5.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
HP Spectrum Analyzer	8590L	3829A02338	Sep. 10, 2003
*ADVANTEST Spectrum Analyzer	R3271A	85060311	May 21, 2003
CHASE RF Pre_Amplifier	CPA9232	1001	Mar. 02, 2004
*HP Pre_Amplifier	8449B	3008A01281	Jun. 12, 2003
*ROHDE & SCHWARZ Test Receiver	ESCS 30	100027	May 23, 2003
*CHASE Broadband Antenna	CBL6112B	2502	Jun. 28, 2003
*Schwarzbeck Horn_Antenna	BBHA9120-D1	D123	Jul. 31, 2003
SCHWARZBECK Tunable Dipole Antenna	UHAP	897	Mar. 07, 2005
SCHWARZBECK Tunable Dipole Antenna	VHAP	880	Mar. 07, 2005
*RF Switches	MP59B	M50867	Jul. 26, 2003
*RF Cable(JETBAO)	BELDN RG-214	Cable_OA_01	Jul. 26, 2003
*Software	AS60P8	NA	NA
*EMCO Antenna Tower	2075-2	9712-2124	NA
*EMCO Turn Table	2081-1.53	9712-2030	NA
*CORCOM AC Filter	MRI2030	107/108	NA

Note:
1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Dipole Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.
2. * = These equipment are used for the final measurement.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The test was performed in ADT Open Site No. A.
5. The VCCI Site Registration No. is R-782.
6. The FCC Site Registration No. is 91097.

5.2.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

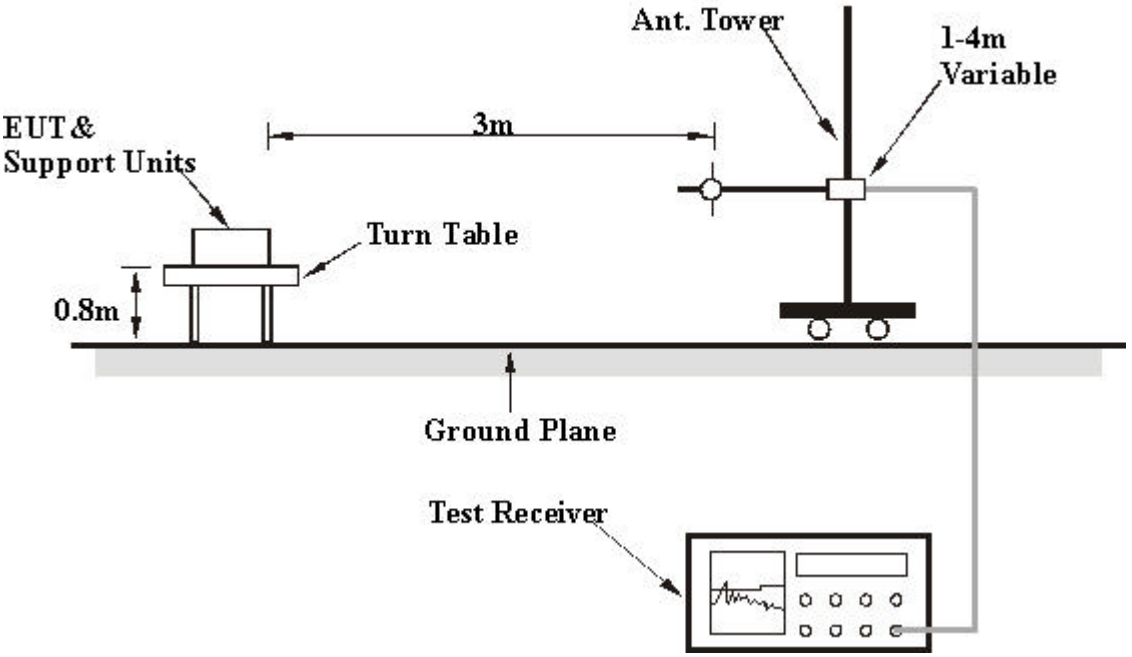
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

5.2.5 DEVIATION FROM TEST STANDARD

No deviation

5.2.6 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.7 EUT OPERATING CONDITIONS

Same as 4.1.6.

5.2.8 TEST RESULTS

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
FREQUENCY RANGE	Below 1000MHz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	38.74	24.8 QP	40.00	-15.20	1.43 H	17	10.30	14.50
2	55.26	29.9 QP	40.00	-10.10	2.37 H	219	21.20	8.60
3	56.78	28.4 QP	40.00	-11.60	3.15 H	177	19.70	8.60
4	142.70	32.1 QP	43.50	-11.40	2.02 H	153	19.70	12.40
5	148.13	33.5 QP	43.50	-10.00	2.08 H	143	22.40	11.10
6	162.54	26.7 QP	43.50	-16.80	2.22 H	149	15.30	11.40
7	256.19	32.5 QP	46.00	-13.50	1.39 H	162	17.90	14.60
8	320.00	32.4 QP	46.00	-13.60	1.20 H	162	16.60	15.80
9	384.00	33.2 QP	46.00	-12.80	1.00 H	172	15.30	17.90
10	400.02	34.2 QP	46.00	-11.80	1.04 H	61	15.70	18.50
11	439.99	34.9 QP	46.00	-11.10	1.00 H	11	16.10	18.80
12	800.00	31.9 QP	46.00	-14.10	1.20 H	159	8.70	23.20

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	38.96	31.7 QP	40.00	-8.30	1.12 V	332	17.30	14.30
2	43.83	33.0 QP	40.00	-7.00	1.46 V	134	21.50	11.50
3	143.25	39.3 QP	43.50	-4.20	1.00 V	153	27.10	12.30
4	148.13	39.0 QP	43.50	-4.50	1.00 V	158	28.00	11.10
5	163.95	33.2 QP	43.50	-10.30	1.00 V	157	21.80	11.40
6	264.00	28.6 QP	46.00	-17.40	1.98 V	62	13.80	14.80
7	480.08	28.6 QP	46.00	-17.40	1.12 V	146	8.90	19.70
8	800.06	31.7 QP	46.00	-14.30	1.29 V	140	8.50	23.20
9	850.06	29.0 QP	46.00	-17.00	1.94 V	281	5.20	23.80
10	900.06	27.5 QP	46.00	-18.50	2.32 V	299	3.40	24.10

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	43.6 PK	74.00	-30.40	1.09 H	64	6.60	37.00
2	#5150.00	50.0 PK	74.00	-24.00	1.74 H	73	13.00	37.00
3	*5180.00	94.9 PK			1.32 H	100	57.90	37.00
3	*5180.00	86.7 AV			1.32 H	100	49.70	37.00
4	#5376.00	45.6 PK	74.00	-28.40	1.47 H	67	8.60	37.00
5	10360.00	49.8 PK	68.3	-19.50	1.04 H	49	5.00	44.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	54.2 PK	74.00	-19.80	1.84 V	97	17.10	37.00
1	#5120.00	47.9 AV	54.00	-6.10	1.84 V	97	10.90	37.00
2	#5150.00	59.5 PK	74.00	-14.50	1.75 V	106	22.40	37.00
2	#5150.00	46.7 AV	54.00	-7.30	1.75 V	106	9.70	37.00
3	*5180.00	98.6 PK			1.32 V	106	61.60	37.00
3	*5180.00	90.2 AV			1.32 V	106	53.20	37.00
4	#5376.00	50.9 PK	74.00	-23.10	1.90 V	52	13.80	37.00
5	10360.00	41.4 PK	68.30	-26.90	1.31 V	55	-3.40	44.70

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	47.3 PK	74.00	-26.70	1.52 H	100	10.20	37.00
2	*5233.00	91.8 PK			2.09 H	114	54.80	37.00
2	*5233.00	83.7 AV			2.09 H	114	46.70	37.00
3	#5376.00	45.1 PK	74.00	-28.90	2.01 H	100	8.10	37.00
4	#5440.00	44.2 PK	74.00	-29.80	1.48 H	108	7.10	37.00
5	10480.00	51.1 PK	68.30	-17.20	1.23 H	136	6.10	45.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	49.3 PK	74.00	-24.70	1.70 V	69	12.30	37.00
2	*5233.00	96.9 PK			1.51 V	64	59.90	37.00
2	*5233.00	89.2 AV			1.51 V	64	52.20	37.00
3	#5376.00	49.3 PK	74.00	-24.70	1.70 V	69	12.30	37.00
4	#5440.00	47.4 PK	74.00	-26.60	1.59 V	67	10.30	37.00
5	10480.00	52.4 PK	68.30	-15.90	1.34 V	95	7.50	45.00

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	45.9 PK	74.00	-28.10	1.67 H	98	8.90	37.00
2	*5254.00	98.3 PK			1.38 H	118	61.30	37.00
2	*5254.00	90.7 AV			1.38 H	118	53.70	37.00
3	#5376.00	44.8 PK	74.00	-29.20	1.67 H	93	7.70	37.00
4	10520.00	59.2 PK	68.30	-9.10	1.06 H	135	14.00	45.20

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	48.3 PK	74.00	-25.70	1.86 V	98	11.20	37.00
2	*5254.00	100.9 PK			1.24 V	116	63.90	37.00
2	*5254.00	93.8 AV			1.24 V	116	56.80	37.00
3	#5376.00	46.9 PK	74.00	-27.10	1.58 V	92	9.90	37.00
4	10520.00	56.4 PK	68.30	-11.90	1.03 V	98	11.20	45.20

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	8
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	46.3 PK	74.00	-27.70	1.79 H	93	9.30	37.00
2	*5320.00	94.5 PK			1.35 H	67	57.40	37.00
2	*5320.00	86.3 AV			1.35 H	67	49.30	37.00
3	#5350.00	56.5 PK	74.00	-17.50	1.27 H	90	19.50	37.00
3	#5350.00	41.9 AV	54.00	-12.10	1.27 H	90	4.90	37.00
4	#10640.00	58.3 PK	74.00	-15.70	1.03 H	65	12.00	46.30

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	50.4 PK	74.00	-23.60	1.50 V	42	13.40	37.00
2	*5320.00	99.0 PK			1.85 V	65	61.90	37.00
2	*5320.00	90.7 AV			1.85 V	65	53.70	37.00
3	#5350.00	58.2 PK	74.00	-15.80	1.33 V	89	21.10	37.00
3	#5350.00	45.5 AV	54.00	-8.50	1.33 V	89	8.40	37.00
4	#10642.00	57.2 PK	74.00	-16.80	1.10 V	104	10.90	46.30

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#" : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	9
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#4596.00	42.7 PK	74.00	-31.30	1.37 H	90	7.50	35.20
2	#5440.00	48.0 PK	74.00	-26.00	1.65 H	70	11.00	37.00
3	5715.00	57.3 PK	68.30	-11.00	1.42 H	27	19.80	37.50
4	5725.00	69.2 PK	78.30	-9.10	1.50 H	132	31.70	37.50
5	*5742.00	97.0 PK			2.26 H	97	59.50	37.50
5	*5742.00	88.2 AV			2.26 H	97	50.60	37.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#4596.00	45.2 PK	74.00	-28.80	1.71 V	105	10.00	35.20
2	#5439.00	51.1 PK	74.00	-22.90	1.67 V	112	14.10	37.00
2	#5439.00	44.1 AV	54.00	-9.90	1.67 V	112	7.10	35.20
3	5715.00	64.4 PK	68.30	-3.90	1.55 V	157	26.90	37.50
4	**5725.00**	**77.7 PK**	**78.30**	**-0.60**	**2.10 V**	**117**	**40.20**	**37.50**
5	*5742.00	102.6 PK			1.83 V	106	65.10	37.50
5	*5742.00	94.9 AV			1.83 V	106	57.30	37.50

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*": Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal Mode	**CHANNEL**	12
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	45.0 PK	74.00	-29.00	1.32 H	277	8.00	37.00
2	#5408.00	43.4 PK	74.00	-30.60	1.88 H	275	6.30	37.00
3	*5810.00	99.2 PK	74.00	25.20	2.06 H	308	61.50	37.70
3	*5810.00	90.4 AV	54.00	36.40	2.06 H	308	52.70	37.00
4	5825.00	64.0 PK			1.83 H	312	26.20	37.70
5	5835.00	55.7 PK			1.71 H	325	18.00	37.70
6	#11610.00	55.6 PK	74.00	-18.40	1.40 H	316	4.60	51.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5088.00	50.2 PK	74.00	-23.80	1.33 V	275	13.20	37.00
2	#5408.00	47.6 PK	74.00	-26.40	1.31 V	287	10.60	37.00
3	*5810.00	102.4 PK			1.60 V	309	64.70	37.70
3	*5810.00	94.2 AV			1.60 V	309	56.50	37.00
4	5825.00	77.3 PK	78.30	-1.00	1.13 V	277	39.60	37.70
5	5835.00	64.4 PK	68.30	-3.90	1.28 V	287	26.60	37.70
6	#11610.00	54.9 PK	74.00	-19.10	1.57 V	307	4.00	51.00

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*": Fundamental frequency
6. "#" : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Turbo Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	47.3 PK	74.00	-26.70	1.38 H	298	10.30	37.00
2	*5218.00	89.6 PK			1.40 H	274	52.60	37.00
2	*5218.00	82.3 AV			1.40 H	274	45.20	37.00
3	#5376.00	47.4 PK	74.00	-26.60	1.65 H	288	10.30	37.00
4	10420.00	51.4 PK	68.30	-16.90	1.10 H	357	6.60	44.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	50.4 PK	74.00	-23.60	1.26 V	281	13.40	37.00
2	*5211.00	98.5 PK			1.34 V	256	61.40	37.00
2	*5211.00	89.9 AV			1.34 V	256	52.80	37.00
3	#5376.00	48.6 PK	74.00	-25.40	1.70 V	288	11.50	37.00
4	10420.00	53.3 PK	68.30	-15.00	1.72 V	340	8.40	44.80

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Turbo Mode	**CHANNEL**	2
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	47.1 PK	74.00	-26.90	1.37 H	297	10.00	37.00
2	*5245.00	91.0 PK			1.76 H	289	53.90	37.00
2	*5245.00	83.9 AV			1.76 H	289	46.80	37.00
3	#5376.00	47.6 PK	74.00	-26.40	1.32 H	295	10.60	37.00
4	10500.00	49.8 PK	68.30	-8.50	1.26 H	274	4.80	45.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	50.1 PK	74.00	-23.90	1.27 V	289	13.10	37.00
2	*5245.00	94.2 PK			1.05 V	297	57.20	37.00
2	*5245.00	86.4 AV			1.05 V	297	49.40	37.00
3	#5376.00	51.7 PK	74.00	-22.30	1.00 V	305	14.60	37.00
3	#5376.00	42.8 AV	54.00	-11.20	1.00 V	305	5.80	37.00
4	10500.00	49.5 PK	68.30	-18.80	1.83 V	295	4.50	45.00

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Turbo Mode	**CHANNEL**	3
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	47.1 PK	74.00	-26.90	1.66 H	305	10.10	37.00
2	*5275.00	92.0 PK			1.46 H	83	54.90	37.00
2	*5275.00	84.4 AV			1.46 H	83	47.40	37.00
3	#5375.00	46.9 PK	74.00	-27.10	1.26 H	279	9.90	37.00
4	10580.00	51.9 PK	68.30	-16.40	1.54 H	308	6.20	45.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	47.9 PK	74.00	-26.10	1.75 V	309	10.80	37.00
2	*5275.00	95.8 PK			1.66 V	297	58.80	37.00
2	*5275.00	88.6 AV			1.66 V	297	51.60	37.00
3	#5375.00	55.1 PK	74.00	-18.90	1.59 V	275	18.00	37.00
3	#5375.00	45.7 AV	54.00	-8.30	1.59 V	275	8.70	37.00
4	10580.00	53.5 PK	68.30	-14.80	1.25 V	316	7.70	45.70

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Turbo Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	45.5 PK	74.00	-28.50	1.87 H	298	8.50	37.00
2	#5376.00	44.3 PK	74.00	-29.70	1.87 H	288	7.30	37.00
3	5715.00	59.2 PK	68.30	-9.1	1.57 H	213	21.70	37.50
4	5725.00	64.2 PK	78.30	-14.10	1.43 H	219	26.70	37.50
5	*5764.00	94.2 PK			1.24 H	277	56.60	37.60
5	*5764.00	87.0 AV			1.24 H	277	49.40	37.50
6	#11520.00	55.3 PK	74.00	-18.70	1.09 H	222	4.00	51.30
6	#11520.00	45.7 AV	54.00	-8.30	1.09 H	222	-5.60	37.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	46.9 PK	74.00	-27.10	1.26 V	309	9.90	37.00
2	#5376.00	51.3 PK	74.00	-22.70	1.25 V	275	14.20	37.00
2	#5376.00	44.9 AV	54.00	-9.10	1.25 V	275	7.90	37.00
3	**5715.00**	**67.7 PK**	**68.30**	**-0.60**	**1.65 V**	**214**	**30.20**	**37.50**
4	5725.00	76.6 PK	78.30	1.70	1.15 V	234	39.10	37.50
5	*5764.00	100.8 PK			1.45 V	276	63.20	37.60
5	*5764.00	92.8 AV			1.45 V	276	55.20	37.50
6	#11520.00	56.8 PK	74.00	-17.20	1.29 V	238	5.50	51.30
6	#11520.00	46.2 AV	54.00	-7.80	1.29 V	238	-5.10	37.60

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Turbo Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 976 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eic Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	45.0 PK	74.00	-29.00	1.14 H	92	8.00	37.00
2	*5784.00	93.5 PK			1.21 H	294	55.80	37.60
2	*5784.00	85.8 AV			1.21 H	294	48.20	37.00
3	5825.00	68.7 PK	78.30	-8.60	1.82 H	296	31.00	37.70
4	5835.00	62.5 PK	68.30	-5.80	1.60 H	175	24.80	37.70
5	#11600.00	55.0 PK	74.00	-19.00	1.53 H	294	4.00	51.00
5	#11600.00	45.0 AV	54.00	-9.00	1.53 H	294	-6.00	37.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5120.00	48.9 PK	74.00	-25.10	1.29 V	52	11.90	37.00
2	*5784.00	100.9 PK			1.21 V	257	63.30	37.60
2	*5784.00	92.8 AV			1.21 V	257	55.20	37.00
3	5825.00	77.1 PK	78.30	-1.20	1.59 V	301	39.40	37.70
4	5835.00	67.2 PK	68.30	-1.10	1.94 V	309	29.50	37.70
5	#11600.00	56.5 PK	74.00	-17.50	1.76 V	276	5.50	51.00
5	#11600.00	46.1 AV	54.00	-7.90	1.76 V	276	-4.90	37.70

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

5.3 PEAK TRANSMIT POWER MEASUREMENT

5.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35 GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825 GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

Note: Where B is the 26dB emission bandwidth in MHz.

5.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2003

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

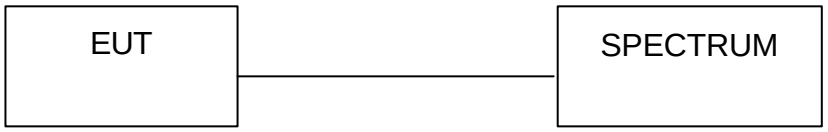
5.3.3 TEST PROCEDURE

2. The transmitter output was connected to the spectrum analyzer.
3. Set span to encompass the entire emission bandwidth of the signal.
4. Set RBW to 1MHz, VBW to 30kHz.
5. Using the spectrum analyzer' s channel power measurement function to measure the output power.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



5.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

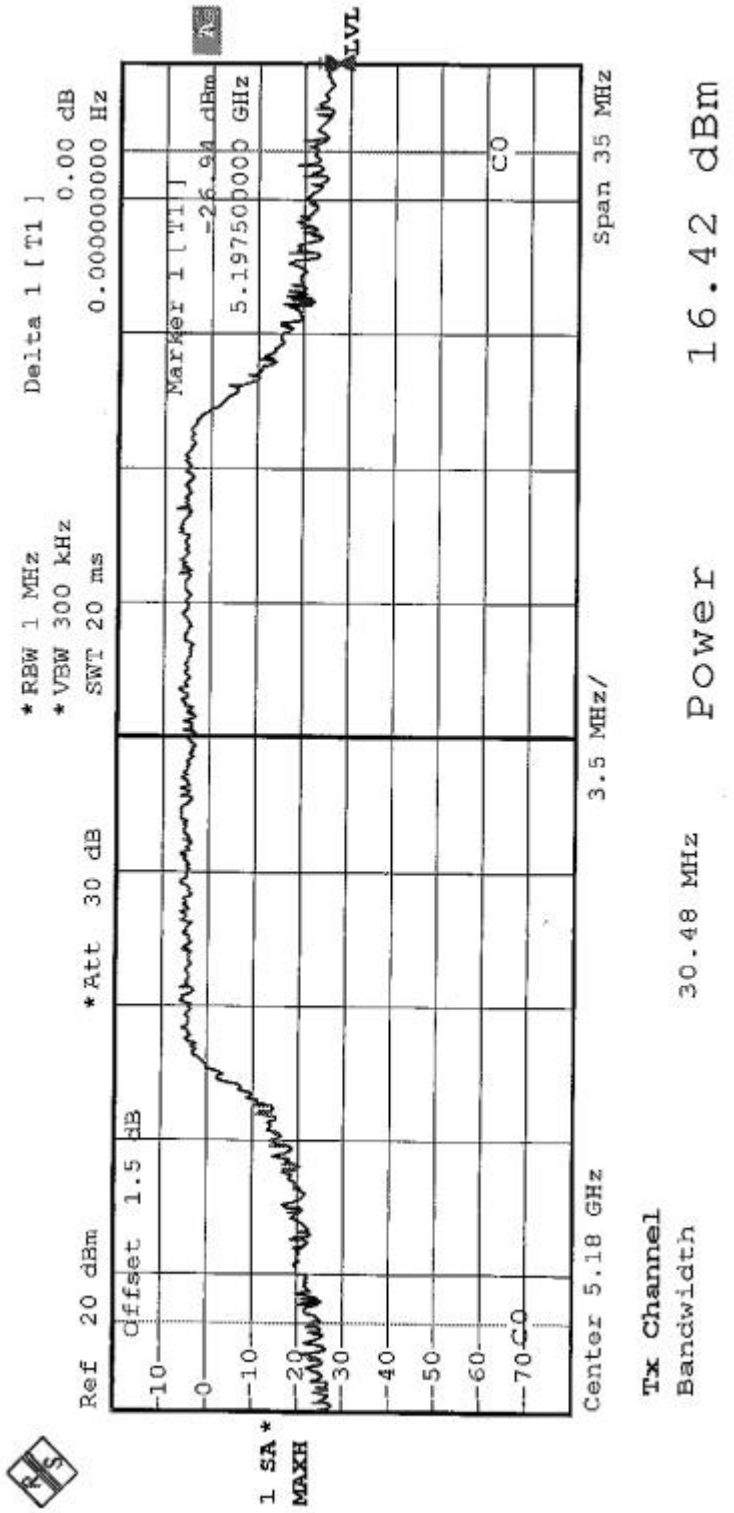
5.3.7 TEST RESULTS

EUT	Wireless LAN Access Point 8700	**MODEL**	3CRWE870075A
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	19eg. C, 64RH, 976 hPa	**TESTED BY**	Hank Chung

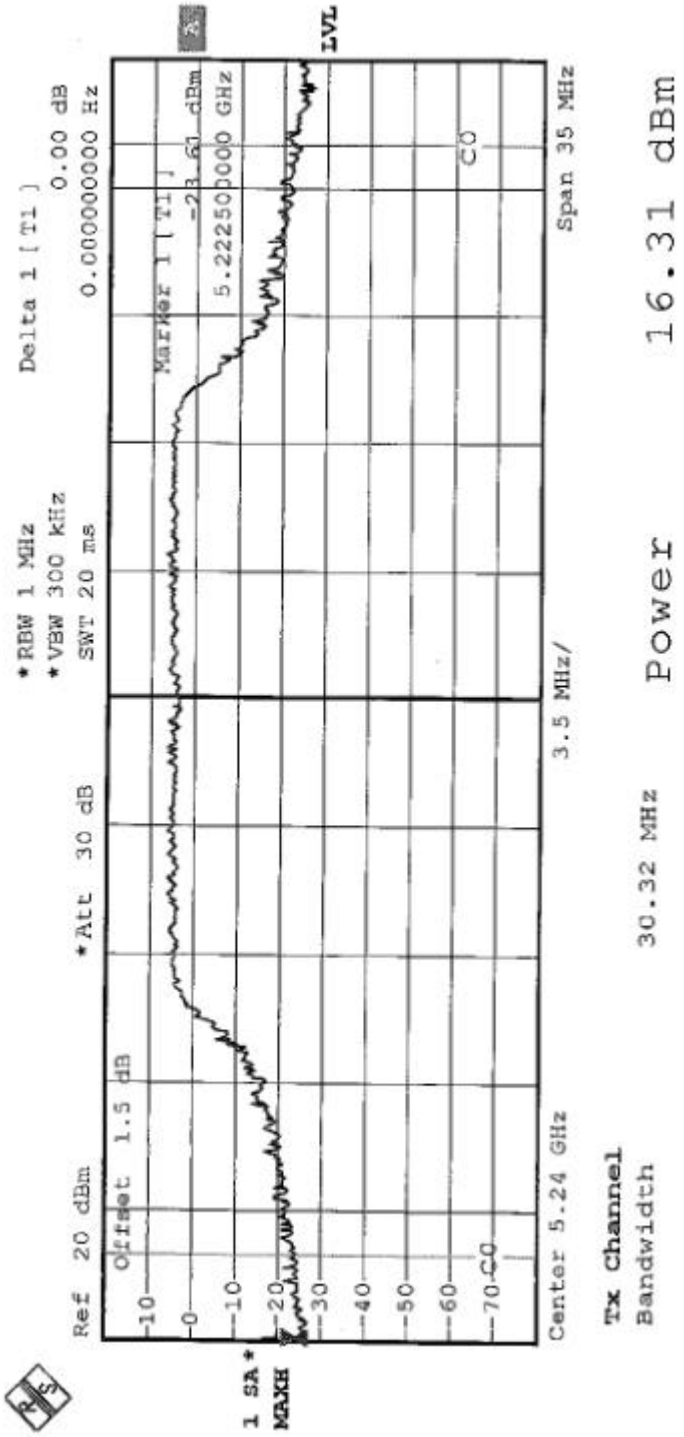
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	16.42	17	30.48	PASS
4	5240	16.31	17	30.32	PASS
5	5260	23.03	24	30.88	PASS
8	5320	18.47	24	30.96	PASS
9	5745	23.40	30	29.44	PASS
12	5805	19.86	30	30.24	PASS

NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.

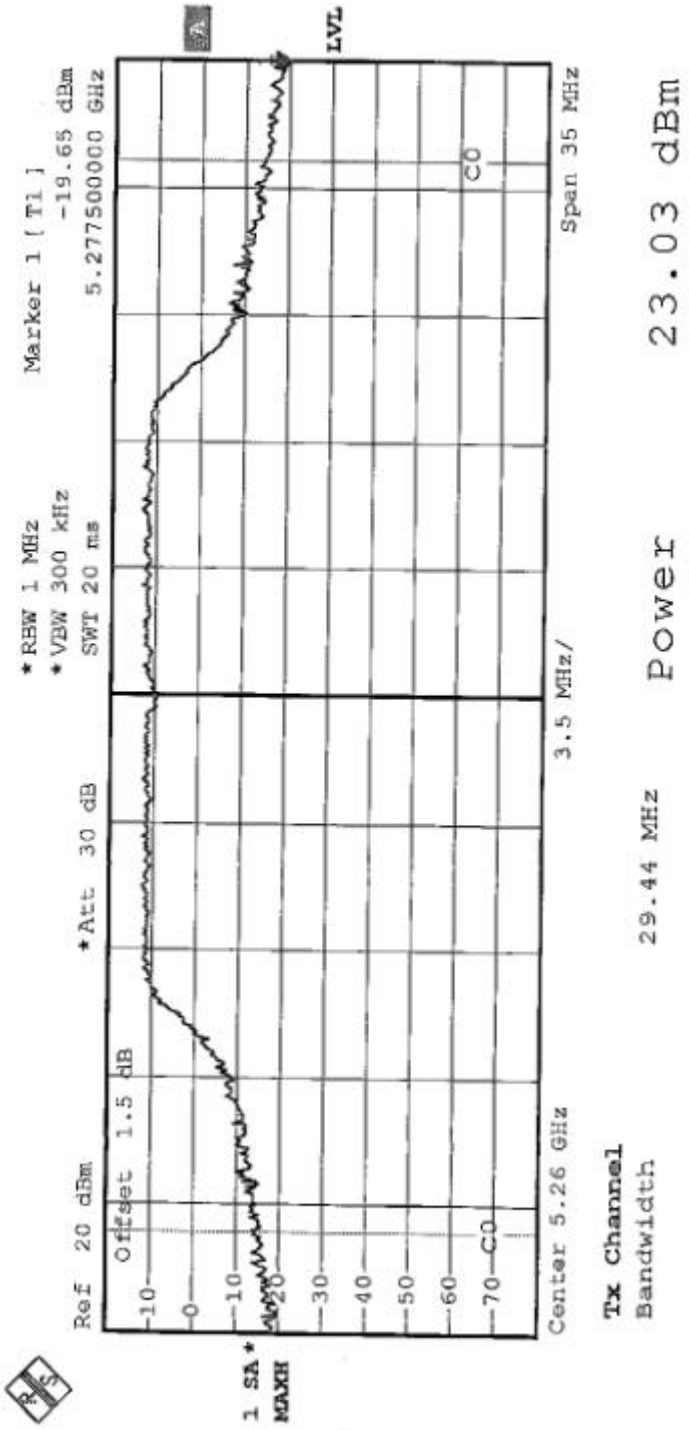
CHANNEL 1


Ref 20 dBm
Offset 1.5 dB
* Att 30 dB
* RBW 1 MHz
* VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
0.00 dB
0.00000000 Hz
Marker 1 [T1]
-26.94 dBm
5.19750000 GHz
LVL
1 SA *
MAXH
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Tx Channel
Bandwidth
30.48 MHz
Power
16.42 dBm

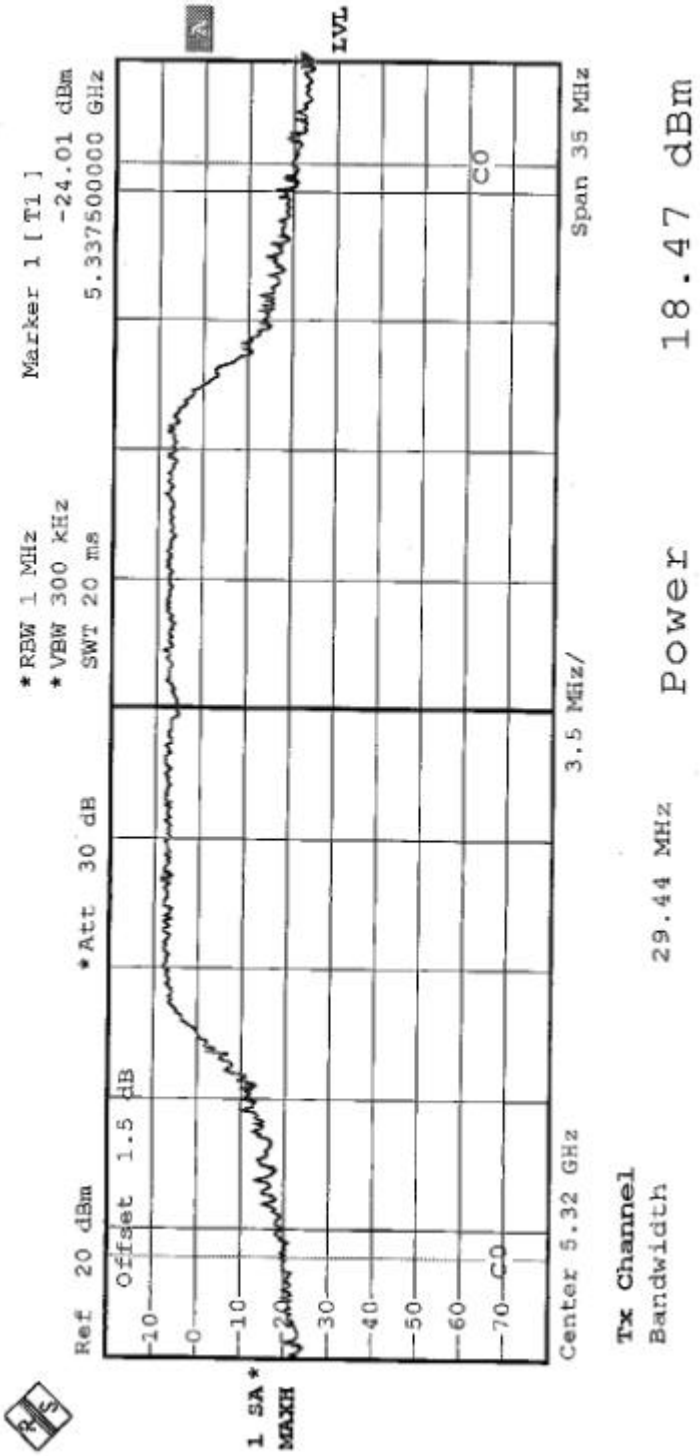
CHANNEL 4


Ref 20 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
0.00 dB
0.000000000 Hz
Marker 1 [T1]
-23.61 dBm
5.222500000 GHz
LVL
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
1 SA*
MAXH
Tx Channel
Bandwidth
30.32 MHz
Power
16.31 dBm

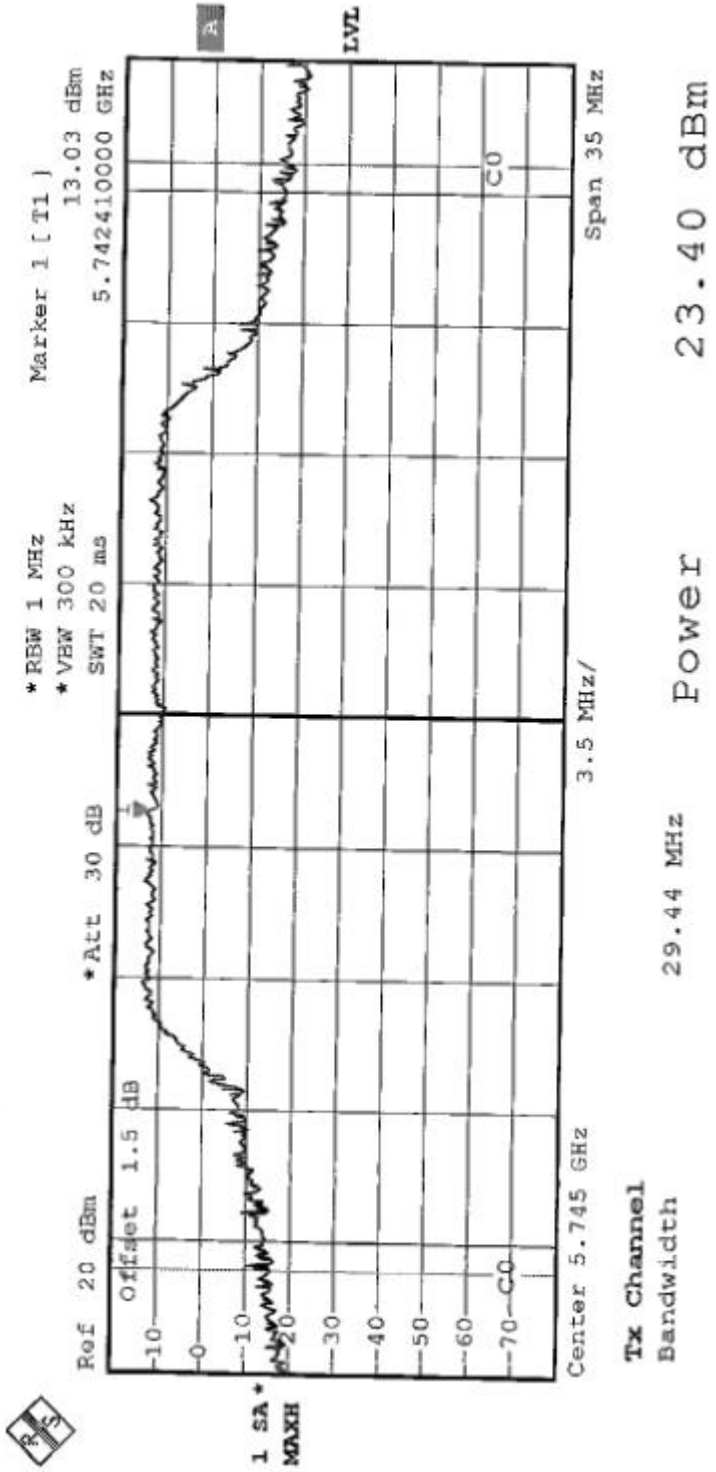
CHANNEL 5


Ref 20 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T1]
-19.65 dBm
5.277500000 GHz
1 SA *
MAXH
LVL
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Tx Channel
Bandwidth
29.44 MHz
Power
23.03 dBm

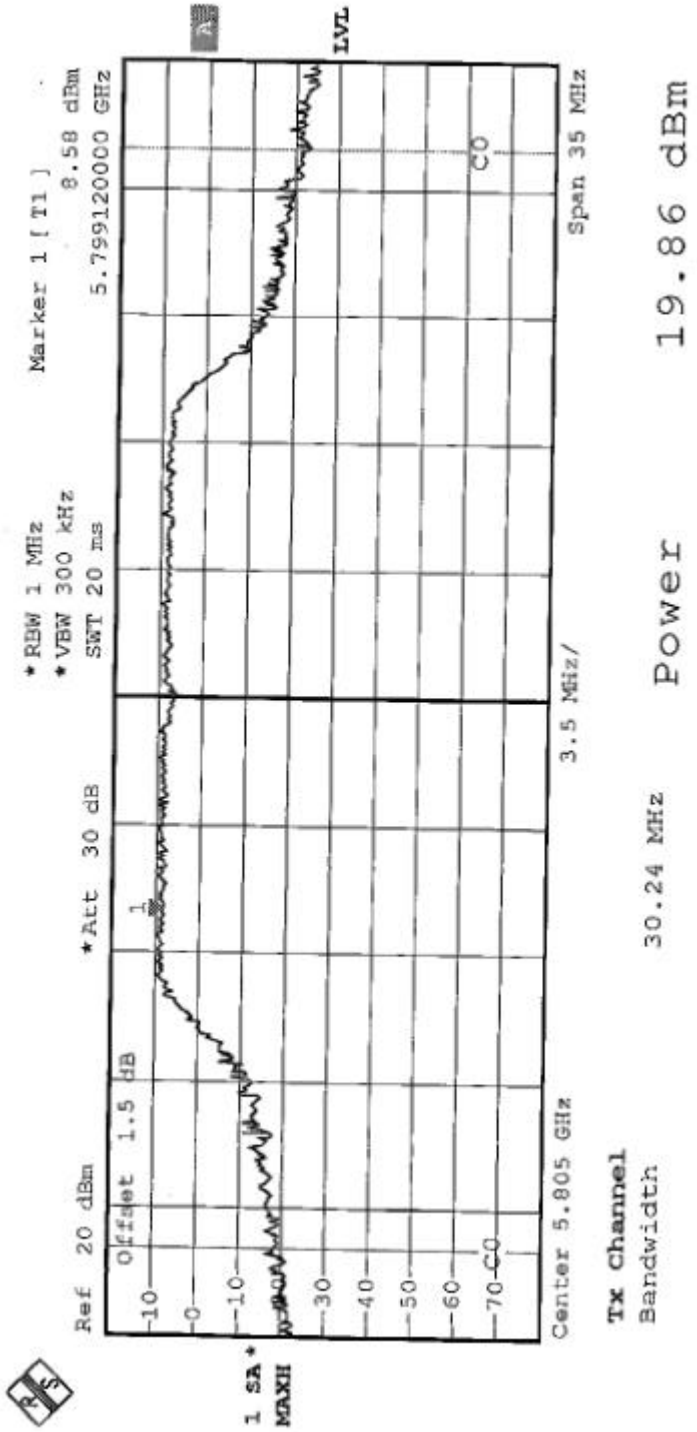
CHANNEL 8


Ref 20 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T1]
-24.01 dBm
5.337500000 GHz
1 SA*
MAXH
LVL
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Tx Channel
Bandwidth
29.44 MHz
Power
18.47 dBm

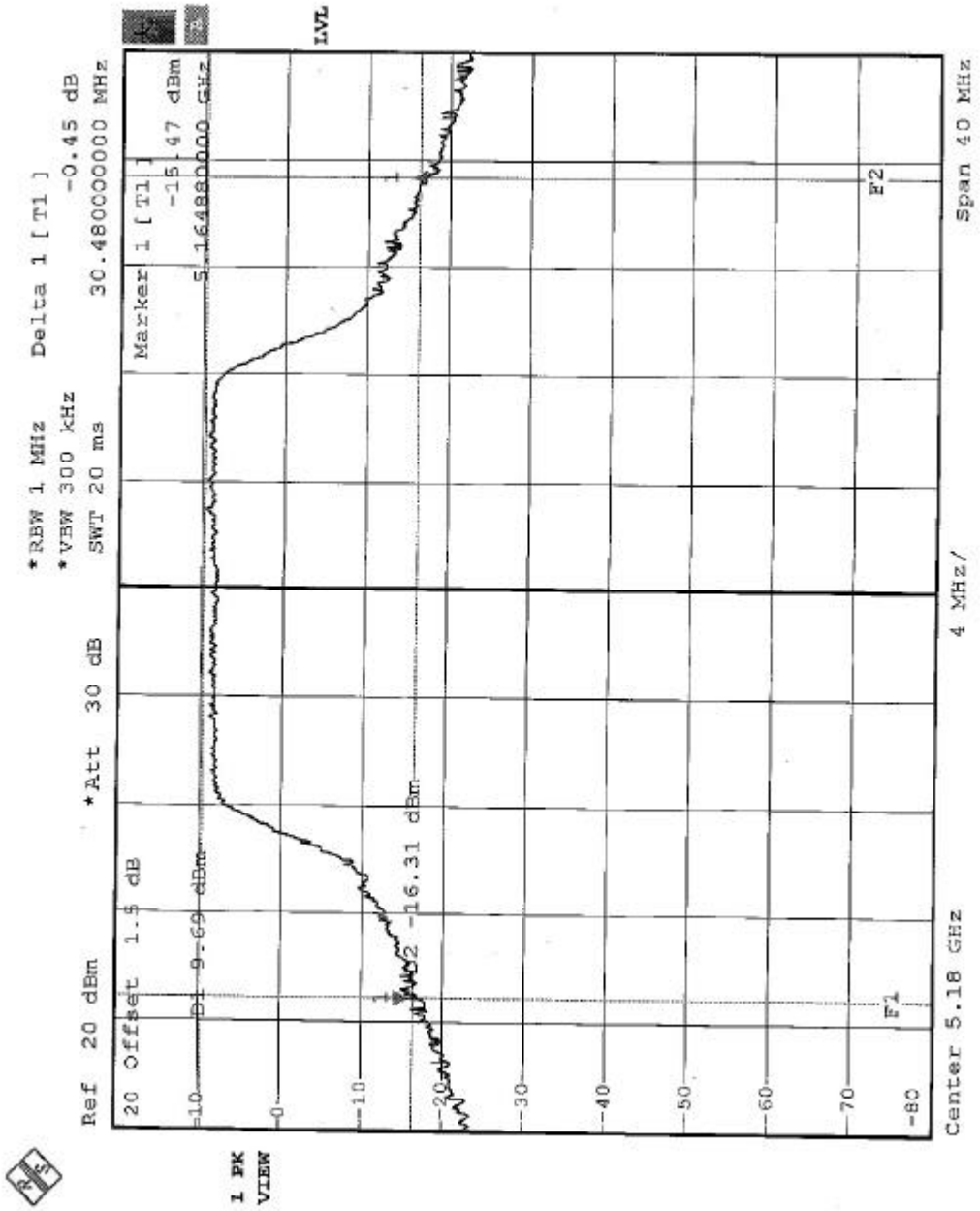
CHANNEL 9


Ref 20 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T1]
13.03 dBm
5.742410000 GHz
A
LVL
1 SA
MAXH
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
Tx Channel
Bandwidth
29.44 MHz
Power
23.40 dBm

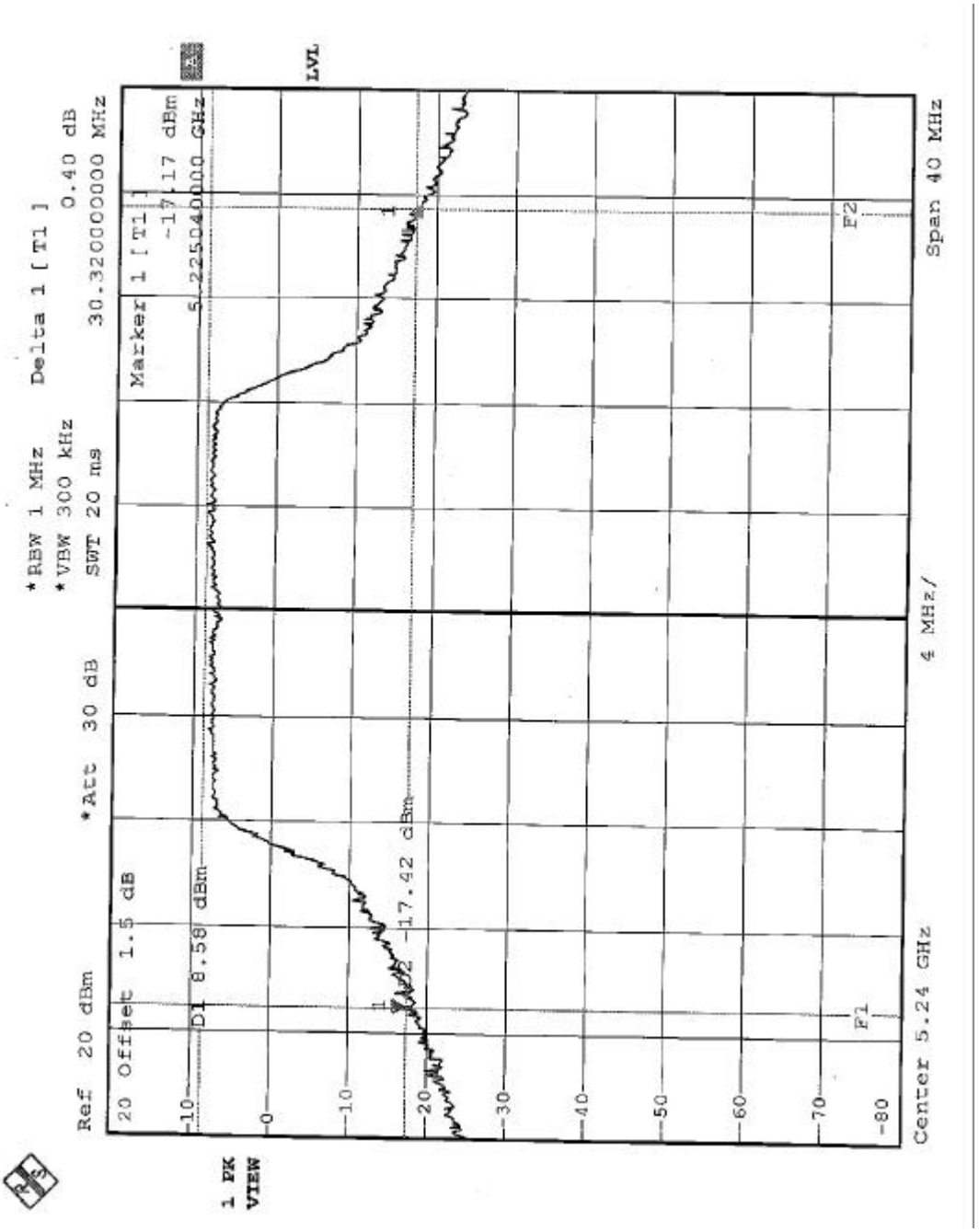
CHANNEL 12


Ref 20 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T1]
8.58 dBm
5.79912000 GHz
1 SA*
MAXH
LVL
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
Tx channel
Bandwidth
30.24 MHz
Power
19.86 dBm

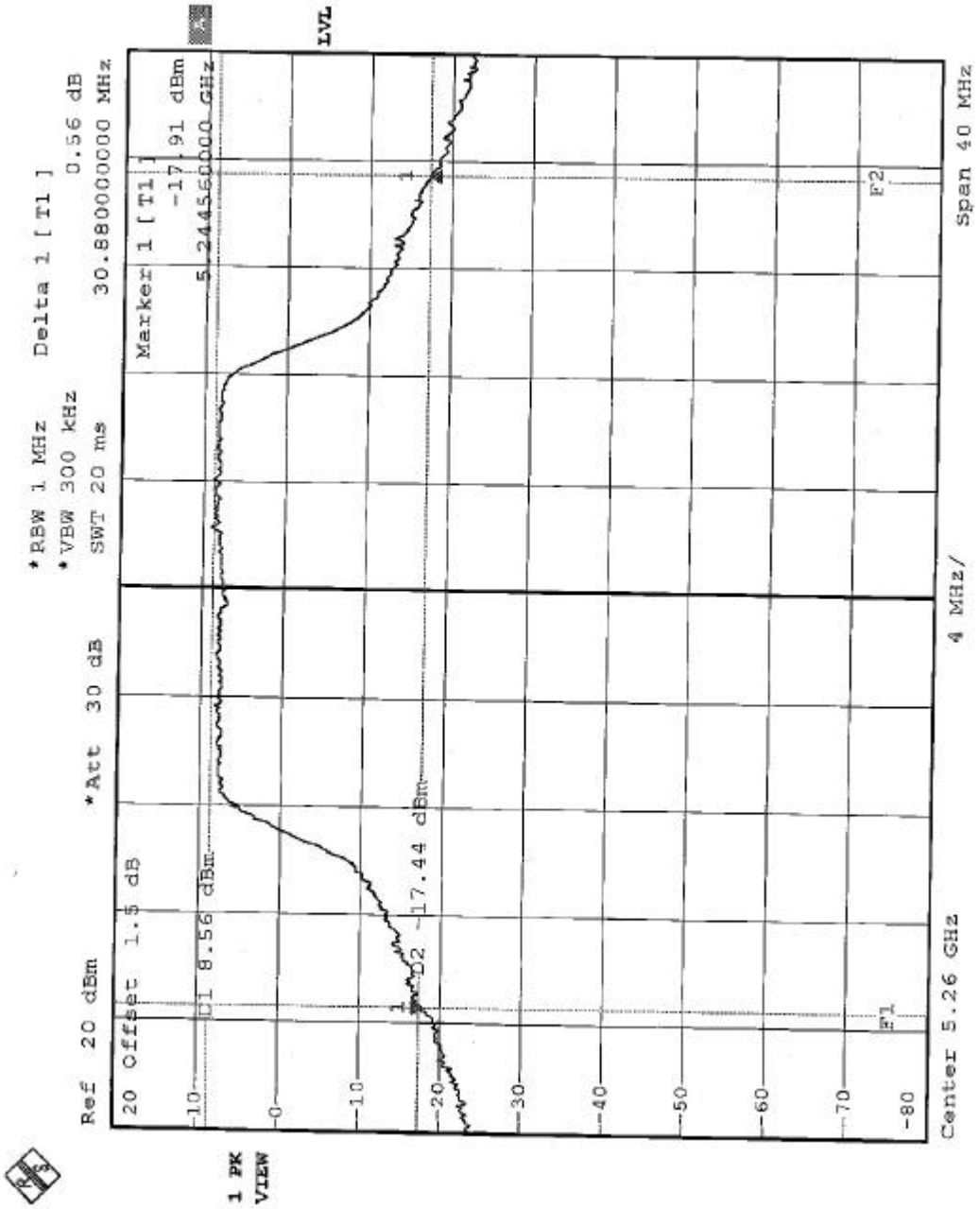
CHANNEL 1


Ref 20 dBm
20 Offset 1.5 dB
D1 9.69 dBm
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
-0.45 dB
30.48000000 MHz
Marker 1 [T1]
-15.47 dBm
5.16480000 GHz
LVL
D2 -16.31 dBm
1 PK
VIEW
Center 5.18 GHz
4 MHz/
Span 40 MHz
F1
F2

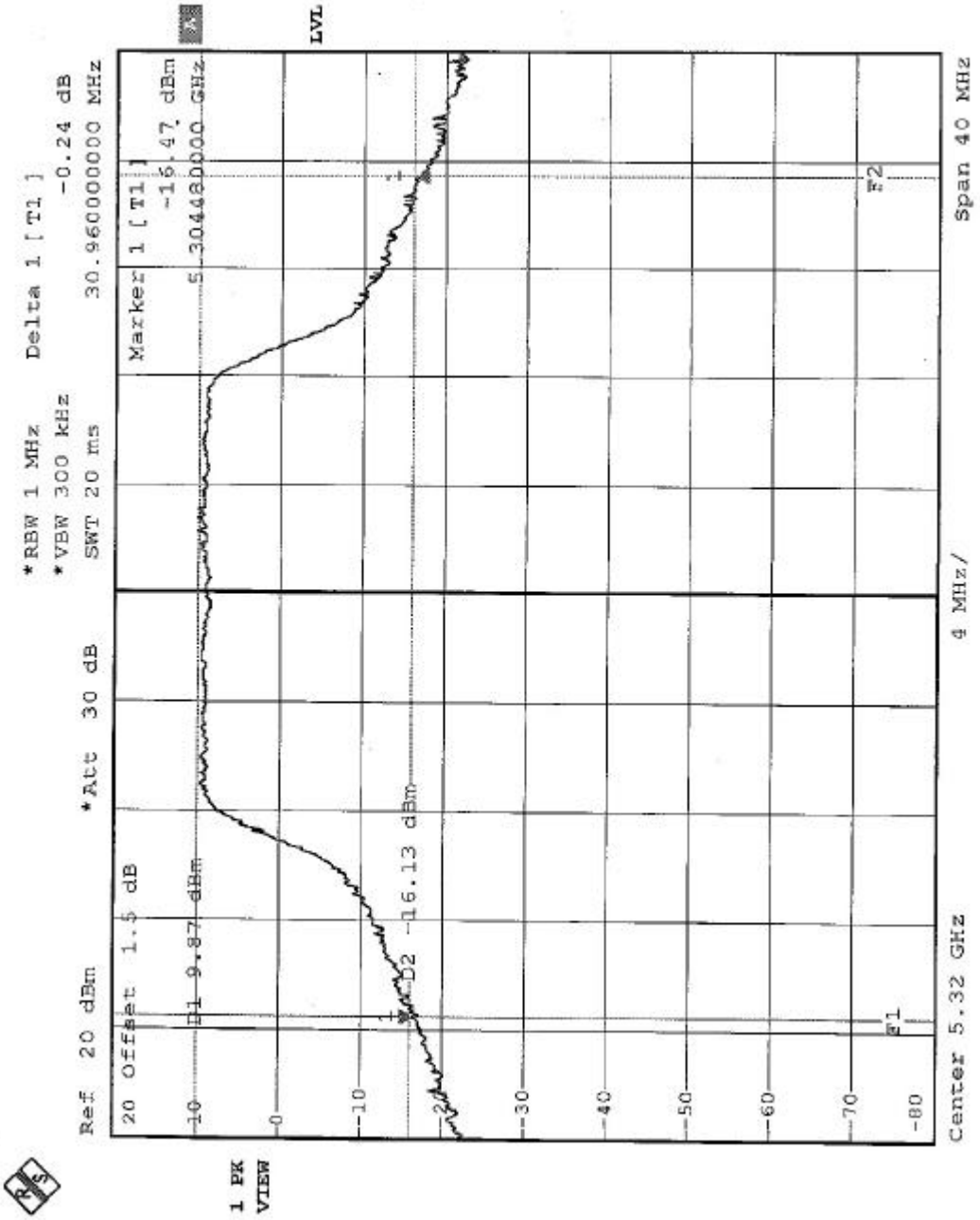
CHANNEL 4


Ref 20 dBm
Att 30 dB
RBW 1 MHz
VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
0.40 dB
30.32000000 MHz
Marker 1 [T1]
-17.17 dBm
5.22504000 GHz
20 Offset 1.5 dB
D1 8.58 dBm
-17.42 dBm
LVL
1 PK
VIEW
Center 5.24 GHz
4 MHz/
Span 40 MHz

CHANNEL 5


Ref 20 dBm
20 Offset 1.5 dB
D1 8.56 dBm
*Att 30 dB
D2 -17.44 dBm
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
0.56 dB
30.880000000 MHz
Marker 1 [T1]
-17.91 dBm
5.244560000 GHz
LVL
1 PK
VIEW
Center 5.26 GHz
4 MHz/
Span 40 MHz
F1
F2

CHANNEL 8


Ref 20 dBm
Att 30 dB
RBW 1 MHz
VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
-0.24 dB
30.960000000 MHz
Marker 1 [T1]
-16.47 dBm
5.304800000 GHz
D1 9.87 dBm
D2 -16.13 dBm
Center 5.32 GHz
4 MHz/
Span 40 MHz
1 PK
VIEW
LVL