

5.4. Test Result of Radiated Emission

5.4.1. Test mode : BASE, CHANNEL 1

~~/~~ Test Distance : 3 M

~~/~~ Temperature : 26°C

~~/~~ Relative Humidity : 57 %

~~/~~ Test Date : Mar. 21, 2002

~~/~~ Emission level (dBuV/m) = 20 log Emission level (uV/m)

~~/~~ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin

2484.70 MHz / 48.96 dBuV/m (HORIZONTAL) Antenna Height 1 Meter, Turntable Degree 35 °.

~~/~~ Spurious Emissions:

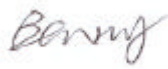
Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m) (uV/m)	Emission Level (dBuV/m) (uV/m)	Margin (dB)	Detect Mode
773.50	H	20.00	4.25	0.42	46.00 199.53	24.67 17.12	-21.33	Peak
800.80	H	20.31	4.35	15.48	46.00 199.53	40.14 101.62	-5.86	Peak
828.20	H	20.36	4.53	13.49	46.00 199.53	38.38 82.99	-7.62	Peak
773.50	V	20.00	4.25	0.72	46.00 199.53	24.97 17.72	-21.03	Peak
800.80	V	20.31	4.35	11.98	46.00 199.53	36.64 67.92	-9.36	Peak
828.20	V	20.36	4.53	7.83	46.00 199.53	32.72 43.25	-13.28	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m) (uV/m)	Emission Level (dBuV/m) (uV/m)	Margin (dB)	Detect Mode
1601.70	H	26.08	5.16	9.88	54.00 501.19	41.12 113.76	-12.88	A.V.
1601.70	H	26.08	5.16	17.74	74.00 5011.87	48.98 281.19	-25.02	Peak
2484.70	H	28.50	6.40	14.06	54.00 501.19	48.96 280.54	-5.04	A.V.
2484.70	H	28.50	6.40	20.26	74.00 5011.87	55.16 572.80	-18.84	Peak
2484.70	V	28.50	6.40	8.86	54.00 501.19	43.76 154.17	-10.24	A.V.
2487.70	V	28.50	6.40	17.25	74.00 5011.87	52.15 405.04	-21.85	Peak

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2402.60	H	28.48	6.30	52.37	94.00	50118.72	87.15	22777.18	-6.85	A.V.
2402.60	H	28.48	6.30	52.42	94.00	50118.72	87.20	22908.68	-6.80	Peak
2402.60	V	28.48	6.30	54.19	94.00	50118.72	88.97	28086.65	-5.03	A.V.
2402.60	V	28.48	6.30	54.19	94.00	50118.72	88.97	28086.65	-5.03	Peak
4805.20	H/V						-			Peak, A.V.
7207.80	H/V						-			Peak, A.V.
9610.40	H/V						-			Peak, A.V.
12013.00	H/V						-			Peak, A.V.
14415.60	H/V						-			Peak, A.V.
16818.20	H/V						-			Peak, A.V.
19220.80	H/V						-			Peak, A.V.
21623.40	H/V						-			Peak, A.V.
24026.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.2. Test mode : BASE, CHANNEL 40

✂ Test Distance : 3 M

✂ Temperature : 26°C

✂ Relative Humidity : 57 %

✂ Test Date : Mar. 21, 2002

✂ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✂ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**2486.60 MHz / 48.15 dBuV/m (HORIZONTAL) Antenna Height 1 Meter, Turntable Degree 70 °.**

✂ Spurious Emissions:

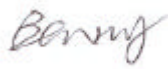
Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
774.10	H	20.00	4.25	-0.16	46.00	199.53	24.09	16.01	-21.91	Peak
801.50	H	20.31	4.35	14.33	46.00	199.53	38.99	89.02	-7.01	Peak
828.90	H	20.36	4.53	10.83	46.00	199.53	35.72	61.09	-10.28	Peak
774.10	V	20.00	4.25	0.87	46.00	199.53	25.12	18.03	-20.88	Peak
801.50	V	20.31	4.35	12.16	46.00	199.53	36.82	69.34	-9.18	Peak
828.90	V	20.36	4.53	7.33	46.00	199.53	32.22	40.83	-13.78	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1603.00	H	26.08	5.16	12.12	54.00	501.19	43.36	147.23	-10.64	A.V.
1603.00	H	26.08	5.16	16.36	74.00	5011.87	47.60	239.88	-26.40	Peak
2486.60	H	28.50	6.40	13.25	54.00	501.19	48.15	255.56	-5.85	A.V.
2486.60	H	28.50	6.40	19.14	74.00	5011.87	54.04	503.50	-19.96	Peak
2486.60	V	28.50	6.40	6.13	54.00	501.19	41.03	112.59	-12.97	A.V.
2486.60	V	28.50	6.40	16.12	74.00	5011.87	51.02	355.63	-22.98	Peak

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2404.50	H	28.48	6.30	54.45	94.00	50118.72	89.23	28940.10	-4.77	A.V.
2404.50	H	28.48	6.30	54.51	94.00	50118.72	89.29	29140.70	-4.71	Peak
2404.50	V	28.48	6.30	53.96	94.00	50118.72	88.74	27352.69	-5.26	A.V.
2404.50	V	28.48	6.30	53.95	94.00	50118.72	88.73	27321.21	-5.27	Peak
4809.00	H/V						-			Peak, A.V.
7213.50	H/V						-			Peak, A.V.
9618.00	H/V						-			Peak, A.V.
12022.50	H/V						-			Peak, A.V.
14427.00	H/V						-			Peak, A.V.
16831.50	H/V						-			Peak, A.V.
19236.00	H/V						-			Peak, A.V.
21640.50	H/V						-			Peak, A.V.
24045	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.3. Test mode : HANDSET, CHANNEL 1, NORMAL MODE

✎ Test Distance : 3 M

✎ Temperature : 26°C

✎ Relative Humidity : 57 %

✎ Test Date : Mar. 19, 2002

✎ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✎ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1649.30 MHz / 47.72 dBuV/m (VERTICAL) Antenna Height 1 Meter, Turntable Degree 64 °.**

✎ Spurious Emissions:

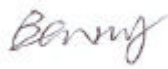
Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
797.30	H	20.27	4.33	10.50	46.00	199.53	35.10	56.89	-10.90	Peak
824.70	H	20.35	4.50	7.67	46.00	199.53	32.52	42.27	-13.48	Peak
852.00	H	20.40	4.68	2.34	46.00	199.53	27.42	23.50	-18.58	Peak
797.30	V	20.27	4.33	6.95	46.00	199.53	31.55	37.80	-14.45	Peak
824.70	V	20.35	4.50	4.17	46.00	199.53	29.02	28.25	-16.98	Peak
852.00	V	20.40	4.68	2.17	46.00	199.53	27.25	23.04	-18.75	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1649.30	H	26.37	5.24	11.22	54.00	501.19	42.83	138.52	-11.17	A.V.
1649.30	H	26.37	5.24	16.43	74.00	5011.87	48.04	252.35	-25.96	Peak
1594.60	V	26.08	5.16	13.75	54.00	501.19	44.99	177.62	-9.01	A.V.
1594.60	V	26.08	5.16	19.42	74.00	5011.87	50.66	341.19	-23.34	Peak
1649.30	V	26.37	5.24	19.37	74.00	5011.87	50.98	354.00	-23.02	Peak
1649.30	V	26.37	5.24	16.11	54.00	501.19	47.72	243.22	-6.28	A.V.

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2474.00	H	28.49	6.36	47.14	94.00	50118.72	81.99	12574.77	-12.01	A.V.
2474.00	H	28.49	6.36	47.27	94.00	50118.72	82.12	12764.39	-11.88	Peak
2474.00	V	28.49	6.36	39.76	94.00	50118.72	74.61	5376.50	-19.39	A.V.
2474.00	V	28.49	6.36	40.06	94.00	50118.72	74.91	5565.45	-19.09	Peak
4948.00	H/V						-			Peak, A.V.
7422.00	H/V						-			Peak, A.V.
9896.00	H/V						-			Peak, A.V.
12370.00	H/V						-			Peak, A.V.
14844.00	H/V						-			Peak, A.V.
17318.00	H/V						-			Peak, A.V.
19792.00	H/V						-			Peak, A.V.
22266.00	H/V						-			Peak, A.V.
24740.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.4. Test mode : HANDSET, CHANNEL 1, VERTICAL MODE

✍ Test Distance : 3 M

✍ Temperature : 26°C

✍ Relative Humidity : 57 %

✍ Test Date : Mar. 19, 2002

✍ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✍ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1649.30 MHz / 51.23 dBuV/m (HORIZONTAL) Antenna Height 1 Meter, Turntable Degree 27 °.**

✍ Spurious Emissions:

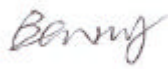
Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
797.30	H	20.27	4.33	5.95	46.00	199.53	30.55	33.69	-15.45	Peak
824.70	H	20.35	4.50	3.34	46.00	199.53	28.19	25.67	-17.81	Peak
852.00	H	20.40	4.68	2.00	46.00	199.53	27.08	22.59	-18.92	Peak
797.30	V	20.27	4.33	10.04	46.00	199.53	34.64	53.95	-11.36	Peak
824.70	V	20.35	4.50	7.84	46.00	199.53	32.69	43.10	-13.31	Peak
852.00	V	20.40	4.68	3.17	46.00	199.53	28.25	25.85	-17.75	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1594.60	H	26.08	5.16	11.75	54.00	501.19	42.99	141.09	-11.01	A.V.
1594.60	H	26.08	5.16	17.66	74.00	5011.87	48.90	278.61	-25.10	Peak
1649.30	H	26.37	5.24	22.59	74.00	5011.87	54.20	512.86	-19.80	Peak
1649.30	H	26.37	5.24	19.62	54.00	501.19	51.23	364.33	-2.77	A.V.
1649.30	V	26.37	5.24	17.03	74.00	5011.87	48.64	270.40	-25.36	Peak
1649.30	V	26.37	5.24	12.57	54.00	501.19	44.18	161.81	-9.82	A.V.

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2474.00	H	28.49	6.36	48.30	94.00	50118.72	83.15	14371.43	-10.85	A.V.
2474.00	H	28.49	6.36	48.38	94.00	50118.72	83.23	14504.41	-10.77	Peak
2474.00	V	28.49	6.36	50.12	94.00	50118.72	84.97	17721.48	-9.03	A.V.
2474.00	V	28.49	6.36	50.16	94.00	50118.72	85.01	17803.28	-8.99	Peak
4948.00	H/V						-			Peak, A.V.
7422.00	H/V						-			Peak, A.V.
9896.00	H/V						-			Peak, A.V.
12370.00	H/V						-			Peak, A.V.
14844.00	H/V						-			Peak, A.V.
17318.00	H/V						-			Peak, A.V.
19792.00	H/V						-			Peak, A.V.
22266.00	H/V						-			Peak, A.V.
24740.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.5. Test mode : HANDSET, CHANNEL 1, HORIZONTAL MODE

✎ Test Distance : 3 M

✎ Temperature : 26°C

✎ Relative Humidity : 57 %

✎ Test Date : Mar. 19, 2002

✎ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✎ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1649.30 MHz / 48.22 dBuV/m (VERTICAL) Antenna Height 1 Meter, Turntable Degree 60 °.**

✎ Spurious Emissions:

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m) (uV/m)	Emission Level (dBuV/m) (uV/m)	Margin (dB)	Detect Mode
797.30	H	20.27	4.33	8.17	46.00 199.53	32.77 43.50	-13.23	Peak
824.70	H	20.35	4.50	5.50	46.00 199.53	30.35 32.92	-15.65	Peak
852.00	H	20.40	4.68	3.17	46.00 199.53	28.25 25.85	-17.75	Peak
797.30	V	20.27	4.33	5.45	46.00 199.53	30.05 31.81	-15.95	Peak
824.70	V	20.35	4.50	3.84	46.00 199.53	28.69 27.20	-17.31	Peak
852.00	V	20.40	4.68	1.84	46.00 199.53	26.92 22.18	-19.08	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m) (uV/m)	Emission Level (dBuV/m) (uV/m)	Margin (dB)	Detect Mode
1649.30	H	26.37	5.24	12.28	54.00 501.19	43.89 156.49	-10.11	A.V.
1649.30	H	26.37	5.24	18.57	74.00 5011.87	50.18 322.85	-23.82	Peak
1594.60	V	26.08	5.16	13.39	54.00 501.19	44.63 170.41	-9.37	A.V.
1594.60	V	26.08	5.16	17.34	74.00 5011.87	48.58 268.53	-25.42	Peak
1649.30	V	26.37	5.24	19.91	74.00 5011.87	51.52 376.70	-22.48	Peak
1649.30	V	26.37	5.24	16.61	54.00 501.19	48.22 257.63	-5.78	A.V.

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2474.00	H	28.49	6.36	48.48	94.00	50118.72	83.33	14672.36	-10.67	A.V.
2474.00	H	28.49	6.36	48.54	94.00	50118.72	83.39	14774.06	-10.61	Peak
2474.00	V	28.49	6.36	45.59	94.00	50118.72	80.44	10519.62	-13.56	A.V.
2474.00	V	28.49	6.36	45.65	94.00	50118.72	80.50	10592.54	-13.50	Peak
4948.00	H/V						-			Peak, A.V.
7422.00	H/V						-			Peak, A.V.
9896.00	H/V						-			Peak, A.V.
12370.00	H/V						-			Peak, A.V.
14844.00	H/V						-			Peak, A.V.
17318.00	H/V						-			Peak, A.V.
19792.00	H/V						-			Peak, A.V.
22266.00	H/V						-			Peak, A.V.
24740.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 
Benny Lee

5.4.6. Test mode : HANDSET, CHANNEL 40, NORMAL MODE

✍ Test Distance : 3 M

✍ Temperature : 26°C

✍ Relative Humidity : 57 %

✍ Test Date : Mar. 20, 2002

✍ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✍ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1595.90 MHz / 49.28 dBuV/m (VERTICAL) Antenna Height 1 Meter, Turntable Degree 55°.**

✍ Spurious Emissions:

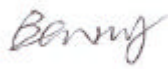
Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
797.90	H	20.30	4.33	12.67	46.00	199.53	37.30	73.28	-8.70	Peak
825.30	H	20.35	4.51	7.66	46.00	199.53	32.52	42.27	-13.48	Peak
852.70	H	20.41	4.69	1.48	46.00	199.53	26.58	21.33	-19.42	Peak
797.90	V	20.30	4.33	6.34	46.00	199.53	30.97	35.36	-15.03	Peak
825.30	V	20.35	4.51	3.66	46.00	199.53	28.52	26.67	-17.48	Peak
852.70	V	20.41	4.69	2.67	46.00	199.53	27.77	24.46	-18.23	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1650.60	H	26.37	5.24	10.24	54.00	501.19	41.85	123.74	-12.15	A.V.
1650.60	H	26.37	5.24	15.42	74.00	5011.87	47.03	224.65	-26.97	Peak
1595.90	V	26.08	5.16	18.04	54.00	501.19	49.28	291.07	-4.72	A.V.
1595.90	V	26.08	5.16	13.59	74.00	5011.87	44.83	174.38	-29.17	Peak
1650.60	V	26.37	5.24	19.94	74.00	5011.87	51.55	378.01	-22.45	Peak
1650.60	V	26.37	5.24	16.17	54.00	501.19	47.78	244.91	-6.22	A.V.

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2475.90	H	28.49	6.38	45.76	94.00	50118.72	80.63	10752.27	-13.37	A.V.
2475.90	H	28.49	6.38	45.90	94.00	50118.72	80.77	10926.98	-13.23	Peak
2475.90	V	28.50	6.38	40.58	94.00	50118.72	75.46	5929.25	-18.54	A.V.
2475.90	V	28.50	6.38	40.91	94.00	50118.72	75.79	6158.86	-18.21	Peak
4951.80	H/V						-			Peak, A.V.
7427.70	H/V						-			Peak, A.V.
9903.60	H/V						-			Peak, A.V.
12379.50	H/V						-			Peak, A.V.
14855.40	H/V						-			Peak, A.V.
17331.30	H/V						-			Peak, A.V.
19807.20	H/V						-			Peak, A.V.
22283.10	H/V						-			Peak, A.V.
24759.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.7. Test mode : HANDSET, CHANNEL 40, VERTICAL MODE

✍ Test Distance : 3 M

✍ Temperature : 26°C

✍ Relative Humidity : 57 %

✍ Test Date : Mar. 21, 2002

✍ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✍ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1650.60 MHz / 49.91 dBuV/m (VERTICAL) Antenna Height 1 Meter, Turntable Degree 88 °.**

✍ Spurious Emissions:

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
797.90	H	20.30	4.33	3.84	46.00	199.53	28.47	26.52	-17.53	Peak
825.30	H	20.35	4.51	1.33	46.00	199.53	26.19	20.39	-19.81	Peak
852.70	H	20.41	4.69	-0.85	46.00	199.53	24.25	16.31	-21.75	Peak
797.90	V	20.30	4.33	10.17	46.00	199.53	34.80	54.95	-11.20	Peak
825.30	V	20.35	4.51	5.16	46.00	199.53	30.02	31.70	-15.98	Peak
852.70	V	20.41	4.69	0.98	46.00	199.53	26.08	20.14	-19.92	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1650.60	H	26.37	5.24	17.08	54.00	501.19	48.69	271.96	-5.31	A.V.
1650.60	H	26.37	5.24	19.67	74.00	5011.87	51.28	366.44	-22.72	Peak
1650.60	V	26.37	5.24	21.06	74.00	5011.87	52.67	430.03	-21.33	Peak
1650.60	V	26.37	5.24	18.30	54.00	501.19	49.91	312.97	-4.09	A.V.
2393.80	V	28.48	6.30	7.99	54.00	501.19	42.77	137.56	-11.23	A.V.
2393.80	V	28.48	6.30	16.77	74.00	5011.87	51.55	378.01	-22.45	Peak

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2475.90	H	28.50	6.38	49.31	94.00	50118.72	84.19	16199.44	-9.81	A.V.
2475.90	H	28.50	6.38	49.32	94.00	50118.72	84.20	16218.10	-9.80	Peak
2475.90	V	28.50	6.38	48.21	94.00	50118.72	83.09	14272.50	-10.91	A.V.
2475.90	V	28.50	6.38	48.27	94.00	50118.72	83.15	14371.43	-10.85	Peak
4951.80	H/V						-			Peak, A.V.
7427.70	H/V						-			Peak, A.V.
9903.60	H/V						-			Peak, A.V.
12379.50	H/V						-			Peak, A.V.
14855.40	H/V						-			Peak, A.V.
17331.30	H/V						-			Peak, A.V.
19807.20	H/V						-			Peak, A.V.
22283.10	H/V						-			Peak, A.V.
24759.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

5.4.8. Test mode : HANDSET, CHANNEL 40, HORIZONTAL MODE

✎ Test Distance : 3 M

✎ Temperature : 26°C

✎ Relative Humidity : 57 %

✎ Test Date : Mar. 19, 2002

✎ Emission level (dBuV/m) = 20 log Emission level (uV/m)

✎ Corrected Reading : Antenna Factor + Cable Loss + Reading = Emission

The Radiated Emission test was passed at minimum margin**1650.60 MHz / 50.45 dBuV/m (VERTICAL) Antenna Height 1 Meter, Turntable Degree 23 °.**

✎ Spurious Emissions:

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
797.90	H	20.30	4.33	14.34	46.00	199.53	38.97	88.82	-7.03	Peak
825.30	H	20.35	4.51	8.83	46.00	199.53	33.69	48.36	-12.31	Peak
852.70	H	20.41	4.69	1.44	46.00	199.53	26.54	21.23	-19.46	Peak
797.90	V	20.30	4.33	6.00	46.00	199.53	30.63	34.00	-15.37	Peak
825.30	V	20.35	4.51	3.16	46.00	199.53	28.02	25.18	-17.98	Peak
852.70	V	20.41	4.69	1.34	46.00	199.53	26.44	20.99	-19.56	Peak

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
1650.60	H	26.37	5.24	20.07	74.00	5011.87	51.68	383.71	-22.32	Peak
1650.60	H	26.37	5.24	16.69	54.00	501.19	48.30	260.02	-5.70	A.V.
2393.80	H	28.48	6.30	7.77	54.00	501.19	42.55	134.12	-11.45	A.V.
2393.80	H	28.48	3.30	19.16	74.00	5011.87	50.94	352.37	-23.06	Peak
1650.60	V	26.37	5.24	18.84	54.00	501.19	50.45	333.04	-3.55	A.V.
1650.60	V	26.37	5.24	21.96	74.00	5011.87	53.57	476.98	-20.43	Peak

 Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	(uV/m)	Emission Level (dBuV/m)	(uV/m)	Margin (dB)	Detect Mode
2475.90	H	28.50	6.38	50.88	94.00	50118.72	85.76	19408.86	-8.24	A.V.
2475.90	H	28.50	6.38	50.88	94.00	50118.72	85.76	19408.86	-8.24	Peak
2475.90	V	28.50	6.38	49.15	94.00	50118.72	84.03	15903.77	-9.97	A.V.
2475.90	V	28.50	6.38	49.22	94.00	50118.72	84.10	16032.45	-9.90	Peak
4951.80	H/V						-			Peak, A.V.
7427.70	H/V						-			Peak, A.V.
9903.60	H/V						-			Peak, A.V.
12379.50	H/V						-			Peak, A.V.
14855.40	H/V						-			Peak, A.V.
17331.30	H/V						-			Peak, A.V.
19807.20	H/V						-			Peak, A.V.
22283.10	H/V						-			Peak, A.V.
24759.00	H/V						-			Peak, A.V.

Remark " - ": The emission emitted by the EUT is too low to be measured except the emission listed above,

Test Engineer : 

Benny Lee

6. EMI Suppression Component List

No. EMI suppression component.

7. Antenna Factor & Cable Loss

Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)
30	17.8	0.7
35	15.1	0.8
40	12.7	0.8
45	10.2	0.8
50	6.6	0.8
55	6.0	0.9
60	5.4	1.0
65	5.1	1.0
70	4.8	1.0
75	5.8	1.1
80	6.8	1.2
85	7.7	1.2
90	8.6	1.2
95	9.6	1.2
100	10.4	1.2
110	11.0	1.3
120	11.6	1.3
130	11.2	1.5
140	10.5	1.5
150	9.8	1.6
160	9.4	1.7
170	9.0	1.8
180	8.7	1.8
190	8.8	1.7
200	8.8	1.8
220	10.2	1.8
240	11.4	2.0
260	12.2	2.2
280	12.6	2.2
300	12.9	2.2
320	13.5	2.3
340	14.0	2.5
360	14.6	2.7
380	15.1	2.8
400	15.7	2.8
450	16.6	3.0
500	17.5	3.2
550	18.1	3.3
600	18.6	3.5
650	18.9	3.7
700	19.1	4.0
750	19.7	4.2
800	20.3	4.3
850	20.4	4.7
900	20.5	5.0
950	21.0	4.8
1000	21.6	5.2
1000	24.3	4.1
2000	28.1	5.8
3000	30.3	7.2
4000	32.8	8.4
5000	33.6	9.6
6000	34.4	11.5
7000	35.4	11.7
8000	37.0	11.8
9000	38.3	13.5
10000	38.6	14.3

8. List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver (site 2)	HP	8591EM	3536A00672	9 KHz – 1.8 GHz	Aug. 28, 2001	Conduction
LISN (Support Unit) (site 2)	AFJ	AFJ LT32	32030012050	50 ohm / 50 uH	May 29, 2001	Conduction
LISN (EUT) (site 2)	Telemeter	NNB-2/16Z	99081	50 ohm / 50 uH	Dec. 17, 2001	Conduction
Spectrum Analyzer (Site 6)	HP	8560E	3728A03190	30KHz – 2.9GHz	Aug. 21, 2001	Radiation
Receiver (Site 6)	R&S	ESCS30	847793/003	9 K – 2.75 GHz	Dec. 29, 2001	Radiation
Amplifier (Site 6)	HP	87405A	3207A01437	100K - 3GHz	Aug. 07, 2001	Radiation
Bilog Antenna (Site 6)	CHASE	CBL6112A	2288	30MHz -2GHz	Jun. 19, 2001	Radiation
Half-wave dipole antenna (Site 6)	EMCO	3121C	9705-1285	28 M - 1GHz	May 17, 2001	Radiation
Turn Table (site 6)	EMCO	2080	9711-2021	0 ? 360 degree	N/A	Radiation
Antenna Mast (site 6)	EMCO	2075	9711-2115	1 m- 4 m	N/A	Radiation
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Jul. 13, 2001	Radiation
Amplifier	HP	85460A	3330a00104	9K – 6.5GHz	Jan. 15, 2002	Radiation
Receiver (Site 6)	HP	85462A	3325A00158	9 K – 6.5 GHz	Jan. 15, 2002	Radiation

Calibration Interval of instruments listed above is one year.

9. Uncertainty of Test Site

Uncertainty of Conducted Emission Measurement

Contribution	Probability Distribution	150KHz – 30MHz
Cable and I/P attenuator calibration	normal(k=2)	± 0.3
RCV/SPA specification	rectangular	± 2.5
LISN coupling specification	rectangular	± 1.5
Transducer factor frequency interpolation	rectangular	± 0.2
Mismatch Receiver VSWR $\gamma_1=0.09$ LISN VSWR $\gamma_2=0.33$ Uncertainty= $20\log(1-\gamma_1\gamma_2)$	U-shaped	0.2
combined standard uncertainty Ue(y)	normal	± 1.7
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	normal (k=2)	± 3.4

$$U = \sqrt{\{(0.3/2)^2 + (2.5^2 + 1.5^2 + 0.2^2)/3 + (0.2)^2/2\}} = 1.7$$

Uncertainty of Radiated Emission Measurement

Contribution	Probability Distribution	3m	10m
Antenna factor calibration	normal(k=2)	± 1.6	± 1.6
cable loss calibration	normal(k=2)	± 0.3	± 0.3
RCV/SPA specification	rectangular	± 2.5	± 2.5
Antenna Directivity	rectangular	± 3	± 0.5
Antenna Factor V.S. Height	rectangular	± 2	± 2
Antenna Factor Interpolation for Frequency	rectangular	± 0.25	± 0.25
site imperfection	rectangular	± 2	± 2
Mismatch Receiver VSWR $\gamma_1=0.09$ Antenna VSWR $\gamma_2=0.67$ Uncertainty= $20\log(1-\gamma_1\gamma_2)$	U-shaped	± 0.54	± 0.54
combined standard uncertainty Ue(y)	normal	± 2.9	± 2.4
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	normal (k=2)	± 5.8	± 4.8

$$U = \sqrt{\{(1.6/2)^2 + (0.3/2)^2 + (3^2 + 0.5^2 + 2^2 + 0.25^2 + 2^2)/3 + (0.54)^2/2\}} = 2.4 \text{ for 10m test distance}$$

$$U = \sqrt{\{(1.6/2)^2 + (0.3/2)^2 + (3^2 + 3^2 + 2^2 + 0.25^2 + 2^2)/3 + (0.54)^2/2\}} = 2.9 \text{ for 3m test distance}$$