Test Mode : Mode 3Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	Limit Line			Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	$\overline{\mathtt{dBuV/m}}$	\overline{dB}	$\overline{\mathtt{dBuV/m}}$	dBu∇	$-\overline{dB/m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	\overline{dB}		cm	deg
1 @ 2 @ 3 @ 4 @ 5 @ 6	183.63 193.89 276.00 276.00 285.69 285.69	39.14 38.97 44.04 42.03 44.38 40.30	-4.36 -4.53 -1.96 -3.97 -1.62 -5.70	43.50 43.50 46.00 46.00 46.00 46.00	59.48 58.72 59.99 57.97 60.26 56.18	9.22 9.68 12.92 12.92 12.93 12.93	31.27 31.21 31.10 31.10 31.04 31.04	1.79 2.24 2.24	Peak	100	178
	Freq	Level	Over Limit	Limit Line			Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBu∀/m	dBuV	dB/m	dB	d₿		cm	deg
1 @ 2 3 @	376.30 449.80 551.30	38.98 37.90 38.45	-7.02 -8.10 -7.55	46.00 46.00 46.00	52.13 49.45 47.00	15.19 16.40 18.68	30.90 30.82 30.61	2.87	Peak Peak Peak	-111	

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level					Preamp Factor			Ant Pos	Table Pos
	MHz	$\overline{\mathtt{dBuV/m}}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{\mathtt{d} \mathtt{B} \mathtt{u} \mathtt{V} / \mathtt{m}}$	dBu∇	<u>dB</u> /m	\overline{dB}	<u>dB</u>			deg
1 @ 2 @	183.63 193.89	39.86 39.90	-3.64 -3.60	2000	60.20 59.64	9.22 9.68		1.70	Peak Peak		
3 @ 4 m	276.00 276.00	44.40	-1.60	46.00	60.34		31.10		Peak	100	180

	Freq	Level		Limit Line						Ant Pos	Table Pos
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{\mathtt{d} \mathtt{B} \mathtt{u} \mathtt{V} 7m}$	—dBu∇	$-\overline{dB7m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$			deg
1	460.30			46.00	0.00	7.000	21000000		7,57,79,73		
2	600.30	36.03	-9.97	46.00	45.01	17.94	30.64	3.72	Peak		
2 3 @	799.80	38.42	-7.58	46.00	42.17	21.90	30.12	4.48	Peak		

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Test Mode : Mode 4Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	Limit Line			Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	$\overline{dBuV7m}$	$\overline{d}\overline{B}$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	\overline{dBuV}	<u>dB</u> 7m	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	\overline{dB}			deg
1	2338.00	100 To 10							Average	117	116
2 3 X	2338.00 2458.00	101.72		74.00	102.29	30.43	35.49	4.49	Peak Peak	1550	772
4 @ 5	2458.00 2483.50		-19.59	74.00	99.26 54.98	5 15 15 15 15 15 15 15 15 15 15 15 15 15	E / E / C / C / E / C		Average Peak	117	116
6	2483.50	43.82	-10.18	54 .00	44 40	30.41	35 51	4 52	Average	117	116

Remark: #3 and #4 Fundamental Signal.

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

		Freq	Level	Over Limit				Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	\overline{dBuV}	<u>dB7m</u>	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>dB</u>		cm	deg
	@	2334.00		-17.96	74.00	56.56				Peak	100	
3	@	2334.00 2458.00	109.10	-10.74	54.00	43.78 109.67	30.54 30.43		4.49	Average Peak	100	232
5	@ @	2458.00 2483.50		-17.32	74.00	107.30 57.25	30.43 30.41	35.49 35.51		Average Peak	100	232
	0	2483.50	45.54	-8.46	54.00	46.12	30.41	35.51	4.52	Average	100	232

Remark: #3 and #4 Fundamental Signal

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Test Mode : Mode 5Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

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		Freq	Level	Over Limit				Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{dBuV7m}$	—dBu∀	<u>dB7m</u>	$\overline{-}\overline{d}\overline{B}$	<u>dB</u>		cm	deg
1	@	2390.00	69.97	-4.03	74.00	70.52	30.48	35.46	4.43	Peak		
1 2 3	@	2390.00	48.62	-5.38	54.00	49.16	30.48	35.46	4.43	Average	100	223
3	@	2414.00	103.65			104.19	30.47	35.47	4.46	Peak		
4	@	2414.00	94.80			95.34	30.47	35.47	4.46	Average	100	223
5	@ @	2494.00	55.03	-18.97	74.00	55.61	30.40	35.53	4.55	Peak		
б	@	2494.00	42.97	-11.03	54.00	43.55	30.40	35.53	4.55	Average	100	223

Remark: #3 and #4 Fundamental Signal.

· Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	Limit Line		Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\overline{d}\overline{B}$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$-\overline{dBuV}$	<u>dB</u> 7m	$\overline{d}\overline{B}$	<u>dB</u>		cm	deg
1 @	2390.00	73.05	-0.95	74.00	73.60	30.48	35.46	4.43	Peak	1 2 2 2	2 2 2 1
2 @	2390.00	53.64	-0.36	54.00	54.18	30.48	35.46	4.43	Average	100	121
3 @	2414.00	110.91			111.47	30.47	35.46	4.43	Peak		
4 @	2414.00	101.44			102.00	30.47	35.46	4.43	Average	100	121
5 @	2498.00	56.22	-17.78	74.00	56.80	30.40	35.53		Peak		
4 @ 5 @ 6 @	2498.00	43.74	-10.26	54.00	44.32	30.40	35.53	4.55	Average	100	121

Remark: #3 and #4 Fundamental Signal

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Test Mode : Mode 6Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	70 25 755 755 6			Preamp Factor		Remark	Ant Pos	Table Pos
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	dBu∀	$\overline{dB/m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	\overline{dB}		cm	deg
1 2 3 !	183.63 256.53 276.24	32.90	-9.09 -13.10 -3.91	43.50 46.00 46.00	56.45 51.36 60.27	9.22 12.55 12.92	31.27 31.01 31.10	0.00	Peak Peak Peak		
	Freq	Level	Over Limit	Limit Line			Preamp Factor		Remark	Ant Pos	Table Pos
	MHz	$\overline{\tt d} \overline{\tt B} \overline{\tt u} \overline{\tt V} \overline{\tt /m}$	$\overline{d}\overline{B}$	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	 dBuV	—dB7m	\overline{dB}	$\overline{d}\overline{B}$		cm	deg
1 2 3 !	551.30 827.80		-7.24 -6.58	46.00 46.00	50.70 48.50		30.61 30.44	0.00		141 100	139 91

	Freq	Level	Over Limit	Limit Line		Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\overline{}\overline{d}\overline{B}\overline{u}\overline{V}$	$\overline{dB7m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>d</u> B			deg
1 @ 2 @ 3 @	2348.00 2348.00	200		74.00 54.00	55.44 43.70	30.52 30.52	The same of the sa		Peak Average	184	33
3 @ 4 @ 5 @	2434.00 2434.00	94.71			103.01 95.27	30.46 30.46	35.47	4.46	Peak Average	184	33
5 @ 6 @	2500.00 2500.00	54.43 42.92	-19.57 -11.08	74.00 54.00	55.00 43.50	30.40 30.40	35.53 35.53		Peak Average	184	33

Remark: #3 and #4 Fundamental Signal.

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Report No. : FR533106

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq Level	Over Limit Limit Line	Level Factor Factor Loss Remark	Ant Pos 	Table Pos ———— deg
	High and the way	1017 - 111 - 117,	PROTECT TOTAL SECTION STATEMENT	HILI	4.7
1 @ 2 3	183.63 42.25 208.74 37.17 276.24 38.52	-1.25 43.50 -6.33 43.50 -7.48 46.00	58.78 9.75 31.36 0.00 Peak	100 194	64 284
	Freq Level	Over Lim Limit Li			Ant Table Pos Pos
	MHz dBuV/m	dB dBu∀	7m		cm deg
1 2 3	374.90 39.58 749.40 39.55 827.80 38.81	-6.45 46.	00 49.80 20.46 30.71 0.00 Peak		
	Freq Level	Over Limit Limit Line dB dBuV/m	Level Factor Factor Loss Remark	Ant Pos	Table Pos ————
1 @ 2 @ 3 @ 4 @	2384.00 57.49 - 2384.00 44.83 2434.00 109.96 2434.00 101.14	-16.51 74.00 -9.17 54.00	58.03 30.50 35.44 4.40 Peak 45.37 30.50 35.44 4.40 Average 110.52 30.46 35.47 4.46 Peak 101.70 30.46 35.47 4.46 Average	110 110	348 348
4 @ 5 @ 6 @	2498.00 55.28 - 2498.00 43.60 -	-18.72 74.00 -10.40 54.00		110	348

Remark: #3 and #4 Fundamental Signal.

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FCC TEST REPORT

Report No. : FR533106

Test Mode : Mode 7Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	Limit Line			Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}/\overline{m}$	<u>dB</u>	$\overline{\mathtt{d} B \mathtt{u} \mathtt{V} 7m}$	—dBu∇	<u>dB</u> /m	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>dB</u>			deg
1	183.63 193.89	40.20	-3.30 -3.51	43.50	60.54 59.74	9.22	31.27 31.21		Peak Peak		
1 ! 2 ! 3 ! 4 ! 5 ! 6 !	276.00 276.00	43.56	-2.44 -4.49	46.00	59.74 59.51 57.45	12.92	31.10	2.24	Peak Average	5.5.5	7.7.7. 7.7.7.
5	285.69 285.69	43.94	-2.06 -5.41	46.00 46.00	59.82 56.47	12.93	31.04		Peak		
0 1	203.09	40.39	-3.41	40.00	30.47	14.95	31.04	4.40	Q1		
	P	Larral	Over	Limit			Preamp	Cable	Dawa wle	Ant	Table

	Freq	Level		Limit Line					Ant Pos	Table Pos
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}/\overline{m}$	dBuV	$-\overline{dB/m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{d}\overline{B}$	cm	deg
1 2 1	367.90 376.30			46.00 46.00						
3	551.30			46.00				3.39	0.0.0	

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit				Preamp Factor		Remark	Ant Pos	Table Pos
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}/\overline{m}$	\overline{dB}	$\overline{\tt d} \overline{\tt B} \overline{\tt u} \overline{\tt V} \overline{\tt /m}$	dBuV	dB/m	d₿	dB		cm	deg
1	183.63	40.86	-2.64	43.50	61.20	9.22	31.27	1.70	Peak		
3 @	276.00	44.15	-1.85	46.00	60.09	12.92	31.21	2.24	Peak Peak		
4 1	276.00	42. 23	-3.77	46.00	58 17	12.92	31 10	2. 24	Average	100	176

	Freq	Level		Limit Line					Remark	Ant Pos	Table Pos
	MHz	$\overline{dBuV/m}$	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	_dB/m	dB	dB		cm	deg
1		33.76							736767077		
2		37.84							70000000		
3	799.80	38.32	-7.68	46.00	42.07	21.90	30.12	4.48	Peak	000	

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Test Mode : Mode 8Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

		Freq	Level	Over Limit			Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	dB	$\overline{\tt dBuV7m}$	dBu∜	$-\overline{dB7m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>dB</u>		cm	deg
1	@ @ @	2390.00	64.16	-9.84	74.00	64.70	30.48	35.46	4.43	Peak		
2	@	2390.00	46.51	-7.49	54.00	47.05	30.48	35.46	4.43	Average	100	214
3	@	2428.00	101.39			101.95	30.46	35.47	4.46	Peak		
4	@	2428.00	93.34			93.90	30.46	35.47	4.46	Average	100	214
5	@	2483.50	58.78	-15.22	74.00	59.35	30.41	35.51	4.52	Peak		2 - 2
	@	2483.50	46.12	-7.88	54.00	46.70	30.41	35.51	4.52	Average	100	214

Remark: #3 and #4 Fundamental Signal.

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit				Preamp Factor		Remark	Ant Pos	Table Pos
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	$\overline{d}\overline{B}$	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	dBuV	$-\overline{dB/m}$	\overline{dB}	dB			deg
1 (70.74	-3.26	74.00	71.28	30.48	35.46	4.43	Peak		
2 (2390.00	53.26	-0.74	54.00	53.80	30.48	35.46	4.43	Average	107	343
3 (101.74			102.30	30.46	35.47	4.46	Average	107	
4 (108.97			109.53	30.46	35.47	4.46	Peak		
5 (<u>2483.50</u>	66.96	-7.04	74.00	67.54	30.41	35.51	4.52	Peak		
6 (2483.50	52.92	-1.08	54.00	53.50	30.41	35.51	4.52	Average	107	343

Remark: #3 and #4 Fundamental Signal.

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Test Mode : Mode 9Polarization : Horizontal

The test that passed at minimum margin was marked by the frame in the following table.

		Freq	Level	Over Limit	Limit Line			Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\overline{d}\overline{B}$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	$\overline{}\overline{d}\overline{B}\overline{u}\overline{V}$	<u>dB</u> 7m	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	\overline{dB}		cm	deg
1	@	2344.00	55.03	-18.97	74.00	55.56	30.52	35.42	4.37	Peak	222	2.2.2
2	@ @	2344.00	43.05	-10.95	54.00	43.57	30.52	35.42	4.37	Average	100	214
3	@	2460.00	101.47			102.04	30.43	35.49	4.49	Peak		
4 5	@	2460.00	93.80			94.37	30.43	35.49	4.49	Average	100	214
5	@	2483.50	60.46	-13.54	74.00	61.04	30.41	35.51	4.52	Peak		
	@	2483.50	46.78	-7.22	54.00	47.36	30.41	35.51	4.52	Average	100	214

Remark: #3 and #4 Fundamental Signal.

Polarization : Vertical

The test that passed at minimum margin was marked by the frame in the following table.

	Freq	Level	Over Limit	Limit Line		Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	<u>M</u> Hz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	$\overline{d}\overline{B}$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	\overline{dBuV}	d <u>B</u> 7m	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>dB</u>		cm	deg
1 @ 2 @	2384.00	56.63	-17.37	74.00	57.17	30.50	35.44	4.40	Peak	1	2221
2 @	2384.00		-9.45	54.00	45.09		35.44		Average	104	11
3 @	2460.00	109.49			110.06	30.43	35.49		Peak		
4 @ _5 @	2460.00	102.03			102.60	30.43	35.49	4.49	Average	104	11
.5 @	2483.50	70.51	-3.49	74.00	71.08	30.41	35.51	4.52	Peak		
6 @	2483.50	52.74	-1.26	54.00	53.32	30.41	35.51	4.52	Average	104	11

Remark: #3 and #4 Fundamental Signal.

Remark: The spurious emission except listed above is too low to be taken.

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5.8 Antenna Requirements

5.8.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no other antenna except assembled by the responsible party shall be used with the device.

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And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

5.8.2 Antenna Connected Construction

The antennas used in this product are fixed dipole with reverse SMA and PCB antenna without conntector and it is considered to meet antenna requirement of FCC.

5.8.3 Antenna Gain

The antenna gain of EUT is less than 6dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

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6. List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9 KHz – 2.75 GHz	Jun. 23, 2004	Jun. 23, 2005	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/008	9 KHz – 30 MHz	May 03, 2004	May 03, 2005	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9 KHz – 30 MHz	Apr. 19, 2004	Apr. 19, 2005	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450 Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 ~ 60 Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9KHz~30MHz	Dec. 23, 2004	Dec. 23, 2005	Conduction (CO01-HY)
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Jul. 27, 2004	Jul. 26, 2005	Radiation (03CH06-HY)
Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul,09,2004	Jul, 10,2005	Radiation (03CH06-HY)
Controller	СТ	SC100	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 22, 2004	Nov. 21, 2005	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 22, 2005	Feb. 22, 2006	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Jun. 22, 2004	Jun. 22, 2005	Radiation (03CH06-HY)
PreAmplifier	Com-Power	PA-103	161055	1MHz - 1000MHz	Apr. 26, 2004	Apr. 26, 2005	Radiation (03CH06-HY)
HF Amplifier	MITEQ	AFS44	973248	0.1G - 26.5G	May 20, 2004	May 20, 2005	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F	997165	26G - 40G	Jun. 24, 2004	Jun. 24, 2005	Radiation (03CH06-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Base Station Emulator	Agilent	E5515C	GB43460754	Qual-band	Jan. 12, 2004	Jan. 12, 2006	Base Station

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7. Uncertainty Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncerta	$u(x_i)$				
	dB	Probability	$u(x_i)$			
	uБ	Distribution				
Receiver reading	0.10	Normal(k=2)	0.05			
Cable loss	0.10	Normal(k=2)	0.05			
AMN insertion loss	2.50	Rectangular	0.63			
Receiver Spec	1.50 Rectangular		0.43			
Site imperfection	1.39	Rectangular	0.80			
Mismatch	+0.34/-0.35	U-shape	0.24			
combined standard uncertainty Uc(y)	1.13					
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	e 2.26					

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncerta	ainty of X_i	
	٩D	Probability	$u(x_i)$
	dB	Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50 Rectangular		0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)		1.27	
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)		2.54	

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Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncerta	inty of X_i	()	Ci	$Ci * u(x_i)$			
	dB	Probability	$u(x_i)$	Ci	$Ci \cdot u(x_i)$			
	QD.	Distribution						
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10			
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85			
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25			
Receiver Correction	±2.00	Rectangular	1.15	1	1.15			
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87			
Site imperfection	±2.80	Triangular	1.14	1	1.14			
Mismatch								
Receiver VSWR Γ 1= 0.197	+0.34/-0.35	Llobopod	0.244	1	0.244			
Antenna VSWR Γ2= 0.194	+0.34/-0.33	U-shaped	0.244	'	0.244			
Uncertainty=20log(1-Γ1*Γ2*Γ3)								
Combined standard uncertainty Uc(y)		2.36						
Measuring uncertainty for a level of								
confidence of 95% U=2Ue(y)	4.72							

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