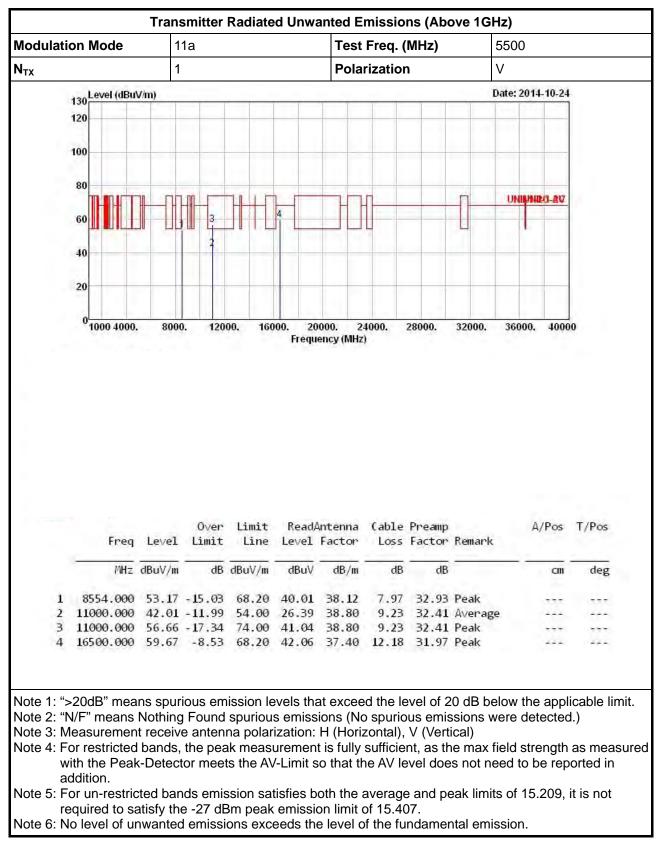
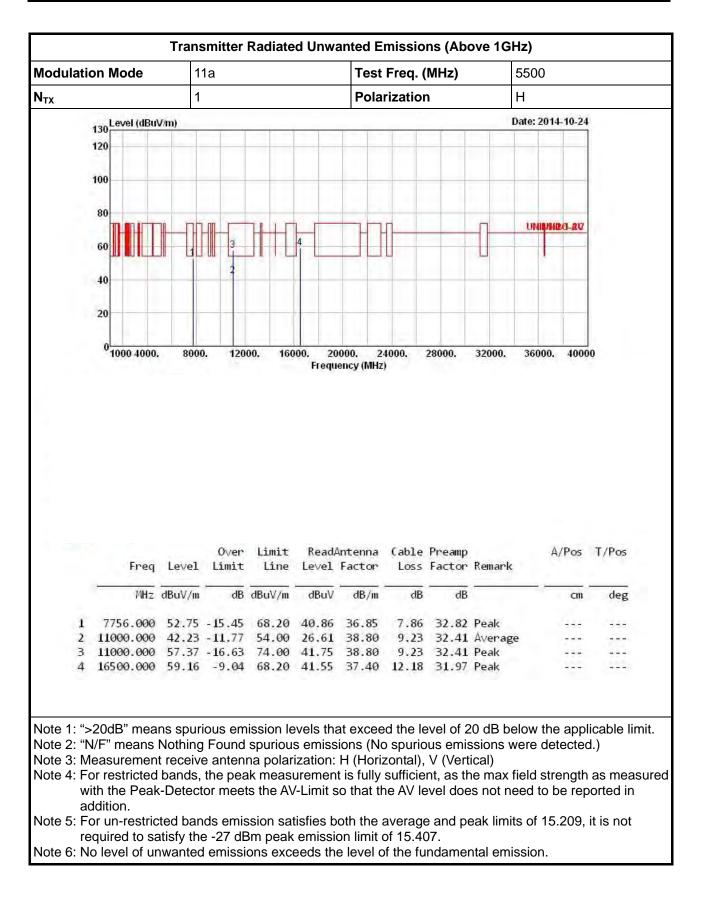




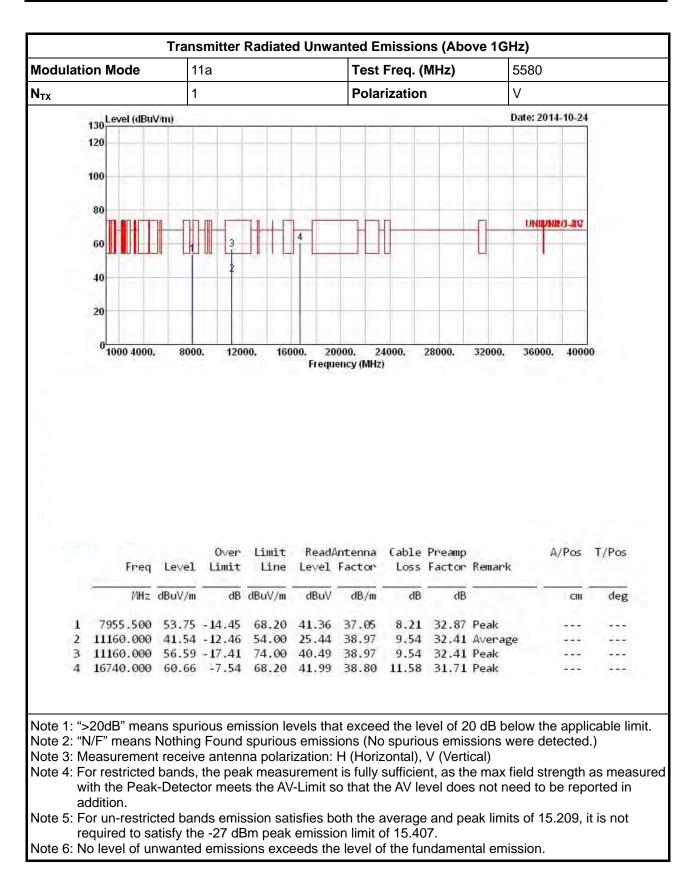
# 3.6.9 Transmitter Radiated Unwanted Emissions For 5470-5725MHz - (Above 1GHz WORST-CASE DATA)



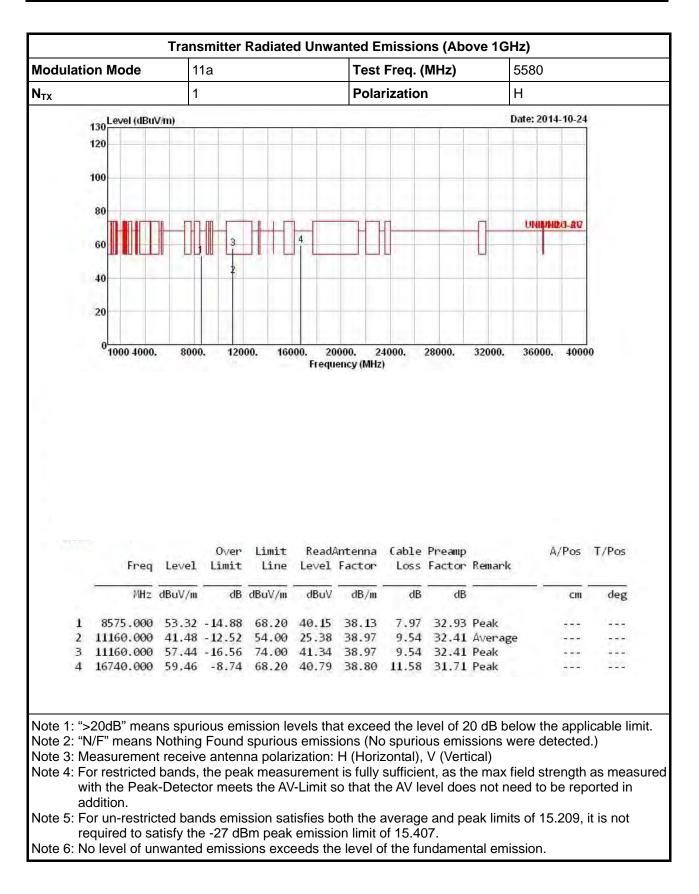




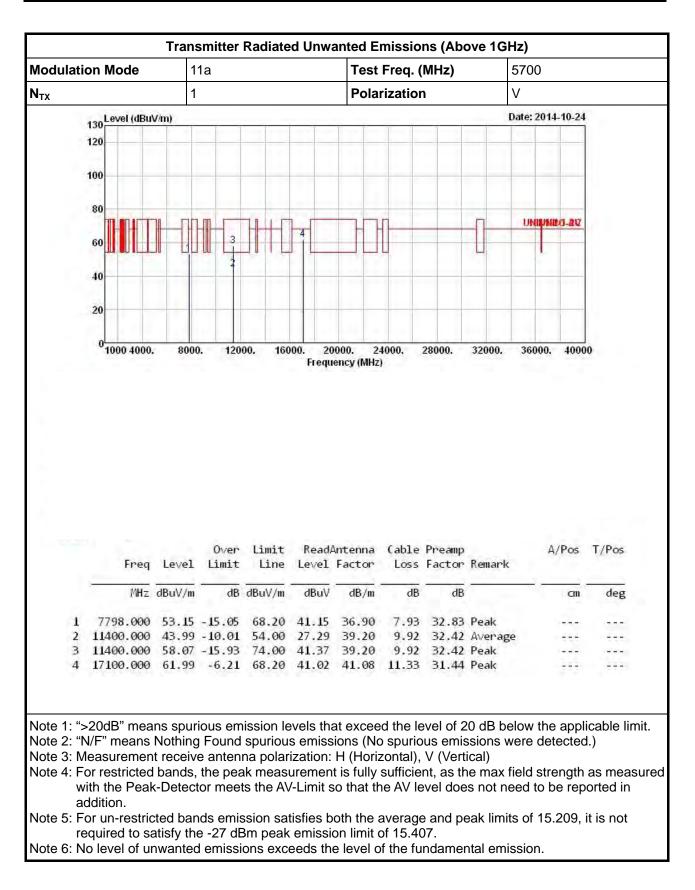




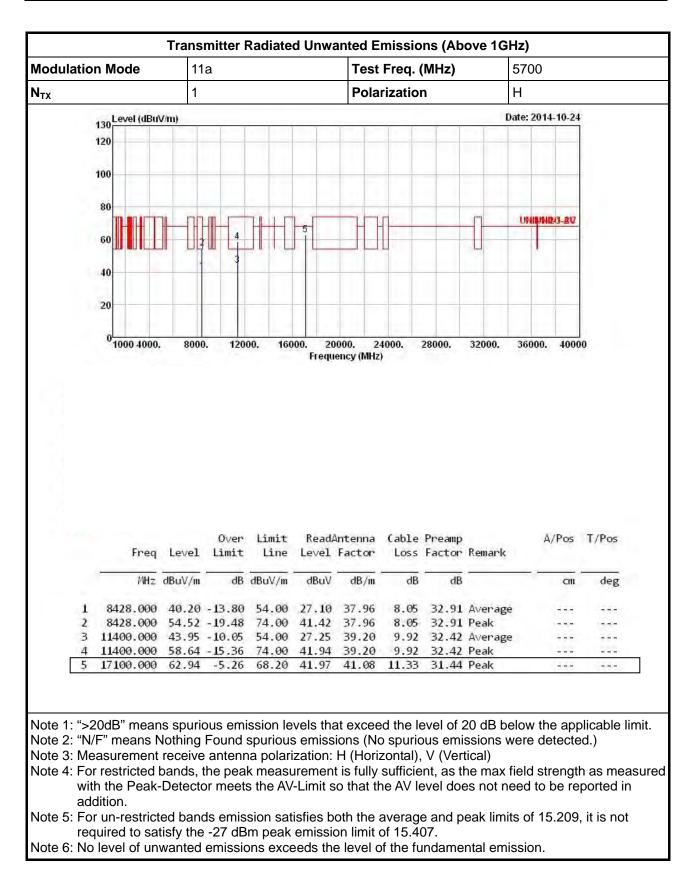




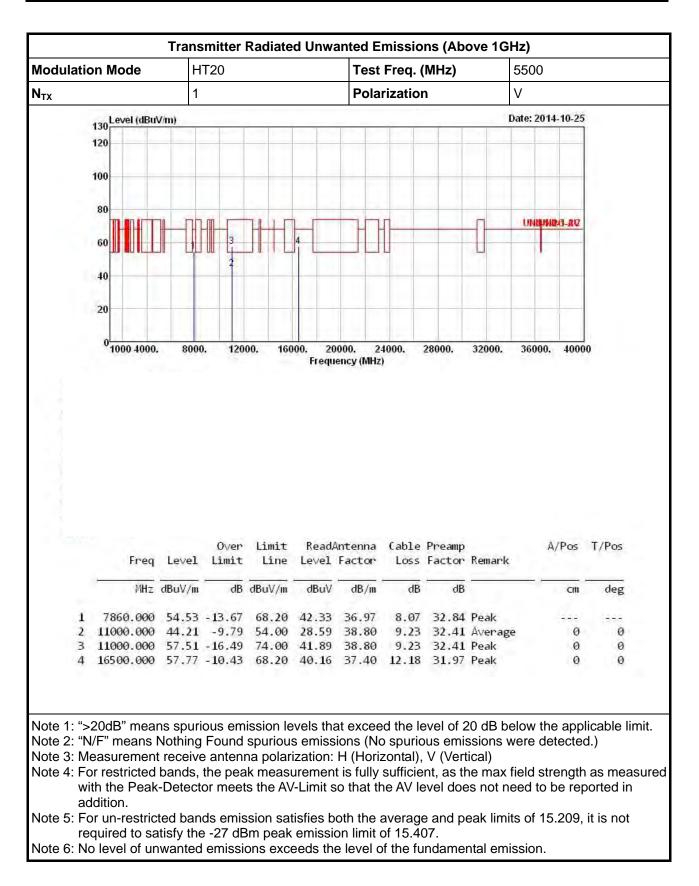




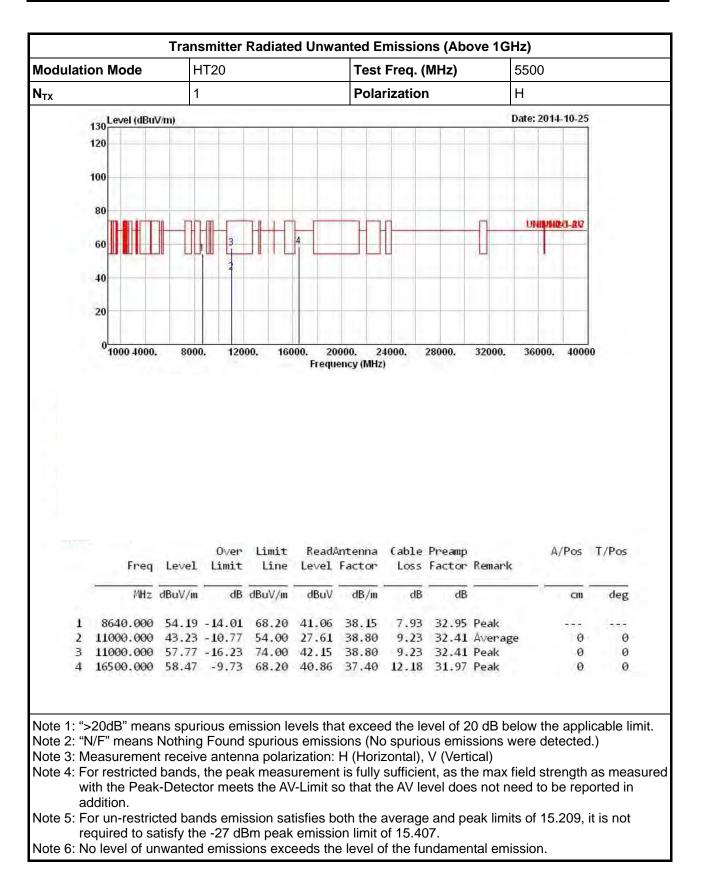




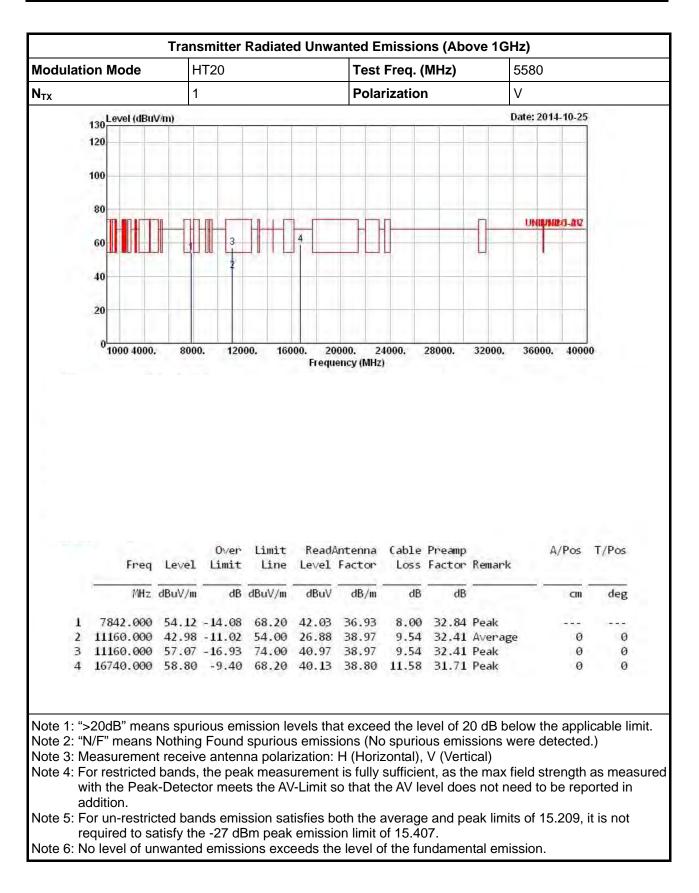




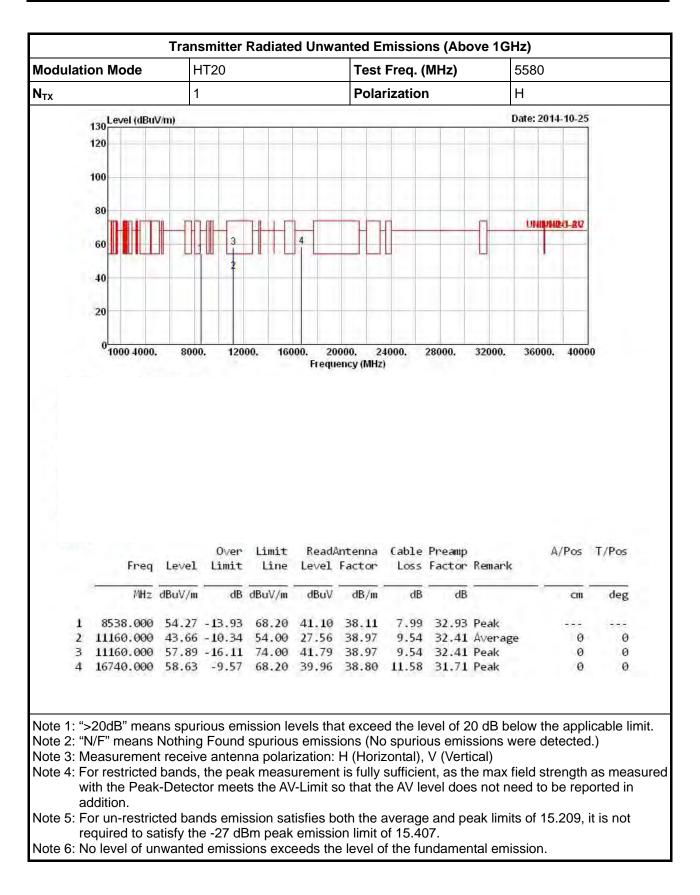




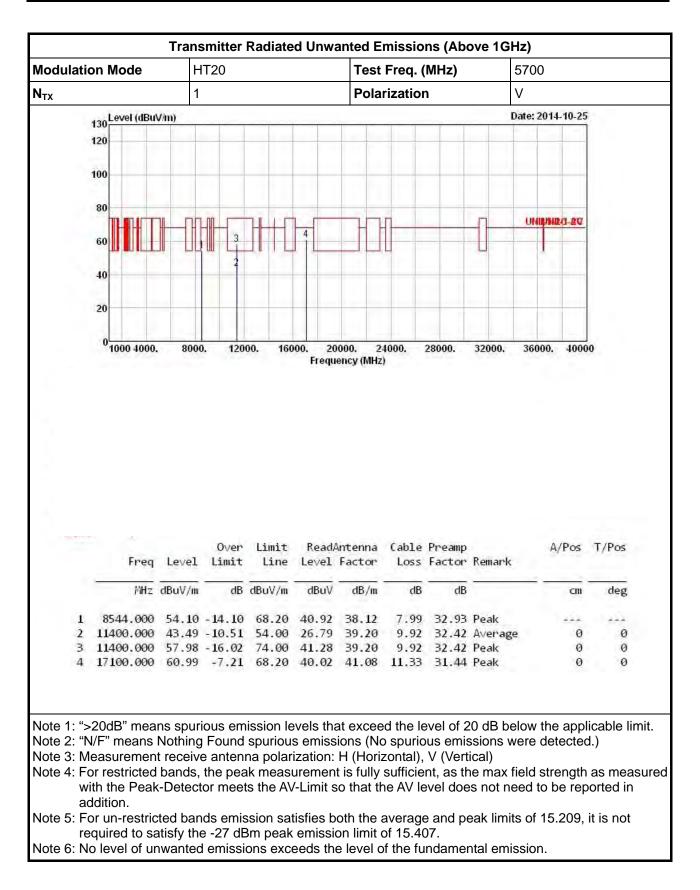




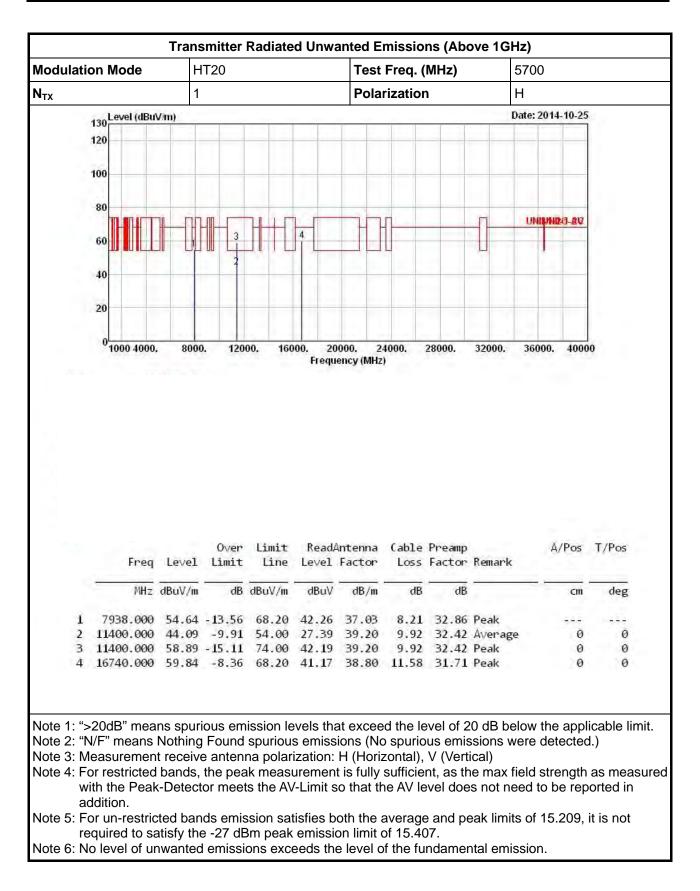






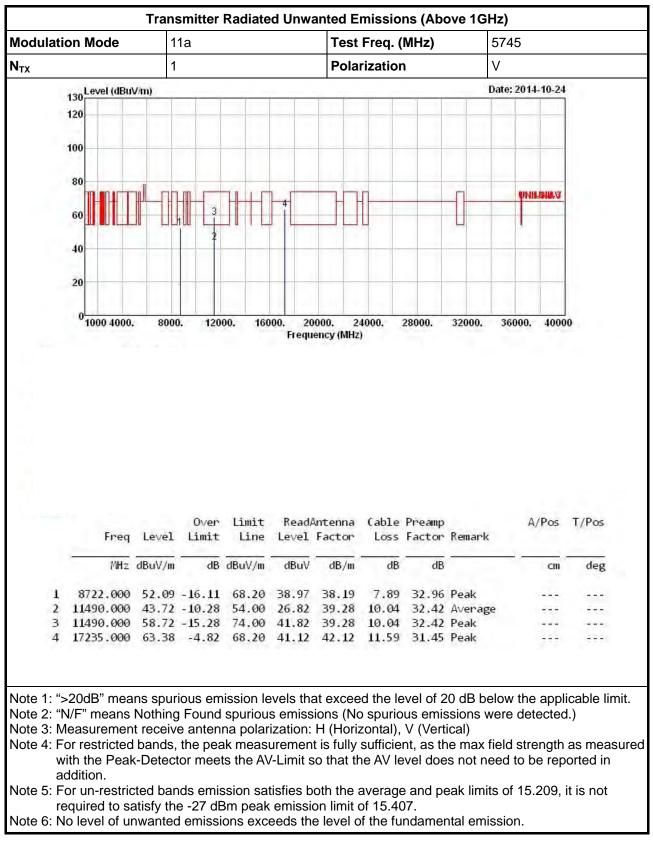




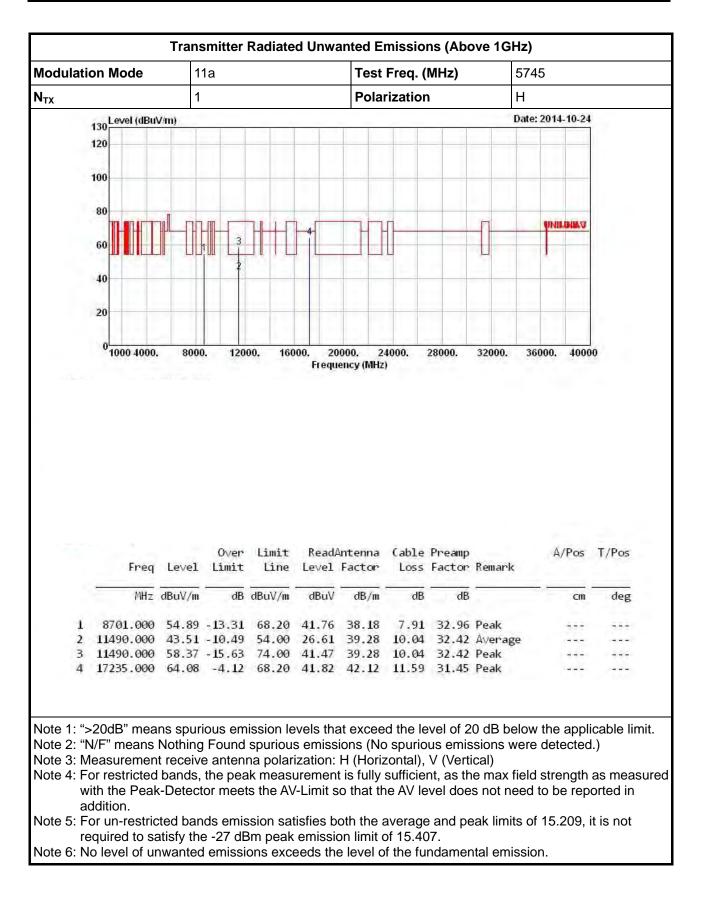




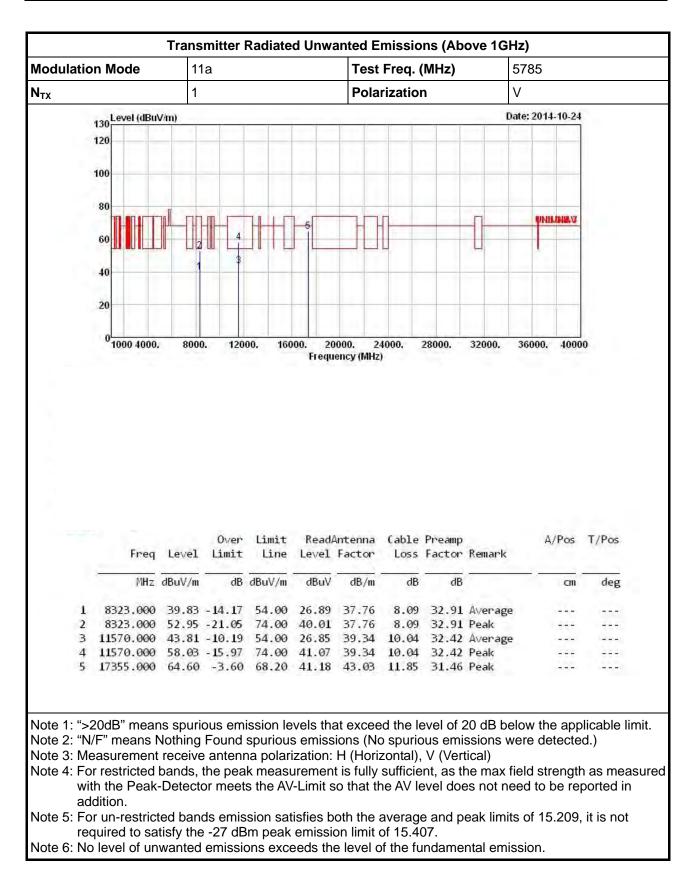




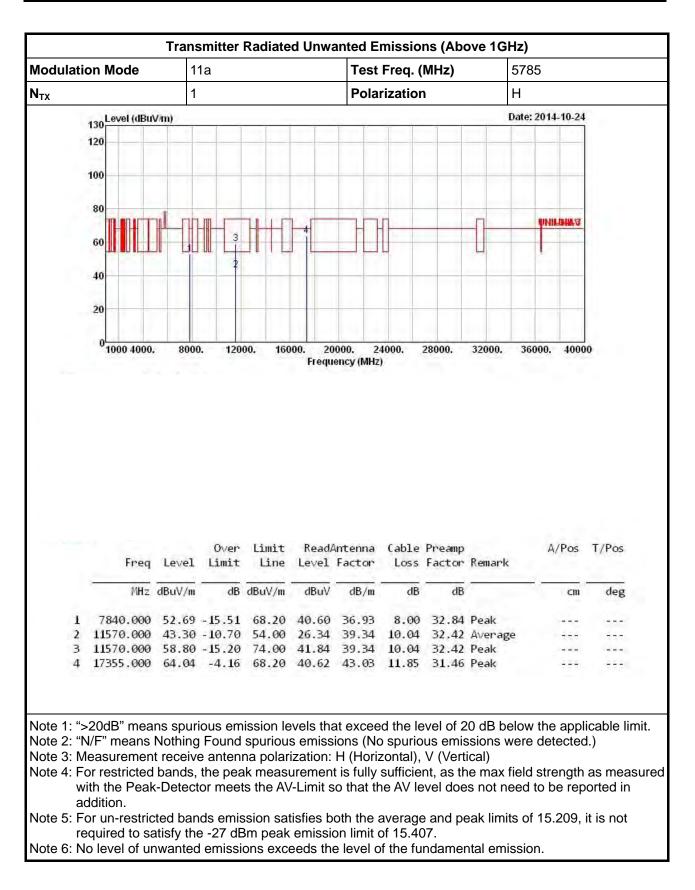




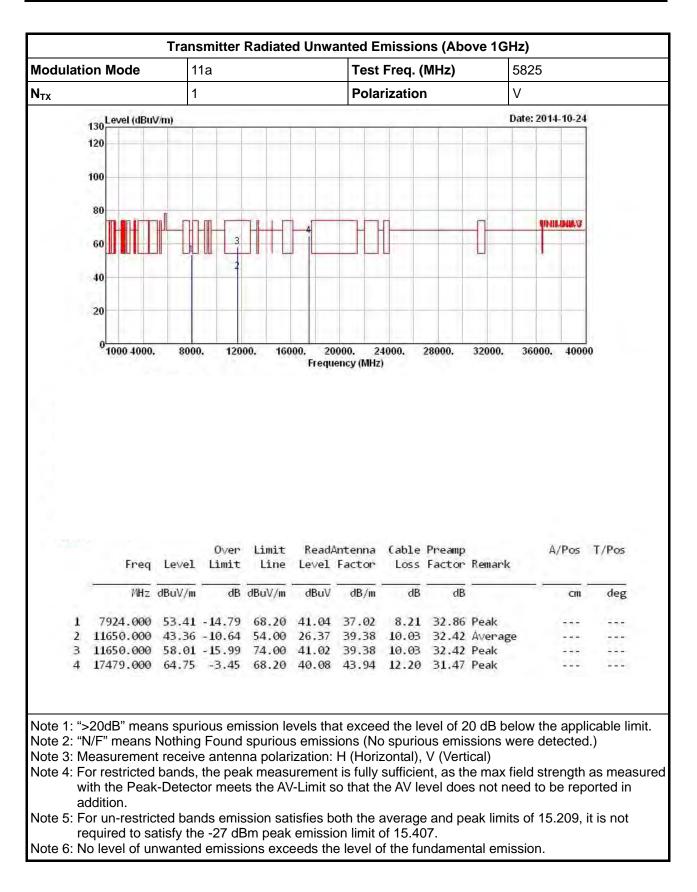




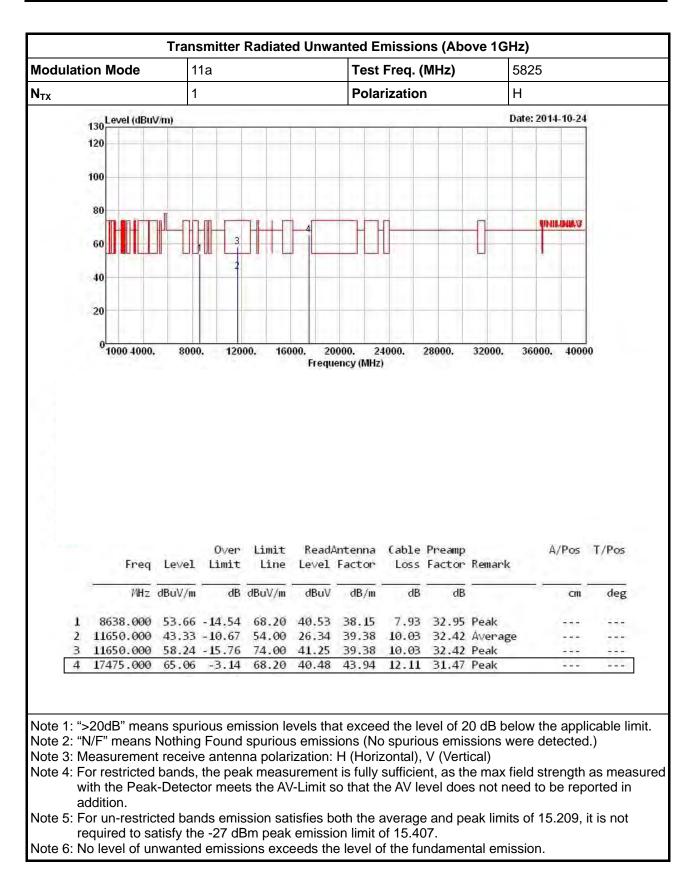




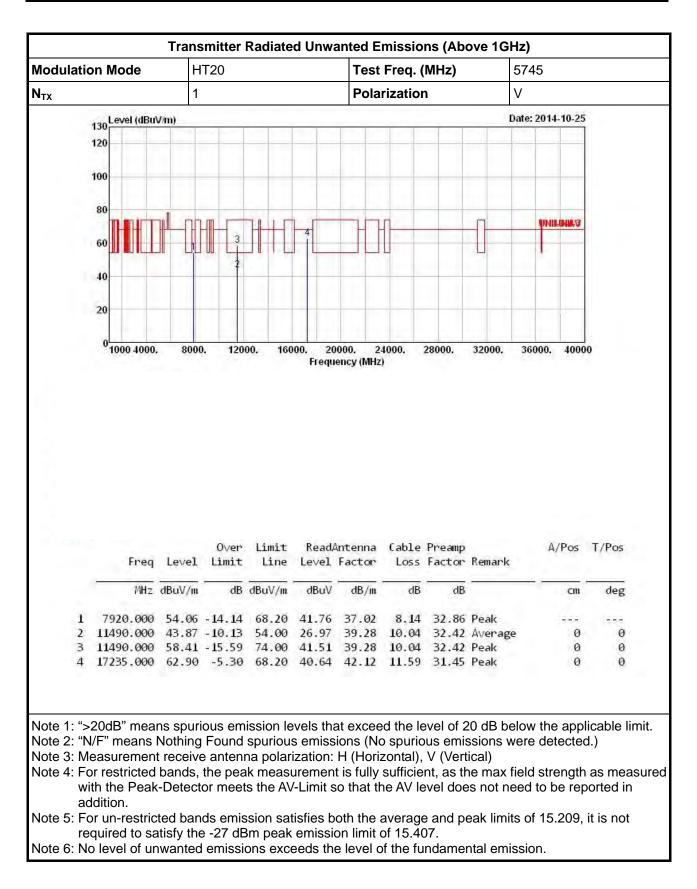




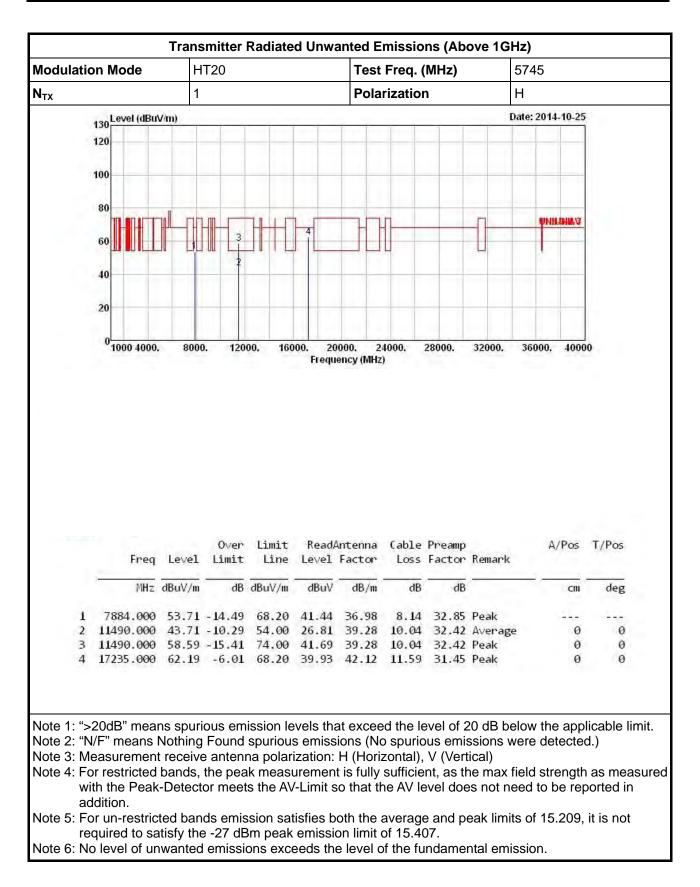




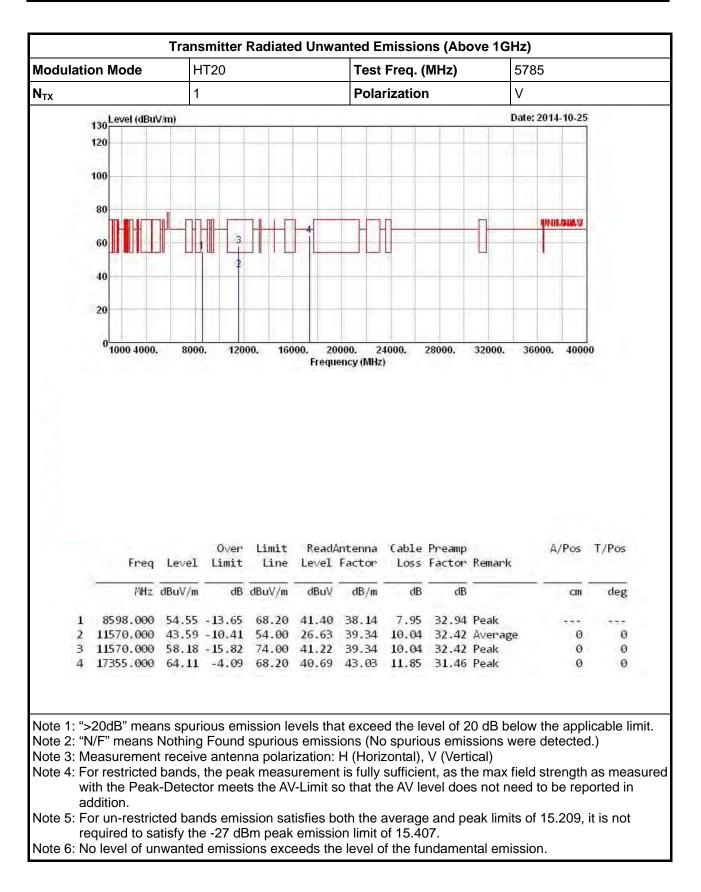




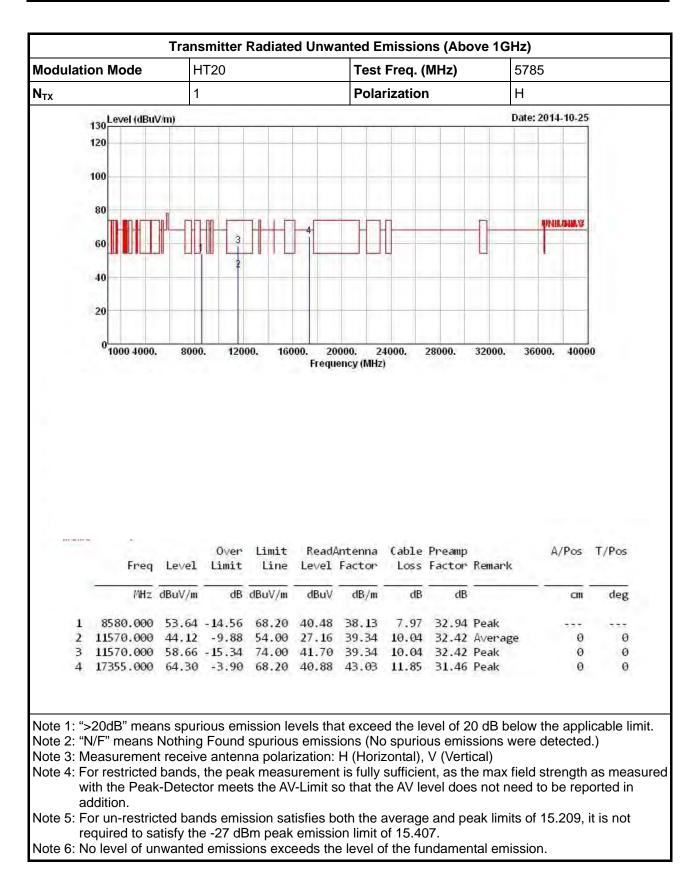




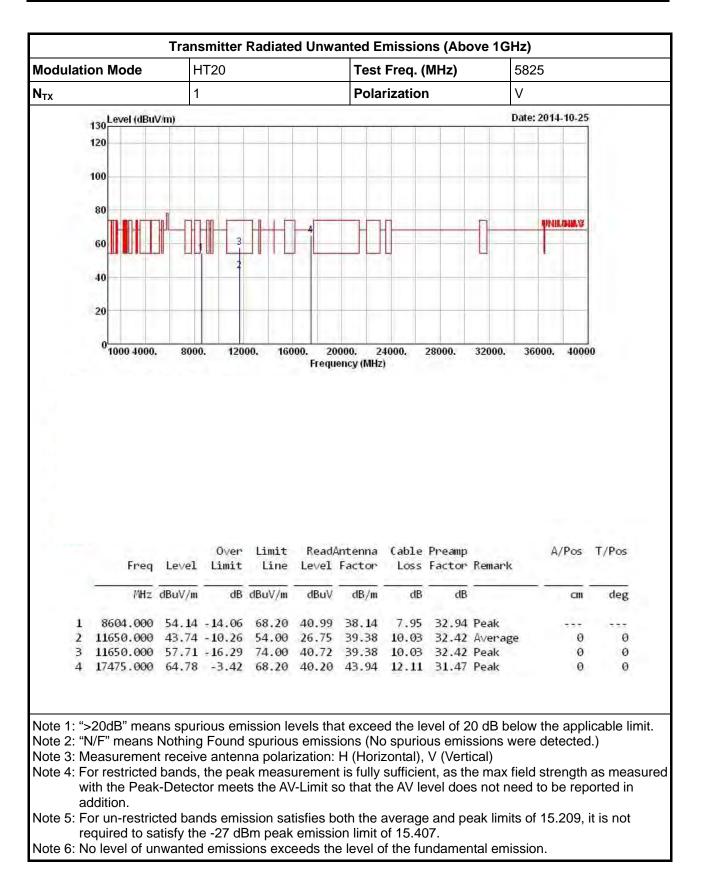




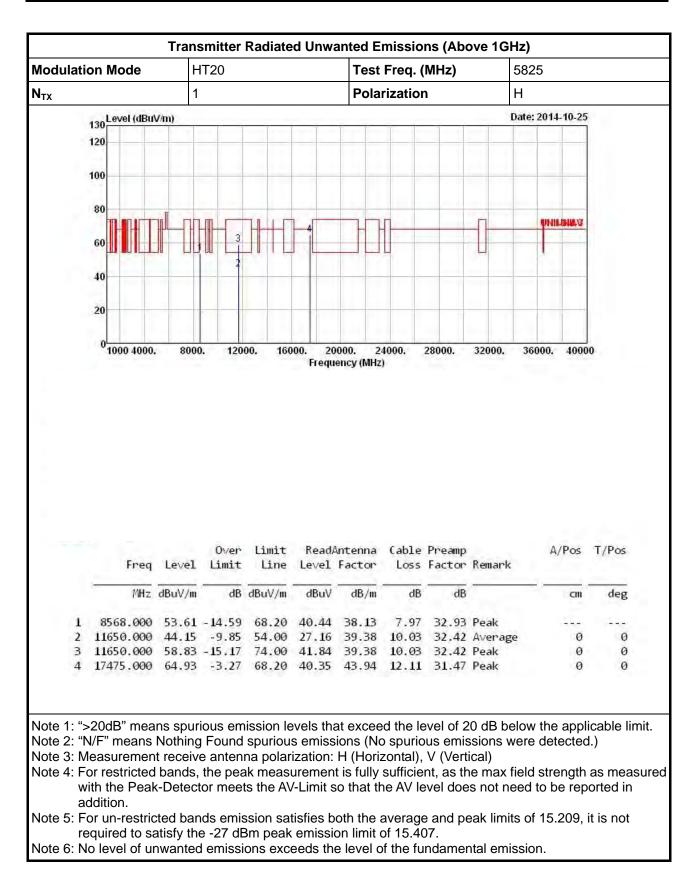














# 3.7 Frequency Stability

## 3.7.1 Frequency Stability Limit

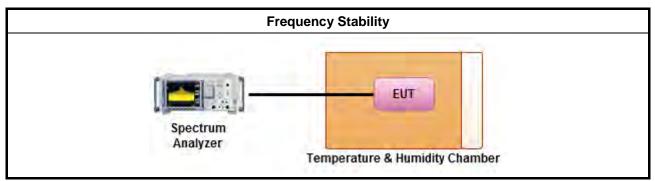
Frequency Stability Limit					
UNII Devices					
In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.					
IEEE Std. 802.11n-2009					
The transmitter center frequency tolerance shall be $\pm$ 20 ppm maximum for the 5 GHz band and $\pm$ 25 ppm maximum for the 2.4 GHz band.					
3.7.2 Measuring Instruments					

Refer a test equipment and calibration data table in this test report.

#### 3.7.3 Test Procedures

	Test Method						
$\boxtimes$	Refer as ANSI C63.10, clause 6.8 for frequency stability tests						
	$\square$	Frequency stability with respect to ambient temperature					
	$\square$	Frequency stability when varying supply voltage					
$\boxtimes$	For	conducted measurement.					
	$\boxtimes$	For conducted measurements on devices with multiple transmit chains: Measurements need only to be performed on one of the active transmit chains (antenna outputs)					
		radiated measurement. The equipment to be measured and the test antenna shall be oriented to an the maximum emitted power level.					

# 3.7.4 Test Setup





3.7.5	Test Result o	f Frequency	Stability
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		Frequency Stability Result			
Мо	de	Frequency Stability (ppm)			
Condition	Freq. (MHz)	Test Frequency (MHz)	Frequency Stability (ppm)		
T <sub>20°C</sub> Vmax	5300	5300.04515	8.5189		
T <sub>20°C</sub> Vmin	5300	5300.04472	8.4377		
$T_{50^{\circ}C}Vnom$	5300	5300.03821	7.2094		
$T_{40^{\circ}C}Vnom$	5300	5300.03864	7.2906		
T <sub>30°C</sub> Vnom 5300   T <sub>20°C</sub> Vnom 5300   T <sub>10°C</sub> Vnom 5300   T <sub>10°C</sub> Vnom 5300   T <sub>0°C</sub> Vnom 5300		5300.04124	7.7811 8.5189		
		5300.04515 5300.05514 5300.06339			
			10.4038 11.9604		
				T <sub>-10°C</sub> Vnom	5300
T <sub>-20°C</sub> Vnom	5300	5300.07250	13.6792		
Limit (ppm)		20			
Res	ult	Complied			



# 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	Apr. 14. 2014	AC Conduction
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 22, 2014	AC Conduction
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 31, 2014	AC Conduction
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	AC Conduction

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

Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
R&S	FSV 40	101013	9KHz~40GHz	Jan. 25, 2014	RF Conducted
G.W	APS-9102	EL920581	AC 0V ~ 300V	Jul. 15, 2014	RF Conducted
R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 31, 2014	RF Conducted
Giant Force	GTH-225-20-SP- SD	MAA1112-007	-20 ~ 100°C	Nov. 20, 2013	RF Conducted
HUBER+SUHNER	SUCOFLEX_104	SN 345675/4	30MHz ~ 26.5GHz	Dec. 02, 2013	RF Conducted
	R&S G.W R&S Giant Force	R&SFSV 40G.WAPS-9102R&SSMR40Giant ForceGTH-225-20-SP- SD	R&S FSV 40 101013   G.W APS-9102 EL920581   R&S SMR40 100116   Giant Force GTH-225-20-SP- SD MAA1112-007	R&S FSV 40 101013 9KHz~40GHz   G.W APS-9102 EL920581 AC 0V ~ 300V   R&S SMR40 100116 10MHz ~ 40GHz   Giant Force GTH-225-20-SP- SD MAA1112-007 -20 ~ 100°C	R&S FSV 40 101013 9KHz~40GHz Jan. 25, 2014   G.W APS-9102 EL920581 AC 0V ~ 300V Jul. 15, 2014   R&S SMR40 100116 10MHz ~ 40GHz Jul. 31, 2014   Giant Force GTH-225-20-SP- SD MAA1112-007 -20 ~ 100°C Nov. 20, 2013

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi			03CH03-HY 30MHz ~ 1GHz 3m	Nov. 30, 2013		
Anechoic Chamber	SIDT FRANKONIA	SAC-3M		•••••	Nov. 29, 2014 (Update)	Radiation
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 05, 2014	Radiation
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 01, 2014	Radiation
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 27, 2014	Radiation
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 20, 2014	Radiation
Horn Antenna	ETS · LINDGREN	3115	6741	1GHz ~ 18GHz	Jun. 11, 2014	Radiation
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 10, 2014	Radiation
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 16, 2013	Radiation
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 11, 2013	Radiation
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EM	EM18G40G	060604	18GHz ~ 40GHz	Oct. 17, 2013	Radiation
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	Dec. 02, 2012	Radiation

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