



GSM1900 (GSM)

Lowest Channel



GSM1900 (EDGE class 8)

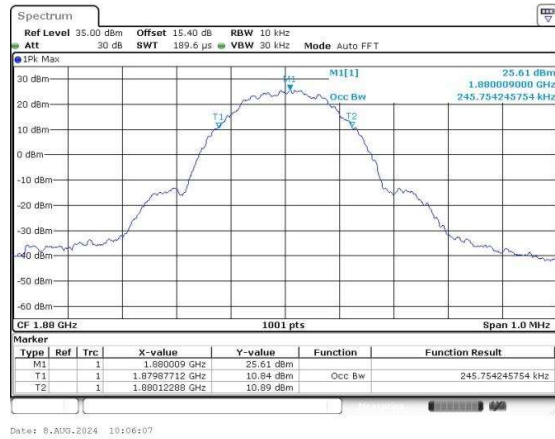
Lowest Channel



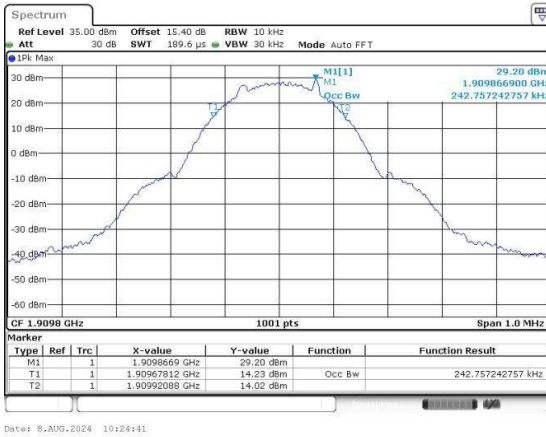
Middle Channel



Middle Channel



Highest Channel

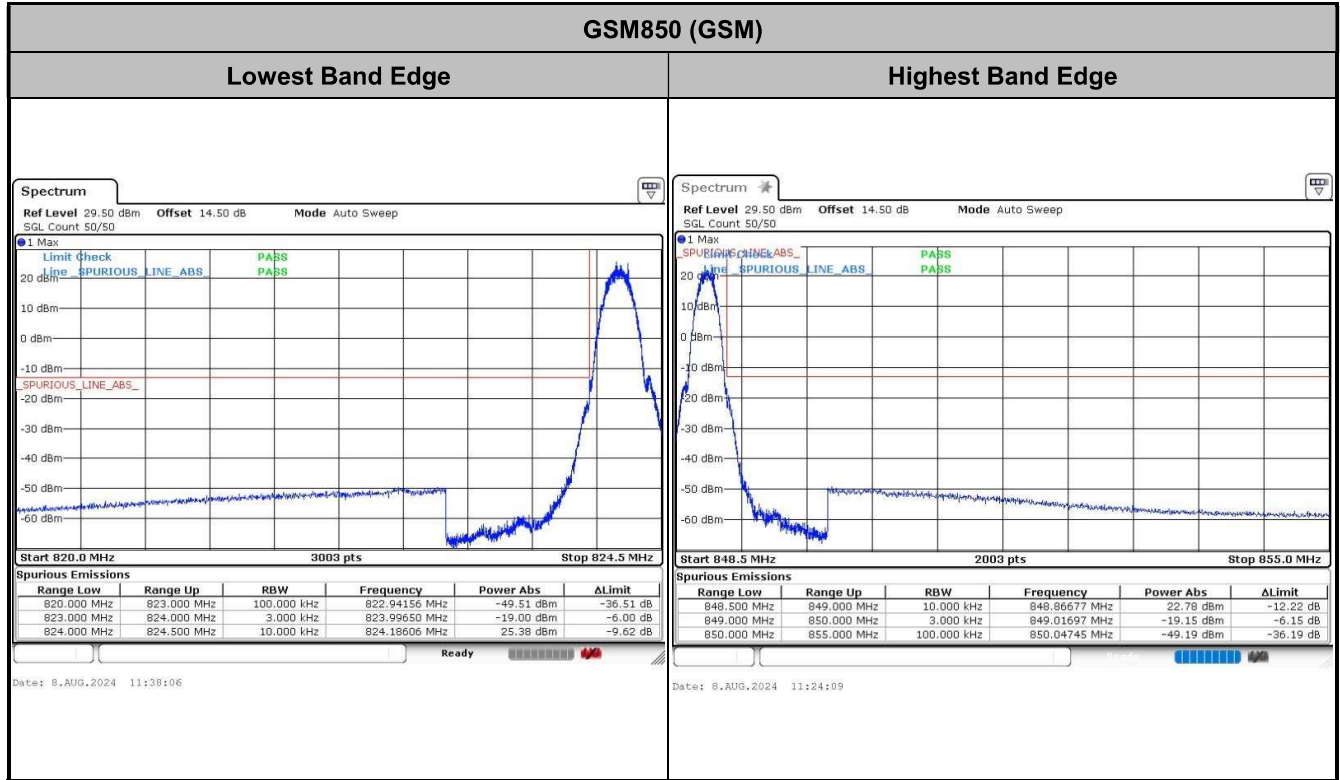


Highest Channel





Conducted Band Edge

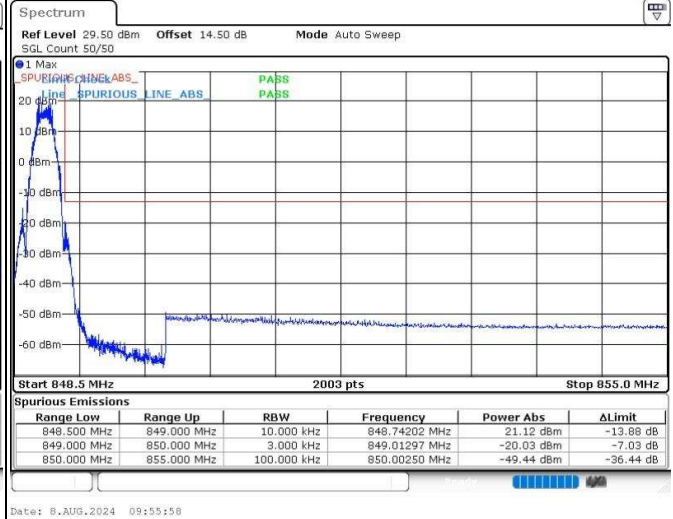
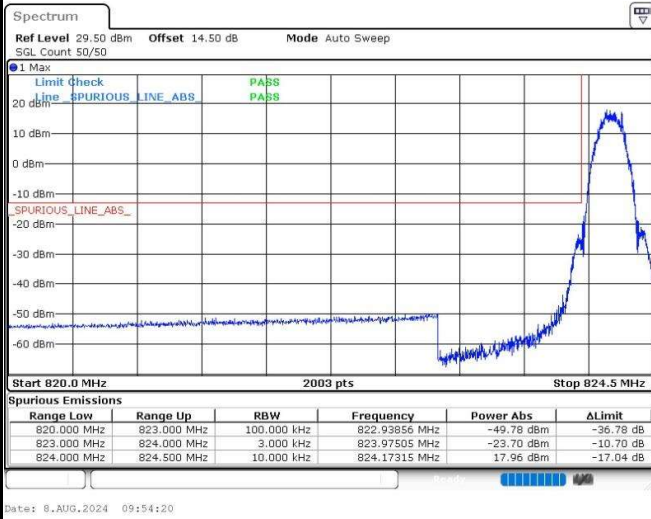


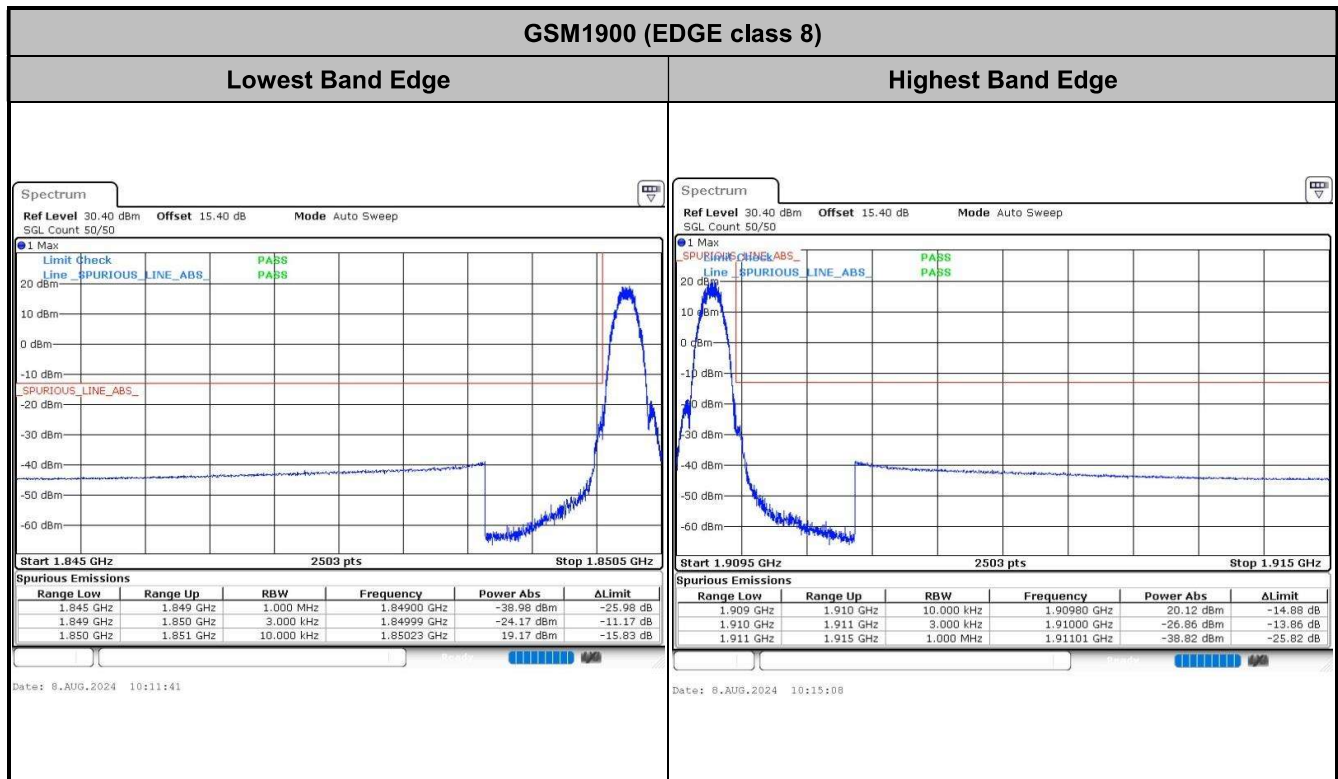
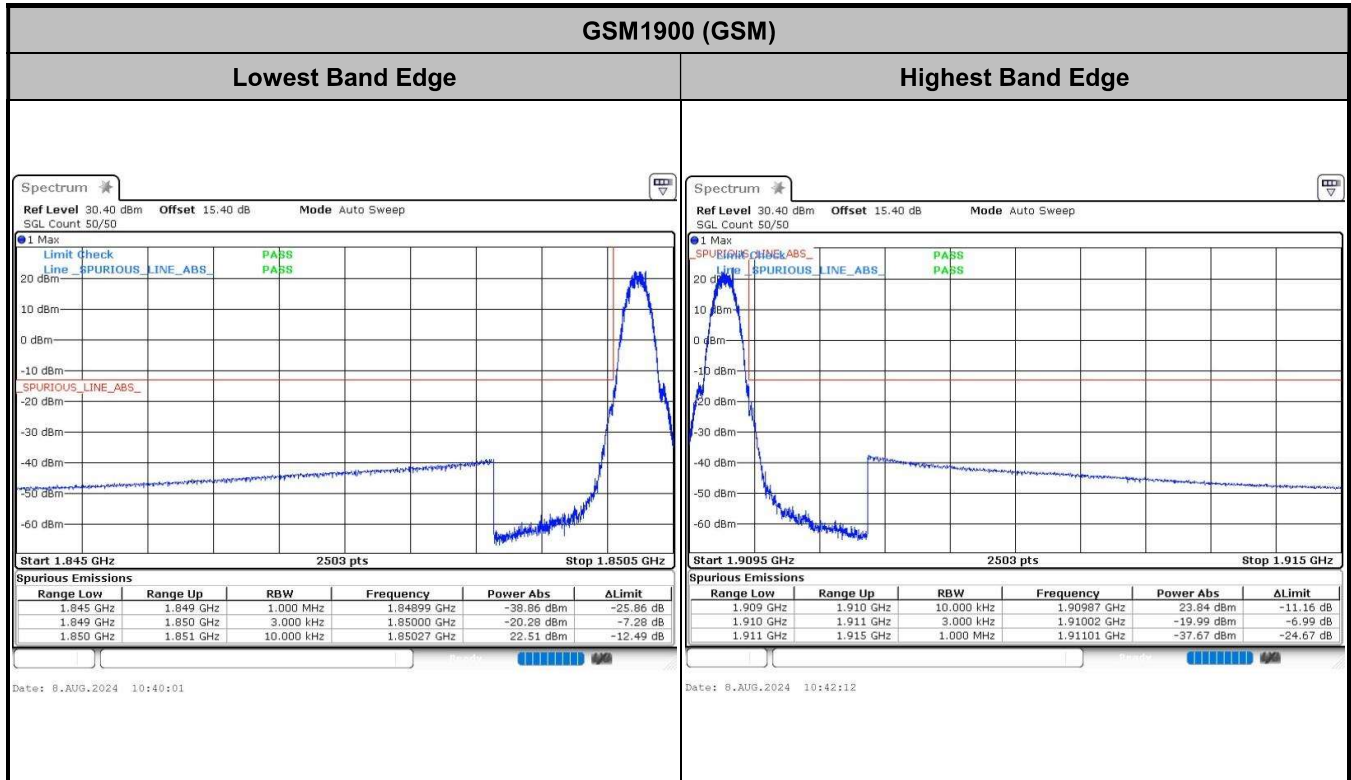


GSM850 (EDGE class 8)

Lowest Band Edge

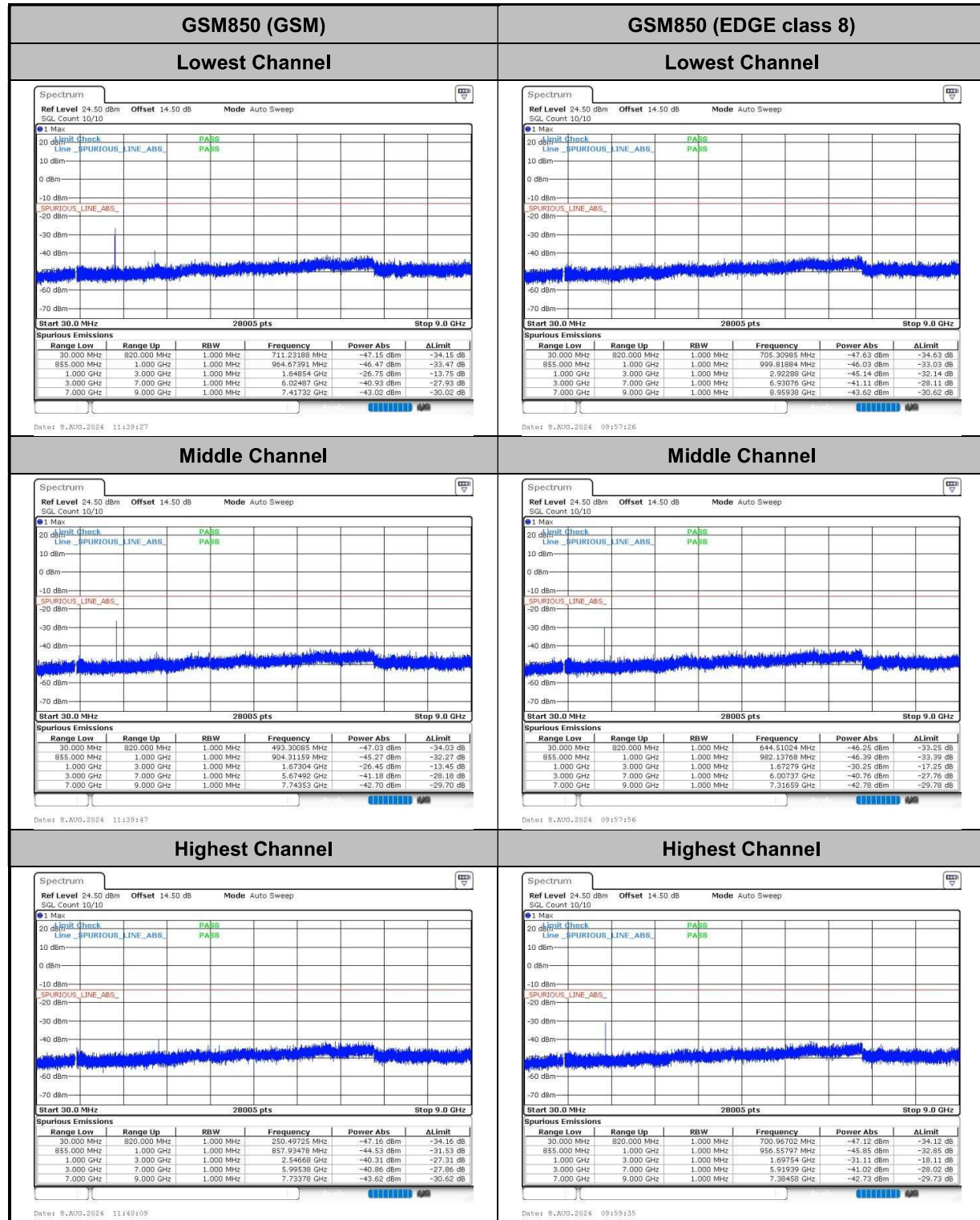
Highest Band Edge

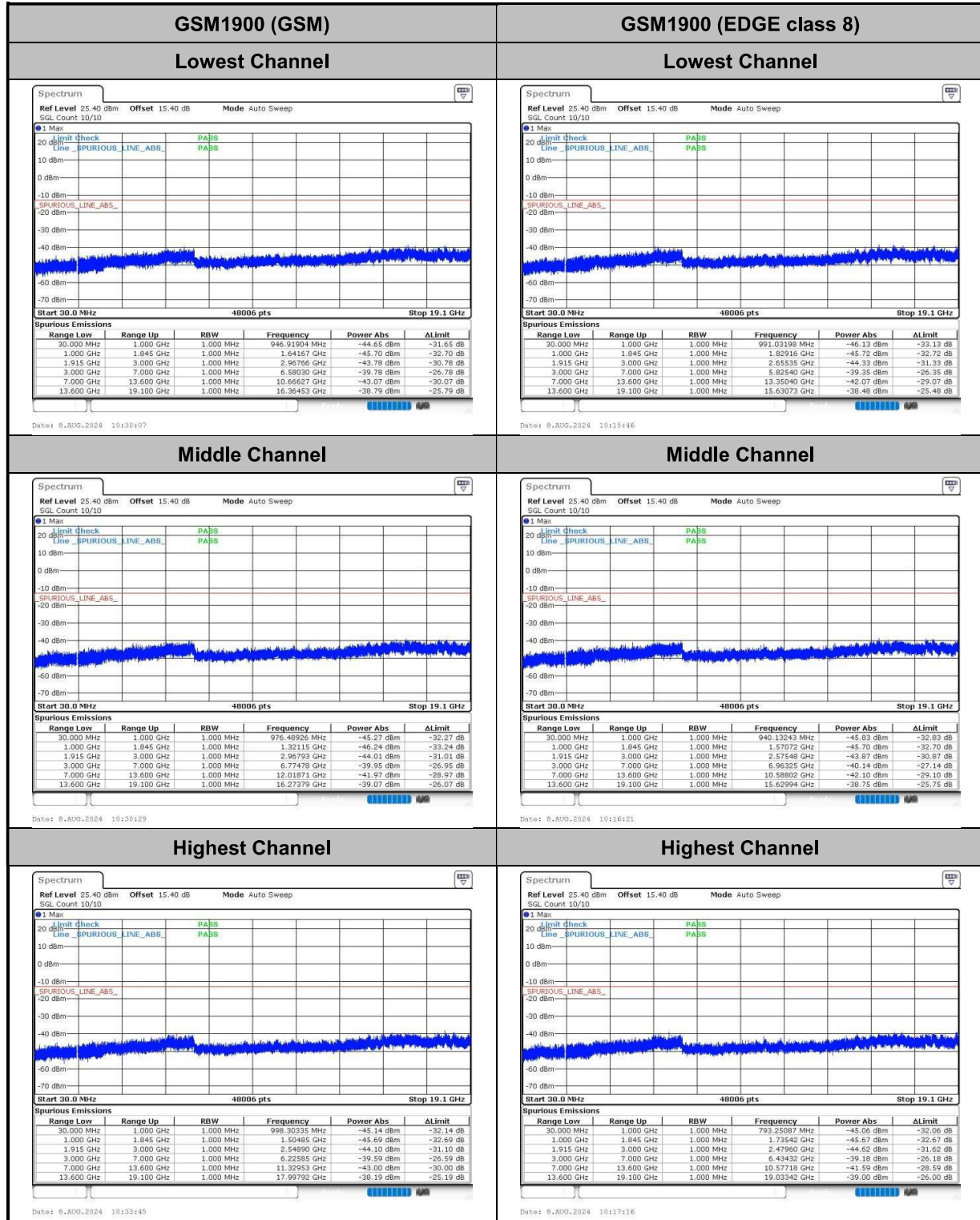






Conducted Spurious Emission







Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		2.5ppm
50	Normal Voltage	0.0173	0.0129	PASS
40	Normal Voltage	0.0255	0.0171	
30	Normal Voltage	0.0171	0.0237	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0086	0.0165	
0	Normal Voltage	0.0169	0.0143	
-10	Normal Voltage	0.0257	0.0421	
-20	Normal Voltage	0.0343	0.0175	
-30	Normal Voltage	0.0172	0.0291	
20	Maximum Voltage	0.0096	0.0234	
20	Normal Voltage	0.0000	0.0000	
20	Minimum Voltage	0.0271	0.0238	



Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0245	0.0212	PASS
40	Normal Voltage	0.0196	0.0171	
30	Normal Voltage	0.0129	0.0145	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0234	0.0247	
0	Normal Voltage	0.0157	0.0144	
-10	Normal Voltage	0.0171	0.0157	
-20	Normal Voltage	0.0254	0.0241	
-30	Normal Voltage	0.0098	0.0159	
20	Maximum Voltage	0.0024	0.0175	
20	Normal Voltage	0.0000	0.0000	
20	Minimum Voltage	0.0174	0.0196	

Note:

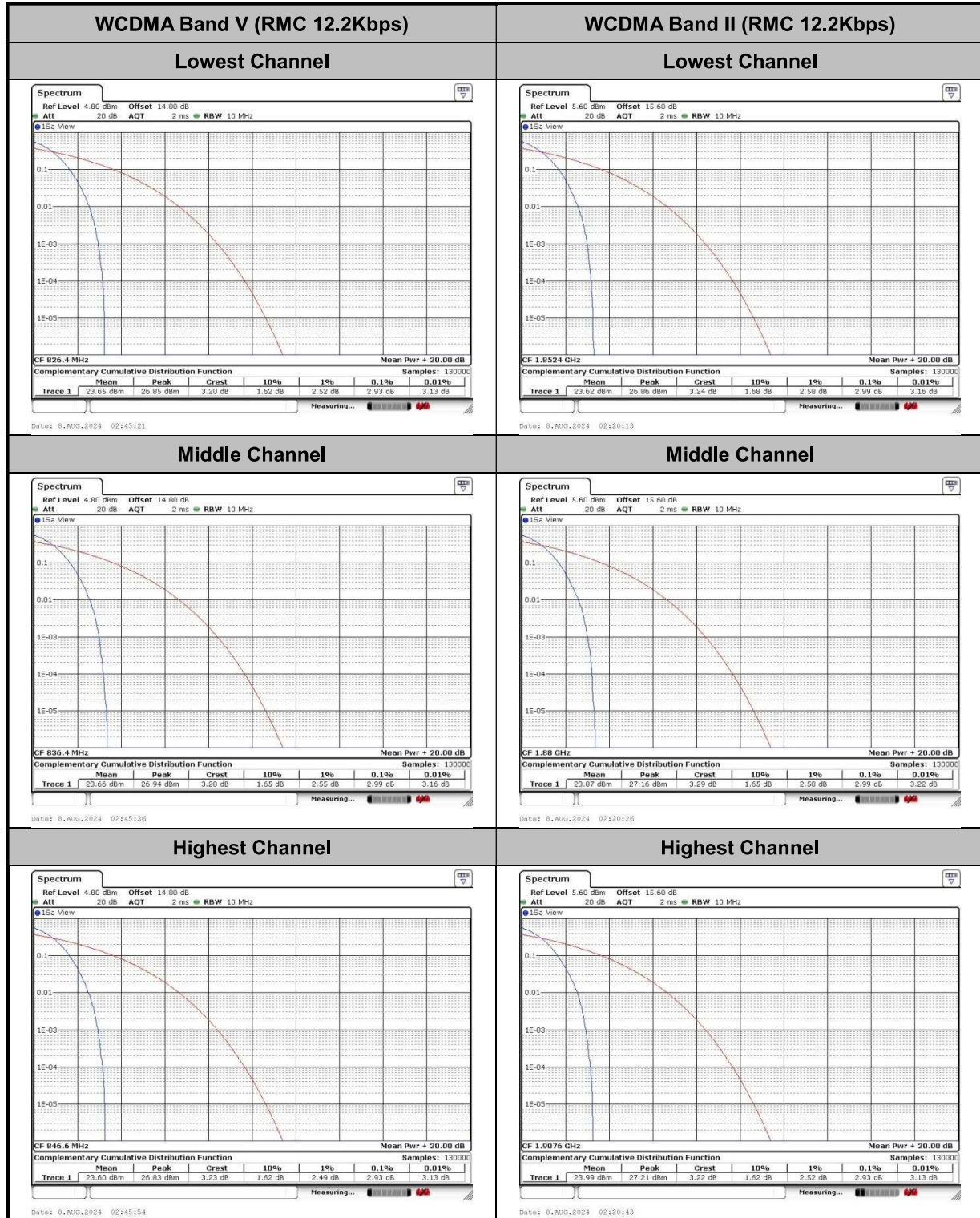
1. Normal Voltage = 3.8V ; Minimum Voltage =3.55V. ; Maximum Voltage =4.4V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



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	2.93	2.99	3.07	PASS
Middle CH	2.99	2.99	3.13	
Highest CH	2.93	2.93	3.10	



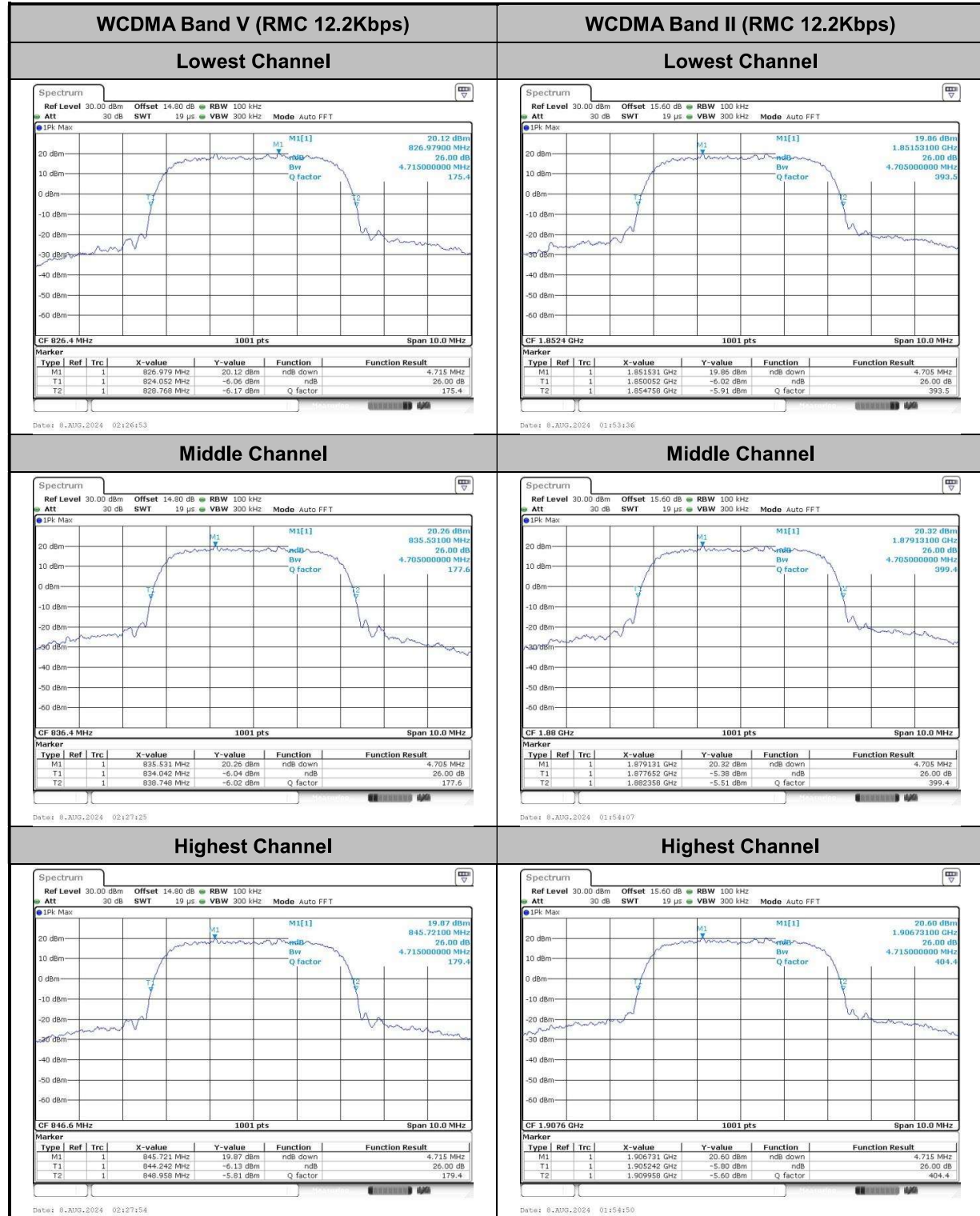


WCDMA Band IV (RMC 12.2Kbps)	-														
Lowest Channel	-														
Spectrum Ref Level 5.60 dBm Offset 15.60 dB Att 20 dB AQT 2 ms RBW 10 MHz 1Sa View CF 1.7124 GHz Mean Pwr + 20.00 dB Complementary Cumulative Distribution Function <table><tr><th>Mean</th><th>Peak</th><th>Crest</th><th>10%</th><th>1%</th><th>0.1%</th><th>0.01%</th></tr><tr><td>23.75 dBm</td><td>27.11 dBm</td><td>3.36 dB</td><td>1.68 dB</td><td>2.64 dB</td><td>3.07 dB</td><td>3.28 dB</td></tr></table> Trace 1 Measuring... Date: 8.AUG.2024 01:49:10	Mean	Peak	Crest	10%	1%	0.1%	0.01%	23.75 dBm	27.11 dBm	3.36 dB	1.68 dB	2.64 dB	3.07 dB	3.28 dB	-
Mean	Peak	Crest	10%	1%	0.1%	0.01%									
23.75 dBm	27.11 dBm	3.36 dB	1.68 dB	2.64 dB	3.07 dB	3.28 dB									
Middle Channel	-														
Spectrum Ref Level 5.60 dBm Offset 15.60 dB Att 20 dB AQT 2 ms RBW 10 MHz 1Sa View CF 1.7326 GHz Mean Pwr + 20.00 dB Complementary Cumulative Distribution Function <table><tr><th>Mean</th><th>Peak</th><th>Crest</th><th>10%</th><th>1%</th><th>0.1%</th><th>0.01%</th></tr><tr><td>23.72 dBm</td><td>27.16 dBm</td><td>3.45 dB</td><td>1.74 dB</td><td>2.70 dB</td><td>3.13 dB</td><td>3.33 dB</td></tr></table> Trace 1 Measuring... Date: 8.AUG.2024 01:49:38	Mean	Peak	Crest	10%	1%	0.1%	0.01%	23.72 dBm	27.16 dBm	3.45 dB	1.74 dB	2.70 dB	3.13 dB	3.33 dB	-
Mean	Peak	Crest	10%	1%	0.1%	0.01%									
23.72 dBm	27.16 dBm	3.45 dB	1.74 dB	2.70 dB	3.13 dB	3.33 dB									
Highest Channel	-														
Spectrum Ref Level 5.60 dBm Offset 15.60 dB Att 20 dB AQT 2 ms RBW 10 MHz 1Sa View CF 1.7526 GHz Mean Pwr + 20.00 dB Complementary Cumulative Distribution Function <table><tr><th>Mean</th><th>Peak</th><th>Crest</th><th>10%</th><th>1%</th><th>0.1%</th><th>0.01%</th></tr><tr><td>23.63 dBm</td><td>27.09 dBm</td><td>3.46 dB</td><td>1.68 dB</td><td>2.64 dB</td><td>3.10 dB</td><td>3.30 dB</td></tr></table> Trace 1 Measuring... Date: 8.AUG.2024 01:50:02	Mean	Peak	Crest	10%	1%	0.1%	0.01%	23.63 dBm	27.09 dBm	3.46 dB	1.68 dB	2.64 dB	3.10 dB	3.30 dB	-
Mean	Peak	Crest	10%	1%	0.1%	0.01%									
23.63 dBm	27.09 dBm	3.46 dB	1.68 dB	2.64 dB	3.10 dB	3.30 dB									

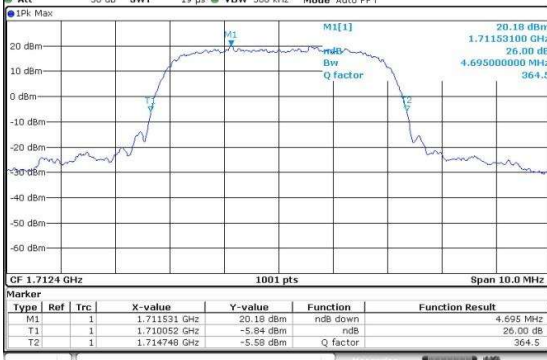
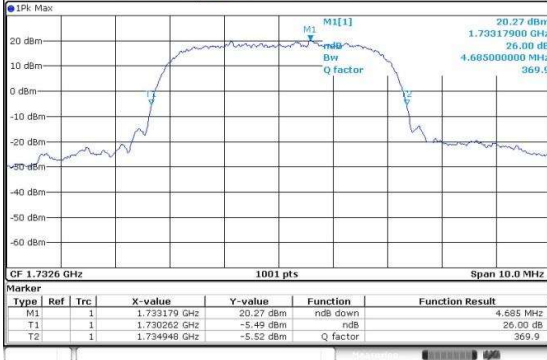
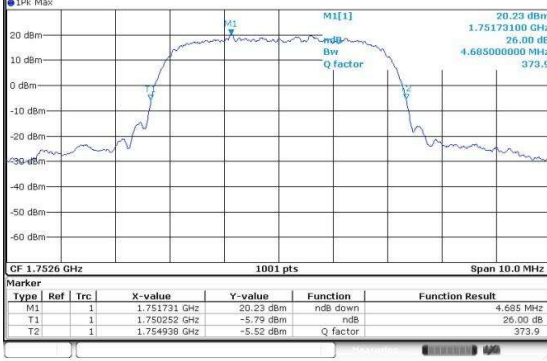


26dB Bandwidth

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





WCDMA Band IV (RMC 12.2Kbps)	-																																
Lowest Channel	-																																
Spectrum Ref Level 30.00 dBm Offset 15.60 dB RBW 100 kHz Att 30 dB SWT 19 µs VBW 300 kHz Mode Auto FFT IPi Max  CF 1.7124 GHz 1001 pts Span 10.0 MHz <table><tr><th>Marker</th><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td></td><td>1.711531 GHz</td><td>20.18 dBm</td><td>ndb down</td><td>4.695 MHz</td></tr><tr><td>T1</td><td>1</td><td></td><td></td><td>1.710052 GHz</td><td>-5.84 dBm</td><td>ndb</td><td>26.00 dB</td></tr><tr><td>T2</td><td>1</td><td></td><td></td><td>1.714748 GHz</td><td>-5.59 dBm</td><td>Q factor</td><td>364.5</td></tr></table> Date: 8.AUG.2024 01:27:17	Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1			1.711531 GHz	20.18 dBm	ndb down	4.695 MHz	T1	1			1.710052 GHz	-5.84 dBm	ndb	26.00 dB	T2	1			1.714748 GHz	-5.59 dBm	Q factor	364.5	-
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result																										
M1	1			1.711531 GHz	20.18 dBm	ndb down	4.695 MHz																										
T1	1			1.710052 GHz	-5.84 dBm	ndb	26.00 dB																										
T2	1			1.714748 GHz	-5.59 dBm	Q factor	364.5																										
Middle Channel	-																																
Spectrum Ref Level 30.00 dBm Offset 15.60 dB RBW 100 kHz Att 30 dB SWT 19 µs VBW 300 kHz Mode Auto FFT IPi Max  CF 1.7326 GHz 1001 pts Span 10.0 MHz <table><tr><th>Marker</th><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td></td><td>1.733179 GHz</td><td>20.27 dBm</td><td>ndb down</td><td>4.685 MHz</td></tr><tr><td>T1</td><td>1</td><td></td><td></td><td>1.730262 GHz</td><td>-5.49 dBm</td><td>ndb</td><td>26.00 dB</td></tr><tr><td>T2</td><td>1</td><td></td><td></td><td>1.734948 GHz</td><td>-5.52 dBm</td><td>Q factor</td><td>369.9</td></tr></table> Date: 8.AUG.2024 01:27:57	Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1			1.733179 GHz	20.27 dBm	ndb down	4.685 MHz	T1	1			1.730262 GHz	-5.49 dBm	ndb	26.00 dB	T2	1			1.734948 GHz	-5.52 dBm	Q factor	369.9	-
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result																										
M1	1			1.733179 GHz	20.27 dBm	ndb down	4.685 MHz																										
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T2	1			1.734948 GHz	-5.52 dBm	Q factor	369.9																										
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Spectrum Ref Level 30.00 dBm Offset 15.60 dB RBW 100 kHz Att 30 dB SWT 19 µs VBW 300 kHz Mode Auto FFT IPi Max  CF 1.7526 GHz 1001 pts Span 10.0 MHz <table><tr><th>Marker</th><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td></td><td>1.751731 GHz</td><td>20.23 dBm</td><td>ndb down</td><td>4.685 MHz</td></tr><tr><td>T1</td><td>1</td><td></td><td></td><td>1.750252 GHz</td><td>-5.79 dBm</td><td>ndb</td><td>26.00 dB</td></tr><tr><td>T2</td><td>1</td><td></td><td></td><td>1.754938 GHz</td><td>-5.52 dBm</td><td>Q factor</td><td>373.9</td></tr></table> Date: 8.AUG.2024 01:28:32	Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1			1.751731 GHz	20.23 dBm	ndb down	4.685 MHz	T1	1			1.750252 GHz	-5.79 dBm	ndb	26.00 dB	T2	1			1.754938 GHz	-5.52 dBm	Q factor	373.9	-
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result																										
M1	1			1.751731 GHz	20.23 dBm	ndb down	4.685 MHz																										
T1	1			1.750252 GHz	-5.79 dBm	ndb	26.00 dB																										
T2	1			1.754938 GHz	-5.52 dBm	Q factor	373.9																										



Occupied Bandwidth

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.106	4.116	4.106
Middle CH	4.106	4.106	4.106
Highest CH	4.116	4.106	4.106