



Table of Contents	Page
B1. Conducted Output Power	2
B2. Peak-To-Average Ratio	3
B3. Transmitter Radiated Power (EIRP/ERP)	6
B4. Occupied Bandwidth(99% Occupied Bandwidth/26dB Bandwidth)	7
B5. Frequency Stability	10
B6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS	11
B7. BAND EDGE	13
B8. Field Strength of Spurious Radiation Measurement	15



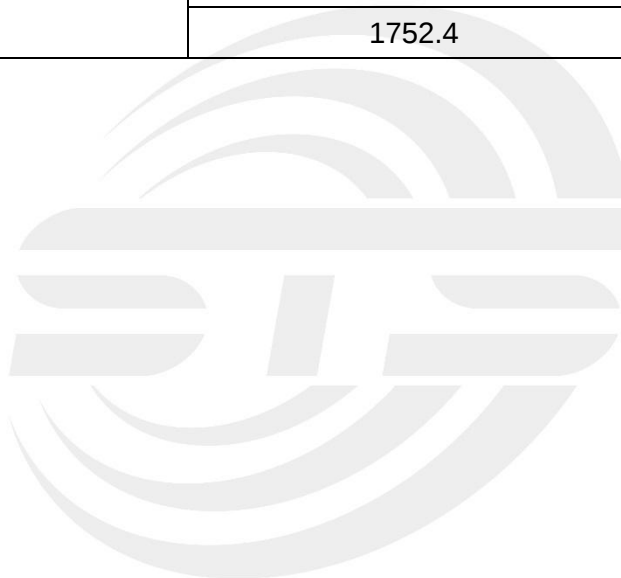
**B1. CONDUCTED OUTPUT POWER**

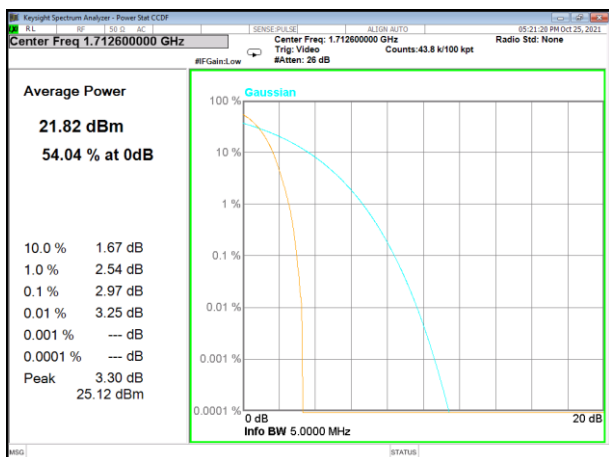
UMTS BAND IV

UMTS BAND 4		
Mode	Frequency(MHz)	AVG Power
WCDMA 1700 RMC	1712.6	23.15
	1740	23.47
	1752.4	23.91
HSDPA Subtest 1	1712.6	22.66
	1740	22.96
	1752.4	23.23
HSDPA Subtest 2	1712.6	22.20
	1740	22.46
	1752.4	22.81
HSDPA Subtest 3	1712.6	21.87
	1740	21.97
	1752.4	22.50
HSDPA Subtest 4	1712.6	21.37
	1740	21.47
	1752.4	22.10
HSUPA Subtest 1	1712.6	22.56
	1740	22.87
	1752.4	23.07
HSUPA Subtest 2	1712.6	21.66
	1740	21.91
	1752.4	22.17
HSUPA Subtest 3	1712.6	21.54
	1740	21.45
	1752.4	21.80
HSUPA Subtest 4	1712.6	21.24
	1740	21.10
	1752.4	21.38
HSUPA Subtest 5	1712.6	19.76
	1740	19.60
	1752.4	19.91

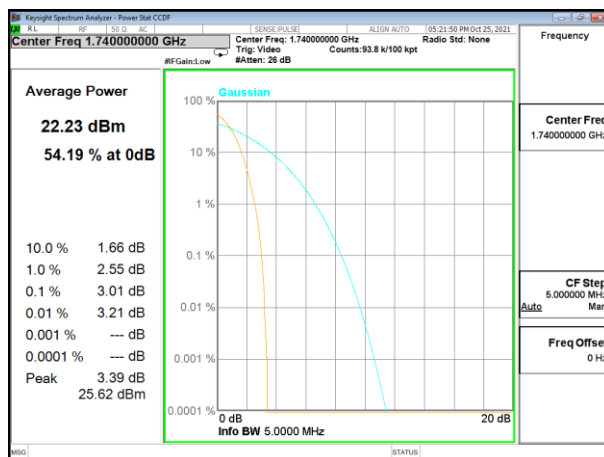
**B2. PEAK-TO-AVERAGE RADIO**

UMTS Band 4		
Mode	Frequency (MHz)	PAR
WCDMA 1700 RMC	1712.6	2.97
	1740	3.01
	1752.4	2.90
HSDPA 1700	1712.6	3.29
	1740	3.34
	1752.4	3.17
HSUPA 1700	1712.6	3.28
	1740	3.40
	1752.4	3.31

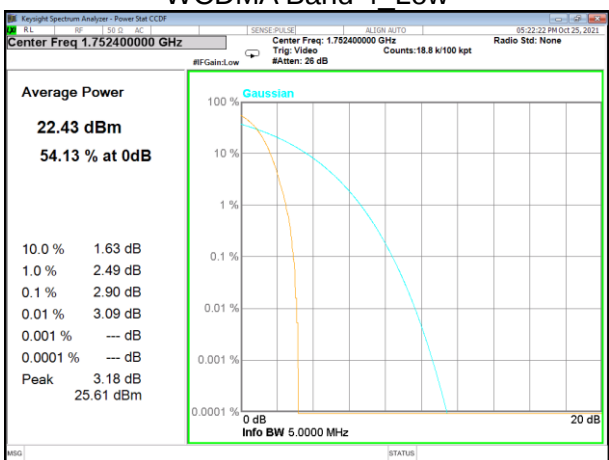




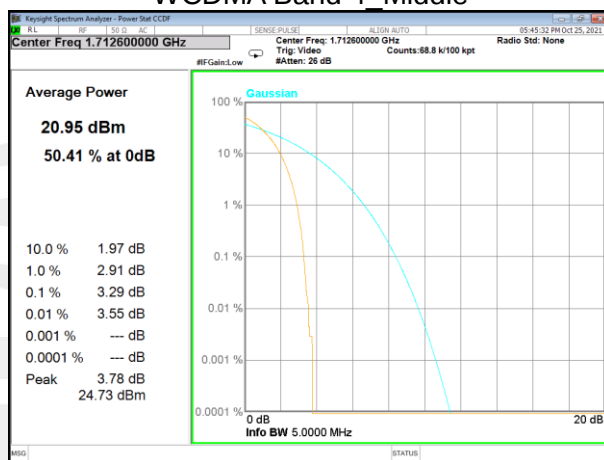
WCDMA Band 4_Low



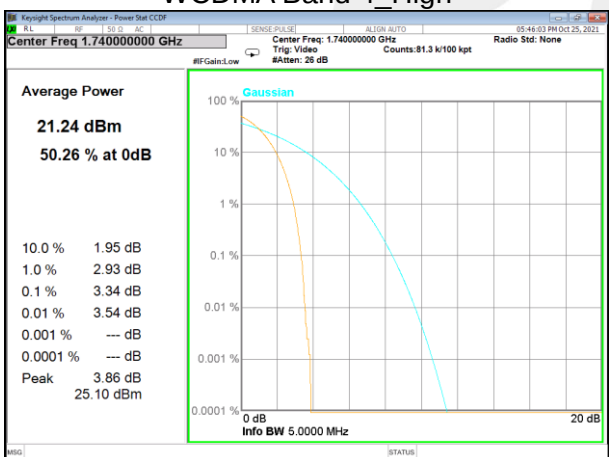
WCDMA Band 4_Middle



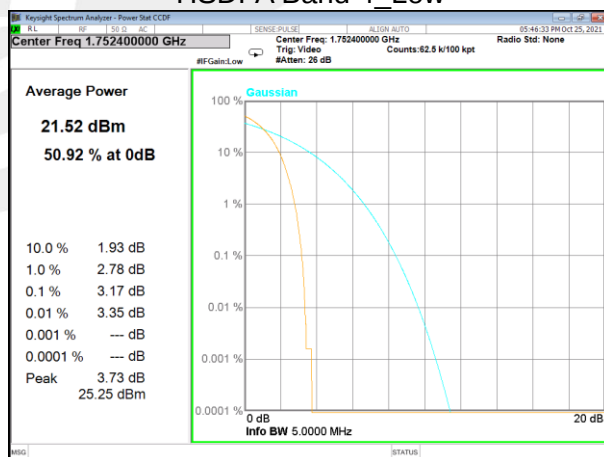
WCDMA Band 4_High



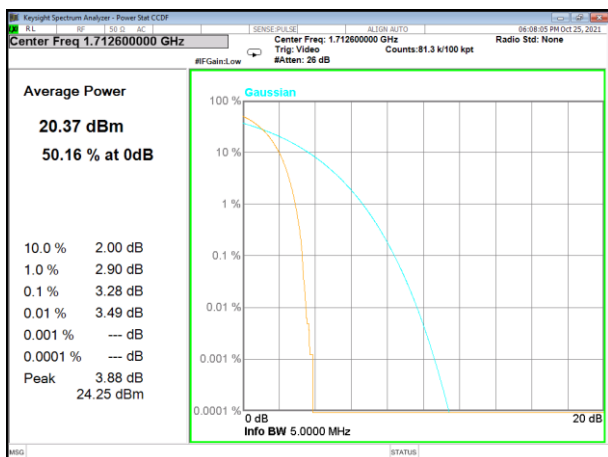
HSDPA Band 4_Low



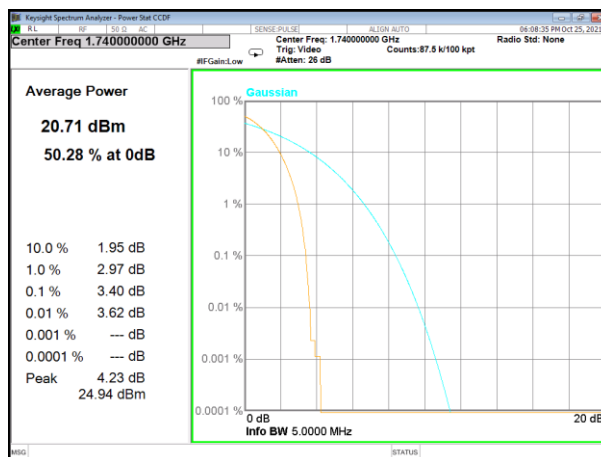
HSDPA Band 4_Middle



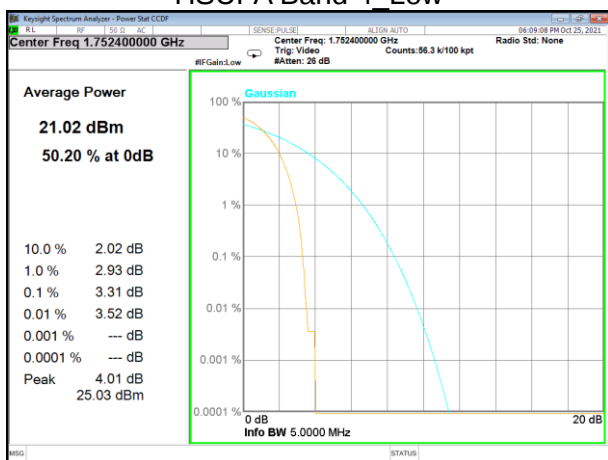
HSDPA Band 4_High



HSUPA Band 4_Low



HSUPA Band 4_Middle



HSUPA Band 4_High

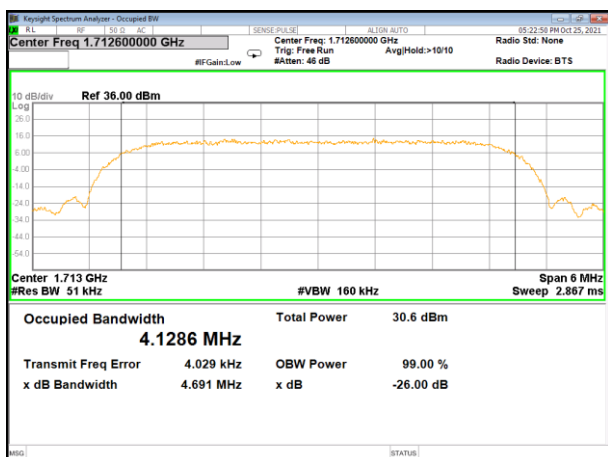
**B3. TRANSMITTER RADIATED POWER (EIRP/ERP)**

Radiated Power (EIRP) for WCDMA Band 4							
Mode	Frequency	Result					Conclusion
		S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max. EIRP	
WCDMA	1712.6	12.65	2.07	10.13	20.71	Horizontal	Pass
	1712.6	14.56	2.07	10.13	22.62	Vertical	Pass
	1740	12.95	2.08	10.13	21.00	Horizontal	Pass
	1740	14.79	2.08	10.13	22.84	Vertical	Pass
	1752.4	13.38	2.09	10.13	21.42	Horizontal	Pass
	1752.4	15.35	2.09	10.13	23.39	Vertical	Pass
HSUPA	1712.6	12.02	2.07	10.13	20.08	Horizontal	Pass
	1712.6	13.92	2.07	10.13	21.98	Vertical	Pass
	1740	12.12	2.08	10.13	20.17	Horizontal	Pass
	1740	14.06	2.08	10.13	22.11	Vertical	Pass
	1752.4	12.74	2.09	10.13	20.78	Horizontal	Pass
	1752.4	14.53	2.09	10.13	22.57	Vertical	Pass
HSDPA	1712.6	12.22	2.07	10.13	20.28	Horizontal	Pass
	1712.6	13.94	2.07	10.13	22.00	Vertical	Pass
	1740	12.14	2.08	10.13	20.19	Horizontal	Pass
	1740	13.94	2.08	10.13	21.99	Vertical	Pass
	1752.4	12.35	2.09	10.13	20.39	Horizontal	Pass
	1752.4	14.14	2.09	10.13	22.18	Vertical	Pass
Limit	EIRP<1W=30dBm						

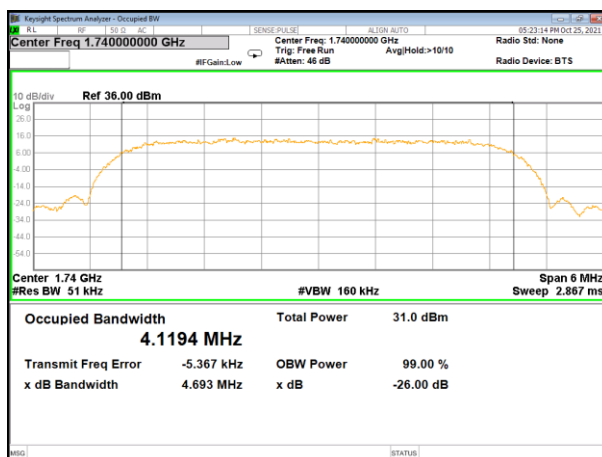
**B4. OCCUPIED BANDWIDTH(99% OCCUPIED BANDWIDTH/26DB BANDWIDTH)**

WCDMA Bandwidth [MHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
WCDMA 4	4.129	4.691	4.119	4.693	4.135	4.681
HSDPA 4	4.12	4.668	4.114	4.666	4.131	4.692
HSUPA 4	4.118	4.661	4.121	4.678	4.119	4.678

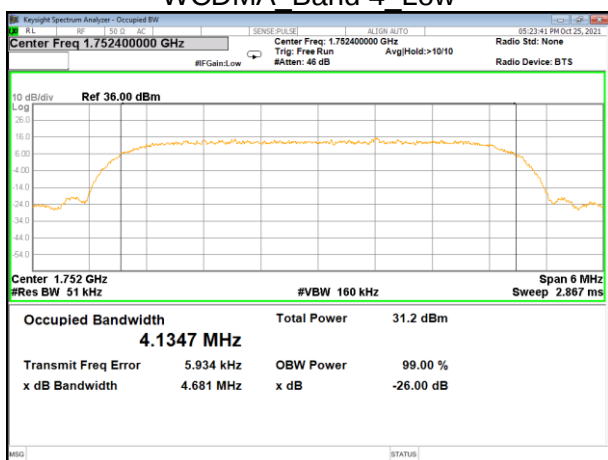




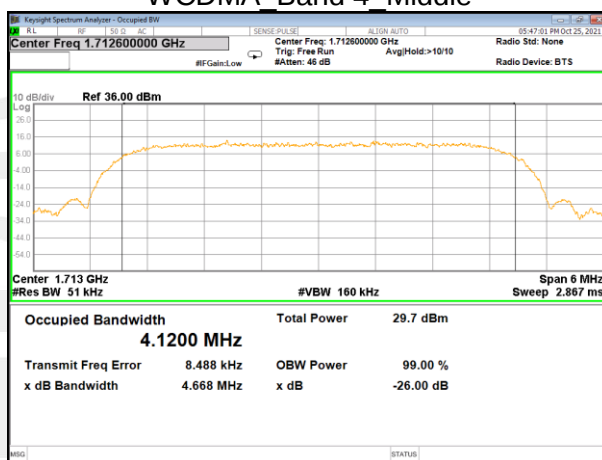
WCDMA_Band 4_Low



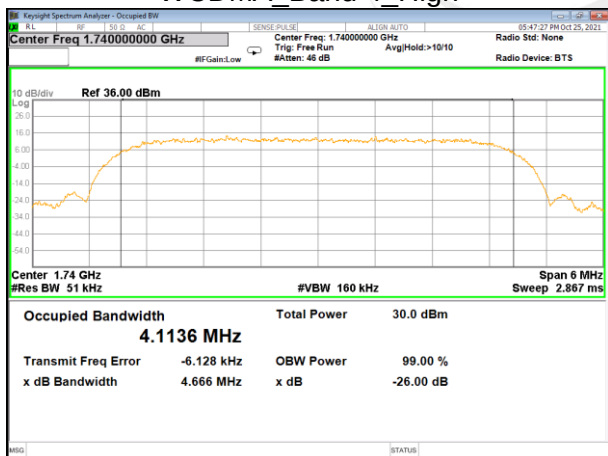
WCDMA_Band 4_Middle



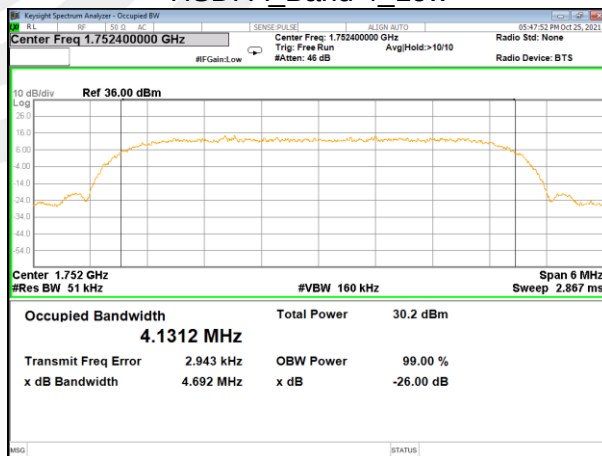
WCDMA_Band 4_High



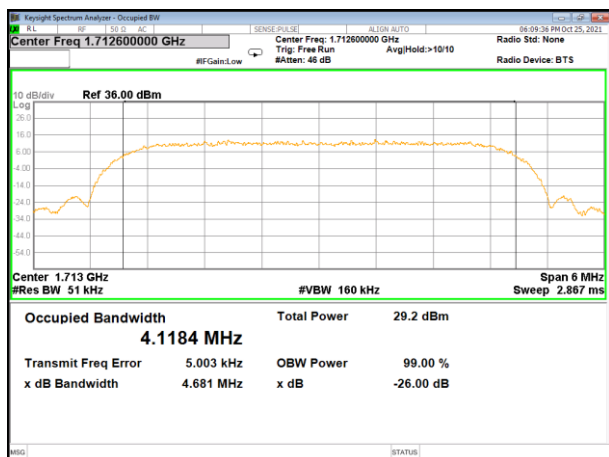
HSDPA_Band 4_Low



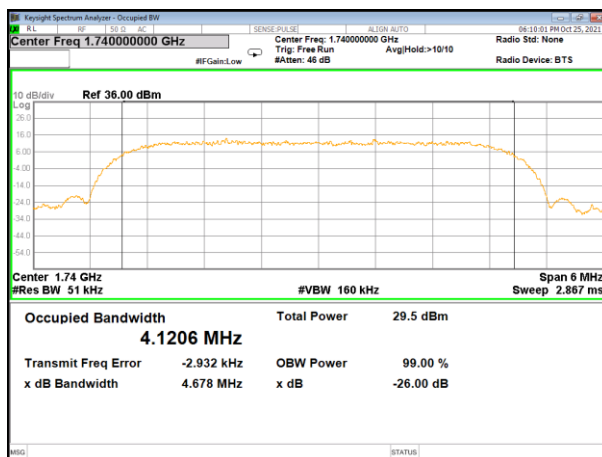
HSDPA_Band 4_Middle



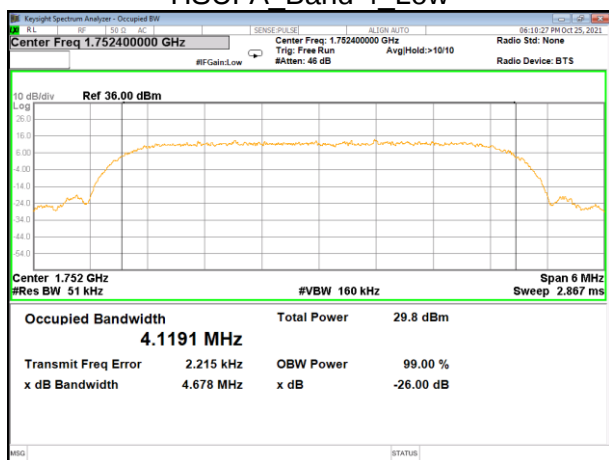
HSDPA_Band 4_High



HSUPA_Band 4_Low



HSUPA_Band 4_Middle



HSUPA_Band 4_High

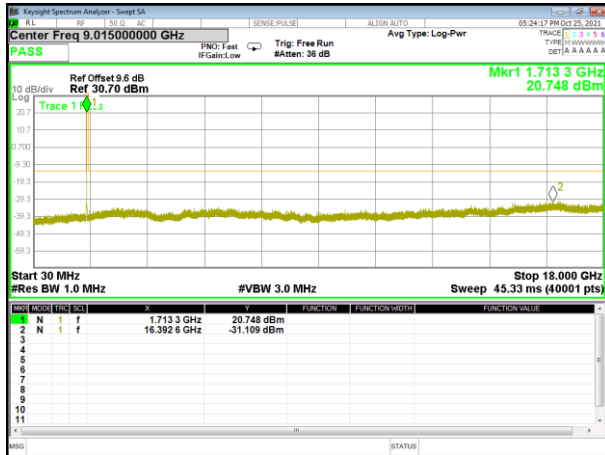
**B5. FREQUENCY STABILITY**

UMTS Band 4 /1740MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	35.75	0.019	Within Authorized Band	PASS
40		16.42	0.009		
30		19.25	0.010		
20		22.23	0.012		
10		28.81	0.015		
0		27.79	0.015		
-10		28.59	0.015		
-20		19.48	0.010		
-30		26.84	0.014		
20	Maximum Voltage	23.93	0.013		
20	BEP	35.20	0.019		

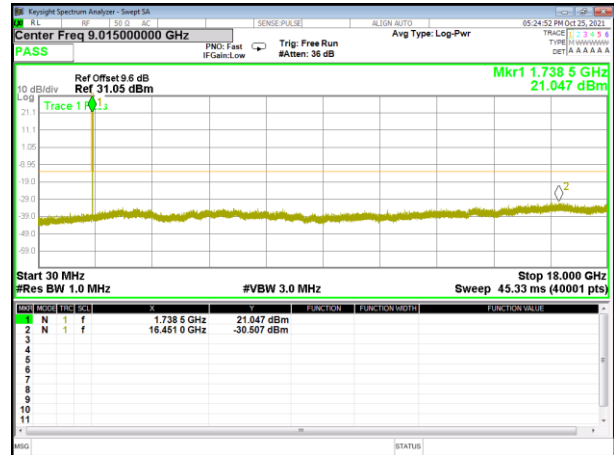
HSDPA Band 4 /1740MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.02	0.016	Within Authorized Band	PASS
40		18.39	0.010		
30		35.21	0.019		
20		26.28	0.014		
10		26.56	0.014		
0		18.36	0.010		
-10		33.88	0.018		
-20		35.59	0.019		
-30		18.40	0.010		
20	Maximum Voltage	12.30	0.007		
20	BEP	15.92	0.008		

HSUPA Band 4 /1740MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	35.31	0.019	Within Authorized Band	PASS
40		32.84	0.017		
30		25.60	0.014		
20		30.75	0.016		
10		17.41	0.009		
0		17.13	0.009		
-10		12.95	0.007		
-20		14.69	0.008		
-30		17.79	0.009		
20	Maximum Voltage	32.19	0.017		
20	BEP	22.77	0.012		

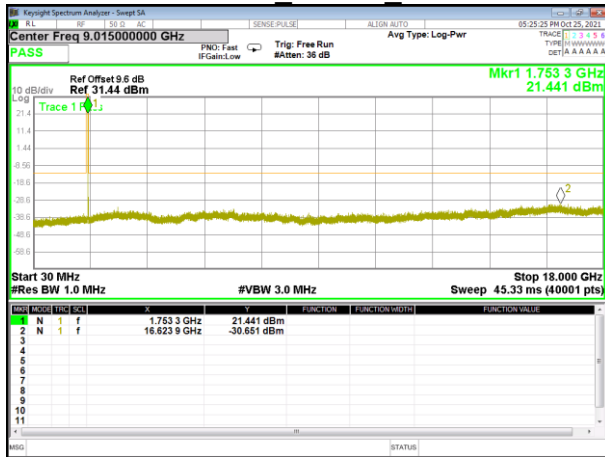
1. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

**B6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS**

WCDMA_Band 4_Low



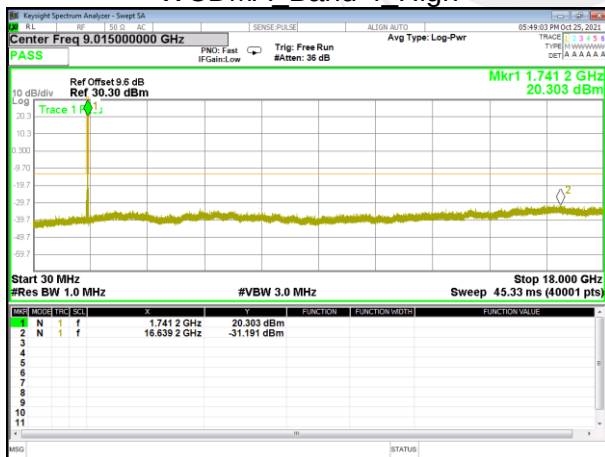
WCDMA_Band 4_Middle



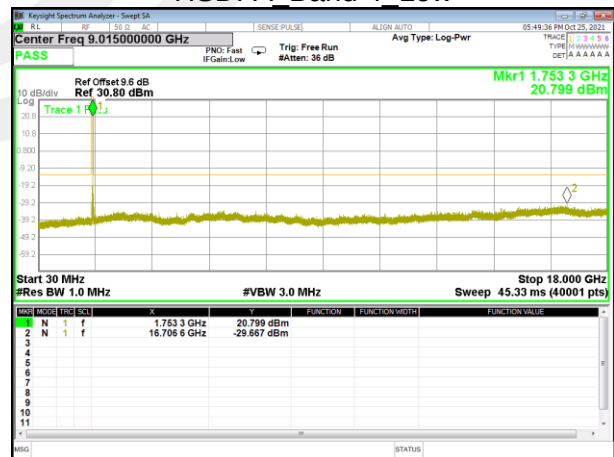
WCDMA_Band 4_High



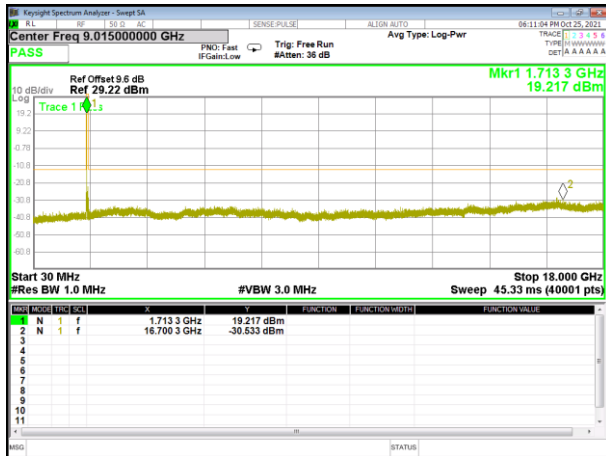
HSDPA_Band 4_Low



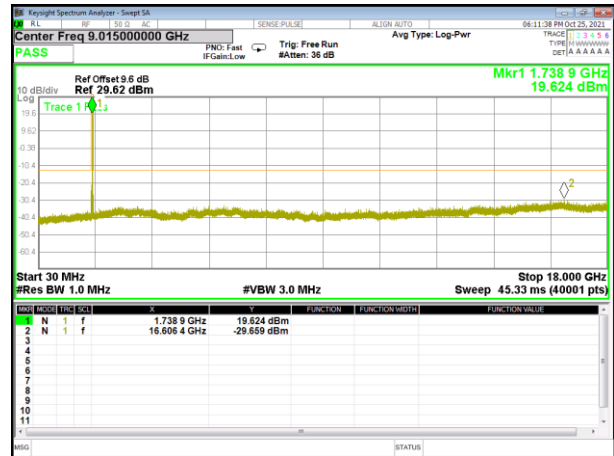
HSDPA_Band 4_Middle



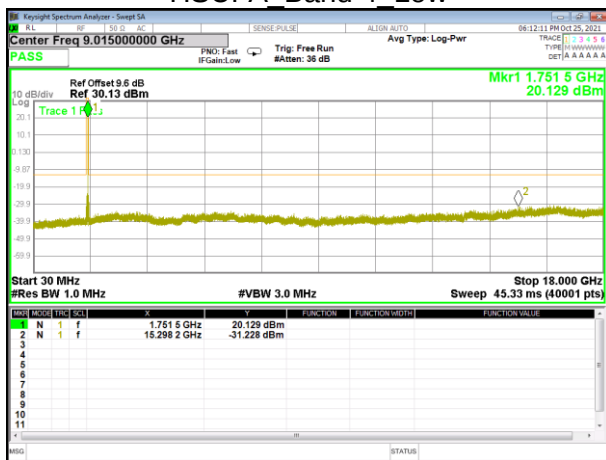
HSDPA_Band 4_High



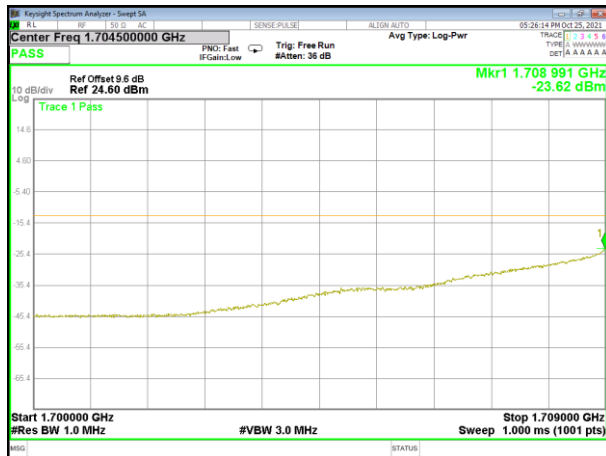
HSUPA_Band 4_Low



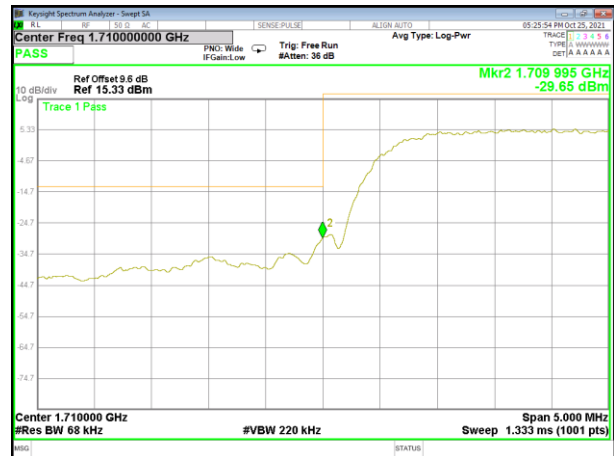
HSUPA_Band 4_Middle



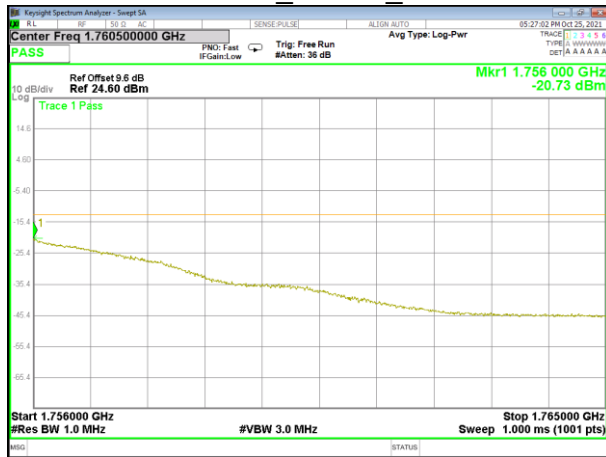
HSUPA_Band 4_High

**B7. BAND EDGE**

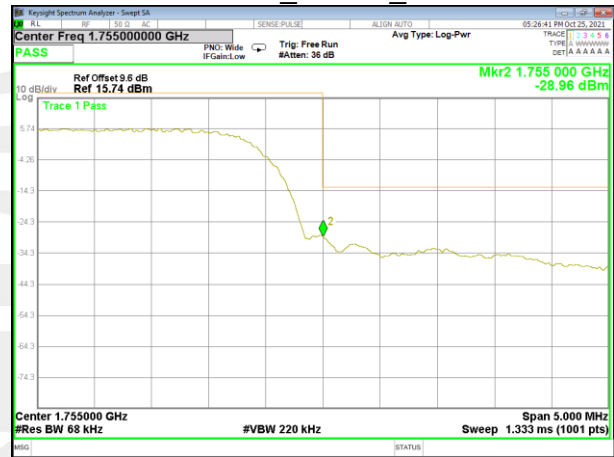
WCDMA_Band 4_Low



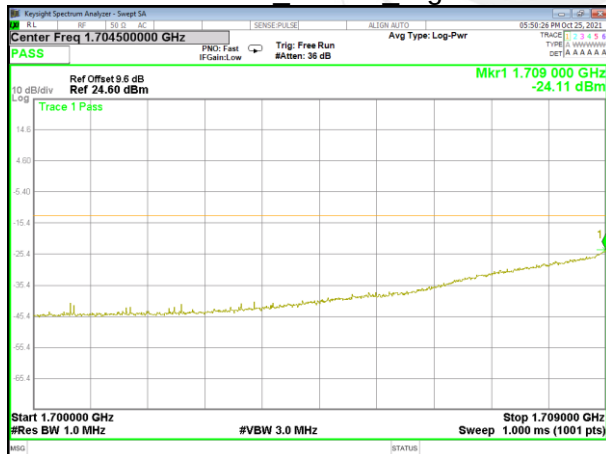
WCDMA_Band 4_Low



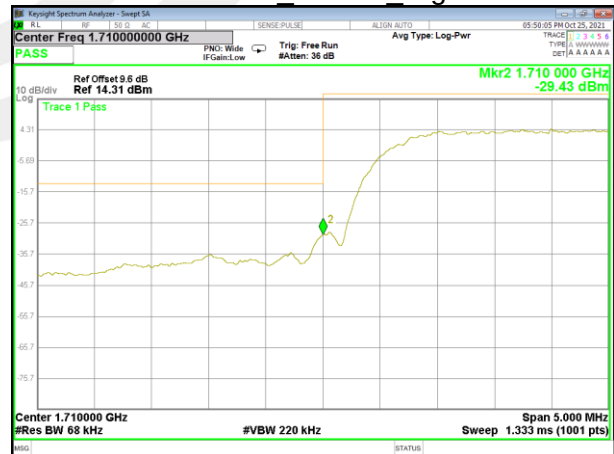
WCDMA_Band 4_High



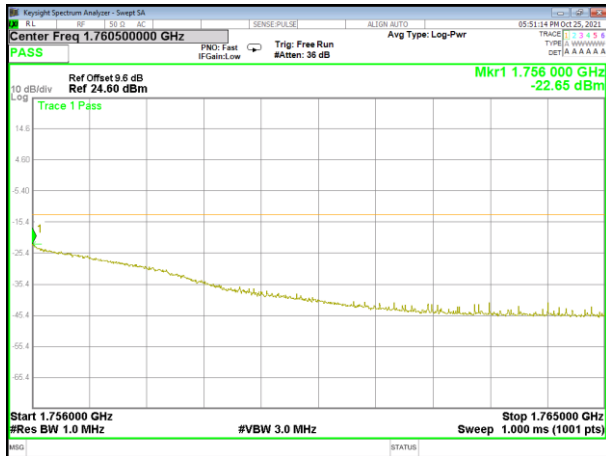
WCDMA_Band 4_High



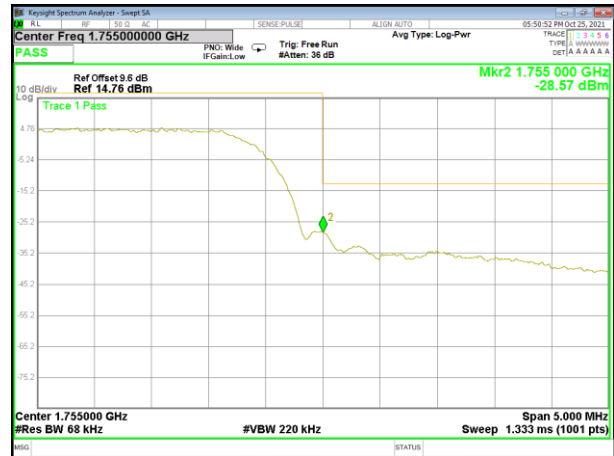
HSDPA_Band 4_Low



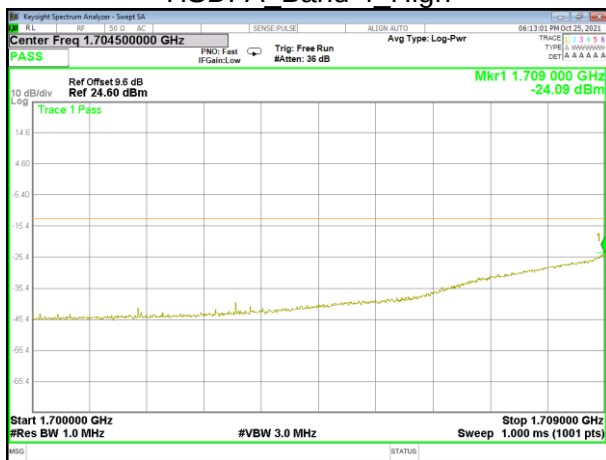
HSDPA_Band 4_Low



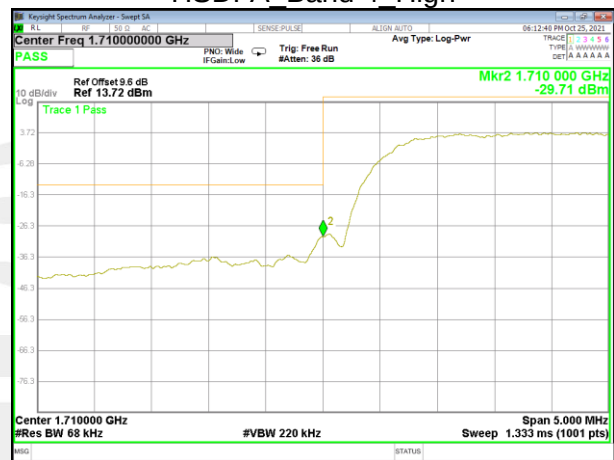
HSDPA_Band 4_High



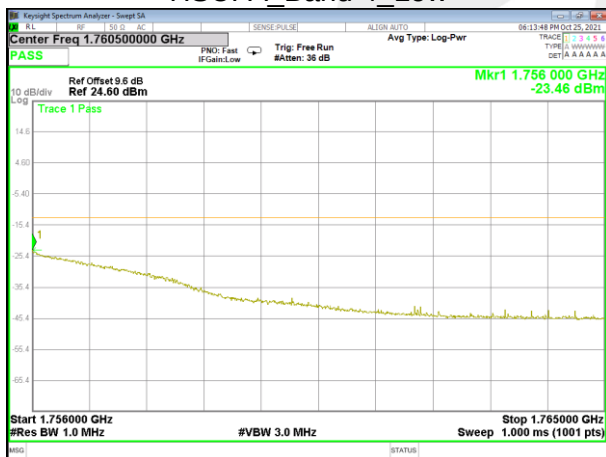
HSDPA_Band 4_High



HSUPA_Band 4_Low



HSUPA_Band 4_Low



HSUPA_Band 4_High



HSUPA_Band 4_High

**B8. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT**

Note:(1) Spurious emissions which are attenuated by more than 20dB below the permissible value for frequency below 1000MHz.

(2) Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value

(3) Test is divided into three directions, X/Y/Z. X pattern for the worst.

WCDMA Band 4: (30-20000)MHz							
The Worst Test Results for Channel 1313/1712.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3425.15	-33.65	12.90	12.05	-32.80	-13.00	-19.80	H
5137.79	-35.39	12.80	16.27	-38.86	-13.00	-25.86	H
6850.08	-33.09	12.30	20.13	-40.92	-13.00	-27.92	H
3425.14	-35.01	12.90	12.05	-34.16	-13.00	-21.16	V
5137.62	-33.79	12.80	16.27	-37.26	-13.00	-24.26	V
6850.20	-31.93	12.30	20.13	-39.76	-13.00	-26.76	V
The Worst Test Results for Channel 1450/1740.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3479.70	-33.98	12.90	12.05	-33.13	-13.00	-20.13	H
5219.98	-35.30	12.80	16.27	-38.77	-13.00	-25.77	H
6959.87	-33.45	12.30	20.13	-41.28	-13.00	-28.28	H
3479.63	-35.11	12.90	12.05	-34.26	-13.00	-21.26	V
5219.66	-34.15	12.80	16.27	-37.62	-13.00	-24.62	V
6959.95	-32.00	12.30	20.13	-39.83	-13.00	-26.83	V
The Worst Test Results for Channel 1512/1752.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3504.54	-33.76	12.90	12.05	-32.91	-13.00	-19.91	H
5256.96	-34.99	12.80	16.27	-38.46	-13.00	-25.46	H
7009.18	-32.27	12.30	20.13	-40.10	-13.00	-27.10	H
3504.60	-34.91	12.90	12.05	-34.06	-13.00	-21.06	V
5257.19	-34.27	12.80	16.27	-37.74	-13.00	-24.74	V
7009.49	-33.08	12.30	20.13	-40.91	-13.00	-27.91	V



HSUPA Band 4: (30-20000)MHz							
The Worst Test Results for Channel 1313/1712.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3425.05	-34.04	12.90	12.05	-33.19	-13.00	-20.19	H
5137.78	-34.98	12.80	16.27	-38.45	-13.00	-25.45	H
6850.30	-33.20	12.30	20.13	-41.03	-13.00	-28.03	H
3424.82	-35.57	12.90	12.05	-34.72	-13.00	-21.72	V
5137.53	-35.15	12.80	16.27	-38.62	-13.00	-25.62	V
6850.01	-32.56	12.30	20.13	-40.39	-13.00	-27.39	V
The Worst Test Results for Channel 1450/1740.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3479.97	-34.67	12.90	12.05	-33.82	-13.00	-20.82	H
5219.69	-34.51	12.80	16.27	-37.98	-13.00	-24.98	H
6959.63	-33.08	12.30	20.13	-40.91	-13.00	-27.91	H
3479.60	-35.71	12.90	12.05	-34.86	-13.00	-21.86	V
5219.69	-33.95	12.80	16.27	-37.42	-13.00	-24.42	V
6959.86	-32.40	12.30	20.13	-40.23	-13.00	-27.23	V
The Worst Test Results for Channel 1512/1752.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3504.47	-34.52	12.90	12.05	-33.67	-13.00	-20.67	H
5257.09	-34.18	12.80	16.27	-37.65	-13.00	-24.65	H
7009.40	-32.34	12.30	20.13	-40.17	-13.00	-27.17	H
3504.44	-35.84	12.90	12.05	-34.99	-13.00	-21.99	V
5256.80	-34.32	12.80	16.27	-37.79	-13.00	-24.79	V
7009.49	-31.96	12.30	20.13	-39.79	-13.00	-26.79	V



HSDPA Band 4: (30-20000)MHz							
The Worst Test Results for Channel 1313/1712.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3424.82	-34.42	12.90	12.05	-33.57	-13.00	-20.57	H
5137.41	-34.03	12.80	16.27	-37.50	-13.00	-24.50	H
6850.37	-32.97	12.30	20.13	-40.80	-13.00	-27.80	H
3425.16	-34.89	12.90	12.05	-34.04	-13.00	-21.04	V
5137.79	-34.30	12.80	16.27	-37.77	-13.00	-24.77	V
6850.10	-33.06	12.30	20.13	-40.89	-13.00	-27.89	V
The Worst Test Results for Channel 1450/1740.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3479.68	-34.90	12.90	12.05	-34.05	-13.00	-21.05	H
5219.91	-35.40	12.80	16.27	-38.87	-13.00	-25.87	H
6959.94	-32.44	12.30	20.13	-40.27	-13.00	-27.27	H
3479.80	-35.29	12.90	12.05	-34.44	-13.00	-21.44	V
5219.82	-34.72	12.80	16.27	-38.19	-13.00	-25.19	V
6959.64	-32.76	12.30	20.13	-40.59	-13.00	-27.59	V
The Worst Test Results for Channel 1512/1752.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3504.34	-34.34	12.90	12.05	-33.49	-13.00	-20.49	H
5256.83	-34.22	12.80	16.27	-37.69	-13.00	-24.69	H
7009.40	-32.94	12.30	20.13	-40.77	-13.00	-27.77	H
3504.52	-35.47	12.90	12.05	-34.62	-13.00	-21.62	V
5257.08	-34.33	12.80	16.27	-37.80	-13.00	-24.80	V
7009.56	-32.92	12.30	20.13	-40.75	-13.00	-27.75	V