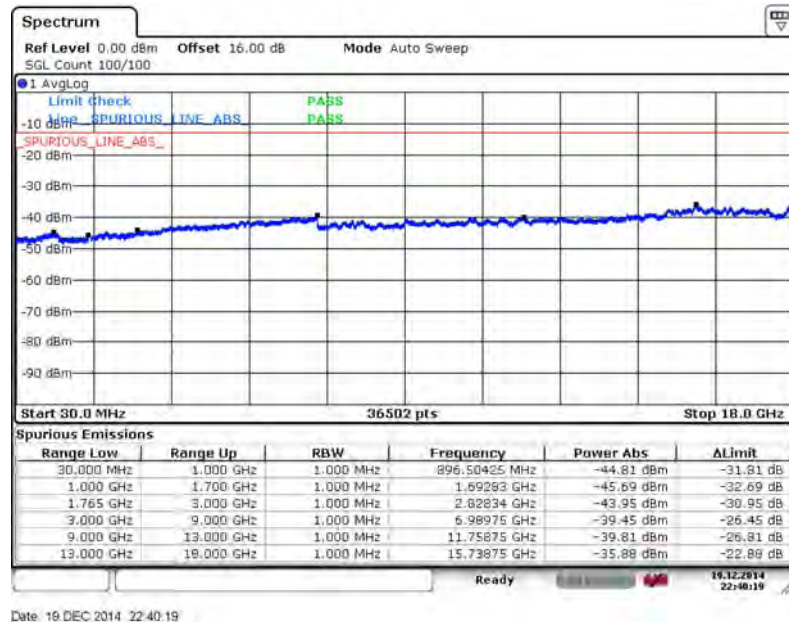
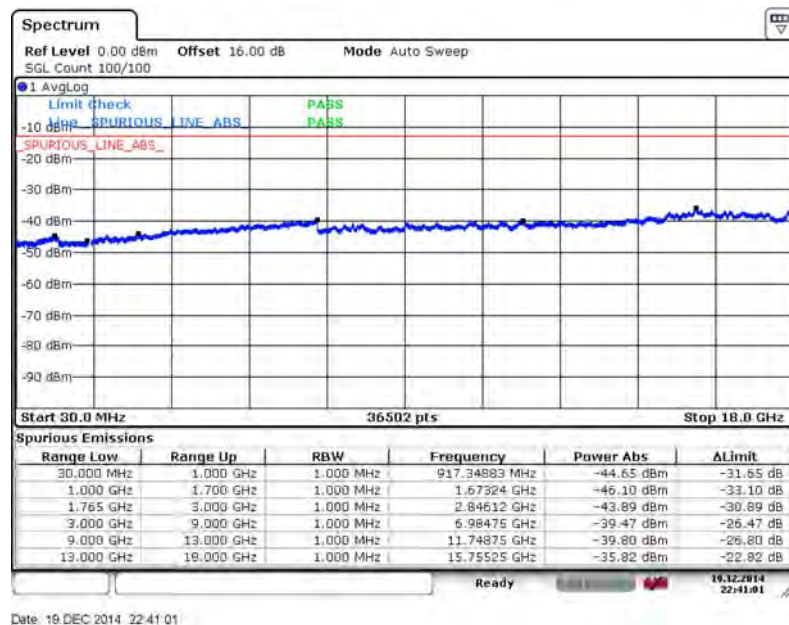


Band :	LTE Band 4	Channel :	CH20000 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



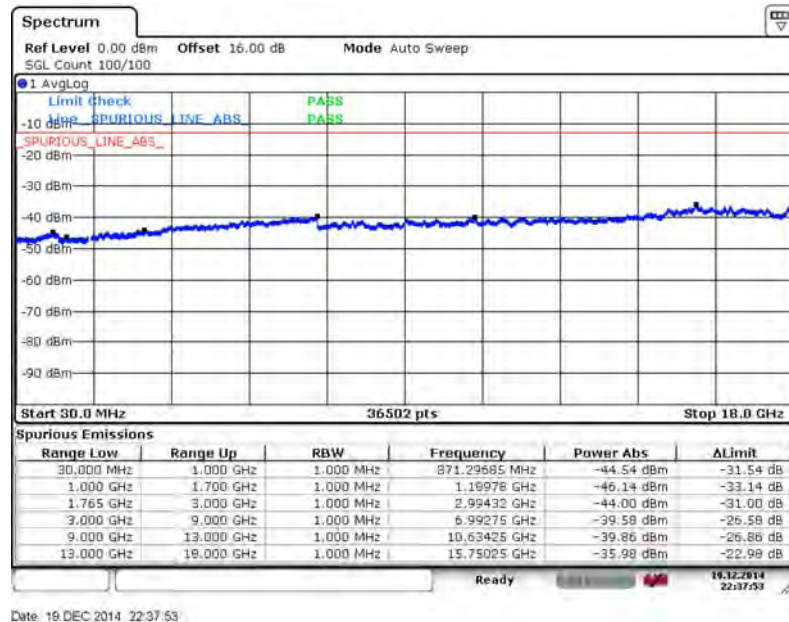
16QAM (RB Size 1, RB Offset 0)



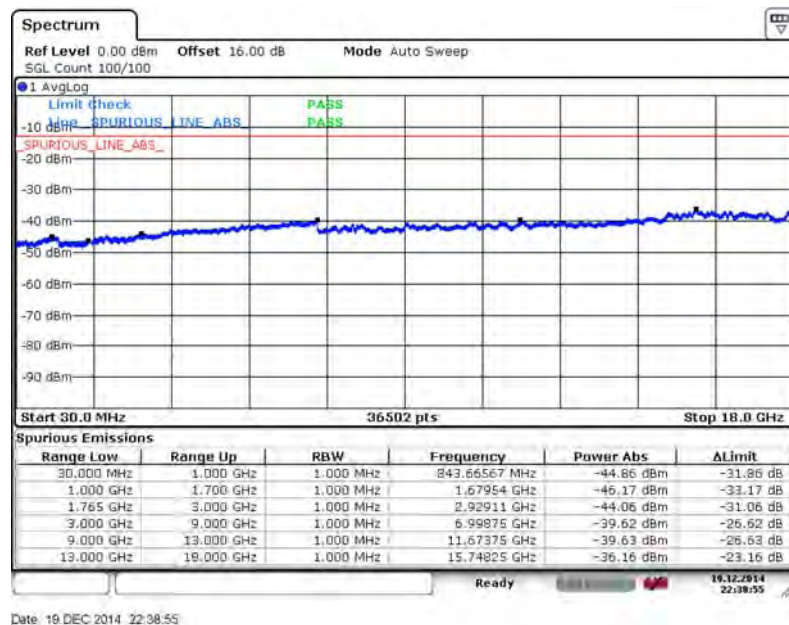


Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)

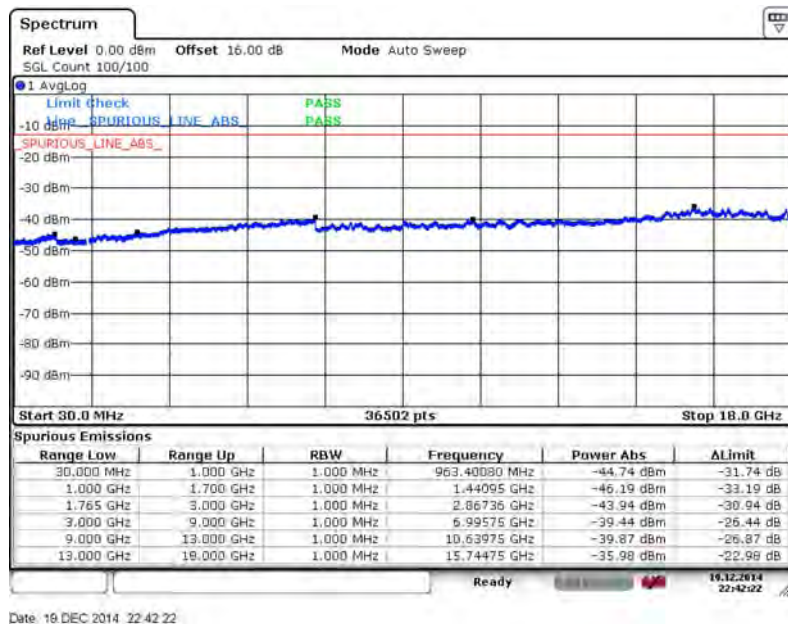


16QAM (RB Size 1, RB Offset 0)

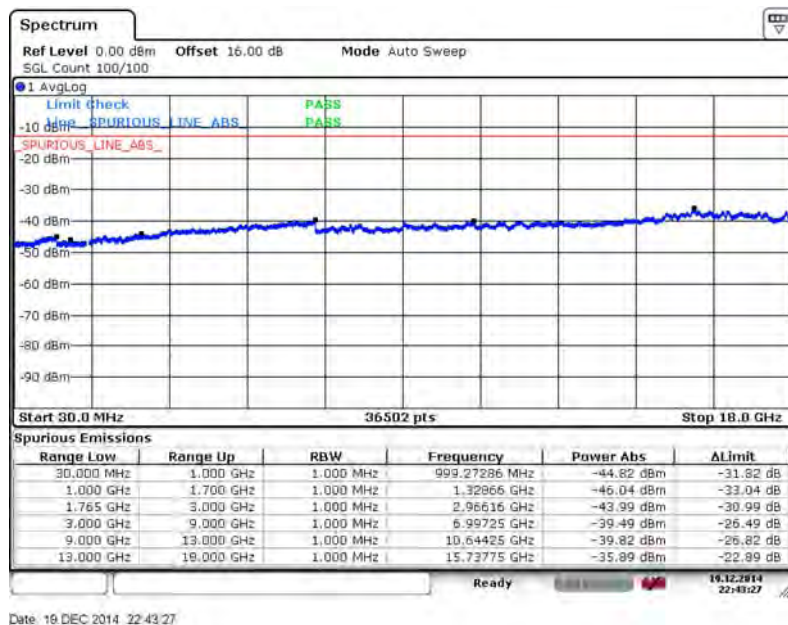


Band :	LTE Band 4	Channel :	CH20350 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)

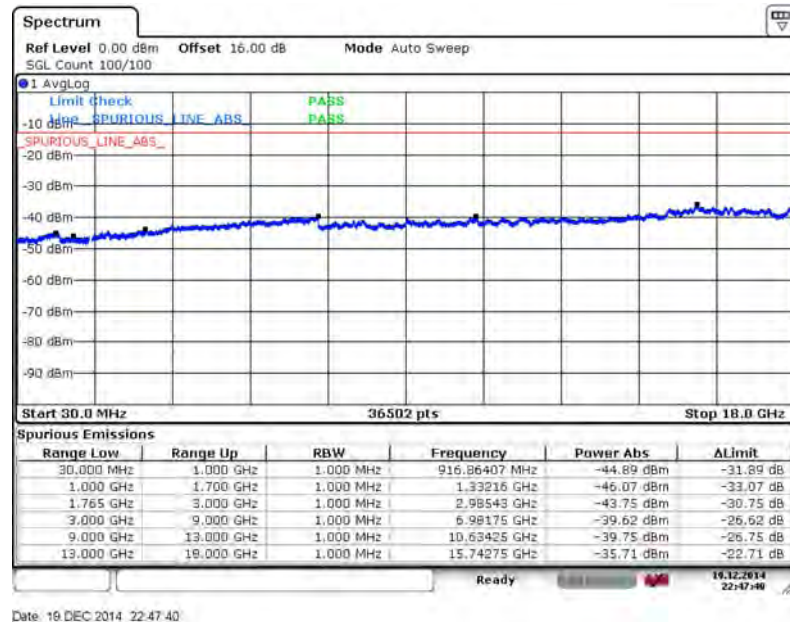


16QAM (RB Size 1, RB Offset 0)

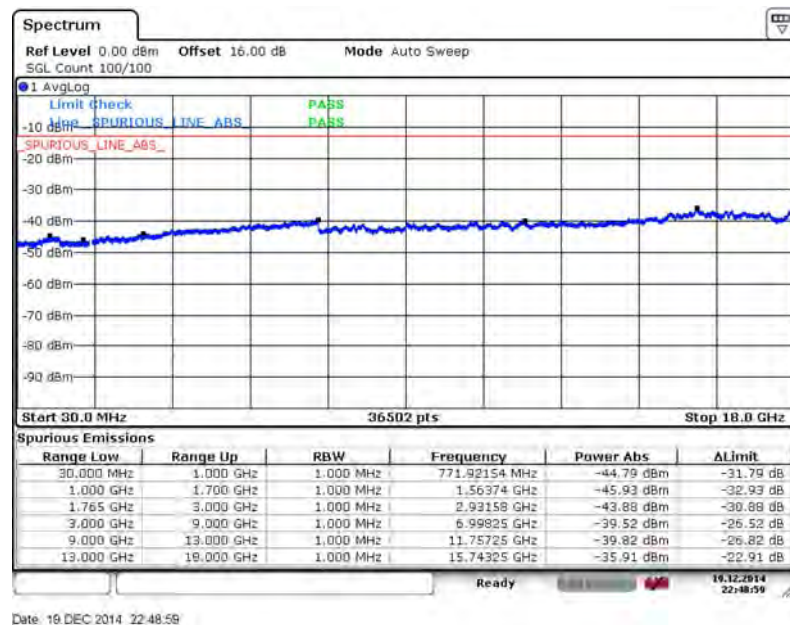


Band :	LTE Band 4	Channel :	CH20025 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



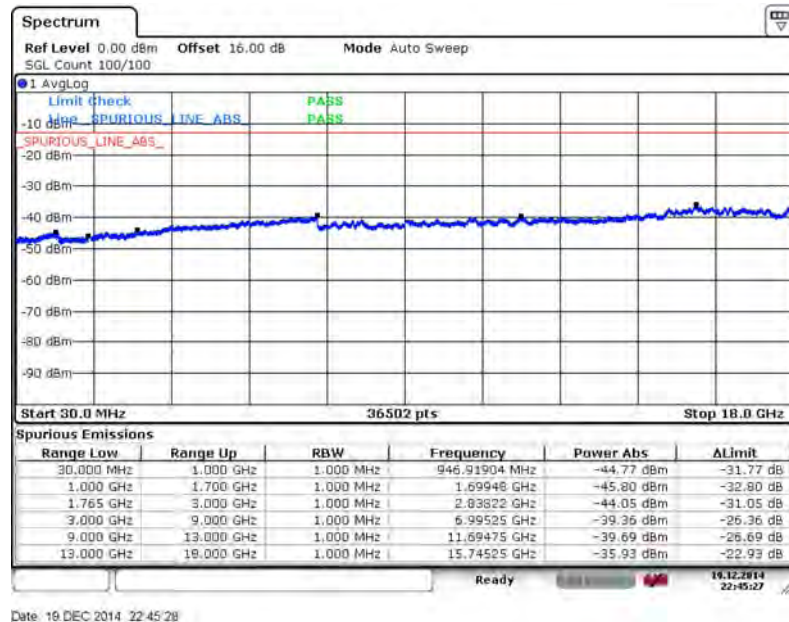
16QAM (RB Size 1, RB Offset 0)



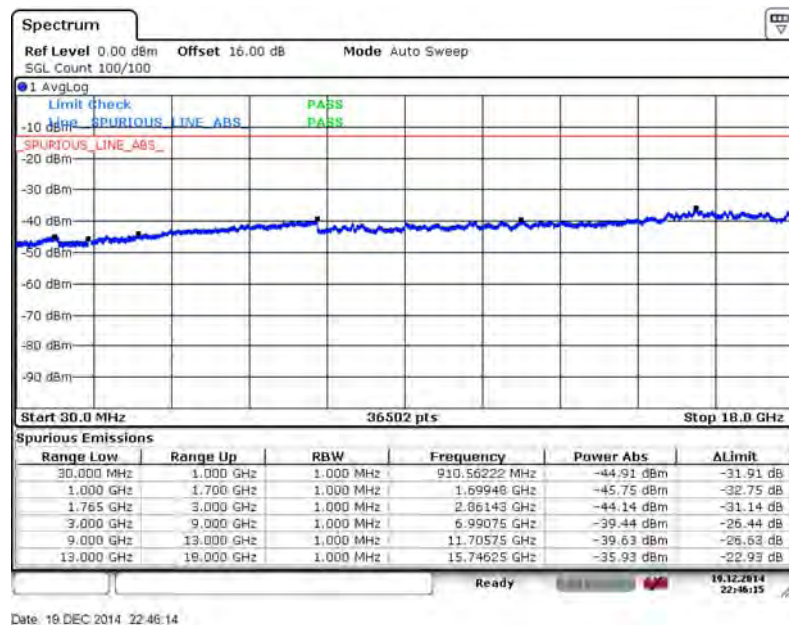


Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)

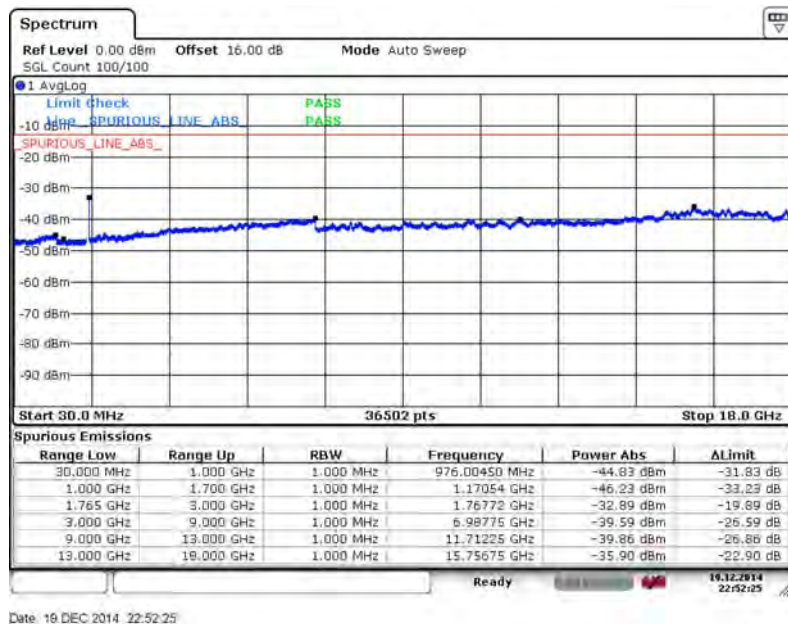


16QAM (RB Size 1, RB Offset 0)

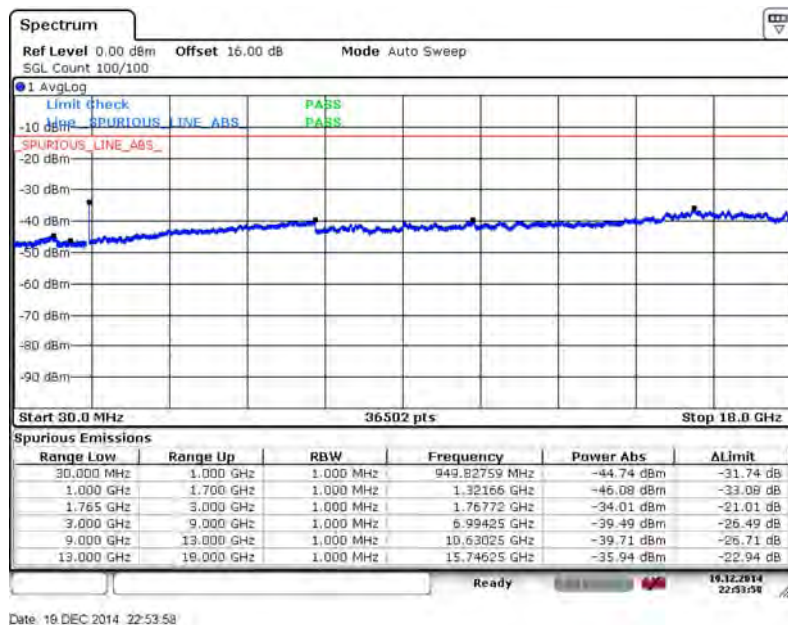


Band :	LTE Band 4	Channel :	CH20325 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)

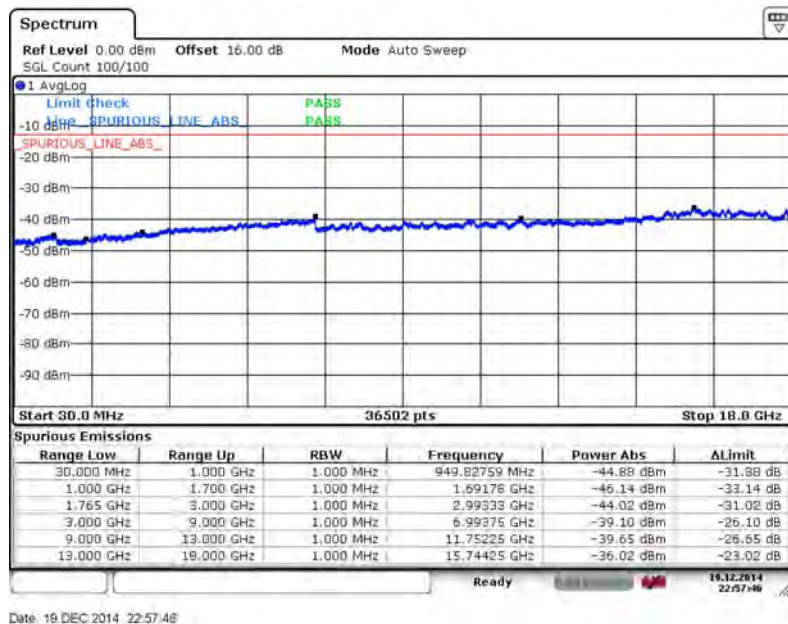


16QAM (RB Size 1, RB Offset 0)

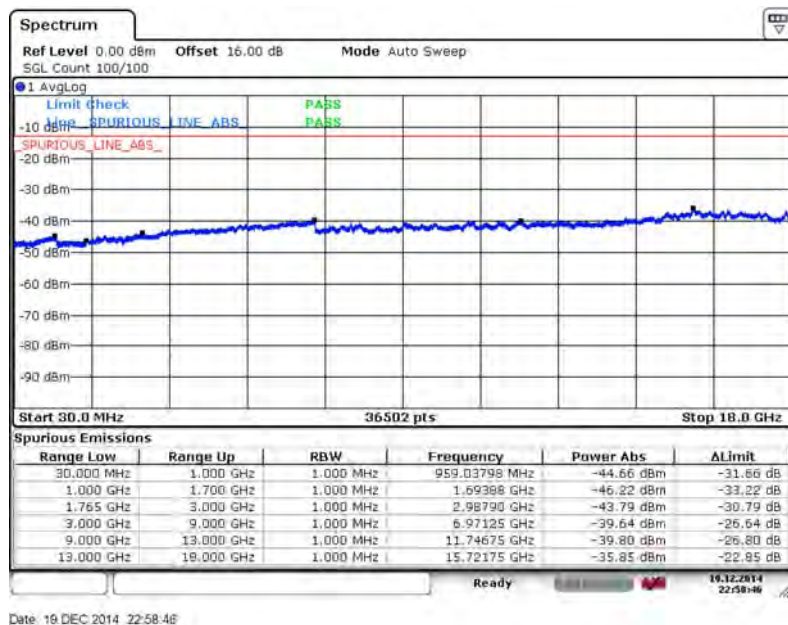


Band :	LTE Band 4	Channel :	CH20050 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

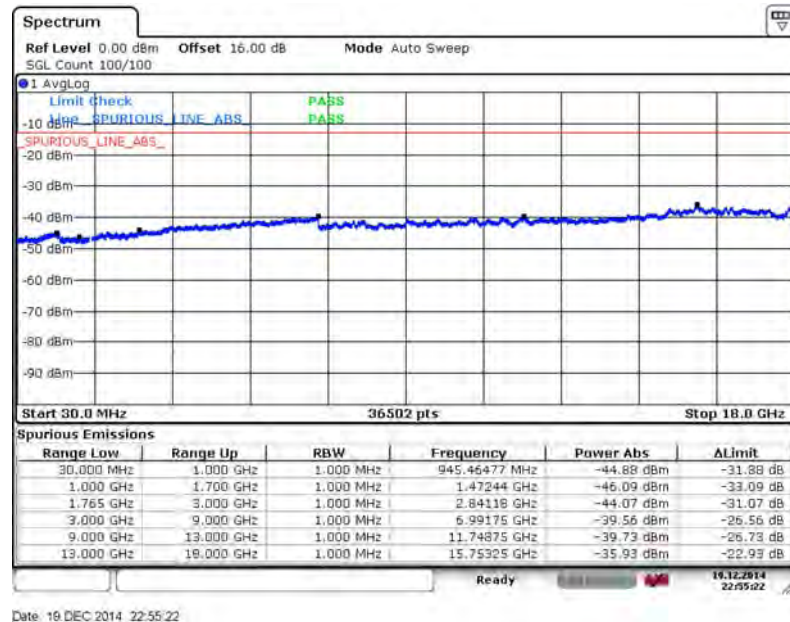


16QAM (RB Size 1, RB Offset 0)

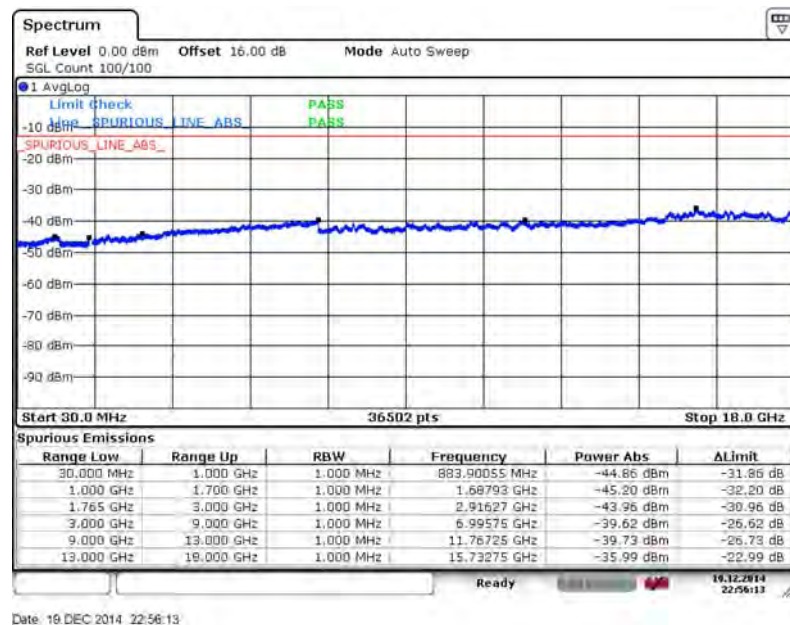


Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

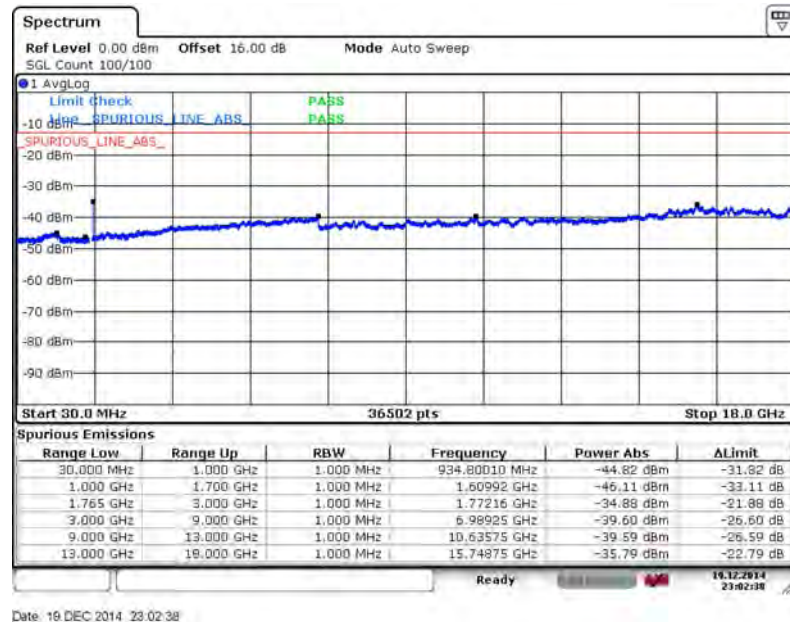


16QAM (RB Size 1, RB Offset 0)

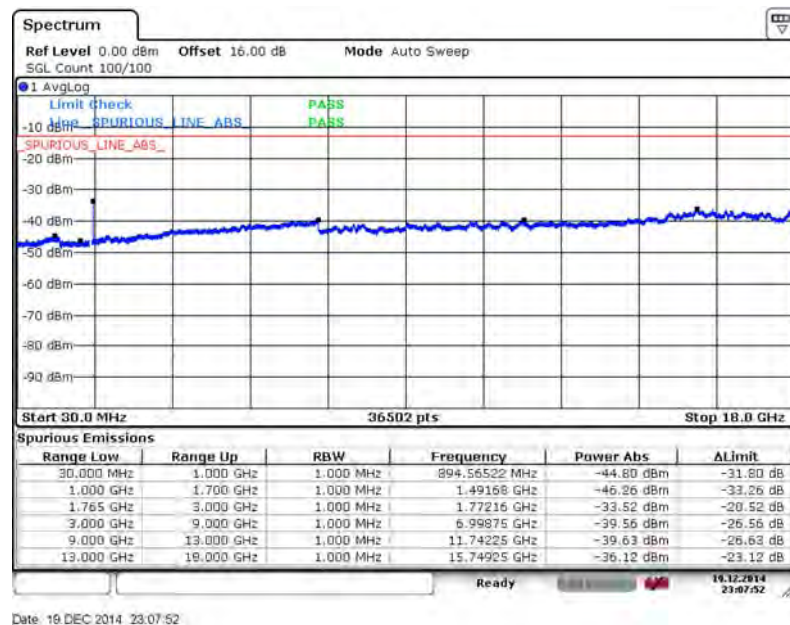


Band :	LTE Band 4	Channel :	CH20300 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



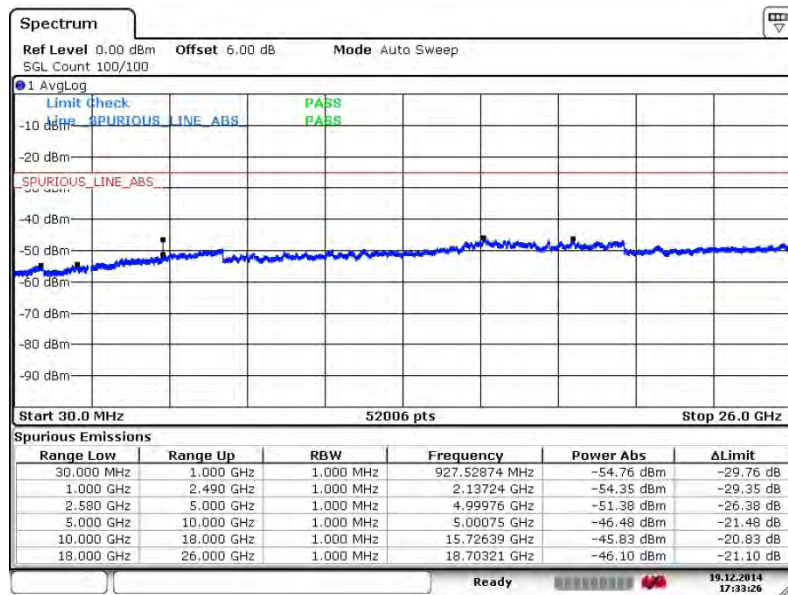
16QAM (RB Size 1, RB Offset 0)





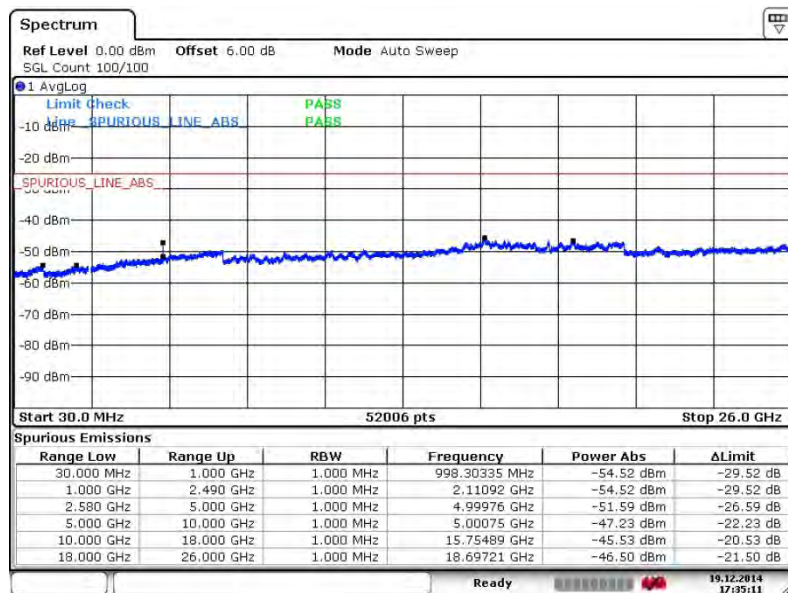
Band :	LTE Band 7	Channel :	CH20775 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 19.DEC.2014 17:33:26

16QAM(RB Size 1, RB Offset 0)

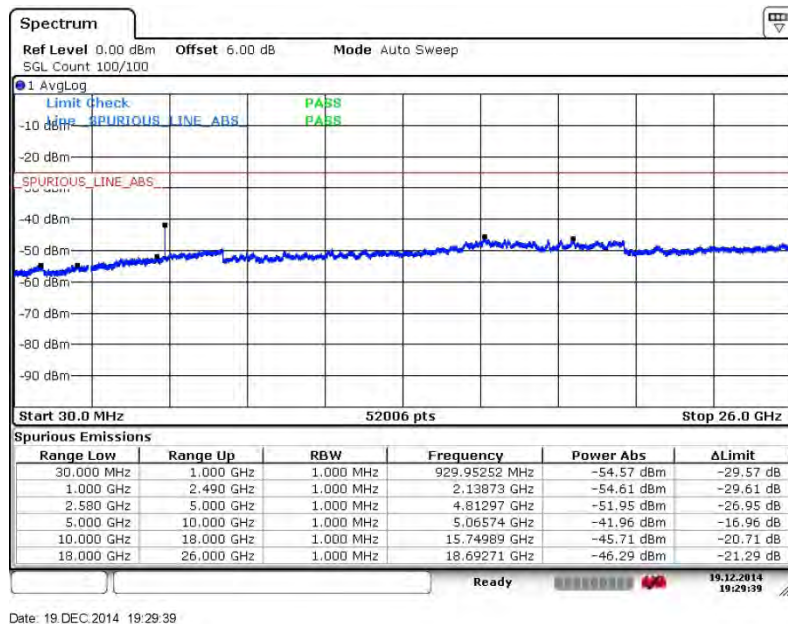


Date: 19.DEC.2014 17:35:11

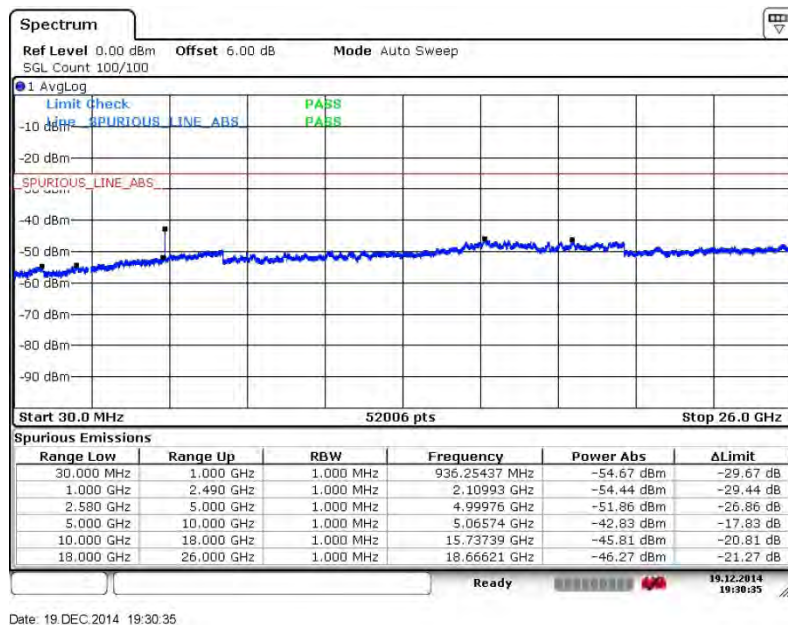


Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



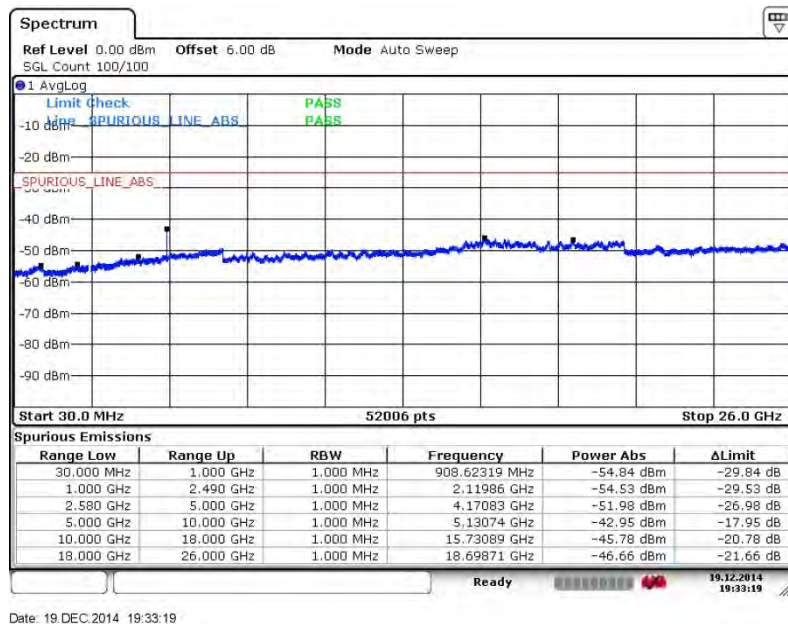
16QAM (RB Size 1, RB Offset 0)



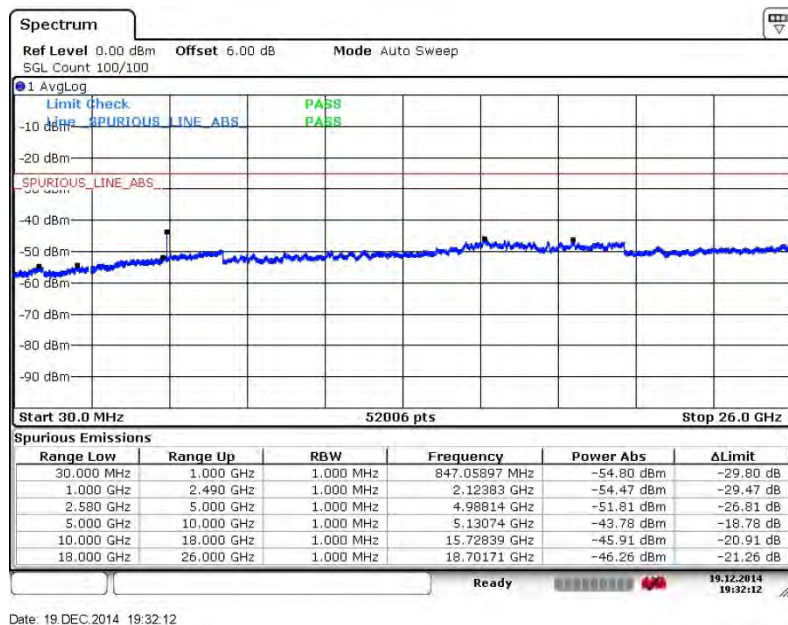


Band :	LTE Band 7	Channel :	CH21425 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



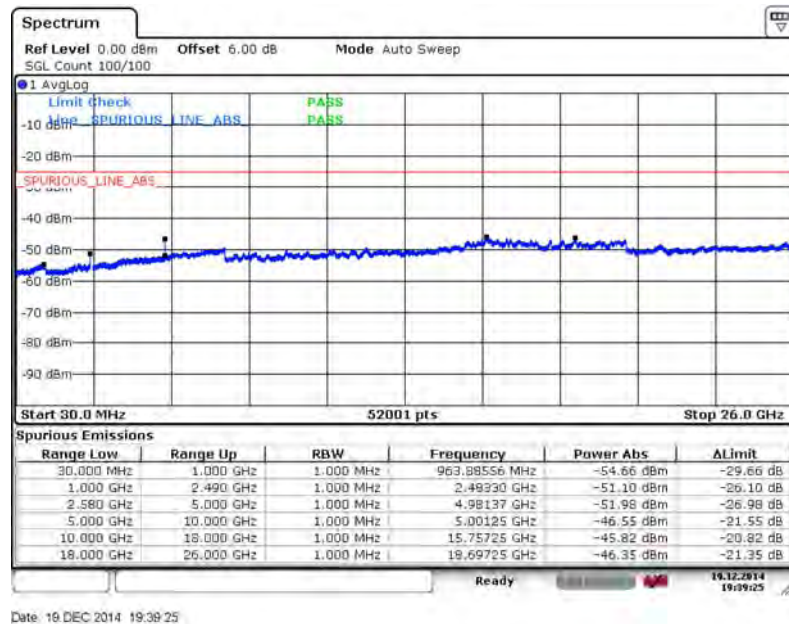
16QAM (RB Size 1, RB Offset 0)



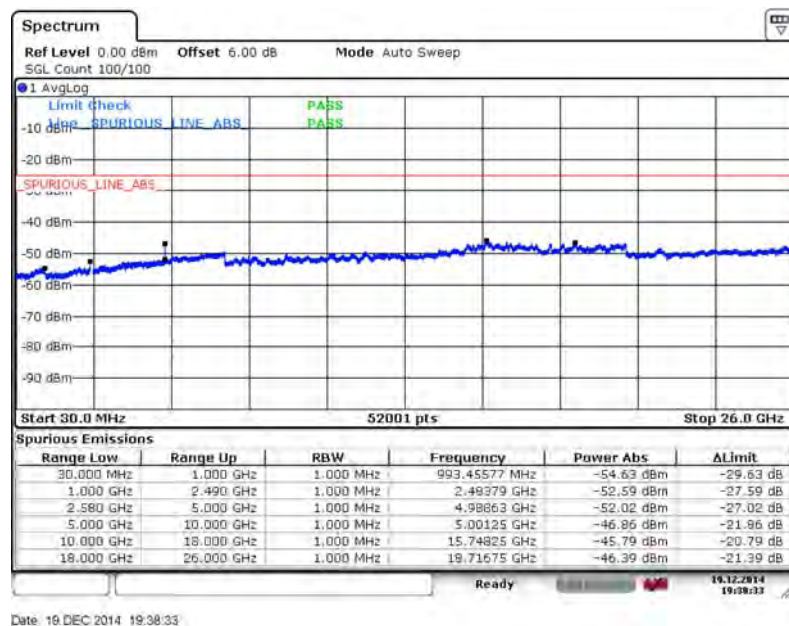


Band :	LTE Band 7	Channel :	CH20800 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



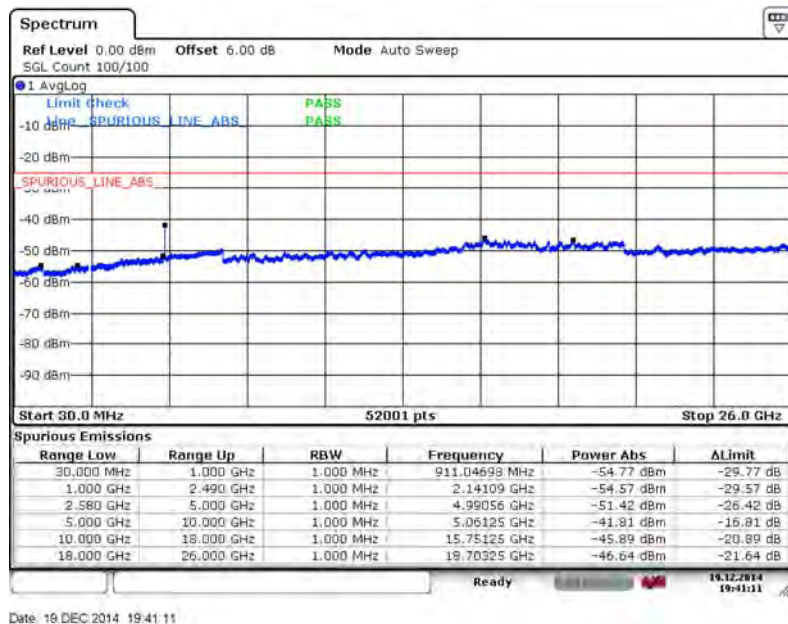
16QAM (RB Size 1, RB Offset 0)



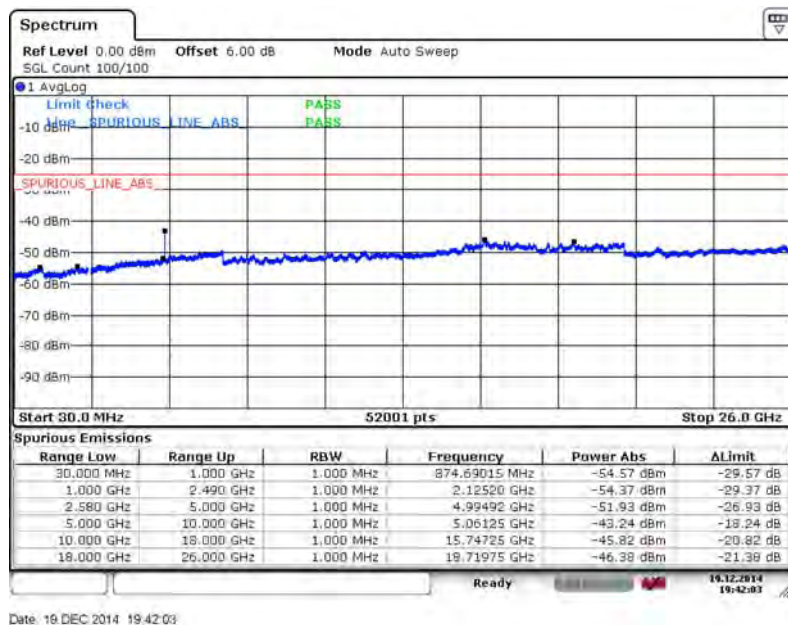


Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



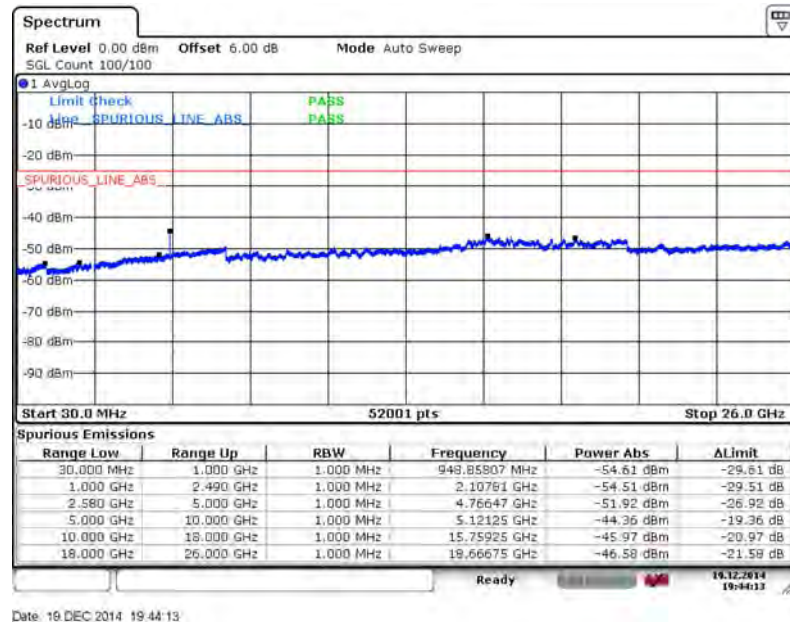
16QAM (RB Size 1, RB Offset 0)



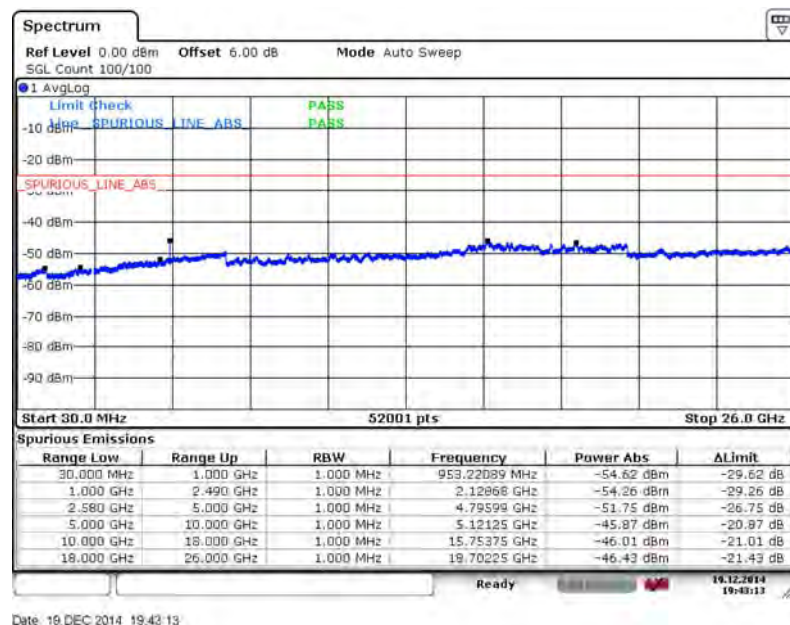


Band :	LTE Band 7	Channel :	CH21400 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



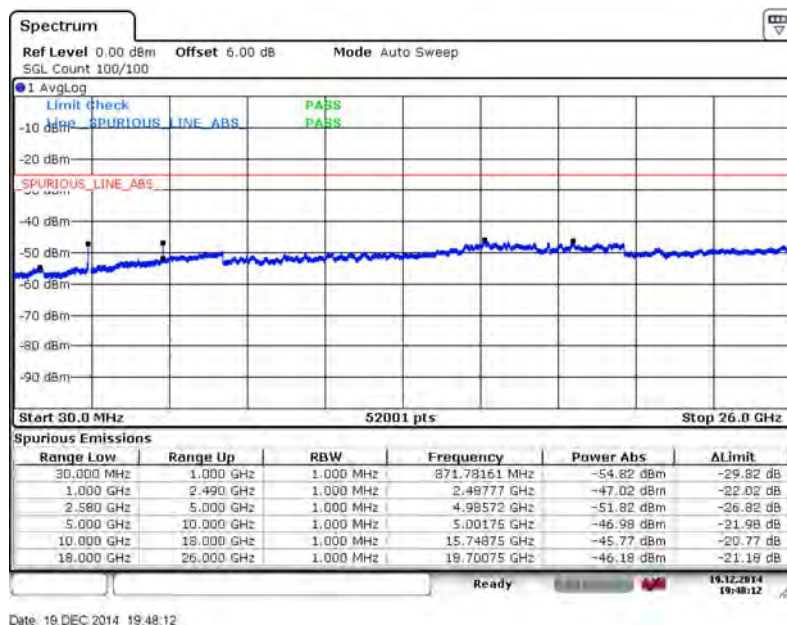
16QAM (RB Size 1, RB Offset 0)



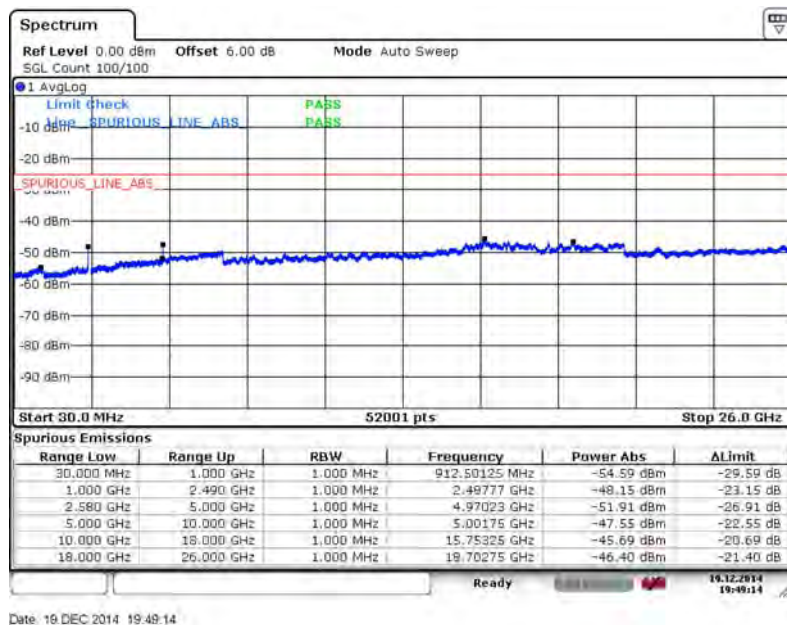


Band :	LTE Band 7	Channel :	CH20825 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



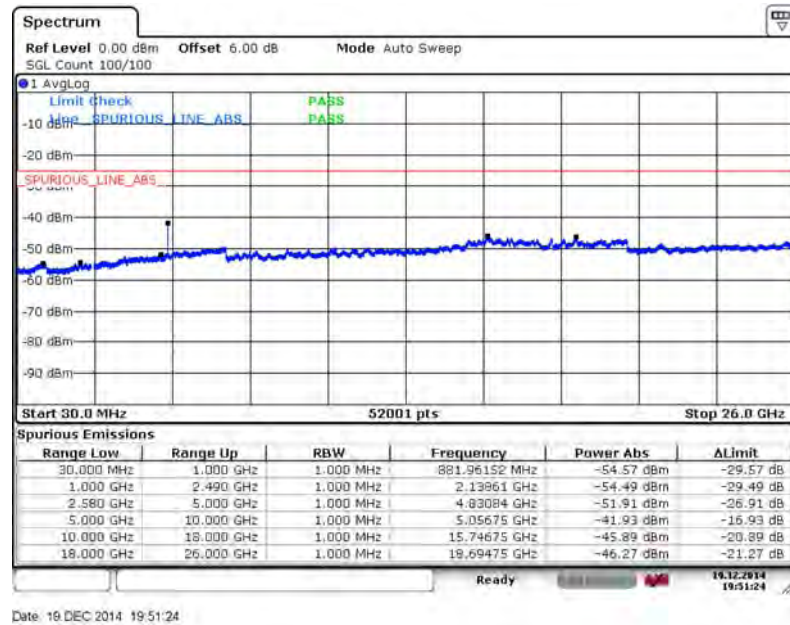
16QAM (RB Size 1, RB Offset 0)



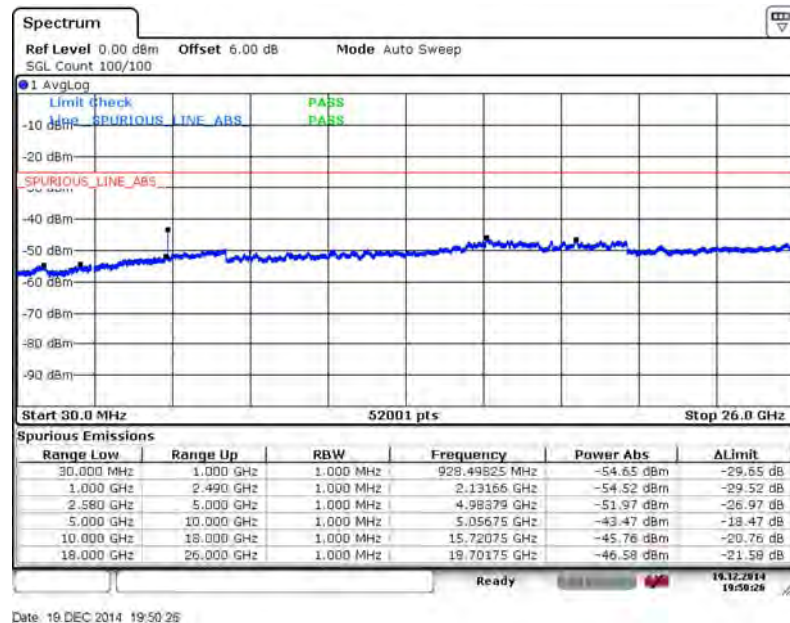


Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



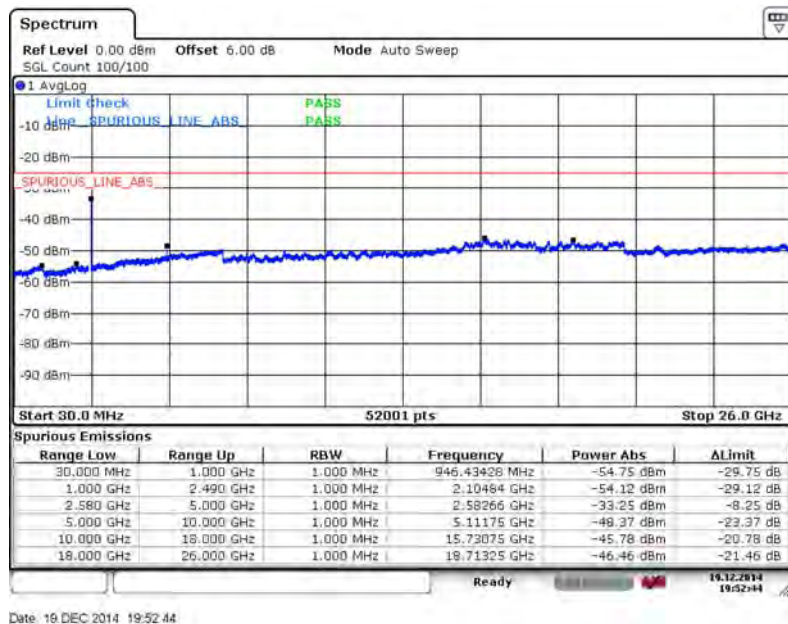
16QAM (RB Size 1, RB Offset 0)



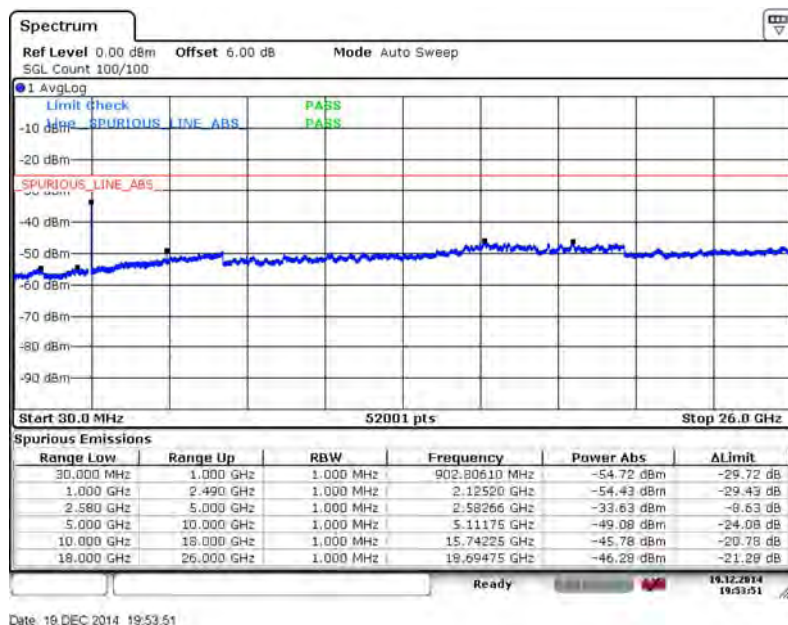


Band :	LTE Band 7	Channel :	CH21375 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



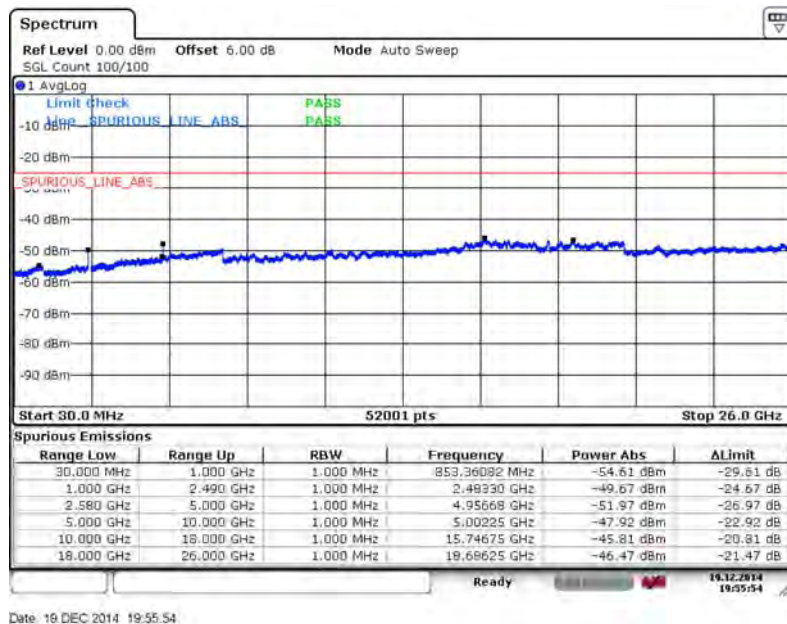
16QAM (RB Size 1, RB Offset 0)



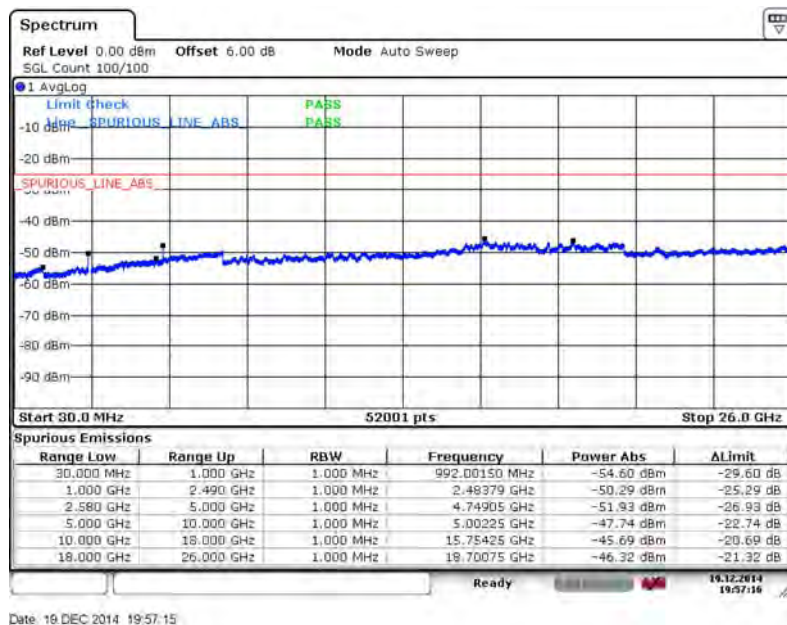


Band :	LTE Band 7	Channel :	CH20850 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



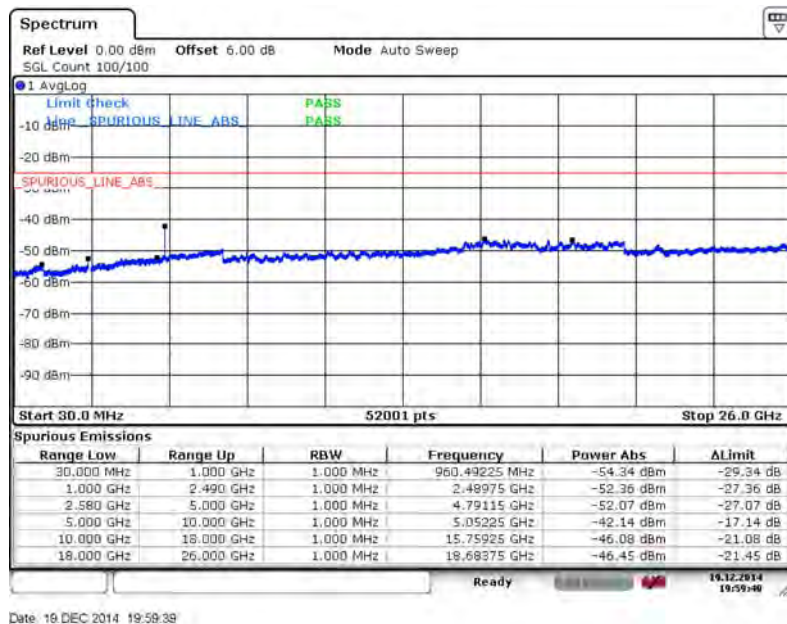
16QAM (RB Size 1, RB Offset 0)



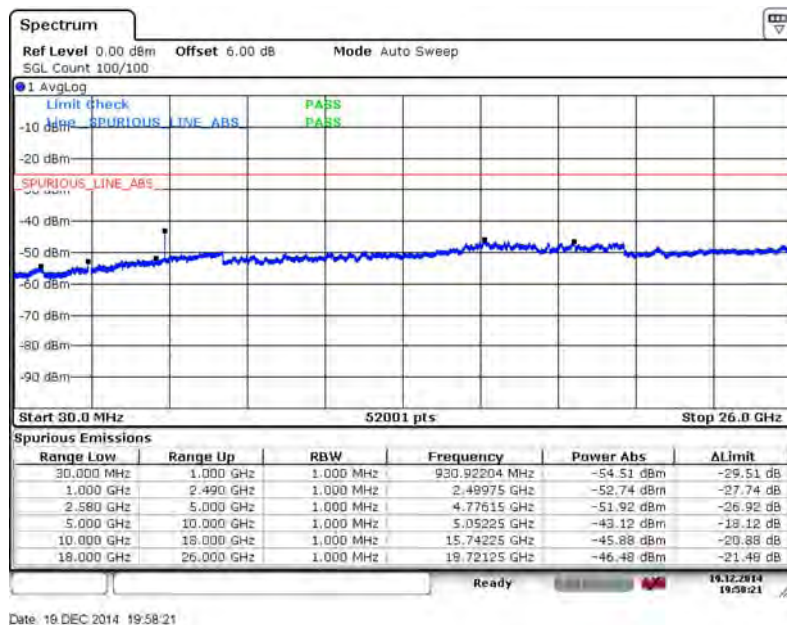


Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



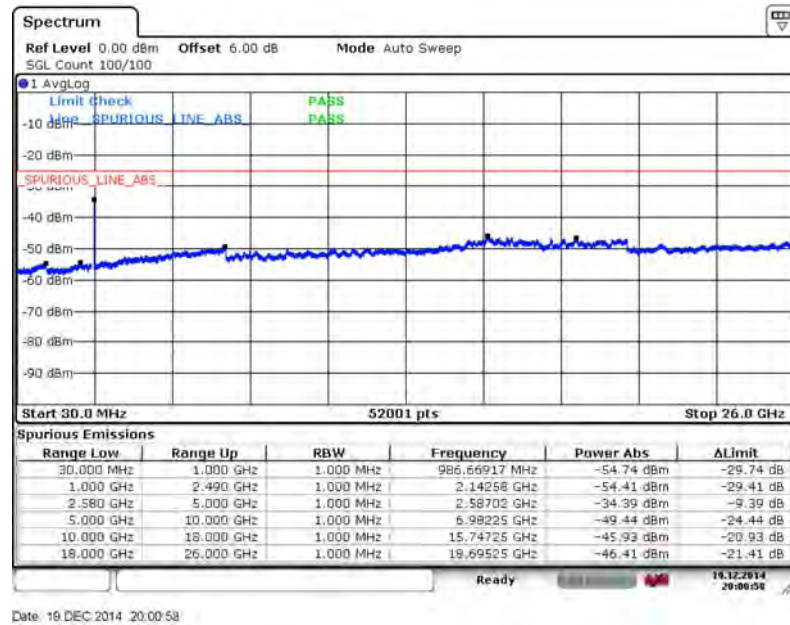
16QAM (RB Size 1, RB Offset 0)



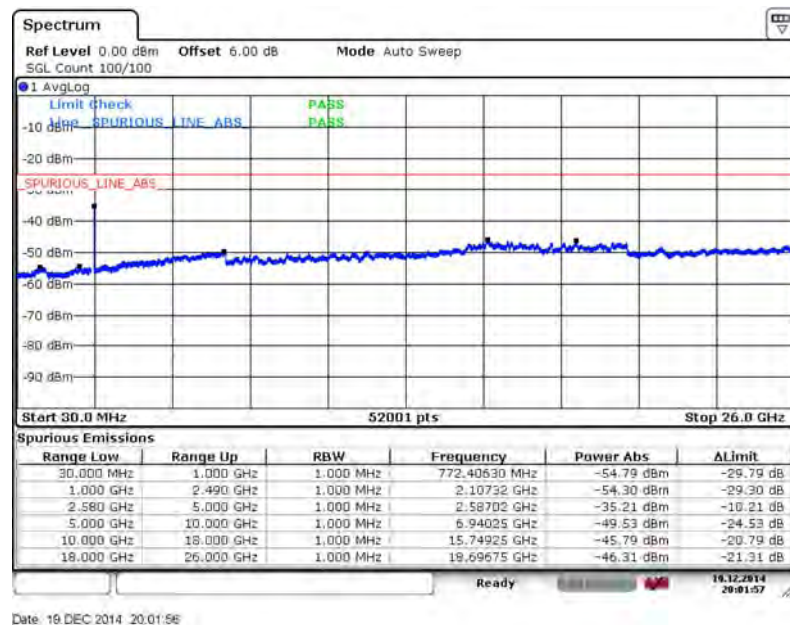


Band :	LTE Band 7	Channel :	CH21350 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



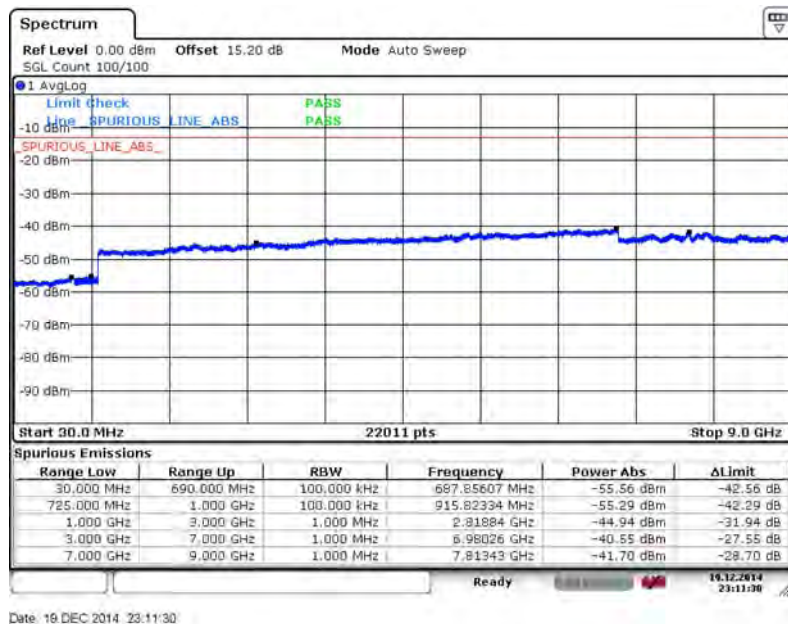
16QAM (RB Size 1, RB Offset 0)



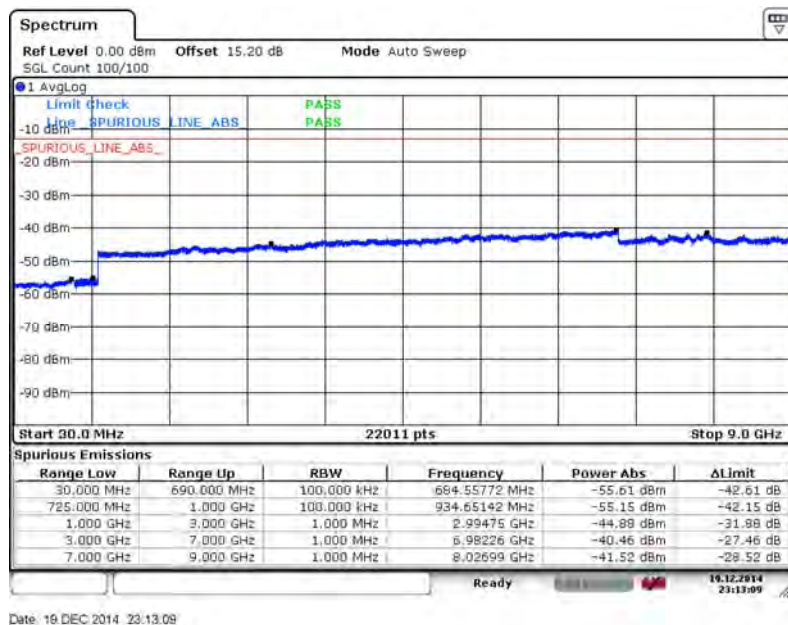


Band :	LTE Band 17	Channel :	CH23755 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



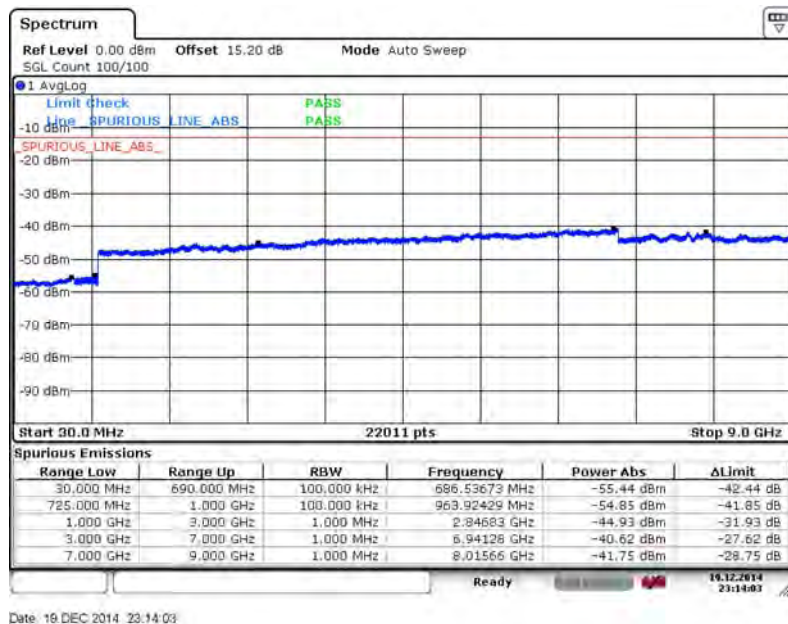
16QAM (RB Size 1, RB Offset 0)



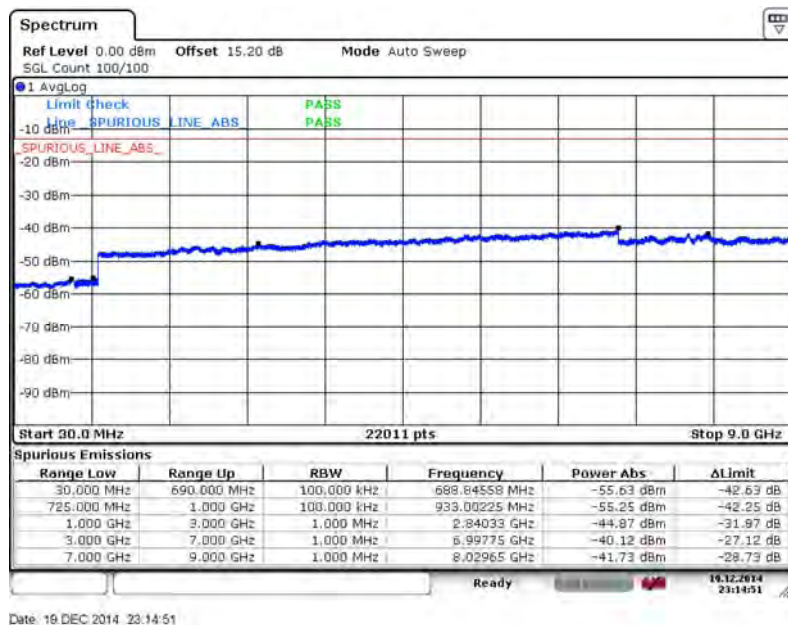


Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



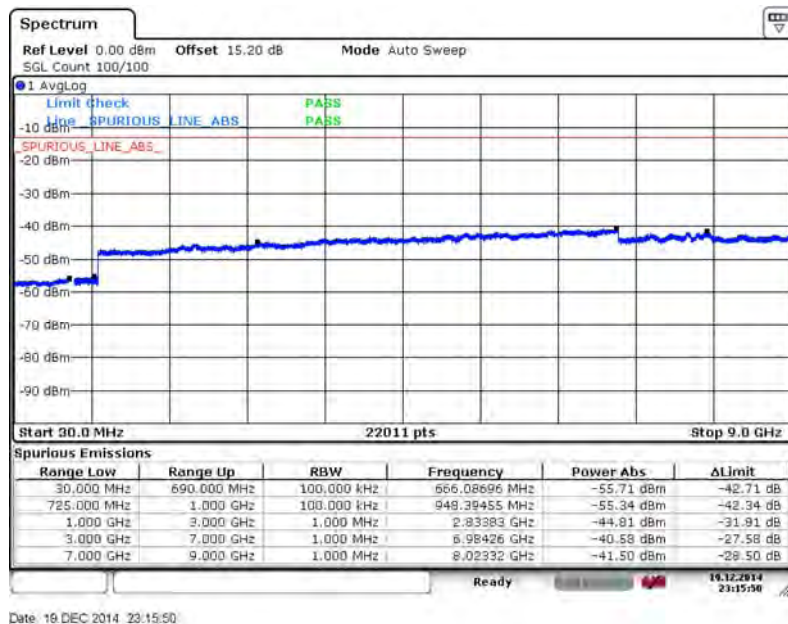
16QAM (RB Size 1, RB Offset 0)



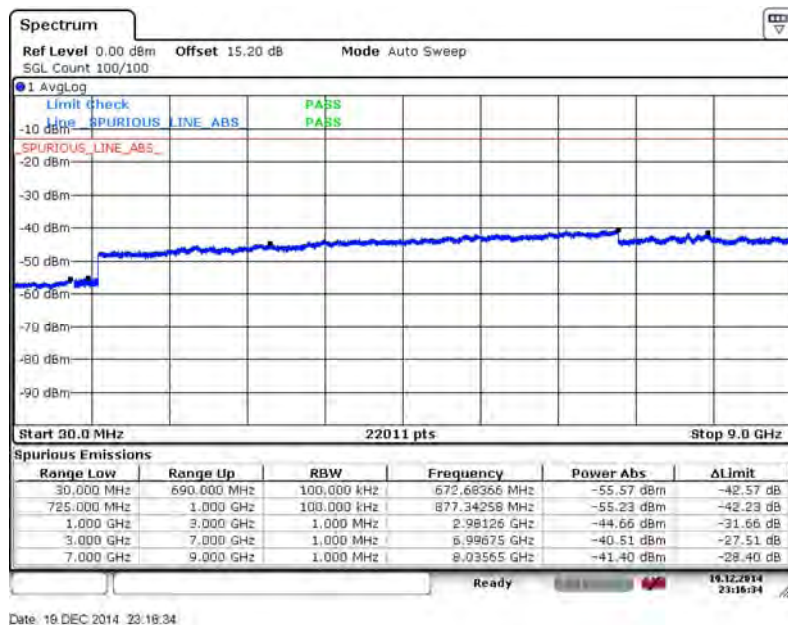


Band :	LTE Band 17	Channel :	CH23825 (High)
Band Width :	5MHz		

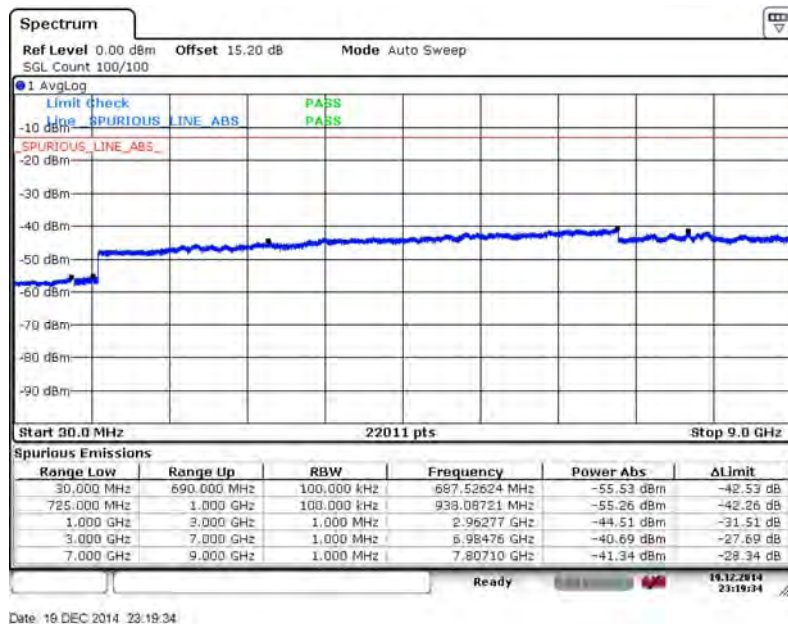
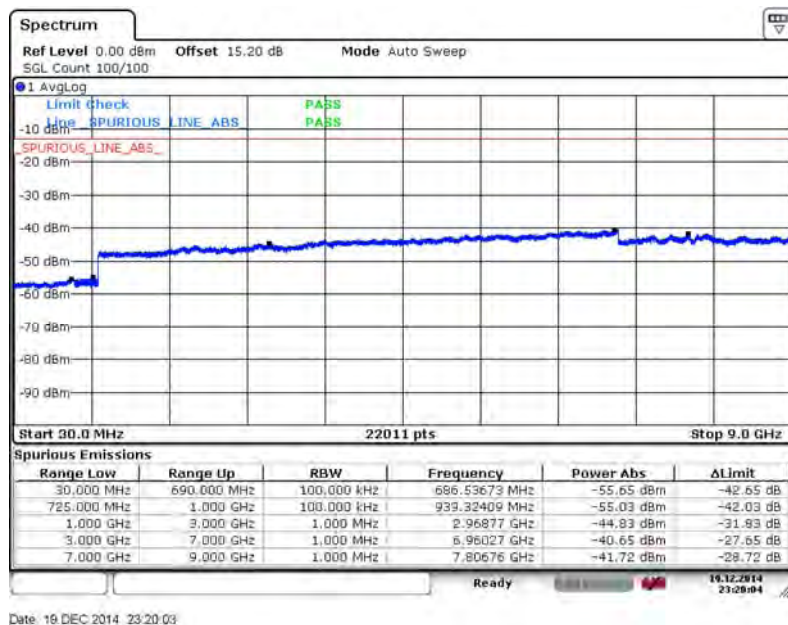
QPSK (RB Size 1, RB Offset 0)



16QAM (RB Size 1, RB Offset 0)



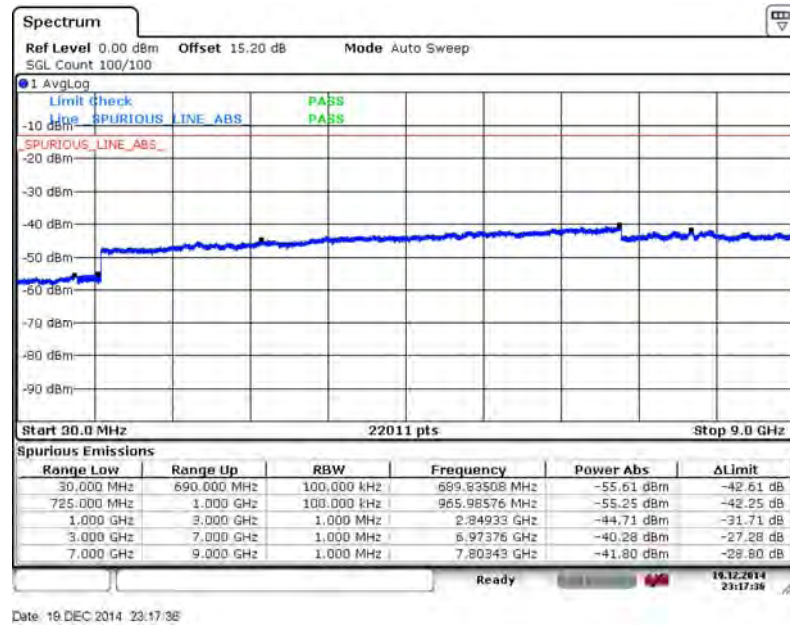
Band :	LTE Band 17	Channel :	CH23780 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)

16QAM (RB Size 1, RB Offset 0)


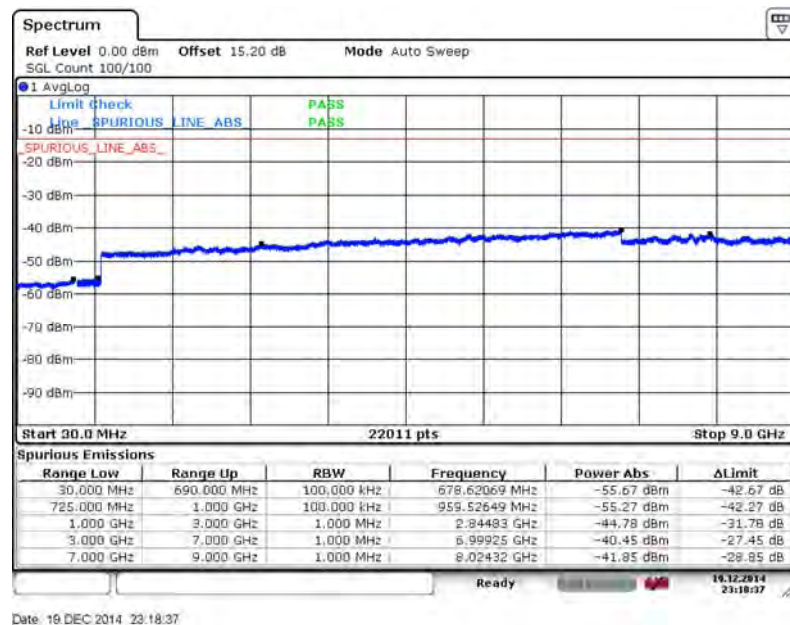


Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



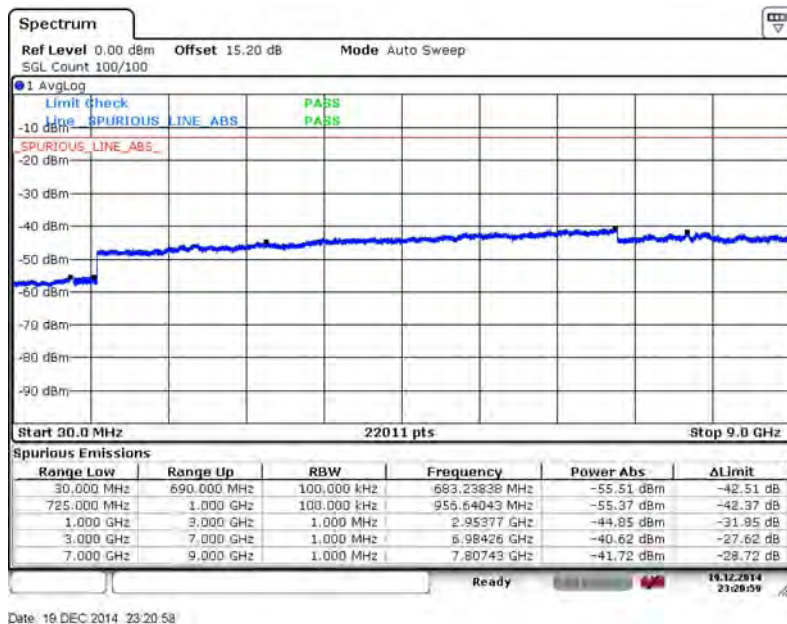
16QAM (RB Size 1, RB Offset 0)



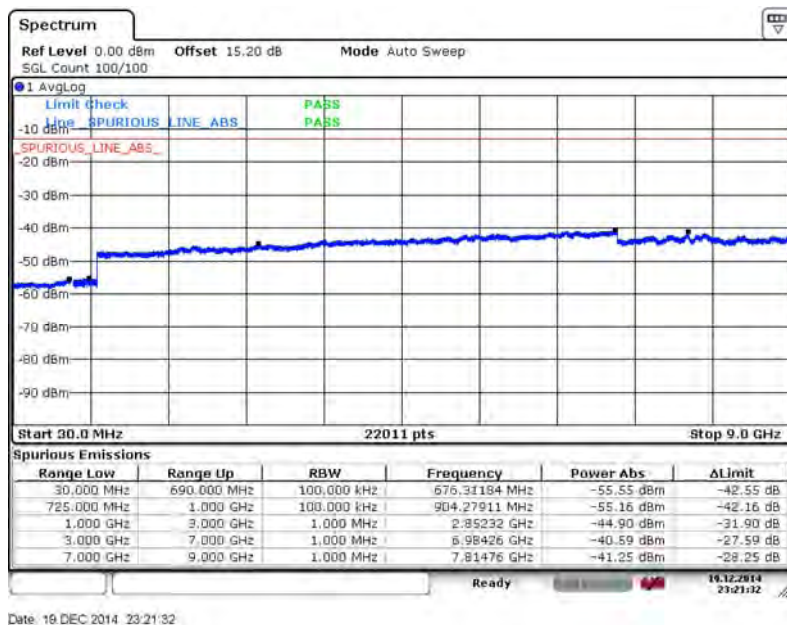


Band :	LTE Band 17	Channel :	CH23800 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



16QAM (RB Size 1, RB Offset 0)



3.7 Radiated Spurious Emission Measurement

3.7.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

For LTE Band 17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$

For Band 7:

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

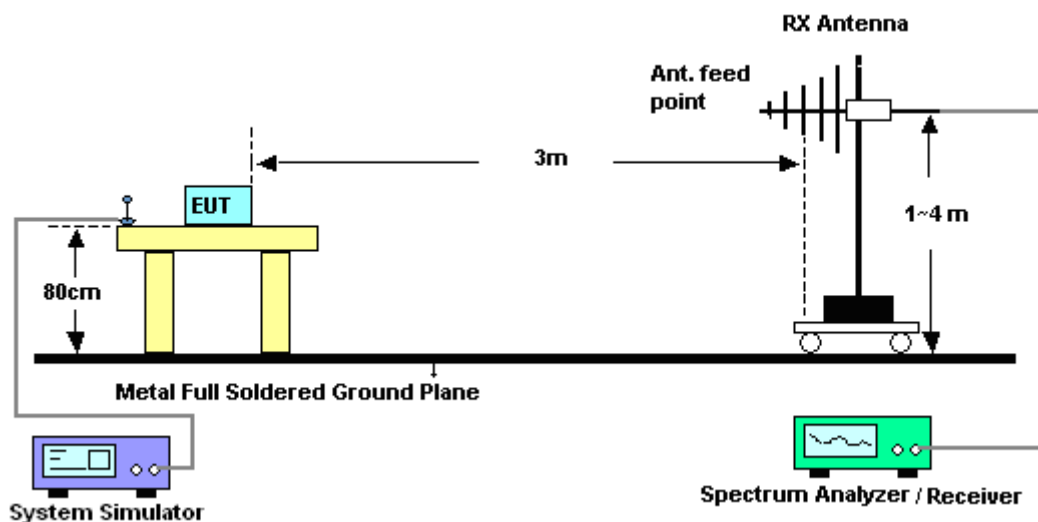
$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

$$= -25\text{dBm}.$$

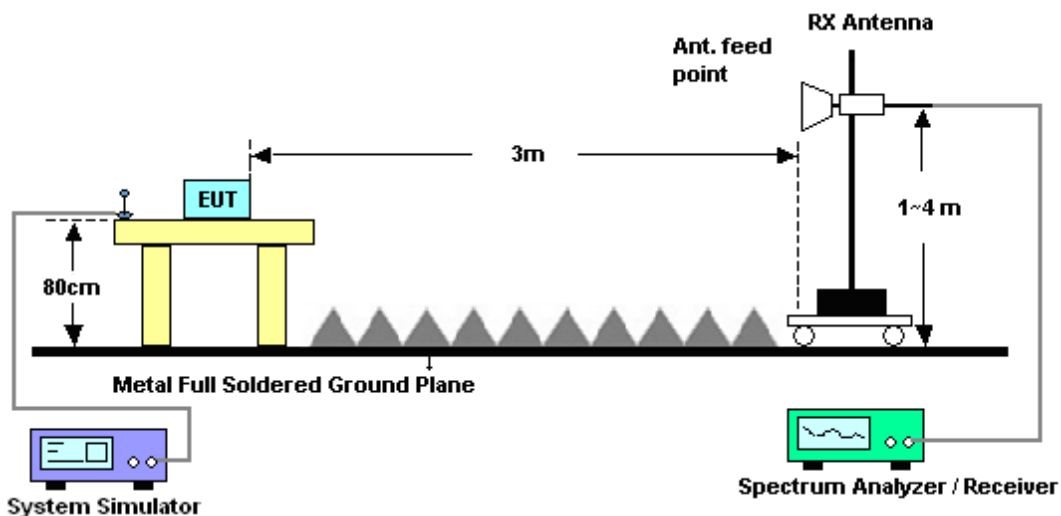
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15

3.7.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.7.5 Test Result of Field Strength of Spurious Radiated

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18607 (Low)	Frequency :	1850.7						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3699	-57.73	-13	-44.73	-64.72	-61.31	3	6.58	H	Pass
5550	-56.67	-13	-43.67	-60.94	-62.04	3.84	9.21	H	Pass
7401	-53.82	-13	-40.82	-61.78	-60.49	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18607 (Low)	Frequency :	1850.7						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3699	-60.16	-13	-47.16	-64.24	-63.73	3	6.58	V	Pass
5550	-55.39	-13	-42.39	-61.62	-60.76	3.84	9.21	V	Pass
7401	-54.43	-13	-41.43	-61.49	-61.10	4.43	11.10	V	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3759	-53.51	-13	-40.51	-62.62	-57.09	3	6.58	H	Pass
5637	-56.57	-13	-43.57	-60.84	-61.94	3.84	9.21	H	Pass
7518	-50.72	-13	-37.72	-60.16	-57.39	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3759	-60.00	-13	-47.00	-64.08	-63.57	3	6.58	V	Pass
5637	-54.73	-13	-41.73	-60.96	-60.10	3.84	9.21	V	Pass
7518	-51.58	-13	-38.58	-60.4	-58.26	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19193 (High)	Frequency :	1909.3						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3816	-54.96	-13	-41.96	-63.28	-58.54	3	6.58	H	Pass
5727	-52.67	-13	-39.67	-59.14	-58.04	3.84	9.21	H	Pass
7635	-51.90	-13	-38.90	-60.85	-58.57	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19193 (High)	Frequency :	1909.3						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3819	-57.35	-13	-44.35	-63.47	-60.93	3	6.58	V	Pass
5725	-54.32	-13	-41.32	-60.55	-59.69	3.84	9.21	V	Pass
7635	-54.07	-13	-41.07	-61.23	-60.74	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18615 (Low)	Frequency :	1851.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Gain	(H/V)	
3699	-57.19	-13	-44.19	-64.18	-60.77	3	6.58	H	Pass
5550	-57.20	-13	-44.20	-61.47	-62.57	3.84	9.21	H	Pass
7401	-52.63	-13	-39.63	-61.22	-59.30	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18615 (Low)	Frequency :	1851.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3699	-57.81	-13	-44.81	-63.69	-61.39	3	6.58	V	Pass
5550	-55.80	-13	-42.80	-62.03	-61.17	3.84	9.21	V	Pass
7401	-54.77	-13	-41.77	-61.93	-61.44	4.43	11.10	V	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3756	-55.93	-13	-42.93	-63.55	-59.50	3	6.58	H	Pass
5637	-53.64	-13	-40.64	-59.49	-59.00	3.84	9.21	H	Pass
7515	-54.02	-13	-41.02	-61.88	-60.69	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3756	-56.40	-13	-43.40	-62.83	-59.98	3	6.58	V	Pass
5634	-55.60	-13	-42.60	-61.83	-60.97	3.84	9.21	V	Pass
7515	-55.19	-13	-42.19	-62.35	-61.86	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19185 (High)	Frequency :	1908.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3813	-56.05	-13	-43.05	-63.59	-59.63	3	6.58	H	Pass
5721	-57.48	-13	-44.48	-61.75	-62.85	3.84	9.21	H	Pass
7629	-52.16	-13	-39.16	-60.99	-58.83	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19185 (High)	Frequency :	1908.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3814	-60.51	-13	-47.51	-64.59	-64.08	3	6.58	V	Pass
5721	-56.21	-13	-43.21	-62.44	-61.58	3.84	9.21	V	Pass
7629	-54.35	-13	-41.35	-61.51	-61.02	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18625 (Low)	Frequency :	1852.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3699	-59.62	-13	-46.62	-66.61	-63.20	3	6.58	H	Pass
5550	-58.24	-13	-45.24	-62.51	-63.61	3.84	9.21	H	Pass
7401	-53.17	-13	-40.17	-61.48	-59.84	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18625 (Low)	Frequency :	1852.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3699	-62.51	-13	-49.51	-66.59	-66.08	3	6.58	V	Pass
5550	-55.92	-13	-42.92	-62.15	-61.29	3.84	9.21	V	Pass
7401	-53.65	-13	-40.65	-61.06	-60.32	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3756	-50.97	-13	-37.97	-61.88	-54.55	3	6.58	H	Pass
5640	-52.55	-13	-39.55	-59.07	-57.92	3.84	9.21	H	Pass
7509	-51.55	-13	-38.55	-60.64	-58.22	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3750	-61.42	-13	-48.42	-65.5	-64.99	3	6.58	V	Pass
5625	-54.48	-13	-41.48	-60.71	-59.85	3.84	9.21	V	Pass
7500	-54.55	-13	-41.55	-61.71	-61.22	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19175 (High)	Frequency :	1907.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3810	-56.14	-13	-43.14	-63.63	-59.72	3	6.58	H	Pass
5715	-56.23	-13	-43.23	-60.50	-61.60	3.84	9.21	H	Pass
7620	-55.46	-13	-42.46	-63.32	-62.13	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19175 (High)	Frequency :	1907.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3810	-60.76	-13	-47.76	-64.84	-64.33	3	6.58	V	Pass
5715	-55.26	-13	-42.26	-61.49	-60.63	3.84	9.21	V	Pass
7620	-55.75	-13	-42.75	-62.91	-62.42	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18650 (Low)	Frequency :	1855						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3699	-57.58	-13	-44.58	-64.57	-61.16	3	6.58	H	Pass
5550	-57.44	-13	-44.44	-61.71	-62.81	3.84	9.21	H	Pass
7401	-51.60	-13	-38.60	-60.67	-58.27	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18650 (Low)	Frequency :	1855						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3702	-57.25	-13	-44.25	-63.42	-60.82	3	6.58	V	Pass
5550	-55.73	-13	-42.73	-61.96	-61.10	3.84	9.21	V	Pass
7401	-53.65	-13	-40.65	-61.06	-60.32	4.43	11.10	V	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3750	-53.06	-13	-40.06	-62.48	-56.64	3	6.58	H	Pass
5625	-57.08	-13	-44.08	-61.35	-62.45	3.84	9.21	H	Pass
7500	-52.44	-13	-39.44	-61.13	-59.12	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3750	-60.45	-13	-47.45	-64.53	-64.02	3	6.58	V	Pass
5625	-55.57	-13	-42.57	-61.8	-60.94	3.84	9.21	V	Pass
7500	-53.48	-13	-40.48	-61.01	-60.15	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19150 (High)	Frequency :	1905						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3801	-56.29	-13	-43.29	-63.69	-59.86	3	6.58	H	Pass
5700	-56.72	-13	-43.72	-60.99	-62.09	3.84	9.21	H	Pass
7599	-53.87	-13	-40.87	-61.80	-60.54	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19150 (High)	Frequency :	1905						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3801	-60.43	-13	-47.43	-64.51	-64.00	3	6.58	V	Pass
5700	-54.44	-13	-41.44	-60.67	-59.81	3.84	9.21	V	Pass
7599	-54.16	-13	-41.16	-61.32	-60.83	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18675 (Low)	Frequency :	1857.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3702	-56.55	-13	-43.55	-63.80	-60.13	3	6.58	H	Pass
5541	-56.63	-13	-43.63	-60.90	-62.00	3.84	9.21	H	Pass
7401	-50.31	-13	-37.31	-59.95	-56.98	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18675 (Low)	Frequency :	1857.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3699	-60.79	-13	-47.79	-64.87	-64.36	3	6.58	V	Pass
5556	-54.41	-13	-41.41	-60.64	-59.78	3.84	9.21	V	Pass
7401	-54.17	-13	-41.17	-61.33	-60.84	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Gain	(H/V)	
3747	-54.32	-13	-41.32	-62.94	-57.90	3	6.58	H	Pass
5617.5	-57.36	-13	-44.36	-61.63	-62.73	3.84	9.21	H	Pass
7491	-53.47	-13	-40.47	-61.62	-60.15	4.43	11.10	H	Pass

Band :	LTE Band 2				Temperature :	22~23°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	40~41%			
Channel :	18900 (Middle)				Frequency :	1880			
Test Engineer :	Nick Su				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3747	-57.16	-13	-44.16	-63.38	-60.74	3	6.58	V	Pass
5616	-55.07	-13	-42.07	-61.3	-60.44	3.84	9.21	V	Pass
7494	-51.94	-13	-38.94	-60.6	-58.61	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19125 (High)	Frequency :	1902.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3789	-58.25	-13	-45.25	-65.24	-61.83	3	6.58	H	Pass
5685	-57.12	-13	-44.12	-61.39	-62.49	3.84	9.21	H	Pass
7581	-55.04	-13	-42.04	-62.90	-61.71	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19125 (High)	Frequency :	1902.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3789	-61.62	-13	-48.62	-65.7	-65.19	3	6.58	V	Pass
5700	-55.04	-13	-42.04	-61.27	-60.41	3.84	9.21	V	Pass
7599	-54.91	-13	-41.91	-62.07	-61.58	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18700 (Low)	Frequency :	1860						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Gain	(H/V)	
3702	-53.29	-13	-40.29	-62.55	-56.86	3	6.58	H	Pass
5556	-56.49	-13	-43.49	-60.76	-61.86	3.84	9.21	H	Pass
7401	-51.90	-13	-38.90	-60.85	-58.57	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18700 (Low)	Frequency :	1860						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3702	-59.16	-13	-46.16	-63.98	-62.74	3	6.58	V	Pass
5550	-55.38	-13	-42.38	-61.61	-60.75	3.84	9.21	V	Pass
7401	-51.96	-13	-38.96	-60.61	-58.63	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Gain	(H/V)	
3741	-55.15	-13	-42.15	-63.34	-58.73	3	6.58	H	Pass
5610	-57.44	-13	-44.44	-61.71	-62.81	3.84	9.21	H	Pass
7479	-52.75	-13	-39.75	-61.28	-59.42	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	18900 (Middle)	Frequency :	1880						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3741	-57.04	-13	-44.04	-63.32	-60.62	3	6.58	V	Pass
5610	-55.08	-13	-42.08	-61.31	-60.45	3.84	9.21	V	Pass
7479	-54.86	-13	-41.86	-62.02	-61.53	4.43	11.10	V	Pass



Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19100 (High)	Frequency :	1900						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3780	-57.94	-13	-44.94	-64.93	-61.52	3	6.58	H	Pass
5676	-55.27	-13	-42.27	-59.90	-60.64	3.84	9.21	H	Pass
7557	-52.44	-13	-39.44	-61.13	-59.12	4.43	11.10	H	Pass

Band :	LTE Band 2	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19100 (High)	Frequency :	1900						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3783	-60.69	-13	-47.69	-64.77	-64.26	3	6.58	V	Pass
5670	-55.21	-13	-42.21	-61.44	-60.58	3.84	9.21	V	Pass
7560	-55.38	-13	-42.38	-62.54	-62.05	4.43	11.10	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19957 (Low)	Frequency :	1710.7						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3420	-56.48	-13	-43.48	-63.74	-59.84	3.12	6.49	H	Pass
5130	-56.89	-13	-43.89	-62.81	-61.87	3.65	8.64	H	Pass
6840	-49.78	-13	-36.78	-61.42	-56.35	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19957 (Low)	Frequency :	1710.7						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3420	-54.60	-13	-41.60	-61.43	-57.97	3.12	6.49	V	Pass
5133	-50.21	-13	-37.21	-58.35	-55.19	3.65	8.64	V	Pass
6840	-50.94	-13	-37.94	-60.7	-57.51	4.15	10.72	V	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3465	-55.63	-13	-42.63	-62.89	-58.99	3.12	6.49	H	Pass
5195.4	-55.99	-13	-42.99	-61.91	-60.97	3.65	8.64	H	Pass
6927	-50.74	-13	-37.74	-62.38	-57.31	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-56.40	-13	-43.40	-62.53	-59.77	3.12	6.49	V	Pass
5196	-57.67	-13	-44.67	-61.07	-62.65	3.65	8.64	V	Pass
6927	-52.75	-13	-39.75	-62.51	-59.32	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20393 (High)	Frequency :	1754.3						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Gain	(H/V)	
3507	-57.61	-13	-44.61	-64.87	-60.97	3.12	6.49	H	Pass
5670	-55.00	-13	-42.00	-60.92	-59.98	3.65	8.64	H	Pass
7014	-50.39	-13	-37.39	-62.03	-56.96	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20393 (High)	Frequency :	1754.3						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3507	-56.90	-13	-43.90	-62.79	-60.27	3.12	6.49	V	Pass
5760	-57.49	-13	-44.49	-60.89	-62.47	3.65	8.64	V	Pass
7014	-51.23	-13	-38.23	-60.99	-57.80	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19965 (Low)	Frequency :	1711.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-56.34	-13	-43.34	-63.60	-59.70	3.12	6.49	H	Pass
5130	-56.35	-13	-43.35	-62.27	-61.33	3.65	8.64	H	Pass
6840	-49.79	-13	-36.79	-61.43	-56.36	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19965 (Low)	Frequency :	1711.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3420	-53.57	-13	-40.57	-60.94	-56.94	3.12	6.49	V	Pass
5130	-54.11	-13	-41.11	-59.69	-59.09	3.65	8.64	V	Pass
6840	-51.58	-13	-38.58	-61.34	-58.15	4.15	10.72	V	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3762	-58.78	-13	-45.78	-66.04	-62.14	3.12	6.49	H	Pass
5193	-55.32	-13	-42.32	-61.24	-60.30	3.65	8.64	H	Pass
6924	-50.93	-13	-37.93	-62.57	-57.50	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3462	-56.67	-13	-43.67	-62.67	-60.04	3.12	6.49	V	Pass
5193	-58.37	-13	-45.37	-61.77	-63.35	3.65	8.64	V	Pass
6924	-51.82	-13	-38.82	-61.58	-58.39	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20385 (High)	Frequency :	1753.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3504	-58.23	-13	-45.23	-65.49	-61.59	3.12	6.49	H	Pass
5256	-57.54	-13	-44.54	-63.46	-62.52	3.65	8.64	H	Pass
7008	-50.31	-13	-37.31	-61.95	-56.88	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20385 (High)	Frequency :	1753.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3504	-57.02	-13	-44.02	-62.85	-60.39	3.12	6.49	V	Pass
5259	-52.22	-13	-39.22	-59.33	-57.21	3.65	8.64	V	Pass
7008	-50.86	-13	-37.86	-60.62	-57.43	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19975 (Low)	Frequency :	1712.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-57.34	-13	-44.34	-64.60	-60.70	3.12	6.49	H	Pass
5130	-56.38	-13	-43.38	-62.30	-61.36	3.65	8.64	H	Pass
6840	-49.09	-13	-36.09	-60.73	-55.66	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	19975 (Low)	Frequency :	1712.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3420	-54.50	-13	-41.50	-61.36	-57.87	3.12	6.49	V	Pass
5133	-52.54	-13	-39.54	-59.43	-57.53	3.65	8.64	V	Pass
6840	-51.57	-13	-38.57	-61.33	-58.14	4.15	10.72	V	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3459	-56.55	-13	-43.55	-63.81	-59.91	3.12	6.49	H	Pass
5190	-56.17	-13	-43.17	-62.09	-61.15	3.65	8.64	H	Pass
6921	-50.66	-13	-37.66	-62.30	-57.23	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3459	-57.91	-13	-44.91	-63.17	-61.28	3.12	6.49	V	Pass
5193	-57.63	-13	-44.63	-61.03	-62.61	3.65	8.64	V	Pass
6921	-52.01	-13	-39.01	-61.77	-58.58	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20375 (High)	Frequency :	1752.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3501	-57.87	-13	-44.87	-65.13	-61.23	3.12	6.49	H	Pass
5250	-55.42	-13	-42.42	-61.34	-60.40	3.65	8.64	H	Pass
6999	-50.76	-13	-37.76	-62.40	-57.33	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20375 (High)	Frequency :	1752.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3501	-62.83	-13	-49.83	-64.91	-66.19	3.12	6.49	V	Pass
5250	-58.73	-13	-45.73	-62.13	-63.71	3.65	8.64	V	Pass
6999	-52.83	-13	-39.83	-62.59	-59.40	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20000 (Low)	Frequency :	1715						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-56.35	-13	-43.35	-63.61	-59.71	3.12	6.49	H	Pass
5130	-56.06	-13	-43.06	-61.98	-61.04	3.65	8.64	H	Pass
6840	-48.92	-13	-35.92	-60.56	-55.49	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20000 (Low)	Frequency :	1715						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3420	-55.47	-13	-42.47	-62	-58.84	3.12	6.49	V	Pass
5133	-55.26	-13	-42.26	-59.96	-60.25	3.65	8.64	V	Pass
6840	-51.77	-13	-38.77	-61.53	-58.34	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3456	-57.14	-13	-44.14	-64.40	-60.50	3.12	6.49	H	Pass
5182.5	-55.78	-13	-42.78	-61.70	-60.76	3.65	8.64	H	Pass
6909	-49.26	-13	-36.26	-60.90	-55.83	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3456	-53.07	-13	-40.07	-60.87	-56.44	3.12	6.49	V	Pass
5184	-51.13	-13	-38.13	-58.73	-56.11	3.65	8.64	V	Pass
6909	-51.62	-13	-38.62	-61.38	-58.19	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20350 (High)	Frequency :	1750						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3489	-57.86	-13	-44.86	-65.12	-61.22	3.12	6.49	H	Pass
5235	-56.43	-13	-43.43	-62.35	-61.41	3.65	8.64	H	Pass
6981	-51.21	-13	-38.21	-62.85	-57.78	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20350 (High)	Frequency :	1750						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3489	-56.90	-13	-43.90	-62.79	-60.27	3.12	6.49	V	Pass
5238	-55.97	-13	-42.97	-60.25	-60.96	3.65	8.64	V	Pass
6981	-52.25	-13	-39.25	-62.01	-58.82	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20025 (Low)	Frequency :	1717.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3420	-56.67	-13	-43.67	-63.93	-60.03	3.12	6.49	H	Pass
5130	-56.84	-13	-43.84	-62.76	-61.82	3.65	8.64	H	Pass
6840	-50.22	-13	-37.22	-61.86	-56.79	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20025 (Low)	Frequency :	1717.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3420	-54.46	-13	-41.46	-61.33	-57.83	3.12	6.49	V	Pass
5133	-52.19	-13	-39.19	-59.32	-57.18	3.65	8.64	V	Pass
6840	-51.54	-13	-38.54	-61.3	-58.11	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3450	-55.66	-13	-42.66	-62.92	-59.02	3.12	6.49	H	Pass
5175	-54.80	-13	-41.80	-60.72	-59.78	3.65	8.64	H	Pass
6900	-50.85	-13	-37.85	-62.49	-57.42	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3450	-57.69	-13	-44.69	-63.09	-61.06	3.12	6.49	V	Pass
5175	-58.86	-13	-45.86	-62.26	-63.84	3.65	8.64	V	Pass
6900	-52.76	-13	-39.76	-62.52	-59.33	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20325 (High)	Frequency :	1747.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3480	-57.10	-13	-44.10	-64.36	-60.46	3.12	6.49	H	Pass
5220	-55.67	-13	-42.67	-61.59	-60.65	3.65	8.64	H	Pass
6960	-51.49	-13	-38.49	-63.13	-58.06	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20325 (High)	Frequency :	1747.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3480	-54.31	-13	-41.31	-61.22	-57.67	3.12	6.49	V	Pass
5220	-59.40	-13	-46.40	-62.8	-64.38	3.65	8.64	V	Pass
6960	-53.44	-13	-40.44	-63.2	-60.01	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20050 (Low)	Frequency :	1720						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3420	-57.02	-13	-44.02	-64.28	-60.38	3.12	6.49	H	Pass
5130	-56.80	-13	-43.80	-62.72	-61.78	3.65	8.64	H	Pass
6840	-49.86	-13	-36.86	-61.50	-56.43	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20050 (Low)	Frequency :	1720						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3420	-55.01	-13	-42.01	-61.72	-58.38	3.12	6.49	V	Pass
5133	-51.24	-13	-38.24	-58.8	-56.23	3.65	8.64	V	Pass
6840	-51.99	-13	-38.99	-61.75	-58.56	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3444	-58.13	-13	-45.13	-65.39	-61.49	3.12	6.49	H	Pass
5167.5	-56.30	-13	-43.30	-62.22	-61.28	3.65	8.64	H	Pass
6891	-51.10	-13	-38.10	-62.74	-57.67	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20175 (Middle)	Frequency :	1732.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3447	-56.98	-13	-43.98	-62.83	-60.35	3.12	6.49	V	Pass
5172	-52.19	-13	-39.19	-59.32	-57.18	3.65	8.64	V	Pass
6891	-61.29	-13	-48.29	-61.29	-67.86	4.15	10.72	V	Pass



Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20300 (High)	Frequency :	1745						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3471	-57.30	-13	-44.30	-64.56	-60.66	3.12	6.49	H	Pass
5205	-56.78	-13	-43.78	-62.70	-61.76	3.65	8.64	H	Pass
6939	-50.88	-13	-37.88	-62.52	-57.45	4.15	10.72	H	Pass

Band :	LTE Band 4	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20300 (High)	Frequency :	1745						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3471	-54.95	-13	-41.95	-61.68	-58.32	3.12	6.49	V	Pass
5205	-58.73	-13	-45.73	-62.13	-63.71	3.65	8.64	V	Pass
6939	-52.77	-13	-39.77	-62.53	-59.34	4.15	10.72	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20775 (Low)	Frequency :	2502.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5000	-39.58	-25	-14.58	-53.42	-44.57	3.49	8.48	H	Pass
7511	-45.69	-25	-20.69	-58.46	-52.56	4.28	11.15	H	Pass
10000	-34.73	-25	-9.73	-57.09	-42.57	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20775 (Low)	Frequency :	2502.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5000	-41.41	-25	-16.41	-54.99	-46.40	3.49	8.48	V	Pass
7500	-51.70	-25	-26.70	-62.27	-58.56	4.28	11.15	V	Pass
10000	-45.78	-25	-20.78	-62.43	-53.62	5.1	12.94	V	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5066	-36.20	-25	-11.20	-50.92	-41.19	3.49	8.48	H	Pass
7610	-45.10	-25	-20.10	-58.13	-51.97	4.28	11.15	H	Pass
10132	-37.44	-25	-12.44	-58.68	-45.29	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5066	-37.62	-25	-12.62	-52.53	-42.61	3.49	8.48	V	Pass
7597.5	-51.81	-25	-26.81	-62.38	-58.67	4.28	11.15	V	Pass
10128	-46.87	-25	-21.87	-63.5	-54.71	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21425 (High)	Frequency :	2567.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5129	-44.26	-25	-19.26	-56.43	-49.25	3.49	8.48	H	Pass
7697	-42.40	-25	-17.40	-57.43	-49.27	4.28	11.15	H	Pass
10264	-35.00	-25	-10.00	-57.29	-42.84	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21425 (High)	Frequency :	2567.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5129	-55.07	-25	-30.07	-60.03	-60.06	3.49	8.48	V	Pass
7694	-50.68	-25	-25.68	-61.4	-57.55	4.28	11.15	V	Pass
10260	-47.10	-25	-22.10	-63.73	-54.94	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20800 (Low)	Frequency :	2505						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5000	-36.66	-25	-11.66	-51.28	-41.65	3.49	8.48	H	Pass
7520	-50.57	-25	-25.57	-61.03	-57.44	4.28	11.15	H	Pass
10004	-34.77	-25	-9.77	-57.12	-42.61	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20800 (Low)	Frequency :	2505						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5000	-37.48	-25	-12.48	-52.42	-42.47	3.49	8.48	V	Pass
7520	-51.39	-25	-26.39	-61.96	-58.25	4.28	11.15	V	Pass
10000	-46.80	-25	-21.80	-63.43	-54.64	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5060	-35.06	-25	-10.06	-50.15	-40.05	3.49	8.48	H	Pass
7592	-45.85	-25	-20.85	-58.55	-52.72	4.28	11.15	H	Pass
10124	-35.70	-25	-10.70	-57.36	-43.54	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5060	-40.09	-25	-15.09	-53.96	-45.08	3.49	8.48	V	Pass
7592	-48.59	-25	-23.59	-60.33	-55.46	4.28	11.15	V	Pass
10124	-43.85	-25	-18.85	-61.31	-51.69	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21400 (High)	Frequency :	2565						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5120	-38.51	-25	-13.51	-52.68	-43.50	3.49	8.48	H	Pass
7682	-41.84	-25	-16.84	-57.16	-48.71	4.28	11.15	H	Pass
10244	-37.64	-25	-12.64	-58.83	-45.48	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21400 (High)	Frequency :	2565						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5120	-41.16	-25	-16.16	-54.91	-46.15	3.49	8.48	V	Pass
7680	-51.36	-25	-26.36	-61.93	-58.22	4.28	11.15	V	Pass
10240	-47.29	-25	-22.29	-63.92	-55.13	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20825 (Low)	Frequency :	2507.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5000	-38.58	-25	-13.58	-52.75	-43.57	3.49	8.48	H	Pass
7500	-52.22	-25	-27.22	-61.63	-59.09	4.28	11.15	H	Pass
10000	-46.28	-25	-21.28	-63.13	-54.12	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20825 (Low)	Frequency :	2507.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5000	-40.52	-25	-15.52	-54.39	-45.51	3.49	8.48	V	Pass
7500	-49.57	-25	-24.57	-60.85	-56.44	4.28	11.15	V	Pass
10000	-46.26	-25	-21.26	-62.89	-54.10	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5057	-38.18	-25	-13.18	-52.38	-43.17	3.49	8.48	H	Pass
7586	-47.75	-25	-22.75	-59.27	-54.61	4.28	11.15	H	Pass
10116	-36.38	-25	-11.38	-57.75	-44.22	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5054	-40.45	-25	-15.45	-54.32	-45.44	3.49	8.48	V	Pass
7582.5	-52.31	-25	-27.31	-62.88	-59.17	4.28	11.15	V	Pass
10112	-46.72	-25	-21.72	-63.35	-54.56	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21375 (High)	Frequency :	2562.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5111	-56.37	-25	-31.37	-61.96	-61.36	3.49	8.48	H	Pass
7664	-53.13	-25	-28.13	-62.00	-59.99	4.28	11.15	H	Pass
10220	-46.59	-25	-21.59	-63.44	-54.43	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21375 (High)	Frequency :	2562.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
5111	-56.71	-25	-31.71	-61.32	-61.70	3.49	8.48	V	Pass
7665	-51.76	-25	-26.76	-62.33	-58.62	4.28	11.15	V	Pass
10220	-46.85	-25	-21.85	-63.48	-54.69	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20850 (Low)	Frequency :	2510						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5000	-35.72	-25	-10.72	-50.58	-40.71	3.49	8.48	H	Pass
7505	-48.68	-25	-23.68	-59.97	-55.55	4.28	11.15	H	Pass
10004	-37.10	-25	-12.10	-58.41	-44.94	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	20850 (Low)	Frequency :	2510						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5000	-39.35	-25	-14.35	-53.58	-44.34	3.49	8.48	V	Pass
7500	-49.21	-25	-24.21	-60.7	-56.08	4.28	11.15	V	Pass
10000	-46.87	-25	-21.87	-63.5	-54.71	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5051	-41.25	-25	-16.25	-54.41	-46.24	3.49	8.48	H	Pass
7580	-42.97	-25	-17.97	-57.70	-49.84	4.28	11.15	H	Pass
10104	-34.26	-25	-9.26	-56.74	-42.10	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21100 (Middle)	Frequency :	2535						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5051	-37.98	-25	-12.98	-52.82	-42.97	3.49	8.48	V	Pass
7575	-51.67	-25	-26.67	-62.24	-58.53	4.28	11.15	V	Pass
10100	-47.10	-25	-22.10	-63.73	-54.94	5.1	12.94	V	Pass



Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21350 (High)	Frequency :	2560						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5102	-43.36	-25	-18.36	-55.65	-48.35	3.49	8.48	H	Pass
7691	-43.83	-25	-18.83	-57.91	-50.70	4.28	11.15	H	Pass
10204	-42.21	-25	-17.21	-60.18	-50.05	5.1	12.94	H	Pass

Band :	LTE Band 7	Temperature :	22~23°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	21350 (High)	Frequency :	2560						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5102	-50.54	-25	-25.54	-58.87	-55.53	3.49	8.48	V	Pass
7650	-51.88	-25	-26.88	-62.45	-58.74	4.28	11.15	V	Pass
10200	-47.26	-25	-22.26	-63.89	-55.10	5.1	12.94	V	Pass



Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23755 (Low)	Frequency :	706.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-62.81	-13	-49.81	-53.70	-61.48	1.75	2.57	H	Pass
2114	-50.49	-13	-37.49	-53.54	-50.16	2.16	3.98	H	Pass
2820	-55.95	-13	-42.95	-60.92	-57.23	2.48	5.91	H	Pass

Band :	LTE Band 17				Temperature :	22~23°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	40~41%			
Channel :	23755 (Low)				Frequency :	706.5			
Test Engineer :	Nick Su				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-65.04	-13	-52.04	-54.24	-63.72	1.75	2.57	V	Pass
2114	-46.66	-13	-33.66	-51.31	-46.33	2.16	3.98	V	Pass
2820	-54.24	-13	-41.24	-60.18	-55.53	2.48	5.91	V	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23790 (Middle)	Frequency :	710						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1416	-57.00	-13	-44.00	-50.43	-55.67	1.75	2.57	H	Pass
2122	-64.41	-13	-51.41	-60.81	-64.08	2.16	3.98	H	Pass
2834	-56.00	-13	-43.00	-60.94	-57.28	2.48	5.91	H	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23790 (Middle)	Frequency :	710						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1416	-59.06	-13	-46.06	-51.32	-57.73	1.75	2.57	V	Pass
2124	-49.99	-13	-36.99	-53.71	-49.66	2.16	3.98	V	Pass
2834	-55.69	-13	-42.69	-61.05	-56.98	2.48	5.91	V	Pass



Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23825 (High)	Frequency :	713.5						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1422	-60.21	-13	-47.21	-52.05	-58.88	1.75	2.57	H	Pass
2136	-50.54	-13	-37.54	-53.58	-50.21	2.16	3.98	H	Pass
2848	-51.43	-13	-38.43	-59.34	-52.72	2.48	5.91	H	Pass
3556	-55.83	-13	-42.83	-62.48	-57.29	2.9	6.52	H	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23825 (High)	Frequency :	713.5						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1422	-57.37	-13	-44.37	-50.54	-56.05	1.75	2.57	V	Pass
2134	-46.39	-13	-33.39	-51.07	-46.06	2.16	3.98	V	Pass
2848	-53.38	-13	-40.38	-59.81	-54.67	2.48	5.91	V	Pass
3556	-59.55	-13	-46.55	-64.89	-61.01	2.9	6.52	V	Pass



Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23780 (Low)	Frequency :	709						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1410	-62.15	-13	-49.15	-53.27	-60.82	1.75	2.57	H	Pass
2114	-50.78	-13	-37.78	-53.77	-50.45	2.16	3.98	H	Pass
2820	-54.94	-13	-41.94	-60.50	-56.22	2.48	5.91	H	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23780 (Low)	Frequency :	709						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1410	-64.25	-13	-51.25	-53.45	-62.92	1.75	2.57	V	Pass
2114	-44.72	-13	-31.72	-50.03	-44.39	2.16	3.98	V	Pass
2820	-54.71	-13	-41.71	-60.57	-56.00	2.48	5.91	V	Pass



Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23790 (Middle)	Frequency :	710						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1410	-60.53	-13	-47.53	-52.21	-59.20	1.75	2.57	H	Pass
2118	-50.31	-13	-37.31	-53.39	-49.98	2.16	3.98	H	Pass
2824	-58.14	-13	-45.14	-62.27	-59.43	2.48	5.91	H	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23790 (Middle)	Frequency :	710						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
1412	-59.89	-13	-46.89	-52.03	-58.56	1.75	2.57	V	Pass
2118	-39.38	-13	-26.38	-45.56	-39.06	2.16	3.98	V	Pass
2824	-58.55	-13	-45.55	-62.39	-59.84	2.48	5.91	V	Pass



Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23800 (High)	Frequency :	711						
Test Engineer :	Nick Su	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1414	-58.01	-13	-45.01	-51.22	-56.69	1.75	2.57	H	Pass
2120	-48.28	-13	-35.28	-52.15	-47.96	2.16	3.98	H	Pass
2828	-57.44	-13	-44.44	-61.53	-58.72	2.48	5.91	H	Pass
3532	-57.15	-13	-44.15	-62.80	-58.61	2.9	6.52	H	Pass

Band :	LTE Band 17	Temperature :	22~23°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	40~41%						
Channel :	23800 (High)	Frequency :	711						
Test Engineer :	Nick Su	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1414	-59.24	-13	-46.24	-51.45	-57.91	1.75	2.57	V	Pass
2122	-39.24	-13	-26.24	-45.4	-38.92	2.16	3.98	V	Pass
2828	-56.19	-13	-43.19	-61.18	-57.47	2.48	5.91	V	Pass
3532	-57.79	-13	-44.79	-62.8	-59.26	2.9	6.52	V	Pass

3.8 Frequency Stability Measurement

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

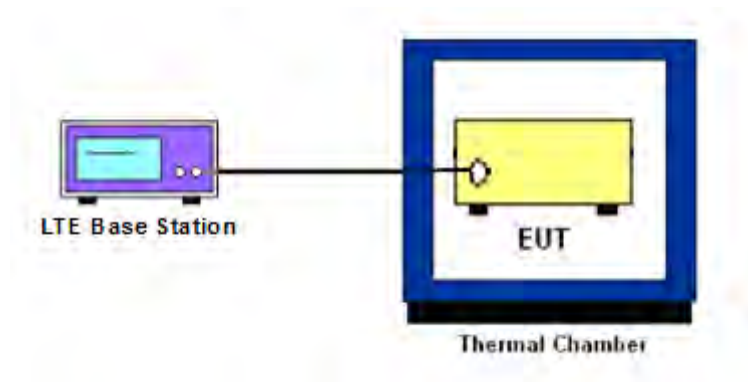
3.8.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the LTE base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.8.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ and connected with the LTE base station.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.8.5 Test Setup



3.8.6 Test Result of Temperature Variation (FCC)

Band :	LTE Band 2 (QPSK)	Limit (ppm) :	within authorized band
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0047	PASS	
40	0.0043		
30	0.0020		
20(Ref.)	0.0000		
10	0.0047		
0	0.0057		
-10	0.0044		
-20	0.0053		
-30	0.0051		

Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Band :	LTE Band 4 (QPSK)	Limit (ppm) :	within authorized band
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0005	PASS	
40	0.0008		
30	0.0107		
20(Ref.)	0.0000		
10	0.0021		
0	0.0036		
-10	0.0026		
-20	0.0021		
-30	0.0012		

Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Band :	LTE Band 7 (QPSK)	Limit (ppm) :	within authorized band
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0001	PASS	
40	0.0006		
30	0.0008		
20(Ref.)	0.0000		
10	0.0007		
0	0.0009		
-10	0.0006		
-20	0.0015		
-30	0.0012		

Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Band :	LTE Band 17 (QPSK)	Limit (ppm) :	within authorized band
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0020	PASS	
40	0.0041		
30	0.0025		
20(Ref.)	0.0000		
10	0.0021		
0	0.0034		
-10	0.0044		
-20	0.0037		
-30	0.0027		

Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

3.8.7 Test Result of Voltage Variation (FCC)

Band	Bandwidth	Voltage (Volt)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 7	10M	4.35	0.0016	(Note 3.)	PASS
		Normal	0.0008		
		3.6	0.0012		
LTE Band 2	10M	4.35	0.0058	(Note 3.)	PASS
		Normal	0.0054		
		3.6	0.0032		
LTE Band 4	10M	4.35	0.0006	(Note 3.)	PASS
		Normal	0.0000		
		3.6	0.0017		
LTE Band 17	10M	4.35	0.0056	(Note 3.)	PASS
		Normal	0.0085		
		3.6	0.0014		

Note:

1. Normal Voltage = 3.8V.
2. The manufacturer declared that the EUT could work properly between voltage 3.6V ~ 4.35V.
3. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV30	101338	9kHz~30GHz	May 04, 2014	Dec. 09, 2014~ Jan. 05, 2015	May 03, 2015	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 25, 2014	Dec. 09, 2014~ Jan. 05, 2015	Oct. 24, 2015	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Oct. 25, 2014	Dec. 16, 2014~ Dec. 21, 2014	Oct. 24, 2015	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	101399	9kHz~30GHz	May 04, 2014	Dec. 16, 2014~ Dec. 21, 2014	May 03, 2015	Radiation (03CH01-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Jan. 08, 2014	Dec. 16, 2014~ Dec. 21, 2014	Jan. 07, 2015	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz~18GHz	Nov. 08, 2014	Dec. 16, 2014~ Dec. 21, 2014	Nov. 07, 2015	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Mar. 10, 2014	Dec. 16, 2014~ Dec. 21, 2014	Mar. 09, 2015	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02371	1GHz~26.5GHz	Oct. 28, 2014	Dec. 16, 2014~ Dec. 21, 2014	Oct. 27, 2015	Radiation (03CH01-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 16, 2014~ Dec. 21, 2014	NCR	Radiation (03CH01-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Dec. 16, 2014~ Dec. 21, 2014	NCR	Radiation (03CH01-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Dec. 16, 2014~ Dec. 21, 2014	NCR	Radiation (03CH01-KS)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.5
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