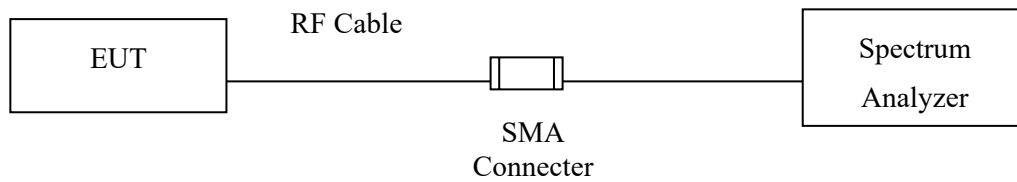


12. Duty Cycle

12.1. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，
待測物應在正常發射狀態下量測。

12.2. 測試架構圖



12.3. 量測不確定度

此項測試之量測不確定度為 $\pm 2.31\text{msec}$

12.4. Duty Cycle 測試結果

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201NGW

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：107 年 10 月 22 日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

Duty Cycle Formula:

$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$
$$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$$

Results:

SISO A

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	2.0870	2.3478	88.89	0.51
802.11n20	24.7681	25.1014	98.67	0.06
802.11n40	17.8116	18.1449	98.16	0.08
802.11ac80	10.9275	11.2609	97.04	0.13
802.11ac160	5.5217	5.8116	95.01	0.22
802.11ax20	24.6323	24.8986	98.93	0.05
802.11ax40	19.8116	20.1014	98.56	0.06
802.11ax80	9.4638	9.7826	96.74	0.14
802.11ax160	4.7681	5.0290	94.81	0.23

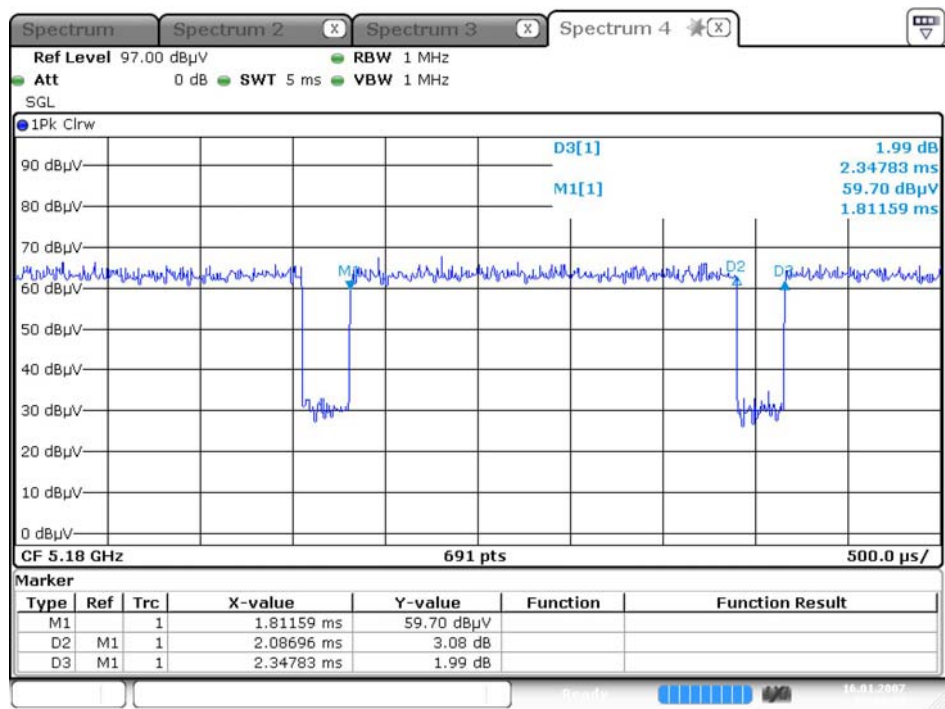
SISO B

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	2.0725	2.3623	87.73	0.57
802.11n20	24.8841	25.1449	98.96	0.05
802.11n40	17.7826	18.0870	98.32	0.07
802.11ac80	10.9130	11.2609	96.91	0.14
802.11ac160	5.4928	5.7971	94.75	0.23
802.11ax20	24.7391	24.9710	99.07	0.04
802.11ax40	19.7391	20.0435	98.48	0.07
802.11ax80	9.4638	9.7536	97.03	0.13
802.11ax160	4.7536	5.0290	94.52	0.24

MIMO

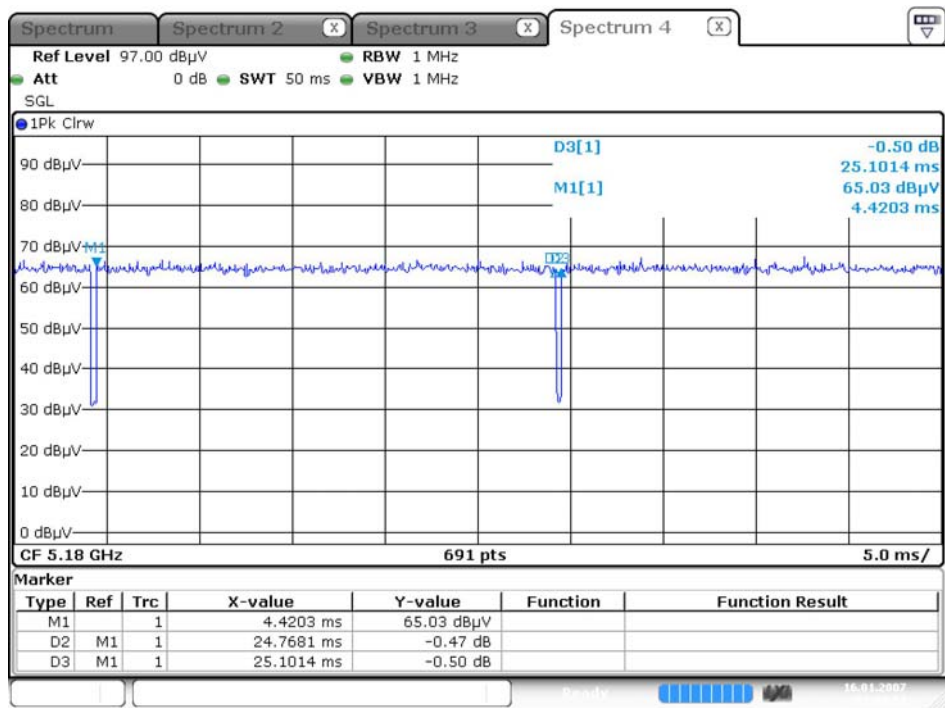
5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11n20	18.5217	18.7116	98.99	0.04
802.11n40	8.8986	9.2174	96.54	0.15
802.11ac80	5.5072	5.7971	95.00	0.22
802.11ac160	2.7826	3.0435	91.43	0.39
802.11ax20	19.6087	19.9710	98.19	0.08
802.11ax40	9.8551	10.2319	96.32	0.16
802.11ax80	4.7246	5.0435	93.68	0.28
802.11ax160	2.4203	2.6957	89.78	0.47

802.11a (SISO A)



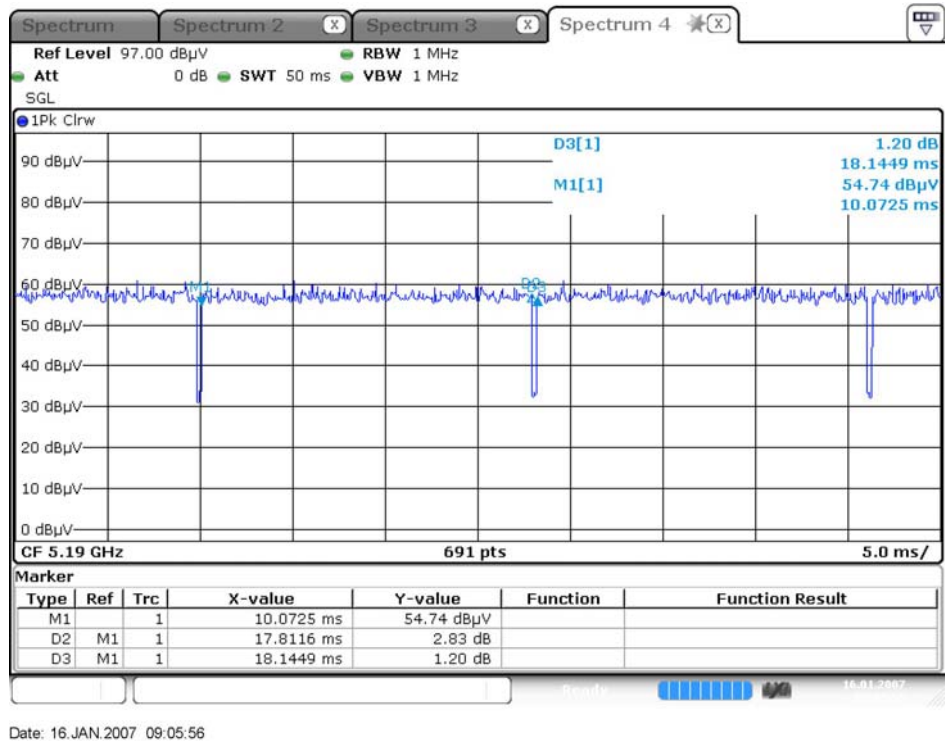
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802.11n20 (SISO A)

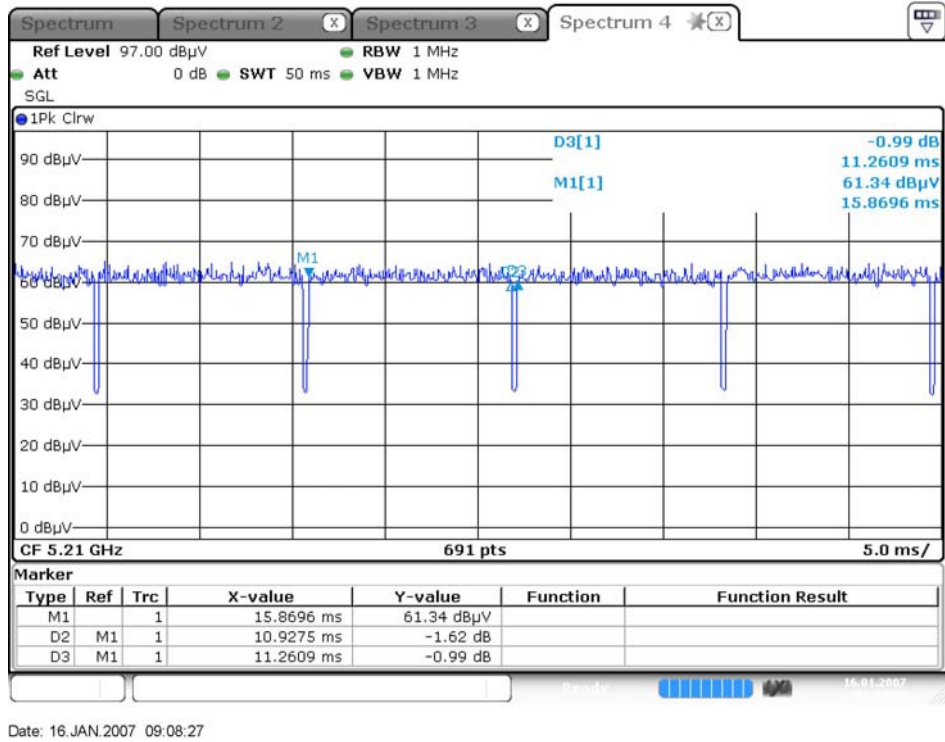


Date: 16.JAN.2007 09:04:51

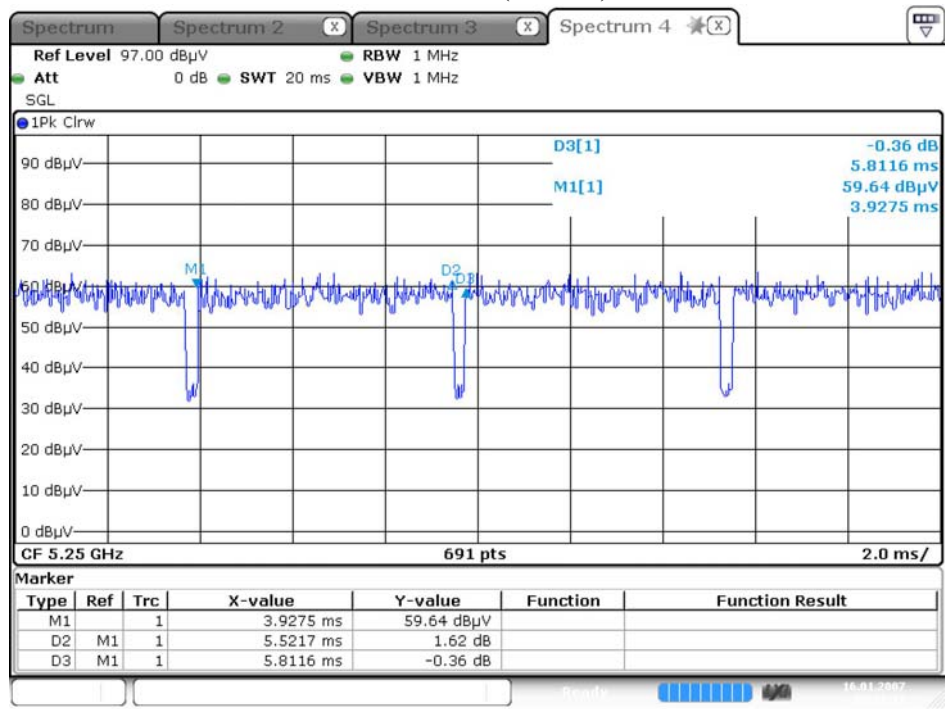
802.11n40 (SISO A)



802.11ac80 (SISO A)

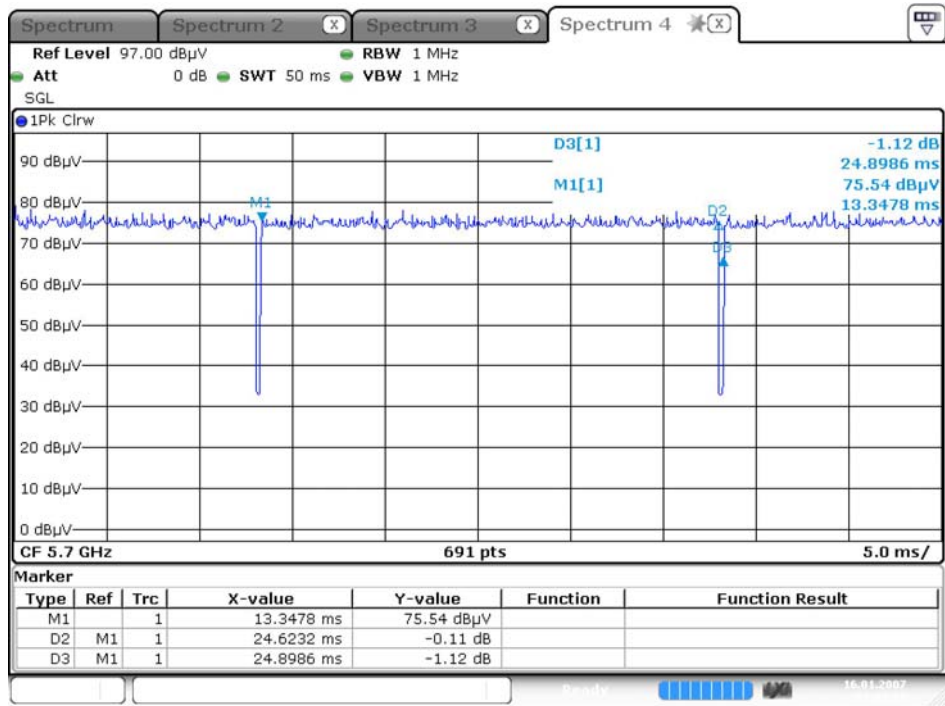


802.11ac160 (SISO A)



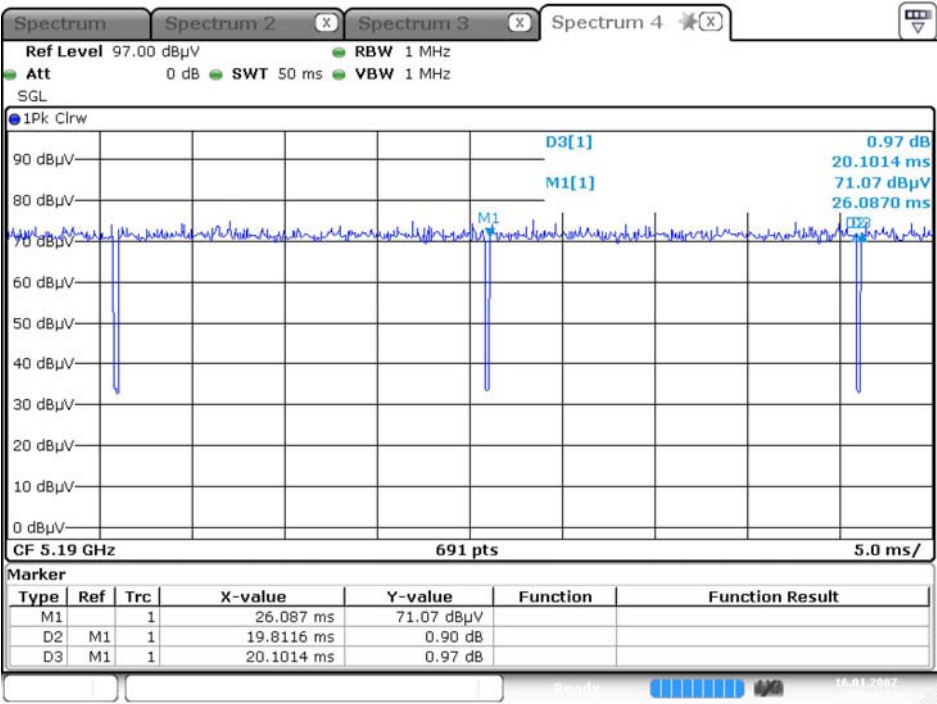
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802.11ax20 (SISO A)



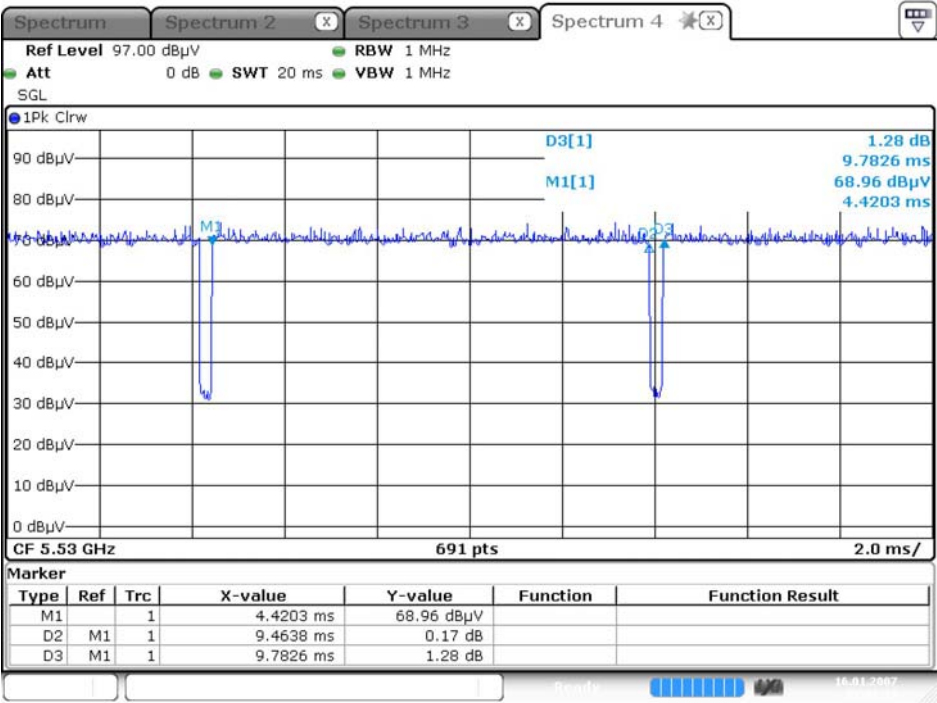
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802.11ax40 (SISO A)



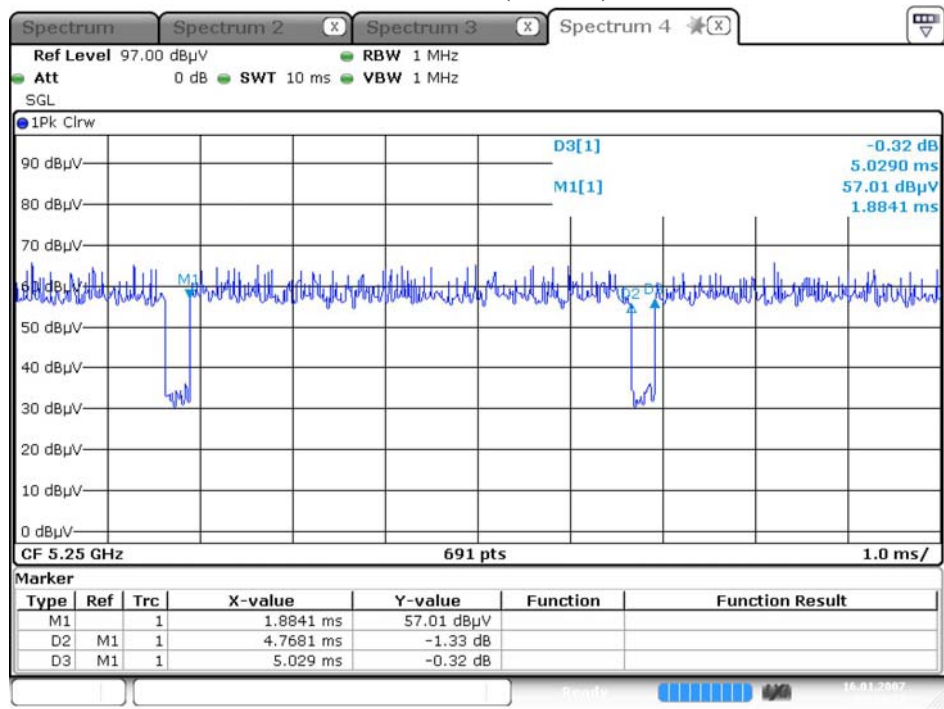
Date: 16.JAN.2007 09:12:17

802.11ax80 (SISO A)



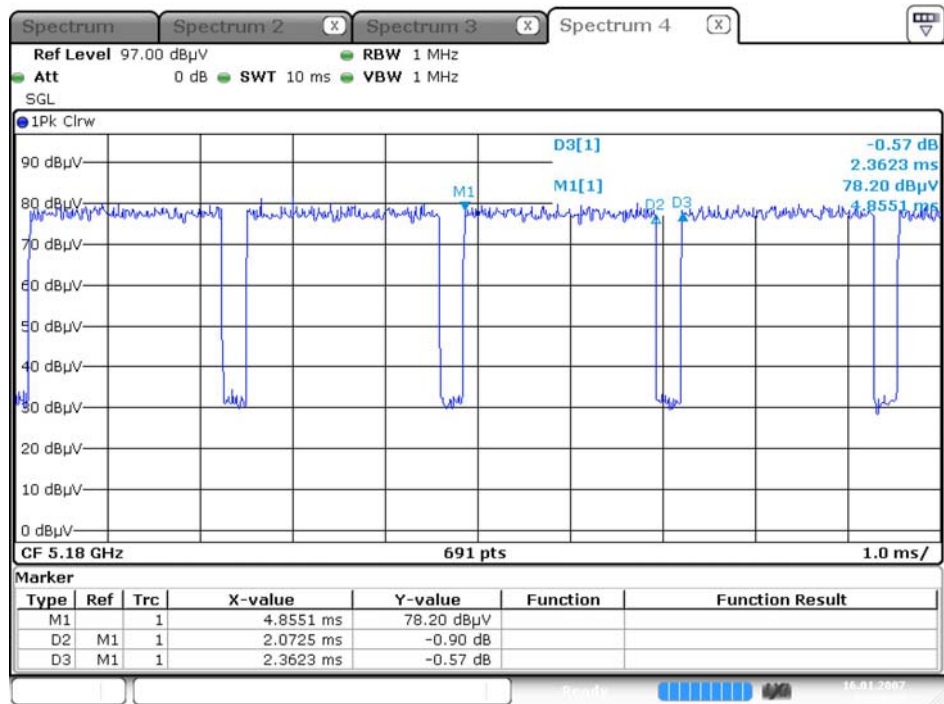
Date: 16.JAN.2007 07:36:16

802.11ax160 (SISO A)



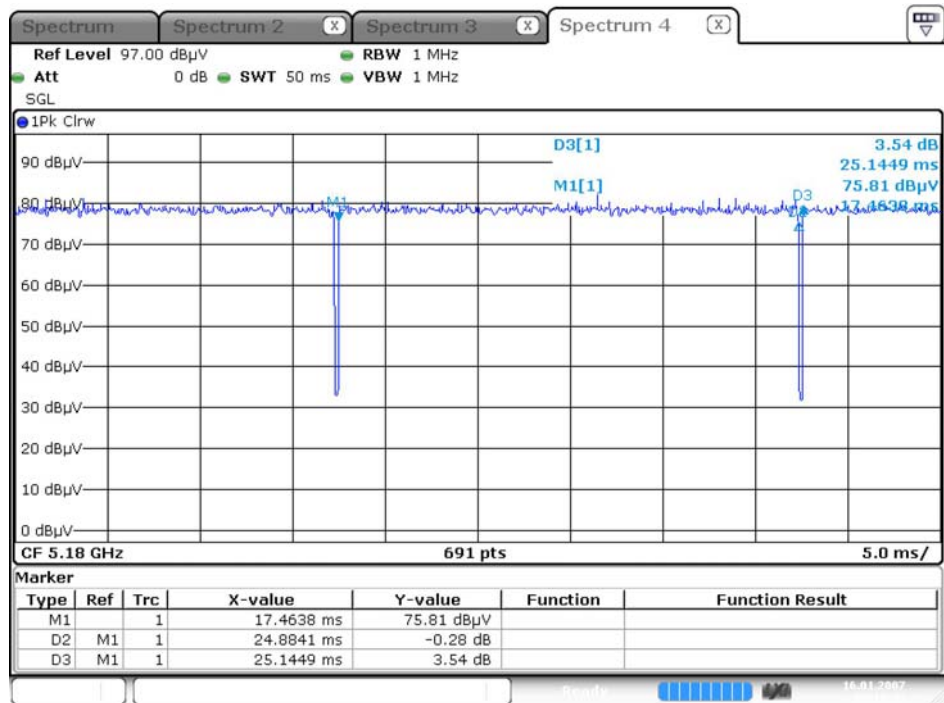
Date: 16.JAN.2007 09:13:37

802.11a (SISO B)



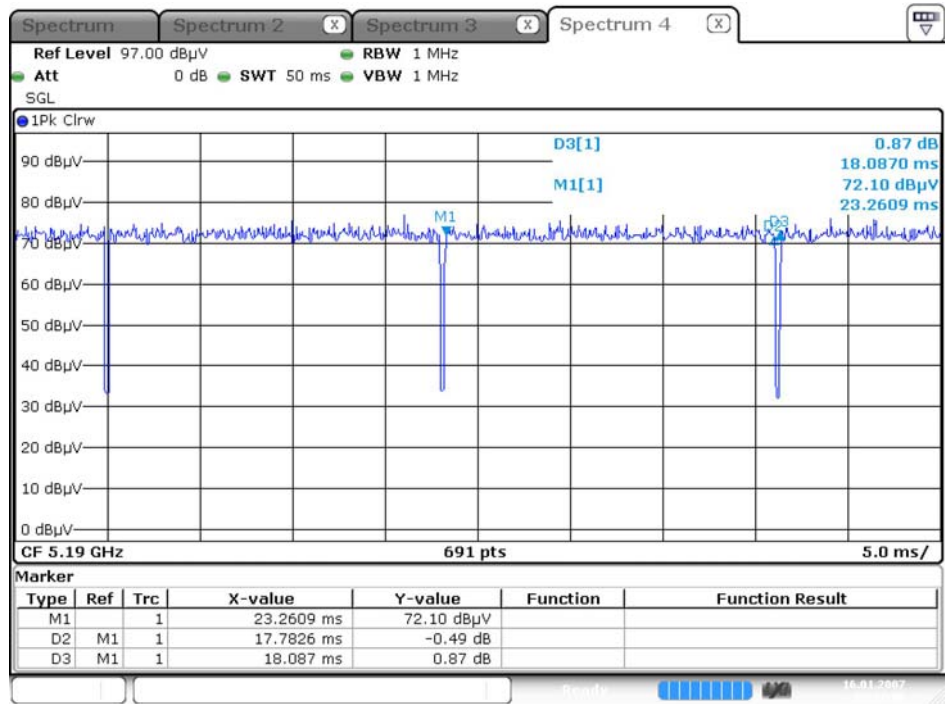
Date: 16 JAN 2007 09:20:34

802.11n20 (SISO B)



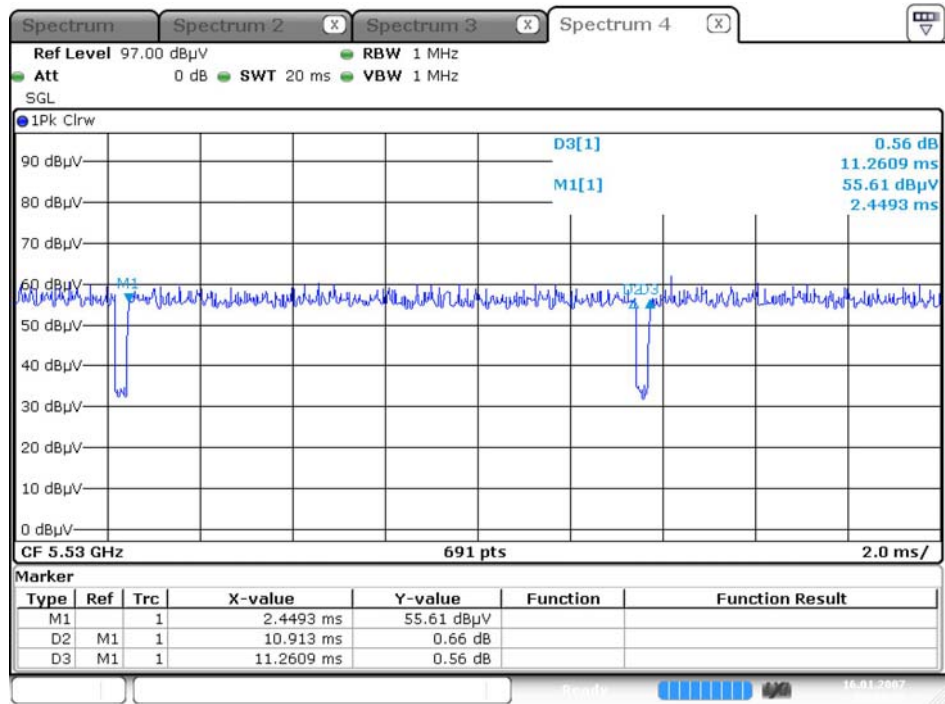
Date: 16 JAN 2007 09:19:43

802.11n40 (SISO B)



Date: 16 JAN 2007 09:17:00

802.11ac80 (SISO B)



Date: 16 JAN 2007 08:00:40

Spectrum 1 Spectrum 2 Spectrum 3 Spectrum 4

Ref Level 97.00 dBμV RBW 1 MHz
Att 0 dB SWT 10 ms VBW 1 MHz
SGL

1Pk Clrw

90 dBμV 3.15 dB
5.7971 ms
80 dBμV 59.75 dBμV
1.5652 ms
70 dBμV
60 dBμV
50 dBμV
40 dBμV
30 dBμV
20 dBμV
10 dBμV
0 dBμV

D3[1]
M1[1]

M1 D2 D3

CF 5.25 GHz 691 pts 1.0 ms/

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.5652 ms	59.75 dBμV		
D2	M1	1	5.4928 ms	0.69 dB		
D3	M1	1	5.7971 ms	3.15 dB		

Spectrum Spectrum 2 Spectrum 3 Spectrum 4

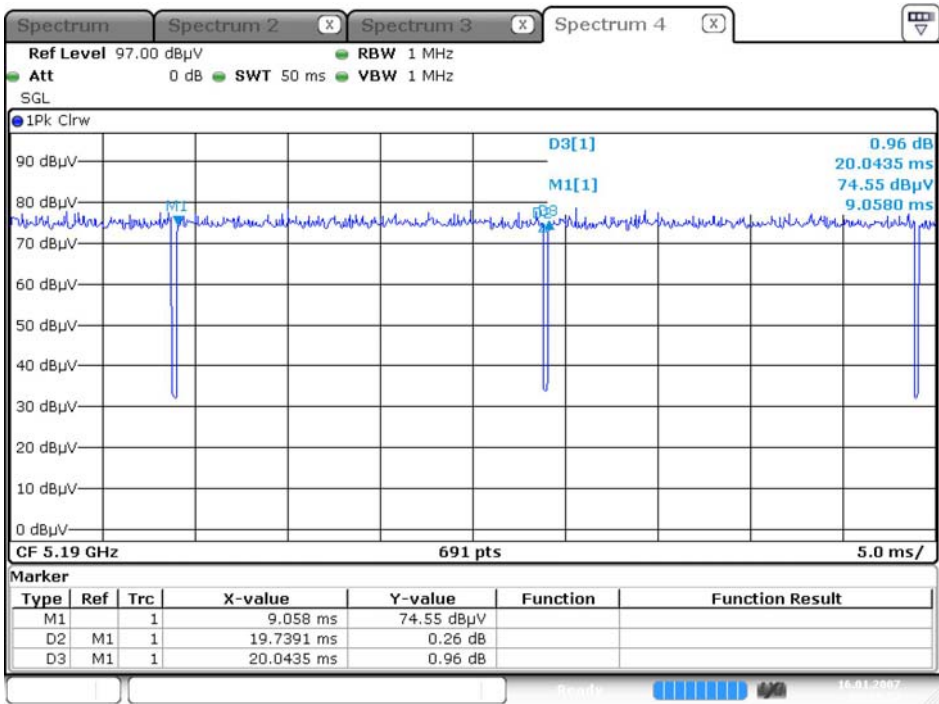
Ref Level 97.00 dBμV RBW 1 MHz
Att 0 dB SWT 50 ms VBW 1 MHz
SGL

1Pk Clrw

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	10.0725 ms	77.20 dBμV		
D2	M1	1	24.7391 ms	2.09 dB		
D3	M1	1	24.971 ms	1.95 dB		

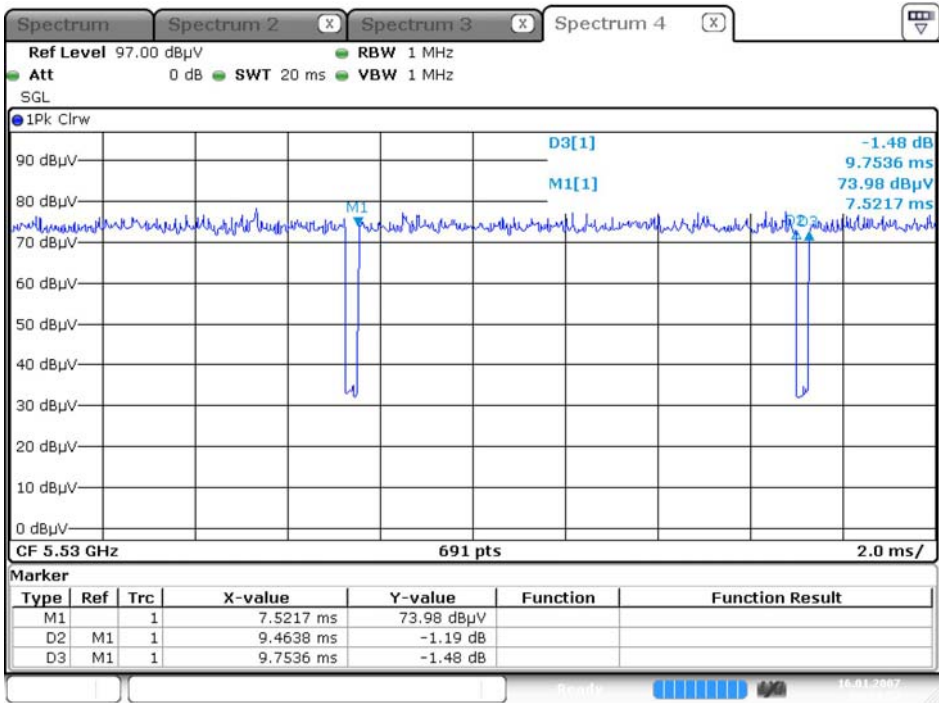
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802.11ax40 (SISO B)



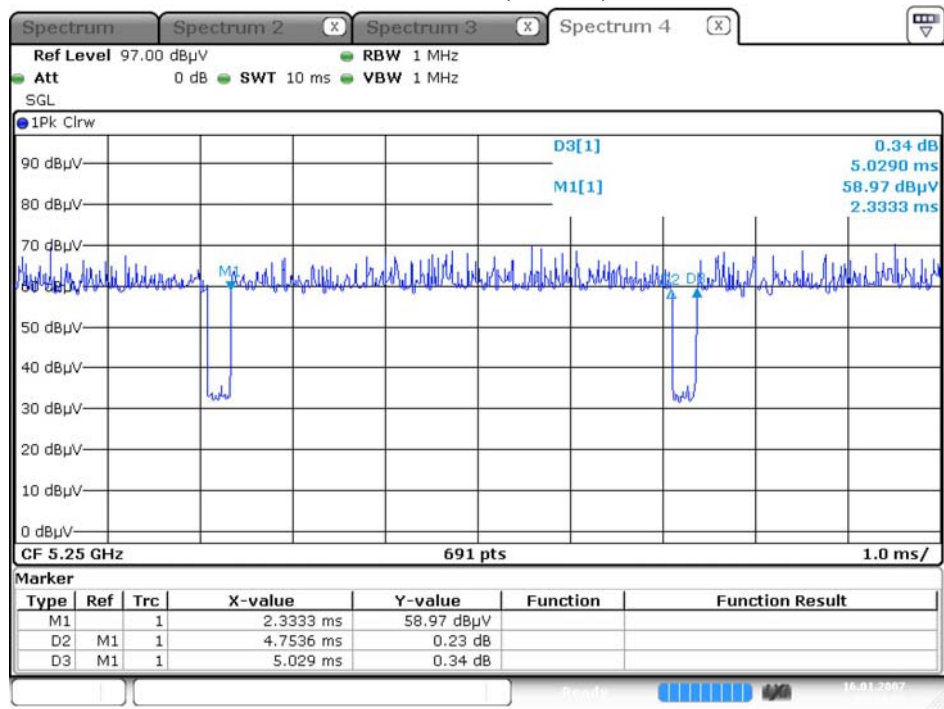
Date: 16.JAN.2007 09:17:58

802.11ax80 (SISO B)



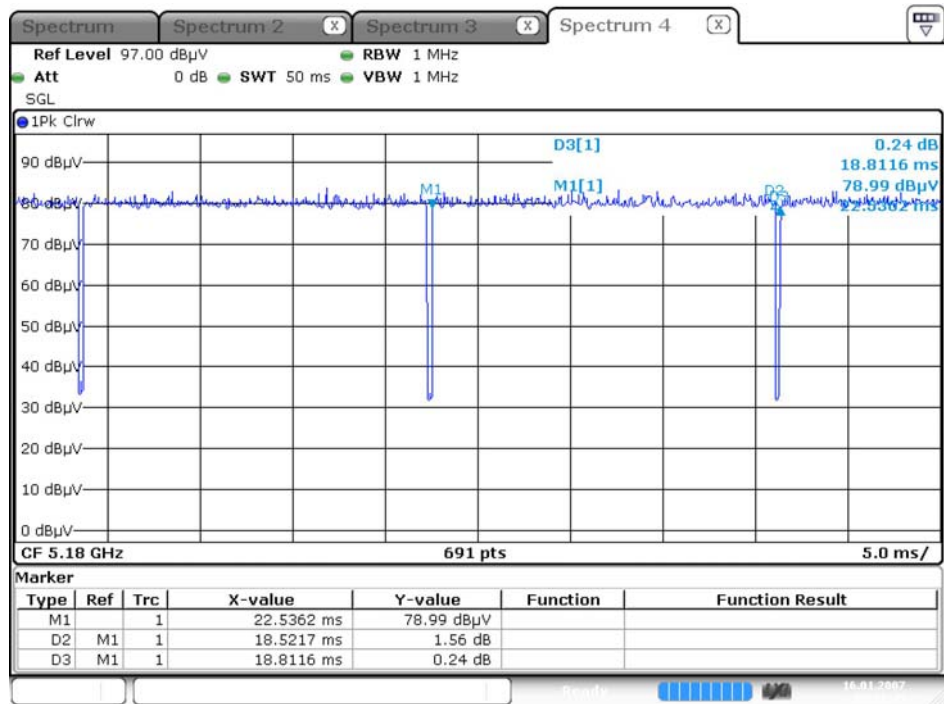
Date: 16.JAN.2007 08:24:56

802.11ax160 (SISO B)



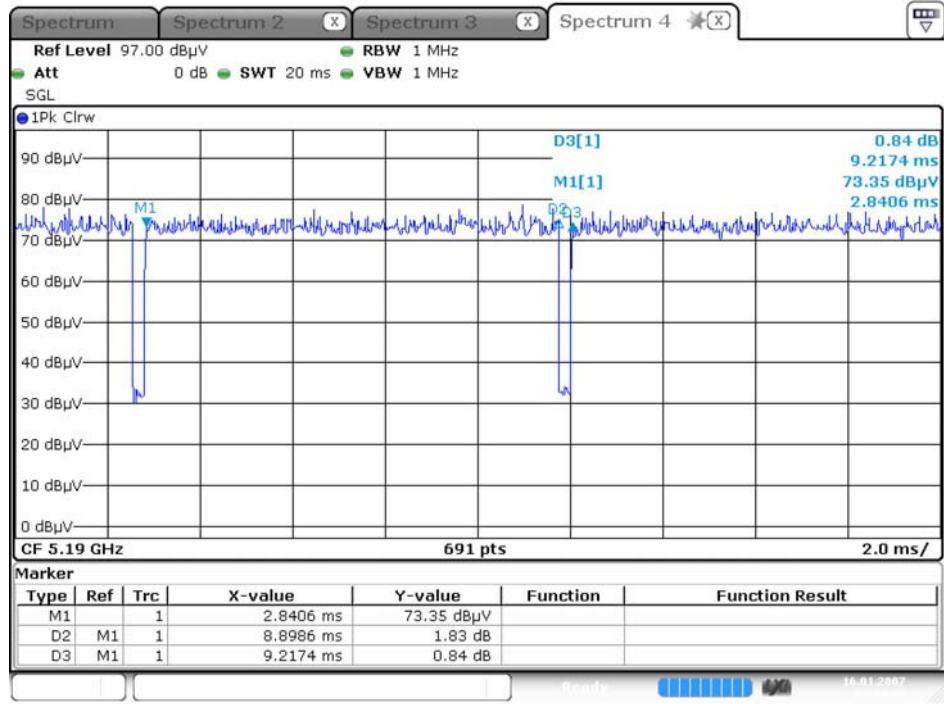
Date: 16.JAN.2007 09:14:28

802.11n20 (MIMO)



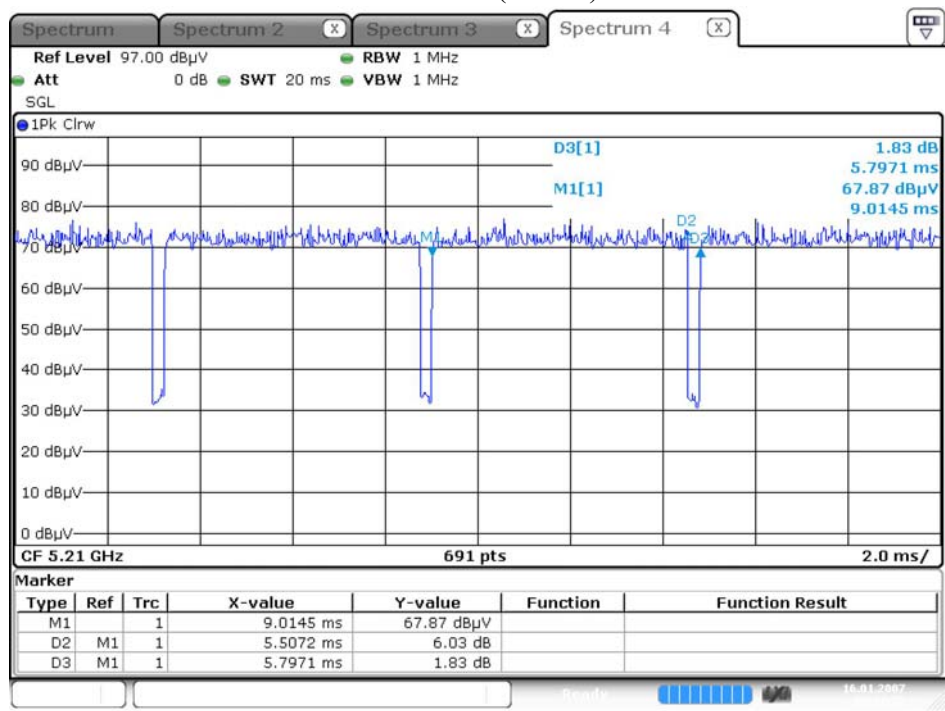
Date: 16.JAN.2007 09:21:44

802.11n40 (MIMO)



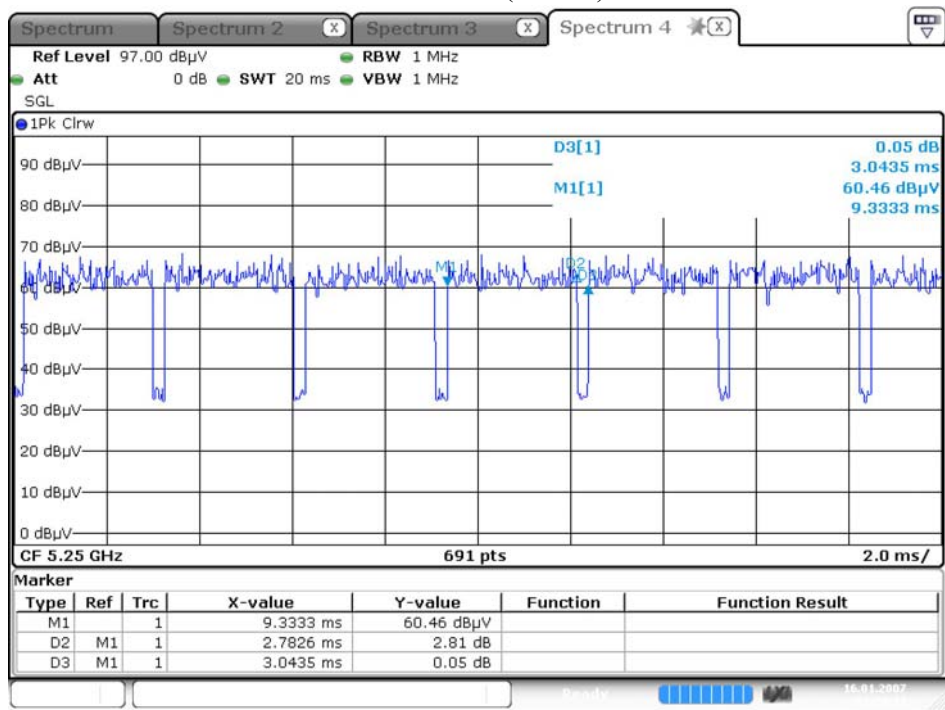
Date: 16.JAN.2007 09:23:48

802.11ac80 (MIMO)



Date: 16.JAN.2007 09:27:22

802.11ac160 (MIMO)



Date: 16.JAN.2007 09:28:11

Spectrum **Spectrum 2** **Spectrum 3** **Spectrum 4**

Ref Level 97.00 dBμV RBW 1 MHz
 Att 0 dB SWT 50 ms VBW 1 MHz
 SGL

1Pk Clrw

90 dBμV
 80 dBμV
 70 dBμV
 60 dBμV
 50 dBμV
 40 dBμV
 30 dBμV
 20 dBμV
 10 dBμV
 0 dBμV

D3[1] -0.96 dB
 M1[1] 19.9710 ms
 D2 80.96 dBμV
 16.8723 ms

CF 5.18 GHz 691 pts 5.0 ms/

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	15.0725 ms	80.96 dBμV		
D2	M1	1	19.6087 ms	1.25 dB		
D3	M1	1	19.971 ms	-0.96 dB		

16.01.2007

Spectrum 1 Spectrum 2 Spectrum 3 Spectrum 4

Ref Level 97.00 dBμV RBW 1 MHz

Att 0 dB SWT 20 ms VBW 1 MHz

SQL

1Pk Clr

90 dBμV

80 dBμV

70 dBμV

60 dBμV

50 dBμV

40 dBμV

30 dBμV

20 dBμV

10 dBμV

0 dBμV

D3[1] 2.33 dB

M1[1] 10.2319 ms

D2[3] 74.63 dBμV

5.2464 ms

CF 5.19 GHz 691 pts 2.0 ms/

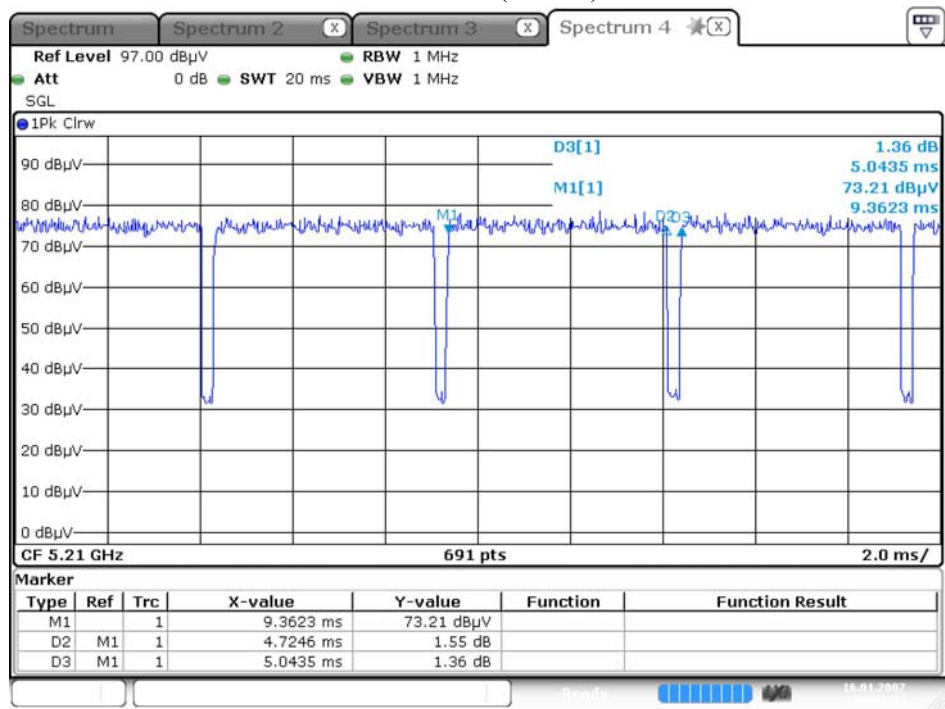
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.2464 ms	74.63 dBμV		
D2	M1	1	9.8551 ms	2.83 dB		
D3	M1	1	10.2319 ms	2.33 dB		

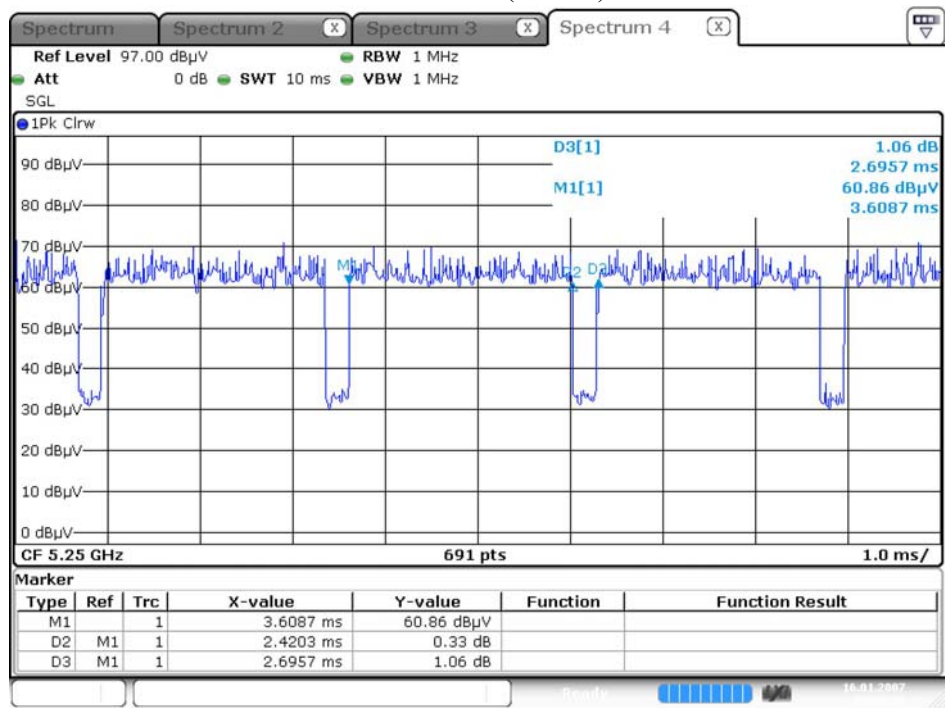
Read 16.01.2007

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802.11ax80 (MIMO)



802.11ax160 (MIMO)



附件 1: 待測物測試擺設相片

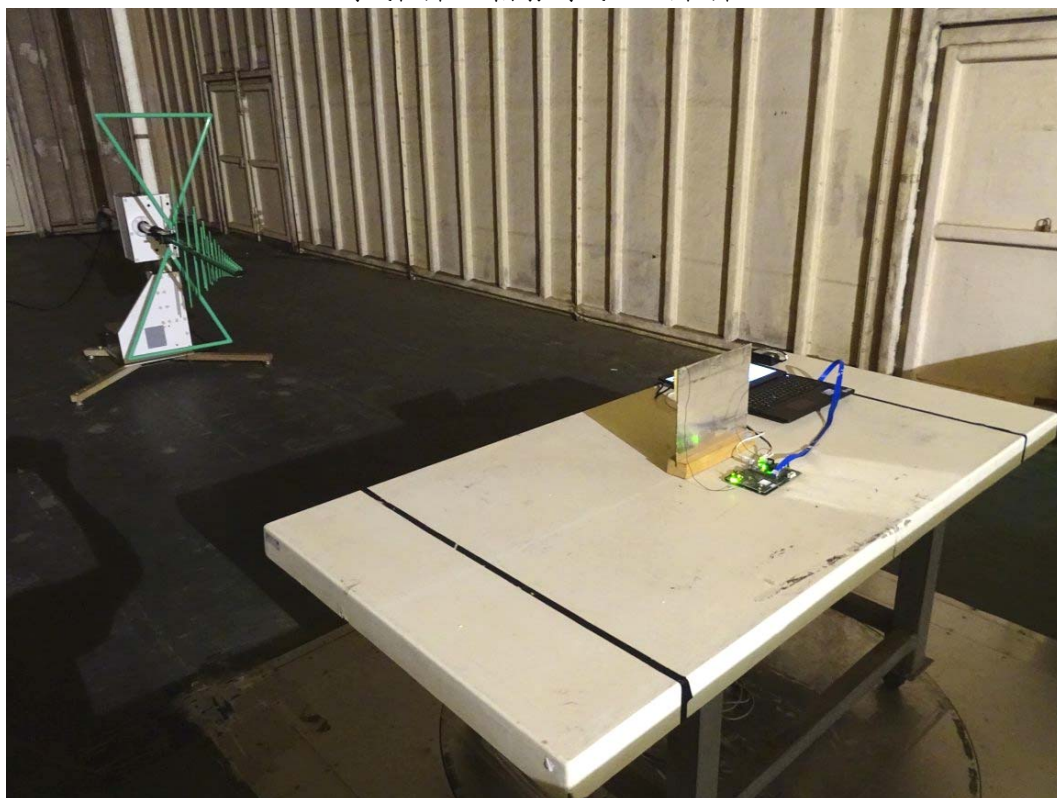
測試相片：電源端點測試 正面相片



測試相片：電源端點測試 背面相片



測試相片：輻射測試 正面相片



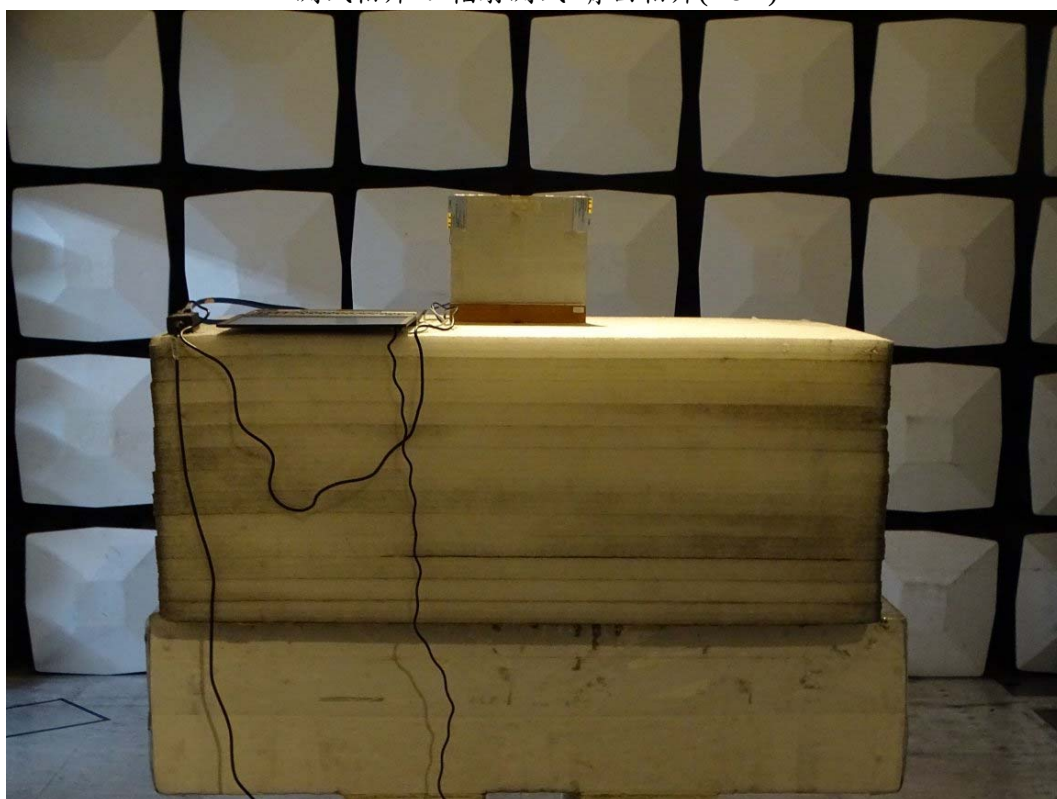
測試相片：輻射測試 背面相片



測試相片：輻射測試 正面相片(Horn)



測試相片：輻射測試 背面相片(Horn)



測試相片：輻射測試 正面相片(Horn)



測試相片：輻射測試 背面相片(Horn)

