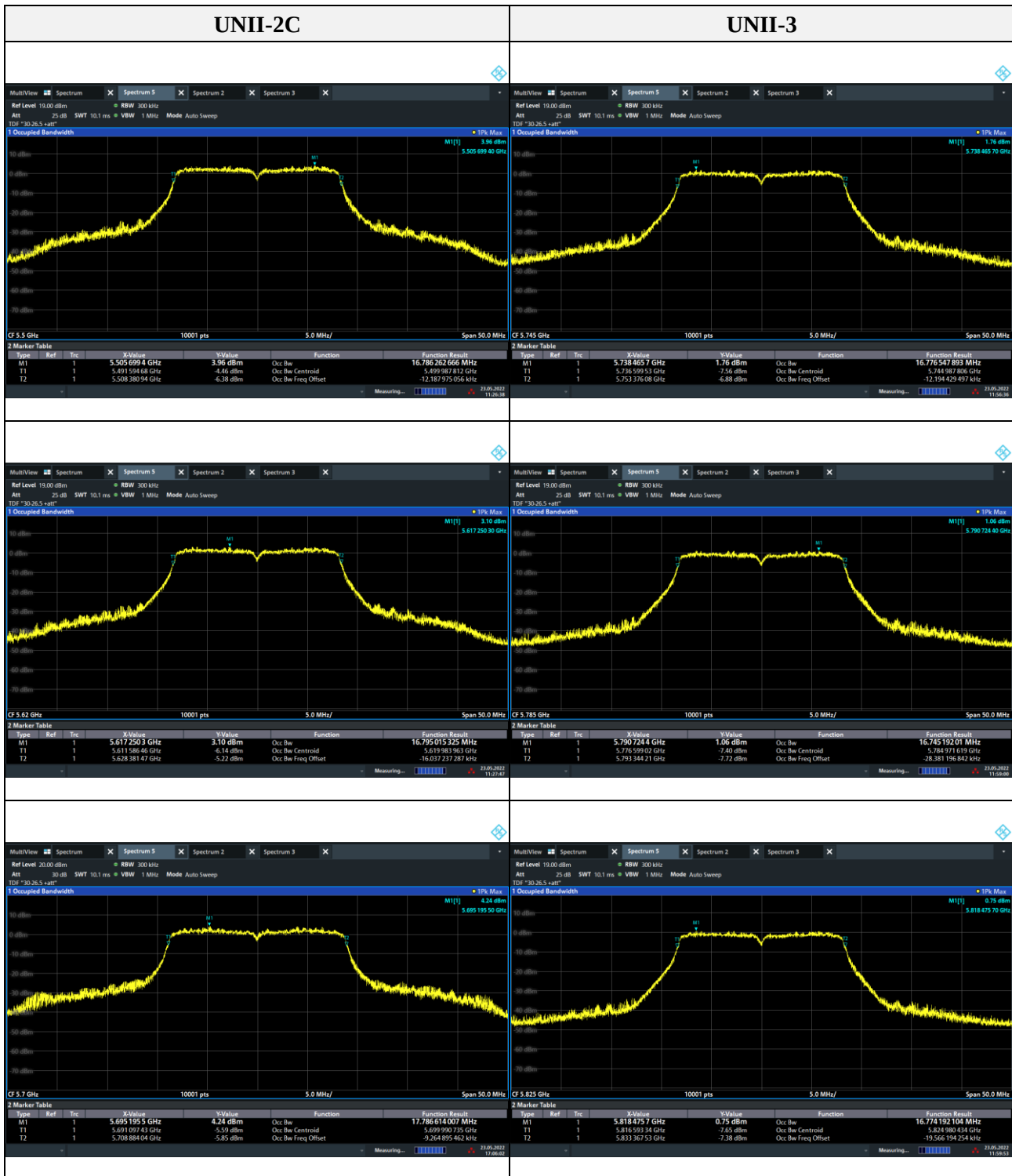
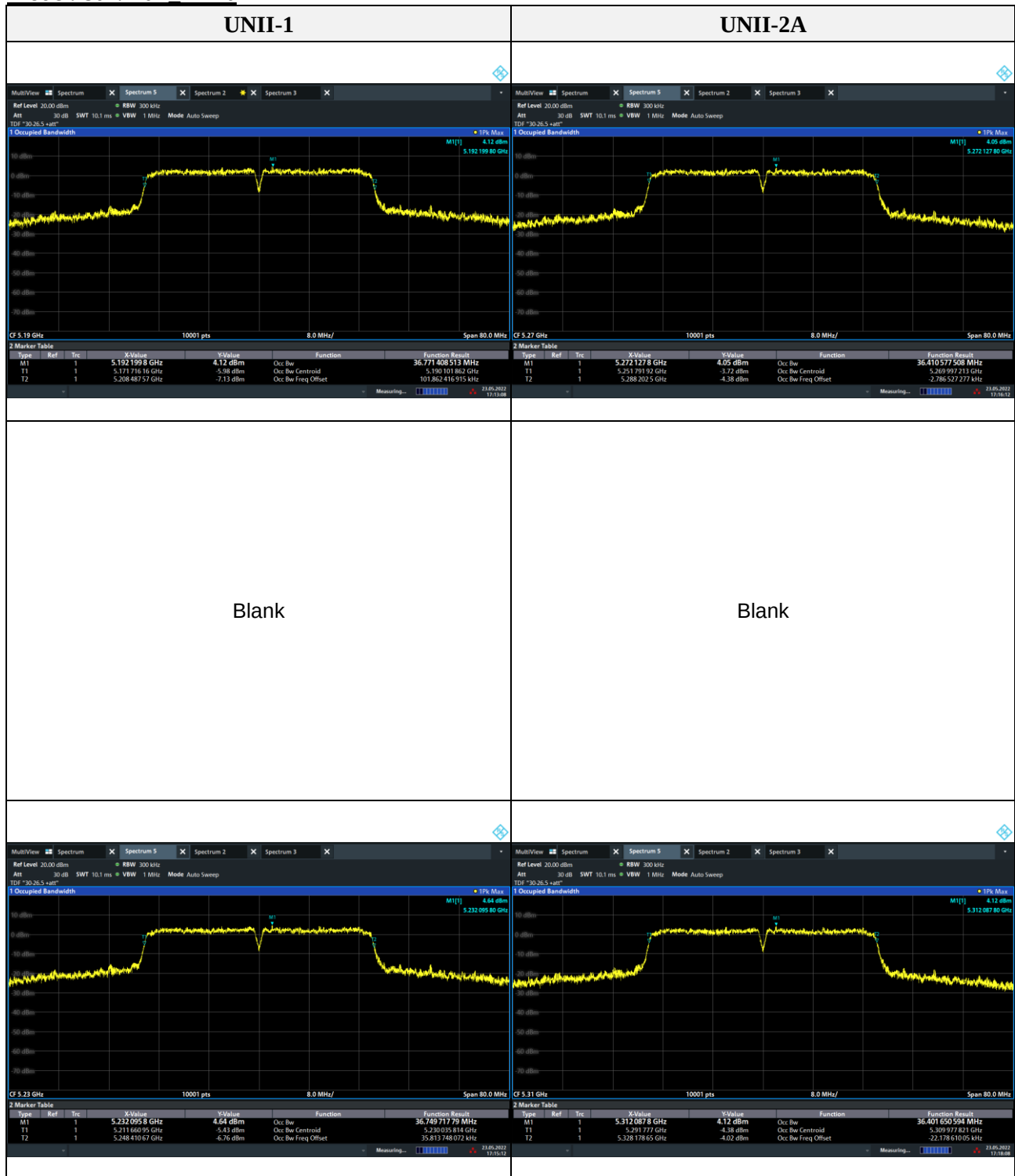


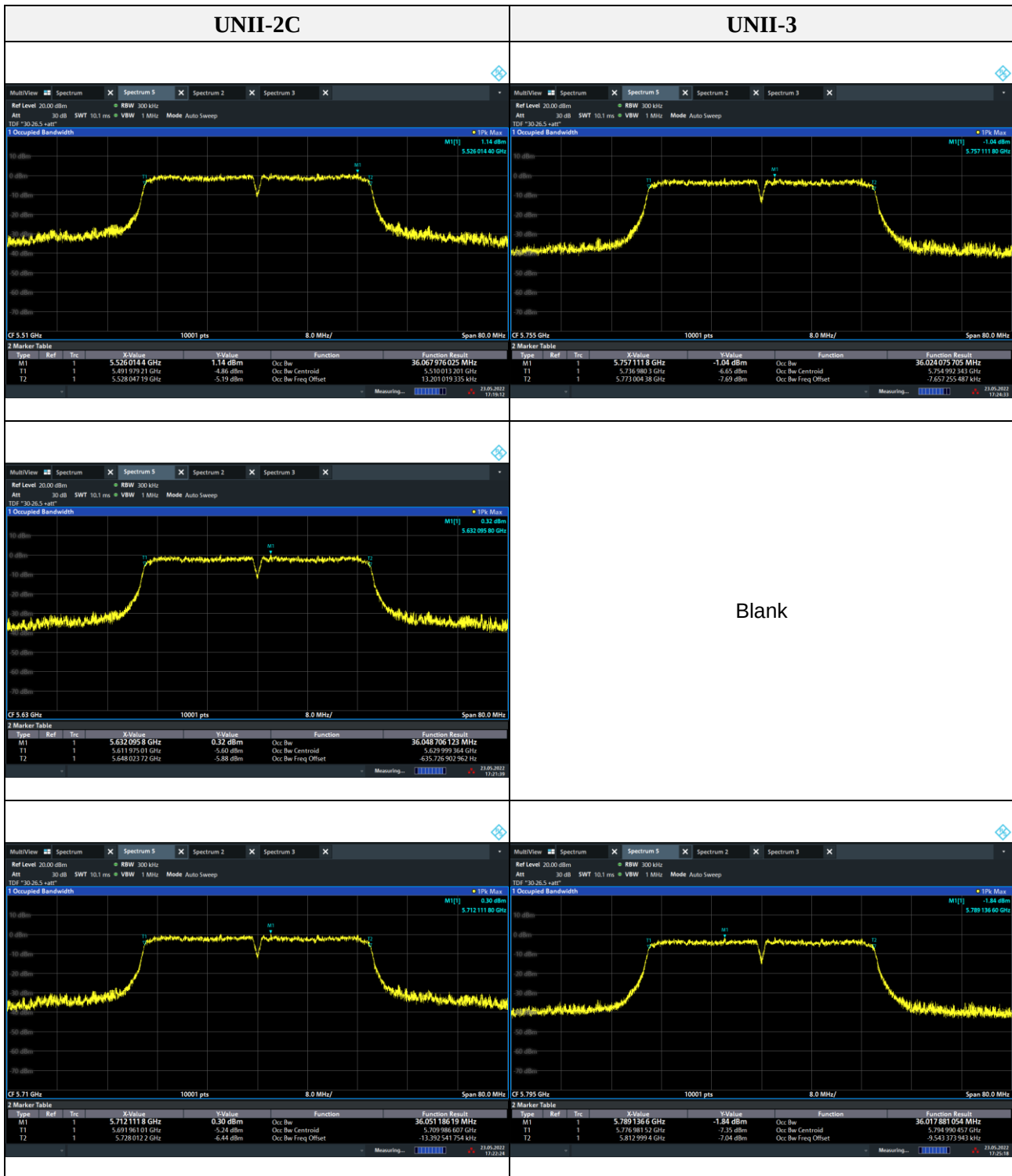


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Mode : 802.11an HT40

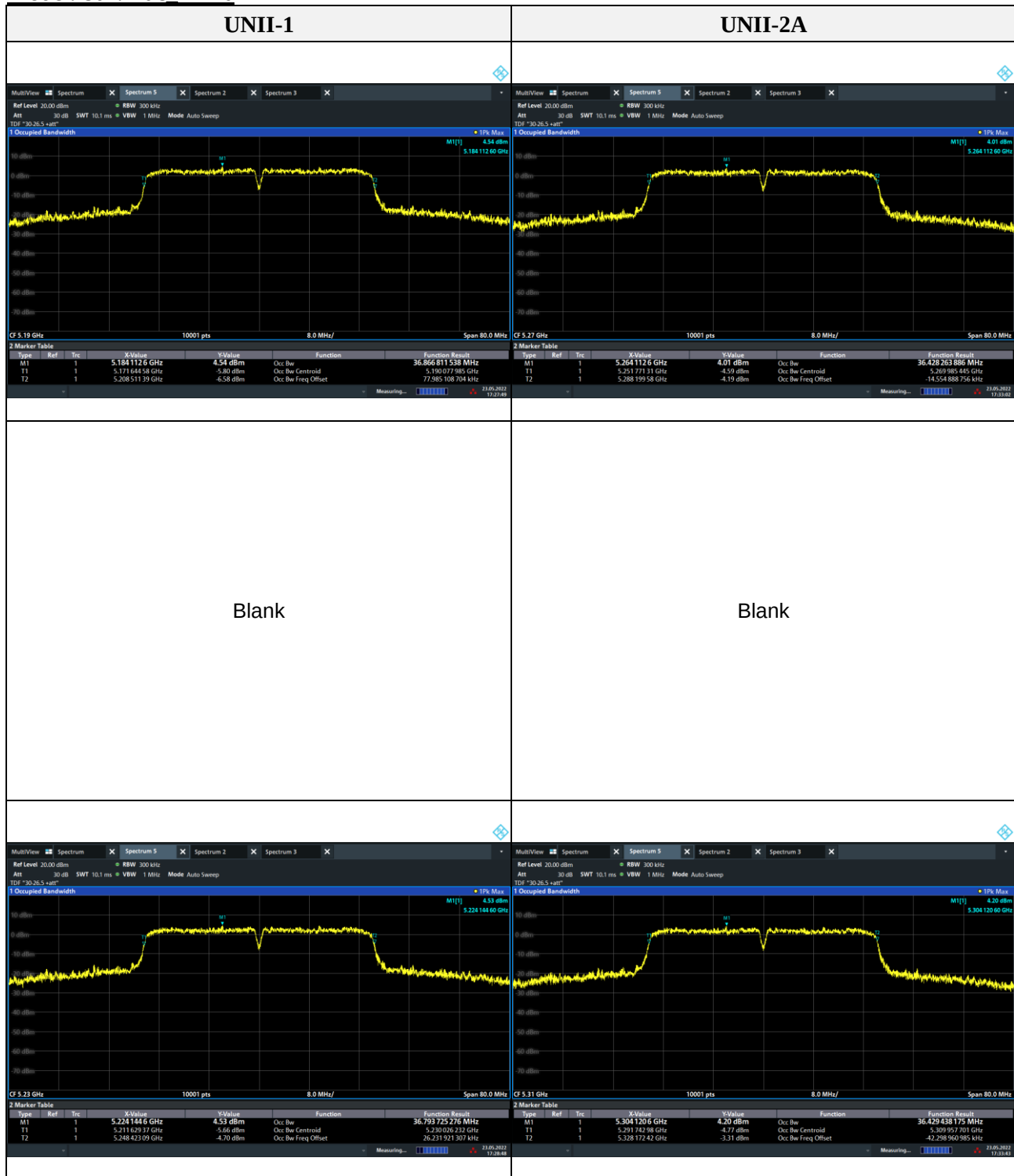


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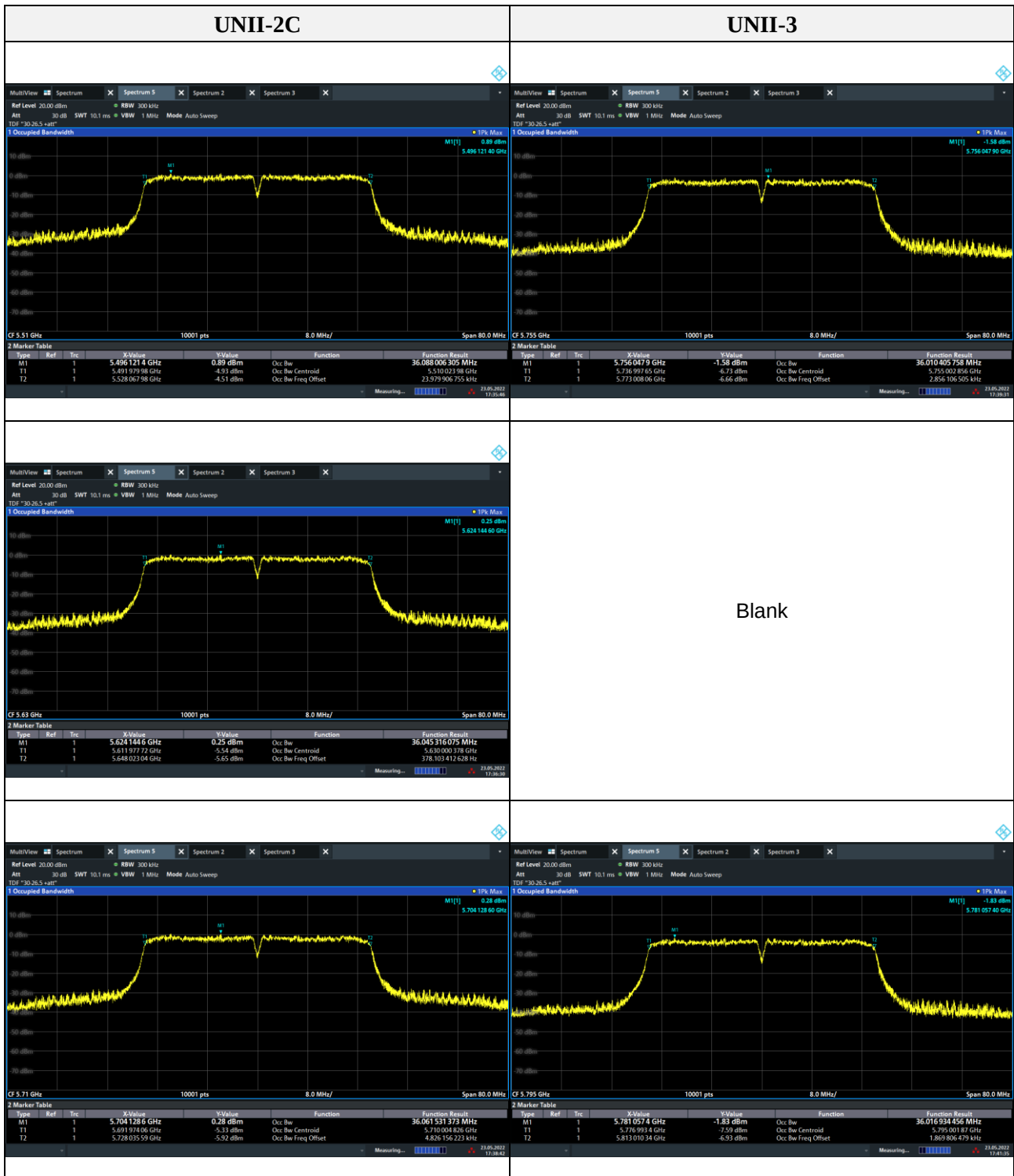


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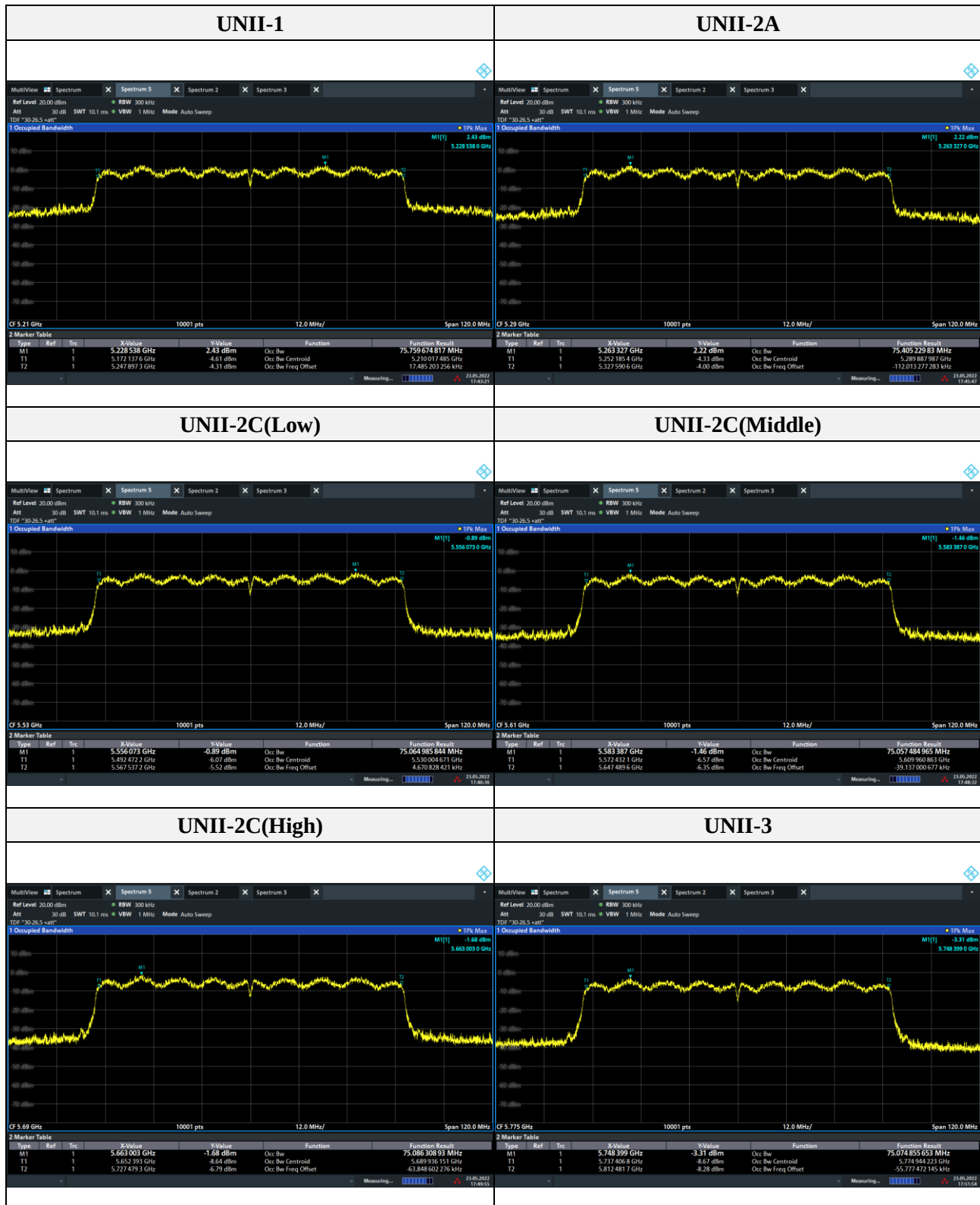
Mode : 802.11ac HT40



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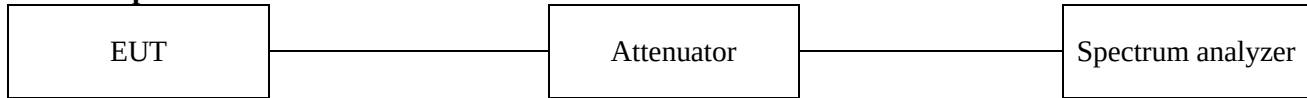
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3.2. 6 dB bandwidth

Test procedure

KDB 789033 D02 v02r01– Section C.2

Test setup



Section C.2

1. Set RBW = 100 kHz
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = peak.
4. Sweep = auto couple.
5. Allow the trace to stabilize
6. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Limit

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

According to RSS-247 6.1 (1), equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

Test results

Band	Frequency(MHz)	Mode	6 dB bandwidth(MHz)
UNII-1	5 180	a	16.28
	5 220		16.30
	5 240		16.30
UNII-2A	5 260		16.30
	5 280		16.28
	5 320		16.27
UNII-2C	5 500		16.31
	5 620		16.32
	5 700		16.29
UNII-3	5 745		15.77
	5 785		16.31
	5 825		16.30
UNII-1	5 180	an_HT20	16.80
	5 220		16.91
	5 240		16.94
UNII-2A	5 260		16.82
	5 280		16.82
	5 320		17.04
UNII-2C	5 500		16.94
	5 620		16.93
	5 700		16.93
UNII-3	5 745		16.95
	5 785		17.04
	5 825		17.02

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Band	Frequency(MHz)	Mode	26 dB bandwidth(MHz)
UNII-1	5 180	ac_HT20	16.55
	5 220		16.91
	5 240		16.88
UNII-2A	5 260		16.94
	5 280		16.95
	5 320		16.91
UNII-2C	5 500		16.91
	5 620		17.05
	5 700		16.95
UNII-3	5 745		16.95
	5 785		16.94
	5 825		16.93
UNII-1	5 190	an_HT40	35.49
	5 230		35.50
UNII-2A	5 270		35.48
	5 310		35.49
UNII-2C	5 510		35.68
	5 690		35.69
	5 710		35.67
UNII-3	5 755		35.66
	5 795		35.65
UNII-1	5 190	ac_HT40	35.67
	5 230		35.69
UNII-2A	5 270		35.68
	5 310		35.67
UNII-2C	5 510		35.64
	5 690		35.70
	5 710		35.77
UNII-3	5 755		35.69
	5 795		35.67

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www.kes.co.kr

Report No.:

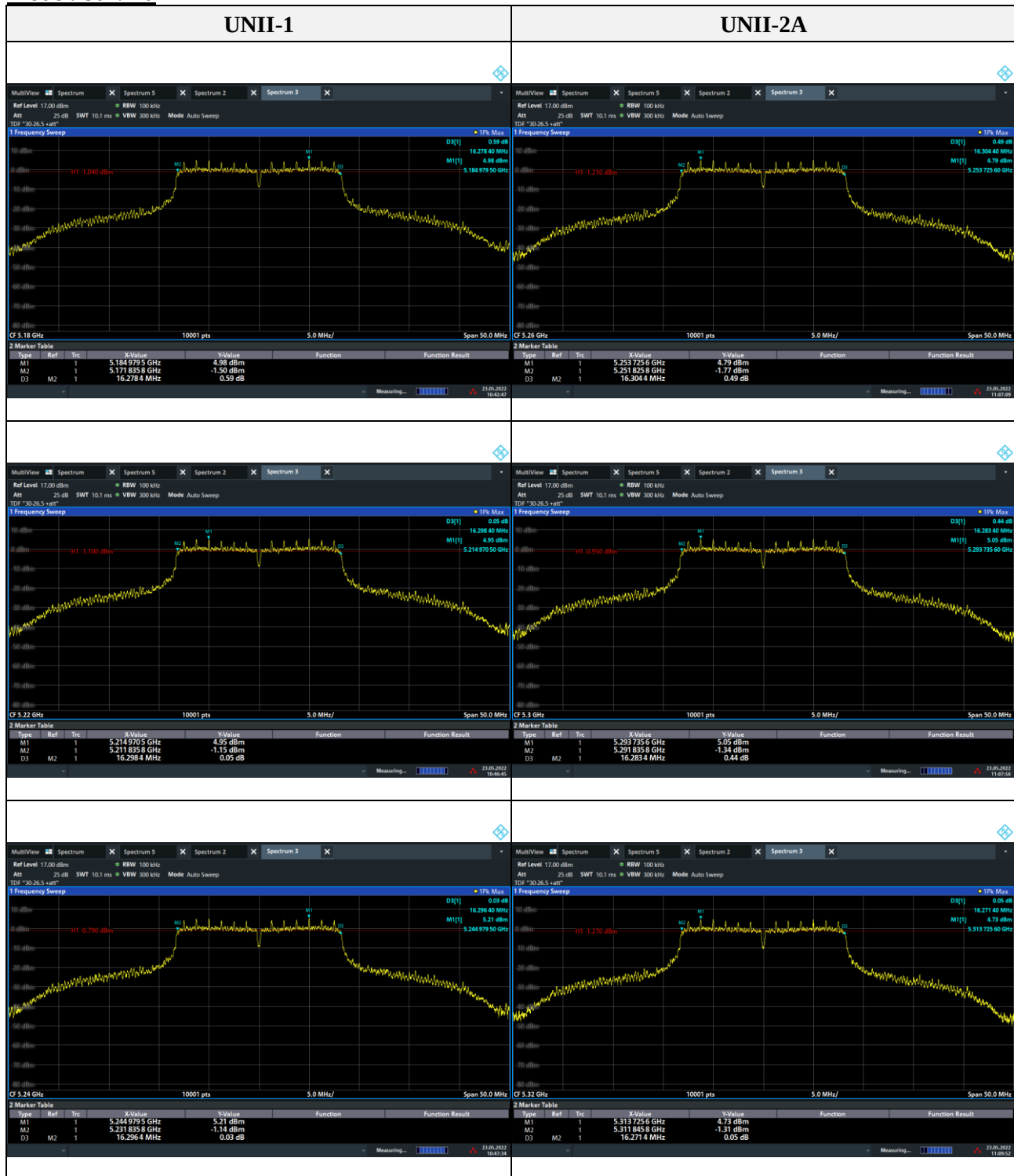
KES-RF1-22T0071

Page (39) of (214)

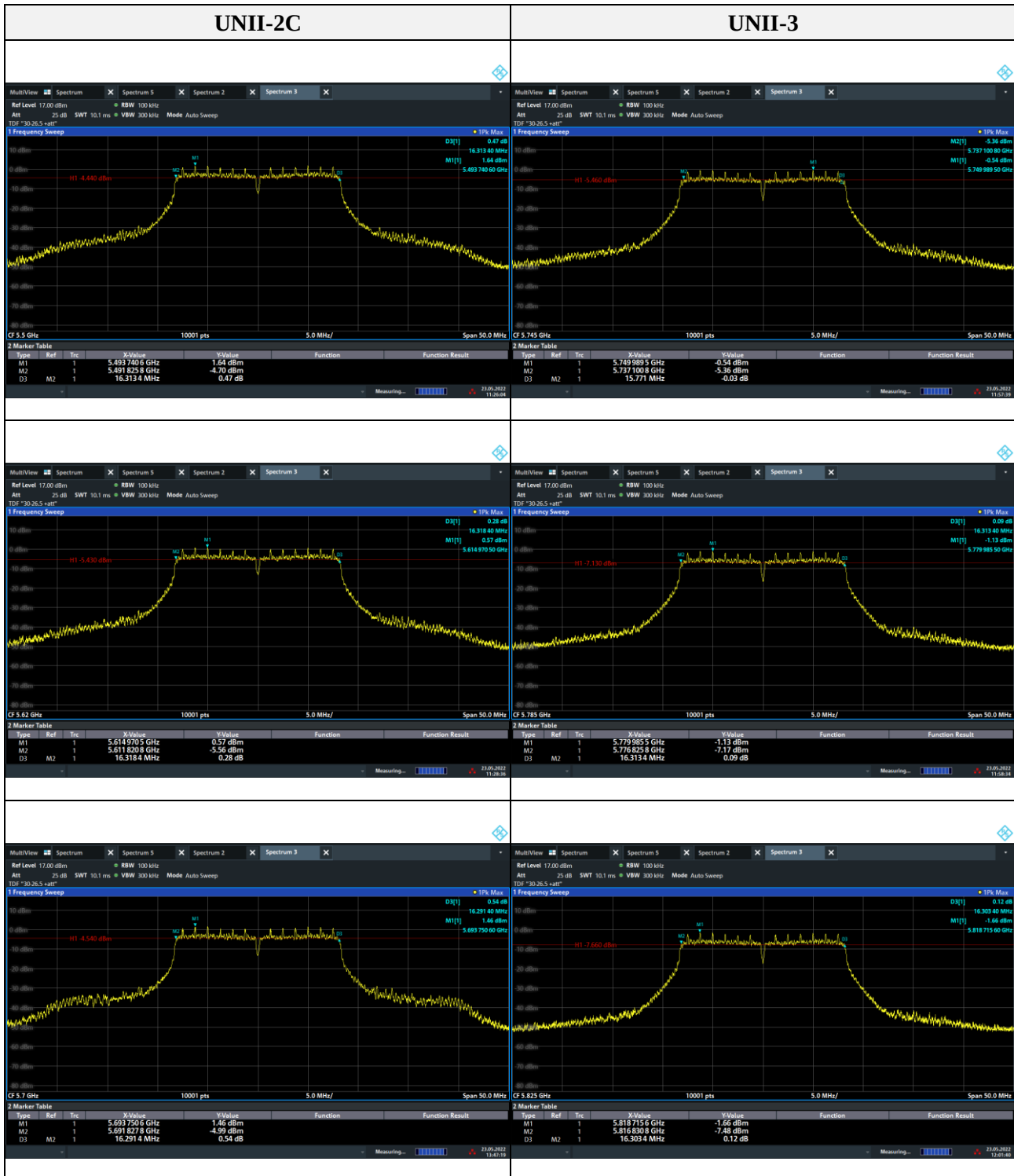
Band	Frequency(MHz)	Mode	26 dB bandwidth(MHz)
UNII-1	5 210	ac_HT80	75.11
UNII-2A	5 290		75.10
UNII-2C	5 530		75.11
	5 610		75.12
	5 690		75.12
UNII-3	5 775		75.10

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Mode : 802.11a

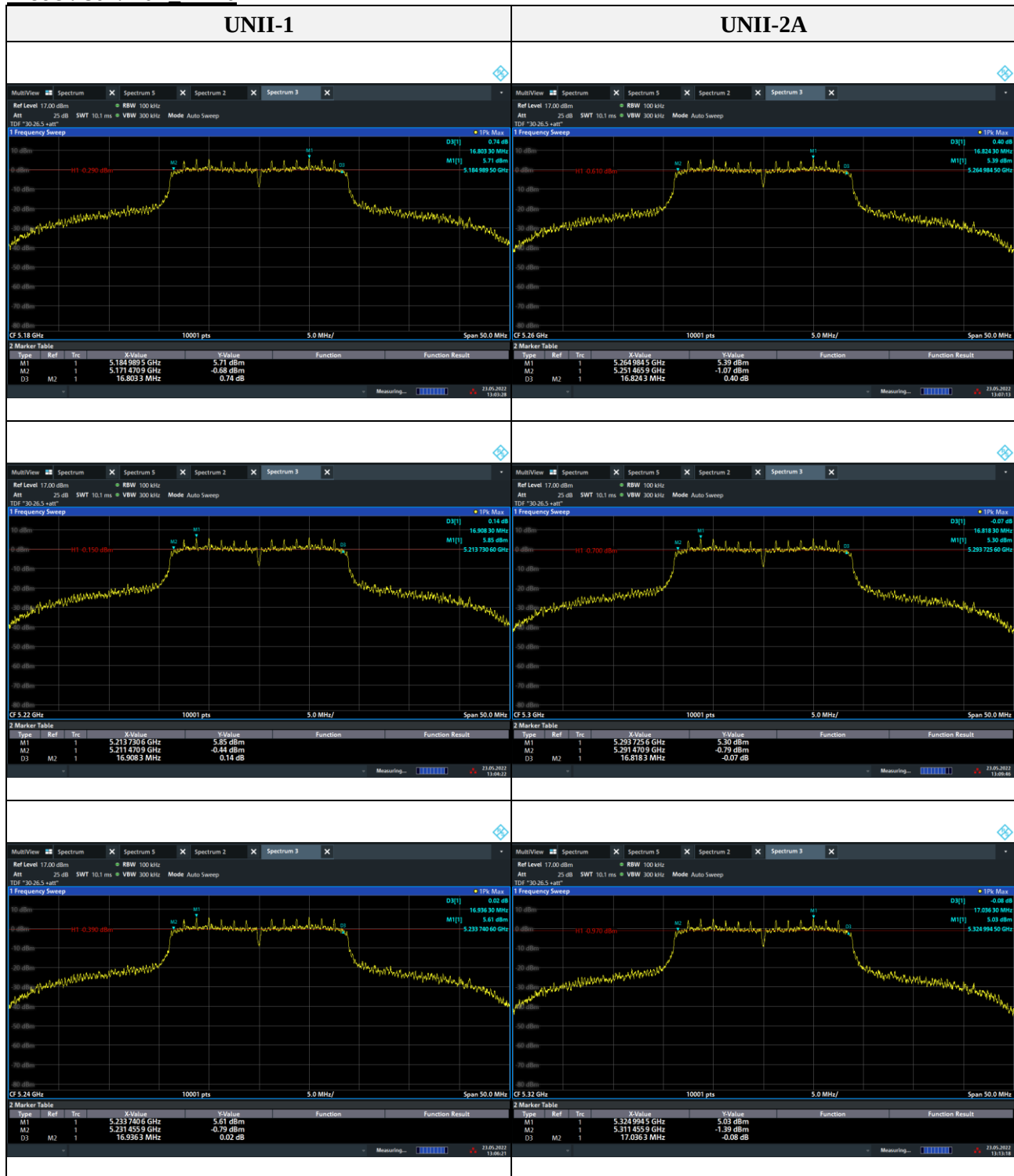


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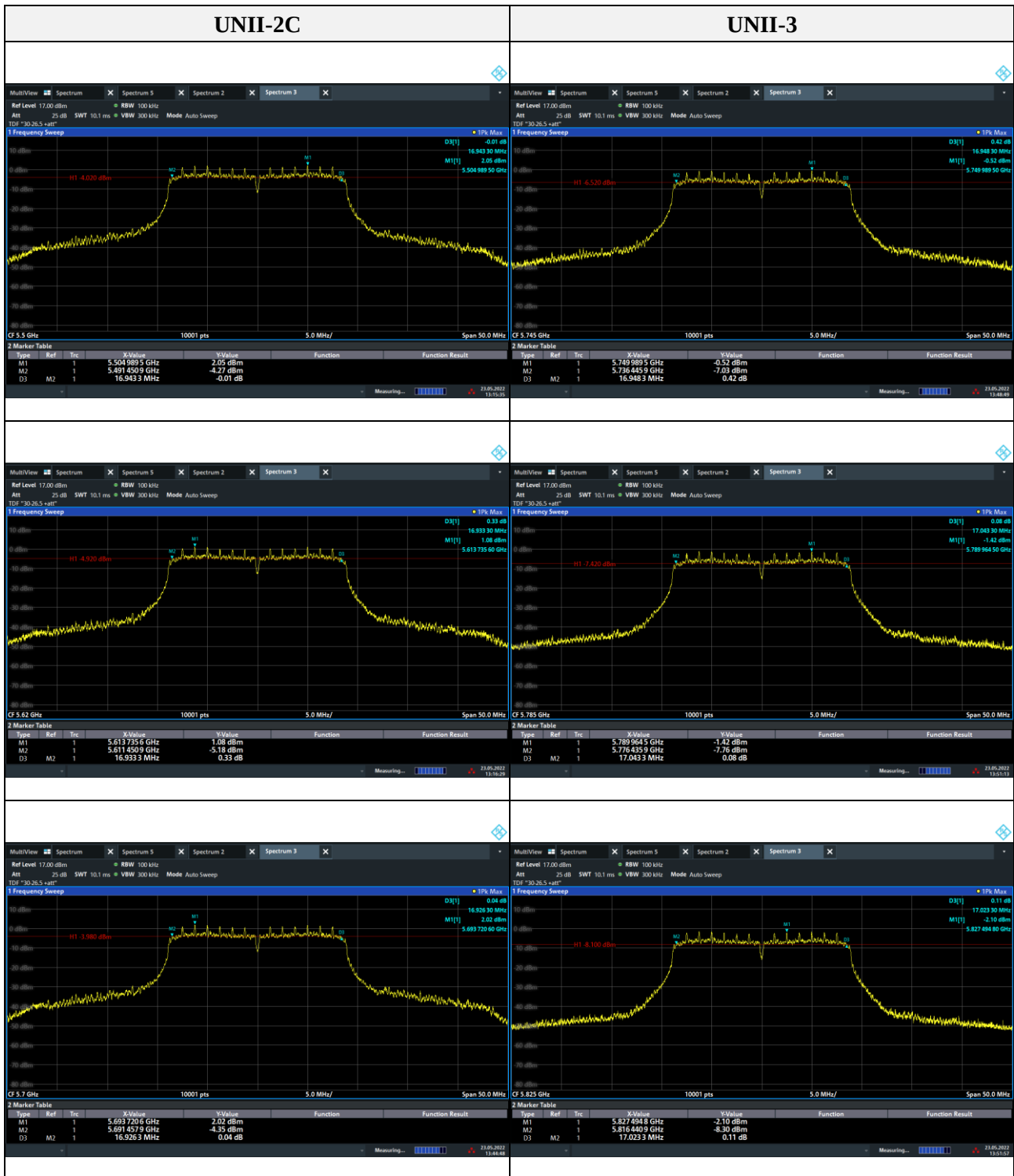


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Mode : 802.11an HT20

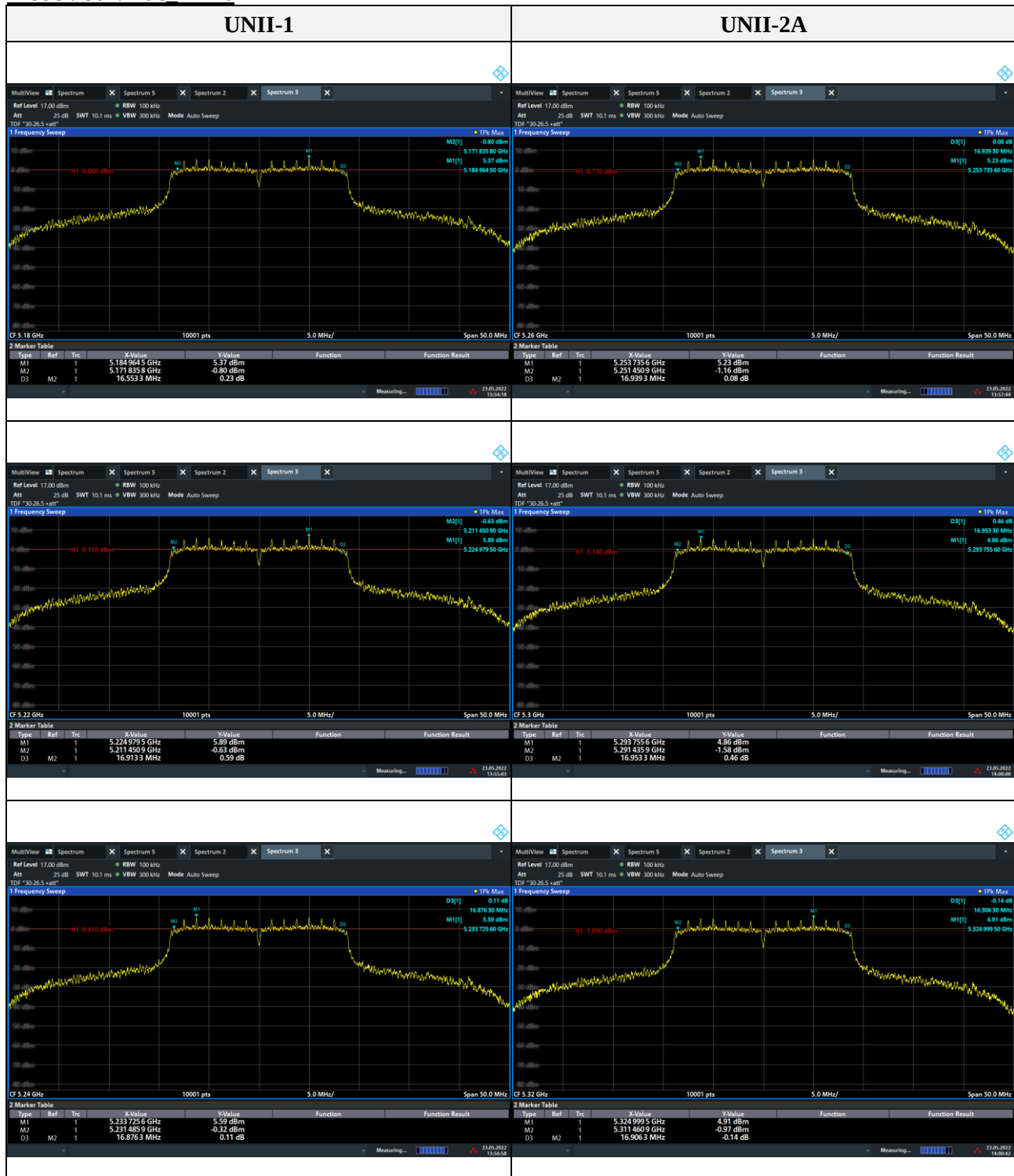


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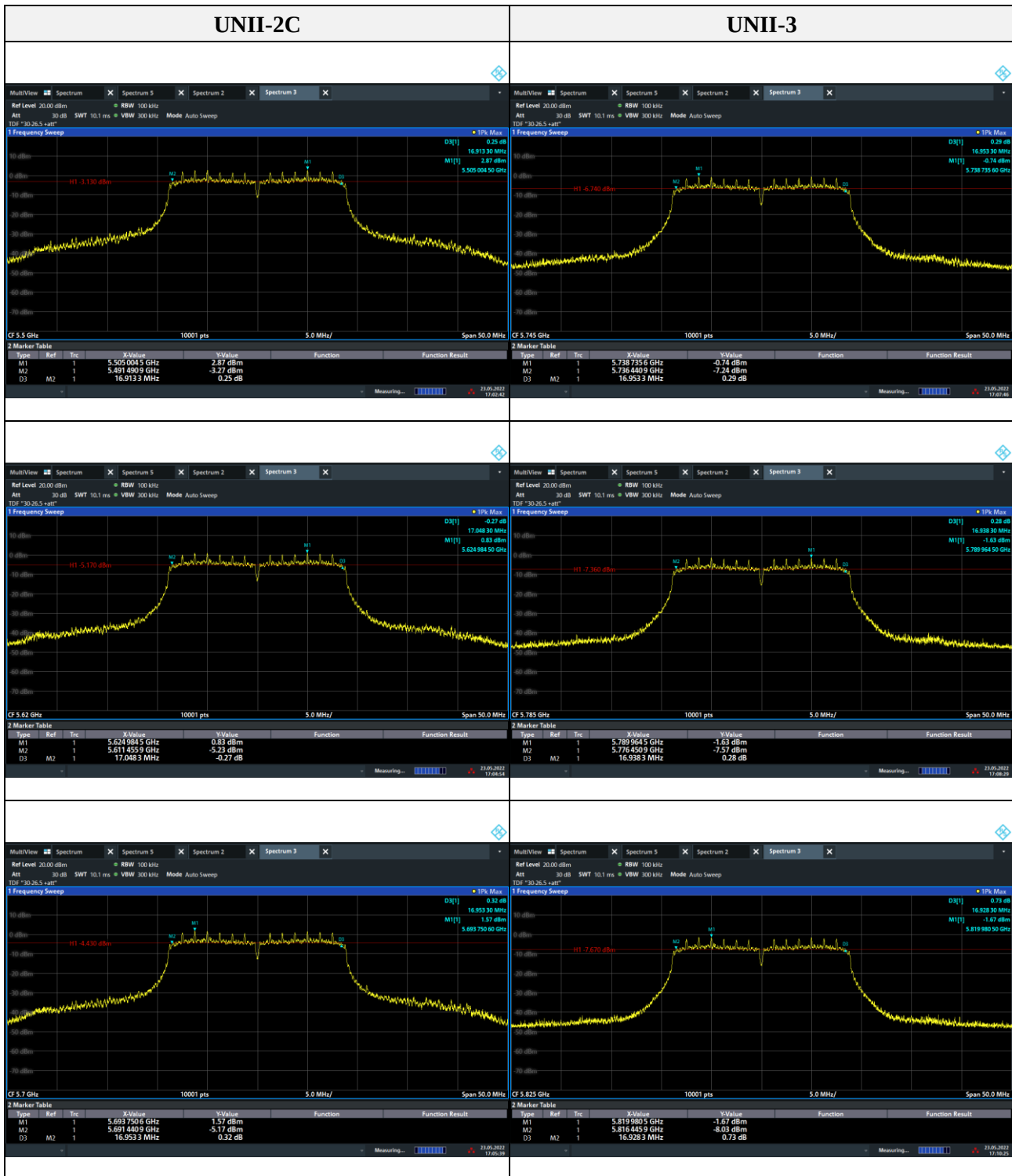


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Mode : 802.11ac HT20

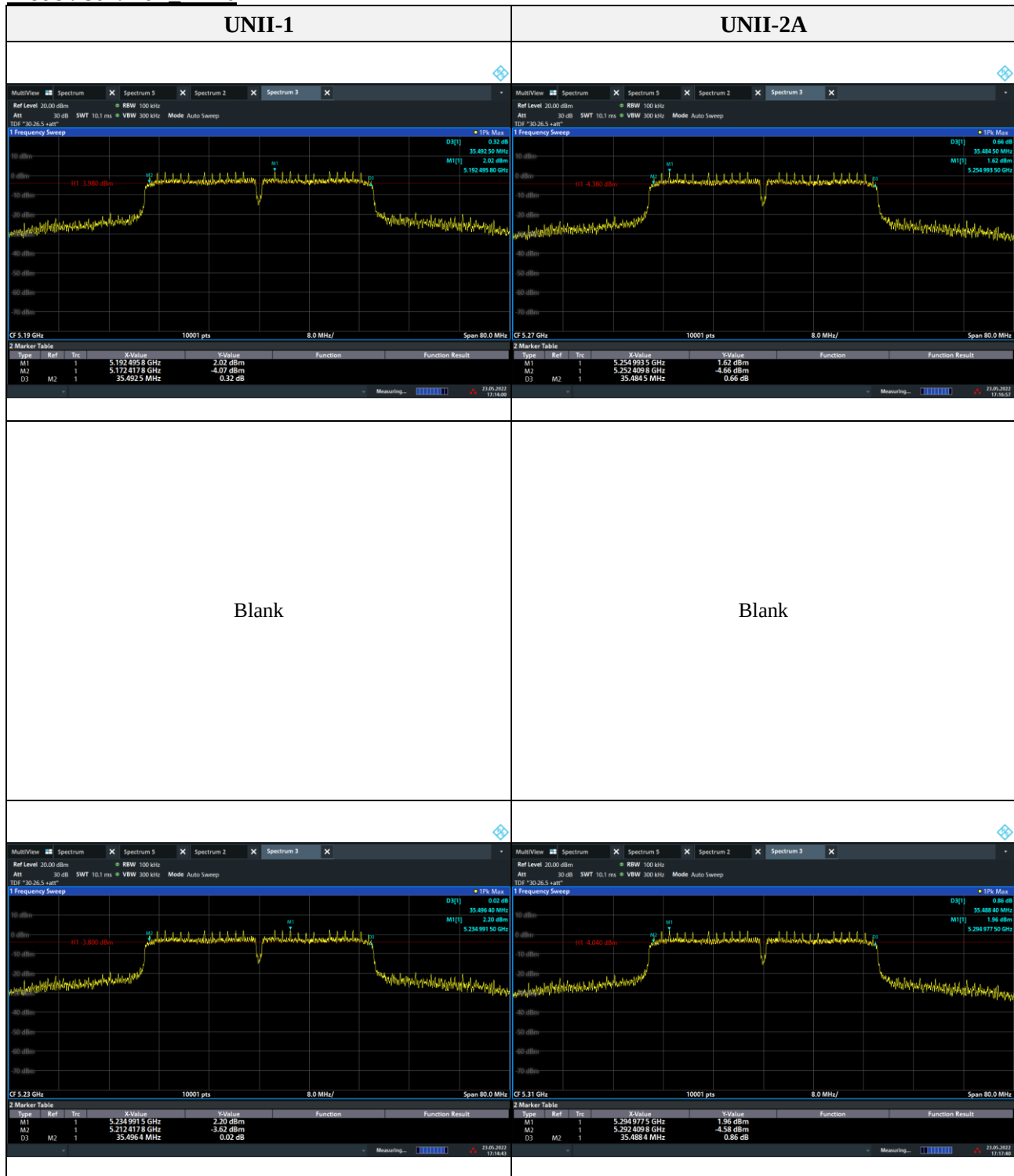


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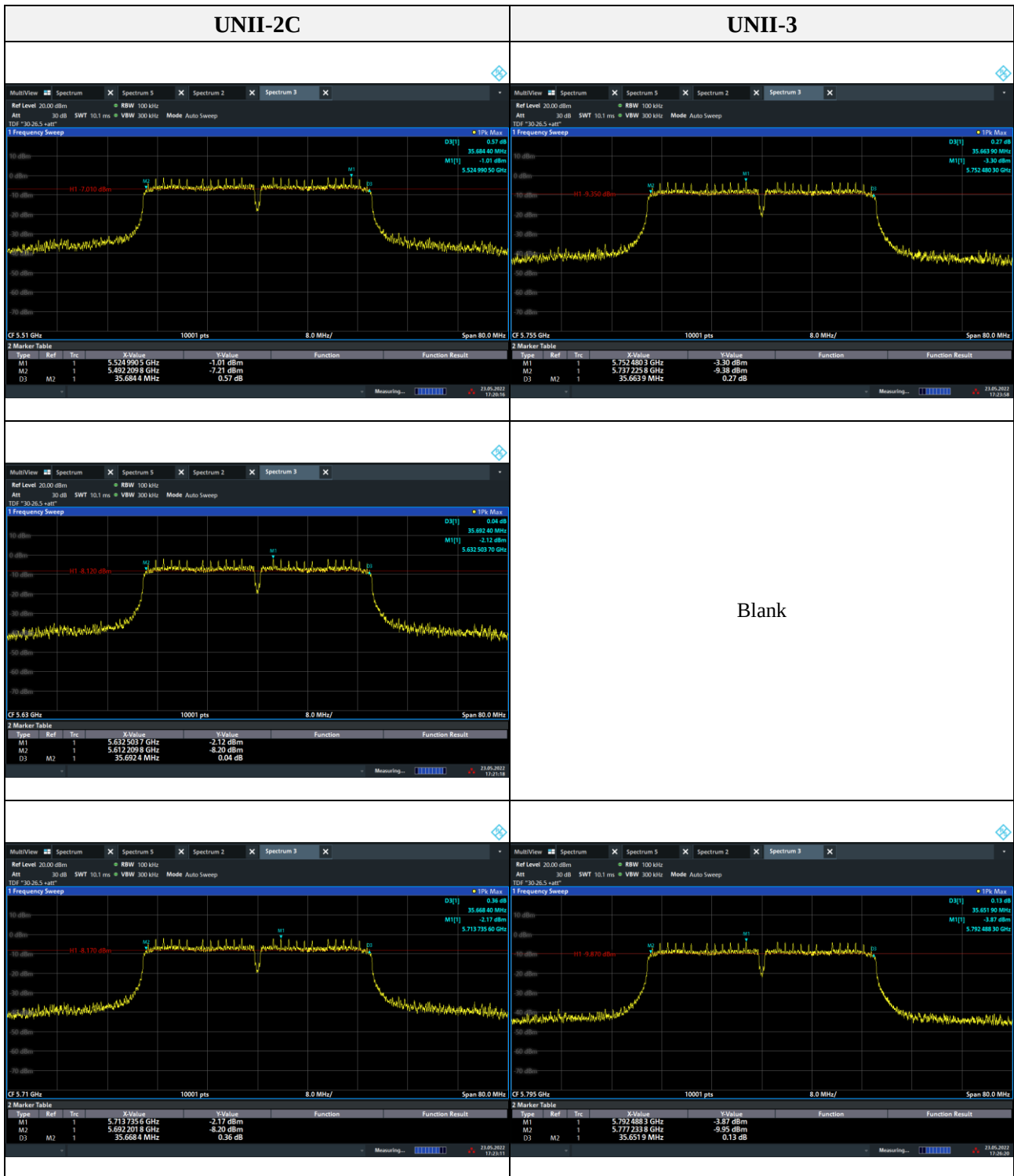


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Mode : 802.11an HT40

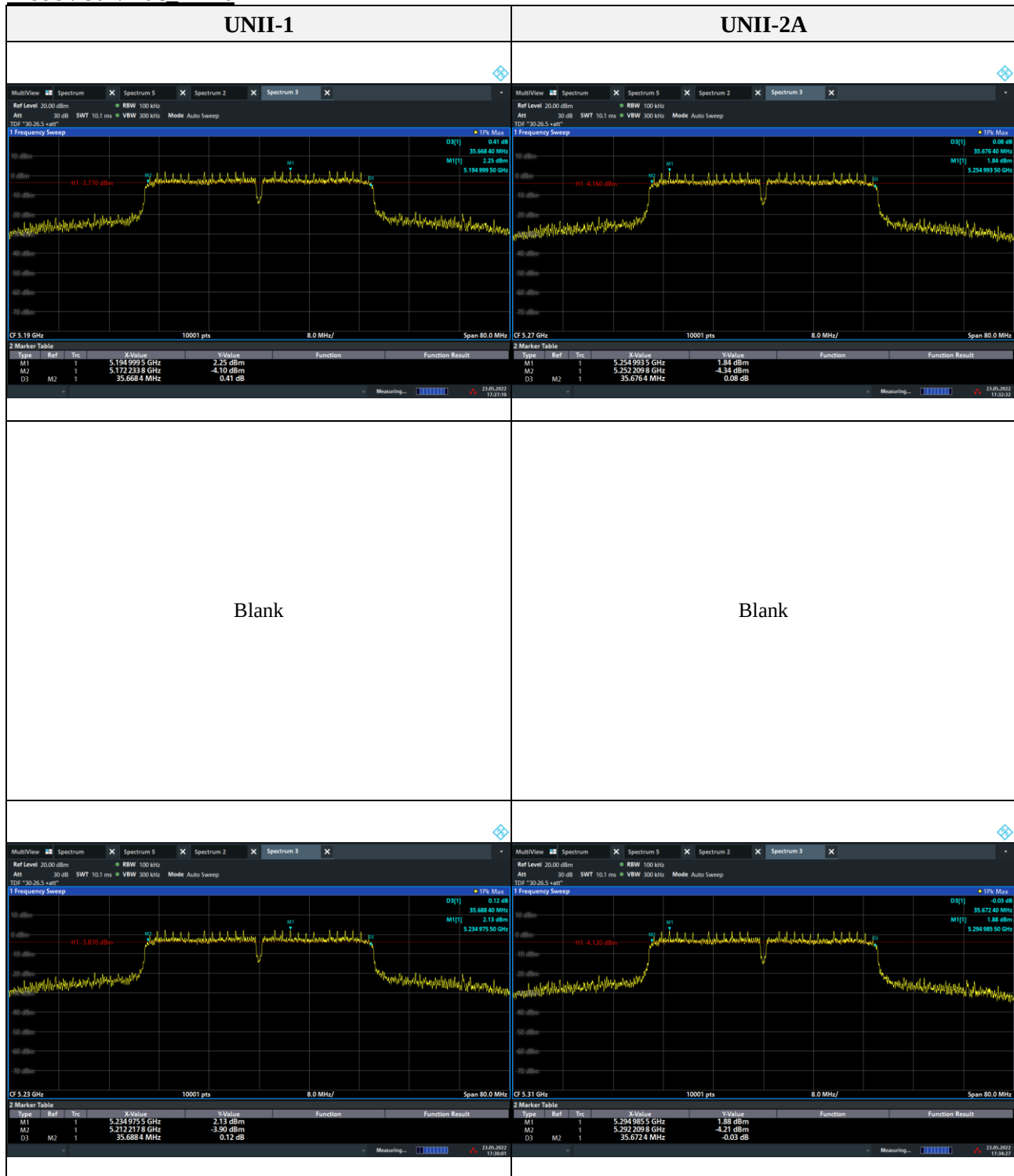


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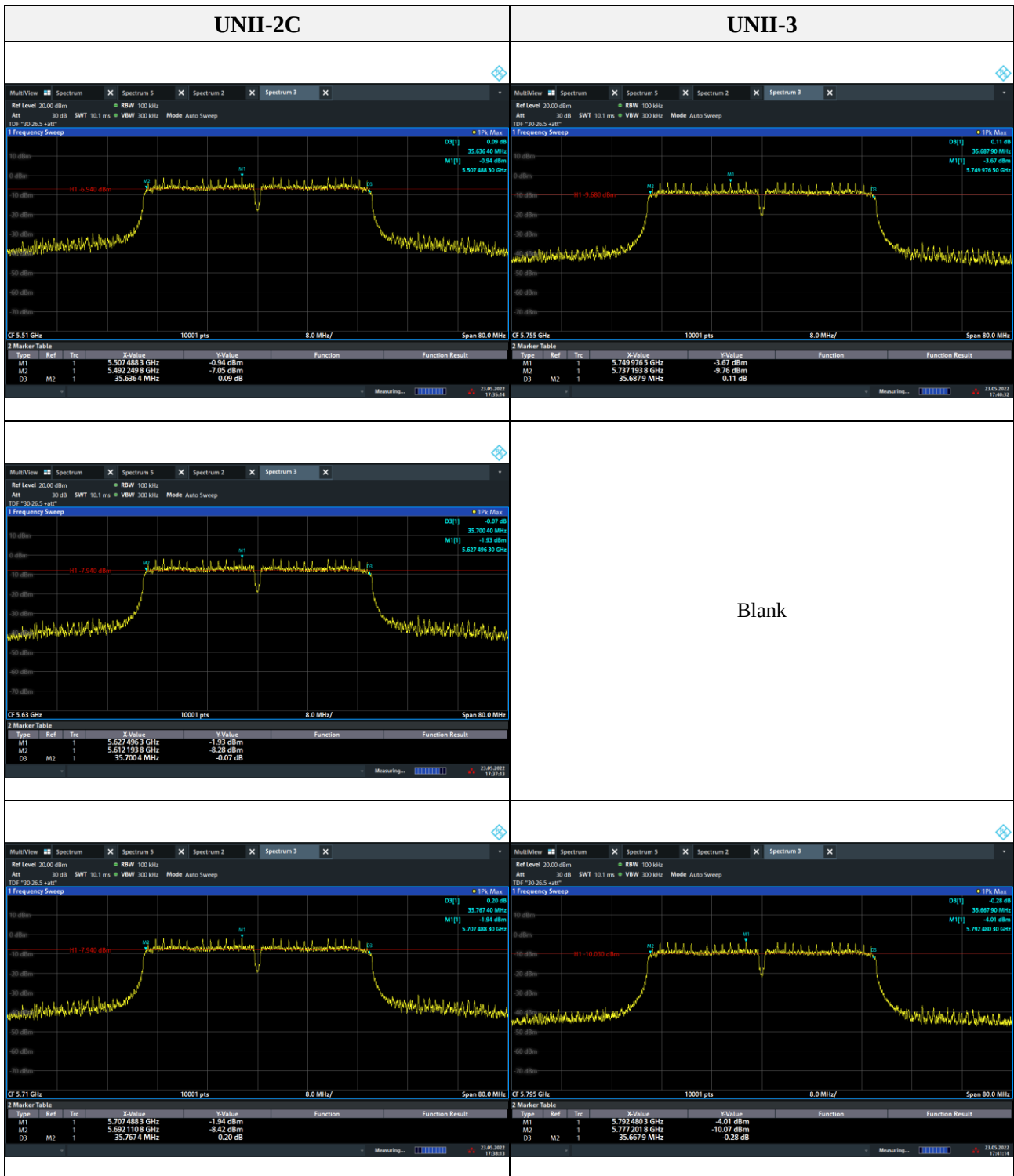


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Mode : 802.11ac HT40

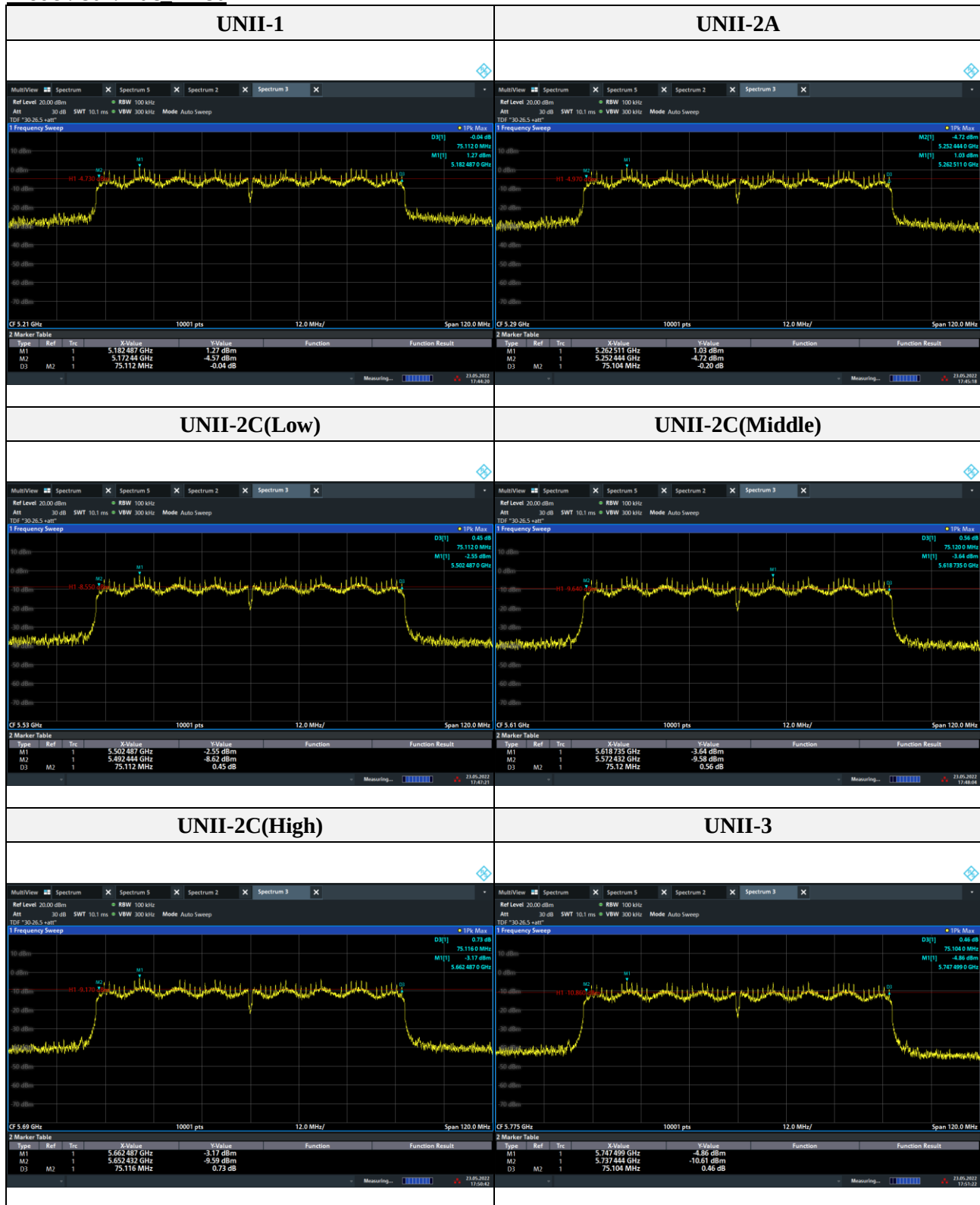


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Mode : 802.11ac HT80



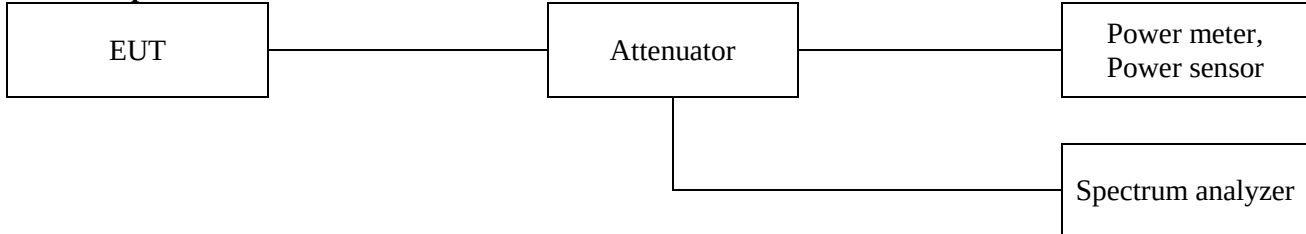
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3.3. Maximum conducted output power

Test procedure

KDB 789033 D02 v02r01– Section E.3.a) or b)
Used test method is Section E.3.b)

Test setup



Section E.3.a)

Method PM (Measurement using an RF average power meter):

- i. Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.
 - The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
 - The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- ii. If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in section II.B.
- iii. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- iv. Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25 %).

Section E.3.b)

Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Limit

FCC

Band	EUT Category		Limit
UNII-1		Outdoor access point	1 W (30 dBm)
	✓	Indoor access point	
		Fixed point-to-point access point	
		Mobile and portable client device	250 mW (24 dBm)
UNII-2A			250 mW or 11 dBm + $10 \log B^*$
UNII-2C			250 mW or 11 dBm + $10 \log B^*$
UNII-3			1 W (30 dBm)

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IC

Band	Limit
5150~5250 MHz	EIRP shall not exceed 200 mW or $10+10\log B^*$, dBm
5250~5350 MHz	Conducted output power shall not exceed 250 mW or 11 dBm + $10\log B^*$ EIRP shall not exceed 1.0 W or $17+10\log B^*$, dBm
5470~5600 MHz and 5650~5725 MHz	Conducted output power shall not exceed 250 mW or 11 dBm + $10\log B^*$ EIRP shall not exceed 1.0 W or $17+10\log B^*$, dBm
5725~5850 MHz	Conducted output power shall not exceed 1 W

Note.

1. FCC Limit B is the 26 dB emission bandwidth.
2. IC Limit B is the 99% emission bandwidth in megahertz.

Test results

Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 180	802.11 a	AV	7.65	30.00	22.45
	5 220		AV	7.06		22.41
	5 240		AV	6.98		22.39
UNII-2A	5 260		AV	6.95	30.00	23.35
	5 280		AV	6.54		23.35
	5 320		AV	6.47		23.33
UNII-2C	5 500		AV	6.31	30.00	23.25
	5 600		AV	6.09		23.25
	5 720		AV	5.89		23.25
UNII-3	5 745		AV	6.24	30.00	30.00
	5 785		AV	6.00		30.00
	5 825		AV	5.79		30.00

Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 180	802.11 an_HT20	AV	6.88	30.00	22.69
	5 220		AV	6.57		22.66
	5 240		AV	6.32		22.64
UNII-2A	5 260		AV	6.24	30.00	23.58
	5 280		AV	6.09		23.59
	5 320		AV	5.92		23.57
UNII-2C	5 500		AV	6.03	30.00	23.50
	5 600		AV	5.77		23.49
	5 720		AV	5.61		23.50
UNII-3	5 745		AV	6.15	30.00	30.00
	5 785		AV	6.01		30.00
	5 825		AV	5.87		30.00

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Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 180	802.11 ac_HT20	AV	6.75	30.00	22.67
	5 220		AV	6.43		22.65
	5 240		AV	6.15		22.64
UNII-2A	5 260		AV	6.18	30.00	23.58
	5 280		AV	6.05		23.59
	5 320		AV	5.89		23.57
UNII-2C	5 500		AV	5.95	30.00	23.50
	5 600		AV	5.76		23.49
	5 720		AV	5.54		23.50
UNII-3	5 745		AV	5.99	30.00	30.00
	5 785		AV	5.76		30.00
	5 825		AV	5.60		30.00

Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 190	802.11 an_HT40	AV	5.95	30.00	25.65
	5 230		AV	5.74		25.65
UNII-2A	5 270		AV	5.64	30.00	26.61
	5 310		AV	5.33		26.61
UNII-2C	5 510		AV	5.39	30.00	26.57
	5 590		AV	5.20		26.57
	5 710		AV	5.05		26.57
UNII-3	5 755		AV	5.10	30.00	30.00
	5 795		AV	4.97		30.00

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Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 190	802.11 ac_HT40	AV	5.89	30.00	25.67
	5 230		AV	5.75		25.66
UNII-2A	5 270		AV	5.58	30.00	26.61
	5 310		AV	5.30		26.61
UNII-2C	5 510		AV	5.41	30.00	26.57
	5 590		AV	5.17		26.57
	5 710		AV	5.10		26.57
UNII-3	5 755		AV	5.20	30.00	30.00
	5 795		AV	5.06		30.00

Mode	Frequency (MHz)	Mode	Detector mode	Output power (dBm)	Limit (dBm)	
					FCC	IC
UNII-1	5 210	802.11 ac_HT80	AV	5.77	30.00	28.79
UNII-2A	5 290		AV	5.25	30.00	29.77
UNII-2C	5 530		AV	5.20	30.00	29.92
	5 610		AV	5.09		29.75
	5 690		AV	5.02		29.76
UNII-3	5 775		AV	5.10	30.00	30.00

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