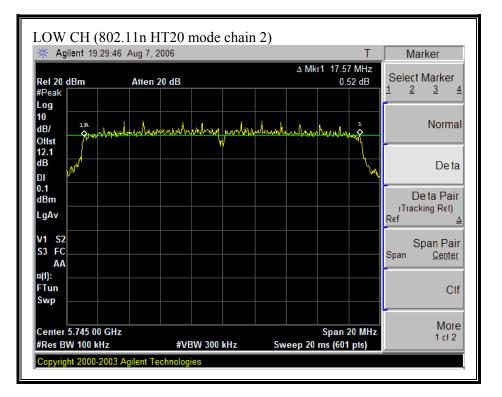
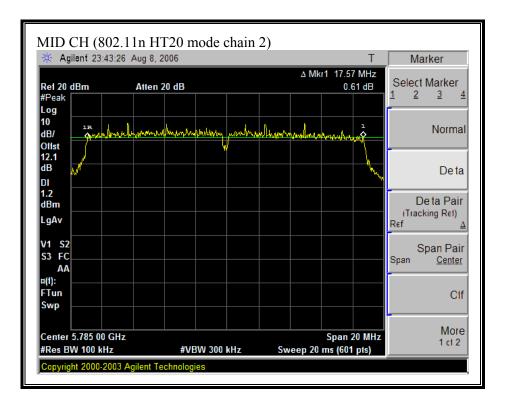


Page 201 of 371

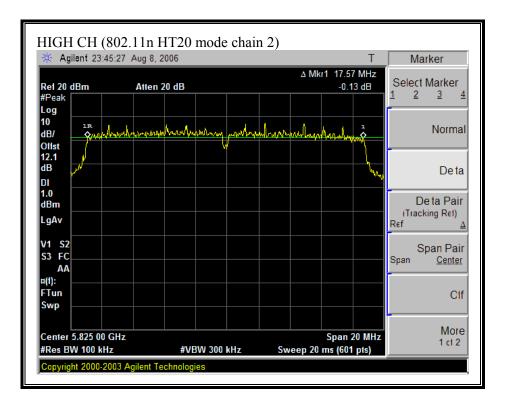
(802.11 HT20 MODE CHAIN 2)



Page 202 of 371

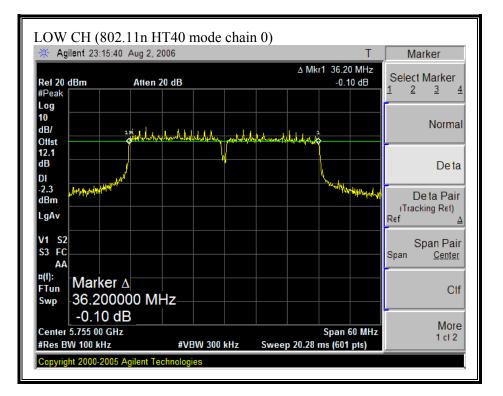


Page 203 of 371

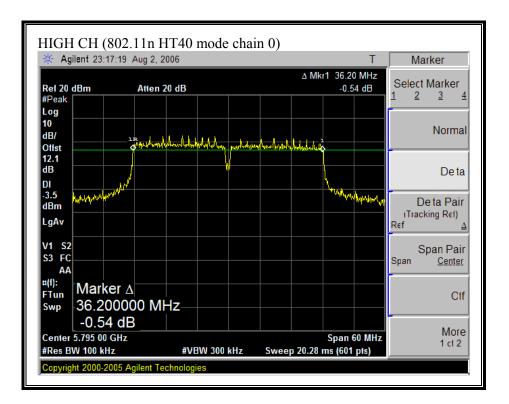


Page 204 of 371

(802.11 HT40 MODE CHAIN 0)

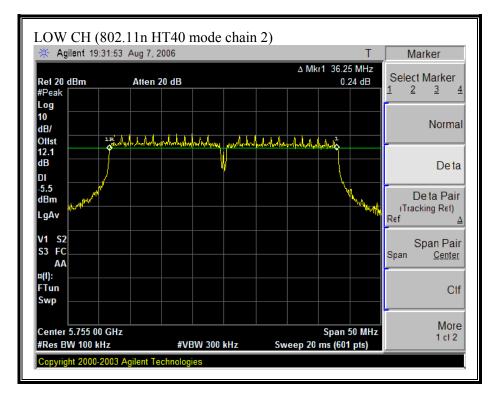


Page 205 of 371

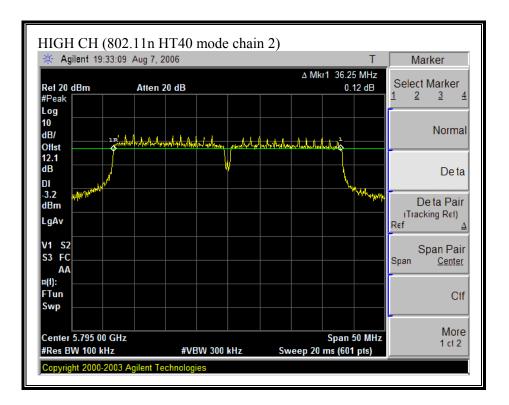


Page 206 of 371

(802.11 HT40 MODE CHAIN 2)



Page 207 of 371



Page 208 of 371

7.2.2. 99% BANDWIDTH AND 26 dB BANDWIDTH

<u>LIMIT</u>

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth and 26 dB bandwidth functions are utilized.

Page 209 of 371

RESULTS

No non-compliance noted:

Mode	Frequency	99% BW	99% BW	26 dB BW	26 dB BW
Channel		Chain 0	Chain 2	Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)

802.11a Mode

Low	5745	16.477	16.519	21.926	21.98
Middle	5785	16.5979	16.6877	21.508	21.82
High	5825	16.6357	16.6125	21.457	21.85

802.11n HT20 Mode

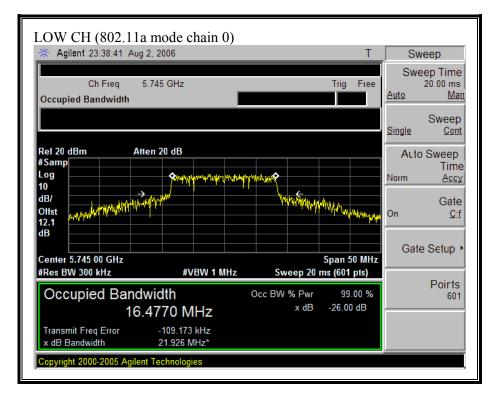
Low	5745	17.4792	17.776	21.37	21.85
Mid	5785	17.686	17.6889	21.935	21.90
High	5825	17.8395	17.7358	21.902	21.87

802.11n HT40 Mode

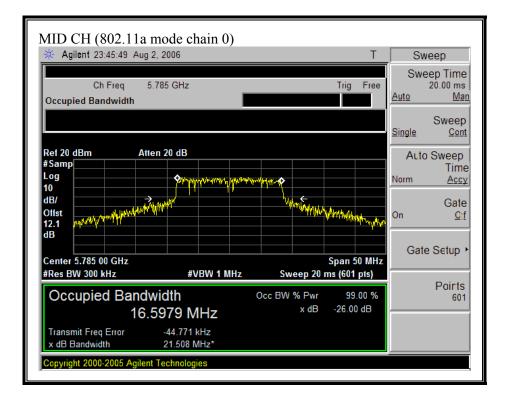
Low	5755	36.2952	36.3789	47.622	45.48
High	5795	36.6087	36.0145	45.965	47.32

Page 210 of 371

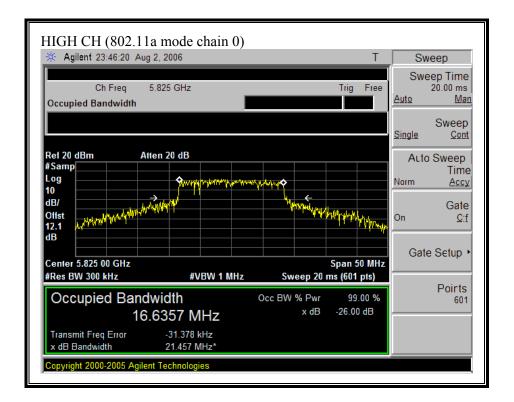
(802.11a MODE CHAIN 0)



Page 211 of 371

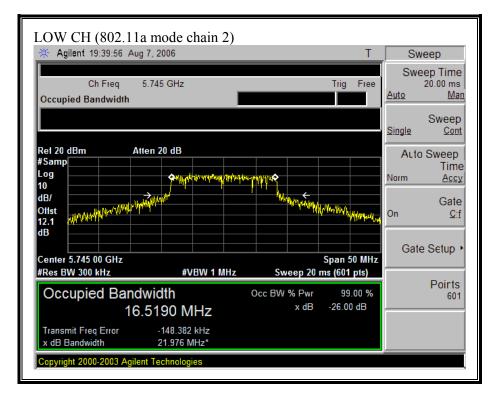


Page 212 of 371

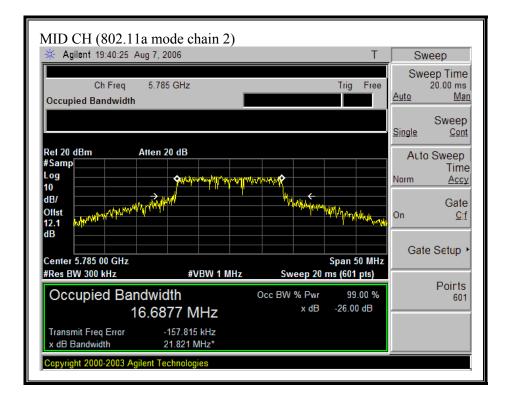


Page 213 of 371

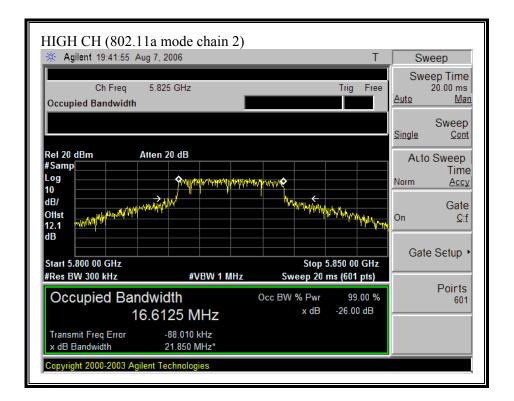
(802.11a MODE CHAIN 2)



Page 214 of 371

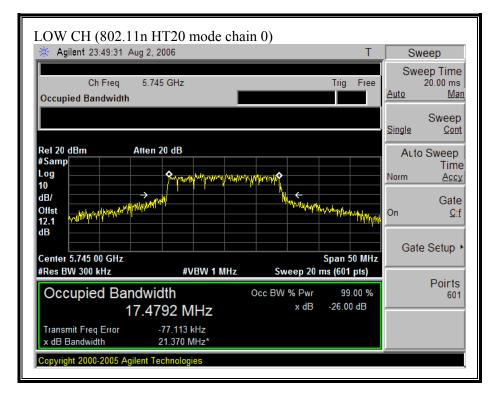


Page 215 of 371

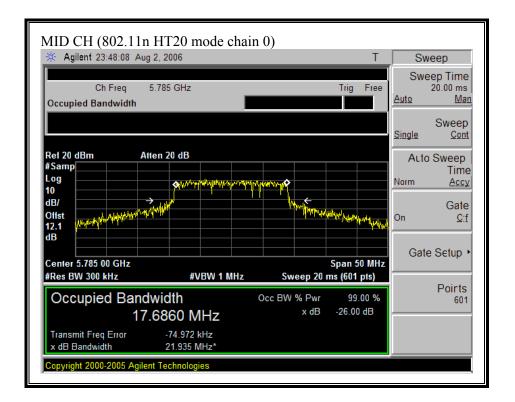


Page 216 of 371

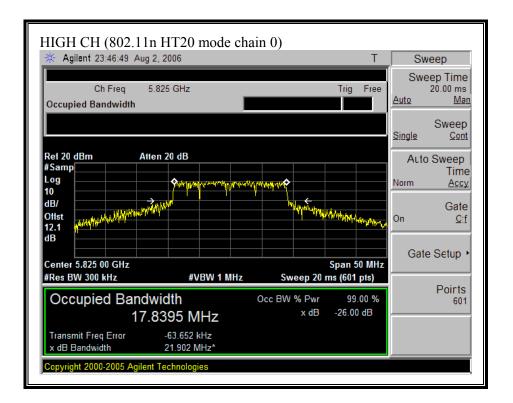
(802.11n HT20 MODE CHAIN 0)



Page 217 of 371

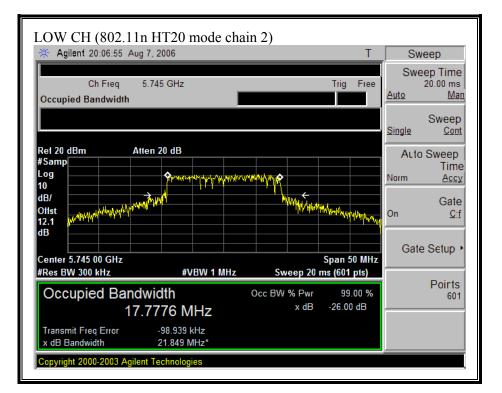


Page 218 of 371

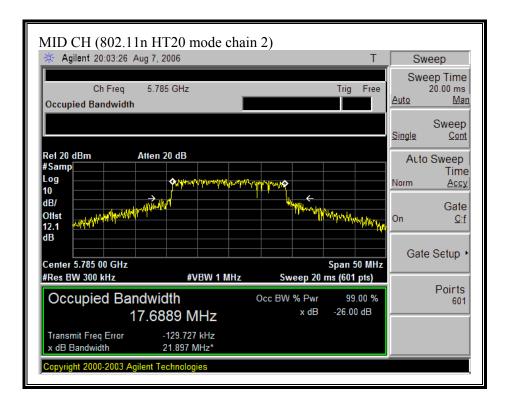


Page 219 of 371

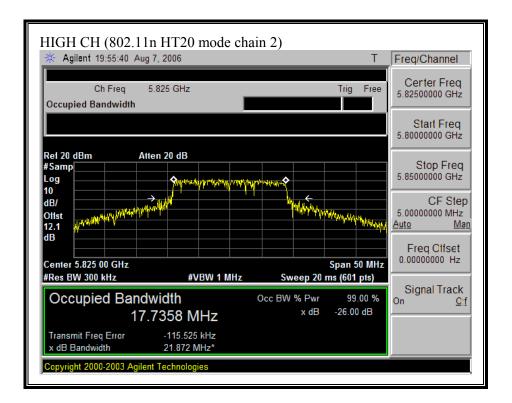
(802.11 HT20 MODE CHAIN 2)



Page 220 of 371

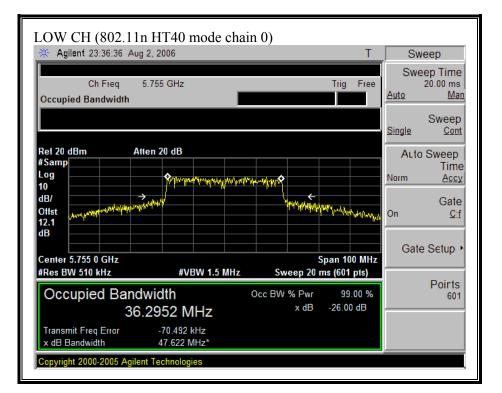


Page 221 of 371

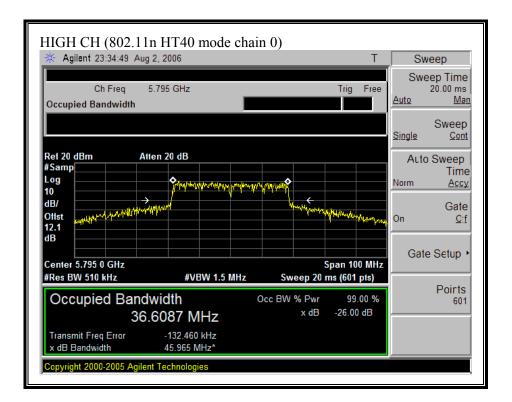


Page 222 of 371

(802.11 HT40 MODE CHAIN 0)

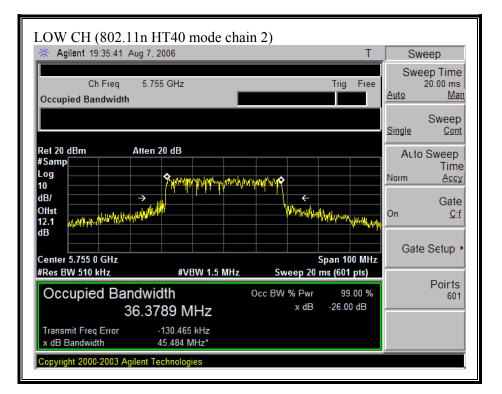


Page 223 of 371

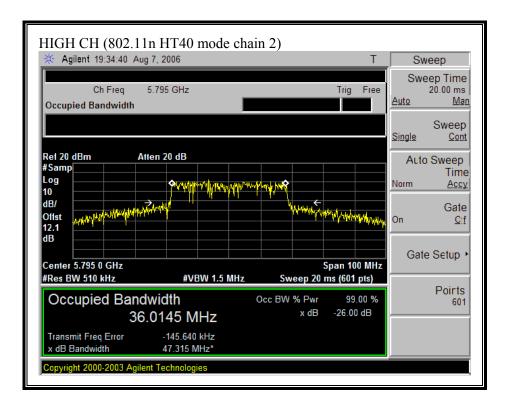


Page 224 of 371

(802.11 HT40 MODE CHAIN 2)



Page 225 of 371



Page 226 of 371

7.2.3. MAXIMUM OUTPUT POWER

<u>LIMIT</u>

§15.247 (b) The maximum peak output power of the intentional radiator shall not exceed the following:

§15.247 (b) (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The test is performed in accordance with Option 2 procedures in FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005. The transmitter operates continuously therefore Method # 1 is used.

Each chain is measured separately and the total power is calculated using:

Total Power = $10 \log (10^{\circ} (Chain 0 Power / 10) + 10^{\circ} (Chain 2 Power / 10))$

Page 227 of 371

RESULTS

No non-compliance noted:

Fixed Limit (dBm)	17
Antenna Gain (dBi)	1.5
10 Log (# Tx Chains)	3.01
Effective Legacy Gain	4.51

Mode	Frequency	Max Power	Max Power	Max Power	Limit	Margin
Channel		Chain 0	Chain 2	Total		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)

802.11a Mode

Low	5745	17.44	17.75	20.61	30.00	-9.39
Middle	5785	17.47	18.04	20.77	30.00	-9.23
High	5825	17.53	18.19	20.88	30.00	-9.12

802.11n HT20 Mode

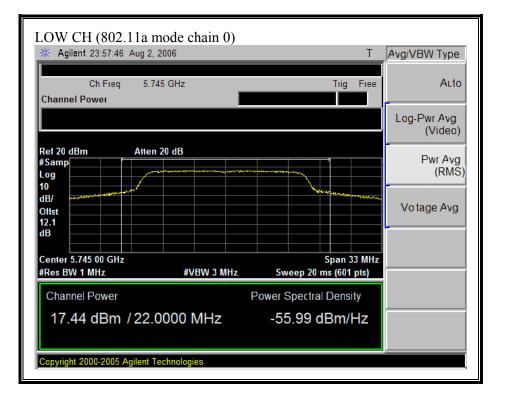
Low	5745	16.94	17.62	20.30	30.00	-9.70
Mid	5785	16.74	17.52	20.16	30.00	-9.84
High	5825	17.05	17.86	20.48	30.00	-9.52

802.11n HT40 Mode

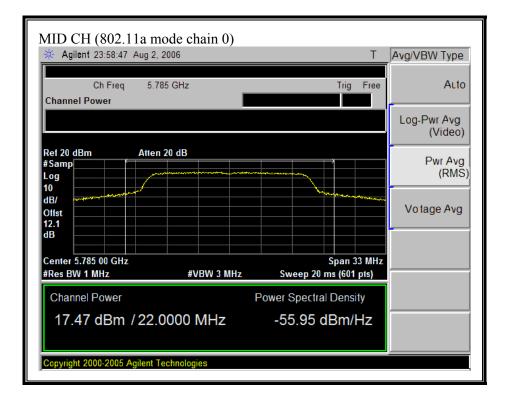
Low	5755	14.82	15.57	18.22	30.00	-11.78
High	5795	16.71	18.00	20.41	30.00	-9.59

Page 228 of 371

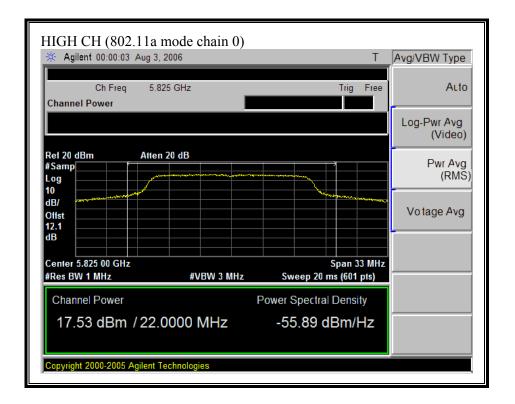
(802.11a MODE CHAIN 0)



Page 229 of 371

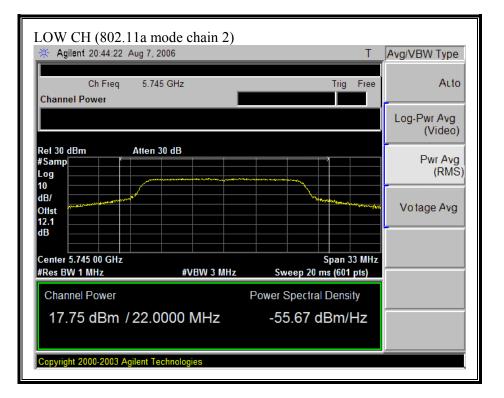


Page 230 of 371

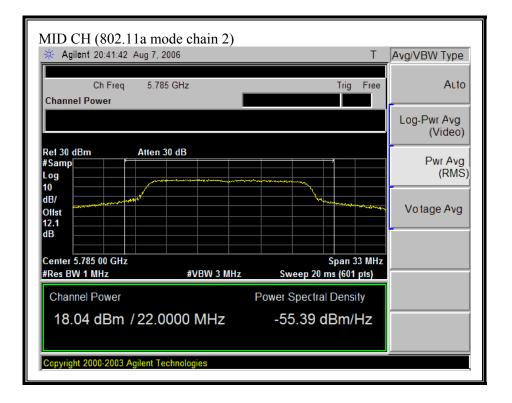


Page 231 of 371

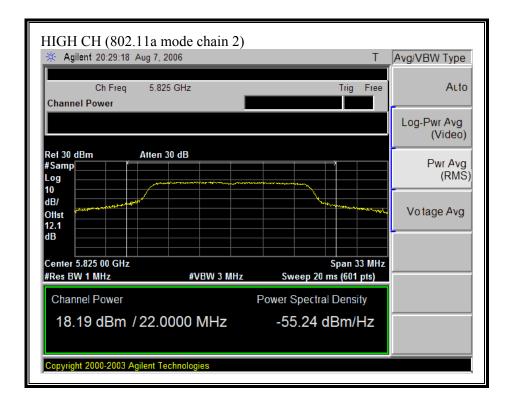
(802.11a MODE CHAIN 2)



Page 232 of 371

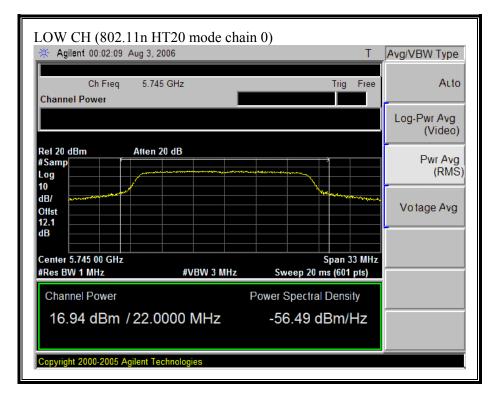


Page 233 of 371

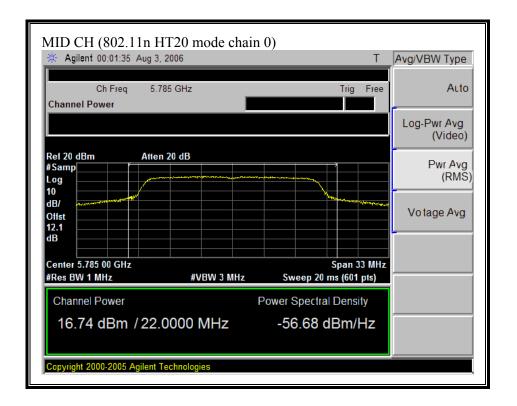


Page 234 of 371

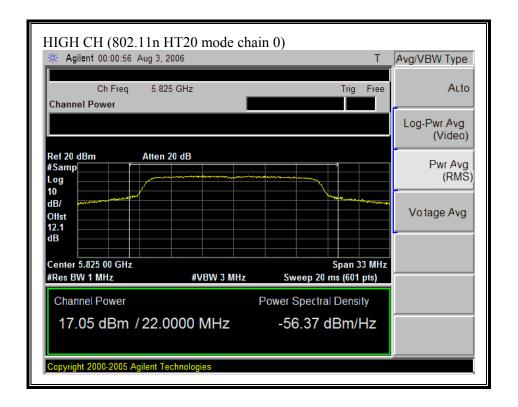
(802.11n HT20 MODE CHAIN 0)



Page 235 of 371

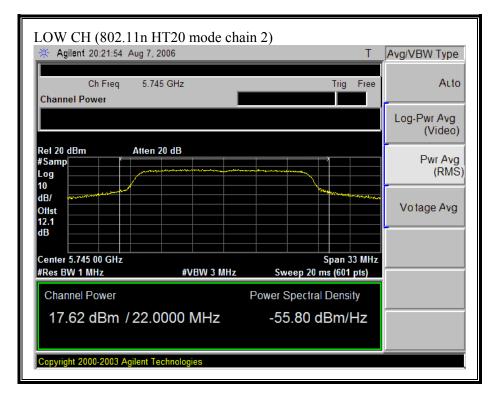


Page 236 of 371

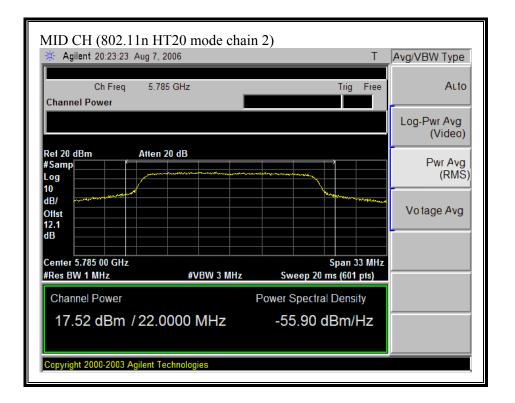


Page 237 of 371

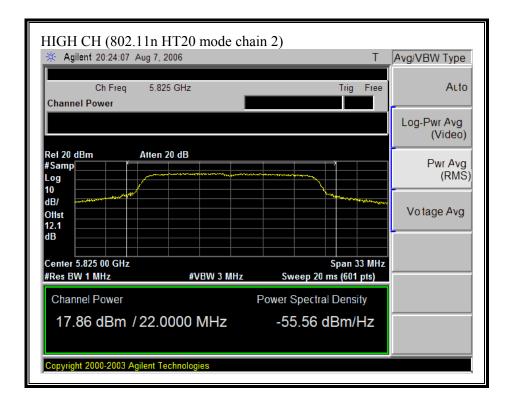
(802.11 HT20 MODE CHAIN 2)



Page 238 of 371

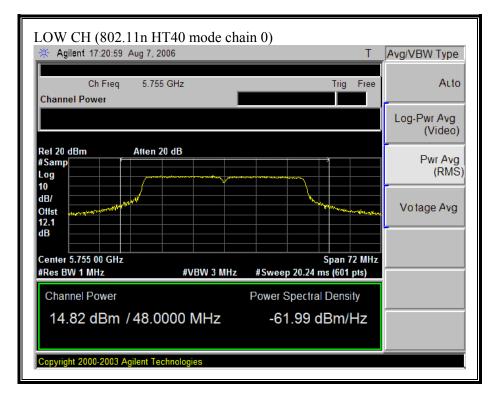


Page 239 of 371

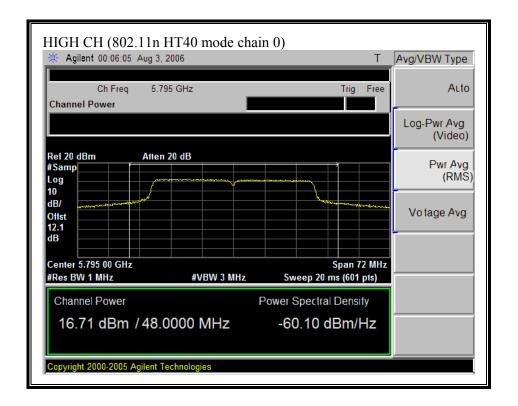


Page 240 of 371

(802.11 HT40 MODE CHAIN 0)

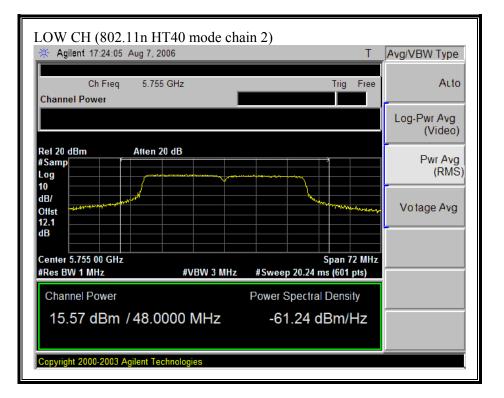


Page 241 of 371

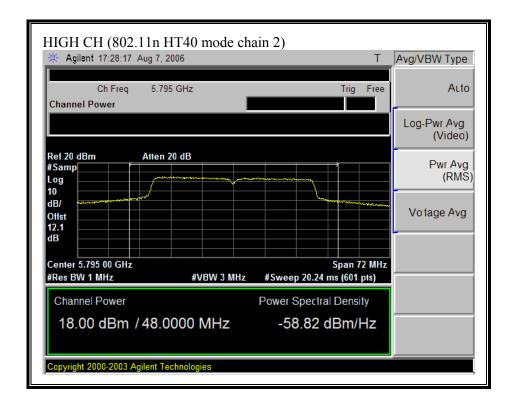


Page 242 of 371

(802.11 HT40 MODE CHAIN 2)



Page 243 of 371



Page 244 of 371

7.2.4. AVERAGE POWER

AVERAGE POWER LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

Each chain is measured separately and the total power is calculated using:

Total Power = $10 \log (10^{\circ} (Chain 0 Power / 10) + 10^{\circ} (Chain 2 Power / 10))$

Page 245 of 371

RESULTS

No non-compliance noted:

The cable assembly insertion loss of 12.1 dB (including 10 dB pad and 2.1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Mode	Frequency	Average Power	Average Power	Average Power
Channel		Chain 0	Chain 2	Total
	(MHz)	(dBm)	(dBm)	(dBm)

802.11a Mode

Low	5745	17.4	17.4	20.4
Middle	5785	17.3	17.7	20.5
High	5825	17.5	17.9	20.7

802.11n HT20 Mode

Low	5745	16.9	17.0	20.0
Middle	5785	16.6	17.0	19.8
High	5825	17.0	17.5	20.3

802.11n HT40 Mode

Low	5755	14.0	15.2	17.7
High	5795	16.7	18.0	20.4

Page 246 of 371

7.2.5. PEAK POWER SPECTRAL DENSITY

<u>LIMIT</u>

§15.247 (d) For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The test is performed in accordance with Option 2 procedures in FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005. The conditions for sample detection are satisfied. The PPSD is the highest level found across the emission in any 3 kHz band.

Each chain is measured separately and the total PPSD is calculated using:

Total PPSD = $10 \log (10^{\circ} (Chain 0 PPSD / 10) + 10^{\circ} (Chain 2 PPSD / 10))$

Page 247 of 371

RESULTS

No non-compliance noted:

Mode	Frequency	PPSD	PPSD	PPSD	Limit	Margin
Channel		Chain 0	Chain 2	Total		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)

802.11a Mode

Low	5745	-19.11	-18.33	-15.69	8	-23.69
Middle	5785	-19.59	-17.75	-15.56	8	-23.56
High	5825	-18.87	-17.55	-15.15	8	-23.15

802.11n HT20 Mode

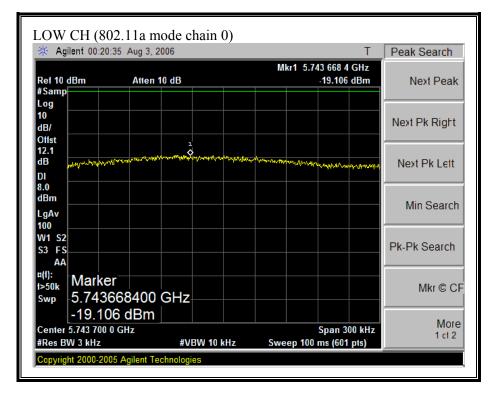
Low	5745	-19.83	-18.95	-16.36	8	-24.36
Middle	5785	-20.16	-18.80	-16.42	8	-24.42
High	5825	-19.68	-19.18	-16.41	8	-24.41

802.11n HT40 Mode

Low	5755	-24.90	-24.04	-21.44	8	-29.44
High	5795	-23.48	-22.17	-19.76	8	-27.76

Page 248 of 371

(802.11a MODE CHAIN 0)



Page 249 of 371

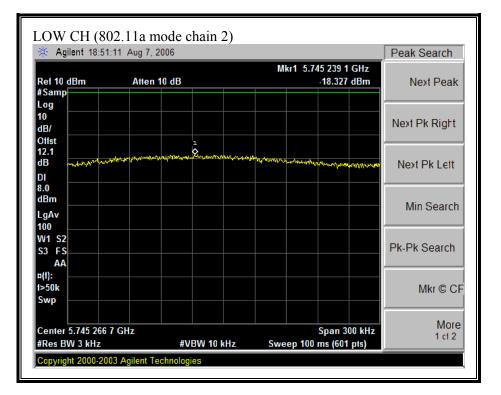
🔆 Agilent 00:22	:53 Aug 3, 2006			Т	Peak Search
Ref 10 dBm #Samp	Atten 10 dB		Mkr1 5.7	86 808 5 GHz -19.588 dBm	Next Peak
Log 10 dB/ Ollst					Next Pk Right
12.1	Andrew marked and a second	Land Contraction of the second	ayaratrakararak	when when the second	Next Pk Lett
6.0 dBm LgAv 100					Min Search
W1 S2 S3 FS AA					Pk-Pk Search
	er 808500 GHz 88 dBm	2			Mkr © CF
Center 5.786 800 #Res BW 3 kHz		/BW 10 kHz	Sweep 100	Span 300 kHz ms (601 pts)	More 1 ct 2

Page 250 of 371

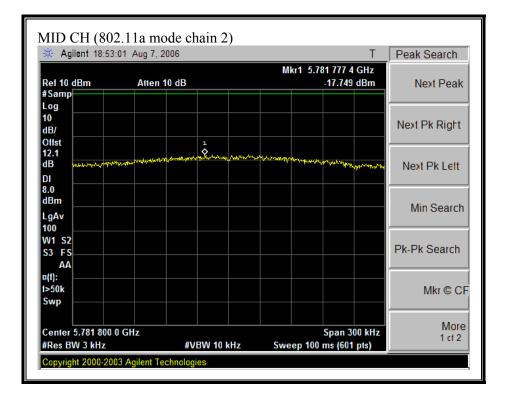
🔆 Agilent 00:24	:19 Aug 3, 2006	Т	Peak Search
Ref 10 dBm #Samp	Atten 10 dB	Mkr1 5.824 251 8 GHz -18.865 dBm	Next Peak
Log 10 dB/			Next Pk Right
Offst 12.1 dB	z everalizatek tilly anvite fligt natur an en gill franket generaliserer everalizatek	anang manang alaman ang manang man	Next Pk Lett
8.0 dBm LgAv			Min Search
100 W1 S2 S3 FS AA			Pk-Pk Search
a(i): 1>50k Swp			Mkr © CF
Center 5.824 333 #Res BW 3 kHz	3 GHz #VBW 10 kH	Span 300 kHz z Sweep 100 ms (601 pts)	More 1 ct 2

Page 251 of 371

(802.11a MODE CHAIN 2)



Page 252 of 371

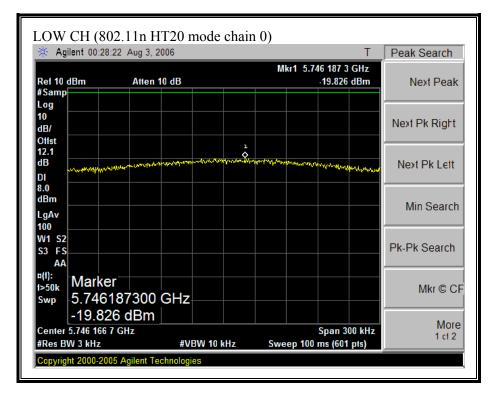


Page 253 of 371

🔆 Agilent 18:54	:10 Aug 7, 2006			Т	Peak Search
Ref 10 dBm #Samp	Atten 10 dB		Mkr1 5.824 010 8 -17.553		Next Peak
Log 10 dB/					Next Pk Right
Offst 12.1 dB	where and a second of the second	an a	Land the second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Next Pk Lett
8.0 dBm LgAv					Min Search
100 W1 S2 S3 FS					Pk-Pk Search
AA ¤(1): t>50k Swp					Mkr © CF
Center 5.823 966 #Res BW 3 kHz		10 kHz	Span 34 Sweep 100 ms (601		More 1 ct 2

Page 254 of 371

(802.11n HT20 MODE CHAIN 0)



Page 255 of 371

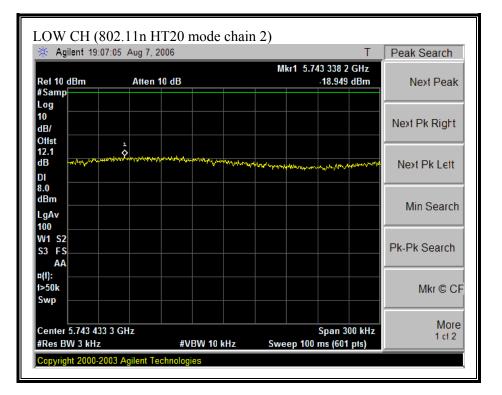
🔆 Agi	ilent 00:26:59 A	ug 3, 2006		Т	Peak Search
Ref 10 (#Samp		Atten 10 dB	N	lkr1 5.782 130 0 GHz -20.161 dBm	
Log 10 dB/ Offst					Next Pk Right
	alu-qualaterant ^{aran} tartar		all and the second and a second	and wards and all all all and and and and all the	Next Pk Lett
8.0 dBm LgAv					Min Search
100 W1 S2 S3 FS AA					Pk-Pk Search
	Marker 5.782130				Mkr © CF
	-20.161 d 5.782 166 7 GH; W 3 kHz	Ľ	10 kHz Sw	Span 300 kH; Span 300 kH; eep 100 ms (601 pts)	More 1 ct 2

Page 256 of 371

🔆 Agilent 00:2	5:48 Aug 3, 2006			Т	Peak Search
Ret 10 dBm #Samp	Atten 10 dB		Mkr1 5.8	22 431 8 GHz -19.680 dBm	Next Peak
Log 10 dB/					Next Pk Right
Offst 12.1 dB DI	ingleanneal spread against individual		-	Warner and the for the former	Next Pk Left
8.0 dBm LgAv					Min Search
100 W1 S2 S3 FS AA					Pk-Pk Search
¤(i): t>50k Swp					Mkr © Cl
Center 5.822 433 #Res BW 3 kHz		/BW 10 kHz	Sweep 100	Span 300 kHz ms (601 pts)	More 1 ct 2

Page 257 of 371

(802.11 HT20 MODE CHAIN 2)



Page 258 of 371

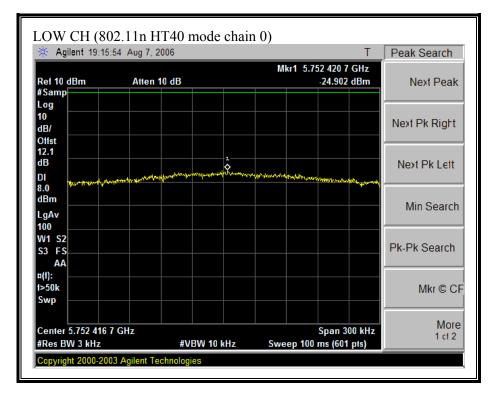
Aglient 19:00	5:01 Aug 7, 2006	Т	Peak Search
Ref 10 dBm #Samp	Atten 10 dB	Mkr1 5.783 044 1 GHz .18.797 dBm	Next Peak
Log 10 dB/			Next Pk Right
Ollst 12.1 dB	the state of the second	analanda manalani ana kana kana kana kana kana kana ka	Next Pk Lett
8.0 dBm LgAv			Min Search
100 W1 S2 S3 FS			Pk-Pk Search
AA ¤(1): 1>50k			 Mkr © Cl
Swp Center 5.783 066	7 CH+	Span 300 kHz	More
			Moro

Page 259 of 371

🔆 Agilent 18:5	5:34 Aug 7, 2006			Т	Peak Search
Ref 10 dBm Samp	Atten 10 dB			5 204 5 GHz 19.176 dBm	Next Peak
Log 10 dB/ Offst					Next Pk Right
	same and a frage all and a state	L	rran proposition of the state o	whenener	Next Pk Lett
8.0 dBm LgAv					Min Search
100 W1 S2 S3 FS AA					Pk-Pk Search
¤(1): t>50k Swp					Mkr © CF
Center 5.825 200 #Res BW 3 kHz		BW 10 kHz		Span 300 kHz ns (601 pts)	More 1 ct 2

Page 260 of 371

(802.11 HT40 MODE CHAIN 0)

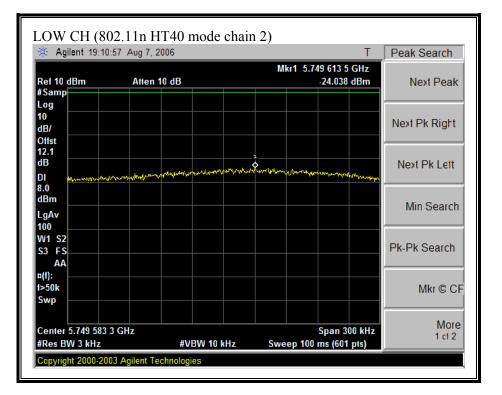


Page 261 of 371

🔆 Agilent 00:31	1:59 Aug 3, 2006			Т	Peak Search
Ref 10 dBm #Samp	Atten 10 dB		Mkr1 5.7	796 802 2 GHz -23.478 dBm	Next Peak
Log 10 dB/ Ollst					Next Pk Right
12.1 dB DI ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2 provention provident and the provident provident provident provident provident provident provident provident pro	manna ann ann ann ann ann ann ann ann an	www.manapanananahy	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Next Pk Left
8.0 dBm LgAv 100					Min Search
W1 S2 S3 FS AA					Pk-Pk Search
¤(I): 1>50k Swp					Mkr © Cł
Center 5.796 833 #Res BW 3 kHz		V 10 kHz	Sweep 100	Span 300 kHz) ms (601 pts)	More 1 ct 2

Page 262 of 371

(802.11 HT40 MODE CHAIN 2)



Page 263 of 371

🔆 Agilent 19:1	3:16 Aug 7, 2006		T	Peak Search
Ref 10 dBm #Samp	Atten 10 dB		Mkr1 5.793 684 7 GHz -22.166 dBm	Next Peak
Log 10 dB/				Next Pk Right
Offst 12.1 dB	ada harring and a second a larger		and a market and a market a ma	Next Pk Lett
8.0 dBm LgAv				Min Search
100 W1 S2 S3 FS AA				Pk-Pk Search
n(t): t>50k Swp				Mkr © CF
Center 5.793 66 #Res BW 3 kHz		W 10 kHz S	Span 300 kHz Sweep 100 ms (601 pts)	More 1 cl 2

Page 264 of 371

7.2.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

§15.247 (c) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in§15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Conducted power was measured using the Option 2 procedures, therefore the required attenuation is 30 dB.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

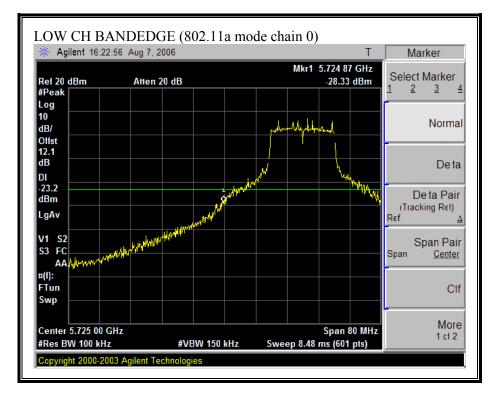
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

RESULTS

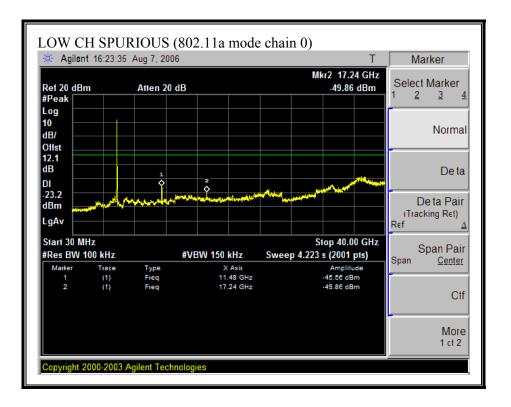
No non-compliance noted:

Page 265 of 371

SPURIOUS EMISSIONS (802.11a MODE CHAIN 0)

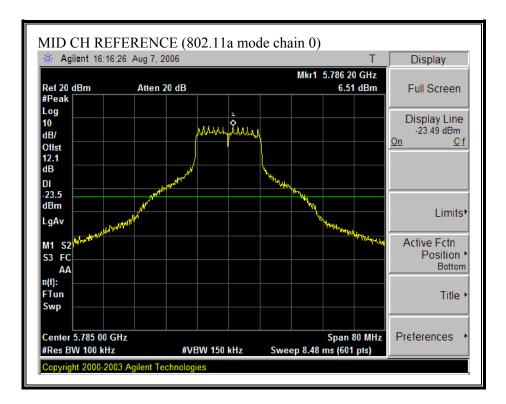


Page 266 of 371

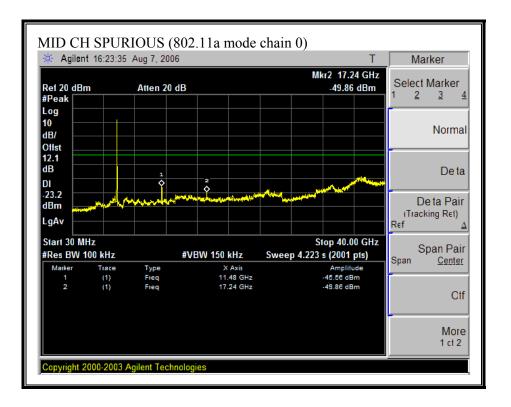


Page 267 of 371

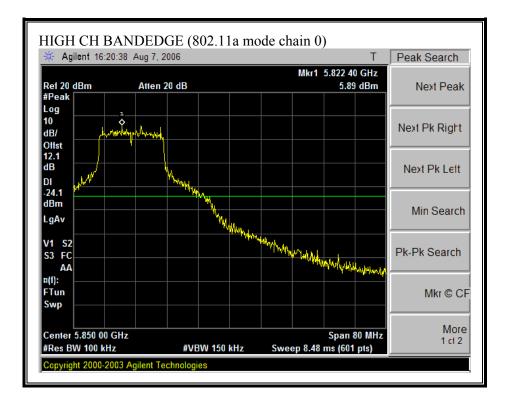
REPORT NO: 06U10485-1



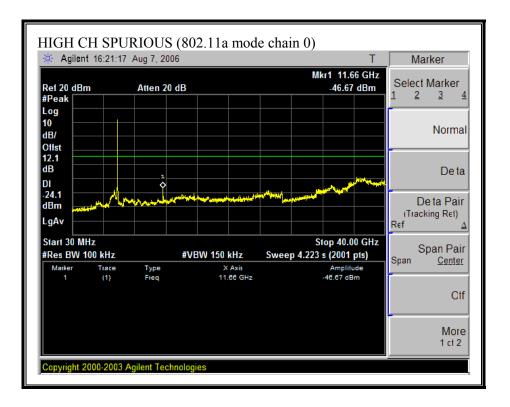
Page 268 of 371



Page 269 of 371

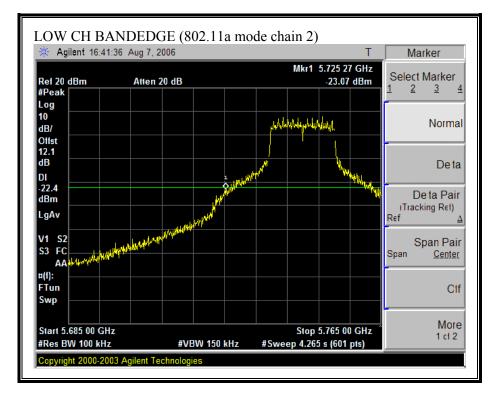


Page 270 of 371

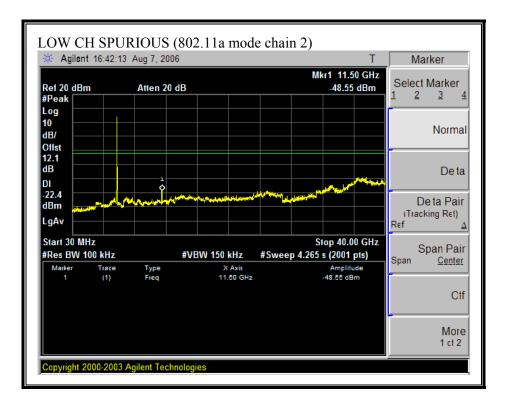


Page 271 of 371

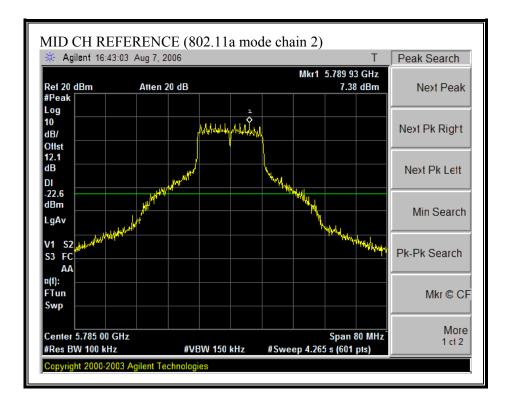
SPURIOUS EMISSIONS (802.11a MODE CHAIN 2)



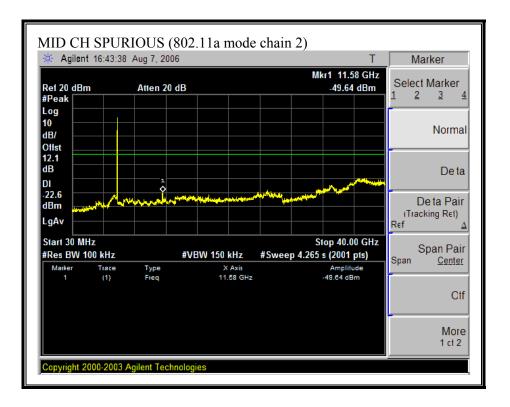
Page 272 of 371



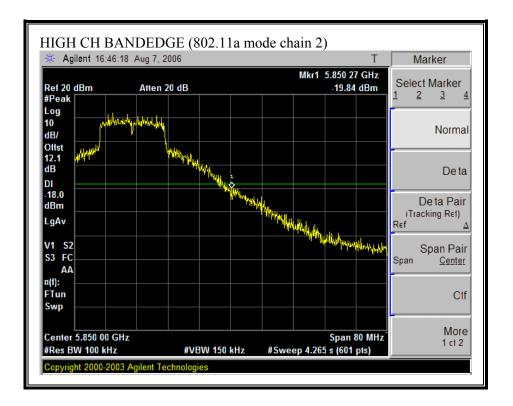
Page 273 of 371



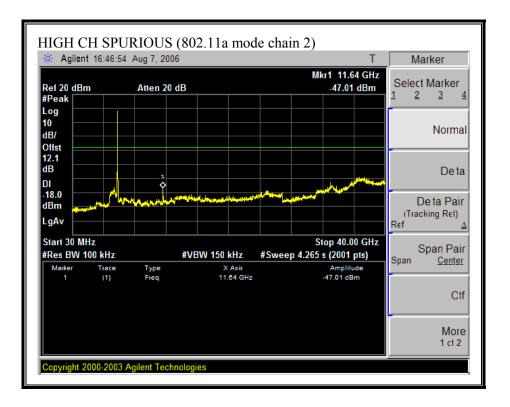
Page 274 of 371



Page 275 of 371

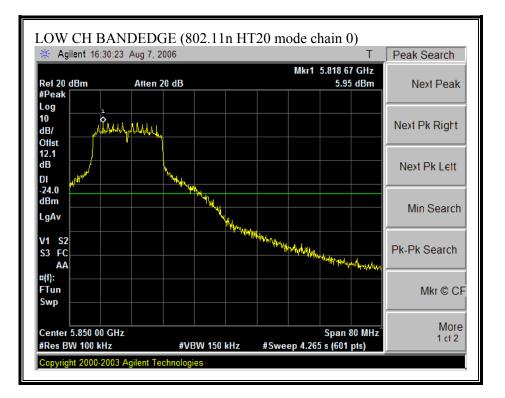


Page 276 of 371

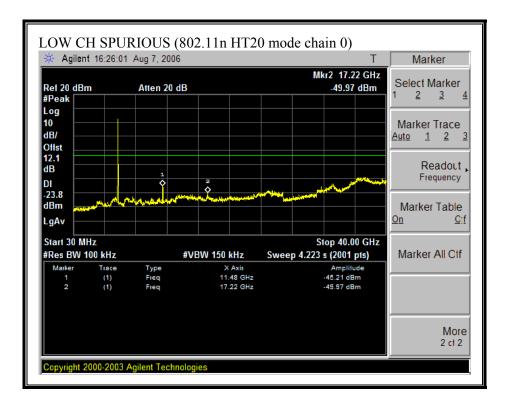


Page 277 of 371

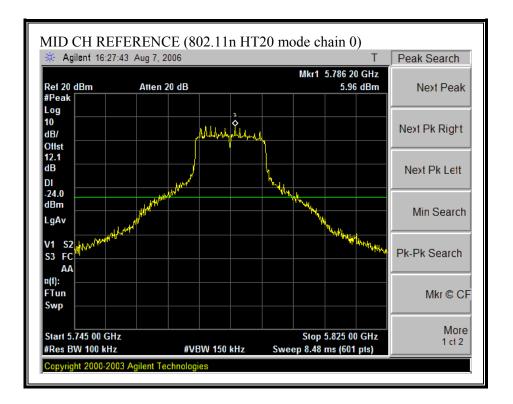
SPURIOUS EMISSIONS (802.11n HT20 MODE CHAIN 0)



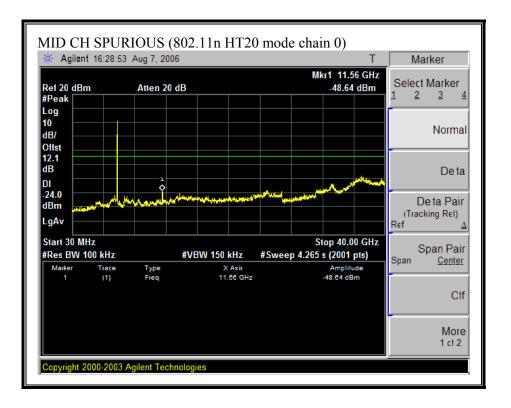
Page 278 of 371



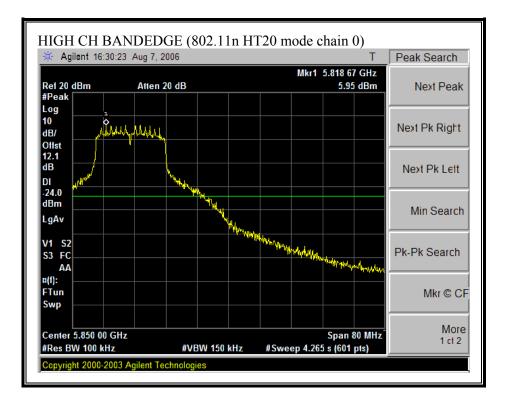
Page 279 of 371



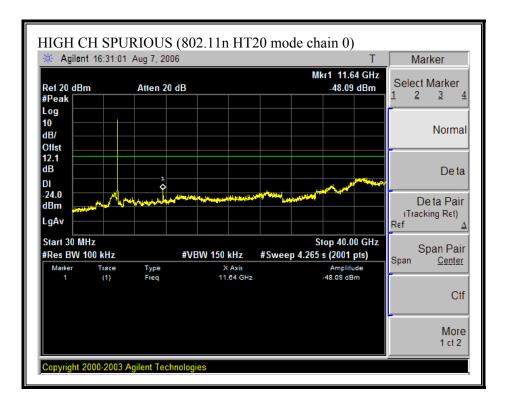
Page 280 of 371



Page 281 of 371

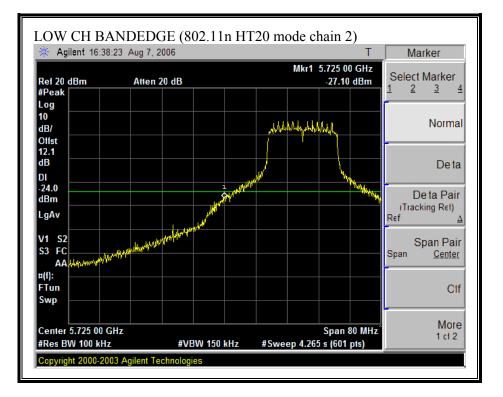


Page 282 of 371

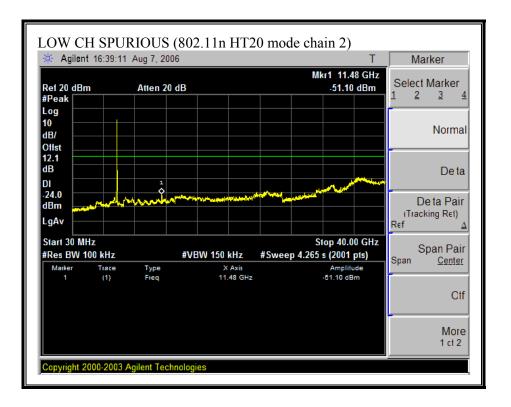


Page 283 of 371

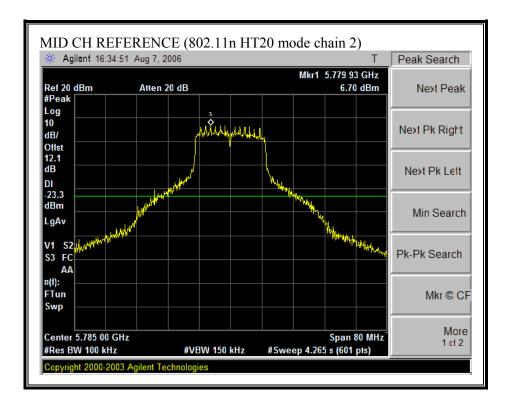
SPURIOUS EMISSIONS (802.11 HT20 MODE CHAIN 2)



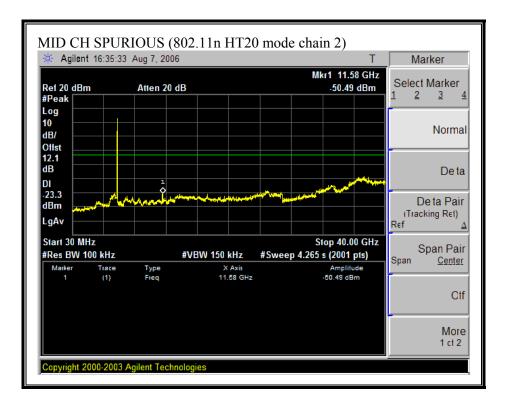
Page 284 of 371



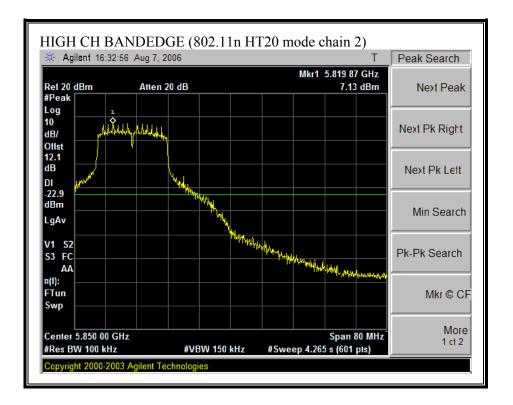
Page 285 of 371



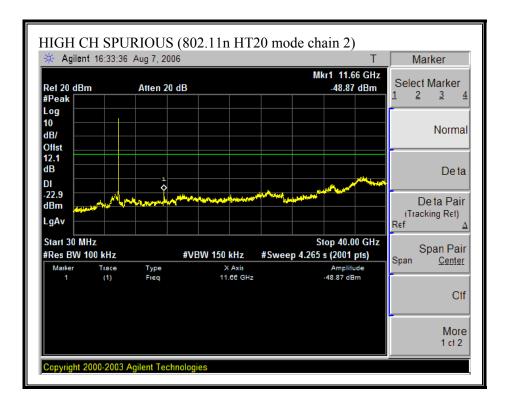
Page 286 of 371



Page 287 of 371

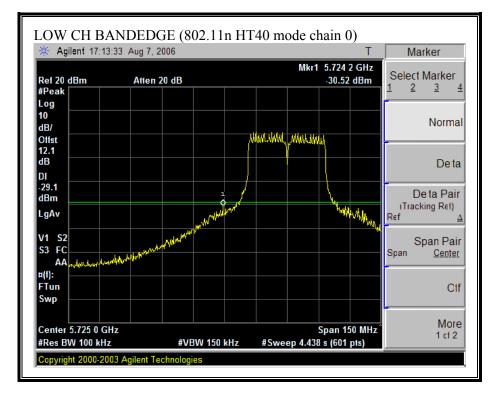


Page 288 of 371

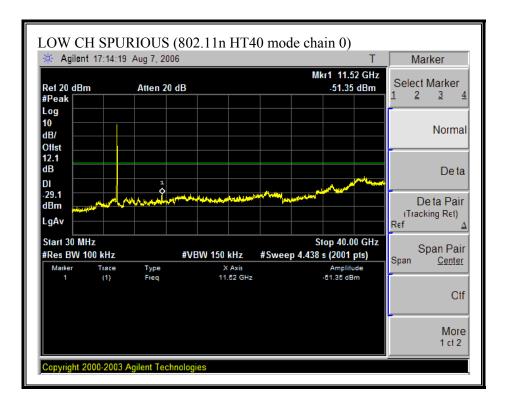


Page 289 of 371

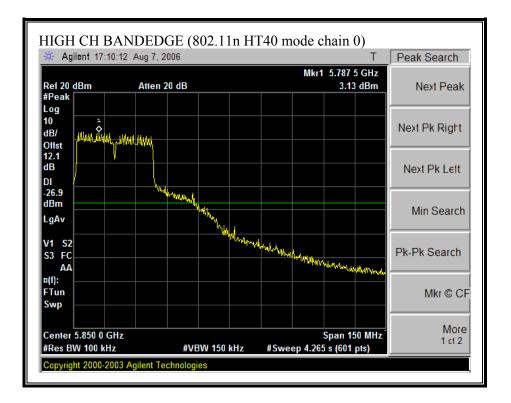
SPURIOUS EMISSIONS (802.11 HT40 MODE CHAIN 0)



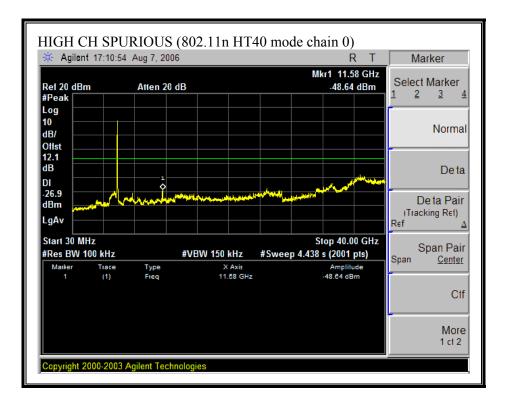
Page 290 of 371



Page 291 of 371

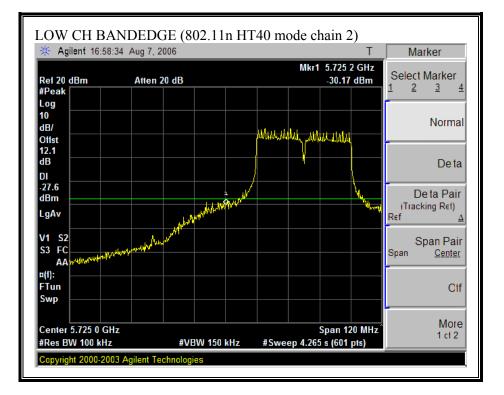


Page 292 of 371

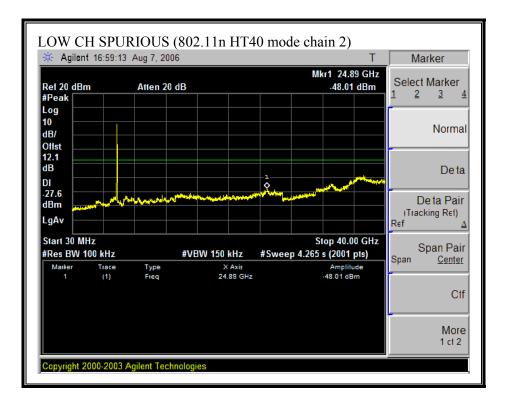


Page 293 of 371

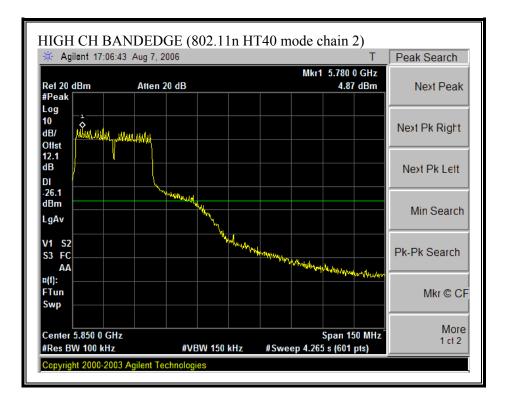
SPURIOUS EMISSIONS (802.11 HT40 MODE CHAIN 2)



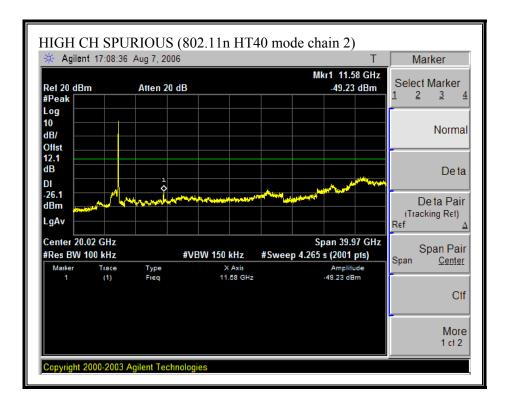
Page 294 of 371



Page 295 of 371

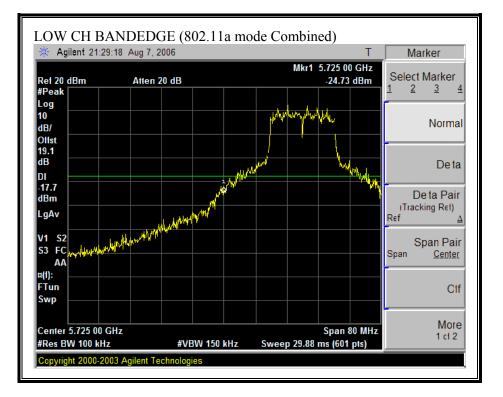


Page 296 of 371

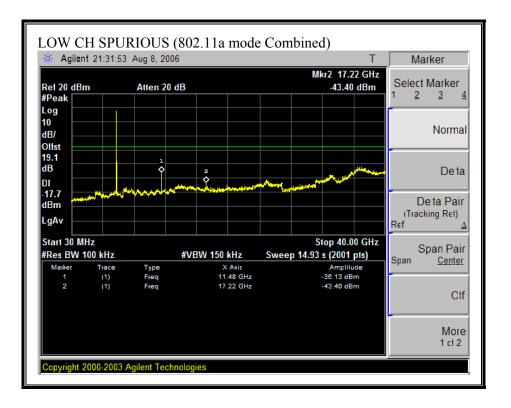


Page 297 of 371

COMBINED SPURIOUS EMISSIONS (802.11a MODE)

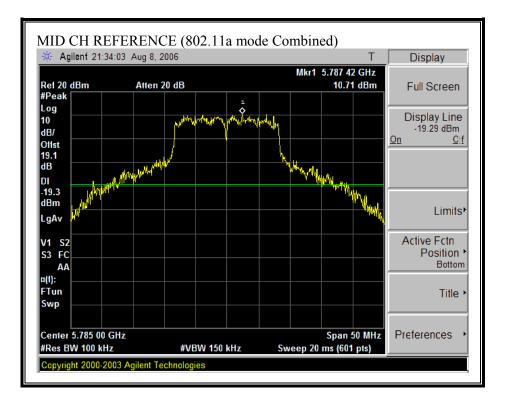


Page 298 of 371

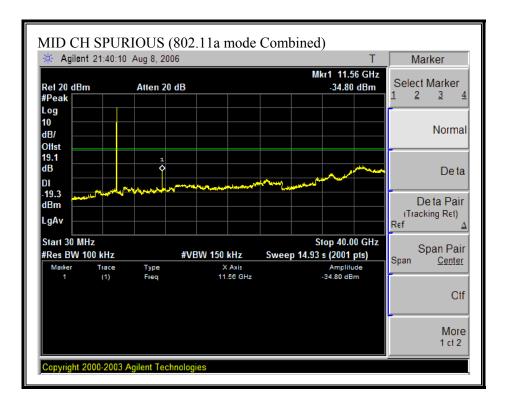


Page 299 of 371

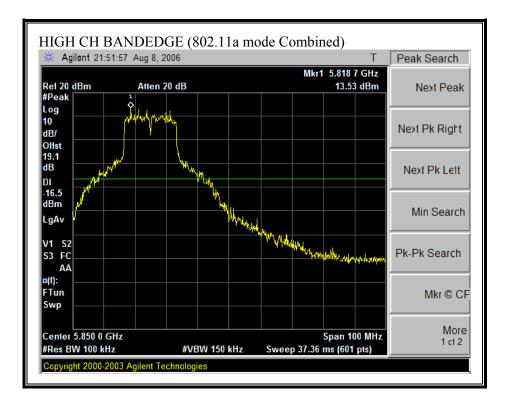




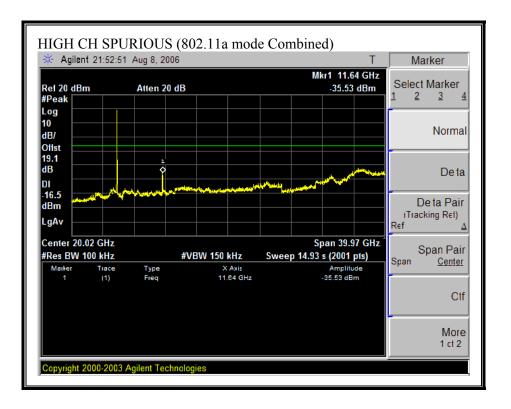
Page 300 of 371



Page 301 of 371

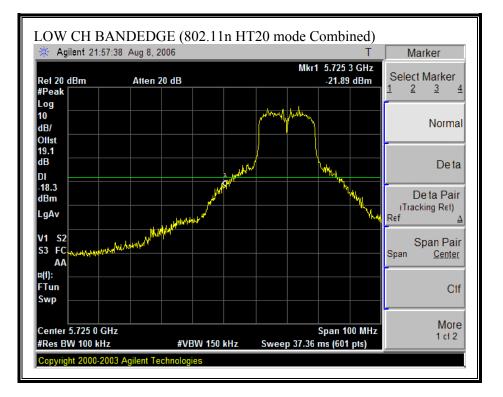


Page 302 of 371

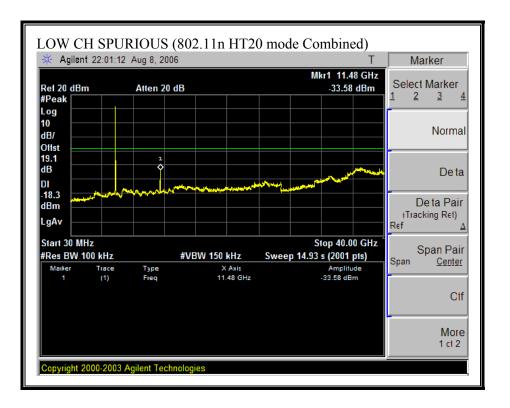


Page 303 of 371

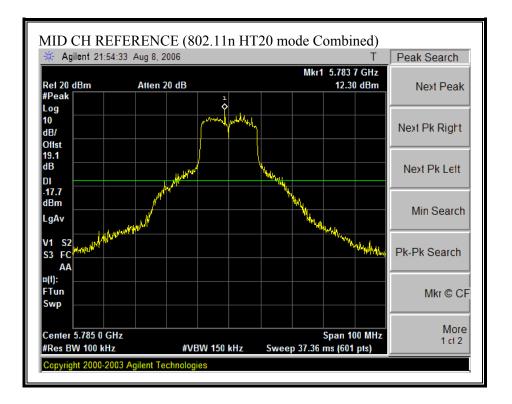
COMBINED SPURIOUS EMISSIONS (802.11n HT20 MODE)



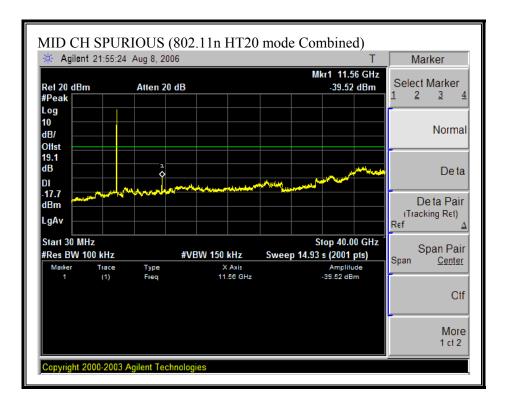
Page 304 of 371



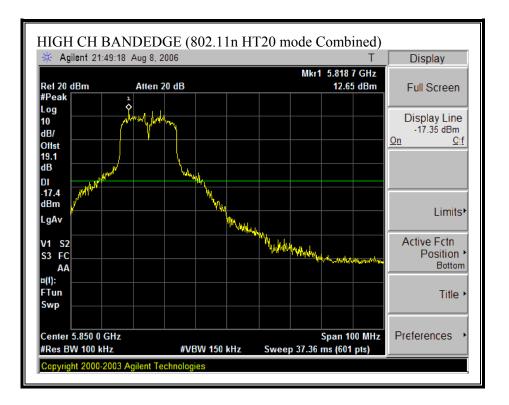
Page 305 of 371



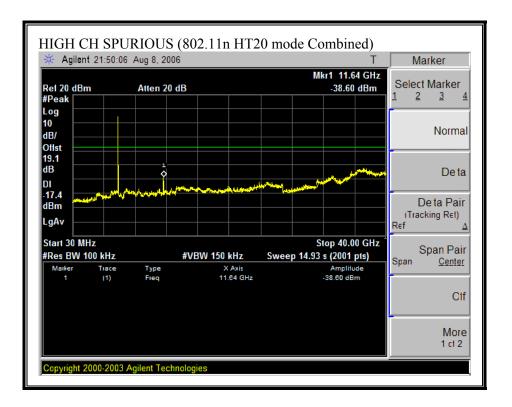
Page 306 of 371



Page 307 of 371

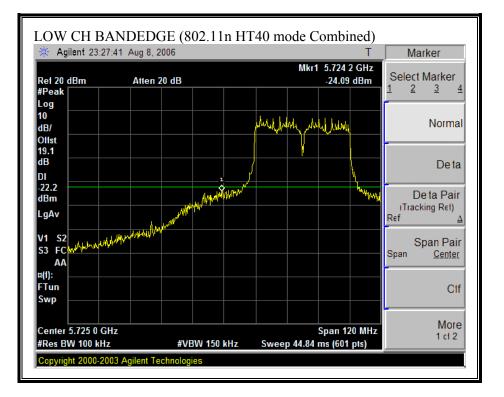


Page 308 of 371

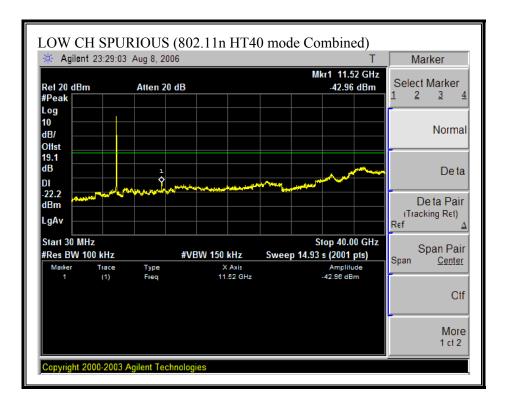


Page 309 of 371

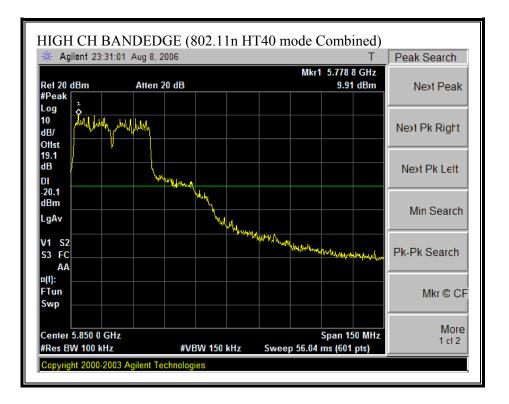
COMBINED SPURIOUS EMISSIONS (802.11 HT40 MODE)



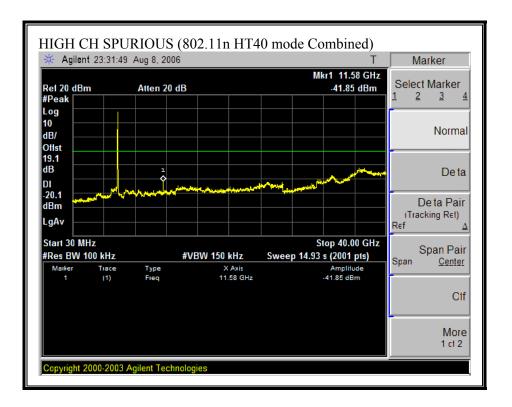
Page 310 of 371



Page 311 of 371



Page 312 of 371



Page 313 of 371

7.3. MAXIMUM PERMISSIBLE EXPOSURE

LIMITS

\$1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

			4 2	
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(A) Lim	its for Occupational	I/Controlled Exposu	res	
0.3–3.0 3.0–30 30–300 300–1500 1500–100,000	614 1842/f 61.4	1.63 4 <i>.89/</i> f 0.163	*(100) *(900/f²) 1.0 f/300 5	6 6 6 8
(B) Limits	for General Populati	ion/Uncontrolled Exp	posure	
0.3–1.34 1.34–30	614 824 <i>/</i> f	1.63 2.19/f	*(100) *(180/f²)	30 30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)-Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
30–300 300–1500 1500–100,000	27.5	0.073	0.2 f/1500 1.0	30 30 30

f = frequency in MHz

f = frequency in MHz
 * = Plane-wave equivalent power density
 NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided the or she is made aware of the potential for exposure. NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure.

exposure or can not exercise control over their exposure.

Page 314 of 371

CALCULATIONS

Given

 $E = \sqrt{(30 * P * G)} / d$

where

and

E = Field Strength in Volts/meter

P = Power in Watts

 $S = E^{2} / 3770$

G = Numeric antenna gain

d = Distance in meters

S = Power Density in milliwatts/square centimeter

Combining equations and rearranging the terms to express the distance as a function of the remaining variables yields:

 $d = \sqrt{((30 * P * G) / (3770 * S))}$

Changing to units of Power to mW and Distance to cm, using:

P(mW) = P(W) / 1000 and d(cm) = 100 * d(m)

yields

 $d = 100 * \sqrt{((30 * (P / 1000) * G) / (3770 * S))}$ $d = 0.282 * \sqrt{(P * G / S)}$

where

d = distance in cm P = Power in mW G = Numeric antenna gain S = Power Density in mW/cm^2

Substituting the logarithmic form of power and gain using:

 $P(mW) = 10^{(P(dBm) / 10)}$ and $G(numeric) = 10^{(G(dBi) / 10)}$

yields

 $d = 0.282 * 10^{(P+G)} / 20) / \sqrt{S}$

where

d = MPE distance in cm P = Power in dBm G = Antenna Gain in dBi S = Power Density Limit in mW/cm^2

Rearranging terms to calculate the power density at a specific distance yields

 $S = 0.0795 * 10^{(P+G)} / 10) / (d^2)$

Page 315 of 371

LIMITS

From \$1.1310 Table 1 (B), the maximum value of S = 1.0 mW/cm²

RESULTS

No non-compliance noted: (MPE distance equals 20 cm)

Band	MPE	Total	Antenna	Power
	Distance	Power	Gain	Density
(GHz)	(cm)	(dBm)	(dBi)	(mW/cm^2)
2.4	20.0	23.56	-1.20	0.03
5.8	20.0	20.88	1.50	0.03

NOTE: For mobile or fixed location transmitters, the minimum separation distance is 20 cm, even if calculations indicate that the MPE distance would be less.

No non-compliance noted: (MPE distance is greater than 20 cm)

Page 316 of 371

7.4. RADIATED EMISSIONS

7.4.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	$(^{2})$
13.36 - 13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

Page 317 of 371

\$15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

Page 318 of 371

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

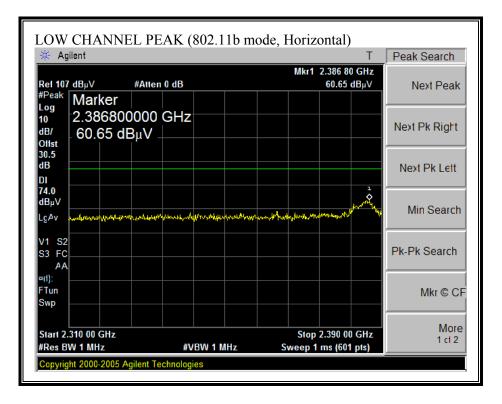
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each 5 GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

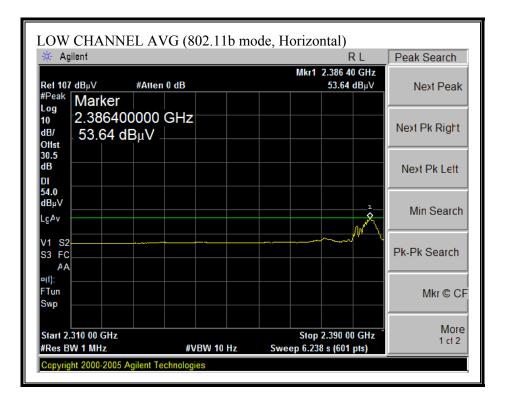
Page 319 of 371

7.4.2. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND

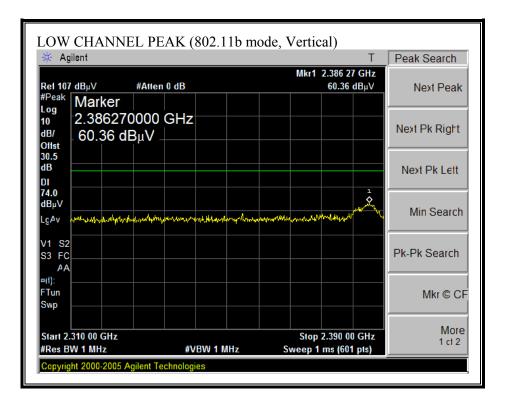
RESTRICTED BANDEDGE (802.11b MODE, LOW CHANNEL)



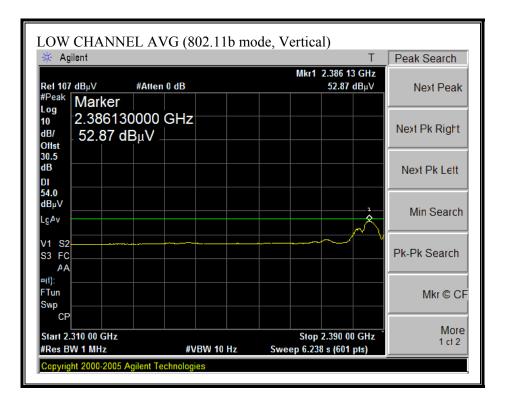
Page 320 of 371



Page 321 of 371

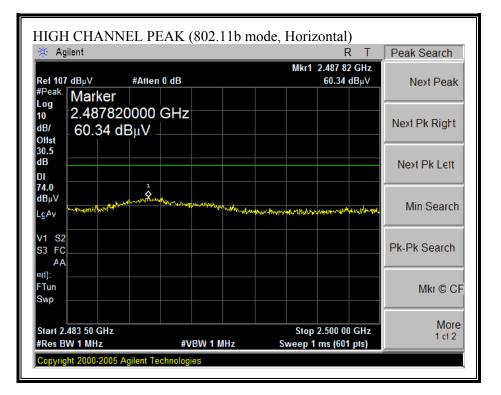


Page 322 of 371

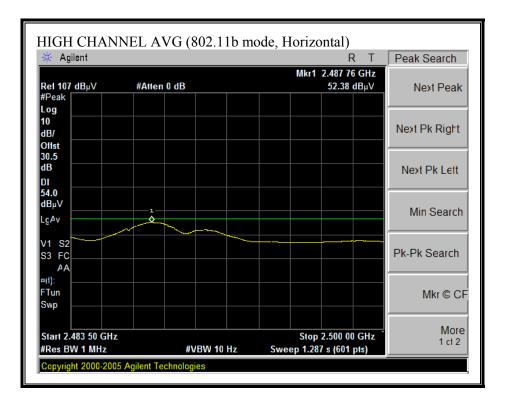


Page 323 of 371

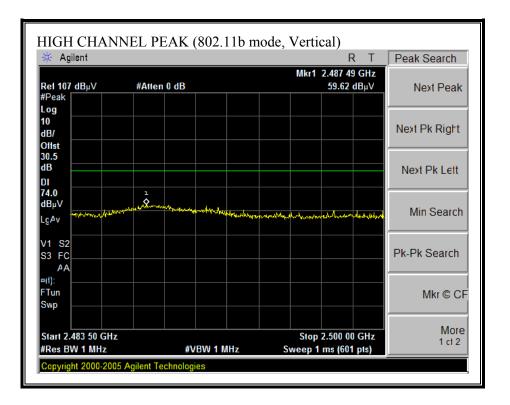
RESTRICTED BANDEDGE (802.11b MODE, HIGH CHANNEL)



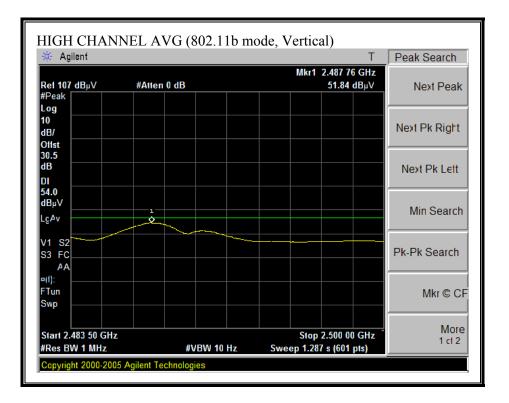
Page 324 of 371



Page 325 of 371



Page 326 of 371



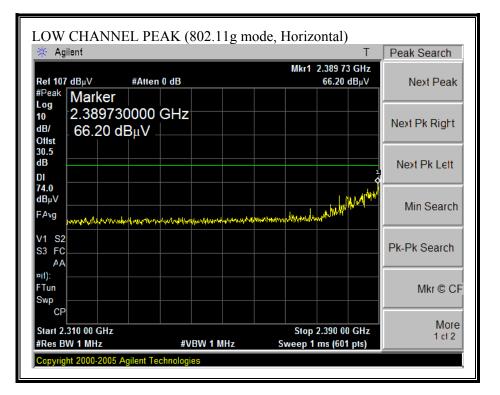
Page 327 of 371

HARMONICS AND SPURIOUS EMISSIONS (802.11b MODE)

Operation of the set of	Compli	_	Frequency ertification S				Hill OJ	oen Fiel	d Site												
roject FioOCU04S5 est Eaglignertion:EUT/Laptop lode:TX, b mode est Eaglignertion:EUT/Laptop lode:TX, b mode lode:TX,																					
arte-322006 set Engine:: Horn 1-18CHz Pre-amplifer 1-26CHz Horn - 18CHz Limit T3; SN: 6171 @3m Colspan="2">Colspan="2" Limit Colspan="2" 2 foot cable 3 foot cable Chin 197538001 Chin 200354001 Pre-amplifer 26-40GHz HOF Pre-amplifer 26-40GHz Horn > 18GHz Limit Colspan="2" Colspan="2" Colspan="2" Colspan="2" Pre-amplifer 26-40GHz Horn > 18GHz Limit Colspan="2" Colspan="2" Pre-amplifer 26-40GHz HOF Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz Pre-amplifer 26-40GHz <th></th>																					
nafiguration: EUTL Lapido test Equipment: Horn 1-18GHz Pre-amplifer 1-26GHz Horn 1-18GHz Limit T145 Agilent 3008A0051 Pre-amplifer 26-40GHz Horn > 18GHz Limit T145 Agilent 3008A0051 Pre-amplifer 26-40GHz Horn > 18GHz Limit T145 Agilent 3008A0051 Image: Colspan="4">Pre-amplifer 26-40GHz Horn > 18GHz Limit T145 Agilent 3008A0051 Image: Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan= 400CHZ Pre-amplifer 26-40GHz Horn > 18GHz Limit T145 Agilent 3008A0051 Image: Colspan="4">Colspan= 400CHZ Peak More Reject Filter Reject Filter Peak Measurements Chin 197538001 Colspan= 400C Peak May Pk Lim Arg Mar Notes Glospan= 400 May Pk Lim Arg Mar Notes Agi 30 Sign 200 Sign 200 Colspan= 400	ate:8/2	/2/2006																			
Indefinition of the set Equipment: Horn 1-18GHz Pre-amplifer 1-26GHz Horn > 18GHz Limit T73; SN: 6717 @3m T45 Agilent 3008A005; Image: Colspan="2" Limit Colspan="2" Limit Colspan="2" Deak Measurements RBW=VBW=1Mfrz 2 foot cable 3 foot cable 12 foot cable HPF Reject Filter Peak Measurements RBW=VBW=1Mfrz (foint 797538001 Image: Colspan="2" Peak Measurements RBW=VBW=1Mfrz (foint 797538001 Image: Colspan="2" Peak Measurements RBW=VBW=1Mfrz (foint 797538001 Image: Colspan="2" Peak Marg Mage Notes RBW=VBW=1Mfrz GfL On of a dag Ang Notes RBW=VBW=1Mfrz Add Bav dBav Add Bav Add Bav Peak Measurements RBW=VBW=1Mfrz Add Bav dBav Add Bav Bek Measurements RBW=VBW=1Mfrz Add Bav Add		<u> </u>																			
set Equipment: Horn 1-18GHz T73; SN: 6717 @3m Pre-amplifer 1-26GHz T145 Agitent 3008A0051 Pre-amplifer 26-40GHz methods Horn > 18GHz methods Limit FC 15-205 H frequency Cables 3 foot cable 12 foot Cable Pre-amplifer 1-26 GHz methods Pre-amplifer 1-26 GHz methods Pre-amplifer 26-40GHz methods HPF Reject Filter R_001 Peak Measurements RBW=10Hz 1 Toto cable 12 foot cable 12 foot cable Peak Measurements RBW=10Hz Repect Filter RBW=10Hz Peak Measurements RBW=10Hz 1 Dist Read Pk Read Avg AF CL Amp D Corr Filt Peak Measurements RBW=10Hz Notes RBW=10Hz <				2																	
Horn 1-18GHz T73; SN: 6717 @3m Pre-amplifer 1-26GHz T45 Agilent Pre-amplifer 26-40GHz 0 Horn > 18GHz Limit T73; SN: 6717 @3m T145 Agilent 3 foot cable 12 foot cable Reject Filter Pre-amplifer Pre-amplife																					
Horn 18GHz T13; SN: 6717 @3m Pre-amplifer 1-26GHz T145 Agilent 30080005', Pre-amplifer 26-40GHz Horn > 18GHz Limit H Frequency Cables 2 foot cable 3 foot cable Chin 197538001 Chin 200354001 <	ost Ec	winmen																			
T13 S.Nt: 6717 @3m T145 Agilient 3008A0051, FCC 15.205 PEC 15.205 2 foot cable 12 foot cable PEC 15.205 PEC 15.205 PEC 15.205 PER Measurements RBW=VBW=IMHz PER Measurements RBW=IMHz VIII Avg Mar Notes Gat and bas V dBBV MB dBWV/m dBuV/m dBuV/			_	-																	
H Frequency Cables 2 foot cable 3 foot cable 12 foot cable HPF Reject Filter Peak Measurements RBW=VBW=1MHz 1 <t< td=""><td>Н</td><td>lorn 1-</td><td>18GHz</td><td></td><td>Pre-am</td><td>nplifer</td><td>1-260</td><td>SHz</td><td>Pre-am</td><td>plifer</td><td>26-40GH</td><td>z</td><td>H</td><td>orn > 180</td><td>GHz</td><td></td><td>Limit</td></t<>	Н	lorn 1-	18GHz		Pre-am	nplifer	1-260	SHz	Pre-am	plifer	26-40GH	z	H	orn > 180	GHz		Limit				
2 foot cable 3 foot cable 12 foot cable HPF Reject Filter Peak Measurements RBW=VBW=1MHz 1 Dist Read Pk Read Avg. AF CL Amp D Corr Fltr Peak Avg Lin Pk Mar Avg Mar Notes GHz (m) dBuV dBu dB dB dB dB dB Avg Pk Lin Avg Lin Pk Mar Avg Mar Notes GHz (m) dBuV dB dB dB dB dB dB Avg Pk Lin Avg Lin Pk Mar Avg Mar Notes Gard, base cover removed -	T73;	S/N: 671	7 @3m	-	T145 A	gilent 3	008800	05(🖵			1	-				-	FCC 15.205				
Z HOUCADJE Chin 197538001 Chin 200354001	Hi Fre	quency Ca	bles									 									
Image: Chin 197538001 Chin 200354001 Chin 200354001 <td></td> <td>2 foot</td> <td>cable</td> <td></td> <td>3</td> <td>foot c</td> <td>able</td> <td></td> <td>12</td> <td>foot</td> <td>able</td> <td></td> <td>HPF</td> <td>Re</td> <td>eiect Filte</td> <td>Peal</td> <td>k Measurements</td>		2 foot	cable		3	foot c	able		12	foot	able		HPF	Re	eiect Filte	Peal	k Measurements				
f Dist Read Pk Read Avg. AF CL Amp D Corr Fltr Peak Avg Pk Lim Avg Lim Pk Mar Avg Mar Notes GHz (m) dBuV dBv dB/ dB dB dB dB dB dB V/m dBuV/m dBuV/m dB dB V/m GHz (m) dBuV dB/d dB dB dB dB dB V/m dBuV/m dBuV/m dB dB V/m V V dB dB V/m dB dB dB V/m dB dB V/m dB		2100	ousio												-	RB					
f Dist Read Avg. AF CL Amp D Corr Fltr Peak Avg Pk Lim Avg Lim Pk Mar Avg Mar Notes 0 dBuV dBuV dBuV dB dB <tdd< td=""><td></td><td></td><td></td><td>•</td><td>Chin 1</td><td>1975380</td><td>01</td><td>•</td><td>Chin 20</td><td>03540</td><td>01 -</td><td></td><td></td><td>• R_</td><td>001</td><td></td><td></td></tdd<>				•	Chin 1	1975380	01	•	Chin 20	03540	01 -			• R_	001						
GHz (m) dBuV dBuV dB dB dB dB dB dB dB dB dB dV/m dBuV/m dB dB dB (V/H) vard, base cover removed 0 1 0	-		-			1.E				714		<u> </u>									
wr Ch, 2412MHz daw wr constraint wr constraint 24 3.0			1 1	1	-					1		-	1	-	1 1	-					
824 3.0 51.7 49.0 33.3 3.2 34.8 0.0 0.0 53.4 50.7 74 54 20.6 3.3 V 824 3.0 52.0 47.0 33.3 3.2 34.8 0.0 0.0 53.7 48.7 74 54 20.6 3.3 V 824 3.0 52.0 47.0 33.3 3.2 34.8 0.0 0.0 53.7 48.7 74 54 20.6 3.3 V 84 2.0 53.5 51.0 33.4 3.2 34.9 0.0 0.0 55.2 52.7 74 54 -18.8 -1.3 V 874 3.0 50.5 44.6 33.4 3.2 -34.9 0.0 0.0 55.2 52.7 74 54 -12.1 V 811 3.0 52.5 39.6 35.0 3.6 -34.7 0.0 0.0 55.4 43.5 74 54 -21.8 -7.7 H 91 51.6 49.0 33.4	w Ch, 2	2412MHz	z									u					(*//				
824 3.0 52.0 47.0 33.3 3.2 34.8 0.0 0.0 53.7 48.7 74 54 -20.3 -5.3 H id h, 2437MHzC				4	0.0	22.2	32	34.8	0.0	0.0	53.4	50.7	74	54	20.6	22	v				
874 3.0 53.5 51.0 33.4 3.2 -34.9 0.0 0.0 55.2 52.7 74 54 -18.8 -1.3 V 311 3.0 51.0 38.0 35.0 3.6 -34.7 0.0 0.0 54.9 41.9 74 54 -19.1 -12.1 V 874 3.0 50.5 44.6 33.4 3.2 -34.9 0.0 0.0 55.2 46.3 74 54 -19.1 -12.1 V 874 3.0 52.5 39.6 35.0 3.6 -34.7 0.0 0.0 56.4 43.5 74 54 -17.6 -10.5 H 190 C.2620HHz 0.0 0.0 56.4 43.5 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.0 41.2 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6																					
874 3.0 53.5 51.0 33.4 3.2 -34.9 0.0 0.0 55.2 52.7 74 54 -18.8 -1.3 V 311 3.0 51.0 38.0 35.0 3.6 -34.7 0.0 0.0 54.9 41.9 74 54 -19.1 -12.1 V 874 3.0 50.5 44.6 33.4 3.2 -34.9 0.0 0.0 55.2 46.3 74 54 -19.1 -12.1 V 874 3.0 52.5 39.6 35.0 3.6 -34.7 0.0 0.0 56.4 43.5 74 54 -17.6 -10.5 H 190 C.2620HHz 0.0 0.0 56.4 43.5 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.0 41.2 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6	id h. 24	437MHzC				<u> </u>	ļ														
874 3.0 50.5 44.6 33.4 3.2 -34.9 0.0 0.0 52.2 46.3 74 54 -21.8 -7.7 H 311 3.0 52.5 39.6 35.0 3.6 -34.7 0.0 0.0 56.4 43.5 74 54 -17.6 -10.5 H igh Ch, 2462MHz	874	3.0	53.5																		
311 3.0 52.5 39.6 35.0 3.6 -34.7 0.0 0.0 56.4 43.5 74 54 -17.6 -10.5 H 924 3.0 51.6 49.0 33.4 3.2 -34.9 0.0 0.0 53.4 50.8 74 54 -17.6 -10.5 H 924 3.0 51.6 49.0 33.4 3.2 -34.9 0.0 0.0 53.4 50.8 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.8 52.3 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.9 -12.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.9 -12.7 H ev. 51.6																					
524 3.0 51.6 49.0 33.4 3.2 -34.9 0.0 0.0 53.4 50.8 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.0 41.2 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.0 41.2 74 54 -20.6 -3.2 V 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.2 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.9 -12.7 H extronologies the system noise floor. extronologies the system noise floor. <td colspan="4" extroologies="" floo<="" noise="" system="" td="" the=""><td></td><td></td><td></td><td>•••••••••••••••••••</td><td></td><td></td><td></td><td></td><td>•••</td><td></td><td>····</td><td>•</td><td></td><td></td><td></td><td></td><td></td></td>	<td></td> <td></td> <td></td> <td>•••••••••••••••••••</td> <td></td> <td></td> <td></td> <td></td> <td>•••</td> <td></td> <td>····</td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>							•••••••••••••••••••					•••		····	•					
24 3.0 51.6 49.0 33.4 3.2 -34.9 0.0 0.0 53.4 50.8 74 54 -20.6 -3.2 V 386 3.0 50.0 37.2 35.0 3.6 -34.6 0.0 0.0 54.0 41.2 74 54 -20.6 -3.2 V 24 3.0 50.0 50.5 33.4 3.2 54.9 0.0 0.0 54.0 41.2 74 54 -20.6 -3.2 V 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.9 -12.7 H Average Teide Strength Concerneet and the system noise floor. Field Strength Concerneet and the system noise floor. Amesurement Frequency Amp Preamp Gain Average Field Strength Pk Lim Peak Fiel	⊲h Ch.	2462MH	iz.	İ			J														
924 3.0 53.0 50.5 33.4 3.2 -34.9 0.0 0.0 54.8 52.3 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.2 -1.7 H 386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.2 -1.7 H Air set in the intermine in	924	3.0	51.6																		
386 3.0 50.1 37.3 35.0 3.6 -34.6 0.0 0.0 54.1 41.3 74 54 -19.9 -12.7 H ev. 51.6 ter: No other emissions were detected above the system noise floor. f Measurement Frequency Amp Preamp Gain Avg Lim Average Field Strength Limit Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Average Limit																	•				
ste: No other emissions were detected above the system noise floor. f Measurement Frequency Amp Preamp Gain Avg Lim Average Field Strength Limit Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit Read Analyzer Reading Avg Average Field Strength @ 3 m Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit																					
ste: No other emissions were detected above the system noise floor. f Measurement Frequency Amp Preamp Gain Avg Lim Average Field Strength Limit Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit Read Analyzer Reading Avg Average Field Strength @ 3 m Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit		-					ļ						-								
ote: No other emissions were detected above the system noise floor. f Measurement Frequency Amp Preamp Gain Avg Lim Average Field Strength Limit Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit Read Analyzer Reading Avg Average Field Strength @ 3 m Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit				<u>.</u>				ļ			1		1								
f Measurement Frequency Amp Preamp Gain Avg Lim Average Field Strength Limit Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit Read Analyzer Reading Avg Average Field Strength (@ 3 m) Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit	.v. 5.1.6	6																			
Dist Distance to Antenna D Corr Distance Correct to 3 meters Pk Lim Peak Field Strength Limit Read Analyzer Reading Avg Average Field Strength @ 3 m Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit	ote: No	other emi	ssions were	letecte	d above t	the syste	m noise	floor.													
Read Analyzer Reading Avg Average Field Strength @ 3 m Avg Mar Margin vs. Average Limit AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit		f	Measurem	ent Fre	equency	y		Amp	Preamp (Gain				Avg Lim	Average F	ield Strengt	h Limit				
AF Antenna Factor Peak Calculated Peak Field Strength Pk Mar Margin vs. Peak Limit														Pk Lim	Peak Field	1 Strength Li	imit				
				-	g				-					-	-	-					
CL Cable Loss nrr night rass rulei												ngth		Pk Mar	Margin vs.	Peak Limit					
		CL	Cable Loss	1				LLL.	fugn r as.	s Pluci											

Page 328 of 371

RESTRICTED BANDEDGE (802.11g MODE, LOW CHANNEL)



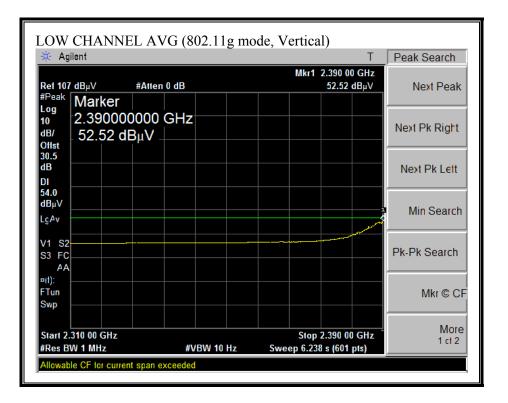
Page 329 of 371

LOW CHANNEL AV	VG (802.11g III		Peak Search
Ret 107 dBµV #Atter	n 0 dB	Mkr1 2.389 73 GHz 53.72 dBµ∨	Next Peak
^{Log} 2.389730000 d ^{B/} 53.72 dBuV	GHz		Next Pk Right
Offst 30.5 dB DI			Next Pk Lett
54.0 dBμV FΔvg		<u>.</u>	Min Search
V1 S2 S3 FC AA			Pk-Pk Search
¤(1): FTun Swp			Mkr © CF
CP Start 2.310 00 GHz #Res BW 1 MHz	#VBW 10 Hz	Stop 2.390 00 GHz Sweep 19.73 s (601 pts)	More 1 ct 2

Page 330 of 371

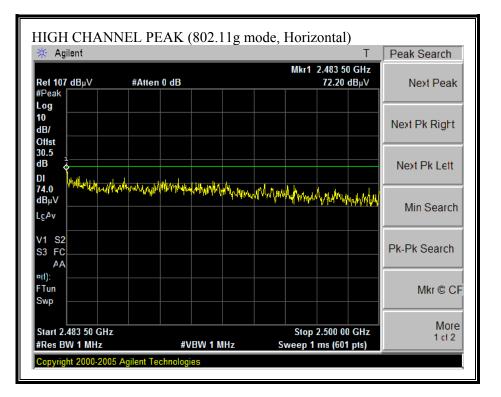
🔆 Agi	ilent								Т	Peak Search
		#Atten	0 dB				Mkr1	2.389 20 68.91		Next Peak
	Marker 2.389200 68.91 dl		GHz							Next Pk Right
30.5 dB DI									1	Next Pk Lett
74.0 dBµ∨ LgAv	Howen	(the second second	-millehren		uphratic	-ton fritten	nt Aleman Marth	www.	W. A. M.	Min Search
V1 S2 S3 FC AA										Pk-Pk Search
¤(1): FTun Swp										Mkr © Cł
	310 00 GHz W 1 MHz		#V	BW 1 N	/Hz	S		2.390 0(ms (601		More 1 ct 2

Page 331 of 371



Page 332 of 371

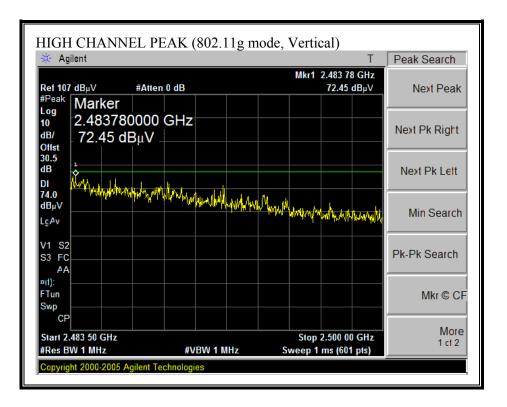
RESTRICTED BANDEDGE (802.11g MODE, HIGH CHANNEL)



Page 333 of 371

🔆 Agilent		Т	Peak Search
Ret 107 dBµV #A	tten 0 dB	Mkr1 2.483 50 GHz 52.50 dBµ∨	Next Peak
^{#Peak} Log 10 2.48350000 dB/ Offist 52.50 dBμ ¹			Next Pk Right
30.5 dB DI 54.0			Next Pk Lett
dBµV LgAv			Min Search
V1 S2 S3 FC AA			Pk-Pk Search
¤(1): FTun Swp			Mkr © CF
Start 2.483 50 GHz #Res BW 1 MHz	#VBW 10 Hz	Stop 2.500 00 GHz Sweep 1.287 s (601 pts)	More 1 ct 2

Page 334 of 371



Page 335 of 371

HIGH CHANNEL A		RL	Peak Search
	n 0 dB	Mkr1 2.483 58 GHz 53.94 dBµ∨	Next Peak
^{#Peak} Log 10 2.483580000 dB/ Ollst 53.94 dBμV	GHz		Next Pk Right
30.5 dB DI			Next Pk Lett
54.0 dBμV <u>-</u> LgAv			Min Search
V1 S2 S3 FC AA		*****	Pk-Pk Search
¤íl): FTun Swp			Mkr © CF
CP Start 2.483 50 GHz #Res BW 1 MHz	#VBW 10 Hz	Stop 2.500 00 GHz Sweep 1.287 s (601 pts)	More 1 ct 2

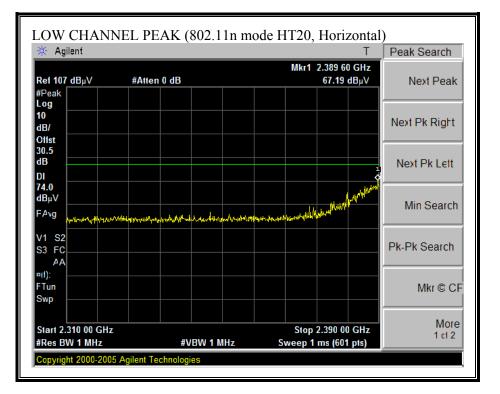
Page 336 of 371

HARMONICS AND SPURIOUS EMISSIONS (802.11g MODE)

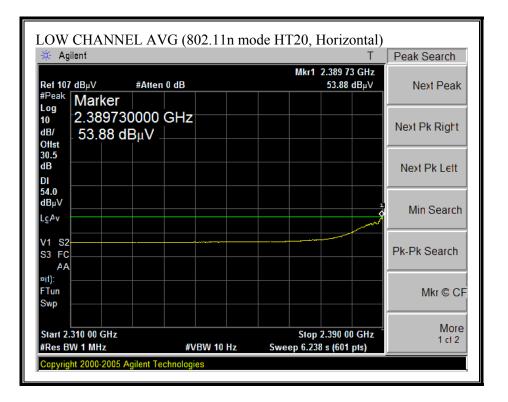
Iode:TX, g n <u>est Equipme</u> Horn 1	10485 ; r:Chin Pang :EUT/Laptop node	1												
est Engineer onfiguration: ode:TX, g n est Equipme Horn 1	; r:Chin Pang :EUT/Laptop node	,												
nfiguration: ode:TX, g n <u>st Equipme</u> Horn 1	:EUT/Laptor node)												
ode:TX, g n <u>st Equipme</u> Horn 1	node	,												
st Equipme Horn 1														
Horn 1	ent:													
Horn 1														
						-								1 Jun 14
	I-18GHz	Pre-an	mplifer	1-260	SHZ	Pre-am	plifer	26-40GH	z	н	orn > 18(GHZ		Limit
173; S/N: 67	17 @3m	T145 A	Agilent 3	3008A00	05(🖵				-				-	FCC 15.205
Hi Frequency C	Cables													
2 foo	t cable	3	foot c	able		12 1	foot c	able		HPF	Re	ject Filte		<u>Measurements</u>
		Chin	1975380	04		Chin 20	03540	01				001	RB	W=VBW=1MHz ge Measurements
			1970200	01	•		033400	·			• <u>R</u>			1MHz ; VBW=10Hz
f Dist	t Road Plr	Read Avg.	AF	CL	Amp	D Corr	Fltr	Peak	Avg	Pk Lim	Avalim	Pl- Mar	Avg Mar	Notes
GHz (m)	1 1	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	-		dBuV/m	dB	dB	(V/H)
w Ch, 2412MF									45.2		54			V
324 3.0 324 3.0		43.5 45.0	33.3 33.3	3.2 3.2	-34.8 -34.8	0.0 0.0	0.0 0.0	59.7 61.1	45.2 46.7	74 74	54 54	-14.3 -12.9	-8.8 -7.3	V H
d h, 2437MHz	c													
374 3.0	59.0	45.5	33.4	3.2	-34.9	0.0	0.0	60.7	47.2	74	54	-13.3	-6.8	v
311 3.0 374 3.0		34.0 50.0	35.0 33.4	3.6 3.2	-34.7 -34.9	0.0 0.0	0.0 0.0	53.9 65.0	37.9 51.7	74 74	54 54	-20.1 -9.0	-16.1 -2.3	V H
311 3.0		34.3	35.0	3.6	-34.7	0.0	0.0	55.9	38.2	74	54	-18.1	-15.8	н
gh Ch, 2462M	Hz			{										
3.0	59.5	45.0	33.4	3.2	-34.9	0.0	0.0	61.3	46.8	74	54	-12.7	-7.2	V
386 3.0 924 3.0		36.0 48.5	35.0 33.4	3.6 3.2	-34.6 -34.9	0.0	0.0	56.0 63.8	40.0 50.3	74 74	54 54	-18.0 -10.2	-14.0 -3.7	
386 3.0		35.2	35.0	3.6	-34.6	0.0	0.0	57.0	39.2	74	54	-17.0	-14.8	H
					<u> </u>	1		1				ĺ		
v. 5.1.6														
te: No other ei	missions were o	etected above t	the system	m noise	floor.									
f	Measureme	ent Frequency	у		Amp	Preamp (Gain				Avg Lim	Average F	ield Strengtl	n Limit
Dist	Distance to							ct to 3 mete					Strength Li	
	Analyzer R	-			Avg			Strength @			-	-	Average Li	
AF	Antenna Fa Cable Loss				Peak HPF	Calculate High Pass		k Field Stre	ngth		Pk Mar	Margin vs.	Peak Limit	
CL					TPF -	riigh Pas ⁱ	s ruter							

Page 337 of 371

RESTRICTED BANDEDGE (802.11n MODE HT20, LOW CHANNEL)



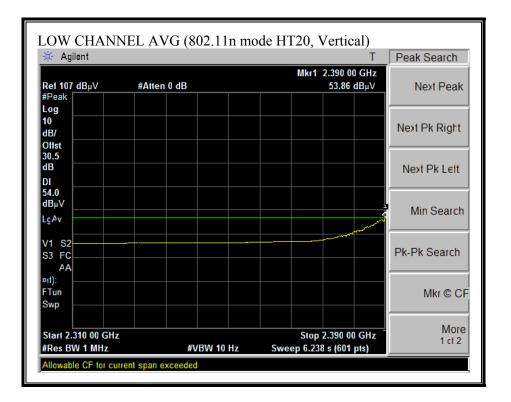
Page 338 of 371



Page 339 of 371

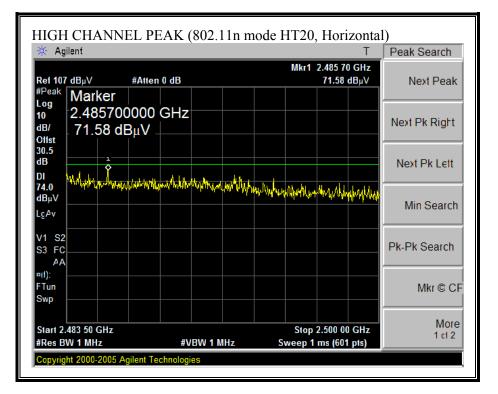
🔆 Agi	ilent								Т	Peak Search
	•	#Atten	0 dB				Mkr1	2.389 87 69.07		Next Peak
Log 10 dB/ Offst	Marker 2.38987 69.07 d		GHz							Next Pk Right
30.5 dB										Next Pk Lett
74.0 dBµV LgAv	www.whendaha	wa dawaya ya	n-shiloship-h	m-Wal-4	they provide the strength of the	Heren prostration	unrat	MUNICAN	Martha Magnet	Min Search
V1 S2 S3 FC AA										Pk-Pk Search
¤(1): FTun Swp										Mkr © Cł
	310 00 GHz W 1 MHz		#V	BW 1 1	MHz	S		2.390 00 ms (601		More 1 ct 2

Page 340 of 371



Page 341 of 371

RESTRICTED BANDEDGE (802.11n MODE HT20, HIGH CHANNEL)



Page 342 of 371

🔆 Agilent		Т	Peak Search
	itten 0 dB	Mkr1 2.483 50 GHz 52.94 dBµ∨	Next Peak
^{#Peak} Log 10 2.4835000 dB/ 0ffst 52.94 dBµ			Next Pk Right
30.5 dB DI			Next Pk Lett
54.0 dBμV LgAv Φ			Min Search
V1 S2 S3 FC AA			Pk-Pk Search
¤l1): FTun Swp			Mkr © CF
Start 2.483 50 GHz #Res BW 1 MHz	#VBW 10 Hz	Stop 2.500 00 GHz Sweep 1.287 s (601 pts)	More 1 ct 2

Page 343 of 371

🔆 Agi	lent								Т	Peak Search
Ref 107	dBμV	#Atten	0 dB				Mkr1	2.484 41 71.53		Next Peak
	Marker 2.48441 71.53 d		GHz							Next Pk Right
30.5 dB DI	1 Millian a ma	aLII								Next Pk Lett
74.0 dBµV LçAv	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	withhat	Hull-Maliv	lhoindhyn	Whenperly	Whileword	WARNER	tin hja _{nd} h	w.	Min Search
V1 S2 S3 FC AA										Pk-Pk Search
¤(1): FTun Swp										Mkr © CF
	483 50 GHz N 1 MHz		#V	'BW 1 N	AHz	S	Stop: weep 1	2.500 0(ms (601		More 1 ct 2

Page 344 of 371

🔆 Agi	lent							Т	Peak Search
Ref 107	dBμV	#Atten	0 dB			Mkr1	2.483 5 53.92		Next Peak
	Marker 2.483500 53.92 dl		GHz						Next Pk Right
30.5 1B DI									Next Pk Lett
54.0 ∃ΒμV <u>⊥</u> _gAv <									Min Search
/1 S2 53 FC AA			~~~~ <u>~</u>						Pk-Pk Search
a(1): Tun Swp									Mkr © CF
	483 50 GHz N 1 MHz		#VB\	N 10 Hz	Swe	Stop 2 eep 1.287	2.500 0 s (601		More 1 ct 2

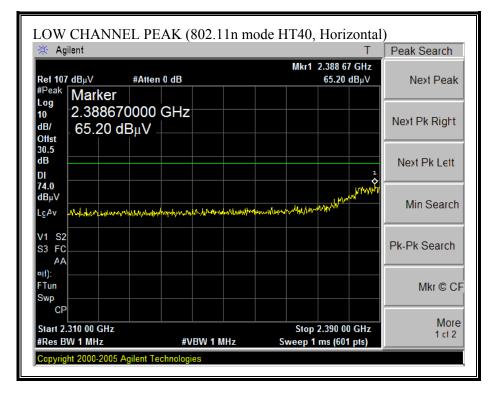
Page 345 of 371

HARMONICS AND SPURIOUS EMISSIONS (802.11n MODE HT20)

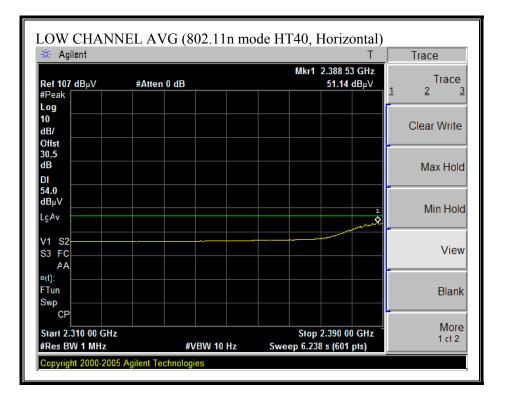
Z 4vg dBuV/m 42.7 47.7	HPF Pk Lim	• R_	GHz eject Filte	Avera	Limit FCC 15.205 • WeVBW=10Hz ge Measurements 1MHz; VBW=10Hz
Avg dBuV/m 42.7	HPF Pk Lim	Re	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
Avg dBuV/m 42.7	HPF Pk Lim	Re	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
Avg dBuV/m 42.7	HPF Pk Lim	Re R_	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
Avg dBuV/m 42.7	HPF Pk Lim	Re R_	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
Avg dBuV/m 42.7	HPF Pk Lim	Re R_	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
Avg dBuV/m 42.7	HPF Pk Lim	Re R_	iject Filte	er <u>Peak</u> RB ¹	FCC 15.205
dBuV/m 42.7	Pk Lim	• R_	-	er <u>Peak</u> RB ¹	<u>k Measurements</u> W=VBW=1MHz ge Measurements
dBuV/m 42.7	Pk Lim	• R_	-	er <u>Peak</u> RB ¹	W=VBW=1MHz ge Measurements
dBuV/m 42.7	Pk Lim	• R_	-	Avera	W=VBW=1MHz ge Measurements
dBuV/m 42.7	Pk Lim	• R_	-	Avera	W=VBW=1MHz ge Measurements
dBuV/m 42.7			001	Avera	ge Measurements
dBuV/m 42.7			001		
dBuV/m 42.7		Avg Lim			
42.7	n dBuV/m		Pk Mar	Avg Mar	Notes
		dBuV/m	dB	dB	(V/H)
	74	54	-15.3	-11.3	v
	74 74	54 54	-15.3 -11.0	-11.3 -6.3	U H
47.2	74	54	-13.3	-6.8	V
37.9	74	54	-20.1	- 16.1	V
50.7	74	54	-9.3	-3.3	H
37.9	74	54	-18.8	-16.1	H
				İ	
47.4	74	54	-12.2	-6.6	V
					 Н
38.4	74	54	-18.0	-15.6	H
[
				ŀ	
		Avg Lim	Average F	ield Strengt	h Limit
rs					
3 m		Avg Mar	Margin vs.	. Average Li	imit
ngth		Pk Mar	Margin vs.	. Peak Limit	
-					
3	39.0 49.8 38.4 ss.4	39.0 74 49.8 74 38.4 74	39.0 74 54 49.8 74 54 38.4 74 54 38.4 74 54	39.0 74 54 -19.4 49.8 74 54 -8.7 38.4 74 54 -18.0 Avg Lim Average F rs Pk Lim Peak Field Sm Avg Mar Margin vs.	39.0 74 54 -19.4 -15.0 49.8 74 54 -8.7 -4.2 38.4 74 54 -18.0 -15.6 38.4 74 54 -18.0 -15.6 Avg Lim Average Field Strength - - Bm Avg Mar Peak Field Strength Ling -

Page 346 of 371

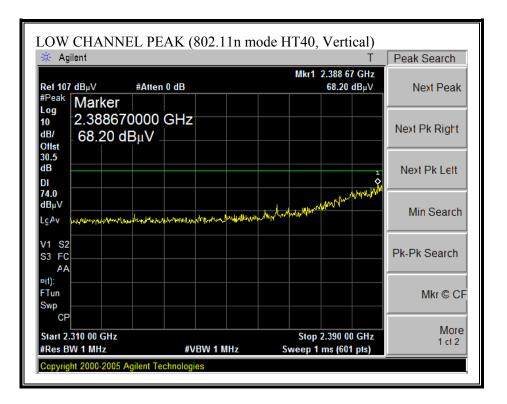
RESTRICTED BANDEDGE (802.11n MODE HT40, LOW CHANNEL)



Page 347 of 371



Page 348 of 371

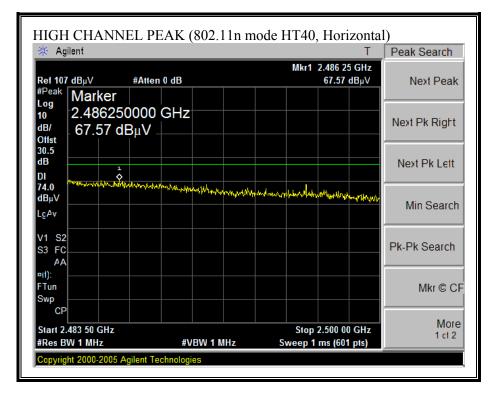


Page 349 of 371

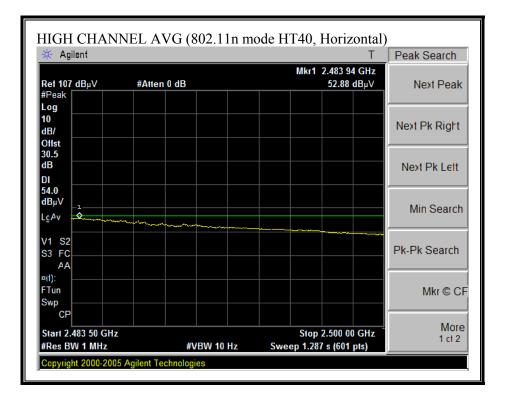
🔆 Agilent		Т	Peak Search
· ·	Atten 0 dB	Mkr1 2.389 60 GHz 53.70 dBµ∨	Next Peak
^{#Peak} Log 10 2.3896000 dB/ Offst			Next Pk Right
30.5 dB DI			Next Pk Lett
54.0 dBμV LgAv			Min Search
V1 S2 S3 FC AA			Pk-Pk Search
P(1): FTun Swp			Mkr © CF
CP Start 2.310 00 GHz #Res BW 1 MHz	#VBW 10 Hz	Stop 2.390 00 GHz Sweep 6.238 s (601 pts)	More 1 ct 2

Page 350 of 371

RESTRICTED BANDEDGE (802.11n MODE HT40, HIGH CHANNEL)



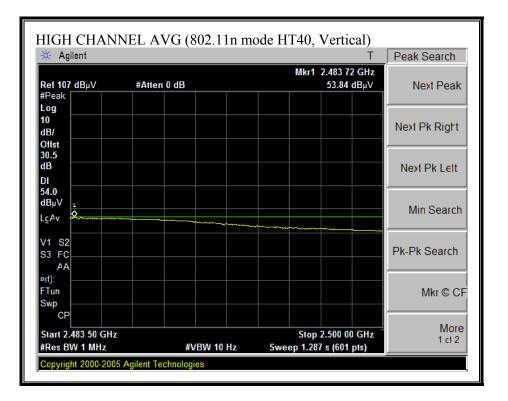
Page 351 of 371



Page 352 of 371

🔆 Agi	lent								Т	Peak Search
Ref 107	dBµV	#Atten	0 dB				Mkr1	2.485 12 71.32		Next Peak
	Marker 2.485120 71.32 dB		GHz							Next Pk Right
30.5 dB DI			U							Next Pk Lett
74.0 dBµV LgAv	www.www.wy.	Jews A Julha	fuja,ki,A ⁿ jar	Man May 1	under of the second	MUNIMUM	Minin/wyst	fr ^h yfr ^h uiddo	hermithenh	Min Search
V1 S2 S3 FC AA										Pk-Pk Search
∝(1): FTun Swp										Mkr © CF
	483 50 GHz N 1 MHz		#V	BW 1 N	MHz (S	Stop: weep 1	2.500 0(ms (601		More 1 ct 2

Page 353 of 371



Page 354 of 371

HARMONICS AND SPURIOUS EMISSIONS (802.11n MODE HT40)

Compli:	_		y Measurem Services, M		Hill O _F	oen Fiel	d Site								
roject ate:8/2	ny:Ather #:06U10 /2/2006 ngineer:0														
	iration:E TX, HT4	EUT/Laptor 40 mode)												
est Eq	quipmen	<u>t:</u>													
	lorn 1- S/N: 6717			m <mark>plifer</mark> Agilent 3			Pre-am	plifer	26-40GH	IZ T	н	orn > 18	GHz	-	Limit FCC 15.205
Hi Fred	quency Cal	bles													·
	2 foot	cable		3 foot o		•	12 1 Chin 20	foot c			HPF		oo1	RB Avera	<u>k Measurements</u> W=VBW=1MHz age Measurements
f	Dist	Read Pk	Read Avg.	AF	CL	Amp	D Corr	Fltr	Peak	Avg	Pk Lim	Avg Lim	Pk Mar	RBW=	1MHz ; VBW=10Hz Notes
GHz	(m) 2422MHz	dBuV	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB	(V/H)
844 844	3.0 3.0	55.0 59.0	42.0 45.0	33.3 33.3	3.2 3.2	-34.8 -34.8	0.0 0.0	0.0 0.0	56.7 60.7	43.7 46.7	74 74	54 54	-17.3 -13.3	-10.3 -7.3	V H
874	437MHzC 3.0	59.0	44.0	33.4	3.2	-34.9	0.0	0.0	60.7	45.7	74	54	-13.3	-8.3	V
311 874 311	3.0 3.0 3.0	48.0 60.3 49.5	34.0 45.7 34.7	35.0 33.4 35.0	3.6 3.2 3.6	-34.7 -34.9 -34.7	0.0 0.0 0.0	0.0 0.0 0.0	51.9 62.0 53.4	37.9 47.4 38.6	74 74 74	54 54 54	-22.1 -12.0 -20.6	-16.1 -6.6 -15.4	V H H
	, 2452MH														
904 356	3.0 3.0	56.0 48.5	42.0 34.5	33.4 35.0	3.2 3.6	-34.9 -34.6	0.0 0.0	0.0	57.8 52.5	43.8 38.5	74 74	54 54	-16.2 -21.5	-10.2 -15.5	V V
924 356	3.0 3.0	60.0 48.0	46.0 34.0	33.4 35.0	3.2 3.6	-34.9 -34.6	0.0 0.0	0.0 0.0	61.8 52.0	47.8 38.0	74 74	54 54	-12.2 -22.0	-6.2 -16.0	H H
ev. 5.1.6 ote: No		issions were (detected above t	the syste	m noise	floor.									
		Measureme Distance to	ent Frequency Antenna	у		Amp D Corr	Preamp (Distance		ct to 3 mete	ers		Pk Lim	Peak Field	ield Strengt 1 Strength L	imit
	AF	Analyzer R Antenna Fa Cable Loss	actor			Avg Peak HPF	-	ed Peal	Strength @ k Field Stre r					. Average L . Peak Limit	

Page 355 of 371

7.4.3. TRANSMITTER ABOVE 1 GHz FOR 5725 TO 5850 MHz BAND

HARMONICS AND SPURIOUS EMISSIONS (802.11a MODE)

Complia Compan Project : Date: 8/	nce Če v:Athe #:06U1	ertification ros 0485	Measurem Services, M		Hill OJ	oen Fiel	d Site									
		Chin Pang														
		EUT/Laptop node, 5.8G														
Cest Eq	uinmen	t:														
					4.00		-							0.1		Limit
		18GHz		nplifer					26-40GH	Z	TOO		orn > 18			Limit
	5/N: 671		▼ T145 4	gilent :	5008A0	- ¹⁰⁰	T88 Mit	eq 26-	10GHz	•	189	; ARA 18-26	GHZ; S/N:	1049	•	FCC 15.205
	uency Ca															
	2 foot	cable	3	foot	able		12	footo	able			HPF	Re	eject Filter		<u>k Measurements</u> W=VBW=1MHz
		-	Chin	1975380	01	•	Chin 2	003540	01 🗸]	HPI	F_7.6GHz	•			ge Measurements 1MHz ; VBW=10Hz
f	Dist	Read Pl-	Read Avg.	AF	CL	Amp	D Corr	Fltr	Peak	<u> </u>	Avg	Pk Lim	Avg Lim	Pk Mar		Notes
GHz	(m)	dBuV	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	1	-		-	dB	dB	(V/H)
low Ch, 5			42.0				0.0		<i></i>							
1.490 1.490	3.0 3.0	55.0 49.5	42.0 36.4	37.5 37.5	4.4 4.4	-33.1 -33.1	0.0	0.7 0.7	64.5 59.0		51.5 45.9	74 74	54 54	-9.5 -15.0	-2.5 -8.1	
	1									Ĭ						
did Ch, 5 1.570	785MHz 3.0	53.0	41.5	37.5	4.4	-33.0	0.0	0.7	62.6		51.1	74	54	-11.4	-2.9	v
11.570	3.0	50.0	37.6	37.5	4.4	-33.0	0.0	0.7	59.6		47.2	74	54	-14.4	-6.8	H
High Ch,	5825MH	z														
1.650	3.0	50.0	38.0	37.5	4.4	-32.9	0.0	0.7	59.8		47.8	74	54	-14.2	-6.2	V
1.650	3.0	49.0	36.5	37.5	4.4	-32.9	0.0	0.7	58.8		46.3	74	54	-15.2	-7.7	H
		l		ļ		<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>	l	<u> </u>		
Rev. 5.1.6 Note: No (issions were d	letected above	the syste	m noise	floor.										
	f		ent Frequenc			Amp	Preamp	Gain					Aug Line	Average Fi	eld Stran-t	h Limit
	Dist	Distance to		,		-	-		ct to 3 mete	ers			Pk Lim	Peak Field	-	
		Analyzer R				Avg			Strength @		1			Margin vs.	-	
	AF	Antenna Fa	ictor			Peak	Calculate	ed Peal	c Field Stre				Pk Mar	-	-	
	CL	Cable Loss				HPF	High Pas	s Filter								

Page 356 of 371

HARMONICS AND SPURIOUS EMISSIONS (802.11n MODE HT20)

	uipmen	<u>t:</u> 18GHz	Pre	nplifer	1.260	247	Pre-am	nlifer	26-40GH	17		ш.	orn >1	18GH7		Limit
	S/N: 671		_	Agilent 3			T88 Mite	-		-	T89	; ARA 18-26			.	FCC 15.205
	quency Cal		3	i foot c	able		121	foot c	able			HPF		Reject Filt		<u>k Measurements</u> W=VBW=1MHz
			• Chin	1975380	01	•	Chin 20	03540	01]	HP	F_7.6GHz	•			ge Measurements 1MHz ; VBW=10Hz
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	1	Avg uV/m	1	-		Avg Mar dB	Notes (V/H)
ow Ch, 5 1.490	5745MHz 3.0	56.0	42.6	37.5	4.4	-33.1	0.0	0.7	65.5	:	52.1	74	54	-8.5	-1.9	V
1.490	3.0	54.8	42.0	37.5	4.4	-33.1	0.0	0.7	64.3	÷	51.5	74	54	-9.7	-2.5	H
	785MHz									ļ						
1.570 1.570	3.0 3.0	53.7 54.0	41.5 41.0	37.5 37.5	4.4 4.4	-33.0 -33.0	0.0	0.7 0.7	63.3 63.6		51.1 50.6	74 74	54 54	-10.7 -10.4	-2.9 -3.4	V H
			.1.0	57.5	+	-00.0	0.0	0. 7	0.00			/ +	24	-10.4	-0.4	
ligh Ch, 1.650	5825MH 3.0	z 56.6	43.0	37.5	4.4	-32.9	0.0	0.7	66.4		52.8	74	54	-7.6	-1.2	v
1.650	3.0	50.0 56.2	43.0 42.0	37.5 37.5	4.4 4.4	-32.9	0.0	0.7 0.7	66.0		52.8 51.8	74 74	54 54	-7.0 -8.0	-1.2 -2.2	H
Rev. 5.1.6 Note: No (other emi f Dist		leading actor			Amp	Average	Corre Field S d Peal	ct to 3 mete Strength @ k Field Stre	3 m			Pk Lim Avg Ma	Peak Fiel ar Margin v	Field Strengt Id Strength L s. Average L s. Peak Limit	imit imit

Page 357 of 371

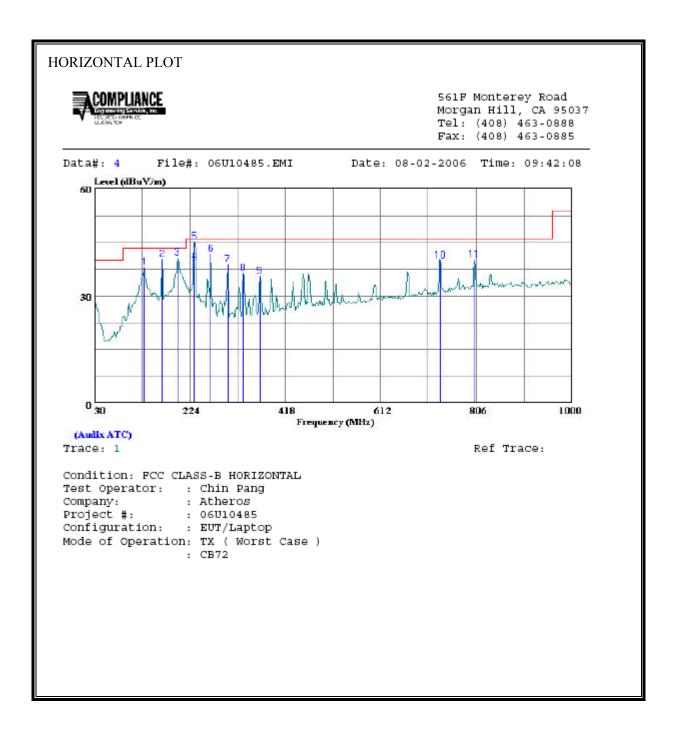
HARMONICS AND SPURIOUS EMISSIONS (802.11n MODE HT40)

est Eq	uipmen	<u>t:</u>														
		18GHz	_	mplifer				·	26-40GH	z	TOO		orn > 18			Limit
	5/N: 671	-	T145 /	Agilent :	3008A0	05(T88 Mit	eq 26-	40GHz	•	189	; ARA 18-26	GHZ; S/N:	1049	•	FCC 15.205
	uency Cal 2 foot		3	3 foot c	able		12	foot o	able			HPF	Re	eject Filte		<u>Measurements</u> W=VBW=1MHz
			Chin	1975380	01	•	Chin 20	003540	01	ĺ	HPI	F_7.6GHz	•		Avera	<u>ge Measurements</u> 1MHz ; VBW=10Hz
f	Dist		Read Avg.	1	CL	Amp	D Corr	1	Peak		vg	Pk Lim	-	1	Avg Mar	Notes
GHz w Ch, 5	(m) 755MHz	dBuV	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dB	ıV/m	dBuV/m	dBuV/m	dB	dB	(V/H)
510	3.0	55.4	42.4	37.5	4.4	-33.1	0.0	0.7	64.9		1.9	74	54	-9.1	-2.1	V
510	3.0	54.0	41.6	37.5	4.4	-33.1	0.0	0.7	63.5	5	1.1	74	54	-10.5	-2.9	H
zh Ch.	5795MH	z														
590	3.0	54.0	40.0	37.5	4.4	-33.0	0.0	0.7	63.7		9.7	74	54	-10.3	-4.3	V
650	3.0	53.0	39.7	37.5	4.4	-32.9	0.0	0.7	62.8	4	9.5	74	54	-11.2	-4.5	Н
v. 5.1.6 te: No o	f Dist		.eading actor			Amp	Average	Corre Field S ed Pea	ct to 3 mete Strength @ k Field Stre	3 m			Pk Lim Avg Mar	Peak Field Margin vs	Tield Strengtl 1 Strength Li . Average Li . Peak Limit	mit mit

Page 358 of 371

7.4.4. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

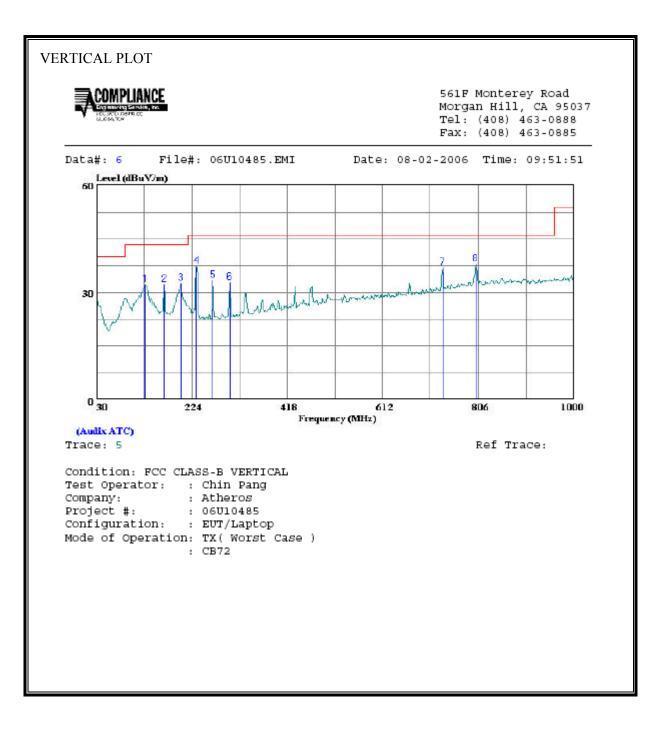


Page 359 of 371

HORIZO	NTAL DAT	ΓA							
						_		Page: 1	
	Freq	Read Level		Level	Limit Line	Over Limit			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	130.880	23.92	14.16	38.08	43.50				
2	167.740				43.50				
3	198.780					-2.70			
4	232.730						~		
5	232.730				46.00				
6	266.680					-4.24			
7	300.630				46.00				
8	332.640				46.00				
9	366.590				46.00				
10	733.250				46.00				
11	800.180	18.18	21.91	40.09	46.00	-5.91	Peak		

Page 360 of 371

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



Page 361 of 371

VERTICA	L DATA								
	Freq	Read Level		Level	Limit Line	Over Limit	Remark	Page: 1	
_	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
5	128.940 167.740 201.690 232.730 266.680 300.630 735.190 800.180	17.98 19.82 19.46 25.46 20.43 18.67 15.72	14.22 12.41 13.11 11.86 13.07 14.13 21.15	32.20 32.23 32.57 37.32 33.50 32.80 36.87	43.50 43.50 43.50 46.00 46.00 46.00 46.00	-11.30 -11.27 -10.93 -8.68 -12.50 -13.20 -9.13	Peak Peak Peak Peak Peak Peak		

Page 362 of 371

7.5. POWERLINE CONDUCTED EMISSIONS

<u>LIMIT</u>

\$15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted I	.imit (dBuV)
	Quasi-peak	Average
0.15-0.5	66 to 56 °	56 to 46 *
0.5-5	56	46
5-30	60	50

Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The resolution bandwidth is set to 9 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

No non-compliance noted:

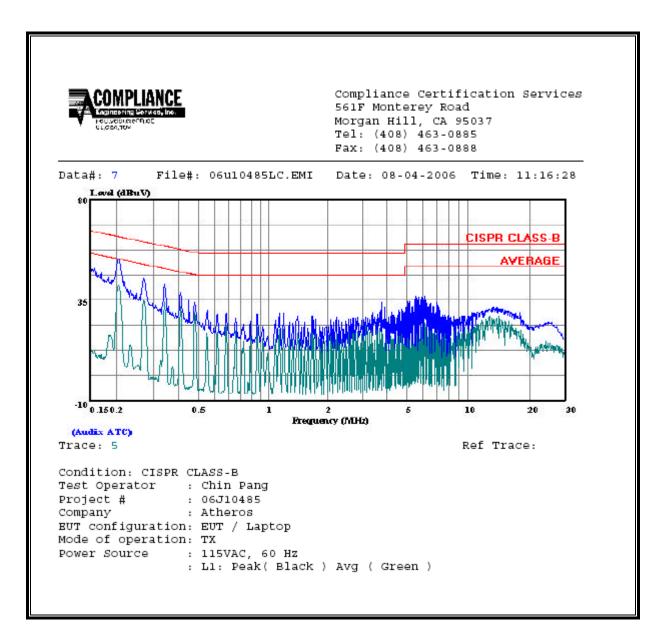
Page 363 of 371

6 WORST EMISSIONS

		CONDUC	TED EMIS	SIONS D	ATA (11:	5VAC 60H	Hz)		
Freq.		Reading		Closs	Limit	EN_B	Mar	gin	Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.21	53.00		41.83	0.00	63.37	53.37	-10.37	-11.54	L1
0.27	44.86		34.62	0.00	61.03	51.03	-16.17	-16.41	L1
0.34	41.92		33.85	0.00	59.18	49.18	-17.26	-15.33	L1
0.20	52.50		40.85	0.00	63.45	53.45	-10.95	-12.60	L2
0.27	42.98		33.34	0.00	61.00	51.00	-18.02	-17.66	L2
14.75	31.32		26.92	0.00	60.00	50.00	-28.68	-23.08	L2
6 Worst I	Data								

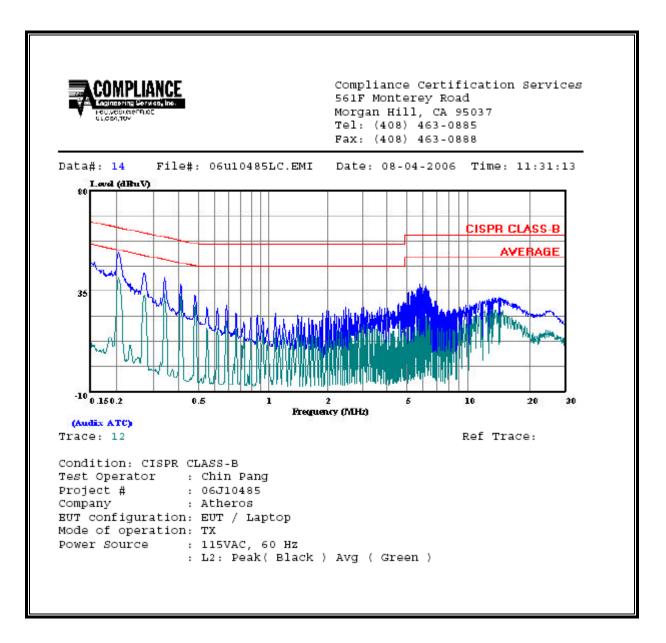
Page 364 of 371

LINE 1 RESULTS



Page 365 of 371

LINE 2 RESULTS



Page 366 of 371