

4.4 Powerline Conducted Emissions [Section 15.207 & 15.407 (b)(5)]

4.4.1 EUT Configuration

The EUT was set up on the non-conductive table that is 1.0 by 1.5 meter, 80cm above ground. The wall of the shielded room was located 40cm to the rear of the EUT.

Power to the EUT was provided through the LISN. The impedance vs. frequency characteristic of the LISN is complied with the limit used.

Both lines (neutral and hot) were connected to the LISN in series at testing. A coaxial-type connector which provides one 50 ohms terminating impedance was provided for connecting the test instrument. The excess length of the power cord was folded back and forth at the center of the lead so as to form a bundle not exceeding 40cm in length.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

If the EUT is a Personal Computer or a peripheral of personal computer, and the personal computer has an auxiliary AC outlet which can be used for providing power to an external monitor, then all measurements will be made with the monitor power from first the computer-mounted AC outlet and then a floor-mounted AC outlet.

4.4.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. The main power line conducted EMI tests were run on the hot and neutral conductors of the power cord and the results were recorded. The effect of varying the position of the interface cables has been investigated to find the configuration that produces maximum emission.

At the frequencies where the peak values of the emissions were higher than 6dB below the applicable limits, the emissions were also measured with the quasi-peak detectors. At the frequencies where the quasi-peak values of the emissions were higher than 6dB below the applicable average limits, the emissions were also measured with the average detectors.

The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.

4.4.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

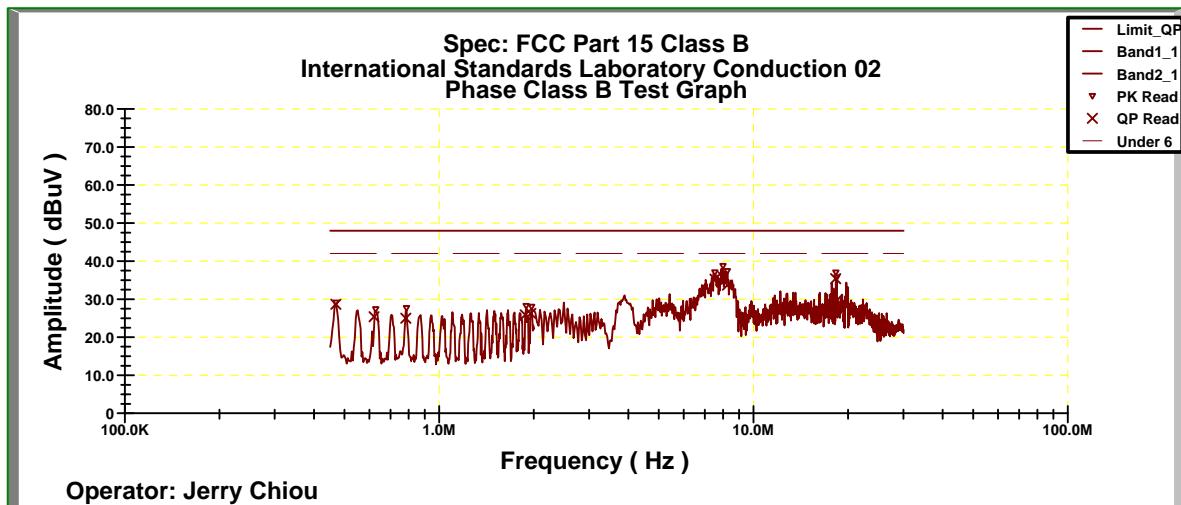
Frequency Range:	150 KHz--30MHz
Detector Function:	Quasi-Peak/Average
Bandwidth (RBW):	9KHz

4.4.4 Test Data:

Power Line Conducted Emissions (Hot)

Operator: Jerry Chiou
Temperature (C): 27
03:44:35 PM, Sunday, August 21, 2005
Humidity (%): 62

Frequency MHz	LISN Loss (dB)	Cable Loss (dB)	QP Corrct. Amp. (dBuV)	QP Limit (dBuV)	QP Margin (dB)
0.4691	0.11	0.07	28.64	47.96	-19.32
0.7833	0.16	0.07	24.96	47.96	-23.00
1.8778	0.21	0.09	25.87	47.96	-22.09
1.9562	0.20	0.09	26.22	47.96	-21.74
7.5384	0.26	0.18	35.25	47.96	-12.71
7.9952	0.27	0.19	35.81	47.96	-12.15
8.2609	0.28	0.19	33.67	47.96	-14.29
18.243	0.66	0.33	35.37	47.96	-12.59
18.427	0.67	0.33	29.77	47.96	-18.19



Power Line Conducted Emissions (Neutral)

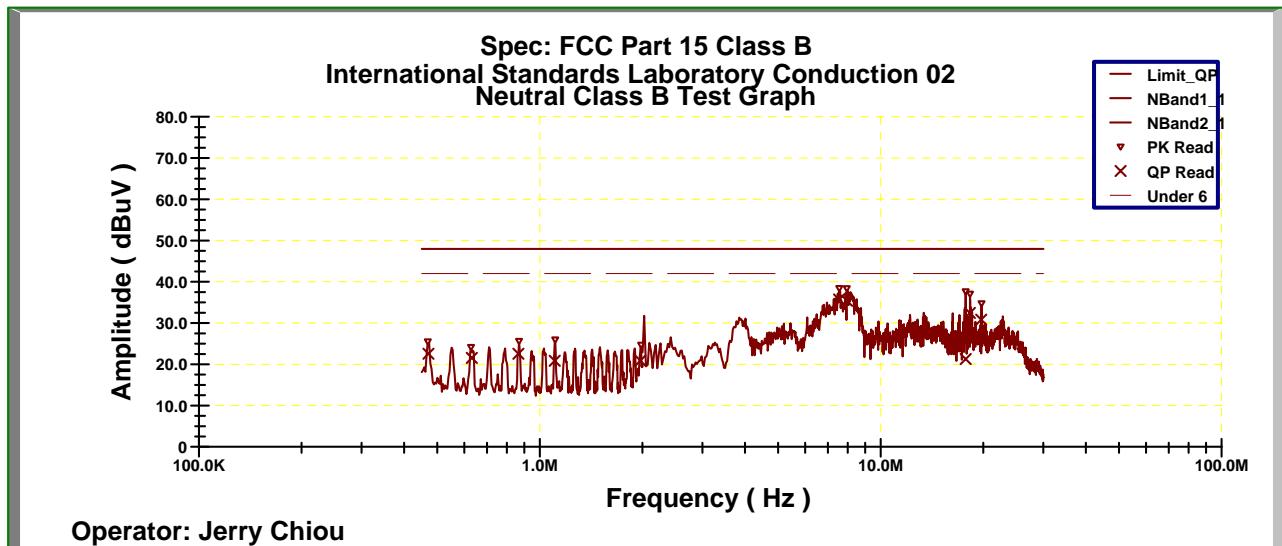
Operator: Jerry Chiou

Temperature (C): 27

04:01:47 PM, Sunday, August 21, 2005

Humidity (%): 62

Frequency	LISN Loss	Cable Loss	QP Corrct.	QP Limit	QP Margin
MHz	(dB)	(dB)	Amp. (dBuV)	(dBuV)	(dB)
0.4710	0.11	0.07	22.52	47.96	-25.44
0.8650	0.18	0.07	22.54	47.96	-25.42
1.1046	0.20	0.07	20.82	47.96	-27.14
1.9719	0.20	0.09	20.84	47.96	-27.12
7.5396	0.17	0.18	35.67	47.96	-12.29
7.9578	0.16	0.19	35.38	47.96	-12.58
17.726	0.21	0.32	21.24	47.96	-26.72
18.243	0.23	0.33	32.42	47.96	-15.54
19.708	0.29	0.34	30.78	47.96	-17.18



- * NOTE: During the test, the EMI receiver was set to Max. Hold then switch the EUT between Left and Right antenna Channel 1 , 4, 5, 8 ,9,10,12 of Normal Mode and Channel 1, 2, 3,4,5 of Turbo Mode to get the maximum reading of all these channels
Margin = Amplitude + Insertion Loss- Limit
A margin of -8dB means that the emission is 8dB below the limit

4.5 Radiated Emission Measurement [Section 15.209 & 15.407(b)(5)]

4.5.1 EUT Configuration

The equipment under test was set up on the 10 meter chamber with measurement distance of 3 meters. The EUT was placed on a non-conductive table 80cm above ground.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

4.5.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. We found the maximum readings by varying the height of antenna and then rotating the turntable. Both polarization of antenna, horizontal and vertical, are measured.

30M to 1GHz: The highest emissions between 30 MHz to 1000 MHz were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in quasi-peak mode to determine the precise amplitude of the emissions. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission.

1GHz – 40GHz: The highest emissions were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in peak mode to determine the precise amplitude of the emission. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission. During test the EMI receiver and spectrum was setup according to para. 6.5.3.

For the test of 2nd to 10th harmonics frequencies , the equipment setup was also refer to para.6.5.3. The frequencies were tested using Peak mode first, if the test data is higher than the emissions limit, an additional measurement using Average mode will be performed and the average reading will be compared to the limit and record in test report.

4.5.3 EMI Receiver/Spectrum Analyzer Configuration

Frequency Range Tested:	30MHz~1000MHz
Detector Function:	Quasi-Peak Mode
Resolution Bandwidth (RBW):	120KHz
Video Bandwidth (VBW)	1MHz
Frequency Range Tested:	1GHz – 40 GHz
Detector Function:	Peak Mode
Resolution Bandwidth (RBW):	1MHz
Video Bandwidth (VBW)	3MHz
Frequency Range Tested:	30MHz – 40 GHz
Detector Function:	Average Mode
Resolution Bandwidth (RBW):	1MHz
Video Bandwidth (VBW)	10 Hz

4.5.4 Test Data (30MHz – 1GHz) .

30M – 1GHz Open Field Radiated Emissions (Horizontal)

Operator: Jerry Chiou
 Temperature (C): 23
 Humidity (%): 54

04:11:19 PM, Saturday, August 20, 2005

Frequency	Rx Amp.	Ant Fact	CableLoss	PreAmpGain	Corrct. Emi.	Limit	Margin	Ant. Pos.	Table Pos.
MHz	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg)
131.85	14.95	11.11	2.17	0.00	28.24	43.50	-15.26	103.00	22.00
215.27	16.19	8.40	2.82	0.00	27.40	43.50	-16.10	196.00	207.00
239.52	15.53	10.14	3.03	0.00	28.71	46.00	-17.29	196.00	92.00
257.95	17.55	12.73	3.17	0.00	33.46	46.00	-12.54	196.00	10.00
263.77	11.99	13.15	3.20	0.00	28.34	46.00	-17.66	196.00	125.00
299.66	12.38	15.85	3.60	0.00	31.84	46.00	-14.16	196.00	304.00
323.91	13.45	16.04	3.87	0.00	33.36	46.00	-12.64	196.00	92.00
353.98	8.23	16.18	4.14	0.00	28.54	46.00	-17.46	103.00	22.00
366.59	7.86	16.10	4.22	0.00	28.18	46.00	-17.82	103.00	186.00
386.96	12.73	15.98	4.35	0.00	33.06	46.00	-12.94	196.00	190.00
517.91	4.77	17.83	5.33	0.00	27.93	46.00	-18.07	103.00	39.00
764.29	1.38	20.17	7.06	0.00	28.62	46.00	-17.38	103.00	72.00

30M – 1GHz Open Field Radiated Emissions (Vertical)

Operator: Jerry Chiou
 Temperature (C): 23
 Humidity (%): 54

04:11:19 PM, Saturday, August 20, 2005

Frequency	Rx Amp.	Ant Fact	CableLoss	PreAmpGain	Corrct. Emi.	Limit	Margin	Ant. Pos.	Table Pos.
MHz	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg)
37.76	8.91	13.54	1.10	0.00	23.56	40.00	-16.44	103.00	104.00
47.46	11.70	8.62	1.16	0.00	21.49	40.00	-18.51	103.00	333.00
112.45	11.44	11.52	2.03	0.00	24.99	43.50	-18.51	103.00	55.00
131.85	17.16	11.11	2.17	0.00	30.45	43.50	-13.05	103.00	22.00
215.27	15.02	8.40	2.82	0.00	26.24	43.50	-17.26	196.00	207.00
321.97	10.73	16.03	3.85	0.00	30.61	46.00	-15.39	196.00	108.00
387.93	12.70	15.97	4.36	0.00	33.03	46.00	-12.97	196.00	92.00
453.89	9.53	16.29	4.89	0.00	30.72	46.00	-15.28	103.00	6.00
517.91	8.19	17.83	5.33	0.00	31.34	46.00	-14.66	103.00	39.00
647.89	3.86	18.99	6.29	0.00	29.14	46.00	-16.86	103.00	219.00
663.41	2.50	19.00	6.39	0.00	27.89	46.00	-18.11	103.00	153.00
841.89	0.81	20.52	7.73	0.00	29.06	46.00	-16.94	103.00	88.00

* NOTE: During the pre-test, the EUT has been tested for Channel 1, 4, 5, 8, 9, 10, 12 of Normal Mode and Channel 1, 2, 3, 4, 5 of Turbo mode and transmit from Left and Right antenna respectively to get all the critical emission frequencies. In the final test all the critical emission frequencies have been tested and the test data are listed above.

Margin=Corrected Amplitude–Limit

Corrected Amplitude = Radiated Amplitude + Antenna Correction Factor + Cable Loss - Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit

All frequencies from 30MHz to 1GHz have been tested

4.5.5 Test Data (1GHz – 40 GHz, Transmitting) .

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 1 : 5180 MHz

Operator: Jerry Chiou

RBW: 1MHz

Humidity (%): 41

Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1226.57	56.73 pk	25.54	2.20	34.05	50.41 pk	54.00	-3.59	74.00	--	102	96
1870.33	51.03 pk	29.91	2.50	34.93	48.52 pk	54.00	-5.48	74.00	--	100	52
5110.69	51.14 pk	35.69	2.43	37.91	51.35 pk	54.00	-2.65	74.00	--	100	32
8174.83	39.18 pk	40.98	2.70	34.92	47.94 pk	54.00	-6.06	74.00	--	101	214
10360.2	53.96 pk	39.51	3.28	34.55	62.20 pk	54.00	--	74.00	-11.80	100.00	21.00
10360.2	39.10 av	39.51	3.28	34.55	47.34 av	54.00	-6.66	74.00	--	100.00	21.00

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 1: 5180 MHz

Operator: Jerry Chiou

RBW: 1MHz

Humidity (%): 41

Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1463.94	56.53 pk	26.63	2.23	34.18	51.21 pk	54.00	-2.79	74.00	--	101	80
7987.81	40.13 pk	40.58	2.54	35.10	48.15 pk	54.00	-5.85	74.00	--	100	253
8625.87	38.98 pk	41.50	3.01	34.41	49.09 pk	54.00	-4.91	74.00	--	102	108
10360.6	52.59 pk	39.51	3.28	34.55	60.83 pk	54.00	--	74.00	-13.17	100.00	3.00
10360.6	37.16 av	39.51	3.28	34.55	45.40 av	54.00	-8.60	74.00	--	100.00	3.00

Note: “ * ”: Fundamental Frequency

“ pk ”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 4: 5240 MHz

Operator: Jerry Chiou

RBW: 1MHz

Humidity (%): 41

Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	54.82 pk	29.28	2.45	34.78	51.77 pk	54.00	-2.23	74.00	--	100	57
5143.06	51.25 pk	35.71	2.50	37.91	51.56 pk	54.00	-2.44	74.00	--	100	41
7714.49	40.33 pk	40.20	2.36	35.81	47.08 pk	54.00	-6.92	74.00	--	100	213
7786.41	40.42 pk	40.30	2.41	35.62	47.51 pk	54.00	-6.49	74.00	--	100	224
8128.07	39.92 pk	40.88	2.66	34.96	48.50 pk	54.00	-5.50	74.00	--	100	225
10480.8	50.89 pk	39.42	3.23	34.58	58.95 pk	54.00	--	74.00	-15.05	100	341
10480.8	36.95 av	39.42	3.23	34.58	45.02 av	54.00	-8.98	74.00	--	100	341

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 4: 5240 MHz

Operator: Jerry Chiou

RBW: 1MHz

Humidity (%): 41

Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
2449.35	51.64 pk	30.91	1.37	35.20	48.72 pk	54.00	-5.28	74.00	--	101	184
3585.81	52.13 pk	31.62	1.78	36.10	49.43 pk	54.00	-4.57	74.00	--	102	206
7495.1	41.27 pk	39.89	2.23	36.37	47.02 pk	54.00	-6.98	74.00	--	101	181
8088.51	39.60 pk	40.79	2.63	35.00	48.03 pk	54.00	-5.97	74.00	--	100	234
10480.7	52.48 pk	39.42	3.23	34.58	60.54 pk	54.00	--	74.00	-13.46	100	358
10480.7	38.05 av	39.42	3.23	34.58	46.12 av	54.00	-7.88	74.00	--	100	358

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss+Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 5 : 5260 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	54.76 pk	29.28	2.45	34.78	51.70 pk	54.00	-2.30	74.00	--	100	57
2114.89	49.76 pk	30.98	2.25	35.18	47.80 pk	54.00	-6.20	74.00	--	100	79
5042.36	47.83 pk	35.63	2.27	37.91	47.82 pk	54.00	-6.18	74.00	--	100	12
7703.7	40.73 pk	40.19	2.35	35.83	47.44 pk	54.00	-6.56	74.00	--	100	212
8063.34	40.07 pk	40.74	2.61	35.02	48.40 pk	54.00	-5.60	74.00	--	100	240
10520.5	50.80 pk	39.40	3.23	34.59	58.84 pk	54.00	--	74.00	-15.16	100.00	53.00
10520.5	35.49 av	39.40	3.23	34.59	43.53 av	54.00	-10.47	74.00	--	100.00	53.00

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 5 : 5260 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1187.01	56.22 pk	25.36	2.19	34.03	49.74 pk	54.00	-4.26	74.00	--	102	99
1794.81	54.04 pk	29.28	2.45	34.78	50.99 pk	54.00	-3.01	74.00	--	100	57
3582.22	51.94 pk	31.62	1.78	36.09	49.24 pk	54.00	-4.76	74.00	--	102	207
7362.04	40.73 pk	39.68	2.46	36.61	46.27 pk	54.00	-7.73	74.00	--	101	162
8020.18	39.70 pk	40.64	2.57	35.05	47.86 pk	54.00	-6.14	74.00	--	100	250
10520.3	50.65 pk	39.40	3.23	34.59	58.69 pk	54.00	--	74.00	-15.31	100	343
10520.3	36.84 av	39.40	3.23	34.59	44.88 av	54.00	-9.12	74.00	--	100	343

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 8: 5320 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1208.59	54.21 pk	25.46	2.20	34.04	47.82 pk	54.00	-6.18	74.00	--	102	98
1798.4	53.73 pk	29.31	2.45	34.78	50.71 pk	54.00	-3.29	74.00	--	100	57
2118.48	49.53 pk	30.98	2.24	35.18	47.56 pk	54.00	-6.44	74.00	--	100	80
5153.85	50.01 pk	35.72	2.54	37.91	50.36 pk	54.00	-3.64	74.00	--	100	44
8048.95	40.16 pk	40.71	2.59	35.03	48.43 pk	54.00	-5.57	74.00	--	100	243
8138.86	39.50 pk	40.91	2.67	34.95	48.12 pk	54.00	-5.88	74.00	--	100	222
10641.6	47.91 pk	39.43	3.28	34.62	55.99 pk	54.00	--	74.00	-18.01	100.00	51.00
10641.6	32.66 av	39.43	3.28	34.62	40.75 av	54.00	-13.25	74.00	--	100.00	51.00

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 8: 5320 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	54.58 pk	29.28	2.45	34.78	51.52 pk	54.00	-2.48	74.00	--	100	57
3100.3	50.20 pk	31.18	1.50	34.97	47.91 pk	54.00	-6.09	74.00	--	103	331
3589.41	53.11 pk	31.63	1.78	36.11	50.40 pk	54.00	-3.60	74.00	--	102	206
7466.33	41.44 pk	39.85	2.28	36.42	47.14 pk	54.00	-6.86	74.00	--	101	177
8160.44	39.57 pk	40.95	2.69	34.94	48.28 pk	54.00	-5.72	74.00	--	100	217
10641.5	46.59 pk	39.43	3.28	34.62	54.67 pk	54.00	--	74.00	-19.33	100	335
10641.5	33.46 av	39.43	3.28	34.62	41.55 av	54.00	-12.45	74.00	--	100	335

Note: “ * ”: Fundamental Frequency

“ pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 9: 5745 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1791.21	54.29 pk	29.25	2.45	34.77	51.21 pk	54.00	-2.79	74.00	--	100	57
1866.73	53.45 pk	29.88	2.50	34.92	50.92 pk	54.00	-3.08	74.00	--	100	52
2988.81	50.63 pk	31.10	1.45	34.76	48.42 pk	54.00	-5.58	74.00	--	103	353
3826.77	54.88 pk	31.96	1.97	36.83	51.97 pk	54.00	-2.03	74.00	--	102	145
5081.92	51.20 pk	35.67	2.36	37.91	51.31 pk	54.00	-2.69	74.00	--	100	24
7998.6	40.23 pk	40.60	2.55	35.07	48.30 pk	54.00	-5.70	74.00	--	100	255
17237.2	41.06 pk	45.22	3.43	32.15	57.56 pk	54.00	--	74.00	-16.44	100.00	27.00
17237.2	24.52 av	45.22	3.43	32.15	41.02 av	54.00	-12.98	74.00	--	100.00	27.00

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 9: 5745 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1791.21	54.48 pk	29.25	2.45	34.77	51.40 pk	54.00	-2.60	74.00	--	100	57
2992.41	51.68 pk	31.10	1.45	34.76	49.47 pk	54.00	-4.53	74.00	--	103	355
8056.14	39.55 pk	40.72	2.60	35.02	47.85 pk	54.00	-6.15	74.00	--	100	242
11490.5	54.17 pk	40.68	3.08	34.87	63.06 pk	54.00	--	74.00	-10.94	100.00	360
11490.5	36.67 av	40.68	3.08	34.87	45.56 av	54.00	-8.44	74.00	--	100.00	360
17235.4	42.22 pk	45.22	3.43	32.15	58.72 pk	54.00	--	74.00	-15.28	100.00	333
17235.4	24.99 av	45.22	3.43	32.15	41.49 av	54.00	-12.51	74.00	--	100.00	333

Note: “ * ”: Fundamental Frequency

“ pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss+Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 10 : 5765 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1791.21	53.65 pk	29.25	2.45	34.77	50.57 pk	54.00	-3.43	74.00	--	100	57
3841.16	54.86 pk	31.98	1.98	36.88	51.94 pk	54.00	-2.06	74.00	--	102	141
11529.7	54.75 pk	40.80	3.10	34.90	63.75 pk	54.00	--	74.00	-10.25	100.00	3.00
11529.7	41.98 av	40.80	3.10	34.90	50.98 av	54.00	-3.02	74.00	--	100.00	3.00
17293.5	40.42 pk	45.35	3.38	32.23	56.92 pk	54.00	--	74.00	-17.08	100.00	63.00
17293.5	24.34 av	45.35	3.38	32.23	40.84 av	54.00	-13.16	74.00	--	100.00	63.00

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 10 : 5765 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1791.21	54.29 pk	29.25	2.45	34.77	51.21 pk	54.00	-2.79	74.00	--	100	57
2776.62	54.38 pk	31.01	1.41	34.95	51.85 pk	54.00	-2.15	74.00	--	102	287
3589.41	52.45 pk	31.63	1.78	36.11	49.75 pk	54.00	-4.25	74.00	--	102	206
5707.69	47.93 pk	35.92	3.02	37.99	48.87 pk	54.00	-5.13	74.00	--	100	203
11530.4	57.66 pk	40.80	3.11	34.90	66.67 pk	54.00	--	74.00	-7.33	100	355
11530.4	41.88 av	40.80	3.11	34.90	50.89 av	54.00	-3.11	74.00	--	100	355
17295.1	39.77 pk	45.35	3.38	32.23	56.27 pk	54.00	--	74.00	-17.73	100	334
17295.1	24.96 av	45.35	3.38	32.23	41.46 av	54.00	-12.54	74.00	--	100	334

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss+Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Normal Mode, Channel 12 : 5805 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	53.74 pk	29.28	2.45	34.78	50.69 pk	54.00	-3.31	74.00	--	100	57
3866.33	55.38 pk	32.01	2	36.95	52.44 pk	54.00	-1.56	74.00	--	102	134
11610.3	53.80 pk	41.05	3.2	34.97	63.08 pk	54.00	--	74.00	-10.92	100	343
11610.3	41.27 av	41.05	3.2	34.97	50.55 av	54.00	-3.45	74.00	--	100	343
17416	40.80 pk	45.62	3.28	32.39	57.31 pk	54.00	--	74.00	-16.69	100	28
17416	25.20 av	45.62	3.28	32.39	41.71 av	54.00	-12.29	74.00	--	100	28

1GHz~ 40 GHz (Vertical), Normal Mode, Channel 12 : 5805 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1791.21	53.29 pk	29.25	2.45	34.77	50.21 pk	54.00	-3.79	74.00	--	100	57
2442.16	56.04 pk	30.91	1.36	35.2	53.11 pk	54.00	-20.89	74.00	--	101	182
2442.16	37.20 av	30.91	1.36	35.2	34.27 av	54.00	-19.73	74.00	--	101	182
5376.82	48.84 pk	35.9	2.82	37.91	49.65 pk	54.00	-4.35	74.00	--	100	108
8099.3	40.22 pk	40.82	2.64	34.99	48.69 pk	54.00	-5.31	74.00	--	100	232
11610.6	55.00 pk	41.05	3.2	34.97	64.28 pk	54.00	--	74.00	-9.72	100	352
11610.6	40.91 av	41.05	3.2	34.97	50.19 av	54.00	-3.81	74.00	--	100	352
17415.1	40.48 pk	45.61	3.28	32.39	56.99 pk	54.00	--	74.00	-17.01	100	335
17415.1	25.66 av	45.61	3.28	32.39	42.16 av	54.00	-11.84	74.00	--	100	335

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss+Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Turbo Mode, Channel 1: 5210 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	56.72 pk	29.28	2.45	34.78	53.67 pk	54.00	-20.33	74.00	--	100	57
1794.81	43.21 av	29.28	2.45	34.78	40.16 pk	54.00	-13.84	74.00	--	100	57
5355.24	48.38 pk	35.88	2.81	37.91	49.17 pk	54.00	-4.83	74.00	--	100	102
5384.02	47.02 pk	35.91	2.82	37.91	47.84 pk	54.00	-6.16	74.00	--	100	110
8023.78	40.54 pk	40.65	2.57	35.05	48.71 pk	54.00	-5.29	74.00	--	100	249
10417.5	49.50 pk	39.47	3.25	34.56	57.66 pk	54.00	--	74.00	-16.34	100	13
10417.5	32.68 av	39.47	3.25	34.56	40.84 av	54.00	-13.16	74.00	--	100	13

1GHz~ 40 GHz (Vertical), Turbo Mode, Channel 1: 5210 MHz

Operator: Jerry Chiou

RBW: 1MHz
 Humidity (%): 41
 Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	58.02 pk	29.28	2.45	34.78	54.96 pk	54.00	--	74.00	-19.04	100	57
1794.81	41.41 av	29.28	2.45	34.78	38.36 av	54.00	-15.64	74.00	--	100	57
3589.41	54.21 pk	31.63	1.78	36.11	51.51 pk	54.00	-2.49	74.00	--	102	206
5387.61	49.46 pk	35.91	2.82	37.91	50.28 pk	54.00	-3.72	74.00	--	100	111
7700.1	40.31 pk	40.18	2.35	35.84	47.00 pk	54.00	-7	74.00	--	100	211
10417.4	51.20 pk	39.47	3.25	34.56	59.36 pk	54.00	--	74.00	-14.64	100	261
10417.4	34.64 av	39.47	3.25	34.56	42.80 av	54.00	-11.2	74.00	--	100	261

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal) , Turbo Mode, Channel 2 : 5250 MHZ

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1873.93	53.68 pk	29.94	2.51	34.93	51.19 pk	54.00	-2.81	74.00	--	100	52
5121.48	51.58 pk	35.7	2.45	37.91	51.82 pk	54.00	-2.18	74.00	--	100	35
8038.16	39.72 pk	40.68	2.58	35.04	47.95 pk	54.00	-6.05	74.00	--	100	246
10502.5	46.73 pk	39.4	3.22	34.59	54.77 pk	54.00	--	74.00	-19.23	100	349
10502.5	29.75 av	39.4	3.22	34.59	37.78 av	54.00	-16.22	74.00	--	100	349

1GHz~ 40 GHz (Vertical), Turbo Mode, Channel 2: 5250 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
5376.82	50.38 pk	35.9	2.82	37.91	51.18 pk	54.00	-2.82	74.00	--	100	108
7336.86	42.19 pk	39.64	2.51	36.65	47.68 pk	54.00	-6.32	74.00	--	101	158
10502.3	51.69 pk	39.4	3.22	34.59	59.73 pk	54.00	--	74.00	-14.27	100	260
10502.3	36.26 av	39.4	3.22	34.59	44.29 av	54.00	-9.71	74.00	--	100	260

Note: “*”: Fundamental Frequency

“pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Turbo Mode, Channel 3 : 5290 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
1794.81	55.37 pk	29.28	2.45	34.78	52.31 pk	54.00	-1.69	74.00	--	100	57
2118.48	49.38 pk	30.98	2.24	35.18	47.41 pk	54.00	-6.59	74.00	--	100	80
5117.88	48.47 pk	35.69	2.45	37.91	48.70 pk	54.00	-5.3	74.00	--	100	34
5402	51.13 pk	35.92	2.82	37.91	51.96 pk	54.00	-2.04	74.00	--	100	115
8038.16	39.52 pk	40.68	2.58	35.04	47.75 pk	54.00	-6.25	74.00	--	100	246
10580.2	45.90 pk	39.42	3.25	34.61	53.96 pk	54.00	-0.04	74.00	--	100	197

1GHz~ 40 GHz (Vertical) , Turbo Mode, Channel 3: 5290 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
2442.16	55.23 pk	30.91	1.36	35.2	52.31 pk	54.00	-1.69	74.00	--	101	182
5387.61	50.06 pk	35.91	2.82	37.91	50.88 pk	54.00	-3.12	74.00	--	100	111
8102.9	39.70 pk	40.83	2.64	34.98	48.18 pk	54.00	-5.82	74.00	--	100	231
10581.1	51.07 pk	39.42	3.25	34.61	59.13 pk	54.00	--	74.00	-14.87	100	238
10581.1	33.52 av	39.42	3.25	34.61	41.58 av	54.00	-12.42	74.00	--	100	238

Note: “ * ”: Fundamental Frequency

“ pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal), Turbo Mode, Channel 4 : 5760 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
3837.56	53.91 pk	31.97	1.98	36.87	50.99 pk	54.00	-3.01	74.00	--	102	142
5121.48	51.63 pk	35.7	2.45	37.91	51.87 pk	54.00	-2.13	74.00	--	100	35
7962.64	39.45 pk	40.55	2.53	35.17	47.36 pk	54.00	-6.64	74.00	--	100	250
11522.8	48.33 pk	40.77	3.1	34.89	57.31 pk	54.00	--	74.00	-16.69	100	212
11522.8	31.96 av	40.77	3.1	34.89	40.94 av	54.00	-13.06	74.00	--	100	212

1GHz~ 40 GHz (Vertical) , Turbo Mode, Channel 4: 5760 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
3096.7	52.91 pk	31.18	1.5	34.96	50.63 pk	54.00	-3.37	74.00	--	103	332
5384.02	50.70 pk	35.91	2.82	37.91	51.52 pk	54.00	-2.48	74.00	--	100	110
7977.02	40.70 pk	40.57	2.53	35.13	48.67 pk	54.00	-5.33	74.00	--	100	252
8160.44	39.92 pk	40.95	2.69	34.94	48.63 pk	54.00	-5.37	74.00	--	100	217
11520.8	52.16 pk	40.77	3.09	34.89	61.13 pk	54.00	--	74.00	-12.87	100	265
11520.8	35.12 av	40.77	3.09	34.89	44.09 av	54.00	-9.91	74.00	--	100	265

Note: “ * ”: Fundamental Frequency

“ pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss+Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

1GHz~ 40 GHz (Horizontal) , Turbo Mode, Channel 5 : 5800 MHZ

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
2118.48	48.51 pk	30.98	2.24	35.18	46.54 pk	54.00	-7.46	74.00	--	100	80
2988.81	49.89 pk	31.1	1.45	34.76	47.67 pk	54.00	-6.33	74.00	--	103	353
3862.74	48.95 pk	32.01	2	36.94	46.02 pk	54.00	-7.98	74.00	--	102	135
5391.21	49.83 pk	35.91	2.82	37.91	50.65 pk	54.00	-3.35	74.00	--	100	112
8142.46	39.31 pk	40.91	2.68	34.95	47.95 pk	54.00	-6.05	74.00	--	100	222
11597.6	46.55 pk	41.01	3.18	34.96	55.79 pk	54.00	--	74.00	-18.21	100	201
11597.6	29.38 av	41.01	3.18	34.96	37.61 av	54.00	-16.39	74.00	--	100	201

1GHz~ 40 GHz (Vertical), Turbo Mode, Channel 5: 5800 MHz

Operator: Jerry Chiou

RBW: 1MHz
Humidity (%): 41
Temperature (C): 26

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Average Limit	Average Margin	Peak Limit	Peak Margin	Ant. Tower	Turn Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dBuV/m	dB	cm	deg
3100.3	51.48 pk	31.18	1.5	34.97	49.19 pk	54.00	-4.81	74.00	--	103	331
5376.82	50.04 pk	35.9	2.82	37.91	50.85 pk	54.00	-3.15	74.00	--	100	108
7394.41	41.19 pk	39.73	2.41	36.55	46.78 pk	54.00	-7.22	74.00	--	101	167
7995	39.59 pk	40.59	2.55	35.08	47.64 pk	54.00	-6.36	74.00	--	100	254
11596.1	48.52 pk	41.01	3.18	34.96	57.75 pk	54.00	--	74.00	-16.25	100	253
11596.1	30.61 av	41.01	3.18	34.96	39.84 av	54.00	-14.16	74.00	--	100	253

Note: “ * ”: Fundamental Frequency

“ pk”: peak reading

“av”: average reading

The Spectrum noise level+Correction Factor<Limit-6 dB

Margin = Corrected Amplitude – Limit

Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 40 GHz have been tested.

4.6 Band Edge Measurement (Section 15.407 (b) (1) (2))

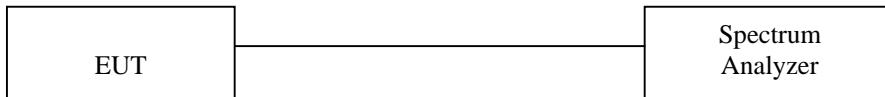
4.6.1 Test Procedure (Conducted)

1. The Transmitter output of EUT was connected to the spectrum analyzer.
Equipment mode: Spectrum analyzer

Peak Mode:	
SPAN	100MHz
RBW	1MHz
VBW	1MHz
Sweep Time	200msec.

2. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed.
3. Find the next peak frequency outside the operation frequency band.

4.6.2 Test Setup (Conducted)



4.6.3 Test Data (conducted):

Band Edge measurement (Conducted)

Temperature ():25

Test Engineer:Jerry Chiou

Humidity (%):50

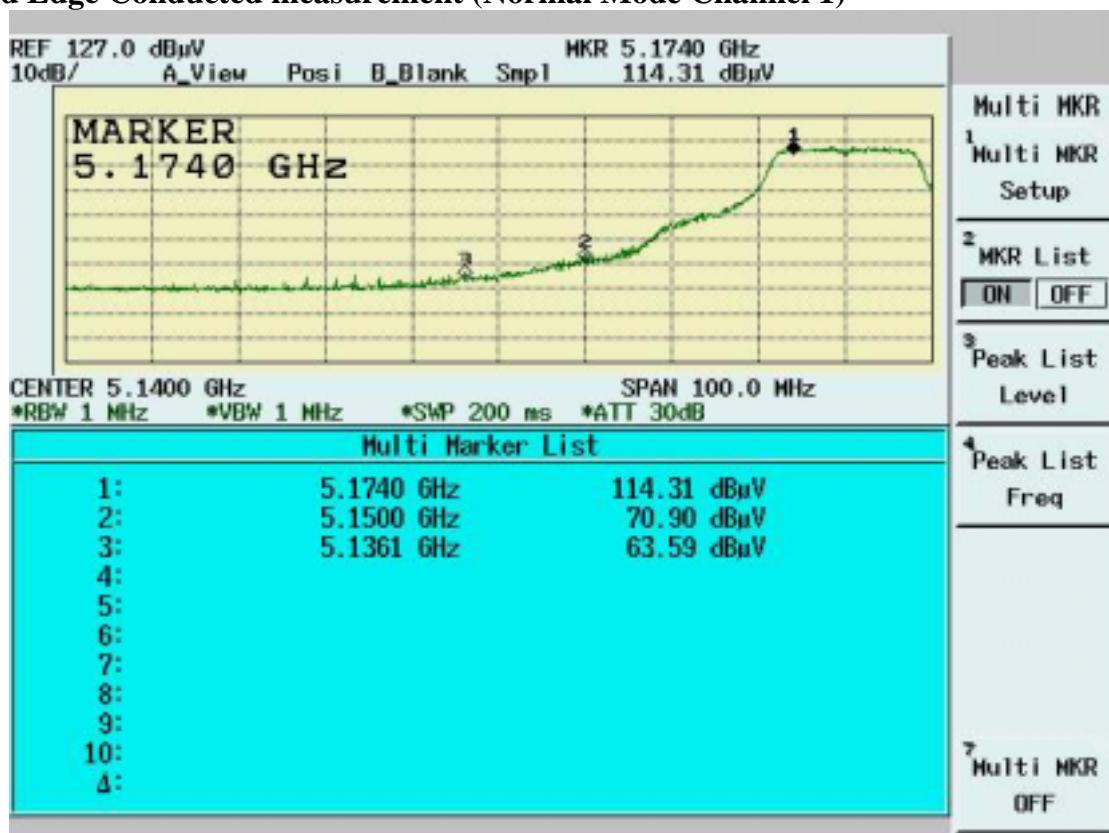
Outside Channel	Frequency (MHz)	Spectrum Reading (dBuV)	Corrected Factor (dB)	Corrected Emissions (dBuV EIRP)	Limit: (dBuV EIRP)	Pass or Fail
1	5136.1	63.59	2.86	66.45	80	Pass
8	5361.0	64.84	2.86	67.70	80	Pass
9	5724.8	83.68	2.86	86.54	90	Pass
9	5714.9	72.95	2.86	75.81	80	Pass
12	5826.1	80.91	2.86	83.77	90	Pass
12	5836.3	72.00	2.86	74.86	80	Pass

Outside Channel Turbo Mode	Frequency (MHz)	Spectrum Reading (dBuV)	Corrected Factor (dB)	Corrected Emissions (dBuV EIRP)	Limit: (dBuV EIRP)	Pass or Fail
1	5139.2	64.42	2.86	67.28	80	Pass
3	5335.3	73.73	2.86	76.59	80	Pass
4	5724.7	81.81	2.86	84.67	90	Pass
4	5713.8	75.48	2.86	78.34	80	Pass
5	5825.6	80.41	2.86	83.27	90	Pass
5	5835.0	75.65	2.86	78.51	80	Pass

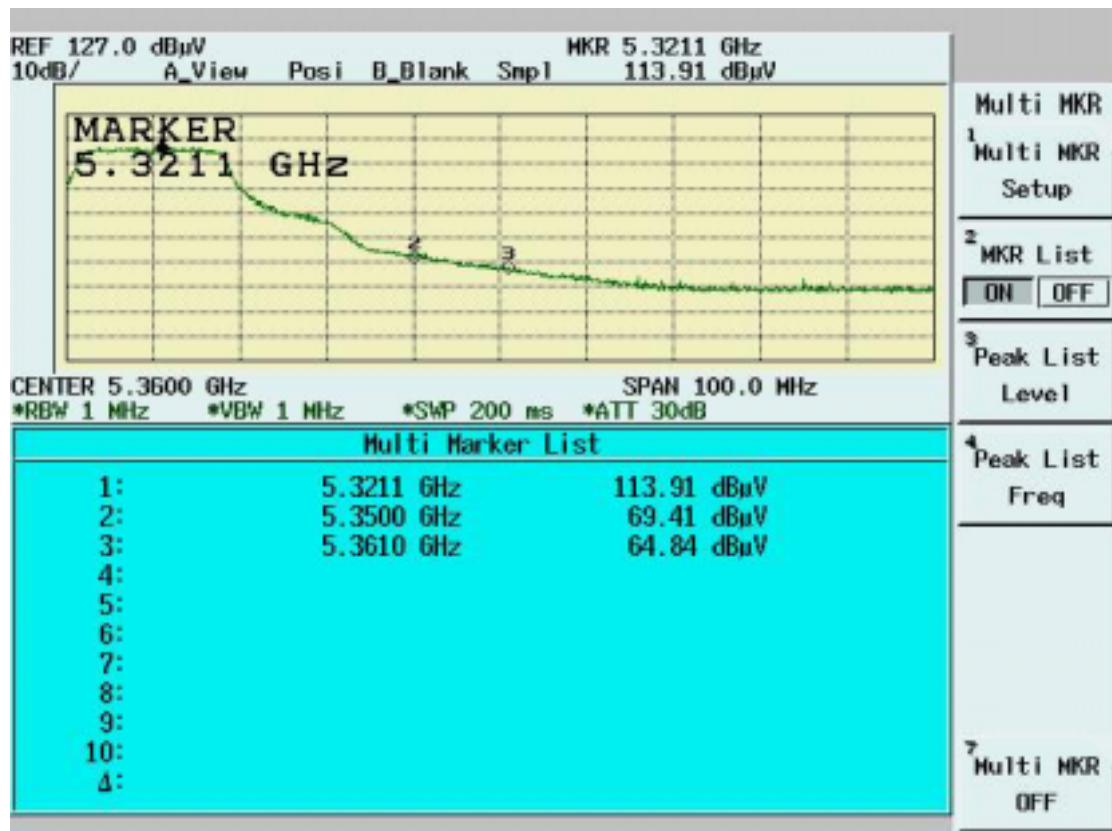
Note: Corrected Emissions=Spectrum + Corrected Factor

Corrected Factor=Cable Loss+Antenna Peak Gain (dBi)

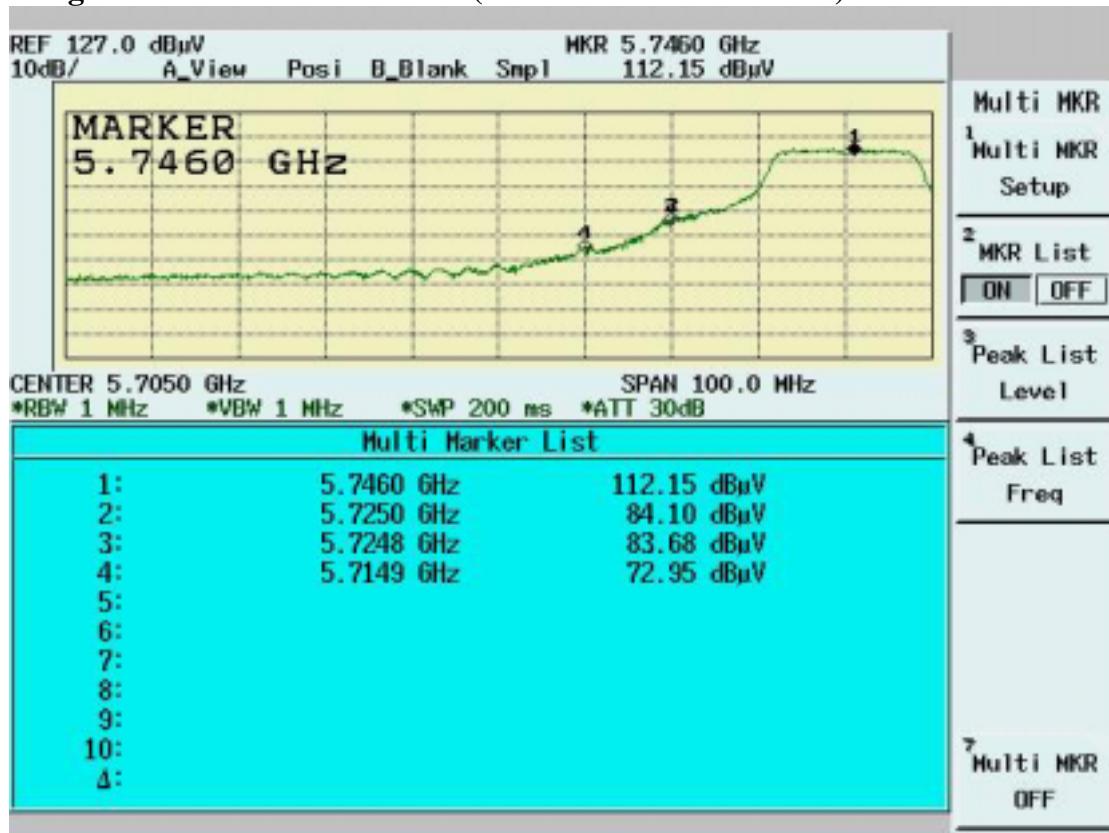
Band Edge Conducted measurement (Normal Mode Channel 1)



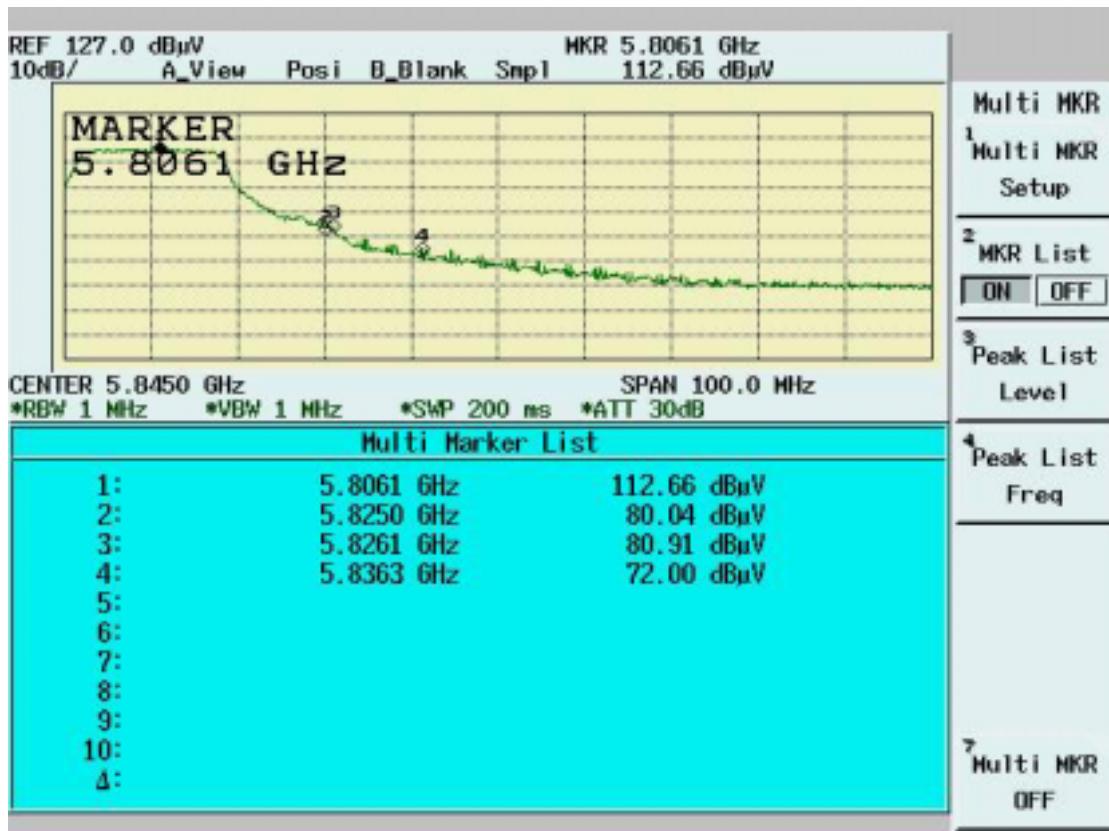
Band Edge Conducted Measurement (Normal Mode Channel 8)



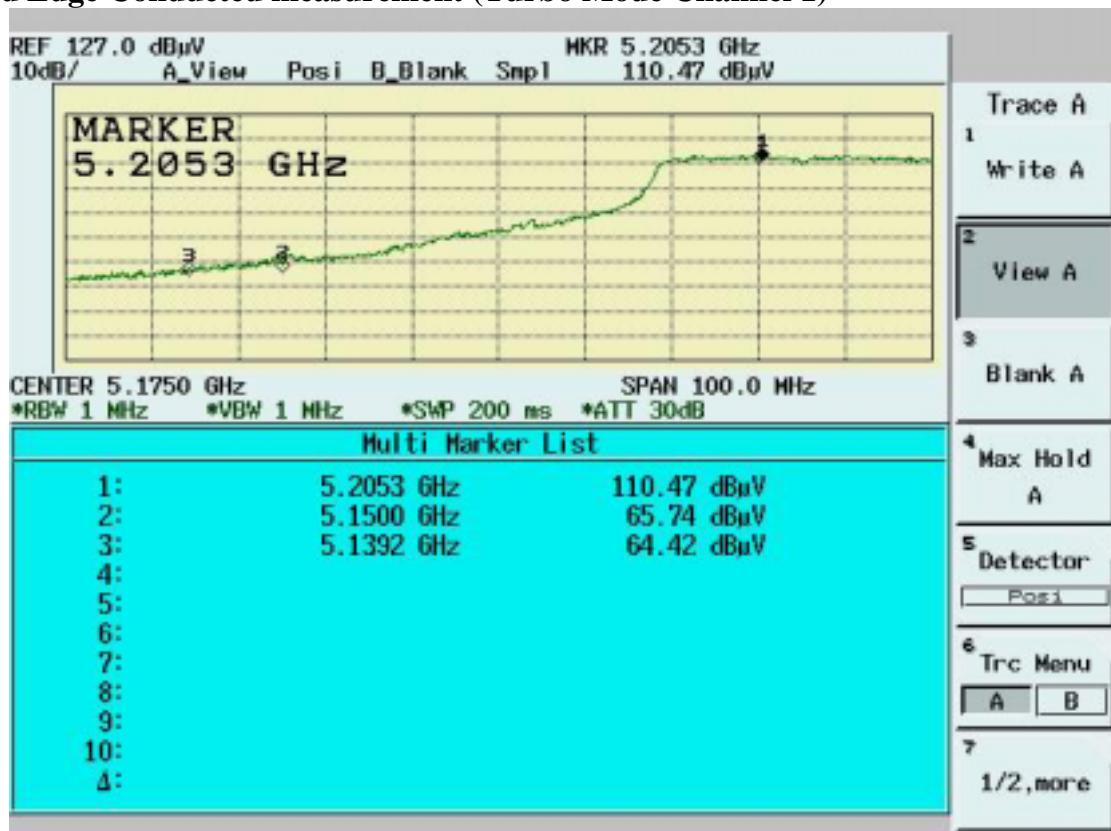
Band Edge Conducted measurement (Normal Mode Channel 9)



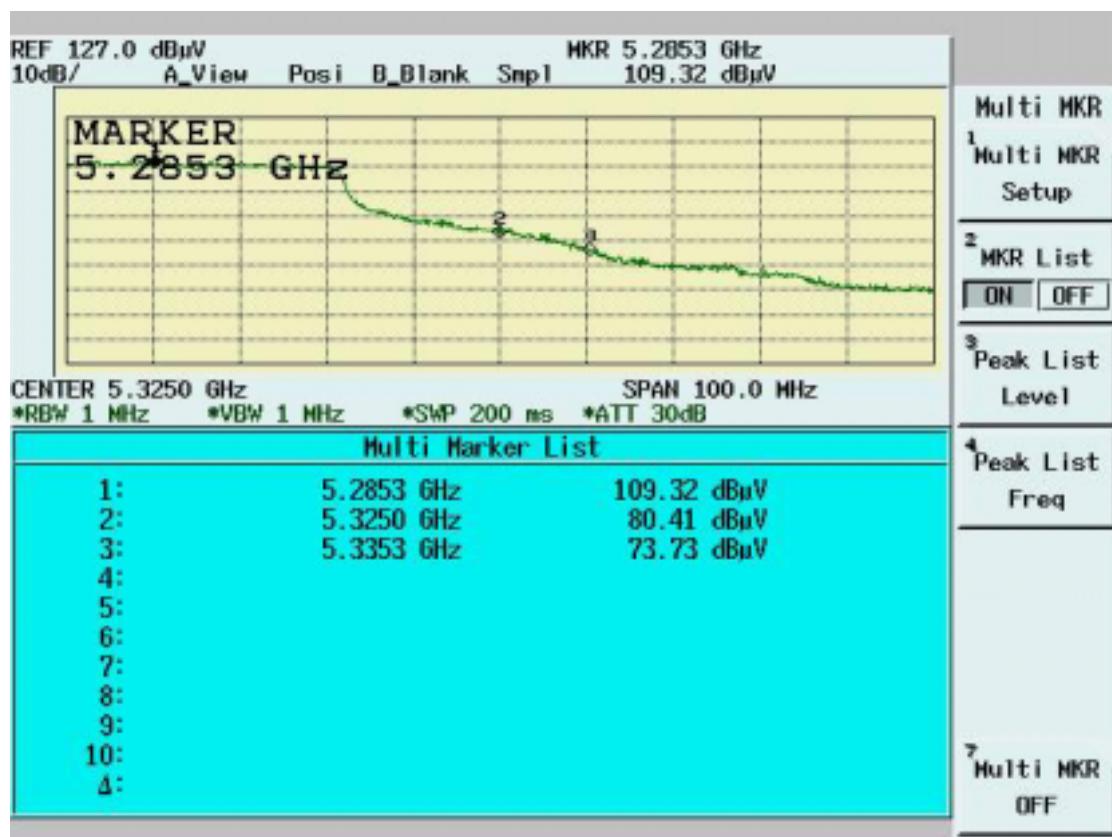
Band Edge Conducted Measurement (Normal Mode Channel 12)



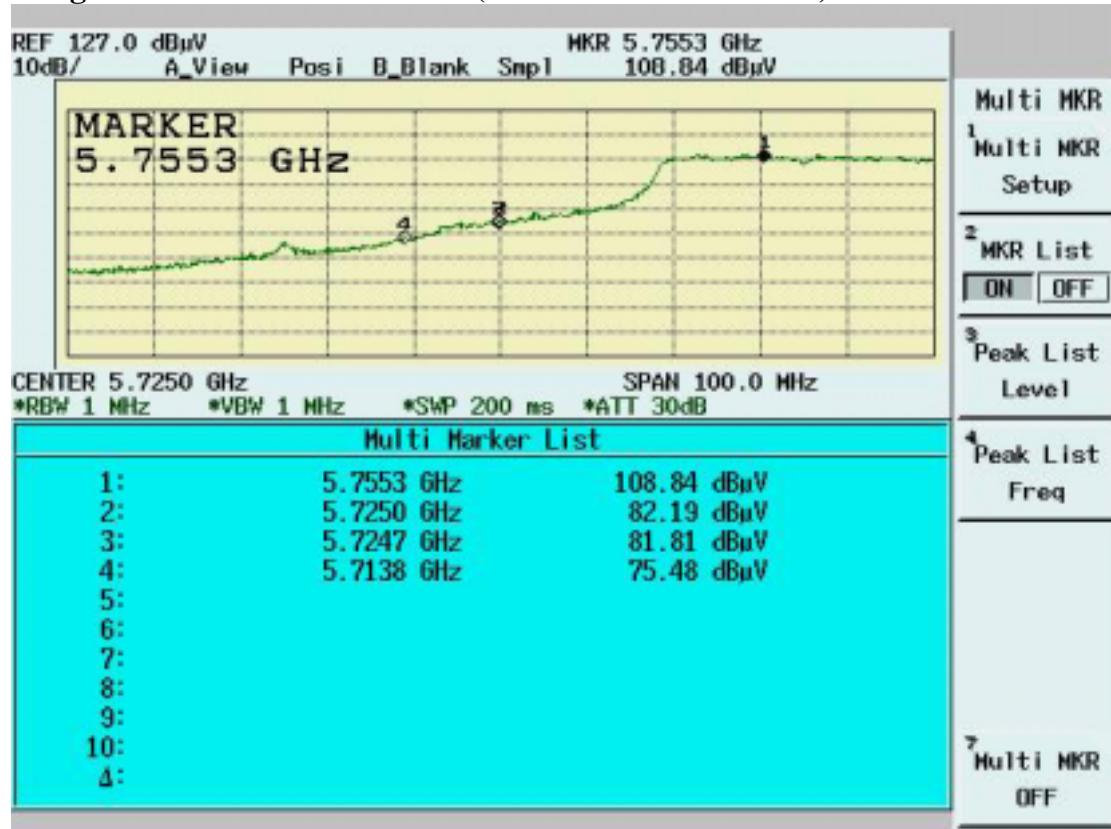
Band Edge Conducted measurement (Turbo Mode Channel 1)



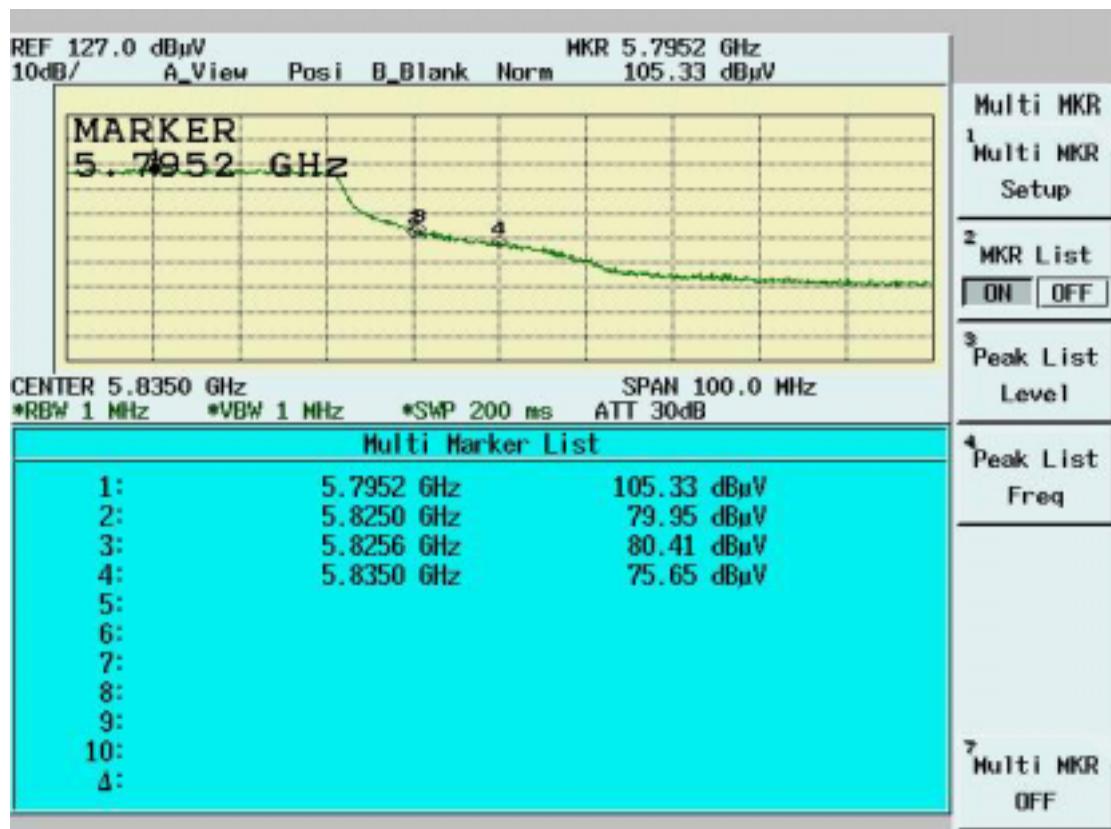
Band Edge Conducted Measurement (Turbo Mode Channel 3)



Band Edge Conducted measurement (Turbo Mode Channel 4)



Band Edge Conducted Measurement (Turbo Mode Channel 5)



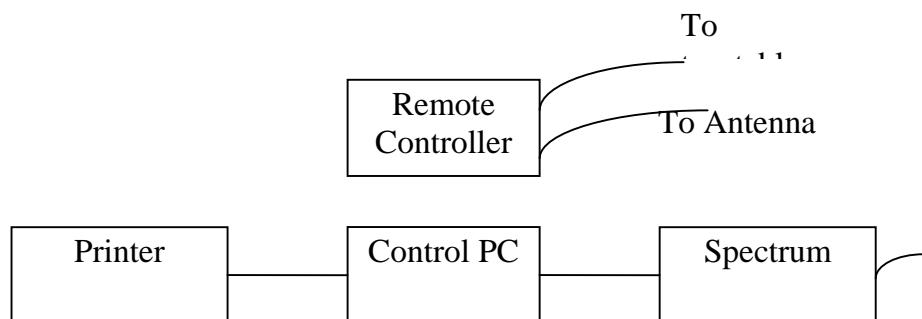
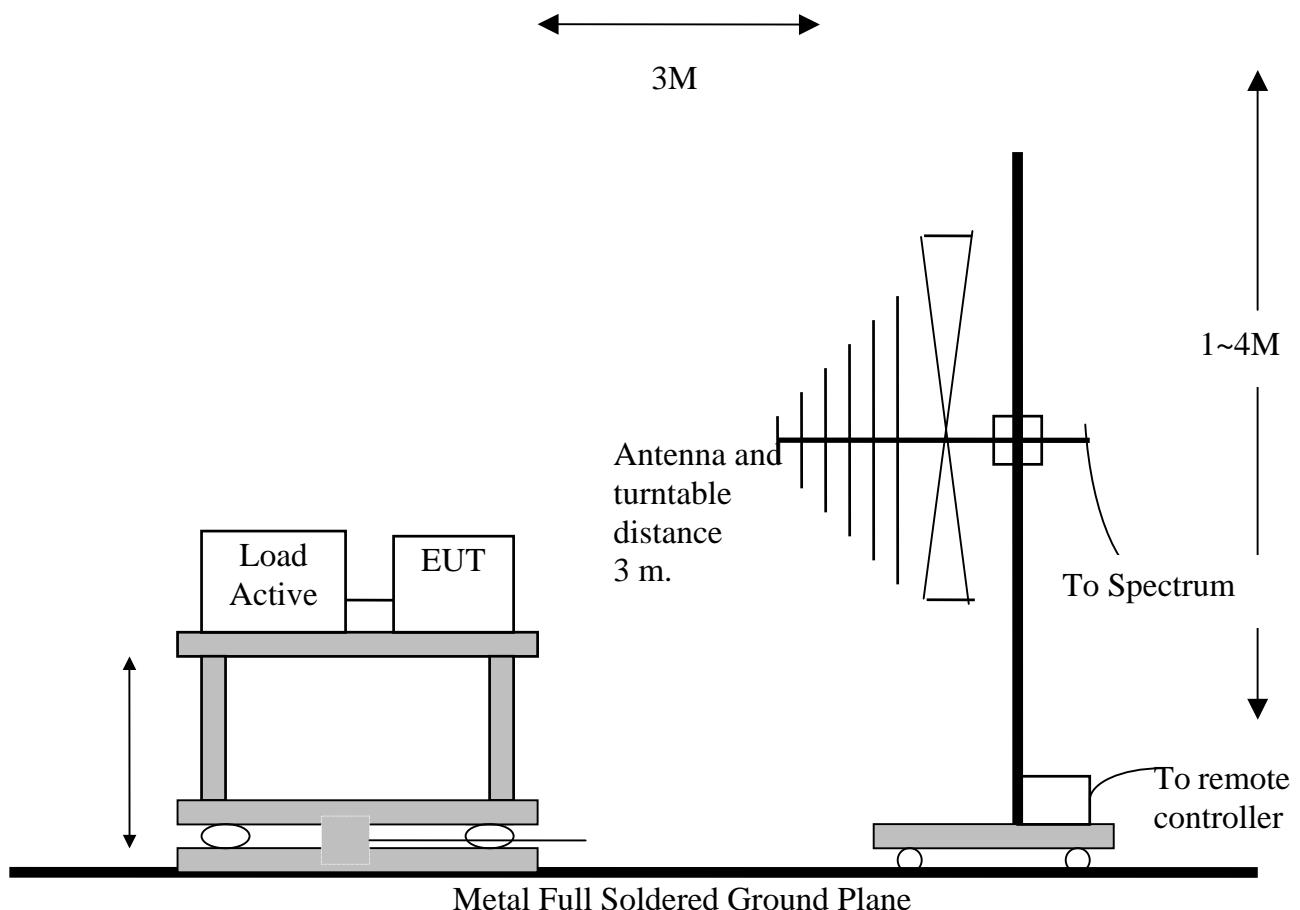
4.6.4 Bandedge Measurement Test Procedure (Radiated)

1. Antenna and Turntable test procedure same as Radiated Emissions measurement listed in Para. 6.5
Equipment mode: Spectrum analyzer

Peak Mode:	
SPAN	100MHz
RBW	1MHz
VBW	3MHz
Sweep Time	200msec.
AVE Mode:	
SPAN	100MHz
RBW	1MHz
VBW	10Hz
Sweep Time	20 sec.

2. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed.
3. Find the next peak frequency outside the operation frequency band.
4. Get the spectrum reading after Maximum Hold function is completed.

4.6.5 Test Setup (Radiated)



4.6.6 Test Data (Radiated):

Band Edge measurement (Radiated)

Temperature ():26

Test Engineer:Jerry Chiou

Humidity (%):45

Outside Channel (Normal)	Frequency (MHz)	Spectrum Reading (dBuV)	Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Pass/Fail
1 (Peak)	5139.8	23.4	39.0	62.39	74	Pass
1 (Average)	5140.0	9.93	39.03	48.96	54	Pass
8 (Peak)	5363.8	23.9	39.3	63.21	74	Pass
8 (Average)	5360.2	9.66	39.34	49.00	54	Pass
9 (Peak)	5714.6	28.4	39.4	67.83	74	Pass
9 (Average)	5715.0	10.91	39.41	50.32	54	Pass
12 (Peak)	5838.0	25.0	39.4	64.40	74	Pass
12 (Average)	5835.1	10.16	39.42	49.58	54	Pass

Outside Channel (Turbol)	Frequency (MHz)	Spectrum Reading (dBuV)	Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Pass/Fail
1 (Peak)	5139.5	24.89	39.03	63.92	74	Pass
1 (Average)	5140.0	10.25	39.03	49.28	54	Pass
3 (Peak)	5336.0	32.38	39.34	71.72	74	Pass
3 (Average)	5335.0	13.95	39.34	53.29	54	Pass
4 (Peak)	5714.2	30.64	39.41	70.05	74	Pass
4 (Average)	5715.0	14.48	39.41	53.89	54	Pass
5 (Peak)	5835.0	29.65	39.42	69.07	74	Pass
5 (Average)	5835.0	14.31	39.42	53.73	54	Pass

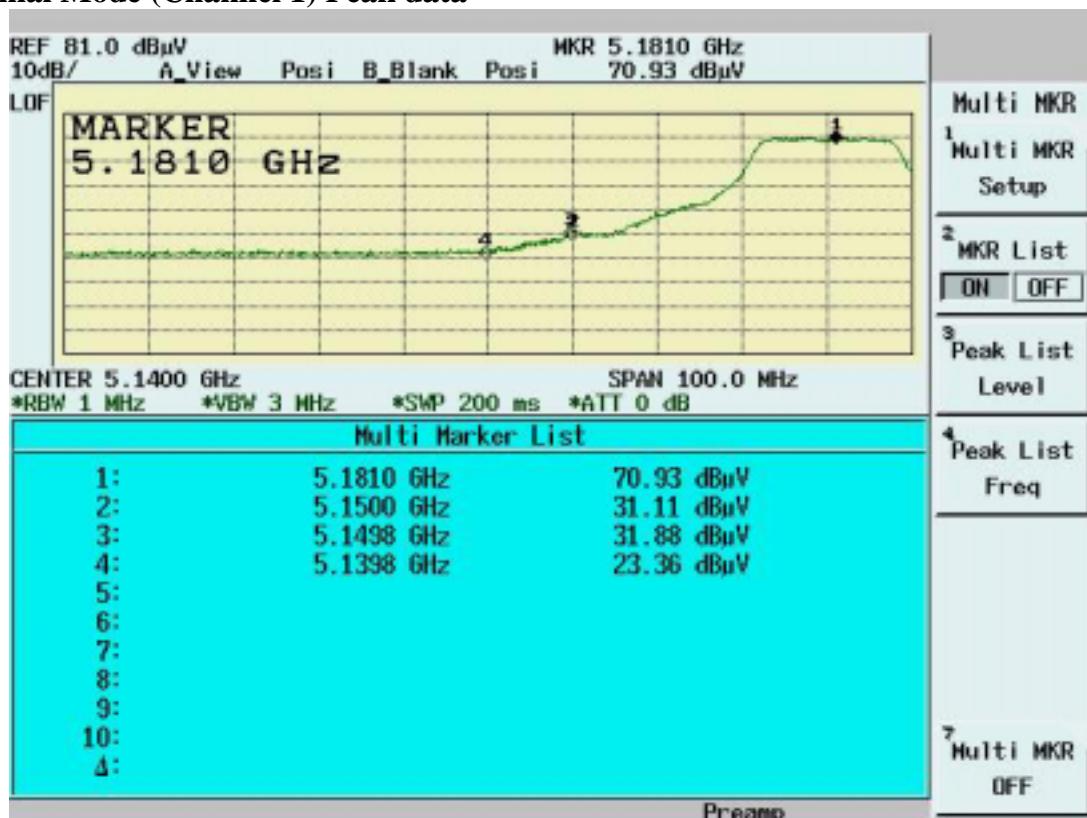
Note: "pk": peak reading
"av": average reading

Emission Level=Spectrum Reading+Correction Factor

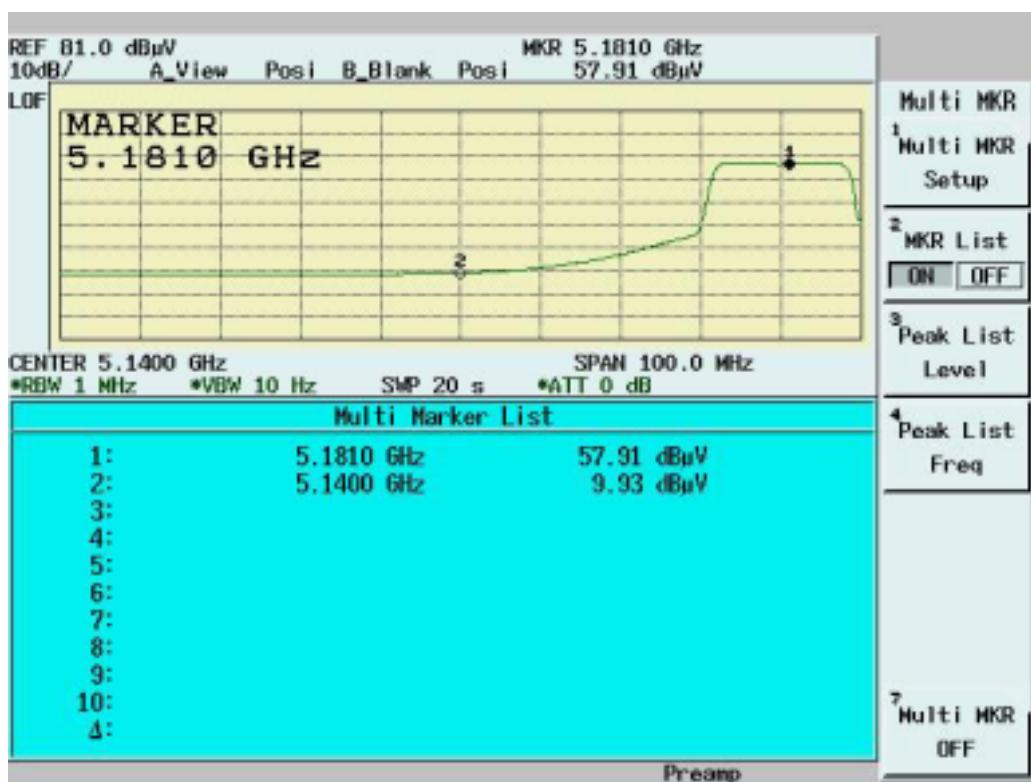
Correction Factor =Antenna Factor+cable loss

Both Horizontal and Vertical polarization have been tested and the worst data is listed above.

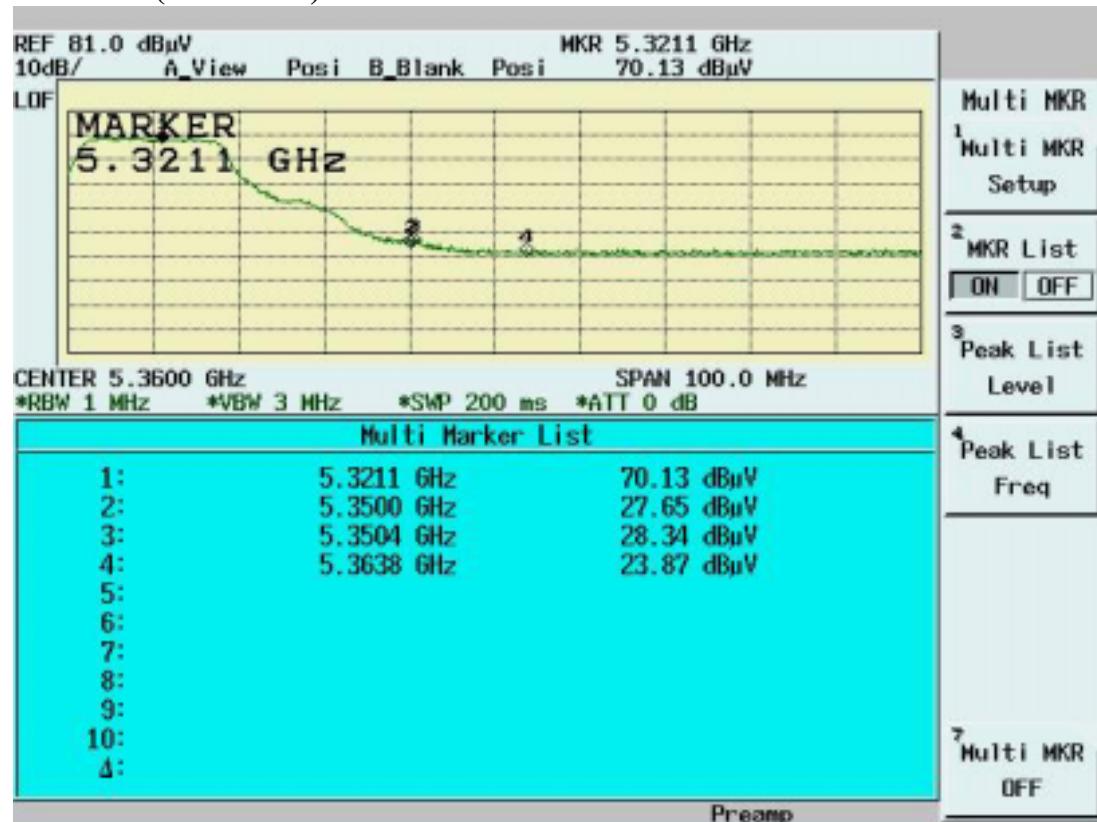
**Band Edge measurement for radiated emission in Restricted Band(Radiated)
Normal Mode (Channel 1) Peak data**



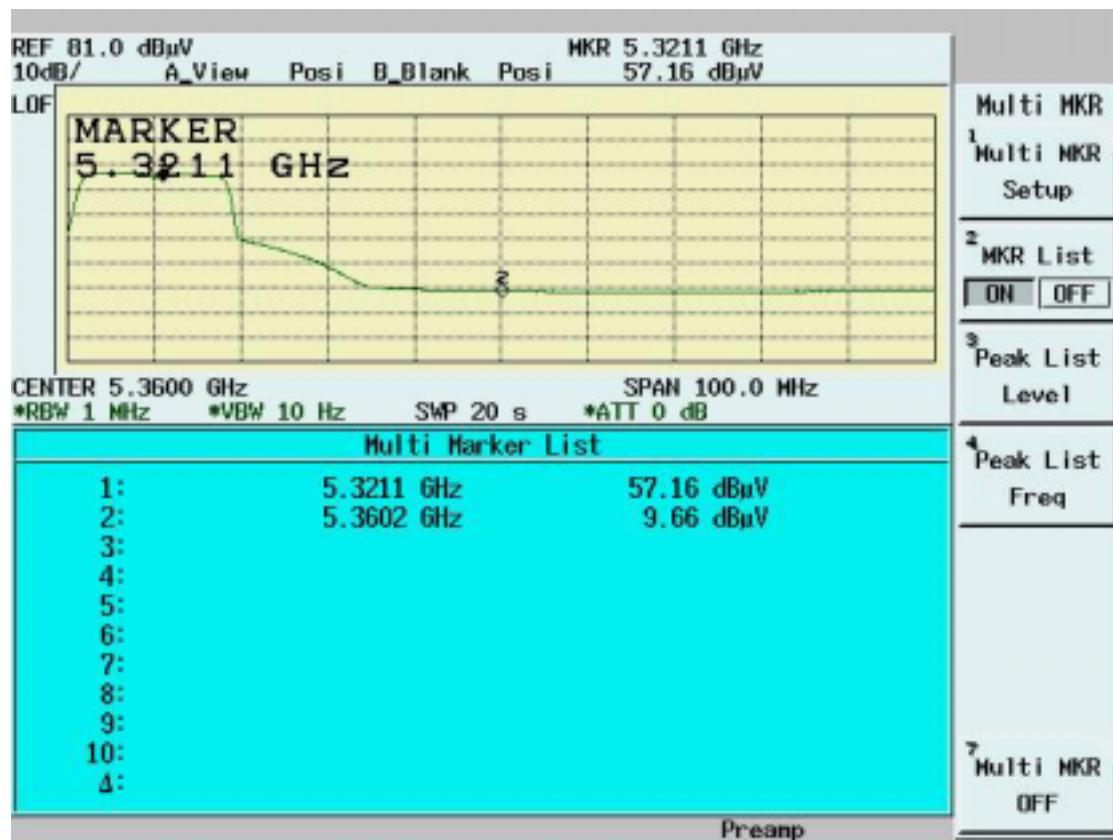
Normal Mode (Channel 1) Average Data



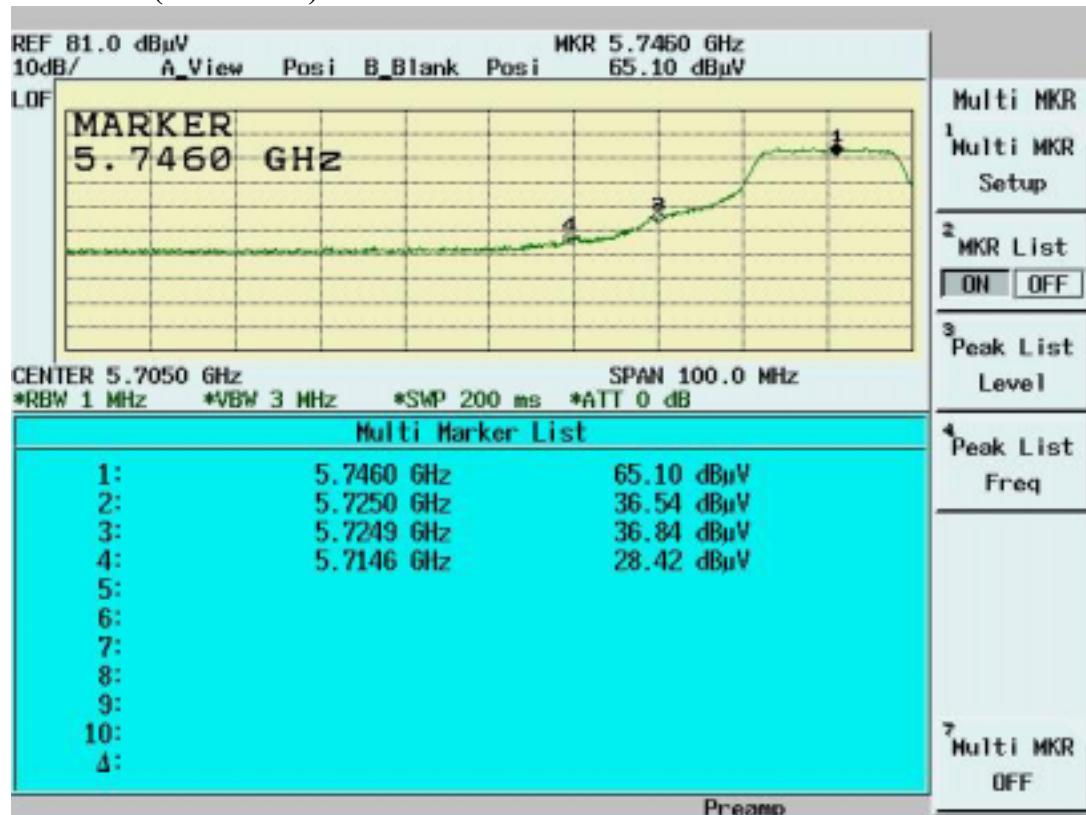
Normal Mode (Channel 8) Peak data



Normal Mode (Channel 8) Average data



Normal Mode (Channel 9) Peak data



Normal Mode (Channel 9) Average Data

