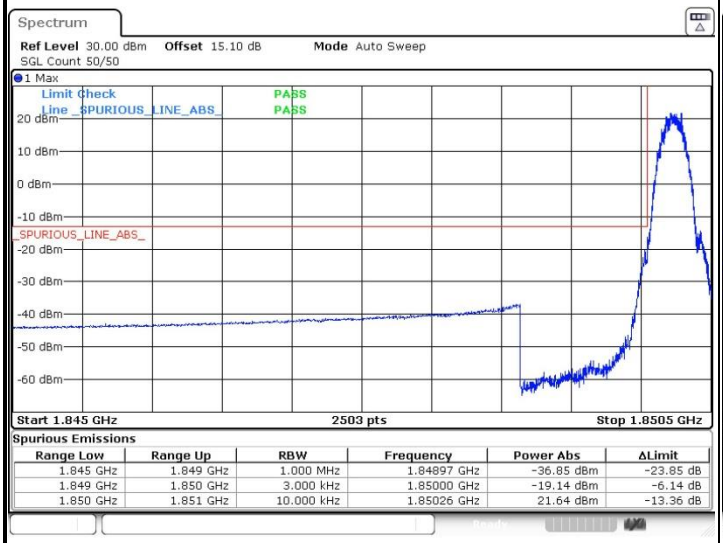
GSM1900 (GSM)

Lowest Band Edge

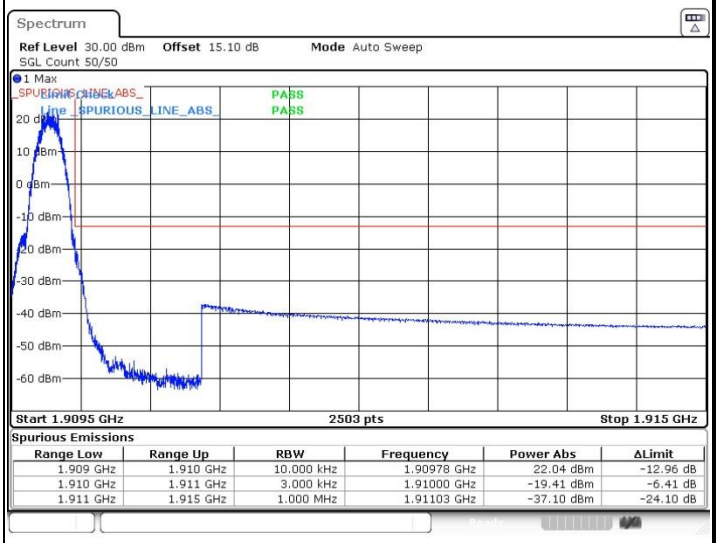


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84897 GHz	-36.85 dBm	-23.85 dB
1.849 GHz	1.850 GHz	3.000 kHz	1.85000 GHz	-19.14 dBm	-6.14 dB
1.850 GHz	1.851 GHz	10.000 kHz	1.85026 GHz	21.64 dBm	-13.36 dB

Date: 12.AUG.2020 22:24:17

Highest Band Edge



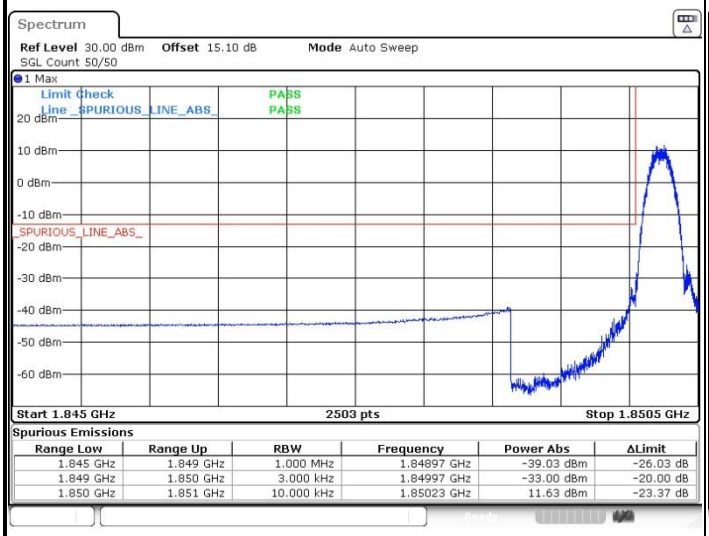
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.909 GHz	1.910 GHz	10.000 kHz	1.90978 GHz	22.04 dBm	-12.96 dB
1.910 GHz	1.911 GHz	3.000 kHz	1.91000 GHz	-19.41 dBm	-6.41 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91103 GHz	-37.10 dBm	-24.10 dB

Date: 12.AUG.2020 22:25:49

GSM1900 (EDGE class 8)

Lowest Band Edge

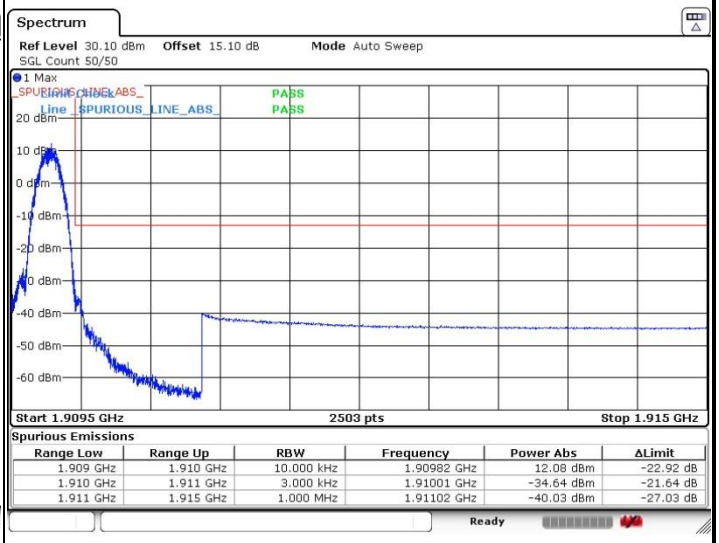


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84897 GHz	-39.03 dBm	-26.03 dB
1.849 GHz	1.850 GHz	3.000 kHz	1.84997 GHz	-33.00 dBm	-20.00 dB
1.850 GHz	1.851 GHz	10.000 kHz	1.85023 GHz	11.63 dBm	-23.37 dB

Date: 12.AUG.2020 23:47:53

Highest Band Edge



Spurious Emissions

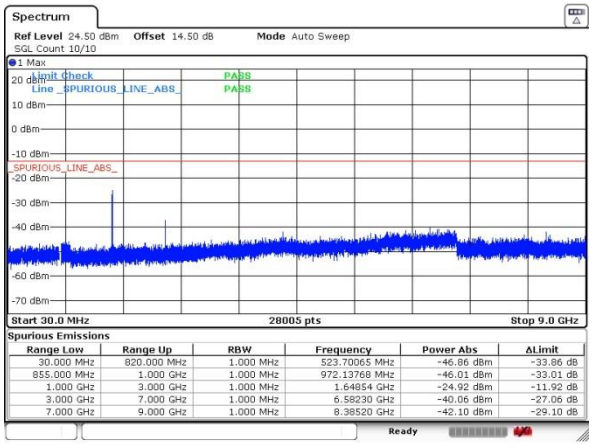
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.909 GHz	1.910 GHz	10.000 kHz	1.90982 GHz	12.08 dBm	-22.92 dB
1.910 GHz	1.911 GHz	3.000 kHz	1.91001 GHz	-34.64 dBm	-21.64 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91102 GHz	-40.03 dBm	-27.03 dB

Date: 12.AUG.2020 23:51:24

Conducted Spurious Emission

GSM850 (GSM)

Lowest Channel

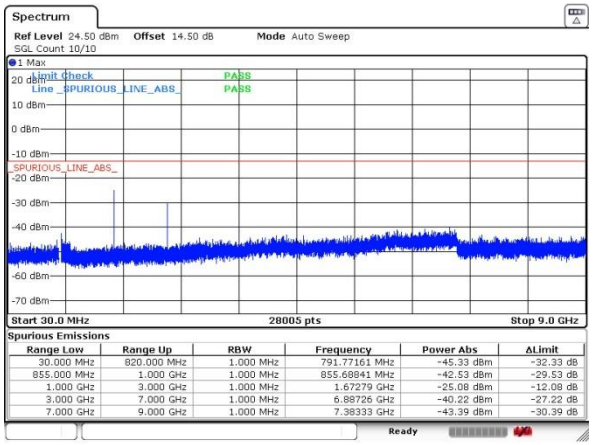


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	523.70065 MHz	-46.86 dBm	-33.86 dB
855.000 MHz	1.000 GHz	1.000 MHz	972.13768 MHz	-46.01 dBm	-33.01 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64854 GHz	-24.92 dBm	-11.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.58230 GHz	-40.06 dBm	-27.06 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.38520 GHz	-42.10 dBm	-29.10 dB

Date: 12.AUG.2020 23:04:43

Middle Channel

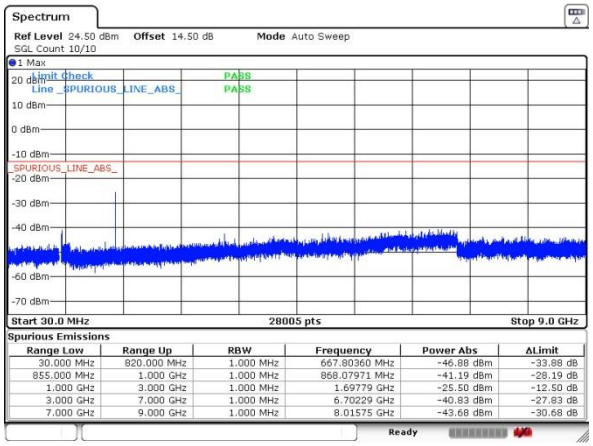


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	791.77161 MHz	-45.33 dBm	-32.33 dB
855.000 MHz	1.000 GHz	1.000 MHz	855.68841 MHz	-42.53 dBm	-29.53 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67279 GHz	-25.08 dBm	-12.08 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.88726 GHz	-40.22 dBm	-27.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.38333 GHz	-43.39 dBm	-30.39 dB

Date: 12.AUG.2020 23:05:23

Highest Channel



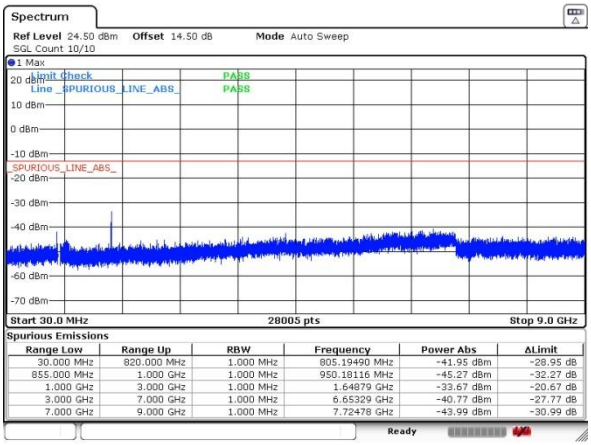
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	667.80360 MHz	-46.88 dBm	-33.88 dB
855.000 MHz	1.000 GHz	1.000 MHz	868.07971 MHz	-41.19 dBm	-28.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69779 GHz	-25.50 dBm	-12.50 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.70229 GHz	-40.83 dBm	-27.83 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.01575 GHz	-43.68 dBm	-30.68 dB

Date: 12.AUG.2020 23:05:48

GSM850 (EDGE class 8)

Lowest Channel

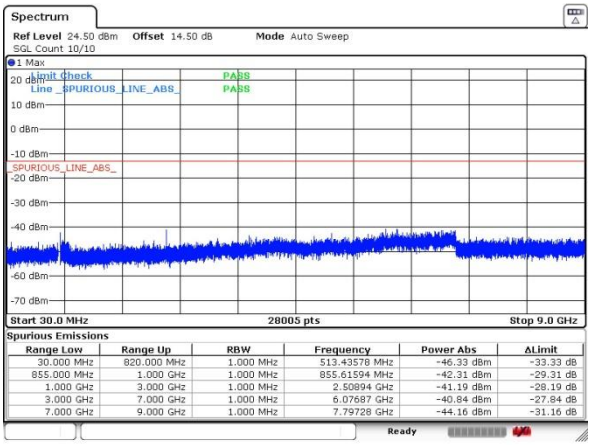


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	805.19490 MHz	-41.95 dBm	-28.95 dB
855.000 MHz	1.000 GHz	1.000 MHz	950.18116 MHz	-45.27 dBm	-32.27 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64879 GHz	-33.67 dBm	-20.67 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.65329 GHz	-40.77 dBm	-27.77 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.72478 GHz	-43.99 dBm	-30.99 dB

Date: 12.AUG.2020 23:27:31

Middle Channel

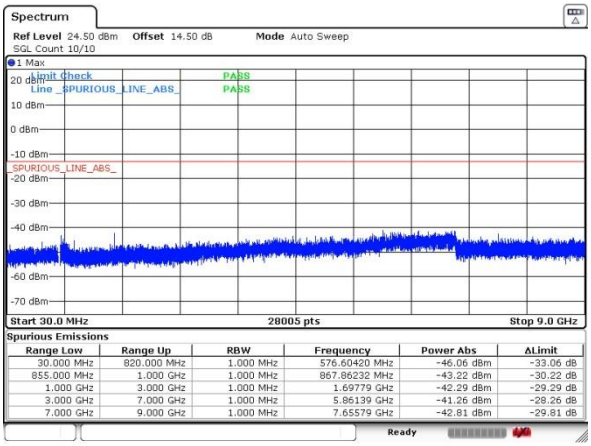


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	513.43578 MHz	-46.33 dBm	-33.33 dB
855.000 MHz	1.000 GHz	1.000 MHz	855.61594 MHz	-42.31 dBm	-29.31 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50894 GHz	-41.19 dBm	-28.19 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.07687 GHz	-40.84 dBm	-27.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.79728 GHz	-44.16 dBm	-31.16 dB

Date: 12.AUG.2020 23:28:04

Highest Channel



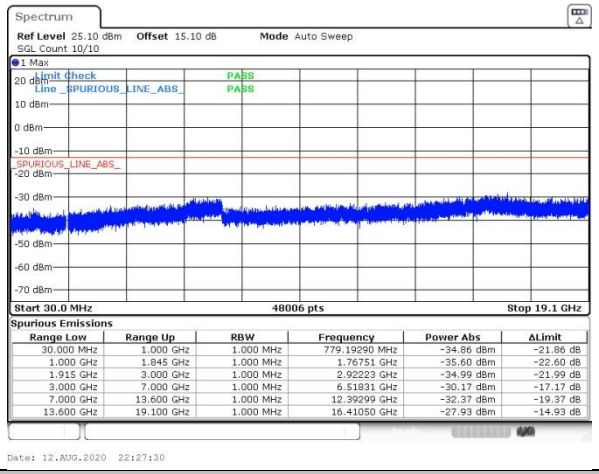
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	576.60420 MHz	-46.06 dBm	-33.06 dB
855.000 MHz	1.000 GHz	1.000 MHz	867.86232 MHz	-43.22 dBm	-30.22 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69779 GHz	-42.29 dBm	-29.29 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.86139 GHz	-41.26 dBm	-28.26 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.65579 GHz	-42.81 dBm	-29.81 dB

Date: 12.AUG.2020 23:28:27

GSM1900 (GSM)

Lowest Channel

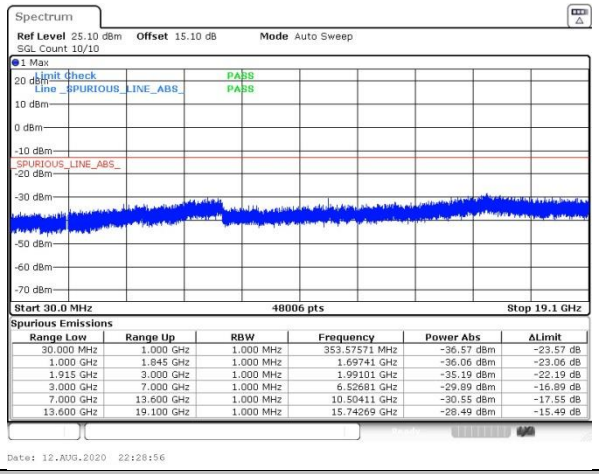


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	779.19290 MHz	-34.86 dBm	-21.86 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.76751 GHz	-35.60 dBm	-22.60 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.92223 GHz	-34.99 dBm	-21.99 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.51831 GHz	-30.17 dBm	-17.17 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.39299 GHz	-32.37 dBm	-19.37 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.41050 GHz	-27.93 dBm	-14.93 dB

Date: 12.AUG.2020 22:27:30

Middle Channel

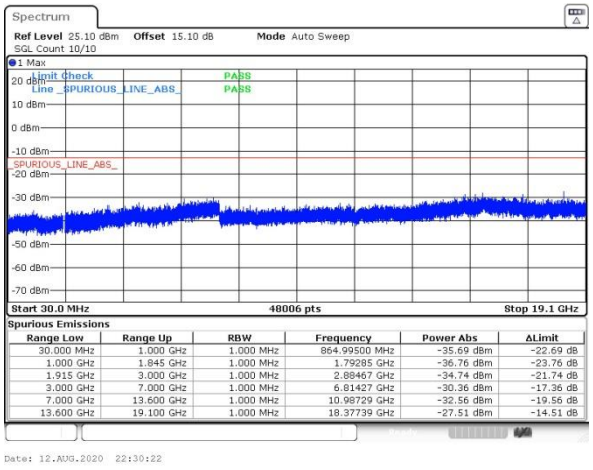


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	353.57571 MHz	-36.57 dBm	-23.57 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.69741 GHz	-36.06 dBm	-23.06 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.99101 GHz	-35.19 dBm	-22.19 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.52681 GHz	-29.89 dBm	-16.89 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.50411 GHz	-30.55 dBm	-17.55 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.74269 GHz	-28.49 dBm	-15.49 dB

Date: 12.AUG.2020 22:28:56

Highest Channel



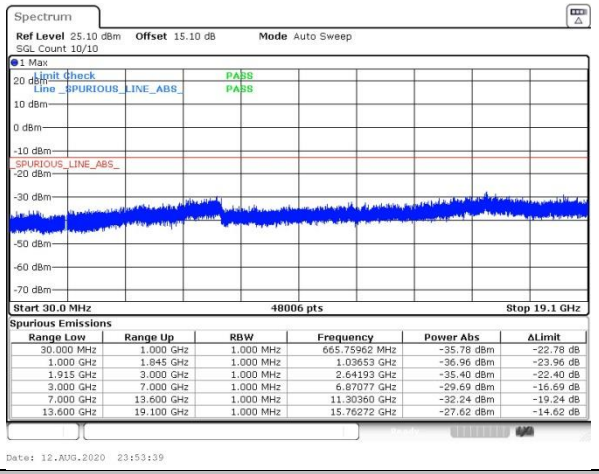
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	864.99500 MHz	-35.69 dBm	-22.69 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.79285 GHz	-36.76 dBm	-23.76 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.88467 GHz	-34.74 dBm	-21.74 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.81427 GHz	-30.36 dBm	-17.36 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.98729 GHz	-32.56 dBm	-19.56 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.37739 GHz	-27.51 dBm	-14.51 dB

Date: 12.AUG.2020 22:30:22

GSM1900 (EDGE class 8)

Lowest Channel

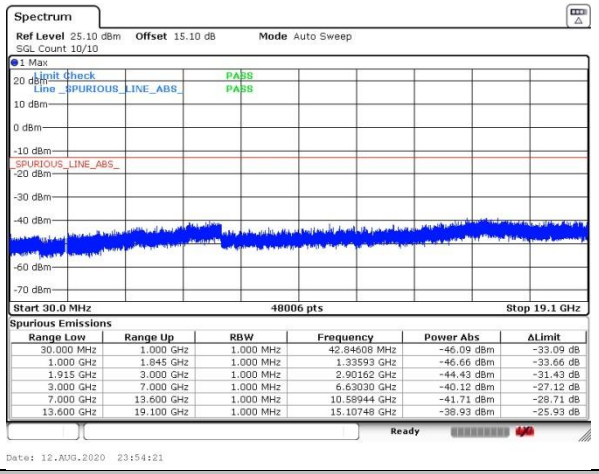


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	665.75962 MHz	-35.78 dBm	-22.78 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.03653 GHz	-36.96 dBm	-23.96 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.64193 GHz	-35.40 dBm	-22.40 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.87077 GHz	-29.69 dBm	-16.69 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.30360 GHz	-32.24 dBm	-19.24 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.76272 GHz	-27.62 dBm	-14.62 dB

Date: 12.AUG.2020 23:53:39

Middle Channel

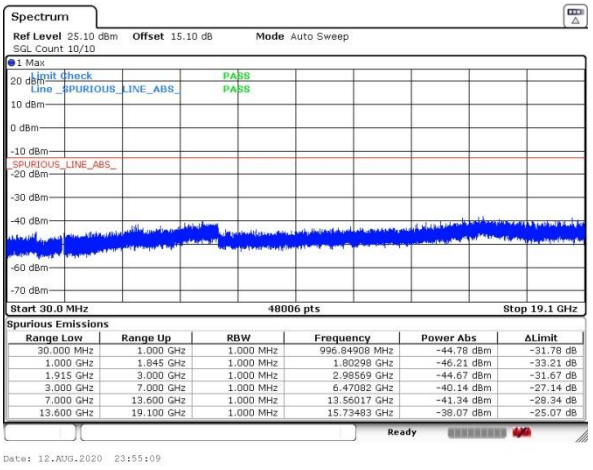


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	42.84608 MHz	-46.09 dBm	-33.09 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.33593 GHz	-46.66 dBm	-33.66 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.90162 GHz	-44.43 dBm	-31.43 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.63030 GHz	-40.12 dBm	-27.12 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.58944 GHz	-41.71 dBm	-28.71 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.10748 GHz	-38.93 dBm	-25.93 dB

Date: 12.AUG.2020 23:54:21

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	996.84908 MHz	-44.78 dBm	-31.78 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.80298 GHz	-46.21 dBm	-33.21 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.98569 GHz	-44.67 dBm	-31.67 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.47082 GHz	-40.14 dBm	-27.14 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.56017 GHz	-41.34 dBm	-28.34 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.73483 GHz	-38.07 dBm	-25.07 dB

Date: 12.AUG.2020 23:55:09

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0191	0.0036	PASS
40	Normal Voltage	0.0120	0.0132	
30	Normal Voltage	0.0096	0.0087	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0145	0.0155	
0	Normal Voltage	0.0079	0.0169	
-10	Normal Voltage	0.0176	0.0234	
-20	Normal Voltage	0.0160	0.0065	
-30	Normal Voltage	0.0143	0.0109	
20	Maximum Voltage	0.0130	0.0178	
20	Normal Voltage	0.0032	0.0203	
20	Battery End Point	0.0108	0.0224	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0124	0.0027	PASS
40	Normal Voltage	0.0011	0.0134	
30	Normal Voltage	0.0118	0.0023	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0145	0.0112	
0	Normal Voltage	0.0136	0.0135	
-10	Normal Voltage	0.0089	0.0174	
-20	Normal Voltage	0.0021	0.0127	
-30	Normal Voltage	0.0119	0.0119	
20	Maximum Voltage	0.0052	0.0018	
20	Normal Voltage	0.0015	0.0131	
20	Battery End Point	0.0058	0.0181	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

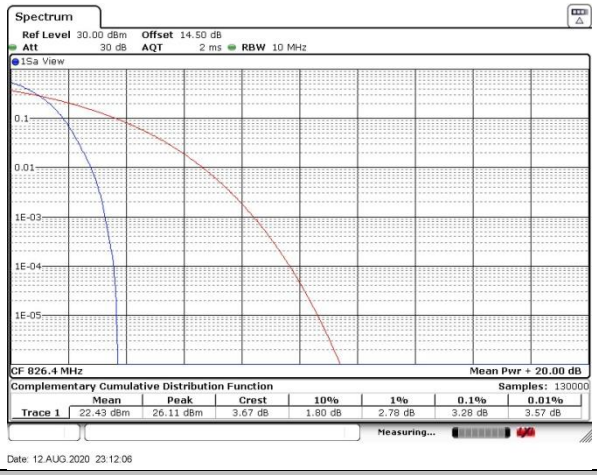
A2. WCDMA

Peak-to-Average Ratio

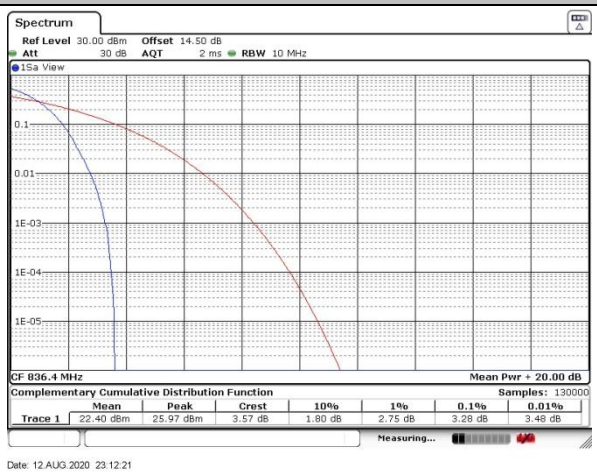
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	3.28	3.07	3.19	PASS
Middle CH	3.28	3.16	3.04	
Highest CH	3.10	3.22	3.33	

WCDMA Band V (RMC 12.2Kbps)

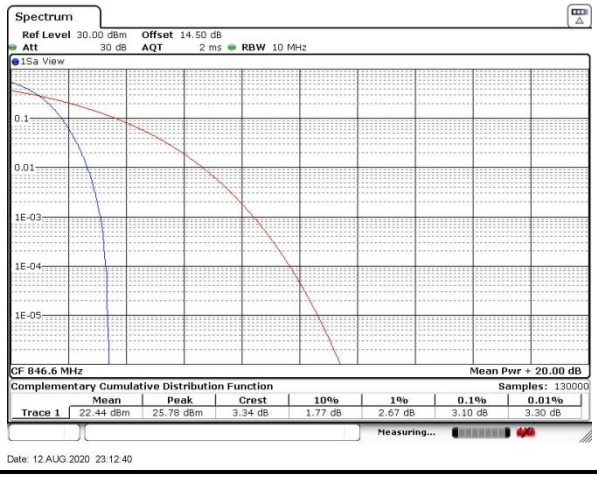
Lowest Channel



Middle Channel

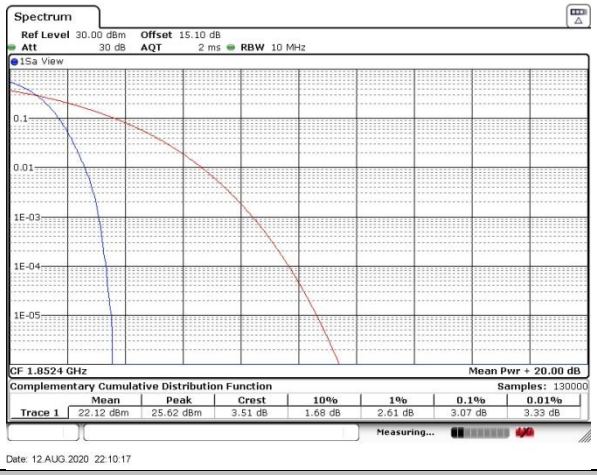


Highest Channel

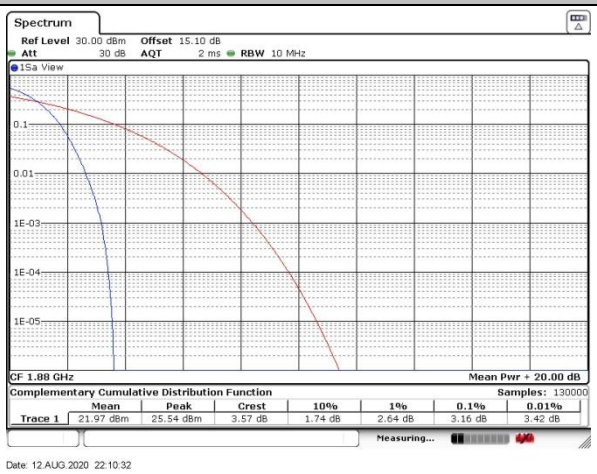


WCDMA Band II (RMC 12.2Kbps)

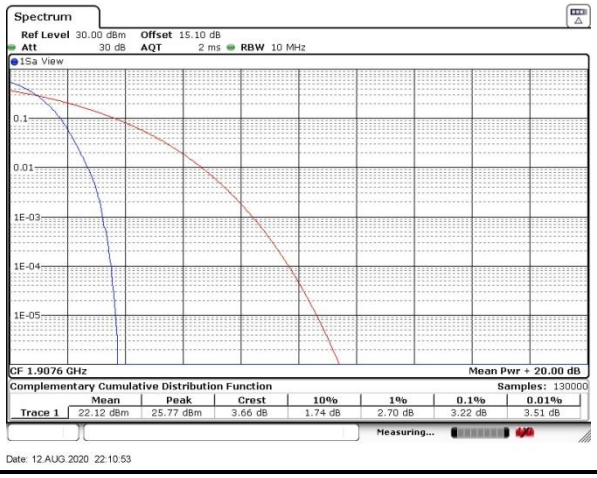
Lowest Channel



Middle Channel

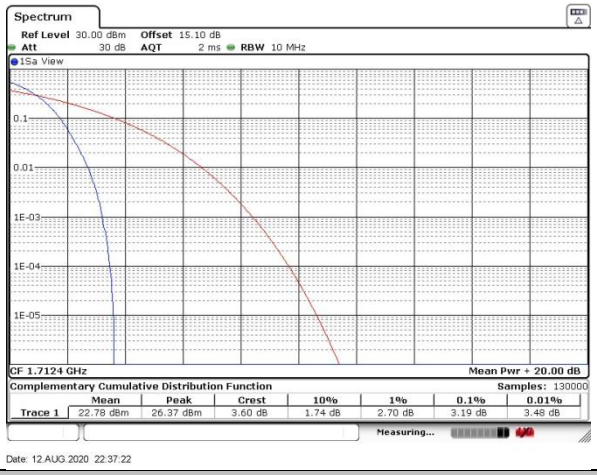


Highest Channel

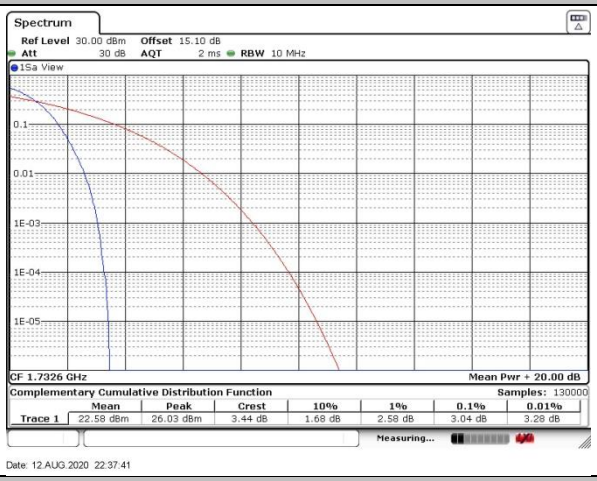


WCDMA Band IV (RMC 12.2Kbps)

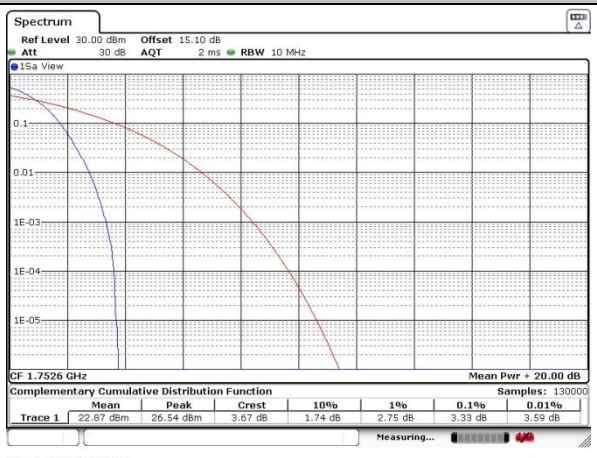
Lowest Channel



Middle Channel



Highest Channel

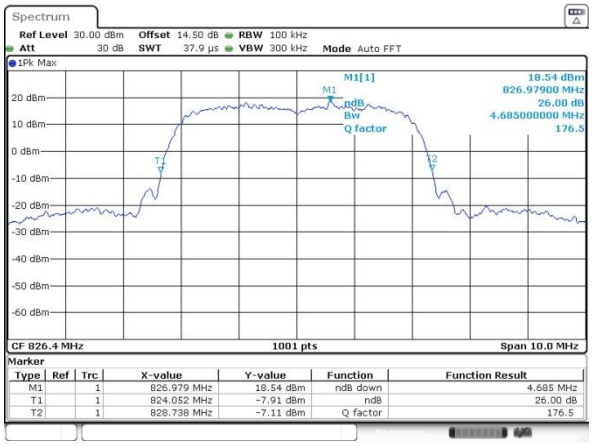


26dB Bandwidth

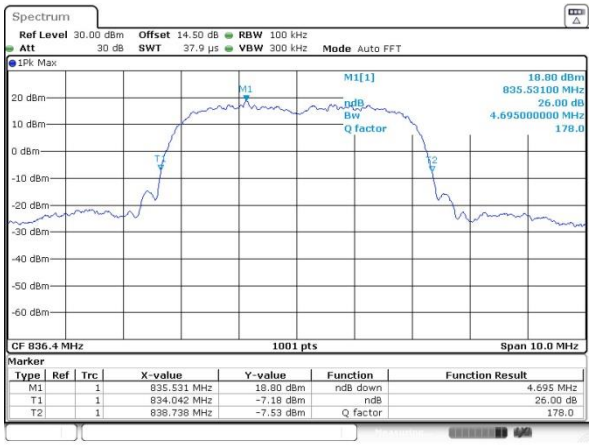
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.685	4.735	4.705
Middle CH	4.695	4.715	4.715
Highest CH	4.705	4.695	4.705

WCDMA Band V (RMC 12.2Kbps)

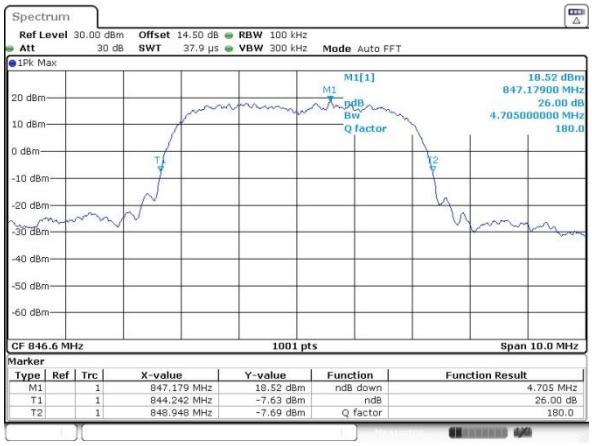
Lowest Channel



Middle Channel

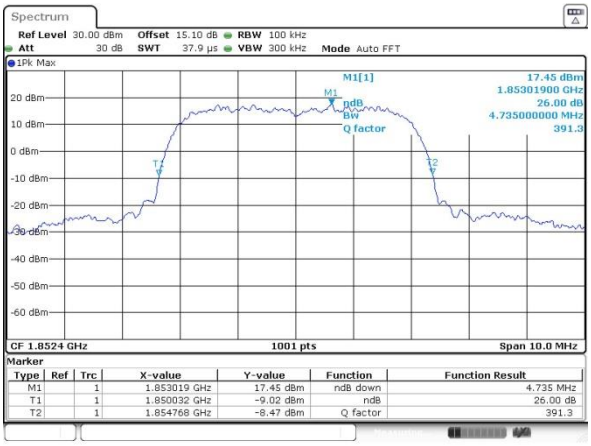


Highest Channel

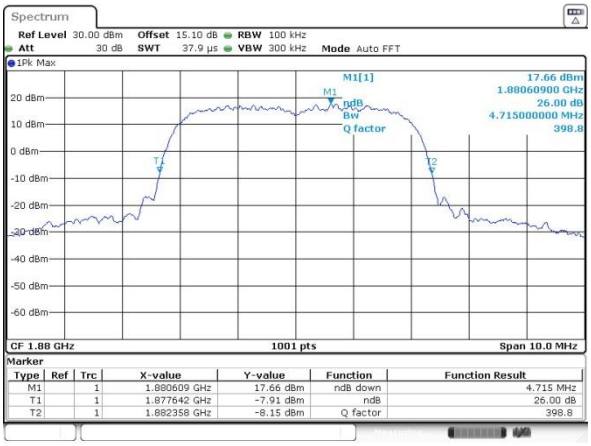


WCDMA Band II (RMC 12.2Kbps)

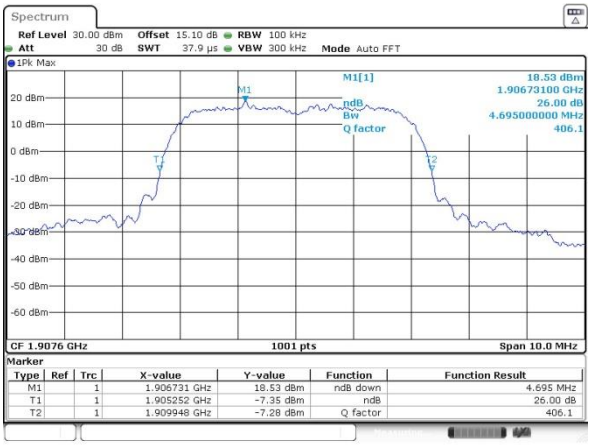
Lowest Channel



Middle Channel

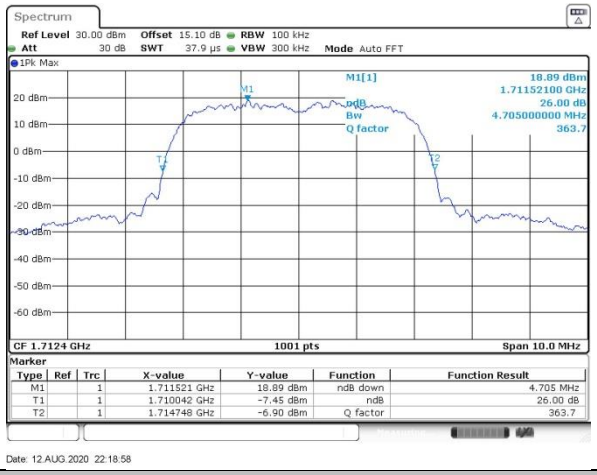


Highest Channel

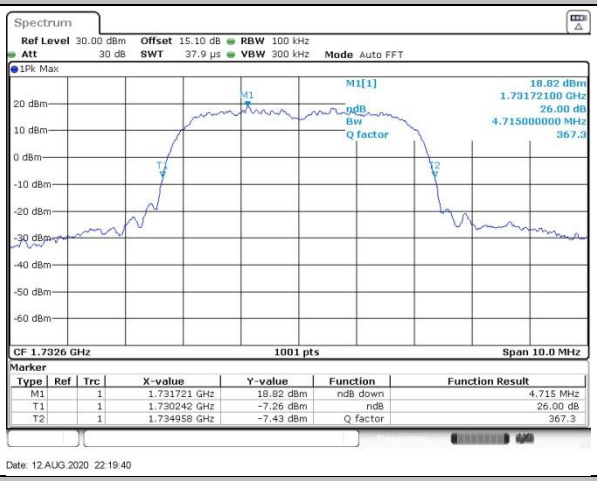


WCDMA Band IV (RMC 12.2Kbps)

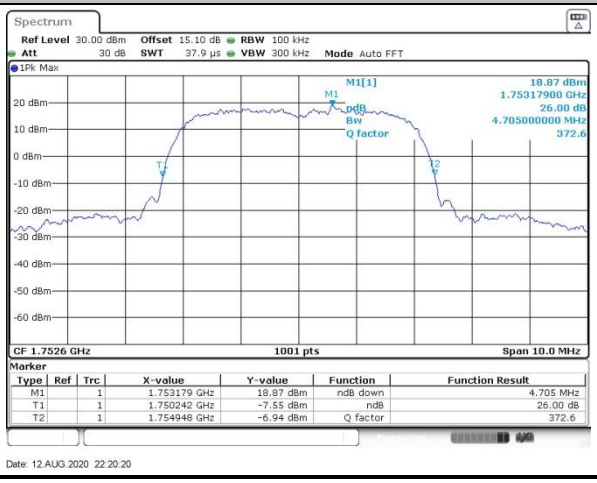
Lowest Channel



Middle Channel



Highest Channel

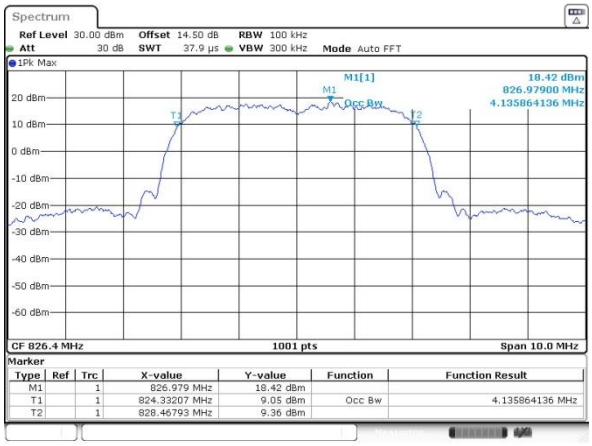


Occupied Bandwidth

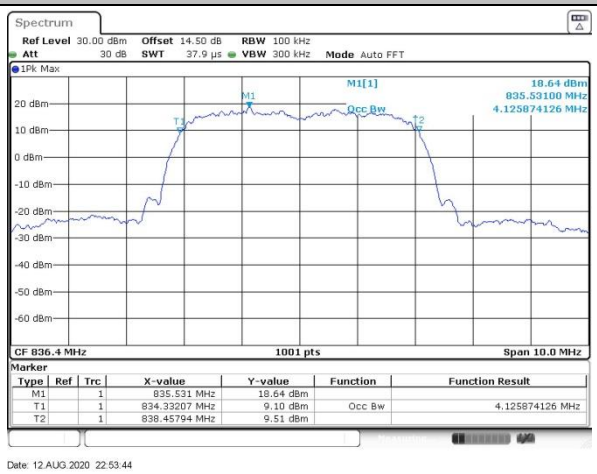
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.14	4.15	4.14
Middle CH	4.13	4.15	4.13
Highest CH	4.14	4.14	4.12

WCDMA Band V (RMC 12.2Kbps)

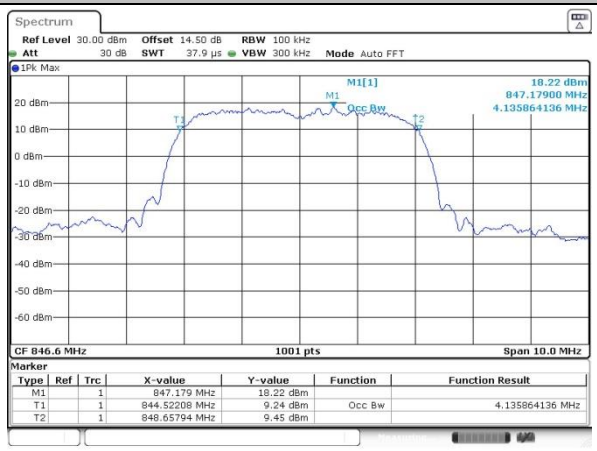
Lowest Channel



Middle Channel

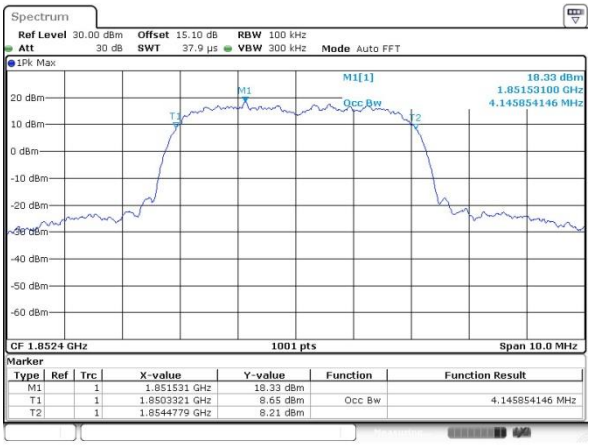


Highest Channel

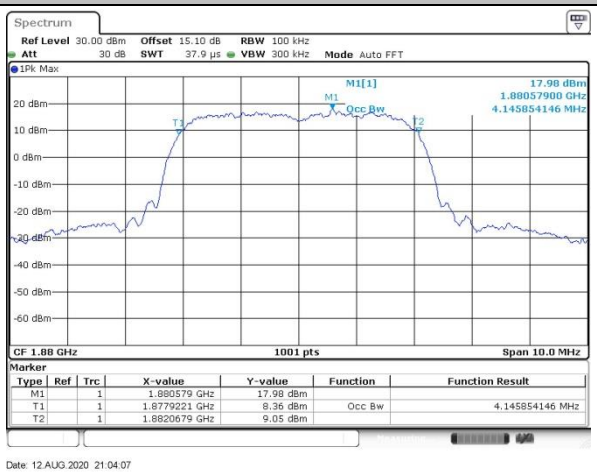


WCDMA Band II (RMC 12.2Kbps)

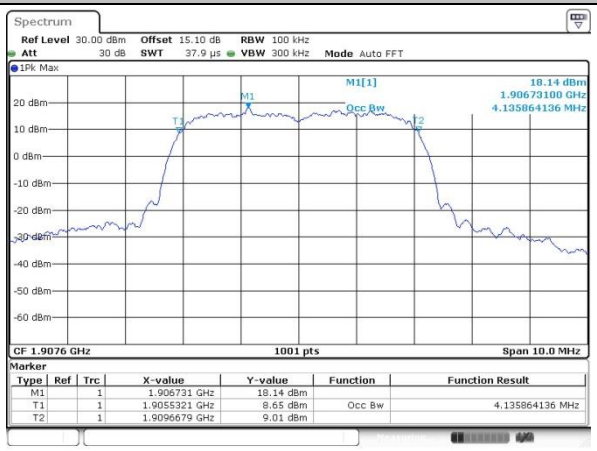
Lowest Channel



Middle Channel

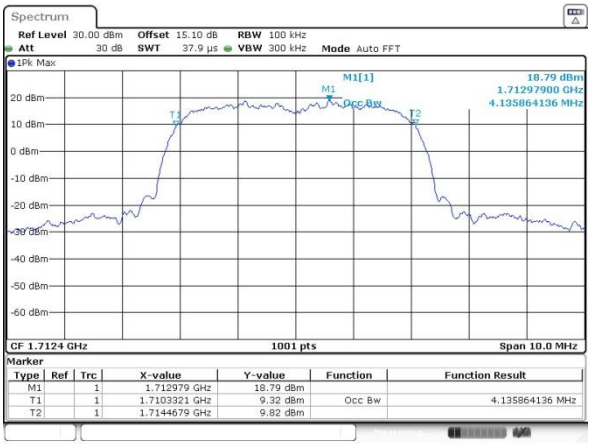


Highest Channel

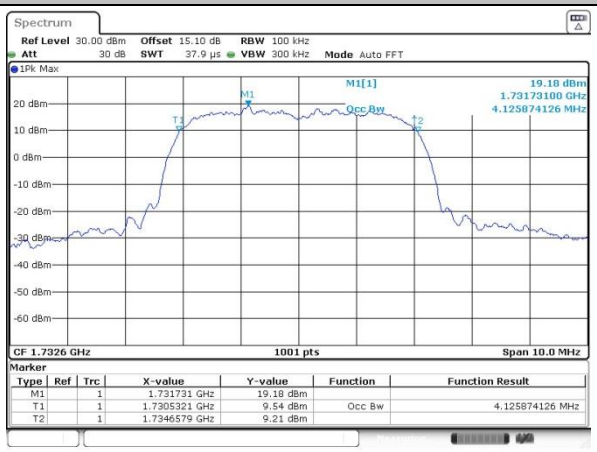


WCDMA Band IV (RMC 12.2Kbps)

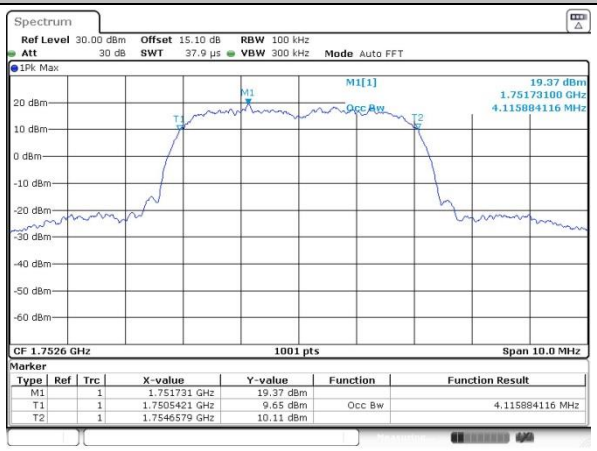
Lowest Channel



Middle Channel



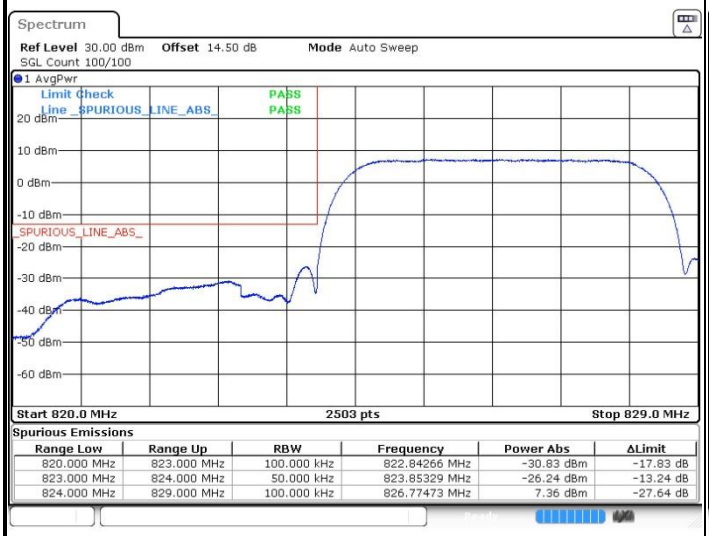
Highest Channel



Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.84266 MHz	-30.83 dBm	-17.83 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.85329 MHz	-26.24 dBm	-13.24 dB
824.000 MHz	829.000 MHz	100.000 kHz	826.77473 MHz	7.36 dBm	-27.64 dB

Date: 12.AUG.2020 22:57:23

Highest Band Edge

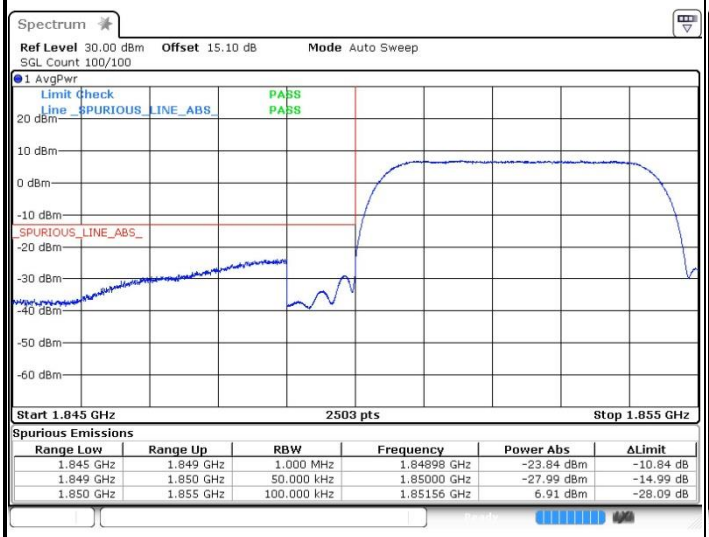
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.74076 MHz	7.48 dBm	-27.52 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.14870 MHz	-29.37 dBm	-16.37 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.15235 MHz	-34.37 dBm	-21.37 dB

Date: 12.AUG.2020 23:00:23

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

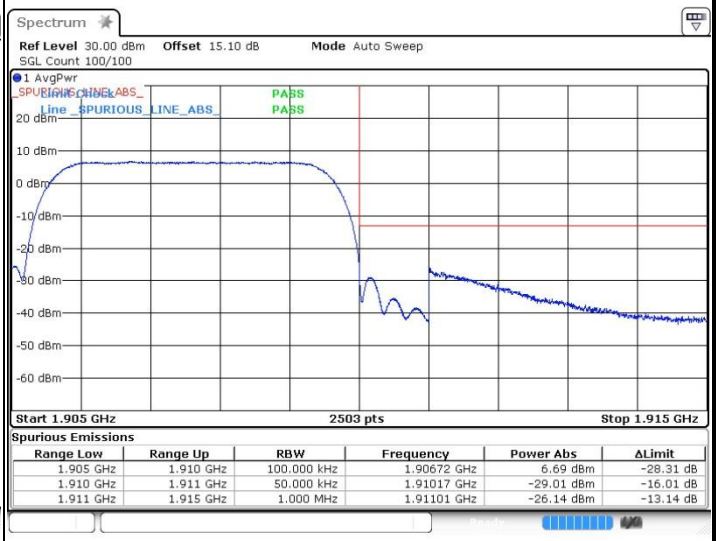


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84898 GHz	-23.84 dBm	-10.84 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-27.99 dBm	-14.99 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85156 GHz	6.91 dBm	-28.09 dB

Date: 12.AUG.2020 21:12:25

Highest Band Edge



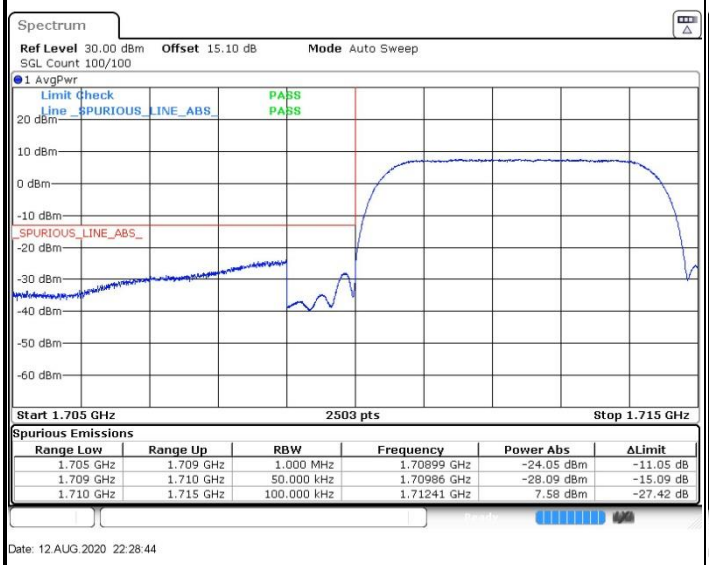
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90672 GHz	6.69 dBm	-28.31 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91017 GHz	-29.01 dBm	-16.01 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91101 GHz	-26.14 dBm	-13.14 dB

Date: 12.AUG.2020 21:15:22

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

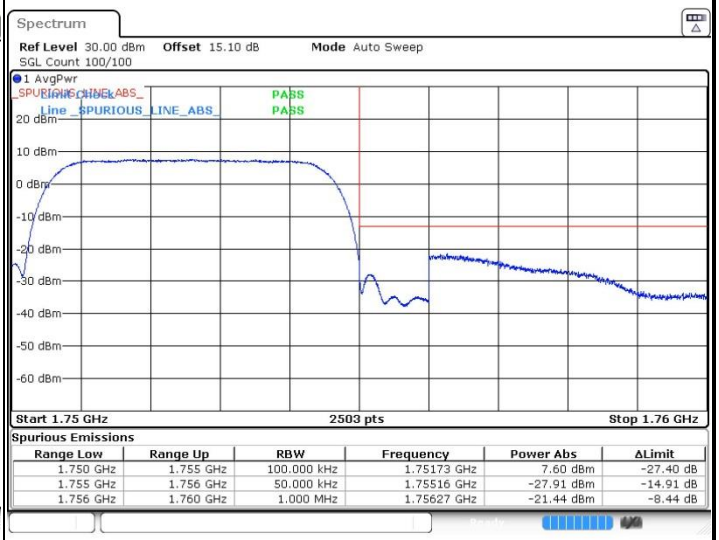


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70899 GHz	-24.05 dBm	-11.05 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70986 GHz	-28.09 dBm	-15.09 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71241 GHz	7.58 dBm	-27.42 dB

Date: 12.AUG.2020 22:28:44

Highest Band Edge



Spurious Emissions

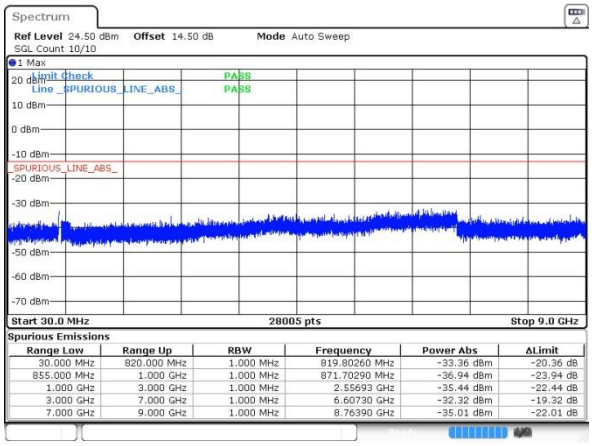
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75173 GHz	7.60 dBm	-27.40 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75516 GHz	-27.91 dBm	-14.91 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75627 GHz	-21.44 dBm	-8.44 dB

Date: 12.AUG.2020 22:31:33

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

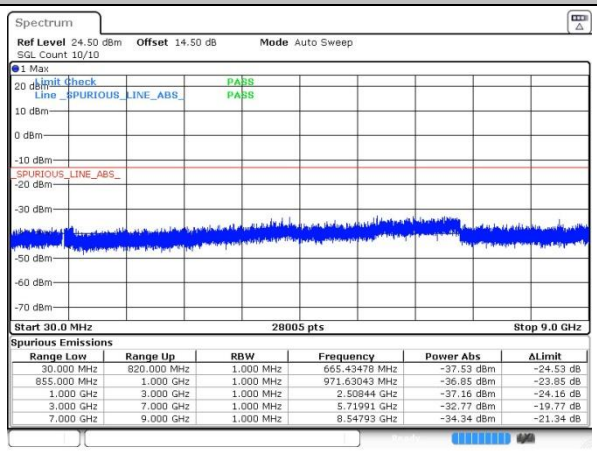


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.80260 MHz	-33.36 dBm	-20.36 dB
855.000 MHz	1.000 GHz	1.000 MHz	871.70290 MHz	-36.94 dBm	-23.94 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.55693 GHz	-35.44 dBm	-22.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.60730 GHz	-32.32 dBm	-19.32 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.76390 GHz	-35.01 dBm	-22.01 dB

Date: 12.AUG.2020 23:02:21

Middle Channel

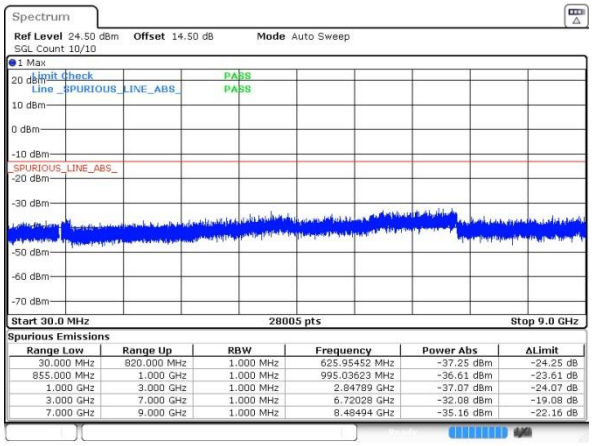


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	665.43478 MHz	-37.53 dBm	-24.53 dB
855.000 MHz	1.000 GHz	1.000 MHz	971.63043 MHz	-36.85 dBm	-23.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50844 GHz	-37.16 dBm	-24.16 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.71991 GHz	-32.77 dBm	-19.77 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.54793 GHz	-34.34 dBm	-21.34 dB

Date: 12.AUG.2020 23:05:20

Highest Channel



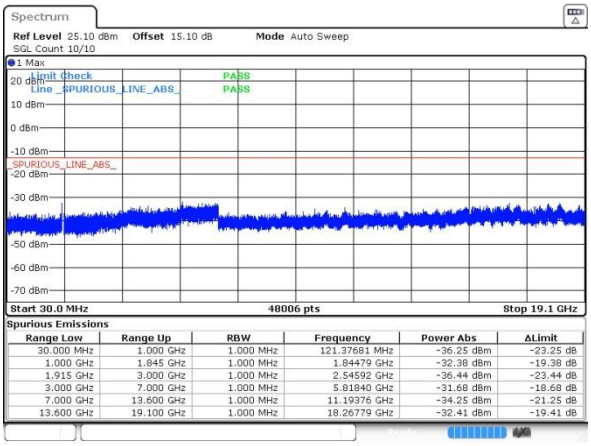
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	625.95452 MHz	-37.25 dBm	-24.25 dB
855.000 MHz	1.000 GHz	1.000 MHz	995.03623 MHz	-36.61 dBm	-23.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.84789 GHz	-37.07 dBm	-24.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.72028 GHz	-32.08 dBm	-19.08 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.48494 GHz	-35.16 dBm	-22.16 dB

Date: 12.AUG.2020 23:06:43

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

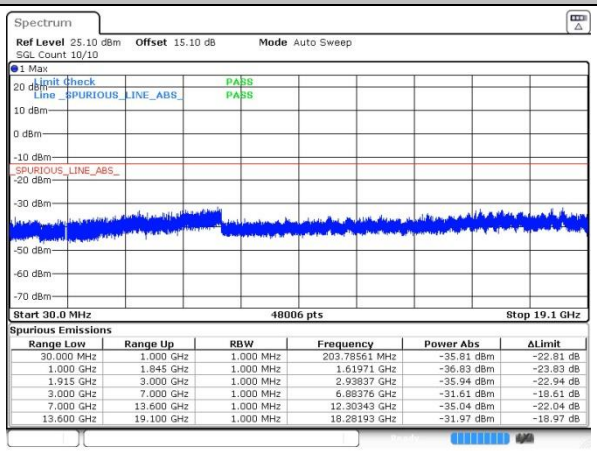


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	121.37681 MHz	-36.25 dBm	-23.25 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-32.38 dBm	-19.38 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.54592 GHz	-36.44 dBm	-23.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.81840 GHz	-31.68 dBm	-18.68 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.19376 GHz	-34.25 dBm	-21.25 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.26779 GHz	-32.41 dBm	-19.41 dB

Date: 12.AUG.2020 22:07:07

Middle Channel

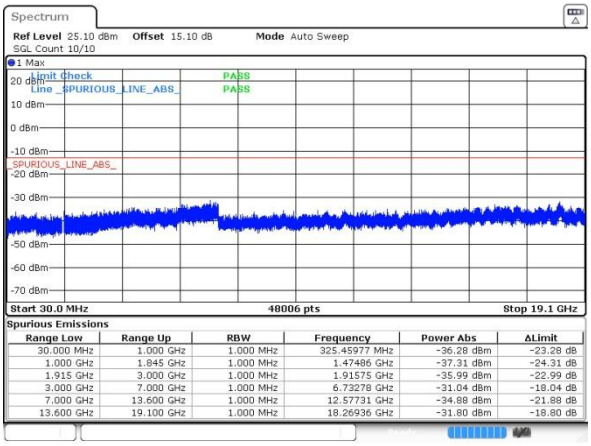


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	203.78561 MHz	-35.81 dBm	-22.81 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.61971 GHz	-36.83 dBm	-23.83 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.93837 GHz	-35.94 dBm	-22.94 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.88376 GHz	-31.61 dBm	-18.61 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.30343 GHz	-35.04 dBm	-22.04 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.28193 GHz	-31.97 dBm	-18.97 dB

Date: 12.AUG.2020 22:08:29

Highest Channel



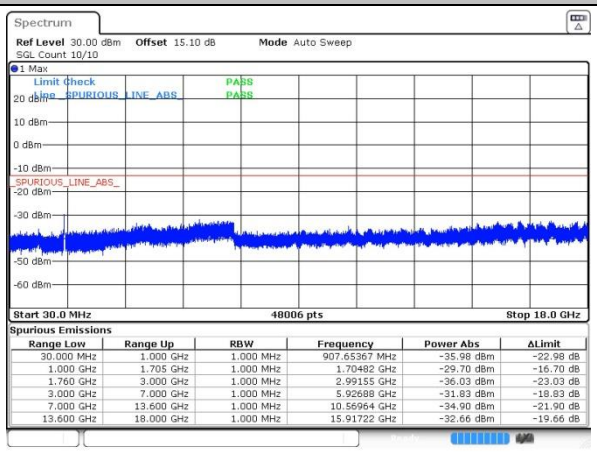
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	325.45977 MHz	-36.28 dBm	-23.28 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.47486 GHz	-37.31 dBm	-24.31 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91575 GHz	-35.99 dBm	-22.99 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.73278 GHz	-31.04 dBm	-18.04 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.57731 GHz	-34.88 dBm	-21.88 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.26936 GHz	-31.80 dBm	-18.80 dB

Date: 12.AUG.2020 22:09:55

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel

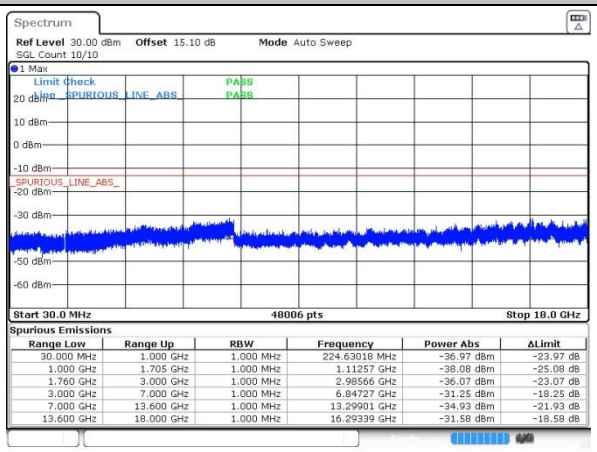


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.65367 MHz	-35.98 dBm	-22.98 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-29.70 dBm	-16.70 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.99155 GHz	-36.03 dBm	-23.03 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.92688 GHz	-31.83 dBm	-18.83 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.56964 GHz	-34.90 dBm	-21.90 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.91722 GHz	-32.66 dBm	-19.66 dB

Date: 12.AUG.2020 22:33:05

Middle Channel

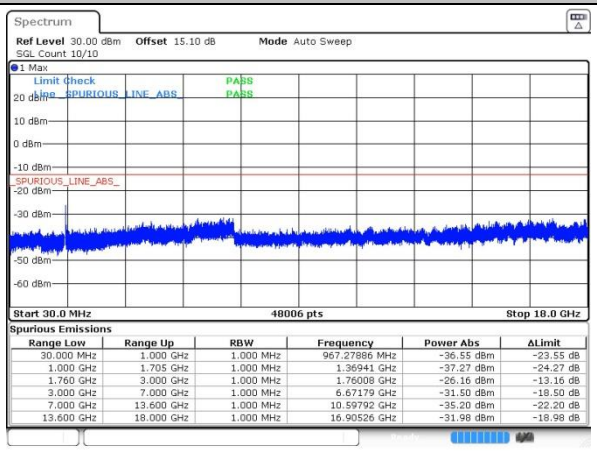


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	224.63018 MHz	-36.97 dBm	-23.97 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.11257 GHz	-38.08 dBm	-25.08 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.98566 GHz	-36.07 dBm	-23.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84727 GHz	-31.25 dBm	-18.25 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.29901 GHz	-34.93 dBm	-21.93 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.29339 GHz	-31.58 dBm	-18.58 dB

Date: 12.AUG.2020 22:34:27

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	967.27886 MHz	-36.55 dBm	-23.55 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.36941 GHz	-37.27 dBm	-24.27 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76008 GHz	-26.16 dBm	-13.16 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.67179 GHz	-31.50 dBm	-18.50 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.59792 GHz	-35.20 dBm	-22.20 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.90526 GHz	-31.98 dBm	-18.98 dB

Date: 12.AUG.2020 22:35:49

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0263	PASS
40	Normal Voltage	0.0255	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0278	
0	Normal Voltage	0.0243	
-10	Normal Voltage	0.0036	
-20	Normal Voltage	0.0273	
-30	Normal Voltage	0.007	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0255	
20	Battery End Point	0.0088	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0096	PASS
40	Normal Voltage	0.0159	
30	Normal Voltage	0.0118	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0153	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0174	
-20	Normal Voltage	0.0122	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0032	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0133	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0127	
-10	Normal Voltage	0.0141	
-20	Normal Voltage	0.0035	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0150	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0035	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

GSM850 (GSM)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-58.95	-13	-45.95	-65.92	1.58	10.70	H
	2472	-63.38	-13	-50.38	-71.63	2.102	12.50	H
	3294	-63.23	-13	-50.23	-72.12	2.856	13.90	H
	1648	-61.72	-13	-48.72	-68.69	1.58	10.70	V
	2472	-57.19	-13	-44.19	-65.44	2.10	12.50	V
	3294	-63.60	-13	-50.60	-72.49	2.86	13.90	V
Middle	1672	-57.53	-13	-44.53	-64.50	1.58	10.70	H
	2510	-60.57	-13	-47.57	-68.82	2.102	12.50	H
	3348	-62.99	-13	-49.99	-71.88	2.856	13.90	H
	1672	-61.02	-13	-48.02	-67.99	1.58	10.70	V
	2510	-54.14	-13	-41.14	-62.39	2.10	12.50	V
	3348	-63.58	-13	-50.58	-72.47	2.86	13.90	V
Highest	1698	-55.82	-13	-42.82	-62.79	1.58	10.70	H
	2546	-59.31	-13	-46.31	-67.56	2.102	12.50	H
	3396	-59.04	-13	-46.04	-67.93	2.856	13.90	H
	1698	-59.80	-13	-46.80	-66.77	1.58	10.70	V
	2546	-53.86	-13	-40.86	-62.11	2.10	12.50	V
	3396	-61.28	-13	-48.28	-70.17	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM850 (EDGE class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-58.56	-13	-45.56	-65.53	1.58	10.70	H
	2472	-60.71	-13	-47.71	-68.96	2.102	12.50	H
	3294	-63.82	-13	-50.82	-72.71	2.856	13.90	H
	1648	-64.22	-13	-51.22	-71.19	1.58	10.70	V
	2472	-55.27	-13	-42.27	-63.52	2.10	12.50	V
	3294	-63.97	-13	-50.97	-72.86	2.86	13.90	V
Middle	1672	-58.02	-13	-45.02	-64.99	1.58	10.70	H
	2510	-60.76	-13	-47.76	-69.01	2.102	12.50	H
	3348	-63.20	-13	-50.20	-72.09	2.856	13.90	H
	1672	-62.51	-13	-49.51	-69.48	1.58	10.70	V
	2510	-55.46	-13	-42.46	-63.71	2.10	12.50	V
	3348	-63.62	-13	-50.62	-72.51	2.86	13.90	V
Highest	1698	-54.50	-13	-41.50	-61.47	1.58	10.70	H
	2546	-58.53	-13	-45.53	-66.78	2.102	12.50	H
	3396	-58.44	-13	-45.44	-67.33	2.856	13.90	H
	1698	-57.92	-13	-44.92	-64.89	1.58	10.70	V
	2546	-54.28	-13	-41.28	-62.53	2.10	12.50	V
	3396	-62.61	-13	-49.61	-71.50	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band V(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1652	-68.04	-13	-55.04	-75.01	1.58	10.70	H
	2479	-65.46	-13	-52.46	-73.71	2.102	12.50	H
	3306	-63.61	-13	-50.61	-72.50	2.856	13.90	H
	1652	-67.77	-13	-54.77	-74.74	1.58	10.70	V
	2479	-65.42	-13	-52.42	-73.67	2.10	12.50	V
	3306	-63.69	-13	-50.69	-72.58	2.86	13.90	V
Middle	1672	-67.98	-13	-54.98	-74.95	1.58	10.70	H
	2509	-65.64	-13	-52.64	-73.89	2.102	12.50	H
	3348	-63.36	-13	-50.36	-72.25	2.856	13.90	H
	1672	-67.32	-13	-54.32	-74.29	1.58	10.70	V
	2509	-65.07	-13	-52.07	-73.32	2.10	12.50	V
	3348	-63.48	-13	-50.48	-72.37	2.86	13.90	V
Highest	1692	-67.76	-13	-54.76	-74.73	1.58	10.70	H
	2539	-65.57	-13	-52.57	-73.82	2.102	12.50	H
	3384	-63.55	-13	-50.55	-72.44	2.856	13.90	H
	1692	-67.74	-13	-54.74	-74.71	1.58	10.70	V
	2540	-65.36	-13	-52.36	-73.61	2.10	12.50	V
	3384	-63.55	-13	-50.55	-72.44	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM1900 (GSM)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3699	-58.00	-13	-45.00	-70.26	2.64	14.90	H
	5550.6	-54.45	-13	-41.45	-66.31	2.94	14.80	H
	7404	-50.66	-13	-37.66	-60.43	3.39	13.16	H
	3700	-58.90	-13	-45.90	-71.16	2.64	14.90	V
	5550	-55.01	-13	-42.01	-66.87	2.94	14.80	V
	7404	-49.99	-13	-36.99	-59.76	3.39	13.16	V
Middle	3759	-58.74	-13	-45.74	-71.00	2.64	14.90	H
	5640	-55.26	-13	-42.26	-67.12	2.94	14.80	H
	7524	-49.92	-13	-36.92	-59.69	3.39	13.16	H
	3759	-59.66	-13	-46.66	-71.92	2.64	14.90	V
	5640	-55.12	-13	-42.12	-66.98	2.94	14.80	V
	7524	-49.70	-13	-36.70	-59.47	3.39	13.16	V
Highest	3819	-59.35	-13	-46.35	-71.61	2.64	14.90	H
	5729	-54.23	-13	-41.23	-66.09	2.94	14.80	H
	7639	-49.53	-13	-36.53	-59.30	3.39	13.16	H
	3819	-59.26	-13	-46.26	-71.52	2.64	14.90	V
	5729	-55.38	-13	-42.38	-67.24	2.94	14.80	V
	7639	-49.59	-13	-36.59	-59.36	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM1900 (EDGE class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3699	-58.75	-13	-45.75	-71.01	2.64	14.90	H
	5550.6	-54.56	-13	-41.56	-66.42	2.94	14.80	H
	7404	-50.62	-13	-37.62	-60.39	3.39	13.16	H
	3700	-59.17	-13	-46.17	-71.43	2.64	14.90	V
	5550	-53.82	-13	-40.82	-65.68	2.94	14.80	V
	7404	-50.19	-13	-37.19	-59.96	3.39	13.16	V
Middle	3759	-56.67	-13	-43.67	-68.93	2.64	14.90	H
	5640	-54.67	-13	-41.67	-66.53	2.94	14.80	H
	7524	-50.10	-13	-37.10	-59.87	3.39	13.16	H
	3759	-59.14	-13	-46.14	-71.40	2.64	14.90	V
	5640	-55.18	-13	-42.18	-67.04	2.94	14.80	V
	7524	-49.95	-13	-36.95	-59.72	3.39	13.16	V
Highest	3819	-59.98	-13	-46.98	-72.24	2.64	14.90	H
	5730	-55.26	-13	-42.26	-67.12	2.94	14.80	H
	7639	-49.94	-13	-36.94	-59.71	3.39	13.16	H
	3819	-60.10	-13	-47.10	-72.36	2.64	14.90	V
	5730	-55.33	-13	-42.33	-67.19	2.94	14.80	V
	7639	-49.73	-13	-36.73	-59.50	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band II(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-59.94	-13	-46.94	-72.20	2.64	14.90	H
	5556	-55.07	-13	-42.07	-66.93	2.94	14.80	H
	7404	-50.79	-13	-37.79	-60.56	3.39	13.16	H
	3705	-59.37	-13	-46.37	-71.63	2.64	14.90	V
	5556	-55.02	-13	-42.02	-66.88	2.94	14.80	V
	7404	-49.90	-13	-36.90	-59.67	3.39	13.16	V
Middle	3759	-60.29	-13	-47.29	-72.55	2.64	14.90	H
	5640	-55.62	-13	-42.62	-67.48	2.94	14.80	H
	7524	-50.53	-13	-37.53	-60.30	3.39	13.16	H
	3759	-59.78	-13	-46.78	-72.04	2.64	14.90	V
	5640	-55.40	-13	-42.40	-67.26	2.94	14.80	V
	7524	-49.60	-13	-36.60	-59.37	3.39	13.16	V
Highest	3816	-59.94	-13	-46.94	-72.20	2.64	14.90	H
	5724	-55.36	-13	-42.36	-67.22	2.94	14.80	H
	7632	-49.90	-13	-36.90	-59.67	3.39	13.16	H
	3816	-59.69	-13	-46.69	-71.95	2.64	14.90	V
	5724	-55.27	-13	-42.27	-67.13	2.94	14.80	V
	7632	-49.28	-13	-36.28	-59.05	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band IV(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3426	-60.28	-13	-47.28	-71.02	2.604	13.34	H
	5136	-56.16	-13	-43.16	-66.67	3.011	13.52	H
	6852	-52.29	-13	-39.29	-62.49	3.271	13.47	H
	3426	-60.76	-13	-47.76	-71.50	2.604	13.34	V
	5136	-56.44	-13	-43.44	-66.95	3.011	13.52	V
	6852	-51.86	-13	-38.86	-62.06	3.271	13.47	V
Middle	3465	-60.16	-13	-47.16	-70.90	2.604	13.34	H
	5199	-54.68	-13	-41.68	-65.19	3.011	13.52	H
	6936	-52.48	-13	-39.48	-62.68	3.271	13.47	H
	3465	-60.40	-13	-47.40	-71.14	2.604	13.34	V
	5199	-55.07	-13	-42.07	-65.58	3.011	13.52	V
	6936	-51.84	-13	-38.84	-62.04	3.271	13.47	V
Highest	3504	-60.24	-13	-47.24	-70.98	2.604	13.34	H
	5259	-54.83	-13	-41.83	-65.34	3.011	13.52	H
	7008	-52.36	-13	-39.36	-62.56	3.271	13.47	H
	3504	-60.42	-13	-47.42	-71.16	2.604	13.34	V
	5259	-55.33	-13	-42.33	-65.84	3.011	13.52	V
	7008	-51.77	-13	-38.77	-61.97	3.271	13.47	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA BC0(1xRTT)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-67.93	-13	-54.93	-74.90	1.58	10.70	H
	2474	-66.14	-13	-53.14	-74.39	2.102	12.50	H
	3300	-64.30	-13	-51.30	-73.19	2.856	13.90	H
	1650	-68.07	-13	-55.07	-75.04	1.58	10.70	V
	2474	-66.06	-13	-53.06	-74.31	2.10	12.50	V
	3300	-64.23	-13	-51.23	-73.12	2.86	13.90	V
Middle	1674	-68.32	-13	-55.32	-75.29	1.58	10.70	H
	2510	-66.51	-13	-53.51	-74.76	2.102	12.50	H
	3348	-64.03	-13	-51.03	-72.92	2.856	13.90	H
	1674	-67.68	-13	-54.68	-74.65	1.58	10.70	V
	2510	-66.20	-13	-53.20	-74.45	2.10	12.50	V
	3348	-64.24	-13	-51.24	-73.13	2.86	13.90	V
Highest	1696	-69.36	-13	-56.36	-76.33	1.58	10.70	H
	2544	-67.09	-13	-54.09	-75.34	2.102	12.50	H
	3396	-63.80	-13	-50.80	-72.69	2.856	13.90	H
	1696	-69.05	-13	-56.05	-76.02	1.58	10.70	V
	2544	-67.04	-13	-54.04	-75.29	2.10	12.50	V
	3396	-63.88	-13	-50.88	-72.77	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA BC1(1xRTT)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-60.77	-13	-47.77	-69.89	1.58	10.70	H
	5553	-56.40	-13	-43.40	-66.80	2.102	12.50	H
	7404	-51.42	-13	-38.42	-62.46	2.856	13.90	H
	3702	-60.60	-13	-47.60	-69.72	1.58	10.70	V
	5553	-56.51	-13	-43.51	-66.91	2.10	12.50	V
	7404	-51.28	-13	-38.28	-62.32	2.86	13.90	V
Middle	3759	-60.19	-13	-47.19	-69.31	1.58	10.70	H
	5640	-56.58	-13	-43.58	-66.98	2.102	12.50	H
	7524	-51.45	-13	-38.45	-62.49	2.856	13.90	H
	3759	-60.62	-13	-47.62	-69.74	1.58	10.70	V
	5640	-56.78	-13	-43.78	-67.18	2.10	12.50	V
	7524	-50.64	-13	-37.64	-61.68	2.86	13.90	V
Highest	3819	-60.20	-13	-47.20	-69.32	1.58	10.70	H
	5727	-56.55	-13	-43.55	-66.95	2.102	12.50	H
	7632	-51.18	-13	-38.18	-62.22	2.856	13.90	H
	3819	-60.78	-13	-47.78	-69.90	1.58	10.70	V
	5727	-56.93	-13	-43.93	-67.33	2.10	12.50	V
	7632	-51.17	-13	-38.17	-62.21	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.