

Application : Qualcomm Atheros, Inc.

Manufacturer 1700 Technology Drive, San Jose, CA95110

Equipment : Dual Band 2x2 MIMO 802.11ac/abgn WLAN plus BT

Brand Name : Qualcomm Atheros

Model No. : QCWB342

FCC ID : PPD-QCWB342

IC ID : 4104A-QCWB342

Standard : 47 CFR FCC Part 15.407

RSS-210 Issue 8

Operating Band : 5150 MHz - 5250 MHz

5250 MHz - 5350 MHz 5470 MHz - 5725 MHz

The product sample received on Feb. 20, 2013 and completely tested on May 17, 2013. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Wayne Hsu

Testing Laboratory 1190

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APPENDIX A. TEST PHOTOS

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Summary of Test Result

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			Conformance Test Specifications		
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
1.1.2	15.203	Antenna Requirement	Antenna connector mechanism complied	According to FCC 15.203	Complied
3.1	15.407(a) / RSS-210 A9.2	Emission Bandwidth	11a: 33.15 MHz HT20: 26.70 MHz HT40: 52.48 MHz VHT20: 25.27 MHz VHT40: 91.60 MHz VHT80: 109.30 MHz	Information only	Complied
3.13.2	15.407(a) / RSS-210 A9.2	Peak Power Spectral Density	5150-5250MHz: 3.86 dBm/MHz 5250-5350MHz: 8.12 dBm/MHz 5470-5725MHz: 8.09 dBm/MHz	5150-5250MHz:4 5250-5350MHz:11 5470-5725MHz:11	Complied
3.3	15.407(a) / RSS-210 A9.2	RF Output Power (Maximum Conducted Output Power)	5150-5250MHz: 16.37 dBm/MHz 5250-5350MHz: 18.08 dBm/MHz 5470-5725MHz: 18.30 dBm/MHz	5150-5250MHz:17 5250-5350MHz:24 5470-5725MHz:24	Complied
3.4	15.407(a)	Peak Excursion	9.36 dB	13 dB	Complied
3.5	15.407(b) / RSS-210 A9.2	Transmitter Band Edge Emissions	5350.00 MHz -27.08 dBm - PK -41.66 dBm - AV	According to FCC 15.209 / RSS-Gen 6.1	Complied
3.6	15.407(b) / RSS-210 A9.2	Transmitter Unwanted Emissions	10476.600 MHz -32.32 dBm - PK -42.50 dBm - AV	According to FCC 15.209 / RSS-Gen 6.1	Complied
3.7	15.207 / RSS-Gen 7.2.4	AC Power-line Conducted Emissions	17.110 MHz 36.91 dBuV - AV 42.70 dBuV - QP	According to 15.207 / RSS-Gen 7.2.4	Complied

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Revision History

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Report No.	Version	Description	Issued Date
FR322814AN	Rev. 01	Initial issue of report	May 24, 2013
FR322814AN	Rev. 02	Add channel (5610MHz) in Band 3 for IEEE 802.11 ac VHT80 to section 1.1.1 .	Jun. 05, 2013
FR322814AN	Rev. 03	Addition information operating passive scan frequency bands in clause 1.1.1.	Jul. 03, 2013

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1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)	Co-location
	а	5180, 5200, 5220, 5240	4	2	14.56	N/A
	n(HT20)	5180, 5200, 5220, 5240	4	2	15.29	N/A
5150-5250	n(HT40)	5190, 5230	2	2	16.24	N/A
	ac(VHT20)	5180, 5200, 5220, 5240	4	2	15.31	N/A
	ac(VHT40)	5190, 5230	2	2	16.22	N/A
	ac(VHT80)	5210	1	2	12.50	N/A
	а	5260, 5280, 5300, 5320	4	2	18.08	N/A
	n(HT20)	5260, 5280, 5300, 5320	4	2	17.14	N/A
5250-5350	n(HT40)	5270, 5310	2	2	16.21	N/A
	ac(VHT20)	5260, 5280, 5300, 5320	4	2	17.23	N/A
	ac(VHT40)	5270, 5310	2	2	16.01	N/A
	ac(VHT80)	5290	1	2	11.43	N/A
	а	5500, 5520, 5540, 5560, 5580, 5600, 5620, 5640, 5660, 5680, 5700, 5720	12	2	18.24	N/A
	n(HT20)	5500, 5520, 5540, 5560, 5580, 5600, 5620, 5640, 5660, 5680, 5700, 5720	12	2	17.24	N/A
5470-5725	n(HT40)	5510, 5550, 5590, 5630, 5670, 5710	6	2	16.23	N/A
	ac(VHT20)	5500, 5520, 5540, 5560, 5580, 5600, 5620, 5640, 5660, 5680, 5700, 5720	12	2	17.18	N/A
	ac(VHT40)	5510, 5550, 5590, 5630, 5670, 5710	6	2	16.24	N/A
	ac(VHT80)	5530, 5610, 5690	3	2	14.05	N/A

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Note 1: RF output power specifies these are Maximum Conducted Output Power.

Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.

Note 5 : For FCC: The listed channels in the DFS band (5250~5350MHz and 5470~5725MHz) are passive scan only.

Note 6 : For IC: The listed channels in the DFS band (5250~5350MHz and 5470~5725MHz) are passive scan only. The device will not operate in 5600~5650MHz band.



1.1.2 WLAN/ BT coexistence mode

◆ 1X1 WLAN + BT: WLAN/BT concurrent at different antenna port and 18MHz separation between WLAN and BT fundamental.

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• 2X2 WLAN + BT: 5GHz 802.11a/an (or 11ac) transmit concurrent with BT. - 2.4GHz WLAN + BT is timely shared coexistence.

1.1.3 Antenna Information

	Antenna Category						
\boxtimes	External antenna (dedicated antennas)						
	□ RF connector provided						
	☐ Unique antenna connector. (e.g., MMCX, U.FL, IPX, and RP-SMA, RP-N type)						
		Standard antenna connector. (e.g., SMA, N, BNC, and TNC type)					

	Antenna General Information							
No. Ant. Type Frequency Band Maximum Gain (dBi)								
		5150 MHz ~ 5250 MHz	3.08					
1	1 PIFA	5250 MHz ~ 5350 MHz	3.08					
		5470 MHz ~ 5725 MHz	4.76					

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Frequenc	Frequency Band (5250 MHz ~ 5350 MHz)						
Directional Gain (DG) Result							
Transmit Chains No.	Transmit Chains No. 1 2						
Maximum G _{ANT} (dBi)	3.	08		3.0	08		
Modulation Mode	N _{TX}	N _{SS} (Min.)	Array Gain (dB)	Power DG (dBi) Note ⁴	Array Gain (dB)	PSD DG (dBi) Note⁵	
11a,6-54Mbps	2	1	0	3.08	3.01	6.09	
HT20,M0-15	2	1	0	3.08	3.01	6.09	
HT40,M0-M15	2	1	0	3.08	3.01	6.09	
VHT20,M10-18	2	1	0	3.08	3.01	6.09	
VHT40,M0-19	2	1	0	3.08	3.01	6.09	
VHT80,M0-19	2	1	0	3.08	3.01	6.09	

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:

 Any transmit signals are correlated, Directional Gain = 10 log[(10^{G1/20} +... + 10^{GN/20})² /N_{TX}]

 All transmit signals are completely uncorrelated, Directional Gain = 10 log[(10^{G1/10} +... + 10^{GN/10})/N_{TX}]
- Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;
- Array Gain = 0 dB (i.e., no array gain) for channel widths \geq 40 MHz for any N_{TX}; Note 5: For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

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Frequency Band (5400 MHz ~ 5725 MHz)							
Directional Gain (DG) Result							
Transmit Chains No. 1 2							
Maximum G _{ANT} (dBi)	4	.76		4.	76		
Modulation Mode	N _{TX}	N _{SS} (Min.)	Array Gain (dB)	Power DG (dBi) Note ⁴	Array Gain (dB)	PSD DG (dBi) Note⁵	
11a,6-54Mbps	2	1	0	4.76	3.01	7.77	
HT20,M0-15	2	1	0	4.76	3.01	7.77	
HT40,M0-M15	2	1	0	4.76	3.01	7.77	
VHT20,M10-18	2	1	0	4.76	3.01	7.77	
VHT40,M0-19	2	1	0	4.76	3.01	7.77	
VHT80,M0-19	2	1	0	4.76	3.01	7.77	

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:

 Any transmit signals are correlated, Directional Gain = 10 log[(10^{G1/20} +... + 10^{GN/20})² /N_{TX}]

 All transmit signals are completely uncorrelated, Directional Gain = 10 log[(10^{G1/10} +... + 10^{GN/10})/N_{TX}]
- Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$; Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{TX} ;
- Note 5: For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

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1.1.4 Test Signal Duty Cycle

Operated Mode for Duty Cycle					
Operated normally mode for duty cycle					
○ Operated test mode for duty cycle					
Test Signal Duty Cycle (x) Power Duty Factor [dB] – (10 log 1/x)					
	0.06				
	0.07				
□ 96.97% - IEEE 802.11n (HT40)	0.13				
□ 98.26% - IEEE 802.11ac (VHT20)	0.08				
□ 98.58% - IEEE 802.11ac (VHT40)	0.06				
□ 94.12% - IEEE 802.11ac (VHT80)	0.26				

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1.1.5 EUT Operational Condition

Supply Voltage	☐ AC mains	□ DC	
Type of DC Source	☐ Internal DC supply		☐ Battery

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1.2 Support Equipment

Support Equipment - Conducted Emissions							
No.	Equipment	Brand Name	Model Name	Serial No.			
1	Notebook	DELL	VOSTR3450	DoC			
2	(USB) Mouse	Microsoft	1113	DoC			
3	(USB) Printer	EPSON	C61	DoC			
4	Bluetooth Earphone	SONY	HBH-PV702				
5	Test Fixture						
6	Wireless AP (Remote Workstation)	D-LINK	DNS-G120	DoC			

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	Support Equipment - Radiated Emissions										
No.	Equipment	Brand Name	Model Name	Serial No.							
1	Notebook	DELL	E5520	DoC							
2	Test Fixture										
3	50Ω Terminal										

1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15 Subpar E 15.407
- RSS-210 Issue 8
- RSS-GEN Issue 3
- ANSI C63.10-2009
- FCC KDB 789033
- FCC KDB 763033
 FCC KDB 662911
- FCC KDB 412172
- FCC KDB 644545 D01

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1.4 Testing Location Information

	Testing Location										
	HWA YA	VA YA ADD : No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.									
	TEL: 886-3-327-3456 FAX: 886-3-327-0973										
Т	est Condition	on	Test Site No.	Test Engineer	Test Environment	Test Date					
Α	C Conduction	on	CO04-HY	Zeus	19.8°C / 61%	May 17, 2013					
RF Conducted TH01-HY Ian 24.7°C / 64% Apr. 24, 2013~ May 03,											
Radiated Emission 03CH02-HY Hsiao 23.9°C / 64% Apr. 26, 2013~ May 18, 2											

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1.5 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

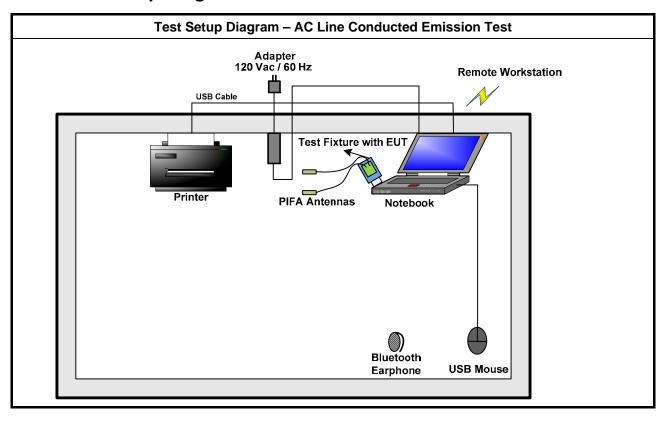
	Measurement Uncertainty	1	
Test Item	Uncertainty	Limit	
AC power-line conducted emissions	±2.26 dB	N/A	
Emission bandwidth		±1.42 %	N/A
RF output power, conducted		±0.63 dB	N/A
Power density, conducted	±0.81 dB	N/A	
Unwanted emissions, conducted	30 – 1000 MHz	±0.51 dB	N/A
	1 – 18 GHz	±0.67 dB	N/A
	18 – 40 GHz	±0.83 dB	N/A
	40 – 200 GHz	N/A	N/A
All emissions, radiated	30 – 1000 MHz	±2.56 dB	N/A
	1 – 18 GHz	±3.59 dB	N/A
	18 – 40 GHz	±3.82 dB	N/A
	40 – 200 GHz	N/A	N/A
Temperature	<u>, </u>	±0.8 °C	N/A
Humidity		±3 %	N/A
DC and low frequency voltages	±3 %	N/A	
Time		±1.42 %	N/A
Duty Cycle		±1.42 %	N/A

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2 Test Configuration of EUT

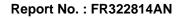
2.1 Test Setup Diagram

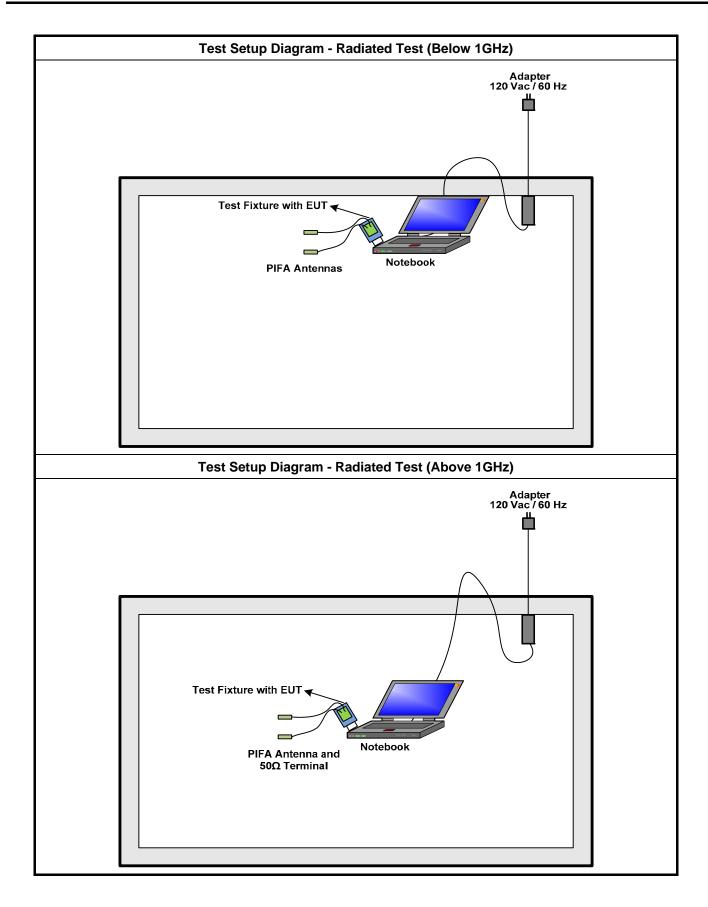


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3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Test Procedures

		Test Method									
\boxtimes	Fort	the emission bandwidth shall be measured using one of the options below:									
	\boxtimes	Refer as FCC KDB 789033, clause D for EBW measurement.									
		Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.									
	\boxtimes	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.									
\boxtimes	For	conducted measurement.									
		The EUT supports single transmit chain and measurements performed on this transmit chain.									
		The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst cas	se.								
	\boxtimes	The EUT supports multiple transmit chains using options given below:									
		Option 1: Multiple transmit chains measurements need to be performed on one of the act transmit chains (antenna outputs). All measurement had be performed on transmit chains ?									
		Option 2: Multiple transmit chains measurements need to be performed on each trans chains individually (antenna outputs). All measurement had be performed on all trans chains.									

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3.1.2 Test Setup

Emission Bandwidth	
Spectrum Analyzer	ЈТ

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3.1.3 Test Result of Emission Bandwidth

	UNII Emission Bandwidth Result (5150-5250MHz band)										
Condit	tion			Emission Bandwidth (MHz)							
Modulation N		Freq.	99% Ba	ndwidth	26dB Ba	ndwidth	Powe	r Limit			
Mode	N _{TX}	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2	99% BW	26dB BW			
11a_6Mbps	2	5180	16.86	16.84	24.25	23.67	16.26	17.74			
11a_6Mbps	2	5220	16.61	16.64	20.92	22.70	16.20	17.21			
11a_6Mbps	2	5240	16.79	16.81	21.40	20.62	16.25	17.14			
HT-20_MCS0	2	5180	18.11	17.71	23.47	23.32	16.48	17.68			
HT-20_MCS0	2	5220	17.71	17.71	23.00	23.35	16.48	17.62			
HT-20_MCS0	2	5240	17.94	18.04	23.35	23.90	16.54	17.68			
HT-40_MCS0	2	5190	36.74	37.02	50.20	50.36	19.65	21.01			
HT-40_MCS0	2	5230	36.94	36.82	49.64	50.48	19.66	20.96			
VHT-20_MCS0	2	5180	18.09	18.06	24.72	25.20	16.57	17.93			
VHT-20_MCS0	2	5220	17.69	17.64	22.37	22.80	16.46	17.50			
VHT-20_MCS0	2	5240	17.86	17.96	23.92	23.17	16.52	17.65			
VHT-40_MCS0	2	5190	37.06	36.98	50.60	49.76	19.68	20.97			
VHT-40_MCS0	2	5230	36.78	37.06	48.12	48.92	19.66	20.82			
VHT-80_MCS0	2	5210	76.04	76.28	102.24	101.36	22.81	24.06			
Resu	ılt				Com	plied					

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	UNII Emission Bandwidth Result (5250-5350MHz band)											
Condit	ion			Emission Bandwidth (MHz)								
Modulation	N _{TX}	Freq.	99% Ba	ndwidth	26dB Ba	ndwidth	Powe	r Limit				
Mode	INTX	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2	99% BW	26dB BW				
11a_6Mbps	2	5260	16.71	17.01	26.35	25.60	23.23	25.08				
11a_6Mbps	2	5300	17.39	17.19	28.17	26.82	23.35	25.28				
11a_6Mbps	2	5320	17.66	18.49	29.85	29.70	23.47	25.73				
HT-20_MCS0	2	5260	17.74	17.99	23.00	22.82	23.49	24.58				
HT-20_MCS0	2	5300	17.96	17.96	25.15	25.10	23.54	25.00				
HT-20_MCS0	2	5320	18.34	18.16	25.87	26.12	23.59	25.13				
HT-40_MCS0	2	5270	37.10	37.02	51.92	52.40	26.68	28.15				
HT-40_MCS0	2	5310	36.90	36.94	48.48	48.48	26.67	27.86				
VHT-20_MCS0	2	5260	17.81	17.94	22.85	22.90	23.51	24.59				
VHT-20_MCS0	2	5300	17.94	18.11	23.20	23.25	23.54	24.65				
VHT-20_MCS0	2	5320	17.96	17.99	24.37	24.15	23.54	24.83				
VHT-40_MCS0	2	5270	36.90	36.82	51.44	51.32	26.66	28.10				
VHT-40_MCS0	2	5310	36.98	36.94	50.72	51.44	26.67	28.05				
VHT-80_MCS0	2	5290	76.12	76.20	95.28	95.76	29.81	30.79				
Resu	ılt				Com	plied						

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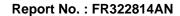
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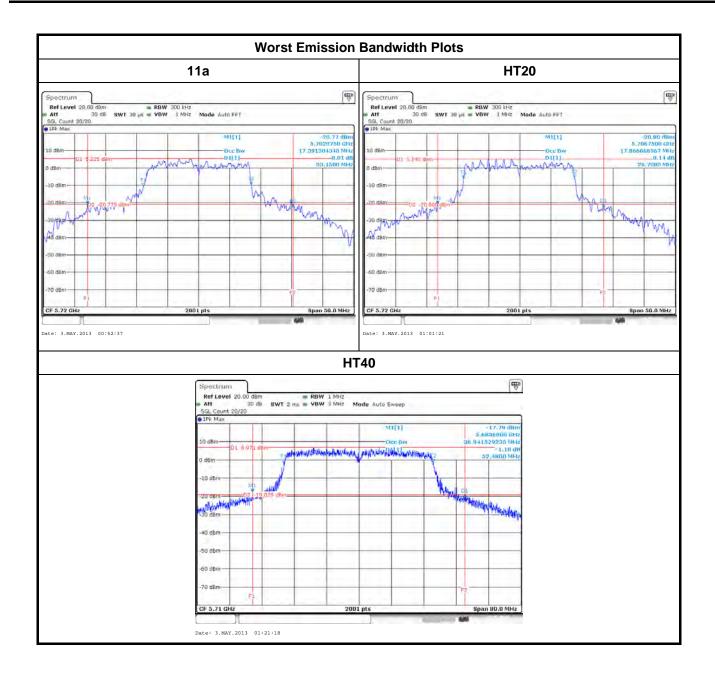


	UNII Emission Bandwidth Result (5470-5725MHz band)										
Condi	tion		Emission Bandwidth (MHz)								
Modulation	N _{TX}	Freq.	99% Ba	ndwidth	26dB Bandwidth		Power Limit				
Mode	INTX	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2	99% BW	26dB BW			
11a_6Mbps	2	5500	16.99	16.66	24.45	23.62	23.22	24.73			
11a_6Mbps	2	5580	16.66	16.71	21.47	22.57	23.22	24.32			
11a_6Mbps	2	5700	16.84	16.91	22.10	23.95	23.26	24.44			
11a_6Mbps	2	5720	17.39	17.24	33.15	33.07	23.37	26.19			
HT-20_MCS0	2	5500	17.66	18.09	23.62	23.90	23.47	24.73			
HT-20_MCS0	2	5580	18.26	17.71	25.30	24.00	23.48	24.80			
HT-20_MCS0	2	5700	17.99	17.89	24.25	24.77	23.53	24.85			
HT-20_MCS0	2	5720	17.86	18.01	26.70	26.70	23.52	25.27			
HT-40_MCS0	2	5510	36.78	36.74	47.88	48.36	26.65	27.80			
HT-40_MCS0	2	5550	36.90	36.78	48.28	48.52	26.66	27.84			
HT-40_MCS0	2	5670	36.82	36.86	51.04	51.48	26.66	28.08			
HT-40_MCS0	2	5710	36.94	36.78	52.48	51.24	26.66	28.10			
VHT-20_MCS0	2	5500	18.69	18.64	24.97	25.27	23.70	24.97			
VHT-20_MCS0	2	5580	17.89	18.14	23.42	23.12	23.53	24.64			
VHT-20_MCS0	2	5700	17.91	17.76	23.42	23.57	23.49	24.70			
VHT-20_MCS0	2	5720	17.91	18.04	23.95	22.62	23.53	24.54			
VHT-40_MCS0	2	5510	36.78	36.66	48.40	47.48	26.64	27.77			
VHT-40_MCS0	2	5550	36.78	36.82	49.56	49.08	26.66	27.91			
VHT-40_MCS0	2	5670	36.78	36.78	48.28	48.28	26.66	27.84			
VHT-40_MCS0	2	5710	51.82	53.37	90.10	91.60	28.14	30.55			
VHT-80_MCS0	2	5530	76.04	76.20	101.04	100.32	29.81	31.01			
VHT-80_MCS0	2	5690	76.16	76.26	109.30	109.10	29.82	31.38			
Resu	ılt				Com	plied					

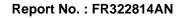
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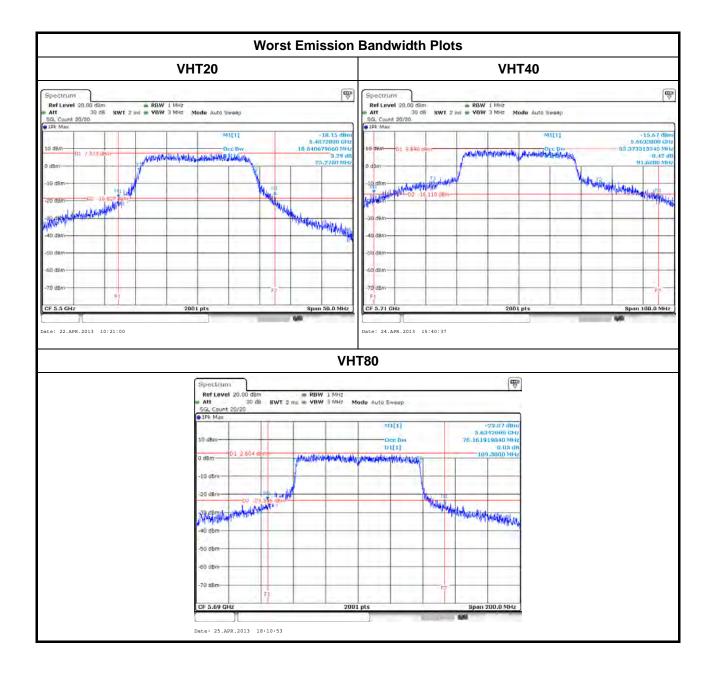
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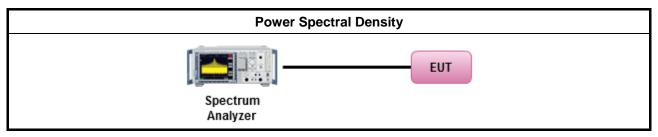
3.2 Peak Power Spectral Density

3.2.1 Test Procedures

		Test Method
	outp func	k power spectral density procedures that the same method as used to determine the conducted ut power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density be measured using below options:
		Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
	[duty	/ cycle ≥ 98% or external video / power trigger]
	\boxtimes	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
	\boxtimes	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
\boxtimes	For	conducted measurement.
		The EUT supports single transmit chain and measurements performed on this transmit chain.
		The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
	\boxtimes	The EUT supports multiple transmit chains using options given below:
		Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
		Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
		If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $
	\boxtimes	Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots.

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3.2.2 Test Setup



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3.2.3 Test Result of Peak Power Spectral Density

	Peak Power Spectral Density Result (5150-5250MHz band)										
Condi	tion			Peak Power Spectral Density (dBm/MHz)							
Modulation Mode	N _{TX}	Freq. (MHz)	Sum Chain	PSD Limit	DG (dBi)	EIRP PSD	EIRP Limit				
11a_6Mbps	2	5180	3.32	3.91	6.09	9.41	10.00				
11a_6Mbps	2	5220	3.37	3.91	6.09	9.46	10.00				
11a_6Mbps	2	5240	3.86	3.91	6.09	9.95	10.00				
HT-20_MCS0	2	5180	3.58	3.91	6.09	9.67	10.00				
HT-20_MCS0	2	5220	3.85	3.91	6.09	9.94	10.00				
HT-20_MCS0	2	5240	3.74	3.91	6.09	9.83	10.00				
HT-40_MCS0	2	5190	1.03	3.91	6.09	7.12	10.00				
HT-40_MCS0	2	5230	1.69	3.91	6.09	7.78	10.00				
VHT-20_MCS0	2	5180	3.51	3.91	6.09	9.60	10.00				
VHT-20_MCS0	2	5220	3.80	3.91	6.09	9.89	10.00				
VHT-20_MCS0	2	5240	3.57	3.91	6.09	9.66	10.00				
VHT-40_MCS0	2	5190	0.45	3.91	6.09	6.54	10.00				
VHT-40_MCS0	2	5230	1.90	3.91	6.09	7.99	10.00				
VHT-80_MCS0	2	5210	-5.29	3.91	6.09	0.80	10.00				
Resu	ılt				Complied						

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Peak Power Spectral Density Result (5250-5350MHz band)										
Condi	tion			Peak Power Spectral Density (dBm/MHz)						
Modulation Mode	N _{TX}	Freq. (MHz)	Sum Chain	PSD Limit	DG (dBi)	EIRP PSD	EIRP Limit			
11a_6Mbps	2	5260	7.82	10.91	6.09	13.91	17.00			
11a_6Mbps	2	5300	8.12	10.91	6.09	14.21	17.00			
11a_6Mbps	2	5320	7.97	10.91	6.09	14.06	17.00			
HT-20_MCS0	2	5260	6.45	10.91	6.09	12.54	17.00			
HT-20_MCS0	2	5300	6.10	10.91	6.09	12.19	17.00			
HT-20_MCS0	2	5320	6.04	10.91	6.09	12.13	17.00			
HT-40_MCS0	2	5270	4.22	10.91	6.09	10.31	17.00			
HT-40_MCS0	2	5310	-0.22	10.91	6.09	5.87	17.00			
VHT-20_MCS0	2	5260	6.28	10.91	6.09	12.37	17.00			
VHT-20_MCS0	2	5300	6.07	10.91	6.09	12.16	17.00			
VHT-20_MCS0	2	5320	6.15	10.91	6.09	12.24	17.00			
VHT-40_MCS0	2	5270	3.77	10.91	6.09	9.86	17.00			
VHT-40_MCS0	2	5310	-0.21	10.91	6.09	5.88	17.00			
VHT-80_MCS0	2	5290	-6.05	10.91	6.09	0.04	17.00			
Resu	ılt				Complied					

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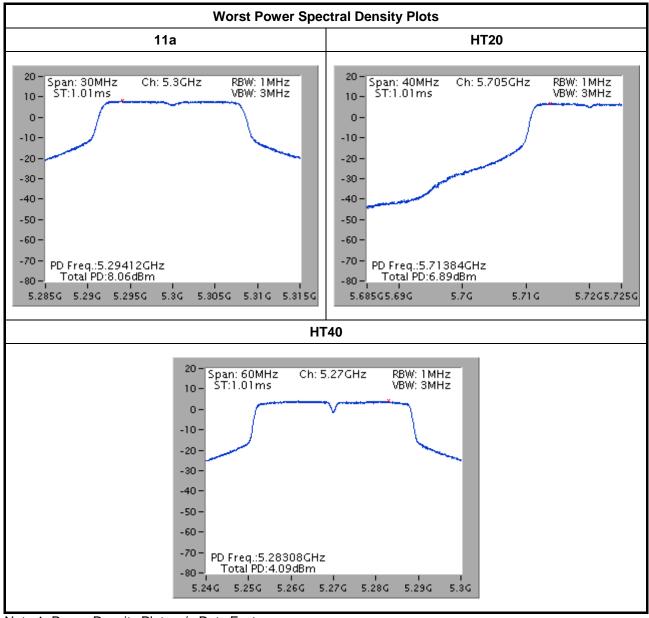


	P	eak Powe	r Spectral Der	nsity Result (5	470-5725MHz	band)			
Condi	tion		Peak Power Spectral Density (dBm/MHz)						
Modulation Mode	N _{TX}	Freq. (MHz)	Sum Chain	PSD Limit	DG (dBi)	EIRP PSD	EIRP Limit		
11a_6Mbps	2	5500	7.19	9.23	7.77	14.96	17.00		
11a_6Mbps	2	5580	7.34	9.23	7.77	15.11	17.00		
11a_6Mbps	2	5700	6.92	9.23	7.77	14.69	17.00		
11a_6Mbps	2	5720	8.09	9.23	7.77	15.86	17.00		
HT-20_MCS0	2	5500	5.87	9.23	7.77	13.64	17.00		
HT-20_MCS0	2	5580	6.71	9.23	7.77	14.48	17.00		
HT-20_MCS0	2	5700	6.73	9.23	7.77	14.50	17.00		
HT-20_MCS0	2	5720	6.96	9.23	7.77	14.73	17.00		
HT-40_MCS0	2	5510	-1.38	9.23	7.77	6.39	17.00		
HT-40_MCS0	2	5550	3.68	9.23	7.77	11.45	17.00		
HT-40_MCS0	2	5670	3.31	9.23	7.77	11.08	17.00		
HT-40_MCS0	2	5710	2.96	9.23	7.77	10.73	17.00		
VHT-20_MCS0	2	5500	6.69	9.23	7.77	14.46	17.00		
VHT-20_MCS0	2	5580	6.67	9.23	7.77	14.44	17.00		
VHT-20_MCS0	2	5700	6.66	9.23	7.77	14.43	17.00		
VHT-20_MCS0	2	5720	6.56	9.23	7.77	14.33	17.00		
VHT-40_MCS0	2	5510	-2.13	9.23	7.77	5.64	17.00		
VHT-40_MCS0	2	5550	3.41	9.23	7.77	11.18	17.00		
VHT-40_MCS0	2	5670	3.40	9.23	7.77	11.17	17.00		
VHT-40_MCS0	2	5710	3.29	9.23	7.77	11.06	17.00		
VHT-80_MCS0	2	5530	-7.53	9.23	7.77	0.24	17.00		
VHT-80_MCS0	2	5690	0.15	9.23	7.77	7.92	17.00		
Resu	ult				Complied				

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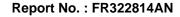


Note 1: Power Density Plots w/o Duty Factor

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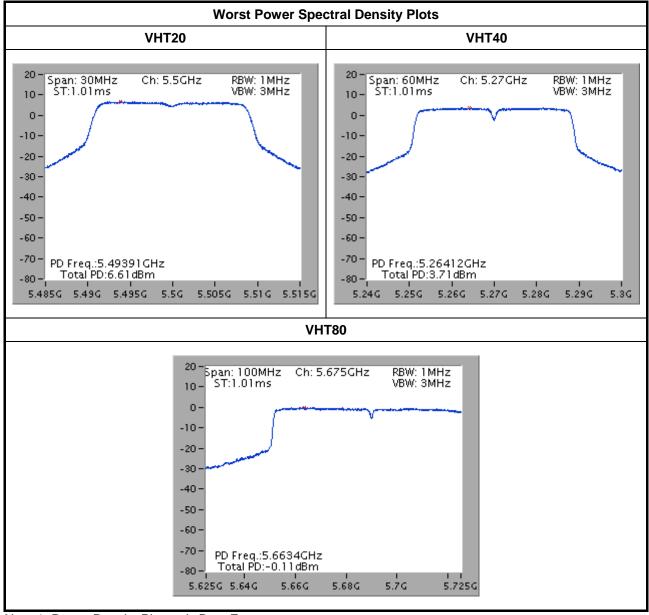
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Note 1: Power Density Plots w/o Duty Factor



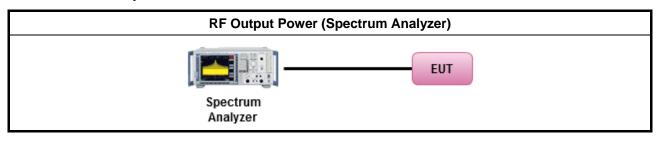
3.3 RF Output Power

3.3.1 Test Procedures

		Test Method									
\boxtimes	Max	imum Conducted Output Power									
	[duty	cycle ≥ 98% or external video / power trigger]									
	\boxtimes	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).									
		Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)									
	duty	cycle < 98% and average over on/off periods with duty factor									
	\boxtimes	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).									
		Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)									
	Wideband RF power meter and average over on/off periods with duty factor										
		Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter).									
\boxtimes	For	conducted measurement.									
		The EUT supports single transmit chain and measurements performed on this transmit chain.									
		The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.									
	\boxtimes	The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.									
	\boxtimes	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$									

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3.3.2 Test Setup



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3.3.3 Test Result of Maximum Average Conducted Output Power

	Maxim	num Aver	age Cond	ucted Out	put Power	(5150-52	50MHz ban	d)	
Condi	tion				RF Out	put Powe	r (dBm)		
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11a_6Mbps	2	5180	11.10	11.79	14.47	17.00	3.08	17.55	22.26
11a_6Mbps	2	5220	11.71	11.37	14.56	17.00	3.08	17.64	22.20
11a_6Mbps	2	5240	11.33	11.44	14.40	17.00	3.08	17.48	22.25
HT-20_MCS0	2	5180	11.76	12.42	15.11	17.00	3.08	18.19	22.48
HT-20_MCS0	2	5220	12.12	12.43	15.29	17.00	3.08	18.37	22.48
HT-20_MCS0	2	5240	11.95	12.13	15.05	17.00	3.08	18.13	22.54
HT-40_MCS0	2	5190	12.51	12.52	15.53	17.00	3.08	18.61	23.00
HT-40_MCS0	2	5230	13.30	13.15	16.24	17.00	3.08	19.32	23.00
VHT-20_MCS0	2	5180	11.72	12.02	14.88	17.00	3.08	17.96	22.57
VHT-20_MCS0	2	5220	12.30	12.31	15.31	17.00	3.08	18.39	22.46
VHT-20_MCS0	2	5240	12.33	11.49	14.94	17.00	3.08	18.02	22.52
VHT-40_MCS0	2	5190	11.90	12.31	15.12	17.00	3.08	18.20	23.00
VHT-40_MCS0	2	5230	13.38	13.02	16.22	17.00	3.08	19.30	23.00
VHT-80_MCS0	2	5210	9.58	9.40	12.50	17.00	3.08	15.58	23.00
Resi	ult					Complied			

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	Maxim	num Aver	age Cond	ucted Out	put Power	(5250-53	50MHz ban	d)	
Condi	tion				RF Out	put Powe	r (dBm)		
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11a_6Mbps	2	5260	15.52	14.40	18.01	24.00	3.08	21.09	29.23
11a_6Mbps	2	5300	15.54	14.53	18.08	24.00	3.08	21.16	29.35
11a_6Mbps	2	5320	15.25	14.26	17.80	24.00	3.08	20.88	29.47
HT-20_MCS0	2	5260	14.58	13.49	17.08	24.00	3.08	20.16	29.49
HT-20_MCS0	2	5300	14.49	13.75	17.14	24.00	3.08	20.22	29.54
HT-20_MCS0	2	5320	14.42	13.69	17.08	24.00	3.08	20.16	29.59
HT-40_MCS0	2	5270	13.75	12.55	16.21	24.00	3.08	19.29	30.00
HT-40_MCS0	2	5310	11.89	10.77	14.38	24.00	3.08	17.46	30.00
VHT-20_MCS0	2	5260	14.63	13.56	17.13	24.00	3.08	20.21	29.51
VHT-20_MCS0	2	5300	14.69	13.69	17.23	24.00	3.08	20.31	29.54
VHT-20_MCS0	2	5320	14.63	13.76	17.22	24.00	3.08	20.30	29.54
VHT-40_MCS0	2	5270	13.42	12.52	16.01	24.00	3.08	19.09	30.00
VHT-40_MCS0	2	5310	12.84	11.86	15.39	24.00	3.08	18.47	30.00
VHT-80_MCS0	2	5290	8.61	8.21	11.43	24.00	3.08	14.51	30.00
Resu	ılt					Complied	1		

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	Maxim	num Aver	age Cond	ucted Out	out Power	(5470-572	25MHz ban	d)	
Condi	tion				RF Out	put Powe	r (dBm)		
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11a_6Mbps	2	5500	15.11	14.98	18.06	24.00	4.76	22.82	29.22
11a_6Mbps	2	5580	15.02	15.42	18.24	24.00	4.76	23.00	29.22
11a_6Mbps	2	5700	14.67	15.47	18.10	24.00	4.76	22.86	29.26
11a_6Mbps	2	5720	16.03	14.17	18.21	24.00	4.76	22.97	29.37
HT-20_MCS0	2	5500	14.01	14.03	17.03	24.00	4.76	21.79	29.47
HT-20_MCS0	2	5580	13.82	14.57	17.22	24.00	4.76	21.98	29.48
HT-20_MCS0	2	5700	13.77	14.48	17.15	24.00	4.76	21.91	29.53
HT-20_MCS0	2	5720	15.09	13.15	17.24	24.00	4.76	22.00	29.52
HT-40_MCS0	2	5510	9.89	9.99	12.95	24.00	4.76	17.71	30.00
HT-40_MCS0	2	5550	12.55	13.41	16.02	24.00	4.76	20.78	30.00
HT-40_MCS0	2	5670	12.85	13.23	16.06	24.00	4.76	20.82	30.00
HT-40_MCS0	2	5710	14.13	12.05	16.23	24.00	4.76	20.99	30.00
VHT-20_MCS0	2	5500	13.96	14.29	17.13	24.00	4.76	21.91	29.70
VHT-20_MCS0	2	5580	13.70	14.60	17.18	24.00	4.76	21.94	29.53
VHT-20_MCS0	2	5700	13.52	14.47	17.03	24.00	4.76	21.79	29.49
VHT-20_MCS0	2	5720	13.57	14.36	16.99	24.00	4.76	21.75	29.53
VHT-40_MCS0	2	5510	9.25	9.36	12.32	24.00	4.76	17.08	30.00
VHT-40_MCS0	2	5550	12.67	13.73	16.24	24.00	4.76	21.00	30.00
VHT-40_MCS0	2	5670	12.77	13.51	16.17	24.00	4.76	20.93	30.00
VHT-40_MCS0	2	5710	11.77	13.83	15.93	24.00	4.76	20.69	30.00
VHT-80_MCS0	2	5530	6.80	6.67	9.75	24.00	4.76	14.51	30.00
VHT-80_MCS0	2	5690	10.46	11.54	14.05	24.00	4.76	18.81	30.00
Resu	ılt					Complied			

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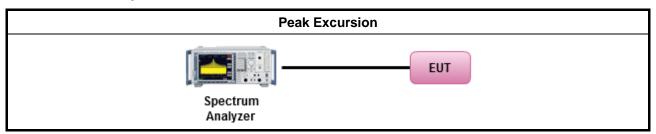
3.4 Peak Excursion

3.4.1 Test Procedures

	Test Method								
\boxtimes	Refer as FCC KDB 789033, clause G peak excursion method.								
\boxtimes	Testing each modulation mode on a single channel is sufficient to demonstrate compliance with the peak excursion requirement								
\boxtimes	For conducted measurement.								
	☐ Testing a single output port is sufficient to demonstrate compliance with the peak excursion.								

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3.4.2 Test Setup



3.4.3 Test Result of Peak Excursion

	UNII Peak Excursion Result (5150-5250MHz band)												
Condi	tion		Peak Excursion (dB)										
		Freq. (MHz)	BPSK	QPSK	16QAM	64QAM	256QAM	Limit					
11a_6Mbps	2	5180	8.21	6.95	7.05	7.85	-	13.0					
HT-20_MCS0	2	5180	7.98	7.65	7.82	8.20	-	13.0					
HT-40_MCS0	2	5190	8.15	7.91	8.52	9.07	-	13.0					
VHT-20_MCS0	2	5180	7.69	7.25	8.50	8.52	7.86	13.0					
VHT-40_MCS0	2	5190	7.89	7.64	8.07	8.40	7.23	13.0					
VHT-80_MCS0	2	5210	7.72	8.62	8.14	9.24	9.36	13.0					
Resu	ılt				Com	plied							

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3.5 Transmitter Band Edge Emissions

3.5.1 Test Procedures

		Test Method
	perfo equi extra dista mea	asurements may be performed at a distance other than the limit distance provided they are not formed in the near field and the emissions to be measured can be detected by the measurement ipment. When performing measurements at a distance other than that specified, the results shall be appolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ance for field-strength measurements, inverse of linear distance-squared for power-density asurements). Measurements in the bandedge are typically made at a closer distance 1m, because instrumentation noise floor is typically close to the radiated emission limit.
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
\boxtimes		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	char will d at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency nnel at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel ower-band and highest frequency channel at higher-band in-band emissions will consist of two acent contiguous bands.)
		Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
'		Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.825 GHz band (higher-band).
	char	UT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency nnel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac Г160)
		Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
		Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.825 GHz band (higher-band).
\boxtimes	For	the transmitter unwanted emissions shall be measured using following options below:
	\boxtimes	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.
		Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
		Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
	<u> </u>	Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
\boxtimes	For	the transmitter bandedge emissions shall be measured using following options below:
		Refer as FCC KDB 789033, clause H)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	\boxtimes	Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
		Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.
\boxtimes	For	radiated measurement, refer as ANSI C63.10, clause 6.5 for radiated emissions from above 1 GHz.

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Test Method

- For conducted and cabinet radiation measurement, refer as FCC KDB 789033, clause H)3).
 - For conducted unwanted emissions into non-restricted bands (relative emission limits).

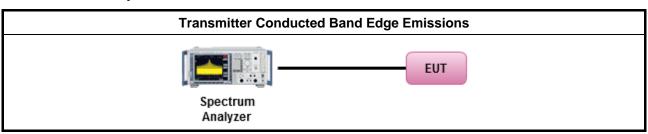
 Devices with multiple transmit chains:

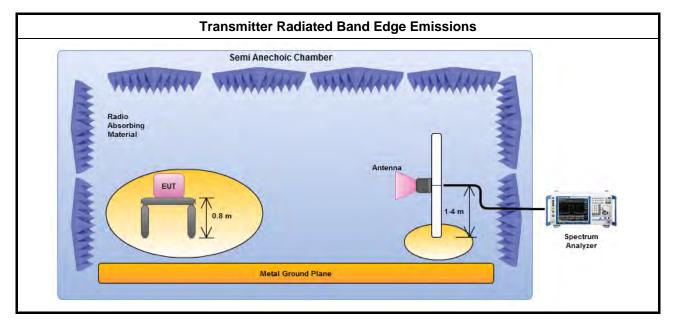
Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.

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- For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below:
 - (1) Measure and sum the spectra across the outputs or
 - (2) Measure and add 10 log(N) dB
- For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.5.2 Test Setup





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Test Result of Transmitter Conducted Band Edge Emissions-11a_6Mbps 3.5.3

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

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	Transmitter Conducted Band Edge Emissions (5150-5250MHz band)												
Modulation	11a_6Mbps	Test Frequency	Frequency 5180 MHz			2							
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type							
5145.10	-	-	6.09	-32.00	-21.2	Peak							
5150.00	-	-	6.09	-44.65	-41.2	Average							

Oper	ating Mod	le	11a	11a_6Mbps								
5180	MHz											
			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	₫В	- dB	÷		deg	
1	5147.900	76.20	-7.34	83.54	37.37	34.46	4.37	0.00	Peak		200	
2 @	5177.500	118.66			79.79	34.47	4.40	0.00	Peak			
1 0	5150.000	60.63	-2.91	63.54	21.80	34.46	4.37	0.00	Average	10111	3,390	
2 @	5183.900	107.36			68.49	34.47	4.40	0.00	Average			
	. .											
The i	tem 2 is Fu	ındamer	ital Em	issions.								

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Conducted Band Edge Emissions (5250-5350MHz band)											
Modulation	11a_6Mbps	Test Frequency	5260	MHz	NTX	2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type						
5353.25	-	-	6.09	-27.08	-21.2	Peak						
5350.00	-	-	6.09	-41.66	-41.2	Average						

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Operating Mod	de	11a	11a_6Mbps								
5320 MHz		Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	- dB		cm.	deg	
1 @ 5316.090	120.94			81.85	34.53	4.56	0.00	Peak	223		
2 5350.010	78.84	-4.70	83.54	39.71	34.54	4.59	0.00	Peak			
1 @ 5316.860	109.54			70.45	34.53	4.56	0.00	Average	2000	(2000)	
2 @ 5350.000	61.64	-1.90	63.54	22.51	34.54	4.59	0.00	Average	1222		

Emission level (dBuV/m) = 20 log Emission level (uV/m). Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Conducted Band Edge Emissions (5470-5725MHz band)												
Modulation	11a_6Mbps	Test Frequency	55	00 MHz	NTX	2							
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type							
5469.85	-	-	7.77	-25.97 Note ¹	-21.2	Peak							
5469.60	-	-	7.77	-38.43 Note ¹	-41.2	Average							

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Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

	Transmitter Cond	ducted Band Edge	e Emissi	ons (547	0-5725MHz band)	
Modulation	11a_6Mbps	Test Frequency	5700	MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5727.40	-	-	7.77	-28.15	-21.2	Peak
5725.00	-	-	7.77	-42.40	-41.2	Average

Operating Mode		11a	11a_6Mbps								
500N	ЛНZ										
			0ver	Limit	ReadAntenna		Cable	Preamp		Ant Pos	Table Pos
Freq	Level		Line dBuV/m	Level Factor		Loss	Factor	Remark			
Á	MHz dBuV/m			dBuV	dB/m	dB	- dB	**	cm.	deg	
10	5466.640	79.58	-3.96	83.54	40.28	34.59	4.71	0.00	Peak	2224	(2)333
2 @	5494.160	121.86			82.56	34.59	4.71	0.00	Peak		
10	5469.280	69 15	_1 20	63.54	22 85	34.59	4.71	0 00	Average	111	30000
	GEOS. LOU	0Z. 13	1. 32	00.01		JE. J.					
2 @	5493.600		1.32	03.34	71.35	34.59	4.71		Average		
400	549 3. 600 em 2 is Fu	110.65			71.35		4.71	0.00		 Ant	 Table
he ite	5493.600 em 2 is Fu VIHZ	110.65	ntal Em 0ve r	issions.	71.35 ReadJ	34.59	4.71 Cable	0.00 Preamp		Ant Pos	Table Pos
he ite	5493.600 em 2 is Fu MHz Freq	110.65 undamer	ntal Em Over Limit	issions. Limit	71.35 ReadJ	34.59 Antenna	4.71 Cable	0.00 Preamp	Average		
he ite 700 l	5493.600 em 2 is Fu MHz Freq	110.65 undamer Level dBuV/m	ntal Em Over Limit	issions. Limit Line	71.35 Readi Level	34.59 Antenna Factor	4.71 Cable Loss	Preamp Factor	Average	Pos	Pos
he ite 700 l l –	5493.600 em 2 is Fu MHZ Freq MHz	Level dBuV/m 118.64	over Limit dB	issions. Limit Line	71.35 Readi Level	34.59 Antenna Factor dB/m	Cable Loss	Preamp Factor dB	Average Remark	Pos	Pos
he ite 700 l	5493.600 em 2 is Fu MHZ Freq MHz 5704.280	110.65 undamen Level dBuV/m 118.64 76.29	over Limit dB	Limit Line dBuV/m	Readi Level dBuV 78.93	34.59 Antenna Factor dB/m 34.72	Cable Loss	Preamp Factor dB 0.00	Remark Peak	Pos	Pos

Note:

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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3.5.4 Test Result of Transmitter Conducted Band Edge Emissions-HT-20_MCS0

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

٦	Fransmitter Cond	ucted Band Edge	Emissio	ons (51	50-5250MHz band	1)
Modulation	HT-20_MCS0	Test Frequency	5180	MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5149.45	-	-	6.09	-30.31	-21.2	Peak
5150.00	-	-	6.09	-42.42	-41.2	Average

Operating Mode		HT-	HT-20_MCS0								
5180MF	lz		0ver	Limit	Readi	Intenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
<i>₹</i>	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	- dB		cm.	deg
1 @ 5	149.500	80.28	-3.26	83.54	41.45	34.46	4.37	0.00	Peak	2501u10	3200
2 @ 5	182.600	120.62			81.75	34.47	4.40	0.00	Peak		
1 @ 5	149.900	61.92	-1.62	63.54	23.09	34.46	4.37	0.00	Average	1111	32301
2 @ 5	183.900	108.96			70.09	34.47	4.40	0.00	Average		
Tlan :4 a	. O :- F.		4-1								
The iter	n 2 is Fu	ındamer	ital Em	issions.							

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Conducted Band Edge Emissions (5250-5350MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5320	MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
5352.00	-	-	6.09	-28.24	-21.2	Peak				
5350.20	-	-	6.09	-43.03	-41.2	Average				

)pera	iting Mod	le	HT-	20_MCS	03						
320	MHz		15 10 10 10 10 10 10 10 10 10 10 10 10 10								2100 TRANSPORT
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
/	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
10	5325.540	123.32			84.23	34.53	4.56	0.00	Peak	1200	221
2 @	5357.180	78.55	-4.99	83.54	39.42	34.54	4.59	0.00	Peak		222
10	5324.490	111.39			72.30	34.53	4.56	0.00	Average		32321
	5350.000 em 1 is Fu				22.92	34.54	4.59	0.00	Average		

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	Transmitter Conducted Band Edge Emissions (5470-5725MHz band)										
Modulation	HT-20_MCS0	Test Frequency	55	00 MHz	NTX	2					
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type					
5465.55	-	-	7.77	-26.30 Note ¹	-21.2	Peak					
5470.00	-	-	7.77	-39.59 Note ¹	-41.2	Average					

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Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

	Transmitter Cond	ducted Band Edge	Emissi	ons (5470-57	25MHz band))
Modulation	HT-20_MCS0	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5725.10	-	-	7.77	-26.02 Note ¹	-21.2	Peak
5725.00	-	-	7.77	-40.83 Note ¹	-41.2	Average

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

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pci	ating Mod	le	HT-	20_MCS	80						
5500	MHz		•								
			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	<u>ав</u>	dB		cm.	deg
1 @	5469.520	78.15	-5.39	83.54	38.85	34.59	4.71	0.00	Peak	1224	3,222
2 @	5495.120	121.73			82.43	34.59	4.71	0.00	Peak		
1 @	5470.000	61.90	-1.64	63.54	22.60	34.59	4.71	0.00	Average	222	3200
2 @	5496.080	110.15			70.85	34.59	4.71	0.00	Average		
	em 2 is Fu <i>MHz</i>	undamer	5-050-0-6	1 (month (0))			WW.			202	
	MHz	undamer Level	0ver	issions. Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	
	MHZ Freq	N. Mariantonia	Over Limit	Limit				. GOMMAND 1141.58	Remark		Table Pos deg
5700	MHZ Freq	Level	Over Limit dB	Limit Line	Level	Factor	Loss	Factor dB	Remark —————————	Pos	Pos
1 @ 2 @	MHZ Freq MHz 5703.800 5728.820	Level dBuV/m 119.30 76.78	Over Limit dB	Limit Line dBuV/m	dBuV 79.59 37.06	######################################	4.99	dB 0.00 0.00	Peak Peak	Pos	Pos
1 @ 2 @ 1 @	MHZ Freq MHZ 5703.800 5728.820 5705.960	Level dBuV/m 119.30 76.78 107.78	Over Limit dB 41.46 29.94	Limit Line dBuV/m	dBuV 79.59 37.06 68.07	### Tactor dB/m 34.72 34.73 34.72	dB 4.99 4.99 4.99	0.00 0.00 0.00	Peak Peak Average	Pos	Pos
1 @ 2 @	MHZ Freq MHz 5703.800 5728.820	Level dBuV/m 119.30 76.78 107.78	Over Limit dB 41.46 29.94	Limit Line dBuV/m	dBuV 79.59 37.06	### Tactor dB/m 34.72 34.73 34.72	4.99	0.00 0.00 0.00	Peak Peak	Pos	Pos
1 @ 2 @ 1 @ 2	MHZ Freq MHZ 5703.800 5728.820 5705.960	Level dBuV/m 119.30 76.78 107.78 59.95	Over Limit dB 41.46 29.94	Limit Line dBuV/m 77.84	dBuV 79.59 37.06 68.07	### Tactor dB/m 34.72 34.73 34.72	dB 4.99 4.99 4.99	0.00 0.00 0.00	Peak Peak Average	Pos	Pos

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Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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3.5.5 Test Result of Transmitter Conducted Band Edge Emissions-HT-40_MCS0

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

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٦	Transmitter Cond	ucted Band Edge	Emissio	ons (5150-5	250MHz band	1)	
Modulation	ModulationHT-40_MCS0Test Frequency5190 MHz						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type	
5146.10	-	-	6.09	-21.79 Note ¹	-21.2	Peak	
5149.90	-	-	6.09	-33.46 Note ¹	-41.2	Average	

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

Opera	ating Mod	le	HT-	40_MCS	80						
5190	MHz		20000	- Carrier			84944			2235.225	12022
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	3	cm.	deg
10	5149.610	78.65	-4.89	83.54	39.82	34.46	4.37	0.00	Peak	2224	222
2 @	5183.820	112.07			73.20	34.47	4.40	0.00	Peak		
1	5150.000	62.50	-1.04	63.54	23.67	34.46	4.37	0.00	Average	1000	3,000
2 X	5187.780	99.62			60.75	34.47	4.40	0.00	Average		

Note:

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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5350.15

Transmitter Conducted Band Edge Emissions (5250-5350MHz band)										
Modulation	HT-40_MCS0	HT-40_MCS0 Test Frequency 5310 MHz NTX								
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
5350.20	-	-	6.09	-26.23 Note ¹	-21.2	Peak				

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Average

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

6.09

-38.36 Note1

-41.2

Opera	iting Mod	le	HT-	40 MCS	80						
5310 l				_							
	••••		0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
ē.	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	- dB		cm.	deg
10	5317.990	113.94			74.85	34.53	4.56	0.00	Peak	2234	221
2	5350.660	76.11	-7.43	83.54	36.98	34.54	4.59	0.00	Peak		
10	5297.110	101.65			62.61	34.52	4.52	0.00	Average	222	3222
2 @	5350.030	61.98	-1.56	63.54	22.85	34.54	4.59	0.00	Average		

The item 1 is Fundamental Emissions.

Note:

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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FC	C	/IC	Radio	Test	Report
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	Transmitter Cond	ducted Band Edge	e Emissi	ons (5470-57	25MHz band)	
Modulation	HT-40_MCS0	Test Frequency	NTX	2		
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5469.50	-	-	7.77	-24.03 Note ¹	-21.2	Peak
5469.95	-	-	-41.2	Average		

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

	Transmitter Cond	ducted Band Edge	e Emissi	ons (547	0-5725MHz band)	
Modulation	HT-40_MCS0	Test Frequency	5670	5670 MHz NTX		2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5727.75	-	-	7.77	-29.41	-21.2	Peak
5725.15	-	-	7.77	-43.34	-41.2	Average

per	ating Mod	le	HT-	40_MCS	03						
510	MHz										
			0ver	Limit		Intenna		Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
3	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg
1	5469.500	76.80	-6.74	83.54	37.50	34.59	4.71	0.00	Peak	5244	(200)
2 @	5507.400	112.56			73.21	34.60	4.75	0.00	Peak		
1 0	5469.500	62.51	-1.03	63.54	23.21	34.59	4.71	0.00	Average	2000	3222
2 @	5494.600	100.56			61.26	34.59	4.71	0.00	Average		
he i	5494.600 em 2 is Fu <i>MHz</i>		ntal Em	issions.	61.26	34.59	4.71	0.00	Average		
he i	em 2 is Fu		ntal Em	issions. Limit	2734020 42002	34.59 Intenna			Average	 Ant	 Table
he i	em 2 is Fu <i>MHz</i>		0ver		Readi	ewatenasia c	Cable	Preamp	Average Remark		Table Pos
he i	em 2 is Fu <i>MHz</i> Freq	ındamer	Over Limit	Limit	Readi	Intenna	Cable	Preamp		Ant	
he i	em 2 is Fu <i>MHz</i> Freq	Level	Over Limit	Limit Line	Readl Level	Antenna Factor	Cable Loss	Preamp Factor		Ant Pos	Pos
he i 670	em 2 is Fu MHz Freq MHz	Level dBuV/m 117.53	Over Limit	Limit Line	Readi Level dBuV	Antenna Factor dB/m	Cable Loss dB	Preamp Factor dB	Remark	Ant Pos	Pos
he i 670	em 2 is Fu MHz Freq MHz 5664.700 5726.200	Level dBuV/m 117.53 76.22	Over Limit	Limit Line dBuV/m	Readi Level dBuV 77.89	Antenna Factor dB/m 34.69 34.73	Cable Loss dB 4.95	Preamp Factor dB 0.00 0.00	Remark Peak	Ant Pos	Pos

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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3.5.6 Test Result of Transmitter Conducted Band Edge Emissions-VHT-20 MCS0

Report No.: FR322814AN

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

	Transmitter Cond	ucted Band Edge	Emissio	ons (5150-5	250MHz band	1)
Modulation	VHT-20_MCS0	Test Frequency	51	80 MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5149.05	-	-	6.09	-28.12 Note ¹	-21.2	Peak
5149.35	-	-	6.09	-41.18 Note ¹	-41.2	Average

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

Operating Mode VHT-2					CS0									
5180MHz Over Limit ReadAntenna Cable Preamp Ant Table														
	Freq	Level	Limit			Factor		Factor	Remark	Pos	Pos			
<i>5</i> €	MHz	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can.	deg
1 @ 5148	. 700	78.16	-5.38	83.54	39.33	34.46	4.37	0.00	Peak		3227			
2 @ 5184	. 700	120.16			81.29	34.47	4.40	0.00	Peak					
1 @ 5149	. 900	61.73	-1.81	63.54	22.90	34.46	4.37	0.00	Average		32320			
2 @ 5187	.000	108.76			69.89	34.47	4.40	0.00	Average					

The item 2 is Fundamental Emissions.

Note:

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Cond	ducted Band Edge	e Emissi	ons (525	0-5350MHz band)	
Modulation	VHT-20_MCS0	Test Frequency	5320	MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5350.20	-	-	6.09	-27.90	-21.2	Peak
5351.25	-	-	6.09	-43.49	-41.2	Average

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Operat	ing Mod	le	VH	VHT-20_MCS0								
5320 M	IHz		0ver	Limit	Limit Read		Cable	Preamp	December 1997	Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	
Ž.	MHz	dBuV/m	ав	dBuV/m	dBuV	dB/m dB	dB		Cm.	deg		
1 @ 5	317.140	123.10			84.01	34.53	4.56	0.00	Peak		32320	
	350.810 316.650		-3.60	83.54	40.81		4.59		Peak Average			
	350.000		-1.68	63.54	22.73	34.54	4.59		Average	-		

Emission level (dBuV/m) = 20 log Emission level (uV/m). Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Cond	ducted Band Edge	e Emissi	ons (5470-57	25MHz band)	
Modulation	VHT-20_MCS0	Test Frequency	55	00 MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5470.00	-	-	7.77	-25.11 Note ¹	-21.2	Peak
5469.50	-	-	7.77	-37.18 Note ¹	-41.2	Average

Report No.: FR322814AN

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

	Transmitter Cond	ducted Band Edge	e Emissi	ons (547	0-5725MHz band))
Modulation	VHT-20_MCS0	Test Frequency	5700	MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5725.40	-	-	7.77	-27.71	-21.2	Peak
5725.05	-	-	7.77	-42.10	-41.2	Average

Operating Mode VHT-20_MCS0											
5500	MHz										
			0ver	Limit	Readi	Intenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1 0	5464.080	78.30	-5.24	83.54	39.04	34.59	4.67	0.00	Peak	52000	2000
2 @	5496.160	122.01			82.71	34.59	4.71	0.00	Peak		
1 0	5464.080	78.30	-5.24	83.54	39.04	34.59	4.67	0.00	Peak	2000	(2007)
2 @	5496.160	122.01			82.71	34.59	4.71	0.00	Peak	-	
	em 2 is Fu	ındamer	ntal Em	issions.							
57ハハ	MHz										
,, 00			0ver	Limit		intenna		Preamp		Ant	Table
,,,	400000040-000044					Factor	Loss	Factor	Remark	Pos	Pos
,,,,,	Freq	Level	Limit	Line	rever						
,		Level	- 5000 SEE 500	dBuV/m	dBuV	dB/m	dB		######################################		deg
3		dBuV/m	- 5000 SEE 500		3337413816			dB	Peak	cm.	deg
1 @	MHz	dBuV/m 119.44	dB		dBuV	dB/m	dB	dB 0.00	Peak Peak		deg
1 @	MHz 5703.620 5725.940	dBuV/m 119.44 76.62	dB	dBuV/m	dBuV	dB/m 34.72	dB 4.99	0.00 0.00			deg

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Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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3.5.7 Test Result of Transmitter Conducted Unwanted Emissions-VHT-40 MCS0

Report No.: FR322814AN

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

-	Transmitter Cond	ucted Band Edge	Emissio	ons (5150-52	250MHz band	1)
Modulation	VHT-40_MCS0	Test Frequency	51	90 MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5148.60	-	-	6.09	-21.27 Note ¹	-21.2	Peak
5150.00	-	-	6.09	-32.53 Note ¹	-41.2	Average

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

Operating Mode VHT-40_MCS0											
5190	5190MHz Over Limit ReadAntenna Cable Preamp Ant Table										
	Freq	Level	Limit			Factor			Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m dBuV	V dB/m	/m dB	B dB	2	cm.	deg	
1	5148.730	76.59	-6.95	83.54	37.76	34.46	4.37	0.00	Peak	2224	222
2 6	5178.100	112.05			73.18	34.47	4.40	0.00	Peak		
1 6	5149.940	62.40	-1.14	63.54	23.57	34.46	4.37	0.00	Average	1000	3,000
2 6	5177.330	100.09			61.22	34.47	4.40	0.00	Average		

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Cond	ducted Band Edge	e Emissi	ons (5250-53	50MHz band)	
Modulation	VHT-40_MCS0	Test Frequency	53	10 MHz	NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type
5351.45	-	-	6.09	-26.68 Note ¹	-21.2	Peak
5350.10	-	-	6.09	-38.19 Note ¹	-41.2	Average

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Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

Operating Mode VHT-40_MCS0												
5310	310 MHz											
			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	B/m dB	dB			deg	
1 @	5320.510	113.05			73.96	34.53	4.56	0.00	Peak	2224	(2007)	
2	5351.020	76.08	-7.46	83.54	36.95	34.54	4.59	0.00	Peak			
1 0	5325.550	100.69			61.60	34.53	4.56	0.00	Average	2000	(2000)	
2 @	5350.000	61.37	-2.17	63.54	22.24	34.54	4.59	0.00	Average			

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Conducted Band Edge Emissions (5470-5725MHz band)											
Modulation	VHT-40_MCS0	Test Frequency	55	10 MHz	NTX	2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type						
5468.45	-	-	7.77	-24.74 Note ¹	-21.2	Peak						
5469.25	-	-	7.77	-36.16 Note ¹	-41.2	Average						

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

	Transmitter Conducted Band Edge Emissions (5470-5725MHz band)										
Modulation	VHT-40_MCS0	Test Frequency	5670 MHz NTX		2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type					
5728.65	-	-	7.77	-28.88	-21.2	Peak					
5725.15	-	-	7.77	-41.91	-41.2	Average					

per	ating Mod	le	VH	T-40_MC	CS0						
510	MHz		•								
			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
8	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	- dB		cm.	deg
1	5469.800	77.31	-6.23	83.54	38.01	34.59	4.71	0.00	Peak	1255	(200)
2 @	5508.300	113.11			73.76	34.60	4.75	0.00	Peak		
4 0	F470 000		4 00	70 F4	23.22	24 EQ	4.71	0 00	Average	2501319	2000
10	5470.000	62.52	-1.02	63.54	23.22	34.59	4. 11	0.00	Average		
2 @	5496.600	100.77			61.46		4.71		Average	1444	
2 e	5496.600 em 2 is Fu <i>MHz</i>	100.77	ntal Em 0 ver		61.46 Readi		4.71 Cable	0.00 Preamp	살아내가 얼마나 돌아가	Ant Pos	
2 e	5496.600 em 2 is Fu <i>MHz</i> Freq	100.77 undamei Level	ntal Em Over Limit	issions. Limit Line	61.46 Readi Level	34.60 Antenna Factor	4.71 Cable Loss	0.00 Preamp Factor	Average		Table Pos
2 e	5496.600 em 2 is Fu <i>MHz</i> Freq	100.77 undamei	ntal Em Over Limit	issions. Limit	61.46 Readi	34.60 Antenna	4.71 Cable	0.00 Preamp Factor	Average		
2 e	5496.600 em 2 is Fu MHz Freq MHz	100.77 undamei Level dBuV/m	ntal Em Over Limit	issions. Limit Line	61.46 Readi Level	34.60 Antenna Factor	4.71 Cable Loss	Preamp Factor	Average	Pos	Pos
2 @ The it 6670	5496.600 em 2 is Fu MHz Freq	Level dBuV/m	ntal Em Over Limit dB	issions. Limit Line dBuV/m	Readi Level	34.60 Antenna Factor dB/m	4.71 Cable Loss	Preamp Factor dB	Average Remark	Pos	Pos
2 @ he if	5496.600 em 2 is Fu MHz Freq MHz	Level dBuV/m 117.74 75.89	ntal Em Over Limit dB	issions. Limit Line dBuV/m	Readi Level dBuV 78.10	34.60 Antenna Factor dB/m 34.69	Cable Loss dB	Preamp Factor dB 0.00	Average Remark Peak	Pos	Pos deg

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Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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Note:

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3.5.8 Test Result of Transmitter Conducted Unwanted Emissions-VHT-80_MCS0

Report No.: FR322814AN

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

-	Transmitter Conducted Band Edge Emissions (5150-5250MHz band)											
Modulation	VHT-80_MCS0	Test Frequency	52	10 MHz	NTX	2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type						
5139.00	-	-	6.09	-21.77 Note ¹	-21.2	Peak						
5149.65	-	-	6.09	-33.59 Note ¹	-41.2	Average						
10458.30	-43.85	-42.07	7.77	-32.10	-21.2	Peak						
10466.40	-53.69	-53.69	7.77	-42.92	-41.2	Average						

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

Opei	ating Mod	le	VH	Г-80_МС	CS0						
210	MHz		<u> </u>								
	0000000000000	1 152 OF 50 P. IV	0ver	Limit		Antenna		Preamp	200-200-00300-0040	Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	5148.900	76.22	-7.32	83.54	37.39	34.46	4.37	0.00	Peak		3222
2 6	5199.000	105.59			66.67	34.48	4.44	0.00	Peak		
3	5388.600	69.86	-13.68	83.54	30.68	34.55	4.63	0.00	Peak		1555
1 6	5150.000	61.69	-1.85	63.54	22.86	34.46	4.37	0.00	Average	2002	(2007)
2 6	5241.000	91.71			52.74	34.49	4.48	0.00	Average		
3	5386.500	56.64	-6.90	63.54	17.50	34.55	4.59	0.00	Average		1000

Note:

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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Transmitter Conducted Band Edge Emissions (5250-5350MHz band)										
Modulation	VHT-80_MCS0	Test Frequency	52	90 MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
5351.25	-	-	6.09	-23.12 Note ¹	-21.2	Peak				
5350 30	_	-	6.09	-35 52 Note1	-41 2	Average				

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

		Tran	smitter	Radiate	ed Ban	d Edge	Emissi	ions (52	250-5350MH	lz band)	
Oper	ating Mod	le	VH	VHT-80_MCS0							
5290	MHz		Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line		Factor		Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB		cm.	deg
1	5112.600	70.11	-13.43	83.54	31.33	34.45	4.33	0.00	Peak	222	(222)
2 6	5311.800	107.40			68.31	34.53	4.56	0.00	Peak		
3	5350.200	76.76	-6.78	83.54	37.63	34.54	4.59	0.00	Peak	0.55	1555
1	5104.500	56.27	-7.27	63.54	17.50	34.44	4.33	0.00	Average		3,300
2 6	5307.300	93.01			53.97	34.52	4.52	0.00	Average	744	
3 6	5350.000	62.35	-1.19	63.54	23.22	34.54	4.59	0.00	Average		1.7577.5

The item 2 is Fundamental Emissions.

Note

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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	Transmitter Conducted Band Edge Emissions (5470-5725MHz band)											
Modulation	Modulation VHT-80_MCS0 Test Frequency 5530 MHz				NTX	2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type						
5469.65	-	-	7.77	-23.47 Note ¹	-21.2	Peak						
5469.75	-	-	7.77	-34.19 Note ¹	-41.2	Average						

Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section.

per	ating Mod	le	VH	Г-80_МC	S0						
530	MHz		•								
	00-00-00-00		Over	Limit		Antenna		Preamp	W-2010001001	Ant	Table
	rreq	Level	Limit	Line	rever	Factor	ross	Factor	Kemark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	3	cm.	deg
1	5467.760	76.77	-6.77	83.54	37.47	34.59	4.71	0.00	Peak	111	222
2 6	5518.000	107.11			67.75	34.61	4.75	0.00	Peak		
3	5744.240	70.10	-7.74	77.84	30.32	34.74	5.04	0.00	Peak	0.00	10000
1 6	5470.000	62.35	-1.19	63.54	23.05	34.59	4.71	0.00	Average	1,01010	32000
2 @	5505.200	92.28			52.93	34.60	4.75	0.00	Average		
3	5730.160	57.19	-20.65	77.84	17.47	34.73	4.99	0.00	Average		1777

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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3.6 Transmitter Unwanted Emissions

3.6.1 Test Procedures

		Test Method							
	Measurements may be performed at a distance other than the limit distance provided they ar performed in the near field and the emissions to be measured can be detected by the measure equipment. Measurements shall not be performed at a distance greater than 30 m for freque above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m o are impractical. When performing measurements at a distance other than that specified, the results be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of distance for field-strength measurements, inverse of linear distance-squared for power-demeasurements).								
	\boxtimes	Measurements in the frequency range 5 GHz - 10GHz are typically made at a closer distance 1.5m, because the instrumentation noise floor is typically close to the radiated emission limit.							
	\boxtimes	Measurements in the frequency range 10 GHz - 18GHz are typically made at a closer distance 1m, because the instrumentation noise floor is typically close to the radiated emission limit.							
	\boxtimes	Measurements in the frequency range above 18 GHz - 40GHz are typically made at a closer distance 0.5m, because the instrumentation noise floor is typically close to the radiated emission limit.							
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].							
\boxtimes	For	the transmitter unwanted emissions shall be measured using following options below:							
	\boxtimes	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.							
	\boxtimes	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.							
		Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).							
		Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).							
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.							
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.							
		Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.							
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.							
\boxtimes	For	radiated measurement.							
	\boxtimes	Refer as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz.							
	\boxtimes	Refer as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1000 MHz.							
	\boxtimes	Refer as ANSI C63.10, clause 6.6 for radiated emissions from above 1 GHz.							

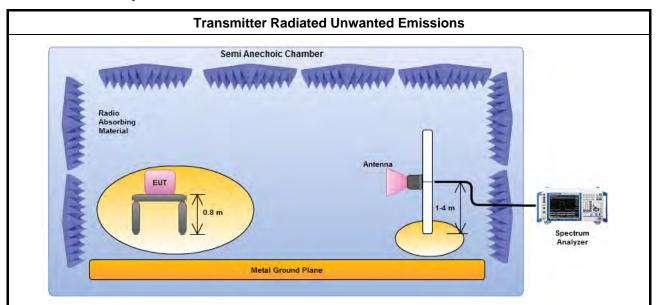
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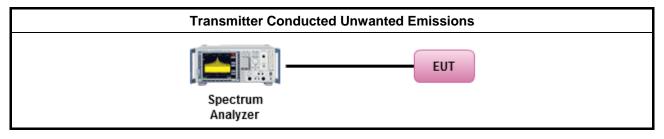


		Test Method
\boxtimes	For	conducted and cabinet radiation measurement, refer as FCC KDB 789033, clause H)3).
		For conducted unwanted emissions into non-restricted bands (relative emission limits). Devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.
		For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
		For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.2 Test Setup



Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.



3.6.3 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

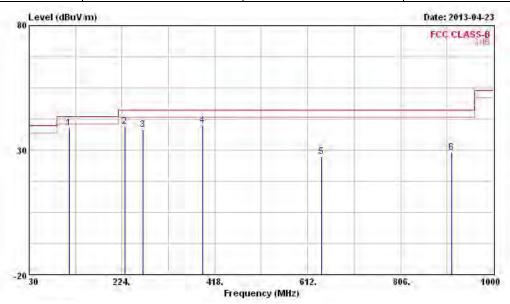
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3.6.4 Transmitter Unwanted Emissions (Below 1GHz)

Tra	Transmitter Radiated Unwanted Emissions (Below 1GHz)								
Operating Mode	11a_6Mbps	Polarization	Н						
Operating Frequency 5200 MHz Configuration With PIFA Ant.									

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
. 17	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con	deg
10	113.420	38.95	-4.55	43.50	52.50	12.80	1.50	27.85	Peak	-04	544
2	230.790	39.45	-6.55	46.00	52.22	12.37	2.27	27.41	Peak		
3	268.620	38.35	-7.65	46.00	49.94	13.26	2.45	27.30	Peak		
4	392.780	39.96	-6.04	46.00	49.74	15.15	2.96	27.89	Peak		
5	641,100	27.40	-18.60	46.00	32.41	19.63	3.87	28.51	Peak	204	
6	912.700	28.88	-17.12	46.00	31.59	20.34	4.66	27.71	Peak		5-4

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

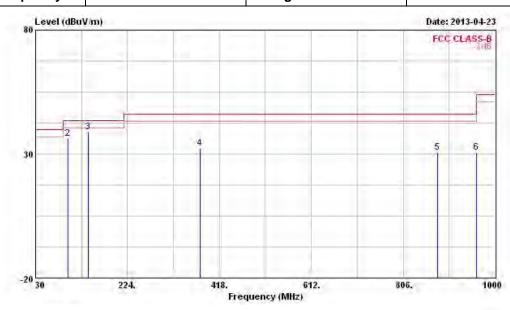
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Report No.: FR322814AN



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
-	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1.	30.000	34.02	-5.98	40.00	45.00	16.22	0.78	27.98	Peak		
2	98.870	36.15	-7.35	43.50	51.65	11.01	1.39	27.90	Peak		
3 8	141.550	38.74	-4.76	43.50	52.98	11.78	1.71	27.73	Peak		
4	377.260	32.29	-13.71	46.00	42.26	14.90	2.91	27.78	Peak		
5	877.780	30.58	-15.42	46.00	33.77	20.08	4.57	27.84	Peak	204	
6	960.230	30.59	-23.41	54.00	31.72	21.52	4.85	27.50	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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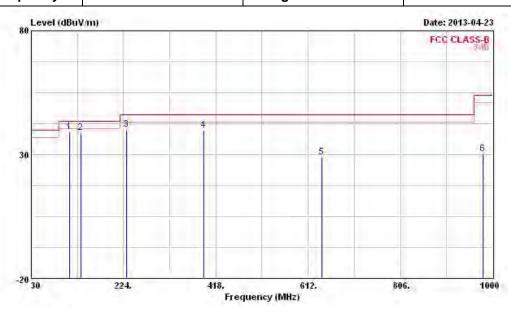


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode 11a_6Mbps Polarization H

Operating Frequency 5300 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Carling Co.	- 0919-99	Antenna	10000	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
. 15	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
10	110.510	39.15	-4.35	43.50	53.07	12.46	1.48	27.86	Peak		
2 @	134.760	38.92	-4.58	43.50	52.61	12.41	1.66	27.76	Peak		
3	229.820	40.13	-5.87	46.00	52.95	12.33	2.26	27.41	Peak		
4	392.780	39.97	-6.03	46.00	49.75	15.15	2.96	27.89	Peak		
5	641.100	28.89	-17.11	46.00	33.90	19.63	3.87	28.51	Peak		
6	979.630	30.18	-23.82	54.00	30.70	22.00	4.90	27.42	Peak		344

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

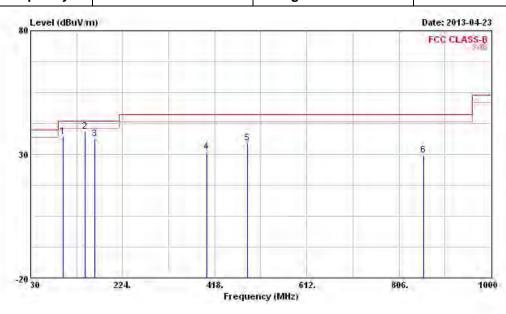
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Report No.: FR322814AN



2.00	Freq	Level	Over Limit	0.000		Antenna Factor	11.00 6.00	Preamp Factor	Remark	Ant Pos	Table Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	- <u> </u>	deg
1	98.870	37.16	-6.34	43.50	52.66	11.01	1.39	27.90	Peak		
2 @	144.460	39.08	-4.42	43.50	53.68	11.40	1.72	27.72	Peak		
3	164.830	36.34	-7.16	43.50	51.82	10.34	1.82	27.64	Peak		
4	400.540	30.88	-15.12	46.00	40.58	15.27	2.98	27.95	Peak		
5	486.870	34.66	-11.34	46.00	42.68	17.02	3.36	28.40	Peak		
6	858.380	29.79	-16.21	46.00	33.02	20.13	4.54	27.90	Peak		222

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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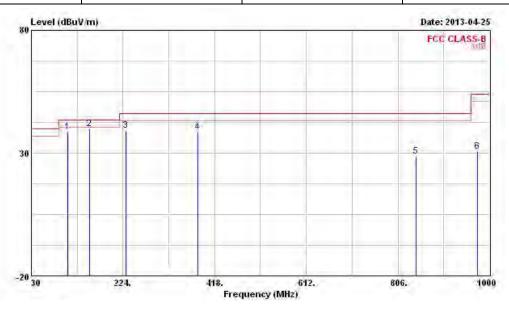


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode 11a_6Mbps Polarization H

Operating Frequency 5580 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	W. 1997		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
N.	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
10	106.630	38.60	-4.90	43.50	53.02	11.99	1.46	27.87	Peak		
2 @	153.190	39.80	-3.70	43.50	55.04	10.70	1.75	27.69	Peak		
3	230.790	39.06	-6.94	46.00	51.83	12.37	2.27	27.41	Peak		
4	382.110	38.65	-7.35	46.00	48.57	14.98	2.92	27.82	Peak		
5	843.830	28.52	-17.48	46.00	31.80	20.16	4.51	27.95	Peak		
6	974.780	30.73	-23.27	54.00	31.40	21.88	4.89	27.44	Peak		

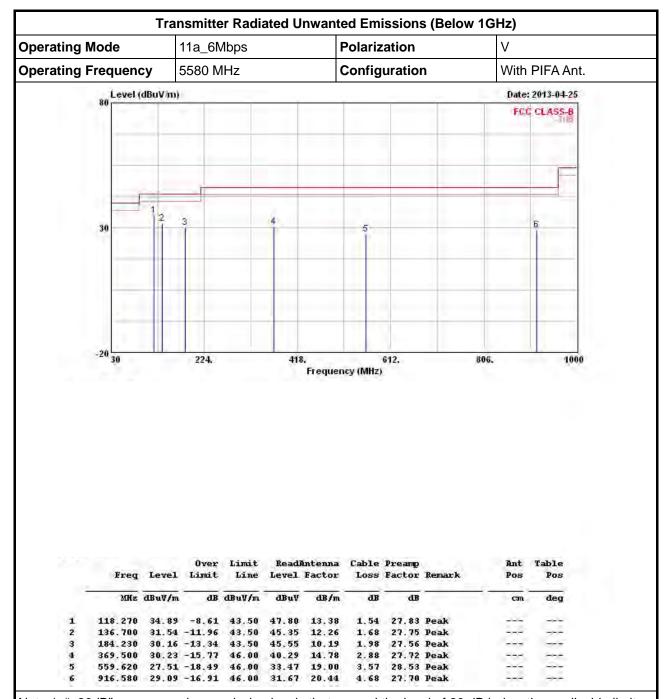
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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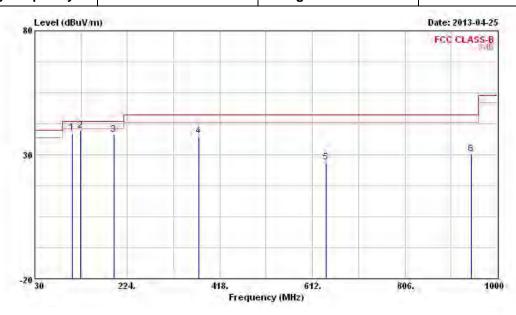


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-20_MCS0 Polarization H

Operating Frequency 5200 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	0.000		Antenna		Preamp	200000	Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
. 15	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
10	108.570	38.73	-4.77	43.50	52.92	12.22	1.46	27.87	Peak		
2 @	126.030	39.82	-3.68	43.50	52.92	13.10	1.60	27.80	Peak		
3 8	195.870	38.24	-5.26	43.50	52.65	11.06	2.05	27.52	Peak		
4	374.350	37.52	-8.48	46.00	47.52	14.86	2.90	27.76	Peak		
5	641.100	27.09	-18.91	46.00	32.10	19.63	3.87	28.51	Peak		
6	944.710	30.44	-15.56	46.00	32.08	21.13	4.80	27.57	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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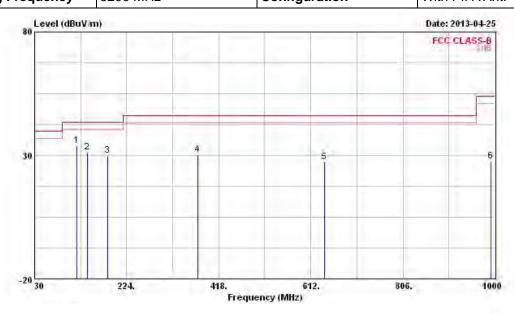


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-20_MCS0 Polarization V

Operating Frequency 5200 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit		Antenna		Preamp		Ant	Table
	Freq	Level	Limit	Line	Level.	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1.	118.270	34.05	-9.45	43.50	46.96	13.38	1.54	27.83	Peak		
2	141.550	31.18	-12.32	43.50	45.42	11.78	1.71	27.73	Peak		
3	184.230	29.86	-13.64	43.50	45.25	10.19	1.98	27.56	Peak		
4	374.350	30.20	-15.80	46.00	40.20	14.86	2.90	27.76	Peak		
5	641, 100	27.48	-18.52	46.00	32.49	19.63	3.87	28.51	Peak	204	
6	991.270	27.86	-26.14	54.00	28.01	22.28	4.94	27.37	Peak		

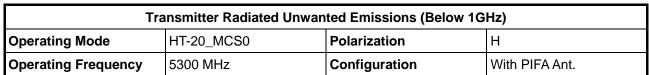
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

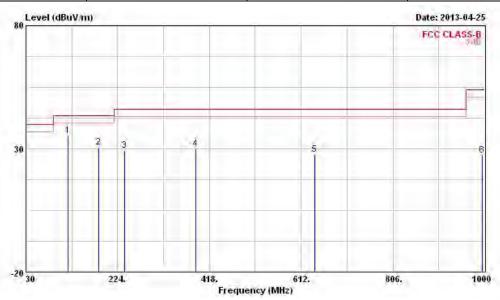
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	дв	dB		cm	deg
1	118.270	35.22	-8.28	43.50	48.13	13.38	1.54	27.83	Peak		
2	184.230	30.81	-12.69	43.50	46.20	10.19	1.98	27.56	Peak		
3	238.550	29.48	-16.52	46.00	41.93	12.62	2.32	27.39	Peak		
4	388.900	29.84	-16.16	46.00	39.67	15.09	2.94	27.86	Peak		100-
5	641.100	27.73	-18.27	46.00	32.74	19.63	3.87	28.51	Peak		
6	995.150	27.41	-26.59	54.00	27.43	22.38	4.95	27.35	Peak		275

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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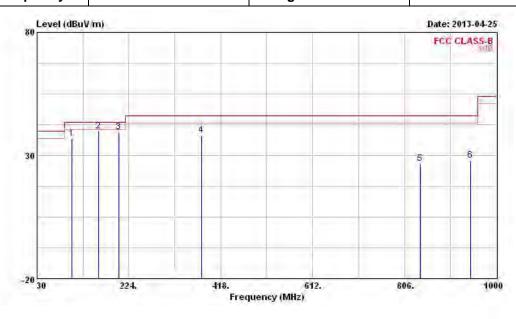


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-20_MCS0 Polarization V

Operating Frequency 5300 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	100 mm		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
n d	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	102.750	36.82	-6.68	43.50	51.76	11.53	1.42	27.89	Peak		1444
2 8	159.980	39.92	-3.58	43.50	55.25	10.55	1.78	27.66	Peak		
3 @	202.660	39.39	-4.11	43.50	53.34	11.45	2.09	27.49	Peak		
4	377.260	38.27	-7.73	46.00	48.24	14.90	2.91	27.78	Peak		
5	838.980	26.77	-19.23	46.00	30.06	20.18	4.50	27.97	Peak		
6	944.710	28.19	-17.81	46.00	29.83	21.13	4.80	27.57	Peak		

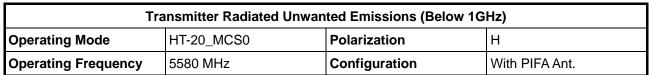
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

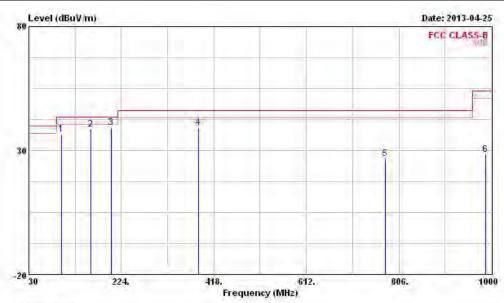
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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	Freq	Level	Over Limit	1000 miles	2000	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
100	мкг	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	98.870	36.53	-6.97	43.50	52.03	11.01	1.39	27.90	Peak		
2 @	159.980	38.55	-4.95	43.50	53.88	10.55	1.78	27.66	Peak		
3 @	203.630	39.19	-4.31	43.50	53.10	11.48	2.10	27.49	Peak		
4	385.020	39.35	-6.65	46.00	49.22	15.03	2.93	27.83	Peak		
5	777.870	26.79	-19.21	46.00	30.70	19.95	4.31	28.17	Peak		
6	987.390	28.24	-25.76	54.00	28.51	22.19	4.92	27.38	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

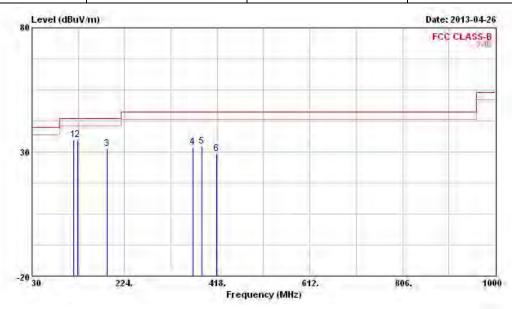
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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	Freq	Level	Over Limit	Carlins.	_021237	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
-	MKz	dBuV/m	- dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	117.300	34.88	-8.62	43.50	47.91	13.27	1.53	27.83	Peak		
2	125.060	34.83	-8.67	43.50	47.86	13.18	1.59	27.80	Peak		
3	187.140	31.34	-12.16	43.50	46.49	10.41	1.99	27.55	Peak		
4	366.590	31.92	-14.08	46.00	42.01	14.74	2.87	27.70	Peak		
5	385.990	32.20	-13.80	46.00	42.06	15.04	2.94	27.84	Peak		
6	417.030	29.35	-16.65	46.00	38.74	15.61	3.04	28.04	Peak		222

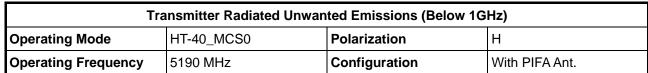
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

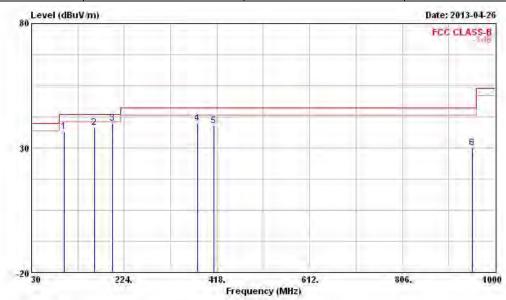
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	ав	dB	_	can	deg
1	98.870	36.62	-6.88	43.50	52.12	11.01	1.39	27.90	Peak		
2 @	160.950	38.24	-5.26	43.50	53.60	10.51	1.79	27.66	Peak		
3 8	198.780	39.75	-3.75	43.50	53.92	11.28	2.06	27.51	Peak		
4	377.260	39.72	-6.28	46.00	49.69	14.90	2.91	27.78	Peak		
5	412.180	38.82	-7.18	46.00	48.29	15.51	3.03	28.01	Peak		
6	952.470	30.11	-15.89	46.00	31.50	21.32	4.83	27.54	Peak		-

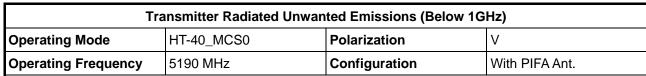
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

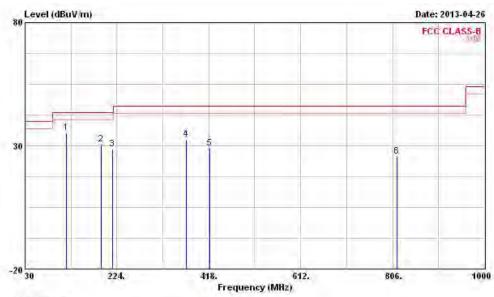
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	117.300	35.21	-8.29	43.50	48.24	13.27	1.53	27.83	Peak	2.22	
2	191.020	30.69	-12.81	43.50	45.51	10.70	2.02	27.54	Peak		
3	215.270	28.81	-14.69	43.50	42.23	11.86	2.17	27.45	Peak		
4	370.470	32.48	-13.52	46.00	42.52	14.80	2.89	27.73	Peak		
5	419.940	28.88	-17.12	46.00	38.21	15.66	3.06	28.05	Peak		
6	815.700	25.82	-20.18	46.00	29.18	20.23	4.45	28.04	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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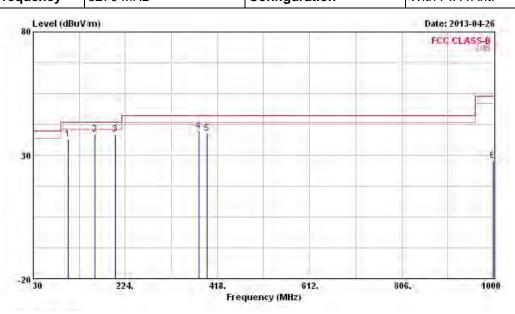


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-40_MCS0 Polarization H

Operating Frequency 5270 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
- 1	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con	deg
1.	102.750	36.42	-7.08	43.50	51.36	11.53	1.42	27.89	Peak		
2 8	159.980	38.64	-4.86	43.50	53.97	10.55	1.78	27.66	Peak		
3 @	203.630	38.57	-4.93	43.50	52.48	11.48	2.10	27.49	Peak		
4	378.230	39.85	-6.15	46.00	49.81	14.92	2.91	27.79	Peak		
5	395.690	39.01	-6.99	46.00	48.76	15.19	2.97	27.91	Peak	244	
6	998.060	27.78	-26.22	54.00	27.71	22.45	4.96	27.34	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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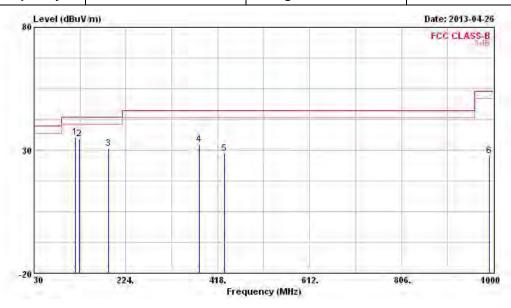


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-40_MCS0 Polarization V

Operating Frequency 5270 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
		dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	117.300	35.21	-8.29	43.50	48.24	13.27	1.53	27.83	Peak		
2	125.060	34.61	-8.89	43.50	47.64	13.18	1.59	27.80	Peak		3-4
3	187.140	30.57	-12.93	43.50	45.72	10.41	1.99	27.55	Peak		777
4	378.230	32.14	-13.86	46.00	42.10	14.92	2.91	27.79	Peak		222
5	431.580	28.68	-17.32	46.00	37.80	15.90	3.10	28.12	Peak		554
6	991.270	27.56	-26.44	54.00	27.71	22.28	4.94	27.37	Peak		3-4

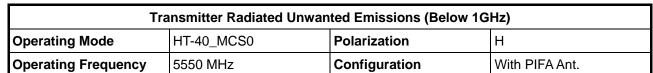
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

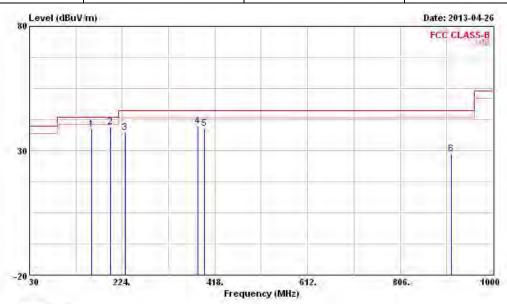
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
10	159.980	38.41	-5.09	43.50	53.74	10.55	1.78	27.66	Peak		5.55
2 @	198.780	39.46	-4.04	43.50	53.63	11.28	2.06	27.51	Peak		
3	229.820	37.19	-8.81	46.00	50.01	12.33	2.26	27.41	Peak		
4	382.110	39.95	-6.05	46.00	49.87	14.98	2.92	27.82	Peak		
5	396.660	38.72	-7.28	46.00	48.46	15.21	2.97	27.92	Peak		
6	912.700	28.79	-17.21	46.00	31.50	20.34	4.66	27.71	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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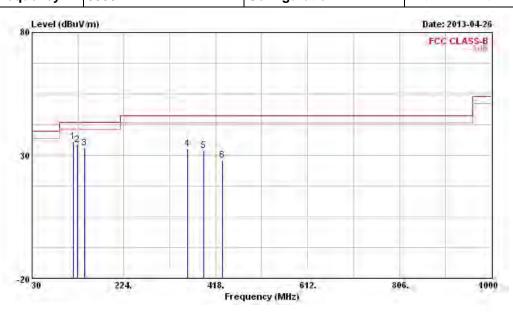


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode HT-40_MCS0 Polarization V

Operating Frequency 5550 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	117.300	35.46	-8.04	43.50	48.49	13.27	1.53	27.83	Peak		
2	125.060	34.33	-9.17	43.50	47.36	13.18	1.59	27.80	Peak		
3	141.550	32.85	-10.65	43,50	47.09	11.78	1.71	27.73	Peak		
4	358.830	32.62	-13.38	46.00	42.80	14.61	2.85	27.64	Peak	-1	
5	392.780	31.97	-14.03	46.00	41.75	15.15	2.96	27.89	Peak		
6	431.580	28.05	-17.95	46.00	37.17	15.90	3.10	28.12	Peak	200	5-4

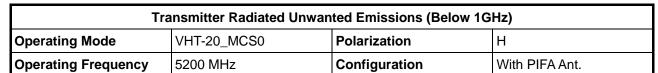
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

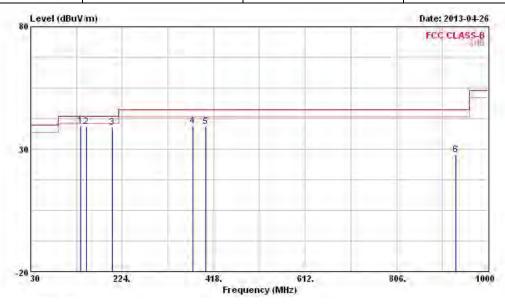
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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	Freq	Level	Over Limit	Limit		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
-) dr.	dBuV/m		dBuV/m	dBuV	- m (-	- 170	dB			
	MAZ	CRUV/M	as	CRATA LIN	OBUV	dB/m	dB	ав		can	deg
1.0	135.730	39.38	-4.12	43.50	53.13	12.34	1.67	27.76	Peak		
2 3	148.340	39.21	-4.29	43.50	54.29	10.90	1.73	27.71	Peak		
3 8	203.630	38.78	-4.72	43.50	52.69	11.48	2.10	27.49	Peak		
4	374.350	39.49	-6.51	46.00	49.49	14.86	2.90	27.76	Peak		
5	400.540	39.05	-6.95	46.00	48.75	15.27	2.98	27.95	Peak	244	
6	932.100	27.75	-18.25	46.00	29.81	20.82	4.75	27.63	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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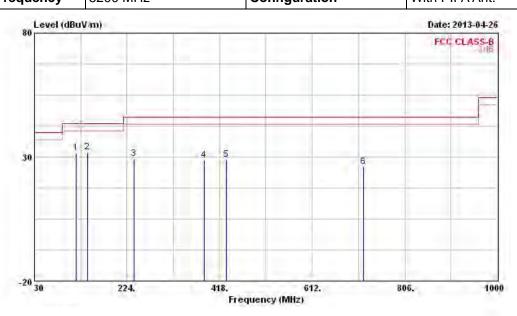


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-20_MCS0 Polarization V

Operating Frequency 5200 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con	deg
1	117.300	31.68	-11.82	43.50	44.71	13.27	1.53	27.83	Peak	-04	
2	141.550	31.92	-11.58	43.50	46.16	11.78	1.71	27.73	Peak		
3	238.550	29.48	-16.52	46.00	41.93	12.62	2.32	27.39	Peak		
4	385.020	28.59	-17.41	46.00	38.46	15.03	2.93	27.83	Peak		
5	431.580	28.89	-17.11	46.00	38.01	15.90	3.10	28.12	Peak	244	
6	719.670	26.09	-19.91	46.00	31.24	19.13	4.08	28.36	Peak		

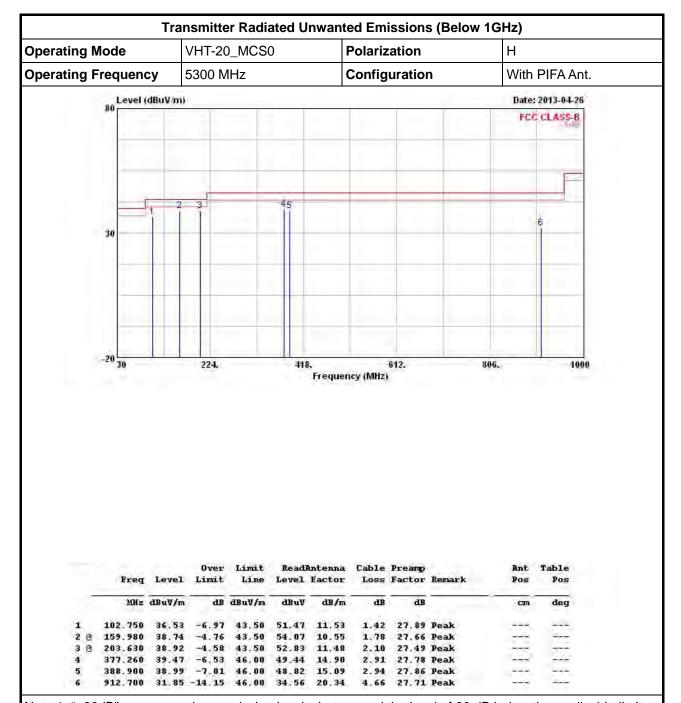
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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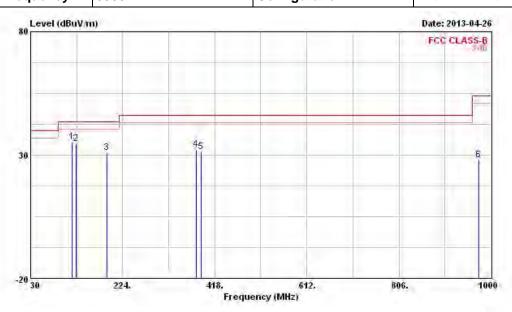


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-20_MCS0 Polarization V

Operating Frequency 5300 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	дв	dB		cm	deg
1	117.300	35.30	-8.20	43.50	48.33	13.27	1.53	27.83	Peak		
2	125.060	34.45	-9.05	43.50	47.48	13.18	1.59	27.80	Peak		
3	191.020	30.94	-12.56	43.50	45.76	10.70	2.02	27.54	Peak		
4	378.230	32.30	-13.70	46.00	42.26	14.92	2.91	27.79	Peak		
5	388.900	31.41	-14.59	46.00	41.24	15.09	2.94	27.86	Peak		
6	974.780	28.06	-25.94	54.00	28.73	21.88	4.89	27.44	Peak		222

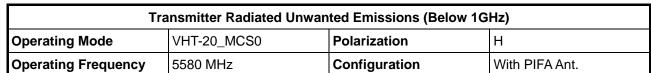
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

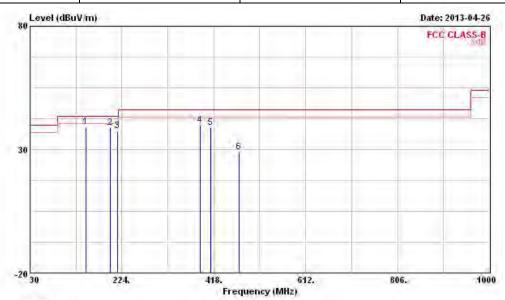
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	- cm	deg
10	148.340	39.28	-4.22	43.50	54.36	10.90	1,73	27.71	Peak		
2 @	198.780	38.79	-4.71	43.50	52.96	11.28	2.06	27.51	Peak		
3	215.270	37.59	-5.91	43.50	51.01	11.86	2.17	27.45	Peak		
4	388.900	39.84	-6.16	46.00	49.67	15.09	2.94	27.86	Peak		
5	412.180	38.84	-7.16	46.00	48.31	15.51	3.03	28.01	Peak		
6	471.350	28.88	-17.12	46.00	37.22	16.71	3.28	28.33	Peak		-

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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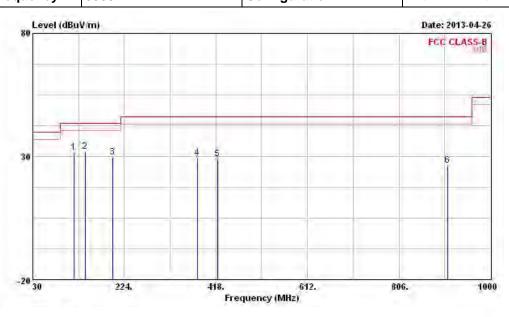


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-20_MCS0 Polarization V

Operating Frequency 5580 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	117.300	31.61	-11.89	43.50	44.64	13.27	1.53	27.83	Peak		
2	141.550	31.83	-11.67	43.50	46.07	11.78	1.71	27.73	Peak		
3	198.780	29.56	-13.94	43.50	43.73	11.28	2.06	27.51	Peak		
4	378.230	29.42	-16.58	46.00	39.38	14.92	2.91	27.79	Peak		
5	420.910	28.85	-17.15	46.00	38.17	15.68	3.06	28.06	Peak		
6	909.790	26.37	-19.63	46.00	29.17	20.27	4.65	27.72	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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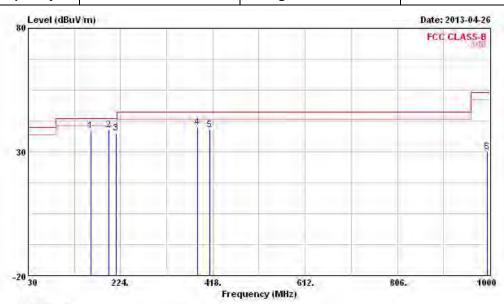


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-40_MCS0 Polarization H

Operating Frequency 5190 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
10	160.950	38.59	-4.91	43.50	53.95	10.51	1.79	27.66	Peak		
2 @	198.780	38.88	-4.62	43.50	53.05	11.28	2.06	27.51	Peak		
3	215,270	37.44	-6.06	43.50	50.86	11.86	2.17	27.45	Peak		
4	385.020	39.71	-6.29	46.00	49.58	15.03	2.93	27.83	Peak		
5	412.180	38.73	-7.27	46.00	48.20	15.51	3.03	28.01	Peak		
6	995.150	29.93	-24.07	54.00	29.95	22.38	4.95	27.35	Peak		-

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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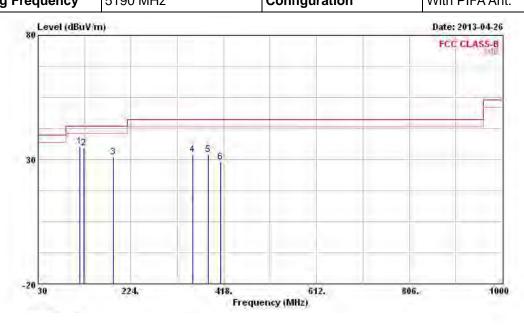


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-40_MCS0 Polarization V

Operating Frequency 5190 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	117.300	35.13	-8.37	43.50	48.16	13.27	1.53	27.83	Peak		
2	125.060	34.62	-8.88	43.50	47.65	13.18	1.59	27.80	Peak		
3	187.140	31.11	-12.39	43.50	46.26	10.41	1.99	27.55	Peak		
4	353.980	31.98	-14.02	46.00	42.21	14.54	2.83	27.60	Peak		
5	385.020	31.88	-14.12	46.00	41.75	15.03	2.93	27.83	Peak		
6	412.180	29.01	-16.99	46.00	38.48	15.51	3.03	28.01	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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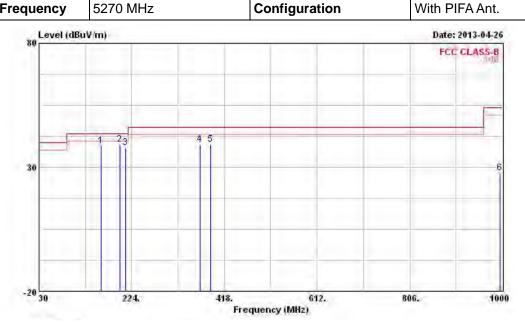


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-40_MCS0 Polarization H

Operating Frequency 5270 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	200	- Contract	Antenna Factor		Preamp Factor		Ant Pos	Table Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
10	159.980	38.39	-5.11	43.50	53.72	10.55	1.78	27.66	Peak		
2 @	198.780	39.08	-4.42	43.50	53.25	11.28	2.06	27.51	Peak		
3 @	211.390	37.82	-5.68	43.50	51.42	11.73	2.14	27.47	Peak		
4	366.590	39.34	-6.66	46.00	49.43	14.74	2.87	27.70	Peak		
5	388.900	39.12	-6.88	46.00	48.95	15.09	2.94	27.86	Peak		
6	995.150	27.78	-26.22	54.00	27.80	22.38	4.95	27.35	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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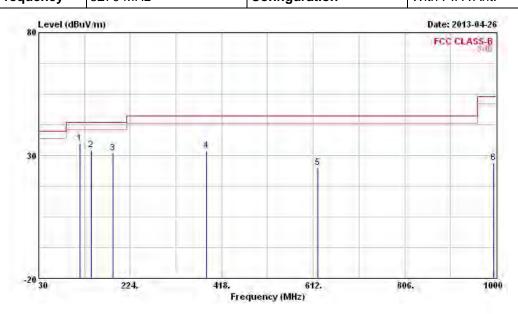


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-40_MCS0 Polarization V

Operating Frequency 5270 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	Limit Line		Antenna Factor	10000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
1	117.300	34.90	-8.60	43.50	47.93	13.27	1.53	27.83	Peak		
2	141.550	32.38	-11.12	43.50	46.62	11.78	1.71	27.73	Peak		
3	187.140	31.04	-12.46	43.50	46.19	10.41	1.99	27.55	Peak		
4	385.990	31.99	-14.01	46.00	41.85	15.04	2.94	27.84	Peak		1000
5	622.670	24.92	-21.08	46.00	29.78	19.88	3.79	28.53	Peak		
6	995.150	27.07	-26.93	54.00	27.09	22.38	4.95	27.35	Peak		

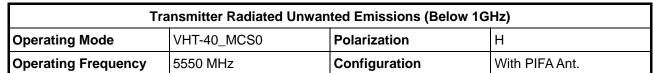
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

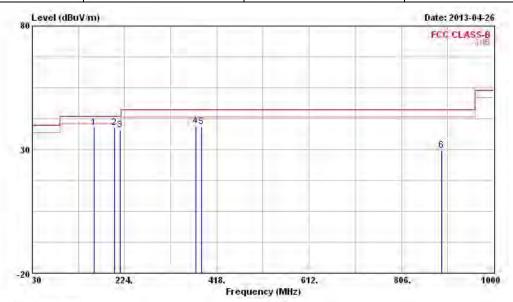
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
. 7	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1.0	159.980	38.76	-4.74	43.50	54.09	10.55	1.78	27.66	Peak		
2 3	203.630	38.97	-4.53	43.50	52.88	11.48	2.10	27.49	Peak		
3 @	215.270	37.83	-5.67	43.50	51.25	11.86	2.17	27.45	Peak		
4	374.350	39.67	-6.33	46.00	49.67	14.86	2.90	27.76	Peak		
5	385.020	39.36	-6.64	46.00	49.23	15.03	2.93	27.83	Peak	244	
6	890.390	29.57	-16.43	46.00	32.73	20.05	4.59	27.80	Peak		5-9

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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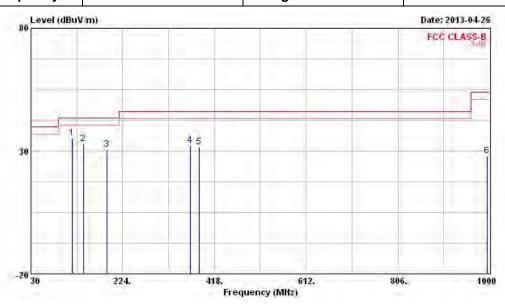


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-40_MCS0 Polarization V

Operating Frequency 5550 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



	Freq	Level	Over Limit	10000		Antenna Factor		Preamp	Remark	Ant	Table Pos
	rred	Dever	шис	Line	Deser	Lactor	LUGG	ractor	Kejiatk	105	ros
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	117.300	35.33	-8.17	43.50	48.36	13.27	1.53	27.83	Peak		
2	141.550	32.80	-10.70	43.50	47.04	11.78	1.71	27.73	Peak		-
3	191.020	30.73	-12.77	43.50	45.55	10.70	2.02	27.54	Peak		
4	366.590	32.21	-13.79	46.00	42.30	14.74	2.87	27.70	Peak		
5	385.990	31.78	-14.22	46.00	41.64	15.04	2.94	27.84	Peak		
6	995.150	27.89	-26.11	54.00	27.91	22.38	4.95	27.35	Peak		-

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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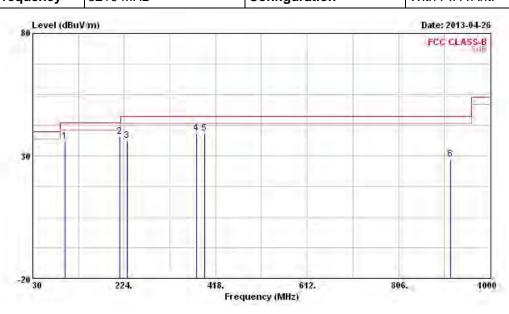


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-80_MCS0 Polarization H

Operating Frequency 5210 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	Mrz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con	deg
1	98.870	35.93	-7.57	43.50	51.43	11.01	1.39	27.90	Peak	-,	777
2 3	215.270	37.87	-5.63	43.50	51.29	11.86	2.17	27.45	Peak		
3	229.820	36.37	-9.63	46.00	49.19	12.33	2.26	27.41	Peak		500
4	377.260	39.31	-6.69	46.00	49.28	14.90	2.91	27.78	Peak		1424
5	393.750	39.27	-6.73	46.00	49.05	15.16	2.96	27.90	Peak	-,	777
6	916.580	28.81	-17.19	46.00	31.39	20.44	4.68	27.70	Peak		9-4

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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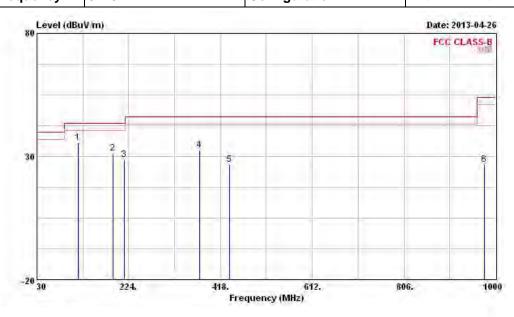


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-80_MCS0 Polarization V

Operating Frequency 5210 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	117.300	35.73	-7.77	43.50	48.76	13.27	1.53	27.83	Peak		
2	191.020	31.30	-12.20	43.50	46.12	10.70	2.02	27.54	Peak		
3	215.270	28.53	-14.97	43.50	41.95	11.86	2.17	27.45	Peak		
4	374.350	32.61	-13.39	46.00	42.61	14.86	2.90	27.76	Peak		
5	436.430	26.76	-19.24	46.00	35.78	16.00	3.12	28.14	Peak		
6	975.750	26.86	-27.14	54.00	27.50	21.90	4.89	27.43	Peak		

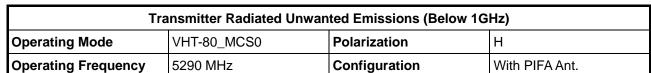
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

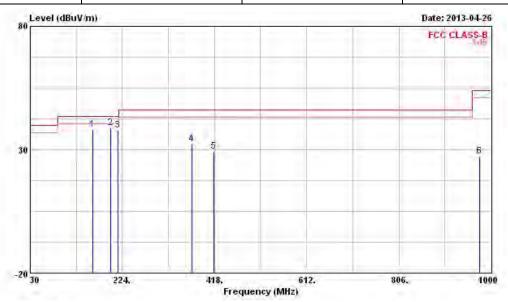
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
18	160.950	38.24	-5.26	43.50	53.60	10.51	1.79	27.66	Peak		
2 @	198.780	38.83	-4.67	43.50	53.00	11.28	2.06	27.51	Peak		
3 8	215.270	37.87	-5.63	43,50	51.29	11.86	2.17	27.45	Peak		
4	370.470	32.22	-13.78	46.00	42.26	14.80	2.89	27.73	Peak		
5	417.030	29.23	-16.77	46.00	38.62	15.61	3.04	28.04	Peak		
6	975.750	27.22	-26.78	54.00	27.86	21.90	4.89	27.43	Peak		3

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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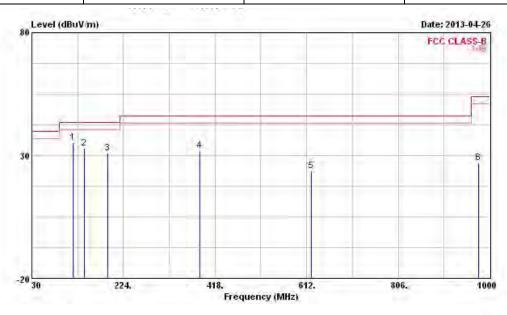


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode VHT-80_MCS0 Polarization V

Operating Frequency 5290 MHz Configuration With PIFA Ant.

Report No.: FR322814AN



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	117.300	35.39	-8.11	43.50	48.42	13.27	1.53	27.83	Peak		-11
2	141.550	32.85	-10.65	43.50	47.09	11.78	1.71	27.73	Peak		224
3	191.020	31.07	-12.43	43.50	45.89	10.70	2.02	27.54	Peak		-
4	385.020	32.10	-13.90	46.00	41.97	15.03	2.93	27.83	Peak		1222
5	622.670	23.71	-22.29	46.00	28.57	19.88	3.79	28.53	Peak		
6	975.750	27.19	-26.81	54.00	27.83	21.90	4.89	27.43	Peak		3-4

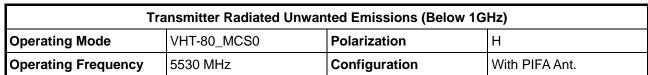
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

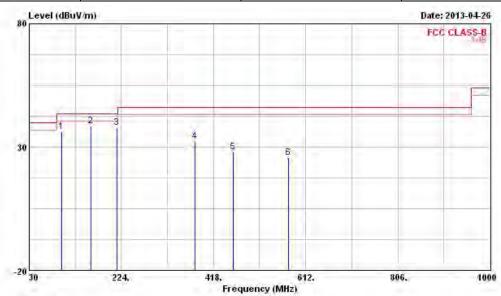
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Readi	Antenna	Cable	Preamp	Committee of	Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	98.870	36.41	-7.09	43.50	51.91	11.01	1.39	27.90	Peak		
2 8	159.980	38.57	-4.93	43.50	53.90	10.55	1.78	27.66	Peak		
3 8	215.270	37.76	-5.74	43.50	51.18	11.86	2.17	27.45	Peak		
4	378.230	32.35	-13.65	46.00	42.31	14.92	2.91	27.79	Peak		-4
5	459.710	28.13	-17.87	46.00	36.71	16.47	3.22	28.27	Peak		
6	575.140	25.71	-20.29	46.00	31.18	19.45	3.62	28.54	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

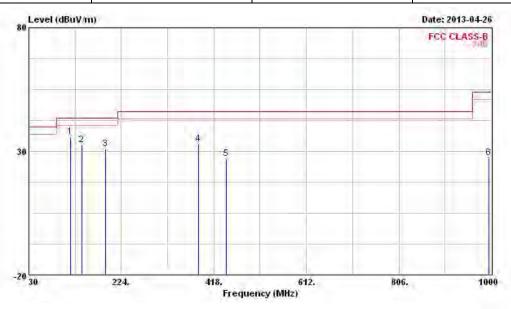
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	117.300	35.87	-7.63	43.50	48.90	13.27	1.53	27.83	Peak		
2	141.550	32.56	-10.94	43.50	46.80	11.78	1.71	27.73	Peak		
3	191.020	31.03	-12.47	43.50	45.85	10.70	2.02	27.54	Peak		
4	385.020	32.93	-13.07	46.00	42.80	15.03	2.93	27.83	Peak		
5	443.220	26.97	-19.03	46.00	35.87	16.14	3.14	28.18	Peak		
6	994.180	27.48	-26.52	54.00	27.52	22.36	4.95	27.35	Peak		222

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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3.6.5 Transmitter Unwanted Emissions (Above 1GHz)

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands; in the meanwhile, an additional radiated test with 50ohm terminator for cabinet spurious emission is also performed.

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	11a_6Mbps	Test Frequency	5180	MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10481.20	-43.86	-41.74	7.77	-31.90	-21.2	Peak				
10463.20	-53.97	-53.44	7.77	-42.93	-41.2	Average				

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	11a_6Mbps	Test Frequency	5200	MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10369.60	-41.26	-45.75	7.77	-32.18	-21.2	Peak				
10441.60	-53.56	-53.56	7.77	-42.79	-41.2	Average				

Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	11a_6Mbps	Test Frequency	5240	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10489.70	-44.70	-40.80	7.77	-31.56	-21.2	Peak			
10483.90	-53.38	-53.64	7.77	-42.74	-41.2	Average			

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Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation11a_6MbpsTest Frequency5260 MHzNTX						2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10465.60	-43.12	-43.04	7.77	-32.31	-21.2	Peak			
10481.20	-53.65	-53.65	7.77	-42.88	-41.2	Average			

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation 11a_6Mbps Test Frequency 5300 MHz NTX 2						2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10440.60	-41.23	-44.46	7.77	-31.78	-21.2	Peak				
10454.40	-53.47	-54.00	7.77	-42.96	-41.2	Average				

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation	11a_6Mbps	Test Frequency	NTX	2					
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10482.40	-41.87	-44.02	7.77	-32.04	-21.2	Peak			
10452.50	-53.74	-53.48	7.77	-42.84	-41.2	Average			

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Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	11a_6Mbps	Test Frequency	55	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10459.90	-45.07	-41.49	7.77	-32.15	-21.2	Peak			
10444.20	-53.54	-53.79	7.77	-42.89	-41.2	Average			

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	Modulation 11a_6Mbps Test Frequency 5580 MHz				NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10457.90	-41.75	-44.80	7.77	-32.24	-21.2	Peak				
10476.60	-53.66	-53.66	7.77	-42.89	-41.2	Average				

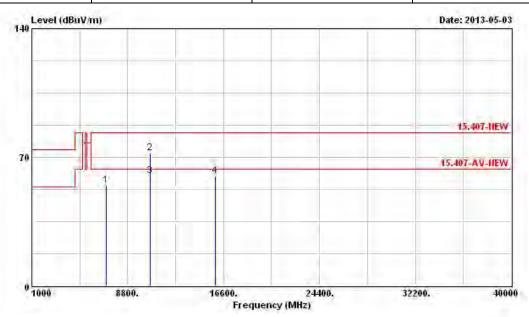
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	11a_6Mbps	Test Frequency	5700	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10475.90	-42.16	-43.16	7.77	-31.86	-21.2	Peak			
10463.50	-53.19	-53.97	7.77	-42.79	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	11a_6Mbps	Test Frequency	5720	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10393.70	-42.03	-43.90	7.77	-32.09	-21.2	Peak			
10476.80	-53.66	-53.40	7.77	-42.76	-41.2	Average			

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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Operating Mode	11a_6Mbps	Polarization	Н				
Operating Frequency 5300 MHz Configuration With 50Ω Terminal							



	Freq	Level	Over Limit	2000	_ 0,919.70	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7044.000	55.00	-8.54	63.54	49.10	35.30	5.70	35.10	PK		
2	10600.000	72.19	-11.35	83.54	63.15	37.66	6.52	35.14	Peak		
3	10600.000	59.92	-3.62	63.54	50.88	37.66	6.52	35.14	Average		
4	15900.000	59.89	-3.65	63.54	46.26	40.80	8.29	35.46	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

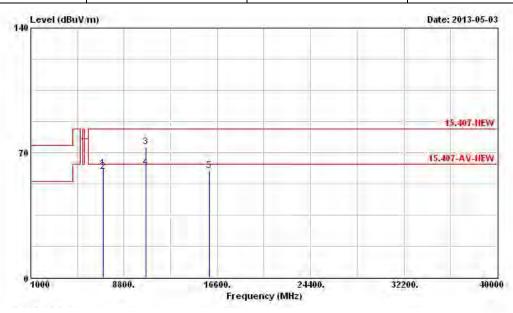
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Operating Mode	11a_6Mbps	Polarization	V				
Operating Frequency	Configuration	With 50Ω Terminated					



			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
1	7044.000	61.39	-22.15	83.54	55.49	35.30	5.70	35.10	Peak		
2	7044.000	59.40	-4.14	63.54	53.50	35.30	5.70	35.10	Average		
3	10600.000	73.05	-10.49	83.54	64.01	37.66	6.52	35.14	Peak		
4	10600.000	61.87	-1.67	63.54	52.83	37.66	6.52	35.14	Average		100-0
5	15900.000	59.72	-3.82	63.54	46.09	40.80	8.29	35.46	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5180	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10476.80	-42.57	-41.95	7.77	-31.48	-21.2	Peak			
10445.50	-53.52	-53.78	7.77	-42.88	-41.2	Average			

Report No.: FR322814AN

Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5200	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10426.30	-42.18	-42.31	7.77	-31.47	-21.2	Peak			
10465.30	-53.70	-53.70	7.77	-42.93	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5240	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10475.50	-42.94	-43.24	7.77	-32.32	-21.2	Peak			
10476.60	-53.15	-53.40	7.77	-42.50	-41.2	Average			

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TEL: 886-3-327-3456 Report Version : Rev. 03



Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5260	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10446.70	-42.97	-43.58	7.77	-32.49	-21.2	Peak			
10466.40	-53.96	-53.18	7.77	-42.78	-41.2	Average			

Report No.: FR322814AN

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5300	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10437.30	-43.98	-42.35	7.77	-32.32	-21.2	Peak			
10439.10	-53.58	-53.84	7.77	-42.94	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation	HT-20_MCS0	Test Frequency	5320	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type			
10486.40	-44.62	-41.28	7.77	-31.87	-21.2	Peak			
10460.90	-53.71	-53.71	7.77	-42.94	-41.2	Average			

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	Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation HT-20_MCS0 Test Frequency 5500 MHz NTX 2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type				
10403.20	-43.51	-42.45	7.77	-32.18	-21.2	Peak				
10438.60	-53.84	-53.59	7.77	-42.94	-41.2	Average				

Report No.: FR322814AN

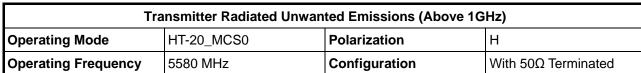
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationHT-20_MCS0Test Frequency5580 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type			
10428.10	-42.36	-43.82	7.77	-32.26	-21.2	Peak			
10480.20	-53.39	-53.92	7.77	-42.88	-41.2	Average			

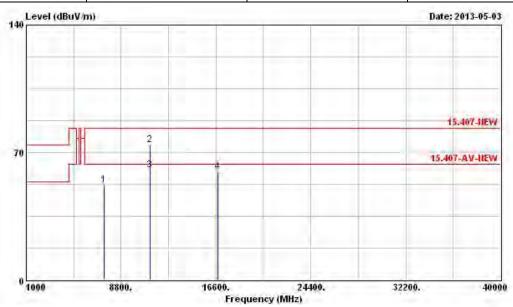
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationHT-20_MCS0Test Frequency5700 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10452.80	-40.62	-45.19	7.77	-31.56	-21.2	Peak			
10486.80	-53.63	-53.63	7.77	-42.86	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationHT-20_MCS0Test Frequency5720 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10443.40	-44.70	-41.45	7.76	-32.01	-21.2	Peak			
10430.30	-53.41	-53.92	7.76	-42.89	-41.2	Average			

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	7428.000	52.08	-11.46	63.54	46.27	35.30	5.71	35.20	PK		
2	11160.000	73.98	-9.56	83.54	64.29	38.03	6.49	34.83	Peak		
3	11160.000	60.48	-3.06	63.54	50.79	38.03	6.49	34.83	Average		
4	16740.000	59.58	-3.96	63.54	45.00	40.90	8.28	34,60	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

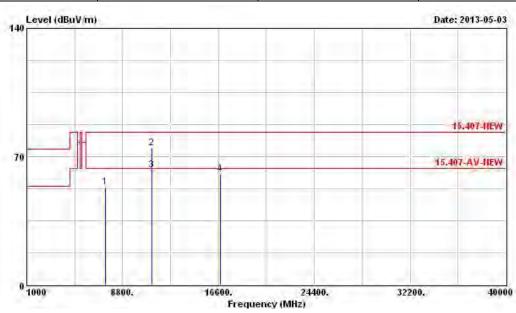
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

SPORTON INTERNATIONAL INC. Page No. : 98 of 120 TEL: 886-3-327-3456 Report Version : Rev. 03



Transmitter Radiated Unwanted Emissions (Above 1GHz)Operating ModeHT-20_MCS0PolarizationVOperating Frequency5580 MHzConfigurationWith 50Ω Terminated

Report No.: FR322814AN



	Fr	eq	Level	Over Limit	Contraction of the Contraction o	- CONT.	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	и	Оťz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	- cm	deg
1	7428.0	00	53.58	-9.96	63.54	47.77	35.30	5.71	35.20	PK		
2	11172.0	00	74.76	-8.78	83.54	65.07	38.03	6.49	34.83	Peak		
3	11172.0	00	62.48	-1.06	63.54	52.79	38.03	6.49	34.83	Average	8-9	
4	16740.0	00	60.22	-3.32	63.54	45.64	40.90	8.28	34.60	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
ModulationHT-40_MCS0Test Frequency5190 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type			
10489.70	-45.17	-41.78	7.77	-32.38	-21.2	Peak			
10447.30	-53.51	-53.77	7.77	-42.87	-41.2	Average			

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	HT-40_MCS0 Test Frequency 5230 MHz NTX 2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10348.90	-44.32	-42.32	7.77	-32.44	-21.2	Peak				
10439.80	-53.32	-53.83	7.77	-42.80	-41.2	Average				

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
ModulationHT-40_MCS0Test Frequency5270 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10455.40	-44.62	-41.28	7.77	-31.87	-21.2	Peak			
10460.90	-53.71	-53.71	7.77	-42.94	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation	ModulationHT-40_MCS0Test Frequency5310 MHzNTX2								
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10450.40	-44.64	-42.03	7.77	-32.37	-21.2	Peak			
10458.00 -53.46 -53.99 7.77 -42.95 -41.2 Average									

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Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationHT-40_MCS0Test Frequency5510 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10449.40	-44.92	-41.52	7.77	-32.13	-21.2	Peak			
10461.50	-53.45	-53.98	7.77	-42.94	-41.2	Average			

Report No.: FR322814AN

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationHT-40_MCS0Test Frequency5550 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10465.30	-44.78	-42.19	7.77	-32.52	-21.2	Peak			
10459.90	-53.71	-53.45	7.77	-42.81	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	odulationHT-40_MCS0Test Frequency5670 MHzNTX2								
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10301.90	-41.72	-44.55	7.77	-32.14	-21.2	Peak			
10461.80	-53.45	-53.97	7.77	-42.93	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	HT-40_MCS0	Test Frequency	Test Frequency 5710 MHz NTX						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type			
10443.20	-43.30	-42.57	7.76	-32.15	-21.2	Peak			
10451.60	-53.74	-53.74	7.76	-42.97	-41.2	Average			

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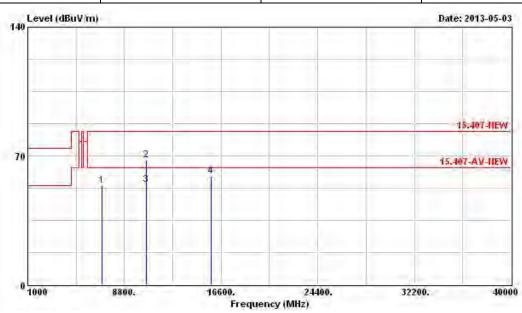


 Transmitter Radiated Unwanted Emissions (Above 1GHz)

 Operating Mode
 HT-40_MCS0
 Polarization
 H

 Operating Frequency
 5270 MHz
 Configuration
 With 50Ω Terminated

Report No.: FR322814AN



2100210	Fı	req	Level	Ove Limi	D 533.3		Antenna Factor	1000	Preamp Factor	Remark	Ant Pos	Table Pos
	1	Mz	dBuV/m	d	B dBuV/	m dBuV	dB/m	dB	dB		cm	deg
1	6996.0	000	53.70	-9.8	4 63.5	4 47.79	35.30	5.70	35.09	PK		
2	10540.0	000	67.51	-16.0	3 83.5	4 58.54	37.62	6.53	35.18	Peak		
3	10540.0	000	54.32	-9.2	2 63.5	4 45.35	37.62	6.53	35.18	Average		
4	15810.0	000	59.10	-4.4	4 63.5	4 45.55	40.71	8.22	35.38	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

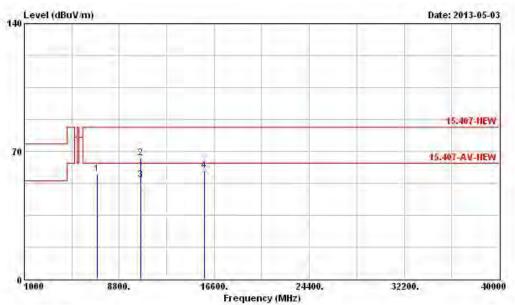
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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72	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1.	6996.000	57.45	-6.09	63.54	51.54	35.30	5.70	35.09	PK		
2	10540.000	66.30	-17.24	83.54	57.33	37.62	6.53	35.18	Peak		
3	10540.000	54.34	-9.20	63.54	45.37	37.62	6.53	35.18	Average		
4	15810.000	59.41	-4.13	63.54	45.86	40.71	8.22	35.38	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
ModulationVHT-20_MCS0Test Frequency5180 MHzNTX2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type				
10377.20	-44.79	-41.64	7.77	-32.17	-21.2	Peak				
10477.30	-53.66	-53.66	7.77	-42.89	-41.2	Average				

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
ModulationVHT-20_MCS0Test Frequency5200 MHzNTX2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10449.60	-44.73	-41.52	7.77	-32.06	-21.2	Peak				
10398.50	-53.95	-53.45	7.77	-42.92	-41.2	Average				

Transmitter Conducted Unwanted Emissions (5150-5250MHz band)									
Modulation	Modulation VHT-20_MCS0 Test Frequency 5240 MHz NTX 2								
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10463.10	-44.43	-41.48	7.77	-31.94	-21.2	Peak			
10474.50 -53.41 -53.16 7.77 -42.51 -41.2 Average									

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	Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
Modulation VHT-20_MCS0 Test Frequency 5260 MHz NTX										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10384.70	-43.69	-42.18	7.77	-32.10	-21.2	Peak				
10477.60	-53.66	-53.93	7.77	-43.02	-41.2	Average				

Report No.: FR322814AN

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
ModulationVHT-20_MCS0Test Frequency5300 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10434.90	-42.44	-41.41	7.77	-31.12	-21.2	Peak			
10444.30	-53.79	-53.53	7.77	-42.89	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)									
ModulationVHT-20_MCS0Test Frequency5320 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10480.10	-42.35	-43.23	7.77	-32.00	-21.2	Peak			
10485.60	-53.90	-53.38	7.77	-42.86	-41.2	Average			

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Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationVHT-20_MCS0Test Frequency5500 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10417.30	-43.38	-42.94	7.77	-32.38	-21.2	Peak			
10441.90	-53.56	53.82	7.77	-42.92	-41.2	Average			

Report No.: FR322814AN

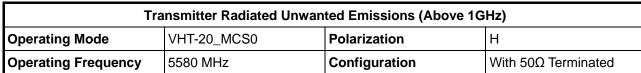
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
ModulationVHT-20_MCS0Test Frequency5580 MHzNTX2									
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10315.30	-41.49	-44.26	7.77	-31.89	-21.2	Peak			
10479.10	-53.66	-53.66	7.77	-42.89	-41.2	Average			

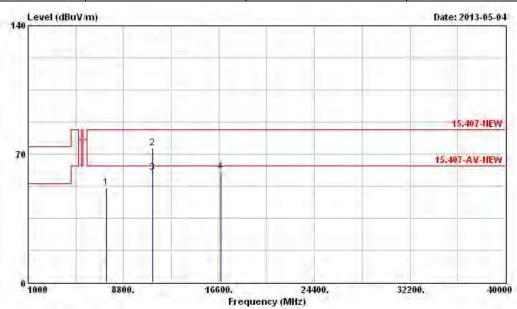
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	VHT-20_MCS0	Test Frequency	5700	MHz	NTX	2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type			
10494.40	-44.51	-41.64	7.77	-32.07	-21.2	Peak			
10438.70	-53.84	-53.33	7.77	-42.81	-41.2	Average			

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	VHT-20_MCS0	-20_MCS0 Test Frequency 5720 MHz				2			
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type			
10458.70	-42.34	-42.21	7.77	-31.50	-21.2	Peak			
10486.30	-53.63	-53.63	7.77	-42.86	-41.2	Average			

SPORTON INTERNATIONAL INC. Page No. : 106 of 120 TEL: 886-3-327-3456 Report Version : Rev. 03







	Freq		Över Limit	Brosier, F	ReadAntenna		Cable Pream			Ant	Table
		I Level			Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1.	7428.000	51.51	-12.03	63.54	45.70	35.30	5.71	35.20	PK		
2	11160.000	73.12	-10.42	83.54	63.43	38.03	6.49	34.83	Peak		
3	11160.000	59.97	-3.57	63.54	50.28	38.03	6.49	34.83	Average		
4	16740.000	60.15	-3.39	63.54	45.57	40.90	8.28	34.60	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

SPORTON INTERNATIONAL INC. Page No. : 107 of 120 TEL: 886-3-327-3456 Report Version : Rev. 03

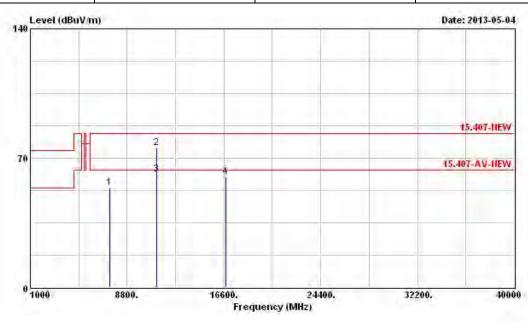


 Transmitter Radiated Unwanted Emissions (Above 1GHz)

 Operating Mode
 VHT-20_MCS0
 Polarization
 V

 Operating Frequency
 5580 MHz
 Configuration
 With 50Ω Terminated

Report No.: FR322814AN



	Freq	Level	Over Level Limit	- Car (1-4 c)	The state of the s		10000	Preamp Factor	Remark	Ant Pos	Table Pos
	мнх	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	7428.000	53.69	-9.85	63.54	47.88	35.30	5.71	35.20	PK		
2	11160.000	75.53	-8.01	83.54	65.84	38.03	6.49	34.83	Peak		
3	11160.000	61.45	-2.09	63.54	51.76	38.03	6.49	34.83	Average		
4	16740.000	59.84	-3.70	63.54	45.26	40.90	8.28	34.60	PK		1000

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

SPORTON INTERNATIONAL INC. Page No. : 108 of 120 TEL: 886-3-327-3456 Report Version : Rev. 03



FCC / IC Radio Test Report

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)											
Modulation	ModulationVHT-40_MCS0Test Frequency5190 MHzNTX2											
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type						
10477.50	-42.50	-43.31	7.77	-32.12	-21.2	Peak						
10456.60	-53.99	-53.21	7.77	-42.81	-41.2	Average						

Report No.: FR322814AN

	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)										
Modulation	VHT-40_MCS0Test Frequency5230 MHzNTX2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type					
10458.70	-43.21	-43.14	7.77	-32.40	-21.2	Peak					
10455.30	-53.47	-53.47	7.77	-42.70	-41.2	Average					

Transmitter Conducted Unwanted Emissions (5250-5350MHz band)										
Modulation	VHT-40_MCS0	Test Frequency	5270	MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type				
10418.10	-43.45	-42.86	7.77	-32.37	-21.2	Peak				
10439.70	-53.58 -53.84 7.77 -42.94 -41.2 Averag									

	Transmitter Conducted Unwanted Emissions (5250-5350MHz band)											
Modulation	dulation VHT-40_MCS0 Test Frequency 5310 MHz NTX 2											
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type						
10466.20	-42.05	-44.24	7.77	-32.24	-21.2	Peak						
10459.90	-53.45	-53.71	7.77	-42.81	-41.2	Average						

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TEL: 886-3-327-3456 Report Version : Rev. 03



FCC / IC Radio Test Report

	Transmitter Conducted Unwanted Emissions (5470-5725MHz band)											
ModulationVHT-40_MCS0Test Frequency5510 MHzNTX2												
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type						
10367.70	-44.00	-42.22	7.77	-32.25	-21.2	Peak						
10439.50	-53.84	-53.58	7.77	-42.94	-41.2	Average						

Report No.: FR322814AN

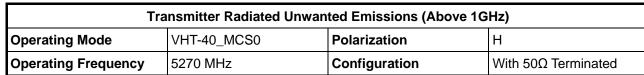
	Transmitter Conducted Unwanted Emissions (5470-5725MHz band)										
Modulation	ModulationVHT-40_MCS0Test Frequency5550 MHzNTX2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type					
10432.00	-43.32	42.53	7.77	-32.14	-21.2	Peak					
10436.10	-53.61	-53.87	7.77	-42.97	-41.2	Average					

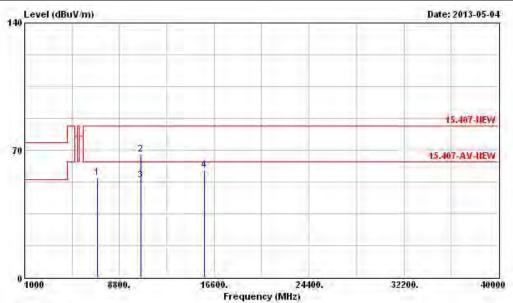
Transmitter Conducted Unwanted Emissions (5470-5725MHz band)										
Modulation	VHT-40_MCS0	Test Frequency	5670	MHz	NTX	2				
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type				
10447.10	-42.53	-43.98	7.77	-32.42	-21.2	Peak				
10440.80	-53.57 -53.83 7.77 -42.93 -41.2 Average									

	Transmitter Conducted Unwanted Emissions (5470-5725MHz band)										
Modulation	ation VHT-40_MCS0 Test Frequency 5710 MHz NTX 2										
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi)	EIRP Level (dBm)	Limit (dBm)	Level Type					
10370.90	-42.19	-43.38	7.77	-31.97	-21.2	Peak					
10482.30	-53.39	-53.91	7.77	-42.87	-41.2	Average					

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		com	deg
1	6996.000	54.63	-8.91	63.54	48.72	35.30	5.70	35.09	PK		
2	10540.000	67.76	-15.78	83.54	58.79	37.62	6.53	35.18	Peak		200
3	10540.000	53.43	-10.11	63.54	44.46	37.62	6.53	35.18	Average		750
4	15810.000	58.88	-4.66	63.54	45.33	40.71	8.22	35.38	PK		12.22

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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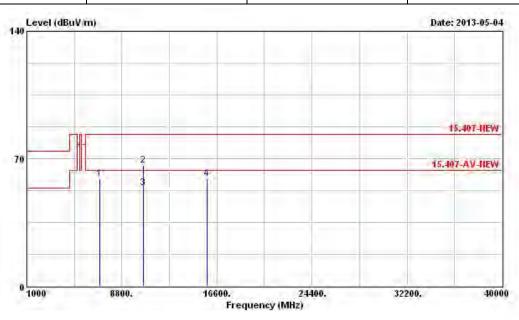


 Transmitter Radiated Unwanted Emissions (Above 1GHz)

 Operating Mode
 VHT-40_MCS0
 Polarization
 V

 Operating Frequency
 5270 MHz
 Configuration
 With 50Ω Terminated

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	Freq	Level	Over Limit	Contract of the Contract of th	1 2 mars 1	Antenna Factor	The state of the s		Remark	Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
1	6996.000	58.75	-4.79	63.54	52.84	35.30	5.70	35.09	PK		
2	10540.000	66.53	-17.01	83.54	57.56	37.62	6.53	35.18	Peak		
3	10540.000	53.77	-9.77	63.54	44.80	37.62	6.53	35.18	Average		
4	15810.000	58.90	-4.64	63.54	45.35	40.71	8.22	35.38	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Transmitter Conducted Unwanted Emissions (5150-5250MHz band)											
Modulation	VHT-80_MCS0	Test Frequency	52	10 MHz	NTX	2						
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type						
10459.90	-43.44	-42.62	7.77	-32.24	-21.2	Peak						
10446.80	-53.51	-53.77	7.77	-42.87	-41.2	Average						

	Transmitter Conducted Unwanted Emissions (5250-5350MHz band)											
ModulationVHT-80_MCS0Test Frequency5290 MHzNTX2												
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type						
10458.30	-43.85	-42.07	7.77	-32.10	-21.2	Peak						
10466.40	-53.69	-53.69	7.77	-42.92	-41.2	Average						

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)									
Modulation	VHT-80_MCS0	Test Frequency	5530 MHz		5530 MHz		NTX	2	
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG EIRP Level (dBi) (dBm)		Limit (dBm)	Level Type			
10450.80	-44.46	-41.96	7.77	-32.26	-21.2	Peak			
10462.60	-53.45	-53.71	7.77	-42.81	-41.2	Average			

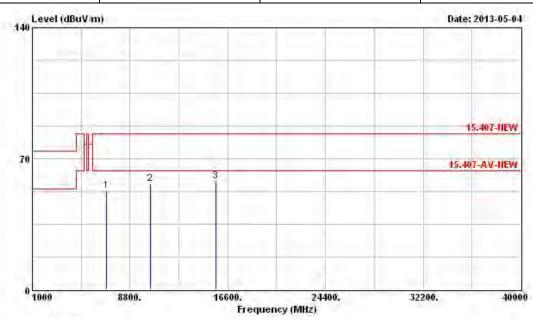
Note¹: Using conducted method with composite antenna gain to test unwanted emissions in restricted bands may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance was demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. The result does show it is compliant. Please refer to radiated section 3.6 in this report.

Transmitter Conducted Unwanted Emissions (5470-5725MHz band)										
Modulation	VHT-80_MCS0	Test Frequency	5690 MHz		5690 MHz		5690 MHz		NTX	2
Frequency (MHz)	Chain 0 Test Level (dBm)	Chain 1 Test Level (dBm)	DG (dBi) EIRP Level (dBm)		Limit (dBm)	Level Type				
10431.50	-42.13	-44.12	7.77	-32.24	-21.2	Peak				
10488.10	-53.90	-53.63	7.77	-42.99	-41.2	Average				

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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Operating Mode	VHT-80_MCS0	Polarization	Н				
Operating Frequency	5210 MHz	Configuration	With 50Ω Terminated				



	Freq	Level	Over Limit	Limit Line		Antenna Factor	1000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1.	6936.000	52.75	-10.79	63.54	46.84	35.29	5.70	35.08	PK		
2	10420.000	56.47	-7.07	63.54	47.74	37.55	6.46	35.28	PK		
3	15630.000	58.13	-5.41	63.54	44.77	40.54	8.03	35.21	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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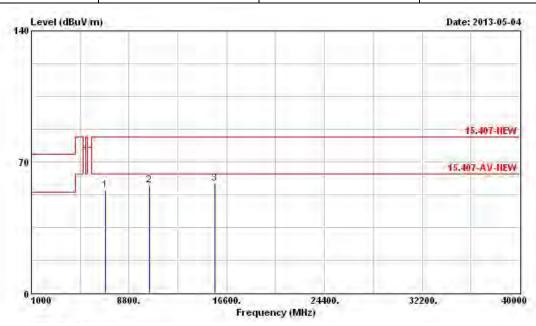


 Transmitter Radiated Unwanted Emissions (Above 1GHz)

 Operating Mode
 VHT-80_MCS0
 Polarization
 H

 Operating Frequency
 5210 MHz
 Configuration
 With 50Ω Terminated

Report No.: FR322814AN



7000 2011	0	1.755	Over		2000	Antenna				Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6936.000	55.00	-8.54	63.54	49.09	35.29	5.70	35.08	PK		
2	10440.000	57.56	-5.98	63.54	48.80	37.56	6.46	35.26	PK		
3	15630.000	58.65	-4.89	63.54	45.29	40.54	8.03	35.21	PK		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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3.7 AC Power-line Conducted Emissions

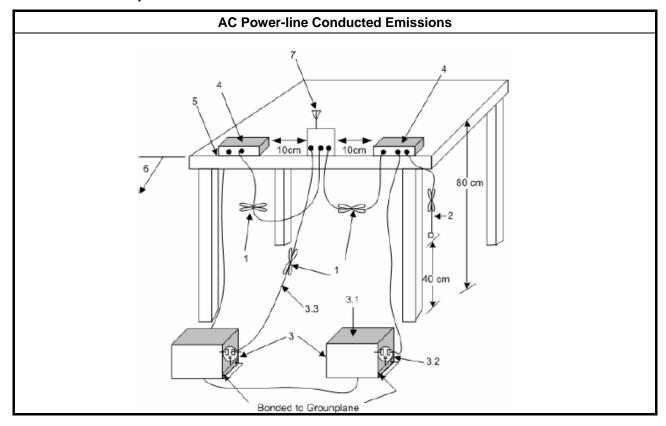
3.7.1 Test Procedures

Test Method

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Refer as ANSI C63.10-2009, clause 6.2 for AC power-line conducted emissions.

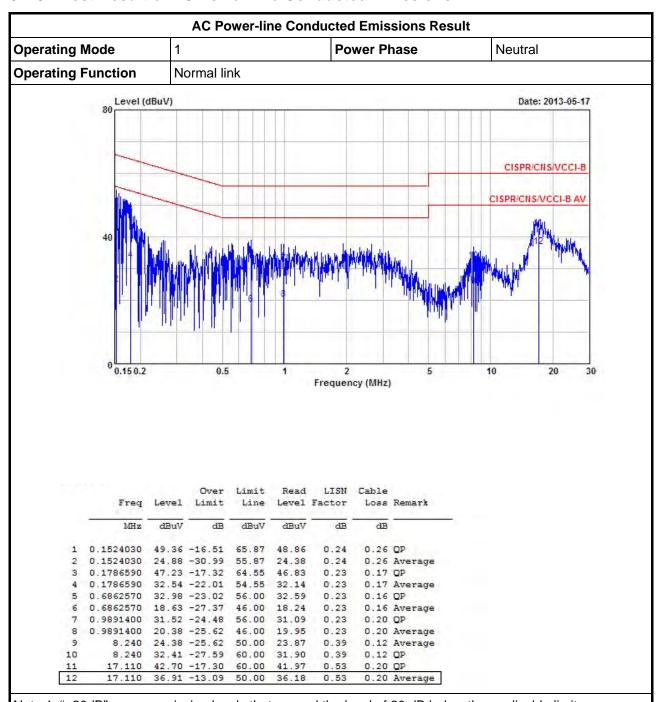
3.7.2 Test Setup



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3.7.3 Test Result of AC Power-line Conducted Emissions

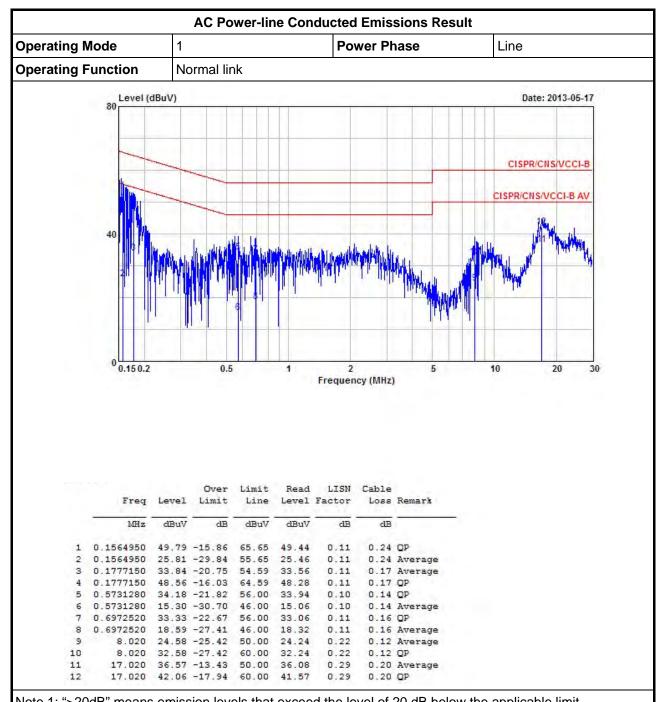


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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz ~ 2.75GHz	Mar. 26, 2013	Conduction (CO04-HY)
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2013	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz ~ 30MHz	Apr. 18, 2013	Conduction (CO04-HY)
RF Cable-CON	HUBER+SUHNER	RG213/U	7.61183201e+012	9kHz ~ 30MHz	Nov. 09, 2012	Conduction (CO04-HY)

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Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP 40	100305	9KHz~40GHz	Mar. 20, 2013	Conducted (TH01-HY)
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jul. 02, 2012	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100°C	Nov. 21, 2012	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jun. 26, 2012	Conducted (TH01-HY)
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	Feb. 02, 2013	Conducted (TH01-HY)
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	Feb. 02, 2013	Conducted (TH01-HY)
RF Cable-2m	HUBER+SUHNER	SUCOFLEX_104	SN 345675/4	1GHz ~ 26.5GHz	NA	Conducted (TH01-HY)
RF Cable-3m	HUBER+SUHNER	SUCOFLEX_104	SN 345669/4	1GHz ~ 26.5GHz	NA	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

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FCC / IC Radio Test Report

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP40	100593	9kHz ~ 40GHz	Sep. 14, 2012	Radiation (03CH02-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	May 10, 2012	Radiation (03CH02-HY)
Amplifier	Agilent	8447D	2944A11146	100kHz ~ 1.3GHz	Jul. 23, 2012	Radiation (03CH02-HY)
Amplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	Aug. 10, 2012	Radiation (03CH02-HY)
Horn Antenna	ETS-LINDGREN	3117	00091920	1GHz ~ 18GHz	Nov. 16, 2012	Radiation (03CH02-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 08, 2013	Radiation (03CH02-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 10, 2012	Radiation (03CH02-HY)
RF Cable-high	SUHNER	SUCOFLEX106	03CH02-HY	1GHz ~ 40GHz	Mar. 05, 2013	Radiation (03CH02-HY)
Bilog Antenna	SCHAFFNER	CBL61128	2723	30MHz ~ 2GHz	Oct. 22, 2012	Radiation (03CH02-HY)
Turn Table	HD	DS 420	420/649/00	0~ 360 degree	N/A	Radiation (03CH02-HY)
Antenna Mast	HD	MA 240	240/559/00	1 ~ 4 m	N/A	Radiation (03CH02-HY)

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Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz - 30 MHz	Dec. 02, 2012	Radiation (03CH02-HY)

Note: Calibration Interval of instruments listed above is two year.

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