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Appendix E): Power Spectral Density Result Table

Kesuit	abic	162	100	16.7	
Mode	Antenna	Channel	Power Spectral Density [dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	LCH	-17.804	8	PASS
11B	Ant2	LCH	-19.737	8	PASS
11B	Ant1	MCH	-19.590	8	PASS
11B	Ant2	MCH	-19.130	8	PASS
11B	Ant1	HCH	-19.274	8	PASS
11B	Ant2	HCH	-18.547	8	PASS
11G	Ant1	LCH	-23.696	8	PASS
11G	Ant2	LCH	-25.774	8	PASS
11G	Ant1	MCH	-24.604	8	PASS
11G	Ant2	MCH	-25.616	8	PASS
11G	Ant1	HCH	-24.911	8	PASS
11G	Ant2	НСН	-24.767	8	PASS
11N20SISO	Ant1	LCH	-25.410	8	PASS
11N20SISO	Ant2	LCH	-25.369	8	PASS
11N20SISO	Ant1	MCH	-25.765	8	PASS
11N20SISO	Ant2	MCH	-25.990	8	PASS
11N20SISO	Ant1	HCH	-25.791	8	PASS
11N20SISO	Ant2	HCH	-24.811	8	PASS
11N20MIMO	Ant1	LCH	-27.135	8	PASS
11N20MIMO	Ant2	LCH	-26.537	8	PASS
11N20MIMO	Ant1+2	LCH	-23.82	8	PASS
11N20MIMO	Ant1	MCH	-26.404	8	PASS
11N20MIMO	Ant2	MCH	-26.323	8	PASS
11N20MIMO	Ant1+2	MCH	-23.35	8	PASS
11N20MIMO	Ant1	HCH	-26.803	8	PASS
11N20MIMO	Ant2	HCH	-27.039	8	PASS
11N20MIMO	Ant1+2	HCH	-23.91	8	PASS
11N40SISO	Ant1	LCH	-28.121	8	PASS
11N40SISO	Ant2	LCH	-29.818	8	PASS
11N40SISO	Ant1	MCH	-28.701	8	PASS
11N40SISO	Ant2	MCH	-29.677	8	PASS
11N40SISO	Ant1	НСН	-29.152	8	PASS
11N40SISO	Ant2	HCH	-28.914	8	PASS
11N40MIMO	Ant1	LCH	-29.199	8	PASS
11N40MIMO	Ant2	LCH	-28.958	8	PASS
11N40MIMO	Ant1+2	LCH	-26.07	8	PASS
11N40MIMO	Ant1	MCH	-28.645	8	PASS
11N40MIMO	Ant2	MCH	-28.983	8	PASS
11N40MIMO	Ant1+2	MCH	-25.80	8	PASS
11N40MIMO	Ant1	HCH	-28.635	8	PASS
11N40MIMO	Ant2	HCH	-29.447	8	PASS
11N40MIMO	Ant1+2	HCH	-26.01	8	PASS





Test Graph



















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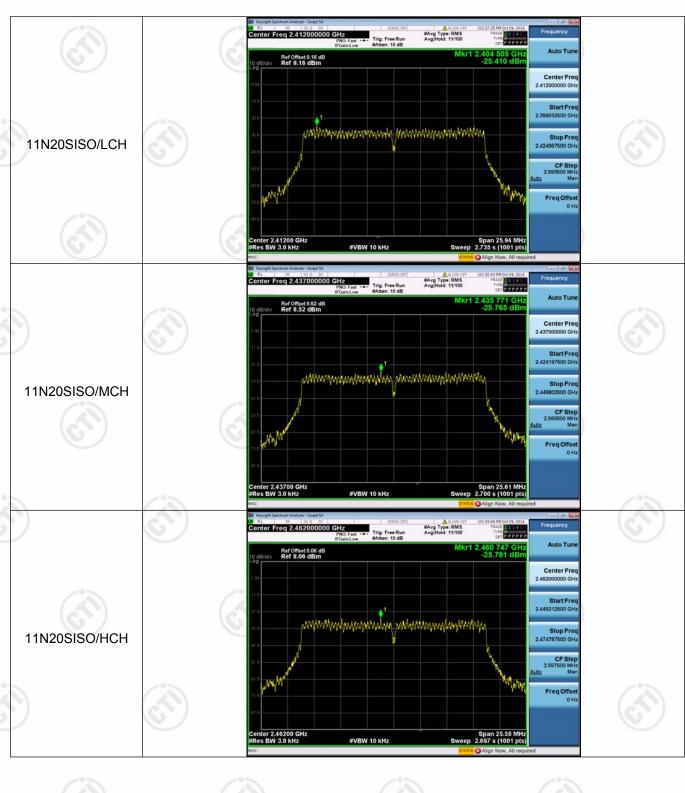








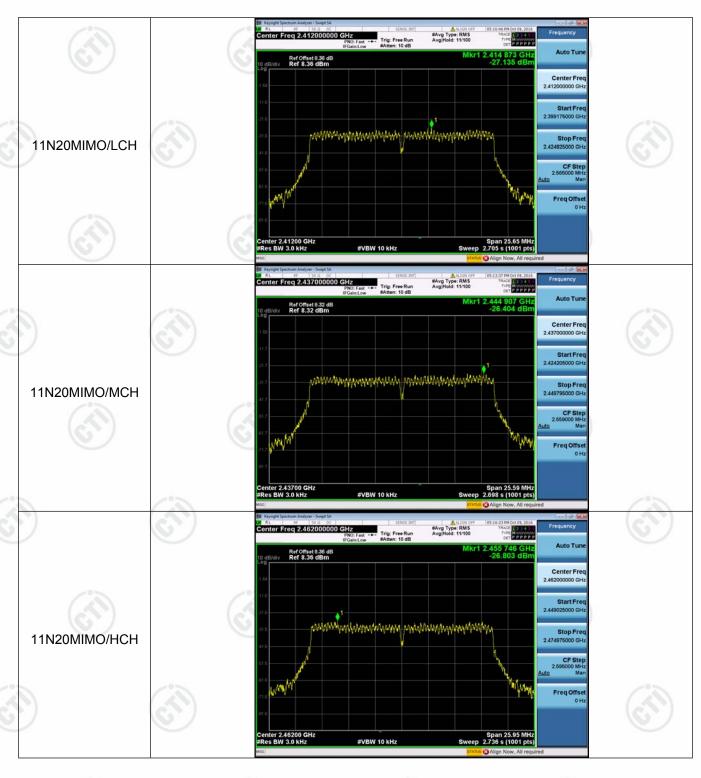








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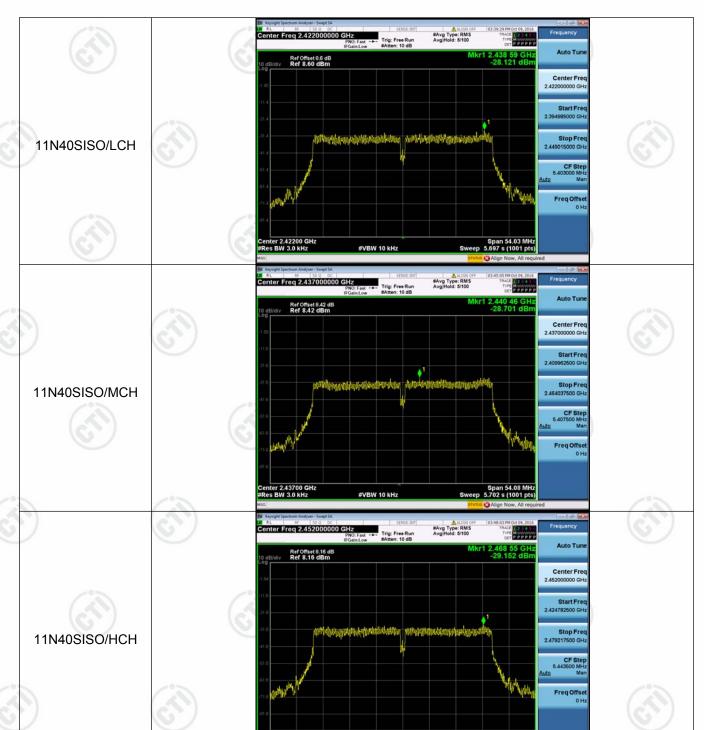




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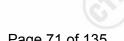




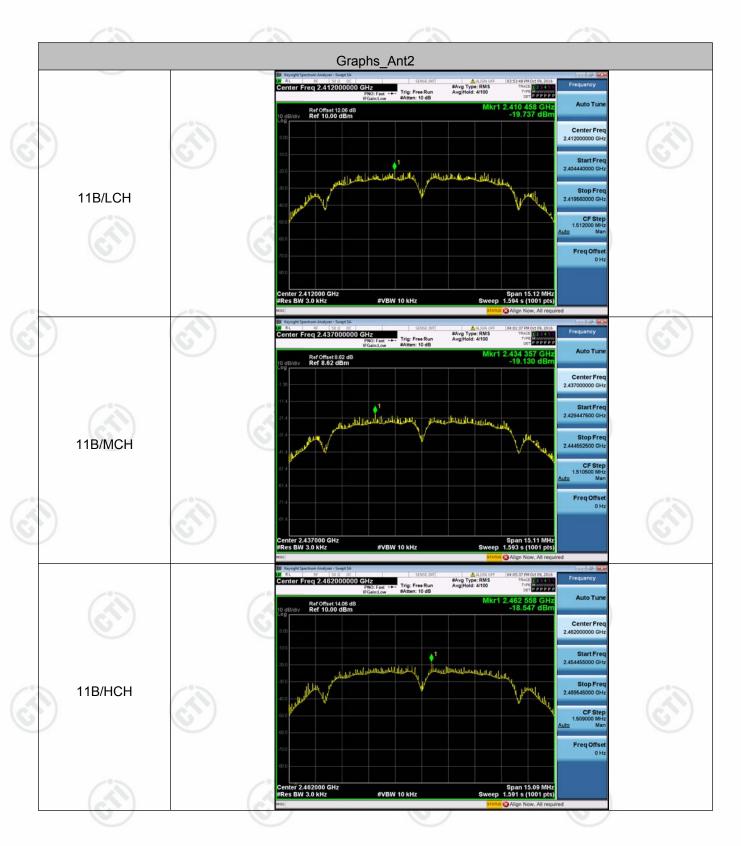








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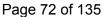








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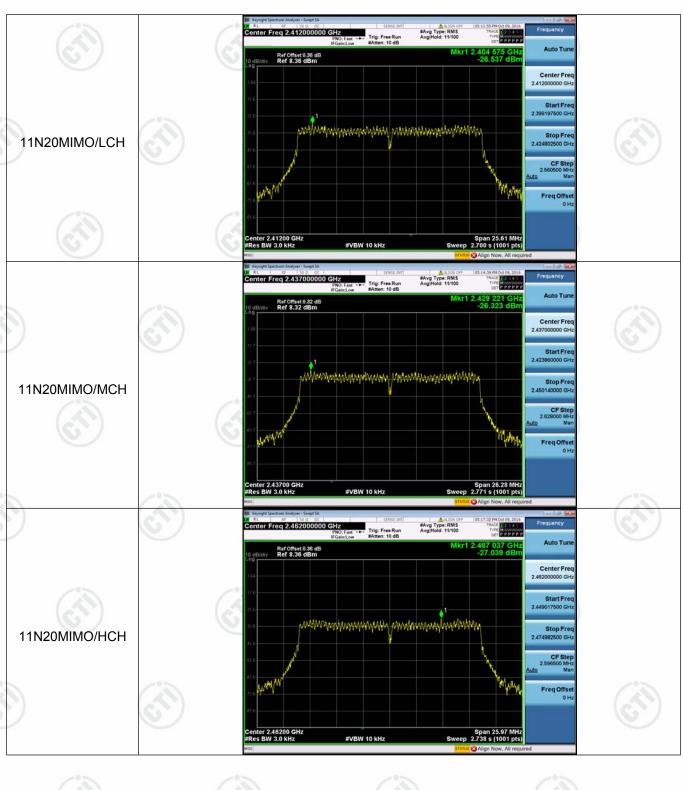


























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Appendix F): Antenna Requirement

15.203 requirement:

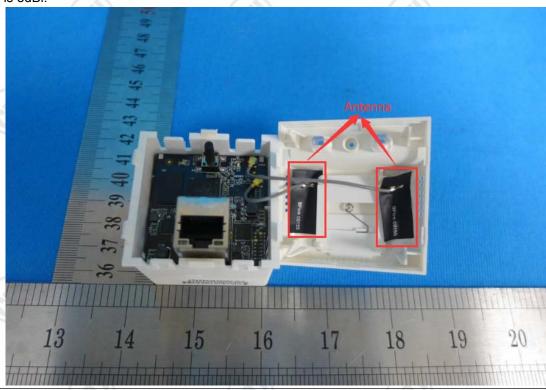
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 3dBi.







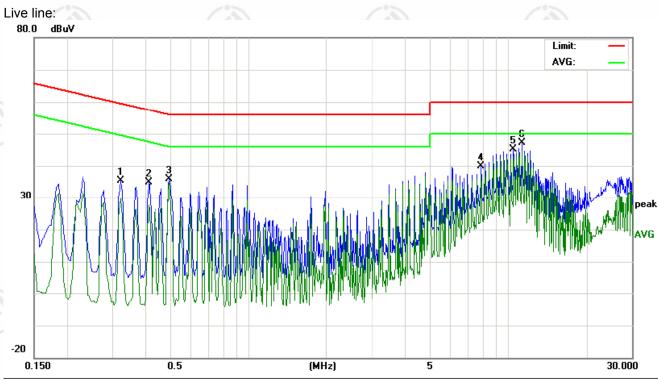
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Test frequency range :150KHz 1)The mains terminal disturba 2) The EUT was connected to Stabilization Network) which power cables of all other which was bonded to the gother unit being measured. A power cables to a single LI	nce voltage test was on the AC power source to the provides a 50Ω/5 units of the EUT were ground reference plane a multiple socket outless.	hrough a LISN 1 (Ling) $0\mu H + 5\Omega$ linear impressed to a seconnected to a second in the same way as a strip was used to contact.	ne Impedance pedance. The econd LISN 2 the LISN 1 fo
exceeded.		of the LISN was not	
reference plane. And for f	floor-standing arrange		-
4) The test was performed with shall be 0.4 m from the reference plane was bond was placed 0.8 m from the reference plane for LISNs distance was between the	th a vertical ground re- vertical ground refe ed to the horizontal groundary of the unit s mounted on top of closest points of the I	rence plane. The viround reference pland under test and bonde the ground reference. ISN 1 and the EUT.	ertical ground e. The LISN fed to a ground ce plane. This All other units
5) In order to find the maximul	m emission, the relativ	e positions of equipr	ment and all o
(67)		(67)	
5 4413	Limit (d	dΒμV)	
Frequency range (MHz)	Quasi-peak	Average	
0.15-0.5	66 to 56*	56 to 46*	/ 2
0.5-5	56	46	(27)
5-30	60	50	
to 0.50 MHz.	_		inge 0.15 MH:
(20)		- requested	
as performed on the live and neut	ral lines with neak det	notor	
	-		omission wor
	eu al lue lleudelicles i	with maximized peak	CITII22IOIT MEL
erage measurement were perform	ou at the hope of		
	reference plane. And for horizontal ground reference to the test was performed with shall be 0.4 m from the reference plane was bond was placed 0.8 m from the reference plane for LISNs distance was between the of the EUT and associated 5) In order to find the maximuthe interface cables must measurement. Frequency range (MHz) 0.15-0.5 0.5-5 5-30 * The limit decreases linearly to 0.50 MHz. NOTE: The lower limit is applease performed on the live and neutral	reference plane. And for floor-standing arrange horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane was bonded to the horizontal grows placed 0.8 m from the boundary of the unit reference plane for LISNs mounted on top of distance was between the closest points of the Lof the EUT and associated equipment was at least 100 measurement. Frequency range (MHz)	4) The test was performed with a vertical ground reference plane. The reshall be 0.4 m from the vertical ground reference plane. The vertication of the unit under test and bonder reference plane was bonded to the horizontal ground reference plane was placed 0.8 m from the boundary of the unit under test and bonder reference plane for LISNs mounted on top of the ground reference distance was between the closest points of the LISN 1 and the EUT. of the EUT and associated equipment was at least 0.8 m from the LIS 5) In order to find the maximum emission, the relative positions of equipment the interface cables must be changed according to ANSI C63.10 measurement. Frequency range (MHz)





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			Read	ding_Le	vel	Correct	M	leasuren	nent	Lin	nit	Mai	rgin		
	No.	Freq.	(dBu∀)		Factor		(dBuV)		(dB	uV)	(0	iB)		
		MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F	Comment
	1	0.3220	25.59	22.40	19.92	9.82	35.41	32.22	29.74	59.65	49.65	-27.43	-19.91	Р	
	2	0.4140	24.93	21.20	17.68	9.90	34.83	31.10	27.58	57.57	47.57	-26.47	-19.99	Р	
1	3	0.4980	25.88	24.90	24.79	9.90	35.78	34.80	34.69	56.03	46.03	-21.23	-11.34	Р	
	4	7.8660	29.90	28.14	27.38	10.00	39.90	38.14	37.38	60.00	50.00	-21.86	-12.62	Ρ	
	5	10.4900	35.18	33.60	32.97	10.01	45.19	43.61	42.98	60.00	50.00	-16.39	-7.02	Р	
	6	11.3700	37.03	35.17	34.29	10.03	47.06	45.20	44.32	60.00	50.00	-14.80	-5.68	Р	







Neutral line: 80.0 dBuV Limit: AVG: 30 -20 0.150 Reading_Level Correct Measurement Limit Margin

No.	Freq.		aing_∟e dBuV)	vei	Factor	IV	(dBuV)		(dB		iviai (c	rgin IB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F	Comment
1	0.4140	25.27	21.50	17.40	9.90	35.17	31.40	27.30	57.57	47.57	-26.17	-20.27	Р	
2	0.4980	24.79	22.00	21.29	9.90	34.69	31.90	31.19	56.03	46.03	-24.13	-14.84	Р	
3	9.0419	34.15	32.60	31.10	10.00	44.15	42.60	41.10	60.00	50.00	-17.40	-8.90	Р	
4	9.6178	35.01	33.40	32.87	10.00	45.01	43.40	42.87	60.00	50.00	-16.60	-7.13	Р	
5	11.0939	37.66	34.90	32.00	10.02	47.68	44.92	42.02	60.00	50.00	-15.08	-7.98	Р	
6	11.9619	35.11	34.18	32.84	10.04	45.15	44.22	42.88	60.00	50.00	-15.78	-7.12	Р	

Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.







Appendix H): Restricted bands around fundamental frequency (Radiated)

(Radiated)							
Receiver Setup:	Freque	ncy	Detector	RBW	VBW	Remark	
	30MHz-1	IGHz	Quasi-peak	120kHz	300kHz	Quasi-peal	k
	A h a v a . 4	OU-	Peak	1MHz	3MHz	Peak	-03
	Above 1	GHZ	Peak	1MHz	10Hz	Average	(2)
Test Procedure:	at a 3 mete determine tb. The EUT www. was mounted. The antenn determine to polarization d. For each suthe antennativas turned.	as placed or semi-aneous set 3 me ed on the to a height is he maximules of the analyspected er a was tuned from 0 deg	on the top of a rochoic camber. To of the highest raters away from op of a variable-tvaried from one m value of the fittenna are set to mission, the EUT to heights from rees to 360 deg	he table wa adiation. the interfer- neight anter meter to fo eld strength make the n was arran 1 meter to rees to find	ence-receinna tower. our meters n. Both hor neasurement ged to its v 4 meters a the maxin	rs above the 360 degrees iving antenna above the grizontal and vent. worst case a and the rotat	to a, which round vertica nd the able
	Bandwidth f. Place a ma frequency t	with Maxim rker at the o show con e the spect	um Hold Mode. end of the restric npliance. Also m rum analyzer plo	cted band c leasure any	losest to the	s in the restri	icted
	Bandwidth of Place a man frequency to bands. Save for lowest at the g. Different beauto fully Aneuto 18GHz the h. Test the Eli. The radiation Transmitting	with Maxim rker at the constant spect of the	um Hold Mode. end of the restric npliance. Also m rum analyzer plo channel	cted band content and content	closest to the community ends of the communi	s in the restriction of the control	icted dulation nambe ove
Limit:	Bandwidth of Place a man frequency to bands. Save for lowest at the g. Different beauto fully Aneuto 18GHz the h. Test the Eli. The radiation Transmitting	with Maxim rker at the o show con e the spect and highest est proced etween abo choic Chan distance is UT in the lo on measure g mode, an ove procedu	um Hold Mode. end of the restrict inpliance. Also m rum analyzer play channel ure as below: we is the test site inber change form 1 meter and tab inwest channel, the ements are perfort d found the X ax	eted band content and the cont	rom Semi- meter to 1 eter). channel Y, Z axis ping which i	s in the restriction of the control	icted dulation nambe ove
imit:	Bandwidth f. Place a ma frequency to bands. Sav for lowest a Above 1GHz to g. Different be to fully Ane 18GHz the h. Test the El i. The radiation Transmitting j. Repeat about	with Maxim rker at the o show con e the spect and highest est proced etween abor choic Chan distance is UT in the lo on measure g mode, an ove procedu	um Hold Mode. end of the restrict inpliance. Also m rum analyzer plot channel ure as below: we is the test site inber change form 1 meter and tab inwest channel, the ements are perfort d found the X an ures until all freq	cted band conteasure anyot. Repeat for table 0.8 ble is 1.5 method in X, kis positioniuencies method in X, kis positionium (3m)	rom Semi- meter to 1 eter). channel Y, Z axis p ing which i	Anechoic Ch .5 meter(Ab positioning for t is worse cases complete.	icted dulation nambe ove
imit:	Bandwidth f. Place a ma frequency to bands. Sav for lowest a second seco	with Maxim rker at the o show con e the spect and highest est proced etween abor choic Chan distance is UT in the lo on measure g mode, an ove procedu ency 88MHz	um Hold Mode. end of the restrict inpliance. Also m rum analyzer plot channel ure as below: we is the test site inber change form if meter and tab ewest channel, the ements are perfort d found the X ax ures until all freq Limit (dBµV)	cted band content of the content of	rom Semi- meter to 1 eter). channel Y, Z axis p ng which i easured wa	Anechoic Ch .5 meter(Ab positioning for t is worse ca as complete.	icted dulation nambe ove
imit:	Bandwidth of Place a man frequency to bands. Save for lowest at the first section of the firs	with Maxim rker at the construction of show considered the spect and highest est procedule tween above choic Chan distance is uT in the logarithm of the standard of the standard ency and the standard ency as MHz	um Hold Mode. end of the restrict inpliance. Also m rum analyzer plot channel ure as below: ve is the test site inber change form 1 meter and tab invest channel, the ements are perfort d found the X av ures until all freq Limit (dBµV 40.6	eted band conteasure anyot. Repeat for table 0.8 ble is 1.5 method in X, kis positioning uencies mediam (23m)	rom Semi- meter to 1 eter). channel Y, Z axis p ing which i easured wa Rei Quasi-pe	Anechoic Ch.5 meter(Abecositioning for tis worse cast complete.	icted dulation nambe ove
imit:	Bandwidth f. Place a ma frequency to bands. Sav for lowest at the g. Different be to fully Ane 18GHz the h. Test the Eli. The radiation Transmitting j. Repeat about 180Hz-888MHz-2	with Maxim rker at the roo show con- e the spect- and highest est proceding etween abordistance is UT in the loon measure g mode, and eve procedule ency 88MHz 16MHz	um Hold Mode. end of the restrict inpliance. Also m rum analyzer plot channel ure as below: ve is the test site inber change form 1 meter and tab inwest channel , the ments are perford d found the X as ures until all freq Limit (dBµV) 40.0 43.6	cted band content of the content of	rom Semi- meter to 1 eter). channel Y, Z axis p ing which i easured wa Rei Quasi-pe Quasi-pe	Anechoic Cl .5 meter(Ab cositioning fo t is worse ca as complete. mark eak Value	icted dulation nambe ove
Limit:	Bandwidth of Place a man frequency to bands. Save for lowest at the second seco	with Maxim rker at the construction of show considered the spect and highest est procedure tween above choic Chan distance is uT in the log mode, an overprocedure the sample of the sam	um Hold Mode. end of the restrict inpliance. Also m rum analyzer plot channel ure as below: we is the test site inber change form 1 meter and tab invest channel, to ements are perford found the X as ures until all freq Limit (dBµV 40.0 43.6	eted band content and content	rom Semi- meter to 1 eter). channel Y, Z axis p ing which i easured wa Rer Quasi-pe Quasi-pe Quasi-pe Quasi-pe	Anechoic Ch.5 meter(Abecositioning for tis worse cast complete. mark eak Value eak Value	icted dulation nambe ove



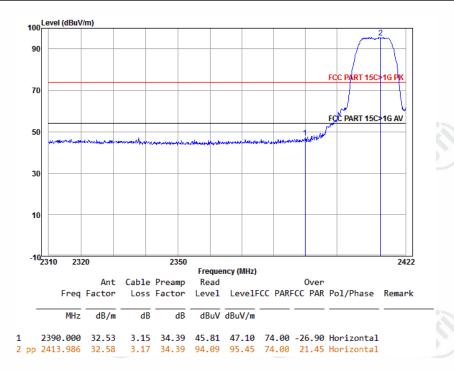


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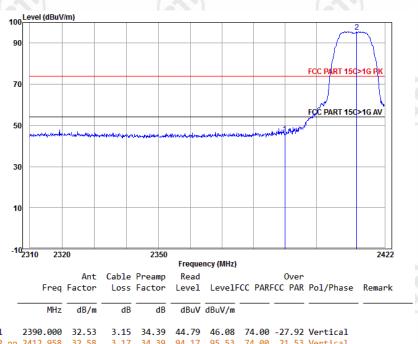
Test plot as follows:

Antenna 1

Worse case mode: 802.11b (11Mbps) Frequency: 2390.0MHz Test channel: Lowest Polarization: Horizontal Remark: Peak



Worse case mode: 802.11b (11Mbps) Frequency: 2390.0MHz Test channel: Lowest | Polarization: Vertical Remark: Peak

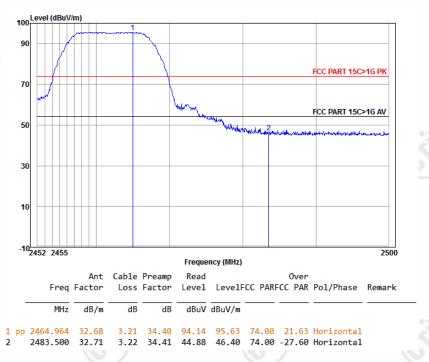


34.39 94.17 95.53 74.00 21.53 Vertical

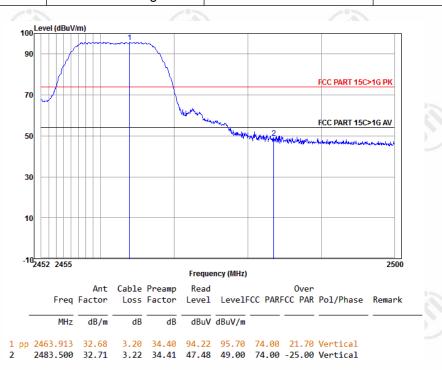


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Worse case mode:	802.11b (11Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



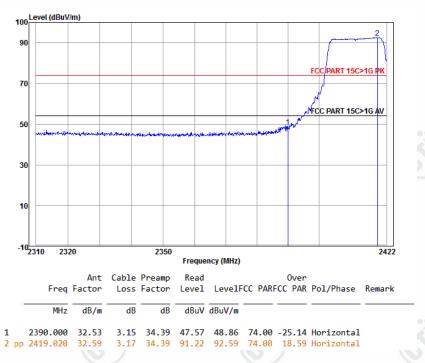
Worse case mode:	802.11b (11Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak



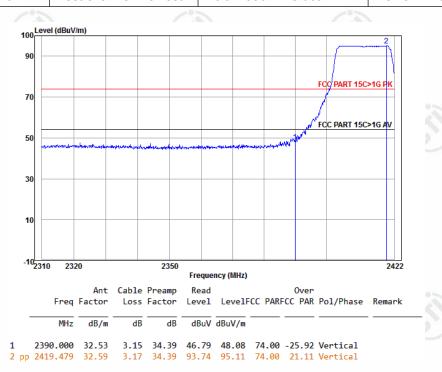


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Worse case mode:	802.11g (6Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



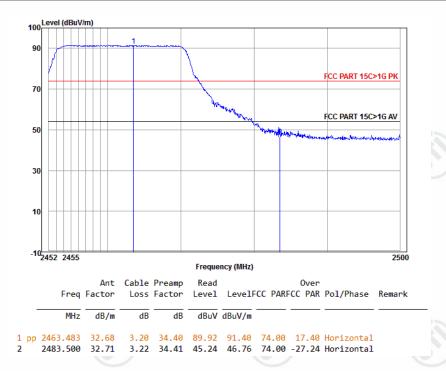
Worse case mode:	802.11g (6Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak





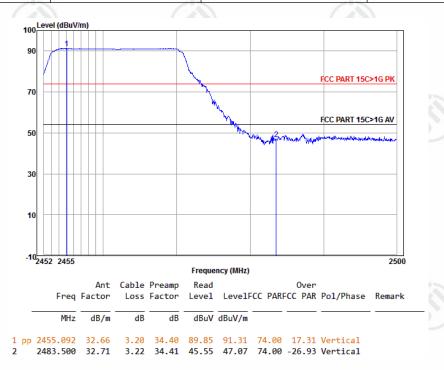
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Worse case mode:	802.11g (6Mbps)	(6,5)	(5,7)
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



Worse case mode: 802.11g (6Mbps)

Frequency: 2483.5MHz Test channel: Highest Polarization: Vertical Remark: Peak

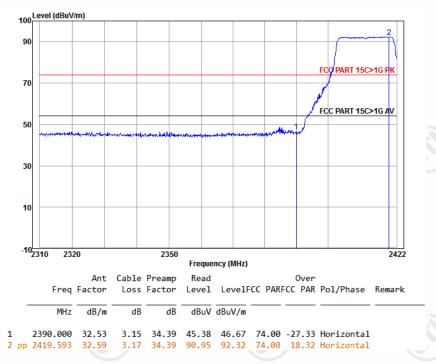




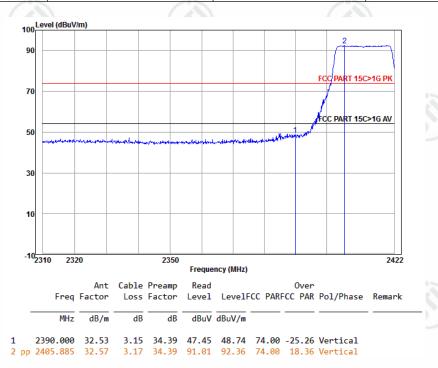
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Worse case mode:	802.11n(HT20) (6.5Mbps)	(6/2)	(672)
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



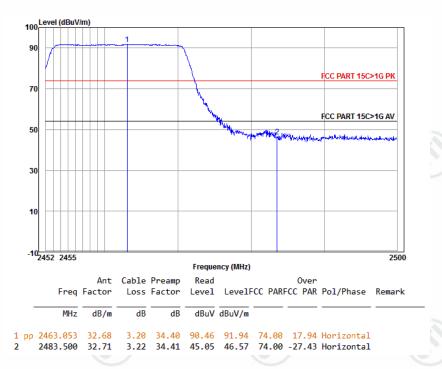
Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



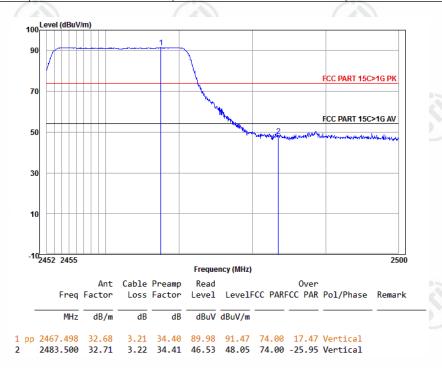


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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak

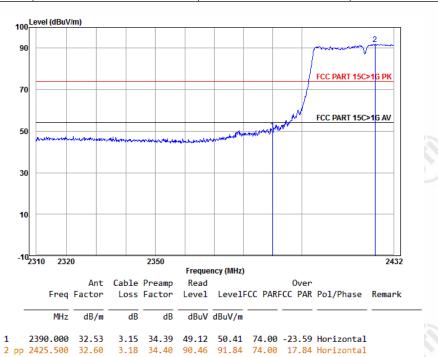




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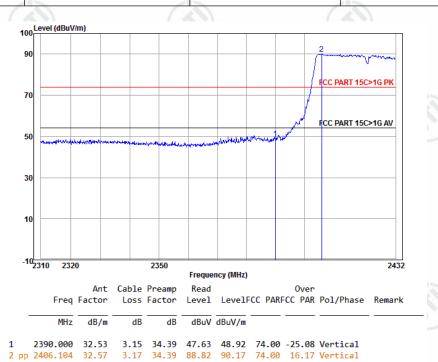
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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



Worse case mode: 802.11n(HT40) (13..5Mbps)

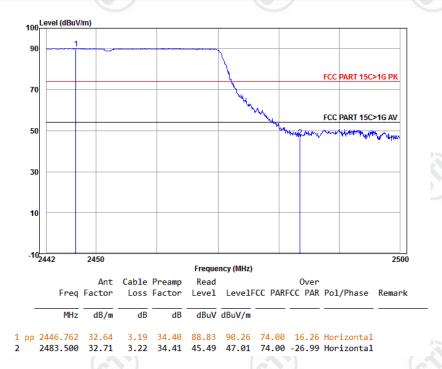
Frequency: 2390.0MHz Test channel: Lowest Polarization: Vertical Remark: Peak



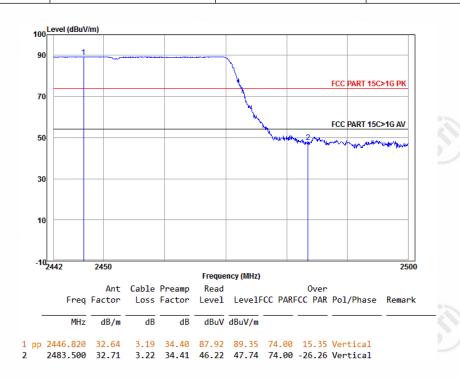


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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Horizontal	Remark: Peak



Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Vertical	Remark: Peak

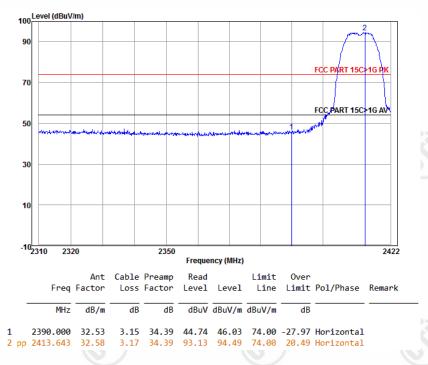




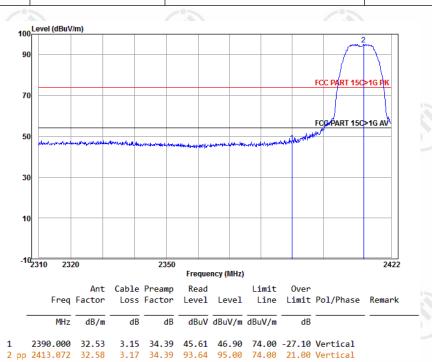
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Antenna 2

Worse case mode:	802.11b (11Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



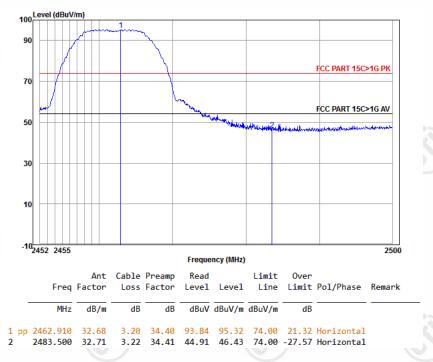
Worse case mode:	802.11b (11Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



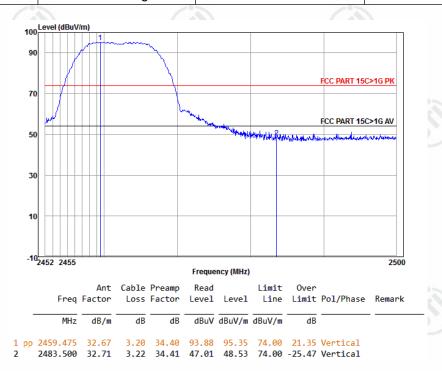


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Worse case mode:	802.11b (11Mbps)	(21)	(20)
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



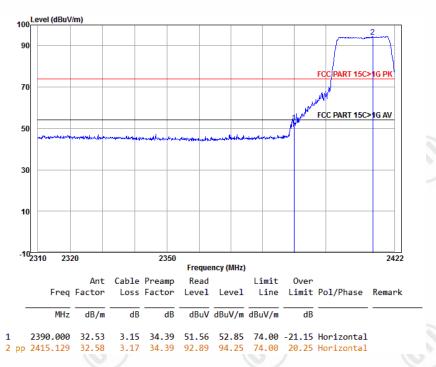
Worse case mode:	802.11b (11Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak





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Worse case mode:	802.11g (6Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



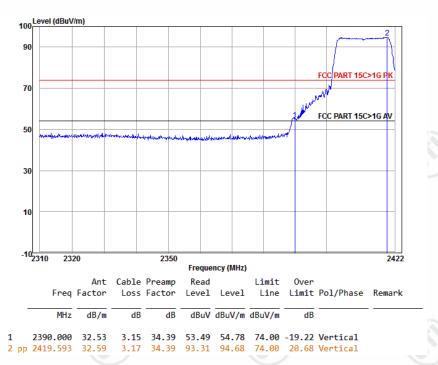
Worse case mode:	802.11g (6Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Average





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Worse case mode:	802.11g (6Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



Worse case mode: 802.11g (6Mbps)

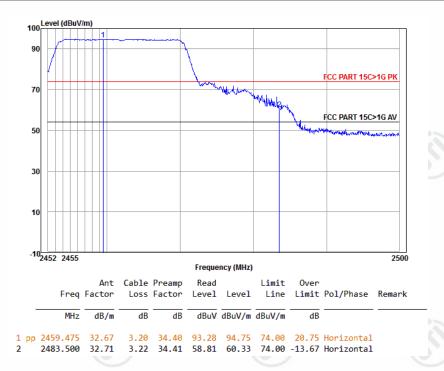
Frequency: 2390.0MHz Test channel: Lowest Polarization: Vertical Remark: Average



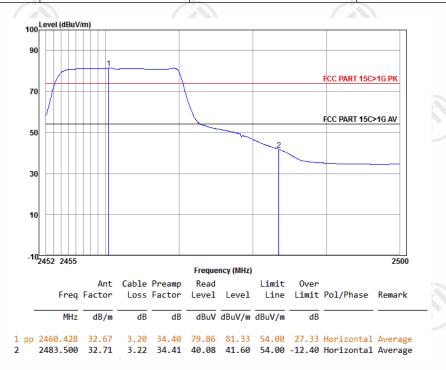


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Worse case mode:	802.11g (6Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



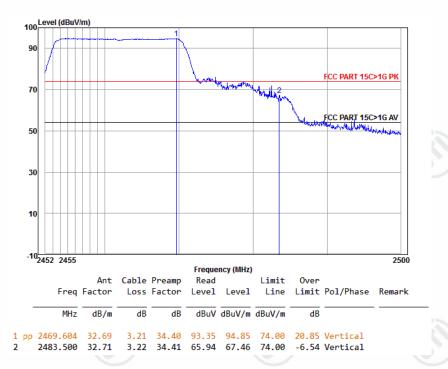
Worse case mode:	802.11g (6Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Average





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Worse case mode:	802.11g (6Mbps)	(6/2)	(6.57)
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak



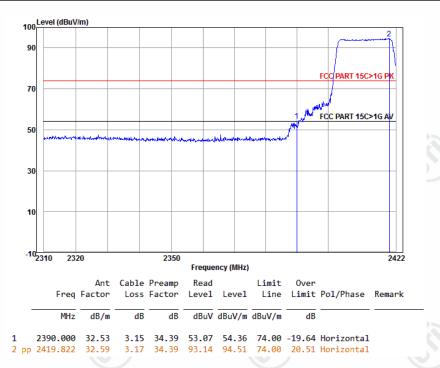
Worse case mode:	802.11g (6Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Average



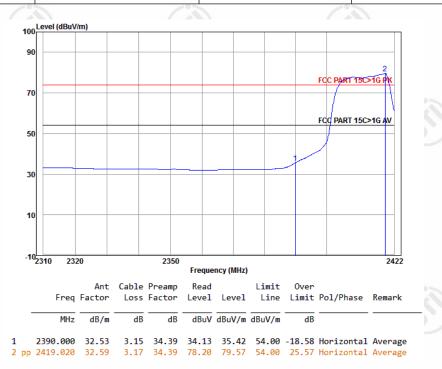


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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



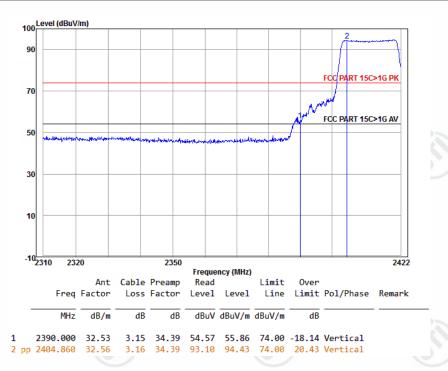
Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Average





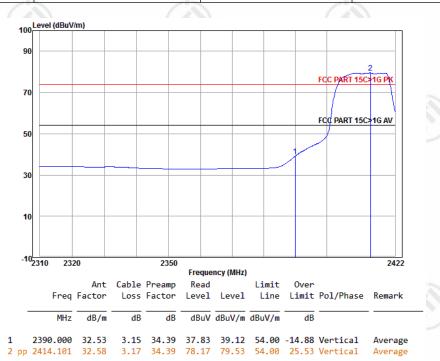
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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



Worse case mode: 802.11n(HT20) (6.5Mbps)

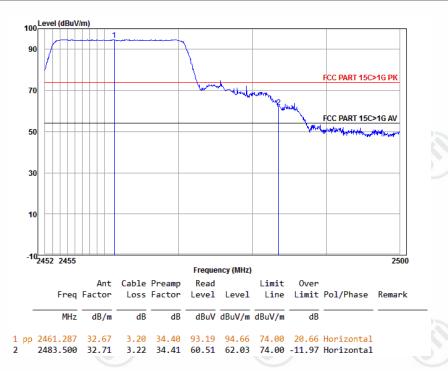
Frequency: 2390.0MHz Test channel: Lowest Polarization: Vertical Remark: Average





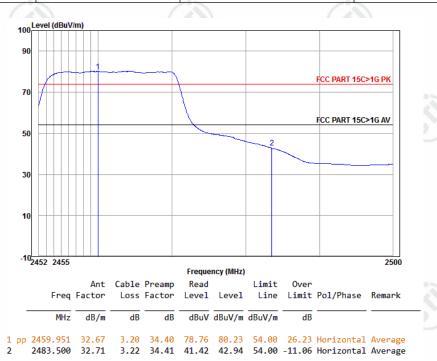
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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



Worse case mode: 802.11n(HT20) (6.5Mbps)

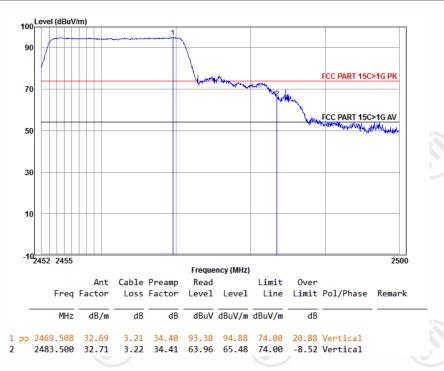
Frequency: 2483.5MHz Test channel: Highest Polarization: Horizontal Remark:Average





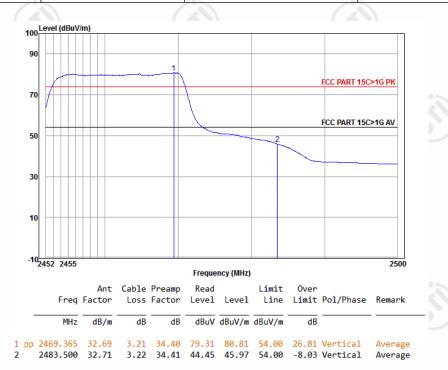
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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak



Worse case mode: 802.11n(HT20) (6.5Mbps)

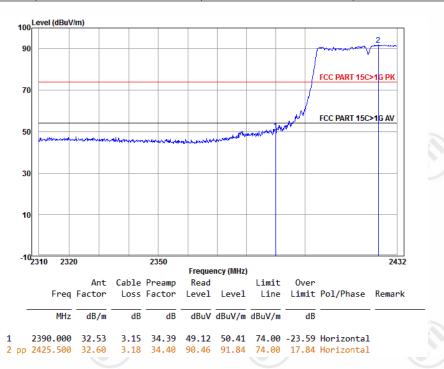
Frequency: 2483.5MHz Test channel: Highest Polarization: Vertical Remark: Average





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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



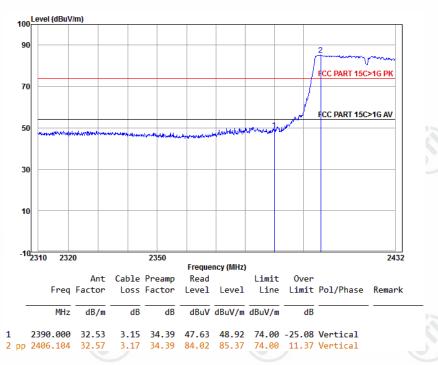
Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Average





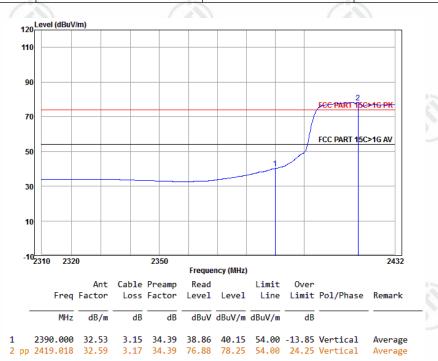
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Worse case mode:	802.11n(HT40) (135Mbps)		(6.57)
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



Worse case mode: 802.11n(HT40) (13..5Mbps)

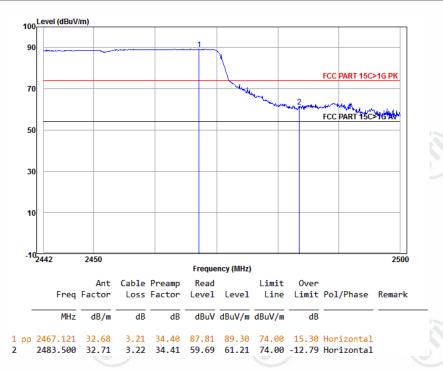
Frequency: 2390.0MHz Test channel: Lowest Polarization: Vertical Remark: Average





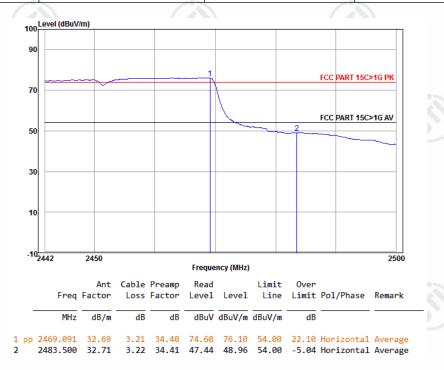
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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Horizontal	Remark: Peak



Worse case mode: 802.11n(HT40) (13..5Mbps)

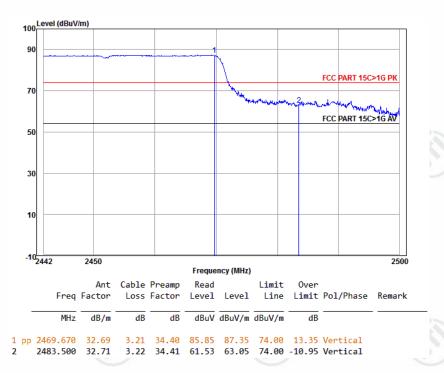
Frequency: 2483.5MHz Test channel:Highest Polarization: Horizontal Remark: Average



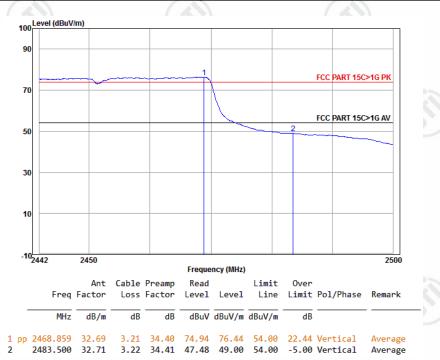


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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Vertical	Remark: Peak



Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Vertical	Remark: Average

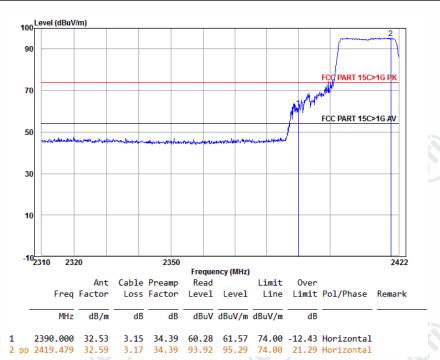




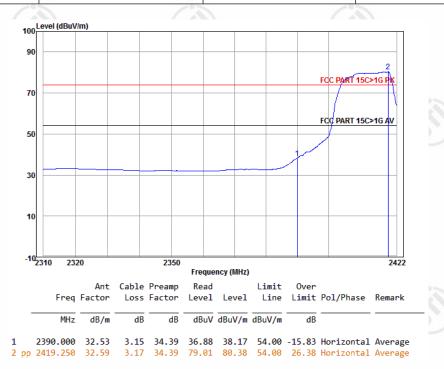
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Antenna 1+Antenna 2

Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Average



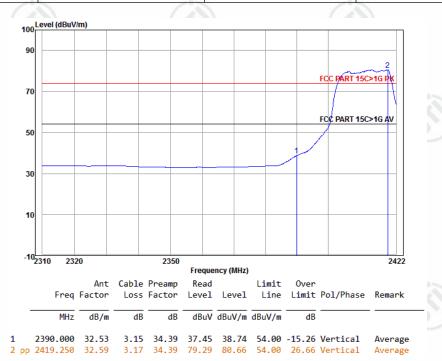


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Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



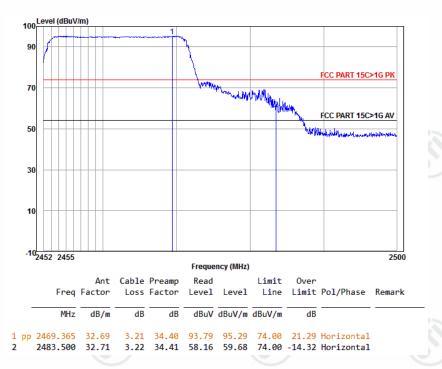
Worse case mode:	802.11n(HT20) (6.5Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Average





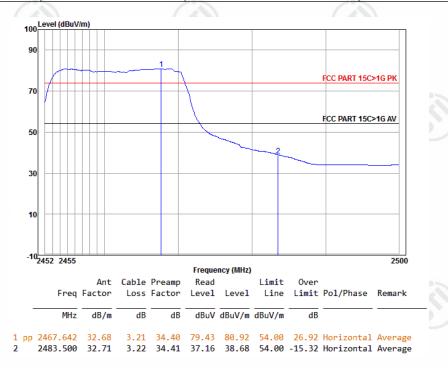
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Worse case mode:	802.11n(HT20) (6.5Mb	ps)	(6.72)
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



Worse case mode: 802.11n(HT20) (6.5Mbps)

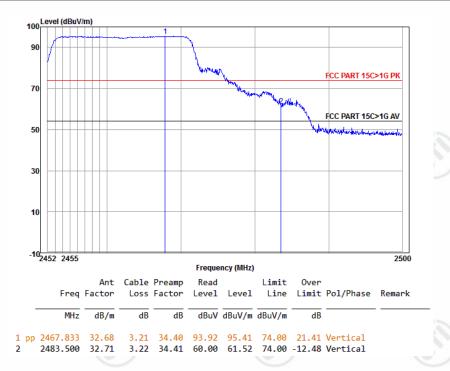
Frequency: 2483.5MHz Test channel: Highest Polarization: Horizontal Remark:Average





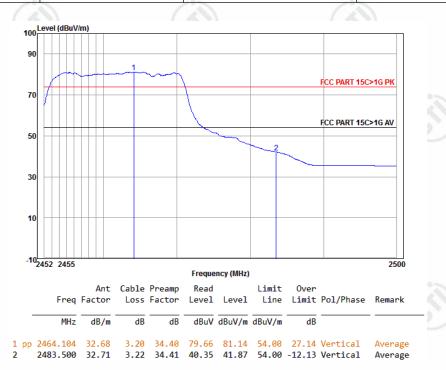
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Worse case mode:	802.11n(HT20) (6.5Mb	ps)	(5,72)
Frequency: 2483.5MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak



Worse case mode: 802.11n(HT20) (6.5Mbps)

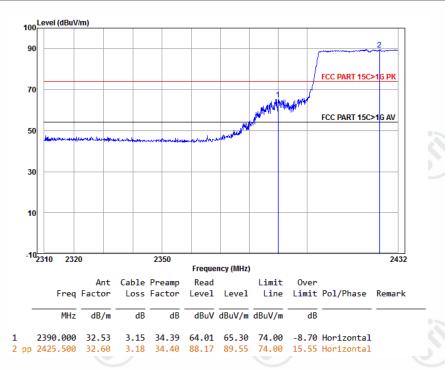
Frequency: 2483.5MHz Test channel: Highest Polarization: Vertical Remark: Average





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Worse case mode:	802.11n(HT40) (135Mbps)			
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak	



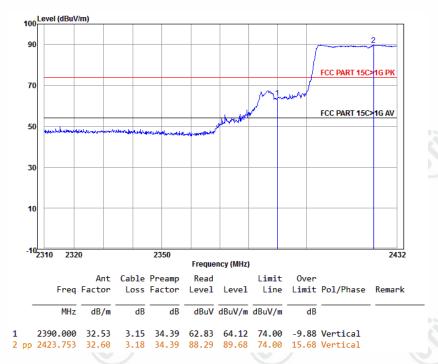
Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Average





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Worse case mode:	802.11n(HT40) (135Mbps)			
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak	



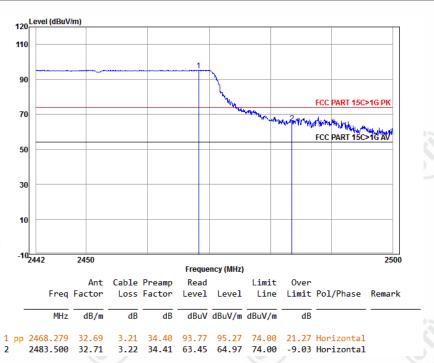
Worse case mode:	802.11n(HT40) (135Mbps		
Frequency: 2390.0MHz	Test channel: Lowest	Polarization: Vertical	Remark: Average



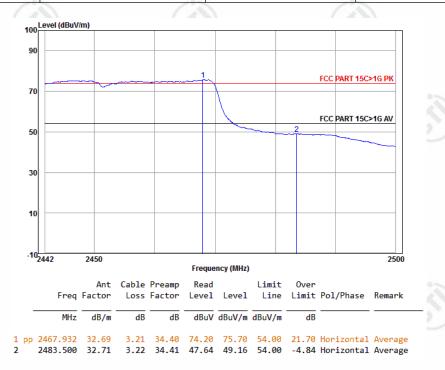


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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Horizontal	Remark: Peak



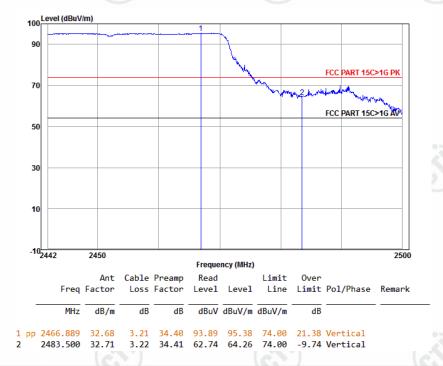
Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Horizontal	Remark: Average



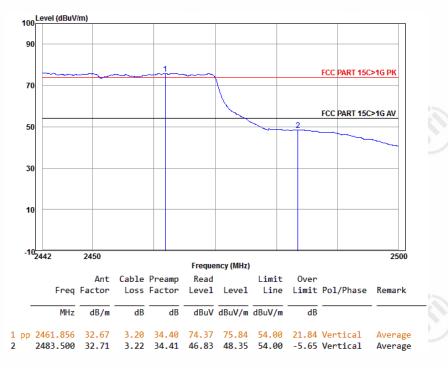


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Worse case mode:	802.11n(HT40) (135Mbps)		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Vertical	Remark: Peak



Worse case mode:	802.11n(HT40) (135Mbps		
Frequency: 2483.5MHz	Test channel:Highest	Polarization: Vertical	Remark: Average



Note:

¹⁾ Through Pre-scan transmitting mode mode with all kind of modulation and data rate, find the 11Mbps of rate is the worst case of 802.11b; 6Mbpsof rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40), and then Only the worst case is recorded in the report.







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2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading - Correct Factor
Correct Factor = Preamplifier Factor—Antenna Factor—Cable Factor







Appendix I): Radiated Spurious Emissions

Receiver	Setup:
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	1.07			
Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Ab 4011-	Peak	1MHz	3MHz	Peak
Above 1GHz	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter (Above 18GHz the distance is 1 meter and table is 1.5 meter)..
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
- j. Repeat above procedures until all frequencies measured was complete.

		• •
	m	11

Frequency	Field strength (microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-		300
0.490MHz-1.705MHz	24000/F(kHz)	-	(44)	30
1.705MHz-30MHz	30	-		30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

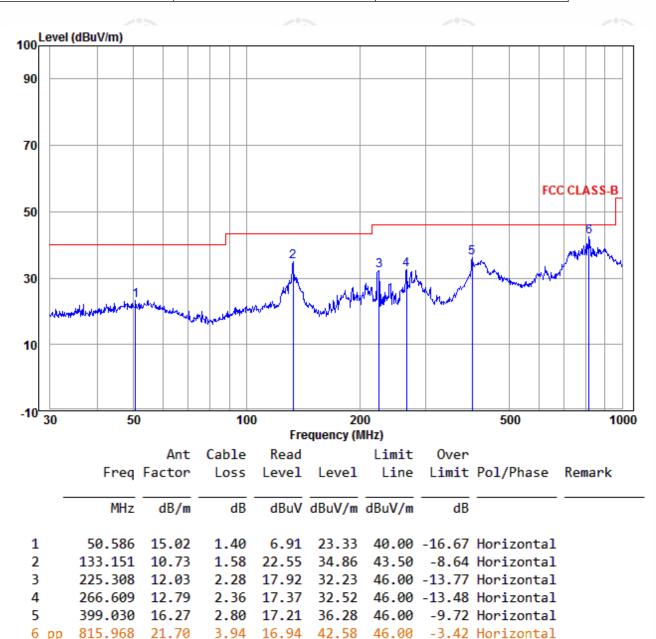
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.





Radiated Spurious Emissions test Data: Radiated Emission below 1GHz

30MHz~1GHz (QP)		
Test mode:	Transmitting	Horizontal



















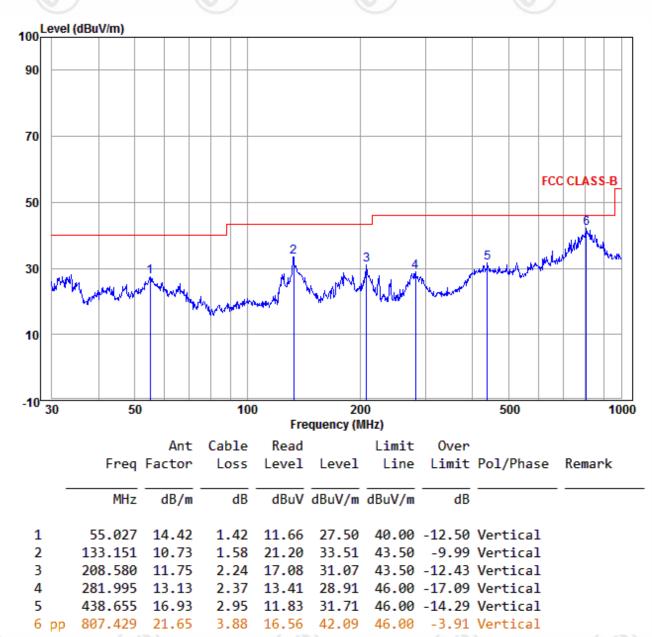






Test mode: Transmitting Vertical

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Note:

1) All modes and antenna are tested, and found the antenna 1 which is worst case, so only the worst case mode is recorded in the report.





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Transmitter Emission above 1GHz Antenna 1

Test mode:	802.11b(11	Mbps)	Test F	requency:	2412MHz	IHz Remark: Peak						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis			
1219.635	30.27	2.54	34.94	47.61	45.48	74.00	-28.52	Pass	Horizontal			
1846.834	31.47	3.12	34.40	46.49	46.68	74.00	-27.32	Pass	Horizontal			
2500.251	32.75	4.55	34.41	45.98	48.87	74.00	-25.13	Pass	Horizontal			
4824.000	34.73	5.10	34.35	42.62	48.10	74.00	-25.90	Pass	Horizontal			
7236.000	36.42	6.69	34.90	39.28	47.49	74.00	-26.51	Pass	Horizontal			
9648.000	37.93	7.70	35.07	37.91	48.47	74.00	-25.53	Pass	Horizontal			
1188.980	30.20	2.50	34.98	47.58	45.30	74.00	-28.70	Pass	Vertical			
1651.146	31.15	2.96	34.55	46.16	45.72	74.00	-28.28	Pass	Vertical			
2081.550	31.89	3.47	34.32	46.95	47.99	74.00	-26.01	Pass	Vertical			
4824.000	34.73	5.10	34.35	44.63	50.11	74.00	-23.89	Pass	Vertical			
7236.000	36.42	6.69	34.90	42.01	50.22	74.00	-23.78	Pass	Vertical			
9648.000	37.93	7.70	35.07	39.19	49.75	74.00	-24.25	Pass	Vertical			

1 1	0.1		/ //		1 0	0.1		100	
Test mode:	802.11b(11	Mbps)	Test Freq	uency: 24	37MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1188.980	30.20	2.50	34.98	47.54	45.26	74.00	-28.74	Pass	Horizontal
1617.862	31.09	2.93	34.58	46.57	46.01	74.00	-27.99	Pass	Horizontal
2065.715	31.85	3.42	34.32	45.97	46.92	74.00	-27.08	Pass	Horizontal
4874.000	34.84	5.09	34.33	41.56	47.16	74.00	-26.84	Pass	Horizontal
7311.000	36.43	6.76	34.90	39.26	47.55	74.00	-26.45	Pass	Horizontal
9748.000	38.03	7.61	35.05	38.20	48.79	74.00	-25.21	Pass	Horizontal
1198.095	30.22	2.51	34.97	47.57	45.33	74.00	-28.67	Pass	Vertical
1413.674	30.70	2.74	34.75	46.76	45.45	74.00	-28.55	Pass	Vertical
1860.992	31.49	3.13	34.39	46.13	46.36	74.00	-27.64	Pass	Vertical
4874.000	34.84	5.09	34.33	42.17	47.77	74.00	-26.23	Pass	Vertical
7311.000	36.43	6.76	34.90	38.73	47.02	74.00	-26.98	Pass	Vertical
9748.000	38.03	7.61	35.05	38.83	49.42	74.00	-24.58	Pass	Vertical















Test mode:	802.11b(11	Mbps)	Test Fred	uency: 24	62MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1173.943	30.16	2.48	34.99	47.37	45.02	74.00	-28.98	Pass	Horizontal
1450.122	30.77	2.78	34.72	46.72	45.55	74.00	-28.45	Pass	Horizontal
2092.175	31.91	3.50	34.32	46.63	47.72	74.00	-26.28	Pass	Horizontal
4924.000	34.94	5.07	34.32	42.65	48.34	74.00	-25.66	Pass	Horizontal
7386.000	36.44	6.83	34.90	41.79	50.16	74.00	-23.84	Pass	Horizontal
9848.000	38.14	7.53	35.03	39.75	50.39	74.00	-23.61	Pass	Horizontal
1188.980	30.20	2.50	34.98	47.67	45.39	74.00	-28.61	Pass	Vertical
1626.120	31.10	2.94	34.57	46.44	45.91	74.00	-28.09	Pass	Vertical
1837.456	31.46	3.11	34.41	46.15	46.31	74.00	-27.69	Pass	Vertical
4924.000	34.94	5.07	34.32	41.57	47.26	74.00	-26.74	Pass	Vertical
7386.000	36.44	6.83	34.90	39.21	47.58	74.00	-26.42	Pass	Vertical
9848.000	38.14	7.53	35.03	38.77	49.41	74.00	-24.59	Pass	Vertical

Test mode:	802.11g(6N	1bps)	Test Frequency: 2412MHz			Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1195.049	30.21	2.51	34.97	48.22	45.97	74.00	-28.03	Pass	Horizontal
1668.044	31.18	2.98	34.54	47.00	46.62	74.00	-27.38	Pass	Horizontal
2097.507	31.92	3.51	34.32	46.07	47.18	74.00	-26.82	Pass	Horizontal
4824.000	34.73	5.10	34.35	42.82	48.30	74.00	-25.70	Pass	Horizontal
7236.000	36.42	6.69	34.90	40.74	48.95	74.00	-25.05	Pass	Horizontal
9648.000	37.93	7.70	35.07	40.21	50.77	74.00	-23.23	Pass	Horizontal
1204.210	30.24	2.52	34.96	47.69	45.49	74.00	-28.51	Pass	Vertical
1851.542	31.48	3.12	34.40	47.17	47.37	74.00	-26.63	Pass	Vertical
4824.000	34.73	5.10	34.35	42.84	48.32	74.00	-25.68	Pass	Vertical
6315.233	36.07	7.11	34.50	41.05	49.73	74.00	-24.27	Pass	Vertical
7236.000	36.42	6.69	34.90	40.22	48.43	74.00	-25.57	Pass	Vertical
9648.000	37.93	7.70	35.07	37.54	48.10	74.00	-25.90	Pass	Vertical















			/ 101						
Test mode:	802.11g(6N	1bps)	Test Fred	quency: 24	37MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1207.279	30.24	2.52	34.96	47.10	44.90	74.00	-29.10	Pass	Horizontal
1842.139	31.46	3.11	34.41	46.71	46.87	74.00	-27.13	Pass	Horizontal
4874.000	34.84	5.09	34.33	41.27	46.87	74.00	-27.13	Pass	Horizontal
6544.350	36.18	6.89	34.64	41.87	50.30	74.00	-23.70	Pass	Horizontal
7311.000	36.43	6.76	34.90	38.82	47.11	74.00	-26.89	Pass	Horizontal
9748.000	38.03	7.61	35.05	38.23	48.82	74.00	-25.18	Pass	Horizontal
1201.149	30.23	2.52	34.96	48.20	45.99	74.00	-28.01	Pass	Vertical
1446.435	30.77	2.78	34.72	46.01	44.84	74.00	-29.16	Pass	Vertical
1856.261	31.48	3.13	34.40	46.81	47.02	74.00	-26.98	Pass	Vertical
4874.000	34.84	5.09	34.33	41.76	47.36	74.00	-26.64	Pass	Vertical
7311.000	36.43	6.76	34.90	39.68	47.97	74.00	-26.03	Pass	Vertical
9748.000	38.03	7.61	35.05	37.90	48.49	74.00	-25.51	Pass	Vertical

Test mode:	802.11g(6N	1bps)	Test Freq	uency: 24	62MHz	Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1204.210	30.24	2.52	34.96	47.48	45.28	74.00	-28.72	Pass	Horizontal
1638.585	31.12	2.95	34.56	46.56	46.07	74.00	-27.93	Pass	Horizontal
2113.586	31.96	3.56	34.33	46.57	47.76	74.00	-26.24	Pass	Horizontal
4924.000	34.94	5.07	34.32	42.40	48.09	74.00	-25.91	Pass	Horizontal
7386.000	36.44	6.83	34.90	39.10	47.47	74.00	-26.53	Pass	Horizontal
9848.000	38.14	7.53	35.03	38.40	49.04	74.00	-24.96	Pass	Horizontal
1198.095	30.22	2.51	34.97	48.00	45.76	74.00	-28.24	Pass	Vertical
1659.574	31.16	2.97	34.54	46.96	46.55	74.00	-27.45	Pass	Vertical
2304.663	32.36	4.07	34.37	46.06	48.12	74.00	-25.88	Pass	Vertical
4924.000	34.94	5.07	34.32	41.52	47.21	74.00	-26.79	Pass	Vertical
7386.000	36.44	6.83	34.90	41.63	50.00	74.00	-24.00	Pass	Vertical
9848.000	38.14	7.53	35.03	38.88	49.52	74.00	-24.48	Pass	Vertical















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Test mode:	802.11n(H	Γ20)(6.5N	(lbps)	Test Freque	ency: 2412M	lHz	Rema	ark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Lim (dBµ\	-	Over Limit (dB)	Result	Antenna Polaxis
1182.943	30.18	2.50	34.98	48.27	45.97	74.0	00	-28.03	Pass	Horizontal
1676.558	31.19	2.98	34.53	46.14	45.78	74.0	00	-28.22	Pass	Horizontal
2081.550	31.89	3.47	34.32	46.81	47.85	74.0	00	-26.15	Pass	Horizontal
4824.000	34.73	5.10	34.35	43.26	48.74	74.0	00	-25.26	Pass	Horizontal
7236.000	36.42	6.69	34.90	39.23	47.44	74.0	00	-26.56	Pass	Horizontal
9648.000	37.93	7.70	35.07	40.11	50.67	74.0	00	-23.33	Pass	Horizontal
1192.011	30.21	2.51	34.97	48.04	45.79	74.0	00	-28.21	Pass	Vertical
1626.120	31.10	2.94	34.57	46.83	46.30	74.0	00	-27.70	Pass	Vertical
1842.139	31.46	3.11	34.41	46.58	46.74	74.0	00	-27.26	Pass	Vertical
4824.000	34.73	5.10	34.35	42.81	48.29	74.0	00	-25.71	Pass	Vertical
7236.000	36.42	6.69	34.90	39.07	47.28	74.0	00	-26.72	Pass	Vertical
9648.000	37.93	7.70	35.07	39.07	49.63	74.0	00	-24.37	Pass	Vertical

Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Freque	ency: 2437M	ark: Peak				
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Lin (dBµ)		Over Limit (dB)	Result	Antenna Polaxis
1195.049	30.21	2.51	34.97	47.48	45.23	74.	00	-28.77	Pass	Horizontal
1626.120	31.10	2.94	34.57	46.11	45.58	74.	00	-28.42	Pass	Horizontal
2097.507	31.92	3.51	34.32	46.31	47.42	74.	00	-26.58	Pass	Horizontal
4874.000	34.84	5.09	34.33	41.59	47.19	74.	00	-26.81	Pass	Horizontal
7311.000	36.43	6.76	34.90	40.29	48.58	74.	00	-25.42	Pass	Horizontal
9748.000	38.03	7.61	35.05	38.28	48.87	74.	00	-25.13	Pass	Horizontal
1198.095	30.22	2.51	34.97	48.18	45.94	74.	00	-28.06	Pass	Vertical
1655.354	31.15	2.97	34.55	46.77	46.34	74.	00	-27.66	Pass	Vertical
2086.856	31.90	3.48	34.32	47.09	48.15	74.	00	-25.85	Pass	Vertical
4874.000	34.84	5.09	34.33	42.00	47.60	74.	00	-26.40	Pass	Vertical
7311.000	36.43	6.76	34.90	39.43	47.72	74.	00	-26.28	Pass	Vertical
9748.000	38.03	7.61	35.05	39.15	49.74	74.	00	-24.26	Pass	Vertical















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Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Freque	ency: 2462M	Hz	Rema	ark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Lir (dBµ	nit V/m)	Over Limit (dB)	Result	Antenna Polaxis	
1188.980	30.20	2.50	34.98	47.65	45.37	74.	00	-28.63	Pass	Horizontal	
1417.277	30.71	2.75	34.75	46.91	45.62	74.	00	-28.38	Pass	Horizontal	
2086.856	31.90	3.48	34.32	46.89	47.95	74.	00	-26.05	Pass	Horizontal	
4924.000	34.94	5.07	34.32	41.80	47.49	74.	00	-26.51	Pass	Horizontal	
7386.000	36.44	6.83	34.90	40.10	48.47	74.	00	-25.53	Pass	Horizontal	
9848.000	38.14	7.53	35.03	38.37	49.01	74.	00	-24.99	Pass	Horizontal	
1204.210	30.24	2.52	34.96	48.25	46.05	74.	.00	-27.95	Pass	Vertical	
1638.585	31.12	2.95	34.56	47.14	46.65	74.	.00	-27.35	Pass	Vertical	
2081.550	31.89	3.47	34.32	46.77	47.81	74.	00	-26.19	Pass	Vertical	
4924.000	34.94	5.07	34.32	41.92	47.61	74.	00	-26.39	Pass	Vertical	
7386.000	36.44	6.83	34.90	39.07	47.44	74.	00	-26.56	Pass	Vertical	
9848.000	38.14	7.53	35.03	36.66	47.30	74.	00	-26.70	Pass	Vertical	

Test mode:	802.11n(HT	40)(13.5	Mbps)	Test Frequency: 2422MHz Remark: Peak						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		mit uV/m)	Over Limit (dB)	Result	Antenna Polaxis
1192.011	30.21	2.51	34.97	48.21	45.96	74	1.00	-28.04	Pass	Horizontal
1613.749	31.08	2.93	34.58	46.63	46.06	74	1.00	-27.94	Pass	Horizontal
2322.330	32.40	4.11	34.37	46.20	48.34	74	1.00	-25.66	Pass	Horizontal
4844.000	34.77	5.10	34.34	41.68	47.21	74	1.00	-26.79	Pass	Horizontal
7266.000	36.43	6.72	34.90	39.38	47.63	74	1.00	-26.37	Pass	Horizontal
9688.000	37.97	7.66	35.06	38.95	49.52	74	1.00	-24.48	Pass	Horizontal
1195.049	30.21	2.51	34.97	48.25	46.00	74	1.00	-28.00	Pass	Vertical
1846.834	31.47	3.12	34.40	47.50	47.69	74	1.00	-26.31	Pass	Vertical
4844.000	34.77	5.10	34.34	41.53	47.06	74	1.00	-26.94	Pass	Vertical
7266.000	36.43	6.72	34.90	39.51	47.76	74	1.00	-26.24	Pass	Vertical
8637.084	36.96	7.94	35.10	40.66	50.46	74	1.00	-23.54	Pass	Vertical
9688.000	37.97	7.66	35.06	38.04	48.61	74	1.00	-25.39	Pass	Vertical

















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Test mode:	802.11n(HT	40)(13.5N	Лbps)	Test Fi	equency: 24	37MHz	Remark: P	eak	
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m	Over Limit (dB)	Result	Antenna Polaxis
1198.095	30.22	2.51	34.97	47.71	45.47	74.00	-28.53	Pass	Horizontal
1609.646	31.07	2.93	34.58	46.43	45.85	74.00	-28.15	Pass	Horizontal
1856.261	31.48	3.13	34.40	46.92	47.13	74.00	-26.87	Pass	Horizontal
4874.000	34.84	5.09	34.33	41.08	46.68	74.00	-27.32	Pass	Horizontal
7311.000	36.43	6.76	34.90	39.16	47.45	74.00	-26.55	Pass	Horizontal
9748.000	38.03	7.61	35.05	39.56	50.15	74.00	-23.85	Pass	Horizontal
1188.980	30.20	2.50	34.98	48.31	46.03	74.00	-27.97	Pass	Vertical
1638.585	31.12	2.95	34.56	46.88	46.39	74.00	-27.61	Pass	Vertical
2081.550	31.89	3.47	34.32	46.80	47.84	74.00	-26.16	Pass	Vertical
4874.000	34.84	5.09	34.33	42.38	47.98	74.00	-26.02	Pass	Vertical
7311.000	36.43	6.76	34.90	39.33	47.62	74.00	-26.38	Pass	Vertical
9748.000	38.03	7.61	35.05	38.54	49.13	74.00	-24.87	Pass	Vertical

Test mode:	802.11n(HT	40)(13.5	Mbps)	Test Freque	ency: 2452M	Hz	Rema	rk: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		mit uV/m)	Over Limit (dB)	Result	Antenna Polaxis
1213.441	30.26	2.53	34.95	47.54	45.38	74	1.00	-28.62	Pass	Horizontal
1605.554	31.07	2.92	34.59	47.19	46.59	74	1.00	-27.41	Pass	Horizontal
2086.856	31.90	3.48	34.32	47.32	48.38	74	1.00	-25.62	Pass	Horizontal
4904.000	34.90	5.07	34.33	42.62	48.26	74	1.00	-25.74	Pass	Horizontal
7356.000	36.44	6.80	34.90	38.59	46.93	74	1.00	-27.07	Pass	Horizontal
9808.000	38.10	7.56	35.04	38.36	48.98	74	1.00	-25.02	Pass	Horizontal
1198.095	30.22	2.51	34.97	49.50	47.26	74	1.00	-26.74	Pass	Vertical
1659.574	31.16	2.97	34.54	46.27	45.86	74	1.00	-28.14	Pass	Vertical
2304.663	32.36	4.07	34.37	46.40	48.46	74	1.00	-25.54	Pass	Vertical
4904.000	34.90	5.07	34.33	41.22	46.86	74	1.00	-27.14	Pass	Vertical
7356.000	36.44	6.80	34.90	38.57	46.91	74	1.00	-27.09	Pass	Vertical
9808.000	38.10	7.56	35.04	37.14	47.76	74	1.00	-26.24	Pass	Vertical















Antenna 2

Test mode:	802.11b(11	Mbps)	Test F	requency	2412MHz	Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1198.095	30.22	2.40	34.97	47.58	45.23	74.00	-28.77	Pass	Horizontal
1450.122	30.77	2.57	34.72	47.07	45.69	74.00	-28.31	Pass	Horizontal
1856.261	31.48	2.79	34.40	46.18	46.05	74.00	-27.95	Pass	Horizontal
4824.000	34.73	6.72	34.35	42.84	49.94	74.00	-24.06	Pass	Horizontal
7236.000	36.42	8.38	34.90	38.64	48.54	74.00	-25.46	Pass	Horizontal
9648.000	37.93	7.63	35.07	36.51	47.00	74.00	-27.00	Pass	Horizontal
1198.095	30.22	2.40	34.97	48.39	46.04	74.00	-27.96	Pass	Vertical
1439.090	30.75	2.57	34.73	47.25	45.84	74.00	-28.16	Pass	Vertical
1884.829	31.53	2.81	34.38	46.76	46.72	74.00	-27.28	Pass	Vertical
4824.000	34.73	6.72	34.35	43.49	50.59	74.00	-23.41	Pass	Vertical
7236.000	36.42	8.38	34.90	39.92	49.82	74.00	-24.18	Pass	Vertical
9648.000	37.93	7.63	35.07	38.16	48.65	74.00	-25.35	Pass	Vertical

Test mode:	802.11b(11	Mbps)	Test Freq	uency: 24	37MHz	Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1179.935	30.18	2.39	34.99	48.93	46.51	74.00	-27.49	Pass	Horizontal
1435.431	30.74	2.56	34.73	46.51	45.08	74.00	-28.92	Pass	Horizontal
1870.490	31.51	2.80	34.39	47.86	47.78	74.00	-26.22	Pass	Horizontal
4874.000	34.84	6.73	34.33	43.15	50.39	74.00	-23.61	Pass	Horizontal
7311.000	36.43	8.44	34.90	40.13	50.10	74.00	-23.90	Pass	Horizontal
9748.000	38.03	7.55	35.05	37.35	47.88	74.00	-26.12	Pass	Horizontal
1207.279	30.24	2.41	34.96	47.19	44.88	74.00	-29.12	Pass	Vertical
1446.435	30.77	2.57	34.72	46.92	45.54	74.00	-28.46	Pass	Vertical
1846.834	31.47	2.79	34.40	46.97	46.83	74.00	-27.17	Pass	Vertical
4874.000	34.84	6.73	34.33	41.35	48.59	74.00	-25.41	Pass	Vertical
7311.000	36.43	8.44	34.90	38.20	48.17	74.00	-25.83	Pass	Vertical
9748.000	38.03	7.55	35.05	38.25	48.78	74.00	-25.22	Pass	Vertical















Test mode:	802.11b(11	Mbps)	Test Freq	juency: 24	62MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1207.279	30.24	2.41	34.96	47.43	45.12	74.00	-28.88	Pass	Horizontal
1461.238	30.79	2.58	34.71	46.51	45.17	74.00	-28.83	Pass	Horizontal
1842.139	31.46	2.79	34.41	47.01	46.85	74.00	-27.15	Pass	Horizontal
4924.000	34.94	6.74	34.32	42.22	49.58	74.00	-24.42	Pass	Horizontal
7386.000	36.44	8.50	34.90	38.25	48.29	74.00	-25.71	Pass	Horizontal
9848.000	38.14	7.47	35.03	36.47	47.05	74.00	-26.95	Pass	Horizontal
1204.210	30.24	2.41	34.96	48.72	46.41	74.00	-27.59	Pass	Vertical
1442.758	30.76	2.57	34.72	46.63	45.24	74.00	-28.76	Pass	Vertical
1685.115	31.21	2.71	34.52	47.69	47.09	74.00	-26.91	Pass	Vertical
4924.000	34.94	6.74	34.32	43.21	50.57	74.00	-23.43	Pass	Vertical
7386.000	36.44	8.50	34.90	39.47	49.51	74.00	-24.49	Pass	Vertical
9848.000	38.14	7.47	35.03	37.74	48.32	74.00	-25.68	Pass	Vertical

Test mode:	est mode: 802.11g(6Mbps)		Test Freq	uency: 24	12MHz	Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1204.210	30.24	2.41	34.96	46.11	43.80	74.00	-30.20	Pass	Horizontal
1634.419	31.12	2.68	34.56	45.19	44.43	74.00	-29.57	Pass	Horizontal
1865.735	31.50	2.80	34.39	45.36	45.27	74.00	-28.73	Pass	Horizontal
4824.000	34.73	6.72	34.35	40.38	47.48	74.00	-26.52	Pass	Horizontal
7236.000	36.42	8.38	34.90	37.10	47.00	74.00	-27.00	Pass	Horizontal
9648.000	37.93	7.63	35.07	38.68	49.17	74.00	-24.83	Pass	Horizontal
1188.980	30.20	2.39	34.98	47.58	45.19	74.00	-28.81	Pass	Vertical
1402.920	30.68	2.54	34.76	47.17	45.63	74.00	-28.37	Pass	Vertical
1856.261	31.48	2.79	34.40	46.61	46.48	74.00	-27.52	Pass	Vertical
4824.000	34.73	6.72	34.35	41.81	48.91	74.00	-25.09	Pass	Vertical
7236.000	36.42	8.38	34.90	37.52	47.42	74.00	-26.58	Pass	Vertical
9648.000	37.93	7.63	35.07	37.33	47.82	74.00	-26.18	Pass	Vertical

















Test mode:	802.11g(6N	(lbps)	Test Fred	quency: 24	37MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1207.279	30.24	2.41	34.96	48.32	46.01	74.00	-27.99	Pass	Horizontal
1410.080	30.69	2.55	34.75	46.57	45.06	74.00	-28.94	Pass	Horizontal
1851.542	31.48	2.79	34.40	46.74	46.61	74.00	-27.39	Pass	Horizontal
4874.000	34.84	6.73	34.33	42.84	50.08	74.00	-23.92	Pass	Horizontal
7311.000	36.43	8.44	34.90	40.08	50.05	74.00	-23.95	Pass	Horizontal
9748.000	38.03	7.55	35.05	39.79	50.32	74.00	-23.68	Pass	Horizontal
1204.210	30.24	2.41	34.96	47.68	45.37	74.00	-28.63	Pass	Vertical
1435.431	30.74	2.56	34.73	46.23	44.80	74.00	-29.20	Pass	Vertical
1646.948	31.14	2.69	34.55	45.92	45.20	74.00	-28.80	Pass	Vertical
4874.000	34.84	6.73	34.33	42.49	49.73	74.00	-24.27	Pass	Vertical
7311.000	36.43	8.44	34.90	39.41	49.38	74.00	-24.62	Pass	Vertical
9748.000	38.03	7.55	35.05	38.95	49.48	74.00	-24.52	Pass	Vertical





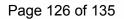
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Test mode:	802.11g(6N	1bps)	Test Freq	uency: 24	62MHz	Remark: P	eak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1192.011	30.21	2.40	34.97	47.08	44.72	74.00	-29.28	Pass	Horizontal
1385.177	30.64	2.53	34.78	46.40	44.79	74.00	-29.21	Pass	Horizontal
1856.261	31.48	2.79	34.40	46.24	46.11	74.00	-27.89	Pass	Horizontal
4924.000	34.94	6.74	34.32	43.18	50.54	74.00	-23.46	Pass	Horizontal
7386.000	36.44	8.50	34.90	37.94	47.98	74.00	-26.02	Pass	Horizontal
9848.000	38.14	7.47	35.03	37.72	48.30	74.00	-25.70	Pass	Horizontal
1201.149	30.23	2.40	34.96	47.51	45.18	74.00	-28.82	Pass	Vertical
1431.782	30.74	2.56	34.73	46.68	45.25	74.00	-28.75	Pass	Vertical
1846.834	31.47	2.79	34.40	46.20	46.06	74.00	-27.94	Pass	Vertical
4924.000	34.94	6.74	34.32	41.52	48.88	74.00	-25.12	Pass	Vertical
7386.000	36.44	8.50	34.90	39.30	49.34	74.00	-24.66	Pass	Vertical
9848.000	38.14	7.47	35.03	37.62	48.20	74.00	-25.80	Pass	Vertical

Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Freque	ency: 2412M	Hz	Rema	ark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		nit V/m)	Over Limit (dB)	Result	Antenna Polaxis
1179.935	30.18	2.39	34.99	47.08	44.66	74.	00	-29.34	Pass	Horizontal
1424.511	30.72	2.56	34.74	46.65	45.19	74.	00	-28.81	Pass	Horizontal
1638.585	31.12	2.68	34.56	46.40	45.64	74.	00	-28.36	Pass	Horizontal
4824.000	34.73	6.72	34.35	42.86	49.96	74.	00	-24.04	Pass	Horizontal
7236.000	36.42	8.38	34.90	38.35	48.25	74.	00	-25.75	Pass	Horizontal
9648.000	37.93	7.63	35.07	37.72	48.21	74.	00	-25.79	Pass	Horizontal
1213.441	30.26	2.41	34.95	47.45	45.17	74.	.00	-28.83	Pass	Vertical
1435.431	30.74	2.56	34.73	47.32	45.89	74.	.00	-28.11	Pass	Vertical
1634.419	31.12	2.68	34.56	46.18	45.42	74.	.00	-28.58	Pass	Vertical
4824.000	34.73	6.72	34.35	43.69	50.79	74.	.00	-23.21	Pass	Vertical
7236.000	36.42	8.38	34.90	38.73	48.63	74.	.00	-25.37	Pass	Vertical
9648.000	37.93	7.63	35.07	39.03	49.52	74.	00	-24.48	Pass	Vertical







Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Frequency: 2437MHz Remark: Peal						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Lir (dBµ'	nit V/m)	Over Limit (dB)	Result	Antenna Polaxis
1198.095	30.22	2.40	34.97	47.43	45.08	74.	00	-28.92	Pass	Horizontal
1453.818	30.78	2.57	34.71	46.54	45.18	74.	00	-28.82	Pass	Horizontal
1638.585	31.12	2.68	34.56	46.96	46.20	74.	00	-27.80	Pass	Horizontal
4874.000	34.84	6.73	34.33	43.14	50.38	74.	00	-23.62	Pass	Horizontal
7311.000	36.43	8.44	34.90	40.39	50.36	74.	00	-23.64	Pass	Horizontal
9748.000	38.03	7.55	35.05	37.49	48.02	74.	00	-25.98	Pass	Horizontal
1185.958	30.19	2.39	34.98	47.19	44.79	74.	.00	-29.21	Pass	Vertical
1435.431	30.74	2.56	34.73	46.23	44.80	74.	.00	-29.20	Pass	Vertical
1856.261	31.48	2.79	34.40	46.57	46.44	74.	00	-27.56	Pass	Vertical
4874.000	34.84	6.73	34.33	42.38	49.62	74.	.00	-24.38	Pass	Vertical
7311.000	36.43	8.44	34.90	39.60	49.57	74.	.00	-24.43	Pass	Vertical
9748.000	38.03	7.55	35.05	40.13	50.66	74.	.00	-23.34	Pass	Vertical

Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Frequ	ency: 2462M	Hz	Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		mit V/m)	Over Limit (dB)	Result	Antenna Polaxis
1188.980	30.20	2.39	34.98	47.32	44.93	74.	.00	-29.07	Pass	Horizontal
1453.818	30.78	2.57	34.71	46.48	45.12	74.	.00	-28.88	Pass	Horizontal
1842.139	31.46	2.79	34.41	46.81	46.65	74.	.00	-27.35	Pass	Horizontal
4924.000	34.94	6.74	34.32	41.77	49.13	74.	.00	-24.87	Pass	Horizontal
7386.000	36.44	8.50	34.90	40.43	50.47	74.	.00	-23.53	Pass	Horizontal
9848.000	38.14	7.47	35.03	37.36	47.94	74.	.00	-26.06	Pass	Horizontal
1204.210	30.24	2.41	34.96	47.06	44.75	74.	.00	-29.25	Pass	Vertical
1431.782	30.74	2.56	34.73	46.34	44.91	74.	.00	-29.09	Pass	Vertical
1856.261	31.48	2.79	34.40	46.60	46.47	74.	.00	-27.53	Pass	Vertical
4924.000	34.94	6.74	34.32	41.86	49.22	74.	.00	-24.78	Pass	Vertical
7386.000	36.44	8.50	34.90	37.92	47.96	74.	.00	-26.04	Pass	Vertical
9848.000	38.14	7.47	35.03	37.19	47.77	74.	.00	-26.23	Pass	Vertical













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			/								
Test mode:	Test mode: 802.11n(HT40)(13.5Mbp				bps) Test Frequency: 2422MHz Remark:						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Gair (dB	า ่	Read Level (dBµV)	Final test level (dBµV/m)		_imit BµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1195.049	30.21	2.40	34.9	7	47.18	44.82	7	4.00	-29.18	Pass	Horizontal
1439.090	30.75	2.57	34.7	3	46.14	44.73	7	4.00	-29.27	Pass	Horizontal
1642.761	31.13	2.68	34.5	6	47.00	46.25	7	4.00	-27.75	Pass	Horizontal
4904.000	34.90	6.74	34.3	3	43.39	50.70	7	4.00	-23.30	Pass	Horizontal
7356.000	36.44	8.48	34.9	0	40.88	50.90	50.90 74.0		-23.10	Pass	Horizontal
9808.000	38.10	7.50	35.0	4	37.61	48.17	74.00		-25.83	Pass	Horizontal
1204.210	30.24	2.41	34.9	6	47.91	45.60	74.00		-28.40	Pass	Vertical
1431.782	30.74	2.56	34.7	3	46.55	45.12	74.00		-28.88	Pass	Vertical
1659.574	31.16	2.69	34.5	4	46.36	45.67	7	4.00	-28.33	Pass	Vertical
4844.000	34.77	6.73	34.3	4	40.63	47.79	7	4.00	-26.21	Pass	Vertical
7266.000	36.43	8.40	34.9	0	38.37	48.30	7	4.00	-25.70	Pass	Vertical
9688.000	37.97	7.60	35.0	6	38.54	49.05	7	4.00	-24.95	Pass	Vertical

Test mode:	802.11n(HT	40)(13.5M	bps)	Tes	t Frequen	cy: 2437MH	Iz Remark: Peak				
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Ga (dE	in .	Read Level (dBµV)	Final test level (dBµV/m)		Limit BµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1195.049	30.21	2.40	34.9	97	47.94	45.58	7	74.00	-28.42	Pass	Horizontal
1642.761	31.13	2.68	34.	56	46.55	45.80	7	74.00	-28.20	Pass	Horizontal
2092.175	31.91	2.93	34.3	32	46.44	46.96	7	74.00	-27.04	Pass	Horizontal
4844.000	34.77	6.73	34.3	34	41.27	48.43	7	74.00	-25.57	Pass	Horizontal
7266.000	36.43	8.40	34.9	90	37.53	47.46	7	74.00	-26.54	Pass	Horizontal
9688.000	37.97	7.60	35.0	06	37.50	48.01) :	74.00	-25.99	Pass	Horizontal
1216.534	30.27	2.42	34.9	95	47.08	44.82	7	74.00	-29.18	Pass	Vertical
1413.674	30.70	2.55	34.	75	46.12	44.62	7	74.00	-29.38	Pass	Vertical
1856.261	31.48	2.79	34.4	40	45.77	45.64	7	74.00	-28.36	Pass	Vertical
4874.000	34.84	6.73	34.3	33	42.55	49.79	7	74.00	-24.21	Pass	Vertical
7311.000	36.43	8.44	34.9	90	39.90	49.87	7	74.00	-24.13	Pass	Vertical
9748.000	38.03	7.55	35.0)5	38.95	49.48	7	74.00	-24.52	Pass	Vertical













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Test mode:	802.11n(HT	40)(13.5N	/lbps)	Test Frequency: 2452MHz Remark: Peak						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Preamp Loss Gain (dB) (dB)		Read Level (dBµV)	Final test level (dBµV/m)	level (dB)		Over Limit (dB)	Result	Antenna Polaxis
1201.149	30.23	2.40	34.96	47.50	45.17	7	4.00	-28.83	Pass	Horizontal
1431.782	30.74	2.56	34.73	46.99	45.56	7	4.00	-28.44	Pass	Horizontal
1860.992	31.49	2.80	34.39	46.06	45.96	7	4.00	-28.04	Pass	Horizontal
4874.000	34.84	6.73	34.33	42.24	49.48	7	4.00	-24.52	Pass	Horizontal
7311.000	36.43	8.44	34.90	39.28	49.25	7	4.00	-24.75	Pass	Horizontal
9748.000	38.03	7.55	35.05	38.17	48.70	7	4.00	-25.30	Pass	Horizontal
1216.534	30.27	2.42	34.95	47.19	44.93	7	4.00	-29.07	Pass	Vertical
1663.803	31.17	2.70	34.54	46.03	45.36	7	4.00	-28.64	Pass	Vertical
1851.542	31.48	2.79	34.40	47.44	47.31	7	4.00	-26.69	Pass	Vertical
4904.000	34.90	6.74	34.33	42.93	50.24	7	4.00	-23.76	Pass	Vertical
7356.000	36.44	8.48	34.90	39.58	49.60	7	4.00	-24.40	Pass	Vertical
9808.000	38.10	7.50	35.04	37.34	47.90	7	4.00	-26.10	Pass	Vertical

Antenna 1 +Antenna 2

Test mode:	802.11n(HT	20)(6.5N	lbps)	Test Frequency: 2412MHz R				Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)	Lim (dBµ\	Limit		Result	Antenna Polaxis	
1204.210	30.24	2.41	34.96	47.55	45.24	74.0	00	-28.76	Pass	Horizontal	
1446.435	30.77	2.57	34.72	47.18	45.80	74.0	00	-28.20	Pass	Horizontal	
1851.542	31.48	2.79	34.40	46.19	46.06	74.0	00	-27.94	Pass	Horizontal	
4824.000	34.73	6.72	34.35	42.41	49.51	74.0	00	-24.49	Pass	Horizontal	
7236.000	36.42	8.38	34.90	38.54	48.44	74.0	00	-25.56	Pass	Horizontal	
9648.000	37.93	7.63	35.07	37.52	48.01	74.0	00	-25.99	Pass	Horizontal	
1198.095	30.22	2.40	34.97	46.98	44.63	74.0	00	-29.37	Pass	Vertical	
1446.435	30.77	2.57	34.72	45.65	44.27	74.0	00	-29.73	Pass	Vertical	
1856.261	31.48	2.79	34.40	45.74	45.61	74.0	00	-28.39	Pass	Vertical	
4824.000	34.73	6.72	34.35	43.31	50.41	74.0	00	-23.59	Pass	Vertical	
7236.000	36.42	8.38	34.90	38.50	48.40	74.0	00	-25.60	Pass	Vertical	
9648.000	37.93	7.63	35.07	39.13	49.62	74.00		-24.38	Pass	Vertical	







Test mode: 802.11n(HT20)(6.5Mbps)				Test Freque	ark: Peak					
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		Limit Over Limit (dB)		Result	Antenna Polaxis
1204.210	30.24	2.41	34.96	47.76	45.45	74.	.00	-28.55	Pass	Horizontal
1642.761	31.13	2.68	34.56	46.44	45.69	74.	.00	-28.31	Pass	Horizontal
4874.000	34.84	6.73	34.33	42.74	49.98	74.	.00	-24.02	Pass	Horizontal
5352.186	35.40	6.47	34.30	40.50	48.07	74.	.00	-25.93	Pass	Horizontal
7311.000	36.43	8.44	34.90	39.23	49.20	74.	.00	-24.80	Pass	Horizontal
9748.000	38.03	7.55	35.05	37.71	48.24	74.	.00	-25.76	Pass	Horizontal
1195.049	30.21	2.40	34.97	47.67	45.31	74	.00	-28.69	Pass	Vertical
1651.146	31.15	2.69	34.55	46.43	45.72	74	.00	-28.28	Pass	Vertical
1837.456	31.46	2.78	34.41	46.15	45.98	74	.00	-28.02	Pass	Vertical
4874.000	34.84	6.73	34.33	41.22	48.46	74	.00	-25.54	Pass	Vertical
7311.000	36.43	8.44	34.90	39.73	49.70	74	.00	-24.30	Pass	Vertical
9748.000	38.03	7.55	35.05	38.35	48.88	74	.00	-25.12	Pass	Vertical

Test mode:	802.11n(HT	20)(6.5N	1bps)	Test Frequency: 2462MHz F				Remark: Peak			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Final test level (dBµV/m)		mit Over Limit (dB)		Result	Antenna Polaxis	
1213.441	30.26	2.41	34.95	47.22	44.94	74.	.00	-29.06	Pass	Horizontal	
1442.758	30.76	2.57	34.72	46.45	45.06	74.	.00	-28.94	Pass	Horizontal	
1851.542	31.48	2.79	34.40	46.83	46.70	74.	.00	-27.30	Pass	Horizontal	
4924.000	34.94	6.74	34.32	42.52	49.88	74.	.00	-24.12	Pass	Horizontal	
7386.000	36.44	8.50	34.90	36.70	46.74	74.	.00	-27.26	Pass	Horizontal	
9848.000	38.14	7.47	35.03	36.62	47.20	74.	.00	-26.80	Pass	Horizontal	
1207.279	30.24	2.41	34.96	47.35	45.04	74.	.00	-28.96	Pass	Vertical	
1453.818	30.78	2.57	34.71	46.76	45.40	74.	.00	-28.60	Pass	Vertical	
1837.456	31.46	2.78	34.41	46.16	45.99	74.	.00	-28.01	Pass	Vertical	
4924.000	34.94	6.74	34.32	42.02	49.38	74.	.00	-24.62	Pass	Vertical	
7386.000	36.44	8.50	34.90	38.18	48.22	74.00		-25.78	Pass	Vertical	
9848.000	38.14	7.47	35.03	37.38	47.96	74.	.00	-26.04	Pass	Vertical	













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Test mode: 802.11n(HT40)(13.5Mbps)				Test Frequency: 2422MHz Remark: Pe							
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Gair (dB)	n .	Read Level (dBµV)	Final test level (dBµV/m)	Limit (dBµV/m)		Over Limit (dB)	Result	Antenna Polaxis
1201.149	30.23	2.40	34.9	6	47.27	44.94	7	4.00	-29.06	Pass	Horizontal
1417.277	30.71	2.55	34.7	5	46.23	44.74	7	4.00	-29.26	Pass	Horizontal
1851.542	31.48	2.79	34.4	0	46.06	45.93	7	4.00	-28.07	Pass	Horizontal
4844.000	34.77	6.73	34.3	4	42.88	50.04	7	4.00	-23.96	Pass	Horizontal
7266.000	36.43	8.40	34.9	0	37.93	47.86	7	4.00	-26.14	Pass	Horizontal
9688.000	37.97	7.60	35.0	6	36.84	47.35	7	4.00	-26.65	Pass	Horizontal
1213.441	30.26	2.41	34.9	5	46.90	44.62	7	4.00	-29.38	Pass	Vertical
1424.511	30.72	2.56	34.7	4	46.55	45.09	7	4.00	-28.91	Pass	Vertical
1832.785	31.45	2.78	34.4	1	46.60	46.42	7	4.00	-27.58	Pass	Vertical
4844.000	34.77	6.73	34.3	4	39.47	46.63	7	4.00	-27.37	Pass	Vertical
7266.000	36.43	8.40	34.9	0	36.59	46.52	7	4.00	-27.48	Pass	Vertical
9688.000	37.97	7.60	35.0	6	35.78	46.29	74.00		-27.71	Pass	Vertical

Test mode: 802.11n(HT40)(13.5Mbps)					Test Frequency: 2437MHz				Remark: Peak			
Frequency (MHz)	uency Factor Loss		oss Gai		Read Level (dBµV)	Final test level (dBµV/m)		Limit BµV/m)	Over Limit (dB)	Result	Antenna Polaxis	
1210.356	30.25	2.41	34.9	95	46.67	44.38	7	74.00	-29.62	Pass	Horizontal	
1613.749	31.08	2.67	34.	58	46.03	45.20	7	74.00	-28.80	Pass	Horizontal	
1842.139	31.46	2.79	34.4	41	46.62	46.46	7	74.00	-27.54	Pass	Horizontal	
4874.000	34.84	6.73	34.	33	41.79	49.03	7	74.00	-24.97	Pass	Horizontal	
7311.000	36.43	8.44	34.9	90	39.04	49.01	7	74.00	-24.99	Pass	Horizontal	
9748.000	38.03	7.55	35.0	05	40.06	50.59) :	74.00	-23.41	Pass	Horizontal	
1204.210	30.24	2.41	34.9	96	47.47	45.16	7	74.00	-28.84	Pass	Vertical	
1431.782	30.74	2.56	34.	73	46.84	45.41	7	74.00	-28.59	Pass	Vertical	
1842.139	31.46	2.79	34.4	41	45.94	45.78	7	74.00	-28.22	Pass	Vertical	
4874.000	34.84	6.73	34.3	33	43.51	50.75	7	74.00	-23.25	Pass	Vertical	
7311.000	36.43	8.44	34.9	90	39.33	49.30	7	74.00	-24.70	Pass	Vertical	
9748.000	38.03	7.55	35.0	05	37.34	47.87	7	74.00	-26.13	Pass	Vertical	















Test mode:	802.11n(HT	(lbps)	Test Frequer	ncy: 2452MH	k: Peak					
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Gain (dB)	Level	Final test level (dBµV/m)	Limit (dBµV/m)		∣ I imit		Antenna Polaxis
1210.356	30.25	2.41	34.95	5 46.60	44.31	7	4.00	-29.69	Pass	Horizontal
1617.862	31.09	2.67	34.58	45.87	45.05	7	4.00	-28.95	Pass	Horizontal
2060.463	31.84	2.91	34.31	1 44.45	44.89	7	4.00	-29.11	Pass	Horizontal
4904.000	34.90	6.74	34.33	3 42.07	49.38	7	4.00	-24.62	Pass	Horizontal
7356.000	36.44	8.48	34.90	38.29	48.31	7	4.00	-25.69	Pass	Horizontal
9808.000	38.10	7.50	35.04	35.55	46.11	7	4.00	-27.89	Pass	Horizontal
1198.095	30.22	2.40	34.97	7 47.65	45.30	7	4.00	-28.70	Pass	Vertical
1435.431	30.74	2.56	34.73	46.99	45.56	7	4.00	-28.44	Pass	Vertical
1856.261	31.48	2.79	34.40	46.63	46.50	7	4.00	-27.50	Pass	Vertical
4904.000	34.90	6.74	34.33	3 41.87	49.18	7	4.00	-24.82	Pass	Vertical
7356.000	36.44	8.48	34.90	38.64	48.66	7	4.00	-25.34	Pass	Vertical
9808.000	38.10	7.50	35.04	36.87	47.43	7	4.00	-26.57	Pass	Vertical

Note

- 1) Through Pre-scan transmitter mode with all kind of modulation and data rate, find the 11Mbps of rate is the worst case of 802.11b; 6Mbpsof rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40),and then Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

3) Scan from 9kHz to 25GHz, the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.











PHOTOGRAPHS OF TEST SETUP

Test Model No.: WF2A



Radiated spurious emission Test Setup-1(Below 30MHz)



Radiated spurious emission Test Setup-2(30MHz-1GHz)





































































































PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32I00114601 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

