



Appendix B

Test Data for SZEM150900598004



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1 Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Part 1 – RF Conducted Power of Transmitter for GSM850

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel128(L)		Channel190(M)		Channel251(H)	
	824.2MHz		836.6 MHz		848.8 MHz	
Tnom/ Vnom	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)
GSM/TM1 (GSM ONLY)	33.24	38.5	33.11	38.5	33.08	38.5
GSM/TM1 (GPRS)	32.85	38.5	32.76	38.5	32.75	38.5
GSM/TM2 (EGPRS)	26.28	38.5	26.35	38.5	26.19	38.5

Part 2– Effective Radiated Power of Transmitter (ERP) for GSM850

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(ERP) / dBm	Limit (dBm)	Result
GSM/TM1 (GSM ONLY)	824.2	33.94	Dipole Ant.	39.19	-4.90	0.6	33.69	38.5	Pass
GSM/TM1 (GSM ONLY)	836.6	33.81	Dipole Ant.	39.27	-5.02	0.6	33.65	38.5	Pass
GSM/TM1 (GSM ONLY)	848.8	33.78	Dipole Ant.	39.18	-5.00	0.6	33.58	38.5	Pass
GSM/TM1 (GPRS)	824.2	33.55	Dipole	38.72	-4.90	0.6	33.22	38.5	Pass
GSM/TM1 (GPRS)	836.6	33.46	Dipole	38.79	-5.02	0.6	33.17	38.5	Pass
GSM/TM1 (GPRS)	848.8	33.45	Dipole	36.83	-5.00	0.6	31.23	38.5	Pass
GSM/TM2 (EGPRS)	824.2	26.98	Dipole	32.23	-4.90	0.6	26.73	38.5	Pass
GSM/TM2 (EGPRS)	836.6	27.05	Dipole	32.51	-5.02	0.6	26.89	38.5	Pass
GSM/TM2 (EGPRS)	848.8	26.89	Dipole	32.36	-5.00	0.6	26.76	38.5	Pass

Note:

a: For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS

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Part 3 – RF Conducted Power of Transmitter for GSM1900

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel512(L)		Channel661(M)		Channel810(H)	
	1850.2MHz		1880 MHz		1909.8 MHz	
Tnom/ Vnom	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)
GSM/TM1 (GSM ONLY)	30.66	38.5	30.23	38.5	30.29	38.5
GSM/TM1 (GPRS)	30.15	38.5	30.00	38.5	29.92	38.5
GSM/TM2 (EGPRS)	24.26	38.5	24.19	38.5	24.74	38.5

Part 4– Effective Isotropic Radiated Power of Transmitter (EIRP) for GSM1900

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(EIRP) / dBm	Limit (dBm)	Result
GSM/TM1 (GSM ONLY)	1850.2	29.06	Dipole Ant.	34.50	-4.90	0.6	29.00	38.5	Pass
GSM/TM1 (GSM ONLY)	1880	28.63	Dipole Ant.	34.14	-5.02	0.6	28.52	38.5	Pass
GSM/TM1 (GSM ONLY)	1909.8	28.69	Dipole Ant.	34.11	-5.00	0.6	28.51	38.5	Pass
GSM/TM1 (GPRS)	1850.2	28.55	Dipole	33.97	-4.90	0.6	28.47	38.5	Pass
GSM/TM1 (GPRS)	1880	28.4	Dipole	33.92	-5.02	0.6	28.30	38.5	Pass
GSM/TM1 (GPRS)	1909.8	28.32	Dipole	33.75	-5.00	0.6	28.15	38.5	Pass
GSM/TM2 (EGPRS)	1850.2	22.66	Dipole	28.09	-4.90	0.6	22.59	38.5	Pass
GSM/TM2 (EGPRS)	1880	22.59	Dipole	28.14	-5.02	0.6	22.52	38.5	Pass
GSM/TM2 (EGPRS)	1909.8	23.14	Dipole	28.58	-5.00	0.6	22.98	38.5	Pass

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS

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Part 3 – RF Conducted Power of Transmitter for WCDMA BAND 5

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel 4132(L)		Channel 4182 (M)		Channel 4233(H)	
	826.4MHz		836.4MHz		846.6MHz	
Tnom/ Vnom	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)
WCDMA	23.21	38.5	23.2	38.5	23.38	38.5
HSDPA	22.24	38.5	22.25	38.5	22.36	38.5
HSUPA	22.11	38.5	22.23	38.5	22.16	38.5

Part 4– Effective Radiated Power of Transmitter (ERP) for WCDMA BAND 5

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(ERP) / dBm	Limit (dBm)	Result
WCDMA	826.4	23.91	Dipole	28.54	-4.90	0.6	23.04	38.5	Pass
WCDMA	836.4	23.90	Dipole	28.63	-5.02	0.6	23.01	38.5	Pass
WCDMA	846.6	24.08	Dipole	28.67	-5.00	0.6	23.07	38.5	Pass
HSDPA	826.4	22.94	Dipole	27.61	-4.90	0.6	22.11	38.5	Pass
HSDPA	836.4	22.95	Dipole	27.76	-5.02	0.6	22.14	38.5	Pass
HSDPA	846.6	23.06	Dipole	27.78	-5.00	0.6	22.18	38.5	Pass
HSUPA	826.4	22.81	Dipole	27.50	-4.90	0.6	22.00	38.5	Pass
HSUPA	836.4	22.93	Dipole	27.64	-5.02	0.6	22.02	38.5	Pass
HSUPA	846.6	22.86	Dipole	27.63	-5.00	0.6	22.03	38.5	Pass

Note:

a: For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



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Part 5 – RF Conducted Power of Transmitter for LTE BAND 7

Bandwidth	TEST CONDITIONS	RF Output Power(Conducted)					
		Channel (L)		Channel (M)		Channel (H)	
		2502.5 ~ 2510 MHz		2535 MHz		2560 ~ 2567.5 MHz	
	Tnom/ Vnom	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)
5MHz	QPSK/ TM1	22.14	38.5	22.20	38.5	22.26	38.5
	16QAM/ TM2	21.35	38.5	21.51	38.5	21.18	38.5
10MHz	QPSK/ TM1	22.09	38.5	22.25	38.5	22.18	38.5
	16QAM/ TM2	21.31	38.5	21.20	38.5	21.26	38.5
15MHz	QPSK/ TM1	22.17	38.5	22.25	38.5	22.09	38.5
	16QAM/ TM2	21.24	38.5	21.47	38.5	21.08	38.5
20MHz	QPSK/ TM1	22.32	38.5	22.38	38.5	22.11	38.5
	16QAM/ TM2	21.09	38.5	21.54	38.5	21.30	38.5

Part 6– Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(EIRP) / dBm	Limit (dBm)	Result
LTE TM1/5MHz	2502.5	23.44	Dipole	28.86	-4.90	0.6	23.36	38.5	Pass
	2535	23.5	Dipole	29.05	-5.02	0.6	23.43	38.5	Pass
	2567.5	23.56	Dipole	29.04	-5.00	0.6	23.44	38.5	Pass
LTE TM2/5MHz	2502.5	22.65	Dipole	28.07	-4.90	0.6	22.57	38.5	Pass
	2535	22.81	Dipole	28.34	-5.02	0.6	22.72	38.5	Pass
	2567.5	22.48	Dipole	27.96	-5.00	0.6	22.36	38.5	Pass
LTE TM1/ 10MHz	2505	23.39	Dipole	28.75	-4.90	0.6	23.25	38.5	Pass
	2535	23.55	Dipole	29.00	-5.02	0.6	23.38	38.5	Pass
	2565	23.48	Dipole	28.93	-5.00	0.6	23.33	38.5	Pass
LTE TM2/ 10MHz	2505	22.61	Dipole	27.96	-4.90	0.6	22.46	38.5	Pass
	2535	22.5	Dipole	27.93	-5.02	0.6	22.31	38.5	Pass
	2565	22.56	Dipole	27.93	-5.00	0.6	22.33	38.5	Pass
LTE TM1/ 15MHz	2507.5	23.47	Dipole	28.83	-4.90	0.6	23.33	38.5	Pass
	2535	23.55	Dipole	29.02	-5.02	0.6	23.40	38.5	Pass
	2562.5	23.39	Dipole	28.76	-5.00	0.6	23.16	38.5	Pass
LTE TM2/ 15MHz	2507.5	22.54	Dipole	27.92	-4.90	0.6	22.42	38.5	Pass
	2535	22.77	Dipole	28.19	-5.02	0.6	22.57	38.5	Pass
	2562.5	22.38	Dipole	27.92	-5.00	0.6	22.32	38.5	Pass
LTE TM1/ 20MHz	2510	23.62	Dipole	29.05	-4.90	0.6	23.55	38.5	Pass
	2535	23.68	Dipole	29.20	-5.02	0.6	23.58	38.5	Pass
	2560	23.41	Dipole	28.99	-5.00	0.6	23.39	38.5	Pass
LTE TM2/ 20MHz	2510	22.39	Dipole	27.80	-4.90	0.6	22.30	38.5	Pass
	2535	22.84	Dipole	28.33	-5.02	0.6	22.71	38.5	Pass
	2560	22.6	Dipole	28.09	-5.00	0.6	22.49	38.5	Pass

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]
b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS

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2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM850	GSM/TM1	LCH	0.25	13	PASS
		MCH	0.31	13	PASS
		HCH	0.23	13	PASS
	GSM/TM2	LCH	0.31	13	PASS
		MCH	0.35	13	PASS
		HCH	0.25	13	PASS

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
WCDMA850	UMTS/TM1	LCH	3.12	13	PASS
		MCH	2.81	13	PASS
		HCH	3.22	13	PASS



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Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
LTE 2600	LTE TM1/5MHz	LCH	4.28	13	PASS
		MCH	4.43	13	PASS
		HCH	4.38	13	PASS
	LTE TM2/5MHz	LCH	4.59	13	PASS
		MCH	4.61	13	PASS
		HCH	4.39	13	PASS
	LTE TM1/10MHz	LCH	4.51	13	PASS
		MCH	4.68	13	PASS
		HCH	4.65	13	PASS
	LTE TM2/10MHz	LCH	4.51	13	PASS
		MCH	4.38	13	PASS
		HCH	4.42	13	PASS
	LTE TM1/15MHz	LCH	4.68	13	PASS
		MCH	4.54	13	PASS
		HCH	4.49	13	PASS
	LTE TM2/15MHz	LCH	4.35	13	PASS
		MCH	4.52	13	PASS
		HCH	4.55	13	PASS
	LTE TM1/20MHz	LCH	4.81	13	PASS
		MCH	4.59	13	PASS
		HCH	4.65	13	PASS
	LTE TM2/20MHz	LCH	4.66	13	PASS
		MCH	4.54	13	PASS
		HCH	4.25	13	PASS

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3 Modulation Characteristics

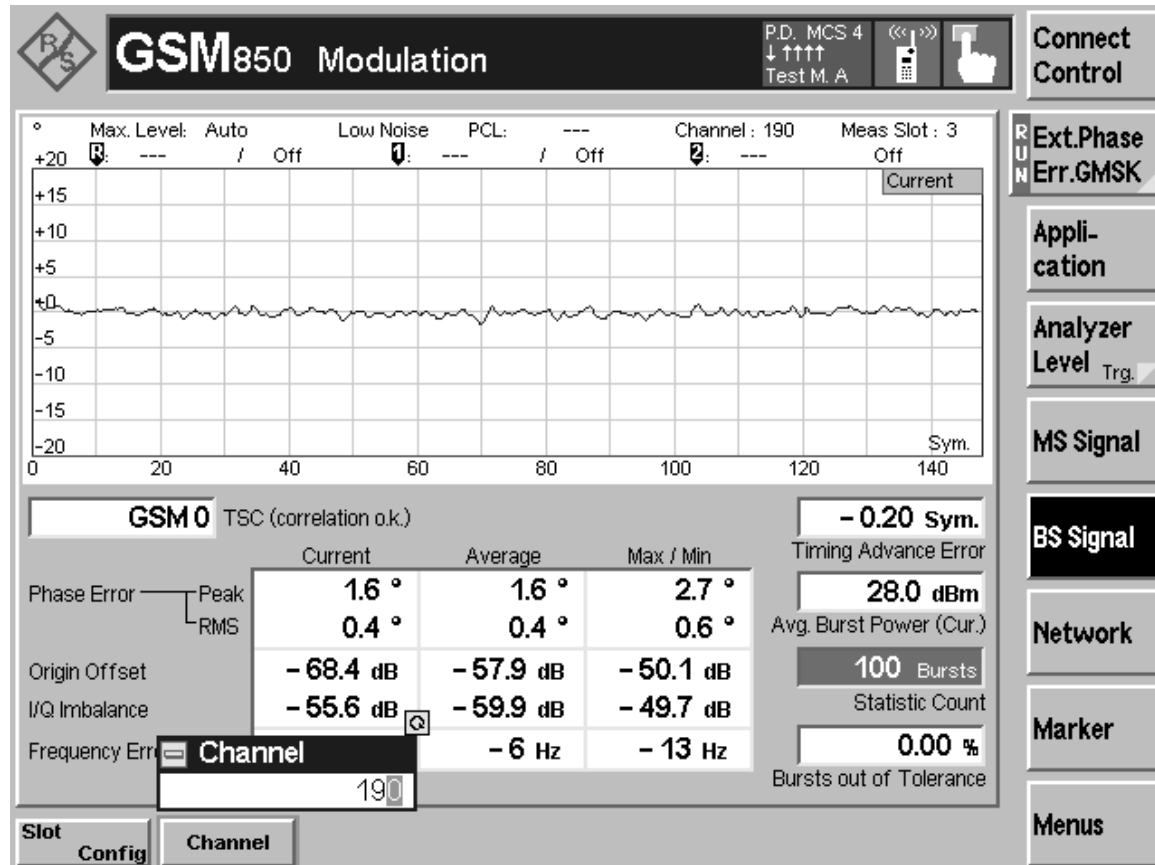
Part I - Test Plots

3.1 For GSM

3.1.1 Test Band = GSM850

3.1.1.1 Test Mode = GSM/TM1

3.1.1.1.1 Test Channel = MCH

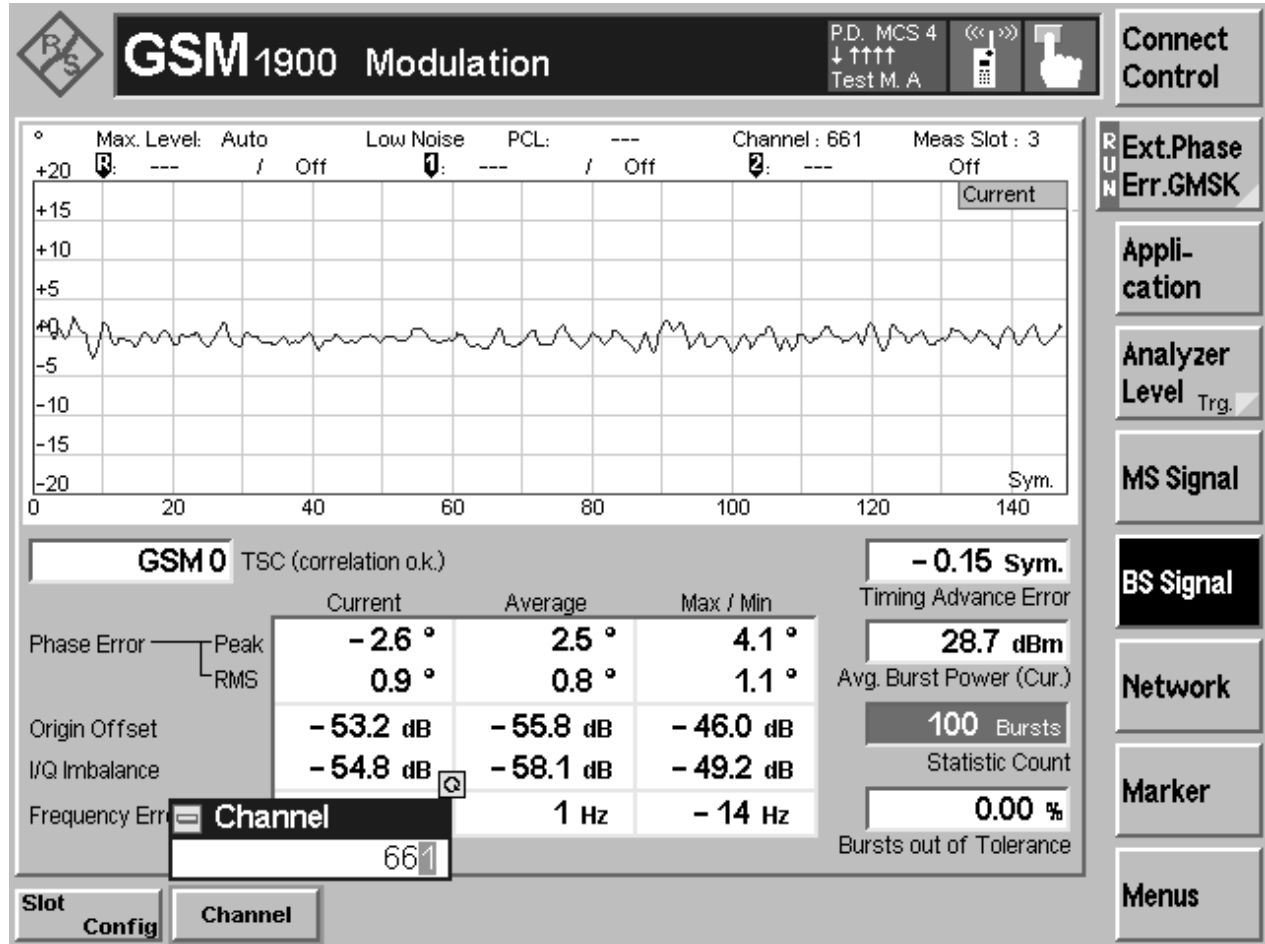




3.1.2 Test Band = GSM1900

3.1.2.1 Test Mode = GSM/TM1

3.1.2.1.1 Test Channel = MCH

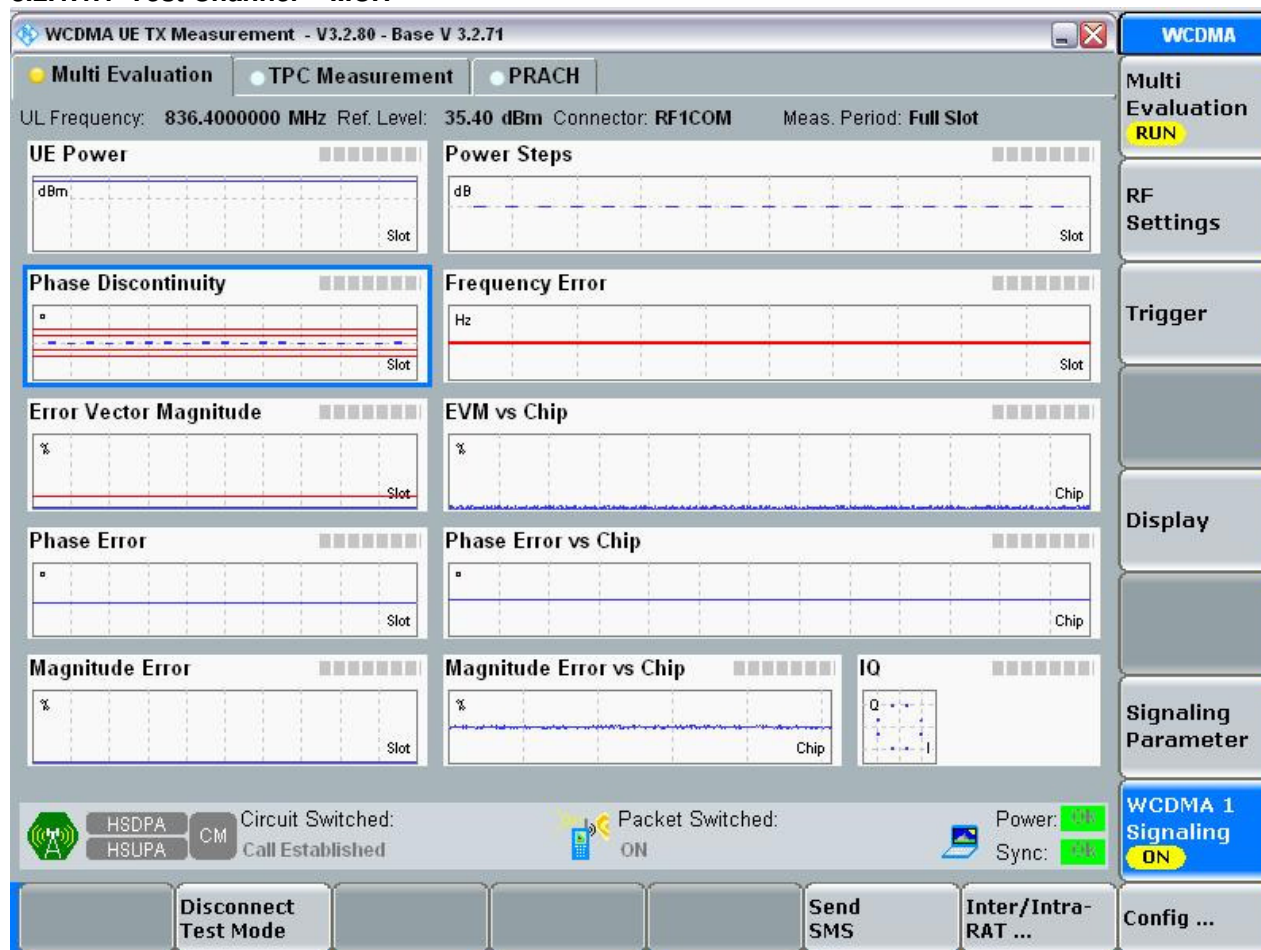


3.2 For WCDMA

3.2.1 Test Band = WCDMA 850

3.2.1.1 Test Mode = WCDMA BAND 5/TM1

3.2.1.1.1 Test Channel = MCH



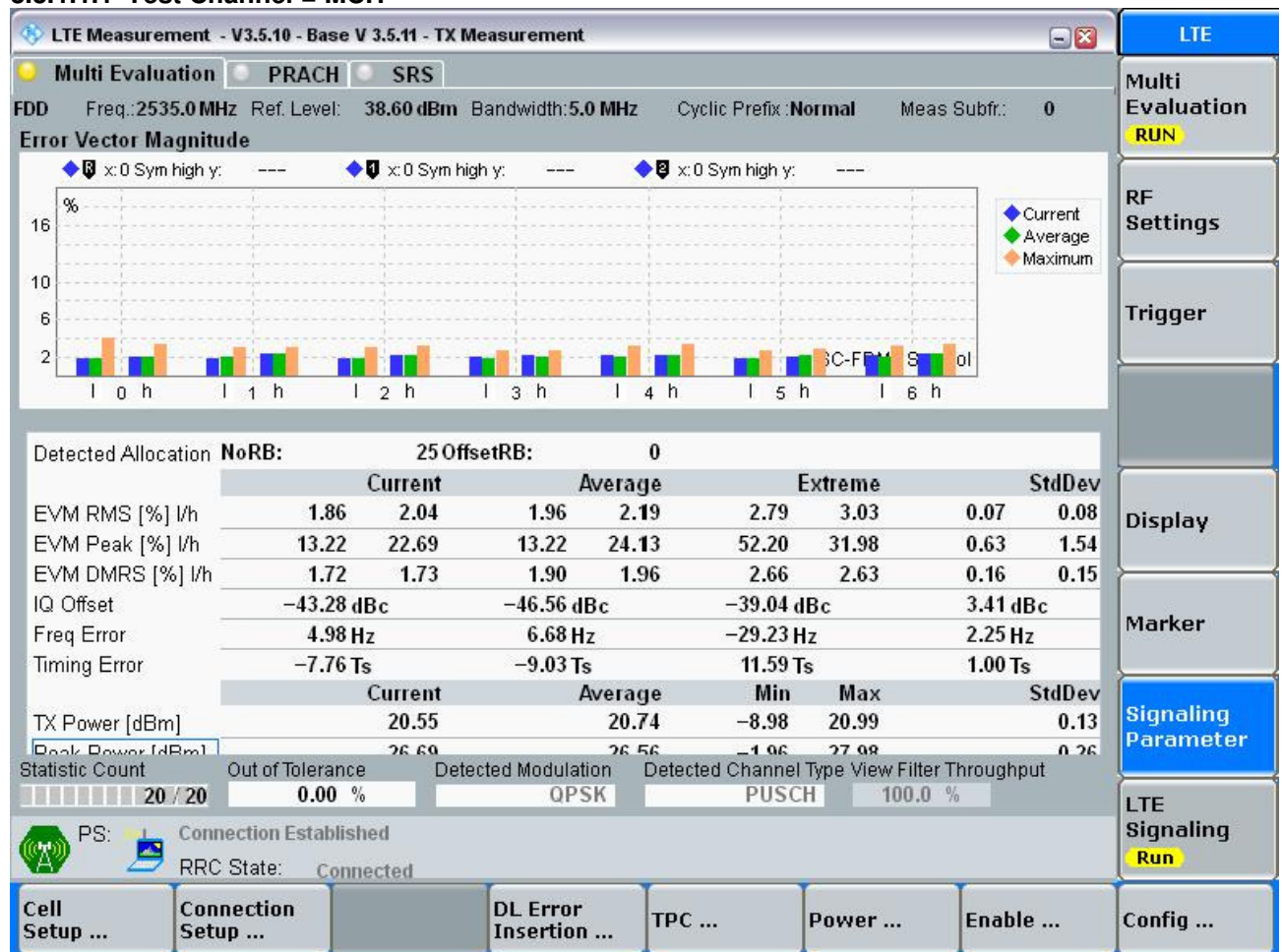


3.3 For LTE

3.3.1 Test Band = LTE2600

3.3.1.1 Test Mode = LTE//TM1 5MHz

3.3.1.1.1 Test Channel = MCH





4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [kHz]	Verdict
GSM850	GSM/TM1	LCH	247.21	312.9	PASS
		MCH	243.73	318.1	PASS
		HCH	243.18	320.0	PASS
	GSM/TM2	LCH	251.08	318.3	PASS
		MCH	243.77	308.3	PASS
		HCH	248.67	317.0	PASS
GSM1900	GSM/TM1	LCH	240.20	317.1	PASS
		MCH	241.10	320.0	PASS
		HCH	245.85	317.4	PASS
	GSM/TM2	LCH	241.81	305.2	PASS
		MCH	251.31	318.4	PASS
		HCH	245.83	305.0	PASS

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
WCDMA850	UMTS/TM1	LCH	4.1509	4.664	PASS
		MCH	4.1522	4.662	PASS
		HCH	4.1527	4.662	PASS



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Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
LTE 2600	LTE TM1/5MHz	LCH	4.5056	5.025	PASS
		MCH	4.5007	5.033	PASS
		HCH	4.5028	4.961	PASS
	LTE TM2/5MHz	LCH	4.5222	5.045	PASS
		MCH	4.5064	5.019	PASS
		HCH	4.5037	4.956	PASS
	LTE TM1/10MHz	LCH	8.9860	9.911	PASS
		MCH	8.9781	9.830	PASS
		HCH	8.9957	9.905	PASS
	LTE TM2/10MHz	LCH	9.0019	9.968	PASS
		MCH	8.9796	9.904	PASS
		HCH	8.9885	9.736	PASS
	LTE TM1/15MHz	LCH	13.445	14.59	PASS
		MCH	13.414	14.60	PASS
		HCH	13.429	14.64	PASS
	LTE TM2/15MHz	LCH	13.456	14.64	PASS
		MCH	13.424	14.63	PASS
		HCH	13.468	14.78	PASS
	LTE TM1/20MHz	LCH	17.887	19.36	PASS
		MCH	17.916	19.50	PASS
		HCH	17.899	19.32	PASS
	LTE TM2/20MHz	LCH	17.910	19.58	PASS
		MCH	17.896	19.30	PASS
		HCH	17.888	19.31	PASS

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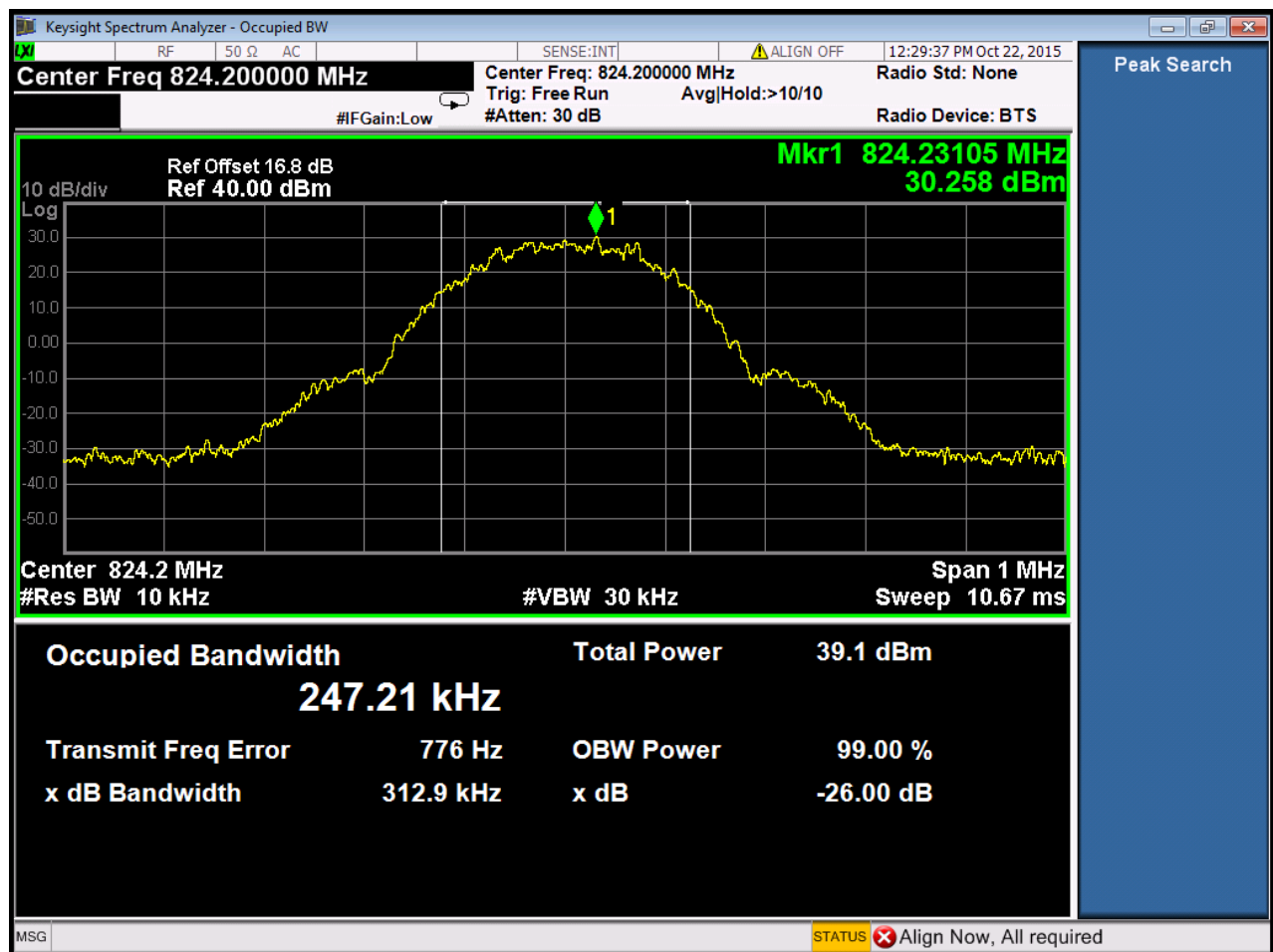


4.1 For GSM

4.1.1 Test Band = GSM850

4.1.1.1 Test Mode = GSM/TM1

4.1.1.1.1 Test Channel = LCH



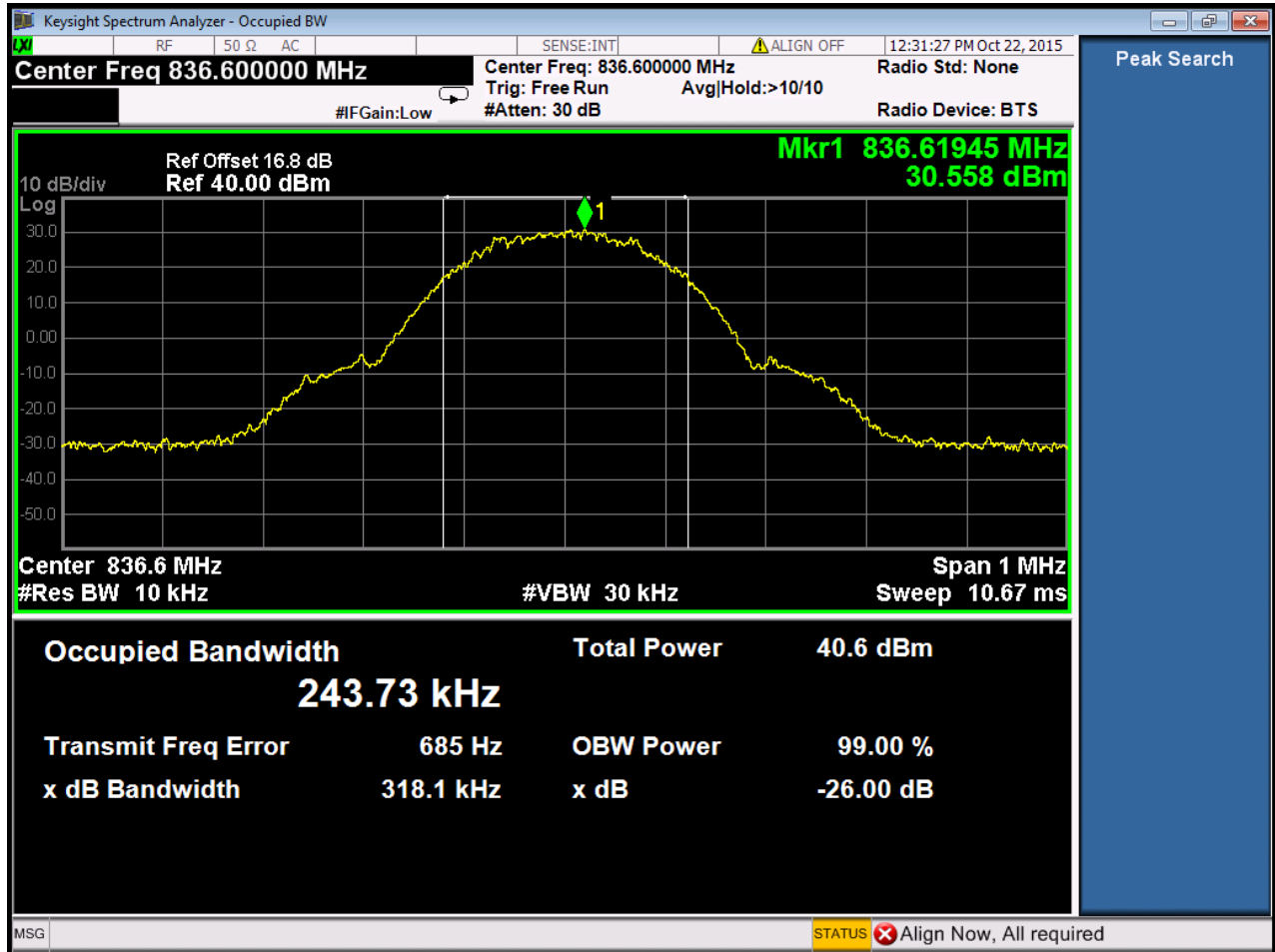


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Shenzhen Branch

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4.1.1.1.2 Test Channel = MCH



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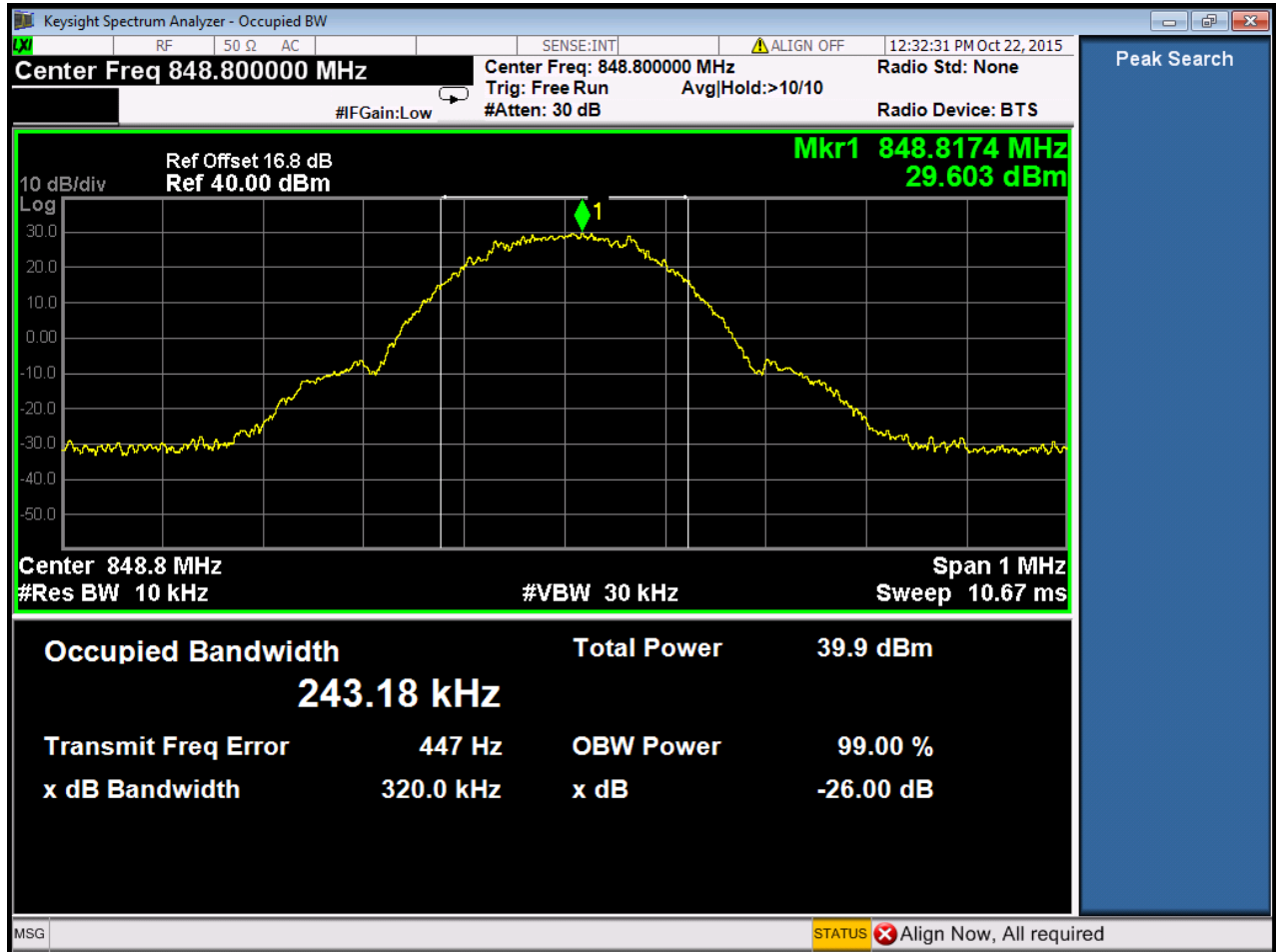


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4.1.1.1.3 Test Channel = HCH



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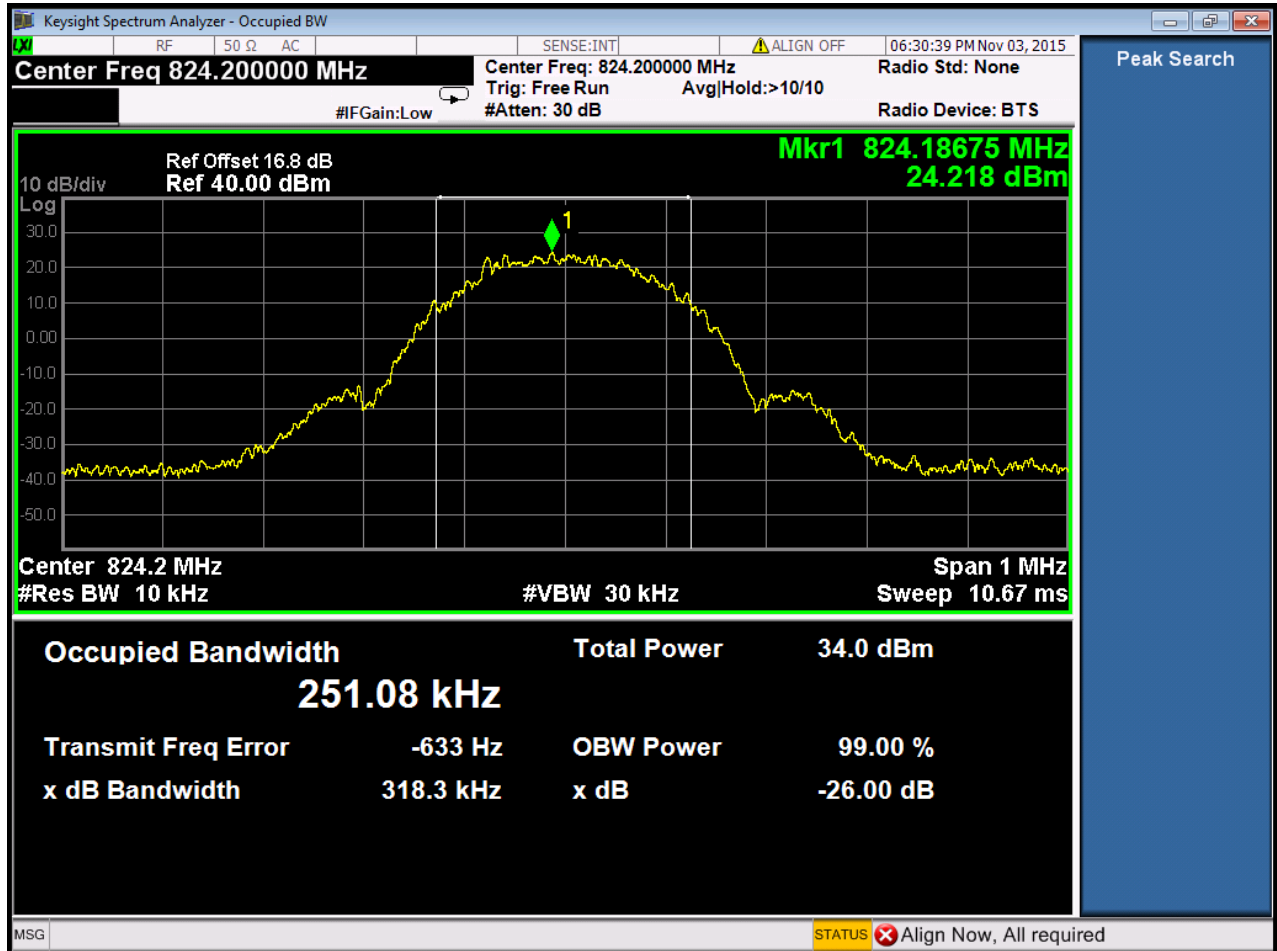
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4.1.1.2 Test Mode = GSM/TM2

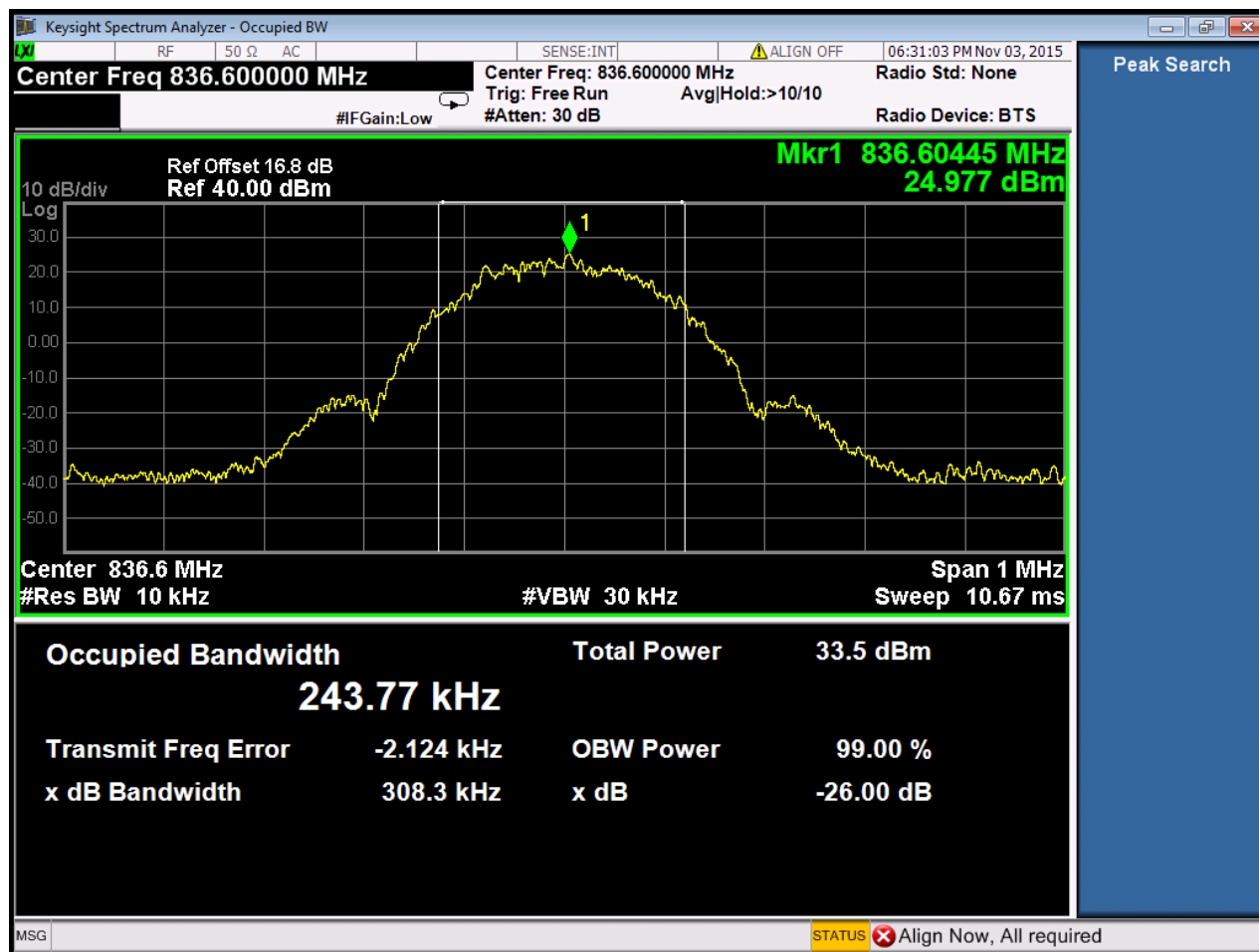
4.1.1.2.1 Test Channel = LCH



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4.1.1.2.2 Test Channel = MCH

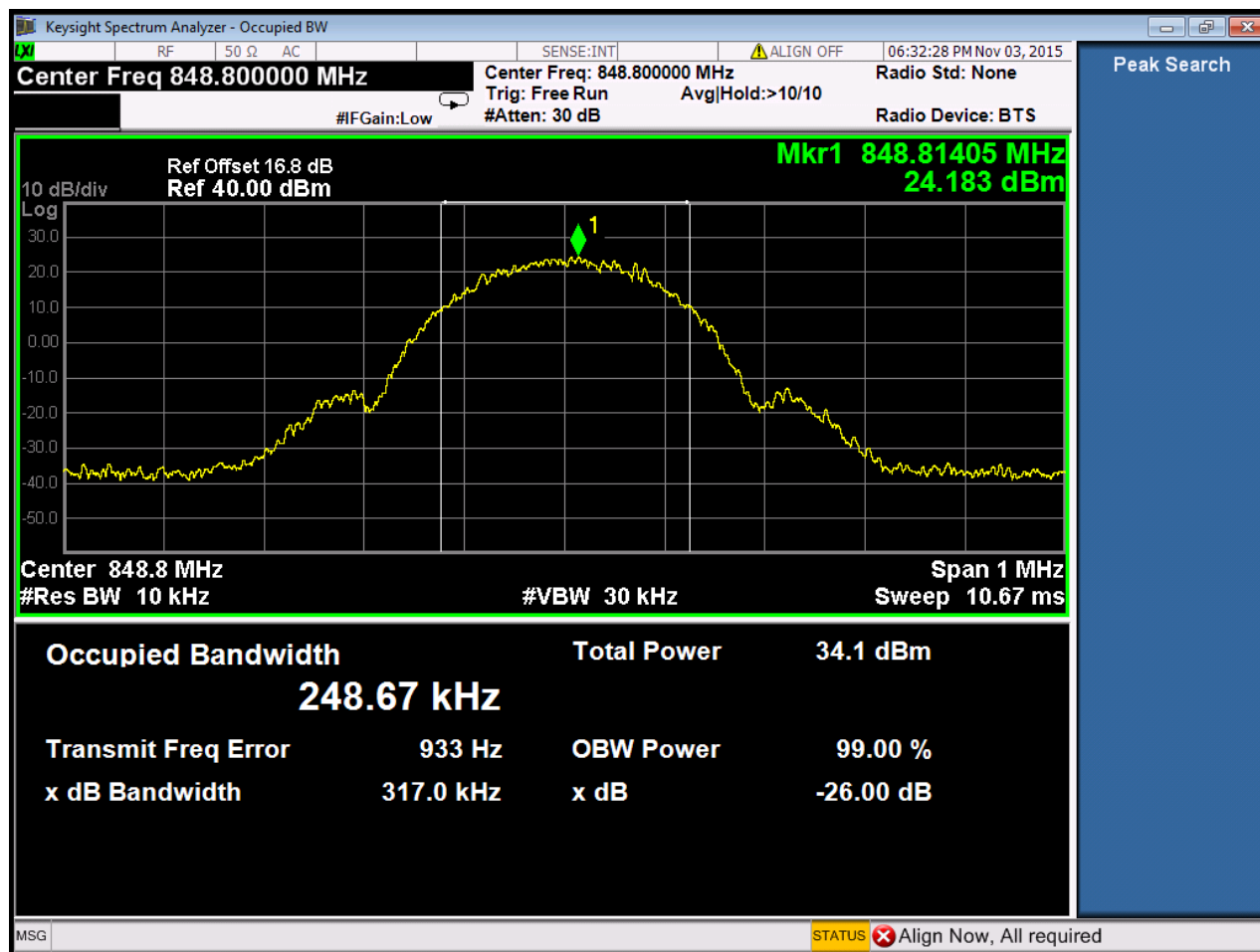




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4.1.1.2.3 Test Channel = HCH



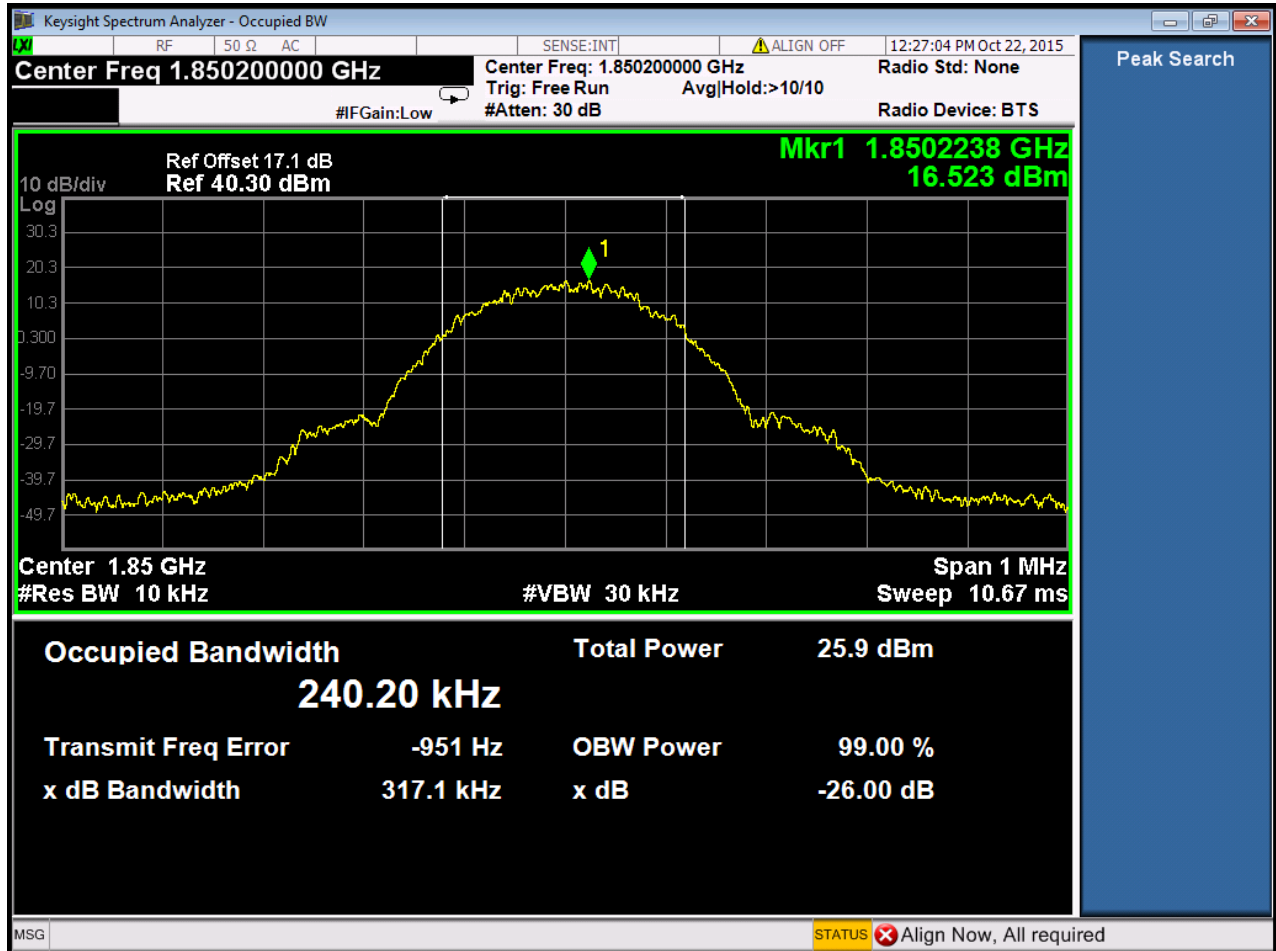
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4.1.2 Test Band = GSM1900

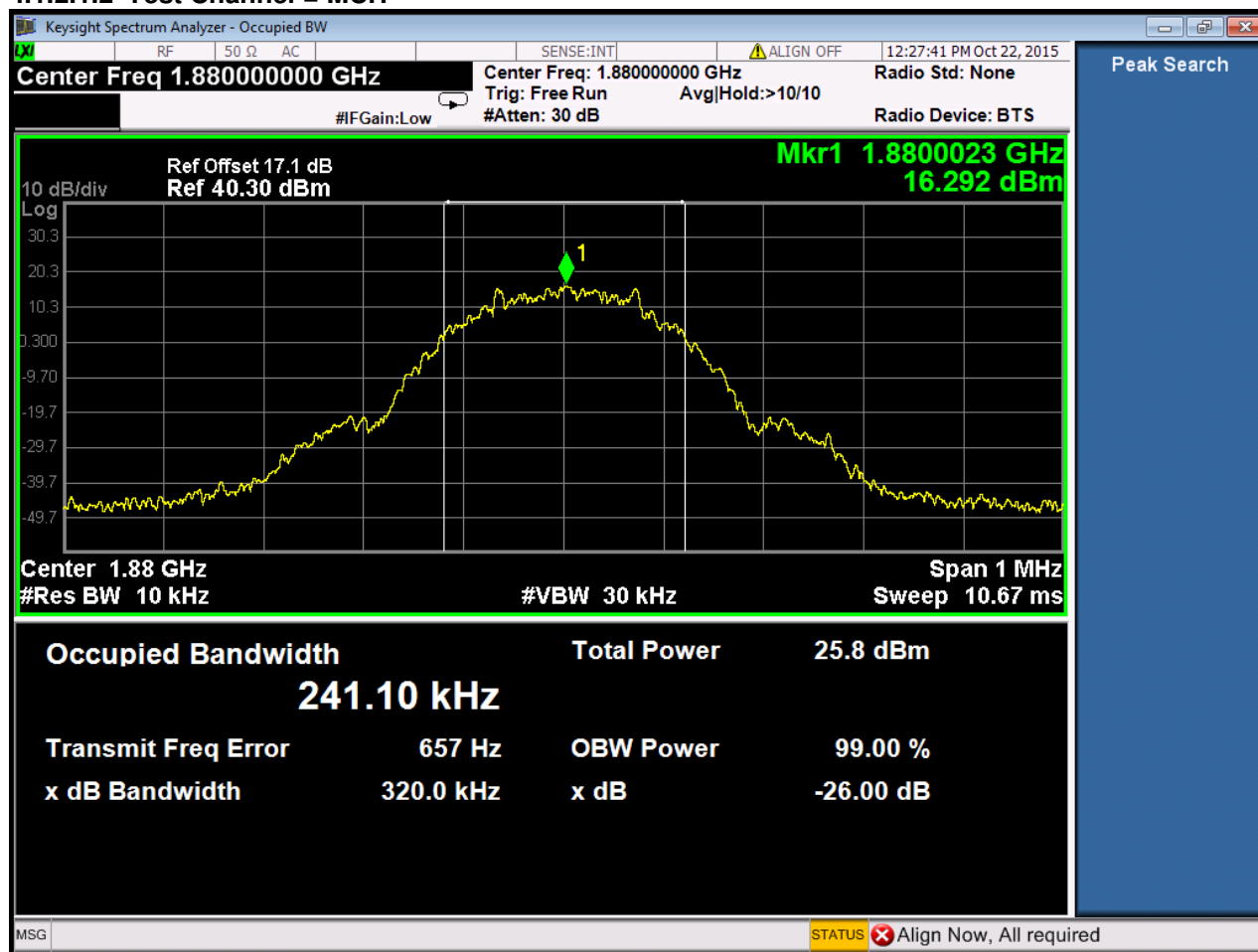
4.1.2.1 Test Mode = GSM/TM1

4.1.2.1.1 Test Channel = LCH



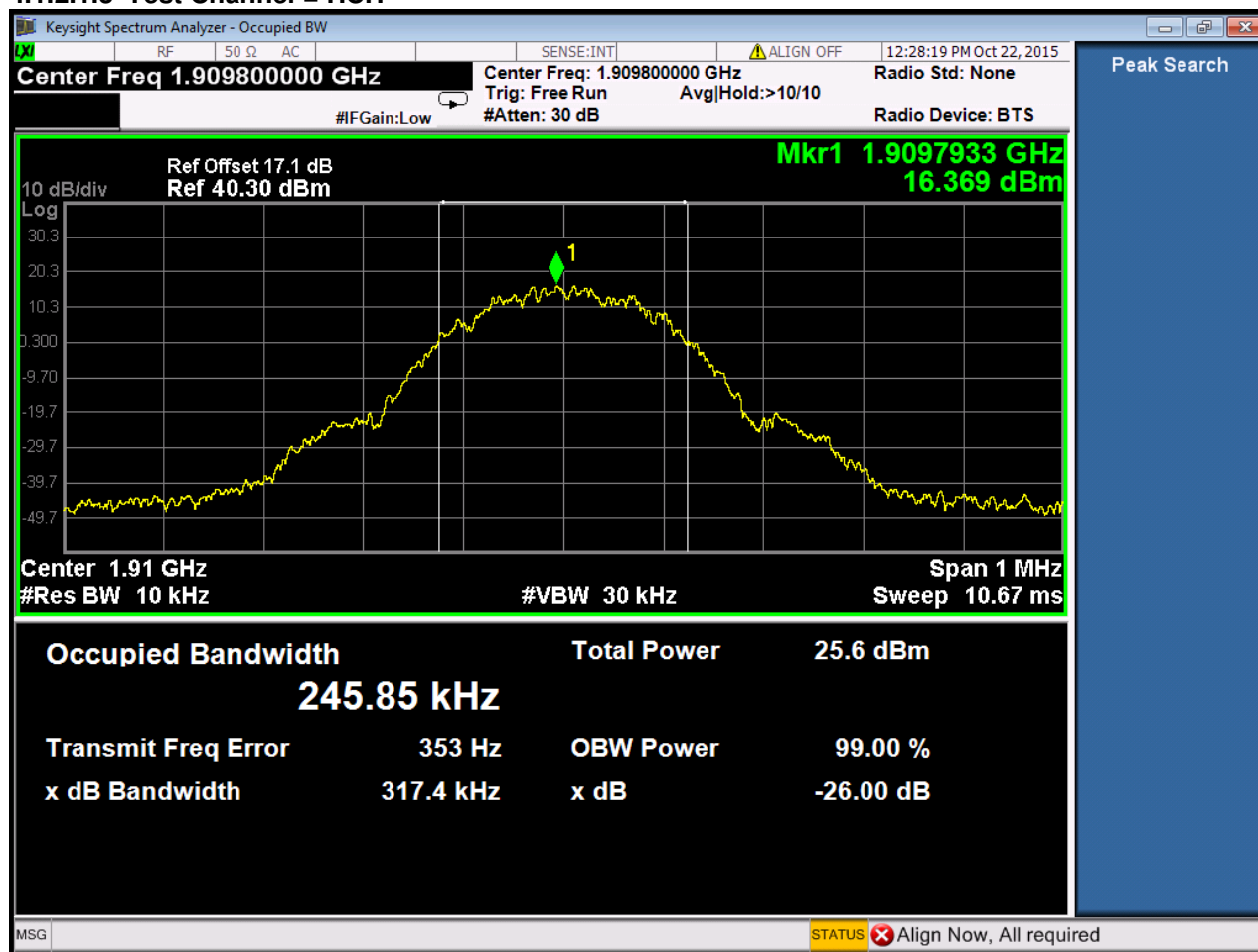


4.1.2.1.2 Test Channel = MCH





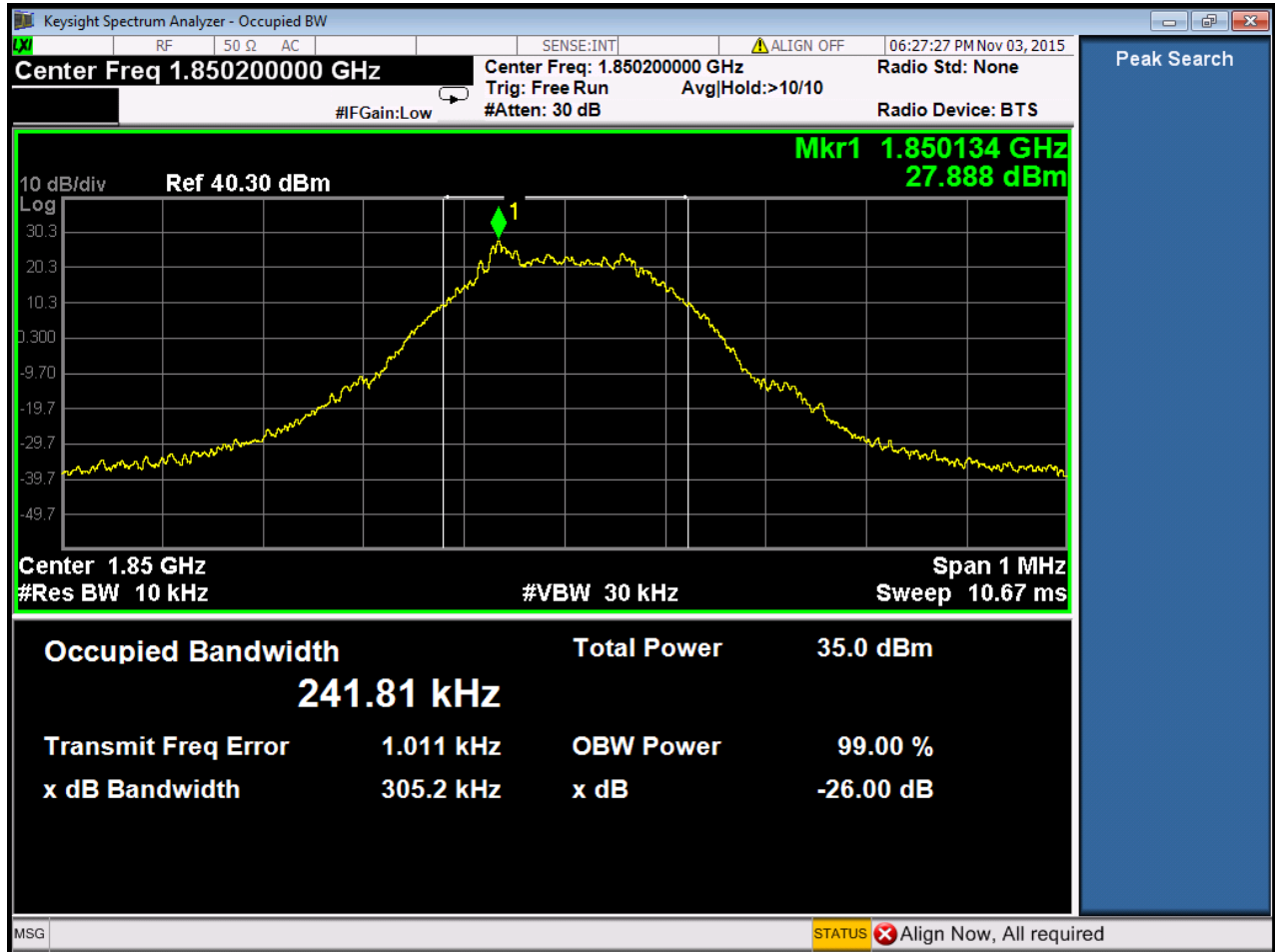
4.1.2.1.3 Test Channel = HCH





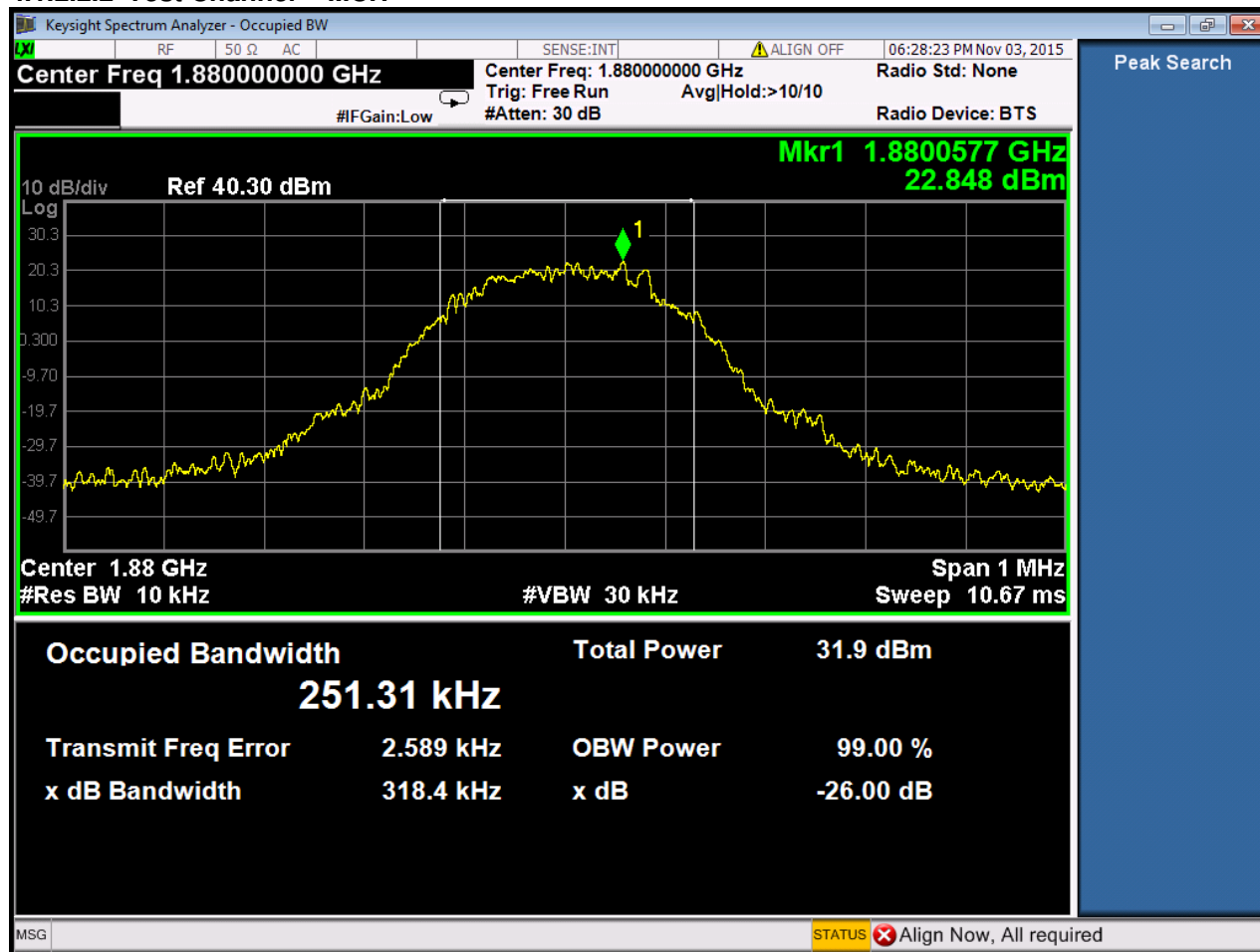
4.1.2.2 Test Mode = GSM/TM2

4.1.2.2.1 Test Channel = LCH



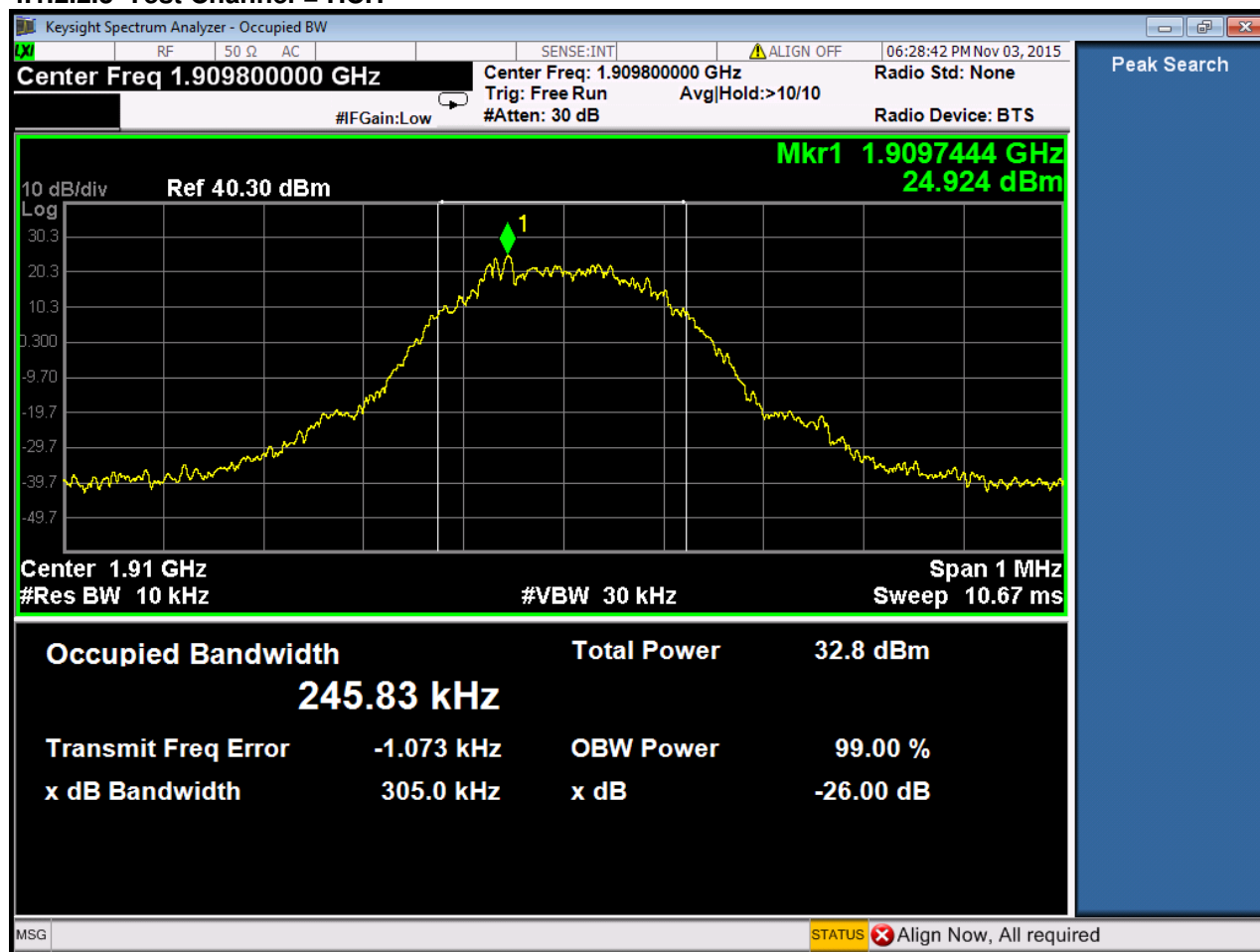


4.1.2.2.2 Test Channel = MCH





4.1.2.2.3 Test Channel = HCH

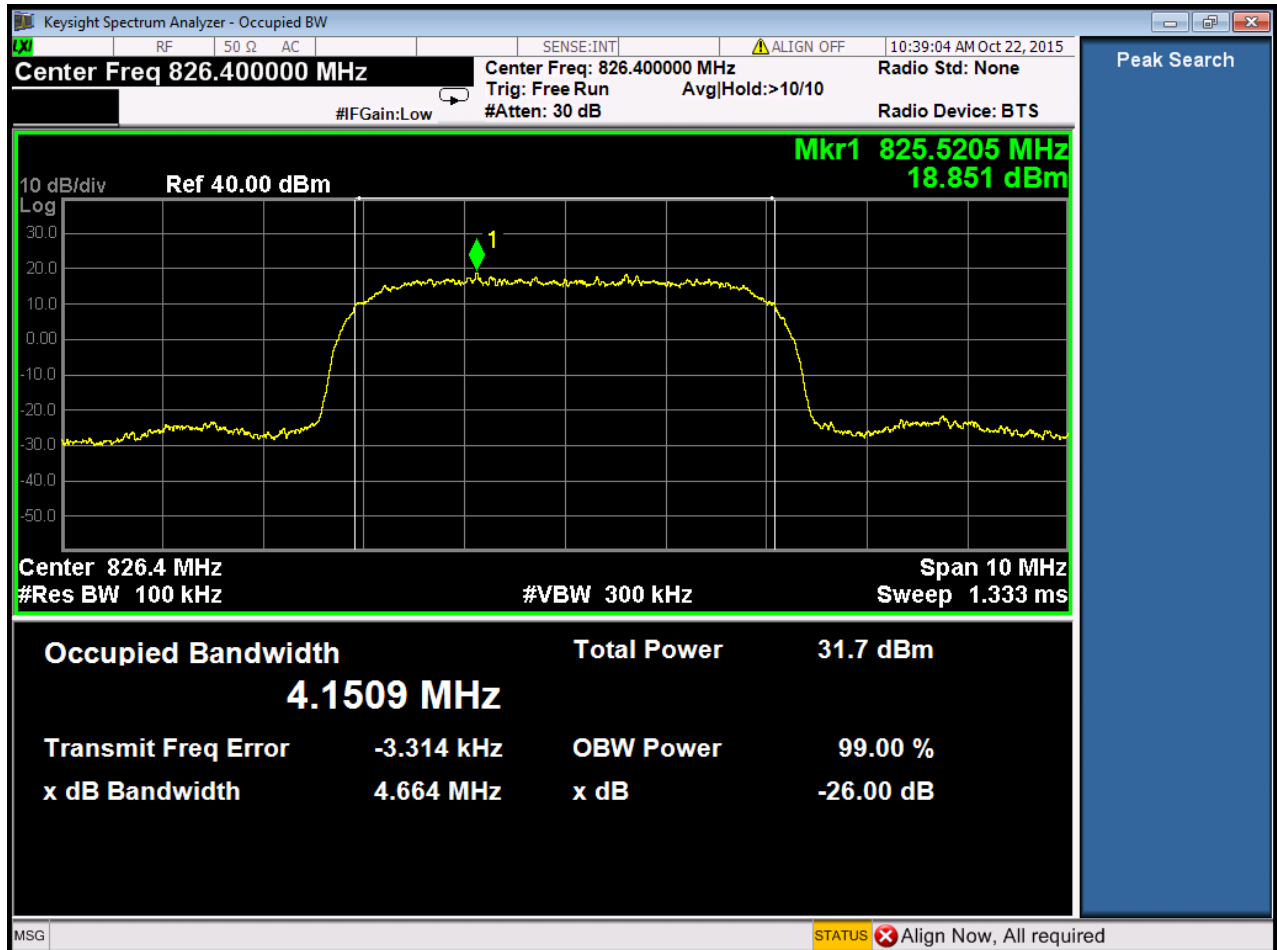




4.1.3 Test Band = WCDMA850

4.1.3.1 Test Mode = UMTS/TM1

4.1.3.1.1 Test Channel = LCH



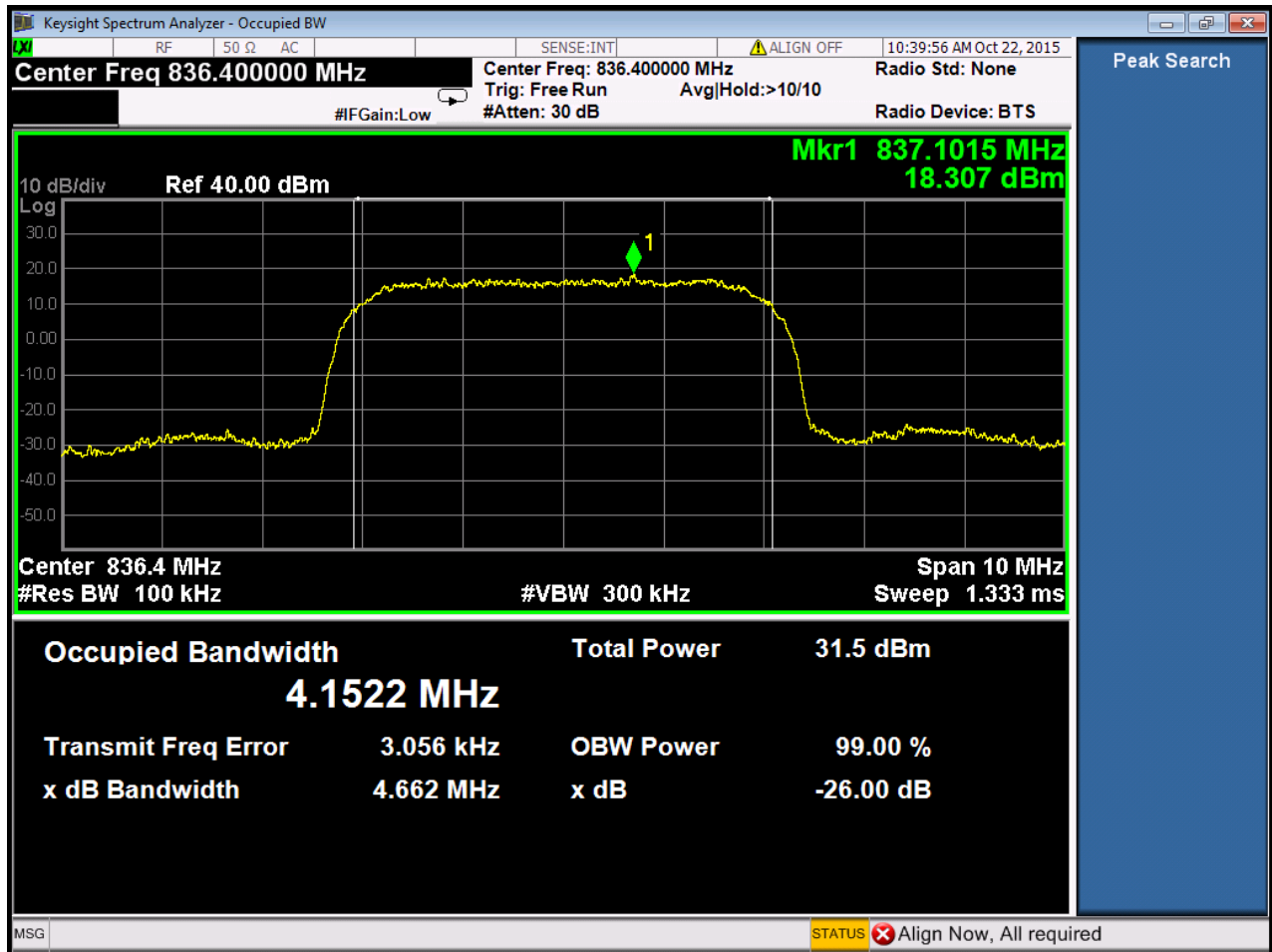


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4.1.3.1.2 Test Channel = MCH



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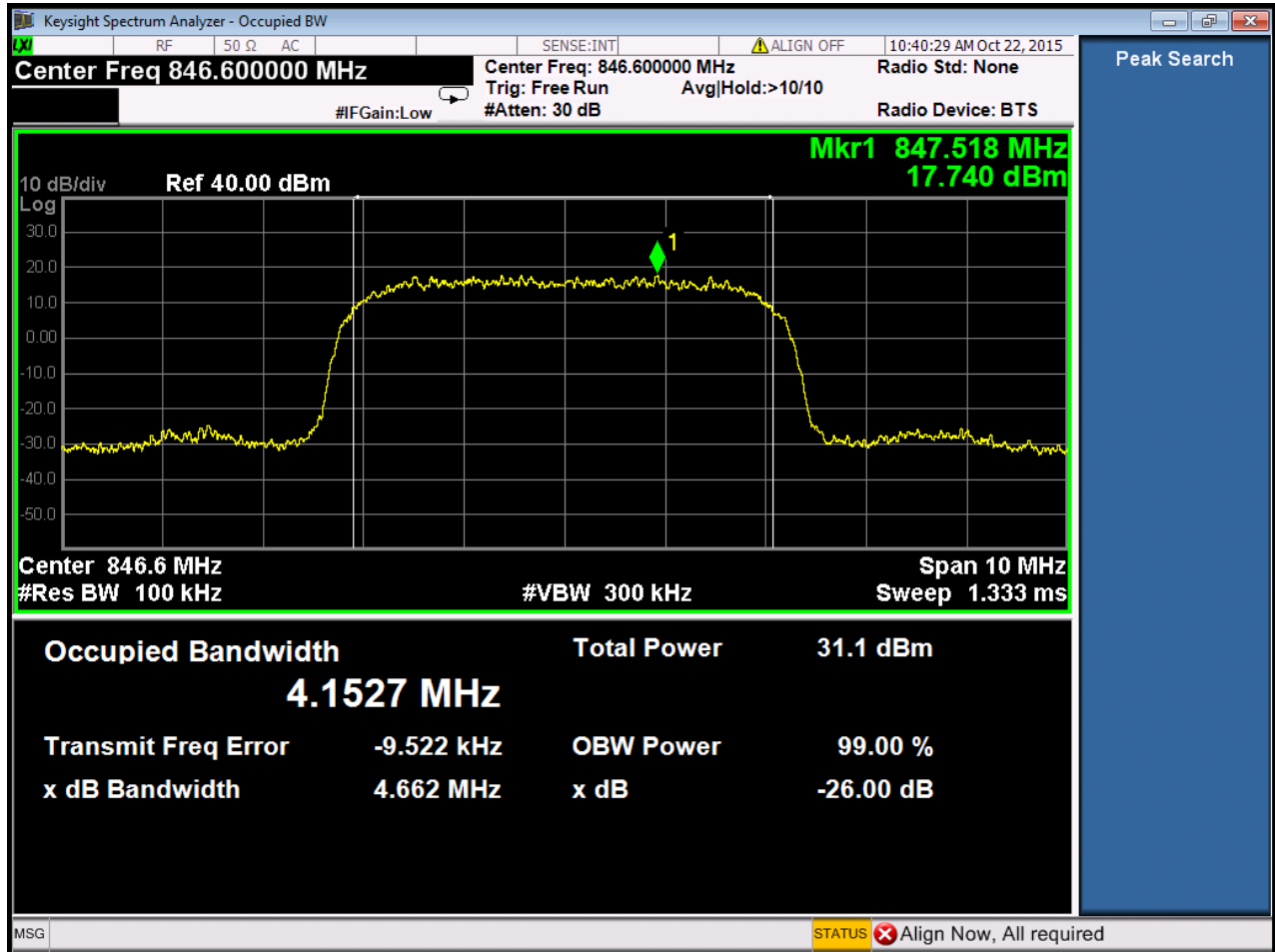


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4.1.3.1.3 Test Channel = HCH



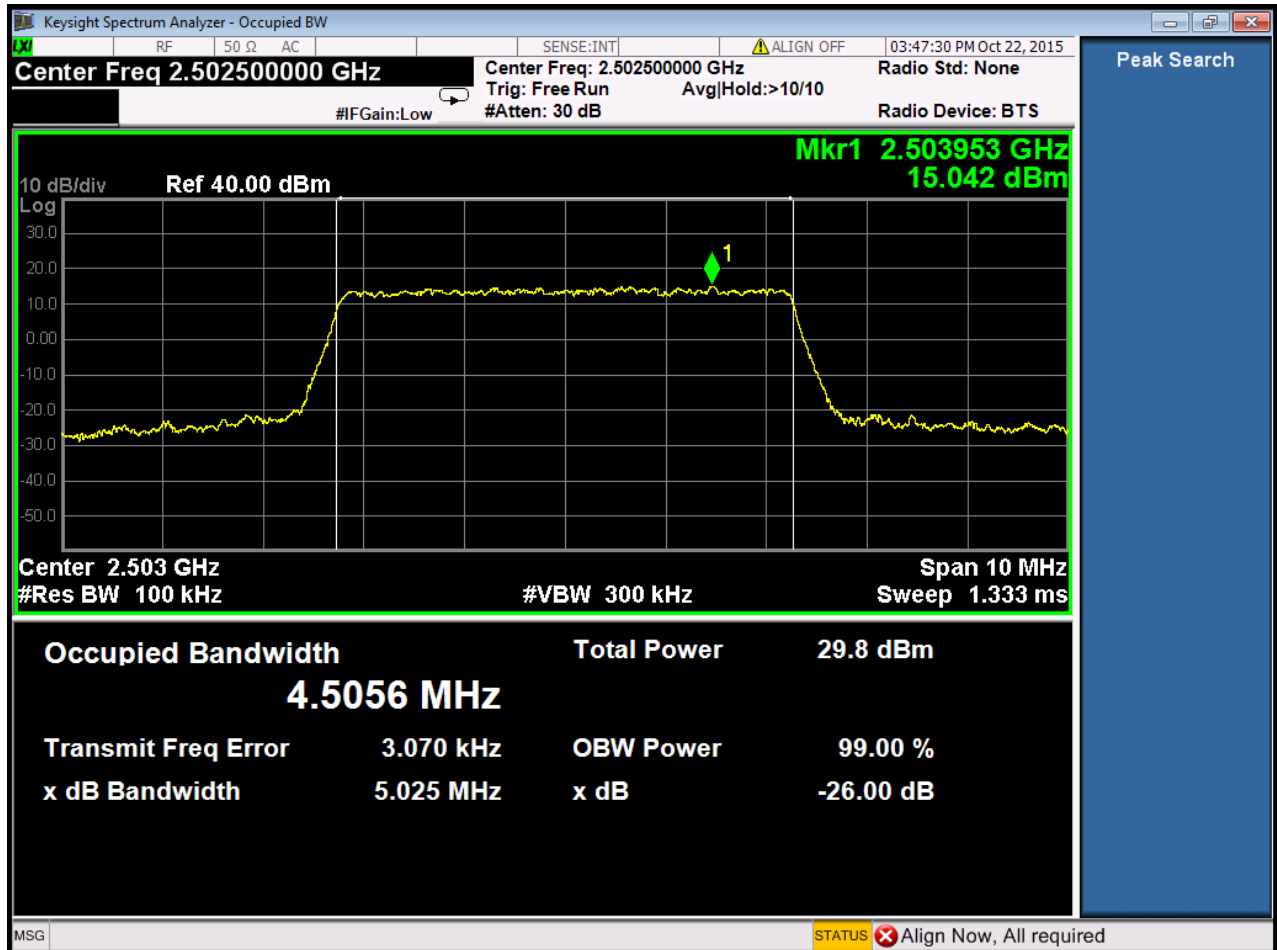
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4.1.4 Test Band = LTE Band 7

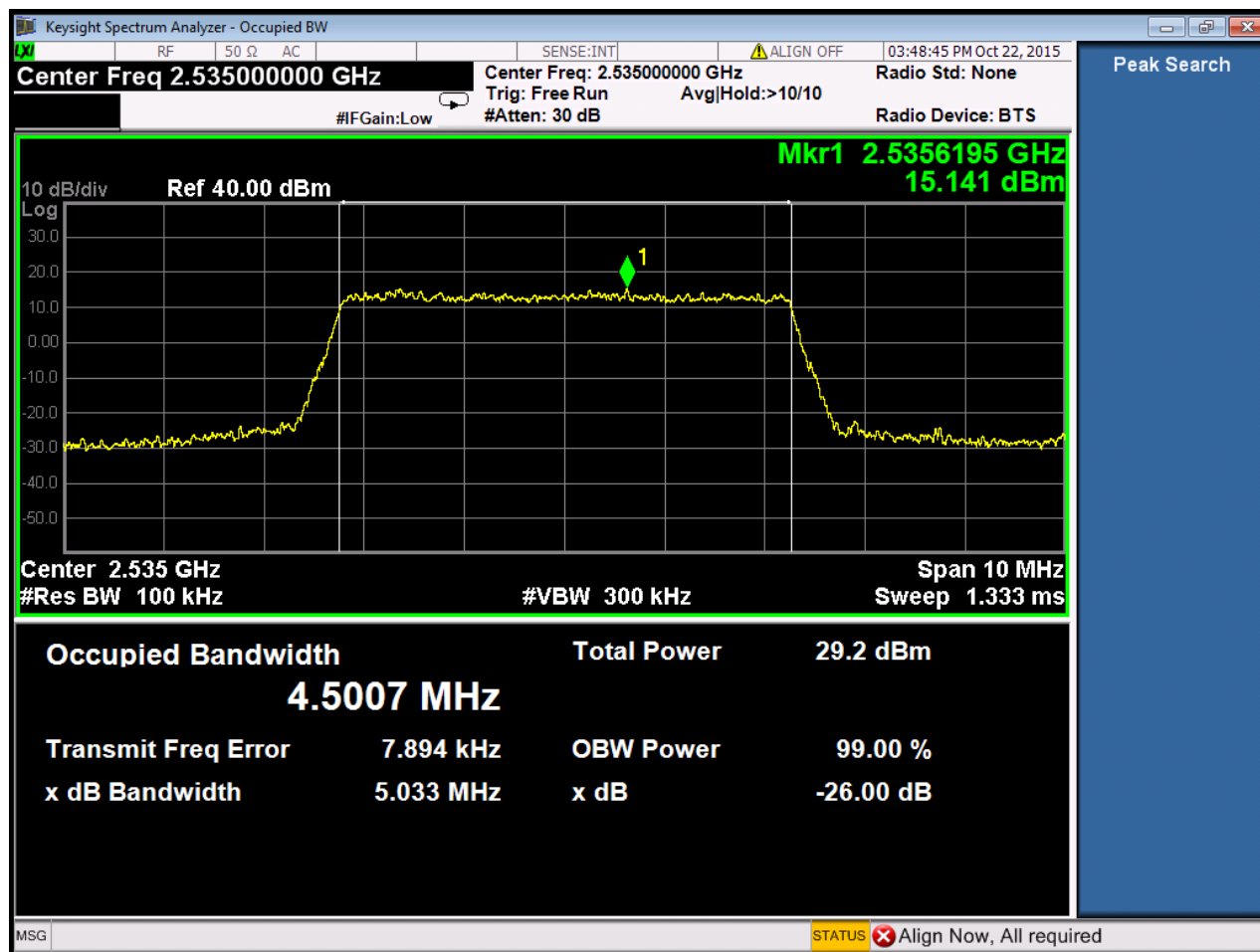
4.1.4.1 Test Mode = LTE/TM1 5MHz

4.1.4.1.1 Test Channel = LCH



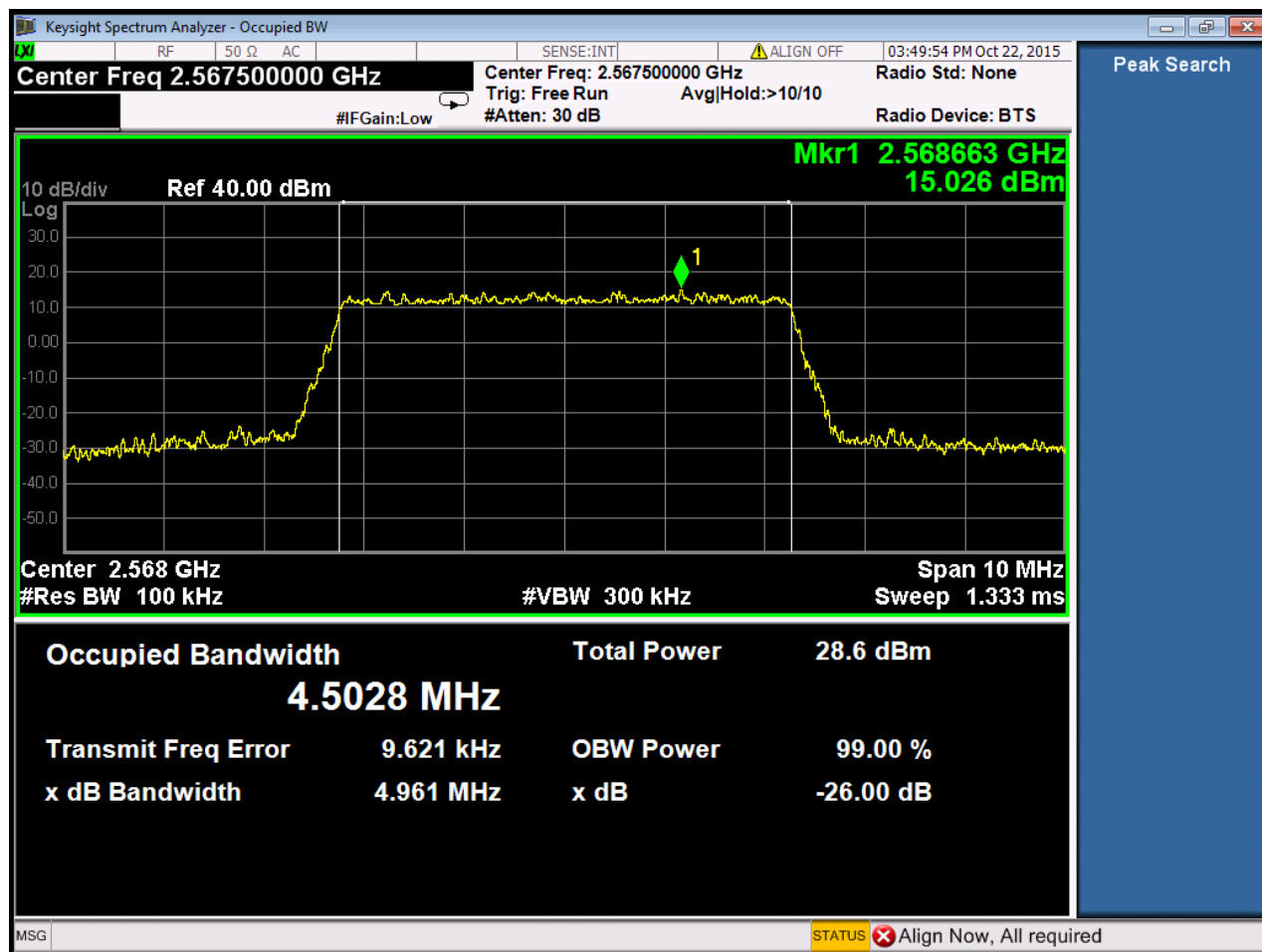


4.1.4.1.2 Test Channel = MCH





4.1.4.1.3 Test Channel = HCH





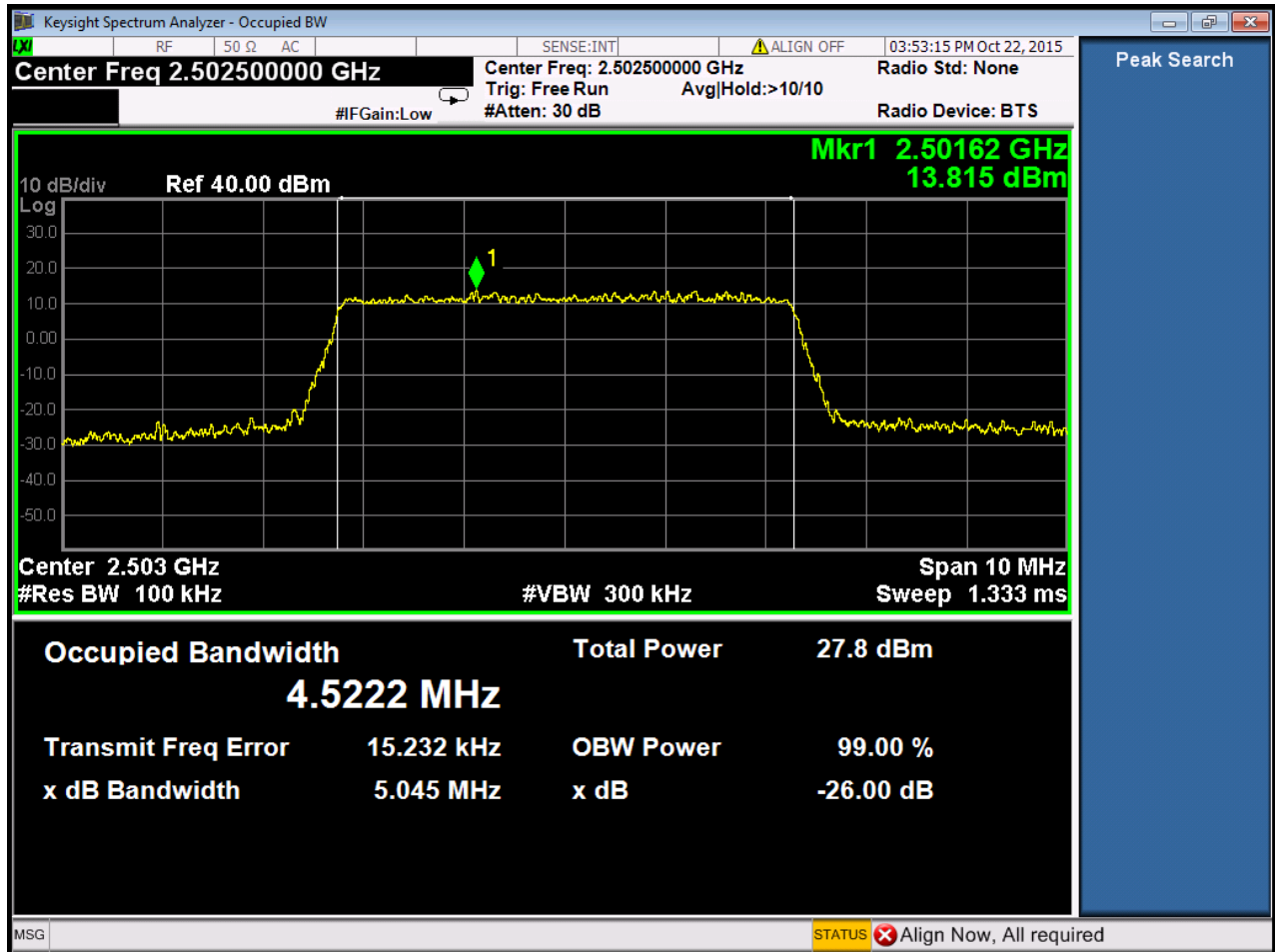
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4.1.4.2 Test Mode = LTE/TM2 5MHz

4.1.4.2.1 Test Channel = LCH



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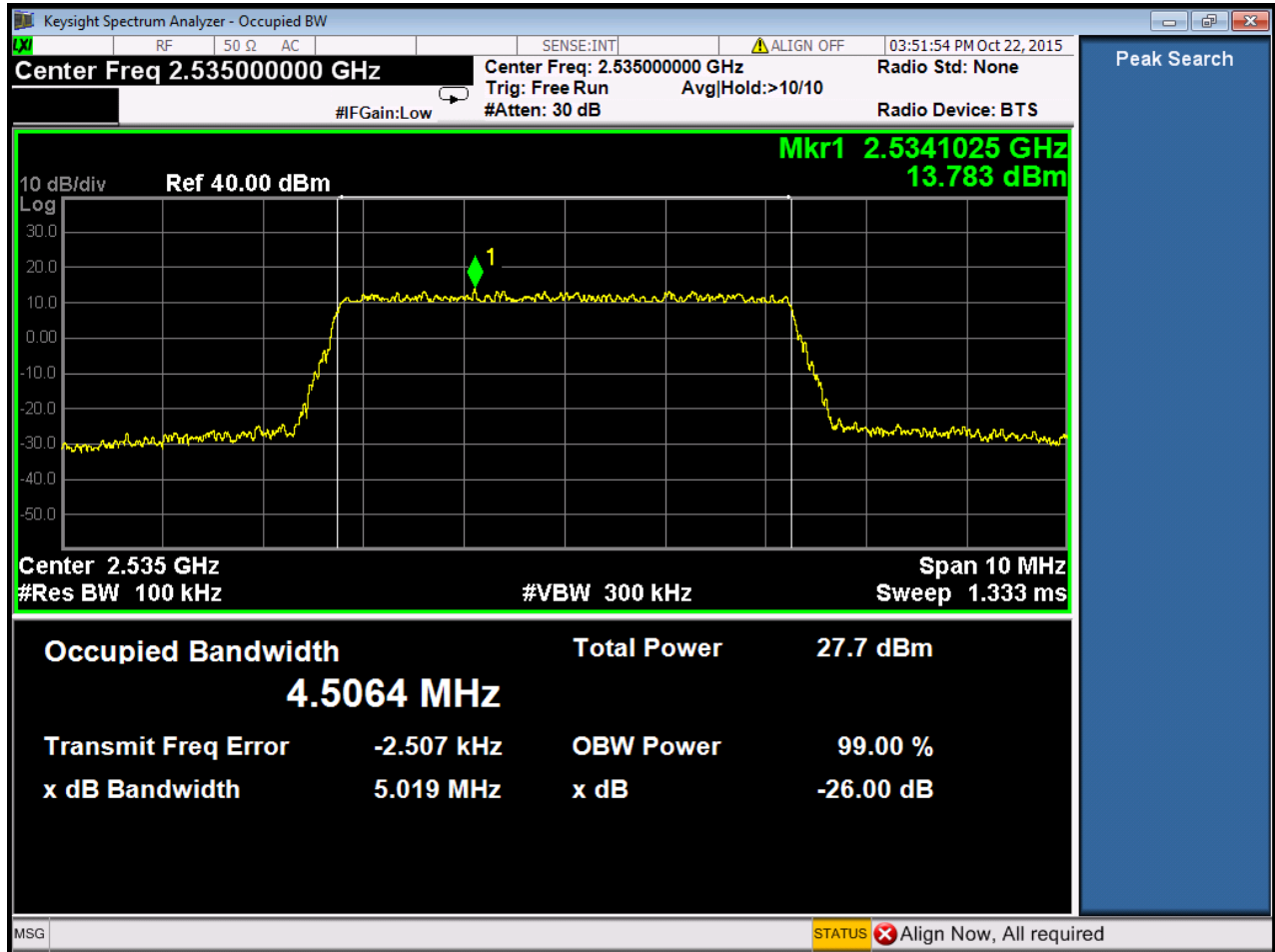


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4.1.4.2.2 Test Channel = MCH



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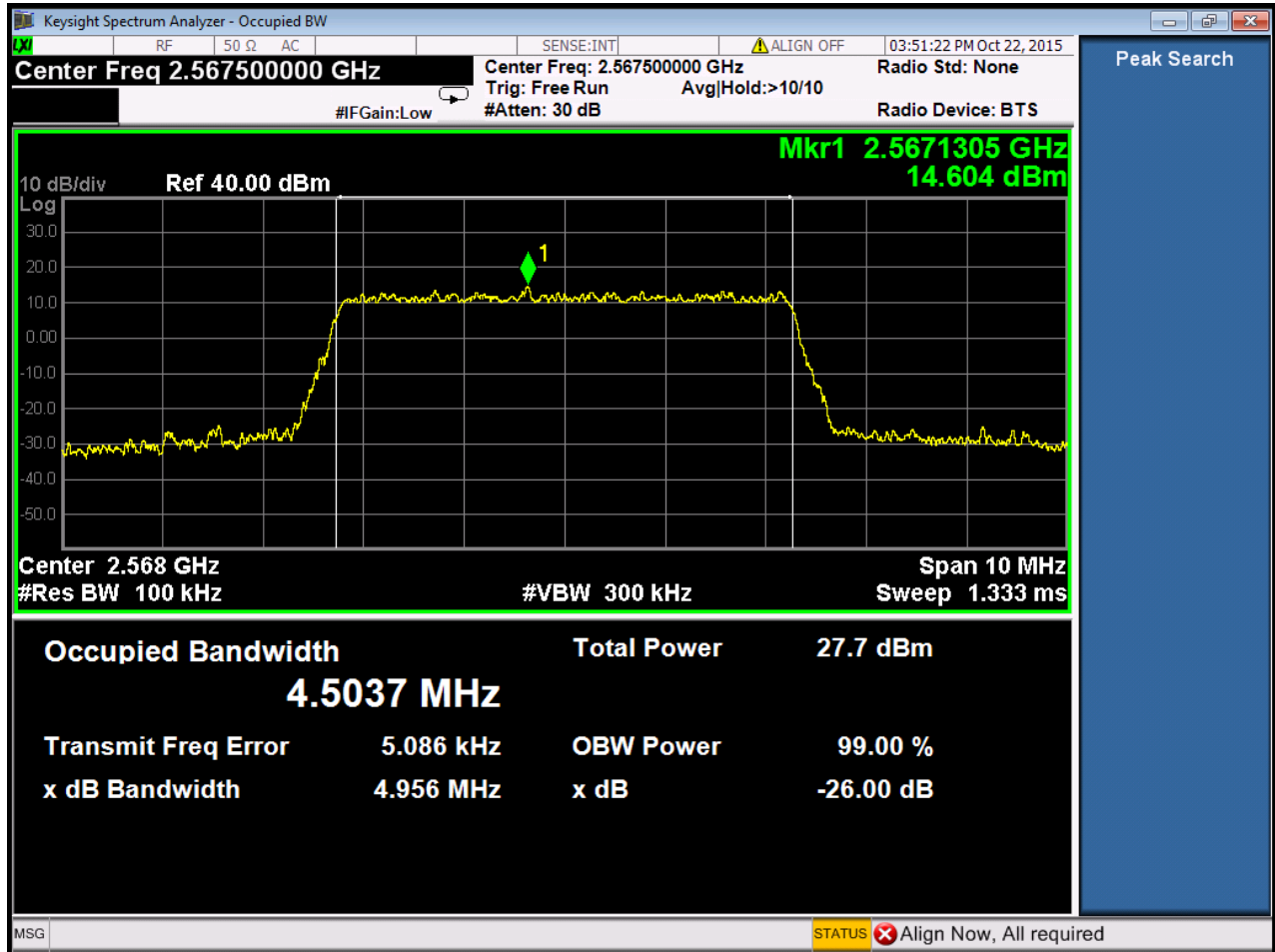


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4.1.4.2.3 Test Channel = HCH



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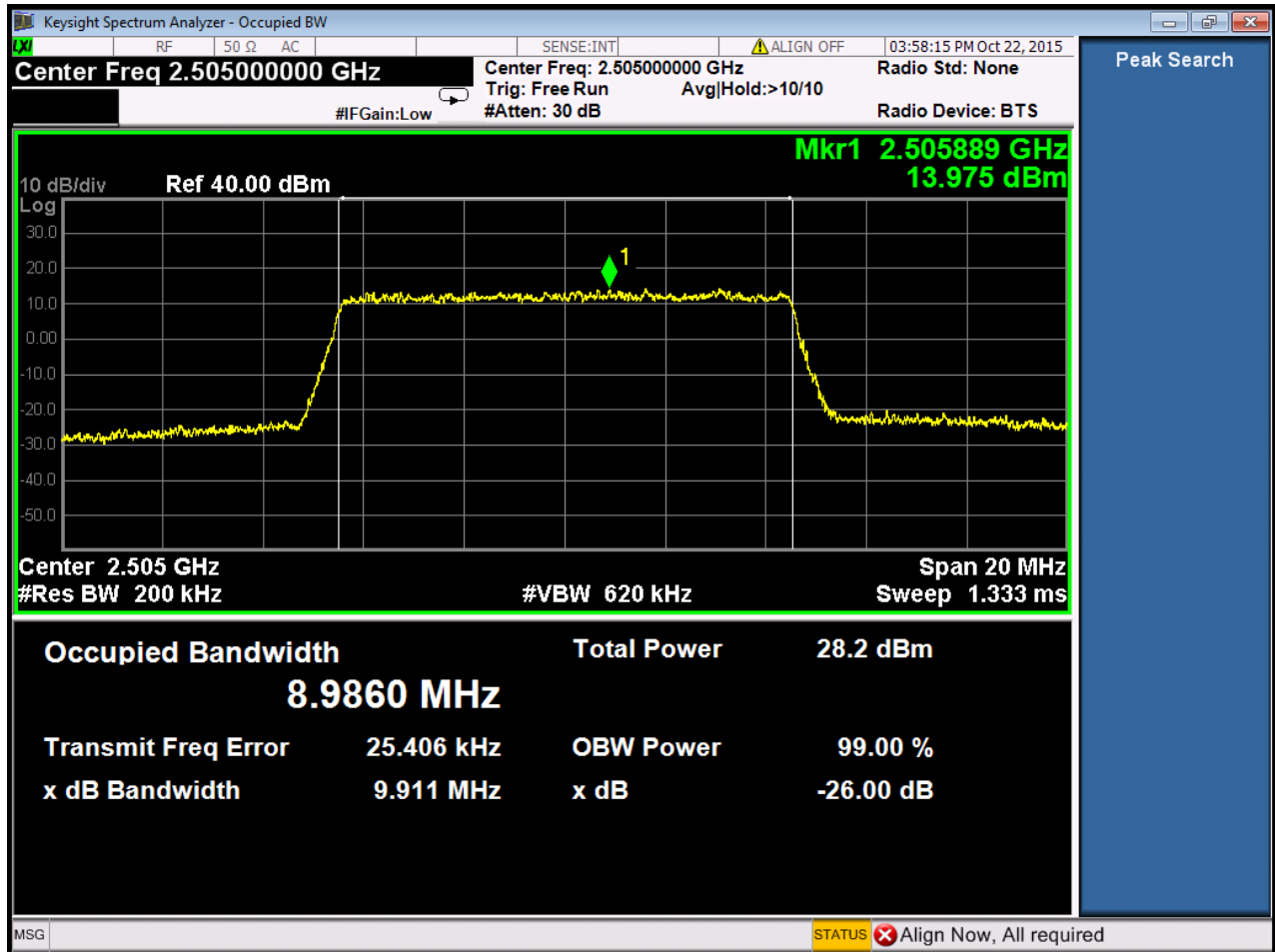
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4.1.4.3 Test Mode = LTE/TM1 10MHz

4.1.4.3.1 Test Channel = LCH



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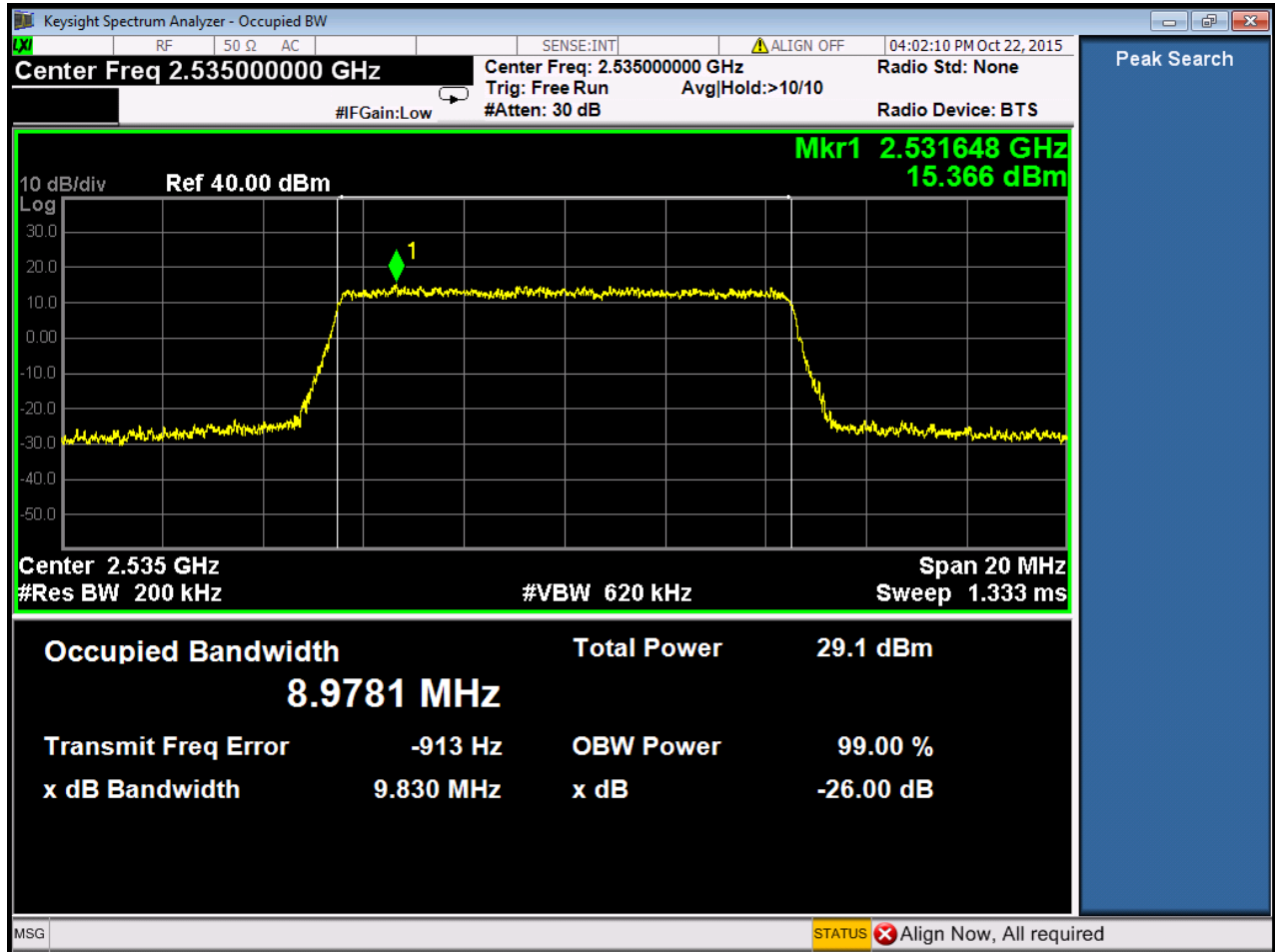


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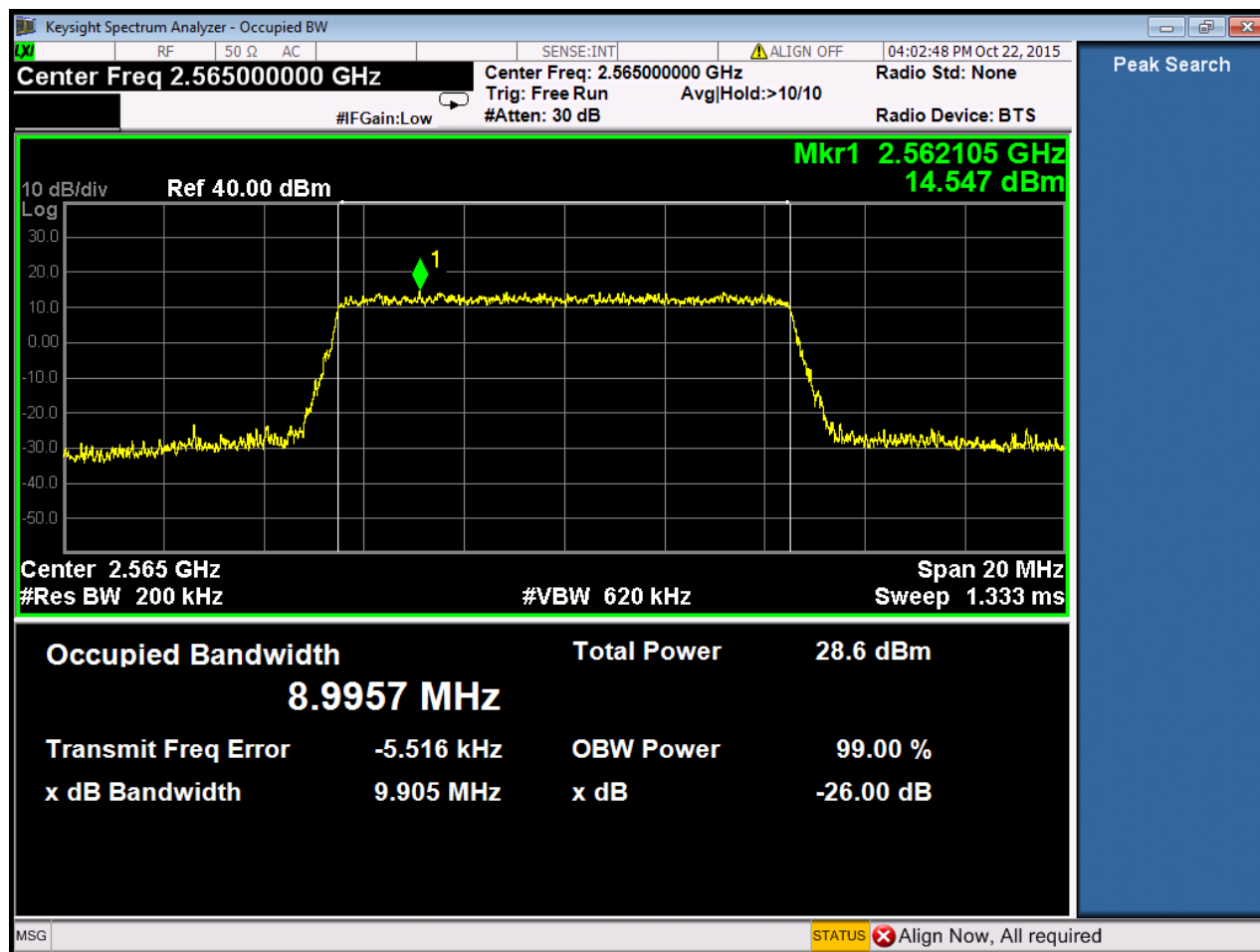
4.1.4.3.2 Test Channel = MCH



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4.1.4.3.3 Test Channel = HCH





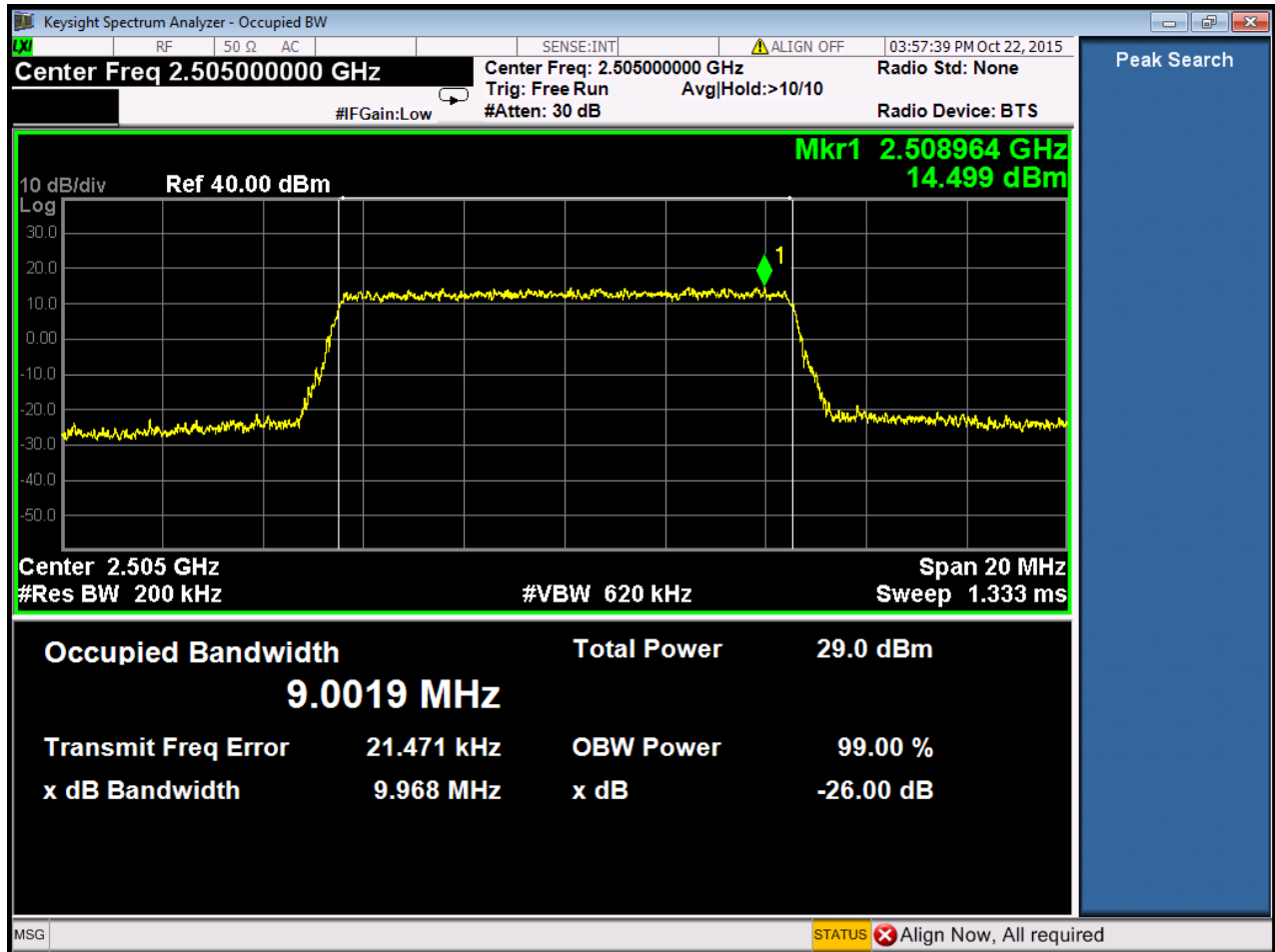
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4.1.4.4 Test Mode = LTE/TM2 10MHz

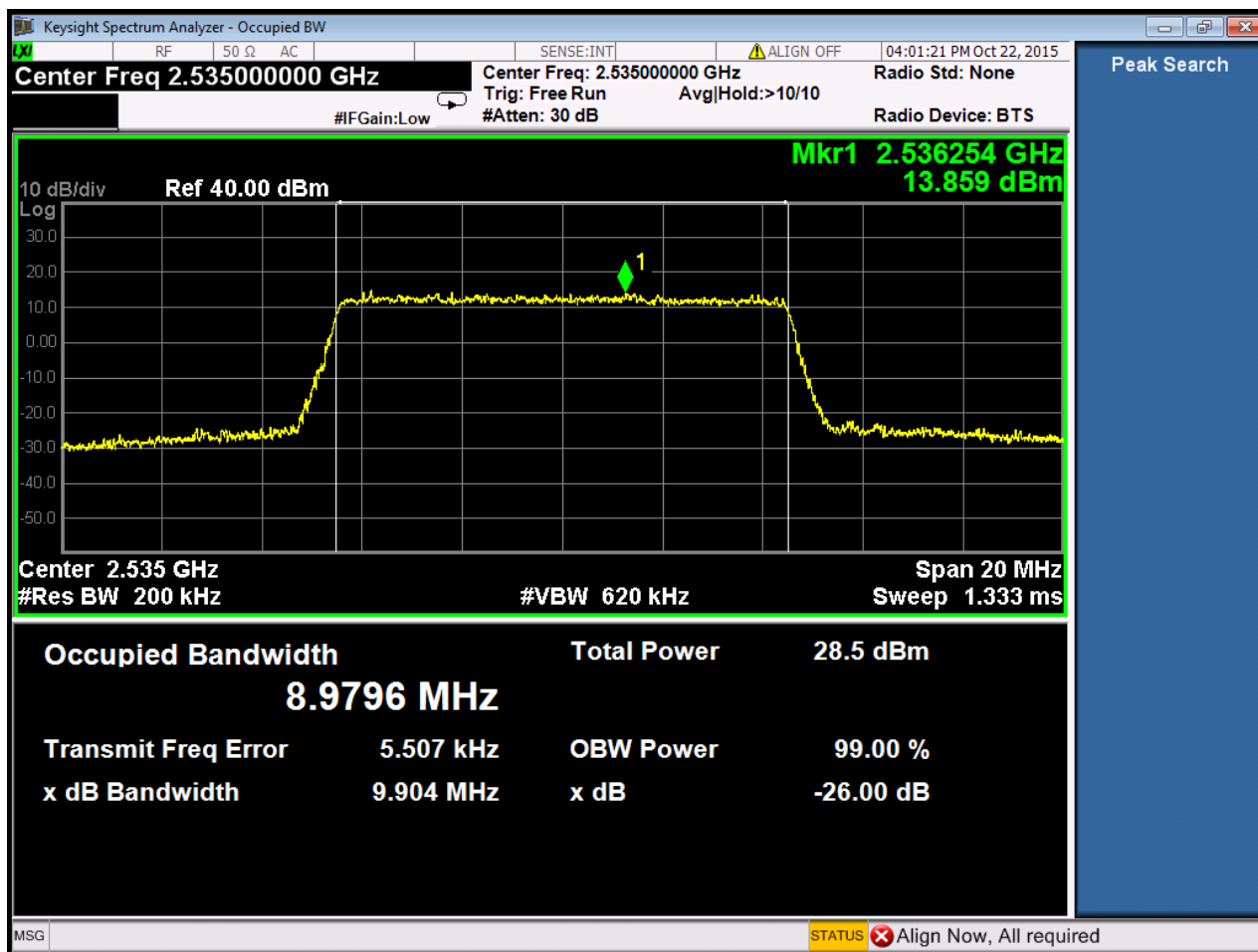
4.1.4.4.1 Test Channel = LCH



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4.1.4.4.2 Test Channel = MCH



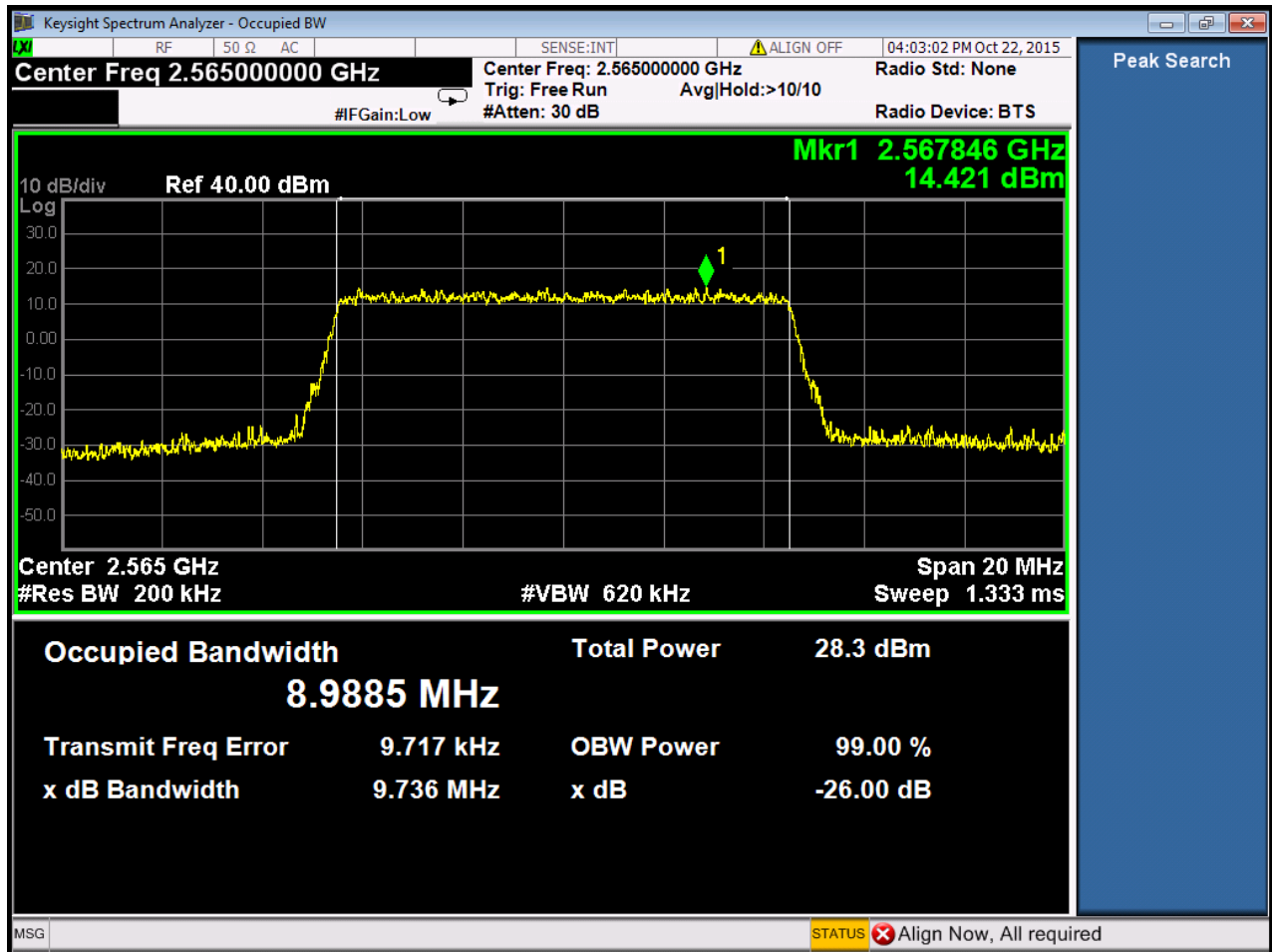


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4.1.4.4.3 Test Channel = HCH



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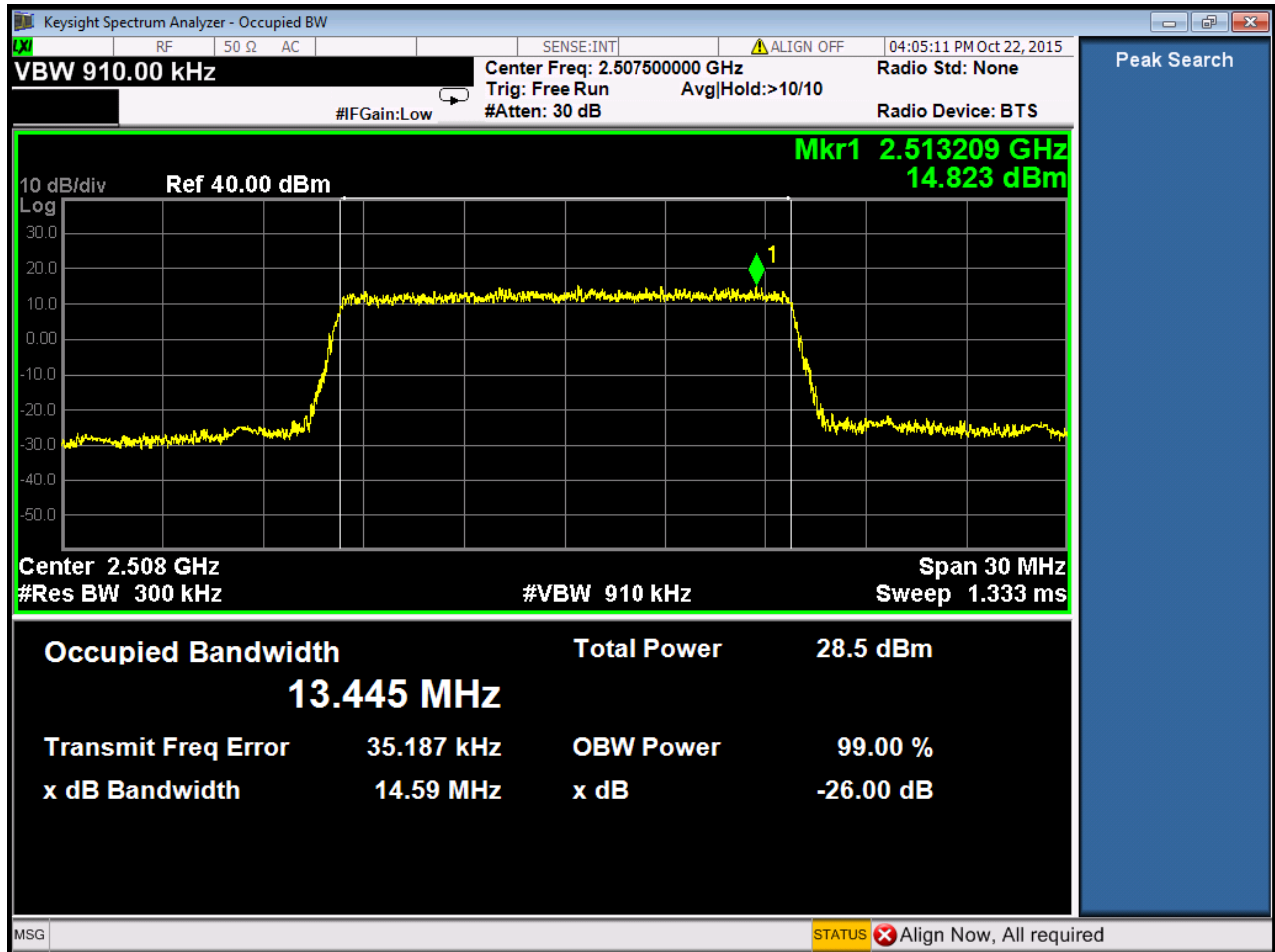
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4.1.4.5 Test Mode = LTE/TM1 15MHz

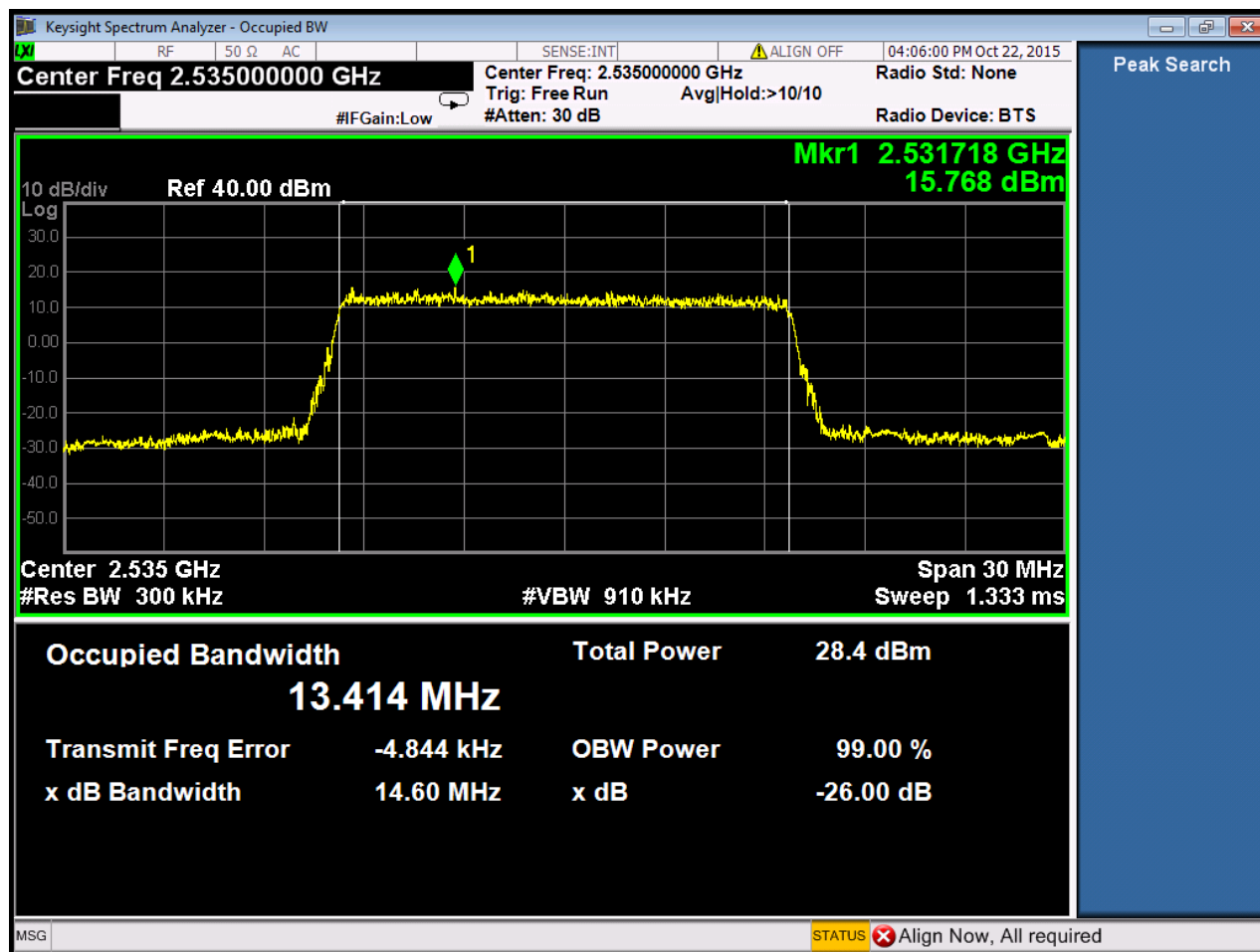
4.1.4.5.1 Test Channel = LCH



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4.1.4.5.2 Test Channel = MCH



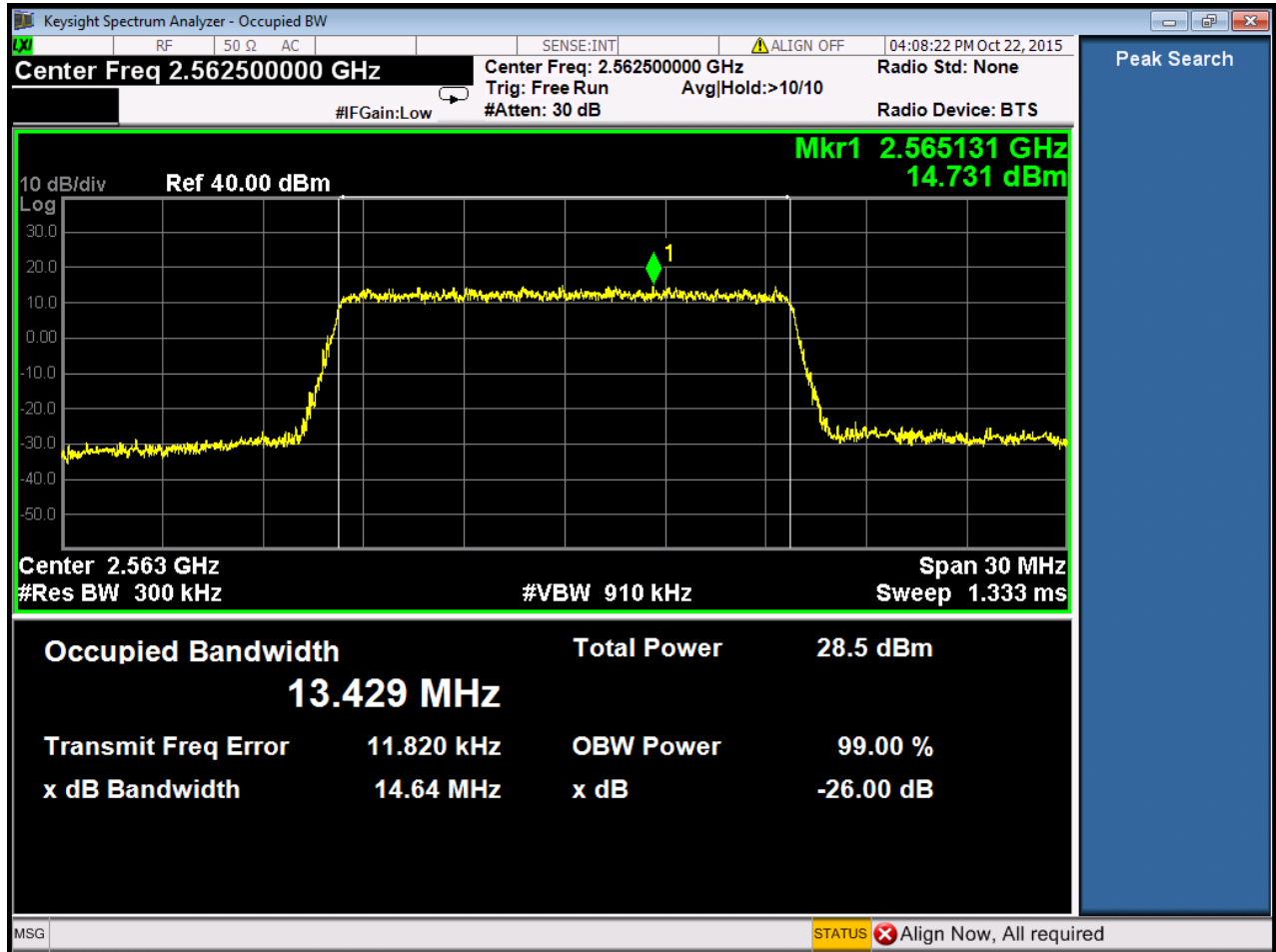


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4.1.4.5.3 Test Channel = HCH



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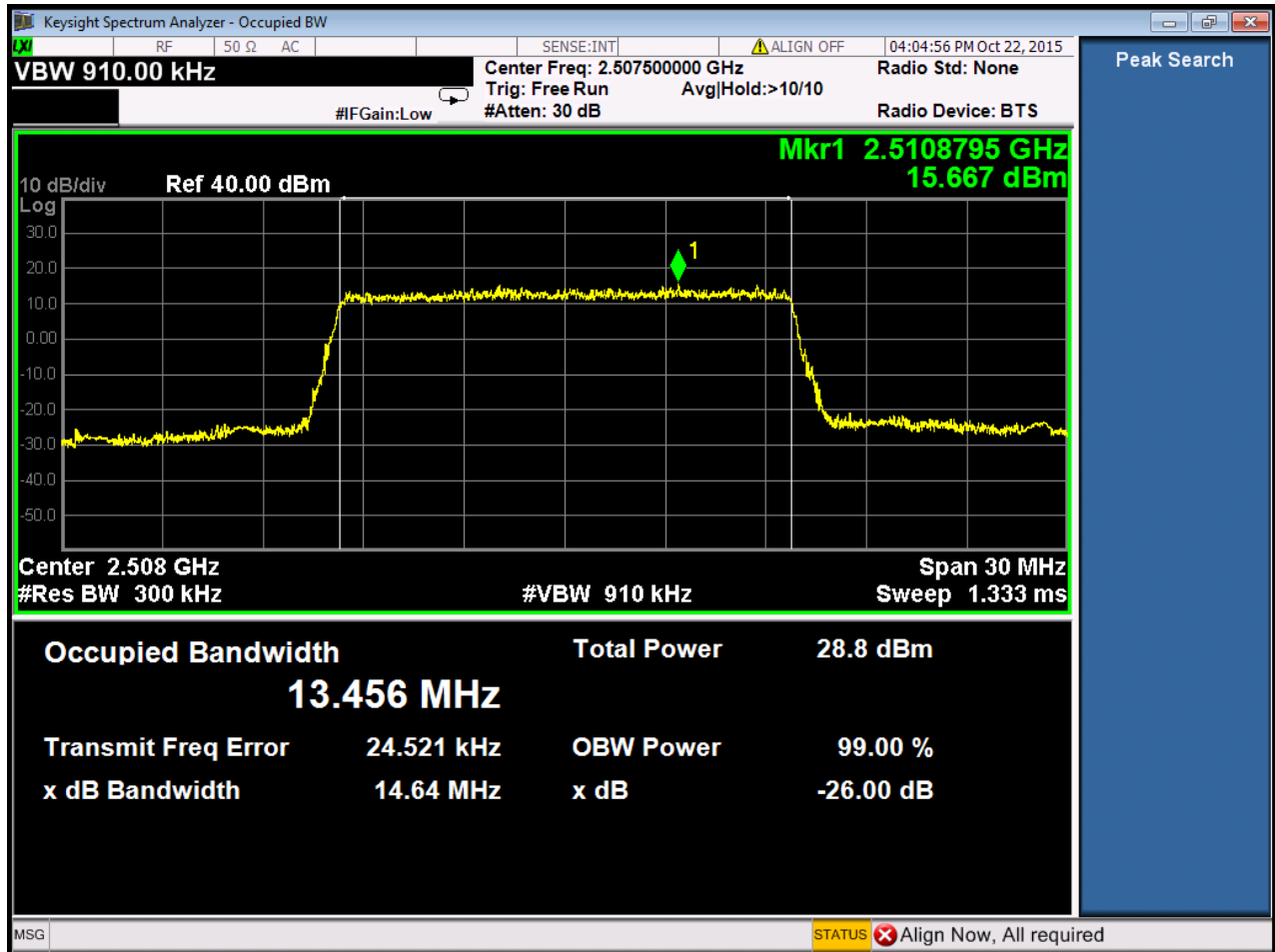
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4.1.4.6 Test Mode = LTE/TM2 15MHz

4.1.4.6.1 Test Channel = LCH



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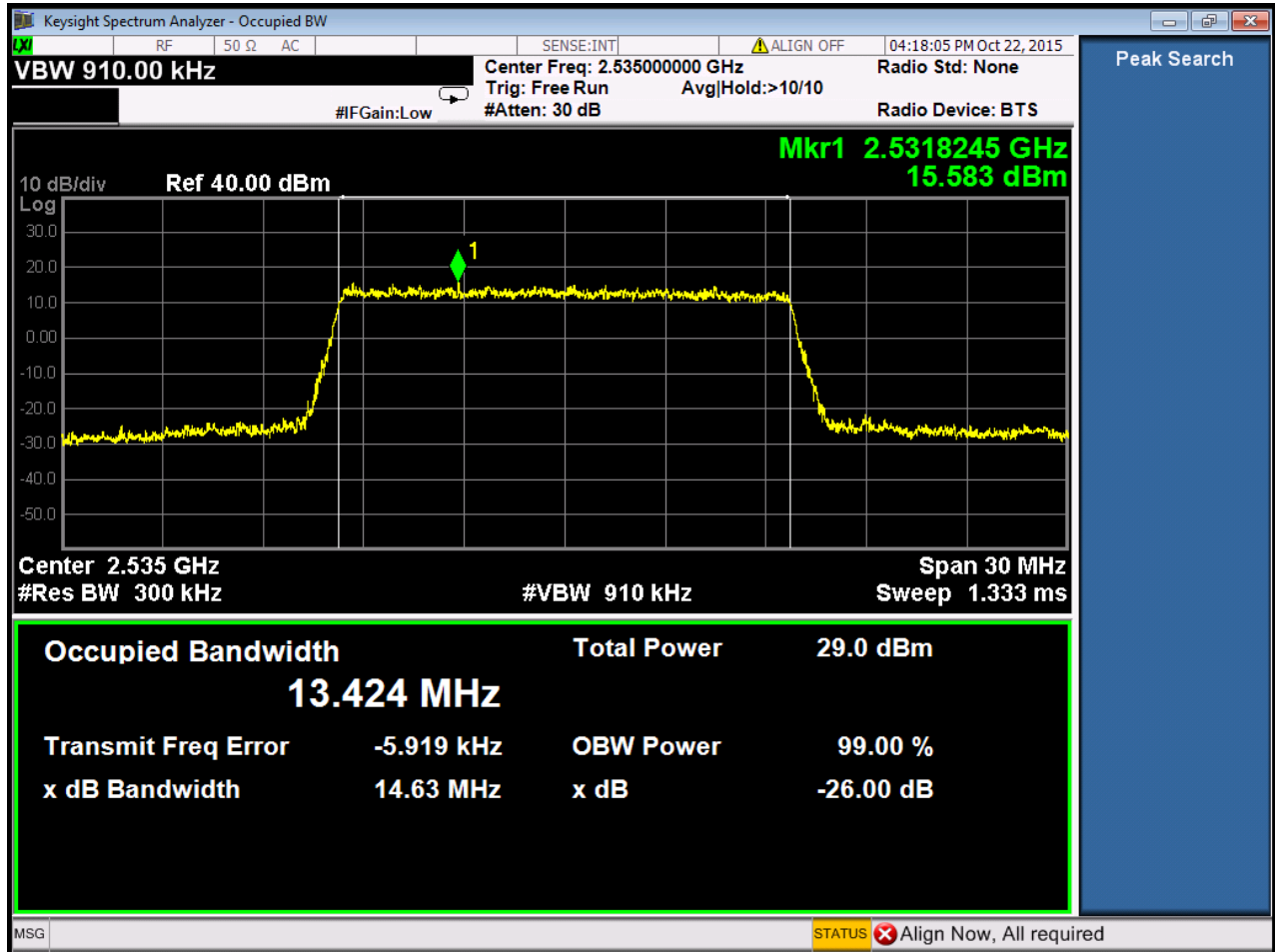


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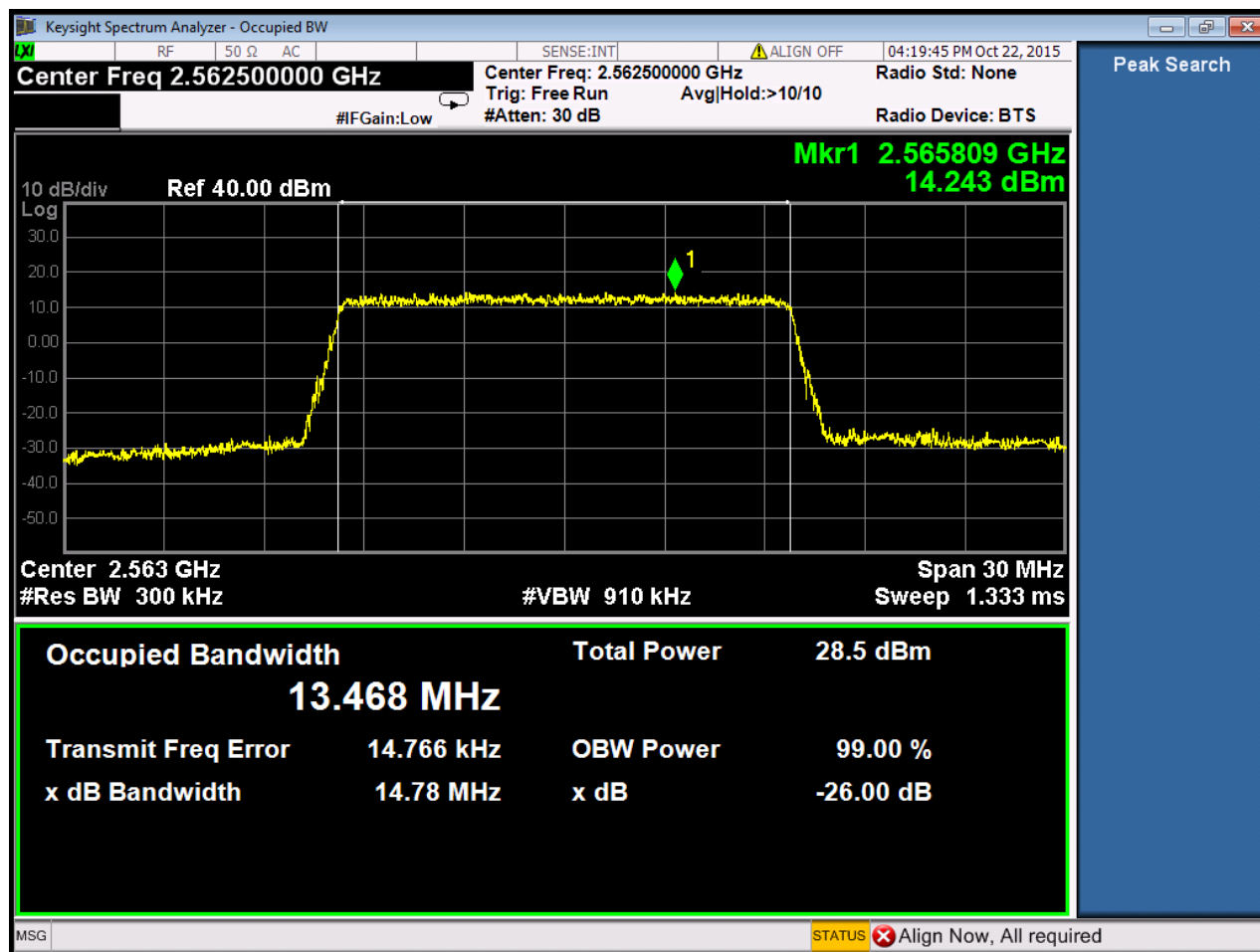
4.1.4.6.2 Test Channel = MCH



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4.1.4.6.3 Test Channel = HCH





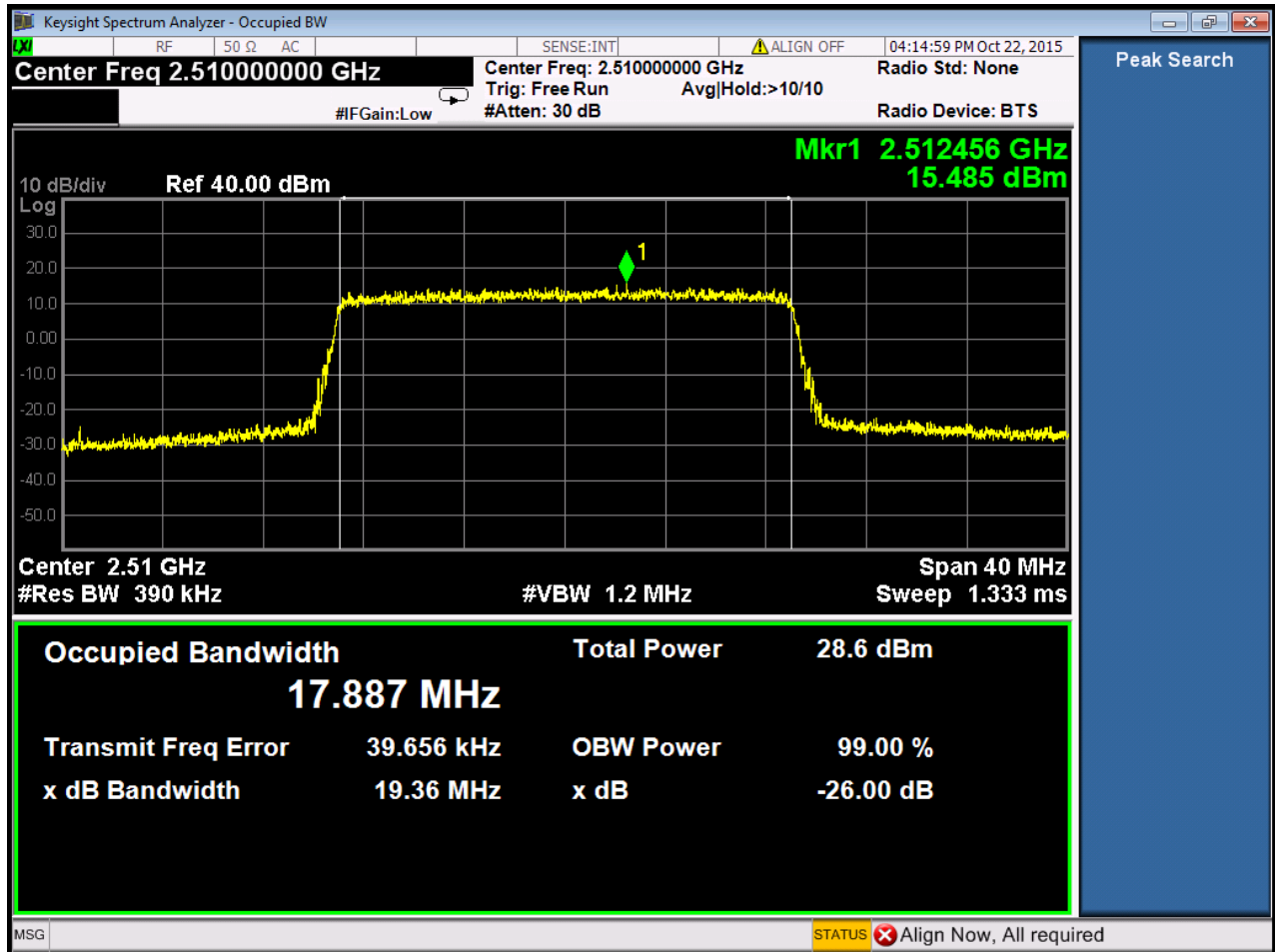
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4.1.4.7 Test Mode = LTE/TM1 20MHz

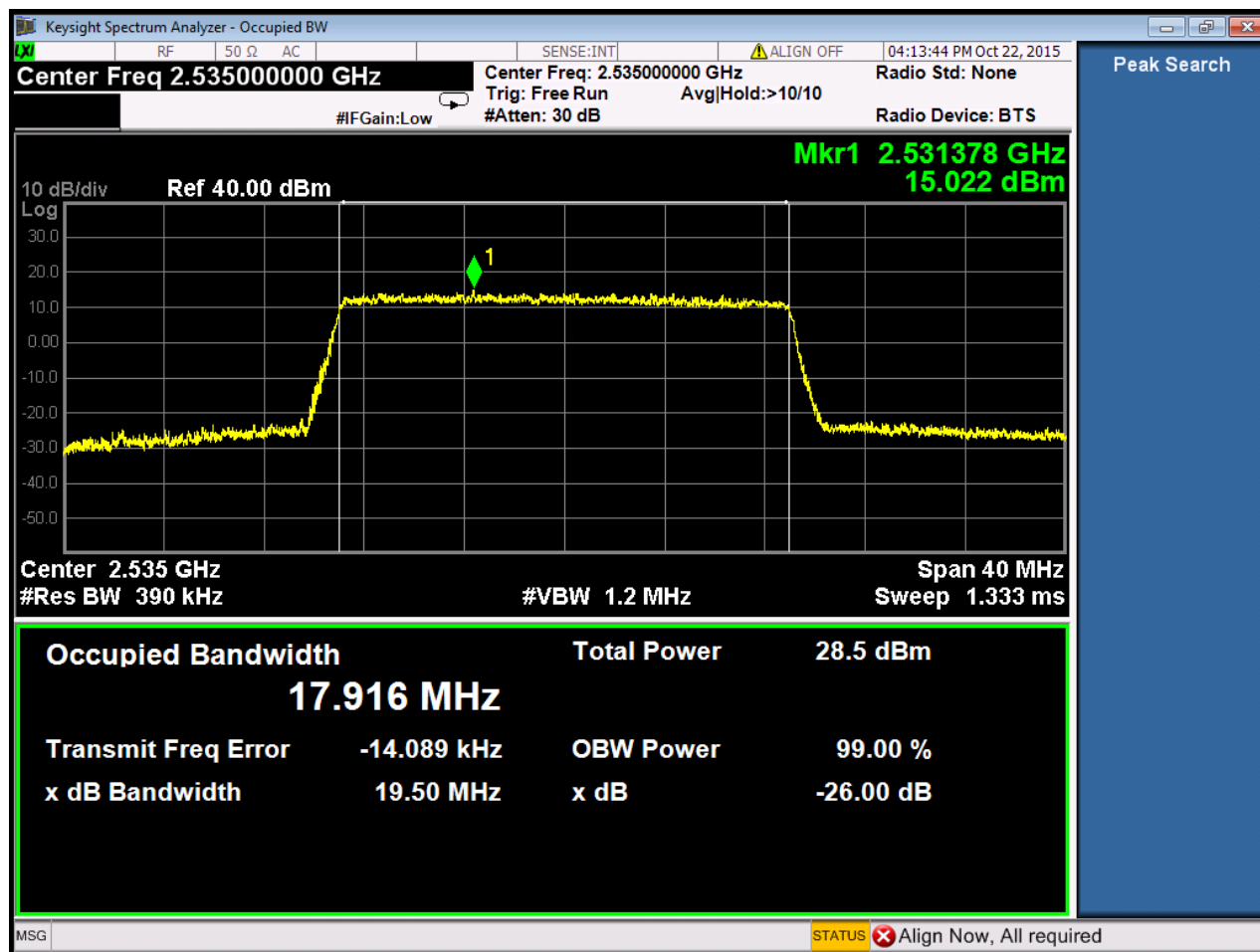
4.1.4.7.1 Test Channel = LCH



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4.1.4.7.2 Test Channel = MCH



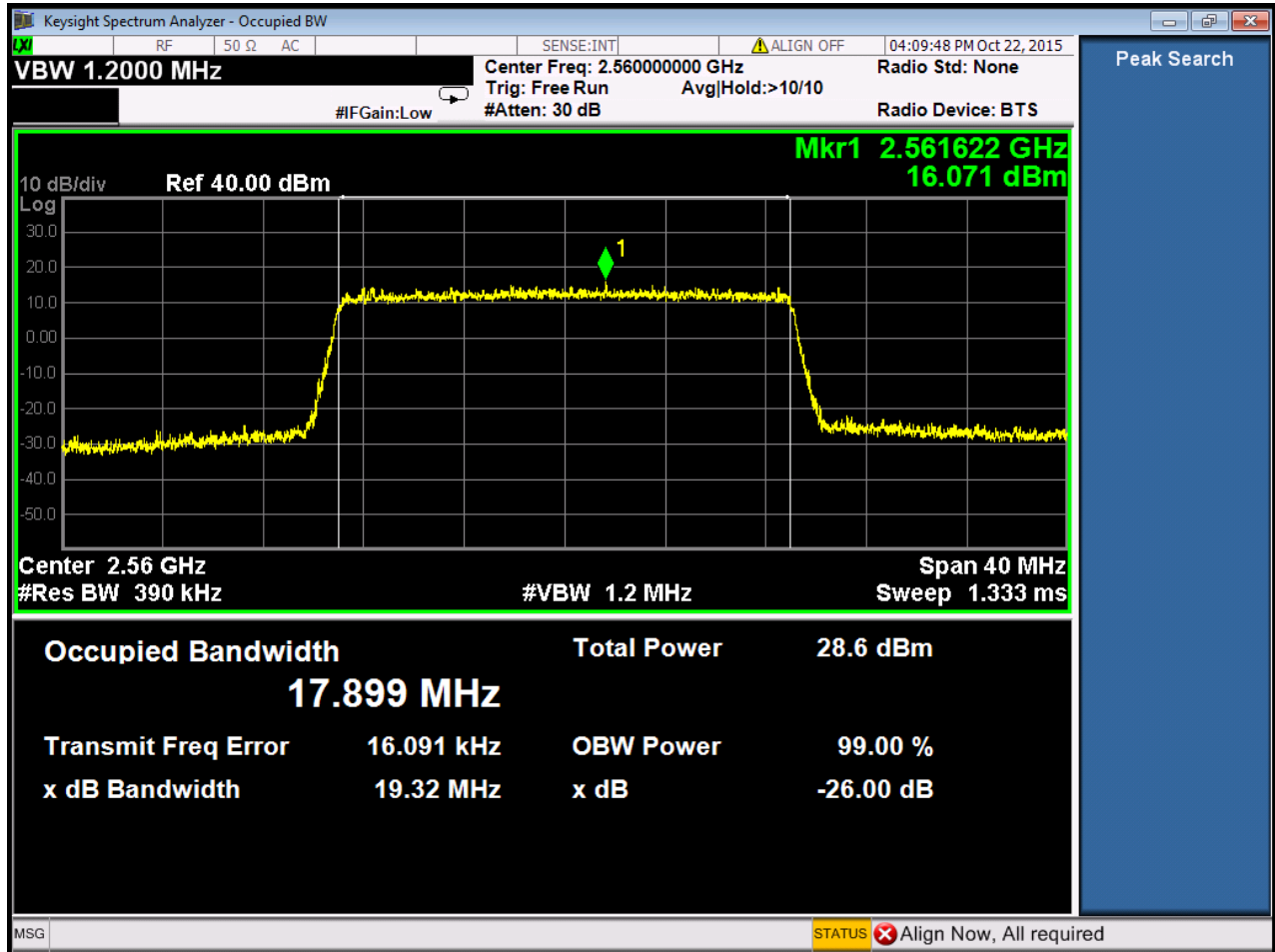


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4.1.4.7.3 Test Channel = HCH



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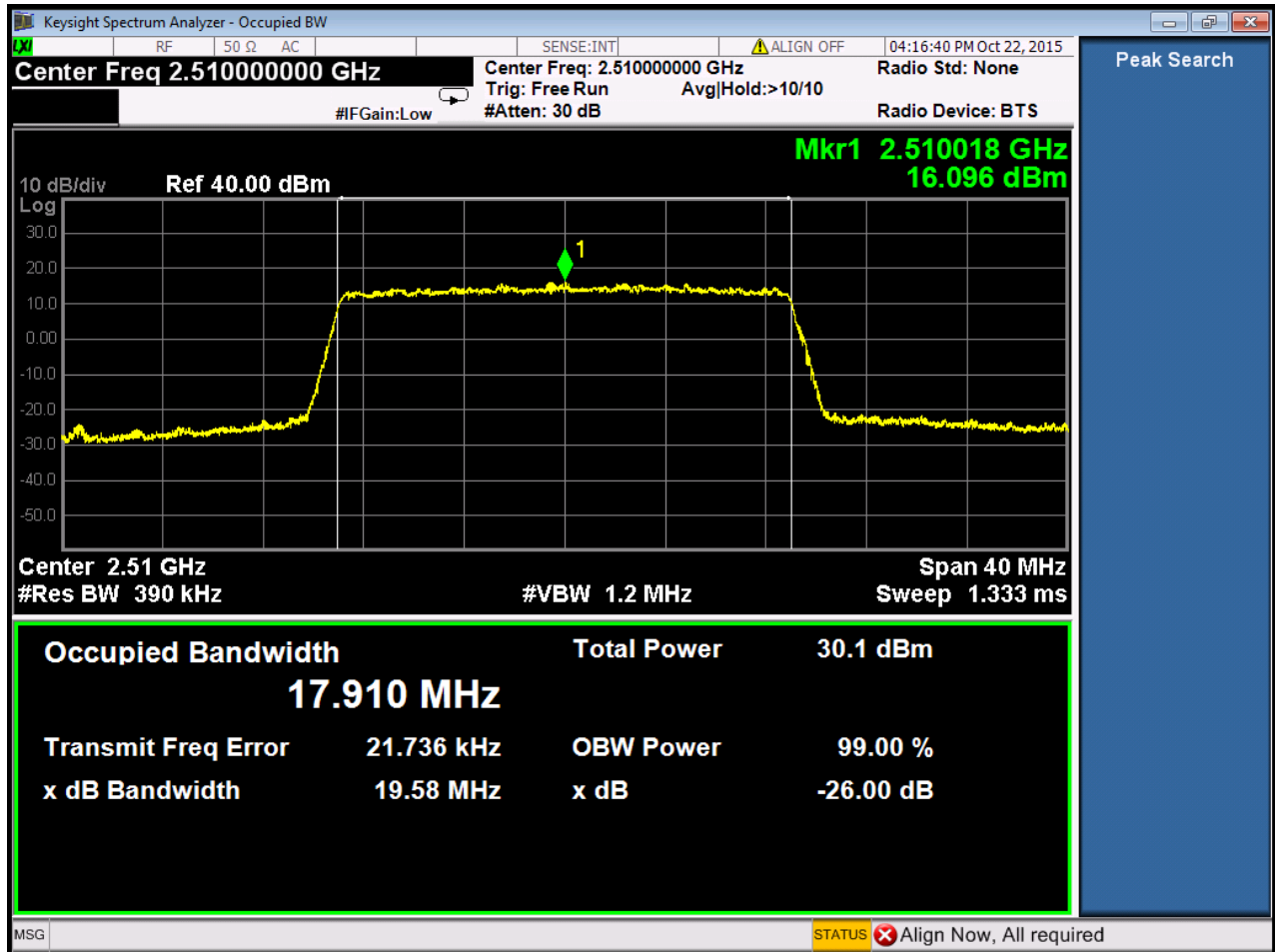
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4.1.4.8 Test Mode = LTE/TM2 20MHz

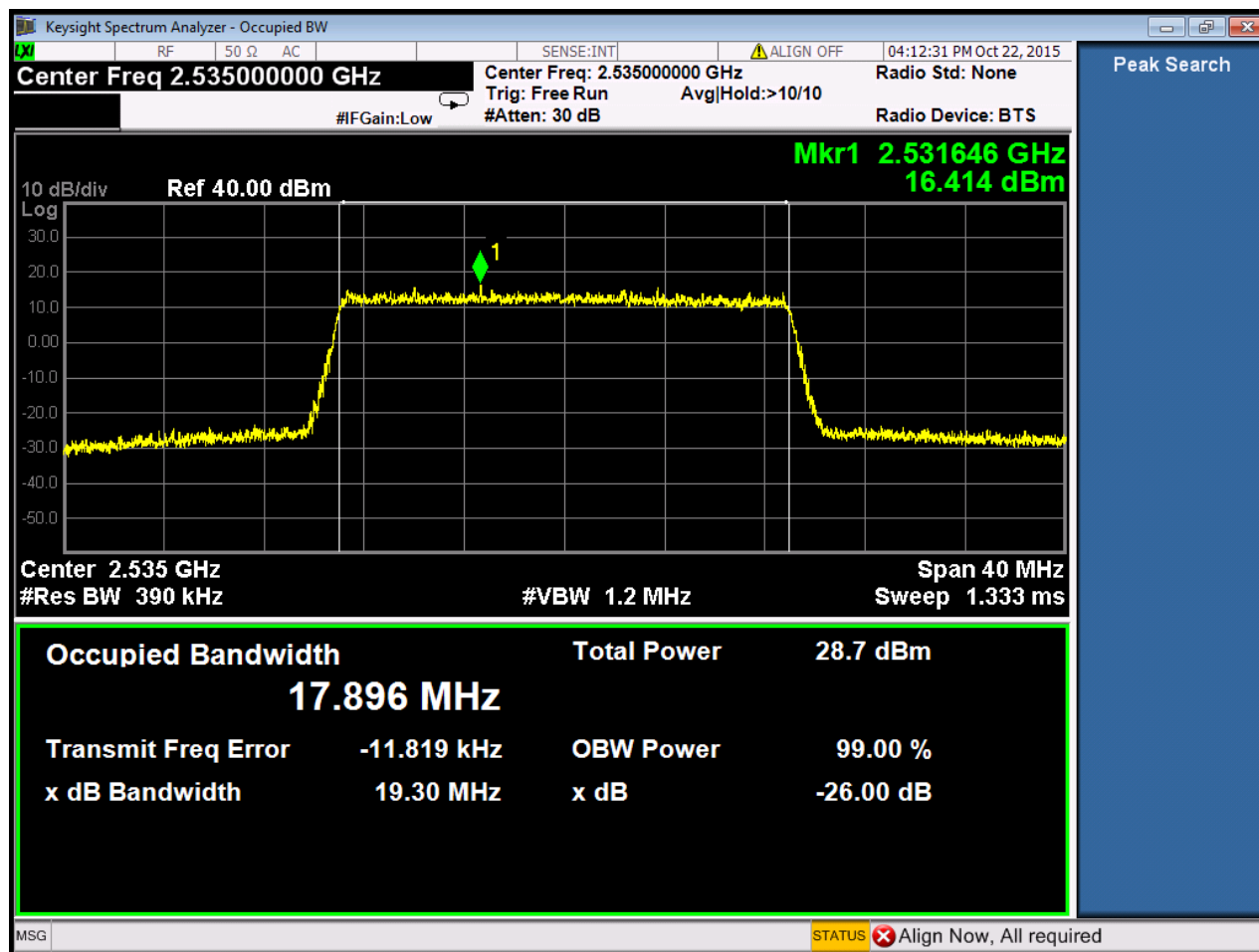
4.1.4.8.1 Test Channel = LCH



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4.1.4.8.2 Test Channel = MCH



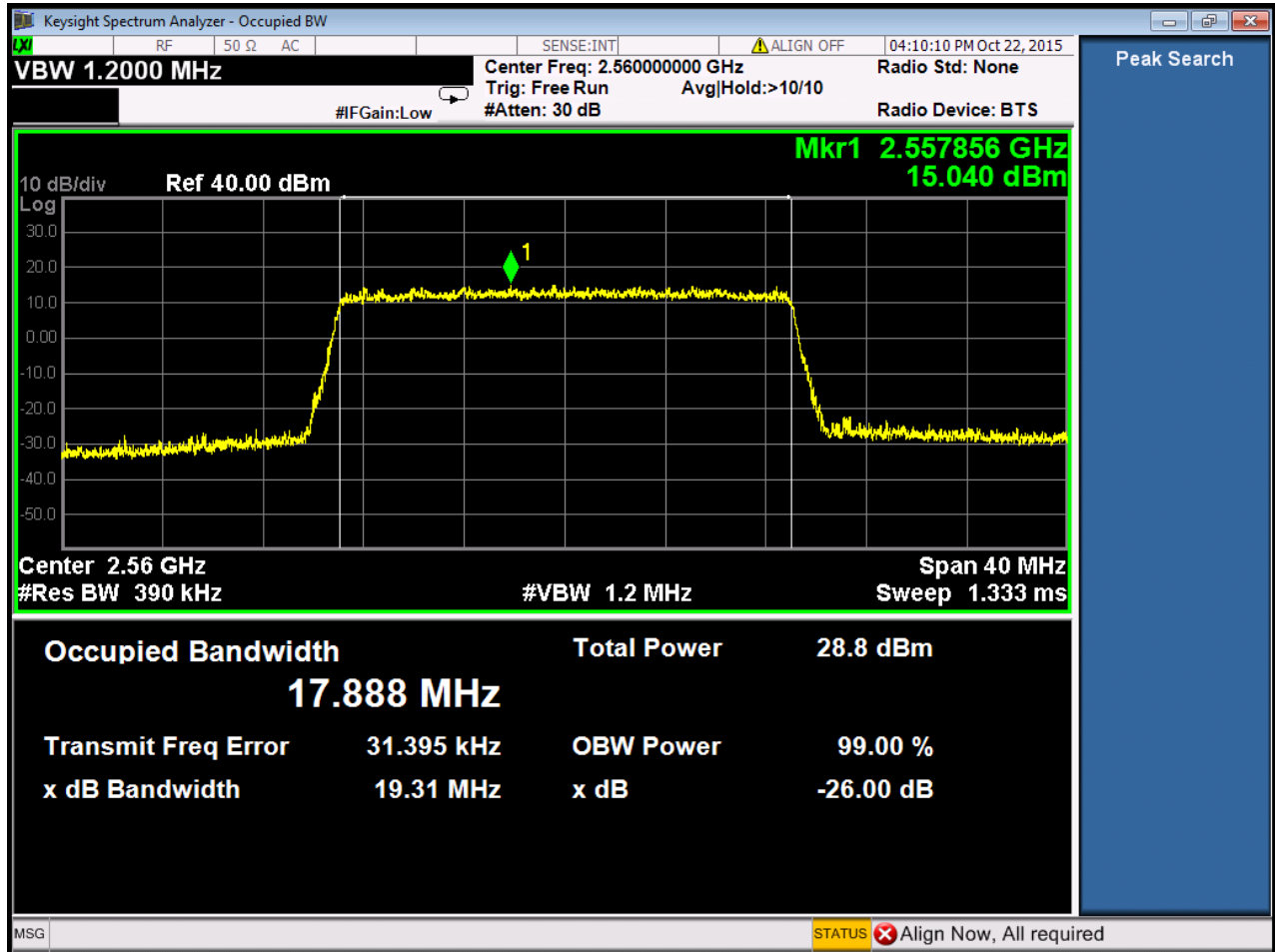


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4.1.4.8.3 Test Channel = HCH



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5 Band Edges Compliance

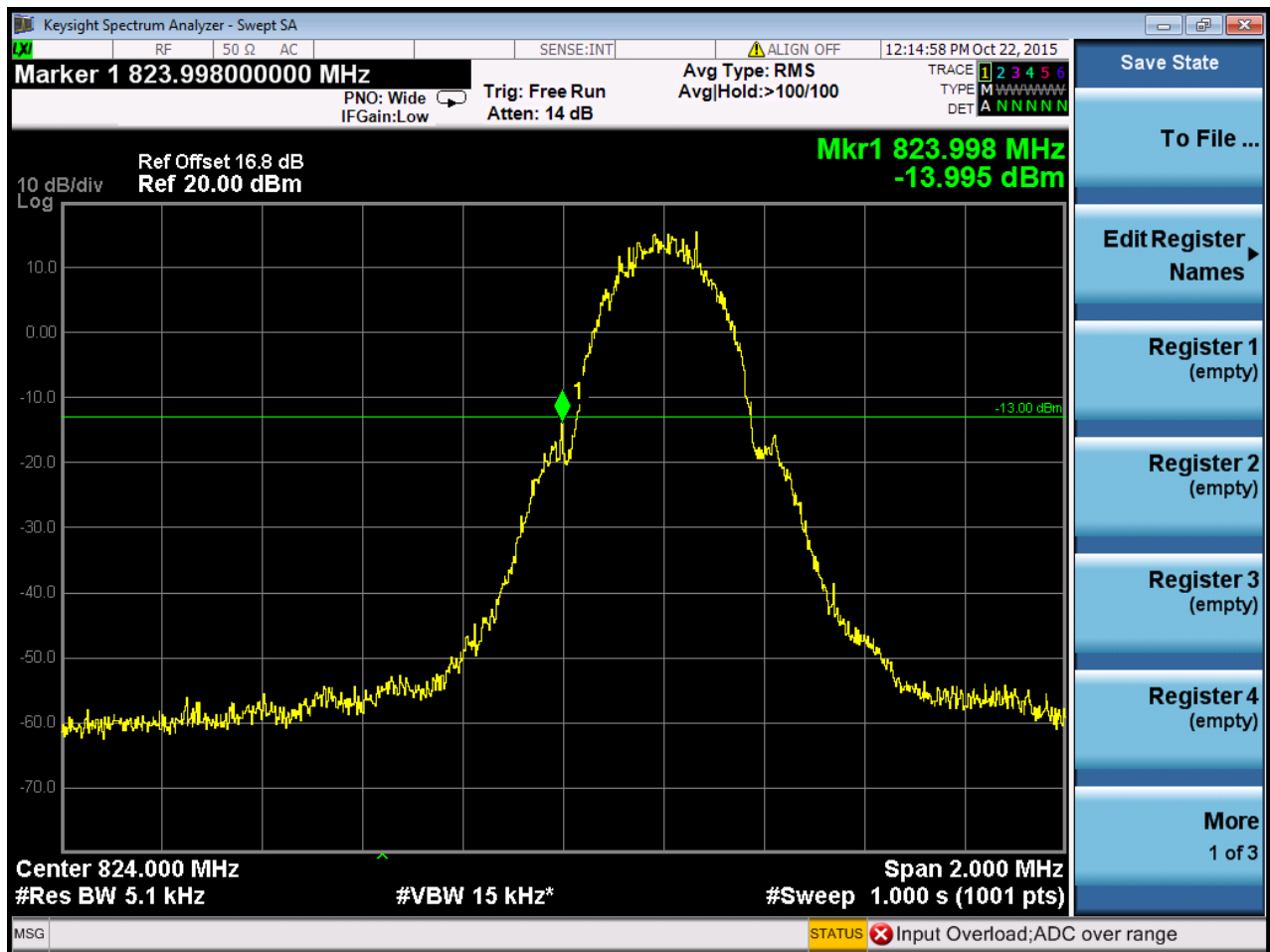
Part I - Test Plots

5.1 For GSM

5.1.1 Test Band = GSM850

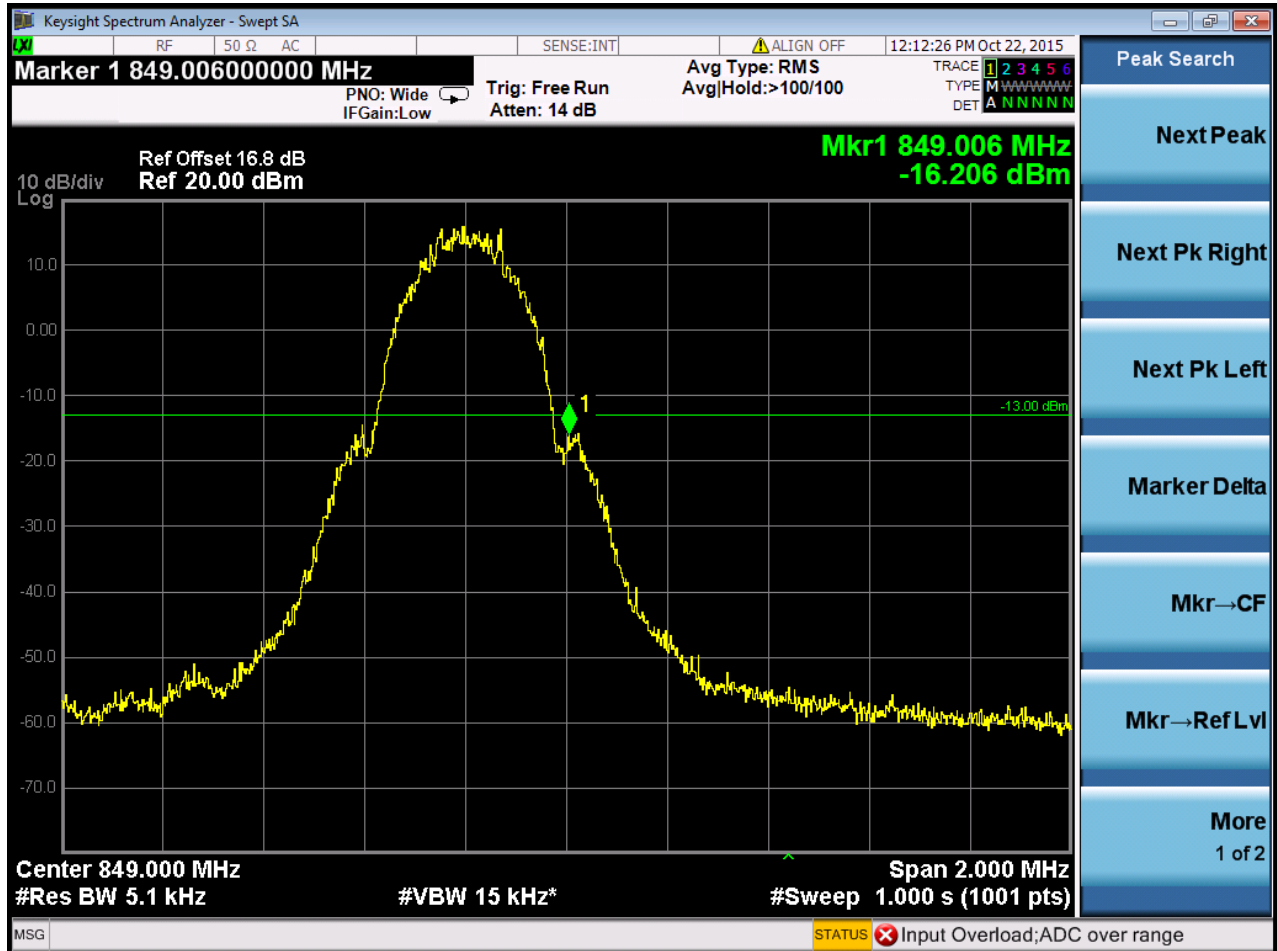
5.1.1.1 Test Mode = GSM/TM1

5.1.1.1.1 Test Channel = LCH



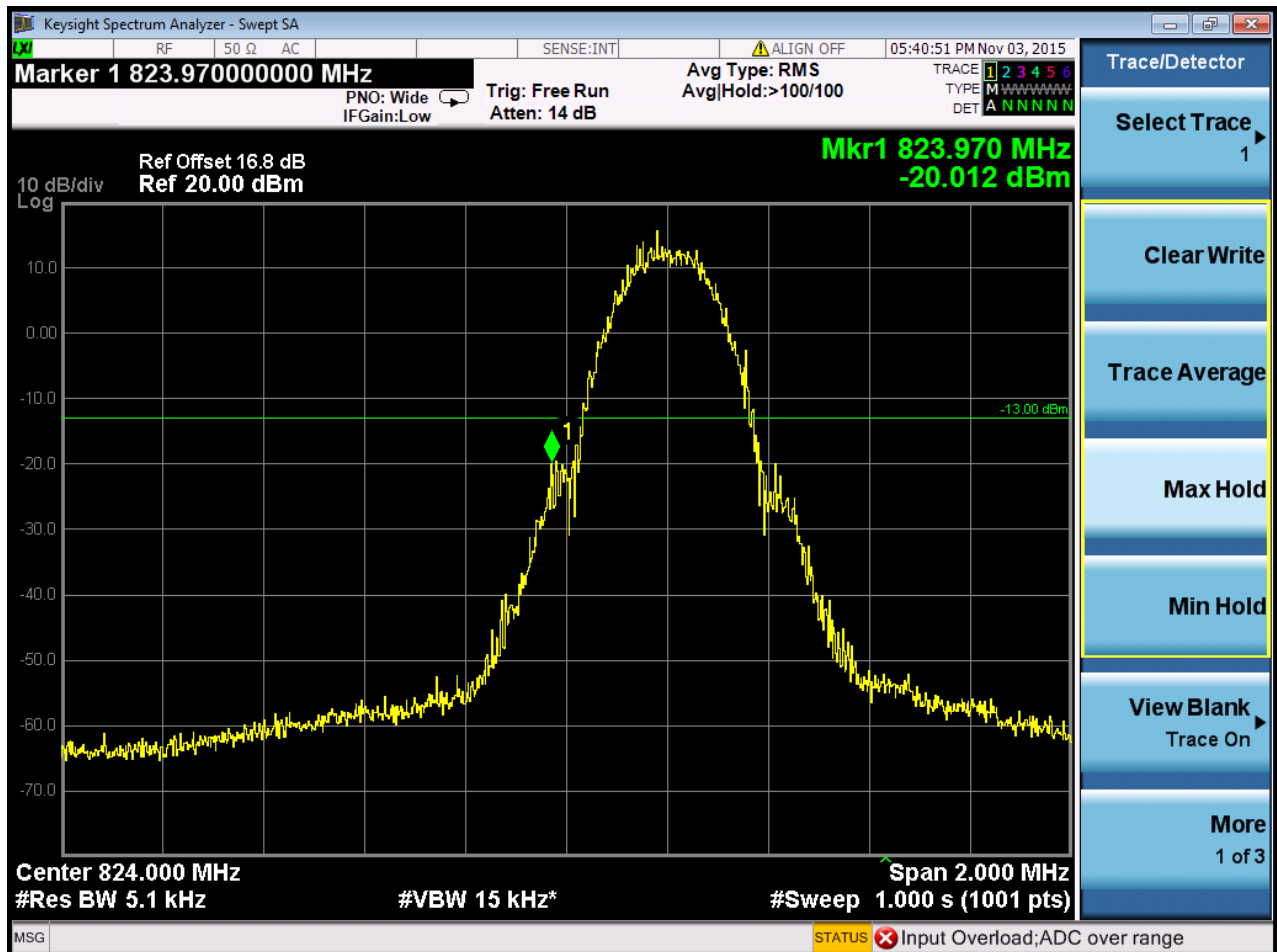


5.1.1.1.2 Test Channel = HCH



5.1.1.2 Test Mode = GSM/TM2

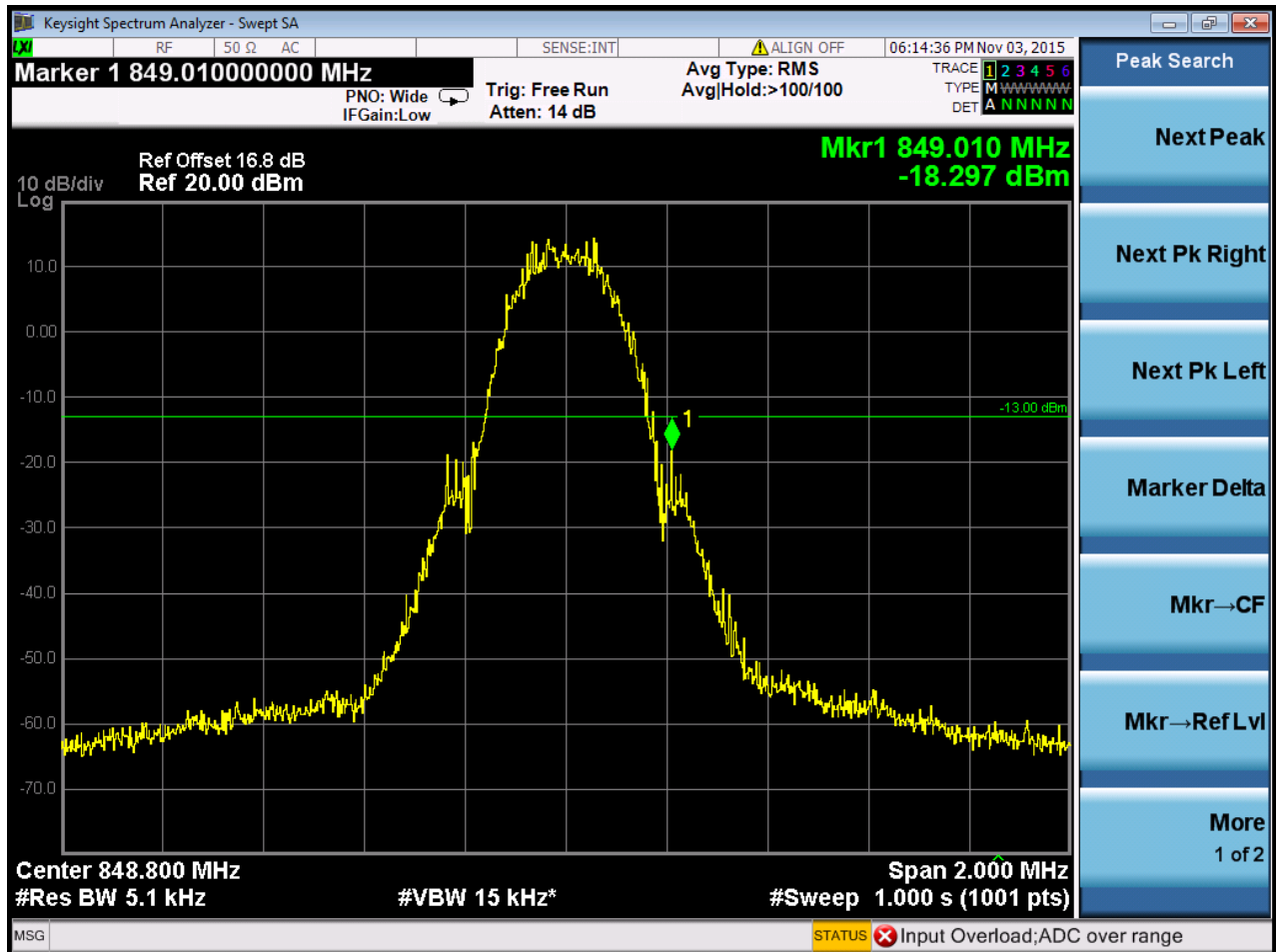
5.1.1.2.1 Test Channel = LCH



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5.1.1.2.2 Test Channel = HCH

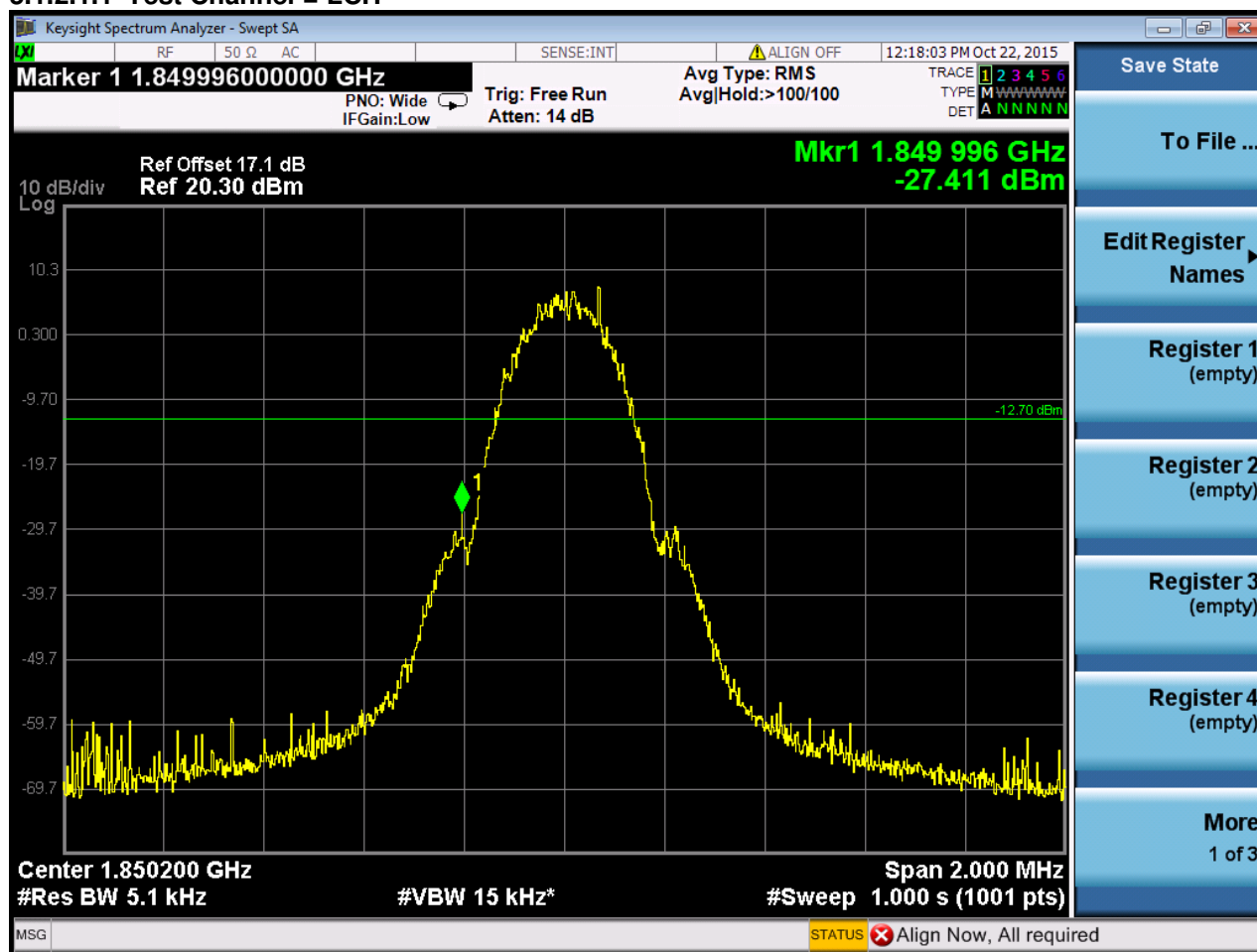




5.1.2 Test Band = GSM1900

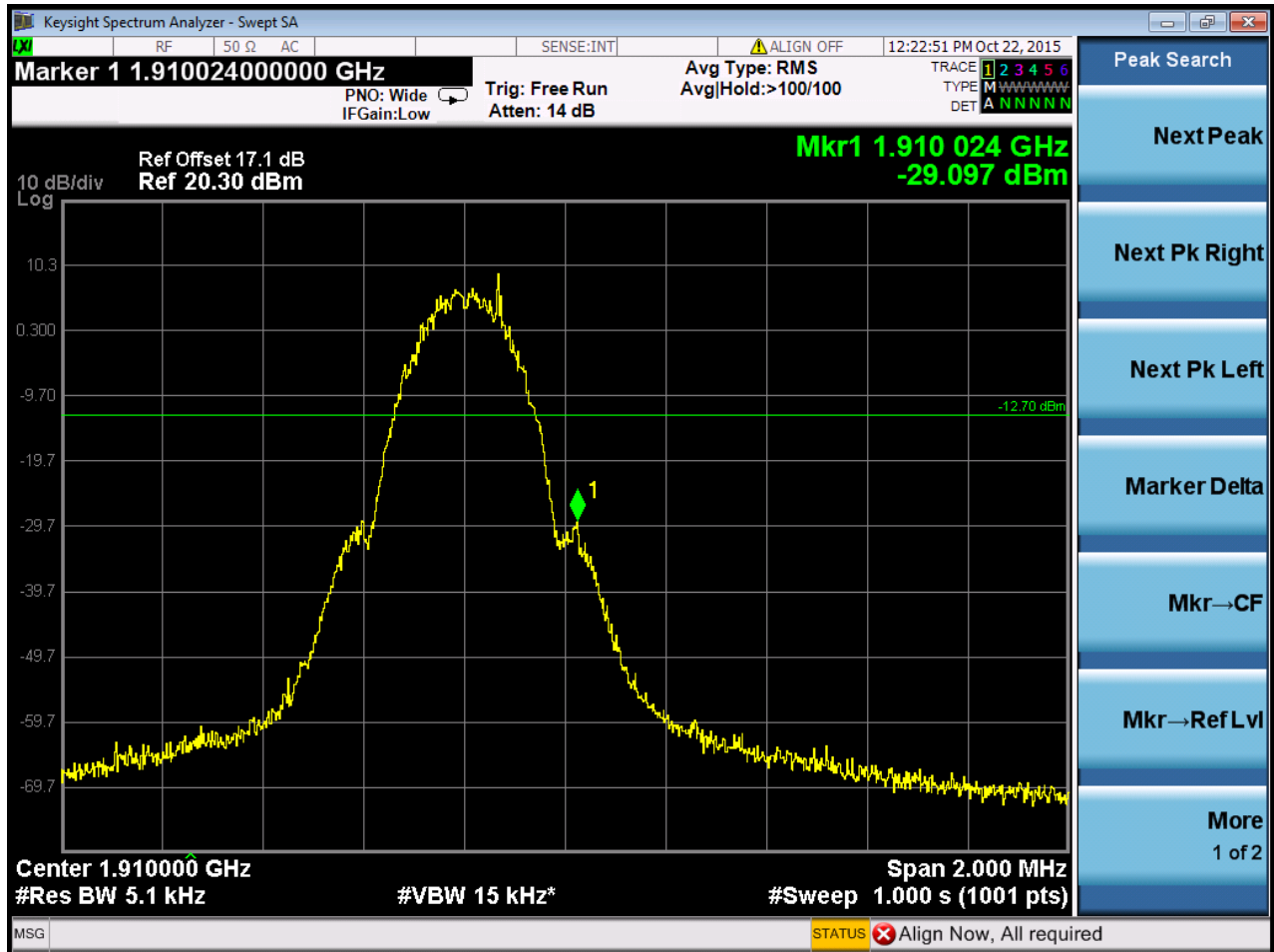
5.1.2.1 Test Mode = GSM/TM1

5.1.2.1.1 Test Channel = LCH



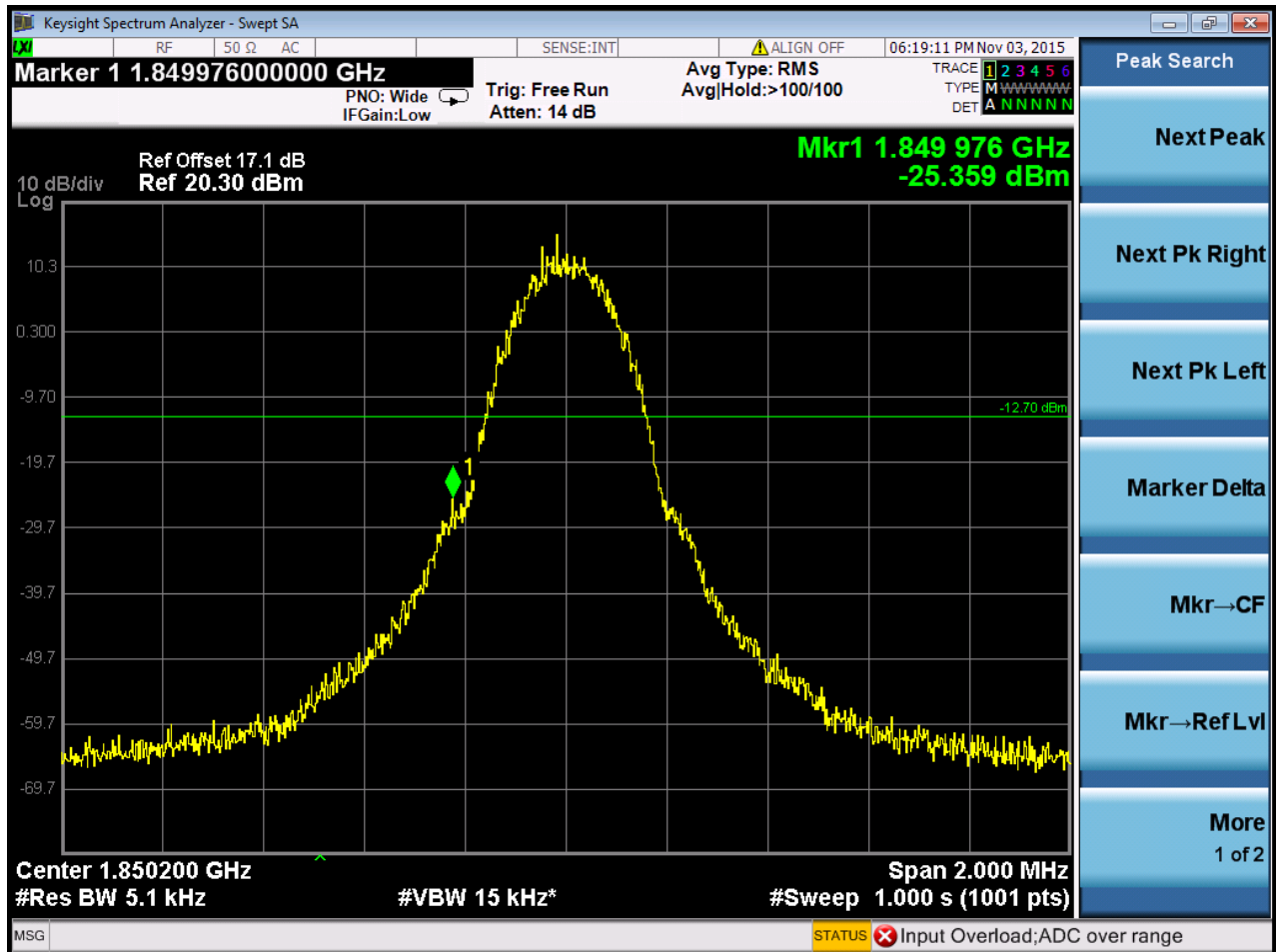


5.1.2.1.2 Test Channel = HCH



5.1.2.2 Test Mode = GSM/TM2

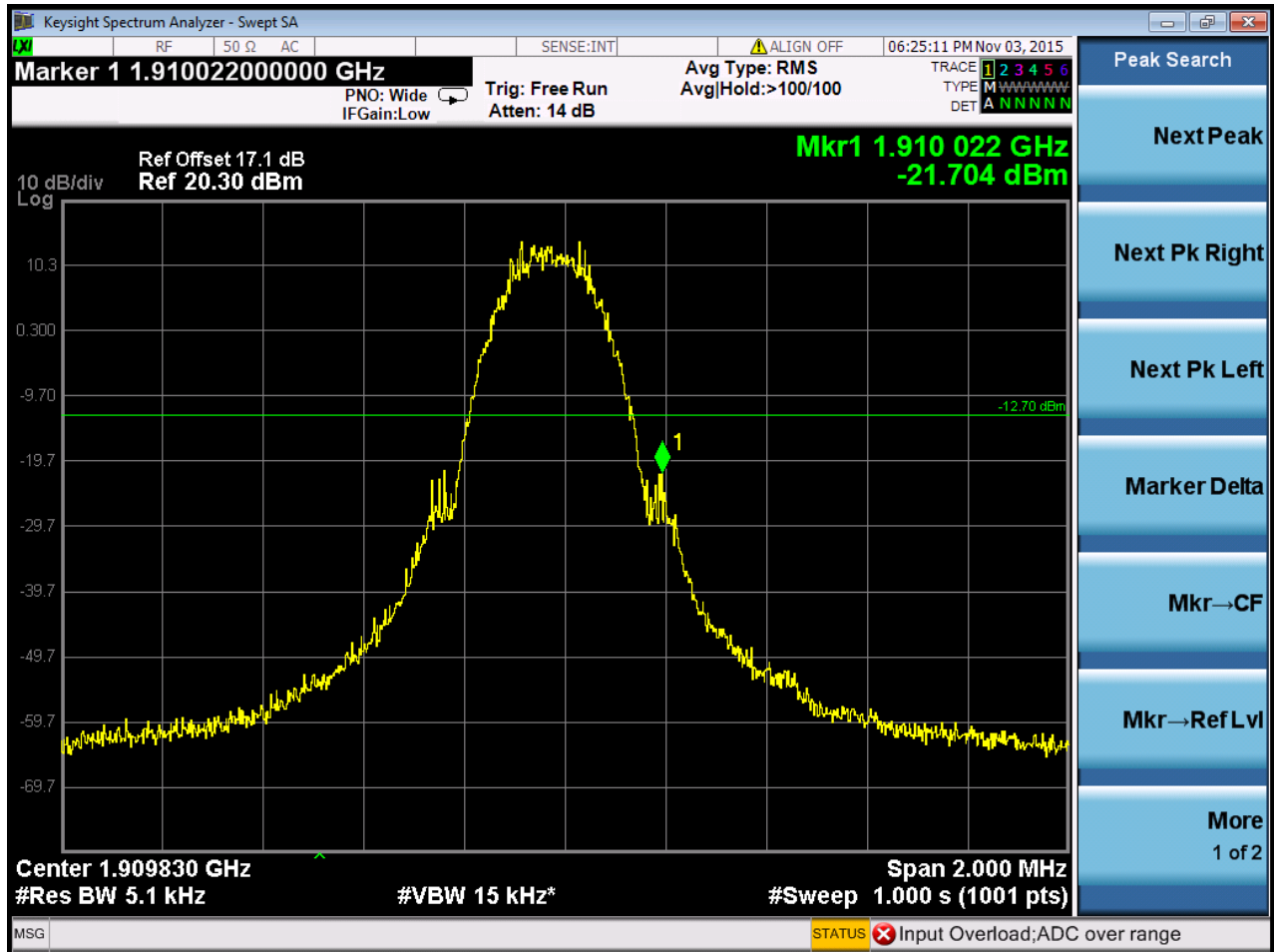
5.1.2.2.1 Test Channel = LCH



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5.1.2.2.2 Test Channel = HCH



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5.3 For LTE Band 7

5.3.1.1 Test Mode = LTE/TM1 5MHz

5.3.1.1.1 Test Channel = LCH





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5.3.1.1.2 Test Channel = HCH



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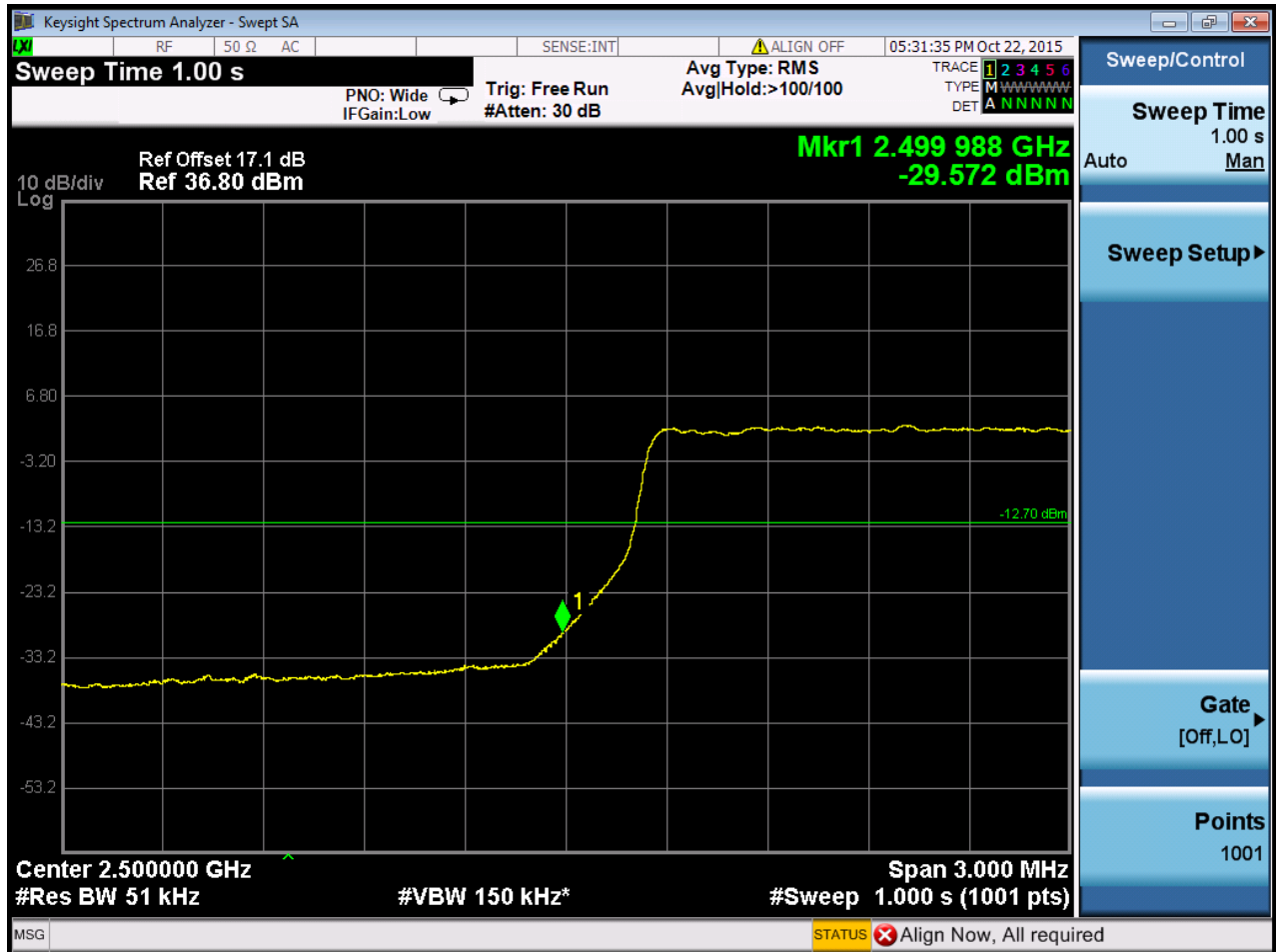
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5.3.1.2 Test Mode = LTE/TM2 5MHz

5.3.1.2.1 Test Channel = LCH



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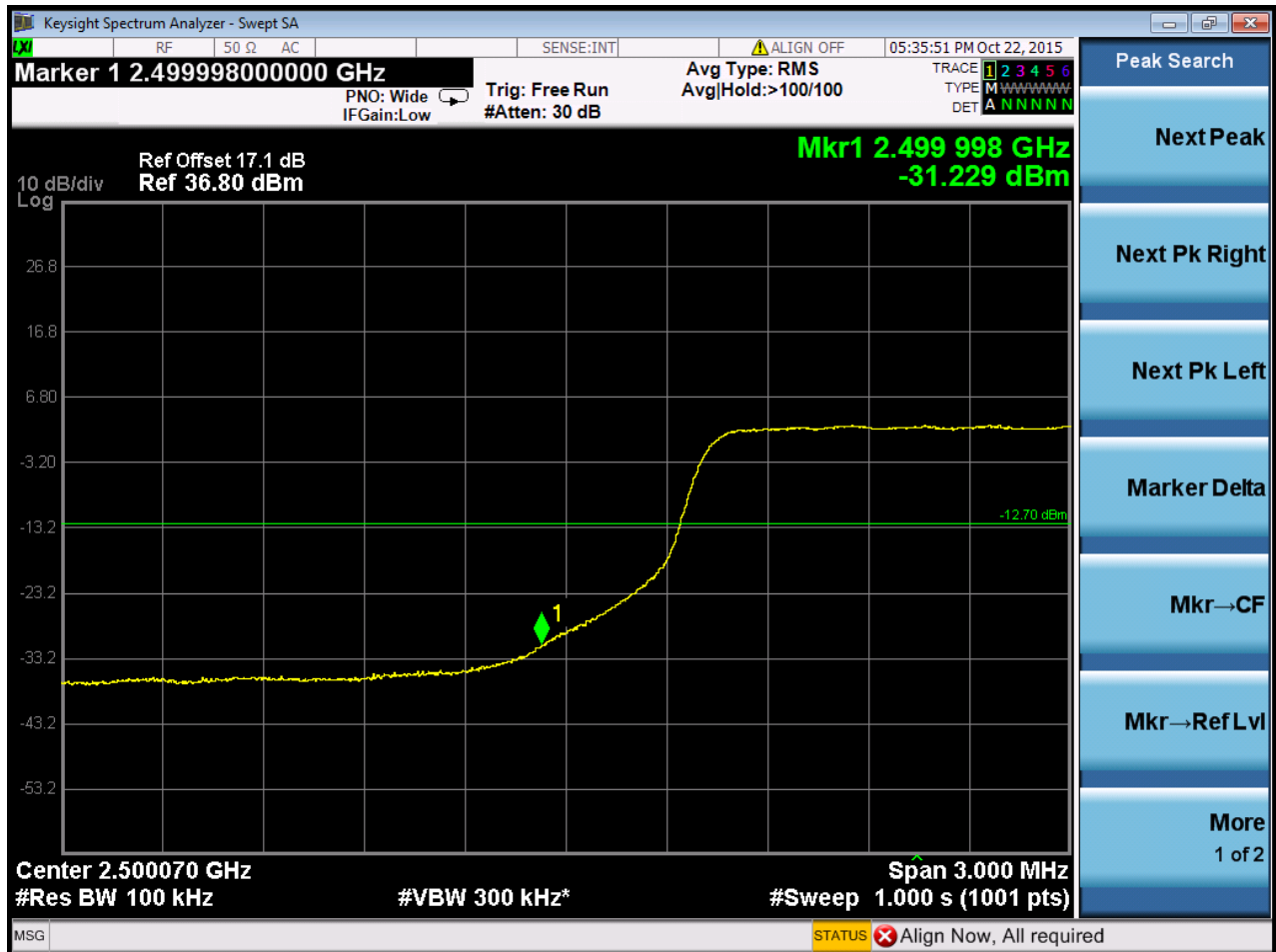
5.3.1.2.2 Test Channel = HCH





5.3.1.3 Test Mode = LTE/TM1 10MHz

5.3.1.3.1 Test Channel = LCH





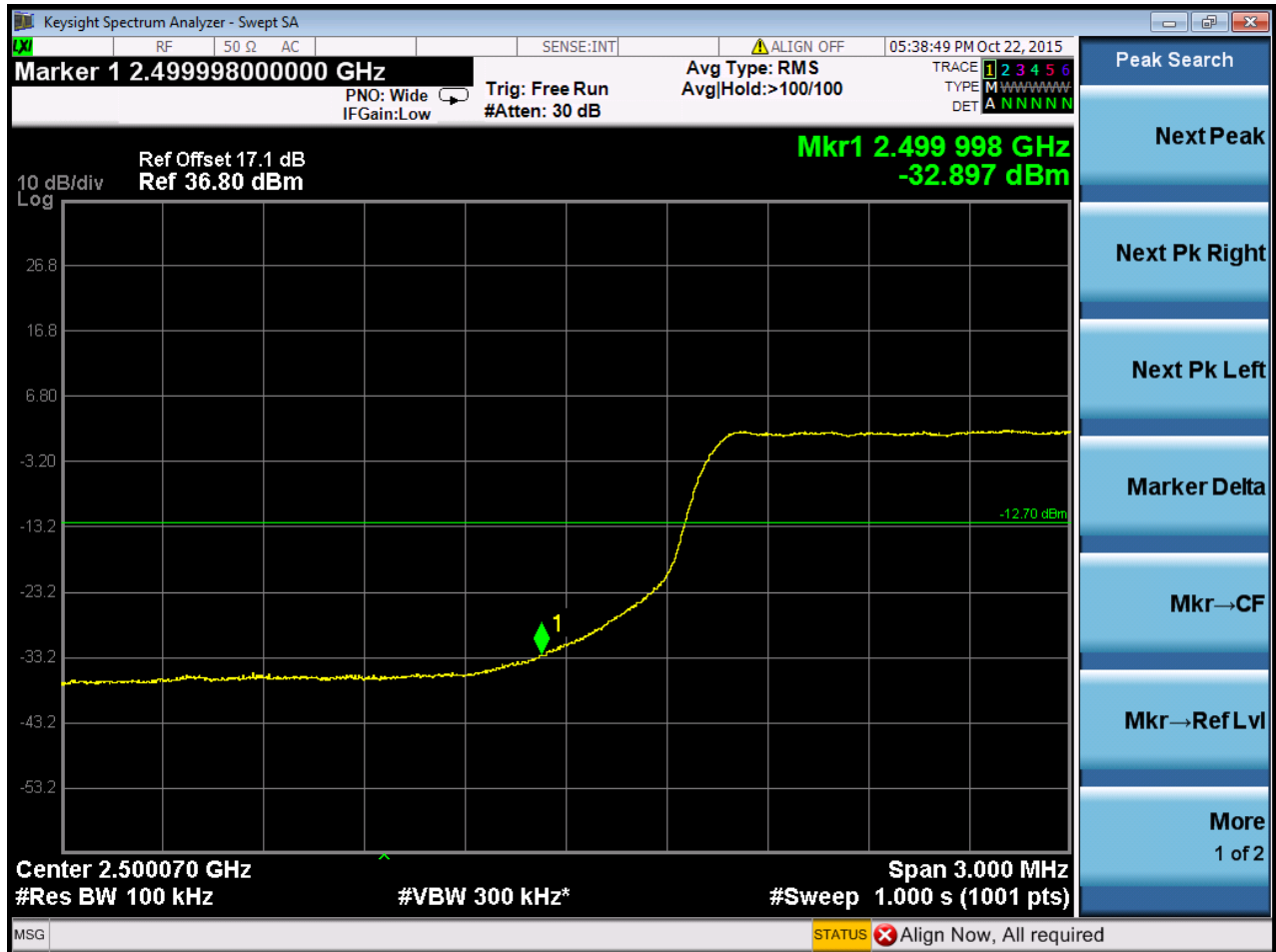
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5.3.1.4 Test Mode = LTE/TM2 10MHz

5.3.1.4.1 Test Channel = LCH



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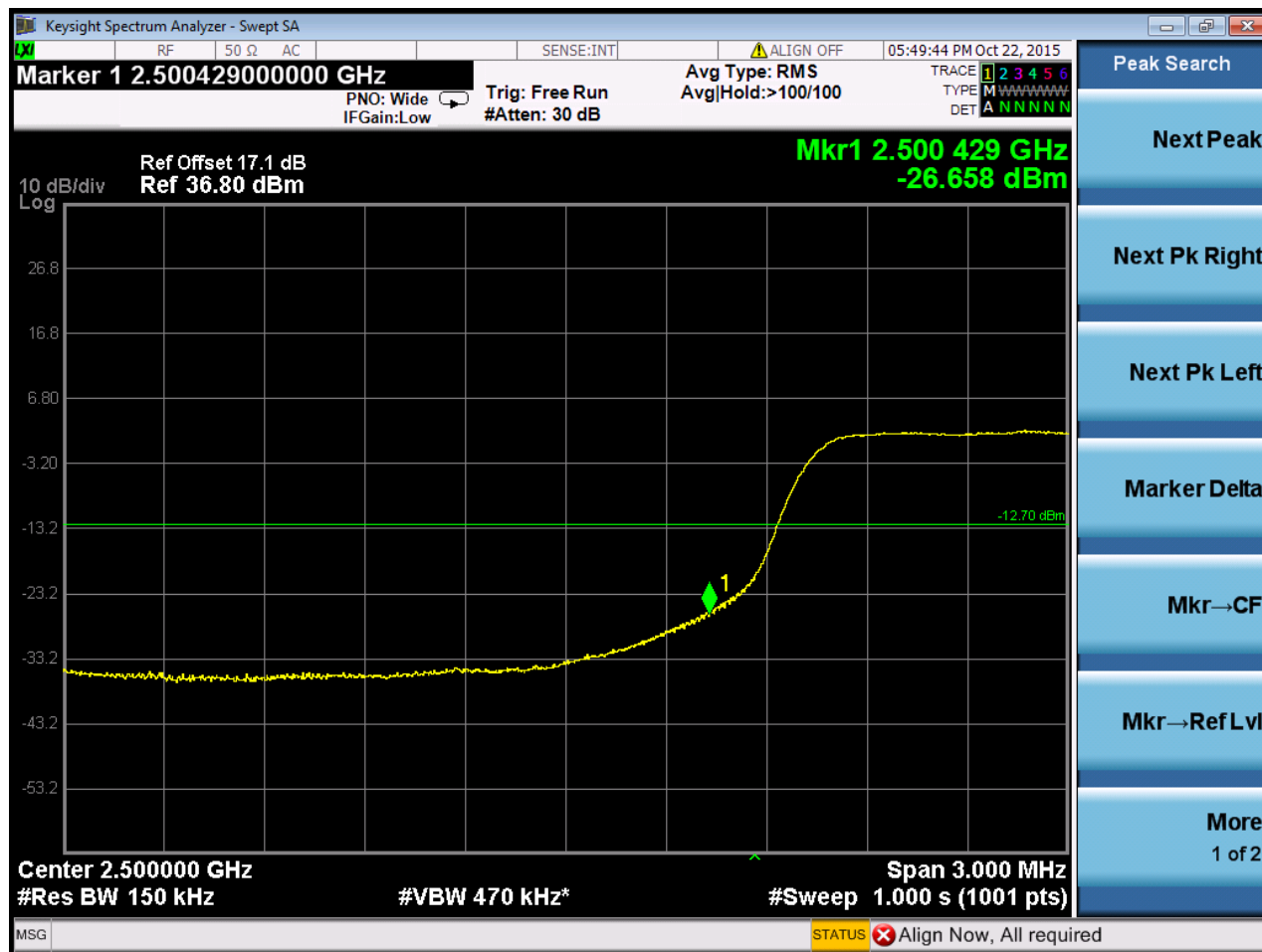
5.3.1.4.2 Test Channel = HCH





5.3.1.5 Test Mode = LTE/TM1 15MHz

5.3.1.5.1 Test Channel = LCH



5.3.1.5.2 Test Channel = HCH





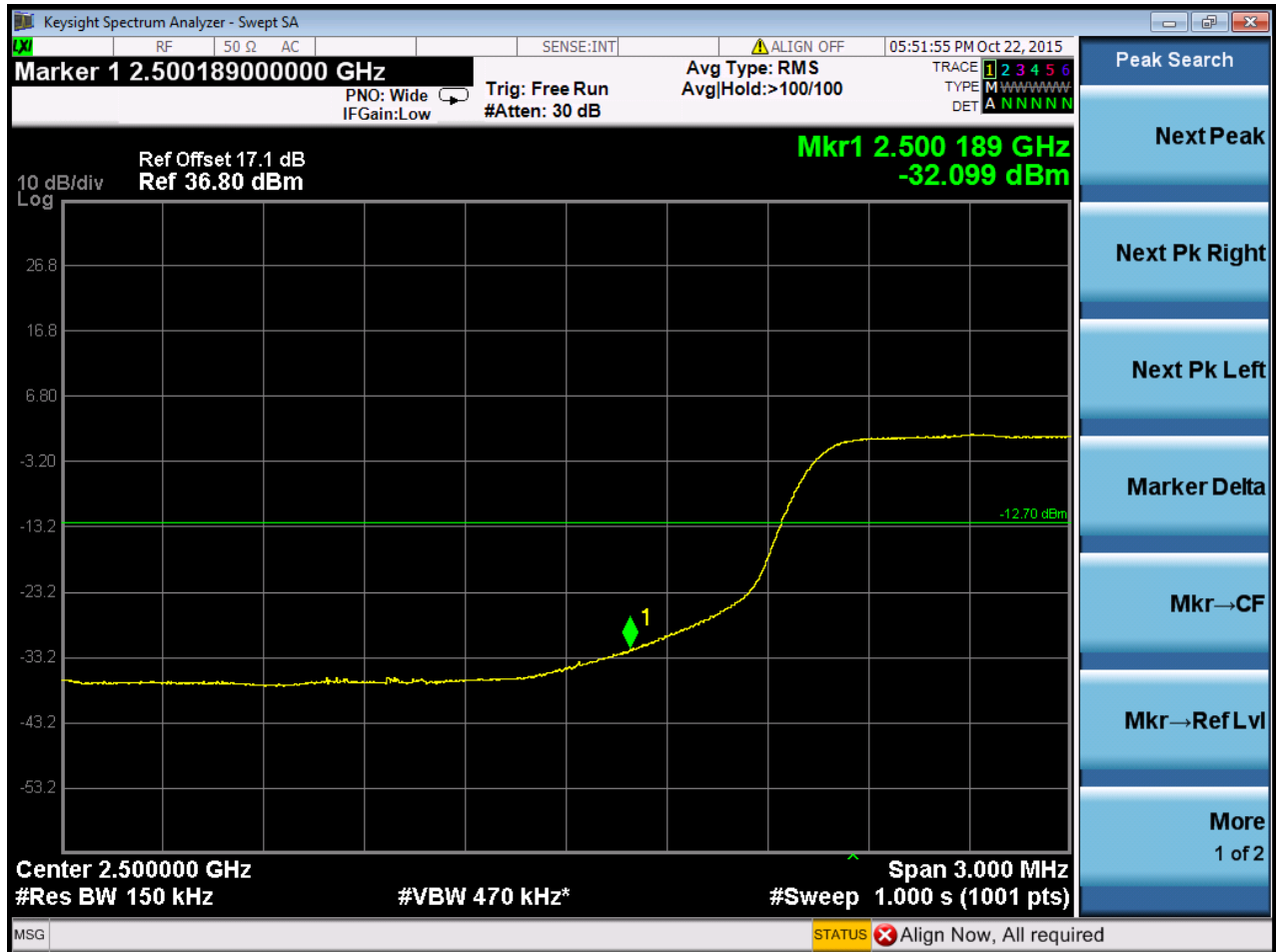
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5.3.1.6 Test Mode = LTE/TM2 15MHz

5.3.1.6.1 Test Channel = LCH



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5.3.1.6.2 Test Channel = HCH





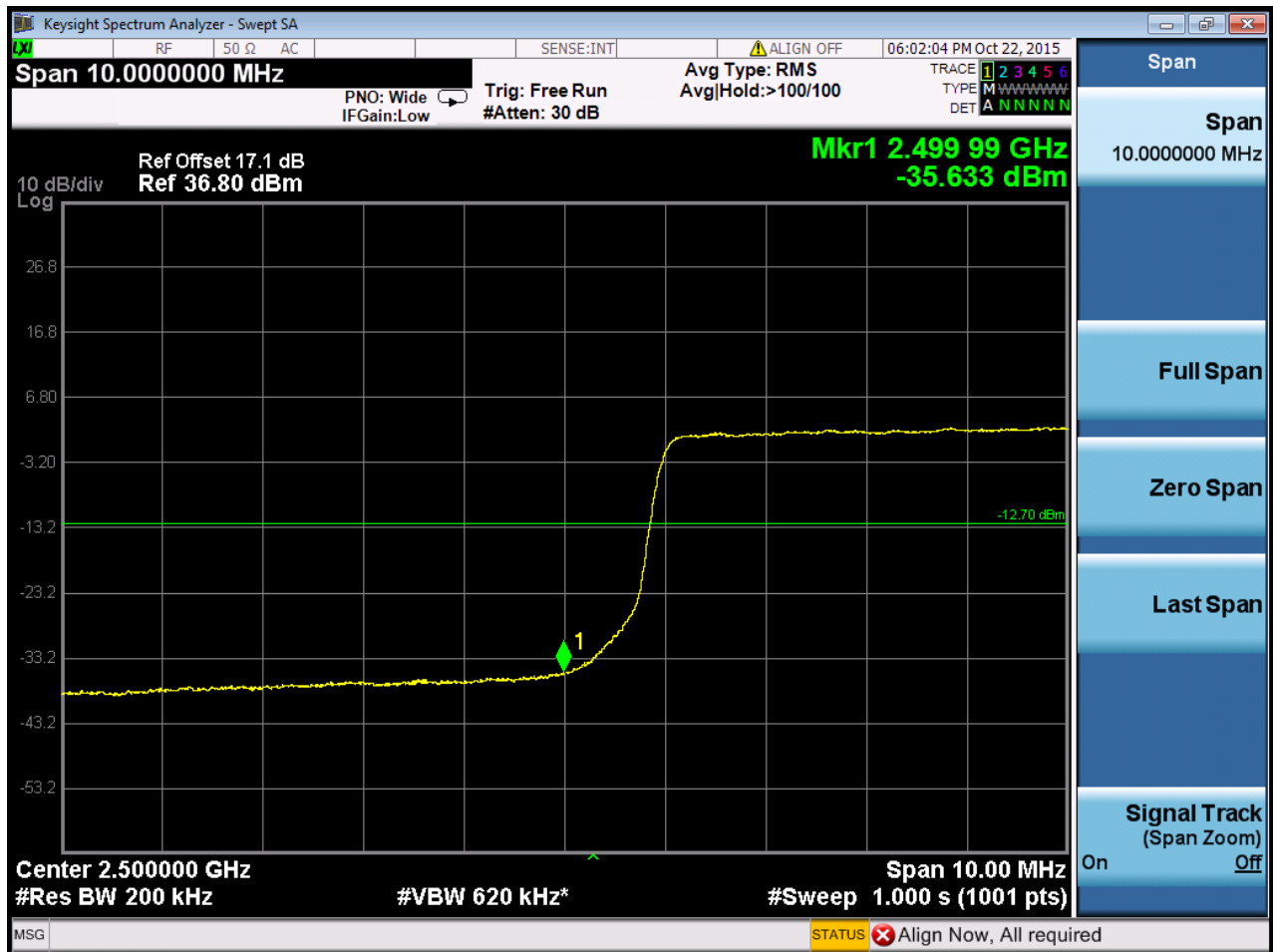
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5.3.1.7 Test Mode = LTE/TM1 20MHz

5.3.1.7.1 Test Channel = LCH



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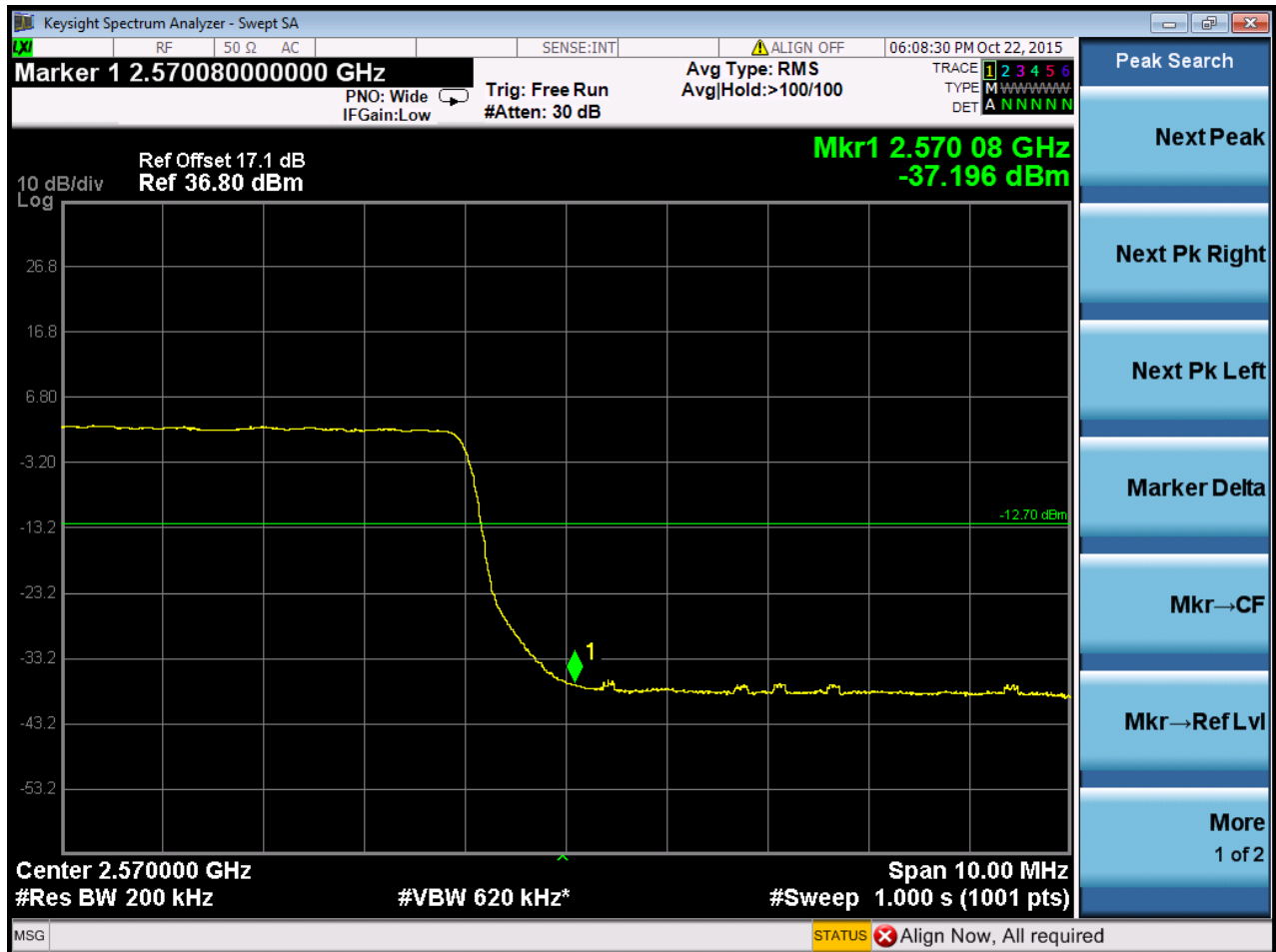


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5.3.1.7.2 Test Channel = HCH

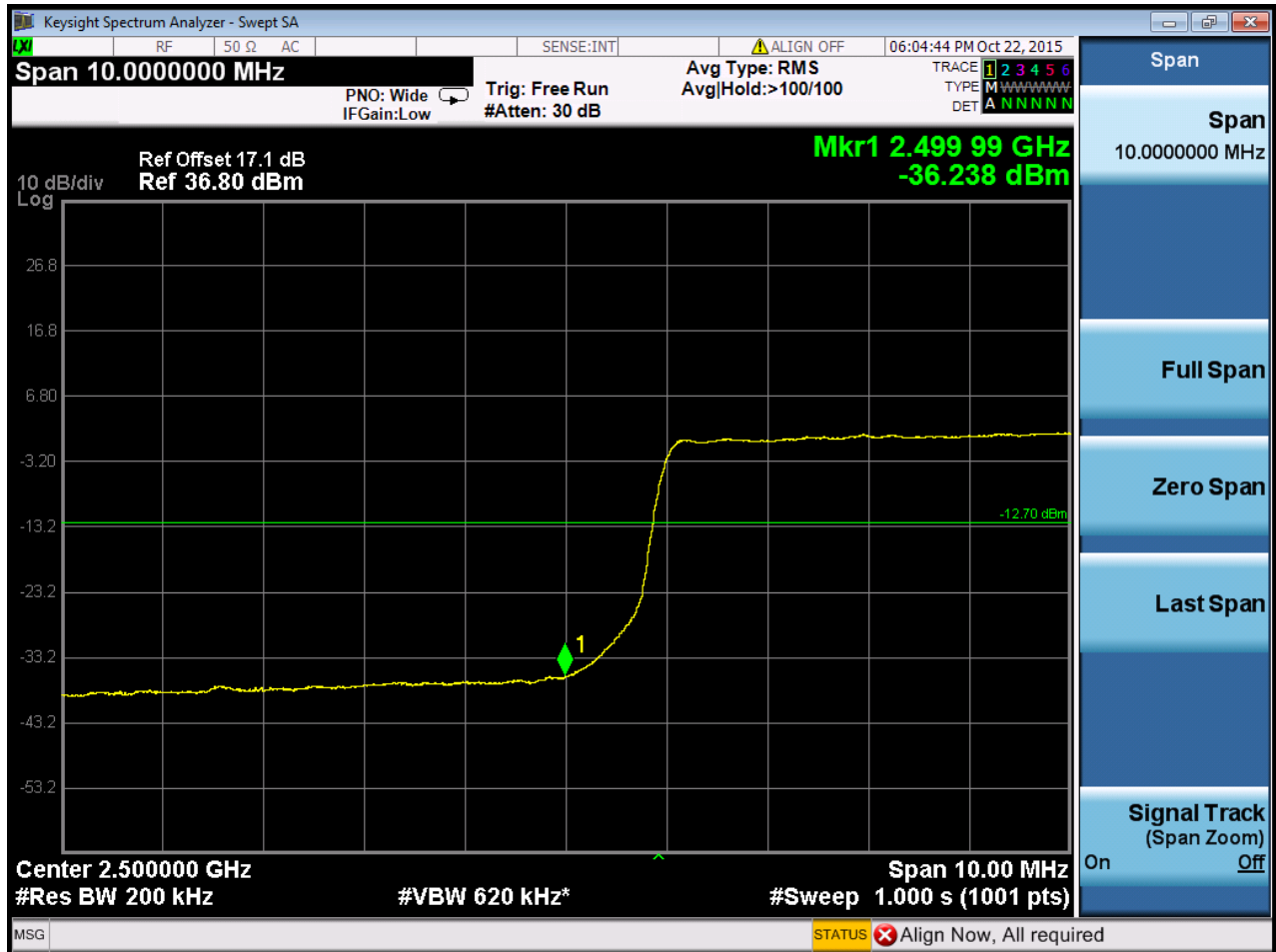


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5.3.1.8 Test Mode = LTE/TM2 20MHz

5.3.1.8.1 Test Channel = LCH





5.3.1.8.2 Test Channel = HCH





6 Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / \text{RBW})$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

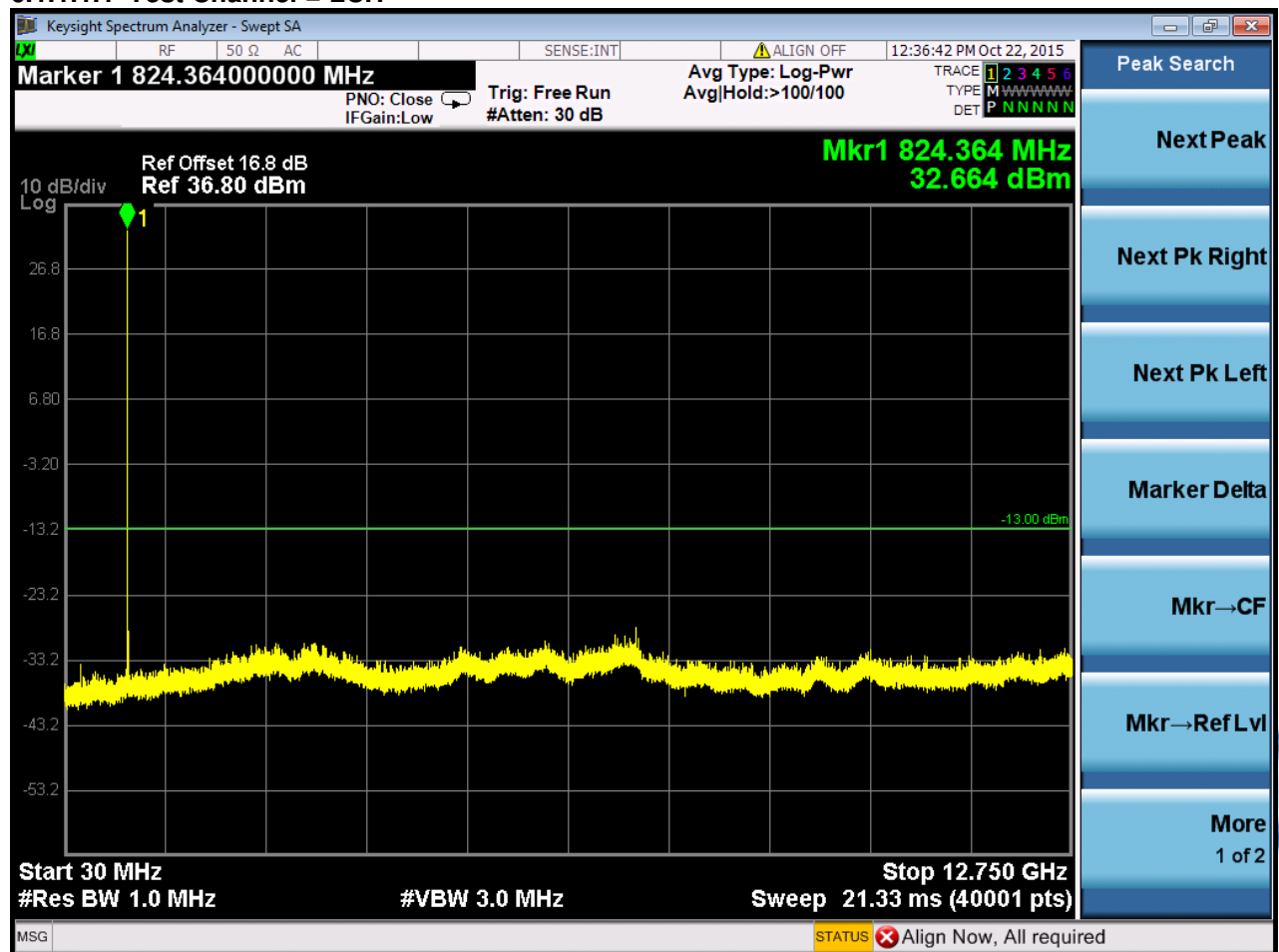
Part I - Test Plots

6.1 For GSM

6.1.1 Test Band = GSM850

6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH



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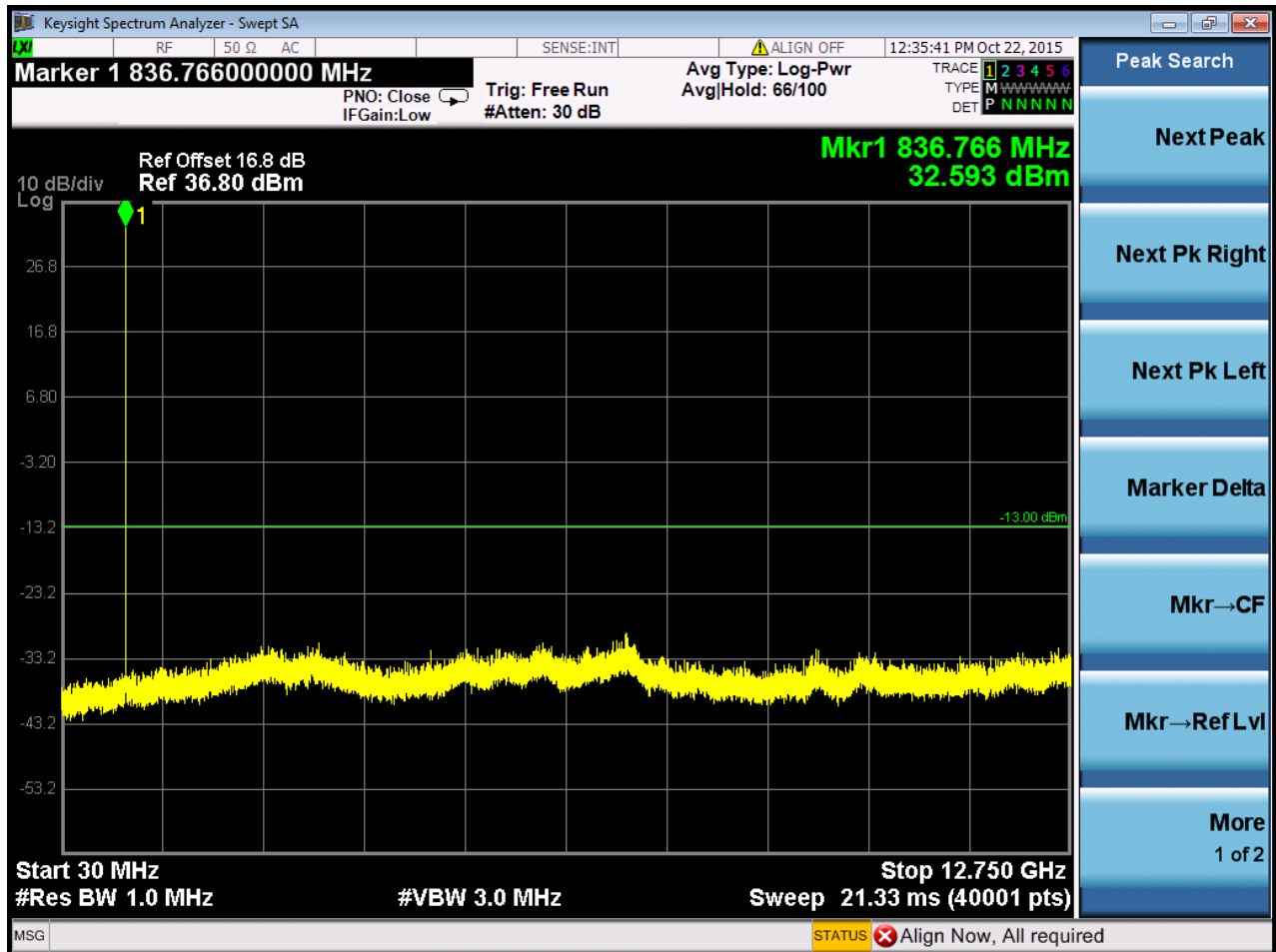


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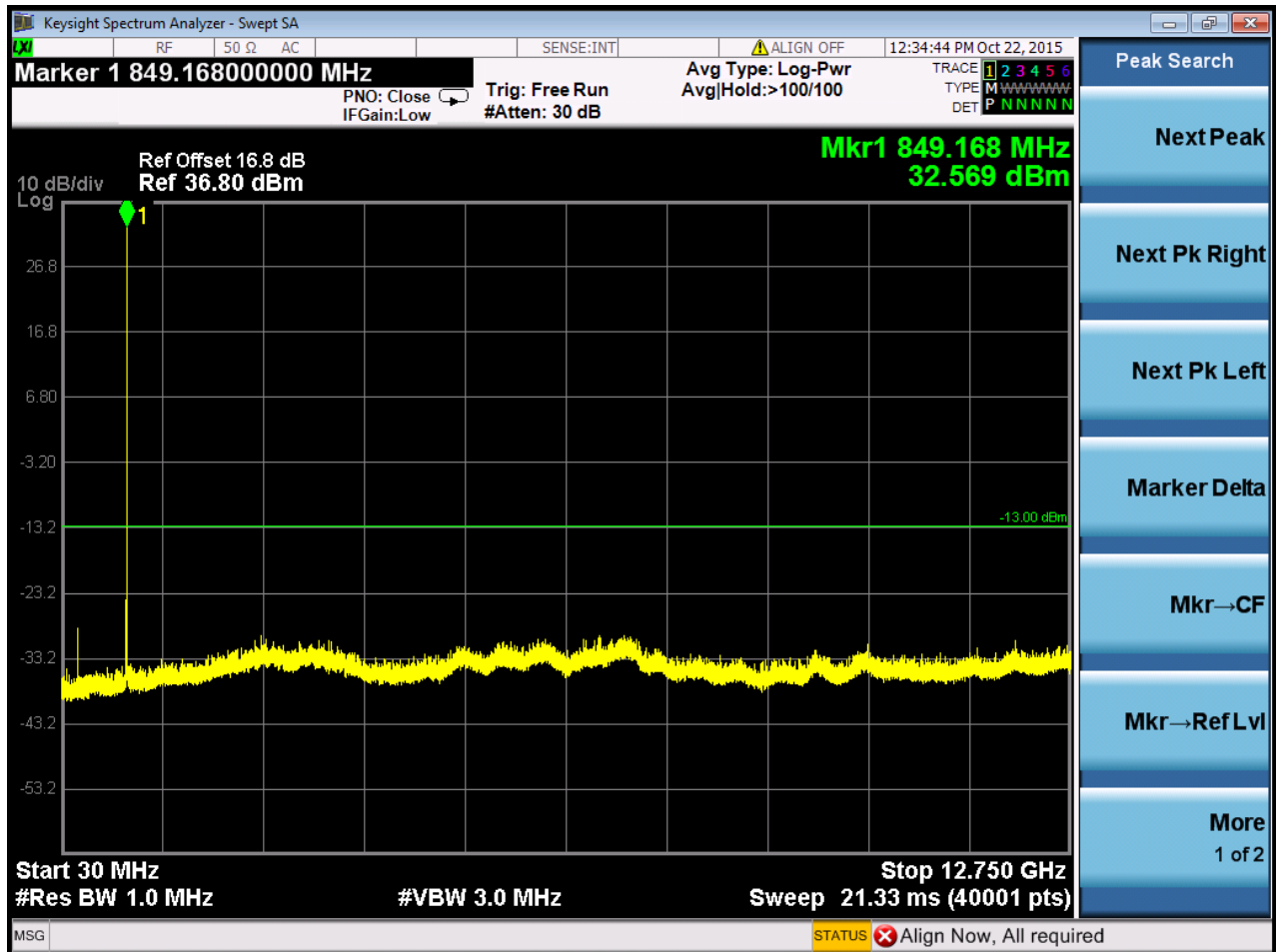
6.1.1.1.2 Test Channel = MCH



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6.1.1.1.3 Test Channel = HCH

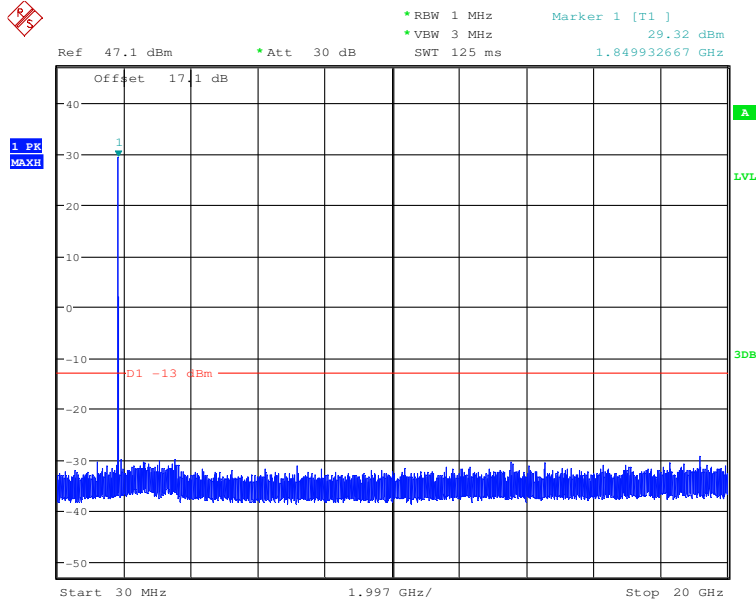




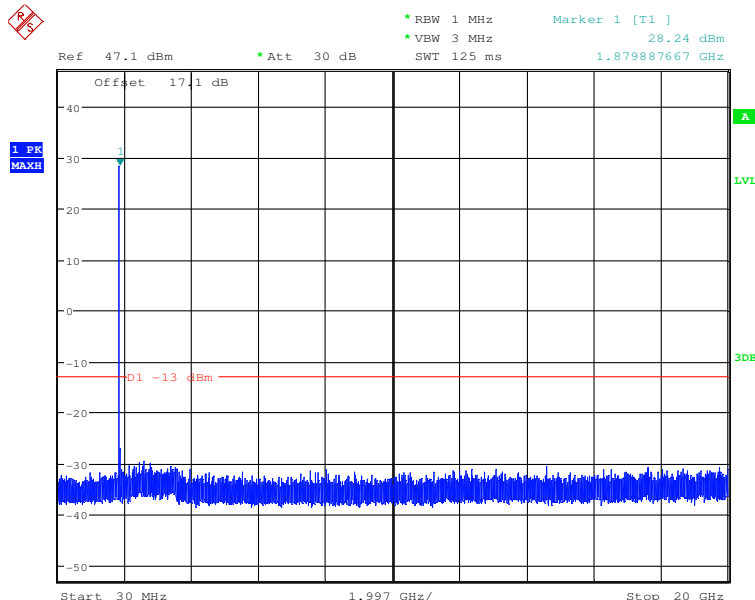
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

6.1.2.1.1 Test Channel = LCH

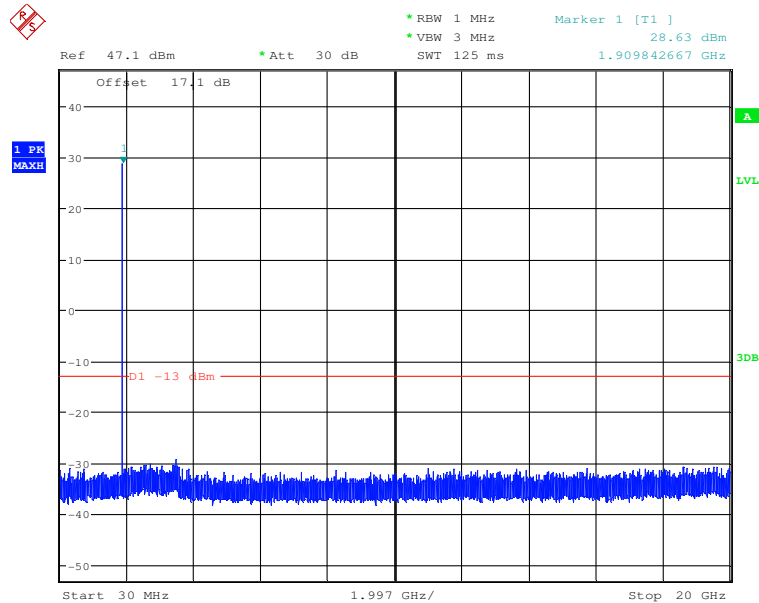


6.1.2.1.2 Test Channel = MCH





6.1.2.1.3 Test Channel = HCH

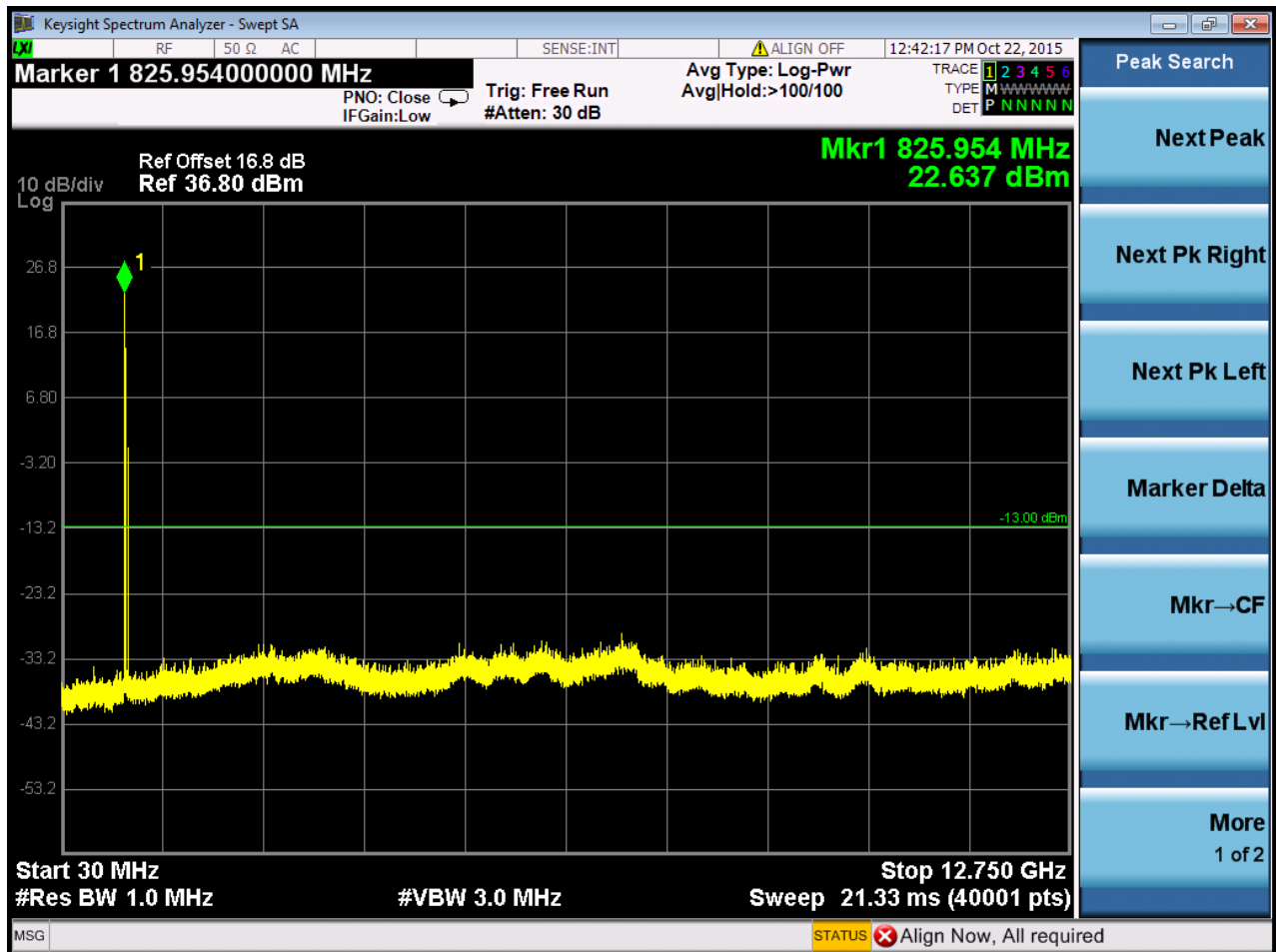




6.2 For WCDMA850 BAND 5

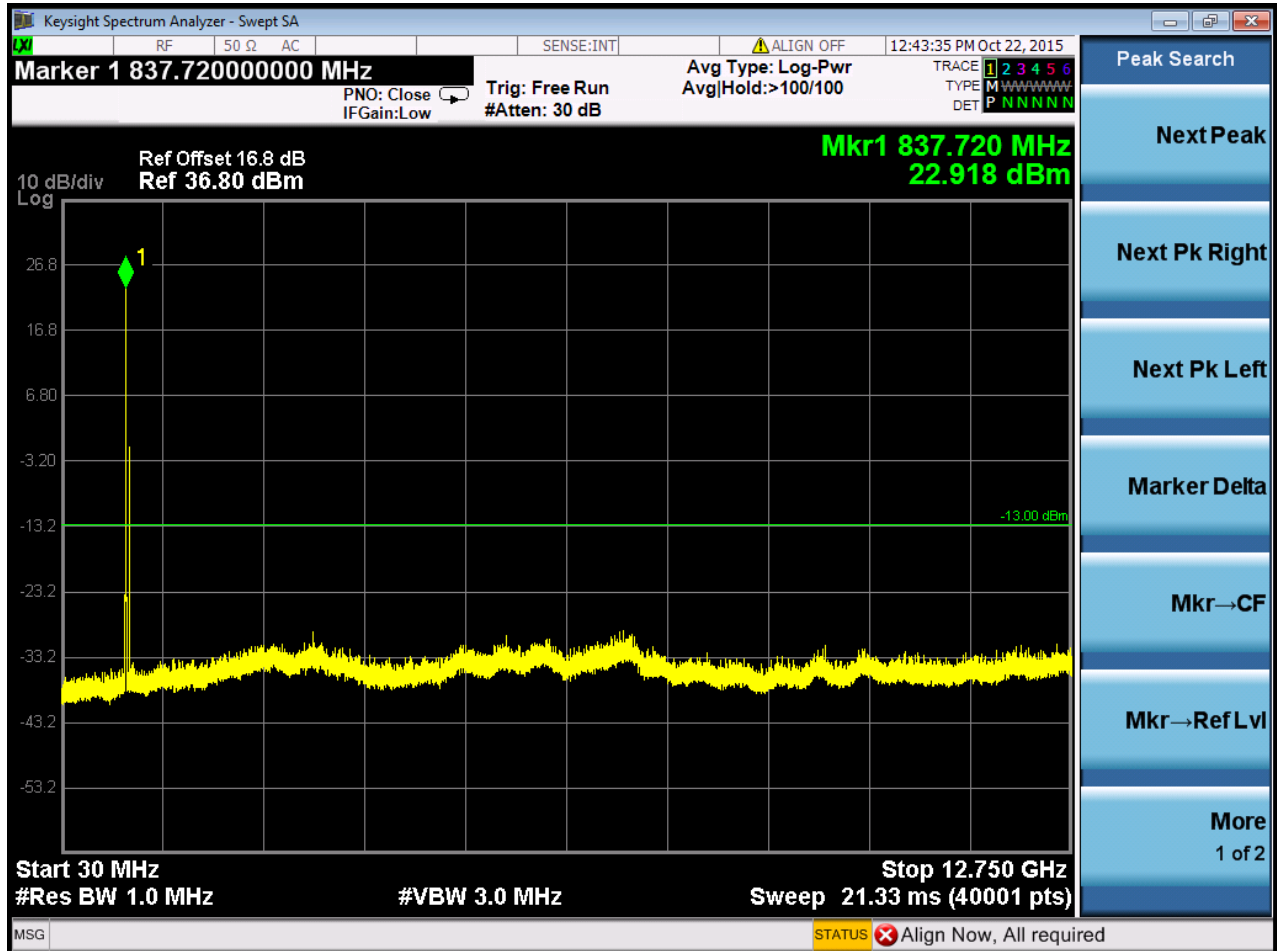
8.1.1.2 Test Mode = UMTS/TM1

6.2.1.1.1 Test Channel = LCH



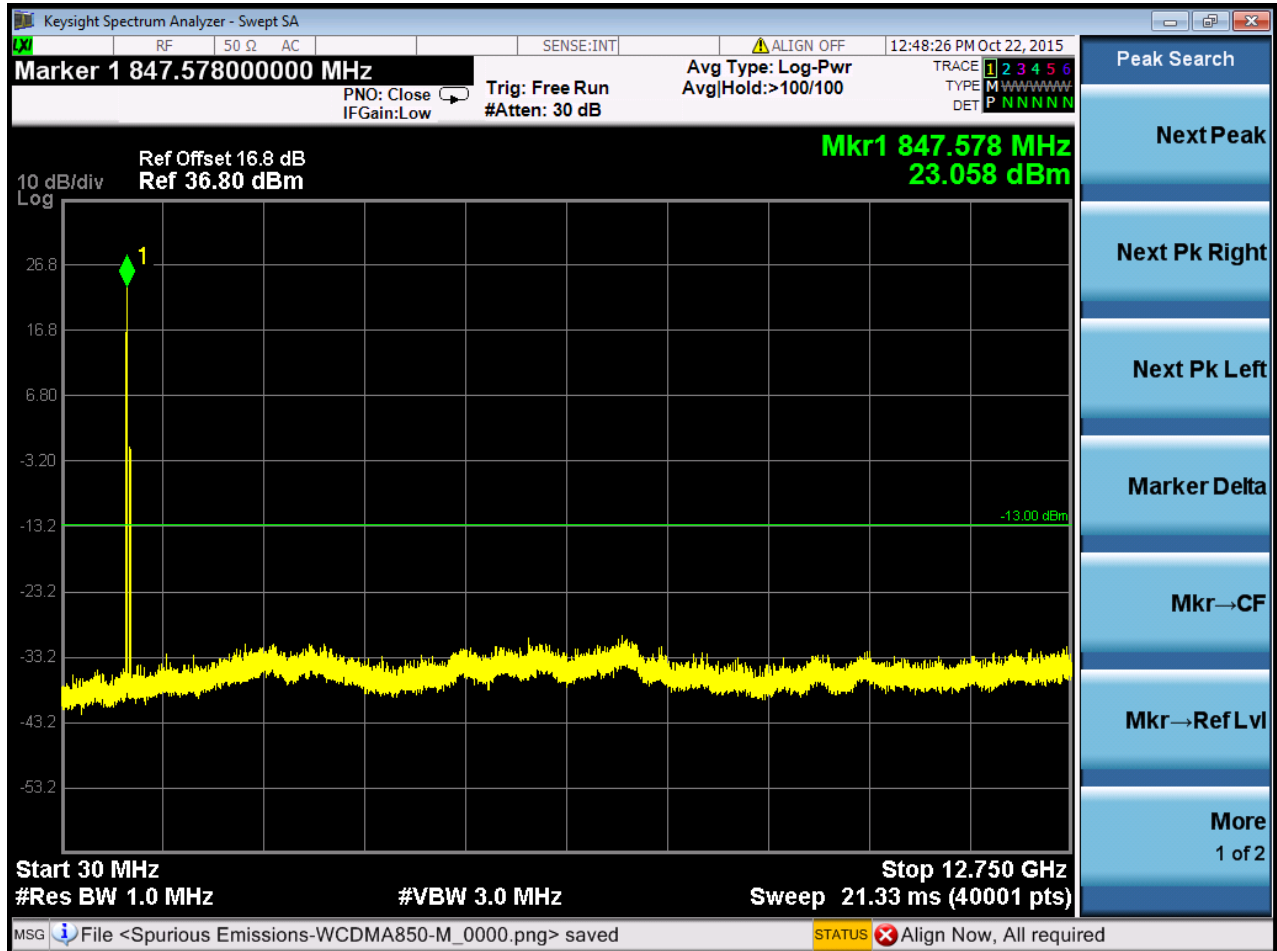


6.2.1.1.2 Test Channel = MCH





6.2.1.1.3 Test Channel = HCH

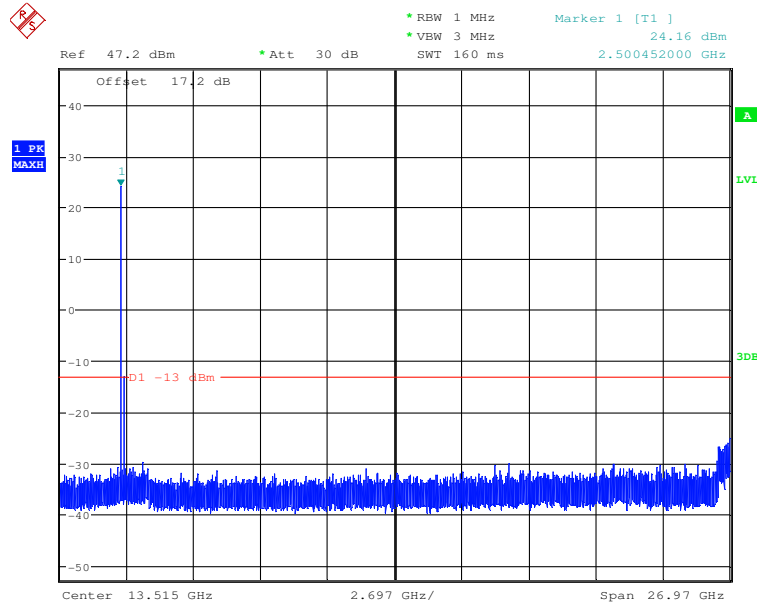




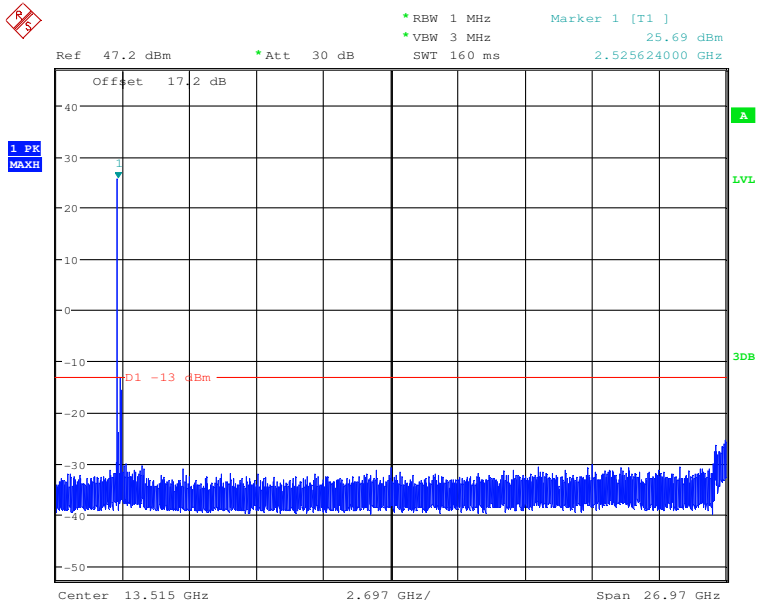
6.3 For LTE BAND 7

6.3.1.1 Test Mode = LTE BAND 7 TM1/20MHz

6.3.1.1.1 Test Channel = LCH

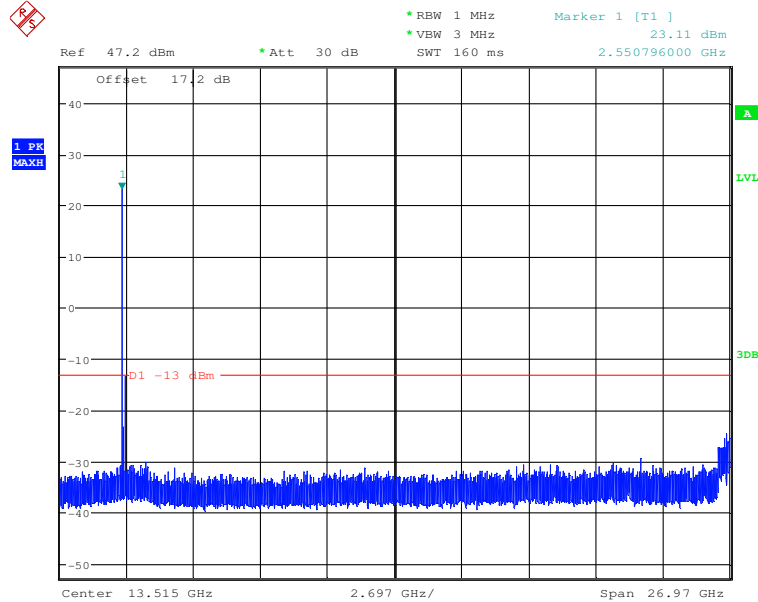


6.3.1.1.2 Test Channel = MCH





6.3.1.1.3 Test Channel = HCH





7 Field Strength of Spurious Radiation

Part I - Test Plots

7.1 For GSM

7.1.1 Test Band = GSM850

7.1.1.1 Test Mode = GSM/TM1

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-54.0	-13.0	-41.0	Vertical
161.040	-62.1	-13.0	-49.1	Vertical
233.580	-64.9	-13.0	-51.9	Vertical
344.730	-58.0	-13.0	-45.0	Vertical
519.060	-59.1	-13.0	-46.1	Vertical
727.320	-56.3	-13.0	-43.3	Vertical
1673.400	-38.2	-13.0	-25.2	Vertical
2479.800	-36.6	-13.0	-23.6	Vertical
3560.000	-52.3	-13.0	-39.3	Vertical
5170.000	-49.6	-13.0	-36.6	Vertical
6913.000	-47.5	-13.0	-34.5	Vertical
8915.000	-43.6	-13.0	-30.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.889	-56.6	-13.0	-43.6	Horizontal
162.210	-63.4	-13.0	-50.4	Horizontal
235.920	-64.8	-13.0	-51.8	Horizontal
327.180	-58.9	-13.0	-45.9	Horizontal
486.300	-60.0	-13.0	-47.0	Horizontal
634.890	-58.2	-13.0	-45.2	Horizontal
1673.400	-35.4	-13.0	-22.4	Horizontal
2479.800	-34.4	-13.0	-21.4	Horizontal
3714.000	-52.7	-13.0	-39.7	Horizontal
4603.000	-49.3	-13.0	-36.3	Horizontal
6388.000	-46.6	-13.0	-33.6	Horizontal
8789.000	-45.0	-13.0	-32.0	Horizontal



7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-54.2	-13.0	-41.2	Vertical
152.850	-60.3	-13.0	-47.3	Vertical
199.650	-65.3	-13.0	-52.3	Vertical
323.670	-58.0	-13.0	-45.0	Vertical
475.770	-61.0	-13.0	-48.0	Vertical
667.650	-57.8	-13.0	-44.8	Vertical
1673.400	-37.2	-13.0	-24.2	Vertical
2431.200	-35.7	-13.0	-22.7	Vertical
3609.000	-52.3	-13.0	-39.3	Vertical
5142.000	-50.1	-13.0	-37.1	Vertical
6990.000	-47.1	-13.0	-34.1	Vertical
8936.000	-43.3	-13.0	-30.3	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
100.200	-57.1	-13.0	-44.1	Horizontal
162.210	-63.5	-13.0	-50.5	Horizontal
240.600	-63.5	-13.0	-50.5	Horizontal
344.730	-59.3	-13.0	-46.3	Horizontal
476.940	-60.3	-13.0	-47.3	Horizontal
653.610	-58.1	-13.0	-45.1	Horizontal
1673.400	-35.9	-13.0	-22.9	Horizontal
2438.400	-34.0	-13.0	-21.0	Horizontal
3721.000	-52.0	-13.0	-39.0	Horizontal
4967.000	-49.7	-13.0	-36.7	Horizontal
6486.000	-43.3	-13.0	-30.3	Horizontal
8698.000	-46.1	-13.0	-33.1	Horizontal



7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-53.1	-13.0	-40.1	Vertical
129.450	-61.6	-13.0	-48.6	Vertical
191.460	-63.8	-13.0	-50.8	Vertical
268.680	-59.5	-13.0	-46.5	Vertical
441.840	-62.7	-13.0	-49.7	Vertical
615.000	-57.9	-13.0	-44.9	Vertical
1696.800	-38.7	-13.0	-25.7	Vertical
2479.800	-34.8	-13.0	-21.8	Vertical
3791.000	-50.4	-13.0	-37.4	Vertical
5429.000	-50.4	-13.0	-37.4	Vertical
7032.000	-49.0	-13.0	-36.0	Vertical
9846.000	-43.2	-13.0	-30.2	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
92.417	-57.3	-13.0	-44.3	Horizontal
151.680	-63.2	-13.0	-50.2	Horizontal
239.430	-63.6	-13.0	-50.6	Horizontal
333.030	-59.3	-13.0	-46.3	Horizontal
490.980	-60.2	-13.0	-47.2	Horizontal
673.500	-57.9	-13.0	-44.9	Horizontal
1696.800	-38.6	-13.0	-25.6	Horizontal
2438.400	-30.6	-13.0	-17.6	Horizontal
3749.000	-52.2	-13.0	-39.2	Horizontal
5345.000	-48.7	-13.0	-35.7	Horizontal
7410.000	-45.9	-13.0	-32.9	Horizontal
9286.000	-43.9	-13.0	-30.9	Horizontal



7.1.2 Test Band = EGPRS850

7.1.2.1 Test Mode = GSM/TM2

7.1.2.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
94.350	-53.6	-13.0	-40.6	Vertical
120.531	-60.5	-13.0	-47.5	Vertical
170.400	-62.8	-13.0	-49.8	Vertical
268.680	-60.3	-13.0	-47.3	Vertical
392.700	-62.3	-13.0	-49.3	Vertical
613.830	-58.0	-13.0	-45.0	Vertical
1648.200	-39.4	-13.0	-26.4	Vertical
2436.600	-34.0	-13.0	-21.0	Vertical
3378.000	-52.7	-13.0	-39.7	Vertical
4498.000	-52.2	-13.0	-39.2	Vertical
6493.000	-48.4	-13.0	-35.4	Vertical
8901.000	-43.6	-13.0	-30.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
89.670	-56.9	-13.0	-43.9	Horizontal
158.700	-63.7	-13.0	-50.7	Horizontal
237.090	-63.4	-13.0	-50.4	Horizontal
342.390	-59.5	-13.0	-46.5	Horizontal
481.620	-60.1	-13.0	-47.1	Horizontal
643.080	-58.1	-13.0	-45.1	Horizontal
1648.200	-40.6	-13.0	-27.6	Horizontal
2442.000	-32.9	-13.0	-19.9	Horizontal
3574.000	-52.8	-13.0	-39.8	Horizontal
5268.000	-49.3	-13.0	-36.3	Horizontal
6598.000	-44.0	-13.0	-31.0	Horizontal
8719.000	-43.5	-13.0	-30.5	Horizontal



7.1.2.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-52.9	-13.0	-39.9	Vertical
148.170	-60.7	-13.0	-47.7	Vertical
228.900	-65.3	-13.0	-52.3	Vertical
345.900	-56.5	-13.0	-43.5	Vertical
502.680	-60.2	-13.0	-47.2	Vertical
717.960	-57.2	-13.0	-44.2	Vertical
1612.200	-45.4	-13.0	-32.4	Vertical
2443.800	-33.8	-13.0	-20.8	Vertical
3742.000	-50.8	-13.0	-37.8	Vertical
5338.000	-49.8	-13.0	-36.8	Vertical
6955.000	-47.5	-13.0	-34.5	Vertical
8901.000	-43.2	-13.0	-30.2	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
94.350	-57.1	-13.0	-44.1	Horizontal
126.452	-64.1	-13.0	-51.1	Horizontal
197.310	-64.9	-13.0	-51.9	Horizontal
318.990	-59.1	-13.0	-46.1	Horizontal
464.070	-60.7	-13.0	-47.7	Horizontal
692.220	-57.2	-13.0	-44.2	Horizontal
1752.600	-42.4	-13.0	-29.4	Horizontal
2623.800	-36.4	-13.0	-23.4	Horizontal
3567.000	-52.4	-13.0	-39.4	Horizontal
5058.000	-49.3	-13.0	-36.3	Horizontal
6640.000	-43.4	-13.0	-30.4	Horizontal
8943.000	-44.7	-13.0	-31.7	Horizontal



7.1.2.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-51.9	-13.0	-38.9	Vertical
161.040	-61.6	-13.0	-48.6	Vertical
242.940	-62.9	-13.0	-49.9	Vertical
345.900	-57.7	-13.0	-44.7	Vertical
503.850	-60.8	-13.0	-47.8	Vertical
673.500	-57.0	-13.0	-44.0	Vertical
1696.800	-41.1	-13.0	-28.1	Vertical
2445.600	-33.2	-13.0	-20.2	Vertical
3763.000	-50.8	-13.0	-37.8	Vertical
5198.000	-49.8	-13.0	-36.8	Vertical
6997.000	-46.9	-13.0	-33.9	Vertical
8719.000	-45.8	-13.0	-32.8	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
100.200	-57.2	-13.0	-44.2	Horizontal
159.870	-63.7	-13.0	-50.7	Horizontal
238.260	-63.8	-13.0	-50.8	Horizontal
347.070	-58.9	-13.0	-45.9	Horizontal
541.290	-59.3	-13.0	-46.3	Horizontal
737.850	-56.6	-13.0	-43.6	Horizontal
1696.800	-42.6	-13.0	-29.6	Horizontal
2431.200	-37.9	-13.0	-24.9	Horizontal
3588.000	-53.0	-13.0	-40.0	Horizontal
5359.000	-48.6	-13.0	-35.6	Horizontal
6682.000	-43.9	-13.0	-30.9	Horizontal
8705.000	-45.5	-13.0	-32.5	Horizontal



7.1.3 Test Band = GSM1900

7.1.3.1 Test Mode = GSM/TM1

7.1.3.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-56.5	-13.0	-43.5	Vertical
161.040	-62.0	-13.0	-49.0	Vertical
239.430	-71.5	-13.0	-58.5	Vertical
345.900	-61.4	-13.0	-48.4	Vertical
499.170	-65.7	-13.0	-52.7	Vertical
722.640	-64.1	-13.0	-51.1	Vertical
3675.000	-53.6	-13.0	-40.6	Vertical
5055.000	-51.9	-13.0	-38.9	Vertical
6990.000	-48.2	-13.0	-35.2	Vertical
8895.000	-45.7	-13.0	-32.7	Vertical
11055.000	-41.9	-13.0	-28.9	Vertical
15195.000	-37.3	-13.0	-24.3	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-62.3	-13.0	-49.3	Horizontal
148.170	-62.4	-13.0	-49.4	Horizontal
213.690	-69.2	-13.0	-56.2	Horizontal
344.730	-67.8	-13.0	-54.8	Horizontal
537.780	-67.9	-13.0	-54.9	Horizontal
769.440	-64.2	-13.0	-51.2	Horizontal
3825.000	-54.9	-13.0	-41.9	Horizontal
5505.000	-50.5	-13.0	-37.5	Horizontal
7320.000	-48.0	-13.0	-35.0	Horizontal
9240.000	-44.9	-13.0	-31.9	Horizontal
11745.000	-40.3	-13.0	-27.3	Horizontal
15585.000	-33.7	-13.0	-20.7	Horizontal



7.1.3.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-58.9	-13.0	-45.9	Vertical
155.190	-63.2	-13.0	-50.2	Vertical
268.680	-62.9	-13.0	-49.9	Vertical
421.950	-65.8	-13.0	-52.8	Vertical
613.830	-65.4	-13.0	-52.4	Vertical
901.650	-62.1	-13.0	-49.1	Vertical
3750.000	-53.6	-13.0	-40.6	Vertical
4980.000	-52.3	-13.0	-39.3	Vertical
6825.000	-49.6	-13.0	-36.6	Vertical
8895.000	-44.9	-13.0	-31.9	Vertical
12060.000	-40.4	-13.0	-27.4	Vertical
15285.000	-36.3	-13.0	-23.3	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-63.2	-13.0	-50.2	Horizontal
154.020	-67.2	-13.0	-54.2	Horizontal
223.050	-67.0	-13.0	-54.0	Horizontal
341.220	-67.9	-13.0	-54.9	Horizontal
562.350	-68.4	-13.0	-55.4	Horizontal
873.570	-63.5	-13.0	-50.5	Horizontal
3630.000	-55.5	-13.0	-42.5	Horizontal
4740.000	-51.8	-13.0	-38.8	Horizontal
6930.000	-44.8	-13.0	-31.8	Horizontal
9255.000	-45.3	-13.0	-32.3	Horizontal
12270.000	-40.9	-13.0	-27.9	Horizontal
16680.000	-32.5	-13.0	-19.5	Horizontal



7.1.3.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-57.0	-13.0	-44.0	Vertical
147.000	-64.6	-13.0	-51.6	Vertical
230.070	-66.1	-13.0	-53.1	Vertical
345.900	-61.3	-13.0	-48.3	Vertical
499.170	-65.4	-13.0	-52.4	Vertical
768.270	-64.3	-13.0	-51.3	Vertical
3720.000	-53.3	-13.0	-40.3	Vertical
5040.000	-51.9	-13.0	-38.9	Vertical
6810.000	-48.6	-13.0	-35.6	Vertical
8895.000	-45.1	-13.0	-32.1	Vertical
11730.000	-40.1	-13.0	-27.1	Vertical
15900.000	-33.9	-13.0	-20.9	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-62.8	-13.0	-49.8	Horizontal
154.020	-63.9	-13.0	-50.9	Horizontal
260.490	-70.9	-13.0	-57.9	Horizontal
345.900	-68.4	-13.0	-55.4	Horizontal
524.910	-68.8	-13.0	-55.8	Horizontal
765.930	-64.1	-13.0	-51.1	Horizontal
3615.000	-55.8	-13.0	-42.8	Horizontal
5205.000	-51.7	-13.0	-38.7	Horizontal
6540.000	-45.0	-13.0	-32.0	Horizontal
8730.000	-47.1	-13.0	-34.1	Horizontal
11550.000	-40.8	-13.0	-27.8	Horizontal
15570.000	-34.5	-13.0	-21.5	Horizontal



7.1.4 Test Band = EGPRS1900

7.1.4.1 Test Mode = GSM/TM2

7.1.4.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-58.1	-13.0	-45.1	Vertical
161.040	-66.0	-13.0	-53.0	Vertical
268.680	-63.4	-13.0	-50.4	Vertical
421.950	-66.2	-13.0	-53.2	Vertical
615.000	-66.7	-13.0	-53.7	Vertical
920.370	-61.7	-13.0	-48.7	Vertical
3750.000	-53.0	-13.0	-40.0	Vertical
5040.000	-52.0	-13.0	-39.0	Vertical
6990.000	-47.8	-13.0	-34.8	Vertical
8925.000	-45.1	-13.0	-32.1	Vertical
11715.000	-40.1	-13.0	-27.1	Vertical
15975.000	-32.9	-13.0	-19.9	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-63.9	-13.0	-50.9	Horizontal
152.850	-64.9	-13.0	-51.9	Horizontal
225.390	-71.8	-13.0	-58.8	Horizontal
321.330	-67.6	-13.0	-54.6	Horizontal
489.810	-68.0	-13.0	-55.0	Horizontal
749.550	-63.9	-13.0	-50.9	Horizontal
3726.298	-55.2	-13.0	-42.2	Horizontal
5385.000	-51.5	-13.0	-38.5	Horizontal
6570.000	-45.0	-13.0	-32.0	Horizontal
8010.000	-46.8	-13.0	-33.8	Horizontal
10290.000	-43.5	-13.0	-30.5	Horizontal
13980.000	-40.3	-13.0	-27.3	Horizontal



7.1.4.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-57.3	-13.0	-44.3	Vertical
161.040	-68.2	-13.0	-55.2	Vertical
255.810	-67.7	-13.0	-54.7	Vertical
399.720	-65.3	-13.0	-52.3	Vertical
615.000	-65.2	-13.0	-52.2	Vertical
934.410	-62.2	-13.0	-49.2	Vertical
3165.000	-53.0	-13.0	-40.0	Vertical
4292.907	-53.5	-13.0	-40.5	Vertical
6600.000	-49.8	-13.0	-36.8	Vertical
8910.000	-45.4	-13.0	-32.4	Vertical
12285.000	-39.9	-13.0	-26.9	Vertical
15930.000	-34.0	-13.0	-21.0	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
106.050	-59.0	-13.0	-46.0	Horizontal
162.210	-67.1	-13.0	-54.1	Horizontal
252.300	-70.0	-13.0	-57.0	Horizontal
395.040	-69.8	-13.0	-56.8	Horizontal
625.530	-66.8	-13.0	-53.8	Horizontal
918.030	-61.8	-13.0	-48.8	Horizontal
3375.000	-56.4	-13.0	-43.4	Horizontal
4545.000	-50.9	-13.0	-37.9	Horizontal
6555.000	-45.4	-13.0	-32.4	Horizontal
8910.000	-46.4	-13.0	-33.4	Horizontal
11880.000	-40.4	-13.0	-27.4	Horizontal
15900.000	-32.8	-13.0	-19.8	Horizontal





7.1.4.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-58.2	-13.0	-45.2	Vertical
162.210	-65.8	-13.0	-52.8	Vertical
260.490	-69.8	-13.0	-56.8	Vertical
421.950	-66.6	-13.0	-53.6	Vertical
595.110	-66.9	-13.0	-53.9	Vertical
853.680	-63.9	-13.0	-50.9	Vertical
3443.808	-55.7	-13.0	-42.7	Vertical
4875.000	-54.2	-13.0	-41.2	Vertical
6960.000	-48.2	-13.0	-35.2	Vertical
8910.000	-45.3	-13.0	-32.3	Vertical
11730.000	-40.9	-13.0	-27.9	Vertical
15165.000	-36.2	-13.0	-23.2	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-63.8	-13.0	-50.8	Horizontal
183.270	-69.5	-13.0	-56.5	Horizontal
293.250	-68.2	-13.0	-55.2	Horizontal
403.230	-69.7	-13.0	-56.7	Horizontal
599.790	-66.0	-13.0	-53.0	Horizontal
891.120	-62.8	-13.0	-49.8	Horizontal
3720.000	-55.6	-13.0	-42.6	Horizontal
5085.000	-52.0	-13.0	-39.0	Horizontal
7365.000	-47.2	-13.0	-34.2	Horizontal
9480.000	-46.4	-13.0	-33.4	Horizontal
12330.000	-40.0	-13.0	-27.0	Horizontal
15900.000	-33.2	-13.0	-20.2	Horizontal

NOTE:

- 1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



For WCDMA

7.1.5 Test Band = WCDMA850

7.1.5.1 Test Mode = UMTS/TM1

7.1.5.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-58.3	-13.0	-45.3	Vertical
130.620	-68.5	-13.0	-55.5	Vertical
179.760	-67.0	-13.0	-54.0	Vertical
268.680	-62.9	-13.0	-49.9	Vertical
383.340	-59.3	-13.0	-46.3	Vertical
615.000	-64.9	-13.0	-51.9	Vertical
1650.000	-37.5	-13.0	-24.5	Vertical
2571.600	-37.4	-13.0	-24.4	Vertical
3735.000	-50.7	-13.0	-37.7	Vertical
5121.000	-49.5	-13.0	-36.5	Vertical
6717.000	-47.5	-13.0	-34.5	Vertical
8908.000	-43.7	-13.0	-30.7	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
87.330	-67.4	-13.0	-54.4	Horizontal
127.110	-72.6	-13.0	-59.6	Horizontal
191.460	-69.6	-13.0	-56.6	Horizontal
307.290	-64.9	-13.0	-51.9	Horizontal
461.730	-69.0	-13.0	-56.0	Horizontal
634.890	-67.1	-13.0	-54.1	Horizontal
1650.000	-35.5	-13.0	-22.5	Horizontal
2442.000	-37.2	-13.0	-24.2	Horizontal
3728.000	-52.3	-13.0	-39.3	Horizontal
4498.000	-48.9	-13.0	-35.9	Horizontal
6927.000	-43.3	-13.0	-30.3	Horizontal
9216.000	-43.4	-13.0	-30.4	Horizontal



7.1.5.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
88.500	-62.7	-13.0	-49.7	Vertical
128.280	-63.4	-13.0	-50.4	Vertical
178.590	-67.9	-13.0	-54.9	Vertical
307.290	-60.4	-13.0	-47.4	Vertical
421.950	-62.9	-13.0	-49.9	Vertical
613.830	-64.5	-13.0	-51.5	Vertical
1675.200	-37.4	-13.0	-24.4	Vertical
2429.400	-37.8	-13.0	-24.8	Vertical
3238.000	-50.6	-13.0	-37.6	Vertical
4967.000	-50.7	-13.0	-37.7	Vertical
6696.000	-48.0	-13.0	-35.0	Vertical
8894.000	-42.6	-13.0	-29.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-64.4	-13.0	-51.4	Horizontal
162.504	-68.4	-13.0	-55.4	Horizontal
249.960	-71.1	-13.0	-58.1	Horizontal
395.040	-69.2	-13.0	-56.2	Horizontal
517.890	-68.7	-13.0	-55.7	Horizontal
689.880	-65.9	-13.0	-52.9	Horizontal
1673.400	-35.6	-13.0	-22.6	Horizontal
2434.800	-31.4	-13.0	-18.4	Horizontal
3756.000	-52.1	-13.0	-39.1	Horizontal
5261.000	-48.6	-13.0	-35.6	Horizontal
6990.000	-42.9	-13.0	-29.9	Horizontal
9265.000	-43.7	-13.0	-30.7	Horizontal



7.1.5.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.536	-57.2	-13.0	-44.2	Vertical
127.388	-69.9	-13.0	-56.9	Vertical
176.250	-69.0	-13.0	-56.0	Vertical
268.680	-63.0	-13.0	-50.0	Vertical
421.950	-63.0	-13.0	-50.0	Vertical
672.330	-65.6	-13.0	-52.6	Vertical
1695.000	-37.6	-13.0	-24.6	Vertical
2616.600	-36.3	-13.0	-23.3	Vertical
3308.000	-51.5	-13.0	-38.5	Vertical
4715.000	-51.4	-13.0	-38.4	Vertical
6962.000	-46.9	-13.0	-33.9	Vertical
9314.000	-43.8	-13.0	-30.8	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
86.160	-67.7	-13.0	-54.7	Horizontal
121.872	-68.2	-13.0	-55.2	Horizontal
184.440	-68.9	-13.0	-55.9	Horizontal
268.680	-67.0	-13.0	-54.0	Horizontal
383.340	-68.2	-13.0	-55.2	Horizontal
648.930	-66.4	-13.0	-53.4	Horizontal
1691.400	-36.7	-13.0	-23.7	Horizontal
2434.800	-37.4	-13.0	-24.4	Horizontal
3525.000	-53.7	-13.0	-40.7	Horizontal
4554.000	-48.5	-13.0	-35.5	Horizontal
5884.000	-49.9	-13.0	-36.9	Horizontal
8152.000	-45.6	-13.0	-32.6	Horizontal

NOTE:

- 1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



7.2 For LTE Band 7

7.2.1 Test Band = LTE

7.2.1.1 Test Mode =LTE/TM1 5MHz

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
87.330	-60.9	-13.0	-47.9	Vertical
150.510	-65.4	-13.0	-52.4	Vertical
237.090	-69.6	-13.0	-56.6	Vertical
363.450	-67.6	-13.0	-54.6	Vertical
563.520	-66.7	-13.0	-53.7	Vertical
913.350	-61.9	-13.0	-48.9	Vertical
3675.000	-54.5	-13.0	-41.5	Vertical
5055.000	-36.8	-13.0	-23.8	Vertical
6885.000	-48.9	-13.0	-35.9	Vertical
8895.000	-45.8	-13.0	-32.8	Vertical
12255.000	-39.9	-13.0	-26.9	Vertical
15570.000	-35.1	-13.0	-22.1	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
96.690	-66.8	-13.0	-53.8	Horizontal
145.830	-65.8	-13.0	-52.8	Horizontal
297.930	-68.3	-13.0	-55.3	Horizontal
448.860	-69.0	-13.0	-56.0	Horizontal
650.100	-66.7	-13.0	-53.7	Horizontal
909.840	-61.7	-13.0	-48.7	Horizontal
3600.000	-56.5	-13.0	-43.5	Horizontal
5055.000	-37.8	-13.0	-24.8	Horizontal
6975.000	-44.4	-13.0	-31.4	Horizontal
9195.000	-45.9	-13.0	-32.9	Horizontal
12360.000	-40.8	-13.0	-27.8	Horizontal
15915.000	-34.0	-13.0	-21.0	Horizontal



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7.2.1.2 Test Mode =LTE/TM1 20MHz

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-58.1	-13.0	-45.1	Vertical
139.980	-67.0	-13.0	-54.0	Vertical
197.310	-69.5	-13.0	-56.5	Vertical
345.900	-59.8	-13.0	-46.8	Vertical
600.960	-66.1	-13.0	-53.1	Vertical
888.780	-52.0	-13.0	-39.0	Vertical
3330.000	-54.6	-13.0	-41.6	Vertical
5040.000	-33.0	-13.0	-20.0	Vertical
6945.000	-48.6	-13.0	-35.6	Vertical
8895.000	-44.9	-13.0	-31.9	Vertical
11280.000	-40.9	-13.0	-27.9	Vertical
15570.000	-33.9	-13.0	-20.9	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-64.7	-13.0	-51.7	Horizontal
156.360	-68.5	-13.0	-55.5	Horizontal
304.950	-68.4	-13.0	-55.4	Horizontal
458.220	-68.7	-13.0	-55.7	Horizontal
643.080	-66.3	-13.0	-53.3	Horizontal
875.910	-61.6	-13.0	-48.6	Horizontal
3630.000	-55.7	-13.0	-42.7	Horizontal
5040.000	-35.5	-13.0	-22.5	Horizontal
6960.000	-44.0	-13.0	-31.0	Horizontal
9195.000	-44.7	-13.0	-31.7	Horizontal
12315.000	-40.0	-13.0	-27.0	Horizontal
15960.000	-32.7	-13.0	-19.7	Horizontal

NOTE:

- 1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) Pretest was performed at the EUT in low, middle, high channel, but only the worst test channel (Channel 21100) and only the data of the worst case show in the test report.

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8 Frequency Stability

8.1 For GSM

8.1.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	TN	VL	-2.91	-0.00353	PASS
				VN	-7.81	-0.00948	PASS
				VH	0.71	0.00086	PASS
		MCH	TN	VL	-7.55	-0.00902	PASS
				VN	-6.33	-0.00757	PASS
				VH	-4.97	-0.00594	PASS
		HCH	TN	VL	-1.03	-0.00121	PASS
				VN	-5.75	-0.00677	PASS
				VH	-9.17	-0.0108	PASS
GSM850	GSM/TM2	LCH	TN	VL	-12.79	-0.00691	PASS
				VN	-10.14	-0.00548	PASS
				VH	-8.59	-0.00464	PASS
		MCH	TN	VL	-2.45	-0.0013	PASS
				VN	-1.74	-0.00093	PASS
				VH	-7.43	-0.00395	PASS
		HCH	TN	VL	-1.10	-0.00058	PASS
				VN	-8.33	-0.00436	PASS
				VH	-18.98	-0.00994	PASS



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Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM1900	GSM/TM1	LCH	TN	VL	-12.56	-0.00679	PASS
				VN	-9.91	-0.00536	PASS
				VH	-8.36	-0.00452	PASS
		MCH	TN	VL	-2.22	-0.00118	PASS
				VN	-1.51	-0.00080	PASS
				VH	-7.20	-0.00383	PASS
		HCH	TN	VL	-1.16	-0.00061	PASS
				VN	-8.39	-0.00439	PASS
				VH	-19.04	-0.00997	PASS
GSM1900	GSM/TM2	LCH	TN	VL	3.57	0.00193	PASS
				VN	-5.73	-0.00310	PASS
				VH	-7.99	-0.00432	PASS
		MCH	TN	VL	-18.97	-0.01009	PASS
				VN	-1.77	-0.00094	PASS
				VH	-14.30	-0.00761	PASS
		HCH	TN	VL	-6.81	-0.00357	PASS
				VN	-10.62	-0.00556	PASS
				VH	-9.36	-0.00490	PASS

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8.1.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	VN	-30	-1.81	-0.00220	PASS
				-20	-1.10	-0.00133	PASS
				-10	-1.42	-0.00172	PASS
				0	-3.36	-0.00408	PASS
				10	1.42	0.00172	PASS
				20	2.65	0.00322	PASS
				30	2.32	0.00281	PASS
				40	0.84	0.00102	PASS
				50	5.94	0.00721	PASS
		MCH	VN	-30	0.00	0.00000	PASS
				-20	2.71	0.00324	PASS
				-10	-0.52	-0.00062	PASS
				0	-1.87	-0.00224	PASS
				10	0.52	0.00062	PASS
				20	-1.03	-0.00123	PASS
				30	1.03	0.00123	PASS
				40	1.61	0.00192	PASS
				50	2.45	0.00293	PASS
		HCH	VN	-30	0.26	0.00031	PASS
				-20	4.91	0.00578	PASS
				-10	-0.71	-0.00084	PASS
				0	-1.16	-0.00137	PASS
				10	-0.90	-0.00106	PASS
				20	-1.16	-0.00137	PASS
				30	-1.36	-0.00160	PASS
				40	-2.26	-0.00266	PASS
				50	-0.19	-0.00022	PASS



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8.1.3 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM1900	GSM/TM1	LCH	VN	-30	-14.91	-0.00806	PASS
				-20	-8.84	-0.00478	PASS
				-10	-14.01	-0.00757	PASS
				0	-2.19	-0.00118	PASS
				10	1.68	0.00091	PASS
				20	-5.03	-0.00272	PASS
				30	-13.81	-0.00746	PASS
				40	-10.39	-0.00562	PASS
				50	1.36	0.00074	PASS
		MCH	VN	-30	-5.74	-0.00305	PASS
				-20	-7.36	-0.00391	PASS
				-10	-13.10	-0.00697	PASS
				0	-0.42	-0.00022	PASS
				10	-15.08	-0.00802	PASS
				20	-7.39	-0.00393	PASS
				30	2.68	0.00143	PASS
				40	-8.62	-0.00459	PASS
				50	-11.66	-0.00620	PASS
		HCH	VN	-30	-14.43	-0.00756	PASS
				-20	-5.21	-0.00273	PASS
				-10	-6.76	-0.00354	PASS
				0	-11.73	-0.00614	PASS
				10	1.05	0.00055	PASS
				20	2.60	0.00136	PASS
				30	-6.31	-0.00330	PASS
				40	-13.61	-0.00713	PASS
				50	-2.18	-0.00114	PASS



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8.2 For WCDMA

8.2.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA	UMTS/TM 1	LCH	TN	VL	0.40	0.00048	PASS
				VN	-0.06	-0.00007	PASS
				VH	0.14	0.00017	PASS
		MCH	TN	VL	0.96	0.00115	PASS
				VN	0.87	0.00104	PASS
				VH	-1.23	-0.00147	PASS
		HCH	TN	VL	1.86	0.00220	PASS
				VN	-2.52	-0.00298	PASS
				VH	2.62	0.00309	PASS



8.2.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA	UMTS/TM1	LCH	VN	-30	2.70	0.00327	PASS
				-20	1.47	0.00178	PASS
				-10	0.61	0.00074	PASS
				0	-2.70	-0.00327	PASS
				10	0.55	0.00067	PASS
				20	-1.86	-0.00225	PASS
				30	1.62	0.00196	PASS
				40	-0.07	-0.00008	PASS
				50	-1.20	-0.00145	PASS
		MCH	VN	-30	-1.95	-0.00233	PASS
				-20	-1.22	-0.00146	PASS
				-10	-0.48	-0.00057	PASS
				0	-1.49	-0.00178	PASS
				10	2.19	0.00262	PASS
				20	1.61	0.00192	PASS
				30	1.50	0.00179	PASS
				40	-0.04	-0.00005	PASS
				50	-0.50	-0.00060	PASS
		HCH	VN	-30	-0.30	-0.00035	PASS
				-20	0.52	0.00061	PASS
				-10	0.72	0.00085	PASS
				0	-1.38	-0.00163	PASS
				10	1.71	0.00202	PASS
				20	-2.67	-0.00315	PASS
				30	2.81	0.00332	PASS
				40	-0.42	-0.00050	PASS
				50	-2.45	-0.00289	PASS



8.3 For LTE

8.3.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE	LTE/TM1 5MHz	LCH	TN	VL	-8.29	-0.00331	PASS
				VN	-4.34	-0.00173	PASS
				VH	-7.76	-0.00310	PASS
		MCH	TN	VL	-5.10	-0.00201	PASS
				VN	-6.43	-0.00254	PASS
				VH	-9.13	-0.00360	PASS
		HCH	TN	VL	-8.00	-0.00312	PASS
				VN	-6.00	-0.00234	PASS
				VH	-7.30	-0.00284	PASS
	LTE/TM2 5MHz	LCH	TN	VL	-6.42	-0.00257	PASS
				VN	-6.54	-0.00261	PASS
				VH	-7.77	-0.00310	PASS
		MCH	TN	VL	-7.30	-0.00288	PASS
				VN	-7.07	-0.00279	PASS
				VH	-4.03	-0.00159	PASS
		HCH	TN	VL	-7.22	-0.00281	PASS
				VN	-2.84	-0.00111	PASS
				VH	-5.07	-0.00197	PASS
	LTE/TM1 10MHz	LCH	TN	VL	-8.29	-0.00331	PASS
				VN	-4.34	-0.00173	PASS
				VH	-7.76	-0.00310	PASS
		MCH	TN	VL	-5.10	-0.00201	PASS
				VN	-6.43	-0.00254	PASS
				VH	-9.13	-0.00360	PASS
		HCH	TN	VL	-8.00	-0.00312	PASS
				VN	-6.00	-0.00234	PASS
				VH	-7.30	-0.00285	PASS



LTE	LTE/TM2 10MHz	LCH	TN	VL	0.34	0.00014	PASS
				VN	3.24	0.00129	PASS
				VH	0.97	0.00039	PASS
		MCH	TN	VL	-0.89	-0.00035	PASS
				VN	0.53	0.00021	PASS
				VH	1.25	0.00049	PASS
		HCH	TN	VL	-1.04	-0.00041	PASS
				VN	-2.13	-0.00083	PASS
				VH	-4.03	-0.00157	PASS
	LTE/TM1 15MHz	LCH	TN	VL	0.70	0.00028	PASS
				VN	3.43	0.00137	PASS
				VH	1.16	0.00046	PASS
		MCH	TN	VL	-0.70	-0.00028	PASS
				VN	0.72	0.00028	PASS
				VH	1.44	0.00057	PASS
		HCH	TN	VL	-0.85	-0.00033	PASS
				VN	-1.94	-0.00076	PASS
				VH	-4.03	-0.00157	PASS
	LTE/TM2 15MHz	LCH	TN	VL	-1.05	-0.00042	PASS
				VN	2.63	0.00105	PASS
				VH	2.05	0.00082	PASS
		MCH	TN	VL	1.94	0.00077	PASS
				VN	0.40	0.00016	PASS
				VH	-0.06	-0.00002	PASS
		HCH	TN	VL	0.14	0.00005	PASS
				VN	0.96	0.00037	PASS
				VH	0.68	0.00027	PASS



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LTE	LTE/TM1 20MHz	LCH	TN	VL	-6.25	-0.00249	PASS
				VN	-6.54	-0.00261	PASS
				VH	-7.77	-0.00310	PASS
		MCH	TN	VL	-7.30	-0.00288	PASS
				VN	-7.07	-0.00279	PASS
				VH	-4.03	-0.00159	PASS
		HCH	TN	VL	-7.22	-0.00282	PASS
				VN	-2.84	-0.00111	PASS
				VH	-5.07	-0.00198	PASS
	LTE/TM2 20MHz	LCH	TN	VL	1.67	0.00067	PASS
				VN	-4.34	-0.00173	PASS
				VH	-7.76	-0.00309	PASS
		MCH	TN	VL	-5.10	-0.00201	PASS
				VN	-6.43	-0.00254	PASS
				VH	-9.13	-0.00360	PASS
		HCH	TN	VL	-8.00	-0.00313	PASS
				VN	-6.00	-0.00234	PASS
				VH	-7.30	-0.00285	PASS

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8.3.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE	LTE/TM1 20MHz	LCH	VN	-30	-6.42	-0.00256	PASS
				-20	-6.54	-0.00261	PASS
				-10	-7.77	-0.00310	PASS
				0	-7.30	-0.00291	PASS
				10	-7.07	-0.00282	PASS
				20	-4.03	-0.00161	PASS
				30	-7.22	-0.00288	PASS
				40	-2.84	-0.00113	PASS
				50	-5.07	-0.00202	PASS
		MCH	VN	-30	-1.05	-0.00041	PASS
				-20	2.63	0.00104	PASS
				-10	2.05	0.00081	PASS
				0	1.94	0.00077	PASS
				10	0.40	0.00016	PASS
				20	-0.06	-0.00002	PASS
				30	0.14	0.00006	PASS
				40	0.96	0.00038	PASS
				50	0.68	0.00027	PASS
		HCH	VN	-30	-8.04	-0.00314	PASS
				-20	-6.04	-0.00236	PASS
				-10	-6.29	-0.00246	PASS
				0	-6.58	-0.00257	PASS
				10	-7.81	-0.00305	PASS
				20	-7.34	-0.00287	PASS
				30	-7.11	-0.00278	PASS
				40	-4.07	-0.00159	PASS
				50	-7.26	-0.00284	PASS

The End