



Product Service

EMC - TEST REPORT

Report Number	: 68.760.12.100.01	Date of Issue:	18 June 2012
Model	: SSD		
Product Type	: SATA-II High Speed Solid State Disk		
Applicant	: Shenzhen KingSpec Electronics Technology Co., Ltd.		
Address	: 3rd/F., Block 4, Tongfuyu Ind. Park, Tanglang, Xili, Nanshan, 518055 Shenzhen, PEOPLE'S REPUBLIC OF CHINA		
Production Facility	: Shenzhen KingSpec Electronics Technology Co., Ltd.		
Address	: 3rd/F., Block 4, Tongfuyu Ind. Park, Tanglang, Xili, Nanshan, 518055 Shenzhen, PEOPLE'S REPUBLIC OF CHINA		
Importer Information	: Shenzhen KingDisk Century Technology CO.,Ltd.		
Address	: Room1216,Qiurui Building, Minkang Road, Minzhi Street, Baoan Dist, Shenzhen, China		
Test Result	: ☒ Positive ☐ Negative		
Total pages including Appendices	: 16		

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2 Details about the Test Laboratory

Details about the Test Laboratory

Location 1: Jiangsu TÜV Product Service Ltd. – Shenzhen Branch
6th Floor, H Hall,
Century Craftwork Culture Square,
No. 4001, Fuqiang Road,
Futian District 518048,
Shenzhen, P.R.C.

Telephone: 86 755 8828 6998
Fax: 86 755 8828 5299

Location 2: Audix Technology (shenzhen) Co., Ltd.
Block Shenzhen, Science & Industry Park, Nantou,
Shenzhen, Guangdong, China

Telephone: 86-755-2663 9496
Fax: 86-755-2663 2877

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: SATA-II High Speed Solid State Disk

Model no.: SSD

Trade Mark: 

Serial number: NIL

Options and accessories: NIL

Rated Input: 5.0V ($\pm 5\%$)

Rated Output: NIL

Rated Power: 2.0W

Description of the EUT: ITE Device

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
LCD Monitor	DELL	1907FPt	CN-009759-71618-6AP-ACPP
USB Mouse	FUJITSU	M-U0002-FSC1	S26381-K426-V102
USB Keyboard	Lenovo	KU-0225	19402
PC	HP	COMPOQ	



Product Service

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart B, 10-1-2011 Edition	Unintentional Radiators

5 Summary of Test Results

Emission Tests					
FCC Part 15 Subpart B					
Test Condition	Pages	Test Result			Test Location
		Pass	Fail	N/A	
Radiated Emission 30MHz to 18GHz	8	☒	☐	☐	Location 2
Conducted Emission on AC 150kHz to 30MHz	13	☒	☐	☐	Location 2

6 General Remarks

Remarks:

This submittal(s) (test report) is intended for FCC ID: OFTSATA-IISPK complies with Section 15.107, 15.109, of the FCC Part 15, Subpart B Rules.

Summary:

All tests according to the regulations cited on page 5 were

☒ - Performed

☐ - **Not** Performed

The Equipment Under Test

☒ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: 24 May 2012

Testing Start Date: 29 May 2012

Testing End Date: 6 June 2012

- Jiangsu TÜV Product Service Ltd. – Shenzhen Branch -

Reviewed by:

Prepared by:

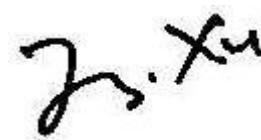
Tested by:



Ken Li
EMC Project Manager



Cookies Bu
EMC Project Engineer

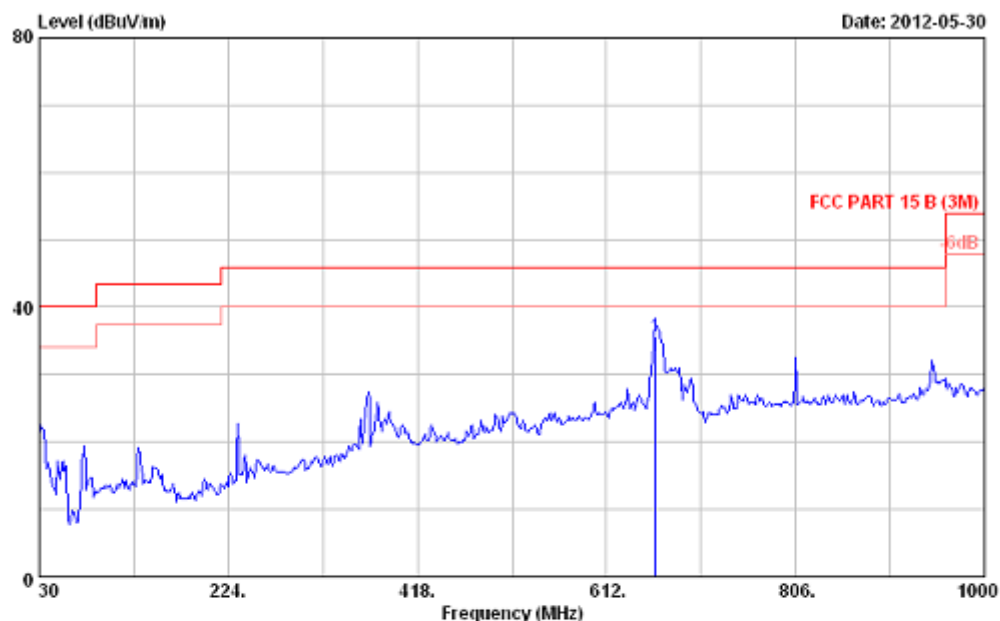


Jolly Xu
EMC Test Engineer

7 Emission Test Results

7.1 Radiated Emission Test 30MHz – 18GHz

M/N : SSD
Operating Condition : Data transmitting
Test Specification : Vertical, 30MHz-1GHz
Comment : DC 5.0V from PC Input AC 120V/60Hz



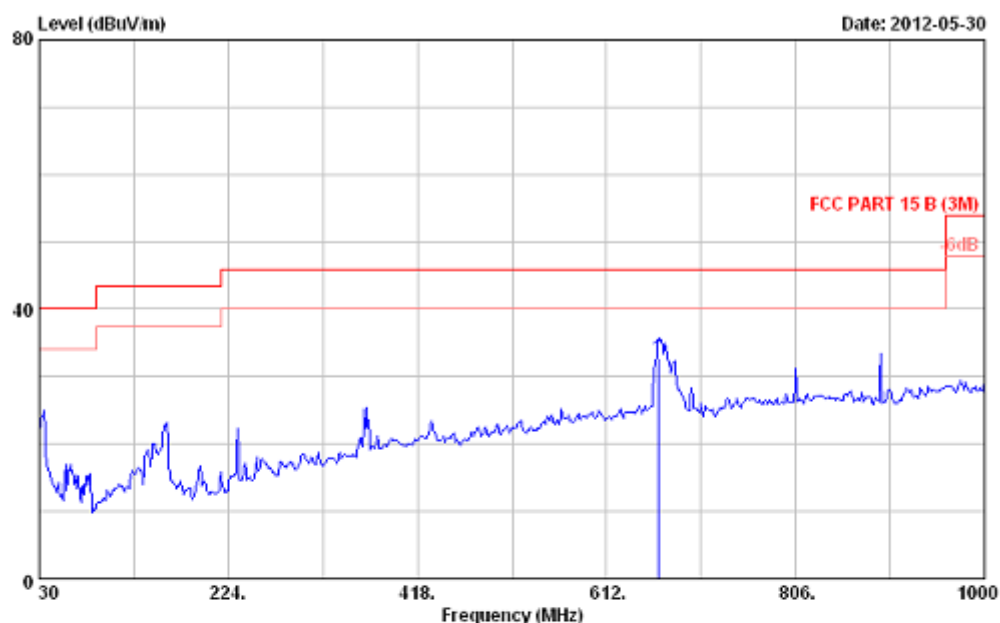
Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24°C/56% Engineer : Jolly_Xu
EUT : SATA-II High Speed M/N:SSD
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	662.440	20.65	1.90	0.00	13.01	35.56	46.00	10.44	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Radiated Emission Test 30MHz – 18GHz

M/N : SSD
Operating Condition : Data transmitting
Test Specification : Horizontal, 30MHz-1GHz
Comment : DC 5.0V from PC Input AC 120V/60Hz



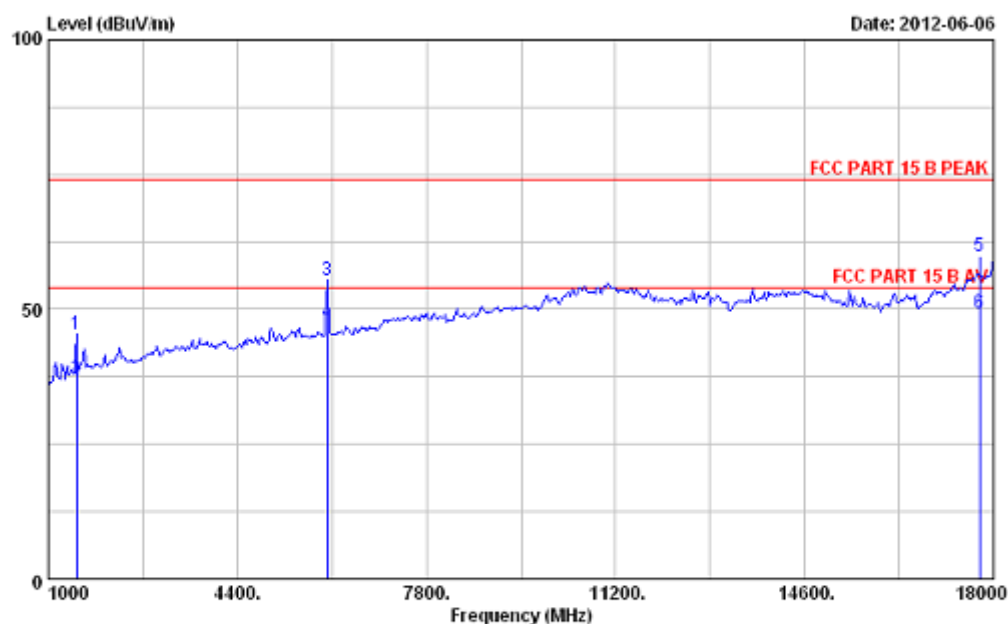
Site no. : 3m Chamber
Dis. / Ant. : 3m 2010 CBL6111C 2598
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24°C/56%
EUT : SATA-II High Speed
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting
Data no. : 10
Ant. pol. : HORIZONTAL
Engineer : Jolly_Xu
M/N:SSD

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	665.350	20.71	1.90	0.00	10.09	32.70	46.00	13.30	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-AMP Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Radiated Emission Test 30MHz – 18GHz

M/N : DOM
Operating Condition : Data transmitting
Test Specification : Vertical, 1GHz-18GHz
Comment : DC 5.0V from PC Input AC 120V/60Hz



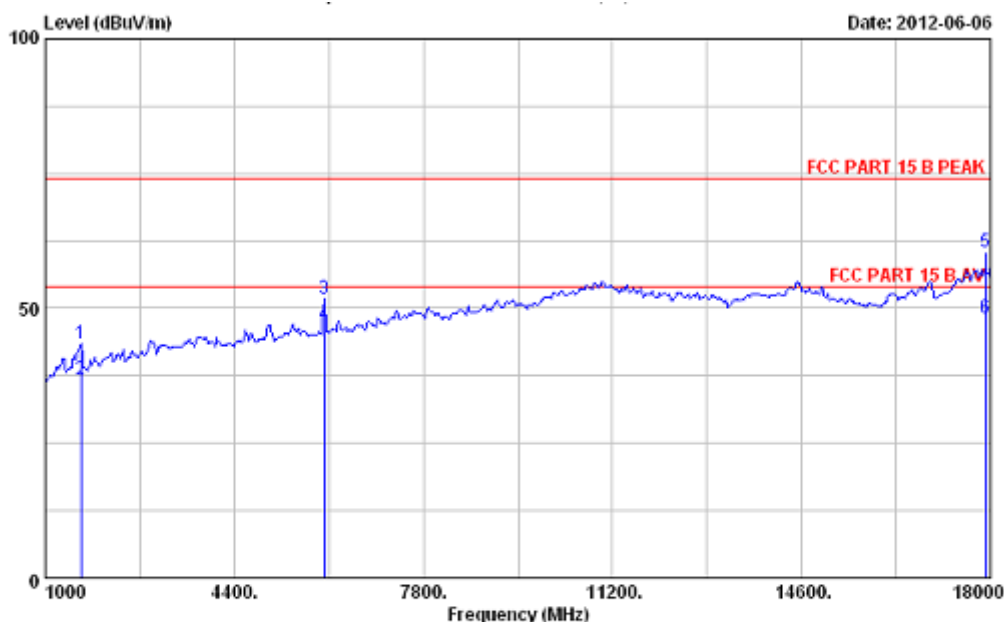
Site no. : 10m Chamber Data no. : 38
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Jolly_Xu
EUT : SATA-II High Speed M/N:SSD
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1510.000	25.66	1.33	34.65	52.93	45.27	74.00	28.73	Peak
2	1510.160	25.66	1.33	34.65	44.63	36.97	60.00	23.03	Average
3	6015.000	34.22	3.85	34.60	51.89	55.36	74.00	18.64	Peak
4	6015.180	34.22	3.85	34.60	44.22	47.69	54.00	6.31	Average
5	17745.000	42.68	7.97	34.93	44.17	59.89	74.00	14.11	Peak
6	17745.520	42.68	7.97	34.93	33.63	49.35	54.00	4.65	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
- Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Radiated Emission Test 30MHz – 18GHz

M/N : SSD
Operating Condition : Data transmitting
Test Specification : Horizontal, 1GHz -18GHz
Comment : DC 5.0V from PC Input AC 120V/60Hz



Site no. : 10m Chamber Data no. : 37
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Jolly_Xu
EUT : SATA-II High Speed M/N:SSD
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1646.000	26.17	1.51	34.58	50.31	43.41	74.00	30.59	Peak
2	1646.110	26.17	1.51	34.58	43.69	36.79	54.00	17.21	Average
3	6015.000	34.22	3.85	34.60	48.21	51.68	74.00	22.32	Peak
4	6015.540	34.22	3.85	34.60	43.55	47.02	54.00	6.98	Average
5	17915.000	43.16	8.28	34.91	43.85	60.38	74.00	13.62	Peak
6	17915.280	43.16	8.28	34.91	31.68	48.21	54.00	5.79	Average

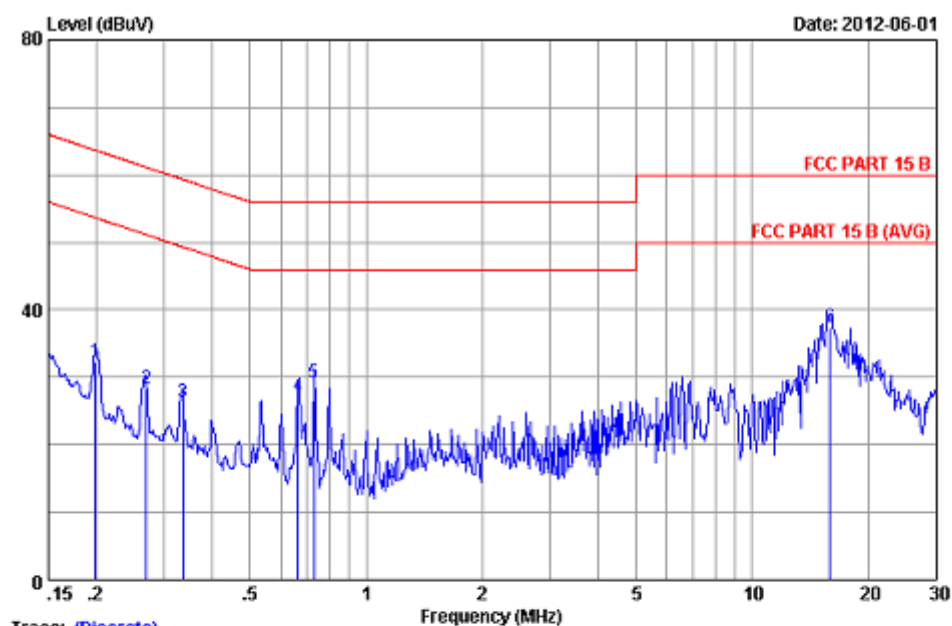
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Test Equipment List**Radiated Emission Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Spectrum	Agilent	E4407B	MY41440292	May.07, 13
Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.07, 13
Amplifier	HP	8447D	2648A04738	May.07, 13
Bilog Antenna	Schaffner	CBL6111C	2598	Nov.09, 12
RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.07, 13
Coaxial Switch	Anritsu	MP59B	M73989	May.07, 13
Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 13
Horn Antenna	EMCO	3115	9607-4877	July.01, 13
Amplifier	Agilent	8449B	3008A00863	May.08, 13
RF Cable	Hubersuhner	SUCOFLEX 106	77980/6	May.08, 13
RF Cable	Hubersuhner	SUCOFLEX 106	77977/6	May.08, 13

7.2 Conducted Emission Test 150kHz – 30MHz

M/N : SSD
Operating Condition : Data transmitting
Test Specification : Live
Comment : DC 5.0V from PC Input AC 120V/60Hz



Trace: (Discrete)

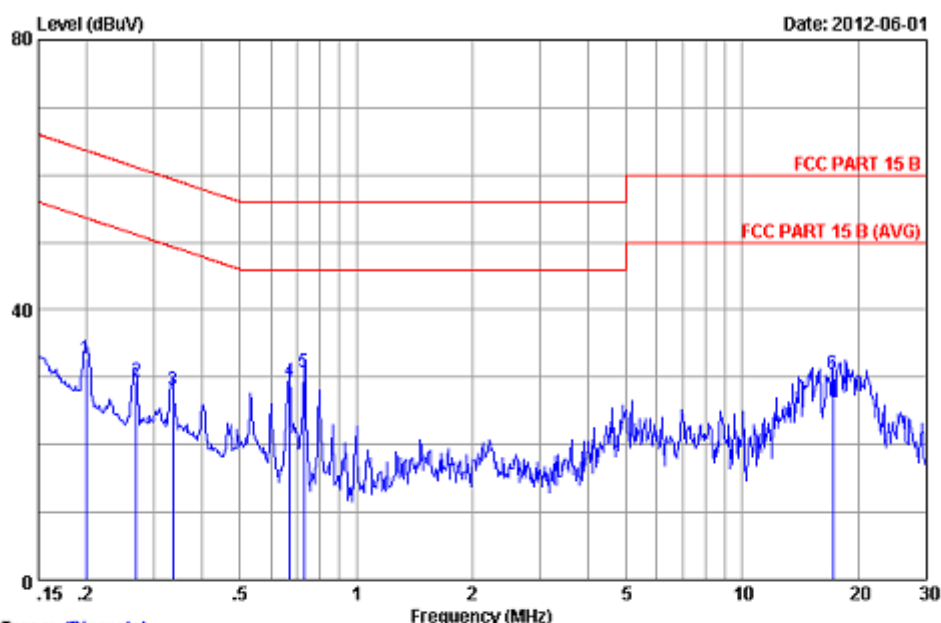
Site no : 1#conduction Data No : 30
Dis./Ant. : ** 2011 ESH2-Z5 LINE
Limit : FCC PART 15 B
Env./Ins. : 20.5°C/55% Engineer : Abner
EUT : SATA-II High Speed M/N:SSD
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting
:

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19863	0.15	9.98	22.29	32.42	63.67	31.25	QP
2	0.26866	0.15	9.98	18.09	28.22	61.16	32.94	QP
3	0.33562	0.16	9.98	16.17	26.31	59.31	33.00	QP
4	0.66478	0.16	9.97	17.11	27.24	56.00	28.76	QP
5	0.73131	0.16	9.97	19.05	29.18	56.00	26.82	QP
6	15.885	0.43	9.94	27.14	37.51	60.00	22.49	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

Conducted Emission Test 150kHz – 30MHz

M/N : SSD
Operating Condition : Data transmitting
Test Specification : Neutral
Comment : DC 5.0V from PC Input AC 120V/60Hz



Trace: (Discrete)

Site no : 1#conduction Data No : 29
Dis./Ant. : ** 2011 ESH2-Z5 NEUTRAL
Limit : FCC PART 15 B
Env./Ins. : 20.5°C/55% Engineer : Abner
EUT : SATA-II High Speed M/N:SSD
Power Rating : AC 120V/60Hz
Test Mode : Data Transmitting
:

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19969	0.14	9.98	22.73	32.85	63.62	30.77	QP
2	0.26866	0.14	9.98	19.29	29.41	61.16	31.75	QP
3	0.33562	0.15	9.98	17.92	28.05	59.31	31.26	QP
4	0.67187	0.16	9.97	19.18	29.31	56.00	26.69	QP
5	0.73131	0.16	9.97	20.54	30.67	56.00	25.33	QP
6	17.199	0.36	9.96	20.24	30.56	60.00	29.44	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Test Equipment List**Conducted Emission Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Dec.18, 12
L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Mar.30, 13
L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 13
Terminator	Hubersuhner	50Ω	No. 1	May.08, 13
Terminator	Hubersuhner	50Ω	No. 2	May.08, 13
RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 13
Coaxial Switch	Anritsu	MP59B	M55367	May.08, 13
Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 13
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 13

8 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty

Items		Extended Uncertainty
RE	Field strength (dB μ V/m)	U=4.32dB (30MHz-25GHz)
CE	Disturbance Voltage (dB μ V)	U=2.4dB