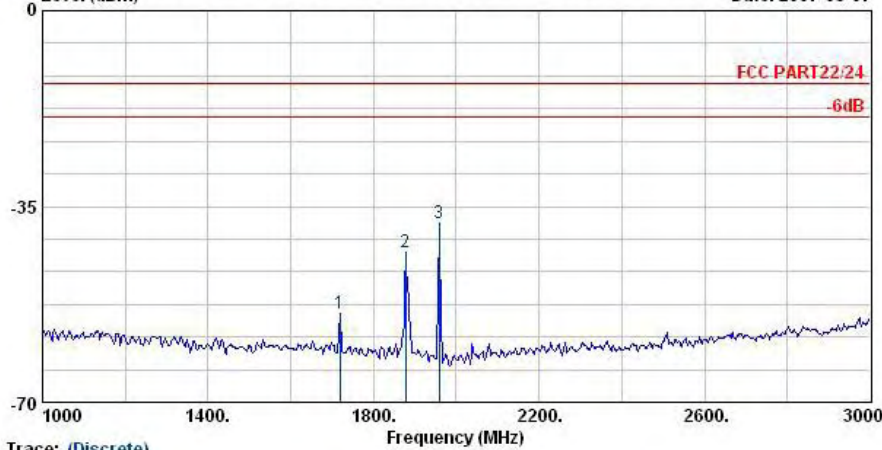




Data: 3 File: D:\Project\2007Q2\亞旭\710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07

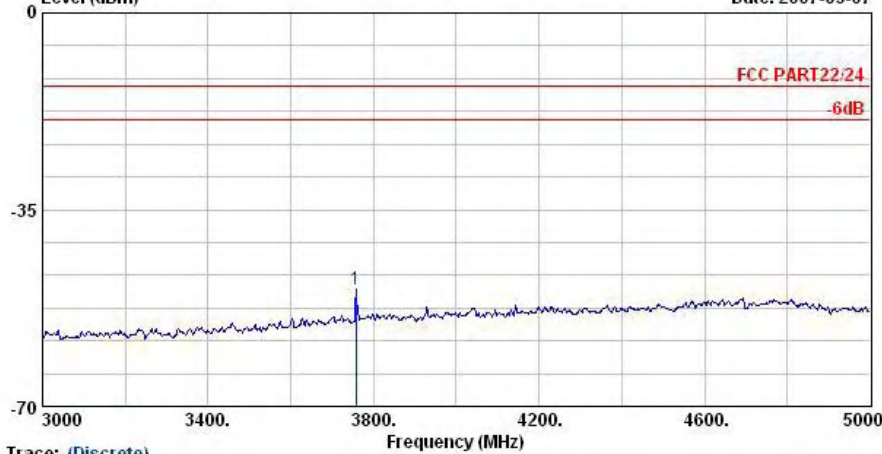


Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode : CH661+Adapter
Plane : E2
Scanner : A3+Pistol Grips

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 3 rows of peak data.

- Remark:
1. #2: MS Signal
2. #3: BS Signal

Data: 4 File: D:\Project\2007Q2\亞旭\710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07

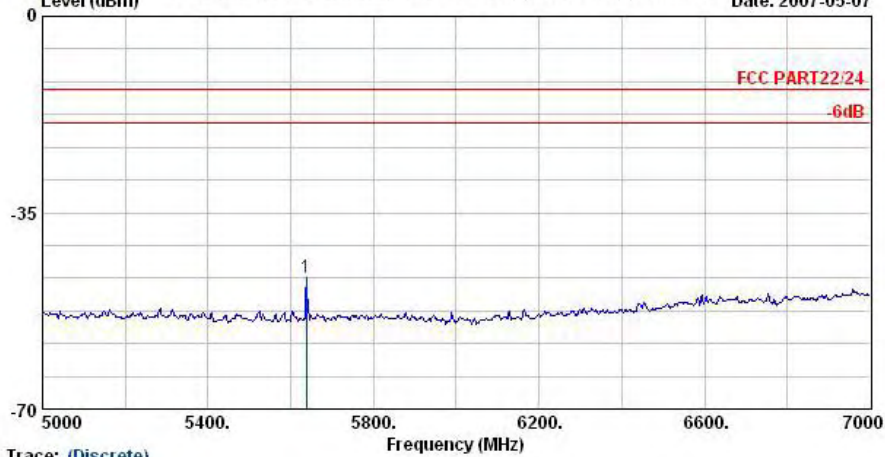


Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode : CH661+Adapter
Plane : E2
Scanner : A3+Pistol Grips

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 1 row of peak data.



Data: 5 File: D:\Project\2007Q2\亞旭\710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07

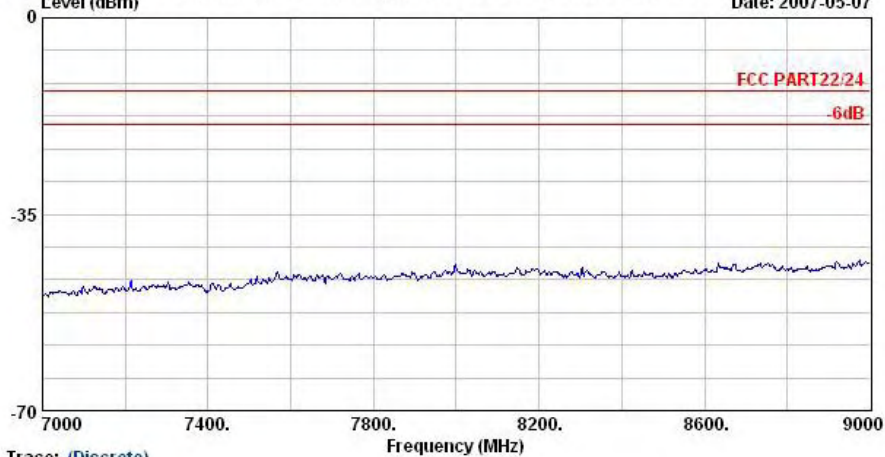


Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

	Freq	Level	Over Limit	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-46.49	-33.49	-13.00	-56.46	9.97	Peak

Data: 6 File: D:\Project\2007Q2\亞旭\710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07

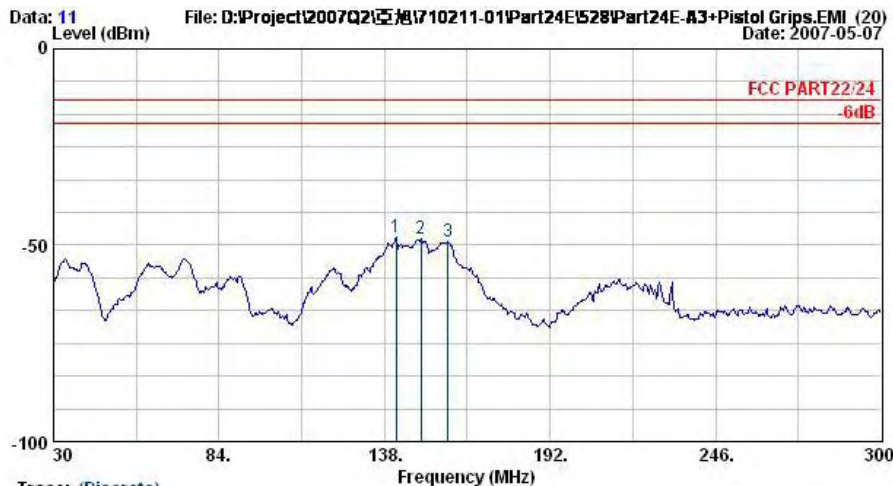


Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

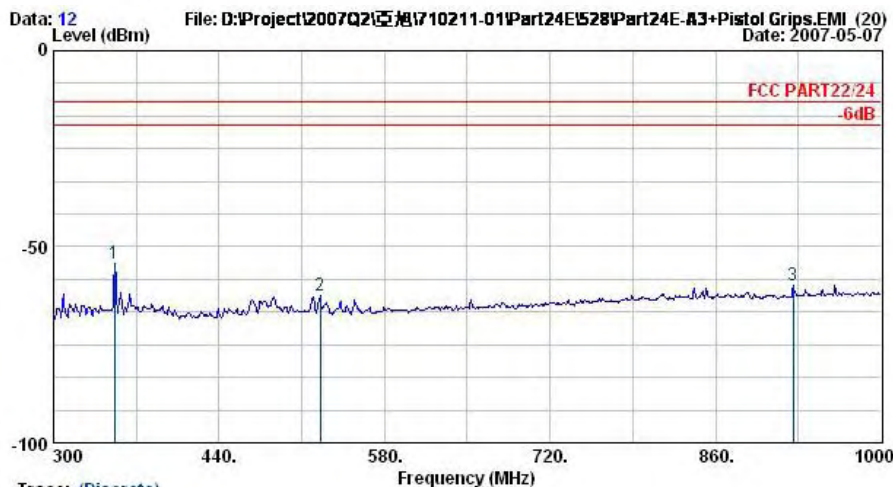


Vertical Polarization



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPORTOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	141.78	-48.08	-35.08	-13.00	-40.02	-8.07	Peak
2 @	149.88	-48.50	-35.50	-13.00	-40.36	-8.14	Peak
3 @	158.79	-48.96	-35.96	-13.00	-40.73	-8.22	Peak

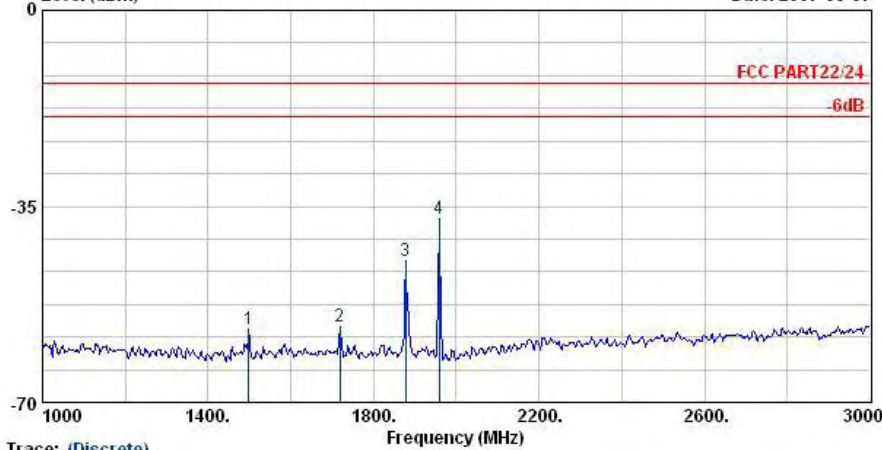


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPORTOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	351.80	-54.21	-41.21	-13.00	-48.87	-5.34	Peak
2 @	525.40	-62.63	-49.63	-13.00	-59.81	-2.82	Peak
3 @	925.80	-59.81	-46.81	-13.00	-61.89	2.07	Peak



Data: 13 File: D:\Project\2007Q2\5781710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07



Trace: (Discrete)

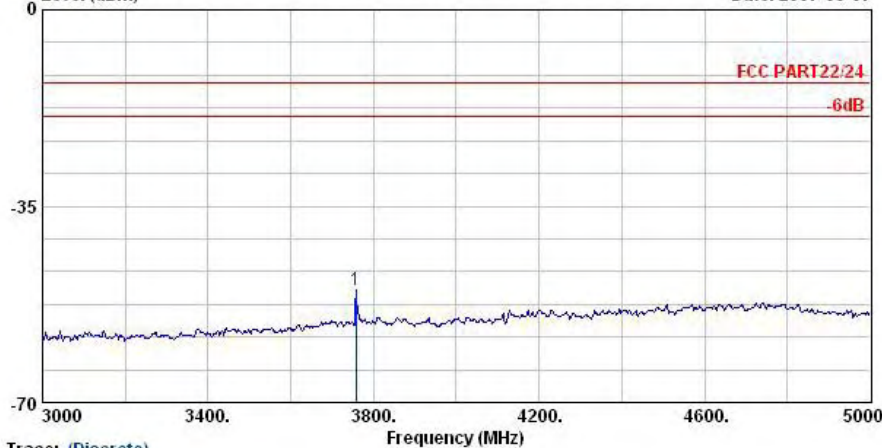
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1800 Link Mode ; CH661+Adapter
Plane : E2
Scanner : A3+Pistol Grips

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 4 rows of peak data.

Remark:

- 1. #3: MS Signal
2. #4: BS Signal

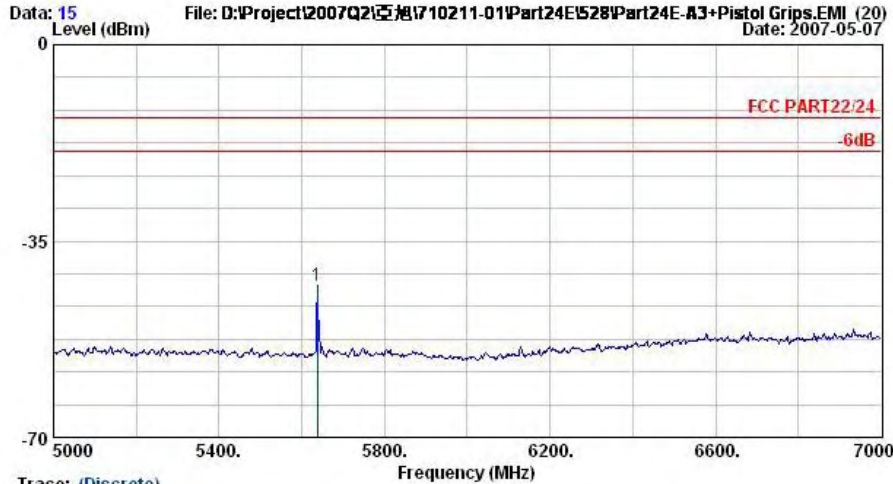
Data: 14 File: D:\Project\2007Q2\5781710211-01\Part24E\528\Part24E-A3+Pistol Grips.EMI (20) Date: 2007-05-07



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1800 Link Mode ; CH661+Adapter
Plane : E2
Scanner : A3+Pistol Grips

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 1 row of peak data.

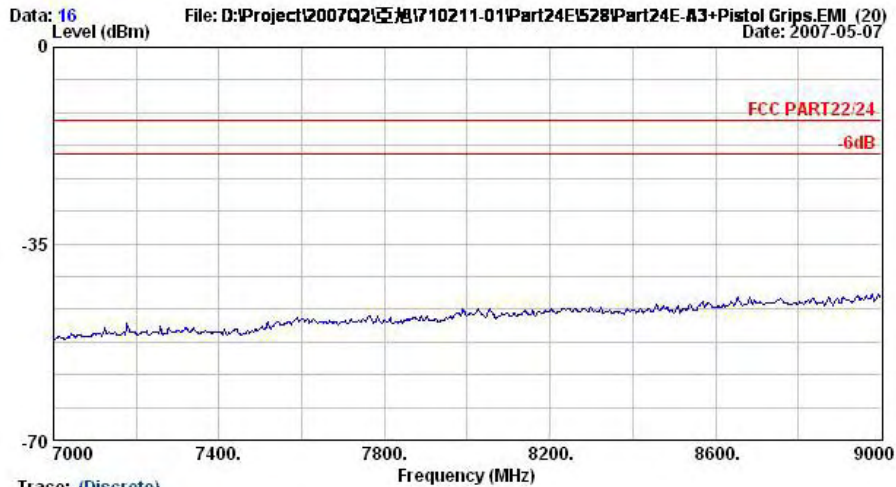


Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

	Over	Limit	Read			
Freq	Level	Limit	Line	Level	Factor	Remark
MHz	dBm	dB	dBm	dBm	dB	

1 @	5638.00	-42.88	-29.88	-13.00	-51.53	8.65 Peak
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Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3+Pistol Grips

Remark : There is no more obvious emission except the listings above.

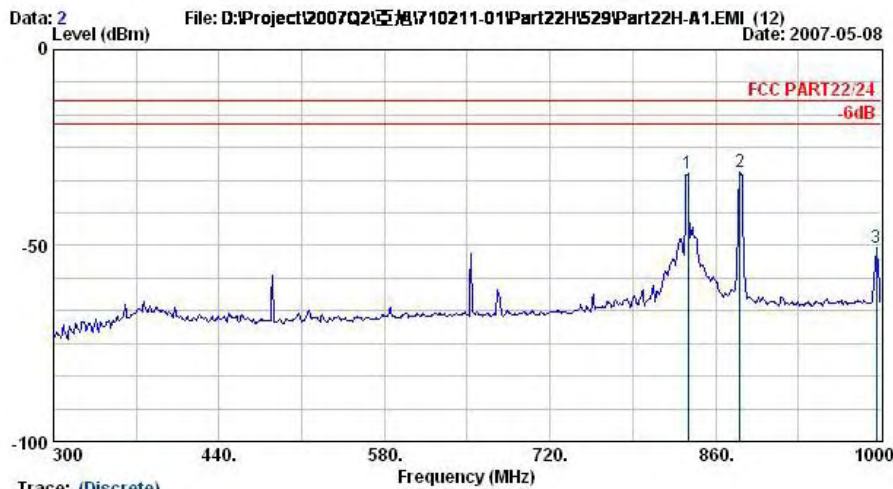


4.6.5.30 Mode 30
Horizontal Polarization



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS HORIZONTAL
 EDT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : GSM 850 Link Mode ; CH189+Adapter
 Plane : E2
 Scanner : A1

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	32.43	-46.77	-33.77	-13.00	-45.30	-1.47	Peak
2	143.13	-50.09	-37.09	-13.00	-37.34	-12.74	Peak
3 @	221.43	-36.56	-23.56	-13.00	-23.91	-12.65	Peak



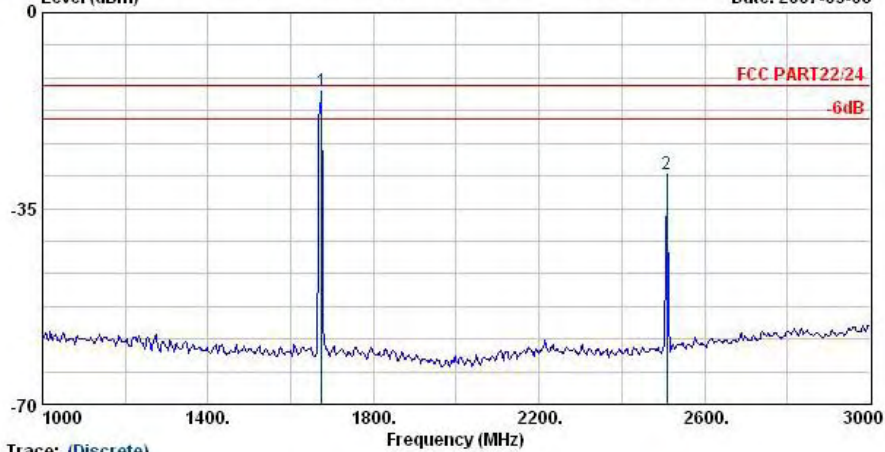
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS HORIZONTAL
 EDT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : GSM 850 Link Mode ; CH189+Adapter
 Plane : E2
 Scanner : A1

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	836.90	-31.75			-30.42	-1.33	Peak
2 @	880.30	-31.26			-30.35	-0.91	Peak
3	995.80	-50.72	-37.72	-13.00	-50.92	0.20	Peak

- Remark:
 1. #1: MS Signal
 2. #2: BS Signal



Data: 3 File: D:\Project\2007Q2\亞旭\710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08

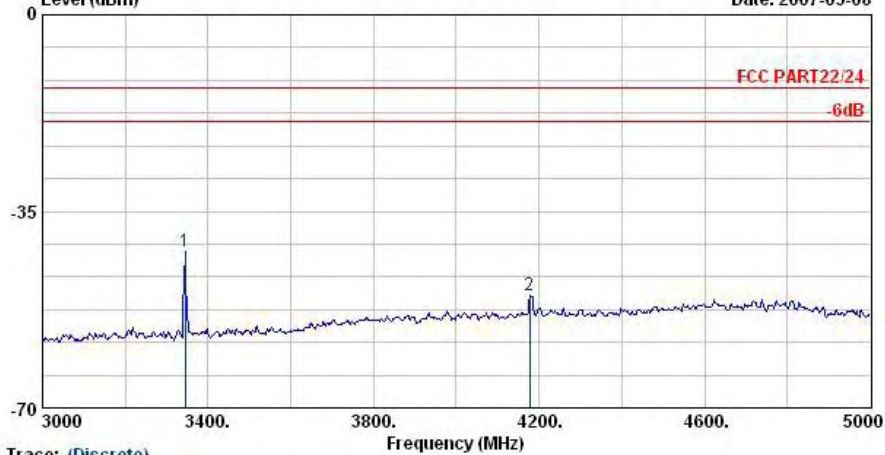


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Table with 7 columns: Freq, Level, Over Limit, Limit Line, Read Level, Factor, Remark. Contains 2 rows of data for peaks at 1674.00 MHz and 2508.00 MHz.

Data: 4 File: D:\Project\2007Q2\亞旭\710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08



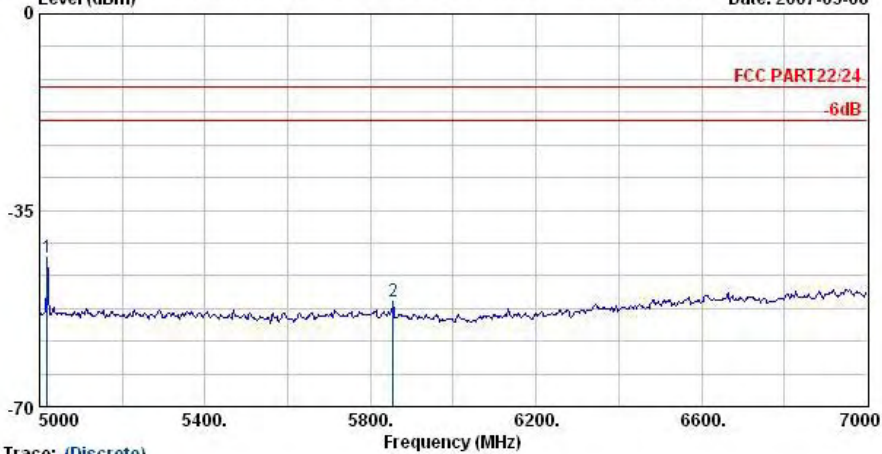
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Table with 7 columns: Freq, Level, Over Limit, Limit Line, Read Level, Factor, Remark. Contains 2 rows of data for peaks at 3344.00 MHz and 4178.00 MHz.



Data: 5 File: D:\Project\2007Q2\207-1710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08

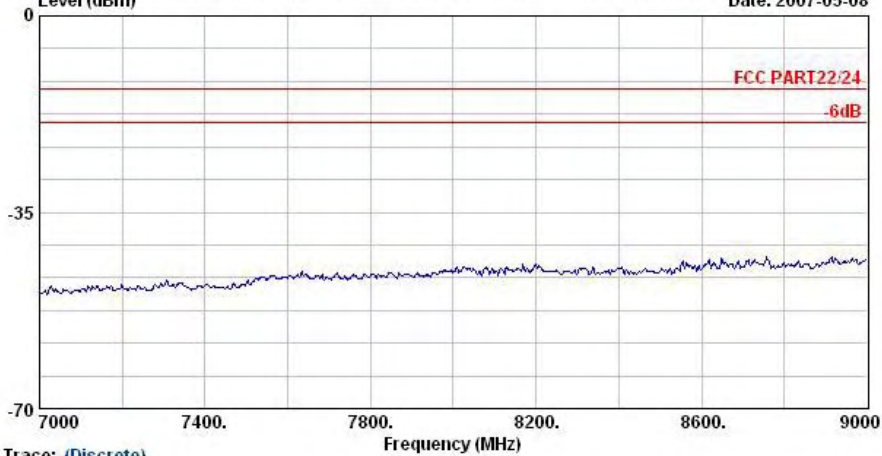


Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : GSM 850 Link Mode ; CH180+Adapter
 Plane : E2
 Scanner : A1

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	5018.00	-43.58	-30.58	-13.00	-53.82	10.24	Peak
2	5854.00	-51.25	-38.25	-13.00	-61.47	10.22	Peak

Data: 6 File: D:\Project\2007Q2\207-1710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08

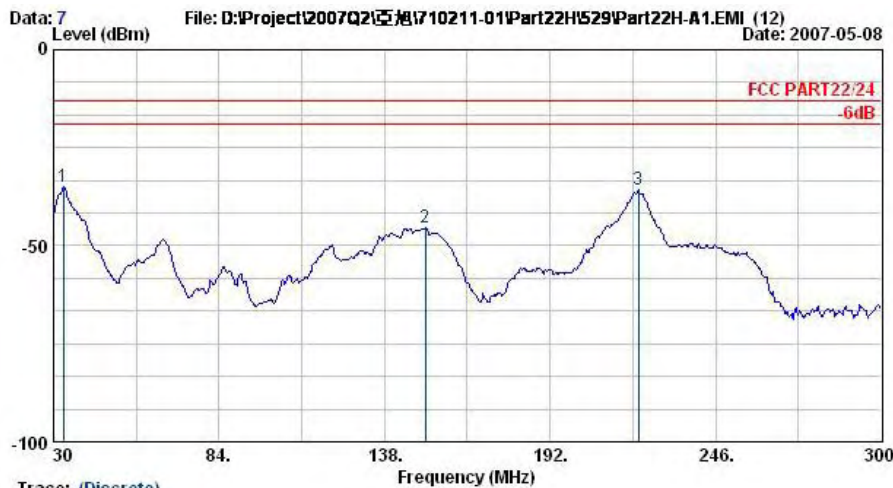


Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : GSM 850 Link Mode ; CH180+Adapter
 Plane : E2
 Scanner : A1

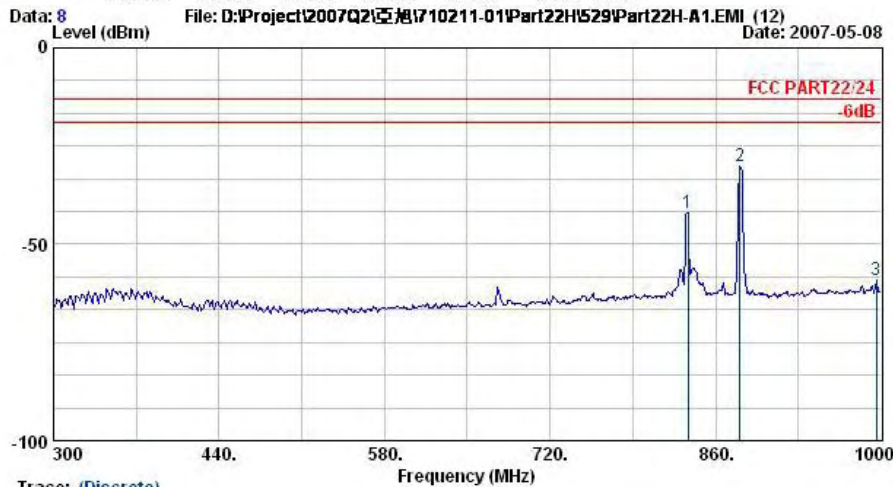


Vertical Polarization



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FC 710211-01
 Memo : GSM 850 Link Mode ; CH189+Adapter
 Plane : E2
 Scanner : A1

	Freq MHz	Level dBm	Over Limit dB	Limit Line dBm	Read Level dBm	Factor dB	Remark
1 @	33.24	-34.96	-21.96	-13.00	-25.07	-9.89	Peak
2	151.23	-45.37	-32.37	-13.00	-37.22	-8.15	Peak
3 @	220.89	-35.75	-22.75	-13.00	-27.61	-8.14	Peak



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FC 710211-01
 Memo : GSM 850 Link Mode ; CH189+Adapter
 Plane : E2
 Scanner : A1

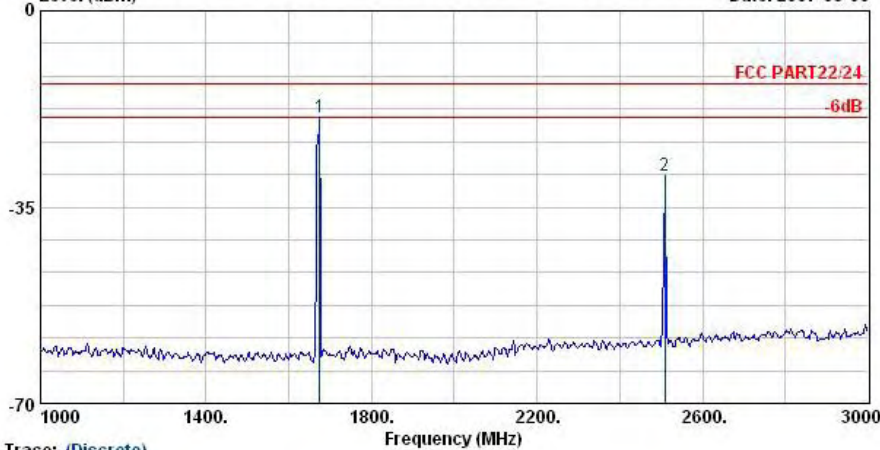
	Freq MHz	Level dBm	Over Limit dB	Limit Line dBm	Read Level dBm	Factor dB	Remark
1 @	836.90	-41.90			-43.26	1.36	Peak
2 @	880.30	-30.18			-31.89	1.71	Peak
3	995.80	-59.21	-46.21	-13.00	-61.84	2.63	Peak

Remark:

- 1. #1: MS Signal
- 2. #2: BS Signal



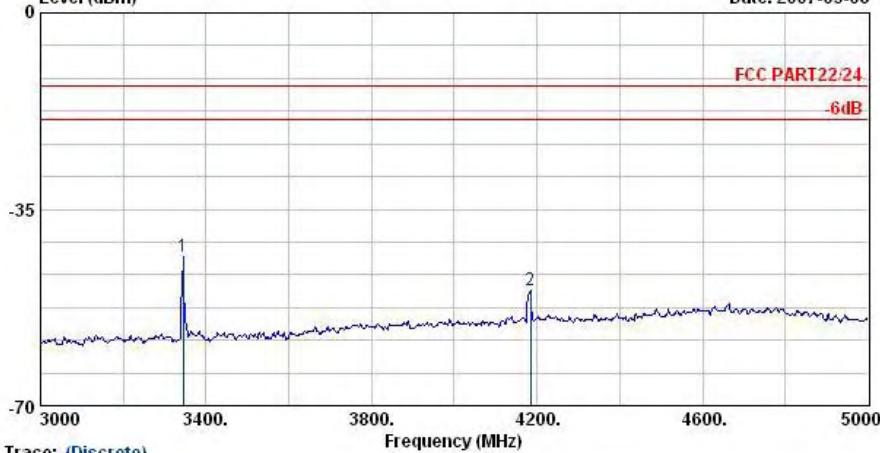
Data: 9 File: D:\Project\2007Q2\251710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08



Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 2 rows of peak data.

Data: 10 File: D:\Project\2007Q2\251710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08

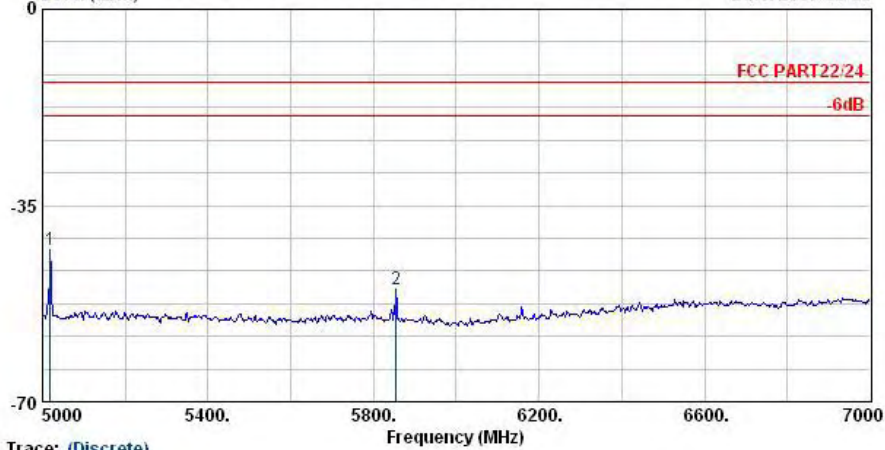


Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 2 rows of peak data.



Data: 11 File: D:\Project\2007Q2\5710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08

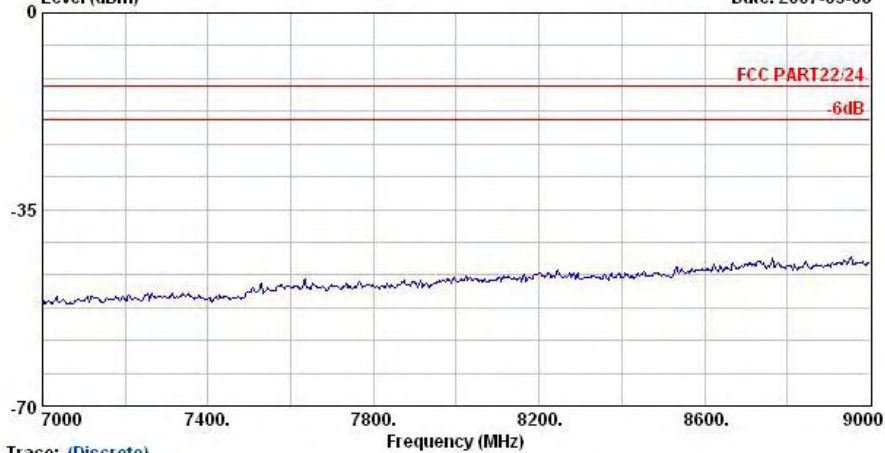


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains two rows of data for peaks at 5018.00 MHz and 5854.00 MHz.

Data: 12 File: D:\Project\2007Q2\5710211-01\Part22H529\Part22H-A1.EMI (12) Date: 2007-05-08



Trace: (Discrete)

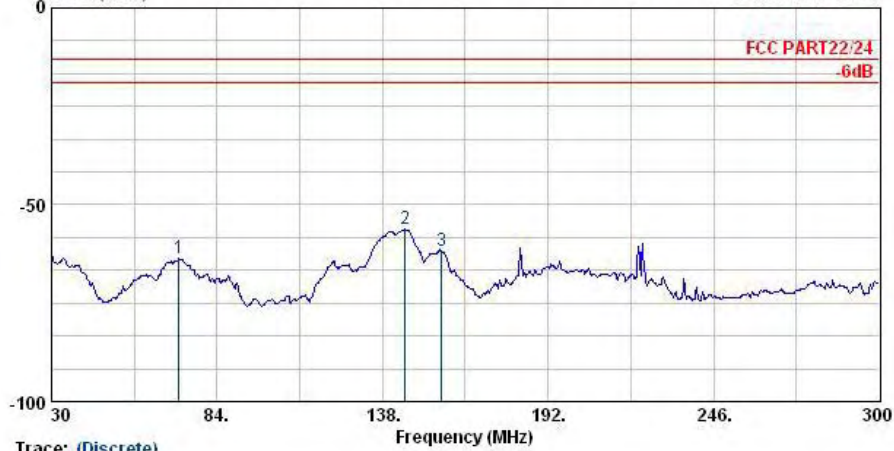
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : GSM 850 Link Mode ; CH189+Adapter
Plane : E2
Scanner : A1

Remark : There is no more obvious emission except the listings above.



4.6.5.31 Mode 31
Horizontal Polarization

Data: 1 File: D:\Project\2007Q2\200710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08

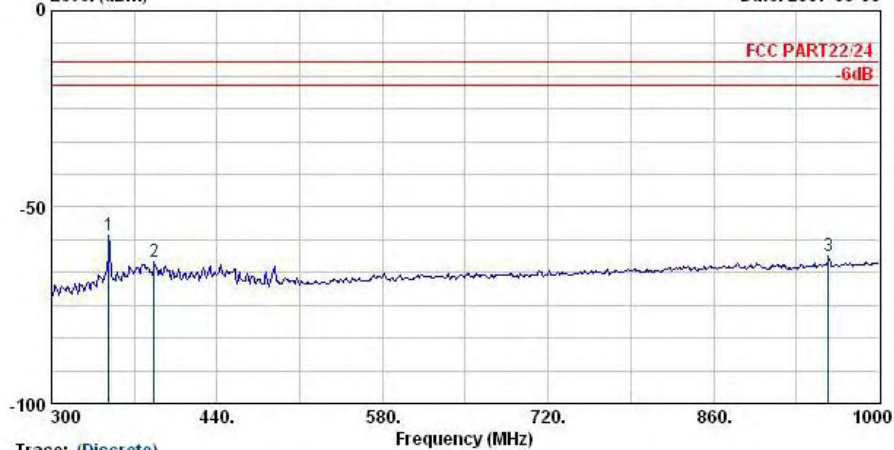


Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	71.58	-63.73	-50.73	-13.00	-51.38	-12.35	Peak
2	145.29	-56.26	-43.26	-13.00	-43.50	-12.76	Peak
3	157.17	-61.77	-48.77	-13.00	-48.87	-12.90	Peak

Data: 2 File: D:\Project\2007Q2\200710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08



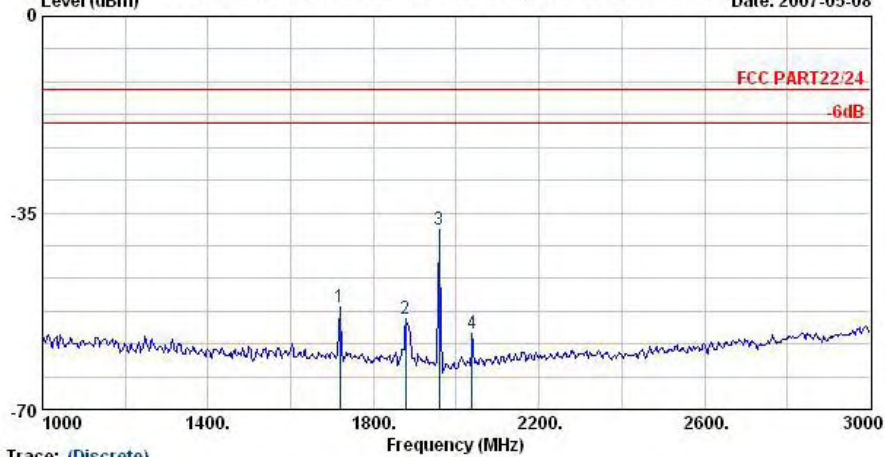
Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	348.30	-57.15	-44.15	-13.00	-48.87	-8.27	Peak
2	386.80	-64.11	-51.11	-13.00	-57.18	-6.93	Peak
3	957.30	-62.36	-49.36	-13.00	-62.18	-0.17	Peak



Data: 3 File: D:\Project\2007Q2\571710211-01\Part24E\529V\Part24E-A3.EMI (20) Date: 2007-05-08



Trace: (Discrete)

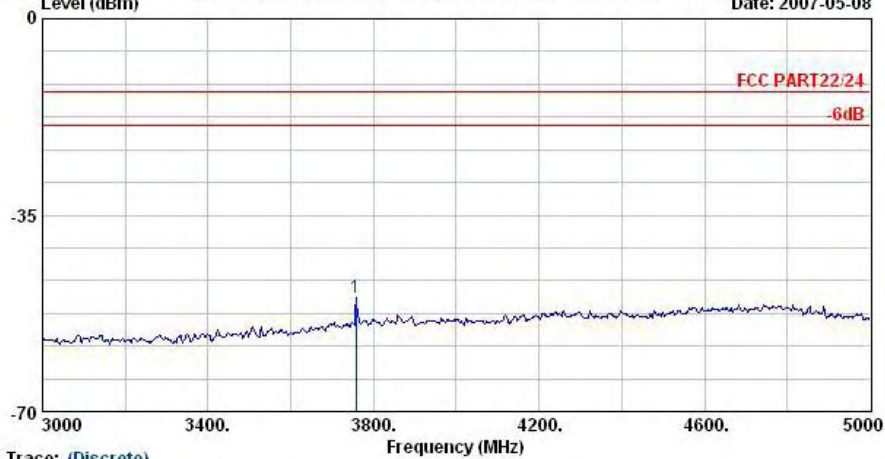
Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	1718.00	-51.69	-38.69	-13.00	-51.76	0.08	Peak
2	1878.00	-53.78			-53.27	-0.51	Peak
3 @	1958.00	-38.02			-36.91	-1.11	Peak
4	2038.00	-56.58	-43.58	-13.00	-55.84	-0.73	Peak

Remark:

- #2: MS Signal
- #3: BS Signal

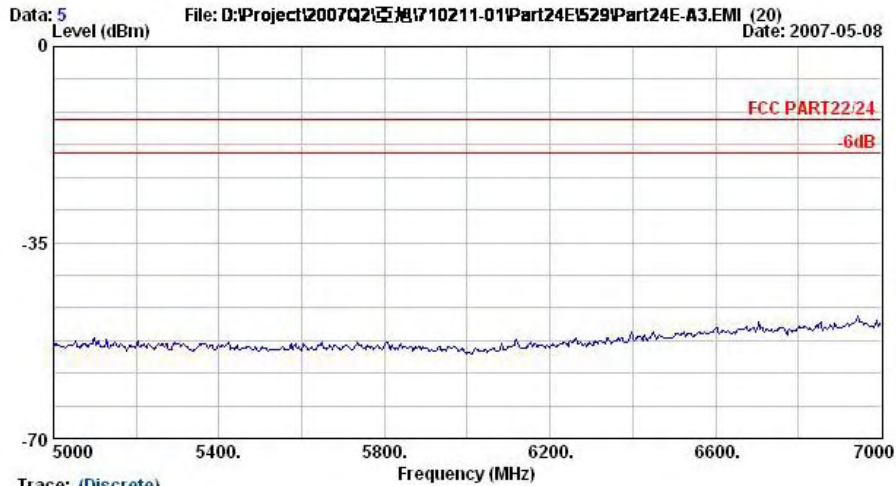
Data: 4 File: D:\Project\2007Q2\571710211-01\Part24E\529V\Part24E-A3.EMI (20) Date: 2007-05-08



Trace: (Discrete)

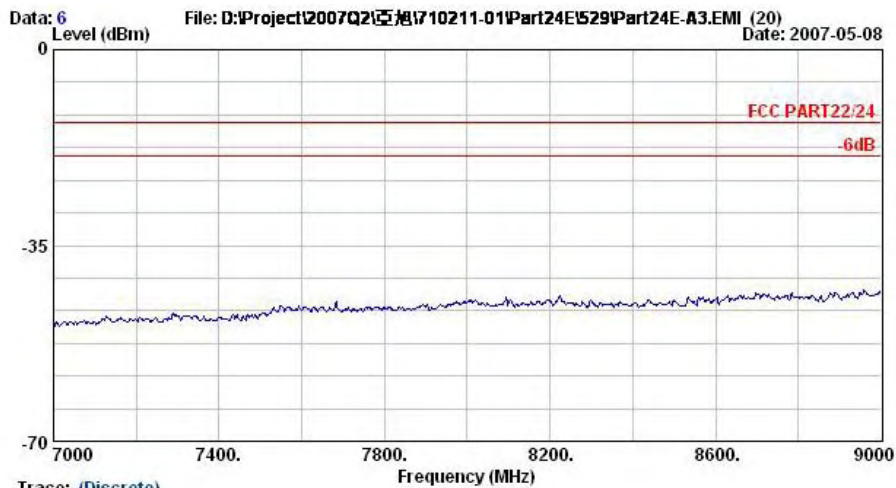
Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	3758.00	-49.66	-36.66	-13.00	-57.58	7.92	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode ; CH661+Adapter
Plane : E2
Scanner : A3

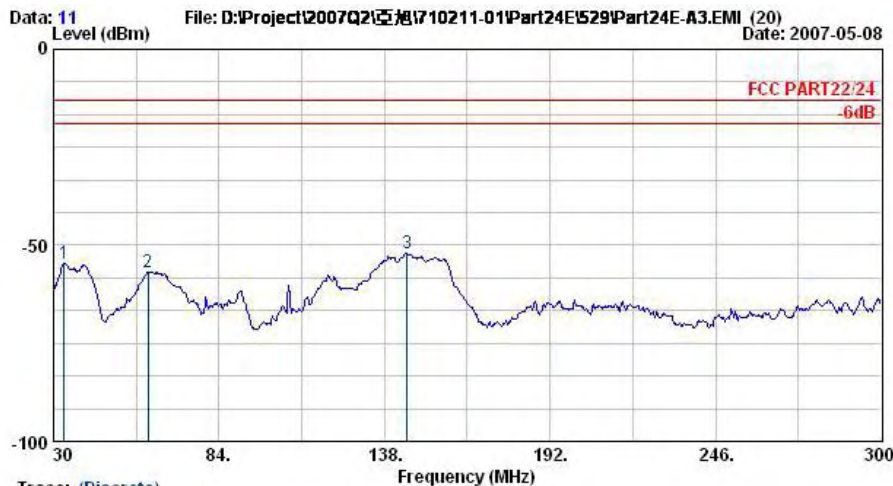


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode ; CH661+Adapter
Plane : E2
Scanner : A3

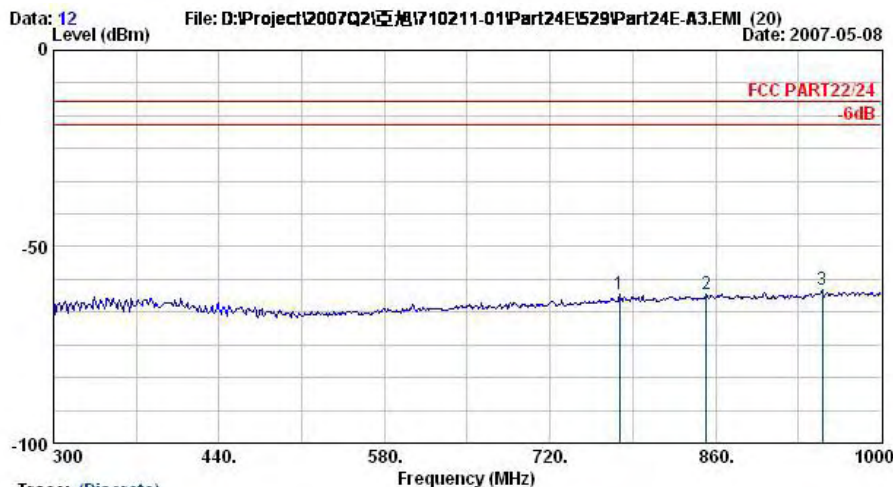


Vertical Polarization



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1800 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq MHz	Level dBm	Over Limit dB	Limit Line dBm	Read Level dBm	Factor dB	Remark
1	33.51	-54.59	-41.59	-13.00	-44.42	-10.17	Peak
2	60.78	-56.74	-43.74	-13.00	-43.46	-13.28	Peak
3	145.29	-52.02	-39.02	-13.00	-43.92	-8.10	Peak

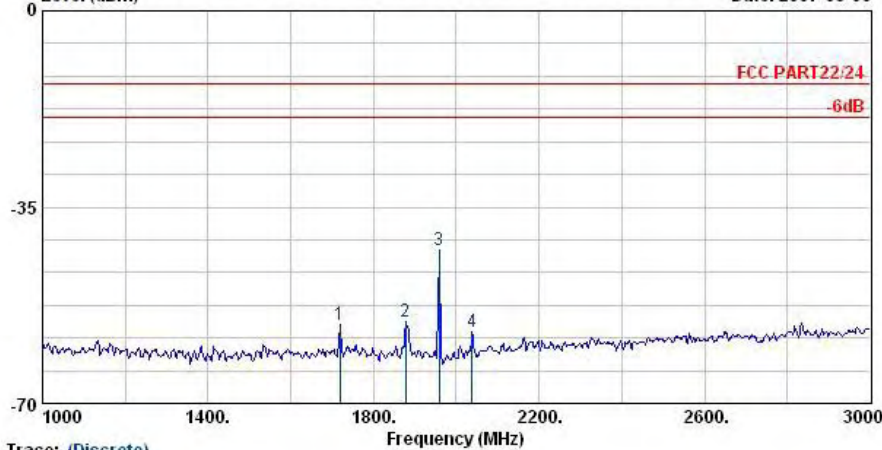


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1800 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

	Freq MHz	Level dBm	Over Limit dB	Limit Line dBm	Read Level dBm	Factor dB	Remark
1	778.80	-62.13	-49.13	-13.00	-62.88	0.75	Peak
2	852.30	-62.10	-49.10	-13.00	-63.59	1.49	Peak
3	950.30	-61.05	-48.05	-13.00	-63.32	2.27	Peak



Data: 13 File: D:\Project\2007Q2\2571710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08



Trace: (Discrete)

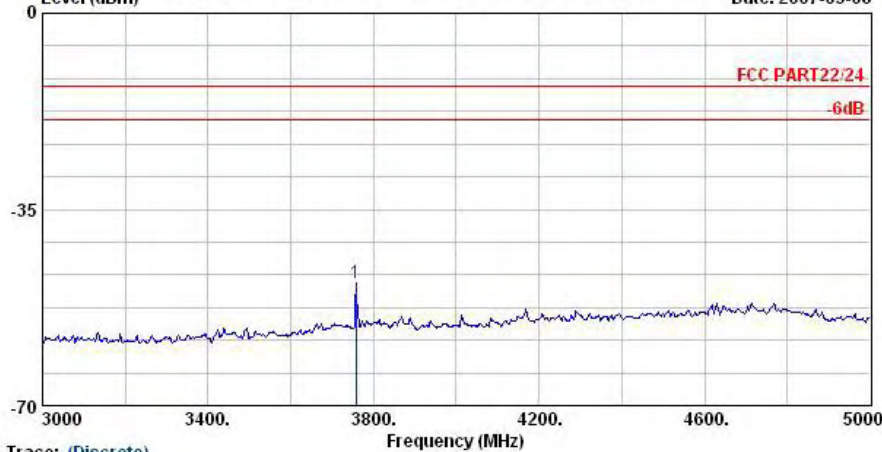
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EDT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode ; CR661+Adapter
Plane : E2
Scanner : A3

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 4 rows of peak data.

Remark:

- 1. #2: MS Signal
2. #3: BS Signal

Data: 14 File: D:\Project\2007Q2\2571710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08



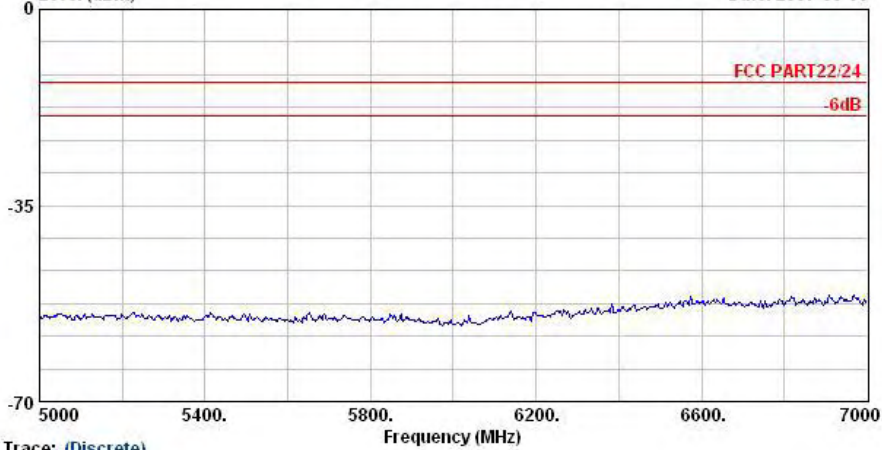
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EDT : PDA
Power : 120Vac/60Hz
Model : FG 710211-01
Memo : PCS 1900 Link Mode ; CR661+Adapter
Plane : E2
Scanner : A3

Table with 7 columns: Freq (MHz), Level (dBm), Over Limit (dB), Limit Line (dBm), Read Level (dBm), Factor (dB), Remark. Contains 1 row of peak data.



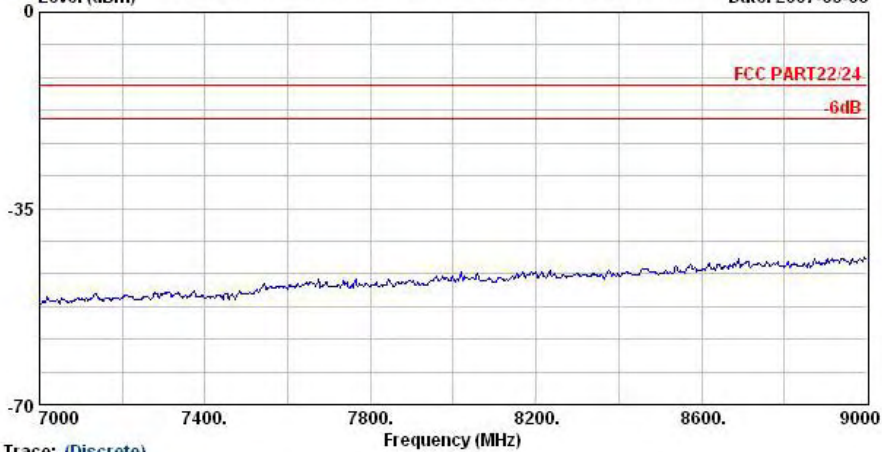
Data: 15 File: D:\Project\2007Q2\2007-05-08\710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08



Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

Data: 16 File: D:\Project\2007Q2\2007-05-08\710211-01\Part24E\529\Part24E-A3.EMI (20) Date: 2007-05-08



Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS VERTICAL
 EUT : PDA
 Power : 120Vac/60Hz
 Model : FG 710211-01
 Memo : PCS 1900 Link Mode ; CH661+Adapter
 Plane : E2
 Scanner : A3

Remark : There is no more obvious emission except the listings above.

4.7 Frequency Stability (Temperature Variation)

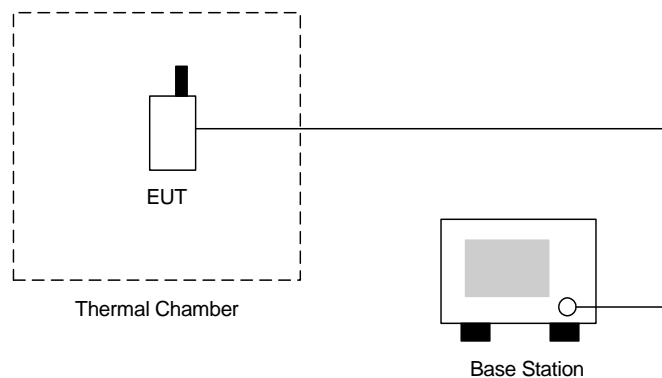
4.7.1 Measurement Instrument

As described in chapter 5 of this test report.

4.7.2 Test Procedure

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute.
3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. Test data was recorded.

4.7.3 Test Setup Layout



**4.7.4 Test Result**

- Test Mode : GSM850 (GSM) CH189

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-	-	2.5	Passed
-20	58	0.03		
-10	-52	-0.03		
0	45	0.02		
10	23	0.01		
20	38	0.02		
30	-35	-0.02		
40	41	0.02		
50	-51	-0.03		

Remark : The DUT can not be turned on at -30 .

- Test Mode : GSM850 (EDGE) CH189

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-	-	2.5	Passed
-20	50	0.03		
-10	-52	-0.03		
0	38	0.02		
10	28	0.01		
20	-35	-0.02		
30	38	0.02		
40	46	0.02		
50	53	0.03		

Remark : The DUT can not be turned on at -30 .



▪ Test Mode : PCS1900 (GSM) CH661

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-	-	2.5	Passed
-20	62	0.03		
-10	-53	-0.03		
0	55	0.03		
10	38	0.02		
20	22	0.01		
30	-40	-0.02		
40	-58	-0.03		
50	-57	-0.03		

Remark : The DUT can not be turned on at -30 .

▪ Test Mode : PCS1900 (EDGE) CH661

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-	-	2.5	Passed
-20	58	0.03		
-10	-52	-0.03		
0	48	0.03		
10	30	0.02		
20	25	0.01		
30	35	0.02		
40	-50	-0.03		
50	-55	-0.03		

Remark : The DUT can not be turned on at -30 .

4.8 Frequency Stability (Voltage Variation)

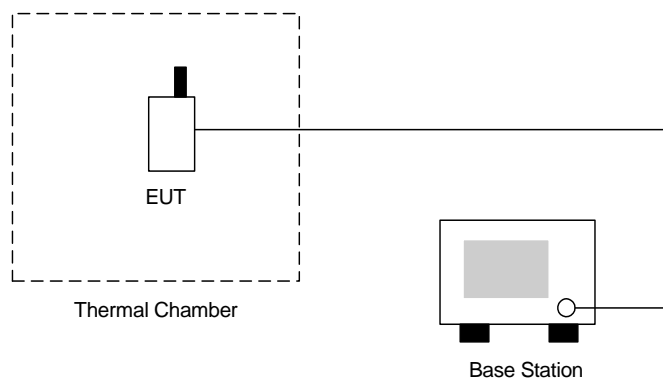
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

1. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

4.8.3 Test Setup Layout



4.8.4 Test Result

- Test Mode : GSM850 (GSM) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	28.0	0.01	2.5	Passed
BEP	-35.0	-0.02		
4.3	28.0	0.01		

- Test Mode : GSM850 (EDGE) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	20.0	0.01	2.5	Passed
BEP	-25.0	-0.01		
4.3	27.0	0.01		



- Test Mode : PCS1900 (GSM) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-22.0	-0.01	2.5	Passed
BEP	-42.0	-0.02		
4.3	27.0	0.01		

- Test Mode : PCS1900 (EDGE8) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	27.0	0.01	2.5	Passed
BEP	34.0	0.02		
4.3	-25.0	-0.01		

Remark:

- Normal Voltage=3.7V.
- Battery End Point (BEP)=3.3 V.



5 List of Measurement Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2006	Jul. 12, 2007	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	10094	1G~18G	Dec. 26, 2006	Dec. 25, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBEC K	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)



6 Uncertainty Evaluation

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

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability 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		

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

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability 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 $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	2.36				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	4.72				

END OF TEST REPORT