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# **TEST REPORT**

ACCORDING TO: FCC part 15 subpart C §15.247, subpart E, subpart B, part 22 §22.917 and part 24 §24.238

FOR:

Mobile Access Networks Ltd. RF distribution amplifier Model:MA850

This report is in conformity with ISO/ IEC 17025. The A2LA logo endorsement applies only to the test methods and the standards that are listed in the scope of Hermon Laboratories accreditation. The test results relate only to the items tested. This test report shall not be reproduced in any form except in full with the written approval of Hermon Laboratories Ltd.

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Date of Issue: May 2006



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## 1 Applicant information

Client name: Mobile Access Networks Ltd.

Address: Ofek One Center Building 2, Northern Industrial Zone, Lod 71293, Israel

**Telephone:** +972 8918 3888 **Fax:** +972 8918 3844

**E-mail:** kochavy@mobileaccess.com

Contact name: Mr. Kochav Yadid, QA and Integration director

## 2 Equipment under test attributes

Product name: RF distribution amplifier

Model(s): MA850 Receipt date 4/26/2006

#### 3 Manufacturer information

Manufacturer name: Mobile Access Networks Ltd.

Address: Ofek One Center Building 2, Northern Industrial Zone, Lod 71293, Israel

**Telephone:** +972 8918 3888 **Fax:** +972 8918 3844

E-Mail: kochavy@mobileaccess.com

Contact name: Mr. Kochav Yadid, QA and Integration director

#### 4 Test details

Project ID: 16608

**Location:** Hermon Laboratories Ltd. P.O.Box 23, Binyamina 30500, Israel

**Test started:** 4/26/2006 **Test completed:** 5/21/2006

Test specification(s): FCC part 15 subpart E; subpart C, §15.247; subpart B; part 22 §22.917; part 24 §24.238



# 5 Tests summary

Test	Status
Transmitter characteristics	
Section 15. 407(a)(3), Occupied 26 dB bandwidth	Pass
Section 15. 407(a)(3), Maximum peak output power	Pass
Section 15. 407(a)(3), Peak power spectral density	Pass
Section 15. 407(a)(6), Ratio of the peak excursion of the modulation envelope	Pass
to the peak transmit power	
Section 15. 407(b), Unwanted radiated emission	Pass
Section 15. 407(f), RF exposure	Provided in documentation for Application
Section 15.247(a)2, 6 dB bandwidth	Pass
Section 15.247(b)3, Peak output power	Pass
Section 15.247(c), Conducted spurious emissions	Pass
Section 15.247(c), Radiated spurious emissions	Pass
Section 15.247(d), Peak power density	Pass
Section 15.203, Antenna requirement	Professional installation is required
Sections 22.917, 24.238, Spurious emissions at antenna terminal	Pass
Section 15.207(a), Conducted emission	Pass
Unintentional emissions	
Section 15.107, Conducted emission at AC power port	Pass
Section 15.109, Radiated emission	Pass
Section 15.111, Conducted emission at receiver antenna port	Not required

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested.

The test results relate only to the items tested. Pass/ fail decision was based on nominal values.

#### This tes report replaces the previously issued test report identified by Doc ID:MOBFCC\_16608.

	Name and Title	Date	Signature
Tested by:	Mr. A. Adelberg, test engineer	May 21, 2006	graph .
Reviewed by:	Mrs. M. Cherniavsky, certification engineer	May 30, 2006	Chu
Approved by:	Mr. M. Nikishin, EMC and radio group leader	May 31, 2006	ff (





# 6 EUT description

## 6.1 General information

The EUT, MobileAccess 850 provides secure and centralized connection for a number of 802.11a/b/g Access Points, significantly expands 802.11 coverage and enables distributing the data services over the same coax and antenna infrastructure used for distributing voice services through other MobileAccess products.

## 6.2 Ports and lines

Port	Port		nected	Connector	Qty.	Cable type	Cable
type	description	From	То	type	Gty.	oabic type	length
Power	48 V DC	adapter	EUT	Power plug	1	unshielded	1.5 m
Power	AC power	mains	adapter	IEC 60320	1	unshielded	1.5 m
Signal	RS232	Open circuit	D-type	1	NA	NA	NA
Signal	Ethernet	Open circuit	RJ-45	1	NA	NA	NA
Conducte	ed measuremen	its					
Signal	802.11b/g	EUT	Access point	TNC modified	1	coax	0.7 m
Signal	802.11b/g	EUT	50 Ω termination	TNC modified	3	NA	NA
Signal	802.11a	EUT	Access point	TNC modified	1	coax	0.7 m
Signal	802.11a	EUT	50 Ω termination	TNC modified	3	NA	NA
RF	Antenna	EUT	50 Ω termination	n-type female	4	NA	NA
RF	CELL mobile services	EUT	Signal generators via divider/splitter	SMA female	1	coax	0.7 m
RF	CELL mobile services	EUT	50 Ω termination	SMA female	1	NA	NA
RF	PCS mobile services	EUT	50 Ω termination	SMA female	2	NA	NA
Radiated	measurements	1					
Signal	802.11b/g	EUT	Access point	TNC modified	4	coax	0.7 m
Signal	802.11a	EUT	Access point	TNC modified	4	coax	0.7 m
RF	Antenna	EUT	antenna	n-type female	4	coax	0.7 m
RF	CELL mobile services	EUT	Signal generators via divider/splitter	SMA female	2	coax	0.7 m
RF	PCS mobile services	EUT	Signal generators via divider/splitter	SMA female	2	coax	0.7 m





# 6.3 Support and test equipment

Description	Manufacturer	Model number	Serial number
			FTX0922E380
Aironet 1200 – a,b,g Wireless Access Point	Cisco Systems	AIR-AP1232AG-A-K9	FTX0922E380
Allohet 1200 – a,b,g Wheless Access Folht	Cisco Systems	AIN-AF 1232AG-A-N9	FTX0922E394
			FTX0923R01B
			PHI09050DEC
Adapter (Access Point)	Cisco Systems		PHI08280RGY
Adapter (Access Politi)	Cisco Systems		PHI090803G3
			PHI0828126A
4 Sencity®Art Ultra-broadband antennas	Huber+Suhner	SWA 0859/360/4/10/V	Art. No.
			23040329
Adapter (EUT)	NA	SB-480A7F-11	006291
Signal generator	HP	E4431B	U538220140
Signal generator	HP	8656A	2228A03615
Laptop	IBM	2645-4A0	5515FL6
Adapter (laptop)	IBM	N79	02K6543
Splitter	HL	NA	NA
Divider	HL	NA	NA

# 6.4 Operating frequencies

Frequency, MHz
800-1000
1800-2000
2500
5100

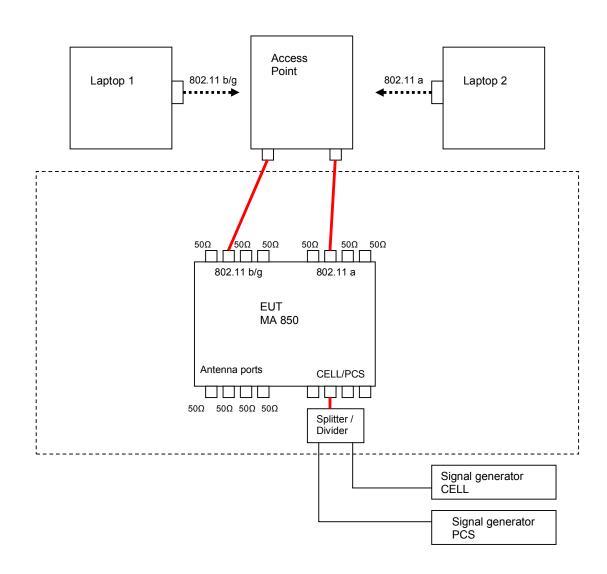
# 6.5 Changes made in the EUT

No changes were implemented.



# 6.6 Test configuration

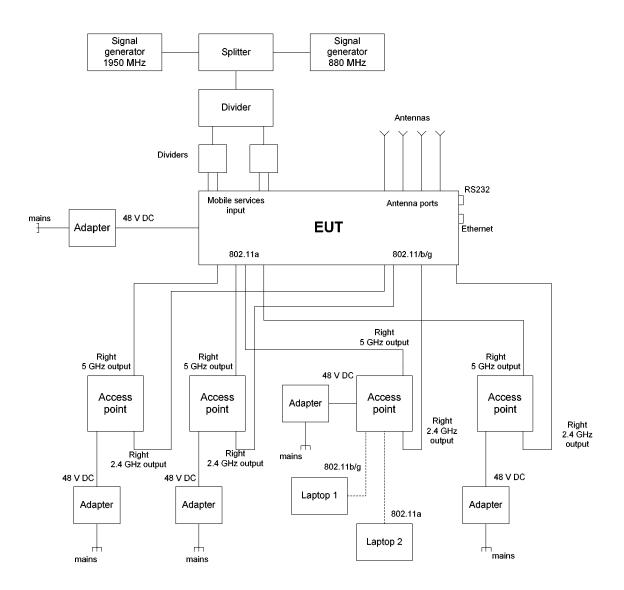
## 6.6.1 EUT setup for conducted measurements







#### 6.6.2 EUT setup for radiated measurements



Note: Throughout the 802.11 b/g module testing the 802.11a module operated at 5.32 GHz, throughout the 802.11a module testing the 802.11 b/g module operated at 2.437 GHz; samples of licensed signals: 881.5 MHz and 1960 MHz.





## 6.7 Transmitter characteristics

T	Type of aguinment								
туре	Type of equipment								
Х	Stand-alone (Equipment with or without its own control provisions)  Combined equipment (Equipment where the radio part is fully integrated within another type of equipment)								
^	Plug-in card (Equ	inment	intended for	a varie	ty of host	sveteme)	iei type t	or equipment)	
Intended use Condition of use									
X	fixed				more than	2 m from all people			
^	mobile					20 cm from all people			
	portable					er than 20 cm to human body			
Assic	ned frequency ran					MHz; 2) 2400 – 2483.5 MHz			
	ating frequency rar					MHz, 5250 – 5350 MHz, 5725	- 5825 N	1Hz; 2) 2412 -	2462 MHz
						er 50 Ω RF output connector			10.5 dBm (802.11 a)
Maxii	mum rated output p	ower				•			26.6 dBm (802.11 b/g)
				Effect	ive radiate	d power (for equipment with n	o RF con	nector)	
No					No				
						continuous variable			
Is transmitter output power variable?				X Yes	stepped variable v	vith steps	ize		
				A 168	163	minimum RF power			
						maximum RF power			
Anter	nna connection								
	unique coupling	Х	star	ndard co	onnector	integral	W	ith temporary	RF connector
	unique ecapiing		otai	idai d	0111100101	integral	X w	ithout tempor	ary RF connector
Anter	nna/s technical cha	racteris	stics						
Type			Manufac	turer		Model number		Gain	
71: -			HUBER-	R+SUHNER		SWA 0859/360/4/10/V 7 dBi		7 dBi	
				SENCITY-ART					
Туре	Type of modulation 16-QAM, QPSK, BPSK								
Туре	of multiplexing		-		TD	MA		·	_
Trans	smitter power sour	се							
	Battery	Nomin	al rated vol	tage		Battery type			
Χ	DC		al rated vol		48 \			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	AC mains	Nomin	al rated vol	tage		Frequency			



Test specification:	Section 15.407(a)(3), 26	dB bandwidth	
Test procedure:	FCC Public Notice DA 02-21	38, Appendix A	
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:		-	

# 7 Transmitter tests according to 47CFR part 15 subpart E requirements with 802.11 b/g and 802.11a

## 7.1 Occupied 26 dB bandwidth

#### 7.1.1 General

This test was performed to measure the 26 dB bandwidth of the device.

#### 7.1.2 Test procedure

- 7.1.2.1 The EUT was set up as shown in Figure 7.1.1, energized and its proper operation was checked.
- **7.1.2.2** The EUT was set to transmit modulated carrier at maximum data rate.
- 7.1.2.3 The measurements were performed in continuous transmission mode of operation for carrier (channel) frequencies at low and high edges and at the middle of the frequency range shown in Table 7.1.1. The transmitter bandwidth was measured with spectrum analyzer as frequency delta between reference points on modulation envelope and provided in Table 7.1.1 and associated plot.

Figure 7.1.1 The 26 dB bandwidth test setup





Test specification:	Section 15.407(a)(3), 26 d	B bandwidth	
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A	
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:		-	-

Table 7.1.1 The 26 dB bandwidth test results

OPERATING FREQUENCY RANGE: 5150 - 5825 MHz

DETECTOR USED:

RESOLUTION BANDWIDTH:

VIDEO BANDWIDTH:

MODULATION SIGNAL:

Peak
300 kHz
≥ RBW
digital

MODOLATION GIGNAL.	digital			
Carrier Frequency, GHz	26 dB bandwidth, MHz			
Data rate 6 Mbps				
5.180	16.937			
5.260	17.000			
5.320	17.187			
5.745	16.875			
5.785	16.875			
5.805	16.937			
Data rate 54 Mbps				
5.180	17.662			
5.260	16.875			
5.320	16.937			
5.745	17.062			
5.785	16.875			
5.805	16.937			

#### Reference numbers of test equipment used

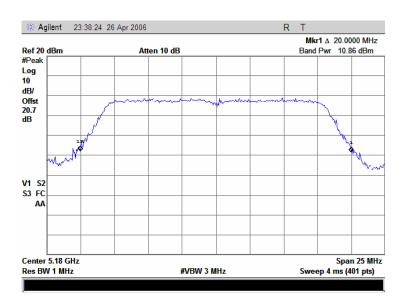
116 1000   116 2207   116 2700	HL 1650	HL 2254	HL 2780						
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Full description is given in Appendix A.

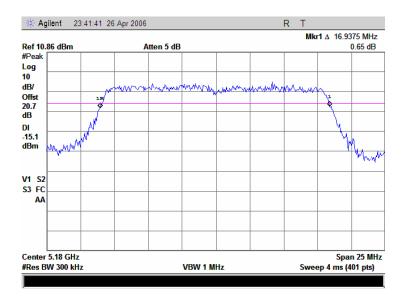


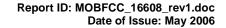
Test specification:	Section 15.407(a)(3), 26 d	B bandwidth	
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A	
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:		-	-

Plot 7.1.1 Reference power level measurement at 5.180 GHz, 6 Mbps



Plot 7.1.2 The 26 dB bandwidth test result at 5.180 GHz, 6 Mbps

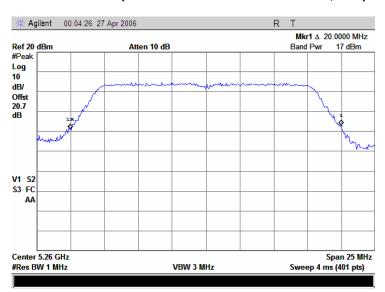




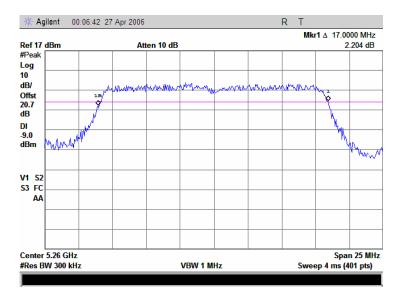


Test specification:	Section 15.407(a)(3), 26 dB bandwidth		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS	
Date:	5/01/2006	verdict.	FASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.3 Reference power level measurement at 5.260 GHz, 6 Mbps



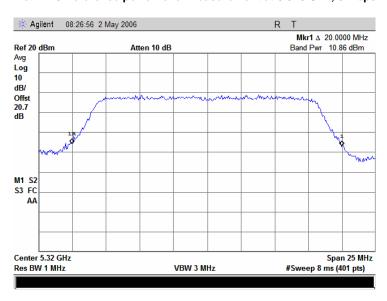
Plot 7.1.4 The 26 dB bandwidth test result at 5.260 GHz, 6 Mbps



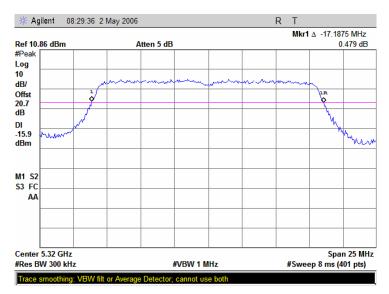


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.5 Reference power level measurement at 5.320 GHz, 6 Mbps



Plot 7.1.6 The 26 dB bandwidth test result at 5.320 GHz, 6 Mbps





Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.7 Reference power level measurement at 5.7450 GHz, 6 Mbps



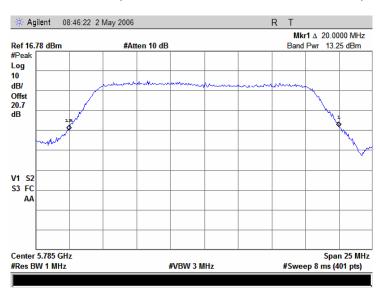
Plot 7.1.8 The 26 dB bandwidth test result at 5.7450 GHz, 6 Mbps



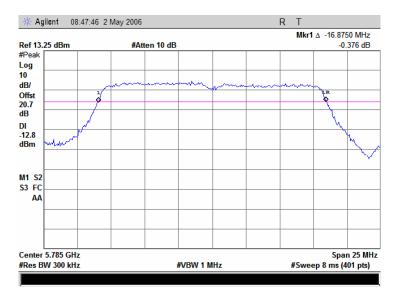


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.9 Reference power level measurement at 5.785 GHz, 6 Mbps



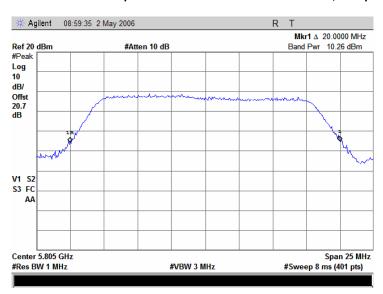
Plot 7.1.10 The 26 dB bandwidth test result at 5.785 GHz, 6 Mbps



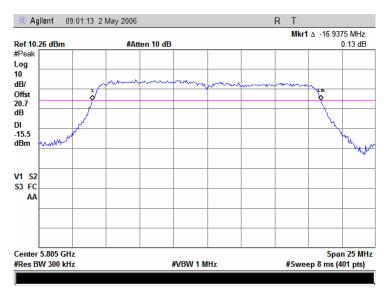


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.11 Reference power level measurement at 5.805 GHz, 6 Mbps



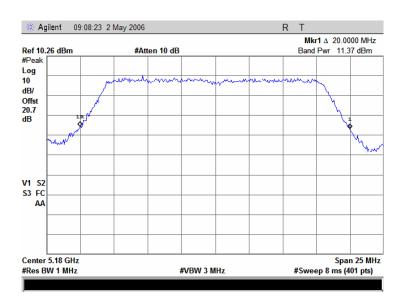
Plot 7.1.12 The 26 dB bandwidth test result at 5.805 GHz, 6 Mbps



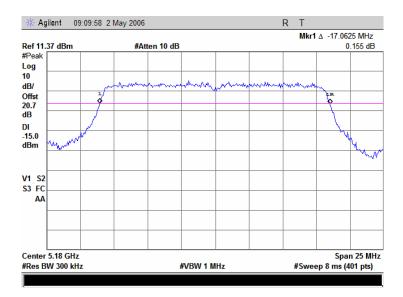


Test specification:	Section 15.407(a)(3), 26 dB bandwidth		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS	
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.13 Reference power level measurement at 5.180 GHz, 54 Mbps



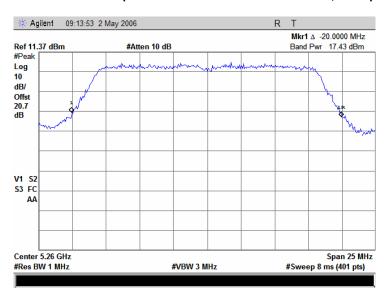
Plot 7.1.14 The 26 dB bandwidth test result at 5.180 GHz, 54 Mbps



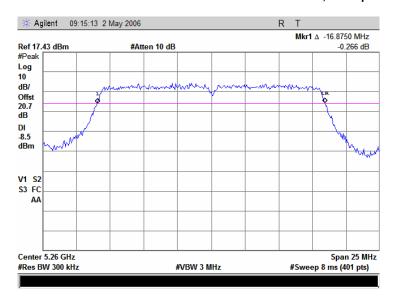


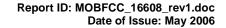
Test specification:	Section 15.407(a)(3), 26 dB bandwidth		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS	
Date:	5/01/2006	verdict.	FASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.15 Reference power level measurement at 5.260 GHz, 54 Mbps



Plot 7.1.16 The 26 dB bandwidth test result at 5.260 GHz, 54 Mbps

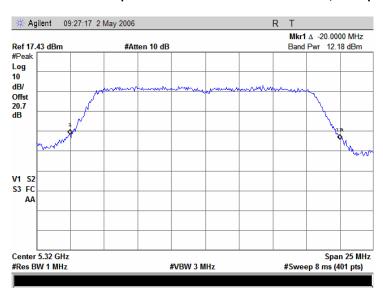




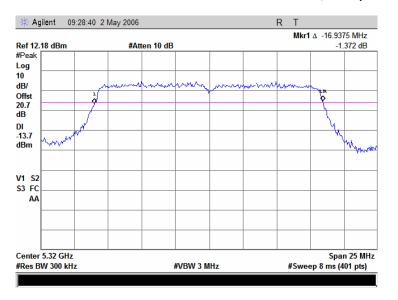


Test specification:	Section 15.407(a)(3), 26 d	Section 15.407(a)(3), 26 dB bandwidth		
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.17 Reference power level measurement at 5.320 GHz, 54 Mbps



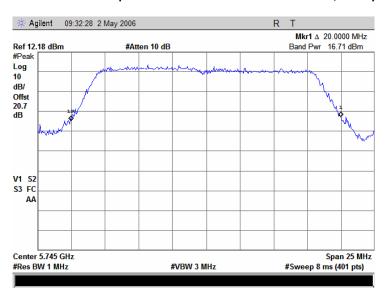
Plot 7.1.18 The 26 dB bandwidth test result at 5.320 GHz, 54 Mbps



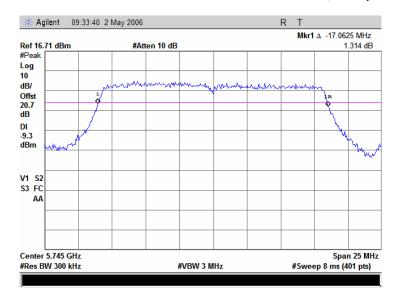


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.19 Reference power level measurement at 5.7450 GHz, 54 Mbps



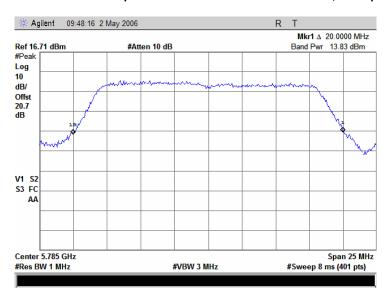
Plot 7.1.20 The 26 dB bandwidth test result at 5.7450 GHz, 54 Mbps



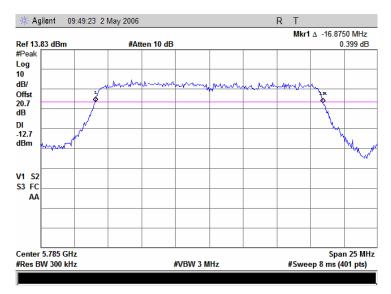


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.21 Reference power level measurement at 5.785 GHz, 54 Mbps



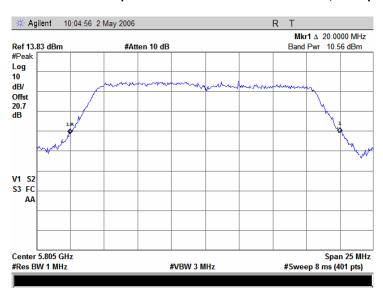
Plot 7.1.22 The 26 dB bandwidth test result at 5.785 GHz, 54 Mbps



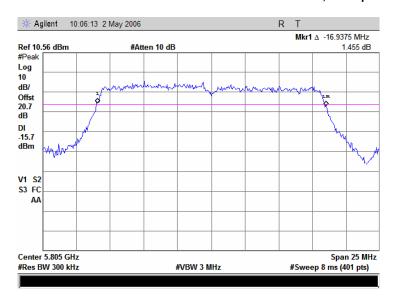


Test specification:	Section 15.407(a)(3), 26 dB bandwidth			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.1.23 Reference power level measurement at 5.805 GHz, 54 Mbps



Plot 7.1.24 The 26 dB bandwidth test result at 5.805 GHz, 54 Mbps





Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power		
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict: PASS		
Date:	4/26/2006	verdict.	PASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks: Final version with new modulation				

## 7.2 Peak output power

#### 7.2.1 General

This test was performed to measure the maximum peak output power at the transmitter RF antenna connector. Specification test limits are given in Table 7.2.1.

Table 7.2.1 Peak output power limits

Operating frequency range, MHz	Maximum peak transmit power*	Used limit*, dBm
5150-5250	The lesser of 50 mW or 4 dBm +10 log B	15.3 dBm
5250-5350	The lesser of 250 mW or 11 dBm +10 log B	22.3 dBm
5725 - 5825	The lesser of 1 W or 17 dBm +10 log B (B is the 26-dB emission bandwidth in MHz)	28.3 dBm

The minimum 26-dB emission bandwidth is 16.875 MHz, the limit is equal to:

#### 7.2.2 Test procedure

- 7.2.2.1 The EUT was set up as shown in Figure 7.2.1, energized and its proper operation was checked.
- **7.2.2.2** The EUT was adjusted to produce maximum available for end user RF output power.
- 7.2.2.3 The measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low and high edges and at the middle of the 5.120-5.825 GHz frequency range. Video bandwidth (VBW) was calculated from maximum usable transmission pulse duration T, shown in the associated plot, VBW ≥ 1/T ≥ 1/50 µs; VBW = 30 kHz.

Figure 7.2.1 Peak output power test setup



<sup>4</sup> dBm + 10 log 16.875 **=16.3 dBm** (less than 50 mW = 17 dBm);

<sup>11</sup> dBm + 10 log 16.875 **=23.3 dBm** (less than 250 mW = 24 dBm);

<sup>17</sup> dBm + 10  $\log 16.875 = 29.3$  dBm (less than 1 W = 30 dBm);

<sup>\*</sup> Note 1: @7 dBi antenna gain the limits of peak output power shall be reduced 1 dB.



Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

## Table 7.2.2 Peak output power test results

OPERATING FREQUENCY RANGE: 5150 - 5825 MHz

DETECTOR USED: Sample RESOLUTION BANDWIDTH: 1 MHz

VIDEO BANDWIDTH: 1 kHz for 6 Mbps 10 kHz for 54 Mbps

MODULATION SIGNAL: Digital

WODULATION SIGNAL.	•	Digital		
Frequency, GHz	Total power, dBm	Limit*, dBm	Margin, dB	Verdict
Data rate 6 Mbps				
5.18	1.84	15.3	-13.46	Pass
5.26	7.79	22.3	-14.51	Pass
5.32	2.14	22.3	-20.16	Pass
5.745	7.11	28.3	-21.19	Pass
5.785	3.42	28.3	-24.88	Pass
5.805	0.71	28.3	-27.59	Pass
Data rate 54 Mbps				
5.18	3.42	15.3	-11.88	Pass
5.26	10.49	22.3	-11.81	Pass
5.32	5.27	22.3	-17.04	Pass
5.745	9.75	28.3	-18.55	Pass
5.785	6.14	28.3	-22.16	Pass
5.805	3.31	28.3	-24.99	Pass

<sup>\*</sup> Note: @7 dBi antenna gain the limits of peak output power were reduced by 1 dB.

#### Reference numbers of test equipment used

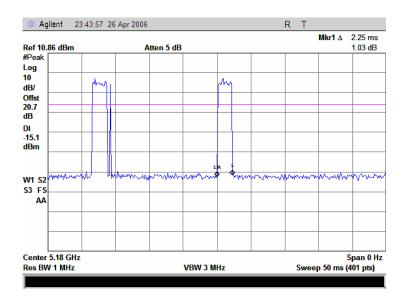
HL 1424	HL 1651	HL 2399			

Full description is given in Appendix A.



Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

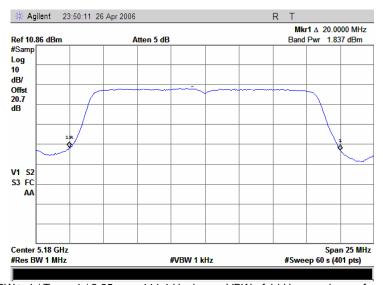
Plot 7.2.1 Pulse duration measurement, 6 Mbps



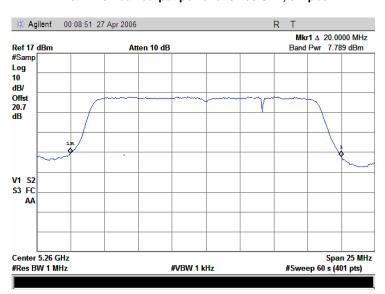


Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	FASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.2 Peak output power at 5.180 GHz, 6 Mpbs



Note: RBW = 1 MHz, VBW ≥ 1 / Ton = 1 / 2.25ms = 444.4 Hz, hence VBW of 1 kHz was chosen for measurements

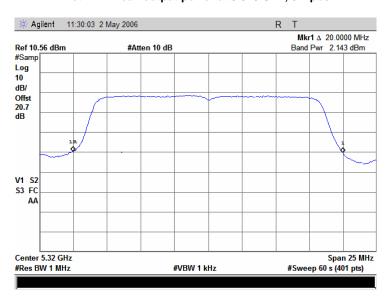


Plot 7.2.3 Peak output power at 5.260 GHz, 6 Mpbs

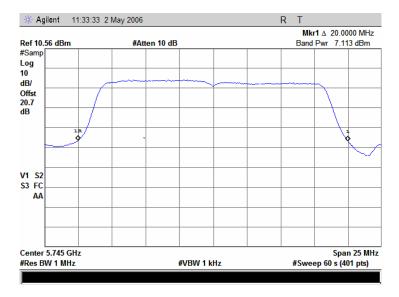


Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.4 Peak output power at 5.320 GHz, 6 Mpbs



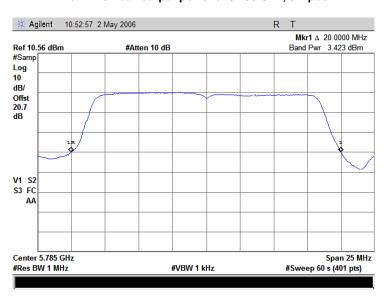
Plot 7.2.5 Peak output power at 5.745 GHz, 6 Mpbs



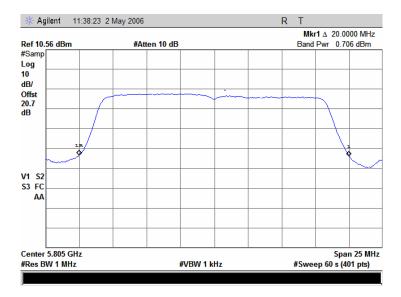


Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.6 Peak output power at 5.785 GHz, 6 Mpbs



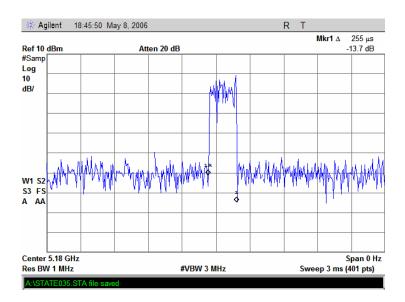
Plot 7.2.7 Peak output power at 5.805 GHz, 6 Mpbs





Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

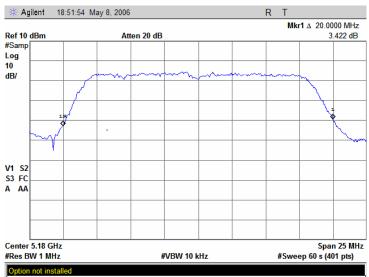
Plot 7.2.8 Pulse duration measurement, 54 Mbps





Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	FASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.9 Peak output power at 5.180 GHz, 54 Mpbs



Note: RBW = 1 MHz, VBW ≥ 1 / Ton = 1 / 0.255ms = 4444.4 Hz, hence VBW of 10 kHz was chosen for measurements

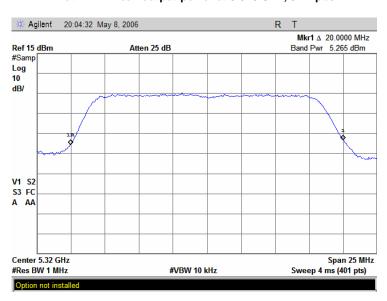
Plot 7.2.10 Peak output power at 5.260 GHz, 54 Mpbs





Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	FASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.11 Peak output power at 5.320 GHz, 54 Mpbs



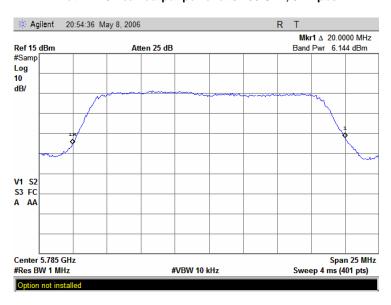
Plot 7.2.12 Peak output power at 5.745 GHz, 54 Mpbs



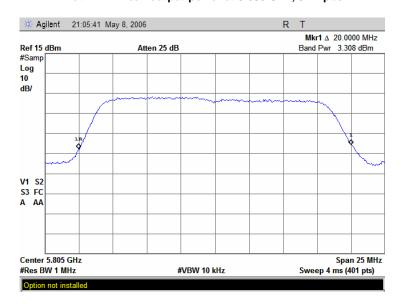


Test specification:	Section 15.407(a)(1-3), Pe	Section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks: Final version with new modulation					

Plot 7.2.13 Peak output power at 5.785 GHz, 54 Mpbs



Plot 7.2.14 Peak output power at 5.805 GHz, 54 Mpbs





Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict: PASS		
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

## 7.3 Peak spectral power density

#### 7.3.1 General

This test was performed to measure the peak spectral power density at the transmitter RF antenna connector. Specification test limits are given in Table 7.3.1.

Table 7.3.1 Peak spectral power density limits

Assigned frequency range, MHz	Measurement bandwidth, MHz	Peak spectral power density, dBm
5150 - 5250		4.0
5250 - 5350	1.0	11.0
5725 - 5825		17.0

<sup>\*</sup> Note 1: @7 dBi antenna gain the limits of peak power spectral density shall be reduced 1 dB.

#### 7.3.2 Test procedure

- 7.3.2.1 The EUT was set up as shown in Figure 7.3.1, energized and its proper operation was checked.
- **7.3.2.2** The EUT was adjusted to produce maximum available to end user RF output power.
- **7.3.2.3** The measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low and high edges and at the middle of the frequency range.
- 7.3.2.4 The peak of emission was zoomed with span set just wide enough to capture the emission peak area and sweep time was set equal to span width divided by resolution bandwidth. Spectrum analyzer was set in peak hold mode, sufficient number of sweeps was allowed for trace stabilization and peak spectral power density was measured as provided in Table 7.3.2 and associated plots.

Figure 7.3.1 Peak spectral power density test setup







Test specification:	Section 15. 407(a)(1-3), Peak power spectral density				
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict: PASS			
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks:		-			

Table 7.3.2 Peak spectral power density test results

OPERATING FREQUENCY RANGE: 5150 - 5825 MHz
DETECTOR USED: Peak hold
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
MODULATION SIGNAL: digital

Carrier frequency, MHz	' '   SNACTYAL MANSITY		Margin**, dB	Verdict
Data rate 6 Mbps				
5180	-2.84	3	-5.84	Pass
5260	3.54	10	-6.46	Pass
5320	0.90	10	-9.10	Pass
5745	6.28	16	-9.72	Pass
5785	2.27	16	-13.73	Pass
5805	-0.42	16	-16.42	Pass
Data rate 54 Mbps				
5180	1.07	3	-1.93	Pass
5260	6.64	10	-3.36	Pass
5320	1.53	10	-8.47	Pass
5745	6.66	16	-9.34	Pass
5785	4.72	16	-11.28	Pass
5805	-0.15	16	-16.15	Pass

<sup>\* @7</sup> dBi antenna gain the limits of peak power spectral density were reduced 1 dB;

## Reference numbers of test equipment used

HL 1424	HL 1650	HL 2254					

Full description is given in Appendix A.

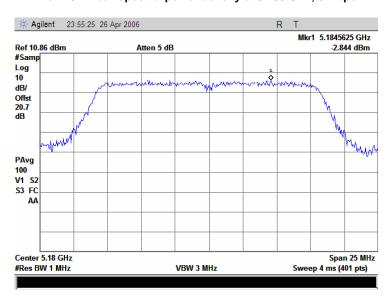
<sup>\*\*</sup> Margin = Peak power density – calculated limit.



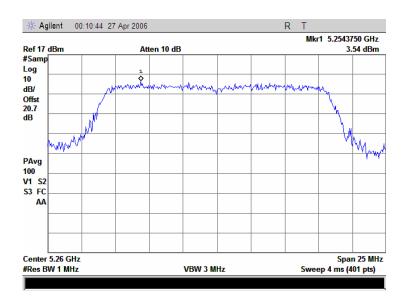


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-2138, Appendix A			
Test mode:	Compliance	Verdict: PASS		
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.1 Peak spectral power density at 5.180 GHz, 6 Mbps



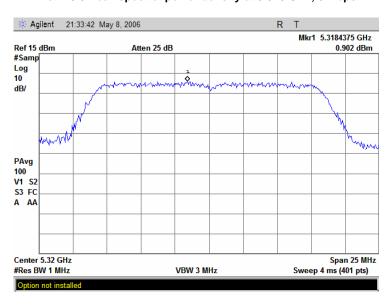
Plot 7.3.2 Peak spectral power density at 5.260 GHz, 6 Mbps



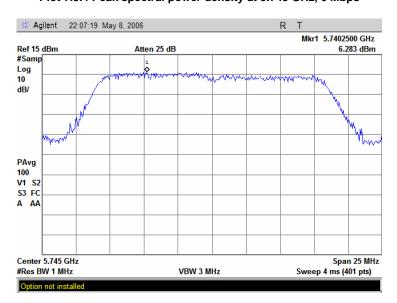


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.3 Peak spectral power density at 5.320 GHz, 6 Mbps



Plot 7.3.4 Peak spectral power density at 5.745 GHz, 6 Mbps

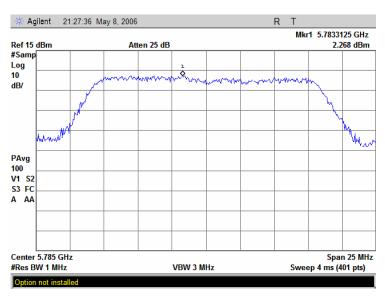




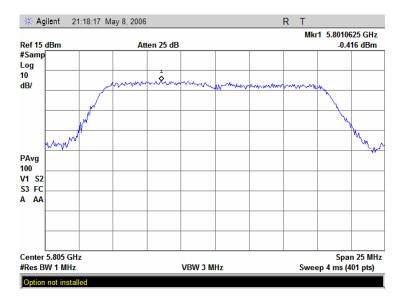


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	PASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.5 Peak spectral power density at 5.785 GHz, 6 Mbps



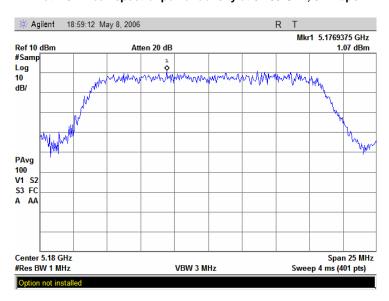
Plot 7.3.6 Peak spectral power density at 5.805 GHz, 6 Mbps



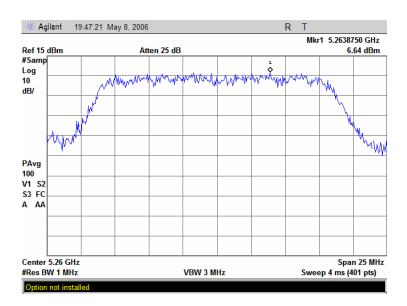


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	PASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.7 Peak spectral power density at 5.180 GHz, 54 Mbps



Plot 7.3.8 Peak spectral power density at 5.260 GHz, 54 Mbps

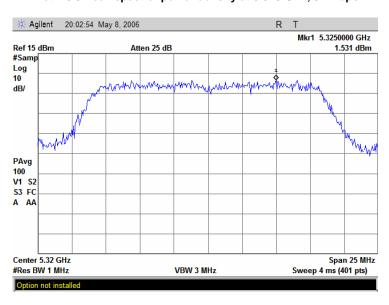




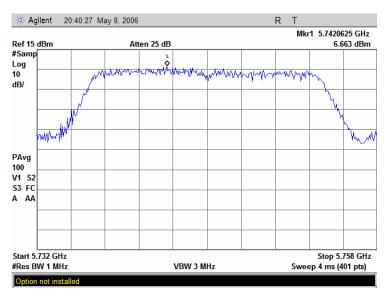


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.9 Peak spectral power density at 5.320 GHz, 54 Mbps



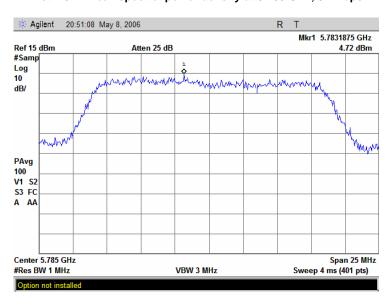
Plot 7.3.10 Peak spectral power density at 5.745 GHz, 54 Mbps



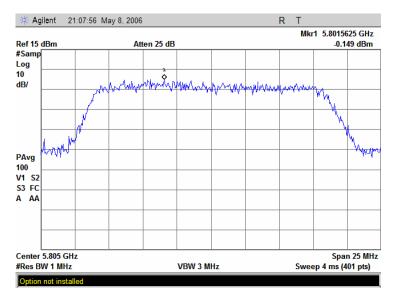


Test specification:	Section 15. 407(a)(1-3), Peak power spectral density			
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.3.11 Peak spectral power density at 5.785 GHz, 54 Mbps



Plot 7.3.12 Peak spectral power density at 5.805 GHz, 54 Mbps





Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power			
Test procedure:	FCC Public Notice DA 02-21	38, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

# 7.4 Ratio of the peak excursion of the modulation envelope to the peak transmit power

### 7.4.1 General

This test was performed to measure the ratio of the peak excursion of the modulation envelope to the peak transmit power at RF antenna connector. Specification test limits are given in Table 7.4.1.

Table 7.4.1 Peak excursion limits

Assigned frequency, MHz	Maximum peak excursion, dB/MHz
5150 - 5250	
5250 – 5350	13.0
5725 – 5825	

### 7.4.2 Test procedure

- 7.4.2.1 The EUT was set up as shown in Figure 7.4.1, energized and its proper operation was checked.
- 7.4.2.2 The EUT was adjusted to produce maximum available to end user RF output power.
- **7.4.2.3** The measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low and high edges and at the middle of the frequency range.
- 7.4.2.4 The maximum peak excursion of modulation envelope was measured as a difference between 2 traces:

trace 1: RBW = 1 MHz, VBW = 3 MHz trace 2: for 6 Mbps RBW = 1 MHz, VBW = 1 kHz for 54 Mbps RBW = 1 MHz, VBW = 10 kHz, where RBW – resolution bandwidth, VBW - video bandwidth.

**7.4.2.5** The test results were recorded in Table 7.4.2 and shown in the associated plots.

Figure 7.4.1 Band edge emission test setup







Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power			
Test procedure:	FCC Public Notice DA 02-21	38, Appendix A		
Test mode:	Compliance	Verdict:	PASS	
Date:	4/26/2006	verdict.	FASS	
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

## Table 7.4.2 Peak excursion test results

ASSIGNED FREQUENCY RANGE: 5150 – 5250 MHz, 5250 – 5350 MHz, 5725 – 5825 MHz

DETECTOR USED:

MODULATION TECHNIQUE::

TRANSMITTER OUTPUT POWER SETTINGS:

RESOLUTION BANDWIDTH:

Peak
digital
Maximum
1 MHz

Carrier frequency,	Measured maximum peak excursion,	Limit,	Margin,	Verdict
MHz	dB	dB/MHz	dB	
Data rate 6 Mbps				
5180	9.84	13	-3.16	Pass
5260	9.54	13	-3.46	Pass
5320	10.94	13	-2.06	Pass
5745	10.57	13	-2.43	Pass
5785	10.76	13	-2.24	Pass
5805	10.54	13	-2.46	Pass
Data rate 54 Mbps				
5180	9.53	13	-3.47	Pass
5260	9.92	13	-3.08	Pass
5320	10.03	13	-2.97	Pass
5745	10.21	13	-2.79	Pass
5785	9.67	13	-3.33	Pass
5805	10.52	13	-2.48	Pass

<sup>\*-</sup> Margin = Attenuation below carrier – specification limit.

# Reference numbers of test equipment used

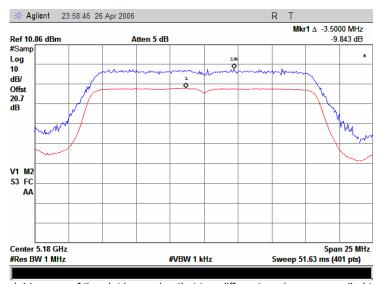
HL 1424   HL 1650   HL 1651   HL 2254	HL 1424	HL 1650	HL 1651	HL 2254				
---------------------------------------	---------	---------	---------	---------	--	--	--	--

Full description is given in Appendix A.



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power				
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks:					

Plot 7.4.1 Peak excursion measurements at 5.180 GHz, 6 Mbps



Note: star (\*) at the upper right corner of the plot is warning that two different modes were applied to different traces (blue trace – peak detector, red trace – sample detector)

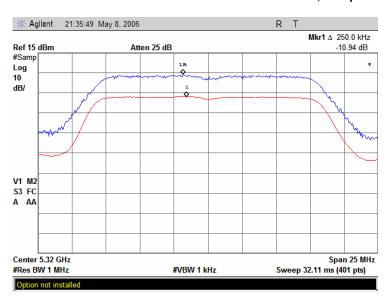
\* Agilent 00:16:51 27 Apr 2006 Mkr1 Δ -7.5625 MHz Ref 17 dBm Atten 10 dB -9.543 dB #Samp Log dB/ Offst 20.7 dB V1 M2 S3 FC AA Center 5.26 GHz Span 25 MHz #VBW 1 kHz Sweep 51.63 ms (401 pts) #Res BW 1 MHz

Plot 7.4.2 Peak excursion measurements at 5.260 GHz, 6 Mbps

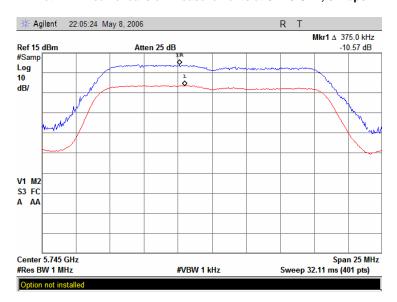


Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power				
Test procedure:	FCC Public Notice DA 02-213	8, Appendix A			
Test mode:	Compliance	Verdict:	PASS		
Date:	4/26/2006	verdict.	PASS		
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks:					

Plot 7.4.3 Peak excursion measurements at 5.320 GHz, 6 Mbps



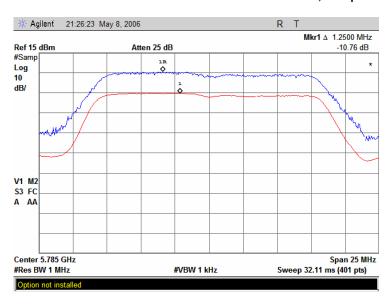
Plot 7.4.4 Peak excursion measurements at 5.745 GHz, 6 Mbps



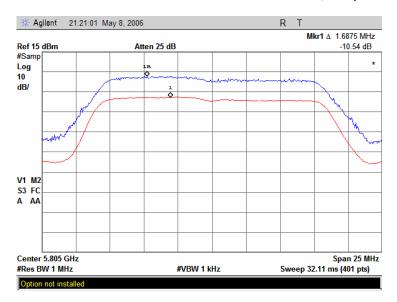


Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power				
Test procedure:	FCC Public Notice DA 02-2138, Appendix A				
Test mode:	Compliance	Verdict: PASS			
Date:	4/26/2006	Verdict: PASS			
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC			
Remarks:					

Plot 7.4.5 Peak excursion measurements at 5.785 GHz, 6 Mbps



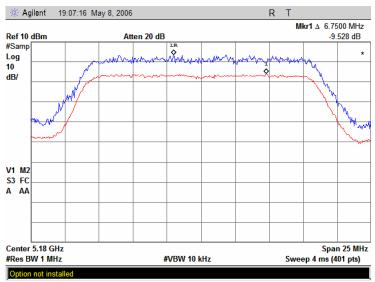
Plot 7.4.6 Peak excursion measurements at 5.805 GHz, 6 Mbps





Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power					
Test procedure:	FCC Public Notice DA 02-213	FCC Public Notice DA 02-2138, Appendix A				
Test mode:	Compliance	Verdict: PASS				
Date:	4/26/2006	Verdict: PASS				
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC				
Remarks:						

Plot 7.4.7 Peak excursion measurements at 5.180 GHz, 54 Mbps



Note: star (\*) at the upper right corner of the plot is warning that two different modes were applied to different traces (blue trace – peak detector, red trace – sample detector)

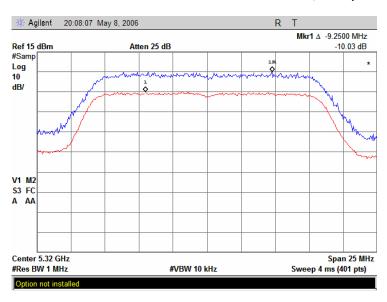
\* Agilent 19:32:49 May 8, 2006 Mkr1 A 10.2500 MHz Ref 15 dBm Atten 25 dB -9.92 dB #Samp Log 10 dB/ M/L V1 M2 S3 FC A AA Span 25 MHz Sweep 4 ms (401 pts) Center 5.26 GHz #Res BW 1 MHz #VBW 10 kHz Option not installed

Plot 7.4.8 Peak excursion measurements at 5.260 GHz, 54 Mbps

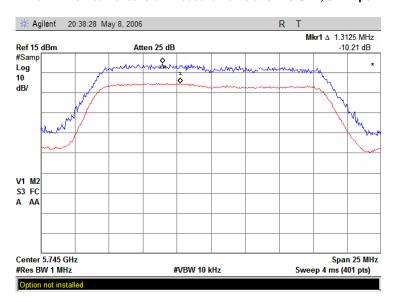


Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power					
Test procedure:	FCC Public Notice DA 02-2138, Appendix A					
Test mode:	Compliance	Verdict: PASS				
Date:	4/26/2006	verdict: PASS				
Temperature: 21 °C	Air Pressure: 1012 hPa	012 hPa Relative Humidity: 46 % Power Supply: 120 VAC				
Remarks:						

Plot 7.4.9 Peak excursion measurements at 5.320 GHz, 54 Mbps



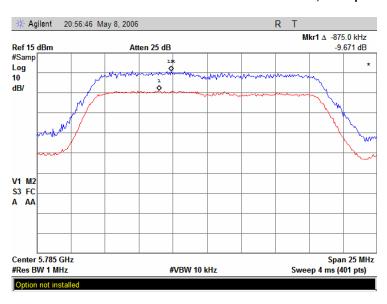
Plot 7.4.10 Peak excursion measurements at 5.745 GHz, 54 Mbps



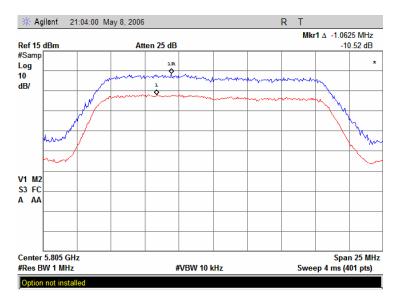


Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power				
Test procedure:	FCC Public Notice DA 02-2138, Appendix A				
Test mode:	Compliance	Verdict: PASS			
Date:	4/26/2006	Verdict: PASS			
Temperature: 21 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC			
Remarks:					

Plot 7.4.11 Peak excursion measurements at 5.785 GHz, 54 Mbps



Plot 7.4.12 Peak excursion measurements at 5.805 GHz, 54 Mbps





Test specification:	Section 15.407(b), Unwanted radiated emissions					
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict: PASS				
Date:	5/01/2006	Verdict: PASS				
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC				
Remarks:						

# 7.5 Field strength of spurious emissions

### 7.5.1 General

This test was performed to measure field strength of spurious emissions from the EUT. Specification test limits are given in Table 7.5.1, Table 7.5.2.

Table 7.5.1 Radiated spurious emissions limits below 1 GHz and within restricted bands above 1 GHz

Frequency, MHz	Field strength at 3 m, dB(μV/m)***			
Frequency, Willz	Peak	Quasi Peak	Average	
0.009 - 0.490*		128.5 – 93.8**		
0.490 - 1.705*		73.8 – 63.0**		
1.705 - 30.0*		69.5**		
30 – 88	NA	40.0	NA	
88 – 216		43.5		
216 – 960		46.0		
960 - 1000		54.0		
Above 1000	74.0	NA	54.0	

<sup>\*-</sup> The limit for 3 m test distance was calculated using the inverse square distance extrapolation factor as follows: LimS2 = LimS1 + 40 log (S1/S2),

where S1 and S2 – standard defined and test distance respectively in meters.

Table 7.5.2 EIRP of undesirable emissions limits outside restricted bands (above 1 GHz)

Frequency band, GHz	Out of band EIRP, dBm/MHz	Field strength at 3 m, dB(μV/m)
5.15 - 5.25		
5.25 - 5.35	-27	68.23
5.47 - 5.725		
5.725 – 5.825	-27 (below 5.715 and above 5.835 GHz)	68.23
5.725 - 5.625	-17 (in 5.715 – 5.725 GHz and 5.825 – 5.835 GHz)	78.23

## 7.5.2 Test procedure for spurious emission field strength measurements in 9 kHz to 30 MHz band

- 7.5.2.1 The EUT was set up as shown in Figure 7.5.1, energized and the performance check was conducted.
- **7.5.2.2** The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360° and the measuring antenna was rotated around its vertical axis.
- **7.5.2.3** The worst test results (the lowest margins) were recorded and shown in the associated plots.

## 7.5.3 Test procedure for spurious emission field strength measurements above 30 MHz

- 7.5.3.1 The EUT was set up as shown in Figure 7.5.2, energized and the performance check was conducted.
- **7.5.3.2** The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360°, the measuring antenna height was changed from 1 to 4 m, its polarization was switched from vertical to horizontal.
- **7.5.3.3** The worst test results (the lowest margins) were recorded and shown in the associated plots.

<sup>\*\*-</sup> The limit decreases linearly with the logarithm of frequency.

<sup>\*\*\* -</sup> The field strength limits applied from the lowest radio frequency generated in the device, without going below 9 kHz up to the tenth harmonic of the highest fundamental frequency.



Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict: PASS				
Date:	5/01/2006	Verdict: PASS				
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC				
Remarks:						

Figure 7.5.1 Setup for spurious emission field strength measurements below 30 MHz

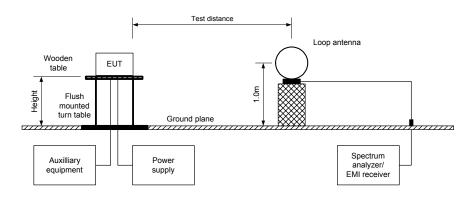
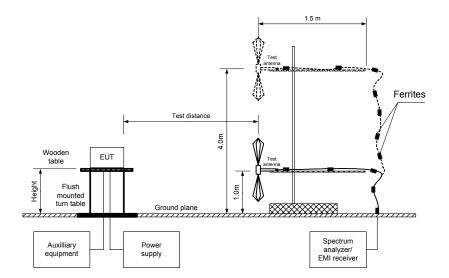


Figure 7.5.2 Setup for spurious emission field strength measurements above 30 MHz







Test specification:	Section 15.407(b), Unwanted radiated emissions					
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict: PASS				
Date:	5/01/2006	Verdict: PASS				
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 % Power Supply: 120 VAC				
Remarks:						

Table 7.5.3 Field strength of emissions outside restricted bands

ASSIGNED FREQUENCY: 5.12-5.35GHz, 5.725-5.825GHz

INVESTIGATED FREQUENCY RANGE: 0.009 - 40GHz

TEST DISTANCE: 3 m
MODULATION: OFDM

MODULATING SIGNAL: CCK and BPSK

BIT RATE: 1 Mbps
TRANSMITTER OUTPUT POWER SETTINGS: Maximum
DETECTOR: USED: Peak
RESOLUTION BANDWIDTH: 1000 kHz
VIDEO BANDWIDTH: 1 kHz

TEST ANTENNA TYPE:

Active loop (9 kHz – 30 MHz)
Biconilog (30 MHz – 1000 MHz)
Double ridged guide (above 1000 MHz)

	Beable Hagea galae (above 1000 III 12)							
requency, MHz	Antenna polarization	Antenna height, m	Azimuth, degrees*	Field strength of spurious, dB(μV/m)	Limit, dBµV/m	Margin, dB**	Verdict	
5.26 GHz carrier	5.26 GHz carrier frequency							
5249.00	V	1.0	179	56.03	68.23	-12.20	Pass	
10519.58	V	1.2	149	60.50	68.23	-7.73	Pass	
5.32 GHz carrier	rfrequency							
5246.8	V	1	249	43.84	68.23	-24.39	Pass	
5.745 GHz carrie	er frequency							
17230.17	V	1.2	150	54.8	68.23	-13.43	Pass	
5.805 GHz carrie	er frequency							
5825.35	V	1.1	100	48.07	78.23	-30.16	Pass	
17350.17	V	1.2	190	55.80	68.23	-12.43	Pass	

<sup>\*-</sup> EUT front panel refers to 0 degrees position of turntable.

Table 7.5.4 Restricted bands

MHz	MHz	MHz	MHz	MHz	GHz
0.09 - 0.11	8.37625 - 8.38675	73 - 74.6	399.9 - 410	2690 - 2900	10.6 - 12.7
0.495 - 0.505	8.41425 - 8.41475	74.8 - 75.2	608 - 614	3260 - 3267	13.25 - 13.4
2.1735 - 2.1905	12.29 - 12.293	108 - 121.94	960 - 1240	3332 - 3339	14.47 - 14.5
4.125 - 4.128	12.51975 - 12.52025	123 - 138	1300 - 1427	3345.8 - 3358	15.35 - 16.2
4.17725 - 4.17775	12.57675 - 12.57725	149.9 - 150.05	1435 - 1626.5	3600 - 4400	17.7 - 21.4
4.20725 - 4.20775	13.36 - 13.41	156.52475 - 156.52525	1645.5 - 1646.5	4500 - 5150	22.01 - 23.12
6.215 - 6.218	16.42 - 16.423	156.7 - 156.9	1660 - 1710	5350 - 5460	23.6 - 24
6.26775 - 6.26825	16.69475 - 16.69525	162.0125 - 167.17	1718.8 - 1722.2	7250 - 7750	31.2 - 31.8
6.31175 - 6.31225	16.80425 - 16.80475	167.72 - 173.2	2200 - 2300	8025 - 8500	36.43 - 36.5
8.291 - 8.294	25.5 - 25.67	240 - 285	2310 - 2390	9000 - 9200	Above 38.6
8.362 - 8.366	37.5 - 38.25	322 - 335.4	2483.5 - 2500	9300 - 9500	Above 36.0

<sup>\*\*-</sup> Margin = Attenuation below carrier – specification limit.





Test specification:	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict: PASS			
Date:	5/01/2006	Verdict: PASS			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks:		-	-		

Table 7.5.5 Field strength of spurious emissions above 1 GHz within restricted bands

ASSIGNED FREQUENCY: 5.12-5.35GHz, 5.725-5.825GHz

INVESTIGATED FREQUENCY RANGE: 1000 - 40000 MHz

TEST DISTANCE: 3 m
MODULATION: OFDM

MODULATING SIGNAL: CCK and BPSK

MODULATING SIGNAL:

BIT RATE:

1 Mbps

TRANSMITTER OUTPUT POWER SETTINGS:

Maximum

DETECTOR USED:

Peak

RESOLUTION BANDWIDTH:

1000 kHz

TEST ANTENNA TYPE: Double ridged guide

TEST ANTEN	Antenr	าล		Peak field s		W=3 MHz)		ld strength (	VBW=1 kHz)	
Frequency, MHz	Polarization	Height, m	Azimuth, degrees*	Measured, dB(μV/m)	Limit, dB(µV/m)	Margin,	Measured, dB(μV/m)	Limit, dB(μV/m)	Margin, dB***	Verdict
5.18 GHz car	rier frequency	1								
2400.00	V	1.0	122	60.42	74.0	-13.58	45.94	54.0	-8.06	Pass
2490.80	V	1.1	123	67.00	74.0	-7.00	46.21	54.0	-7.79	Pass
5.26 GHz car	rier frequency	'								
2278.00	V	1.0	122	56.28	74.0	-17.72	45.65	54.0	-8.35	Pass
2491.92	V	1.1	177	63.84	74.0	-10.16	45.55	54.0	-8.45	Pass
5000.00	V	1.0	320	56.01	74.0	-17.99	45.49	54.0	-8.51	Pass
5.32 GHz car	rier frequency									
2393.00	V	1.0	110	56.28	74.0	-17.72	45.56	54.0	-8.44	Pass
2491.09	V	1.1	234	66.45	74.0	-7.55	45.82	54.0	-8.18	Pass
4948.00	V	1.0	311	55.72	74.0	-18.28	45.35	54.0	-8.65	Pass
5361.60	V	1.0	149	58.60	74.0	-15.40	45.55	54.0	-8.45	Pass
10641.25	V	1.3	180	65.83	74.0	-8.17	52.17	54.0	-1.83	Pass
5.745 GHz ca	rrier frequenc	y								
2229.00	V	1.0	112	54.93	74.0	-19.07	45.77	54.0	-8.23	Pass
2491.92	V	1.1	193	67.68	74.0	-6.32	45.74	54.0	-8.26	Pass
4911.00	V	1.0	337	55.87	74.0	-18.13	45.29	54.0	-8.71	Pass
11483.33	V	1.3	190	68.00	74.0	-6.00	52.00	54.0	-2.00	Pass
5.785 GHz ca	rrier frequenc	y								
2397.00	V	1.0	109	56.72	74.0	-17.28	45.67	54.0	-8.33	Pass
2491.75	V	1.1	200	66.98	74.0	-7.02	45.88	54.0	-8.12	Pass
4801.00	V	1.0	329	55.11	74.0	-18.89	45.11	54.0	-8.89	Pass
11562.00	V	1.2	180	63.67	74.0	-10.33	50.00	54.0	-4.00	Pass
5.805 GHz ca	rrier frequenc	y								
2250.00	V	1.0	173	56.04	74	-17.96	45.83	54	-8.17	Pass
2491.92	V	1.1	170	63.84	74	-10.16	45.27	54	-8.73	Pass
4837.00	V	1.0	321	55.74	74	-18.26	45.22	54	-8.78	Pass
11611.23	V	1.1	170	67.17	74	-6.83	52.50	54	-1.50	Pass

<sup>\*-</sup> Margin = Measured emission - specification limit.

## Reference numbers of test equipment used

HL 0446	HL 0465	HL 0521	HL 0589	HL 0592	HL 0593	HL 0594	HL 0604
HL 1947	HL 1984	HL 2009					

Full description is given in Appendix A.

<sup>\*\*-</sup> EUT front panel refer to 0 degrees position of turntable.



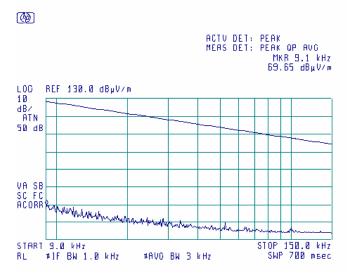
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.1 Radiated emission measurements at the 5.18GHz carrier frequency

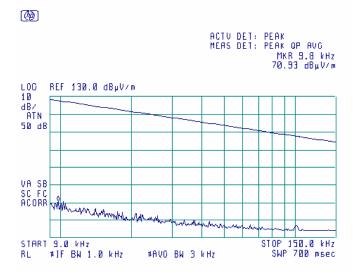
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.2 Radiated emission measurements from 9 to 150 kHz at the 5.26 GHz carrier frequency





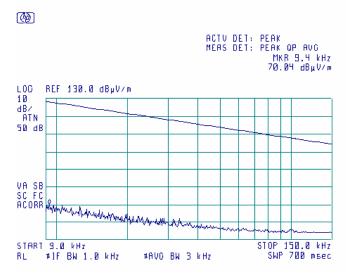
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.3 Radiated emission measurements from 9 to 150 kHz at the 5.32GHz carrier frequency

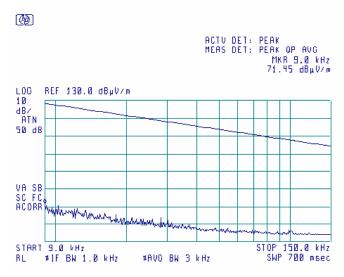
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.4 Radiated emission measurements from 9 to 150 kHz at the 5.745GHz carrier frequency





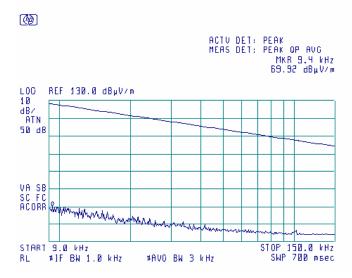
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.5 Radiated emission measurements from 9 to 150 kHz at the 5.785GHz carrier frequency

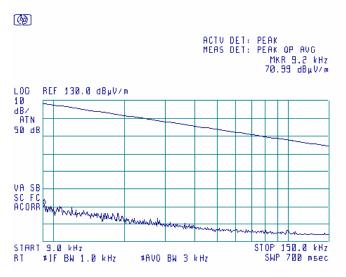
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.6 Radiated emission measurements from 9 to 150 kHz at the 5.805GHz carrier frequency





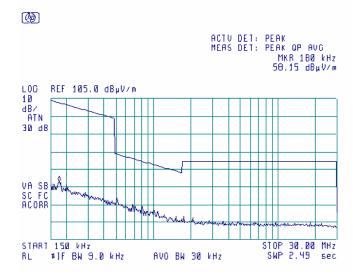
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/47 0	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict:	PASS			
Date:	5/01/2006	verdict.	FASS			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC			
Remarks:						

Plot 7.5.7 Radiated emission measurements from 0.15 to 30 MHz at the 5.18GHz carrier frequency

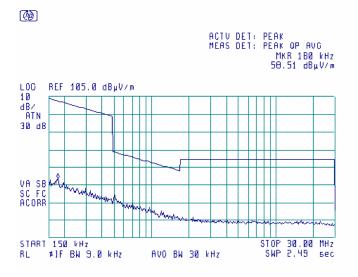
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.8 Radiated emission measurements from 0.15 to 30 MHz at the 5.26GHz carrier frequency





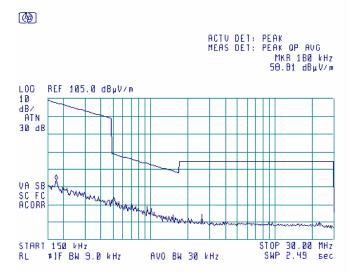
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict:	PASS			
Date:	5/01/2006	verdict.	PASS			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC			
Remarks:						

Plot 7.5.9 Radiated emission measurements from 0.15 to 30 MHz at the 5.32GHz carrier frequency

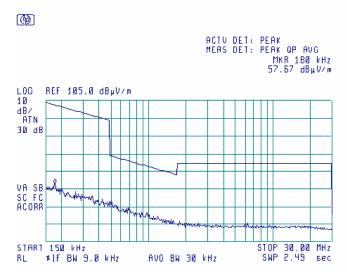
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.10 Radiated emission measurements from 0.15 to 30 MHz at the 5.745GHz carrier frequency





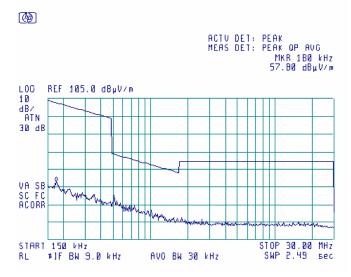
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.11 Radiated emission measurements from 0.15 to 30 MHz at the 5.785GHz carrier frequency

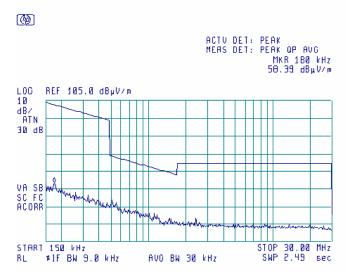
TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.12 Radiated emission measurements from 0.15 to 30 MHz at the 5.805GHz carrier frequency







Test specification:

Test procedure:
Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4

Test mode:
Compliance
Date:
5/01/2006

Temperature: 23 °C
Air Pressure: 1012 hPa
Relative Humidity: 46 %
Power Supply: 120 VAC

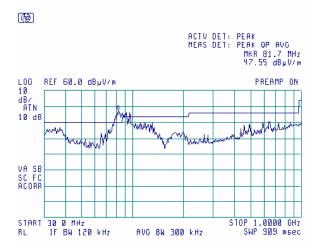
Remarks:

Plot 7.5.13 Radiated emission measurements from 30 to 1000 MHz at the 5.18GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



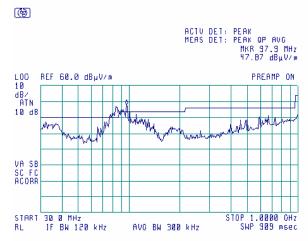
Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.

Plot 7.5.14 Radiated emission measurements from 30 to 1000 MHz at the 5.26GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.





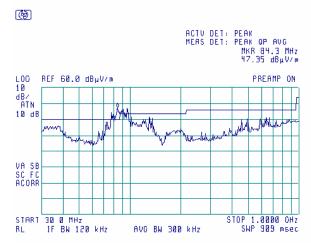
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict:	PASS			
Date:	5/01/2006	verdict.	PASS			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC			
Remarks:						

Plot 7.5.15 Radiated emission measurements from 30 to 1000 MHz at the 5.32GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



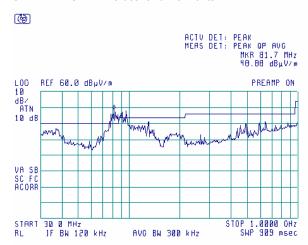
Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.

Plot 7.5.16 Radiated emission measurements from 30 to 1000 MHz at the 5.745GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.





Test specification:

Test procedure:

Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4

Test mode:

Compliance
Date:

5/01/2006

Temperature: 23 °C
Remarks:

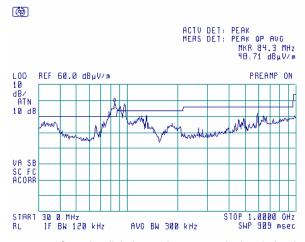
Relative Humidity: 46 %
Power Supply: 120 VAC

Plot 7.5.17 Radiated emission measurements from 30 to 1000 MHz at the 5.785GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



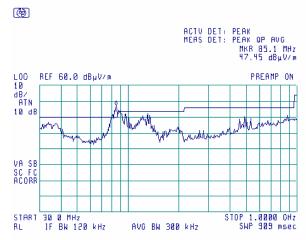
Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.

Plot 7.5.18 Radiated emission measurements from 30 to 1000 MHz at the 5.805GHz carrier frequency

TEST SITE: Anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Emissions in 80-100 MHz range are from the digital part, the test results in tabular data are submitted in section 10.1 of this test report.



Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

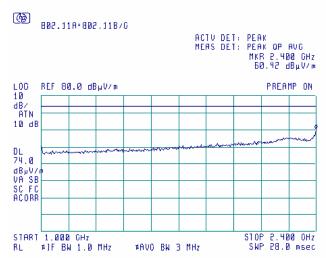
Plot 7.5.19 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.18 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak



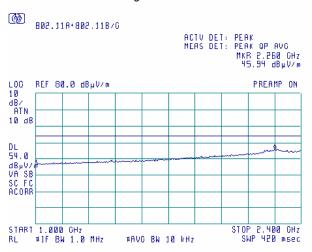
Plot 7.5.20 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.18 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
Test mode:	Compliance	Verdict: PASS			
Date:	5/01/2006	verdict.	PASS		
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC		
Remarks:					

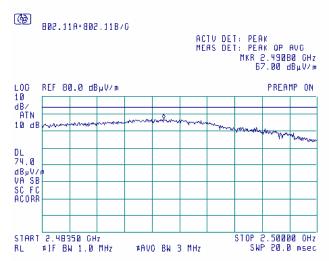
Plot 7.5.21 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.18 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak



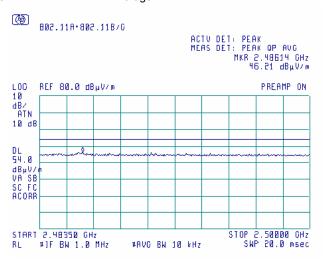
Plot 7.5.22 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average





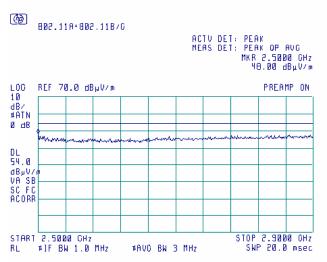
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions				
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4				
Test mode:	Compliance	Verdict:	PASS			
Date:	5/01/2006	verdict.	PASS			
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC			
Remarks:						

Plot 7.5.23 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



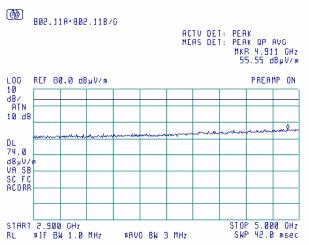
Plot 7.5.24 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS	PASS	
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

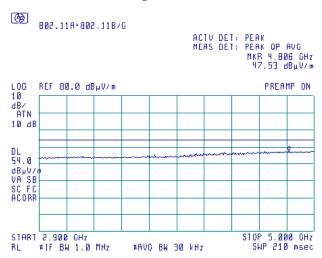
Plot 7.5.25 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average



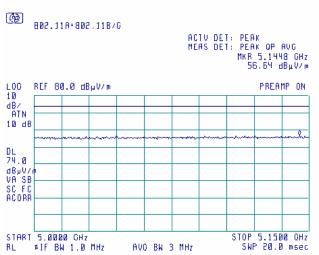
Plot 7.5.26 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS	DAGG
Date:	5/01/2006		PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

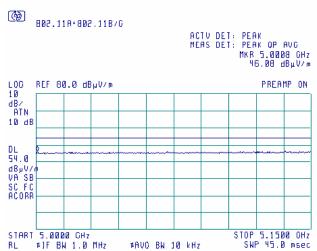
Plot 7.5.27 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average

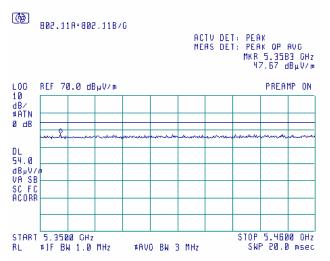


Plot 7.5.28 Radiated emission measurements from 5.35 to 5.46 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





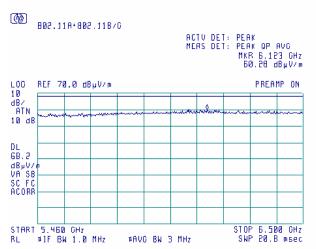
Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS	PASS
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:		•	-

Plot 7.5.29 Radiated emission measurements from 5.46 to 6.5 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



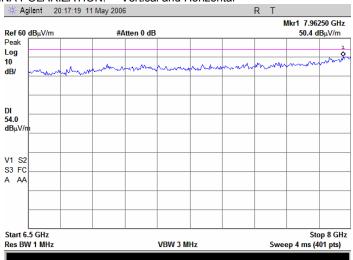
Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is 68.23 dBµV/m

Plot 7.5.30 Radiated emission measurements from 6.5 to 8.0 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





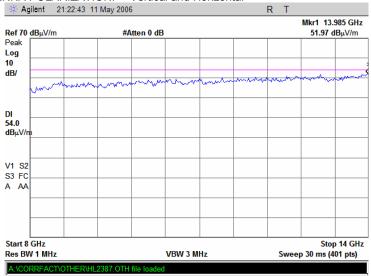
Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006		PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.5.31 Radiated emission measurements from 8.0 to 14.0 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



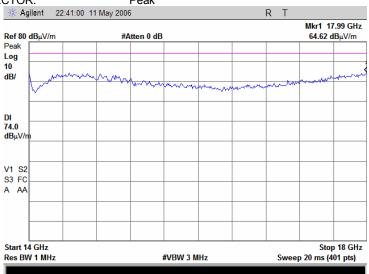
Plot 7.5.32 Radiated emission measurements from 14 to 18 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006		PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

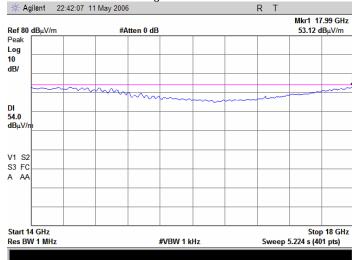
Plot 7.5.33 Radiated emission measurements from 14 to 18 GHz at the 5.18GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

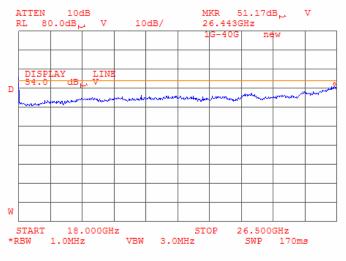
DETECTOR: Average



Plot 7.5.34 Radiated emission measurements from 18 to 26.5 GHz at the 5.18GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



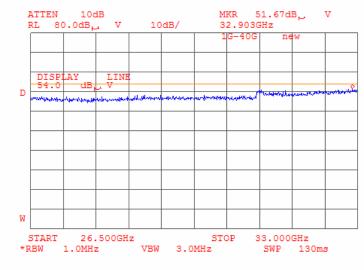


Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006		PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.5.35 Radiated emission measurements from 26.5 to 33 GHz at the 5.18GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m

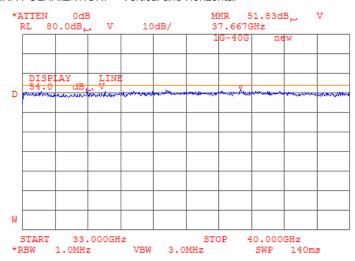
ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.36 Radiated emission measurements from 33 to 40 GHz at the 5.18GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS
Date:	5/01/2006		PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

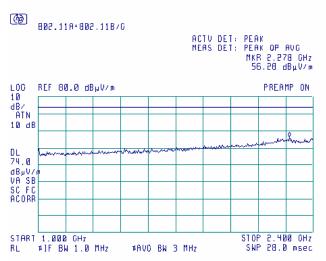
Plot 7.5.37 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

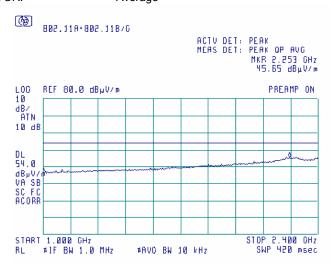
DETECTOR: Peak



Plot 7.5.38 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

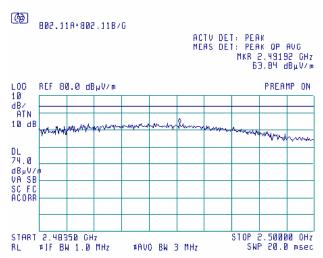
Plot 7.5.39 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

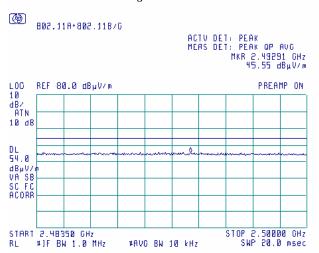


Plot 7.5.40 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





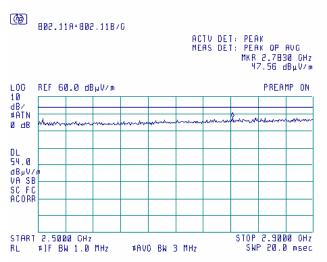
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.41 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



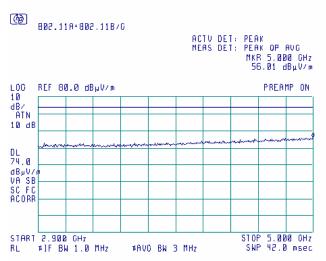
Plot 7.5.42 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

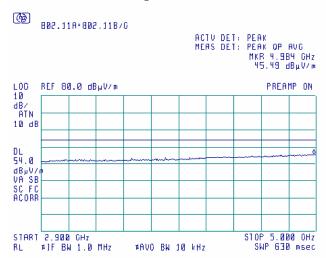
Plot 7.5.43 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average



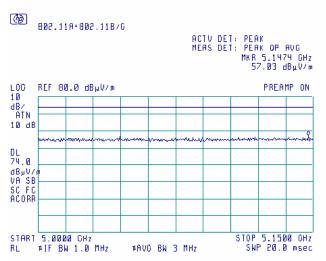
Plot 7.5.44 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak







Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

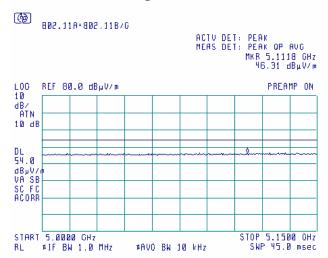
Plot 7.5.45 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average

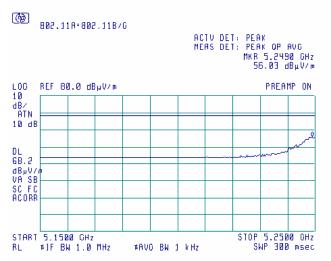


Plot 7.5.46 Radiated emission measurements from 5.15 to 5.25 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band emissions. Settings: RBW = 1 MHz, VBW ≥ 1 / Ton = 1 / 2.1ms = 470 Hz → VBW = 1 kHz



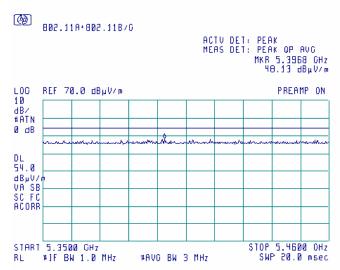
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.47 Radiated emission measurements from 5.35 to 5.46 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

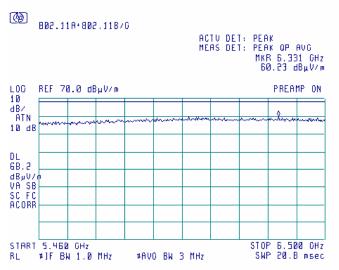


Plot 7.5.48 Radiated emission measurements from 5.46 to 6.5 GHz at the 5.26 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $68.23~dB\mu V/m$ 



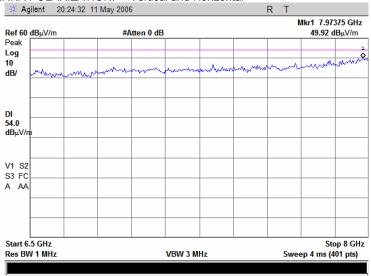
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-	-	

Plot 7.5.49 Radiated emission measurements from 6.5 to 8.0 GHz at the 5.26GHz carrier frequency

TEST SITE: Semi anechoic chamber

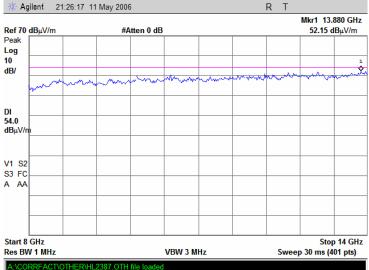
TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.50 Radiated emission measurements from 8 to 14 GHz at the 5.26GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

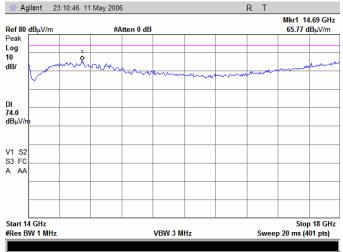
Plot 7.5.51 Radiated emission measurements from 14 to 18 GHz at the 5.26GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

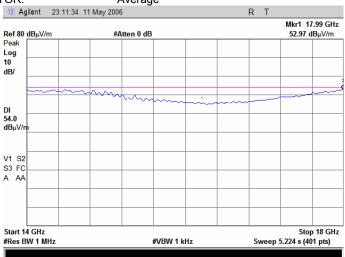


Plot 7.5.52 Radiated emission measurements from 14 to 18 GHz at the 5.26GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



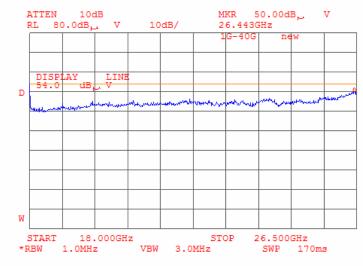


Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.53 Radiated emission measurements from 18 to 26.5 GHz at the 5.26GHz carrier frequency

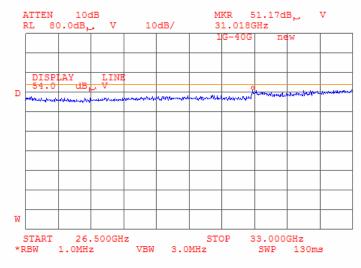
TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.54 Radiated emission measurements from 26.5 to 33 GHz at the 5.26GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m



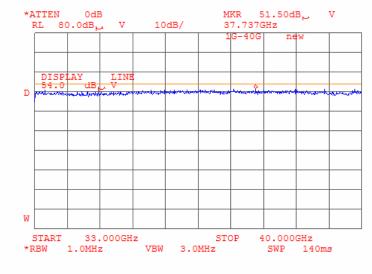




Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.55 Radiated emission measurements from 33 to 40 GHz at the 5.26GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

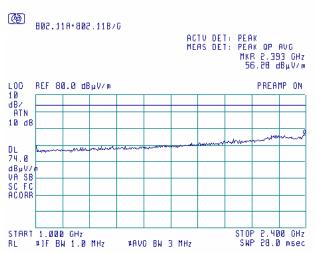
Plot 7.5.56 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

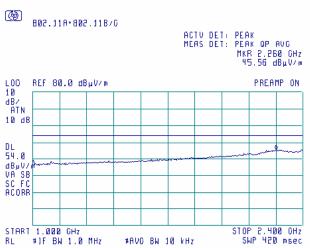


Plot 7.5.57 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

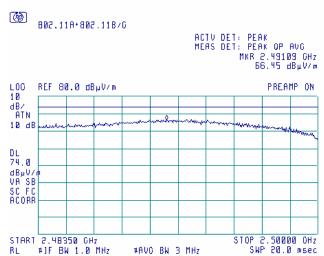
Plot 7.5.58 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

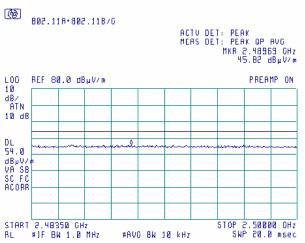


Plot 7.5.59 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





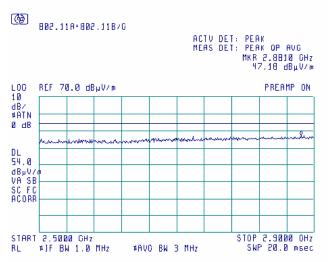
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.60 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



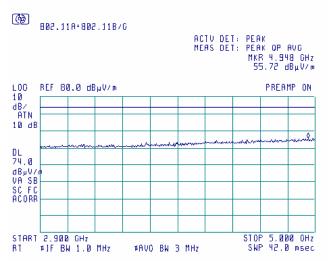
Plot 7.5.61 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

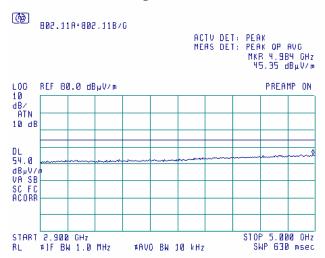
Plot 7.5.62 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average



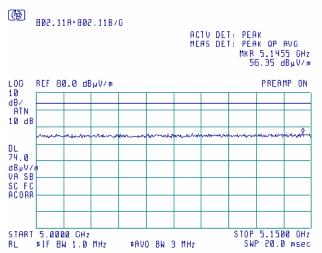
Plot 7.5.63 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak







Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-	-	

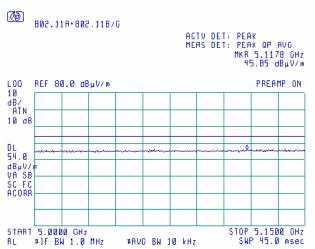
Plot 7.5.64 Radiated emission measurements from 5.0 to 5.15 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average

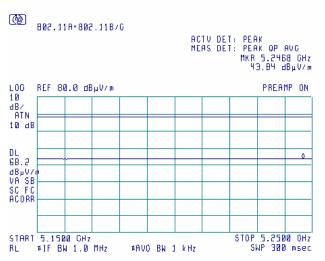


Plot 7.5.65 Radiated emission measurements from 5.15 to 5.25 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band emissions. Settings: RBW = 1 MHz, VBW ≥ 1 / Ton = 1 / 2.1ms = 470 Hz → VBW = 1 kHz



Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

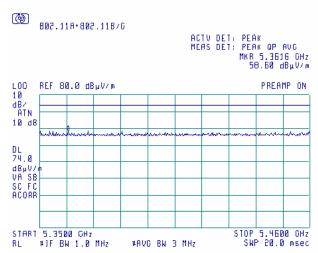
Plot 7.5.66 Radiated emission measurements from 5.35 to 5.46 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

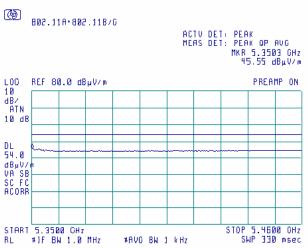


Plot 7.5.67 Radiated emission measurements from 5.35 to 5.46 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





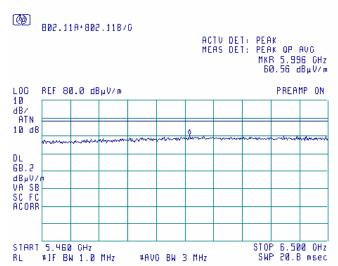
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.68 Radiated emission measurements from 5.46 to 6.5 GHz at the 5.32 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

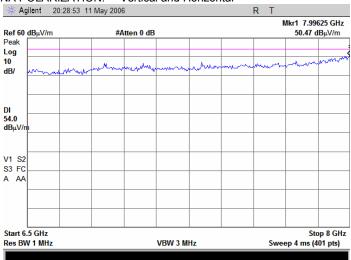
ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $68.23~\text{dB}\mu\text{V/m}$ 

Plot 7.5.69 Radiated emission measurements from 6.5 to 8.0 GHz at the 5.32GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m





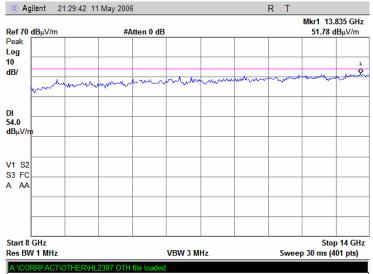
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		•		

Plot 7.5.70 Radiated emission measurements from 8 to 14 GHz at the 5.32GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



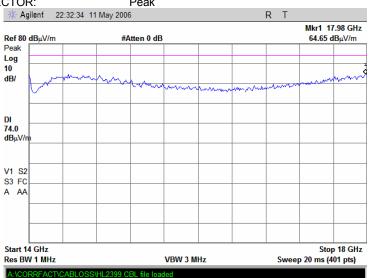
Plot 7.5.71 Radiated emission measurements from 14 to 18 GHz at the 5.32GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

**DETECTOR:** Peak





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

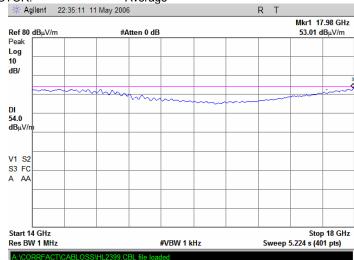
Plot 7.5.72 Radiated emission measurements from 14 to 18 GHz at the 5.32GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

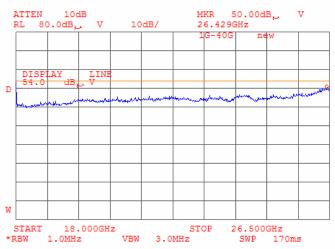
ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average



Plot 7.5.73 Radiated emission measurements from 18 to 26.5 GHz at the 5.32GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m



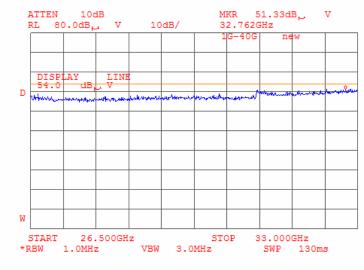


Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.74 Radiated emission measurements from 26.5 to 33 GHz at the 5.32GHz carrier frequency

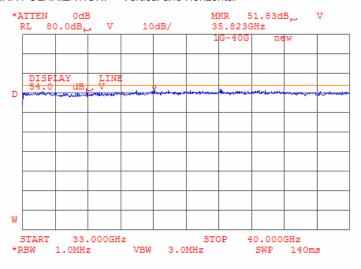
TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.75 Radiated emission measurements from 33 to 40 GHz at the 5.32GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-		

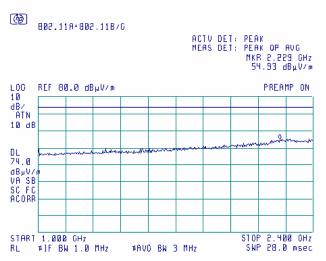
Plot 7.5.76 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

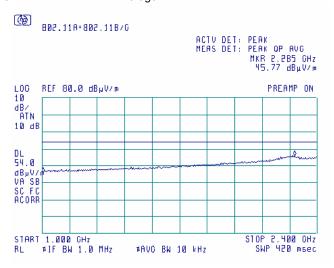
ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak



Plot 7.5.77 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

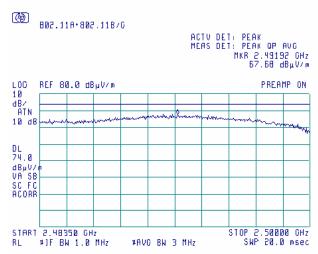
Plot 7.5.78 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

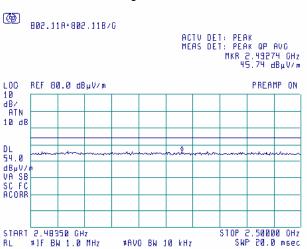


Plot 7.5.79 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





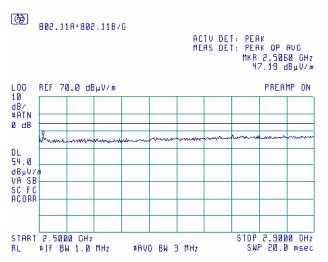
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.80 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



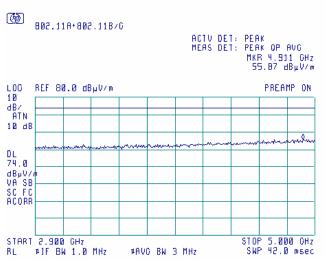
Plot 7.5.81 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

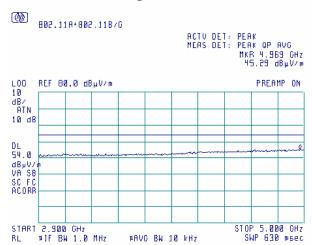
Plot 7.5.82 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

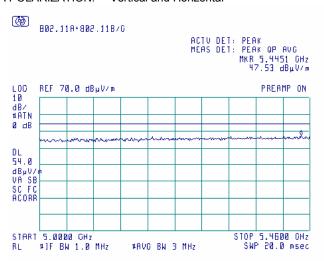
DETECTOR: Average



Plot 7.5.83 Radiated emission measurements from 5.0 to 5.46 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m







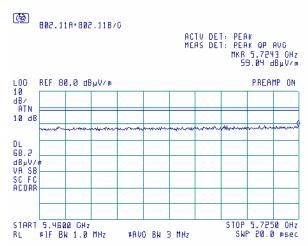
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.84 Radiated emission measurements from 5.46 to 5.725 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

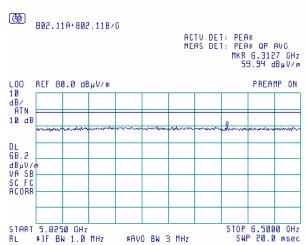


Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $78.23~dB\mu V/m$  between 5.715~GHz and 5.725~GHz;  $68.23~dB\mu V/m$  below 5.715~GHz

Plot 7.5.85 Radiated emission measurements from 5.825 to 6.5 GHz at the 5.745 GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $78.23~dB\mu V/m$  between 5.825~GHz and 5.835~GHz;  $68.23~dB\mu V/m$  above 5.835~GHz



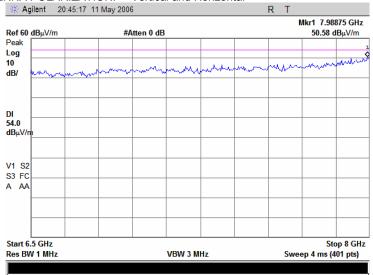
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.86 Radiated emission measurements from 6.5 to 8.0 GHz at the 5.745GHz carrier frequency

TEST SITE: Semi anechoic chamber

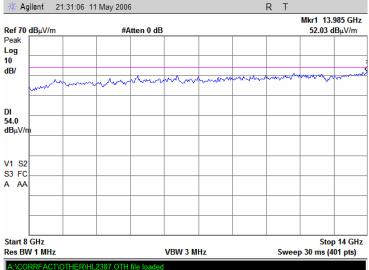
TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.87 Radiated emission measurements from 8 to 14 GHz at the 5.745GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

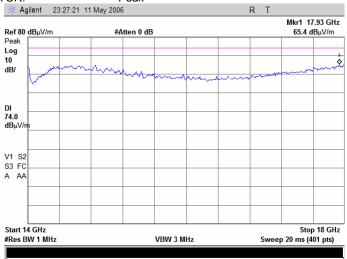
Plot 7.5.88 Radiated emission measurements from 14 to 18 GHz at the 5.745GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

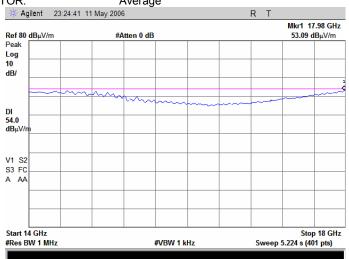


Plot 7.5.89 Radiated emission measurements from 14 to 18 GHz at the 5.745GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



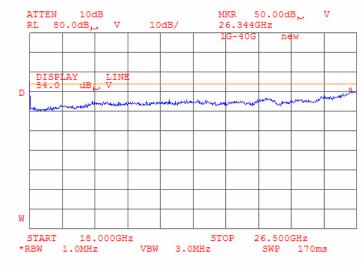


Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.90 Radiated emission measurements from 18 to 26.5 GHz at the 5.745GHz carrier frequency

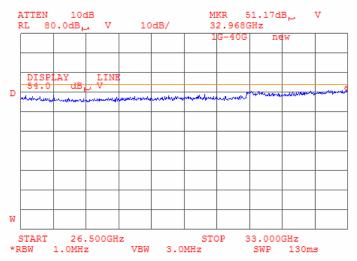
TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.91 Radiated emission measurements from 26.5 to 33 GHz at the 5.745GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m



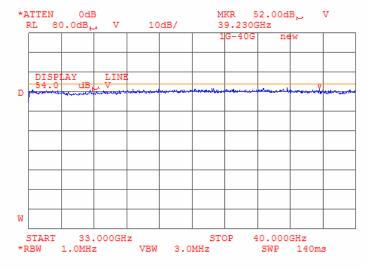




Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.92 Radiated emission measurements from 33 to 40 GHz at the 5.745GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-	-	

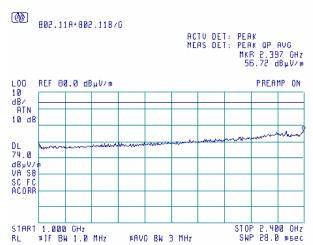
Plot 7.5.93 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

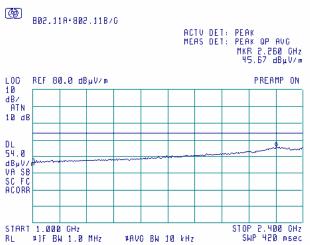


Plot 7.5.94 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

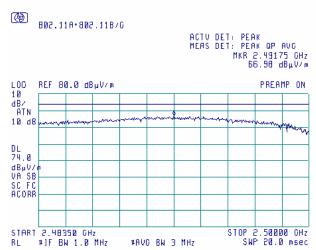
Plot 7.5.95 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak

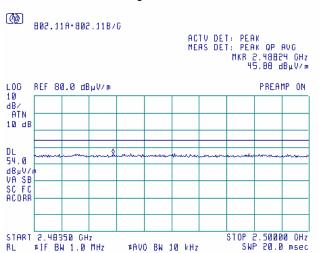


Plot 7.5.96 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal





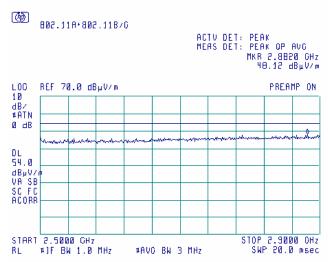
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.97 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



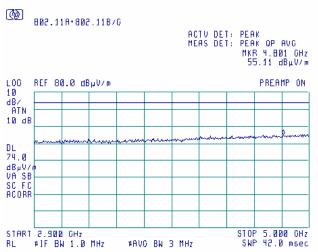
Plot 7.5.98 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

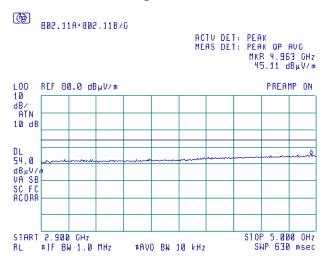
Plot 7.5.99 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

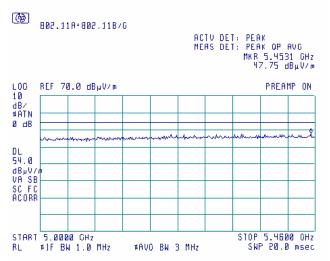
DETECTOR: Average



Plot 7.5.100 Radiated emission measurements from 5.0 to 5.46 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m







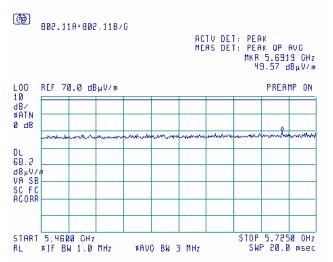
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-		

Plot 7.5.101 Radiated emission measurements from 5.46 to 5.725 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



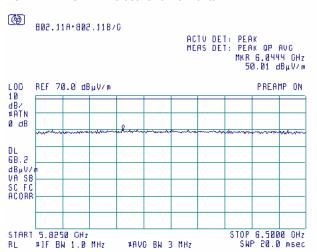
Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $78.23~dB\mu V/m$  between 5.715~GHz and 5.725~GHz;  $68.23~dB\mu V/m$  below 5.715~GHz.

Plot 7.5.102 Radiated emission measurements from 5.825 to 6.5 GHz at the 5.785 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $78.23~dB\mu V/m$  between 5.825~GHz and 5.835~GHz;  $68.23~dB\mu V/m$  above 5.835~GHz.





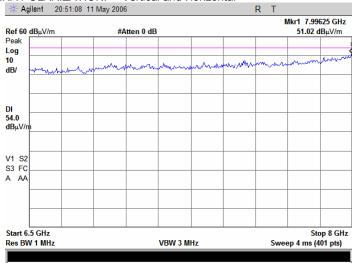
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.103 Radiated emission measurements from 6.5 to 8 GHz at the 5.785GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

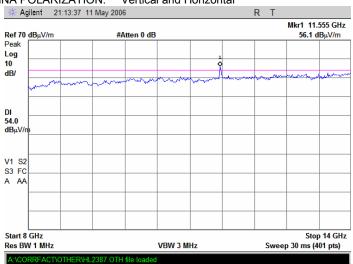


Plot 7.5.104 Radiated emission measurements from 8 to 14 GHz at the 5.785GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: 11.57 GHz – 2<sup>nd</sup> harmonic of 802.11a module



Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		•		

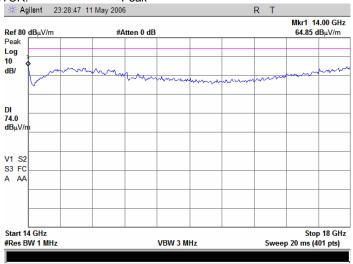
Plot 7.5.105 Radiated emission measurements from 14 to 18 GHz at the 5.785GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

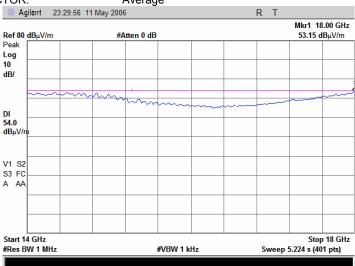
DETECTOR: Peak



Plot 7.5.106 Radiated emission measurements from 14 to 18 GHz at the 5.785GHz carrier frequency

TEST SITE: Semi anechoic chamber TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



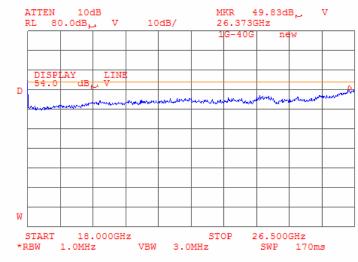


Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.107 Radiated emission measurements from 18 to 26.5 GHz at the 5.785GHz carrier frequency

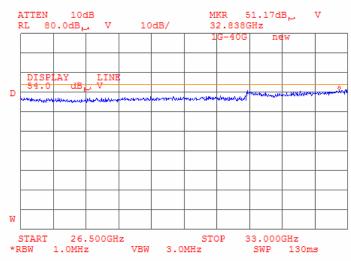
TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.108 Radiated emission measurements from 26.5 to 33 GHz at the 5.785GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m

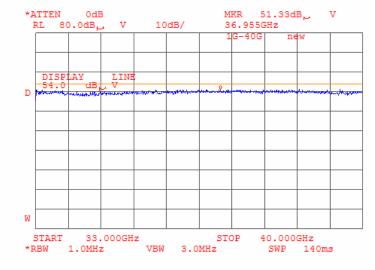






Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.109 Radiated emission measurements from 33 to 40 GHz at the 5.785GHz carrier frequency





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

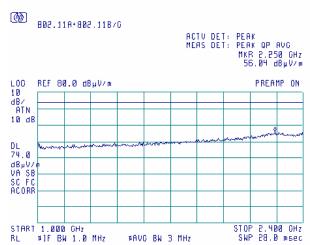
Plot 7.5.110 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak



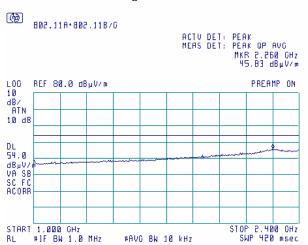
Plot 7.5.111 Radiated emission measurements from 1.0 to 2.4 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

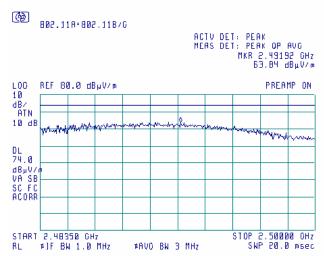
Plot 7.5.112 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak



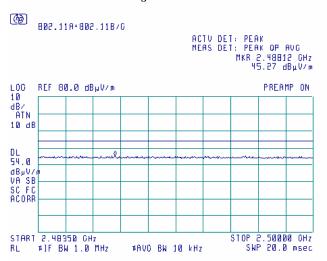
Plot 7.5.113 Radiated emission measurements from 2.4835 to 2.5GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average





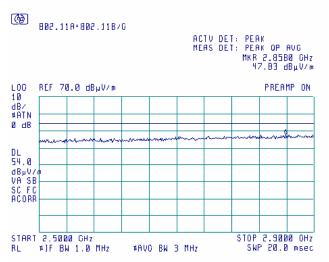
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.114 Radiated emission measurements from 2.5 to 2.9 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



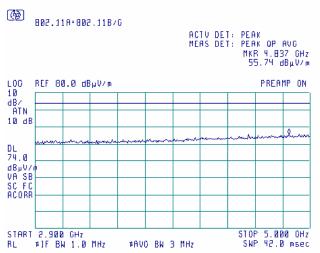
Plot 7.5.115 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

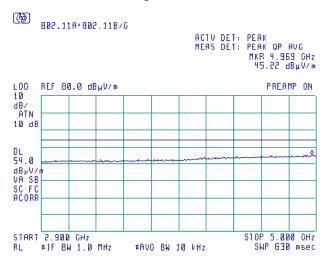
Plot 7.5.116 Radiated emission measurements from 2.9 to 5.0 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

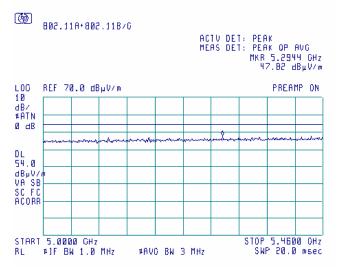
DETECTOR: Average



Plot 7.5.117 Radiated emission measurements from 5.0 to 5.46 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m







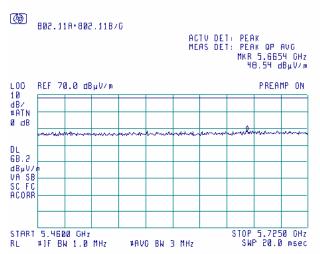
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.118 Radiated emission measurements from 5.46 to 5.725 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



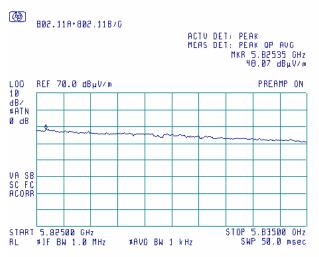
Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is  $78.23~dB\mu V/m$  between 5.715 GHz and 5.725 GHz;  $68.23~dB\mu V/m$  below 5.715 GHz

Plot 7.5.119 Radiated emission measurements from 5.825 to 5.835 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is 78.23 dB $\mu$ V/m between 5.825 GHz and 5.835 GHz.. Settings: RBW = 1 MHz, VBW  $\geq$  1 / Ton = 1 / 2.1ms = 470 Hz  $\rightarrow$  VBW = 1 kHz



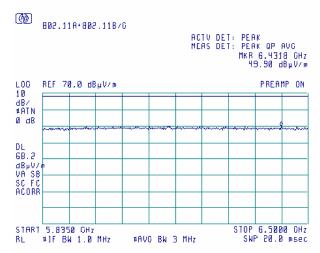
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.120 Radiated emission measurements from 5.835 to 6.5 GHz at the 5.805 GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

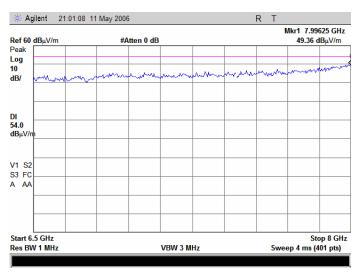


Note: Outside restricted band range (between 5460 MHz and 7250 MHz) the limit is 68.23 dBμV/m above 5.835 GHz

Plot 7.5.121 Radiated emission measurements from 6.5 to 8 GHz at the 5.805GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m





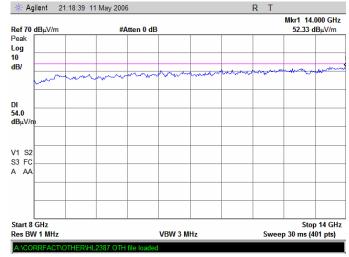
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict:	PASS	
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.122 Radiated emission measurements from 8 to 14 GHz at the 5.805GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



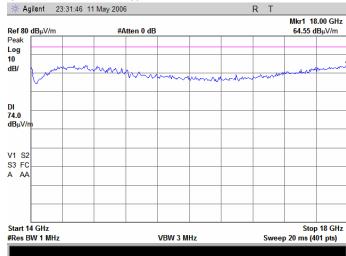
Plot 7.5.123 Radiated emission measurements from 14 to 18 GHz at the 5.805GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Peak





Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

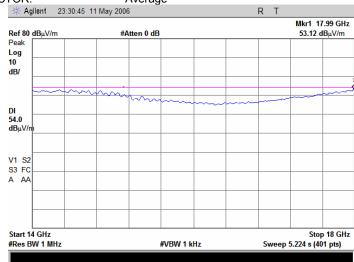
Plot 7.5.124 Radiated emission measurements from 14 to 18 GHz at the 5.805GHz carrier frequency

TEST SITE: Semi anechoic chamber

TEST DISTANCE: 3 m

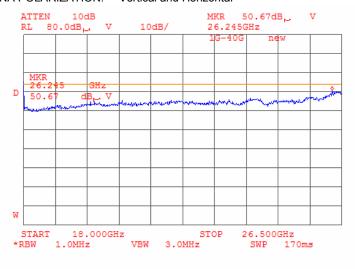
ANTENNA POLARIZATION: Vertical and Horizontal

DETECTOR: Average



Plot 7.5.125 Radiated emission measurements from 18 to 26.5 GHz at the 5.805GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m



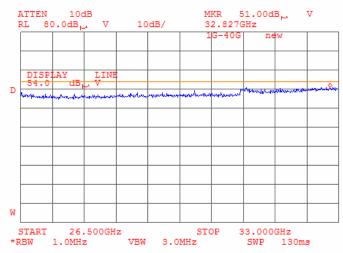


Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.126 Radiated emission measurements from 26.5 to 33 GHz at the 5.805GHz carrier frequency

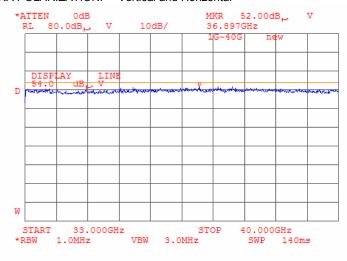
TEST SITE: OATS TEST DISTANCE: 3 m

ANTENNA POLARIZATION: Vertical and Horizontal



Plot 7.5.127 Radiated emission measurements from 33 to 40 GHz at the 5.805GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m

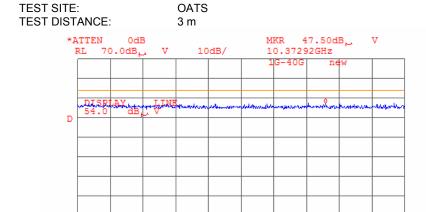






Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		-		

Plot 7.5.128 Radiated emission measurements at the second harmonic of 5.18GHz carrier frequency



Plot 7.5.129 Radiated emission measurements at the second harmonic of 5.26GHz carrier frequency

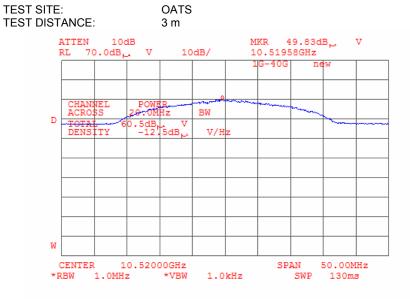
3.0MHz

SPAN

SWP

50.00MHz

50.0ms



Note: outside restricted band emission, limit 68.23 dB $\mu$ V/m

CENTER

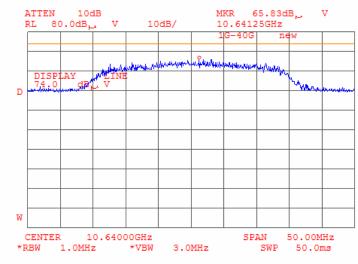
10.36000GHz



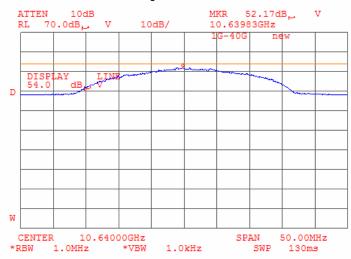
Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.130 Radiated emission measurements at the second harmonic of 5.32GHz carrier frequency

TEST SITE: OATS
TEST DISTANCE: 3 m
DETECTOR: Peak



Plot 7.5.131 Radiated emission measurements at the second harmonic of 5.32GHz carrier frequency

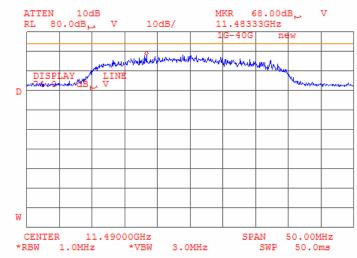




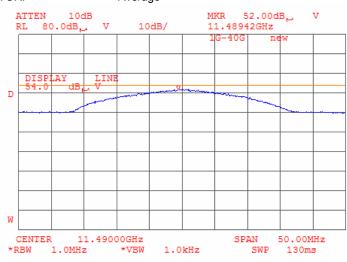
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.132 Radiated emission measurements at the second harmonic of 5.745GHz carrier frequency

TEST SITE: OATS
TEST DISTANCE: 3 m
DETECTOR: Peak



Plot 7.5.133 Radiated emission measurements at the second harmonic of 5.745GHz carrier frequency

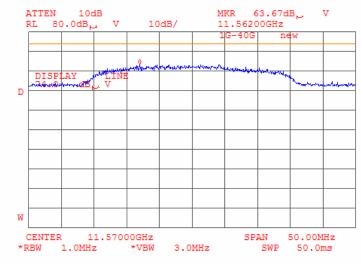




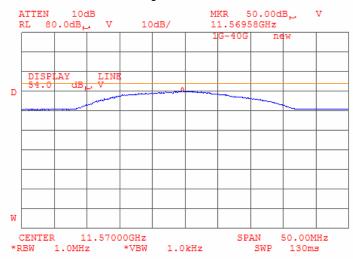
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.134 Radiated emission measurements at the second harmonic of 5.785GHz carrier frequency

TEST SITE: OATS
TEST DISTANCE: 3 m
DETECTOR: Peak



Plot 7.5.135 Radiated emission measurements at the second harmonic of 5.785GHz carrier frequency

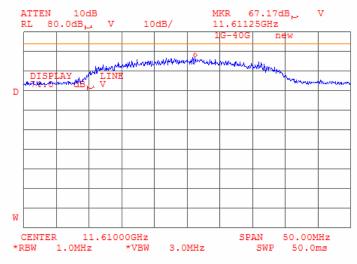




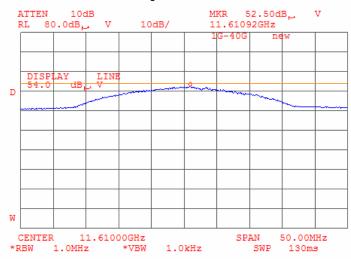
Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.136 Radiated emission measurements at the second harmonic of 5.805GHz carrier frequency

TEST SITE: OATS
TEST DISTANCE: 3 m
DETECTOR: Peak



Plot 7.5.137 Radiated emission measurements at the second harmonic of 5.805GHz carrier frequency

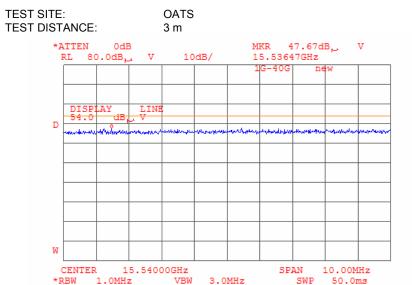




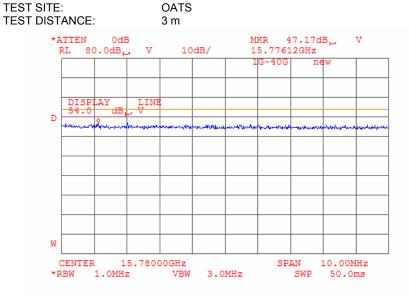


Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.138 Radiated emission measurements at the third harmonic of 5.18GHz carrier frequency



Plot 7.5.139 Radiated emission measurements at the third harmonic of 5.26GHz carrier frequency







Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/ 47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.140 Radiated emission measurements at the third harmonic of 5.32GHz carrier frequency

TEST SITE: OATS TEST DISTANCE: 3 m 48.33dB \*ATTEN V 0dB MKR RL 80.0dB 10dB/ 15.96083GHz 1G-40G LINE D W CENTER 15.96000GHz SPAN 10.00MHz

Plot 7.5.141 Radiated emission measurements at the third harmonic of 5.745GHz carrier frequency

OATS

3.0MHz

SWP

50.0ms

1.0MHz

TEST SITE:

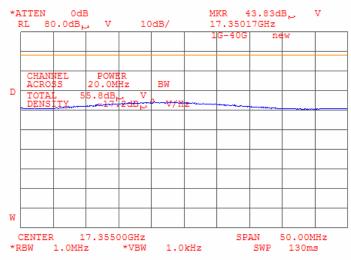
TEST DISTANCE: 3 m 43.00dB \*ATTEN 0dB MKR RL 80.0dB 17.23017GHz 1G-40G CHANNEL ACROSS BW D 50.00MHz CENTER 17.23500GHz SPAN \*VBW \*RBW 1.0MHz 1.0kHz SWP 130ms



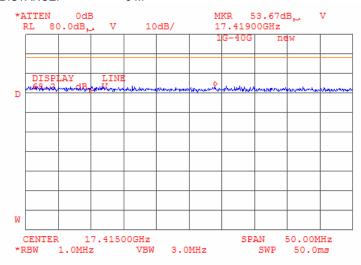


Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.142 Radiated emission measurements at the third harmonic of 5.785GHz carrier frequency



Plot 7.5.143 Radiated emission measurements at the third harmonic of 5.805GHz carrier frequency

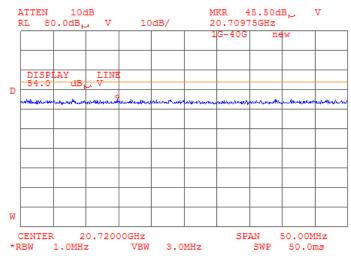




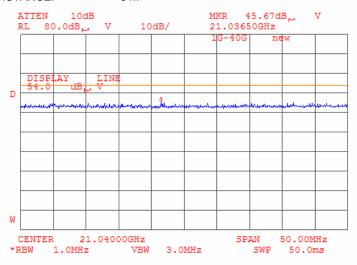


Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 (	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.144 Radiated emission measurements at the forth harmonic of 5.18 carrier frequency



Plot 7.5.145 Radiated emission measurements at the forth harmonic of 5.26 carrier frequency

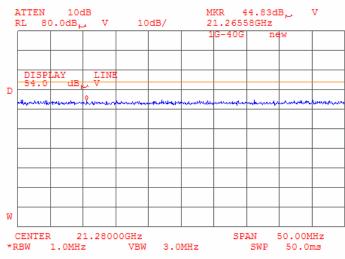




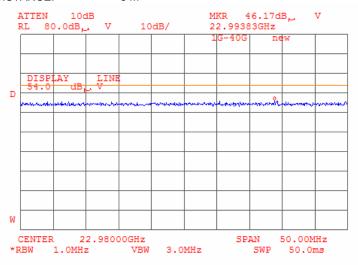


Test specification:	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS	
Date:	5/01/2006	verdict.	PASS
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.5.146 Radiated emission measurements at the forth harmonic of 5.32 carrier frequency



Plot 7.5.147 Radiated emission measurements at the forth harmonic of 5.745 carrier frequency

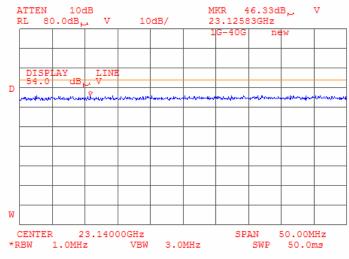




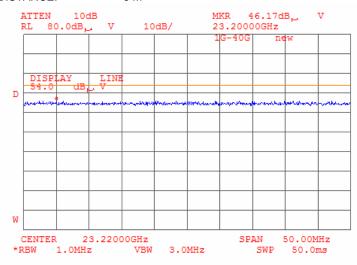


Test specification:	Section 15.407(b), Unwanted radiated emissions			
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	Verdict: PASS		
Date:	5/01/2006	verdict.	FASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:		•		

Plot 7.5.148 Radiated emission measurements at the forth harmonic of 5.785 carrier frequency



Plot 7.5.149 Radiated emission measurements at the forth harmonic of 5.805 carrier frequency

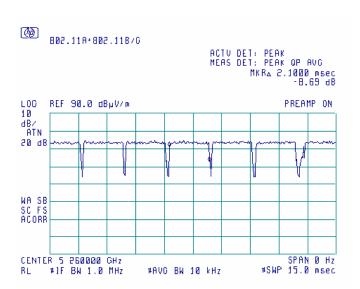






Test specification:	Section 15.407(b), Unwar	Section 15.407(b), Unwanted radiated emissions		
Test procedure:	Public notice DA 00-705/47 C	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
Test mode:	Compliance	- Verdict: PASS		
Date:	5/01/2006	verdict.	PASS	
Temperature: 23 °C	Air Pressure: 1012 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC	
Remarks:				

Plot 7.5.150 Transmission burst duration



Plot 7.5.151 Transmission burst period

