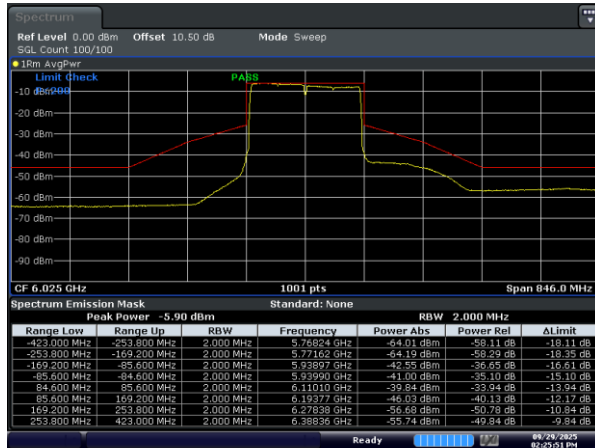
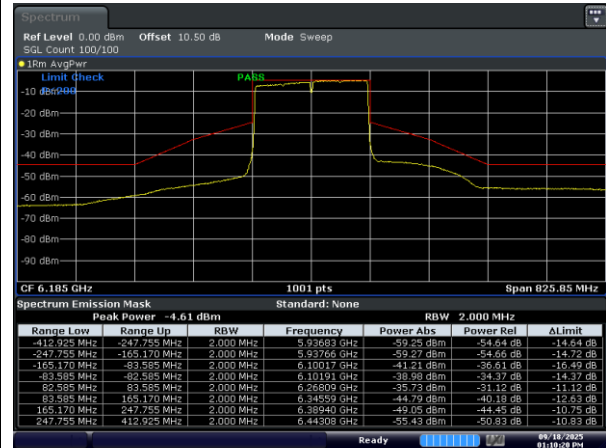


Test mode : 802.11ax(HE160)

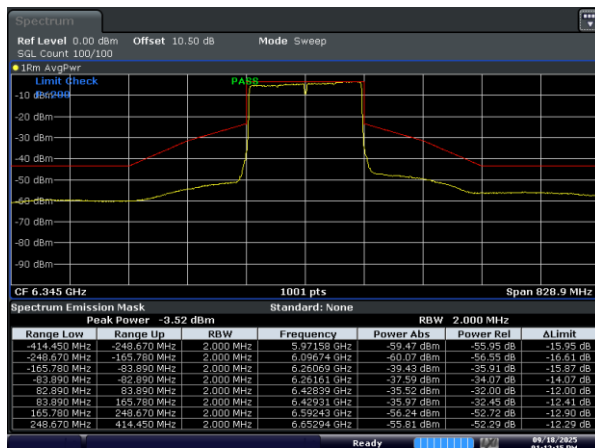
6025MHz



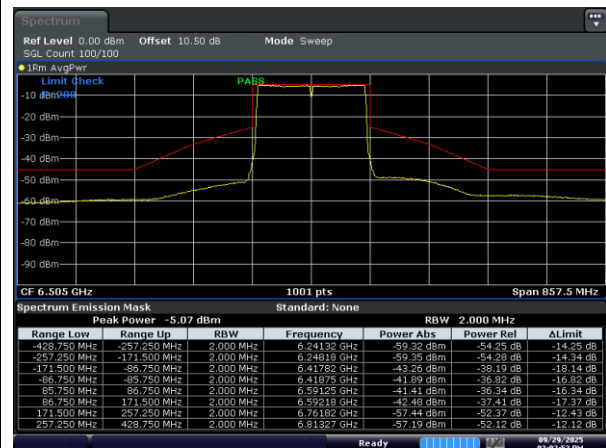
6185MHz



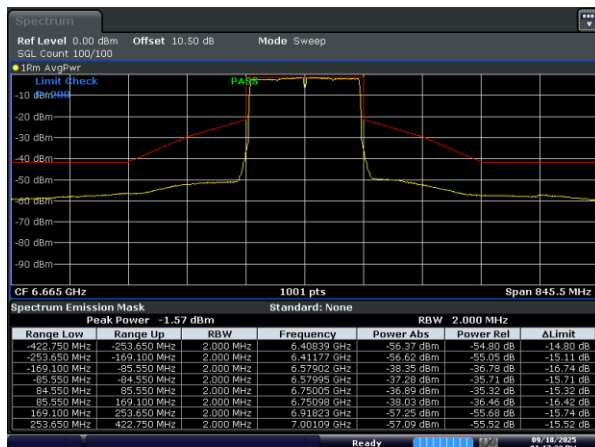
6345MHz



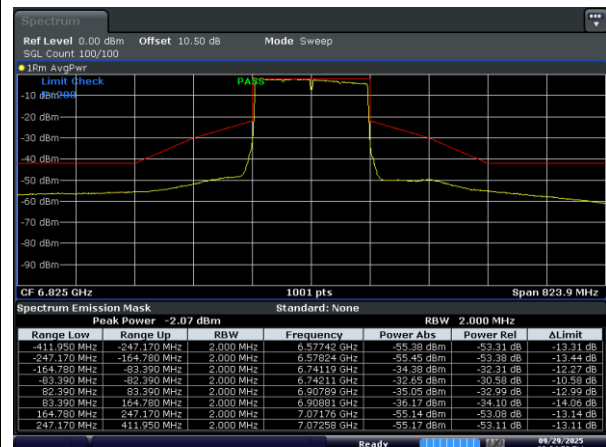
6505MHz



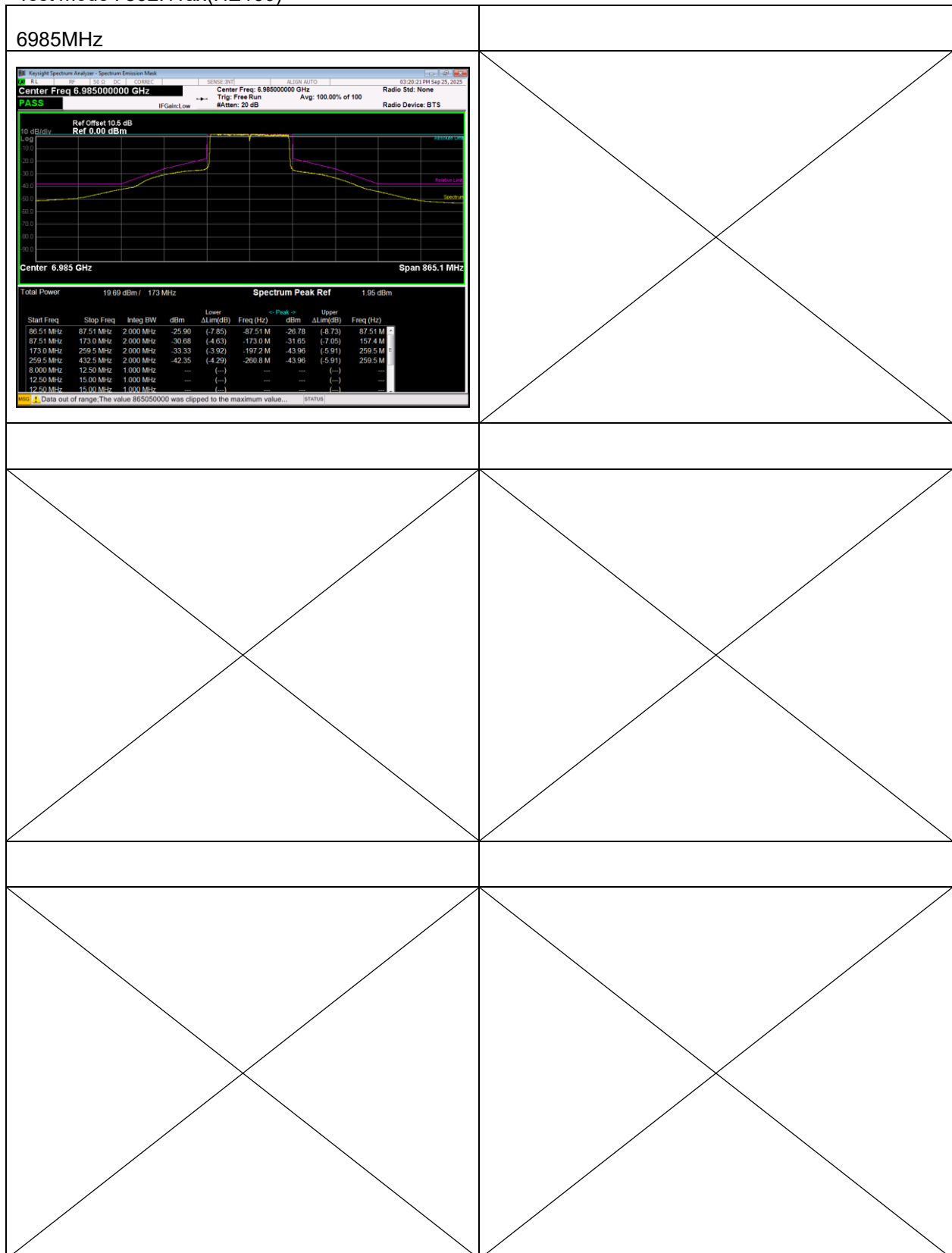
6665MHz



6825MHz

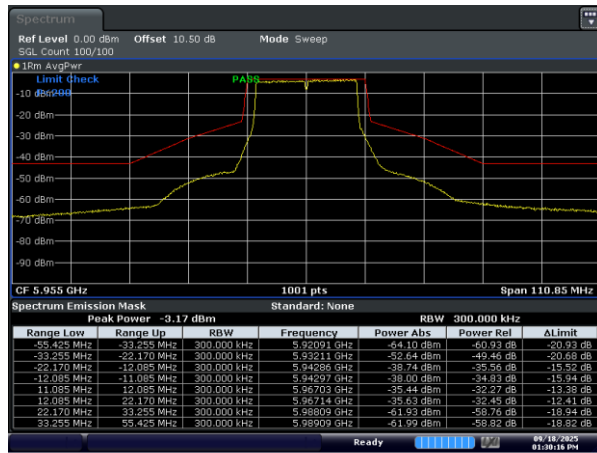


Test mode : 802.11ax(HE160)

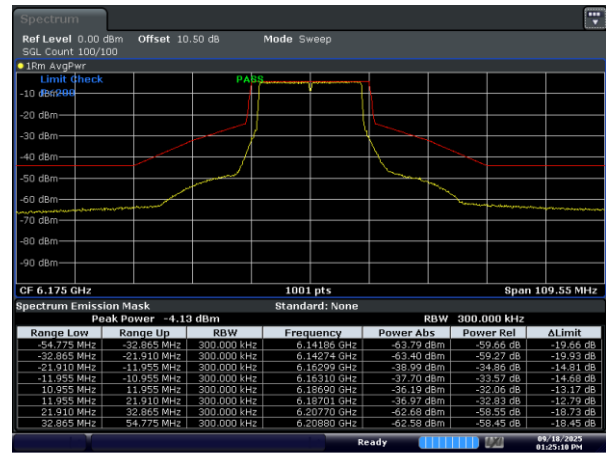


Test mode : 802.11be(EHT20)

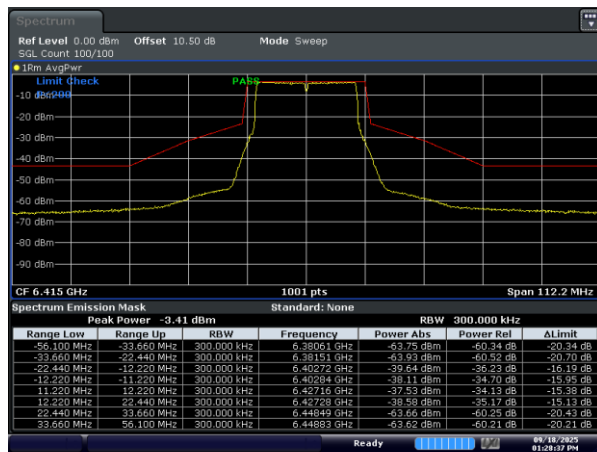
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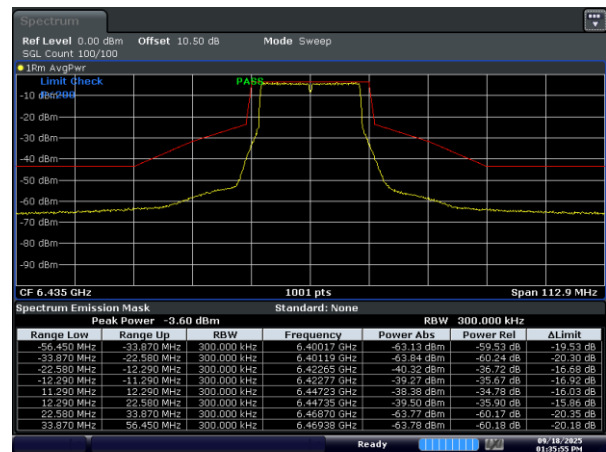
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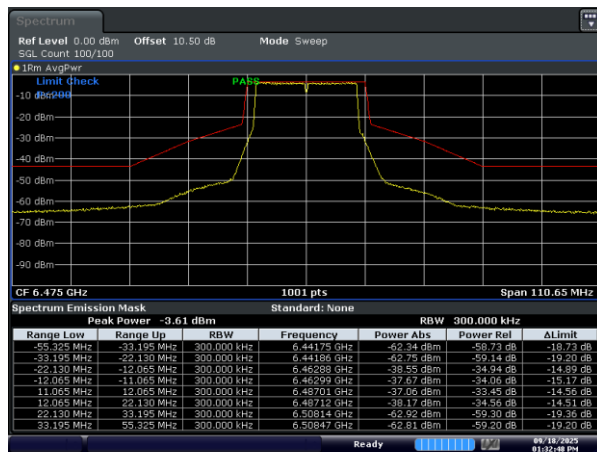
6415MHz



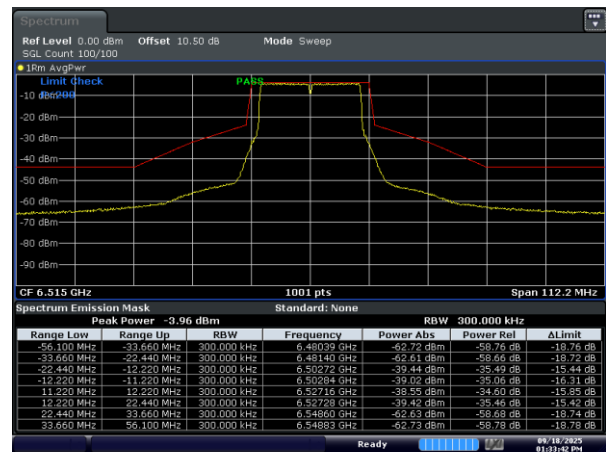
6435MHz



6475MHz

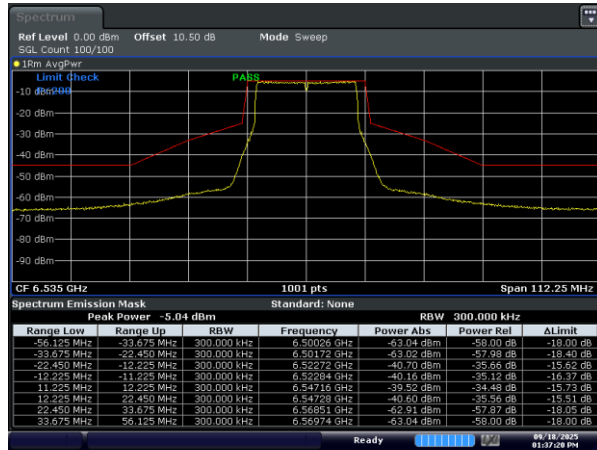


6515MHz

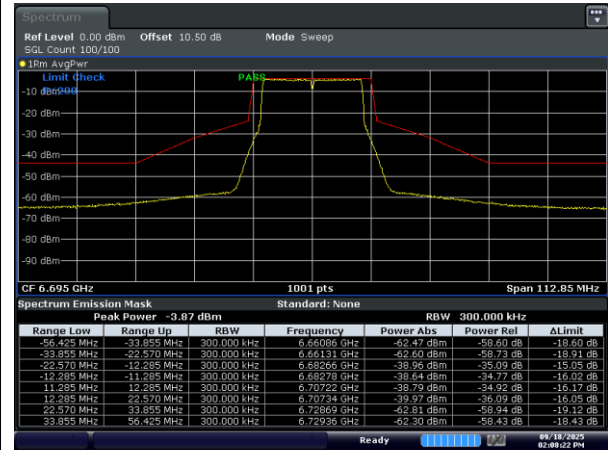


Test mode : 802.11be(EHT20)

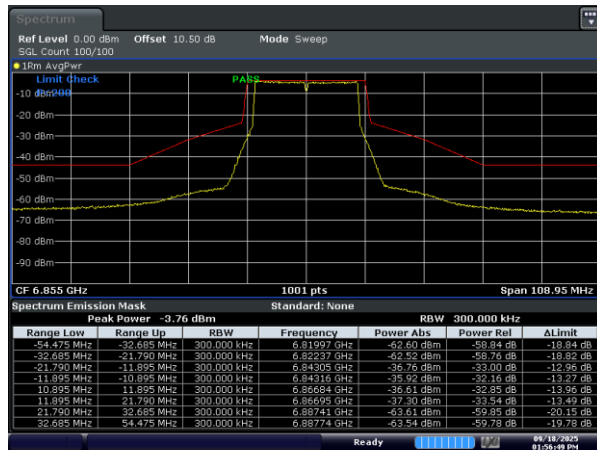
6535MHz



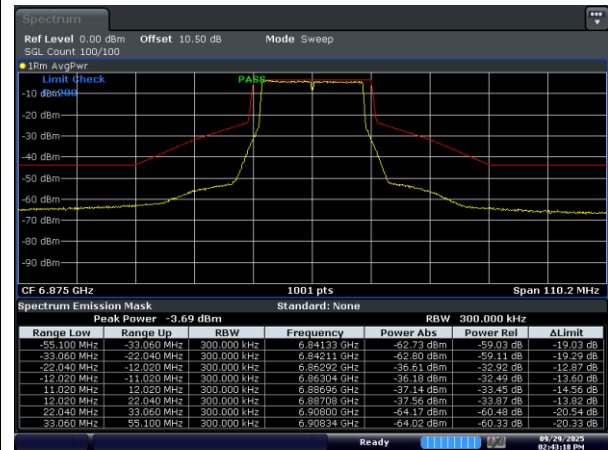
6695MHz



6855MHz



6875MHz



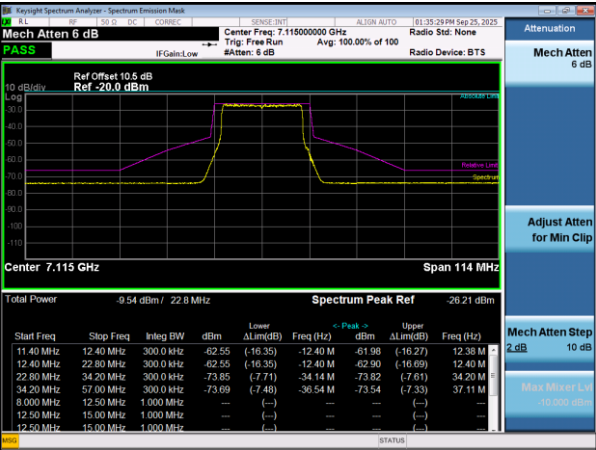
6895MHz



6995MHz

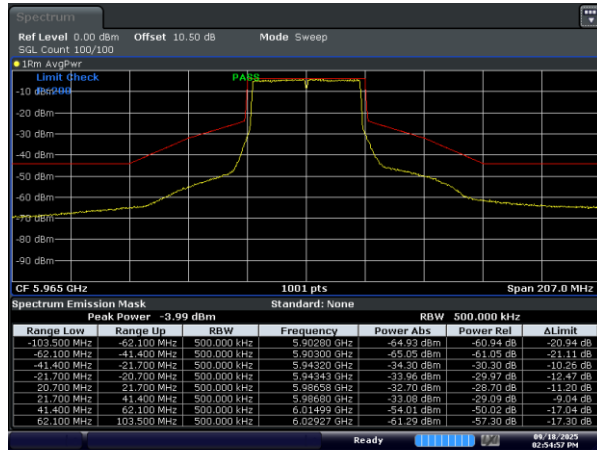


Test mode : 802.11be(EHT20)

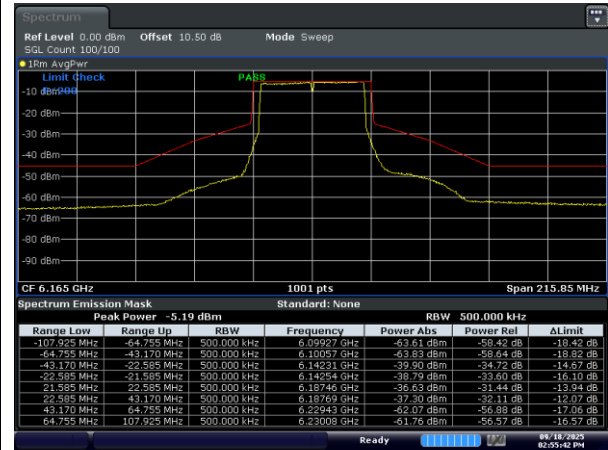
7115MHz 	

Test mode : 802.11be(EHT40)

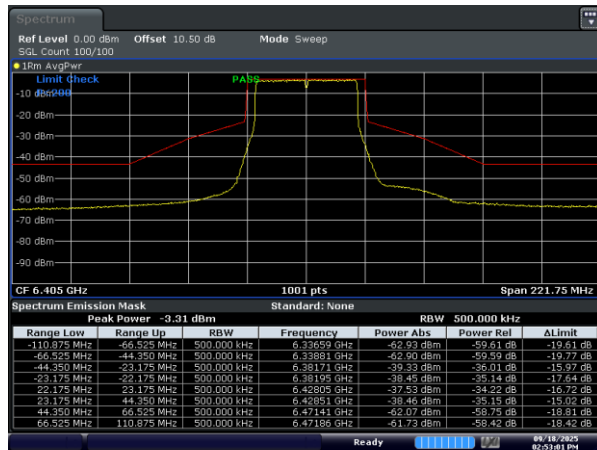
5965MHz



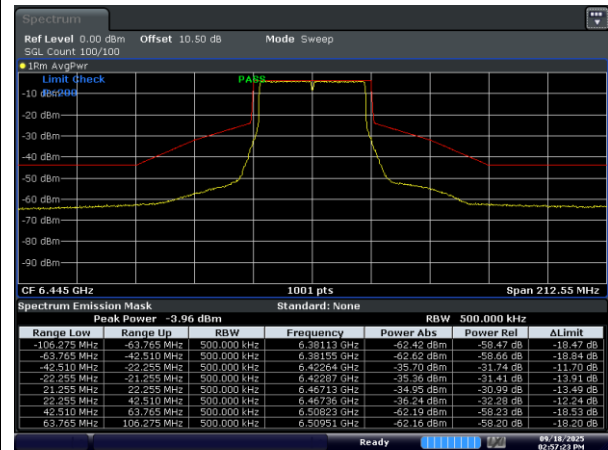
6165MHz



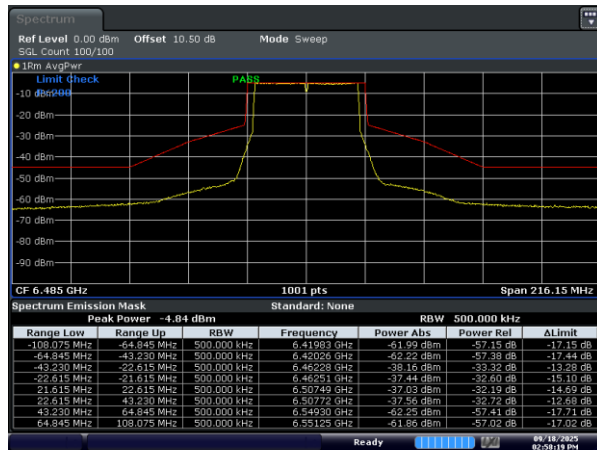
6405MHz



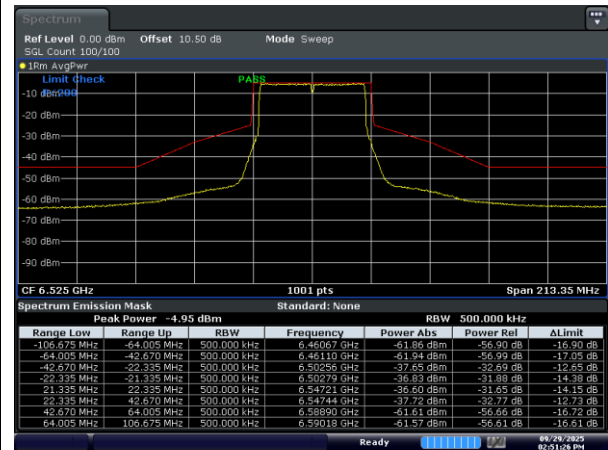
6445MHz



6485MHz

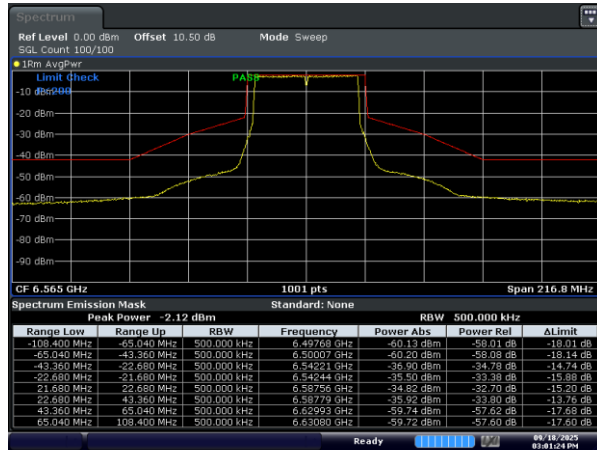


6525MHz

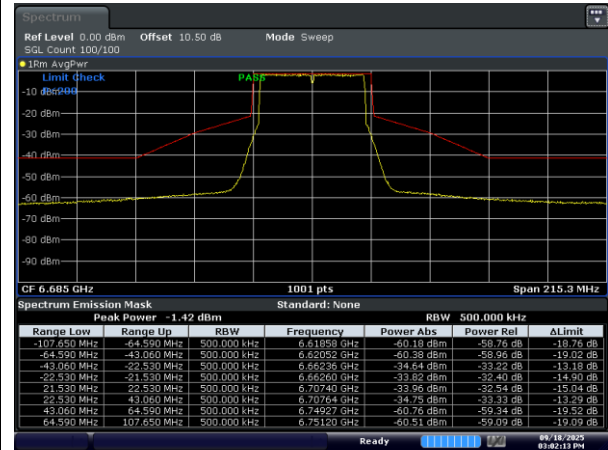


Test mode : 802.11be(EHT40)

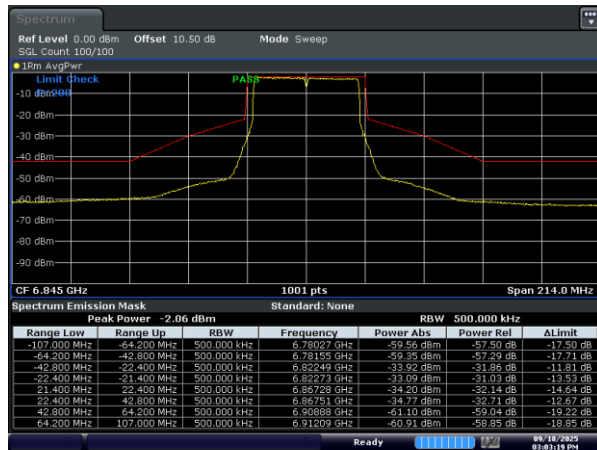
6565MHz



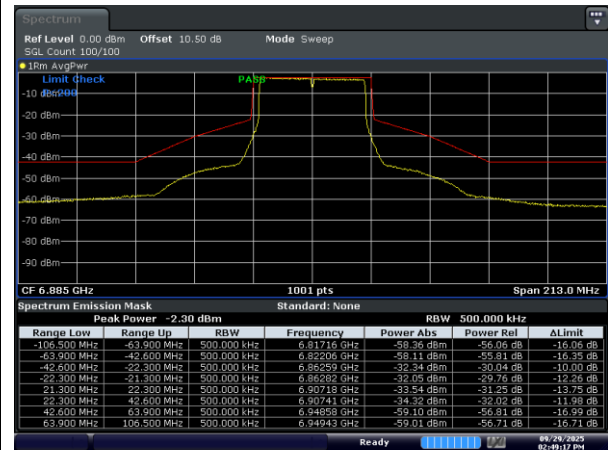
6685MHz



6845MHz



6885MHz



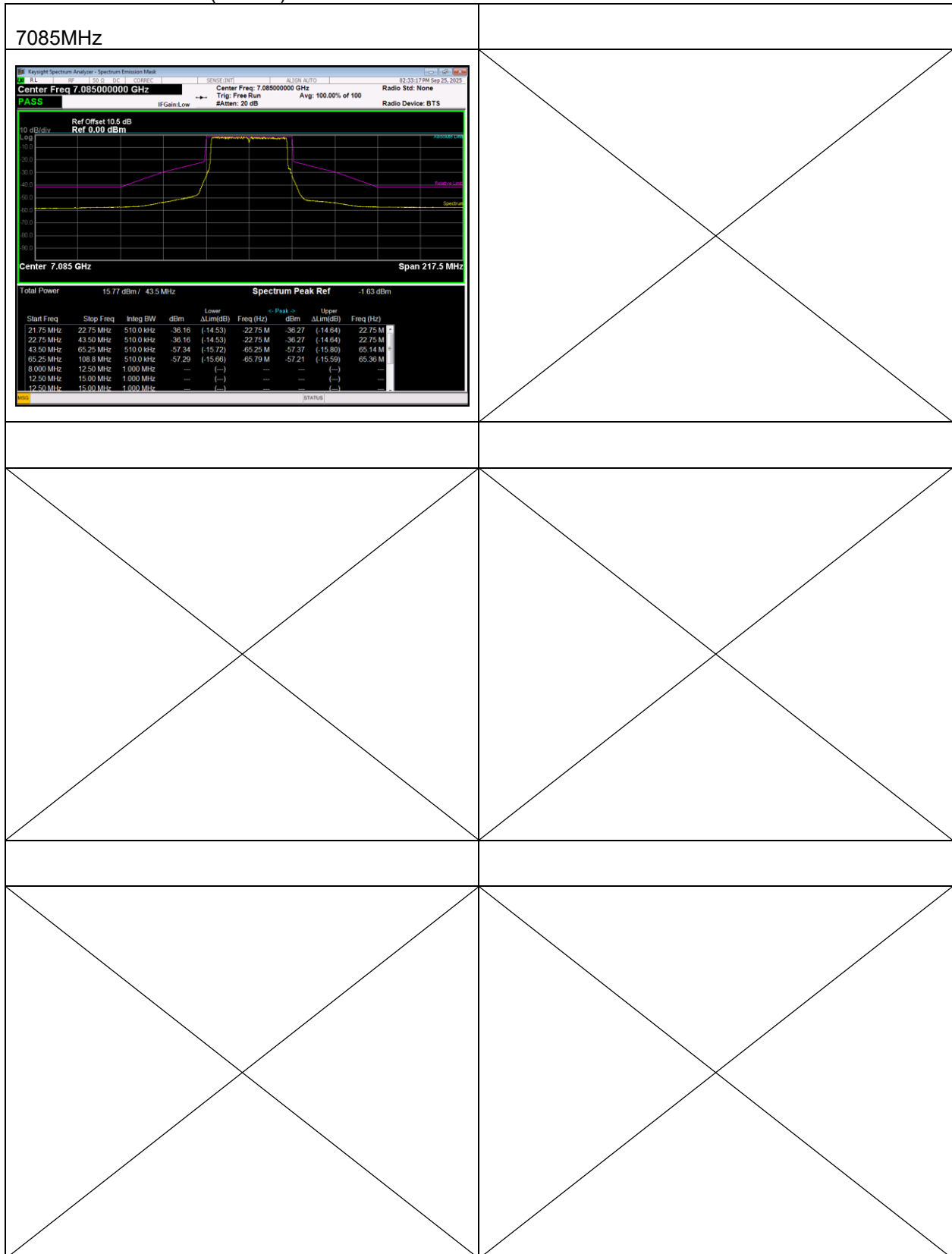
6925MHz



7005MHz

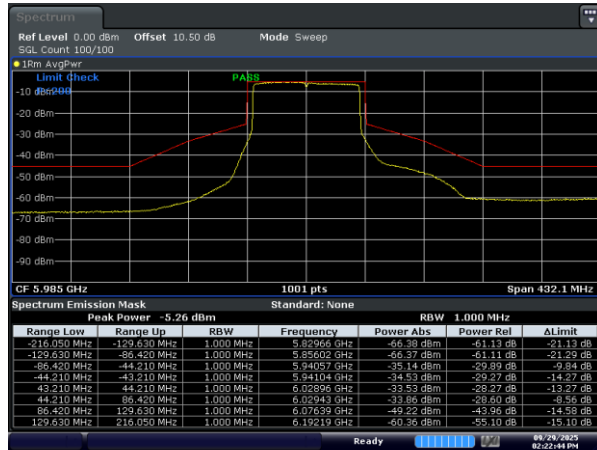


Test mode : 802.11be(EHT40)

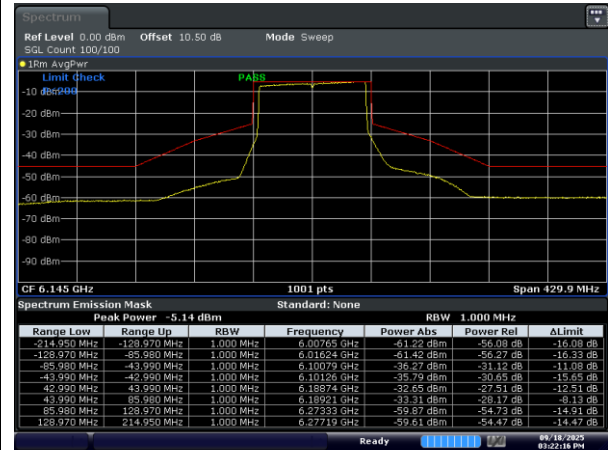


Test mode : 802.11be(EHT80)

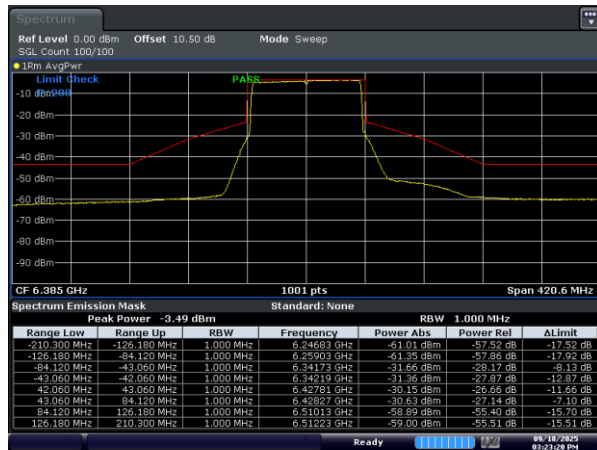
5985MHz



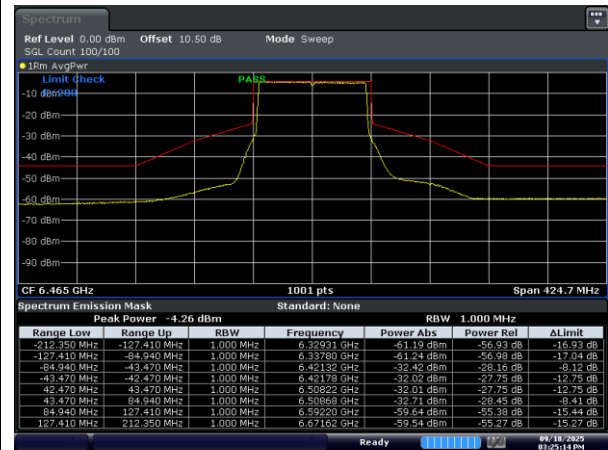
6145MHz



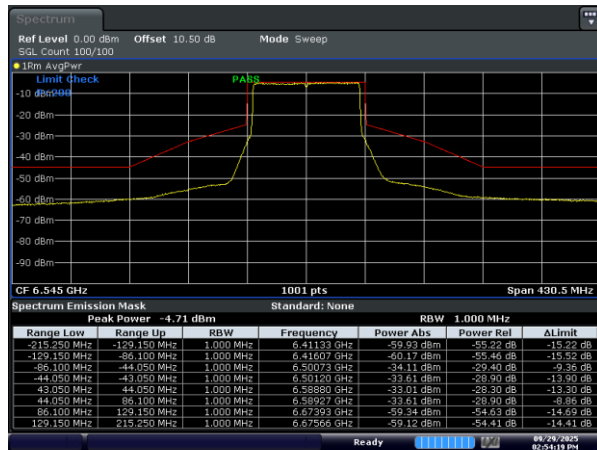
6385MHz



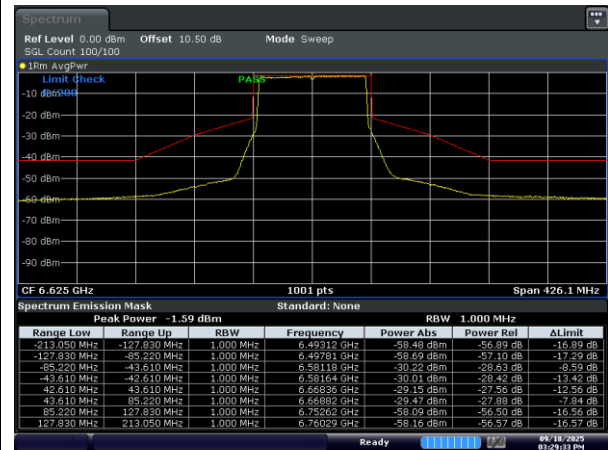
6465MHz



6545MHz

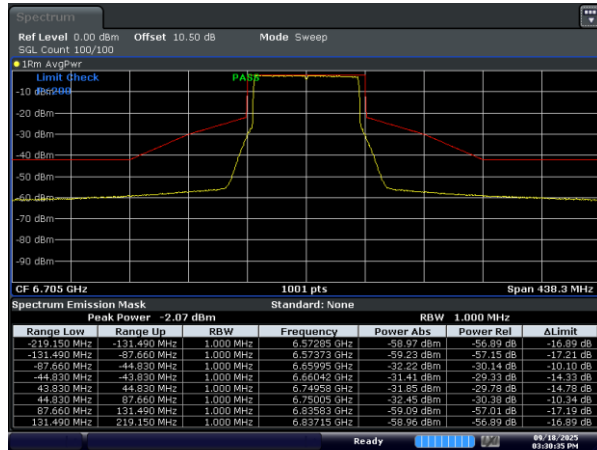


6625MHz

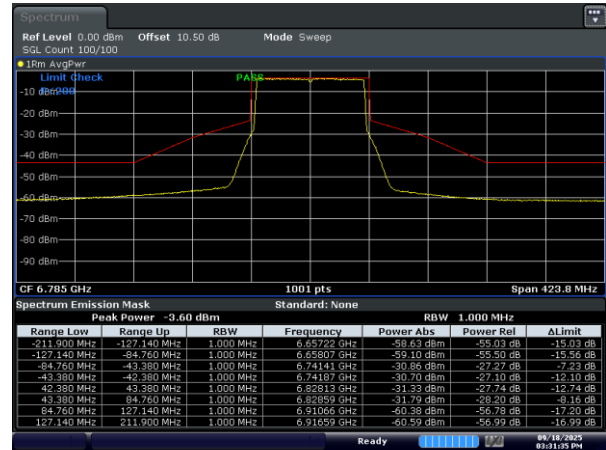


Test mode : 802.11be(EHT80)

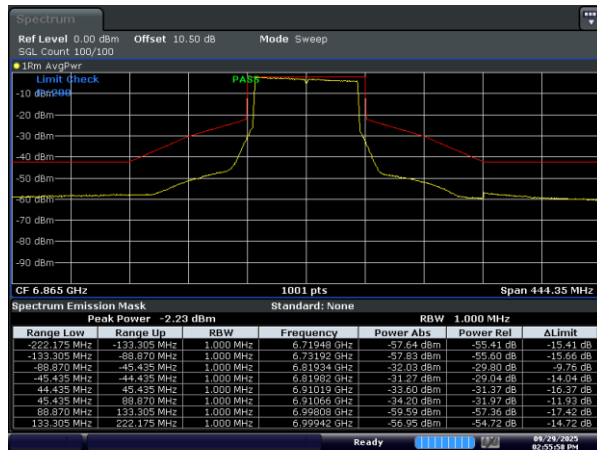
6705MHz



6785MHz



6865MHz



6945MHz

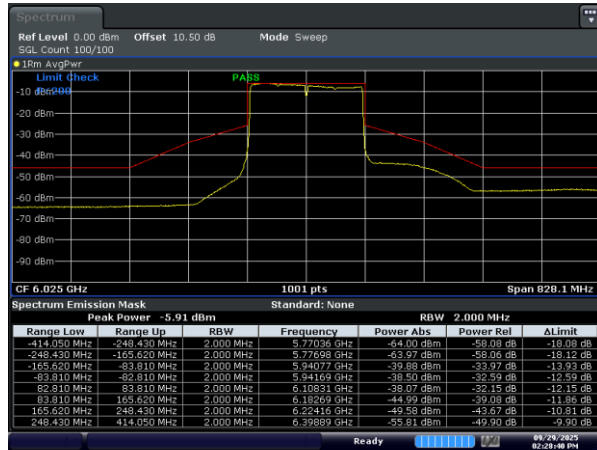


7025MHz

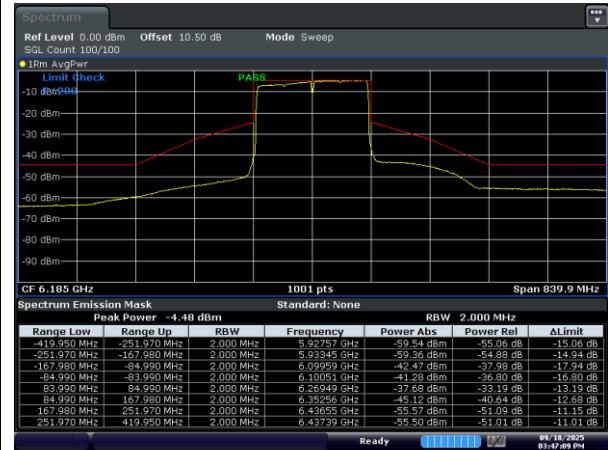


Test mode : 802.11be(EHT160)

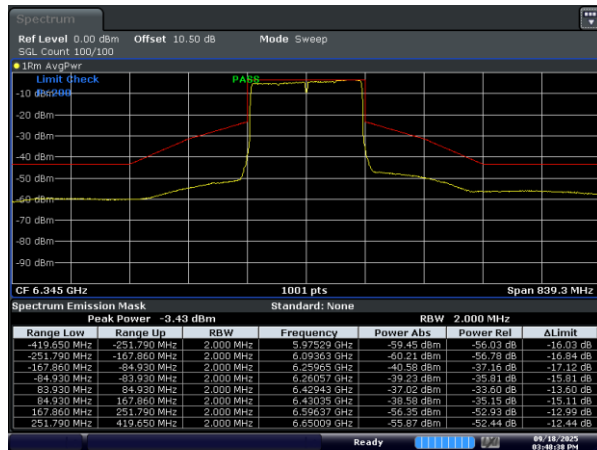
6025MHz



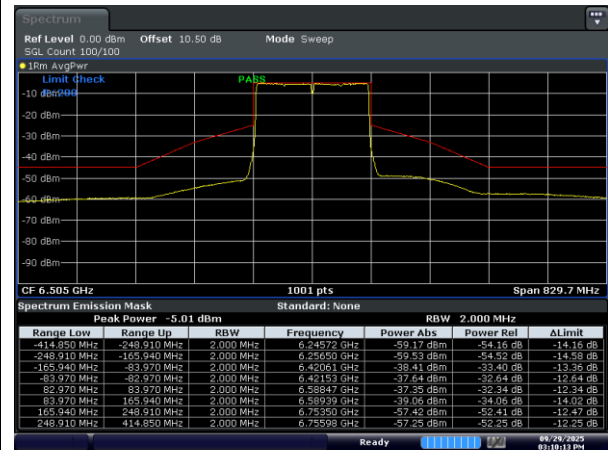
6185MHz



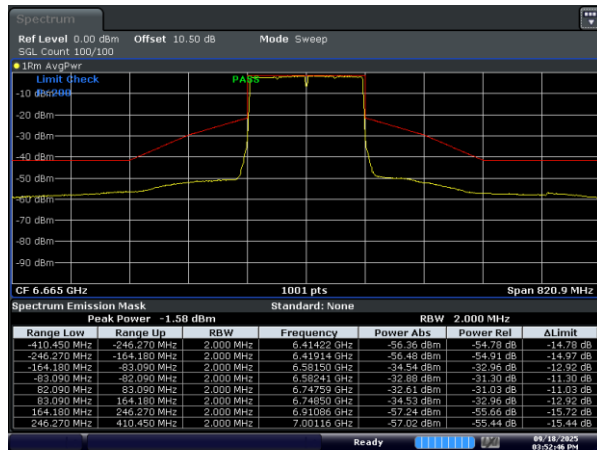
6345MHz



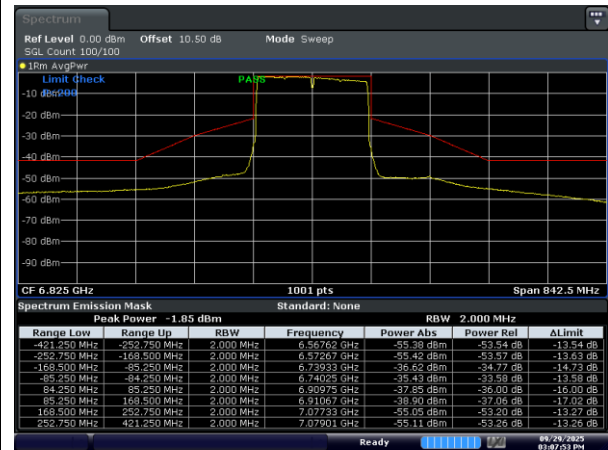
6505MHz



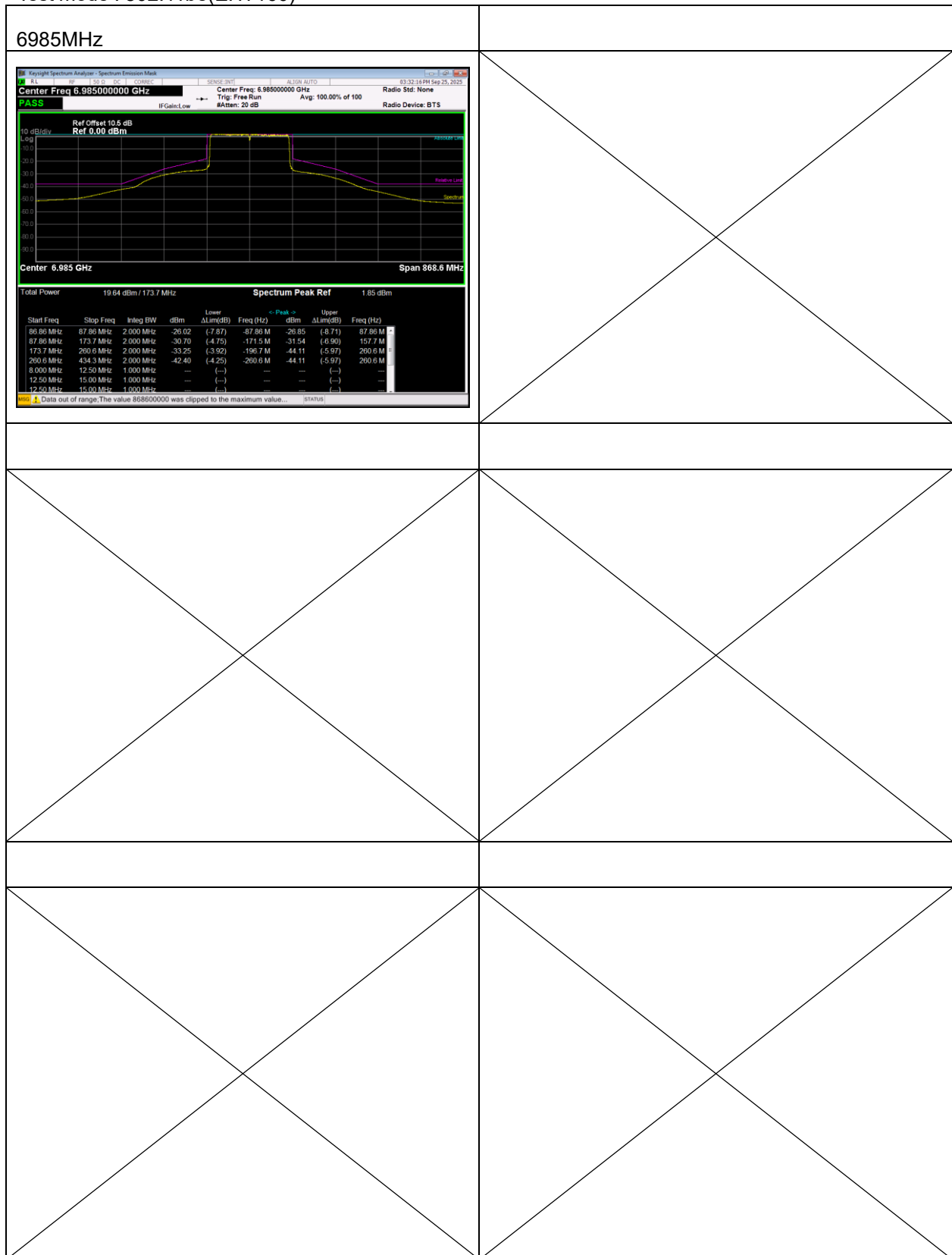
6665MHz



6825MHz



Test mode : 802.11be(EHT160)



4.3.8 Conducted Emission

4.3.8.1 Regulation

According to §15.207(a), and RSS-GEN 8.8 for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 - 30	60	50

* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

4.3.8.2 Measurement Procedure

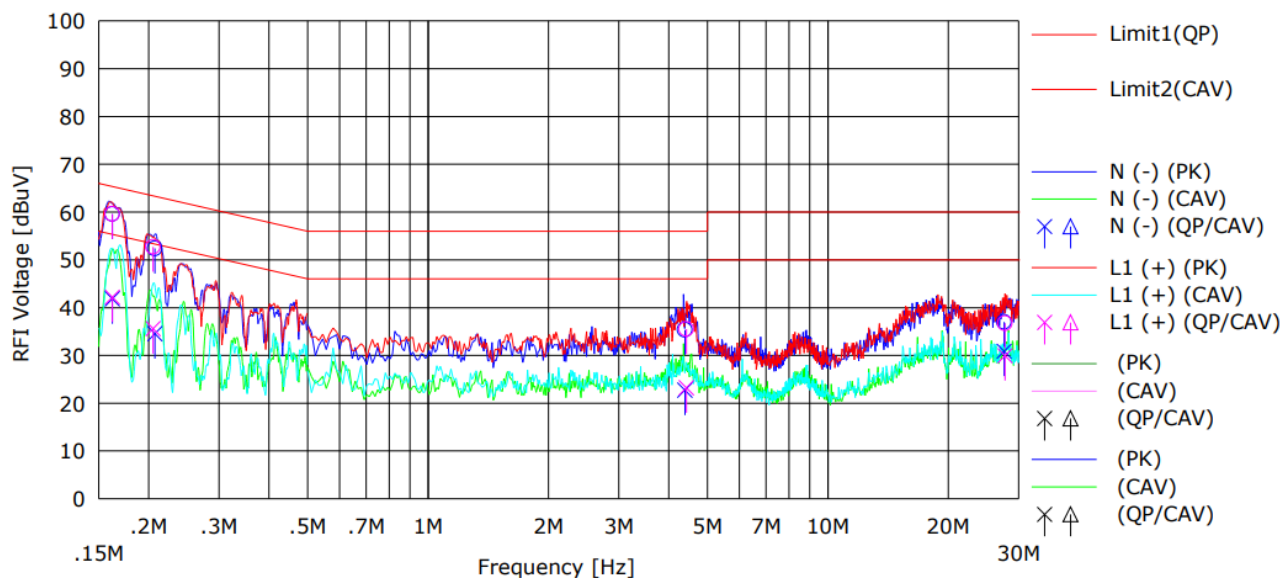
- 1) The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5 m away from the side wall of the shielded room.
- 2) Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.
- 3) Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
- 4) The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
- 5) The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 kHz or to QUASIPeAK and AVERAGE within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

4.3.8.3 Result

Comply (measurement data : refer to the next page)

4.3.8.4 Measurement data

Test mode : 802.11be(EHT160)_6 985 MHz



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.16230	39.5	21.8	20.1	59.6	41.8	65.3	55.3	5.7	13.5	N (-)
2	0.20746	32.4	14.5	20.0	52.4	34.5	63.3	53.3	10.9	18.8	N (-)
3	4.38843	15.3	2.7	20.0	35.3	22.7	56.0	46.0	20.7	23.3	N (-)
4	27.61172	16.2	10.1	20.8	37.0	30.9	60.0	50.0	23.0	19.1	N (-)
5	0.16234	39.5	22.1	20.1	59.6	42.2	65.3	55.3	5.7	13.1	L1 (+)
6	0.20523	32.7	15.6	20.0	52.7	35.6	63.4	53.4	10.7	17.8	L1 (+)
7	4.42780	15.5	3.2	20.0	35.5	23.2	56.0	46.0	20.5	22.8	L1 (+)
8	27.72756	16.1	9.3	20.7	36.7	30.0	60.0	50.0	23.3	20.0	L1 (+)

4.3.9 Contention-based protocol

4.3.9.1 Regulation

According to §15.407(d)(6) and RSS-248 4.7 II U-NII transmitters, except for standard power access points and fixed client devices, operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Unlicensed devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low-power indoor devices must vacate the channel (in which the incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

4.3.9.2 Measurement Procedure

These test measurement settings are specified in section I 987594 D02 U-NII 6 GHz EMC Measurement.

4.3.9.2.1 Test Setup

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the EUT's operating parameters, including power level, operating frequency, modulation, and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The signal analyzer's span range shall be between two times and five times the EUT's OBW. Connect the EUT's output port to signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to prevent the signal analyzer two receiver overloading.
4. Monitor signal analyzer two and verify that the EUT operates and transmits with the parameters set in step 2.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to a shallow level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source via a 3-dB splitter to signal analyzer one and the EUT, as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, incrementally increase the AWGN signal power level until it stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least ten times to verify the EUT can detect an AWGN signal with a 90% (or better) level of certainty.
10. Refer to Table 1 to determine the number of times the detection threshold testing needs to be repeated. If testing is required more than once, go back to step 5, choose a different center frequency for the AWGN signal, and repeat the process.

Table 1. Criteria to determine the number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$TwoBW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is close to the EUT channel's lower and upper edges.
$fourBW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of the EUT channel, and as closely as possible to the upper edge of the EUT channel.

Where:

BW_{EUT} : Transmission bandwidth of EUT signal

BW_{INC} : Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)

f_{c1} : The center frequency of EUT transmission

f_{c2} : Center frequency of the simulated incumbent signal

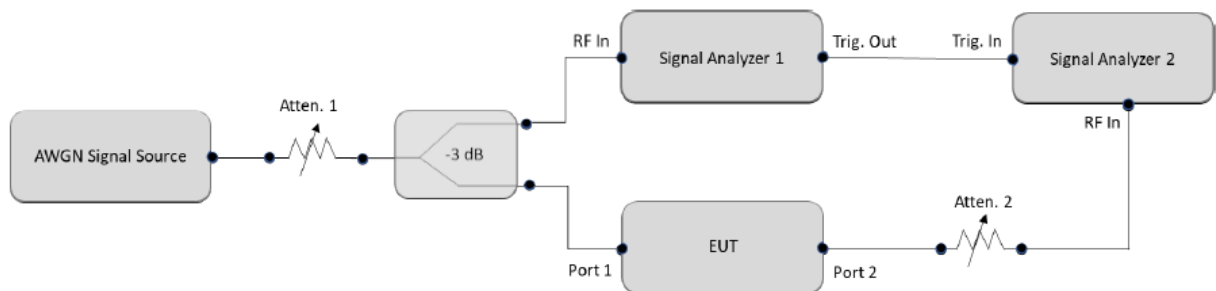


Figure 2. Contention-based protocol test setup conducted method

4.3.9.3 Result

Comply (measurement data : refer to the next page)

4.3.9.4 Measurement data

Test mode : 802.11be(EHT20)

Detection Threshold

UNII Band	CH	Bandwidth (MHz)	Frequency (MHz)	Interference Frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain(dBi)	Detection Power (dBm)	Detection Limit (dBm)
5	5	20	5975	Center	5975	OFF	-67.59	3.5	-71.09	-62
						Minimal	-68.54	3.5	-72.04	-62
						ON	-77.92	3.5	-81.42	-62
6	101	20	6455	Center	6455	OFF	-66.92	3.5	-70.42	-62
						Minimal	-67.88	3.5	-71.38	-62
						ON	-77.98	3.5	-81.48	-62
7	149	20	6695	Center	6695	OFF	-70.42	3.5	-73.92	-62
						Minimal	-71.33	3.5	-74.83	-62
						ON	-78.35	3.5	-81.85	-62
8	213	20	7015	Center	7015	OFF	-69.02	3.5	-72.52	-62
						Minimal	-68.16	3.5	-71.66	-62
						ON	-77.58	3.5	-81.08	-62

Detection Probability

UNII Band	CH	Bandwidth (MHz)	Frequency (MHz)	Interference Frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Number of Detected	Detection Probability (%)	Limit (%)
5	5	20	5975	Center	5975	OFF	-67.59	10	100	90
6	101	20	6455	Center	6455	OFF	-66.92	10	100	90
7	149	20	6695	Center	6695	OFF	-70.42	10	100	90
8	213	20	7015	Center	7015	OFF	-69.02	10	100	90

Test mode : 802.11be(EHT160)

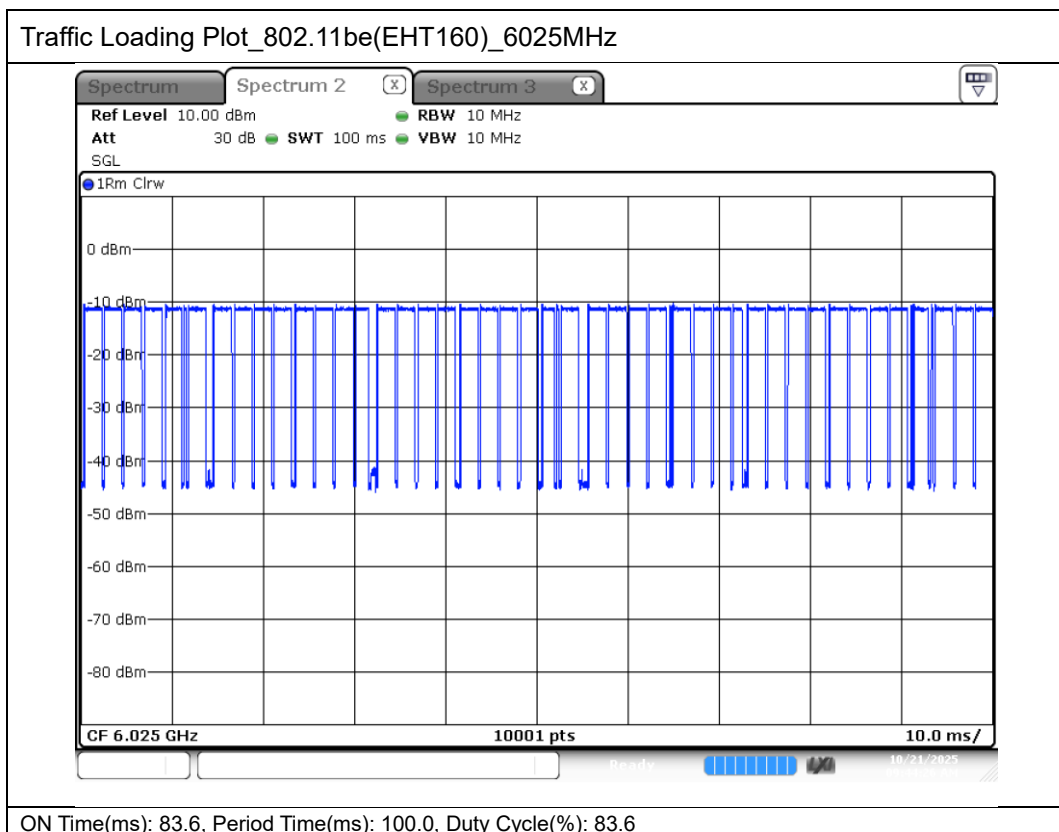
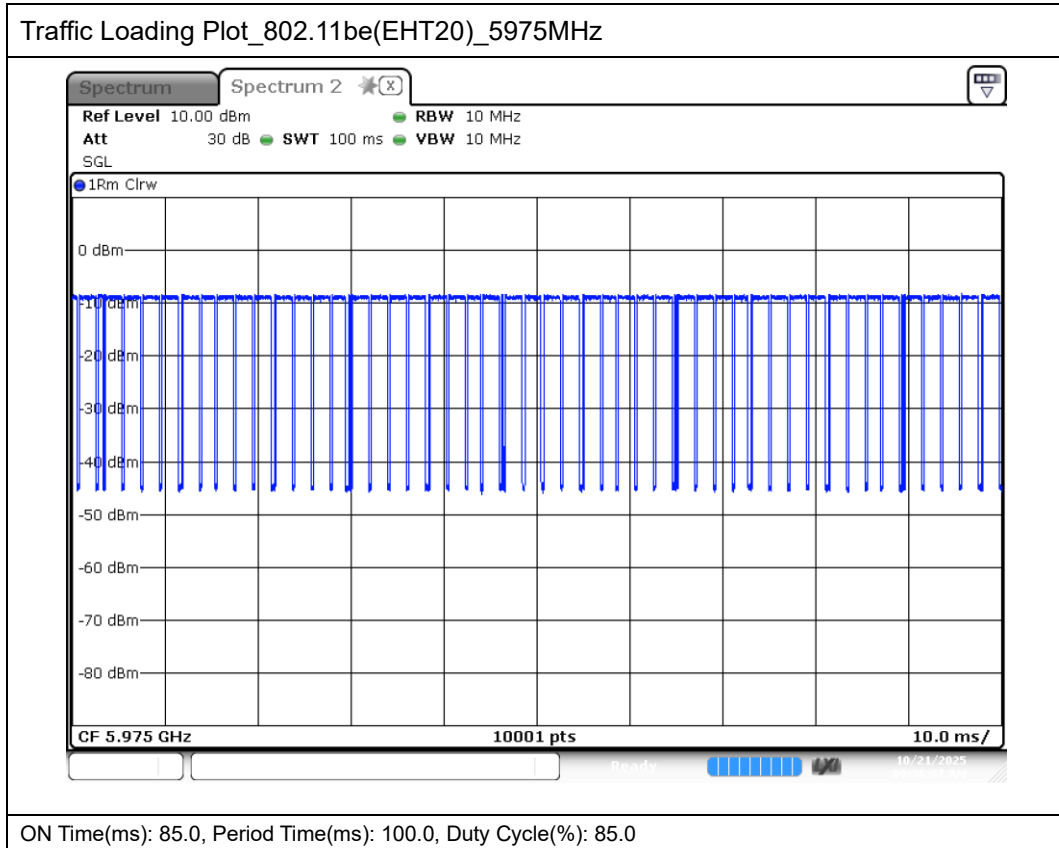
Detection Threshold

UNII Band	CH	Bandwidth (MHz)	Frequency (MHz)	Interference Frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain(dBi)	Detection Power (dBm)	Detection Limit (dBm)
5	15	160	6025	Low edge	5950	OFF	-60.8	3.5	-64.3	-62
						Minimal	-61.8	3.5	-65.3	-62
						ON	-78.0	3.5	-81.5	-62
				Center	6025	OFF	-59.6	3.5	-63.1	-62
						Minimal	-60.6	3.5	-64.1	-62
						ON	-78.5	3.5	-82.0	-62
				High edge	6100	OFF	-59.4	3.5	-62.9	-62
						Minimal	-60.4	3.5	-63.9	-62
						ON	-78.5	3.5	-82.0	-62
6/7	111	160	6505	Low edge	6430	OFF	-61.8	3.5	-65.3	-62
						Minimal	-62.9	3.5	-66.4	-62
						ON	-77.9	3.5	-81.4	-62
				Center	6505	OFF	-63.9	3.5	-67.4	-62
						Minimal	-64.9	3.5	-68.4	-62
						ON	-78.2	3.5	-81.7	-62
				High edge	6580	OFF	-62.4	3.5	-65.9	-62
						Minimal	-63.3	3.5	-66.8	-62
						ON	-77.7	3.5	-81.2	-62
7	143	160	6665	Low edge	6590	OFF	-61.7	3.5	-65.2	-62
						Minimal	-62.6	3.5	-66.1	-62
						ON	-78.5	3.5	-82.0	-62
				Center	6665	OFF	-65.9	3.5	-69.4	-62
						Minimal	-66.9	3.5	-70.4	-62
						ON	-78.3	3.5	-81.8	-62
				High edge	6740	OFF	-62.3	3.5	-65.8	-62
						Minimal	-63.3	3.5	-66.8	-62
						ON	-77.9	3.5	-81.4	-62
8	207	160	6985	Low edge	6910	OFF	-63.0	3.5	-66.5	-62
						Minimal	-64.0	3.5	-67.5	-62
						ON	-77.8	3.5	-81.3	-62
				Center	6985	OFF	-66.9	3.5	-70.4	-62
						Minimal	-67.9	3.5	-71.4	-62
						ON	-78.2	3.5	-81.7	-62
				High edge	7060	OFF	-59.0	3.5	-62.5	-62
						Minimal	-60.0	3.5	-63.5	-62
						ON	-78.5	3.5	-82.0	-62

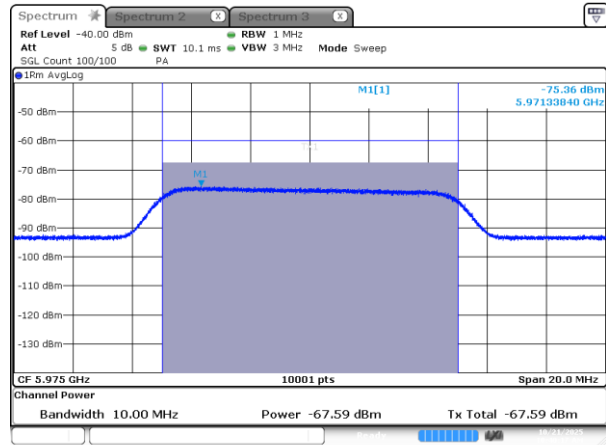
Detection Probability

UNII Band	CH	Bandwidth (MHz)	Frequency (MHz)	Interference Frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Number of Detected	Detection Probability (%)	Limit (%)
5	15	160	6025	Low edge	5950	OFF	-60.8	10	100	90
				Center	6025	OFF	-59.6	10	100	90
				High edge	6100	OFF	-59.4	10	100	90
6/7	111	160	6505	Low edge	6430	OFF	-61.8	10	100	90
				Center	6505	OFF	-63.9	10	100	90
				High edge	6580	OFF	-62.4	10	100	90
7	143	160	6665	Low edge	6590	OFF	-61.7	10	100	90
				Center	6665	OFF	-65.9	10	100	90
				High edge	6740	OFF	-62.3	10	100	90
8	207	160	6985	Low edge	6910	OFF	-63.0	10	100	90
				Center	6985	OFF	-66.9	10	100	90
				High edge	7060	OFF	-59.0	10	100	90

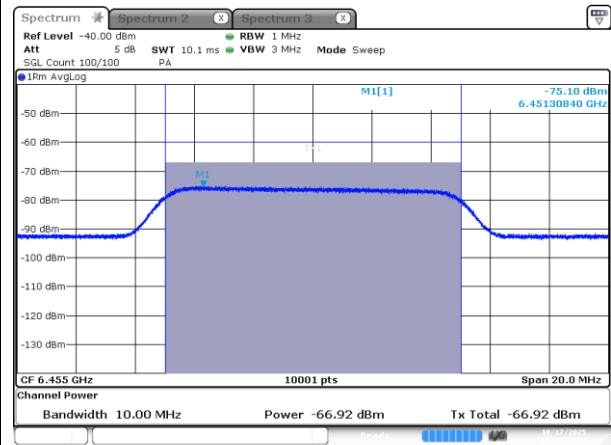
4.3.9.5 Measurement data Plot



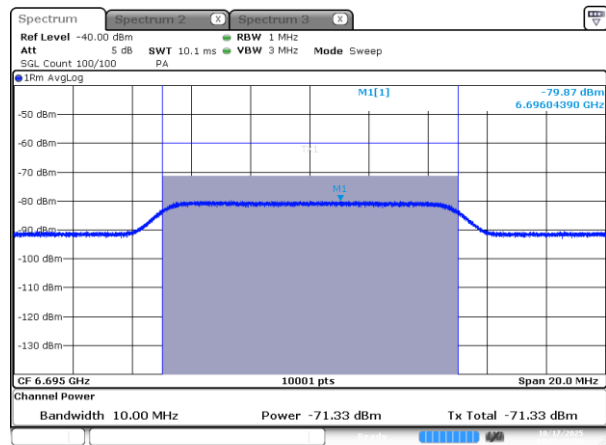
AWGN Signal level Plot
802.11be(EHT20) 5975MHz



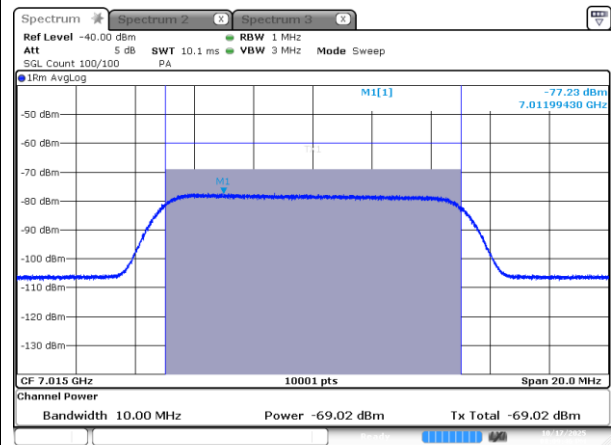
AWGN Signal level Plot
802.11be(EHT20) 6455MHz



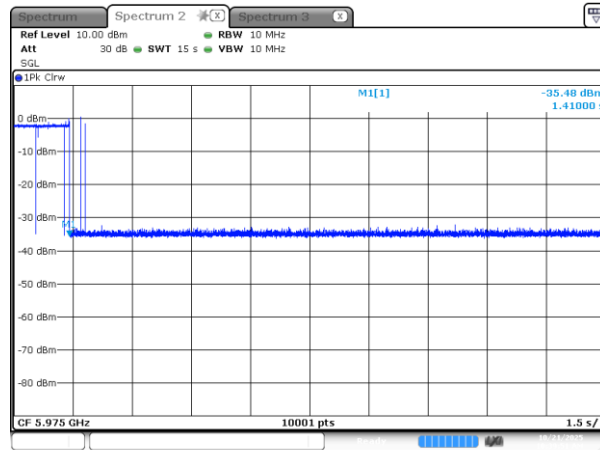
AWGN Signal level Plot
802.11be(EHT20) 6695 MHz



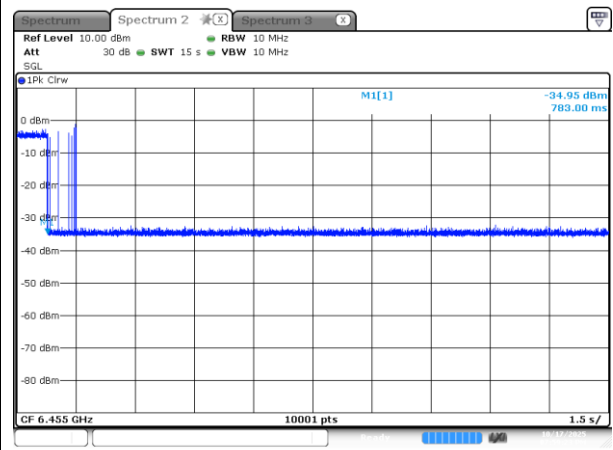
AWGN Signal level Plot
802.11be(EHT20) 7015 MHz



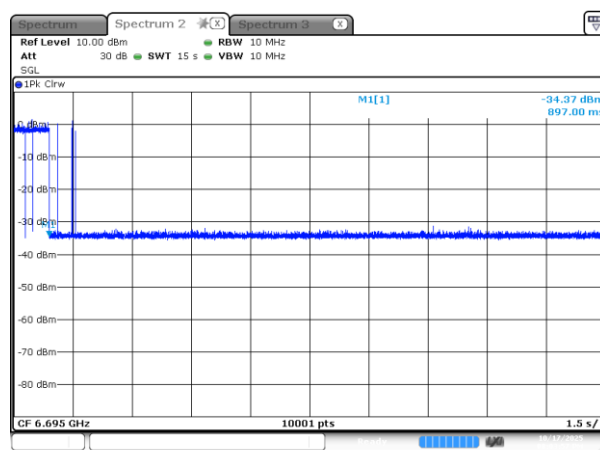
Contention-based protocol Plot
802.11be(EHT20) 5975MHz



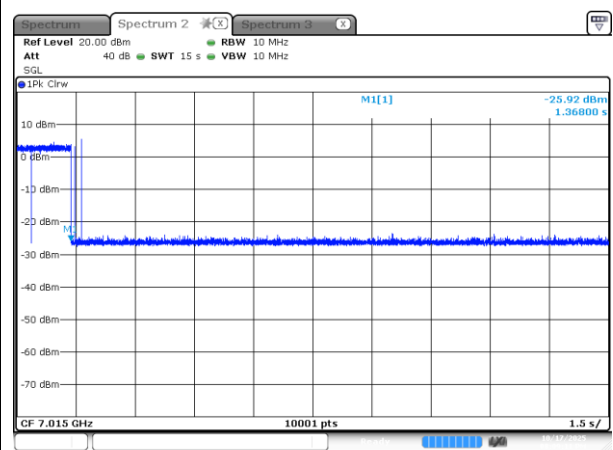
Contention-based protocol Plot
802.11be(EHT20) 6455MHz



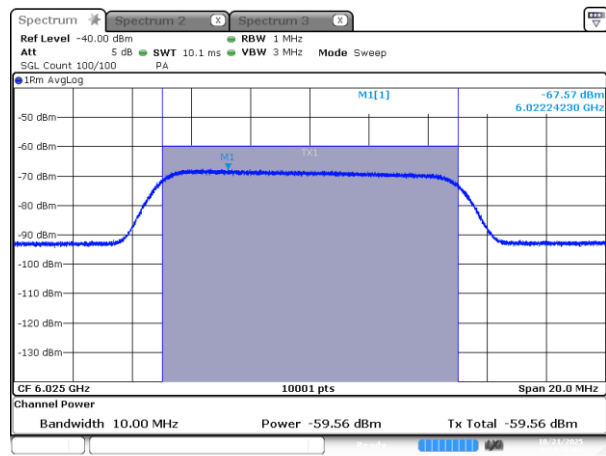
Contention-based protocol Plot
802.11be(EHT20) 6695 MHz



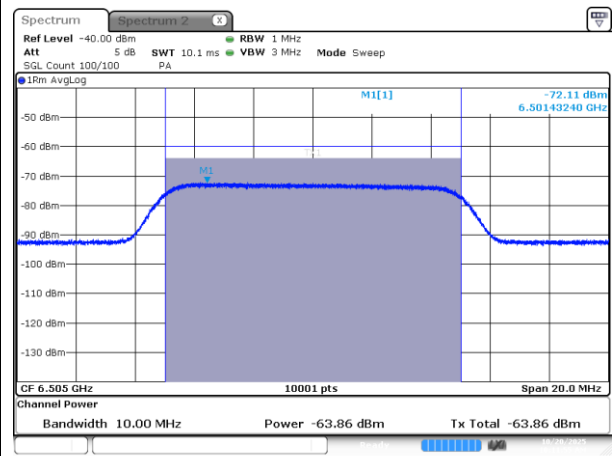
Contention-based protocol Plot
802.11be(EHT20) 7015 MHz



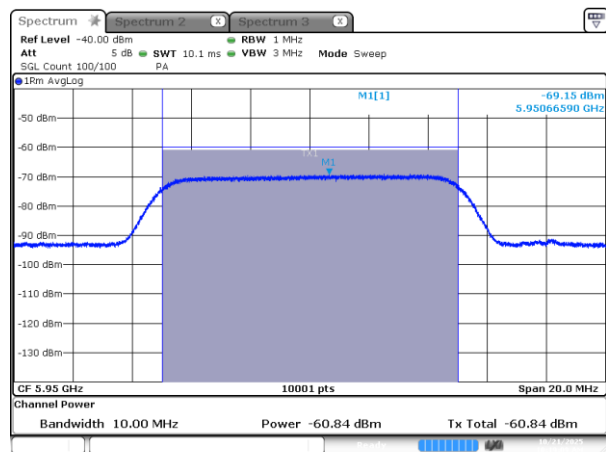
AWGN Signal level Plot
802.11be(EHT160)_6025MHz(6025MHz_Center)



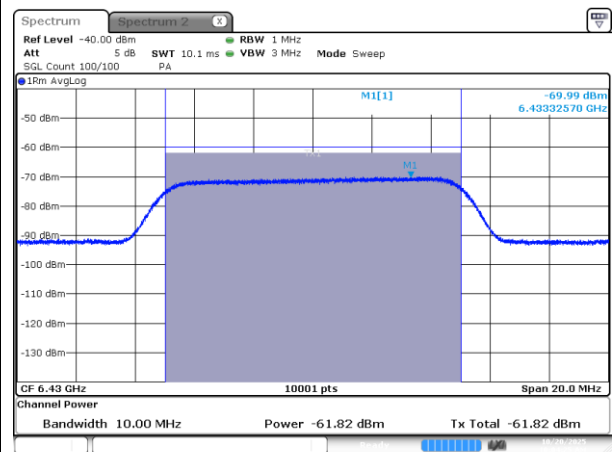
AWGN Signal level Plot
802.11be(EHT160)_6505MHz(6505MHz_Center)



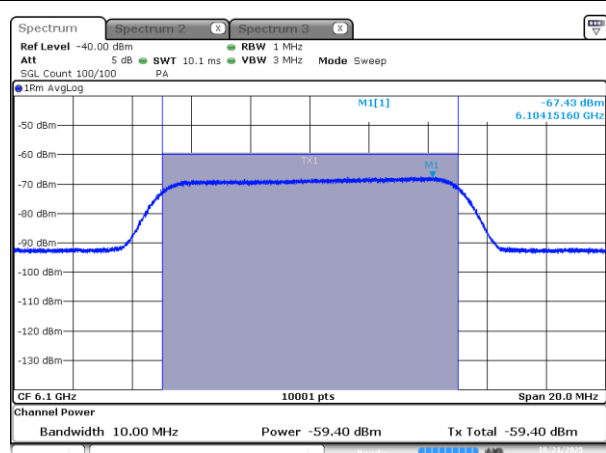
AWGN Signal level Plot
802.11be(EHT160)_6025MHz(5950MHz_Low edge)



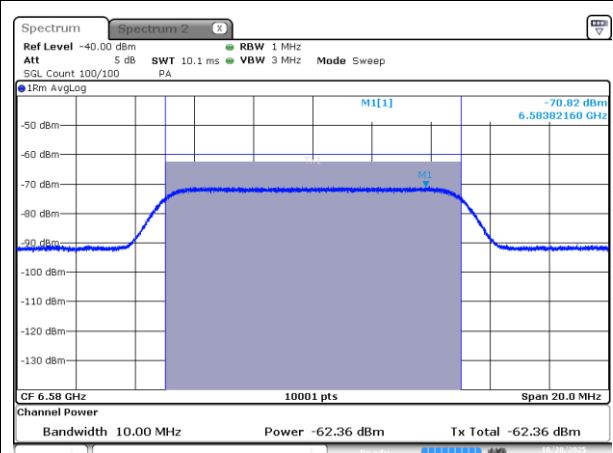
AWGN Signal level Plot
802.11be(EHT160)_6025MHz(6430MHz_Low edge)



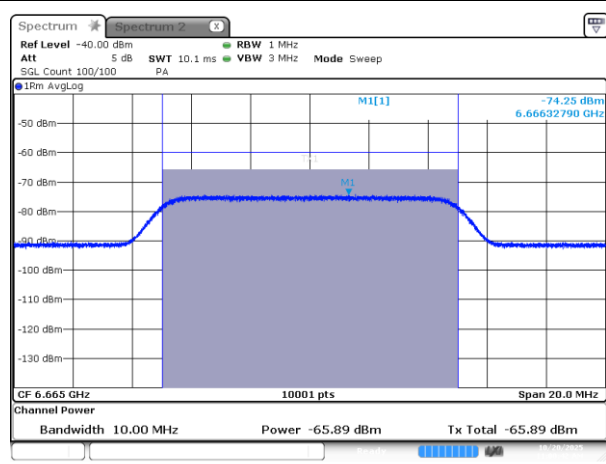
AWGN Signal level Plot
802.11be(EHT160)_6025MHz(6100MHz_High edge)



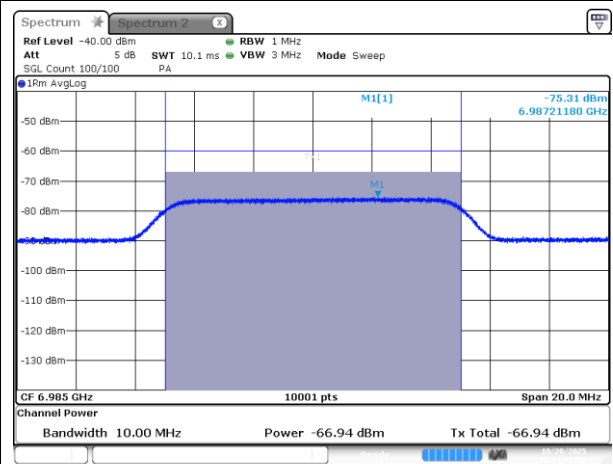
AWGN Signal level Plot
802.11be(EHT160)_6025MHz(6580MHz_High edge)



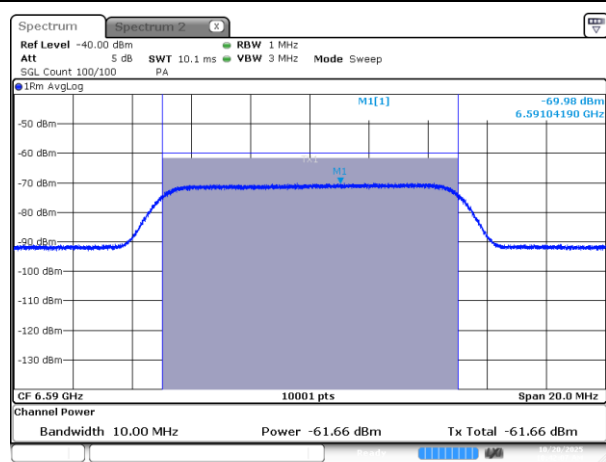
AWGN Signal level Plot
802.11be(EHT160)_6665MHz(6665MHz_Center)



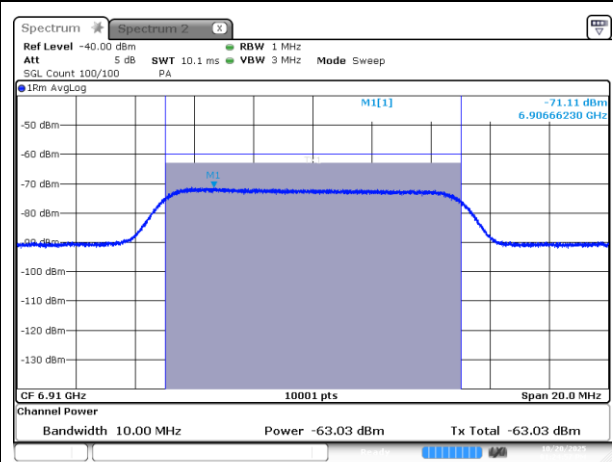
AWGN Signal level Plot
802.11be(EHT160)_6985MHz(6985MHz_Center)



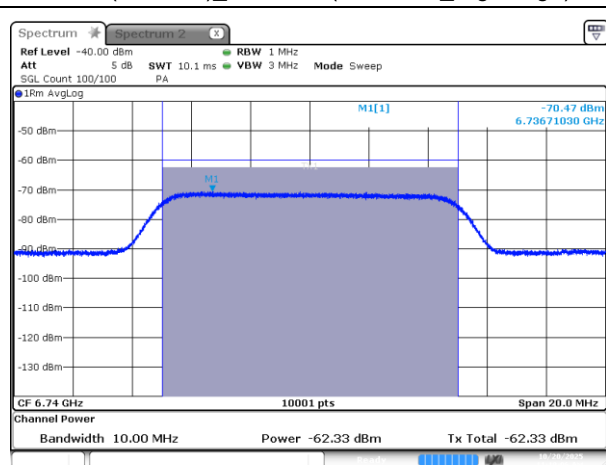
AWGN Signal level Plot
802.11be(EHT160)_6665MHz(6590MHz_Low edge)



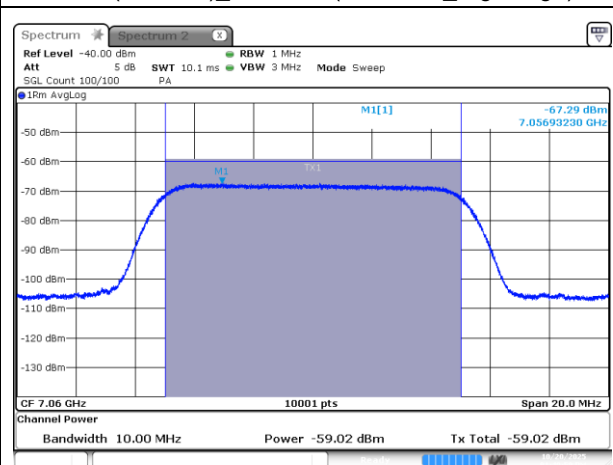
AWGN Signal level Plot
802.11be(EHT160)_6985MHz(6910MHz_Low edge)



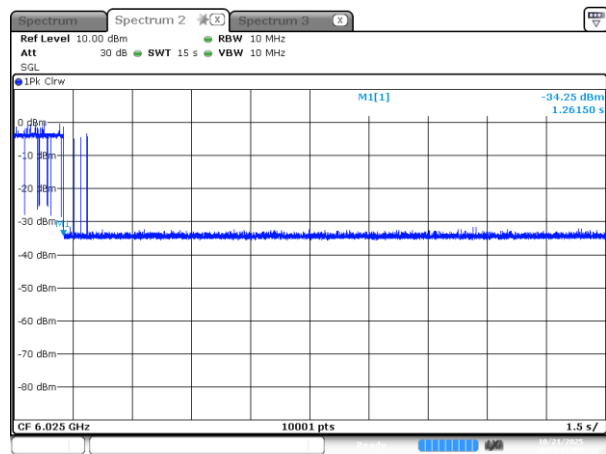
AWGN Signal level Plot
802.11be(EHT160)_6665MHz(6740MHz_High edge)



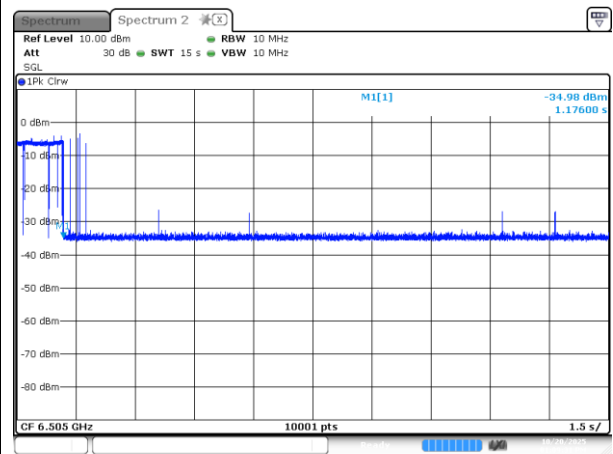
AWGN Signal level Plot
802.11be(EHT160)_6985MHz(7060MHz_High edge)



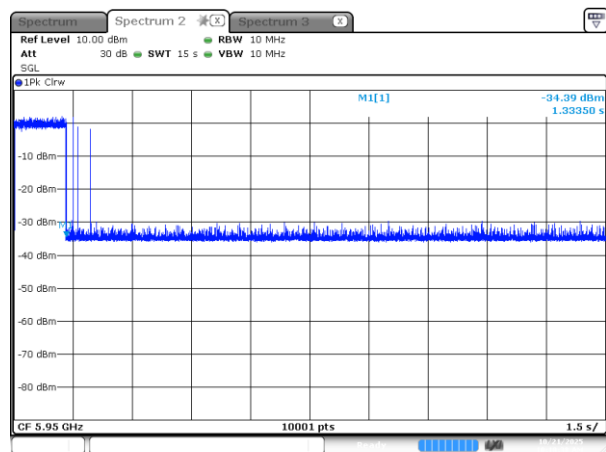
Contention-based protocol Plot
802.11be(EHT160)_6025MHz(6025MHz_Center)



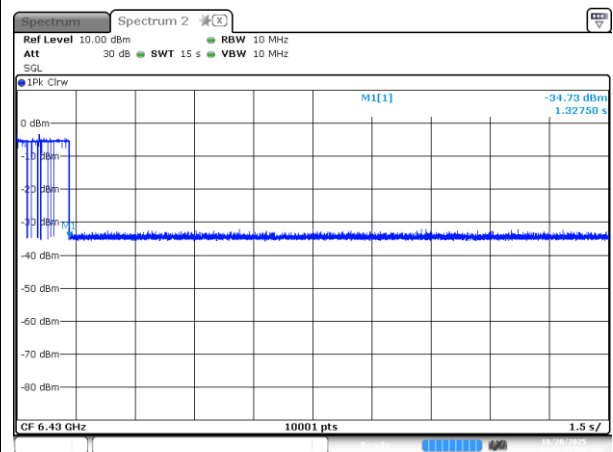
Contention-based protocol Plot
802.11be(EHT160)_6505MHz(6505MHz_Center)



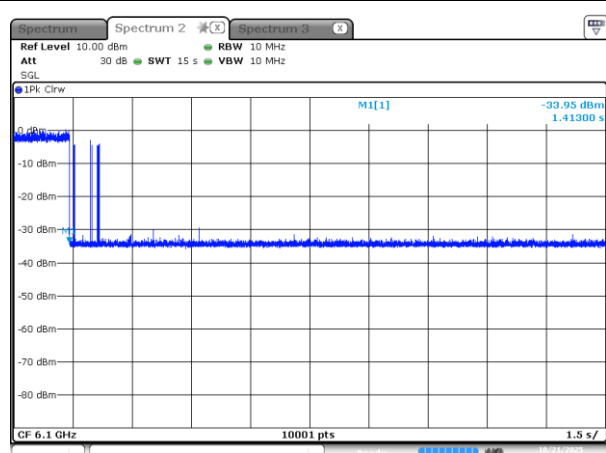
Contention-based protocol Plot
802.11be(EHT160)_6025MHz(5950MHz_Low edge)



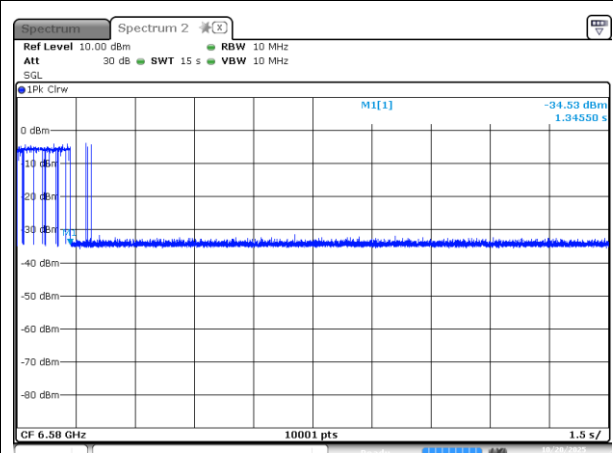
Contention-based protocol Plot
802.11be(EHT160)_6025MHz(6430MHz_Low edge)



Contention-based protocol Plot
802.11be(EHT160)_6025MHz(6100MHz_High edge)



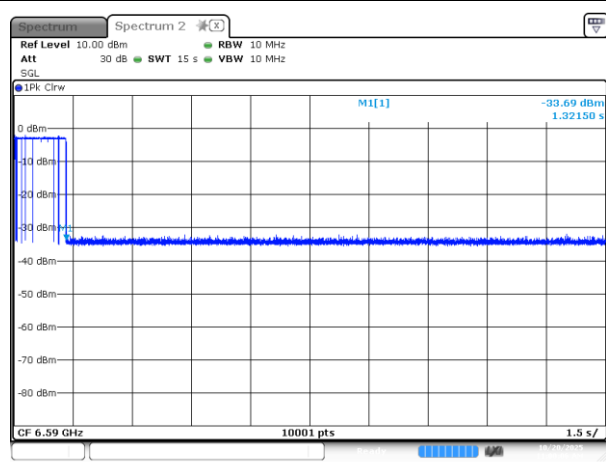
Contention-based protocol Plot
802.11be(EHT160)_6025MHz(6580MHz_High edge)



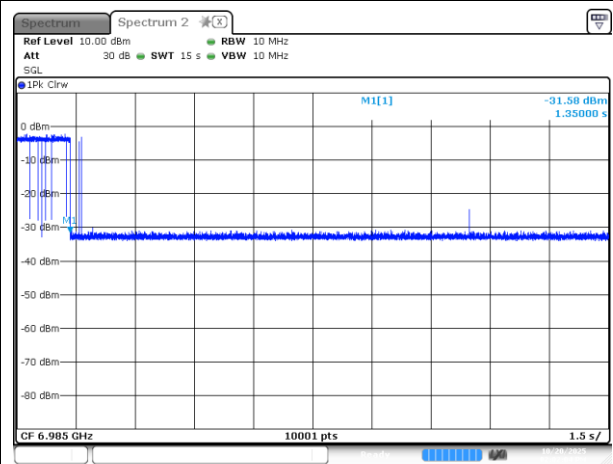
- M1: Injection AWGN Signal

- M1: Injection AWGN Signal

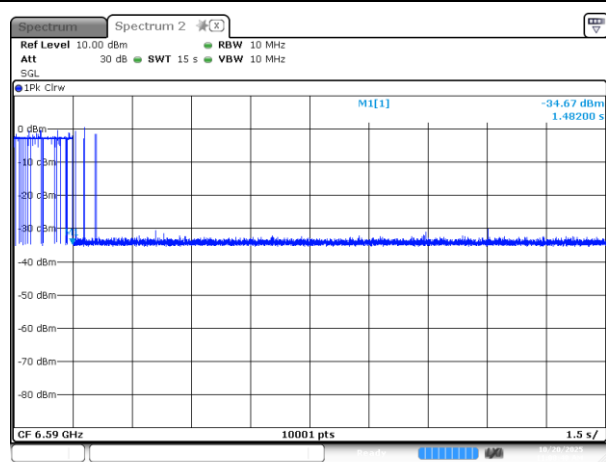
Contention-based protocol Plot
802.11be(EHT160)_6665MHz(6665MHz_Center)



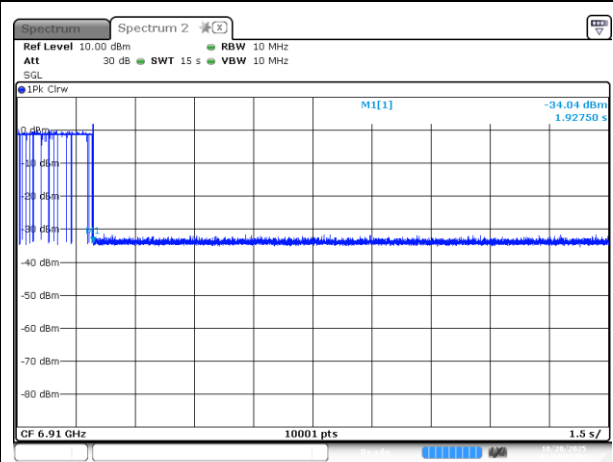
Contention-based protocol Plot
802.11be(EHT160)_6985MHz(6985MHz_Center)



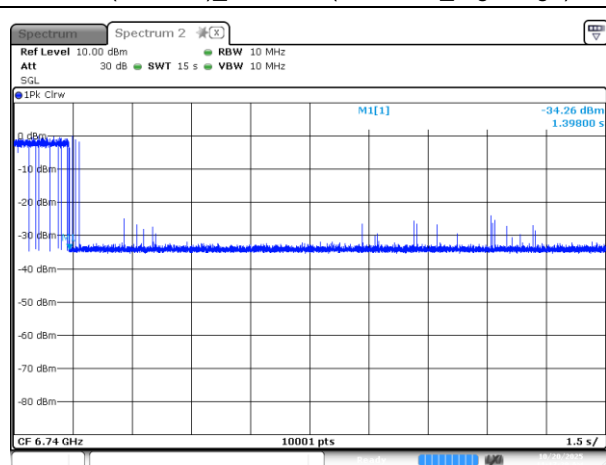
Contention-based protocol Plot
802.11be(EHT160)_6665MHz(6590MHz_Low edge)



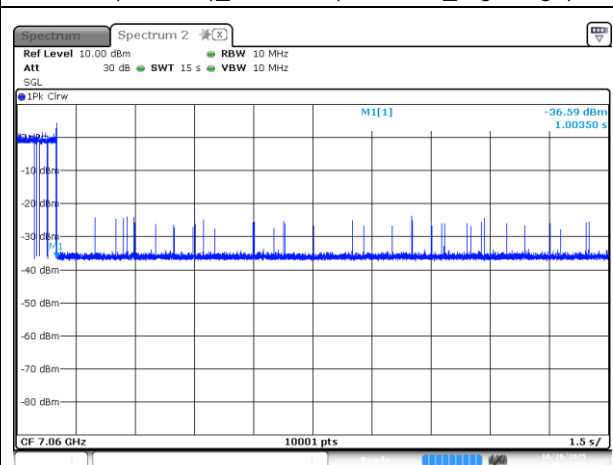
Contention-based protocol Plot
802.11be(EHT160)_6985MHz(6910MHz_Low edge)



Contention-based protocol Plot
802.11be(EHT160)_6665MHz(6740MHz_High edge)



Contention-based protocol Plot
802.11be(EHT160)_6985MHz(7060MHz_High edge)



- M1: Injection AWGN Signal

- M1: Injection AWGN Signal

APPENDIX I

TEST EQUIPMENT USED FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

Equipment	Manufacturer	Model	Serial No.	Cal. Date (yy.mm.dd)	Next Cal.Date (yy.mm.dd)
FSV Signal Analyzer	ROHDE&SCHWARZ	FSV30	103370	2025-10-01	2026-10-01
FSV Signal Analyzer	ROHDE&SCHWARZ	FSV40	101010	2025-04-01	2026-04-01
PXA Signal Analyzer	KEYSIGHT	N9030A	MY54410264	2024-11-12	2025-11-12
ATTENUATOR	WEINSCHTEL	54A-10	69672	2025-09-30	2026-09-30
Digital MultiMeter	HP	34401A	US36025428	2025-01-02	2026-01-02
Humidity & Temp. chamber	SJ SCIENCE	SJ-TH-S50	170719	2025-04-02	2026-04-02
Power Sensor	KEYSIGHT	U2022XA	MY55320008	2025-08-07	2026-08-07
DC POWER SUPPLY	AGILENT	E3632A	MY51160055	2025-04-01	2026-04-01
Signal Generator	ROHDE&SCHWARZ	SMB100A	178384	2025-10-01	2026-10-01
POWER DIVIDER	WEINSCHTEL	1580-1	SQ747	2025-04-02	2026-04-02
POWER DIVIDER	WEINSCHTEL	1580-1	SQ748	2025-04-02	2026-04-02
ATTENUATOR	INMET	26A-30	TR013	2025-10-01	2026-10-01
TERMINATION	Agilent	909D	51640	2025-08-07	2026-08-07
Vector Signal Generator	ROHDE&SCHWARZ	SMM100A	101603	2025-10-01	2026-10-01
STEP ATTENUATOR	Agilent	8494B	MY42145885	2025-04-01	2026-04-01
STEP ATTENUATOR	Agilent	8495B	MY42143360	2025-04-01	2026-04-01
High pass filter	Wainwright Instruments GmbH	WHKX10-2580-3000-18000-60SS	14	2025-01-03	2026-01-03
High pass filter	Wainwright Instruments GmbH	WHNX6-5840-8000-26500-60CC	4	2025-01-03	2026-01-03
High pass filter	Wainwright Instruments GmbH	WHNX8.5/26.5G-6SS	1	2025-05-28	2026-05-28
RF Cable	Radiall	1800920922000KE	CON-R006	2025-07-21	2026-01-21
RF Cable	Radiall	1800920922000KE	CON-R007	2025-07-21	2026-01-21
RF Cable	GigaLane. Co., Ltd.	KMS116-GL140sE-KMS116-1.0M	CON-R009	2025-07-21	2026-01-21
RF Cable	Junkosha Inc.	MWX221	CON-R013	2025-07-21	2026-01-21
EMI Test Receiver	ROHDE&SCHWARZ	ESU40	100445	2025-09-01	2026-09-01
BiLog Antenna	Schwarzbeck	VULB9168	00821	2025-03-05	2027-03-05
ATTENUATOR	JFW	50F-006	6 dB-3	2025-03-04	2026-03-04
Antenna Mast	Innco	MA4640-XPET-0800	578	-	-
Antenna Mast	TOKIN	5977	-	-	-
Controller	TOKIN	5909L	141909L-1	-	-
Controller	Innco	CO3000	40040217	-	-
Turn Table	TOKIN	5983-1.5	-	-	-

Equipment	Manufacturer	Model	Serial No.	Cal. Date (yy.mm.dd)	Next Cal.Date (yy.mm.dd)
Active Loop H-Field	ETS	6502	150598	2025-06-05	2027-06-05
Double Ridege Horn Antenna	ETS	3117	00168719	2025-07-03	2026-07-03
Double Ridege Horn Antenna	A.H Systems, Inc	SAS-574	465	2025-04-02	2027-04-02
PREAMPLIFIER	Agilent	8449B	3008A02110	2025-01-03	2026-01-03
Preamplifier	TSJ	MLA-10k01-b01-27	1870367	2025-03-27	2026-03-27
PREAMPLIFIER	A.H Systems, Inc	PAM-1840VH	166	2025-01-03	2026-01-03
EMI Test Receiver	ROHDE&SCHWARZ	ESR7	101440	2025-09-01	2026-09-01
LISN	ROHDE&SCHWARZ	ENV216	101883	2025-03-26	2026-03-26
Pulse Limiter	Schwarzbeck	VTSD 9561-F	00189	2025-03-26	2026-03-26
LISN	ROHDE&SCHWARZ	NSLK8127	877	2025-03-26	2026-03-26

-End-