FCC- TEST REPORT

Report Number	:	**68.760.11.324.01**	Date of Issue:	16 November 2011

Model	:	**XC2900-F6C**
Product Type	:	XC2900-F6C Handheld RFID Reader
Applicant	:	Invengo Information Technology Co., Ltd.
Address	:	3/F, No. T2-B, High-tech Industrial Park South, Shenzhen 518057, China
Production Facility	:	Invengo Information Technology Co., Ltd.
Address	:	Invengo RFID Industrial Park, Guangming Hi-Tech Zone, Tongguan Road, Guangming New District, Shenzhen, Guangdong 518100, PRC
Test Result	:	■ **Positive** ☐ **Negative**
Total pages including Appendices	:	30

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Jiangsu TÜV Product Service Ltd. – Shenzhen Branch reports apply only to the specific samples tested under stated test conditions. Construction of the actual test samples has been documented. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. The manufacturer/importer is responsible to the Competent Authorities in Europe for any modifications made to the production units which result in non-compliance to the relevant regulations. Jiangsu TÜV Product Service Ltd. – Shenzhen Branch shall have no liability for any deductions, inferences or generalizations drawn by the client or others from Jiangsu TÜV Product Service Ltd. – Shenzhen Branch issued reports.

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6 floor, H Hall, Century Craftwork Culture Square, No. 4001, Fuqiang Road, Futian District, Shenzhen 518048, P. R. China, Tel. +86 755 8828 6998, Fax: +86 755 8828 5299

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test site1:

Company name: 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

Test site2:

Company name: Shenzhen Emtek Co., Ltd.,
Bldg. 69, Majialong Industry Zone, Nanshan District,
Shenzhen, China

Telephone: 86 755 26954280
Fax: 86 755 26954282

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: XC2900-F6C Handheld RFID Reader

Model no.: XC2900-F6C

Brand Name: Invengo

Options and accessories: NIL

Rating: DC 3.7V (Supplied by battery 1500mAh, or
Charged by external adapter:
Adaptor Model No.: FSP020-DGAA1
Adaptor Input: 100-240VAC, 50-60Hz, 1.0A
Adpator Ouput: 5.0VDC, 4.0A Max)

Description of the EUT: NIL

Auxiliary Equipment and Cable Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
PC	LENOVO	9702	L3C4410 (Unshielded, 1.5m)
LCD Monitor	LENOVO	9227-AE6	4M0293084302824 (Unshielded, 1.5m)
Keyboard	LENOVO	KU-0225	0585494 (Unshielded, 2.0m)
Mouse	LENOVO	MO28UOL	44G7862 068 (Unshielded, 2.0m)
USB Disk	aigo	L8206	XMD742174201210
SD Card	Apacer	AP1GSD60	210750400000

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4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart B	PART 15 - RADIO FREQUENCY DEVICES Subpart B - Unintentional Radiators

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5 Summary of Test Results

Technical Requirements					
FCC Part 15 Subpart B					Test Location
Test Condition	Pages	Test Result			
		Pass	Fail	N/A	Test Site2
15.107 Conducted Emission AC Power Port	8	☒	☐	☐	Test Site2
15.109 Spurious radiated emissions	18	☒	☐	☐	Test Site2

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6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: TQ4XC2900-F6C filing to comply 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: 19 August 2011

Testing Start Date: 21 August 2011

Testing End Date: 16 November 2011

- Jiangsu TÜV Product Service Ltd. – Shenzhen Branch -

Reviewed by:	Prepared by:	Prepared by:
Paul Yu	Cookies Bu	June Xie
Assistant EMC Manager	EMC Project Engineer	EMC Test Engineer

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7 Technical Requirement

7.1 Conducted Emission

Test Method

1 The EUT was placed on a table, which is 0.8m above ground plane
2 The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3 Maximum procedure was performed to ensure EUT compliance
4 A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions from both sides of AC line

Limit

Frequency MHz	QP Limit dBµV	AV Limit dBµV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency

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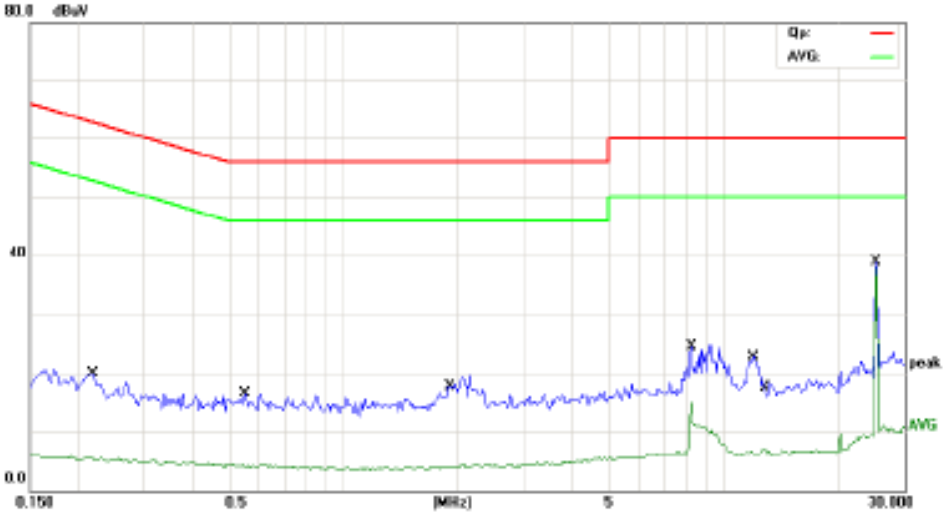
Conducted Emission

Downloading mode test data:



Site Conduction #1 Phase: L1 Temperature: 28

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: CONNECT TO PC

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2220	19.19	0.00	19.19	62.74	-43.55	QP	
2		0.2220	5.69	0.00	5.69	52.74	-47.05	AVG	
3		0.5550	16.41	0.00	16.41	56.00	-39.59	QP	
4		0.5550	4.25	0.00	4.25	46.00	-41.75	AVG	
5		1.8980	17.70	0.00	17.70	56.00	-38.30	QP	
6		1.8980	4.06	0.00	4.06	46.00	-41.94	AVG	
7		1.8980	15.02	0.00	15.02	46.00	-30.98	AVG	
8		8.2351	24.59	0.00	24.59	60.00	-35.41	QP	
9		12.0500	22.80	0.00	22.80	60.00	-37.20	QP	
10		12.9750	7.07	0.00	7.07	50.00	-42.93	AVG	
11		25.2750	38.88	0.00	38.88	60.00	-21.12	QP	
12	*	25.2750	37.81	0.00	37.81	50.00	-12.19	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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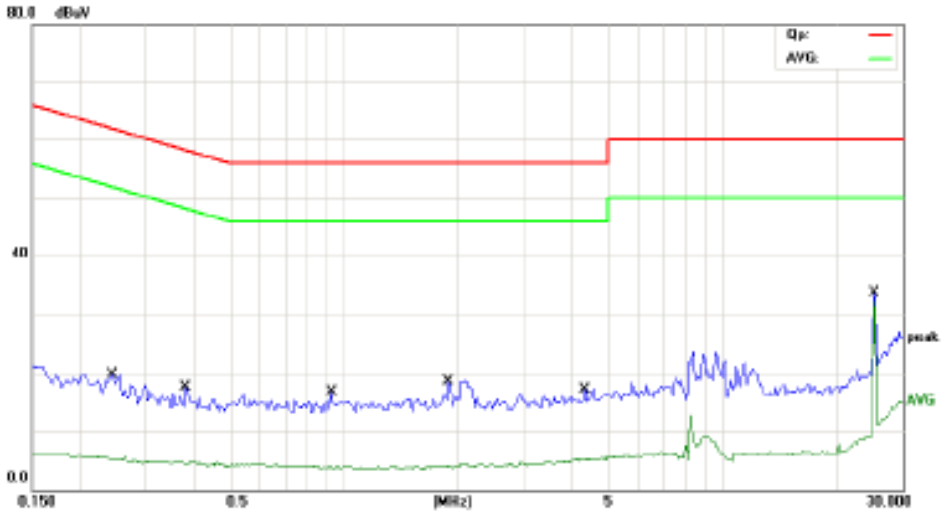
Conducted Emission



Site Conduction #1 Phase: N Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: CONNECT TO PC

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2450	19.80	0.00	19.80	61.92	-42.12	QP	
2		0.2450	5.68	0.00	5.68	51.92	-46.24	AVG	
3		0.3850	17.41	0.00	17.41	58.17	-40.76	QP	
4		0.3850	4.81	0.00	4.81	48.17	-43.36	AVG	
5		0.3850	4.00	0.00	4.00	48.17	-44.17	AVG	
6		0.9300	16.68	0.00	16.68	56.00	-39.32	QP	
7		1.8900	18.48	0.00	18.48	56.00	-37.52	QP	
8		1.8900	4.06	0.00	4.06	46.00	-41.94	AVG	
9		4.3600	17.03	0.00	17.03	56.00	-38.97	QP	
10		4.3600	5.36	0.00	5.36	46.00	-40.64	AVG	
11		25.2750	33.80	0.00	33.80	60.00	-26.20	QP	
12	*	25.2750	32.24	0.00	32.24	50.00	-17.76	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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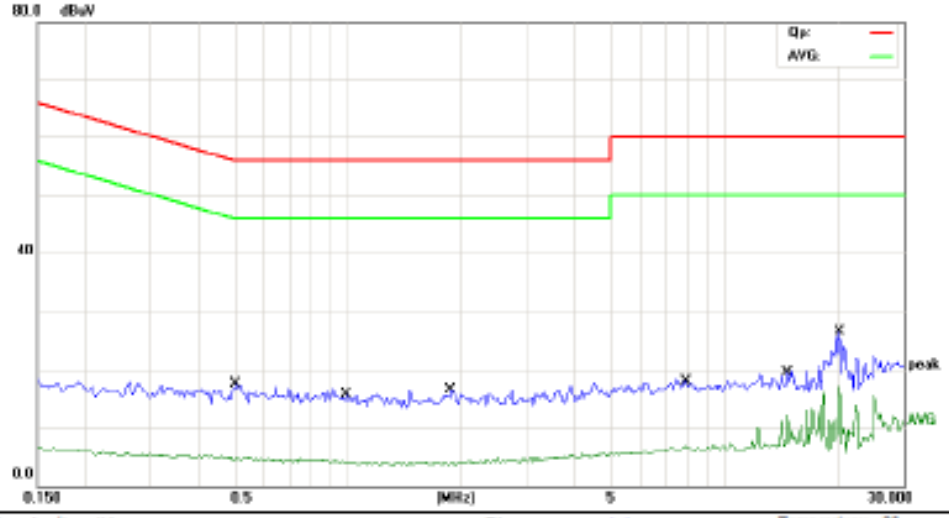
Conducted Emission

USB Playing mode test data:



Site Conduction #1 Phase: L1 Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode: USB PLAY
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.5100	17.54	0.00	17.54	56.00	-38.46	QP	
2		0.5100	4.86	0.00	4.86	46.00	-41.14	AVG	
3		0.9950	15.70	0.00	15.70	56.00	-40.30	QP	
4		0.9950	4.25	0.00	4.25	46.00	-41.75	AVG	
5		1.8850	16.49	0.00	16.49	56.00	-39.51	QP	
6		1.8850	4.03	0.00	4.03	46.00	-41.97	AVG	
7		7.8500	18.23	0.00	18.23	60.00	-41.77	QP	
8		7.8500	6.68	0.00	6.68	50.00	-43.32	AVG	
9		14.7500	19.55	0.00	19.55	60.00	-40.45	QP	
10		14.7500	12.19	0.00	12.19	50.00	-37.81	AVG	
11		20.2750	26.44	0.00	26.44	60.00	-33.56	QP	
12	*	20.2750	17.11	0.00	17.11	50.00	-32.89	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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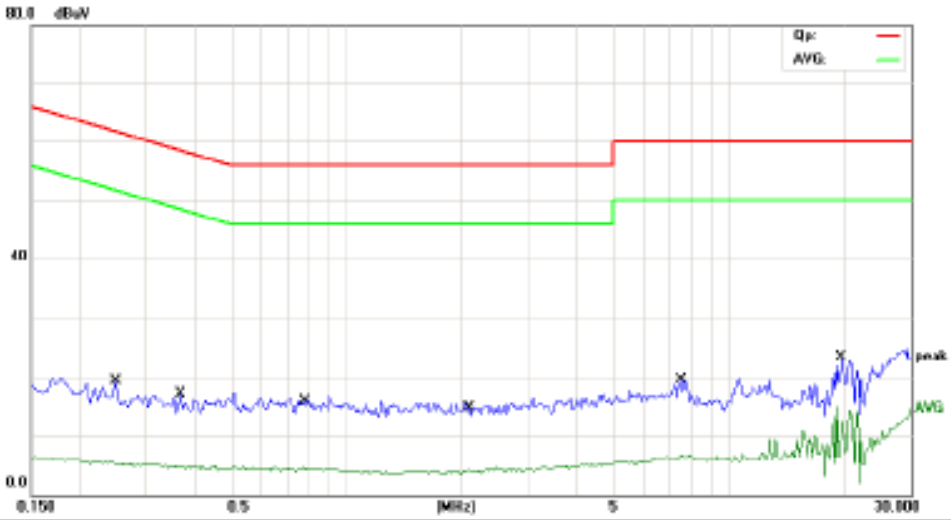
Conducted Emission



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode: USB PLAY
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2500	19.22	0.00	19.22	61.76	-42.54	QP	
2		0.2500	5.57	0.00	5.57	51.76	-46.19	AVG	
3		0.3700	17.13	0.00	17.13	58.50	-41.37	QP	
4		0.3700	4.90	0.00	4.90	48.50	-43.60	AVG	
5		0.7750	16.37	0.00	16.37	56.00	-39.63	QP	
6		0.7750	4.61	0.00	4.61	46.00	-41.39	AVG	
7		2.1000	15.45	0.00	15.45	56.00	-40.55	QP	
8		2.1000	4.24	0.00	4.24	46.00	-41.76	AVG	
9		7.5500	19.59	0.00	19.59	60.00	-40.41	QP	
10		7.5500	6.78	0.00	6.78	50.00	-43.22	AVG	
11		19.7750	23.23	0.00	23.23	60.00	-36.77	QP	
12	*	19.7750	14.83	0.00	14.83	50.00	-35.17	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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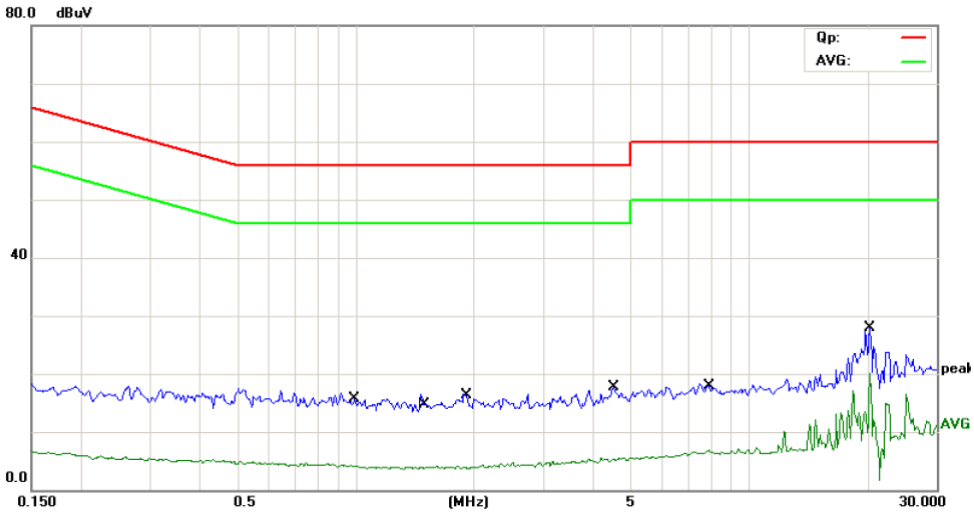
Conducted Emission

SD Card Playing mode test data:



Site Conduction #1 Phase: L1 Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: SD Card Play

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.9950	15.70	0.00	15.70	56.00	-40.30	QP	
2		0.9950	4.25	0.00	4.25	46.00	-41.75	AVG	
3		1.5100	16.46	0.00	16.46	56.00	-39.54	QP	
4		1.5100	3.90	0.00	3.90	46.00	-42.10	AVG	
5		1.9250	16.03	0.00	16.03	56.00	-39.97	QP	
6		1.9250	3.92	0.00	3.92	46.00	-42.08	AVG	
7		4.5300	17.66	0.00	17.66	56.00	-38.34	QP	
8		4.5300	5.33	0.00	5.33	46.00	-40.67	AVG	
9		7.8516	18.23	0.00	18.23	60.00	-41.77	QP	
10		7.8516	6.68	0.00	6.68	50.00	-43.32	AVG	
11		20.2750	27.94	0.00	27.94	60.00	-32.06	QP	
12	*	20.2750	20.11	0.00	20.11	50.00	-29.89	AVG	

:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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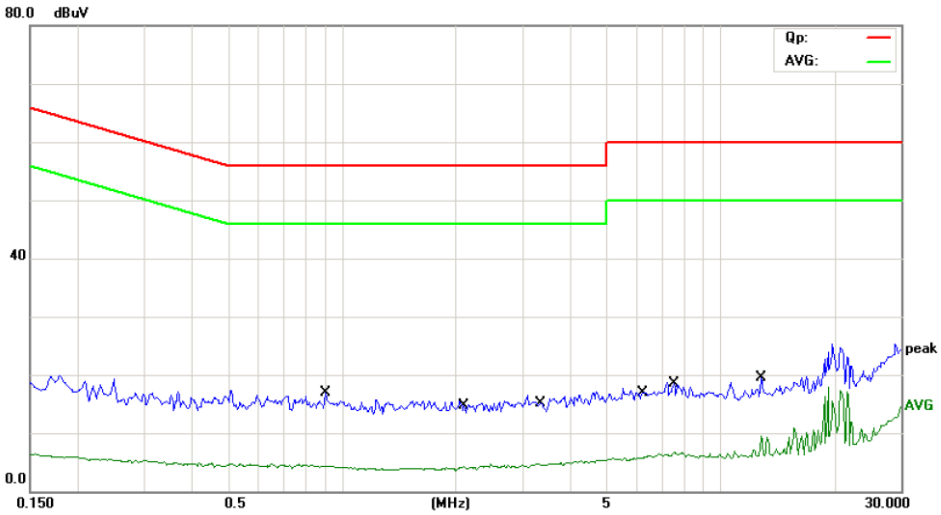
Conducted Emission



Site Conduction #1 Phase: N Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: SD Card Play

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.9050	16.84	0.00	16.84	56.00	-39.16	QP	
2		0.9050	4.36	0.00	4.36	46.00	-41.64	AVG	
3		2.1000	15.45	0.00	15.45	56.00	-40.55	QP	
4		2.1000	4.24	0.00	4.24	46.00	-41.76	AVG	
5		3.3000	16.47	0.00	16.47	56.00	-39.53	QP	
6		3.3000	4.80	0.00	4.80	46.00	-41.20	AVG	
7		6.1534	17.69	0.00	17.69	60.00	-42.31	QP	
8		6.1534	5.72	0.00	5.72	50.00	-44.28	AVG	
9		7.5500	18.74	0.00	18.74	60.00	-41.26	QP	
10		7.5500	6.78	0.00	6.78	50.00	-43.22	AVG	
11		12.8250	19.45	0.00	19.45	60.00	-40.55	QP	
12		12.8250	9.46	0.00	9.46	50.00	-40.54	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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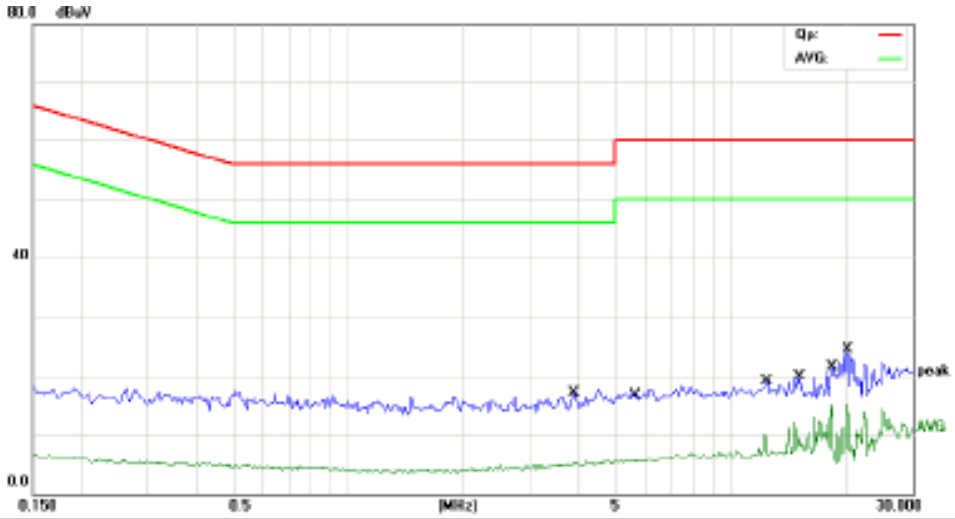
Conducted Emission

Memory playing mode test data:



Site Conduction #1 Phase: L1 Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: Music Playing

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		3.6807	16.13	0.00	16.13	56.00	-39.87	QP	
2		3.6807	5.02	0.00	5.02	46.00	-40.98	AVG	
3		5.6800	17.03	0.00	17.03	60.00	-42.97	QP	
4		5.6800	5.70	0.00	5.70	50.00	-44.30	AVG	
5		12.5000	19.14	0.00	19.14	60.00	-40.86	QP	
6		12.5000	10.14	0.00	10.14	50.00	-39.86	AVG	
7		15.2250	19.84	0.00	19.84	60.00	-40.16	QP	
8		15.2250	12.19	0.00	12.19	50.00	-37.81	AVG	
9		18.6000	21.54	0.00	21.54	60.00	-38.46	QP	
10		18.6000	15.04	0.00	15.04	50.00	-34.96	AVG	
11		20.2750	24.44	0.00	24.44	60.00	-35.56	QP	
12	*	20.2750	15.11	0.00	15.11	50.00	-34.89	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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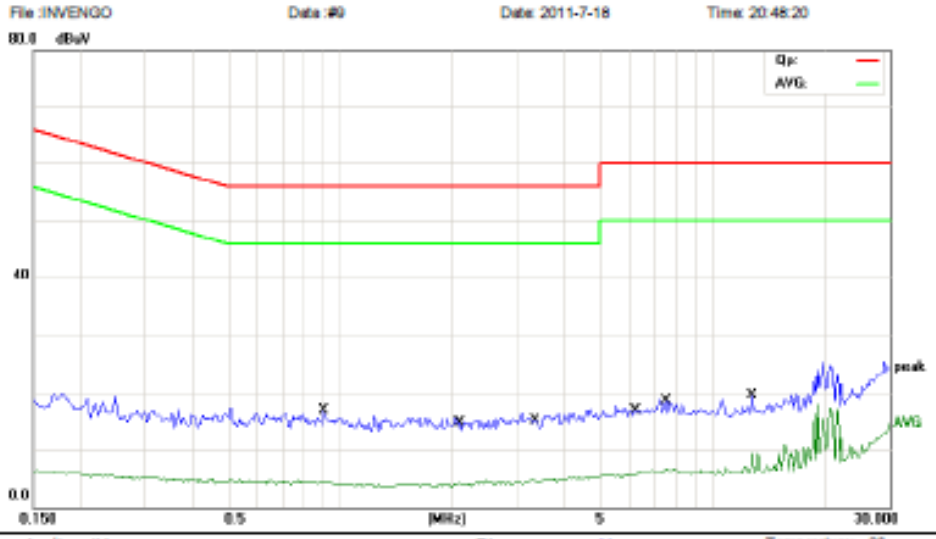
Conducted Emission



Site Conduction #1 Phase: N Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode: Music Playing

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.9050	16.84	0.00	16.84	56.00	-39.16	QP	
2		0.9050	4.36	0.00	4.36	46.00	-41.64	AVG	
3		2.1000	15.45	0.00	15.45	56.00	-40.55	QP	
4		2.1000	4.24	0.00	4.24	46.00	-41.76	AVG	
5		3.3000	16.47	0.00	16.47	56.00	-39.53	QP	
6		3.3000	4.80	0.00	4.80	46.00	-41.20	AVG	
7		6.1534	17.69	0.00	17.69	60.00	-42.31	QP	
8		6.1534	5.72	0.00	5.72	50.00	-44.28	AVG	
9		7.5500	18.74	0.00	18.74	60.00	-41.26	QP	
10		7.5500	6.78	0.00	6.78	50.00	-43.22	AVG	
11		12.8250	19.45	0.00	19.45	60.00	-40.55	QP	
12		12.8250	9.46	0.00	9.46	50.00	-40.54	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: WOLF

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Test Equipment List

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Test Receiver	Rohde & Schwarz	ESCS30	100162	May 29, 2012
L.I.S.N.	Rohde & Schwarz	ENV216	101161	May 29, 2012
50Ω Coaxial Switch	Anritsu	MP59B	6100214550	N/A
Voltage Probe	Rohde & Schwarz	TK9416	N/A	May 29, 2012
I.S.N	Teseq GmbH	ISN T800	30327	May 29, 2012
LCL adaoter	Teseq GmbH	ADT800-Cat.5	30327.01	May 29, 2012
LCL adaoter	Teseq GmbH	ADT800-Cat.3	30327.02	May 29, 2012
LCL adaoter	Teseq GmbH	ADT800-R	30327.02	May 29, 2012

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7.2 Radiated emissions

Test Method

1 The EUT is placed on a turntable, which is 0.8m above ground plane.
2 The turntable shall be rotated for 360 degrees to determine the position of maximum emission level
3 EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4 Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5 Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Limit

Frequency MHz	Field Strength uV/m	Field Strength dBµV/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

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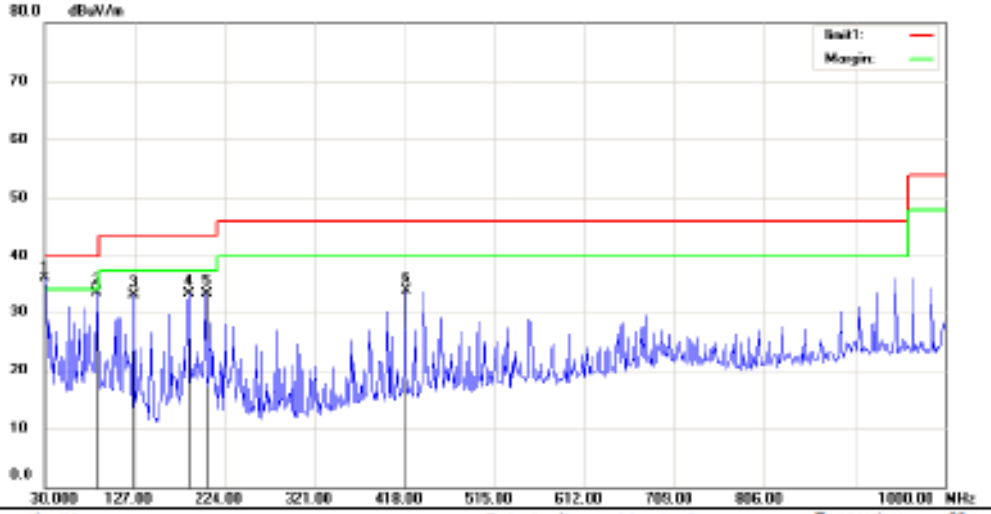
Radiated Emission

Downloading mode test data:



Site site #1 Polarization: Vertical Temperature: 26

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode:Connect to PC

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	30.0000	21.95	13.93	35.88	40.00	-4.12	QP			
2		85.9615	22.24	11.10	33.34	40.00	-6.66	QP			
3		126.3782	21.89	11.11	33.00	43.50	-10.50	QP			
4		185.4487	21.27	11.91	33.18	43.50	-10.32	QP			
5		204.1026	20.12	13.05	33.17	43.50	-10.33	QP			
6		418.6218	16.39	17.38	33.77	46.00	-12.23	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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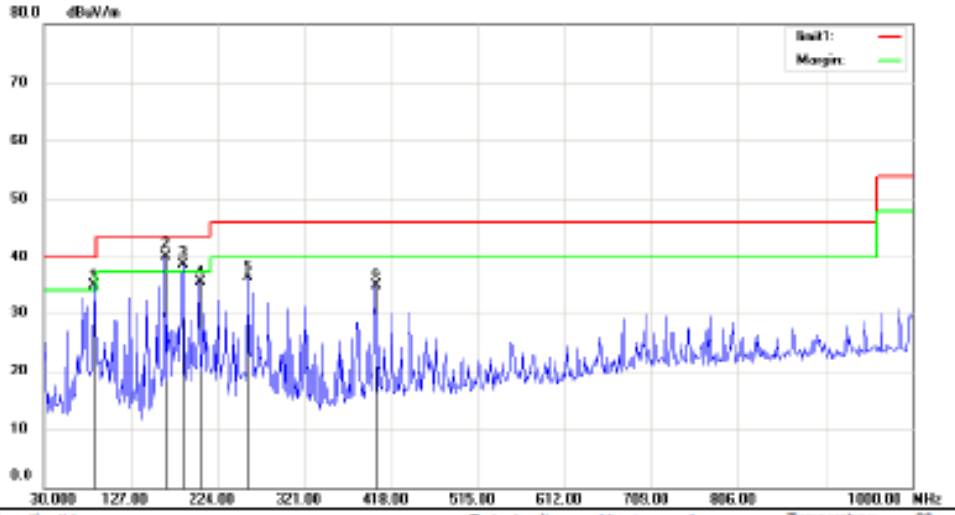
Radiated Emission



Site site #1 Polarization: *Horizontal* Temperature: 26
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode: Connect to PC
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	85.9615	23.54	11.10	34.64	40.00	-5.36	QP			
2	*	165.2404	30.66	9.54	40.20	43.50	-3.30	QP			
3	!	185.4487	28.06	10.61	38.67	43.50	-4.83	QP			
4		204.1026	23.66	11.55	35.21	43.50	-8.29	QP			
5		258.5096	22.12	14.02	36.14	46.00	-9.86	QP			
6		399.9680	16.60	18.06	34.66	46.00	-11.34	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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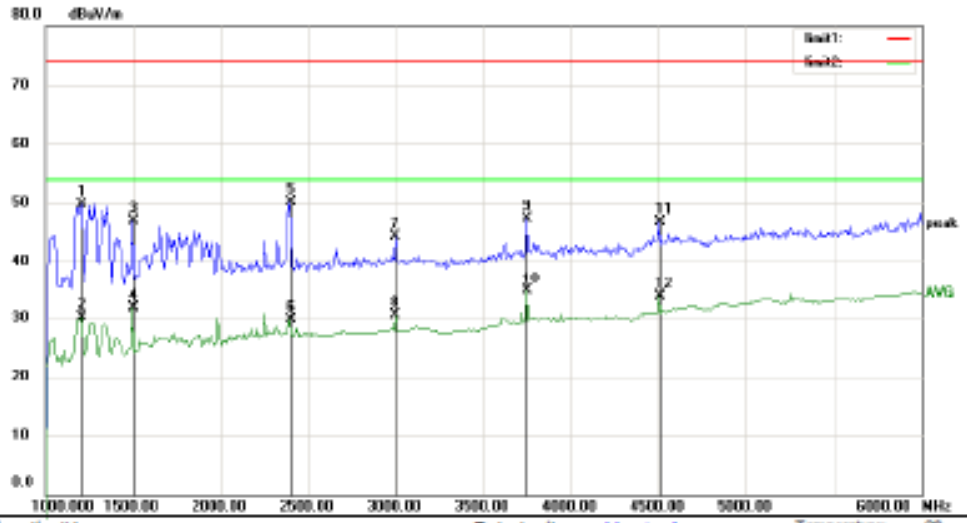
Radiated Emission



Site site #1 Polarization: Vertical Temperature: 26

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode:connect to pc

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1200.321	62.68	-13.02	49.66	74.00	-24.34	peak			
2		1200.321	43.05	-13.02	30.03	54.00	-23.97	AVG			
3		1496.795	59.17	-12.27	46.90	74.00	-27.10	peak			
4		1496.795	43.89	-12.27	31.62	54.00	-22.38	AVG			
5		2394.231	58.79	-8.66	50.13	74.00	-23.87	peak			
6		2394.231	38.39	-8.66	29.73	54.00	-24.27	AVG			
7		2995.192	51.80	-7.59	44.21	74.00	-29.79	peak			
8		2995.192	38.14	-7.59	30.55	54.00	-23.45	AVG			
9		3748.397	54.10	-6.72	47.38	74.00	-26.62	peak			
10	*	3748.397	41.33	-6.72	34.61	54.00	-19.39	AVG			
11		4501.603	51.68	-5.05	46.63	74.00	-27.37	peak			
12		4501.603	38.69	-5.05	33.64	54.00	-20.36	AVG			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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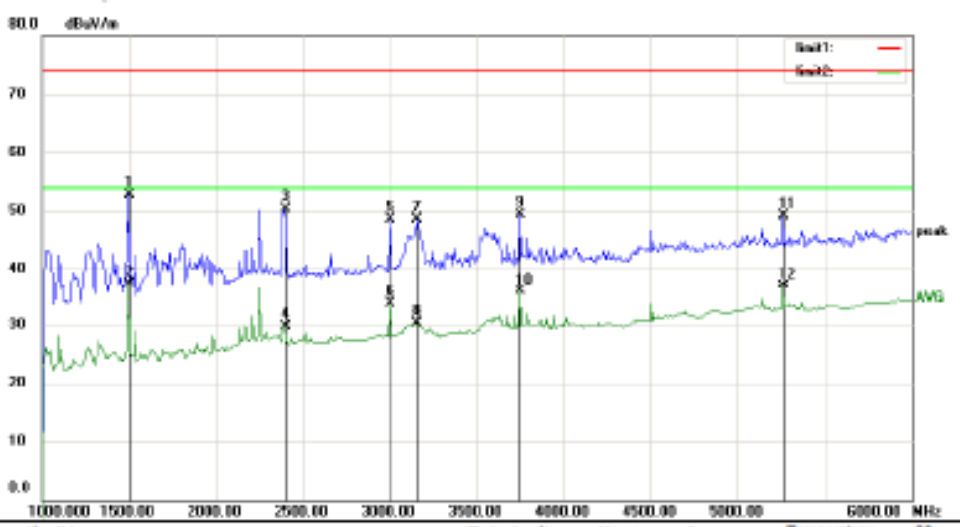
Radiated Emission



Site site #1 Polarization: *Horizontal* Temperature: 26

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode:connect to pc

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1496.795	65.05	-12.27	52.78	74.00	-21.22	peak			
2	*	1496.795	49.49	-12.27	37.22	54.00	-16.78	AVG			
3		2394.231	58.88	-8.66	50.22	74.00	-23.78	peak			
4		2394.231	38.40	-8.66	29.74	54.00	-24.26	AVG			
5		3003.205	56.05	-7.58	48.47	74.00	-25.53	peak			
6		3003.205	41.37	-7.58	33.79	54.00	-20.21	AVG			
7		3147.436	56.07	-7.49	48.58	74.00	-25.42	peak			
8		3147.436	37.70	-7.49	30.21	54.00	-23.79	AVG			
9		3748.397	55.96	-6.72	49.24	74.00	-24.76	peak			
10		3748.397	42.70	-6.72	35.98	54.00	-18.02	AVG			
11		5254.808	53.19	-4.06	49.13	74.00	-24.87	peak			
12		5254.808	41.04	-4.06	36.98	54.00	-17.02	AVG			

":Maximum data x:Over limit !:over margin Operator: WOLF

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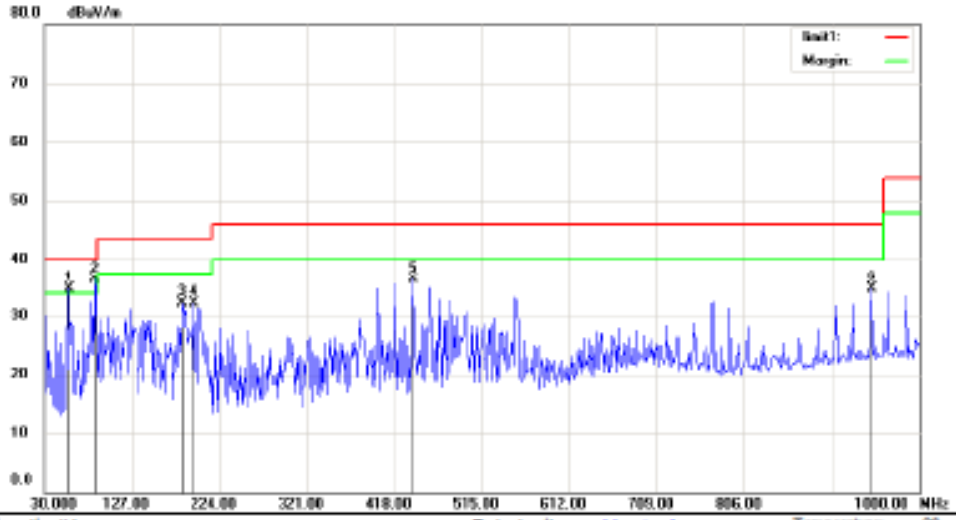
Radiated Emission

USB Playing mode test data:



Site site #1 Polarization: Vertical Temperature: 26
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode: USB Playing
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	56.4263	21.30	13.36	34.66	40.00	-5.34	QP			
2	"	85.9615	25.21	11.10	36.31	40.00	-3.69	QP			
3		183.8942	20.61	11.52	32.13	43.50	-11.37	QP			
4		196.3301	18.76	13.38	32.14	43.50	-11.36	QP			
5		438.8301	18.79	17.44	36.23	46.00	-9.77	QP			
6		947.1474	10.06	24.65	34.71	46.00	-11.29	QP			

":Maximum data x:Over limit !:over margin Operator: WOLF

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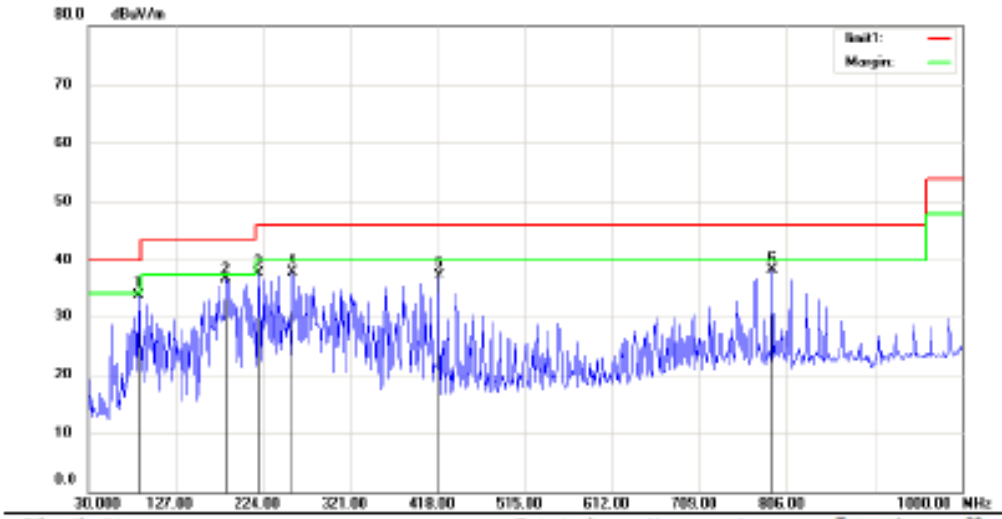
Radiated Emission



Site site #1 Polarization: Horizontal Temperature: 26

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

EUT: Handheld Reader

M/N: XC2900-F6C

Mode:USB Playing

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	85.9615	22.40	11.10	33.50	40.00	-6.50	QP			
2		183.8942	25.73	10.51	36.24	43.50	-7.26	QP			
3		219.6474	25.91	11.84	37.75	46.00	-8.25	QP			
4		256.9551	24.05	13.95	38.00	46.00	-8.00	QP			
5		418.6218	18.69	18.53	37.22	46.00	-8.78	QP			
6		790.1442	15.10	23.13	38.23	46.00	-7.77	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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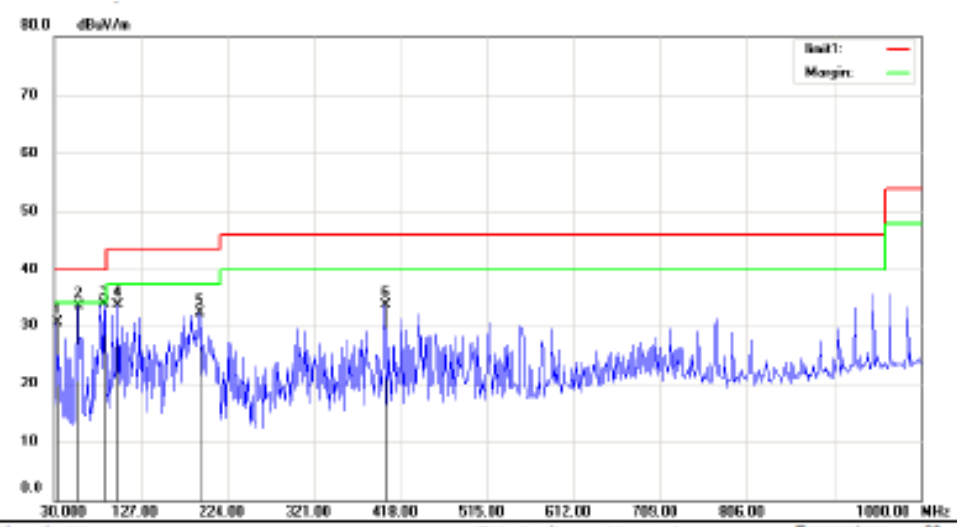
Radiated Emission

SD Card Playing mode test data:



Site site #1 Polarization: Verzical Temperature: 28
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode:SD Card Playing
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		33.1090	16.33	14.13	30.46	40.00	-9.54	QP			
2		56.4263	19.85	13.36	33.21	40.00	-6.79	QP			
3	*	85.9615	22.64	11.10	33.74	40.00	-6.26	QP			
4		101.5064	19.95	13.58	33.53	43.50	-9.97	QP			
5		191.6667	18.92	13.15	32.07	43.50	-11.43	QP			
6		399.9680	16.49	17.06	33.55	46.00	-12.45	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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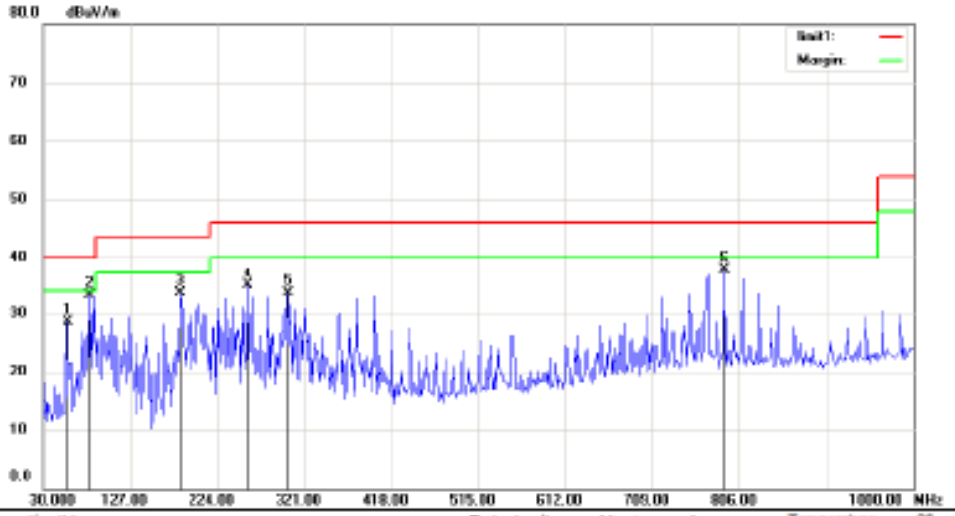
Radiated Emission



Site site #1 Polarization: *Horizontal* Temperature: 26
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode:SD Card Playing
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		56.4263	15.19	13.37	28.56	40.00	-11.44	QP			
2	*	82.8525	22.97	10.10	33.07	40.00	-6.93	QP			
3		183.8942	22.95	10.51	33.46	43.50	-10.04	QP			
4		258.5096	20.92	14.02	34.94	46.00	-11.06	QP			
5		302.0353	19.52	13.91	33.43	46.00	-12.57	QP			
6		790.1442	14.71	23.13	37.84	46.00	-8.16	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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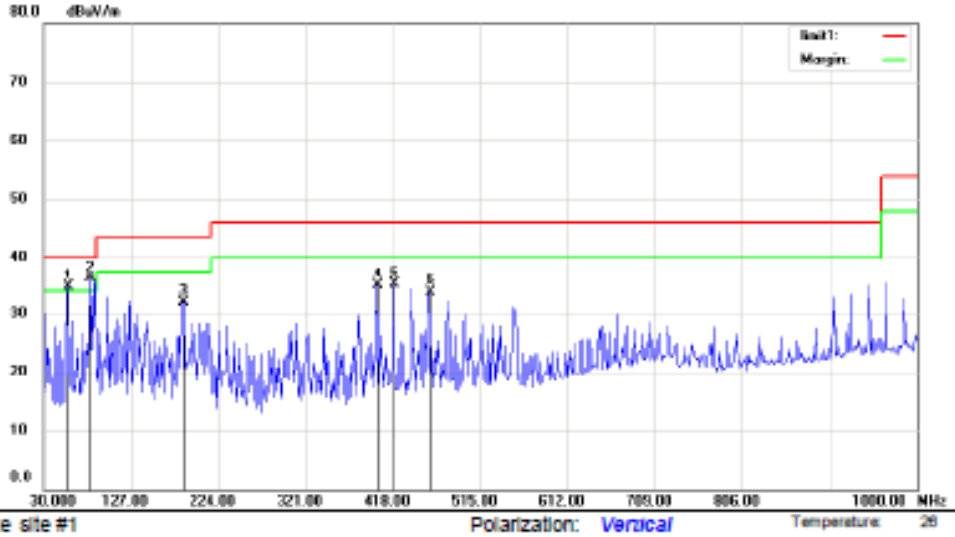
Radiated Emission

Memory playing mode test data:



Site site #1 Polarization: Vertical Temperature: 28
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode:Music Playing(memory)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	56.4263	21.43	13.36	34.79	40.00	-5.21	QP			
2	*	82.8525	25.99	10.09	36.08	40.00	-3.92	QP			
3		185.4487	19.90	11.91	31.81	43.50	-11.69	QP			
4		399.9680	17.76	17.06	34.82	46.00	-11.18	QP			
5		418.6218	17.80	17.38	35.18	46.00	-10.82	QP			
6		459.0385	15.61	18.17	33.78	46.00	-12.22	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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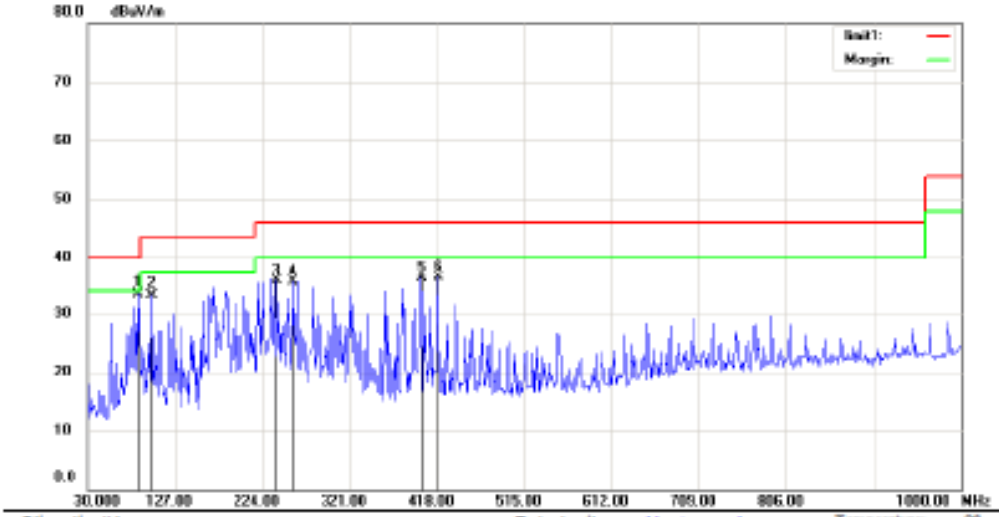
Radiated Emission



Site site #1 Polarization: *Horizontal* Temperature: 26
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %
EUT: Handheld Reader
M/N: XC2900-F6C
Mode:Music Playing(memory)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	85.9615	22.30	11.10	33.40	40.00	-6.60	QP			
2		101.5064	19.58	13.53	33.11	43.50	-10.39	QP			
3		238.3013	22.64	13.05	35.69	46.00	-10.31	QP			
4		258.5096	21.48	14.02	35.50	46.00	-10.50	QP			
5		399.9680	18.08	18.06	36.14	46.00	-9.86	QP			
6		418.6218	17.73	18.53	36.26	46.00	-9.74	QP			

*:Maximum data x:Over limit !:over margin Operator: WOLF

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Test Equipment List

Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	May 29, 2012
Pre-Amplifier	HP	8447D	2944A07999	May 29, 2012
Bilog Antenna	Schwarzbeck	VULB9163	142	May 29, 2012
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170399	May 29, 2012
Horn Antenna	Schwarzbeck	BBHA 9120	D143	May 29, 2012
Cable	Schwarzbeck	AK9513	ACRX1	May 29, 2012
Cable	Rosenberger	N/A	FP2RX2	May 29, 2012
Cable	Schwarzbeck	AK9513	CRPX1	May 29, 2012
Cable	Schwarzbeck	AK9513	CRRX2	May 29, 2012
EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	May 29, 2012

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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 (dBμV/m)	U=4.32dB (30MHz-25GHz)
CE	Disturbance Voltage (dBμV)	U=2.4dB

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