



## FCC Test Report

**Issued Date** : Aug. 16, 2010  
**Project No.** : 1008C045  
**Equipment** : KS-Reader  
**Model Name** : KS-7H  
**Applicant** : KeyScan Inc.  
**Address** : 95 Christopher Columbus Dr. Floor 12A  
Jersey City NJ, 07302 USA

**Tested by:**  
Neutron Engineering Inc. EMC Laboratory  
**Date of Receipt:** Aug. 03, 2010  
**Date of Test:**  
Aug. 03, 2010 ~ Aug. 15, 2010

**Testing Engineer:** Josh Lin  
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**Neutron** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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## **1. CERTIFICATION**

Equipment : KS-Reader  
Brand Name : Keyscan  
Model Name. : KS-7H  
Applicant : KeyScan Inc.  
Date of Test : Aug. 03, 2010 ~ Aug. 15, 2010  
Test Item : ENGINEERING SAMPLE  
Standards : FCC Part 15, Subpart B, Class B  
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-FCCE-1-1008C045) 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:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15, Subpart B	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

**NOTE:**

(1) " N/A" denotes test is not applicable in this Test Report.



**2.1 TEST FACILITY**

The test facilities used to collect the test data in this report is **C01/CB08** at the location of 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan

**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
C01	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)	NOTE
CB08	CISPR	30MHz ~ 200MHz	V	3.22	
		30MHz ~ 200MHz	H	3.35	
		200MHz ~ 1,000MHz	V	3.24	
		200MHz ~ 1,000MHz	H	3.11	
		1000MHz ~ 18000MHz	V	4.05	
		1000MHz ~ 18000MHz	H	3.97	
		18000MHz ~ 40000MHz	V	4.04	
		18000MHz ~ 40000MHz	H	4.01	



**3. GENERAL INFORMATION**

**3.1 GENERAL DESCRIPTION OF EUT**

Equipment	KS-Reader
Brand Name	Keyscan
Model Name	KS-7H
Model Difference	N/A
OEM Model Name	N/A
OEM Brand	N/A
Product Description	The EUT is a KS-Reader.
	Operation Frequency: 13.56MHz
	Modulation Type: ASK
	Number Of Channel 1CH (13.56MHz )
	Antenna Designation: Loop ANT
	Field Strength 53.56 dBuV/m @3m
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification. Please refer to the User's Manual.	
Power Source	DC Voltage supplied from PC Host System
Power Rating	I/P AC 120V /60Hz O/P DC 5V 0.5A
Connecting I/O Port(s)	Please refer to the User's Manual
Products Covered	N/A
EUT Modification(s)	N/A

**Note:**

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



### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested base 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	Card Reader
Mode 2	RF Card Reader

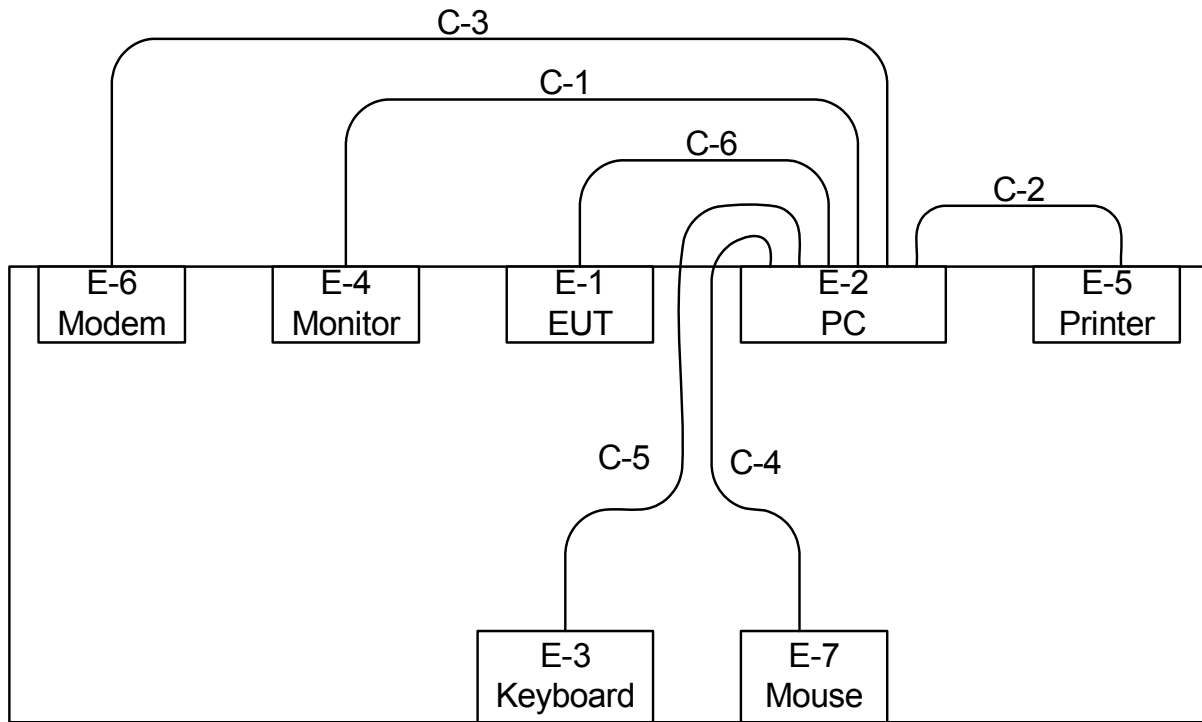
The EUT system operated these modes were found to be the worst case during the pre-scanning test as Following:

For Conducted Test	
Final Test Mode	Description
Mode 1	Card Reader
Mode 2	RF Card Reader

For Radiated Test	
Final Test Mode	Description
Mode 1	Card Reader
Mode 2	RF Card Reader



**3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**



- C-1: D-Sub Cable
- C-2: Parallel Cable
- C-3: RS232 Cable
- C-4: USB Cable
- C-5: USB Cable
- C-6: USB Cable



**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	KS-Reader	Keyscan	KS-7H	YNO-KSM0007	N/A	EUT
E-2	PC	Lenovo	H2510	DOC	SS07999198	EUT
E-3	USB Keyboard	Dell	L100	DOC	CNORH659658908 5C00U7	
E-4	LCD monitor	Dell	E177FPc	DOC	CNOFJ179-64180-6 AG-1WNS	
E-5	Printer	SII	DPU-414	DOC	3018507 B	
E-6	Modem	ACEEX	DM-1414V	IFAXDm1414	0603002131	
E-7	USB Mouse	Dell	MO56UOA	DOC	G01003HO	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	YES	1.5M	
C-2	YES	NO	1.5M	
C-3	YES	NO	1.5M	
C-4	YES	NO	1.8M	
C-5	YES	YES	1.8M	
C-6	YES	YES	1M+0.2M	EUT 0.2M

- Note:
- (1) The support equipment was authorized by Declaration of Conformity.
  - (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 (FREQUENCY RANGE 150KHZ-30MHZ)

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

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	00042991	Jan. 26, 2011
2	Test Cable	N/A	SR03_C_01 &02	N/A	Aug. 19, 2010
3	Pulse Limiter	Electro-Metrics	EM-7600	112644	Dec. 27, 2010
4	EMI Test Receiver	R&S	ESCI	100082	Mar. 17, 2011
5	50Ω BNC TYPE Terminator	N/A	N/A	03	May 25, 2011
6	LISN	EMCO	4825/2	00028234	Jul. 12, 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

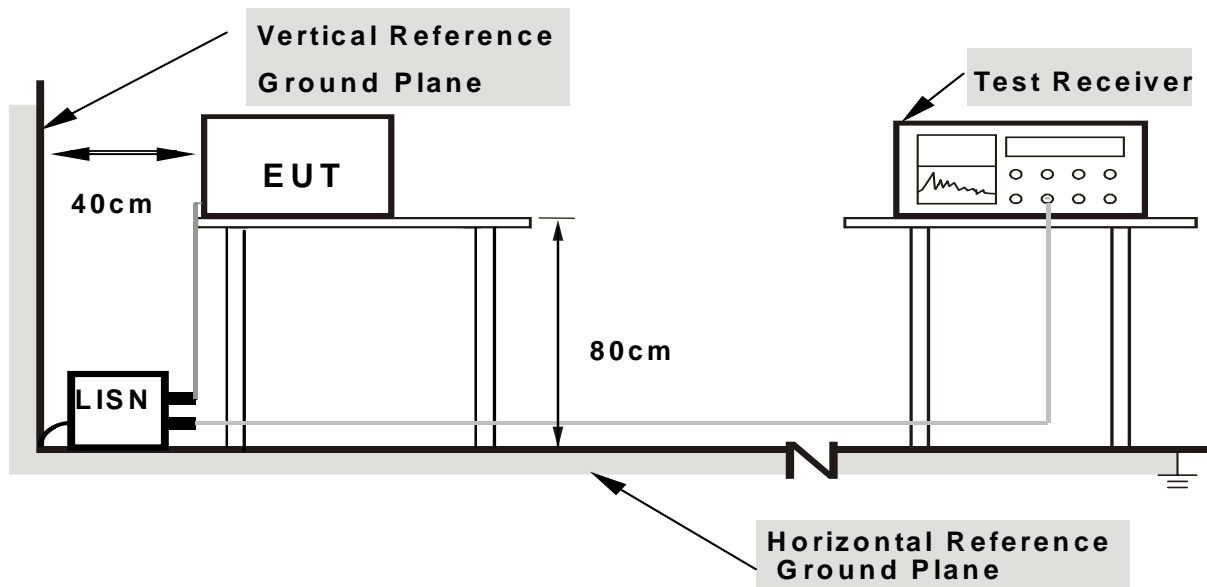
#### 4.1.3 TEST PROCEDURE

- a. 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. 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 exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use. The program contained on a PC hard disk and is auto-starting on power-up. Once loaded, the program sequentially exercises each system component in turn. The sequence used is:



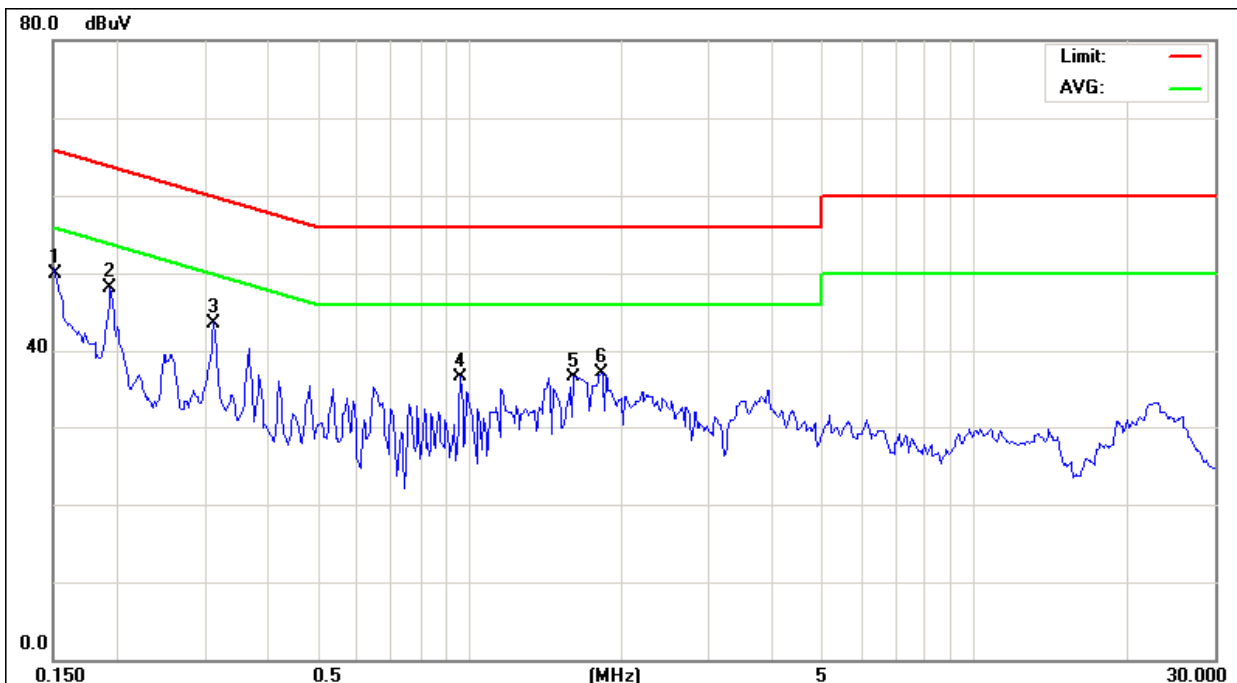
**4.1.7 TEST RESULT**

EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Card Reader		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Line	49.82	*	65.91	55.91	-16.09	(QP)
0.20	Line	48.08	*	63.82	53.82	-15.74	(QP)
0.31	Line	43.60	*	59.92	49.92	-16.32	(QP)
0.96	Line	36.56	*	56.00	46.00	-19.44	(QP)
1.61	Line	36.57	*	56.00	46.00	-19.43	(QP)
1.82	Line	37.18	*	56.00	46.00	-18.82	(QP)

**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.



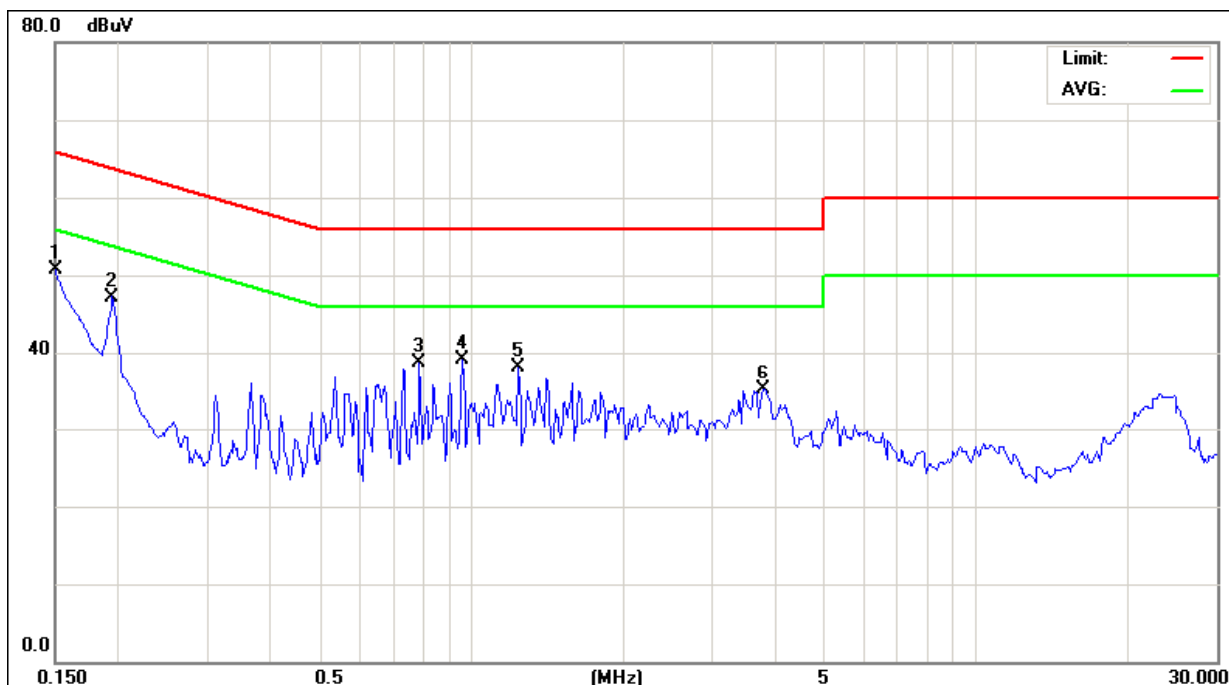


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Card Reader		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Neutral	50.73	*	66.00	56.00	-15.27	(QP)
0.20	Neutral	47.19	*	63.82	53.82	-16.63	(QP)
0.79	Neutral	38.70	*	56.00	46.00	-17.30	(QP)
0.96	Neutral	39.10	*	56.00	46.00	-16.90	(QP)
1.24	Neutral	38.13	*	56.00	46.00	-17.87	(QP)
3.81	Neutral	35.14	*	56.00	46.00	-20.86	(QP)

**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.



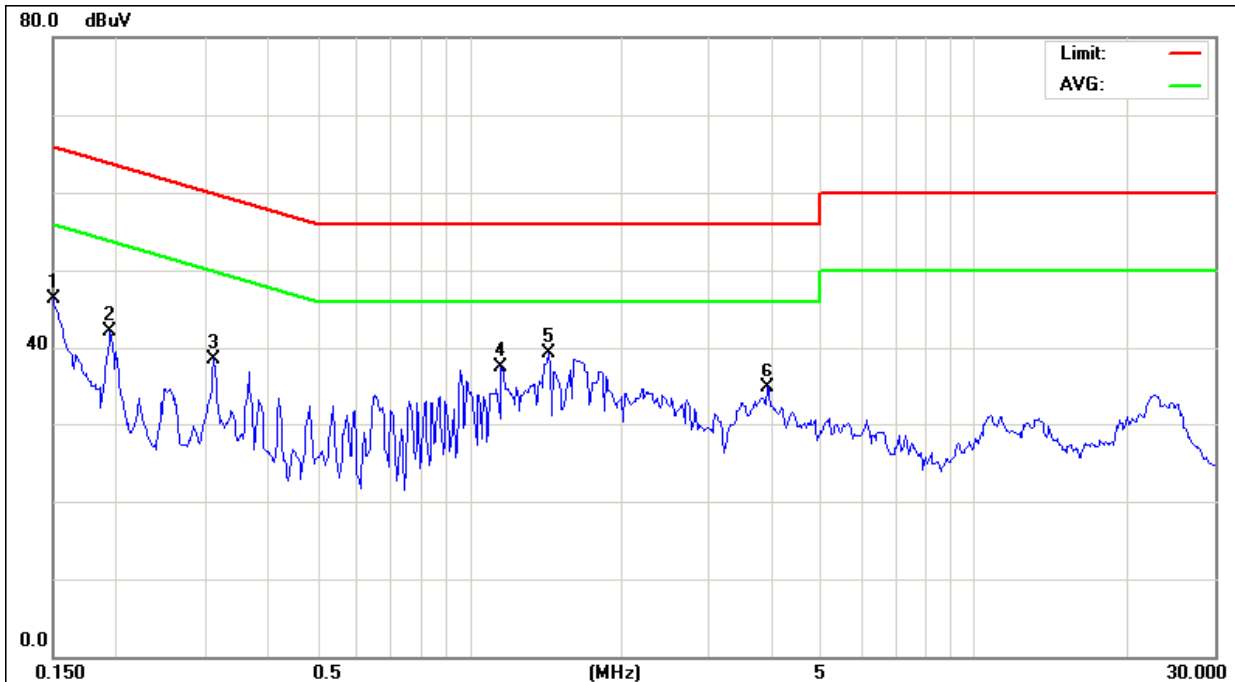


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	RF Card Reader		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Line	46.26	*	66.00	56.00	-19.74	(QP)
0.20	Line	42.08	*	63.82	53.82	-21.74	(QP)
0.31	Line	38.60	*	59.92	49.92	-21.32	(QP)
1.16	Line	37.45	*	56.00	46.00	-18.55	(QP)
1.44	Line	39.30	*	56.00	46.00	-16.70	(QP)
3.92	Line	34.70	*	56.00	46.00	-21.30	(QP)

**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.



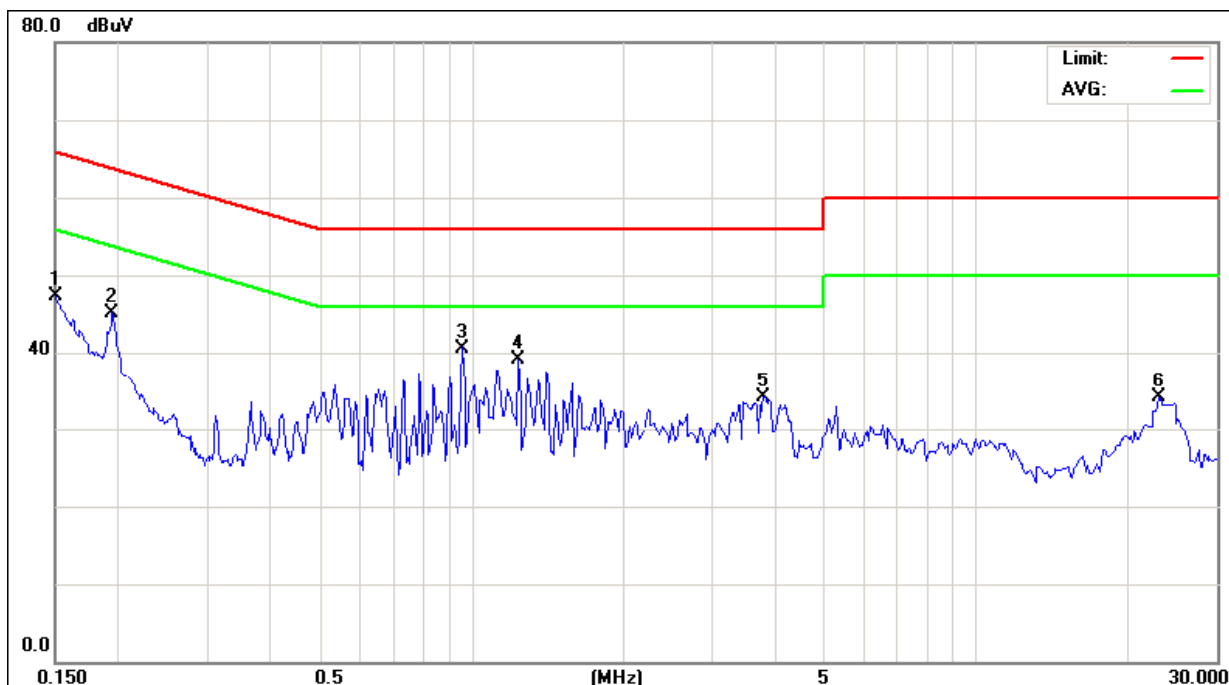


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	RF Card Reader		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Neutral	47.23	*	66.00	56.00	-18.77	(QP)
0.20	Neutral	45.19	*	63.82	53.82	-18.63	(QP)
0.96	Neutral	40.60	*	56.00	46.00	-15.40	(QP)
1.24	Neutral	39.13	*	56.00	46.00	-16.87	(QP)
3.81	Neutral	34.14	*	56.00	46.00	-21.86	(QP)
23.05	Neutral	34.09	*	60.00	50.00	-25.91	(QP)

**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.







**4.2 RADIATED EMISSION MEASUREMENT**

**4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1000MHz)**

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)
	dBuV/m	dBuV/m
30~88	39.1	40.0
88~216	43.5	43.5
216~960	46.4	46.0
Above 960	49.5	54.0

Notes:

- (1) The limit for radiated test was performed according to as following: FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

**LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)**

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

**FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)**

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower



**4.2.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Sep. 10, 2010
2	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-546	Mar. 19, 2011
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 19, 2011
4	Microflex Cable	N/A	N/A	1m	May. 19, 2011
5	Microflex Cable	AISI	S104-SMAP- 1	10m	Aug. 23, 2010
6	Microflex Cable	N/A	N/A	3m	Aug. 23, 2010
7	Test Cable	N/A	LMR-400	966_12m	Jun. 17, 2011
8	Test Cable	N/A	LMR-400	966_3m	Jun. 17, 2011
9	Pre-Amplifier	EMC	EMC-330	980001	Jun. 02, 2011
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-3 52	9168-352	Jun. 16, 2011

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

**4.2.3 TEST PROCEDURE**

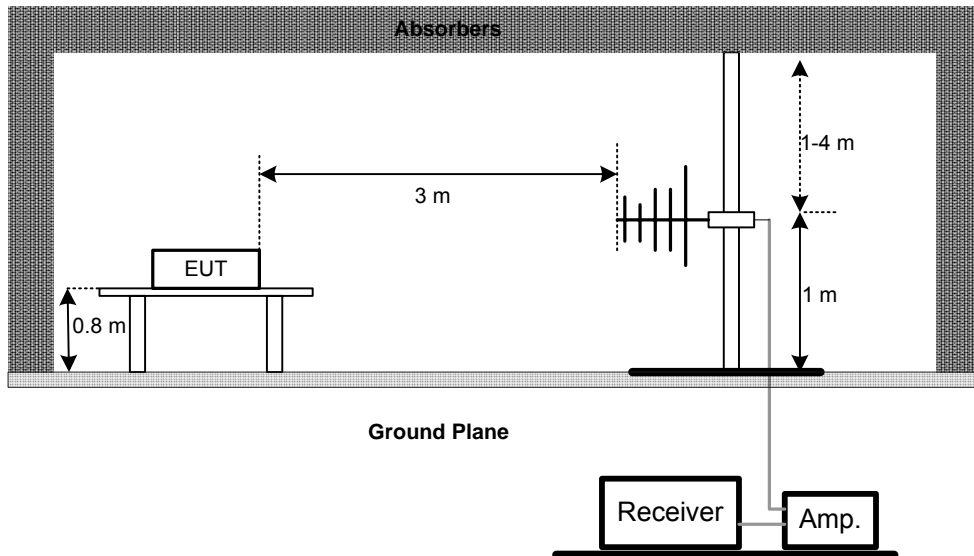
- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 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 radiated 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**

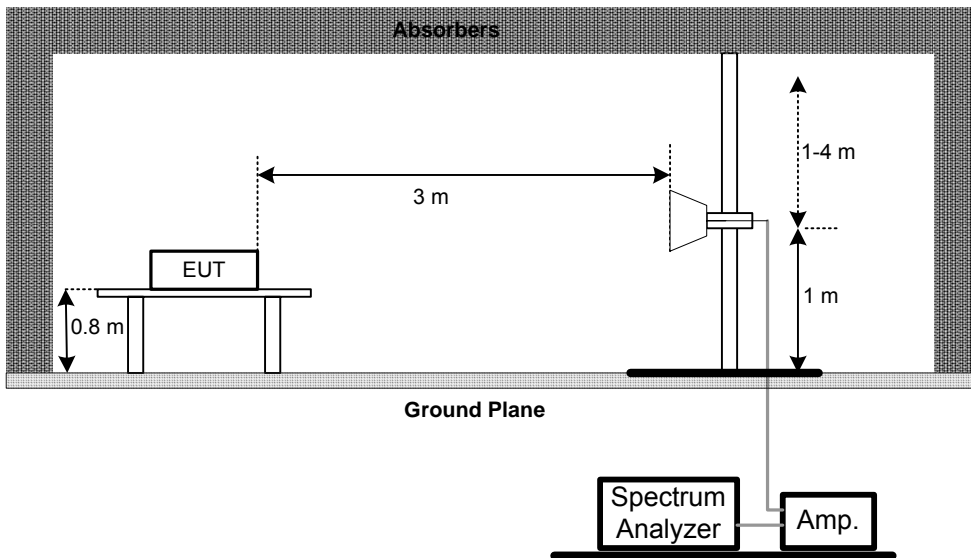
No deviation

**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.



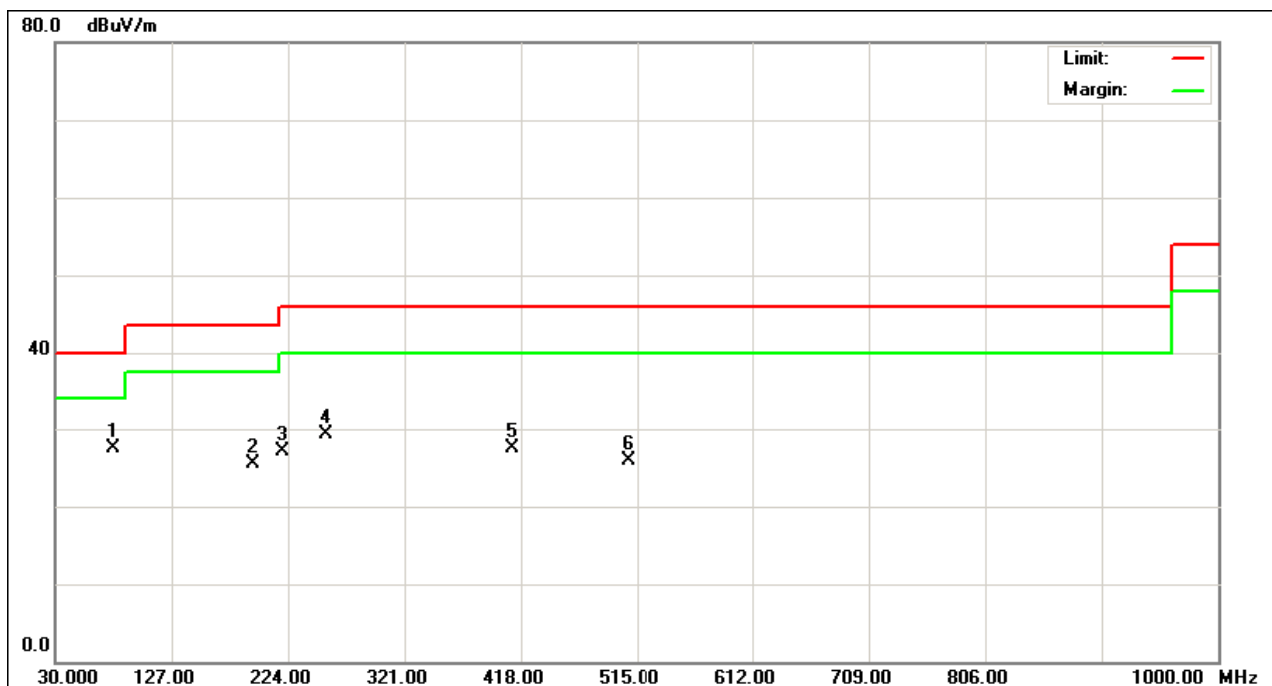
**4.2.7 TEST RESULTS (30~1000MHZ)**

EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1001 hPa	Test Power :	AC 120V/60Hz
Test Mode :	Card Reader		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
78.50	V	50.48	-23.04	27.44	40.00	- 12.56	
194.90	V	47.28	-21.87	25.41	43.50	- 18.09	
219.15	V	48.59	-21.46	27.13	46.00	- 18.87	
255.53	V	49.64	-20.28	29.36	46.00	- 16.64	
410.73	V	43.82	-16.34	27.48	46.00	- 18.52	
507.73	V	40.24	-14.29	25.95	46.00	- 20.05	

**Remark :**

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz ◦
- (2) 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 ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦



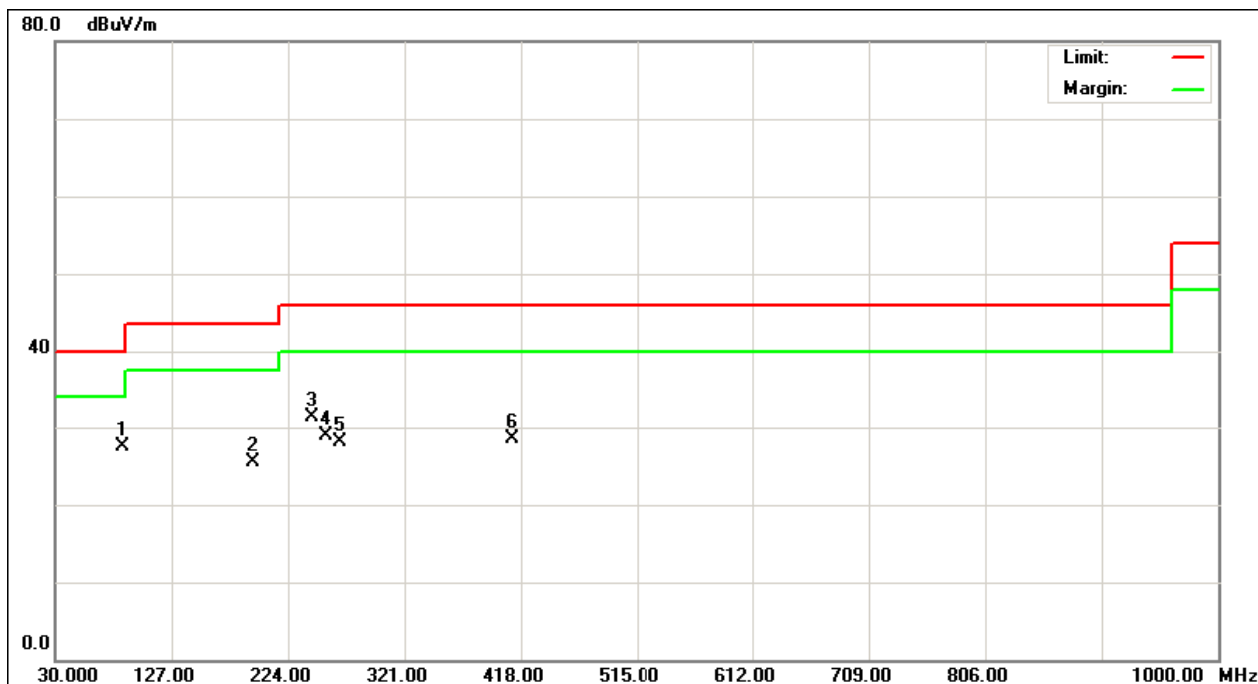


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1001 hPa	Test Power :	AC 120V/60Hz
Test Mode :	Card Reader		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
85.78	H	50.67	-23.22	27.45	40.00	- 12.55	
194.90	H	47.42	-21.87	25.55	43.50	- 17.95	
243.40	H	51.77	-20.54	31.23	46.00	- 14.77	
255.53	H	49.16	-20.28	28.88	46.00	- 17.12	
267.65	H	48.03	-19.87	28.16	46.00	- 17.84	
410.73	H	44.80	-16.34	28.46	46.00	- 17.54	

**Remark :**

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz ◦
- (2) 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 ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦



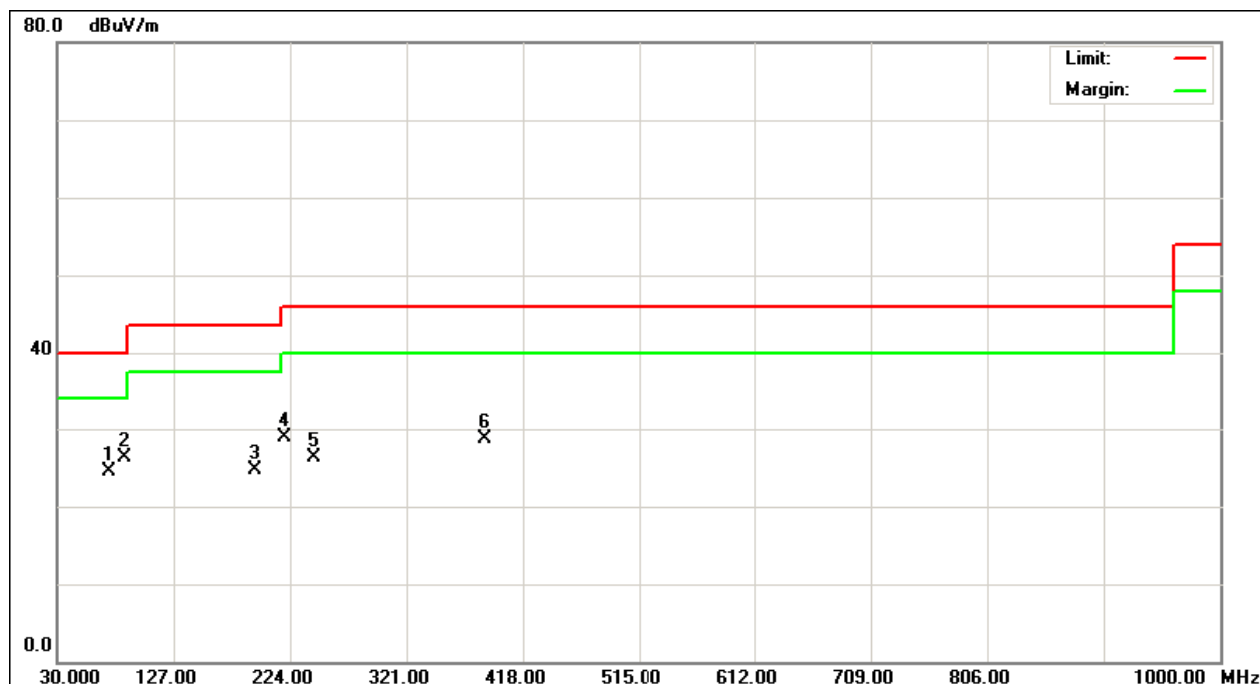


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1001 hPa	Test Power :	AC 120V/60Hz
Test Mode :	RF Card Reader		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
73.65	V	46.83	-22.27	24.56	40.00	- 15.44	
85.78	V	49.55	-23.22	26.33	40.00	- 13.67	
194.90	V	46.65	-21.87	24.78	43.50	- 18.72	
219.15	V	50.45	-21.46	28.99	46.00	- 17.01	
243.40	V	46.87	-20.54	26.33	46.00	- 19.67	
386.48	V	45.73	-16.99	28.74	46.00	- 17.26	

**Remark :**

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz ◦
- (2) 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 ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦



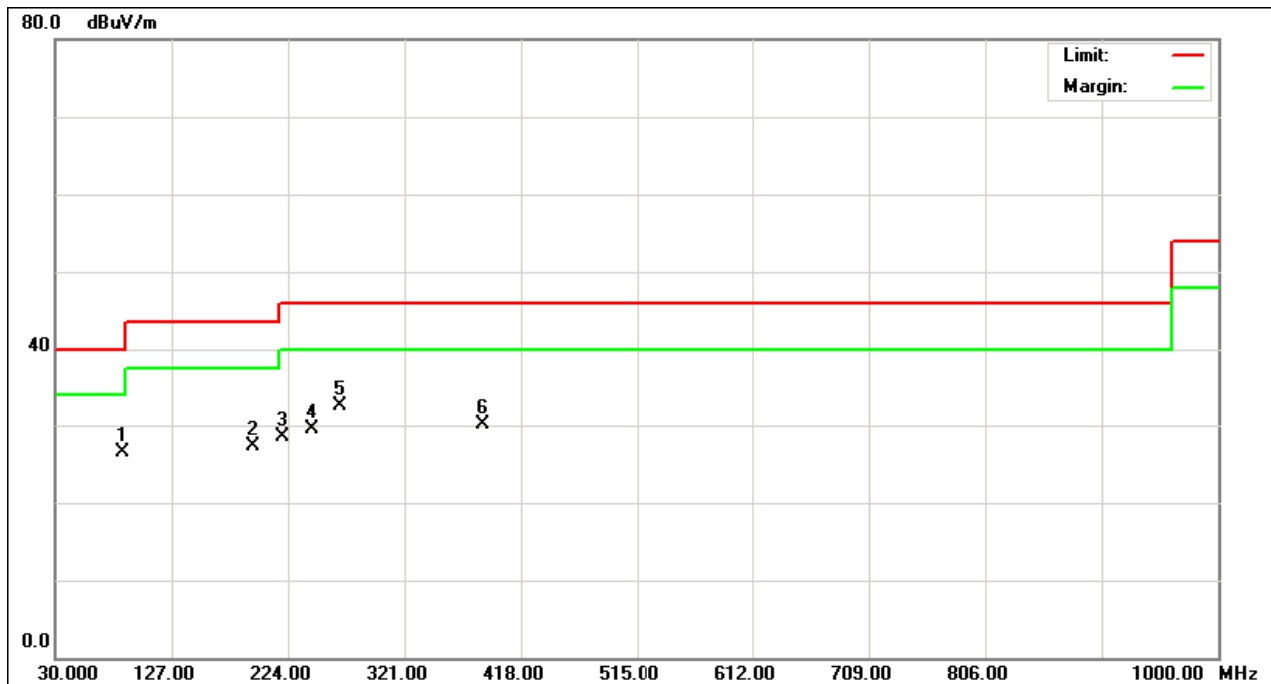


EUT :	KS-Reader	Model Name. :	G03UF
Temperature :	23 °C	Relative Humidity :	57 %
Pressure :	1001 hPa	Test Power :	AC 120V/60Hz
Test Mode :	RF Card Reader		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
85.78	H	49.72	-23.22	26.50	40.00	- 13.50	
194.90	H	49.10	-21.87	27.23	43.50	- 16.27	
219.15	H	50.01	-21.46	28.55	46.00	- 17.45	
243.40	H	50.02	-20.54	29.48	46.00	- 16.52	
267.65	H	52.43	-19.87	32.56	46.00	- 13.44	
386.48	H	47.16	-16.99	30.17	46.00	- 15.83	

**Remark :**

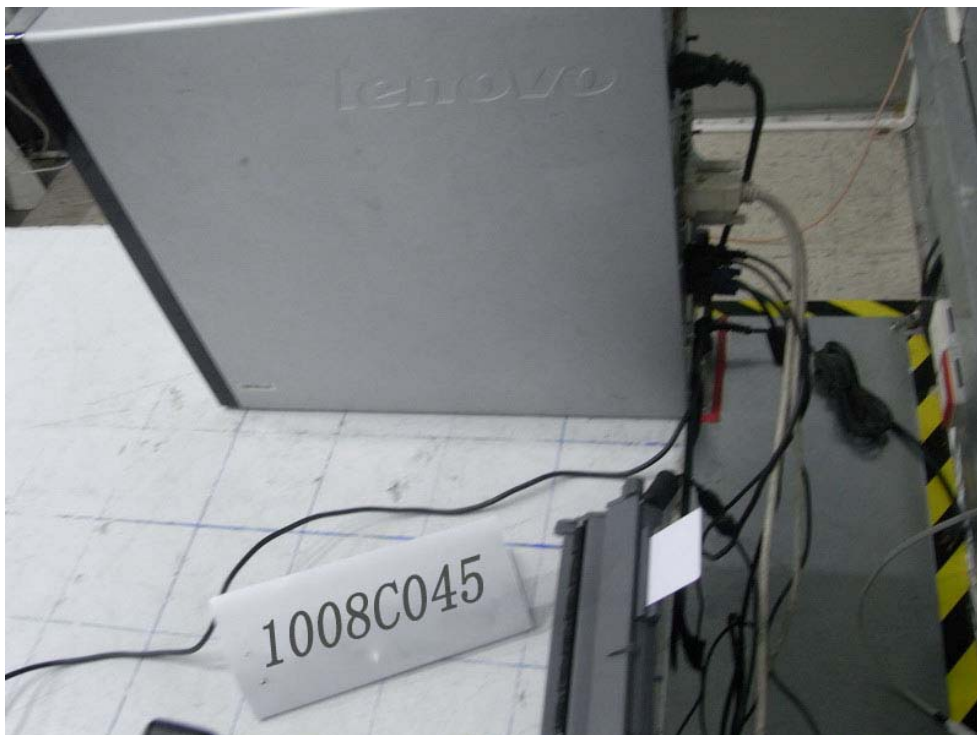
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz ◦
- (2) All readings are Peak unless otherwise stated QP in column of 『 Note 』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦





**5. EUT TEST PHOTO**

**Conducted Measurement Photos  
Card Reader**







**Conducted Measurement Photos  
RF Card Reader**



**Radiated Measurement Photos  
Card Reader**



**Radiated Measurement Photos  
RF Card Reader**

