

9.4 開放頻帶邊緣之量測結果

請參考附圖

判定結果：合格

發射限制測試值

Test Mode: IEEE 802.11b Mode

發射限制測試值 CH Low(下邊緣頻帶):

在下邊緣頻帶之 100kHz 頻寬內 Peak 為 60.71dBuV/m ; Average 為 40.96dBuV/m 。

發射限制測試值 CH High(上邊緣頻帶):

在上邊緣頻帶之 100kHz 頻寬內 Peak 為 58.52dBuV/m ; Average 為 40.29dBuV/m 。

Test Mode: IEEE 802.11g Mode

發射限制測試值 CH Low(下邊緣頻帶):

在下邊緣頻帶之 100kHz 頻寬內 Peak 為 62.27dBuV/m ; Average 為 49.70dBuV/m 。

發射限制測試值 CH High(上邊緣頻帶):

在上邊緣頻帶之 100kHz 頻寬內 Peak 為 62.64dBuV/m ; Average 為 46.42dBuV/m 。

Test Mode: IEEE 802.11n HT 20 Mode

發射限制測試值 CH Low(下邊緣頻帶):

在下邊緣頻帶之 100kHz 頻寬內 Peak 為 61.52dBuV/m ; Average 為 45.20dBuV/m 。

發射限制測試值 CH High(上邊緣頻帶):

在上邊緣頻帶之 100kHz 頻寬內 Peak 為 51.95dBuV/m ; Average 為 39.54dBuV/m 。

Test Mode: IEEE 802.11n HT 40 Mode

發射限制測試值 CH Low(下邊緣頻帶):

在下邊緣頻帶之 100kHz 頻寬內 Peak 為 64.63dBuV/m ; Average 為 47.26dBuV/m 。

發射限制測試值 CH High(上邊緣頻帶):

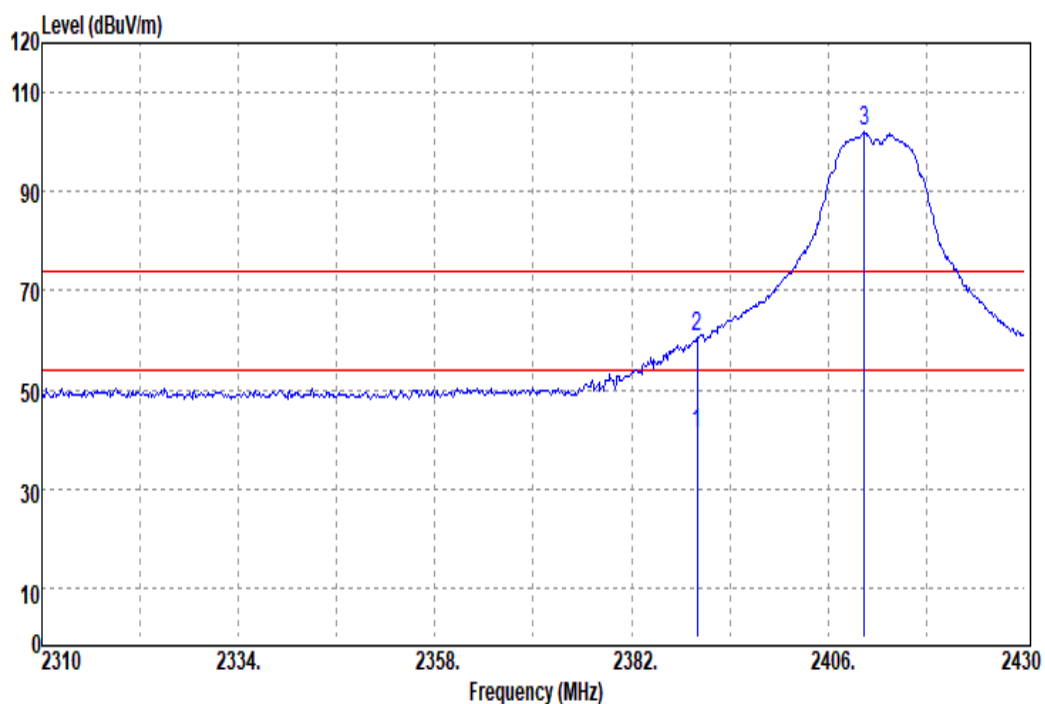
在上邊緣頻帶之 100kHz 頻寬內 Peak 為 56.41dBuV/m ; Average 為 41.05dBuV/m 。

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發射限制測試

IEEE 802.11b Mode / CH Low

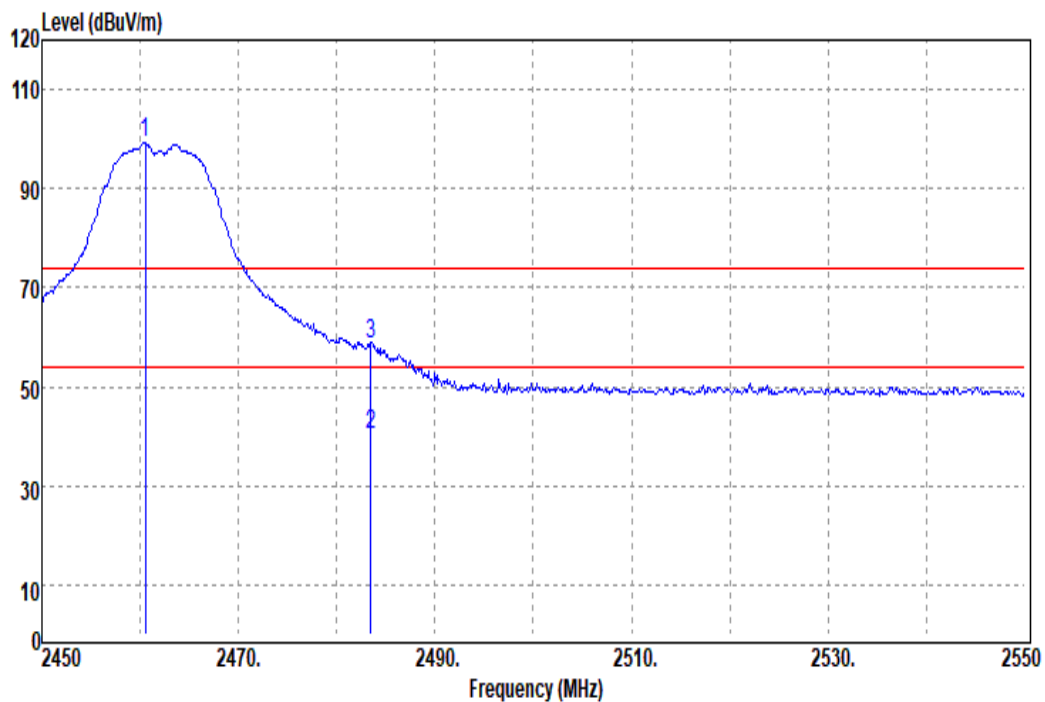
Detector mode: Peak & Average



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.00	44.34	-3.38	40.96	54.00	-13.04	Average
2	2390.00	64.09	-3.38	60.71	74.00	-13.29	Peak
3	2410.44	105.31	-3.36	101.95	-	-	Peak

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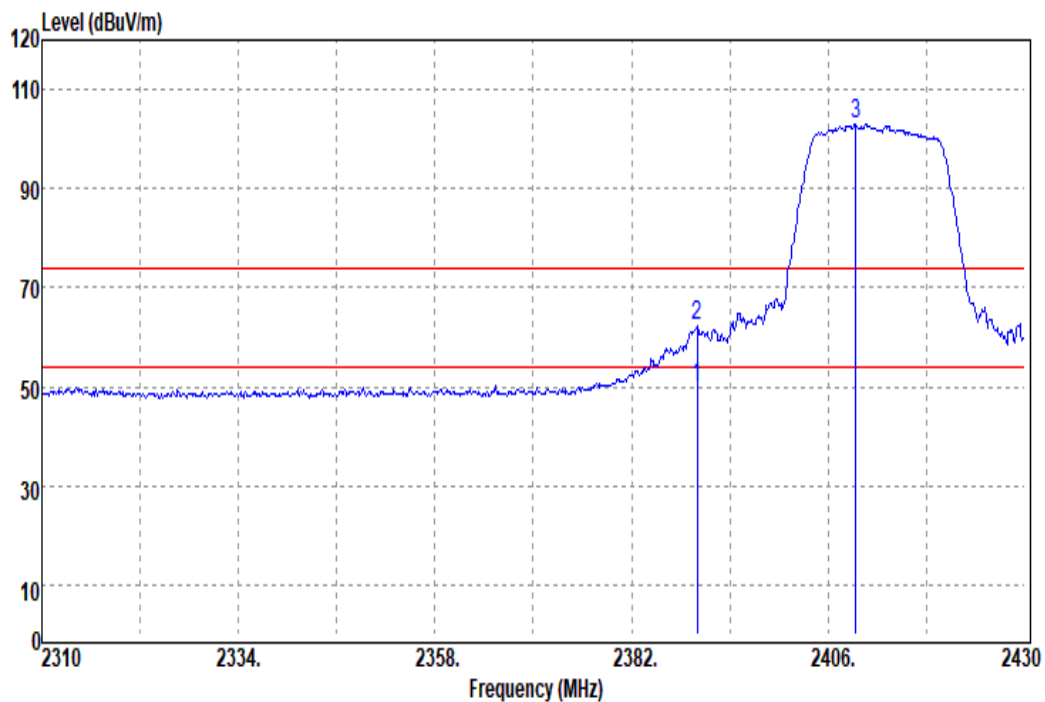
IEEE 802.11b Mode / CH High
Detector mode: Peak & Average



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.50	102.11	-3.05	99.06	-	-	Peak
2	2483.50	43.12	-2.83	40.29	54.00	-13.71	Average
3	2483.50	61.35	-2.83	58.52	74.00	-15.48	Peak

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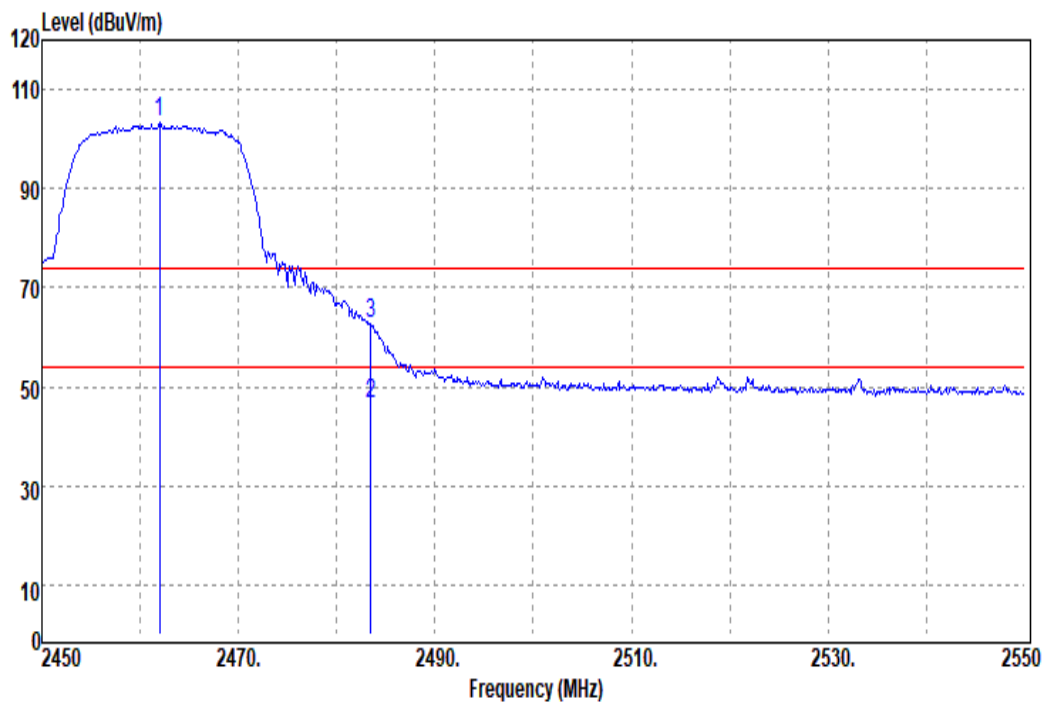
IEEE 802.11g Mode / CH Low
Detector mode: Peak & Average



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.00	53.08	-3.38	49.70	54.00	-4.30	Average
2	2390.00	65.65	-3.38	62.27	74.00	-11.73	Peak
	2409.36	106.22	-3.37	102.85	-	-	Peak

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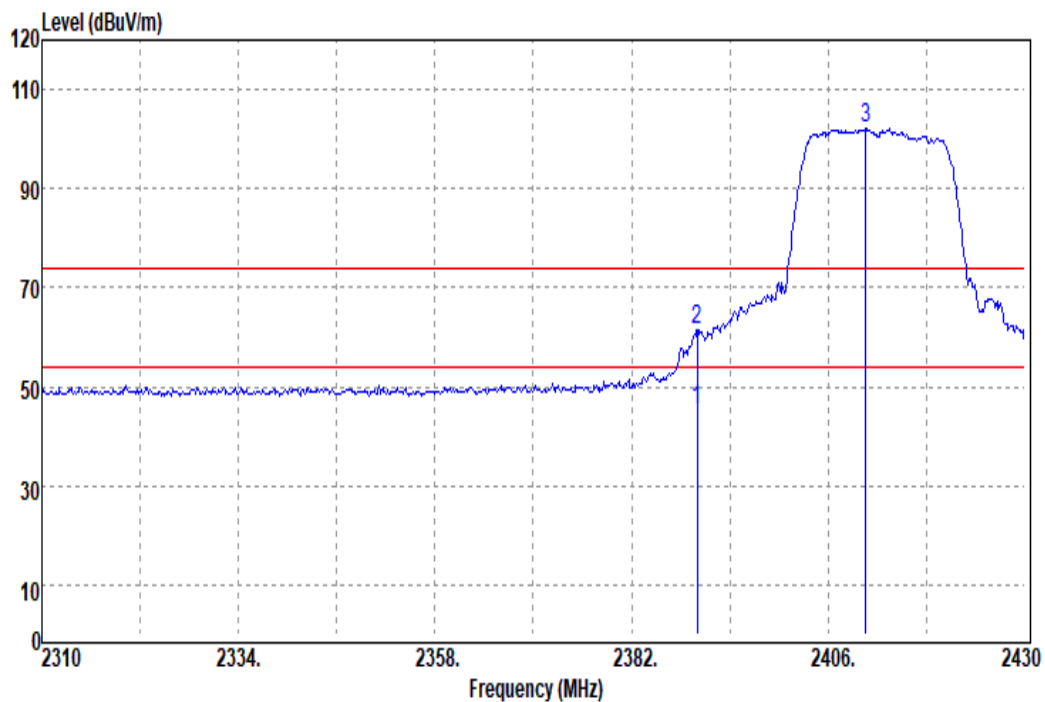
IEEE 802.11g Mode / CH High
Detector mode: Peak & Average



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2462.00	106.56	-3.03	103.53	-	-	Peak
2	2483.50	49.25	-2.83	46.42	54.00	-7.58	Average
	2483.50	65.47	-2.83	62.64	74.00	-11.36	Peak

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IEEE 802.11n HT 20 Mode / CH Low
Detector mode: Peak & Average

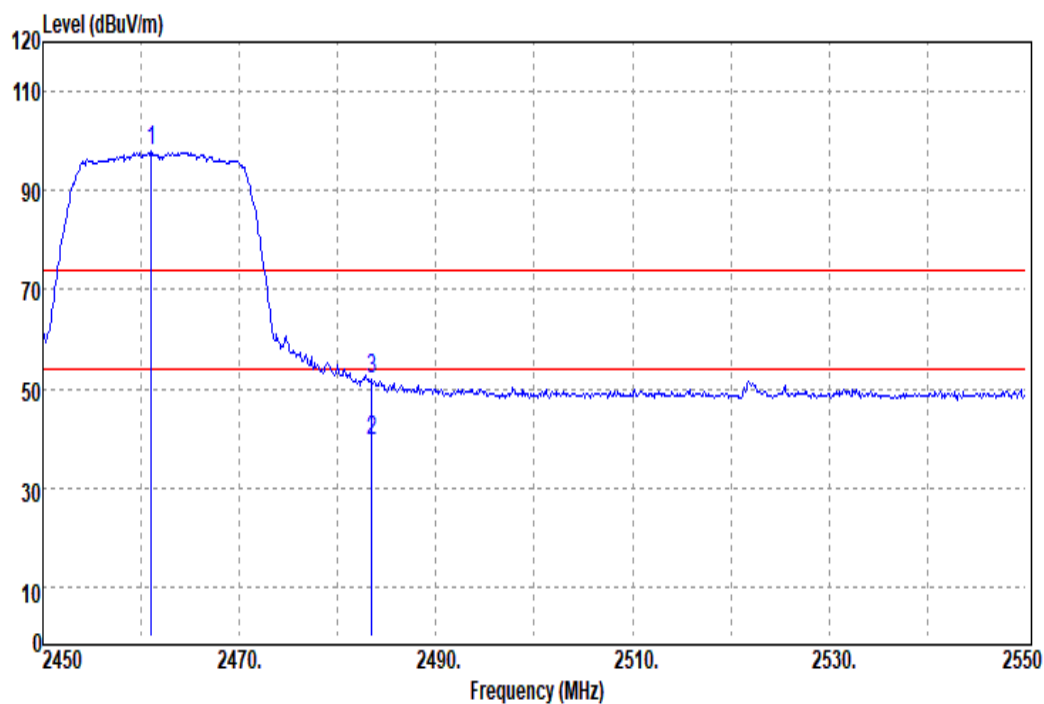


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.00	48.58	-3.38	45.20	54.00	-8.80	Average
2	2390.00	64.90	-3.38	61.52	74.00	-12.48	Peak
3	2410.56	105.56	-3.36	102.20	-	-	Peak

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IEEE 802.11n HT 20 Mode / CH High

Detector mode: Peak & Average

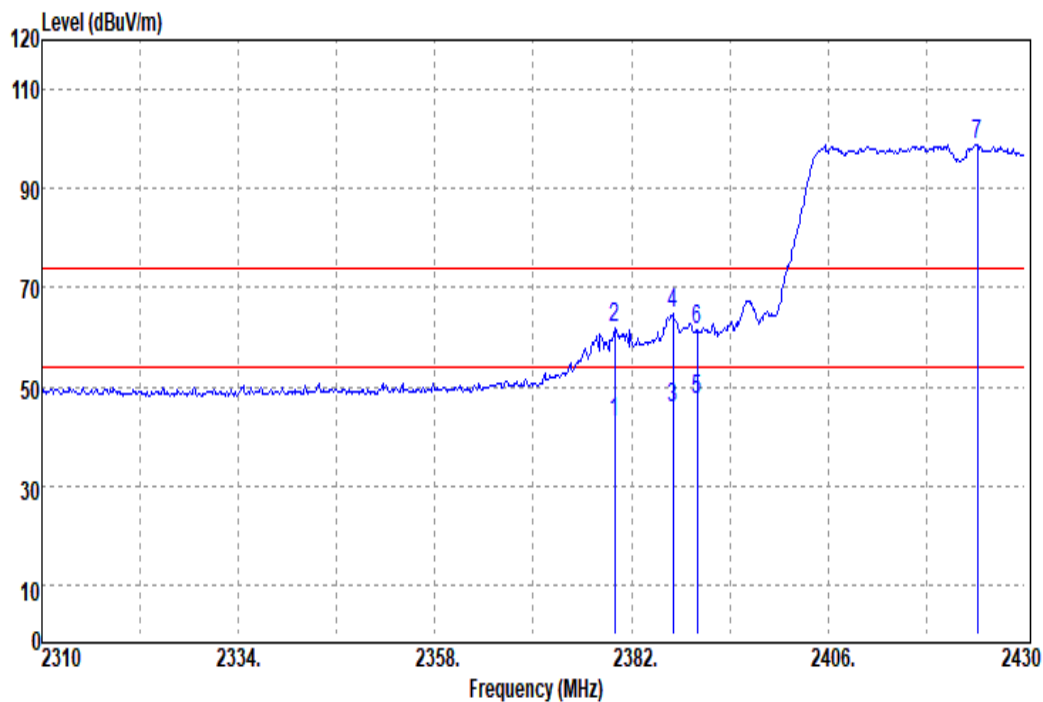


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2461.00	100.85	-3.04	97.81	-	-	Peak
2	2483.50	42.37	-2.83	39.54	54.00	-14.46	Average
	2483.50	54.78	-2.83	51.95	74.00	-22.05	Peak

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IEEE 802.11n HT 40 Mode / CH Low

Detector mode: Peak & Average

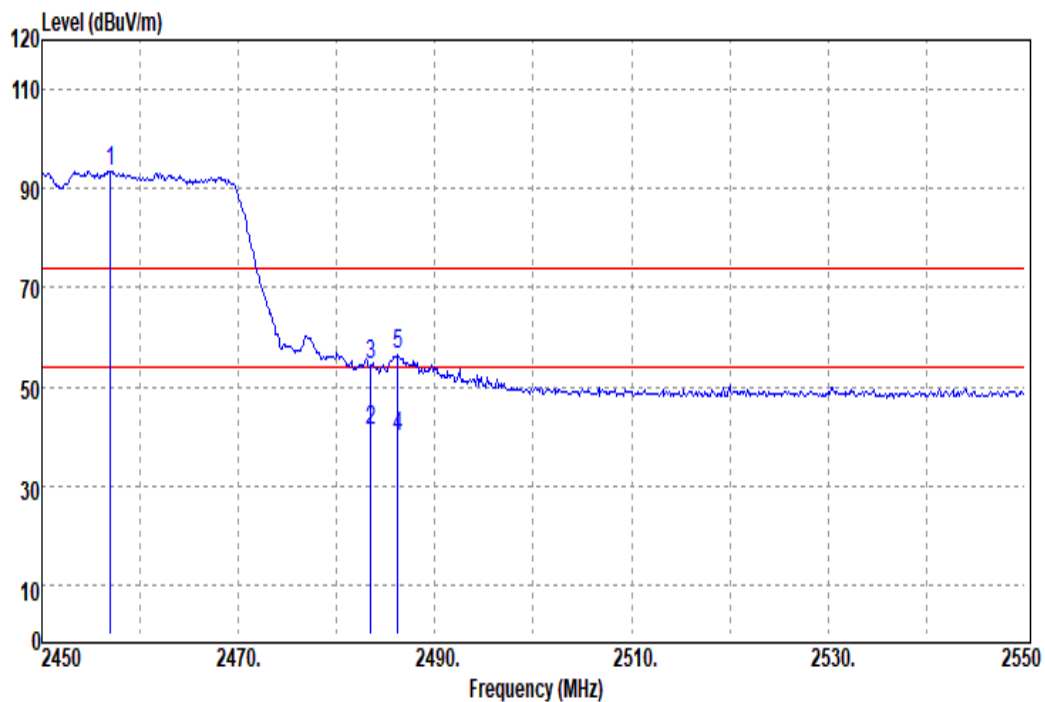


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2379.96	45.96	-3.37	42.59	54.00	-11.41	Average
2	2379.96	65.11	-3.37	61.74	74.00	-12.26	Peak
3	2387.04	49.21	-3.38	45.83	54.00	-8.17	Average
4	2387.04	68.01	-3.38	64.63	74.00	-9.37	Peak
5	2390.00	50.64	-3.38	47.26	54.00	-6.74	Average
6	2390.00	65.02	-3.38	61.64	74.00	-12.36	Peak
7	2424.24	102.21	-3.30	98.91	-	-	Peak

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IEEE 802.11n HT 40 Mode / CH High

Detector mode: Peak & Average



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2457.00	96.56	-3.08	93.48	-	-	Peak
2	2483.50	43.88	-2.83	41.05	54.00	-12.95	Average
3	2483.50	57.14	-2.83	54.31	74.00	-19.69	Peak
4	2486.20	42.81	-2.81	40.00	54.00	-14.00	Average
5	2486.20	59.22	-2.81	56.41	74.00	-17.59	Peak

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10. 帶外發射限制

10.1 適用標準

操作頻帶範圍外之任意 100 kHz 內，發射機所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 kHz 內的射頻功率，其衰減值限制如下：

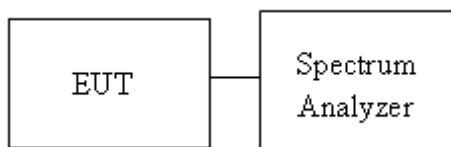
- (1) 輸出功率以附件二之峰值輸出功率方式測量者，至少須衰減 20 dB，可使用射頻傳導或輻射方式測量。
- (2) 輸出功率以 3.10.1.2(1)(C)之最大傳導輸出功率測量方式者，至少須衰減 30 dB。此外，落於 2.7 禁用頻段之輻射發射，應符合 2.8 之規定。

10.2 測試方法

Test method Refer as KDB 558074 D01.

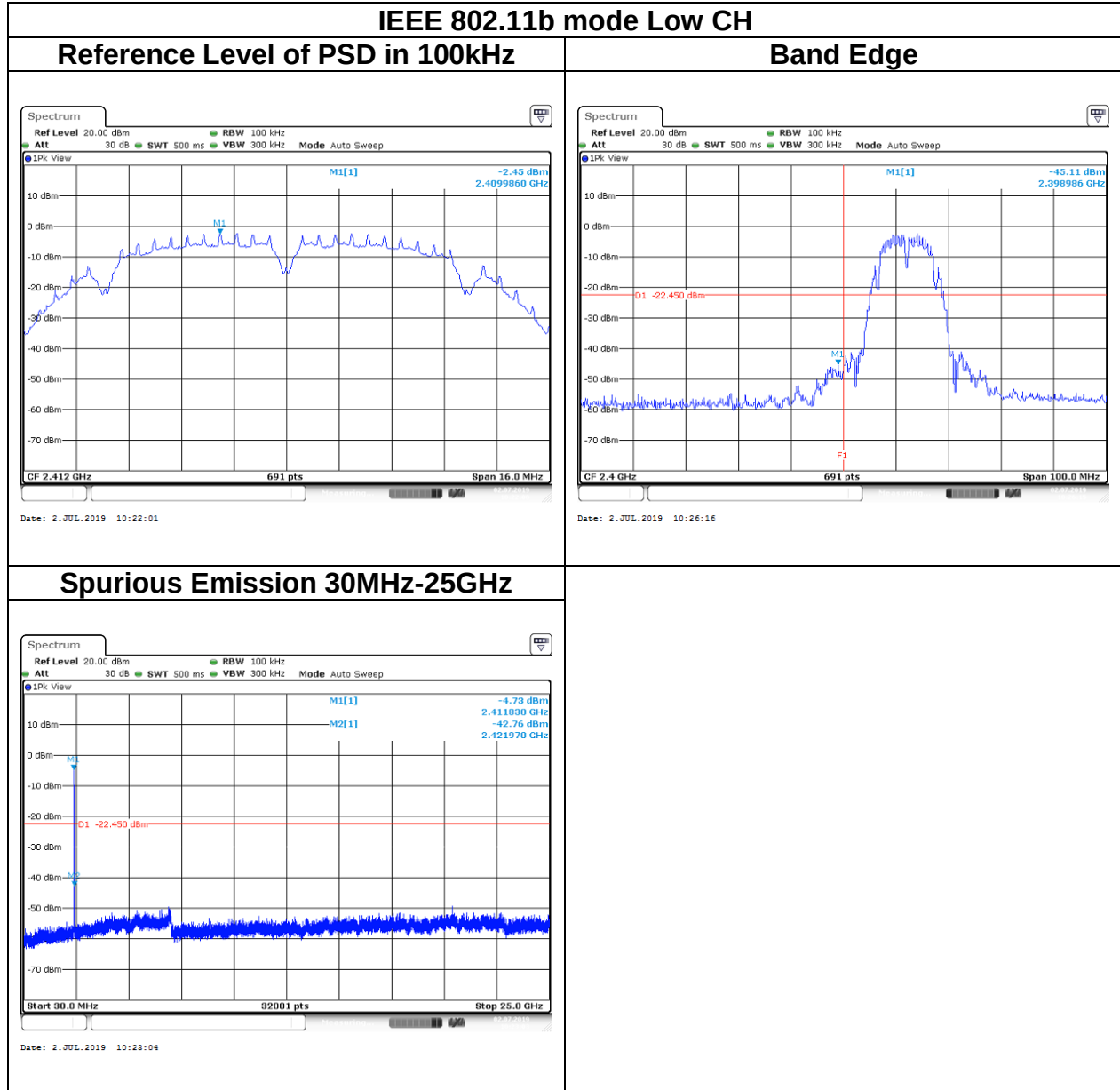
1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.
2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.
3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

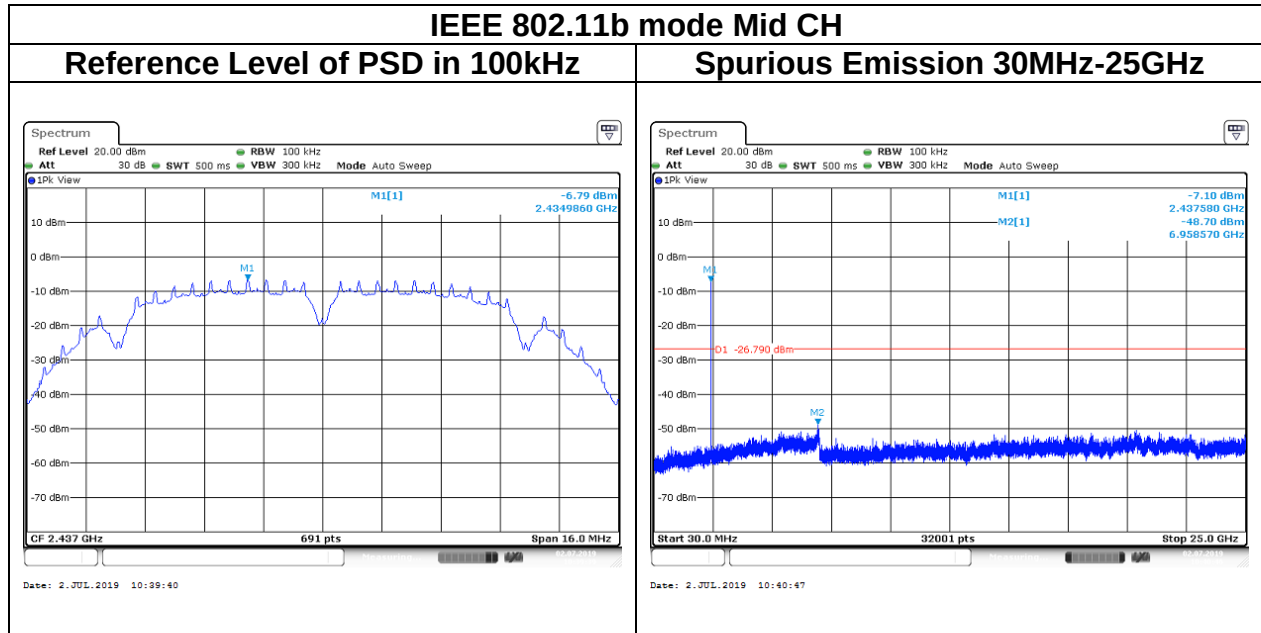
10.3 帶外發射限制之測試配置

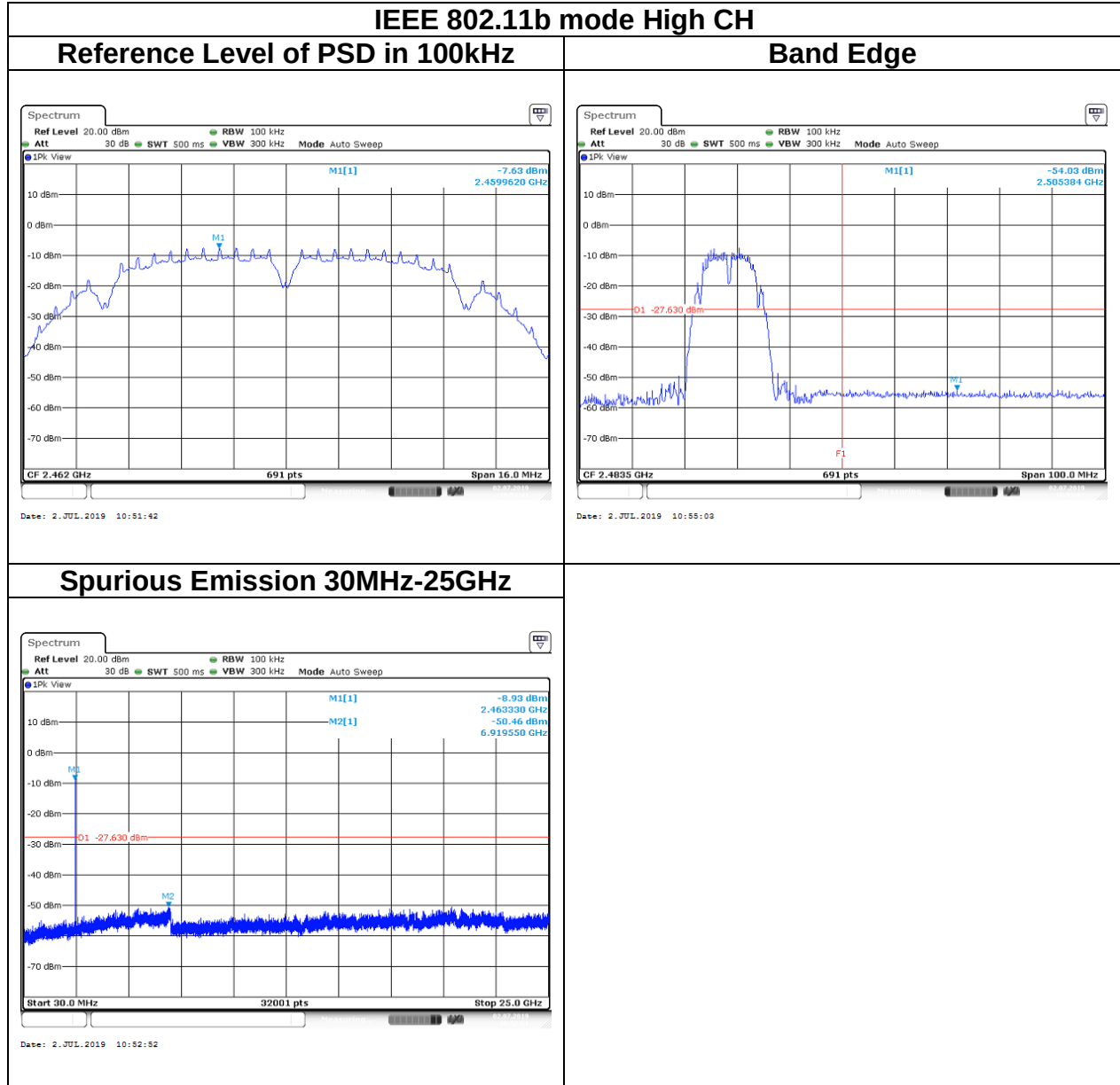


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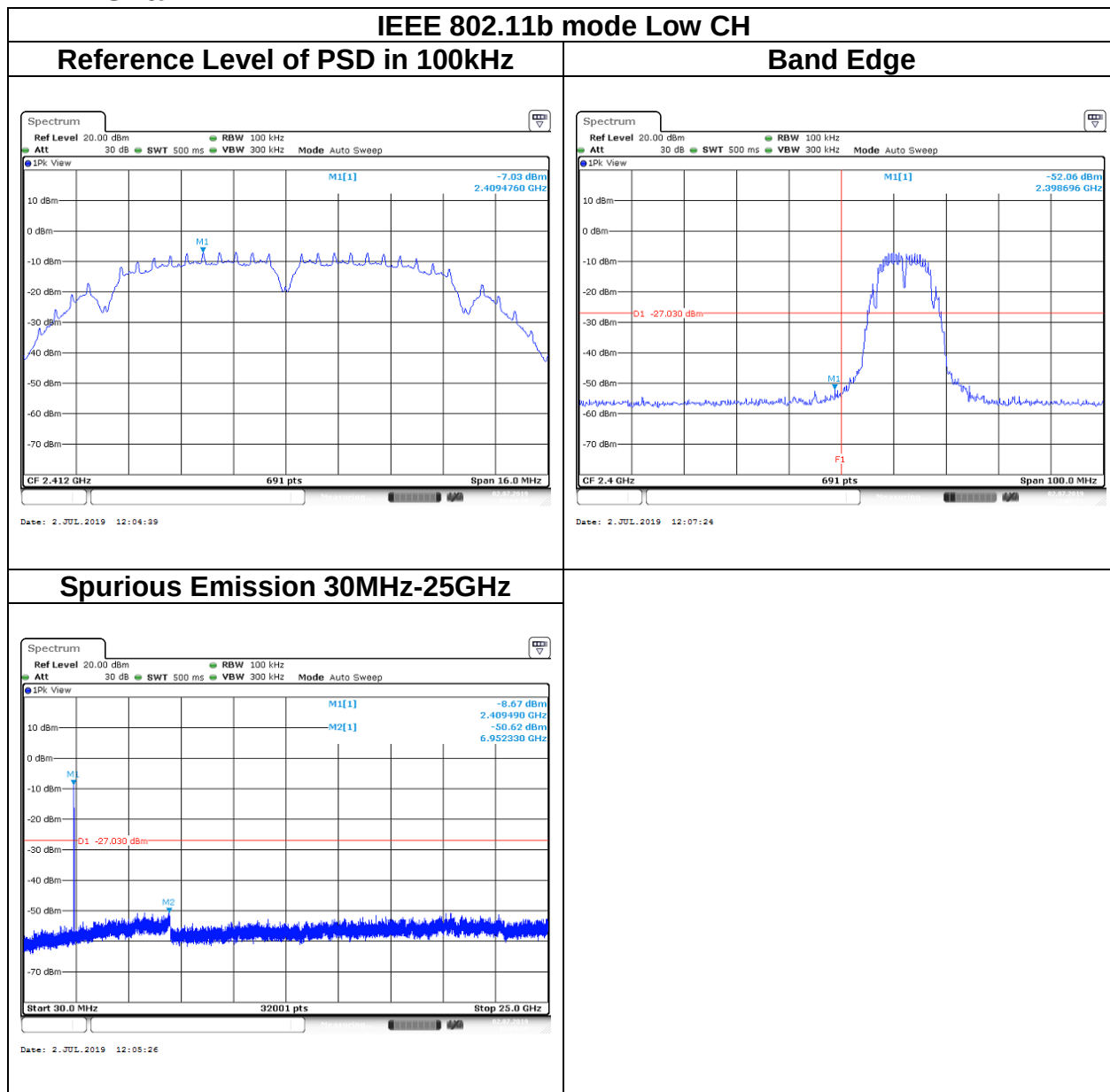


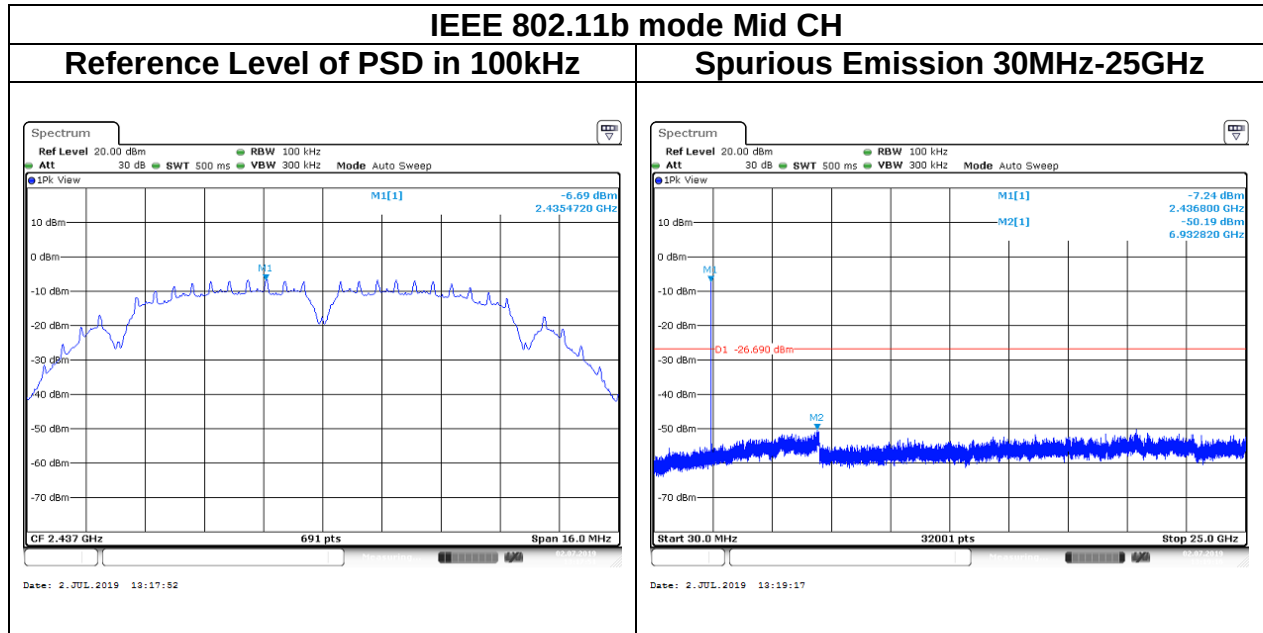




Report No.: T190429W01-RD1

1TX: Chain 1



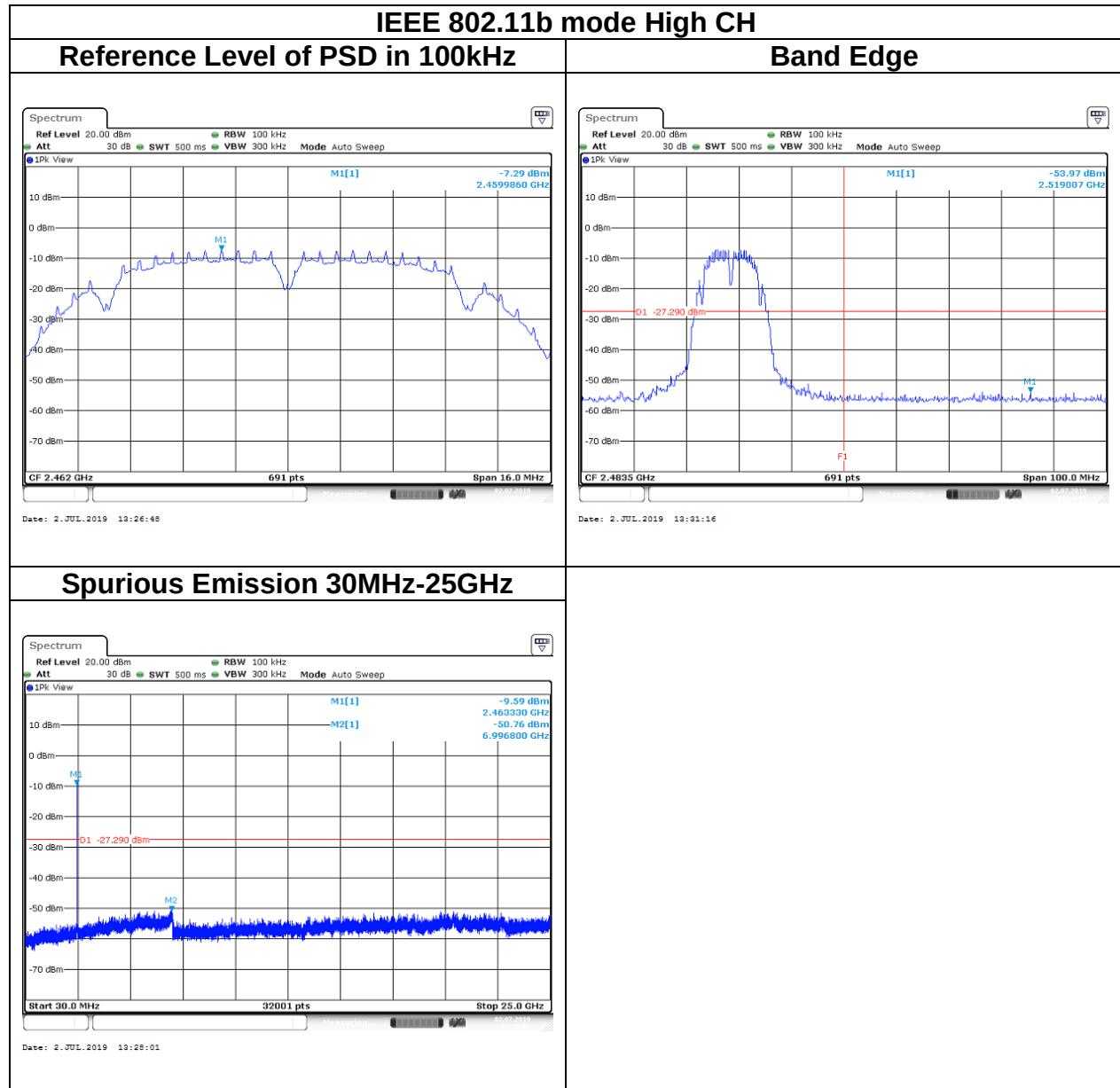




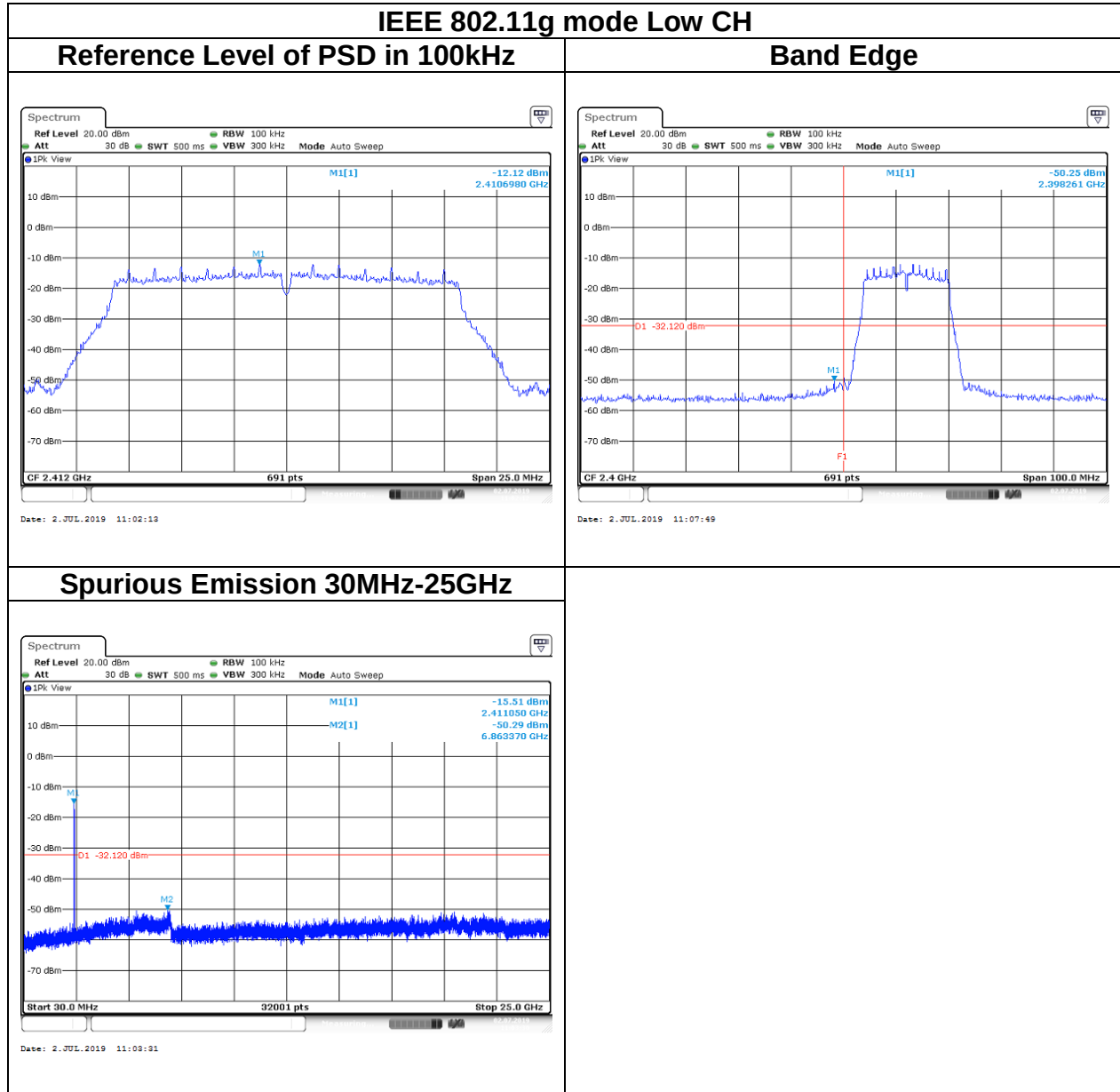
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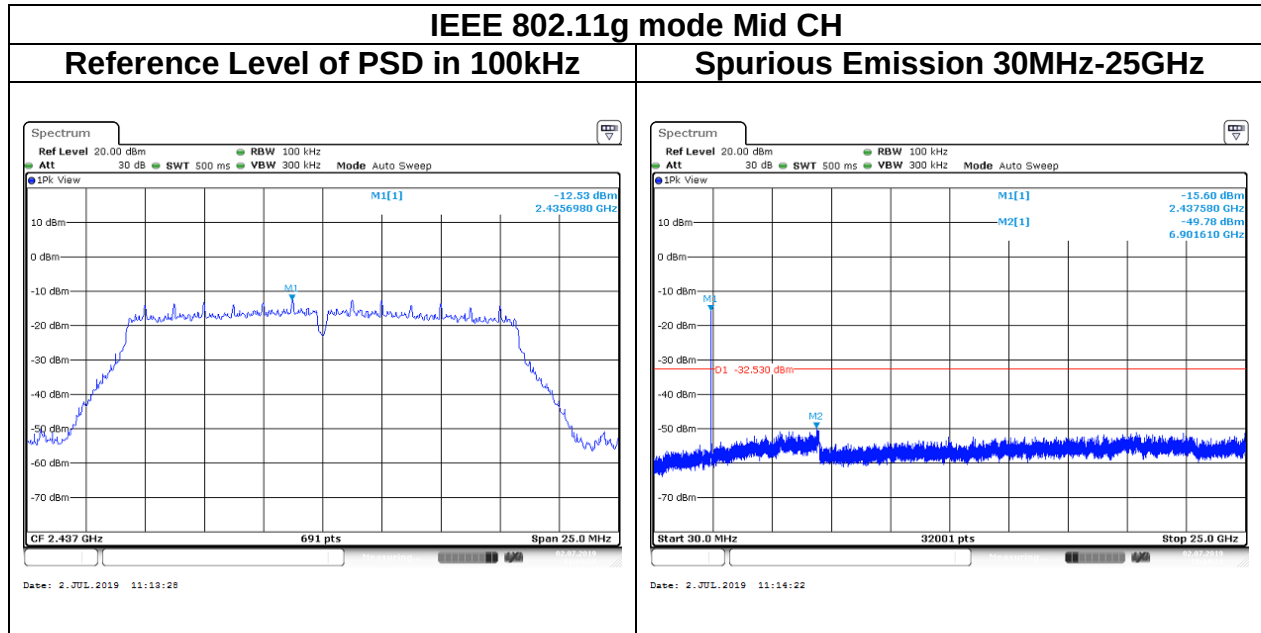
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1TX: Chain 0



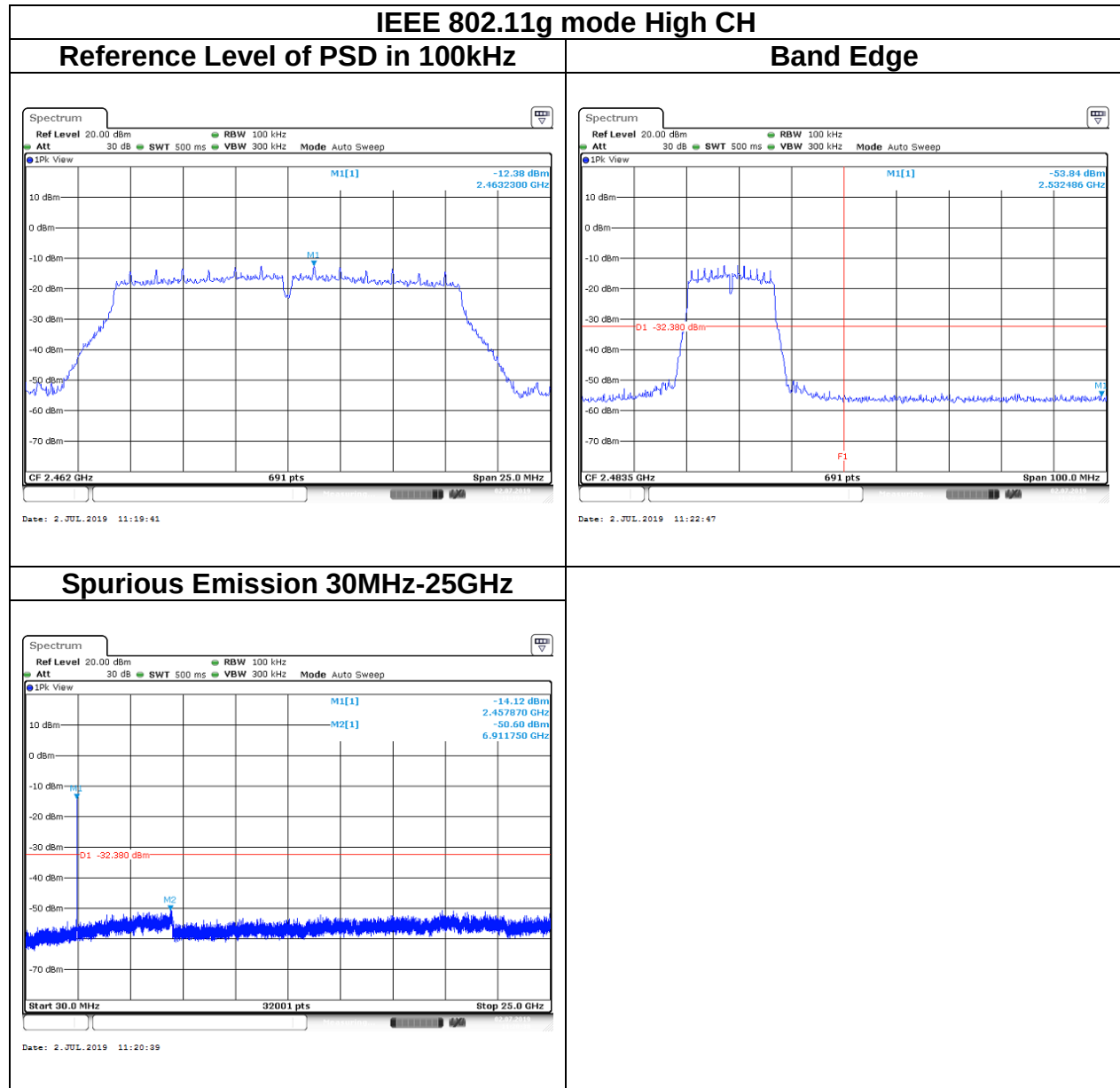




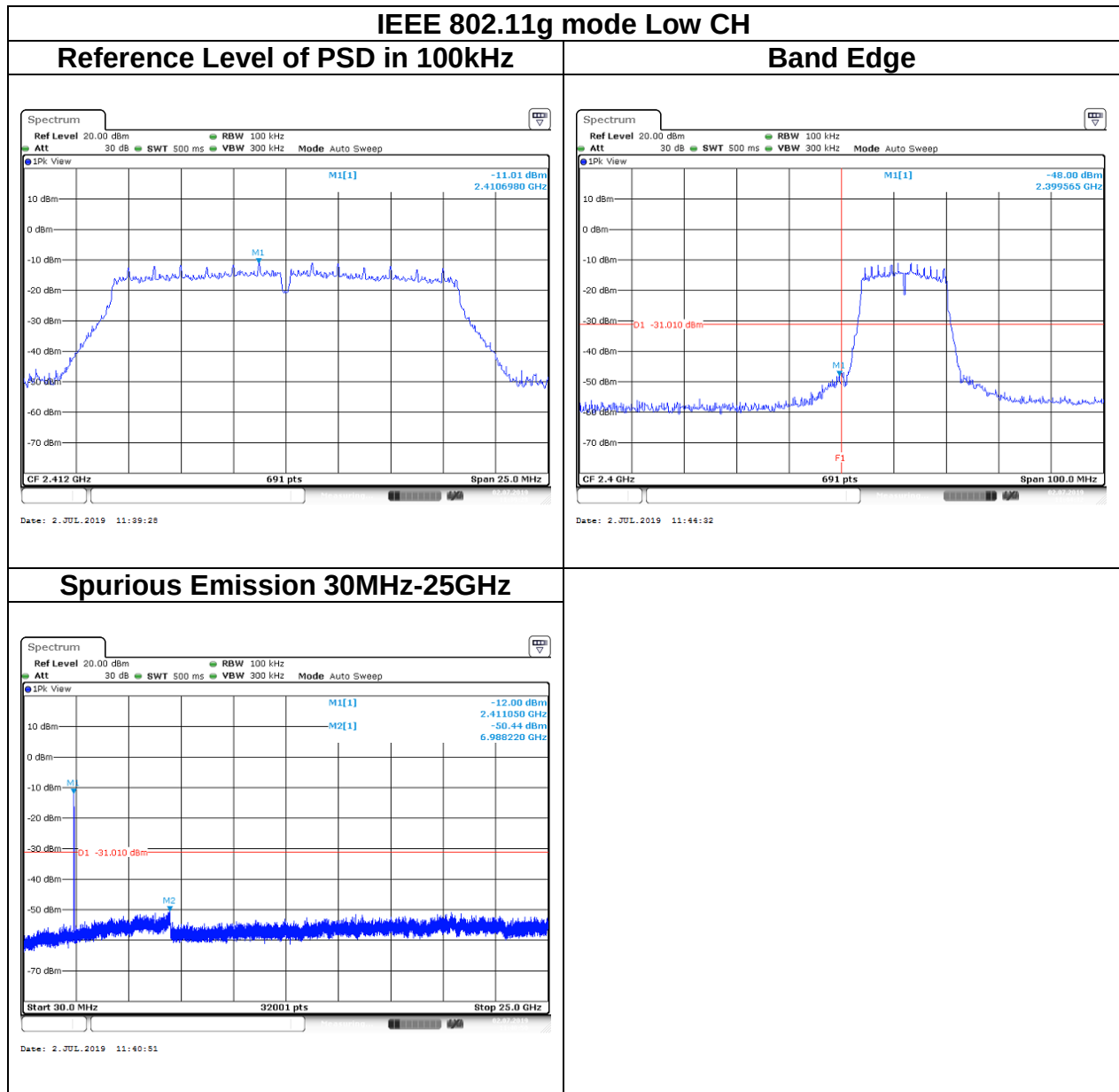
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1TX: Chain 1

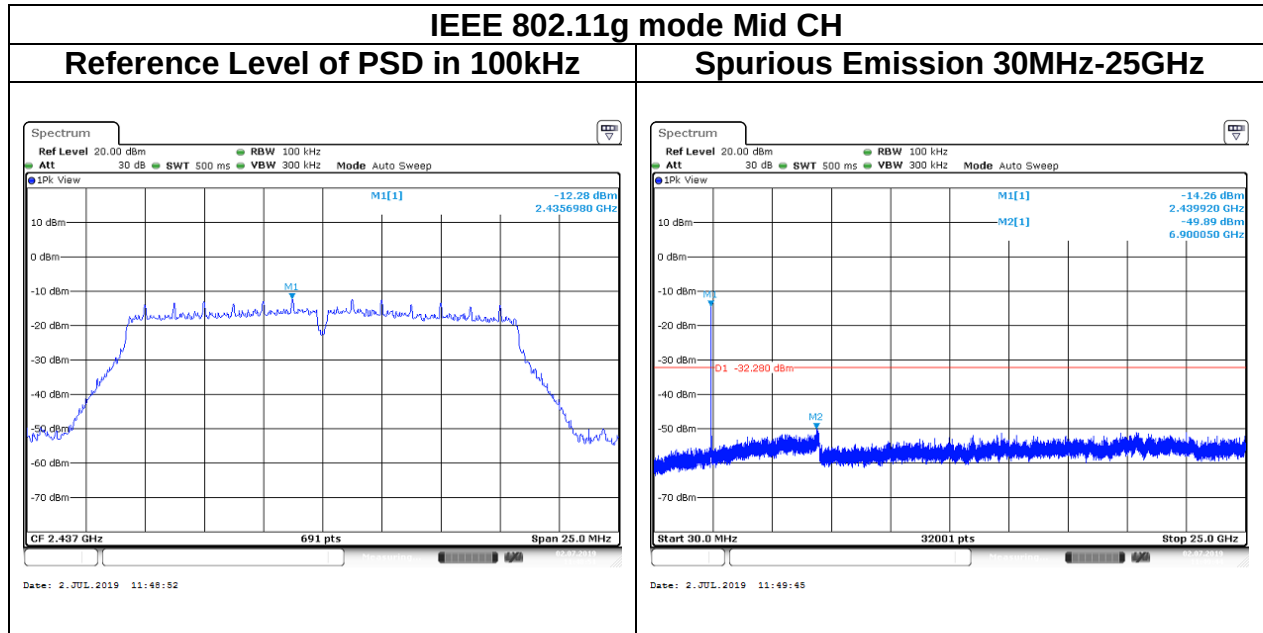




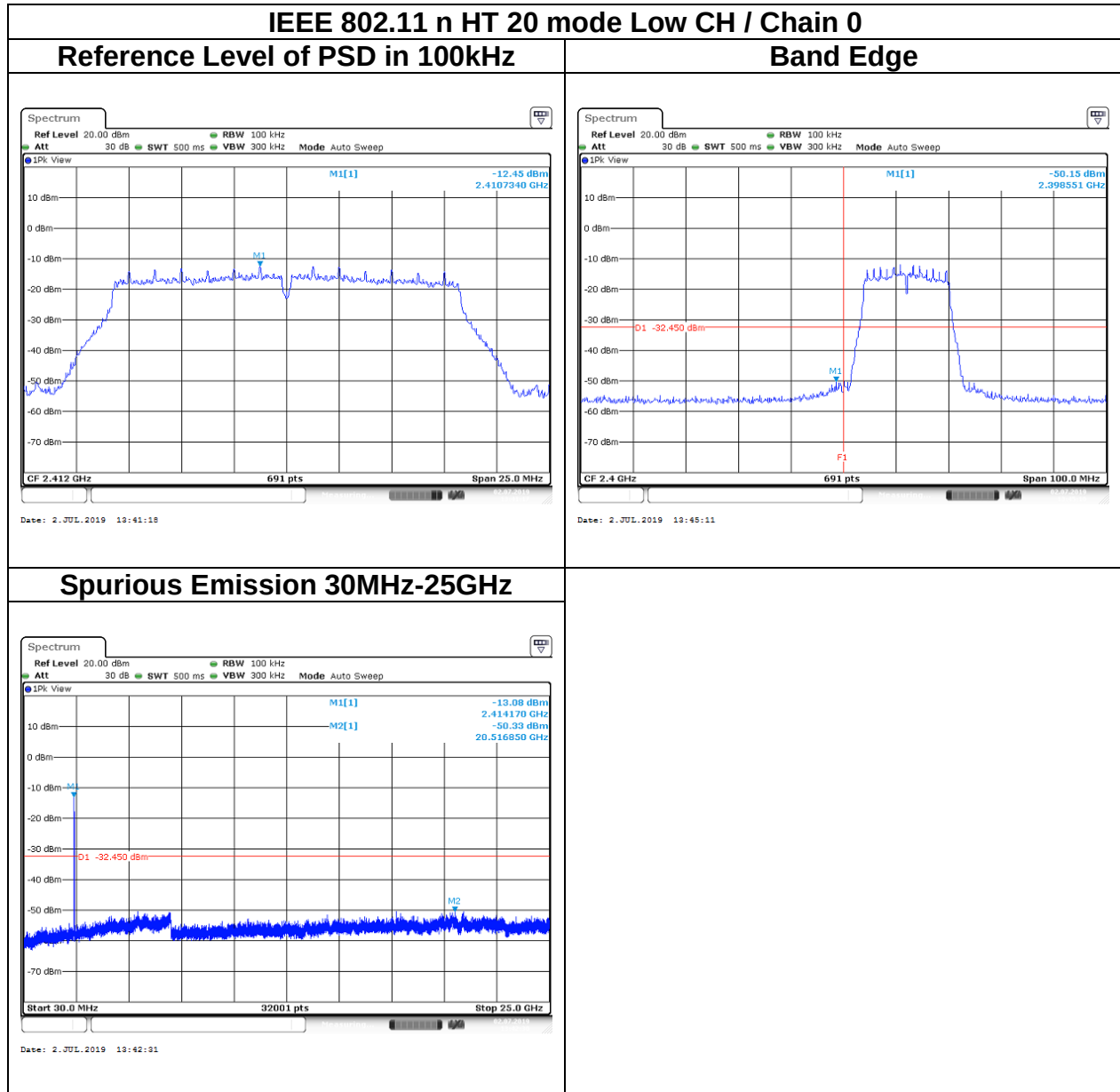
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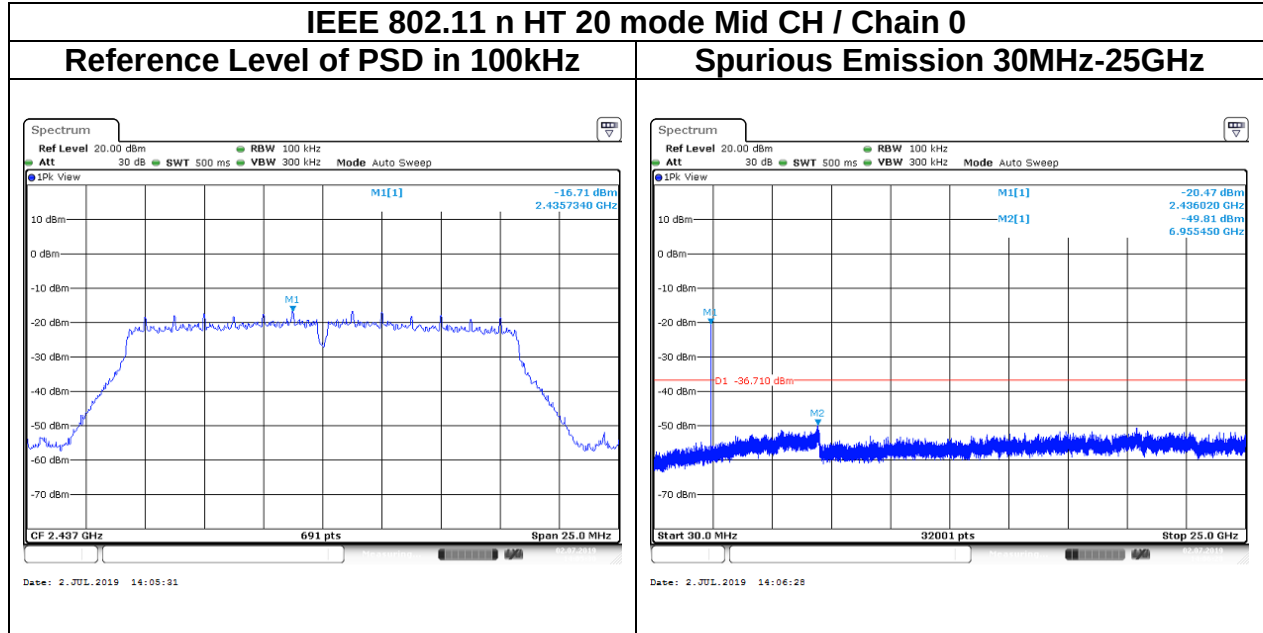


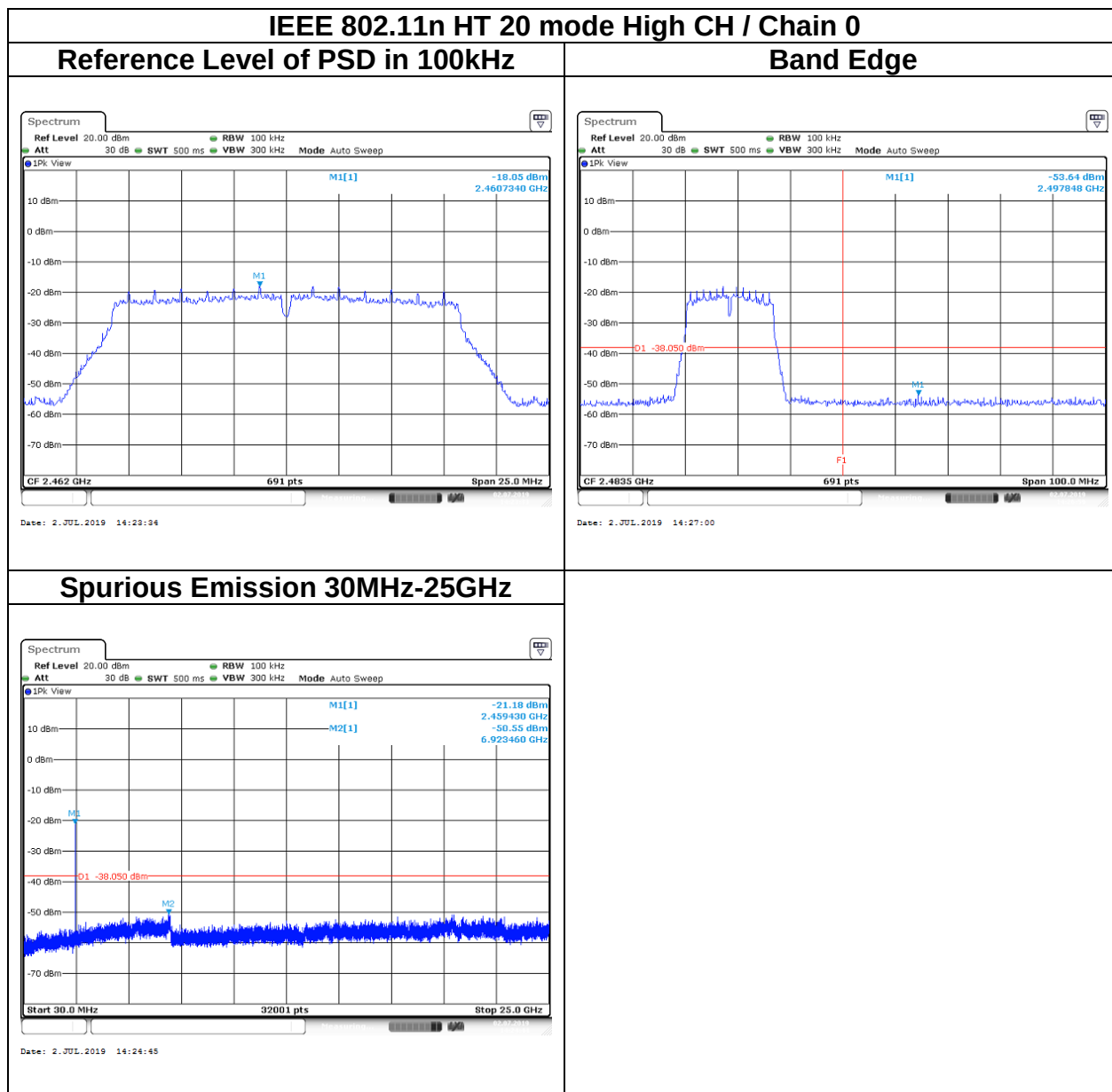


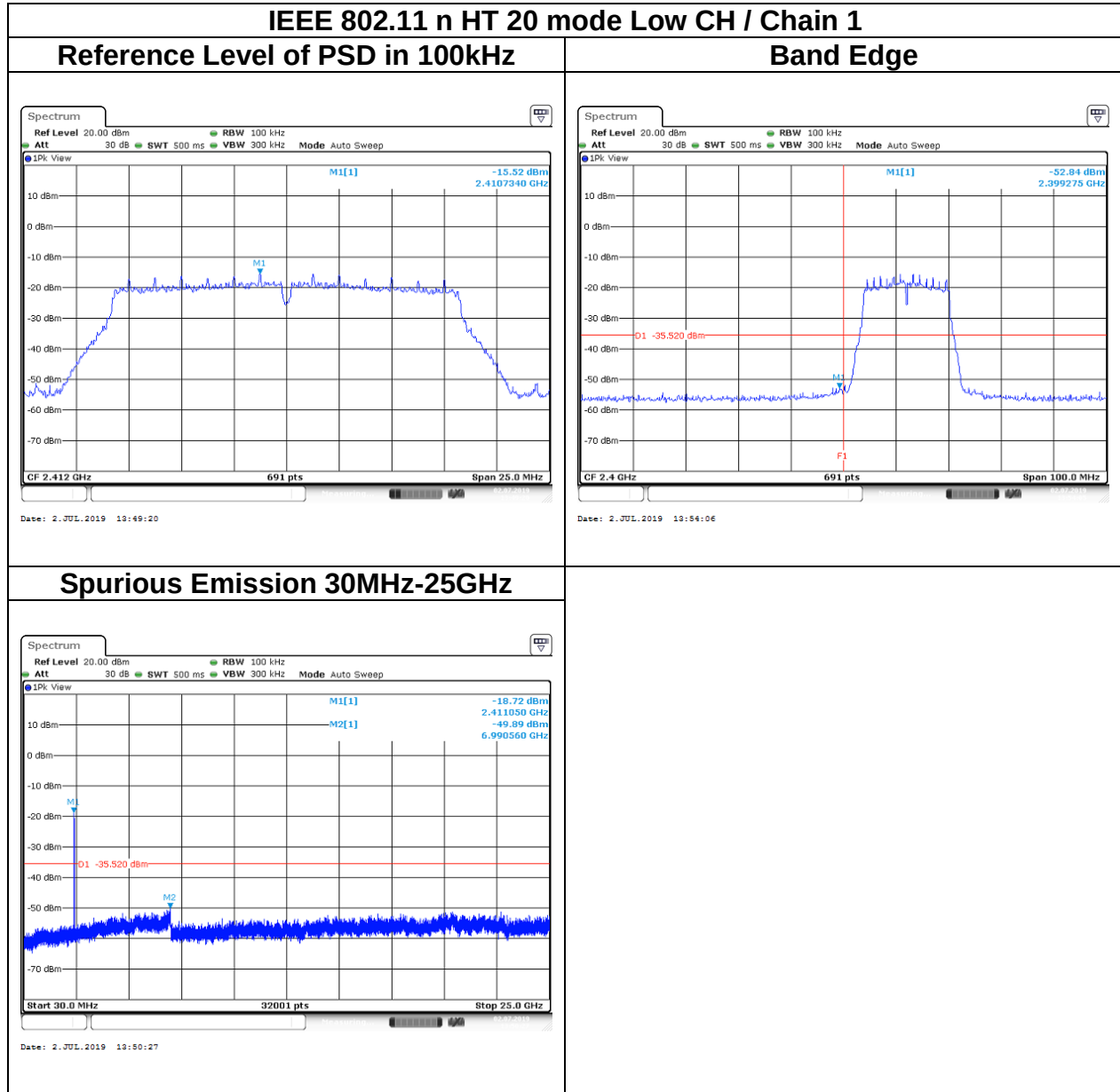
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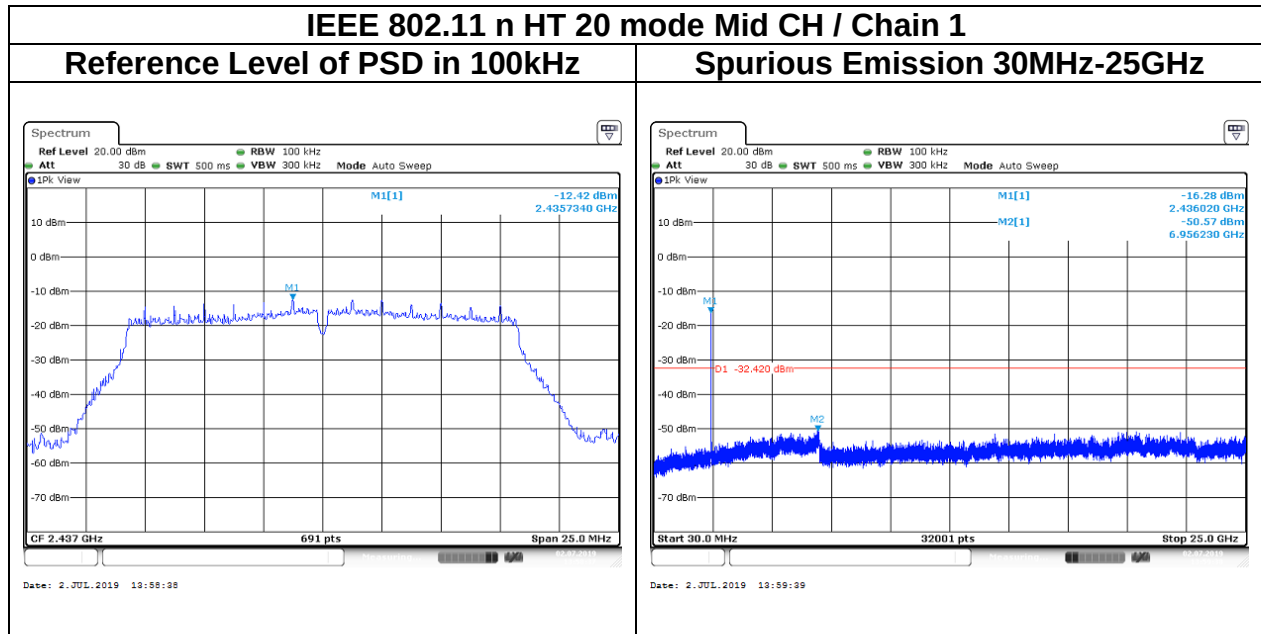
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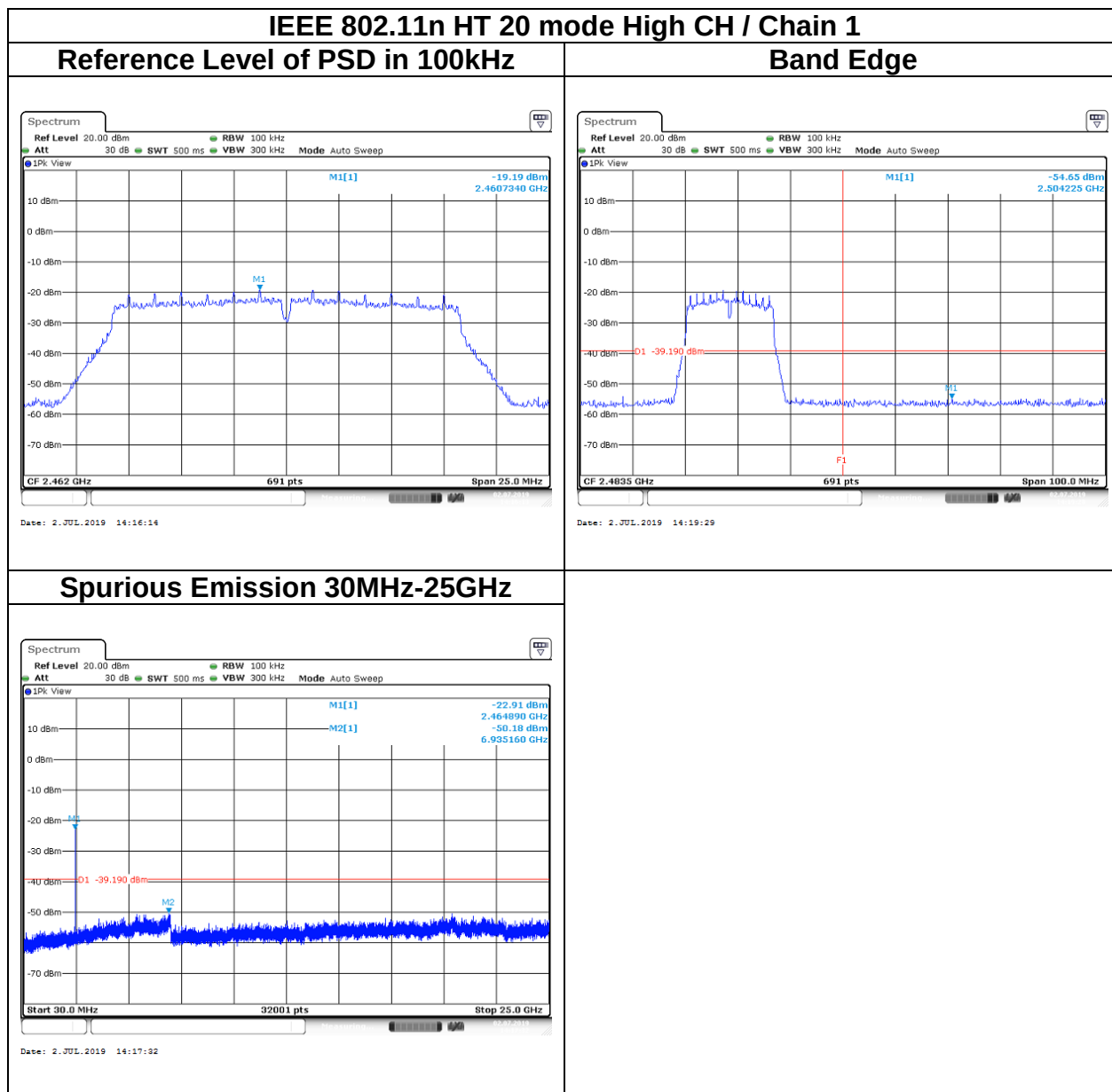
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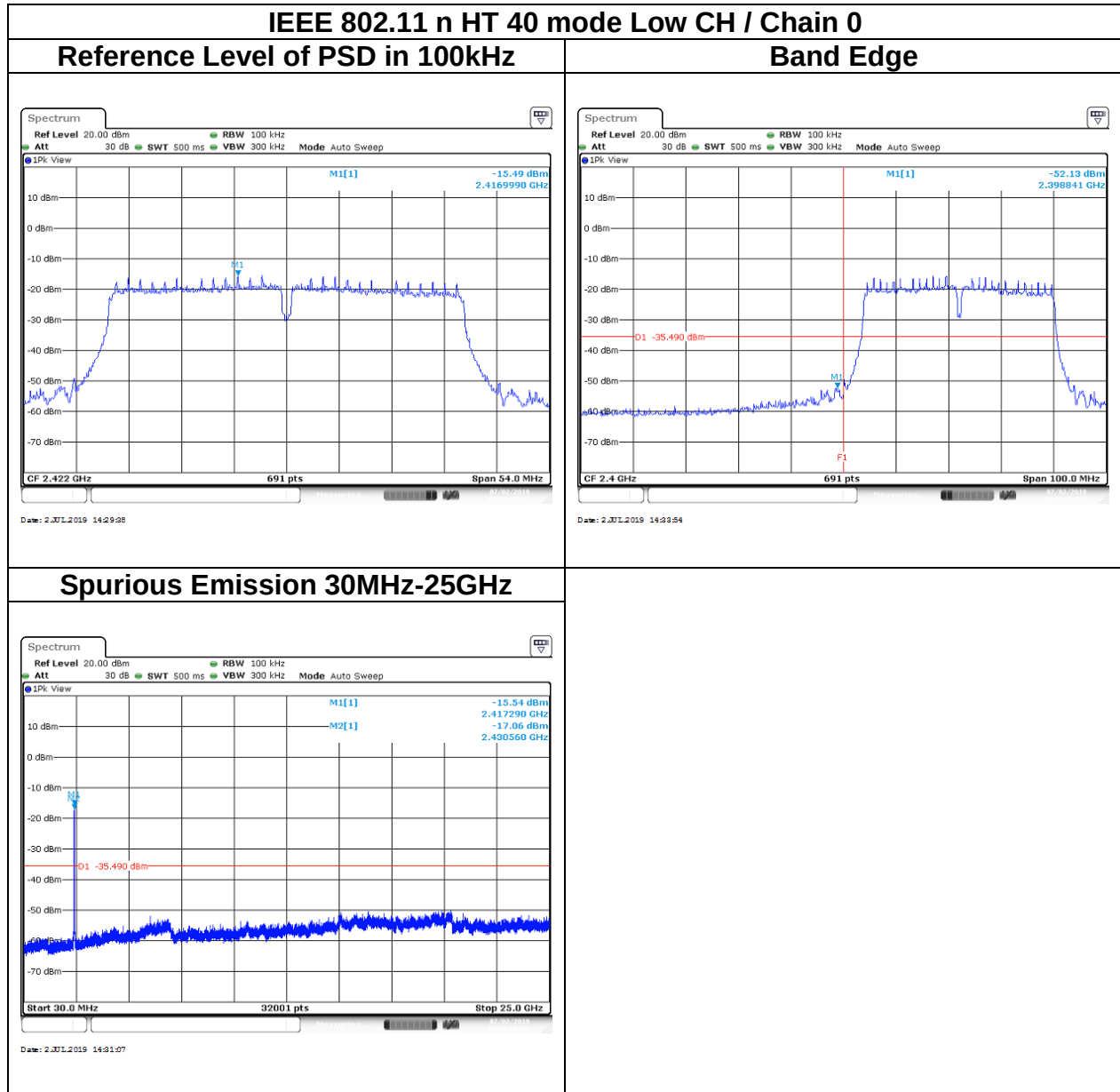










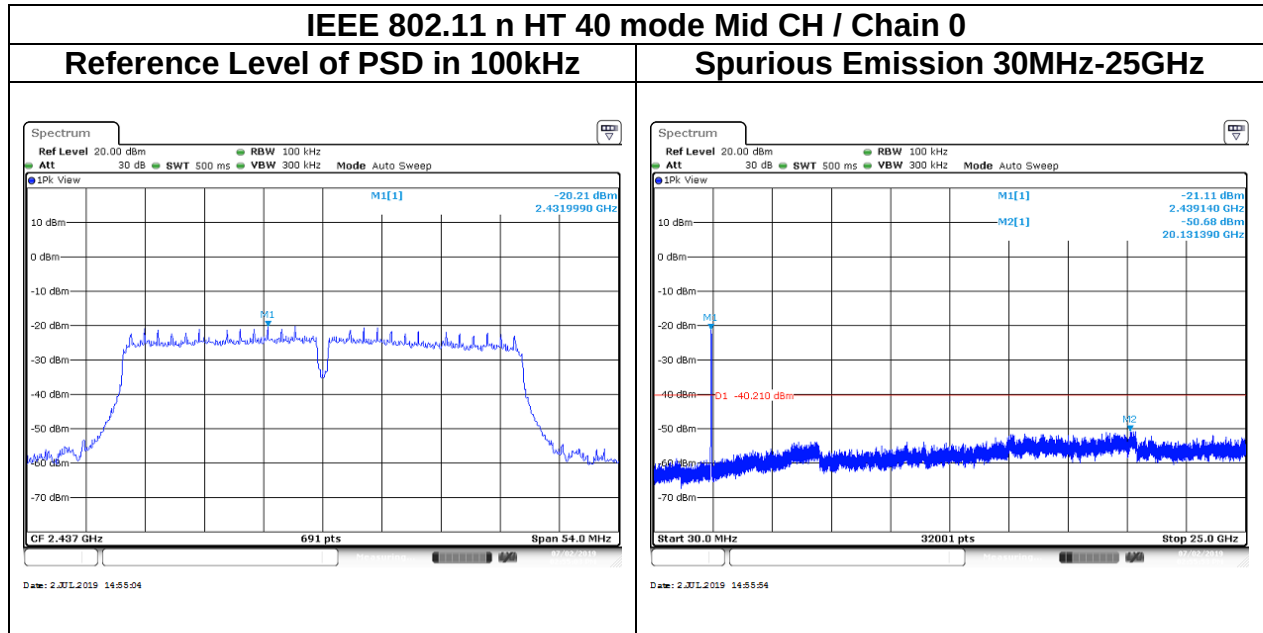




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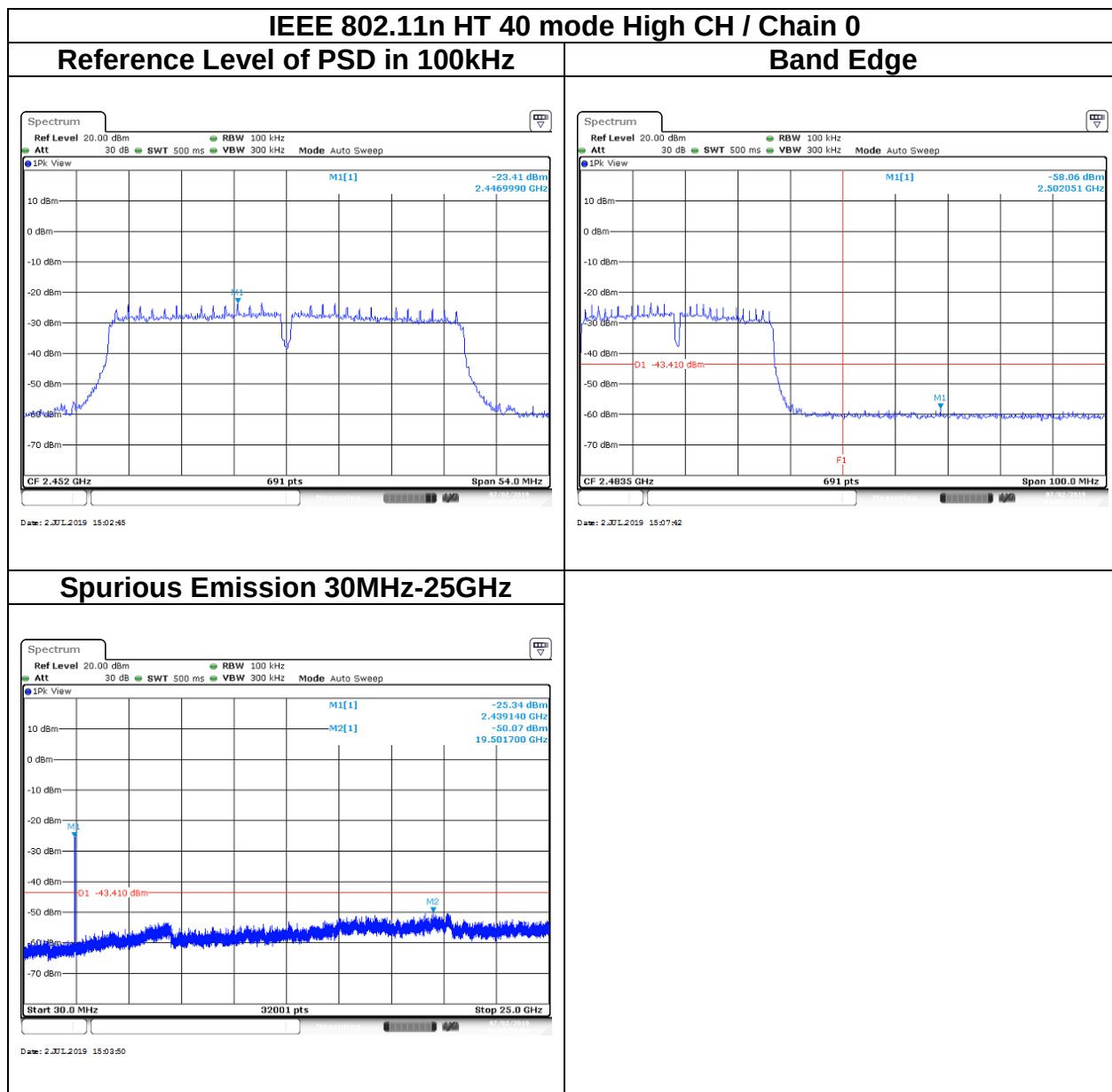
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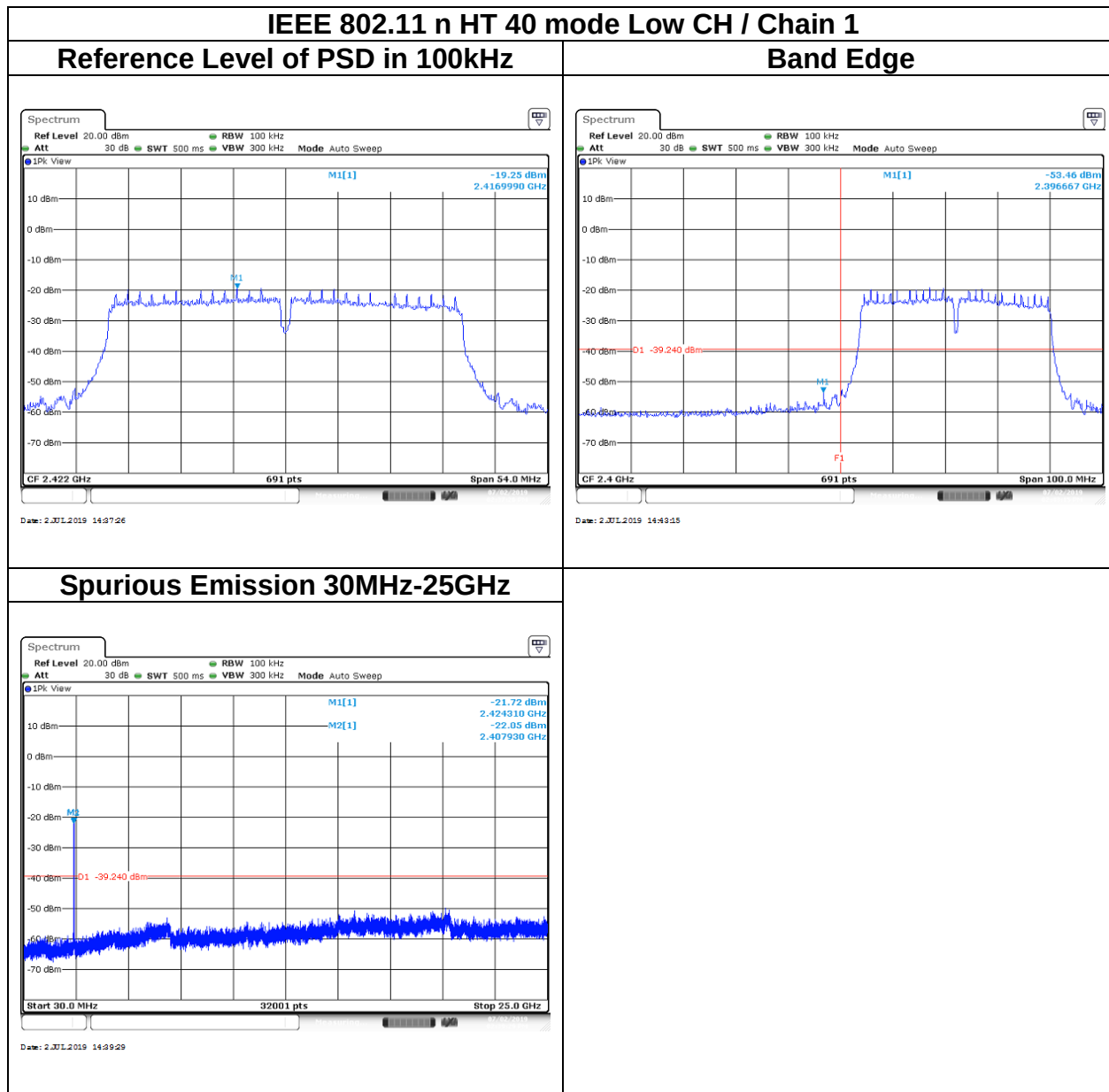


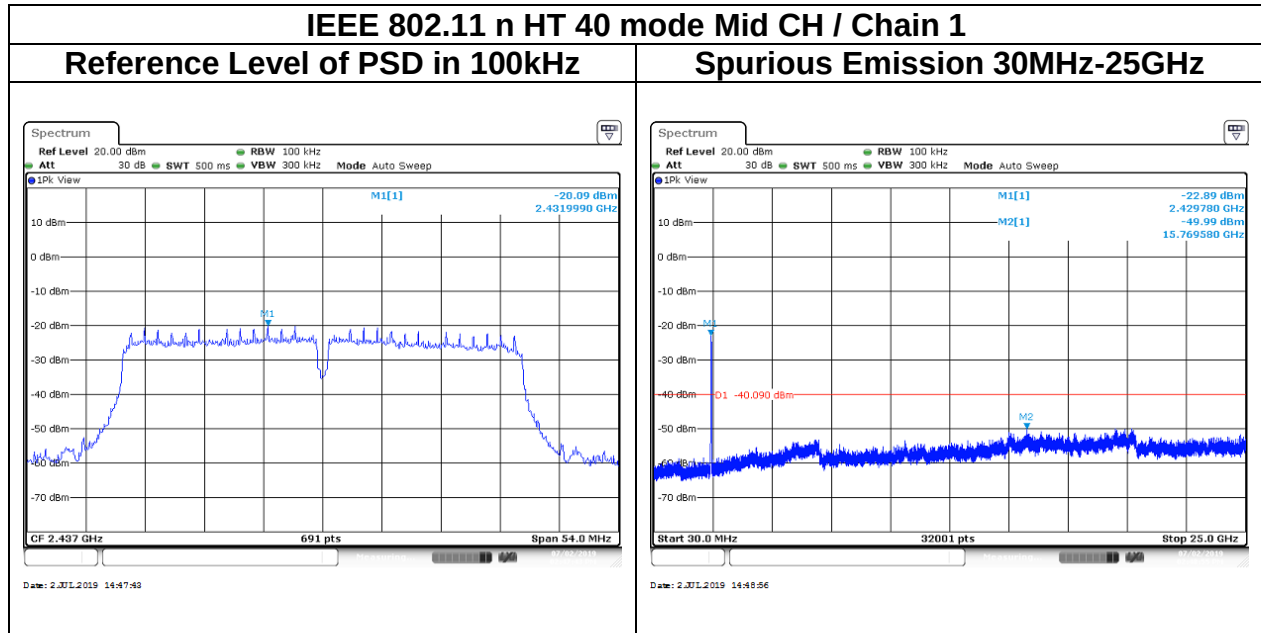


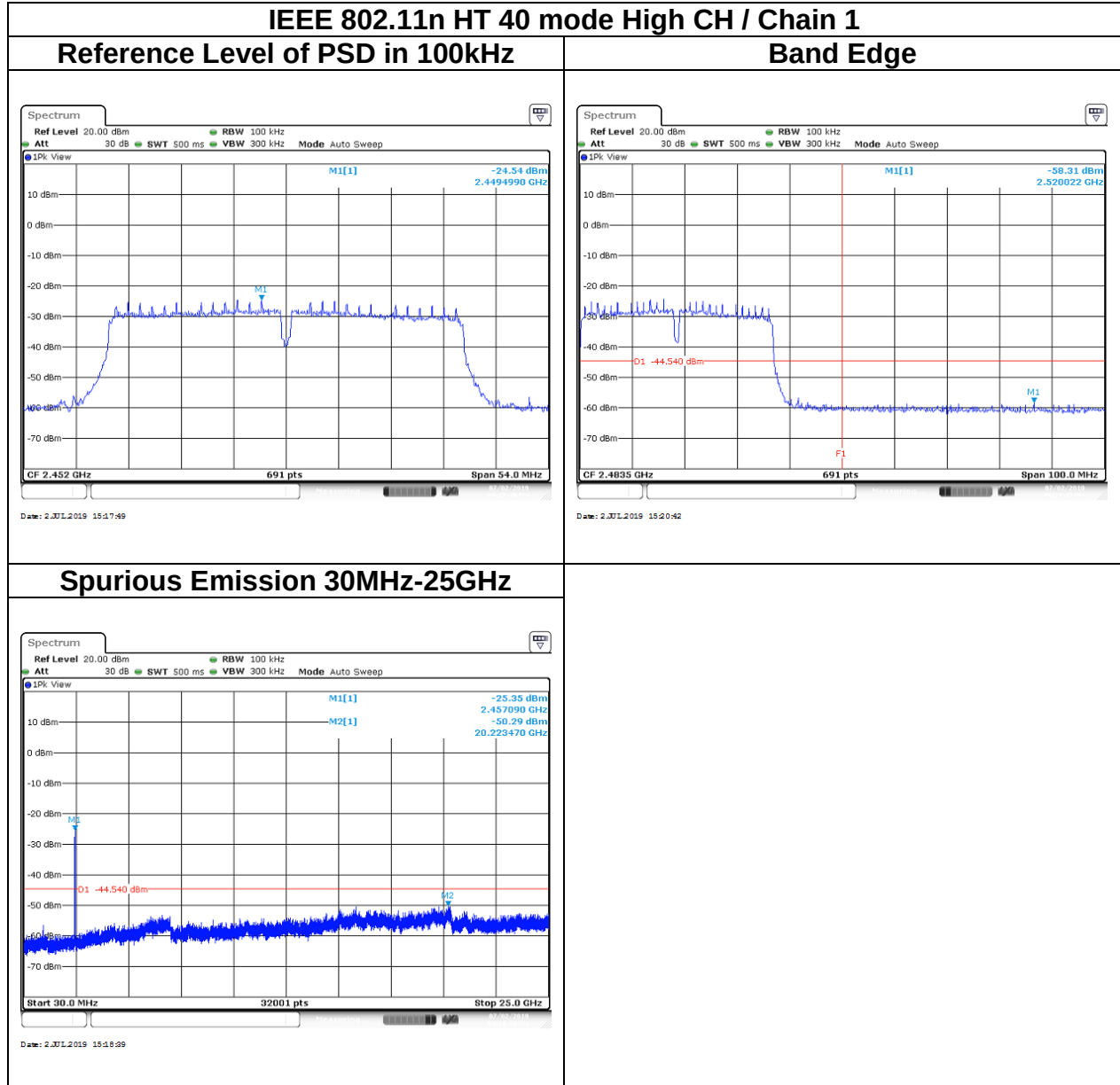
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11. 功率密度之量測

11.1 適用標準

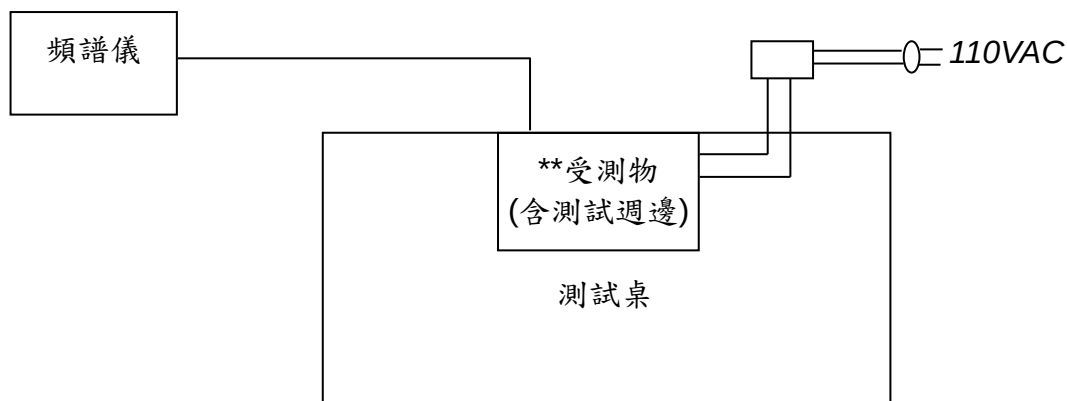
依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(2)(B)條規定，對數位調變之系統，在使用頻率範圍之任意 3kHz 頻寬內，由發射機傳導至天線之峰值發射電功率密度在任意期間內，皆不得大於 8dBm。

11.2 測試方法

1. 將發射機之天線埠經由適當之衰減直接連至測試儀器。找出發射峰值並擴展於通帶內，設定解析頻寬為 $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$ ，視訊頻寬 $\geq 3 \times \text{RBW}$ ，掃描時間為 auto couple, Span 大於 DTS 頻寬 1.5 倍。所測得之峰值位準必須不大於 +8dBm。
2. 若受測裝置之頻譜線間隔小於 3 kHz，測量時應將解析頻寬降低以使頻譜線間隔大於 3kHz，所測得之數據再藉加總 3 kHz 頻帶內所有個別頻譜線之功率而標準化至 3 kHz 以決定是否符合規定。

註：測試方法依據 FCC KDB 558074 D01

11.3 測試配置



註：**請參照 3.2 節

11.4 功率密度之量測結果

1TX:

Test Mode: IEEE 802.11b Mode

頻道	頻率 (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	限制值 (dBm)	測試結果
CH Low	2412	-10.53	-9.63	8	PASS
CH Mid	2437	-9.54	-9.67		PASS
CH High	2462	-9.43	-10.29		PASS

Test Mode: IEEE 802.11g Mode

頻道	頻率 (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	限制值 (dBm)	測試結果
CH Low	2412	-14.49	-14.65	8	PASS
CH Mid	2437	-15.37	-15.12		PASS
CH High	2462	-15.50	-14.52		PASS

2TX:

Test Mode: IEEE 802.11n HT 20 Mode

頻道	頻率 (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PPSD (dBm)	限制值 (dBm)	測試結果
CH Low	2412	-15.41	-17.85	-13.45	8	PASS
CH Mid	2437	-19.32	-20.13	-16.70		PASS
CH High	2462	-21.5	-21.71	-18.59		PASS

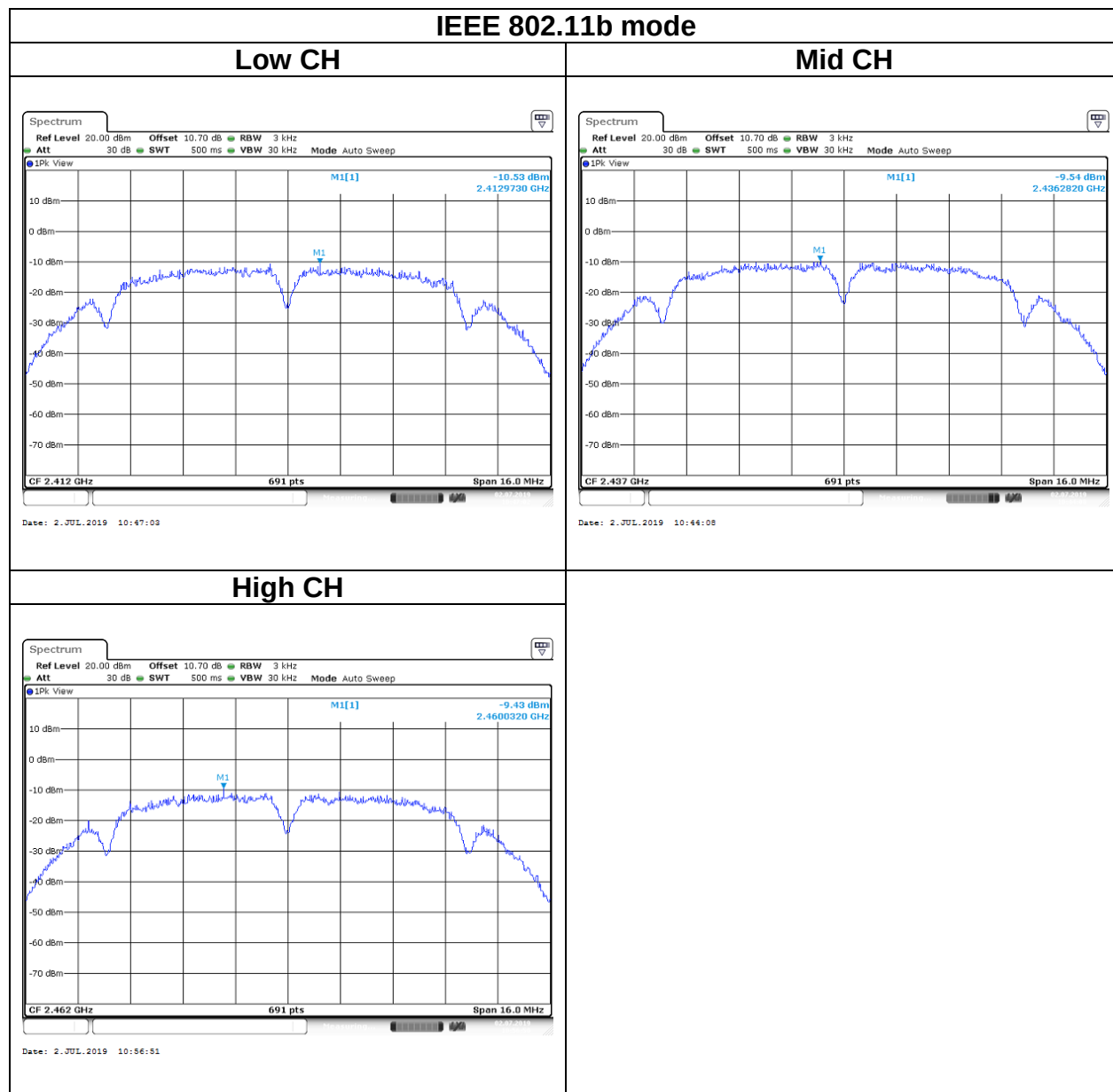
Test mode: IEEE 802.11n HT 40 mode

頻道	頻率 (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PPSD (dBm)	限制值 (dBm)	測試結果
CH Low	2422	-17.72	-20.98	-16.04	8	PASS
CH Mid	2437	-21.64	-21.73	-18.67		PASS
CH High	2452	-24.01	-25.09	-21.51		PASS



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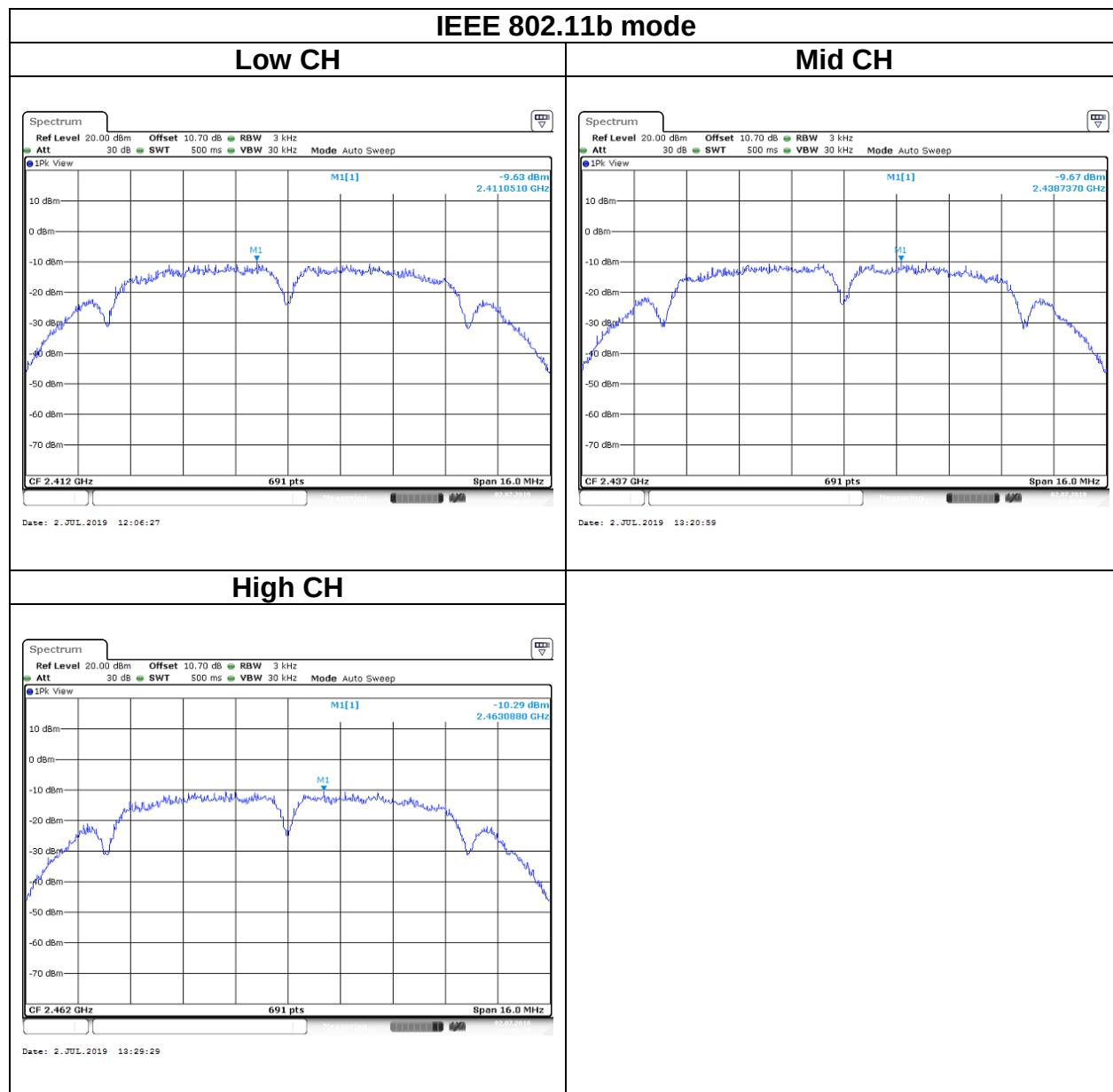
1TX: Chain 0





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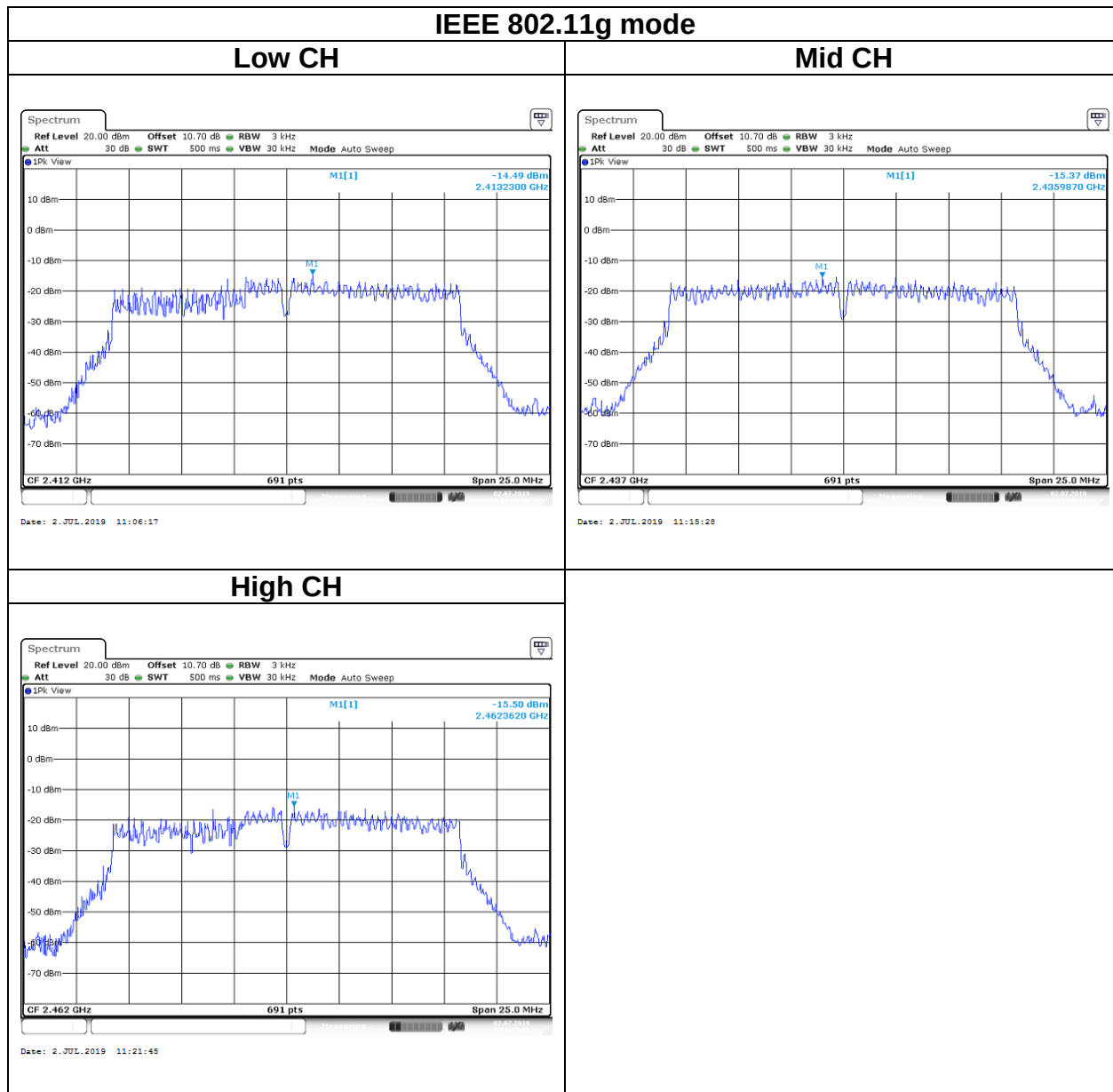




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1TX: Chain 0



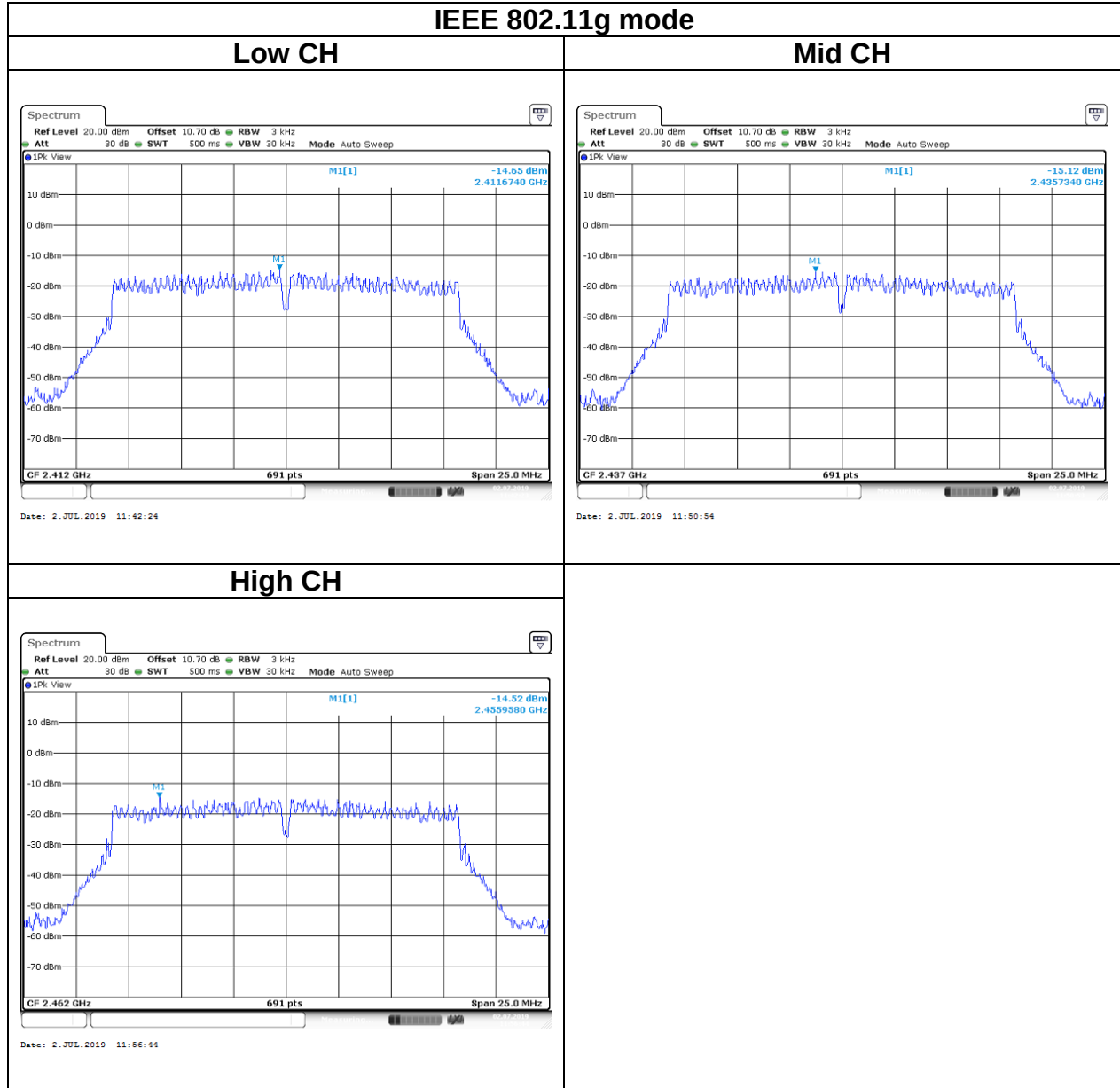


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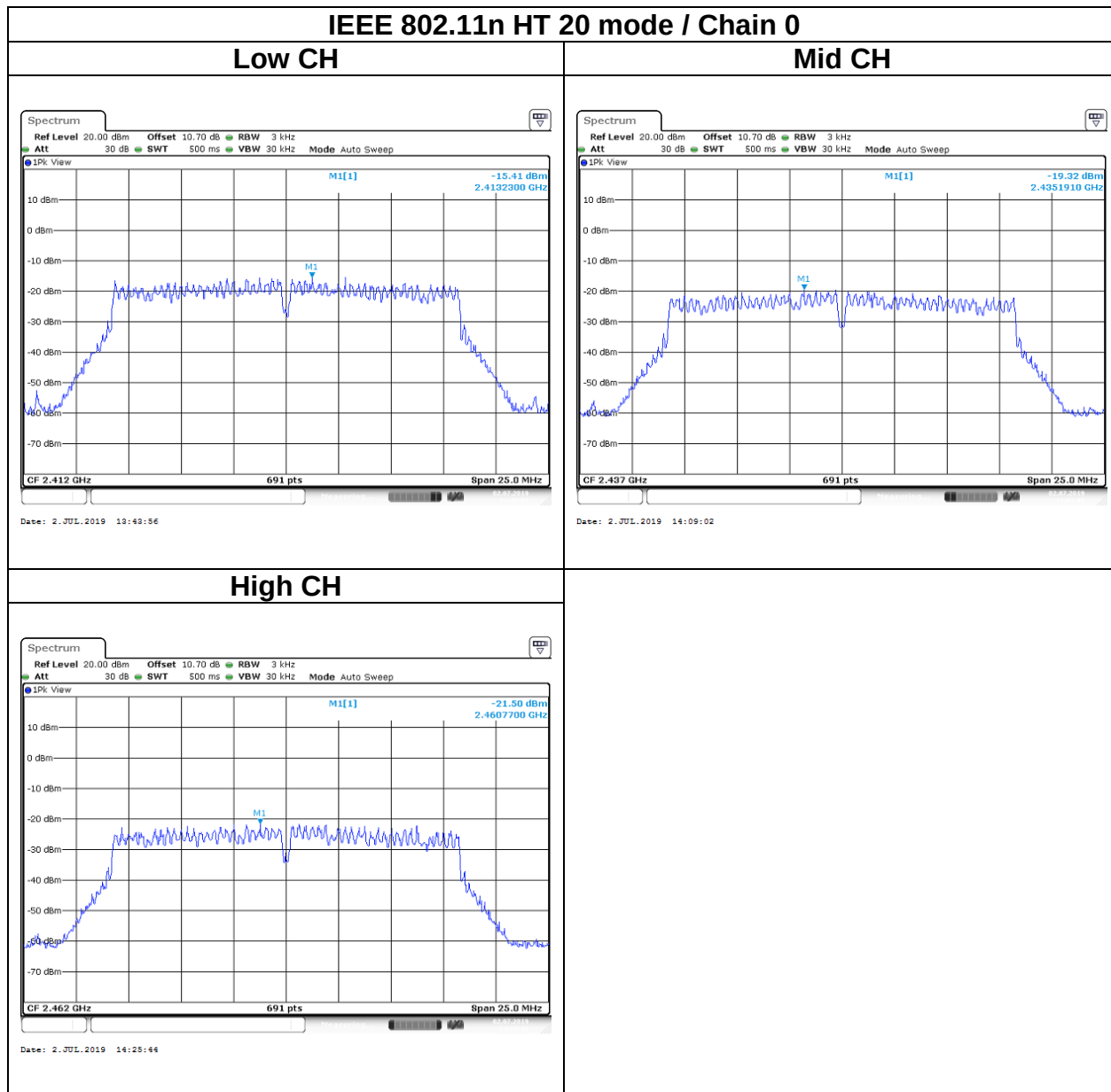
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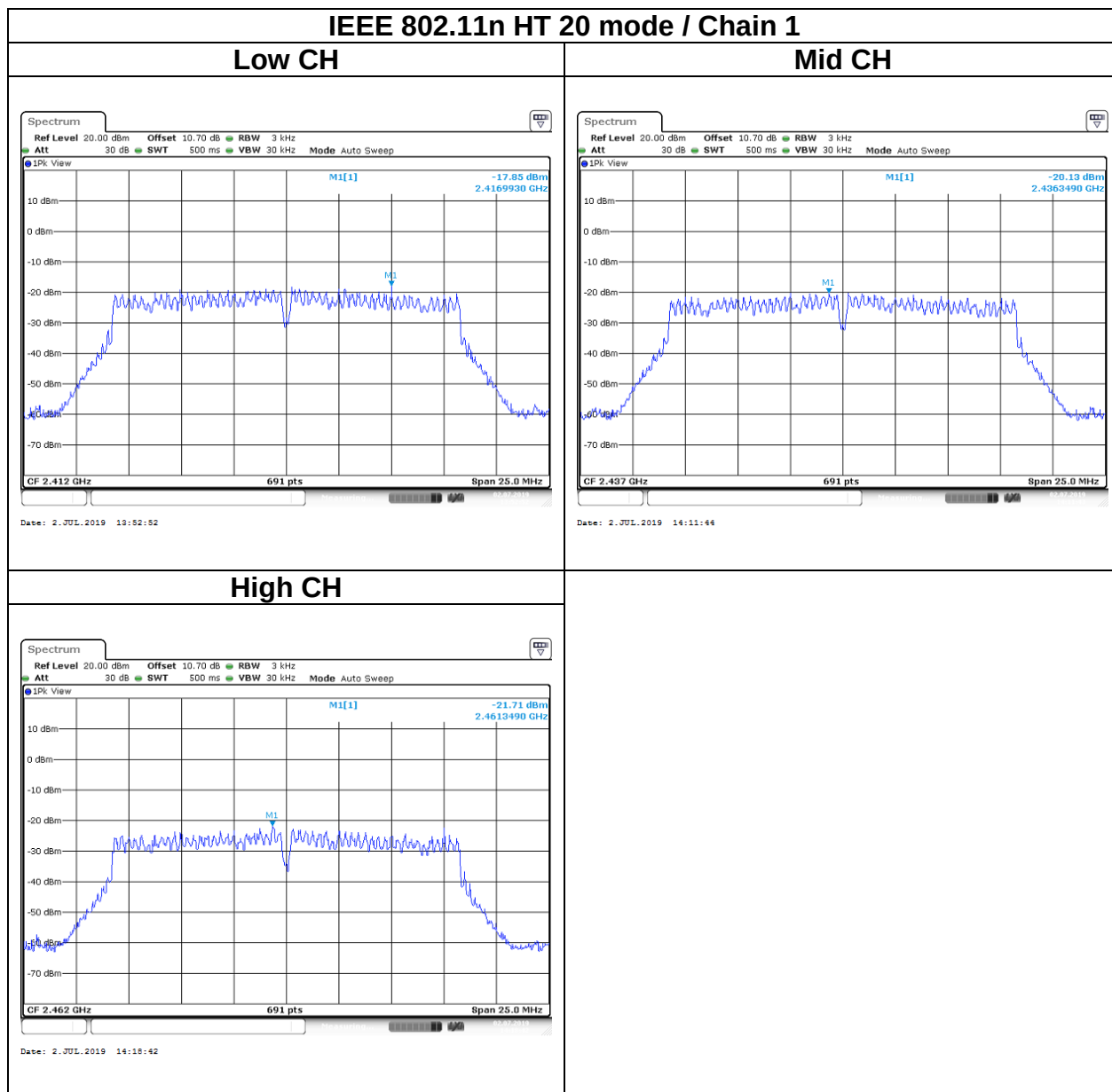
2TX:





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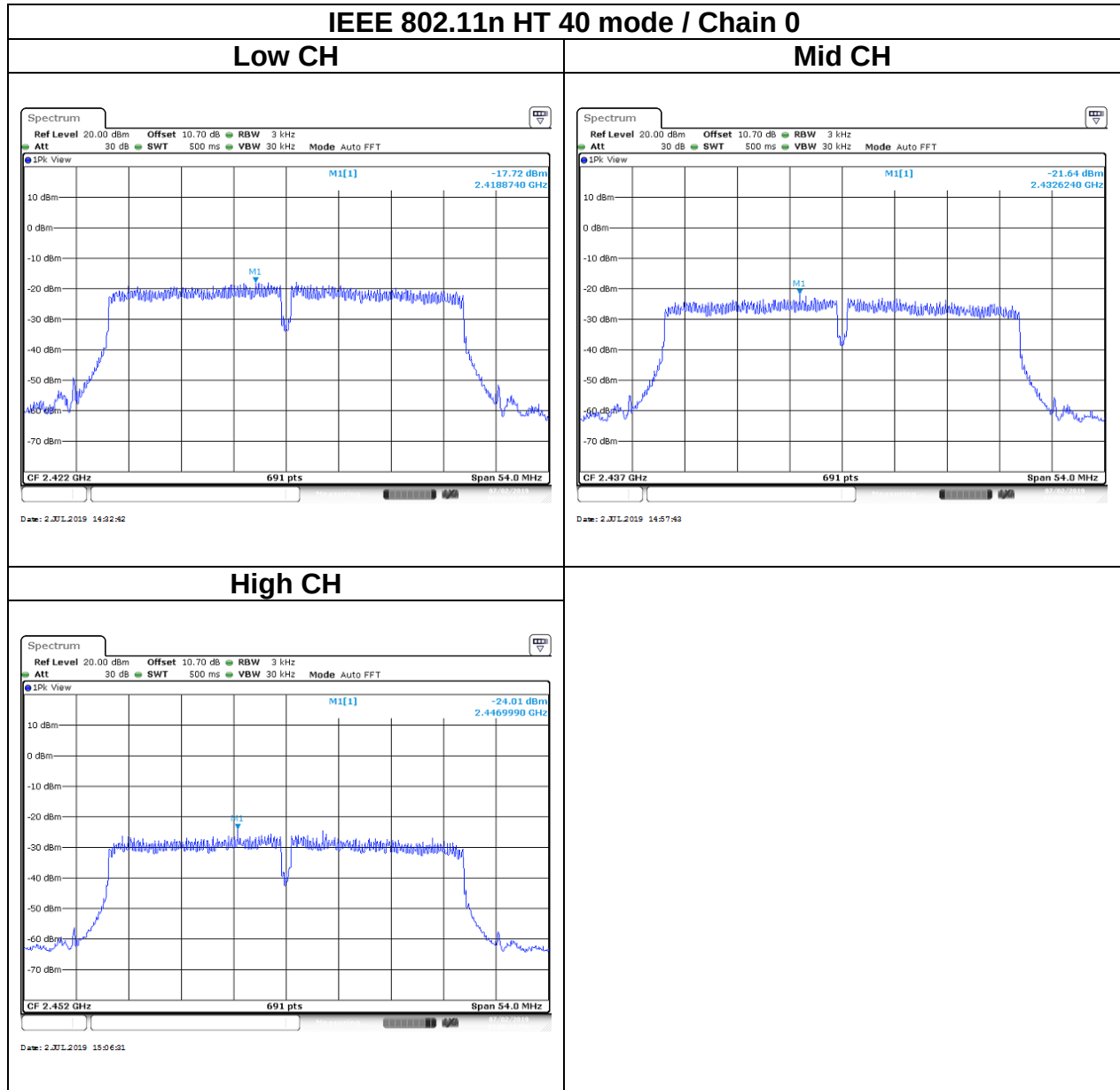




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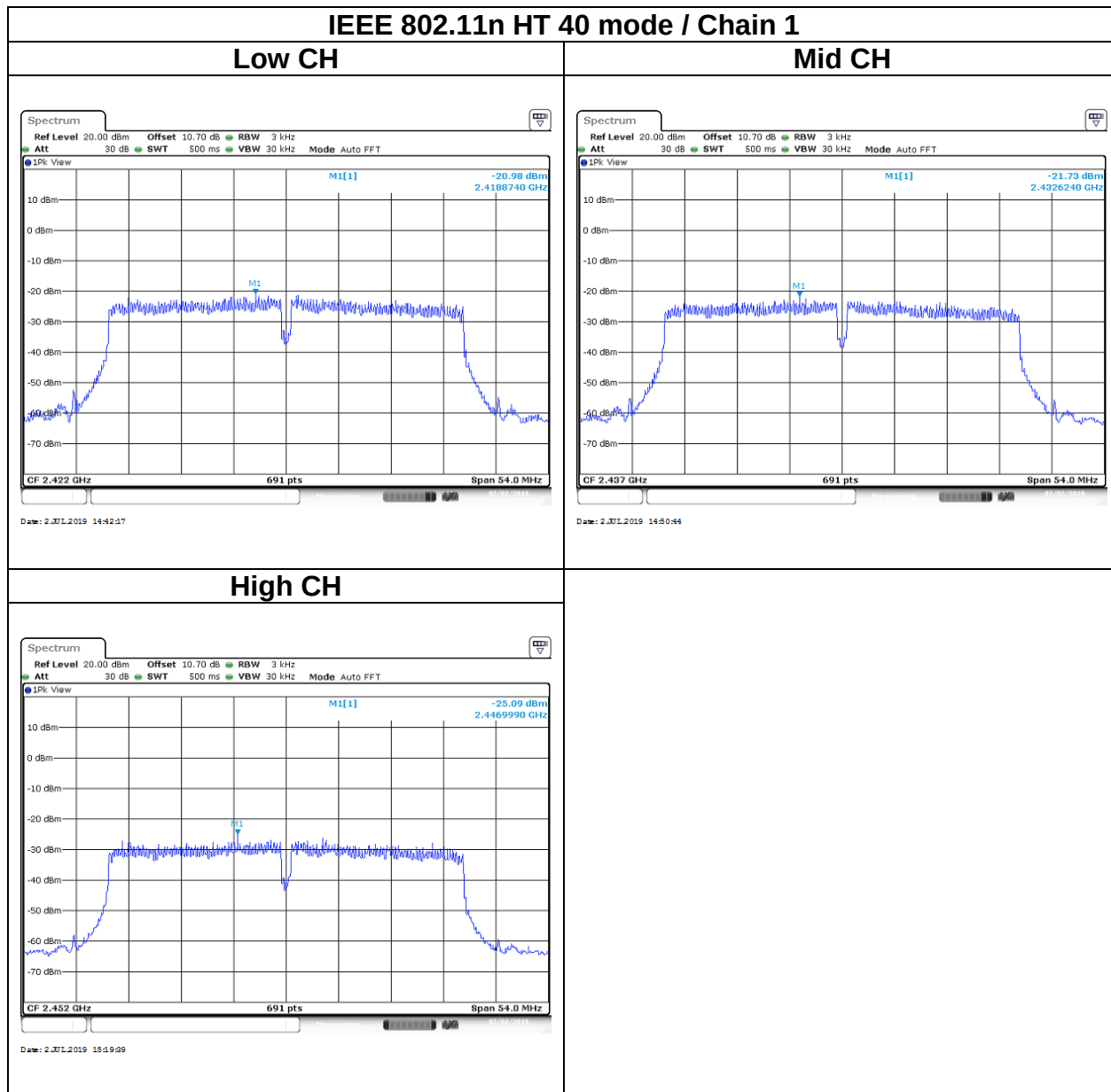
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- End of Test Report -