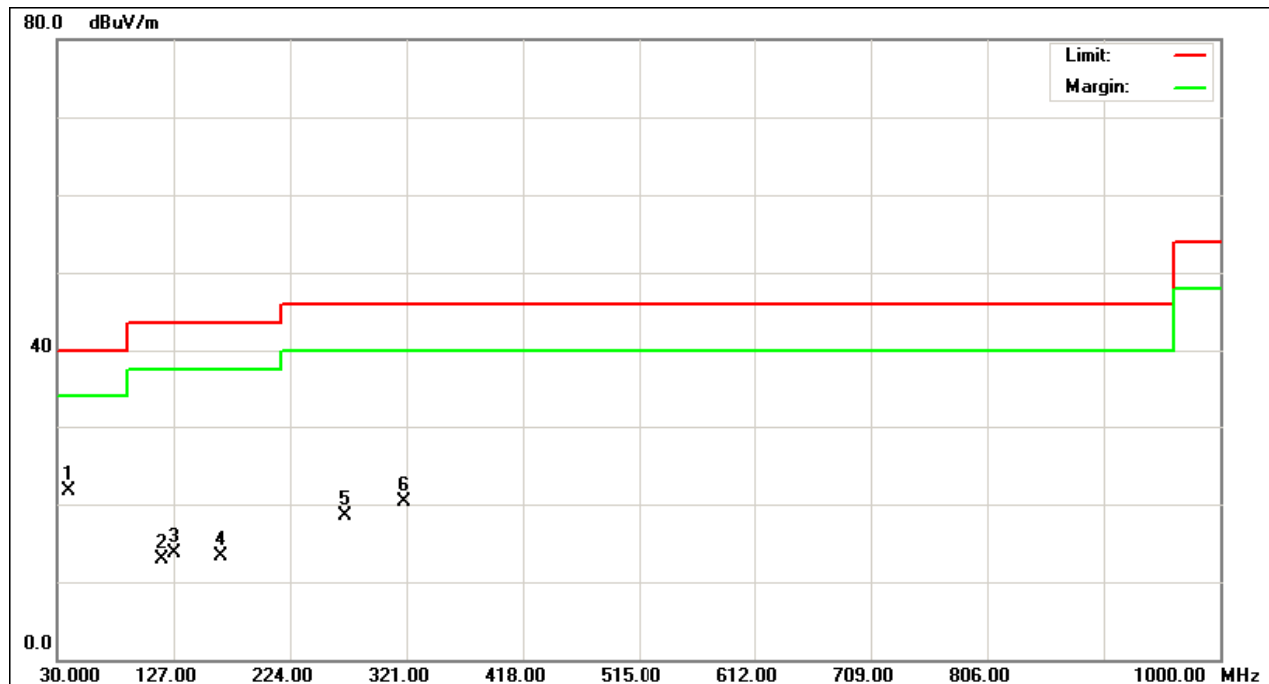


EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	23°C	Relative Humidity :	58 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX Mode --10525MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
39.70	H	38.63	-16.83	21.80	40.00	- 18.20	
117.30	H	31.19	-18.30	12.89	43.50	- 30.61	
124.60	H	31.91	-18.20	13.71	43.50	- 29.79	
165.80	H	30.77	-17.45	13.32	43.50	- 30.18	
267.70	H	31.93	-13.41	18.52	46.00	- 27.48	
316.20	H	31.91	-11.68	20.23	46.00	- 25.77	

Remark :

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform .
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency . "F" denotes fundamental frequency; " H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission .
- (4) Data of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.





4.2.8 TEST RESULTS (ABOVE 1000 MHz)

EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	22°C	Relative Humidity :	56 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX Mode --10525MHz		

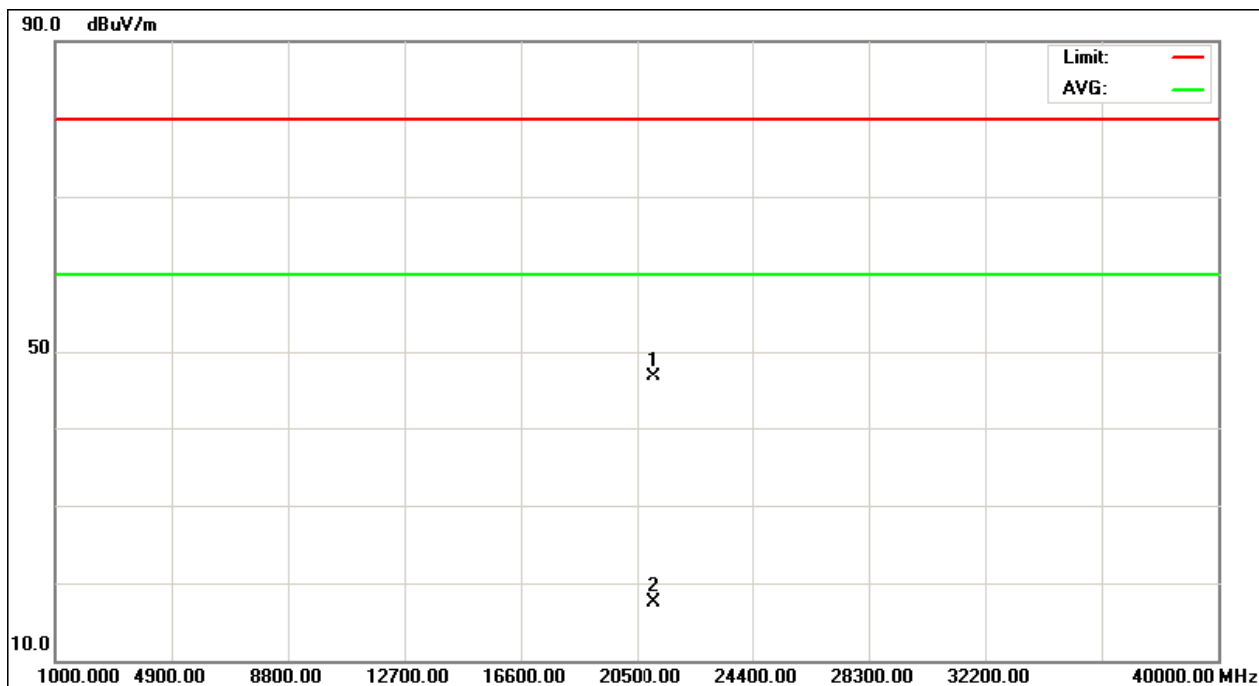
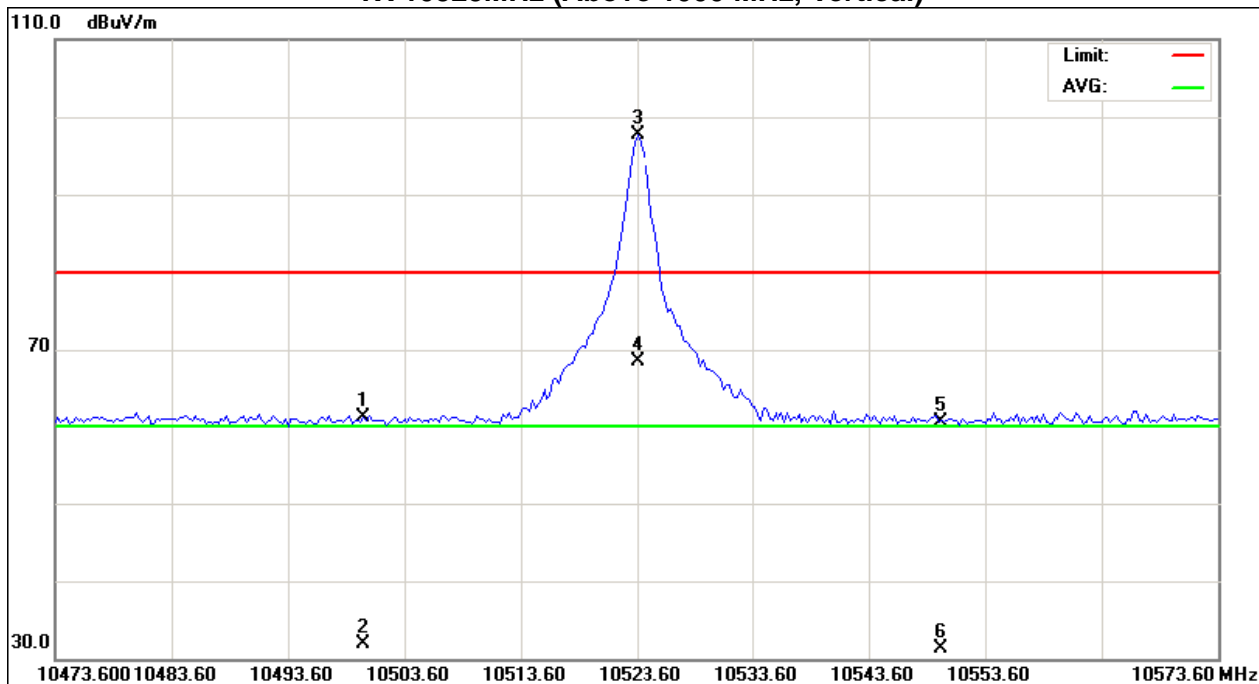
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
10500.00	V	47.84	18.64	13.17	61.01	31.81	74.00	54.00	X/E
10523.60	V	84.48	55.27	13.20	97.68	68.47	148.00	128.00	X/F
10550.00	V	47.20	18.00	13.23	60.43	31.23	74.00	54.00	X/E
21054.81	V	66.26	37.05	-19.64	46.62	17.41	108.00	88.00	X/H

Remark :

- (1) Emission level (dBuV/m) = 20 log Emission level (uV/m).
Distance extrapolation factor = 20 log (specific distance / test distance) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.
<Frequency Range above 15GHz> Test distance is 1.5meter.
- (2) Measuring frequency range is 40GHz. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The amplitude of spurious emissions (3th harmonic of fundamental frequency to 40GHz) which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) , Final AV=PK-29.205



Orthogonal Axis : X
TX 10525MHz (Above 1000 MHz, Vertical)





EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	22°C	Relative Humidity :	56 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX Mode --10525MHz		

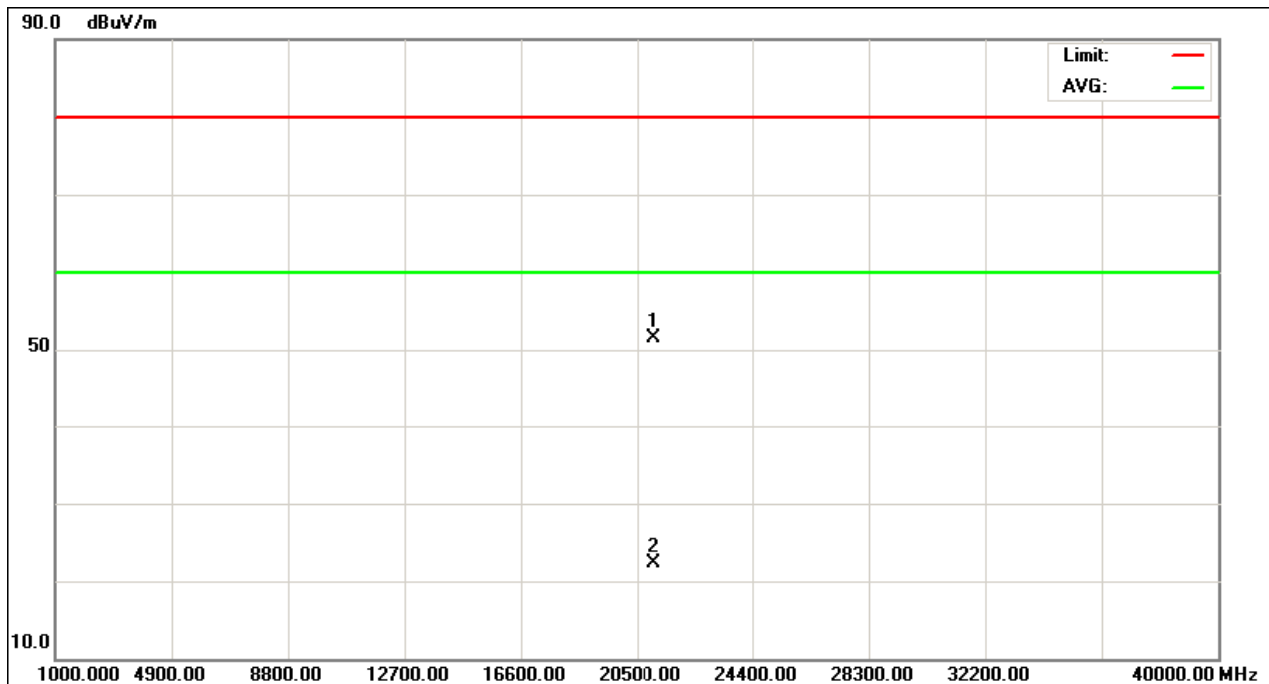
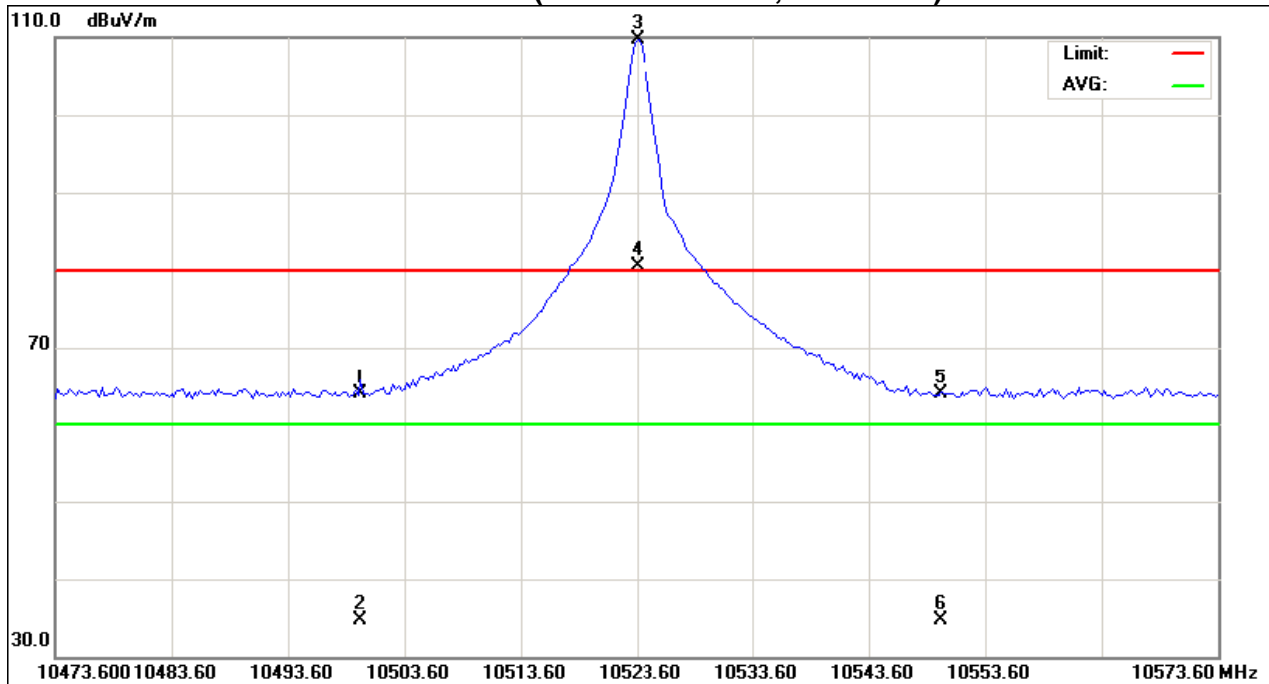
Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
10500.00	H	50.75	21.54	13.16	63.91	34.70	74.00	54.00	X/E
10523.60	H	96.60	67.39	13.20	109.80	80.59	148.00	128.00	X/F
10550.00	H	50.71	21.50	13.23	63.94	34.73	74.00	54.00	X/E
21054.81	H	71.07	41.87	-19.64	51.43	22.23	108.00	88.00	X/H

Remark :

- (1) Emission level (dBuV/m) = 20 log Emission level (uV/m).
Distance extrapolation factor = 20 log (specific distance / test distance) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.
<Frequency Range above 15GHz> Test distance is 1.5meter.
- (2) Measuring frequency range is 40GHz. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The amplitude of spurious emissions (3th harmonic of fundamental frequency to 40GHz) which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) , Final AV=PK-29.205



Orthogonal Axis : X
TX 10525MHz (Above 1000 MHz, Horizontal)





5. BANDWIDTH TEST

5.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.27.2010

Remark: " N/A" denotes No Model Name. , Serial No. or No Calibration specified.

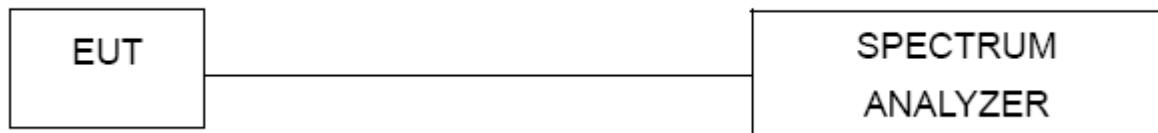
5.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 20 ms.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

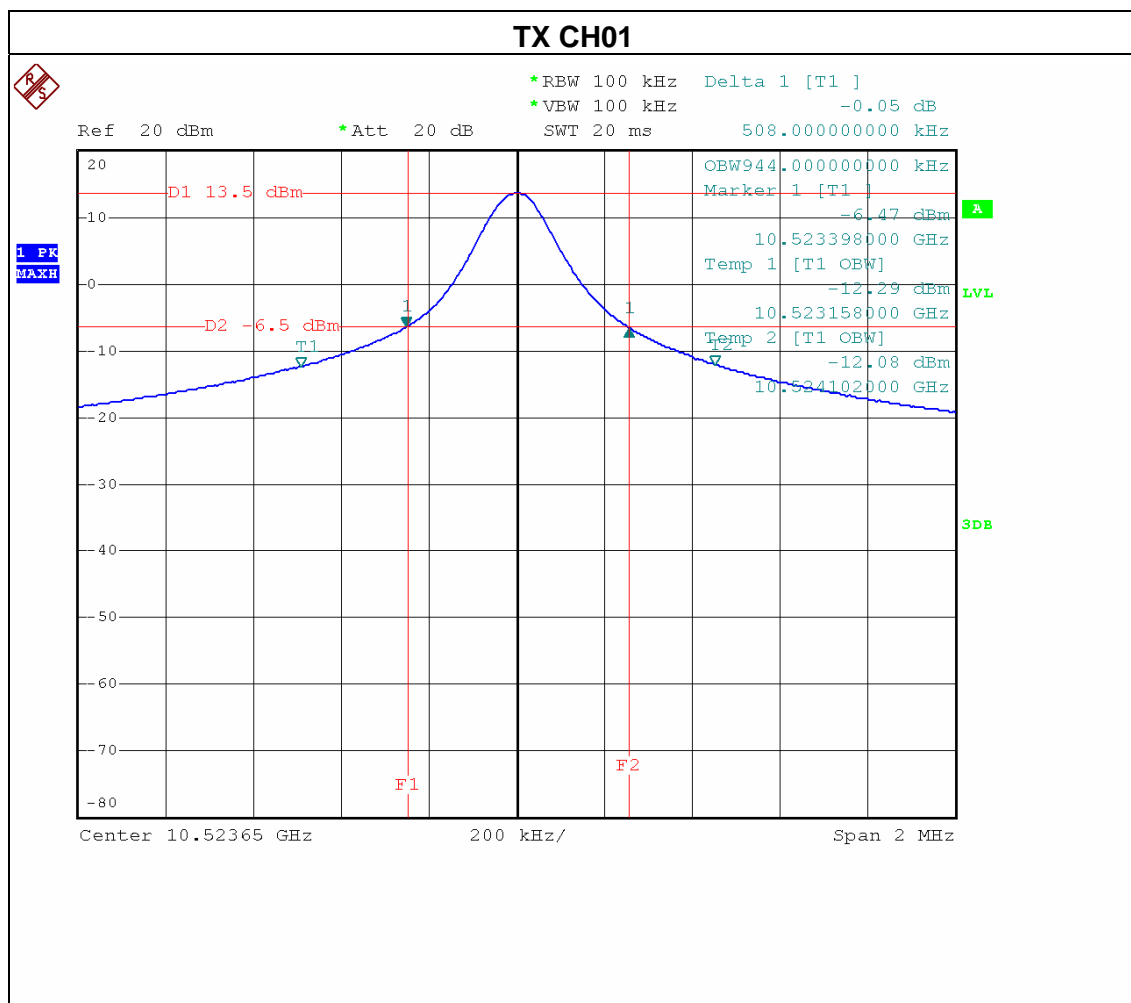
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



5.6 TEST RESULTS

EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	20°C	Relative Humidity :	51 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX CH 01		

Test Channel	Frequency (MHz)	20 dBc Bandwidth (MHz)	99% occupied Bandwidth(MHz)
CH01	10525	0.944	0.508





6. ANTENNA CONDUCTED SPURIOUS EMISSION

6.1 APPLIED PROCEDURES / LIMIT

This test was performed to verify the EUT band edge emission including all associated side bands was attenuated at least 50dB below the unmodulated carrier level or below the general spurious emissions limit. Specification test limits in the table below has to be followed.

Frequency band (MHz)	Field Strength limit at 3m (dBuV/m)		Attenuation below carrier (dBc)
	Peak	Average	
10500~10550	74.0	54.0	50

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.27.2010

Remark: " N/A" denotes No Model Name. , Serial No. or No Calibration specified.

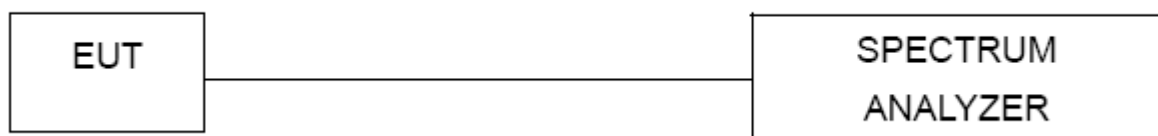
6.1.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP



6.1.5 EUT OPERATION CONDITIONS

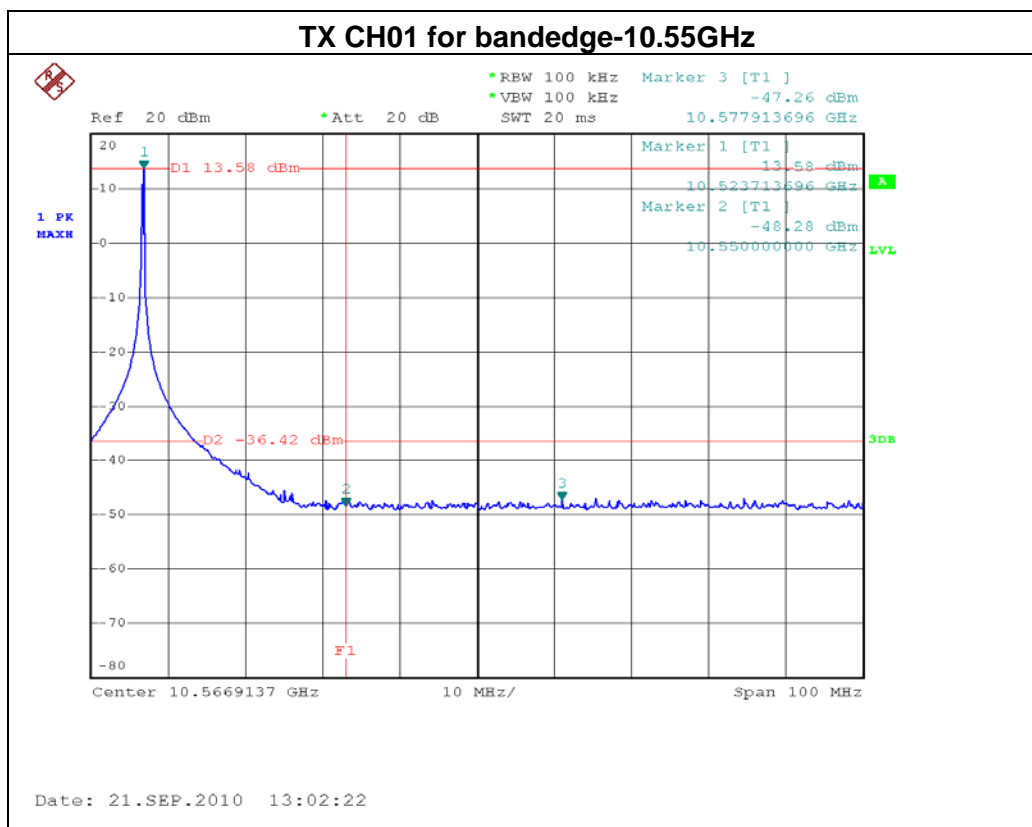
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

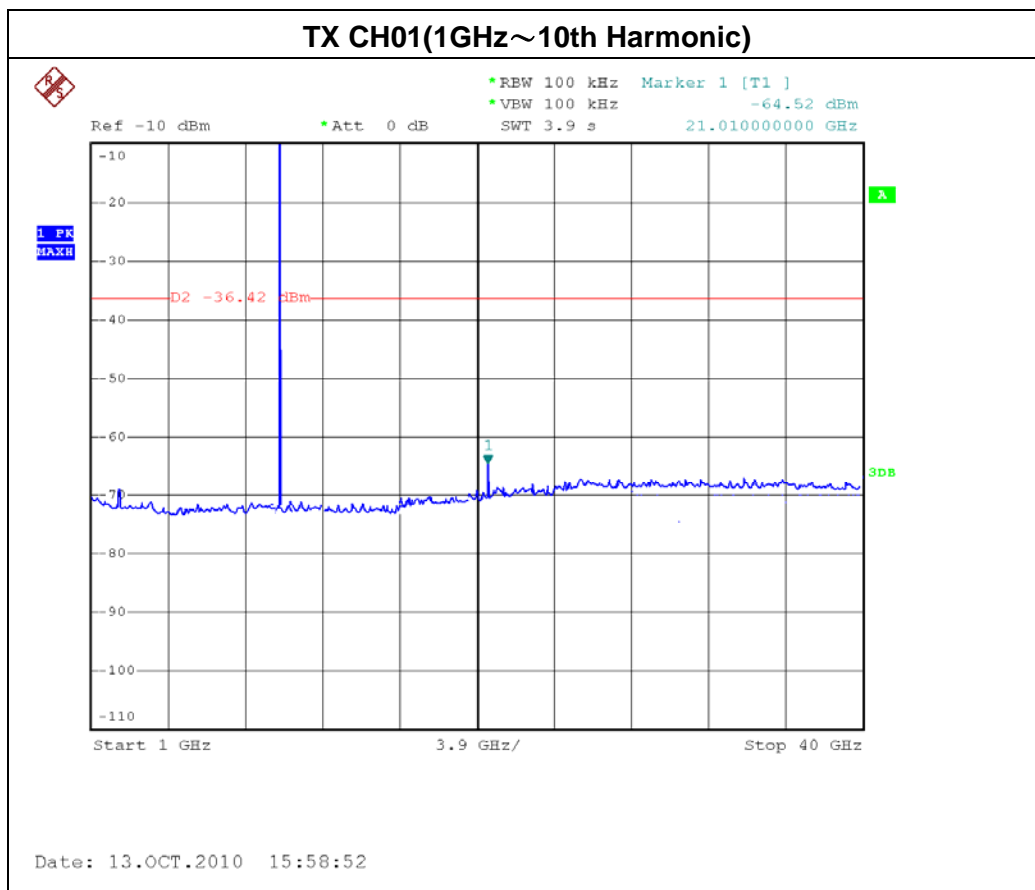
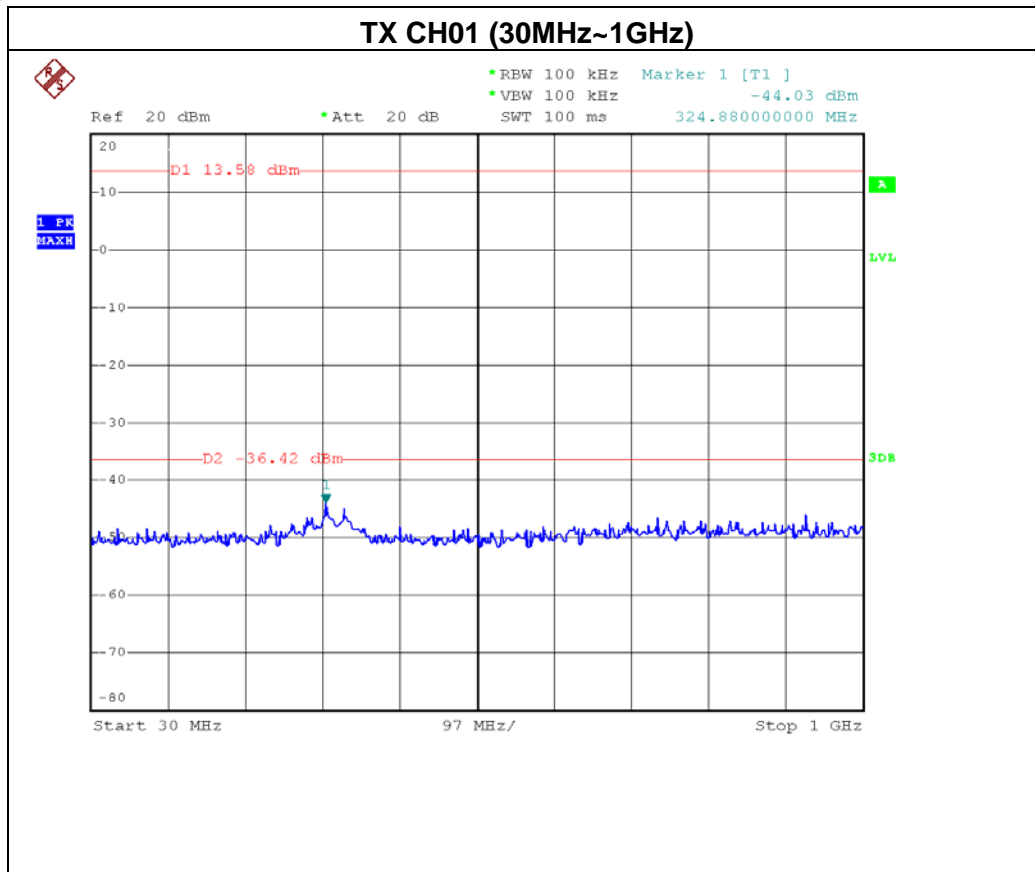


6.1.6 TEST RESULTS

EUT :	Triple Technology Detector	Model Name. :	LH-918C
Temperature :	20°C	Relative Humidity :	51 %
Pressure :	1001 hPa	Test Power :	DC 12V
Test Mode :	TX CH01		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
10461.21	-46.84	10577.91	-47.26
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 50dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			







7. EUT TEST PHOTO

Radiated Measurement Photos

