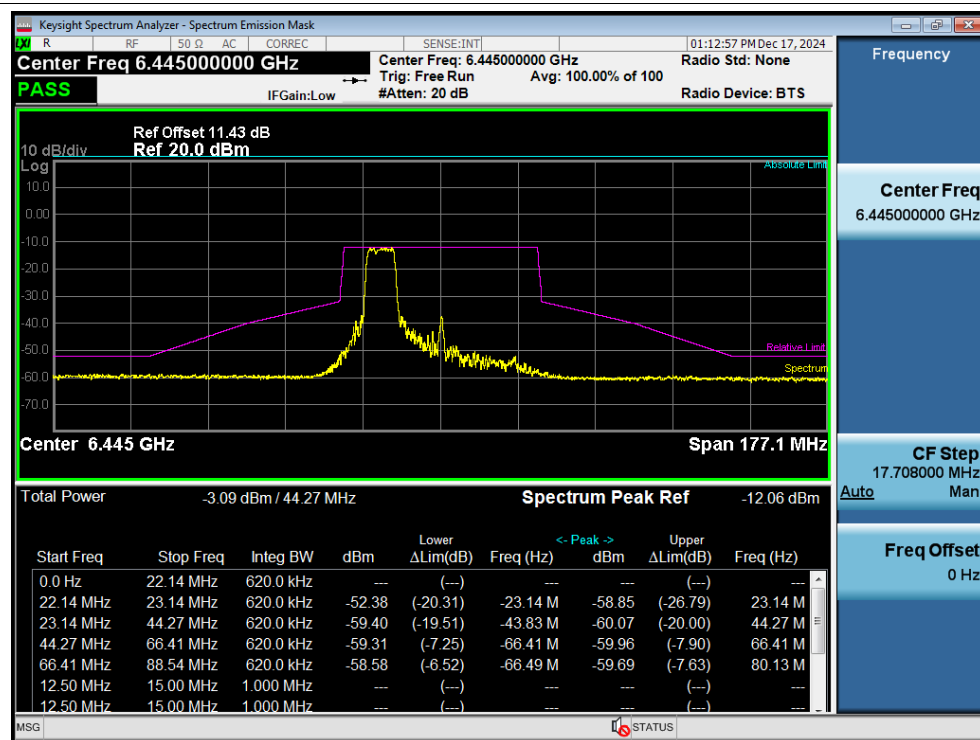
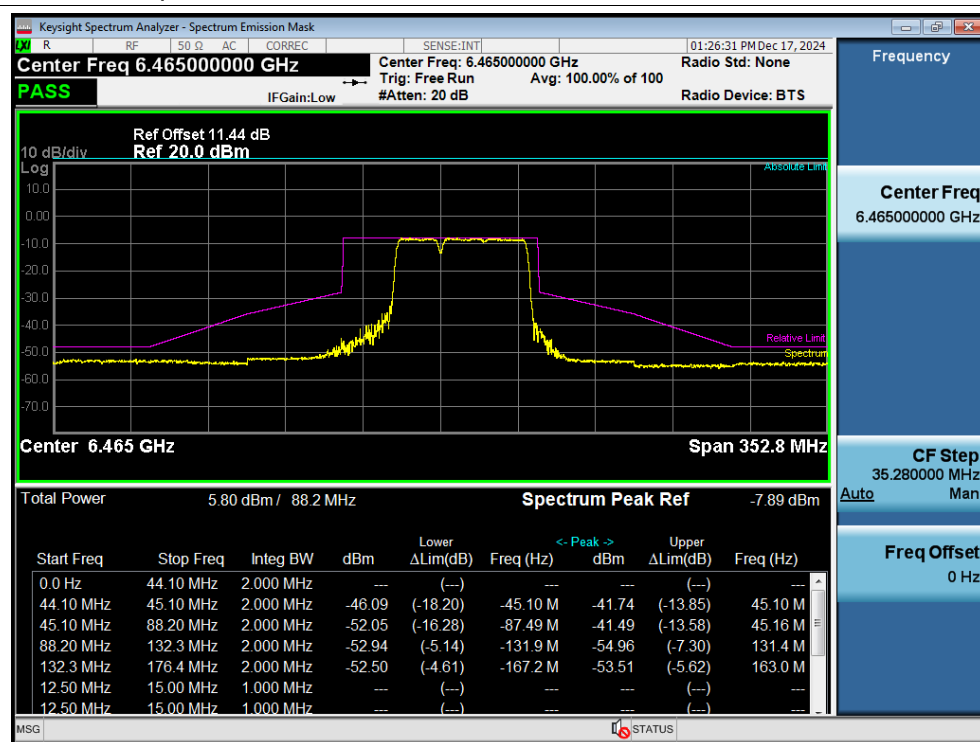


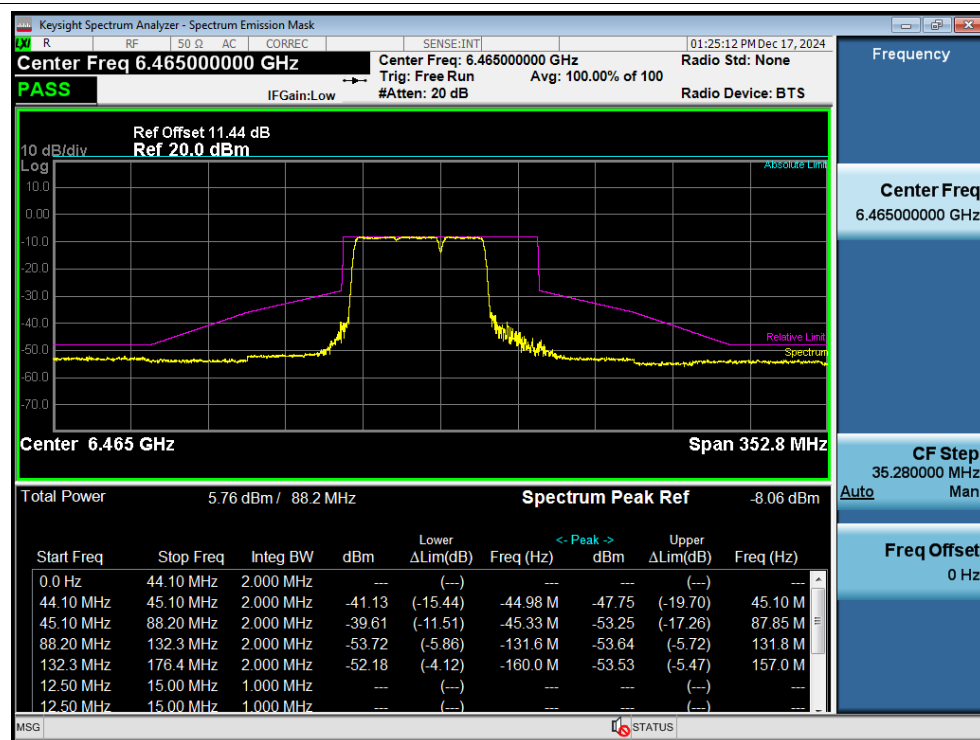
Power spectral mask 802.11be EHT40 52+26-Tones LOW 6445MHz



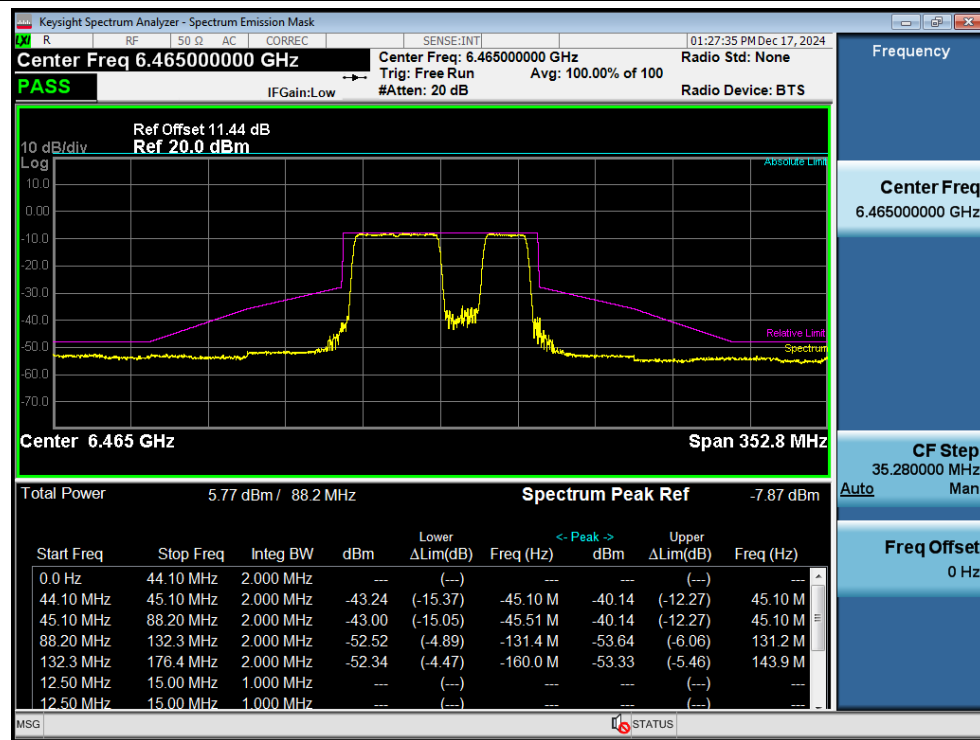
Power spectral mask 802.11be EHT80 484+242-Tones HIGH 6465MHz



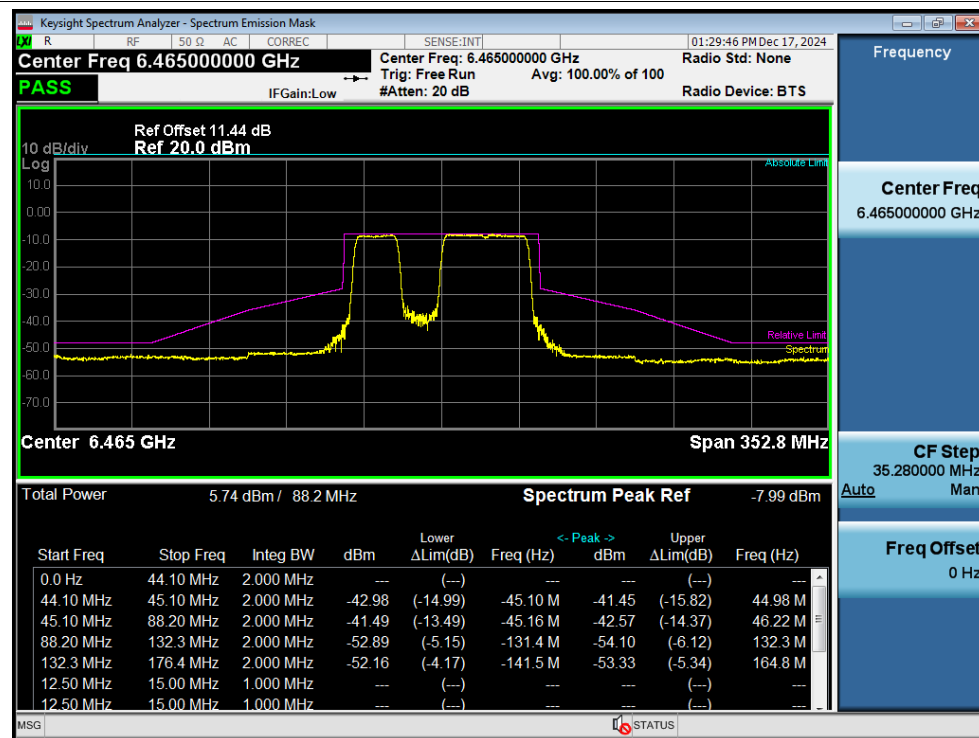
Power spectral mask 802.11be EHT80 484+242-Tones LOW 6465MHz



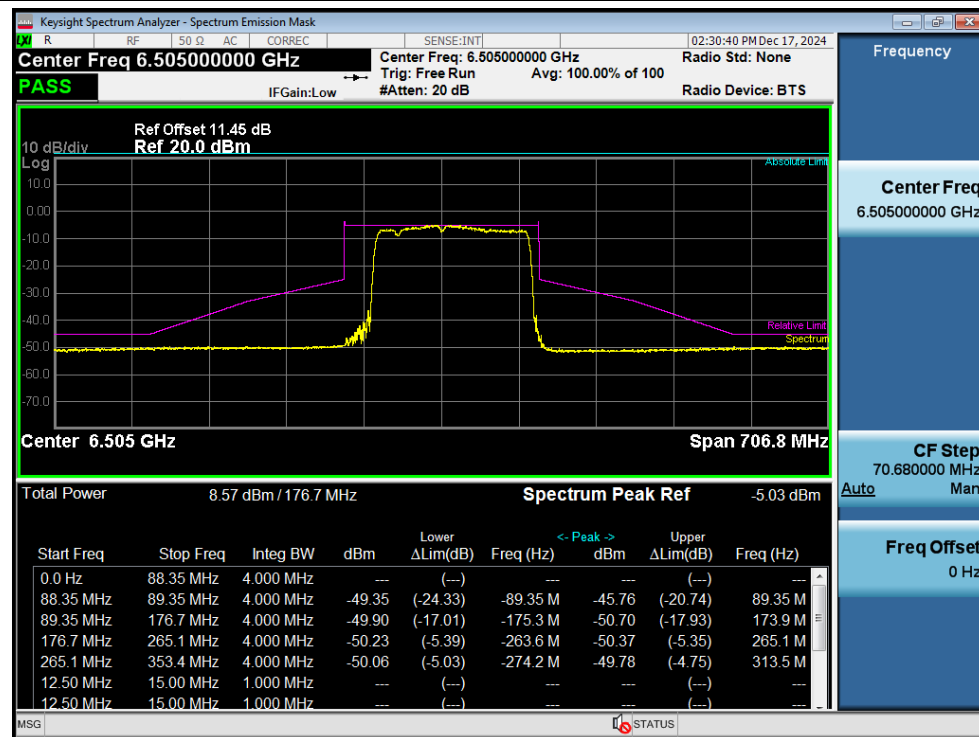
Power spectral mask 802.11be EHT(80-20) 242+484 Tone INDEX 3 6465MHz



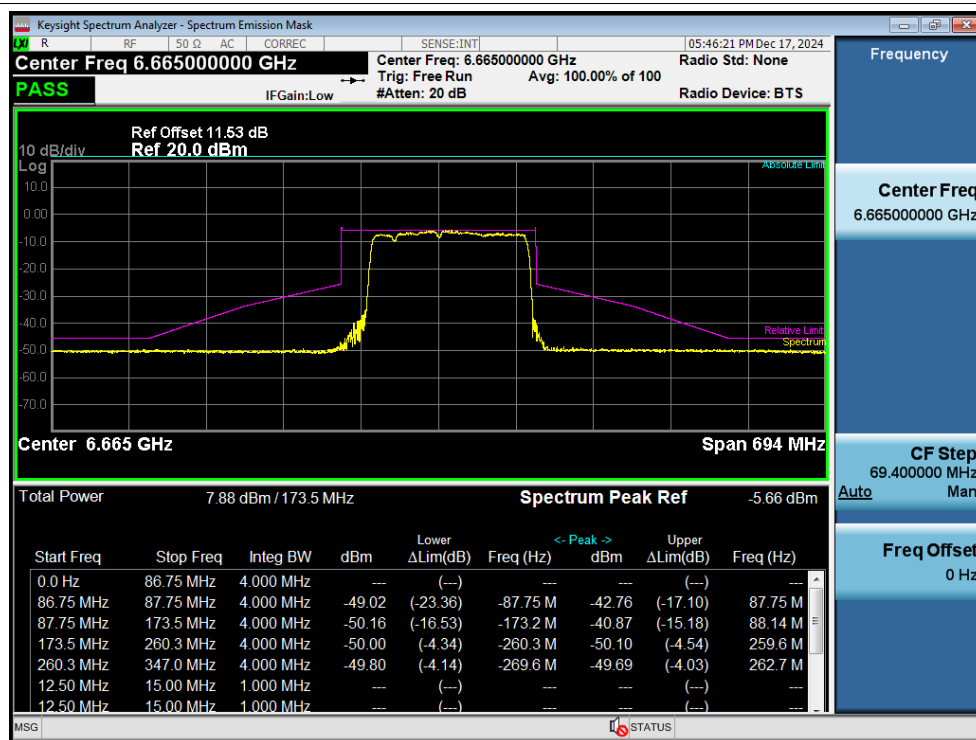
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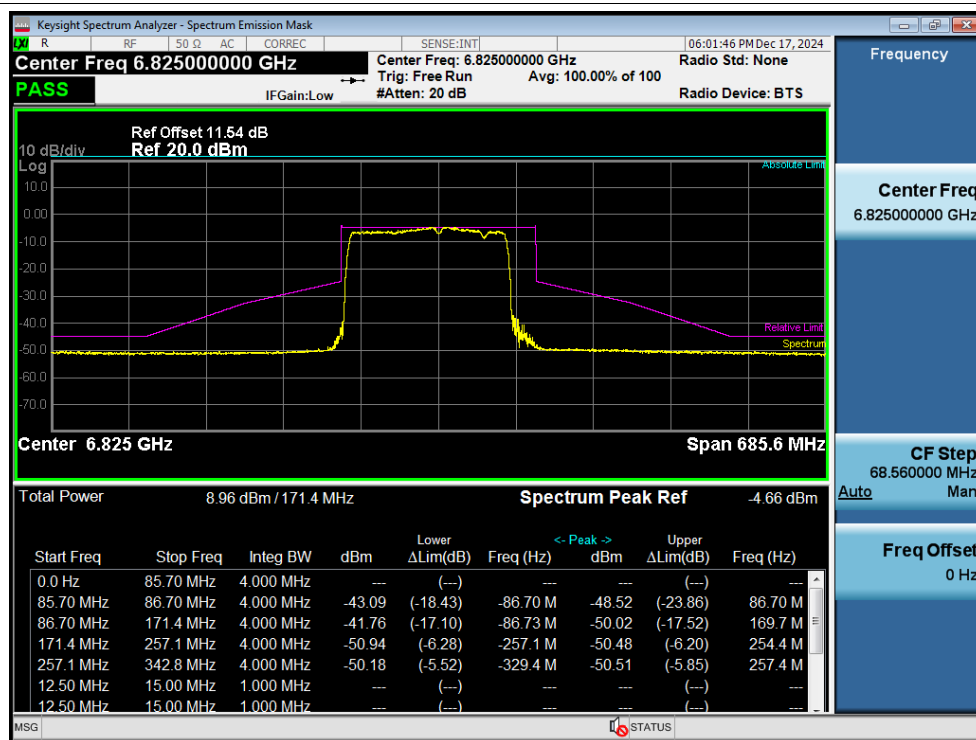
Power spectral mask 802.11be EHT(160-20)242+484+996 Tone INDEX 1 6505MHz



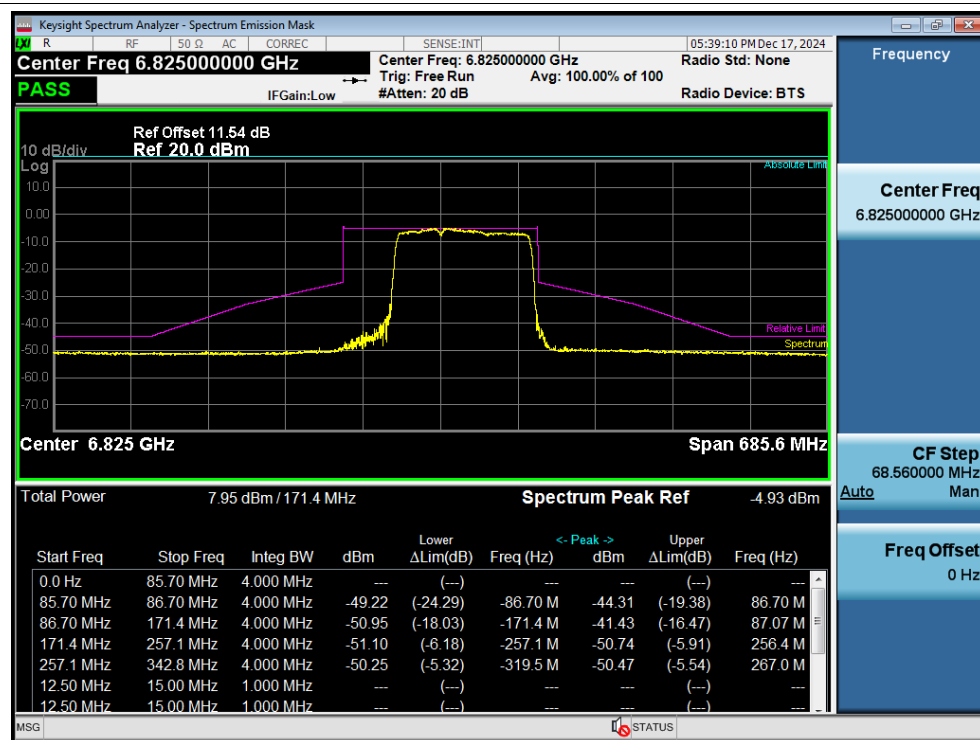
Power spectral mask 802.11be EHT(160-20)242+484+996 Tone INDEX 1 6665MHz



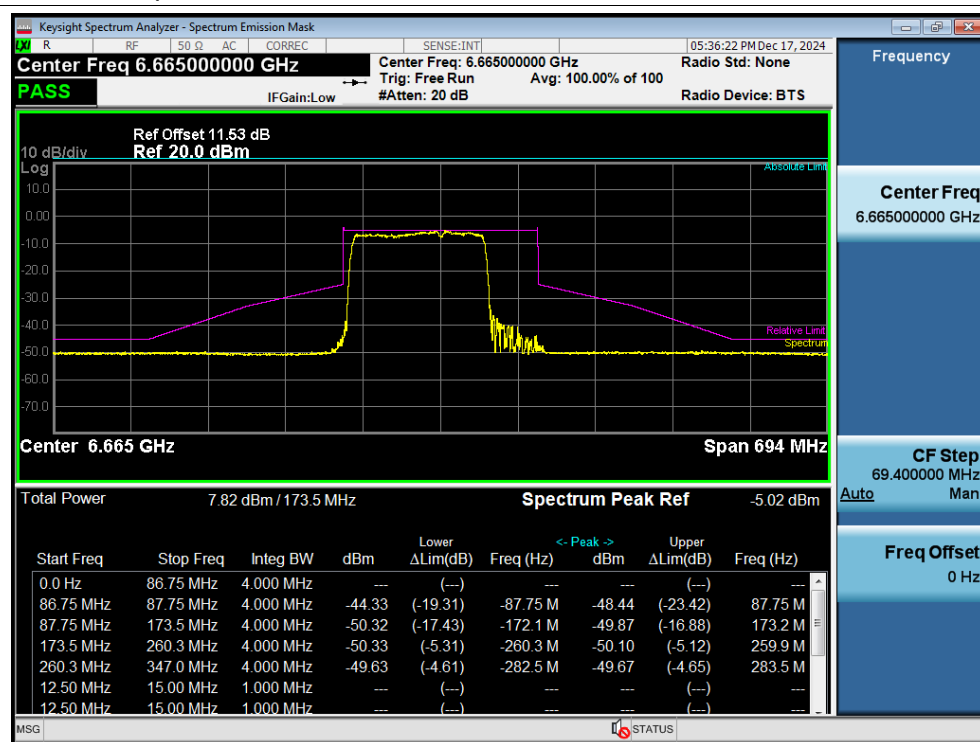
Power spectral mask 802.11be EHT(160-20)242+484+996 Tone INDEX 8 6825MHz



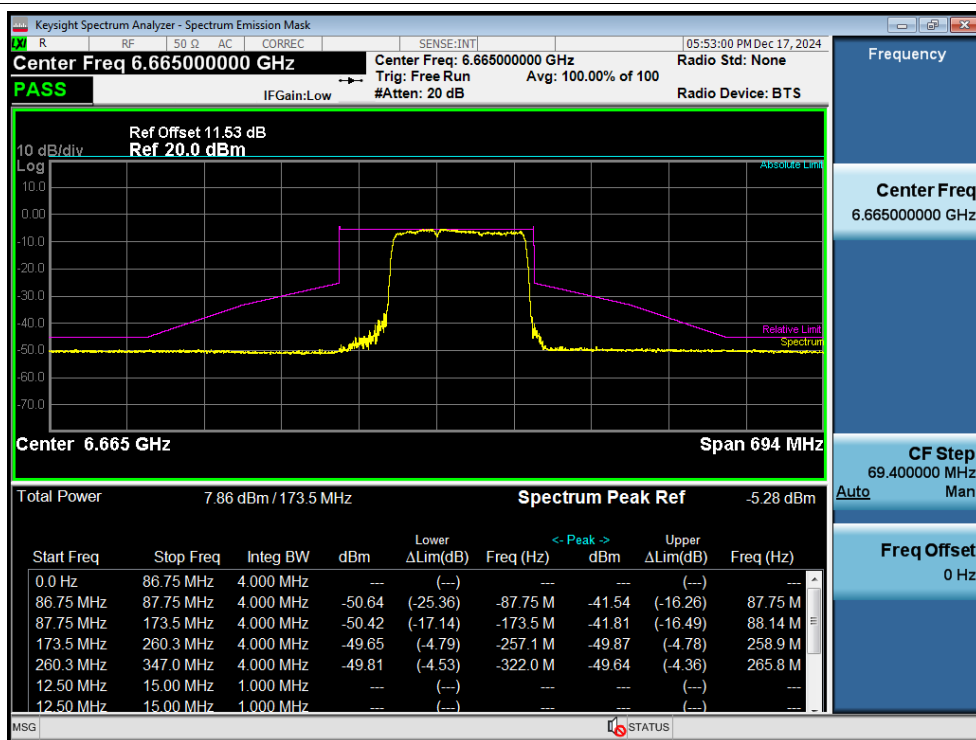
Power spectral mask 802.11be EHT160 996+484-Tones HIGH 6825MHz



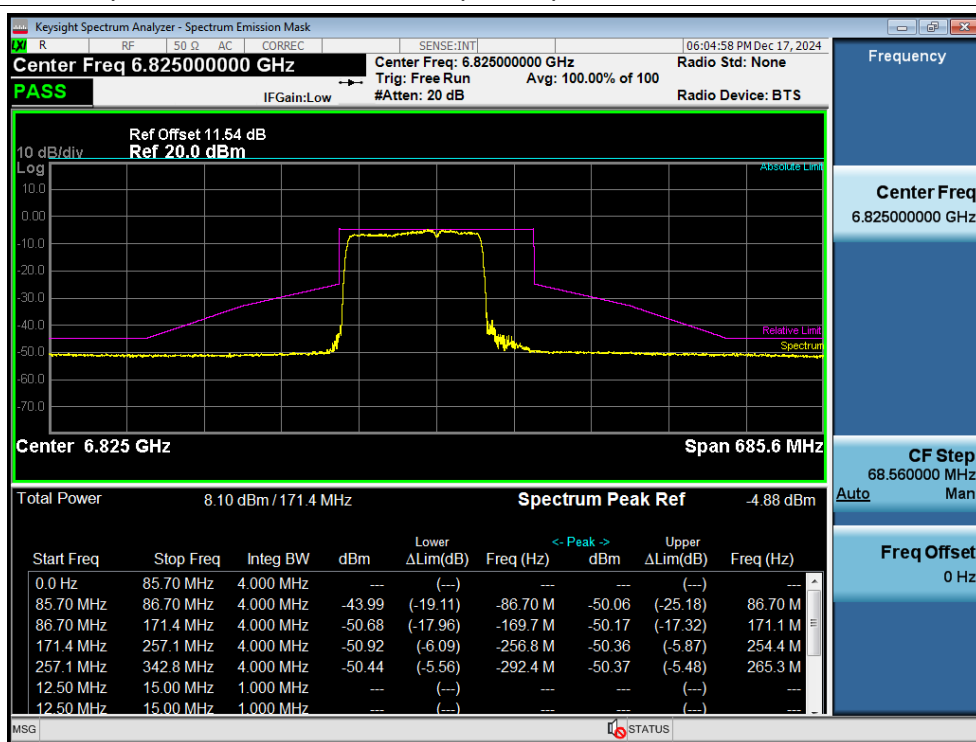
Power spectral mask 802.11be EHT160 996+484-Tones LOW 6665MHz



Power spectral mask 802.11be EHT(160-40)484+996 Tone INDEX 1 6665MHz



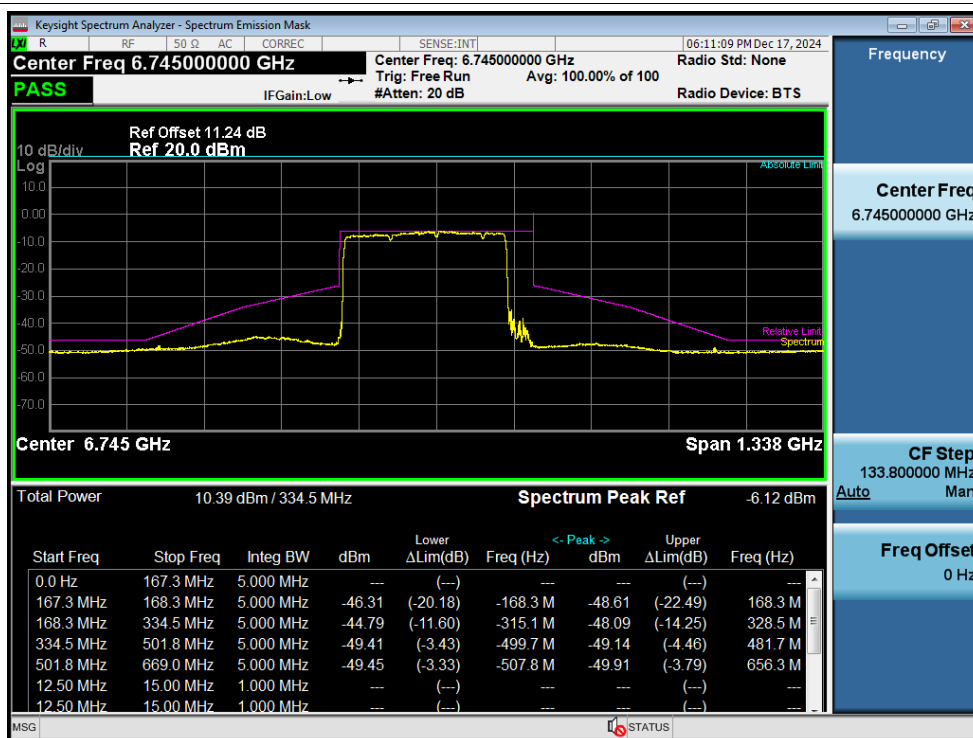
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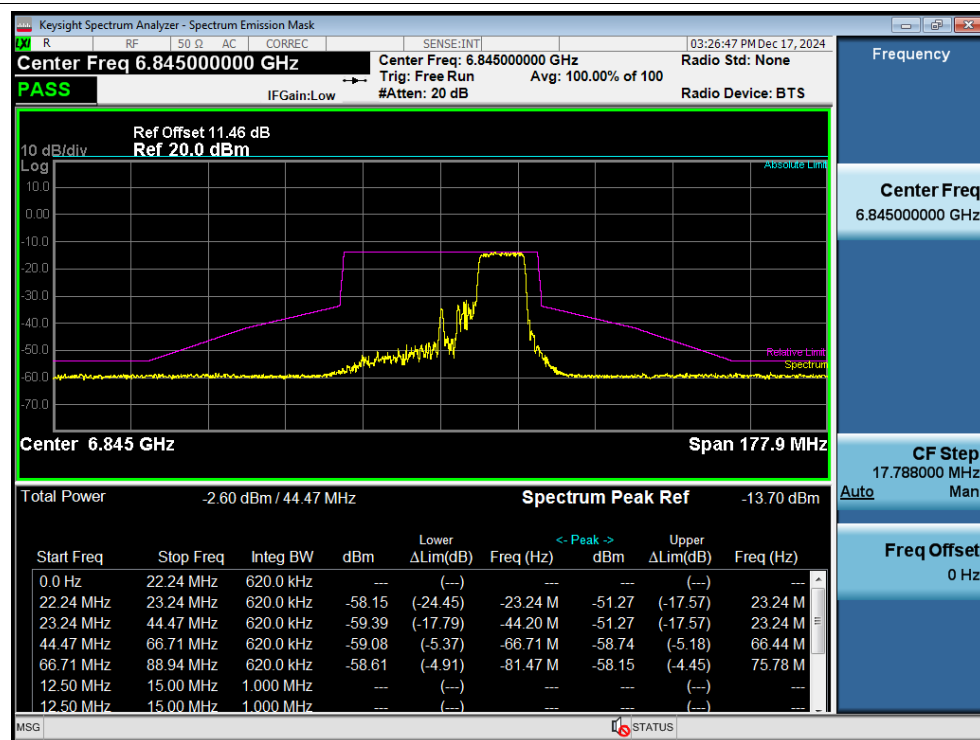
Power spectral mask 802.11be EHT320 484+996+996+996-Tones HIGH 6585MHz



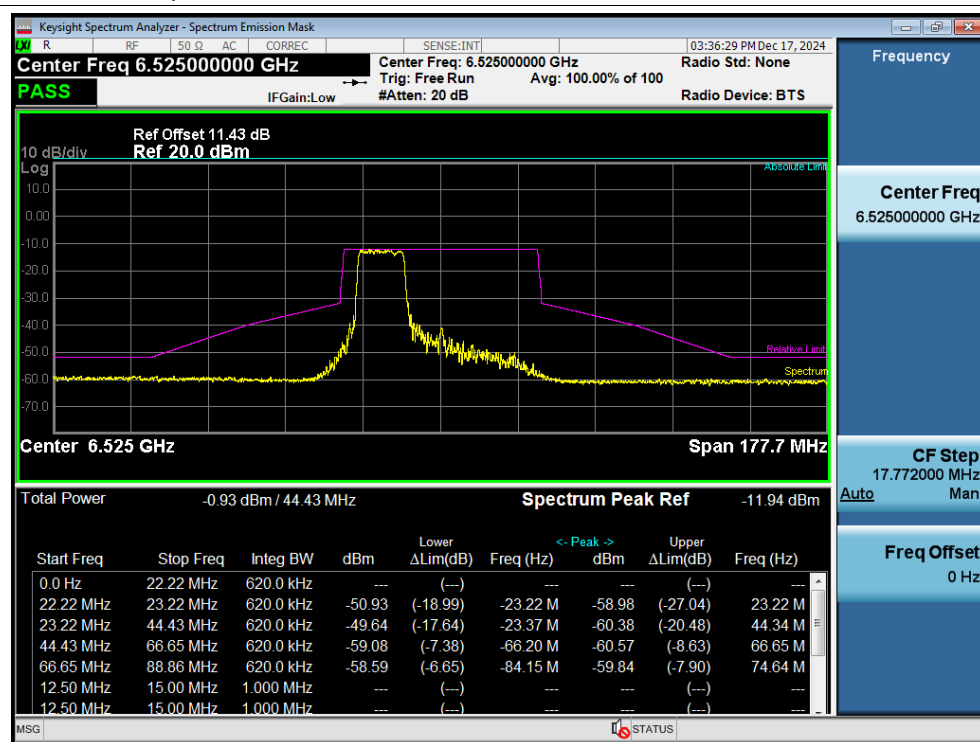
Power spectral mask 802.11be EHT320 996+996+996+484-Tones LOW 6745MHz



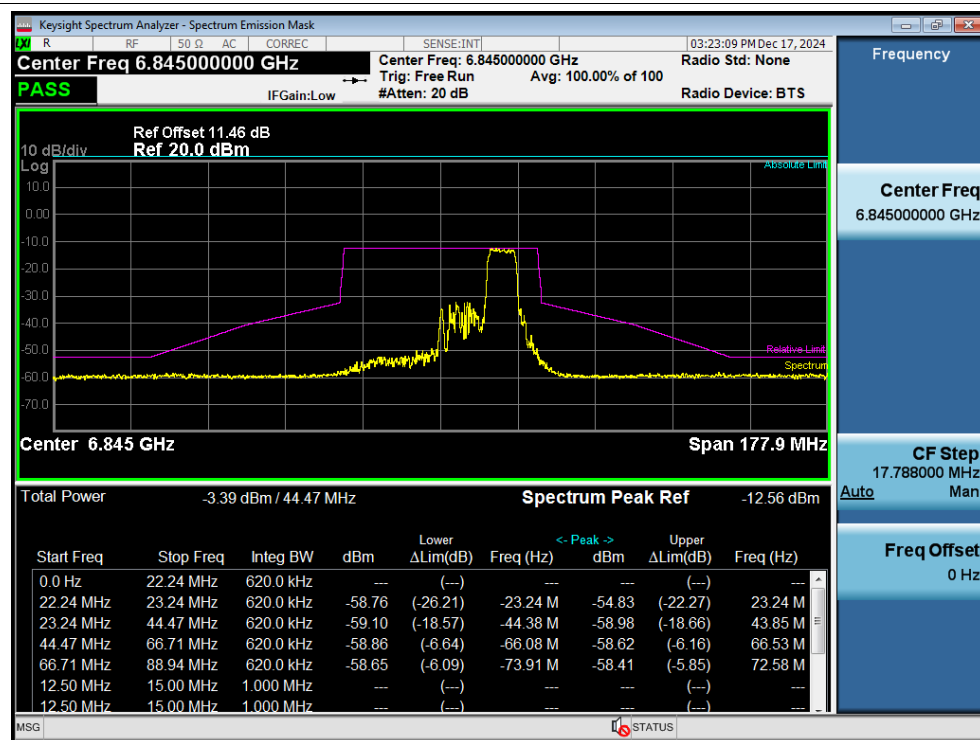
Power spectral mask 802.11be EHT40 106+26-Tones HIGH 6845MHz



Power spectral mask 802.11be EHT40 106+26-Tones LOW 6525MHz



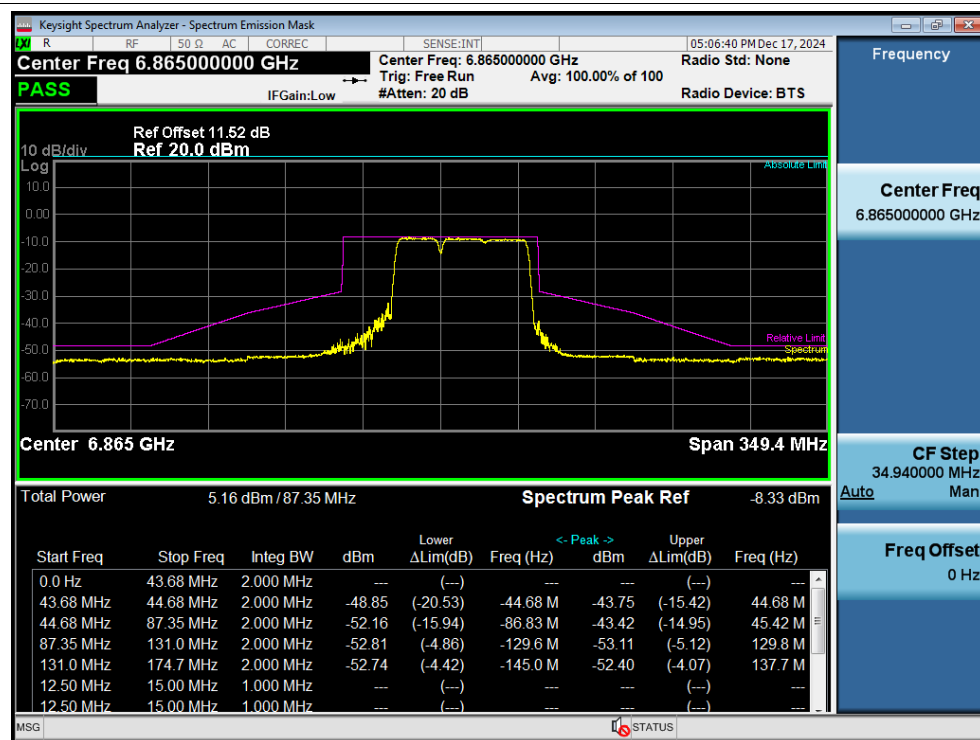
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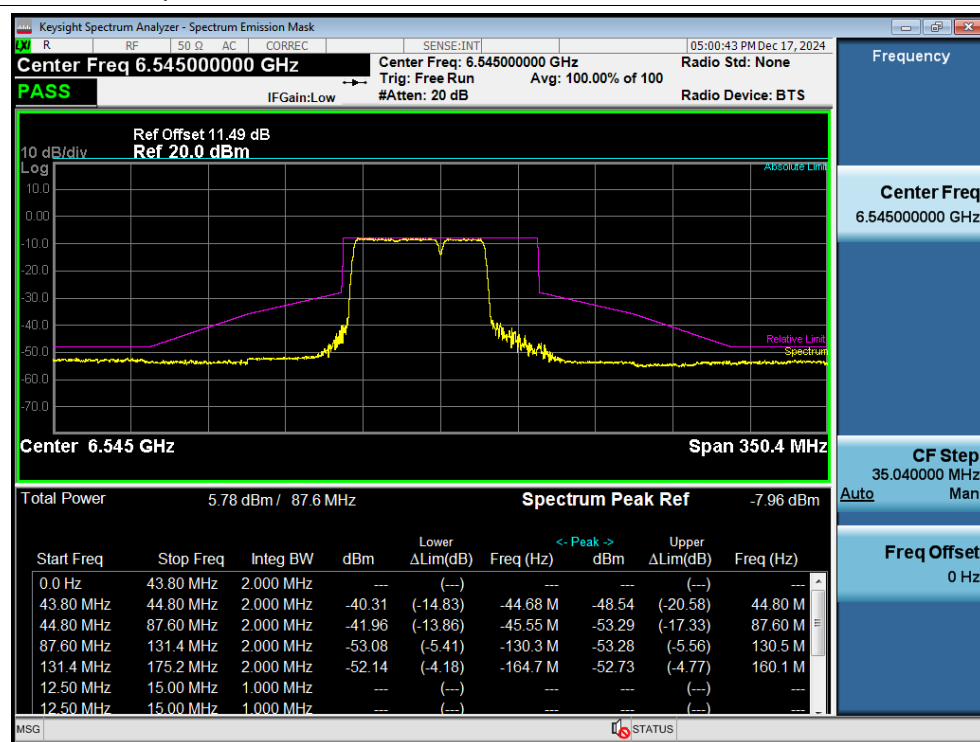
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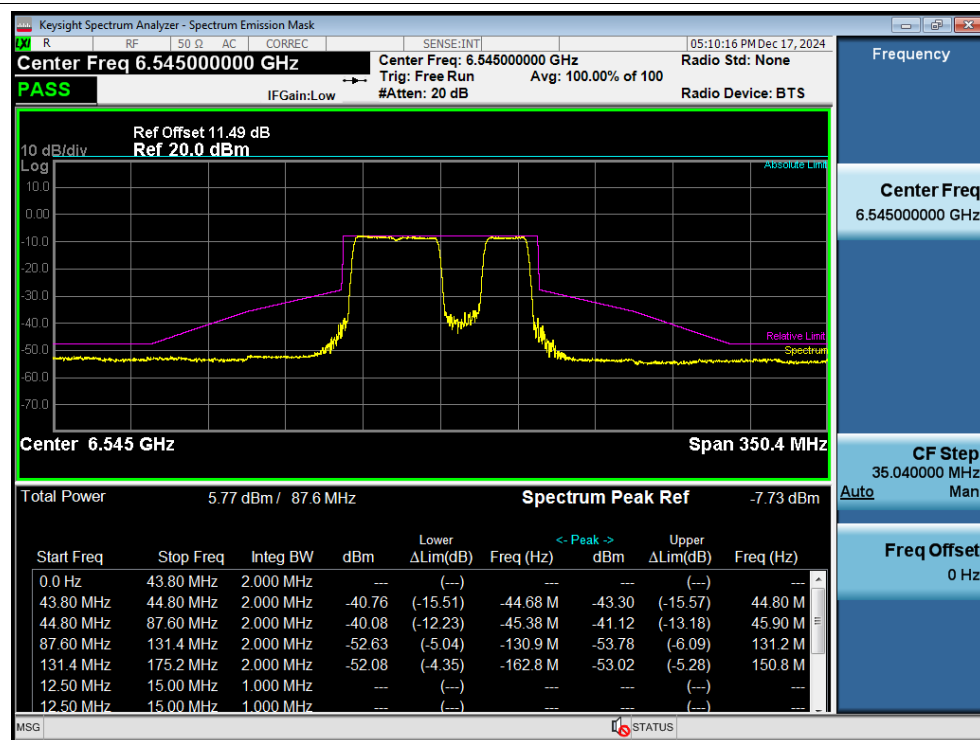
Power spectral mask 802.11be EHT80 484+242-Tones HIGH 6865MHz



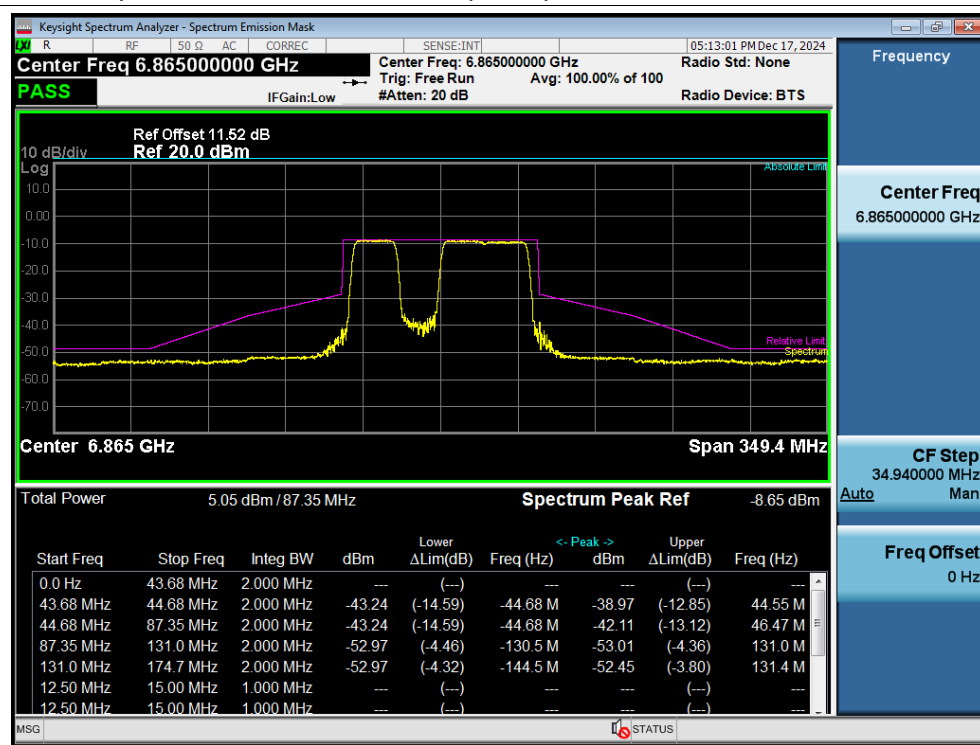
Power spectral mask 802.11be EHT80 484+242-Tones LOW 6545MHz



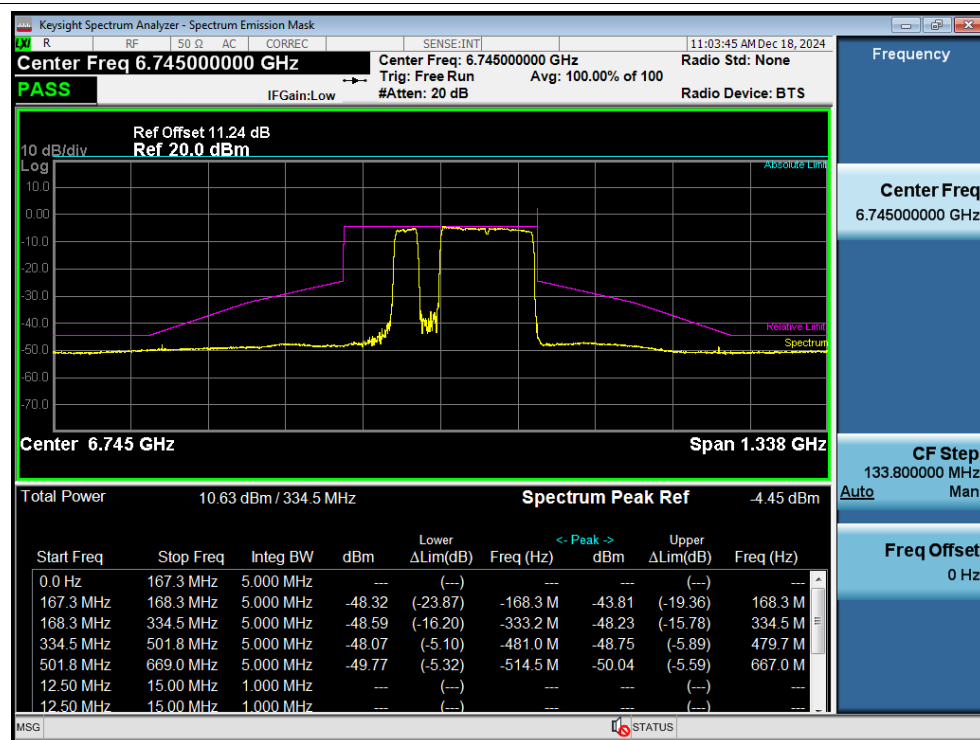
Power spectral mask 802.11be EHT(80-20) 242+484 Tone INDEX 3 6545MHz



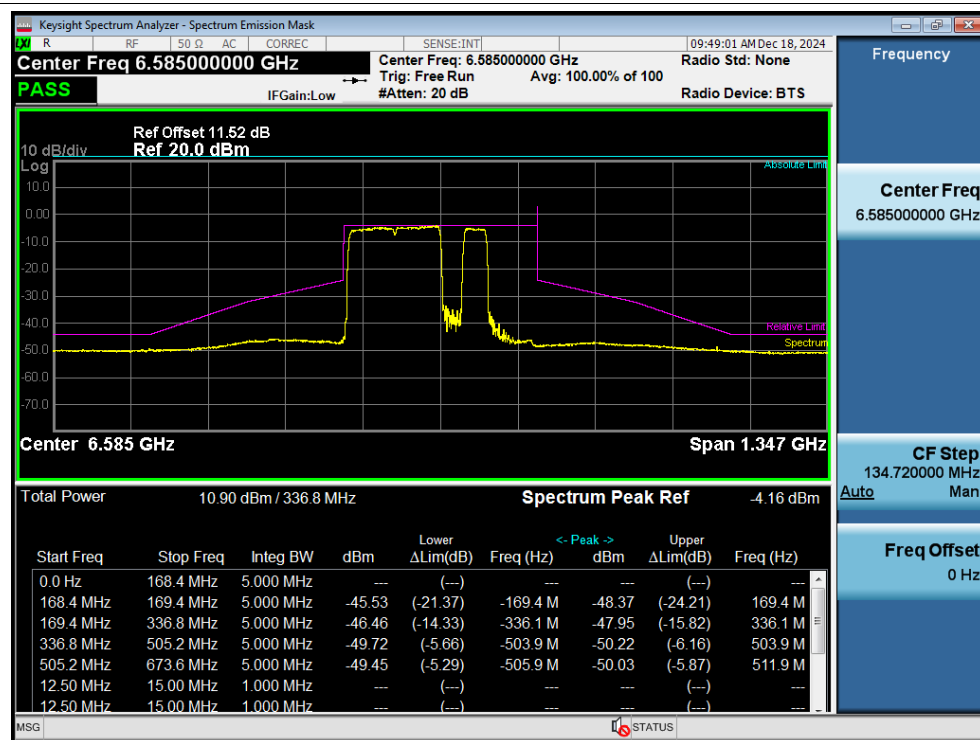
Power spectral mask 802.11be EHT(80-20) 242+484 Tone INDEX 2 6865MHz



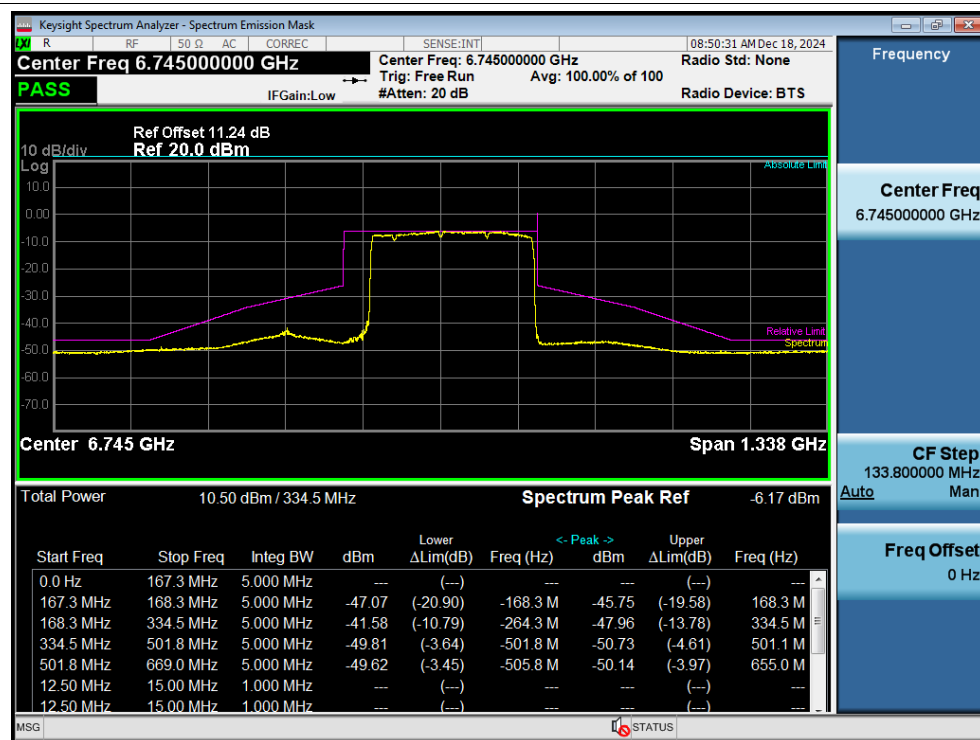
Power spectral mask 802.11be(320-120)996x2+484 Tone INDEX 8 6745MHz



Power spectral mask 802.11be(320-120)996x2+484 Tone INDEX 5 6585MHz



Power spectral mask 802.11be(320-40)484+996x3 Tone INDEX 1 6745MHz



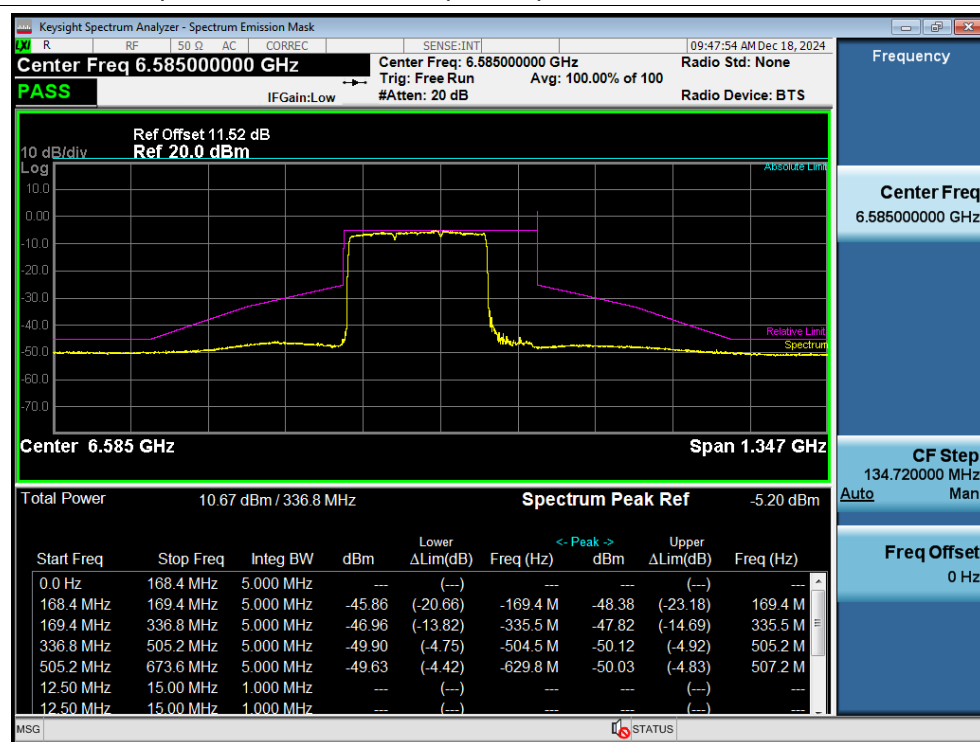
Power spectral mask 802.11be(320-40)484+996x3 Tone INDEX 8 6585MHz



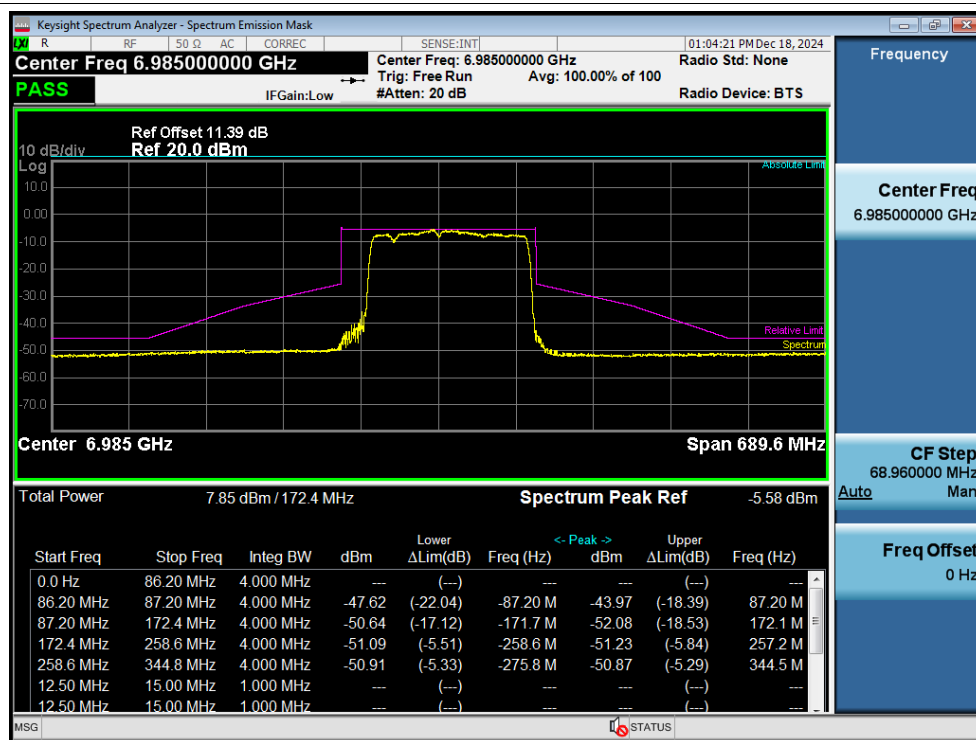
Power spectral mask 802.11be(320-80) 996x3 Tone INDEX 1 6745MHz



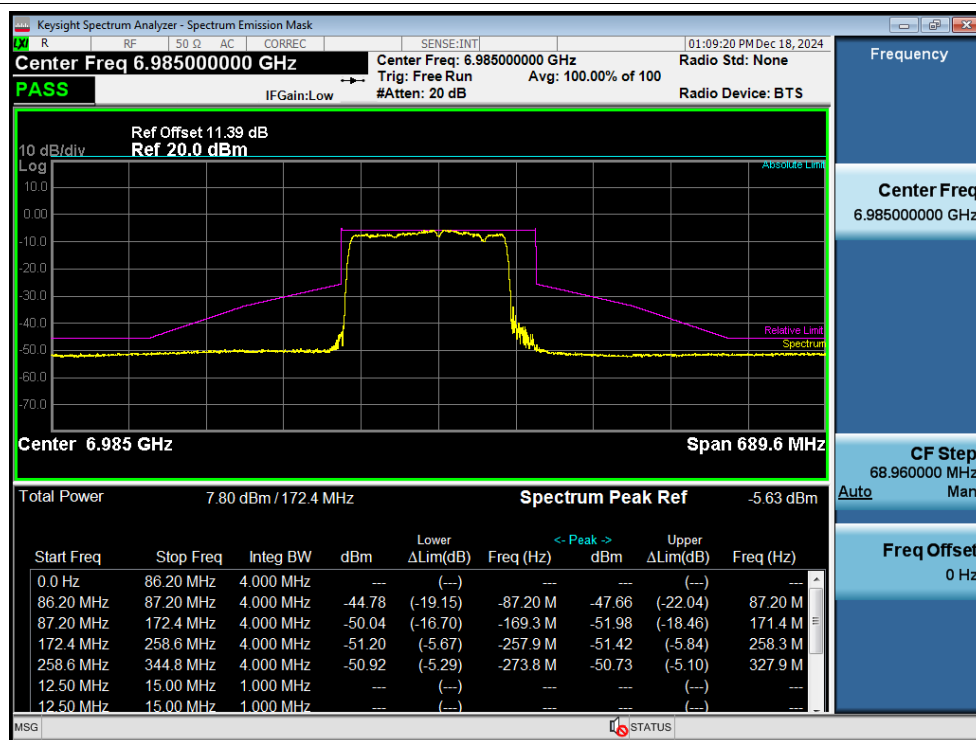
Power spectral mask 802.11be(320-80) 996x3 Tone INDEX 4 6585MHz



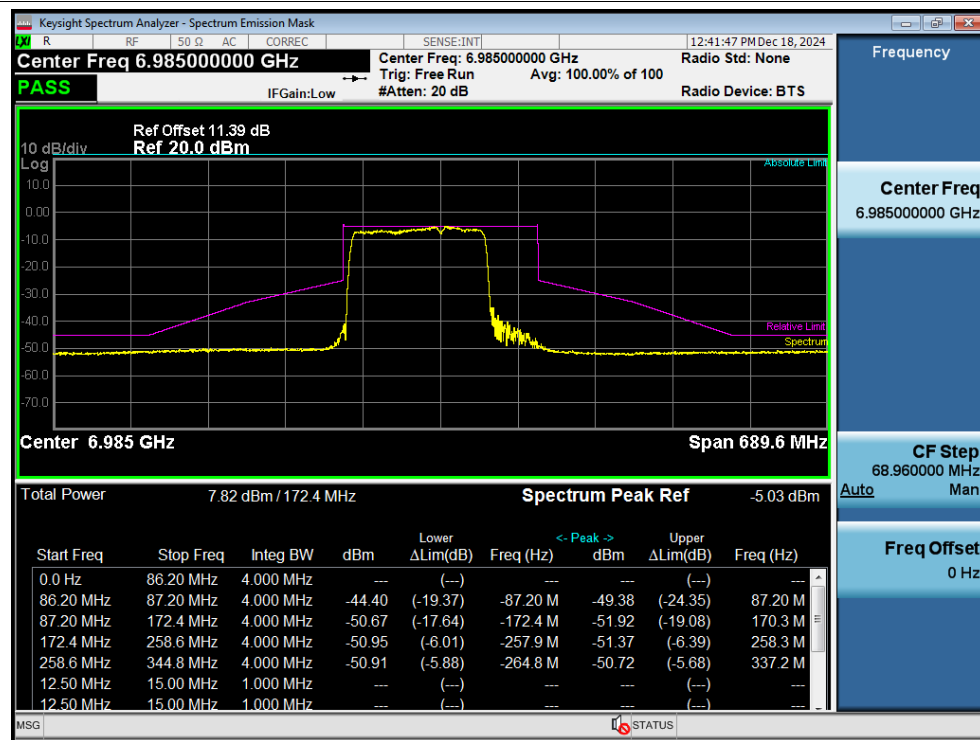
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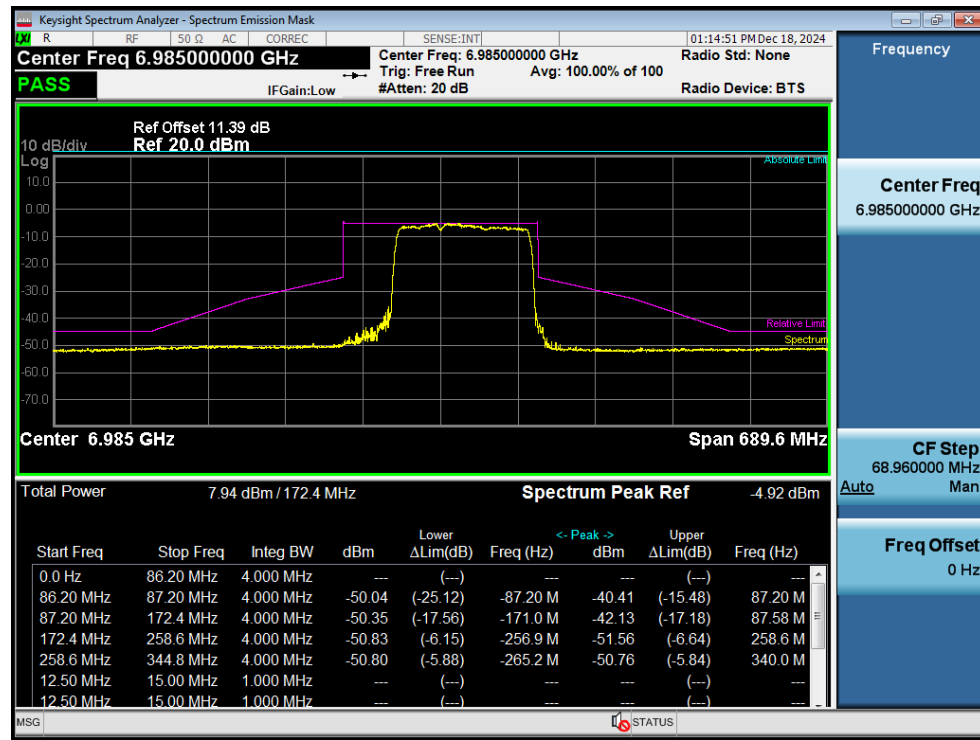
Power spectral mask 802.11be EHT(160-20)242+484+996 Tone INDEX 8 6985MHz



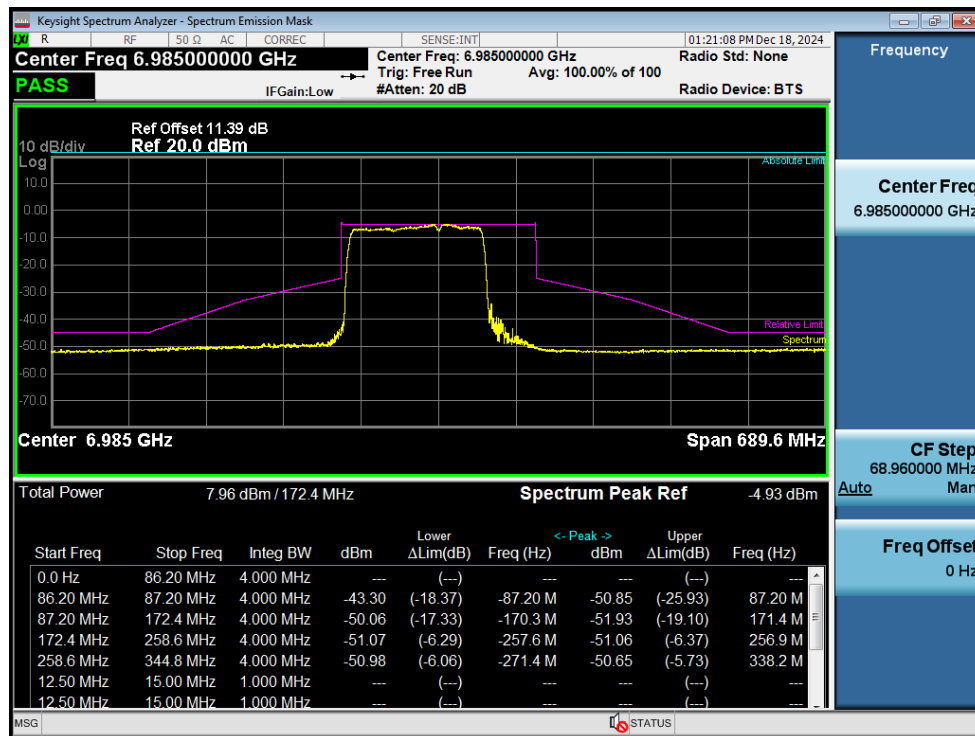
Power spectral mask 802.11be EHT160 996+484-Tones LOW 6985MHz



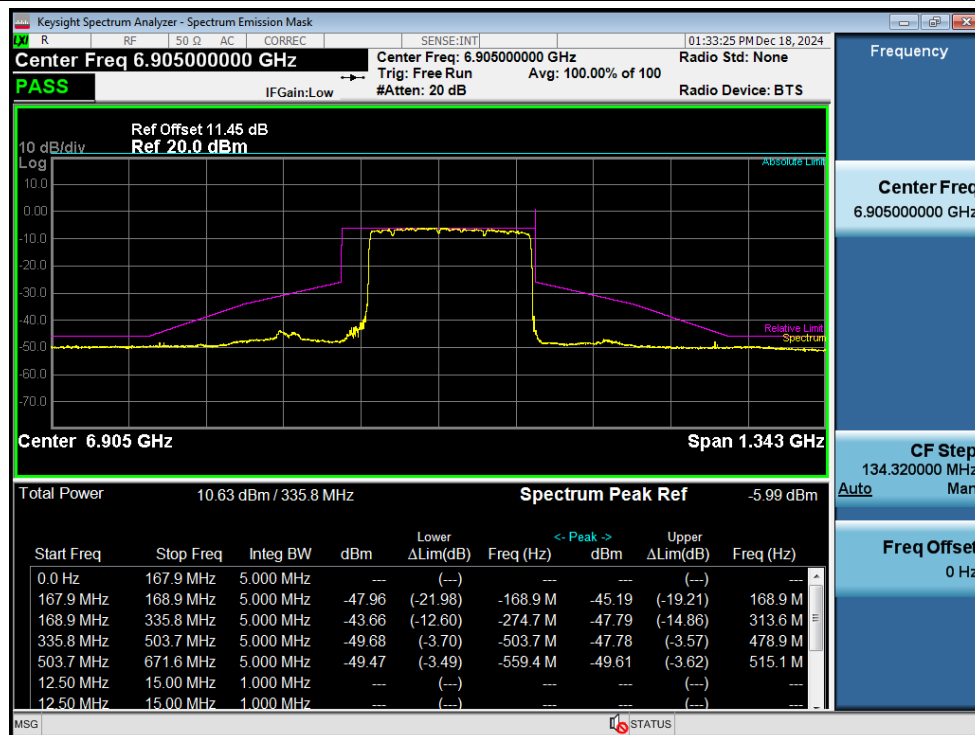
Power spectral mask 802.11be EHT(160-40)484+996 Tone INDEX 1 6985MHz



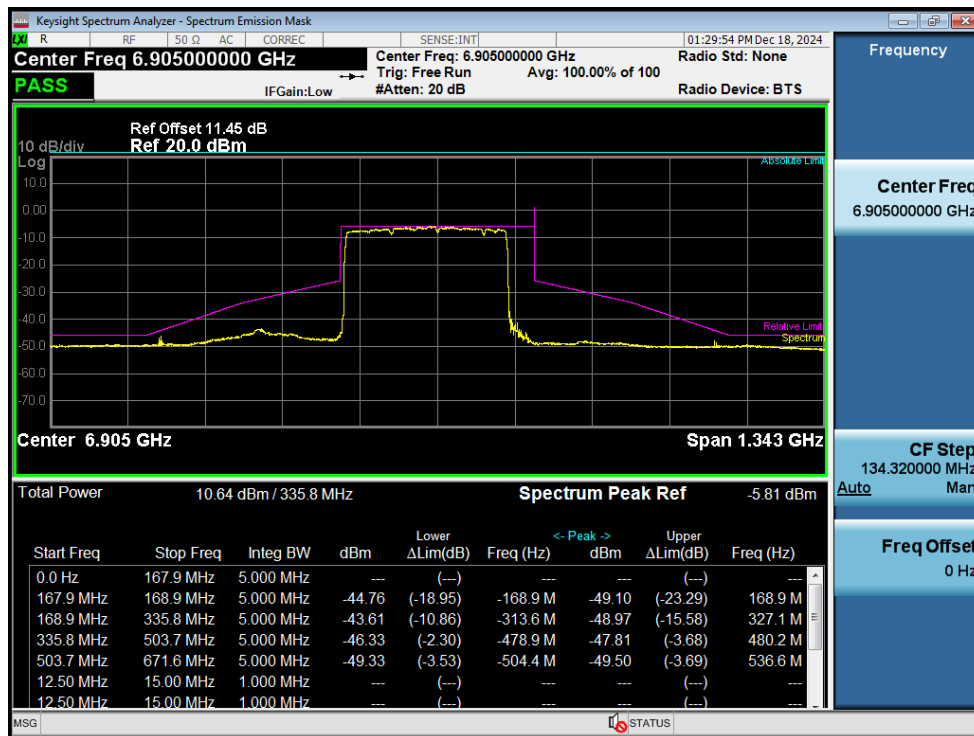
Power spectral mask 802.11be EHT(160-40)484+996 Tone INDEX 4 6985MHz



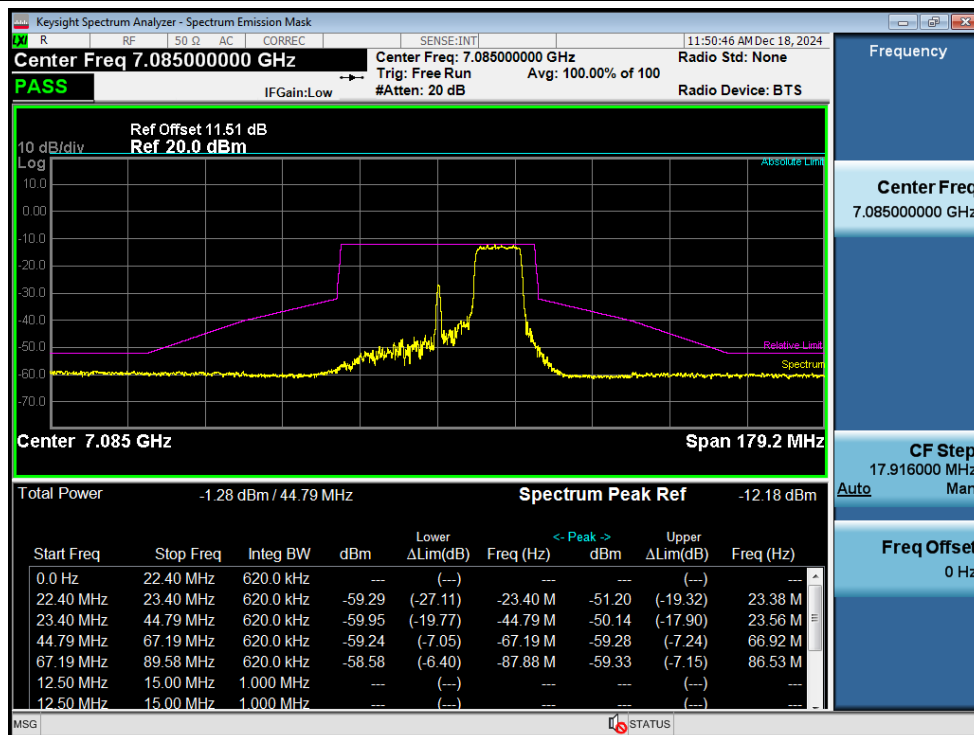
Power spectral mask 802.11be EHT320 484+996+996+996-Tones HIGH 6905MHz



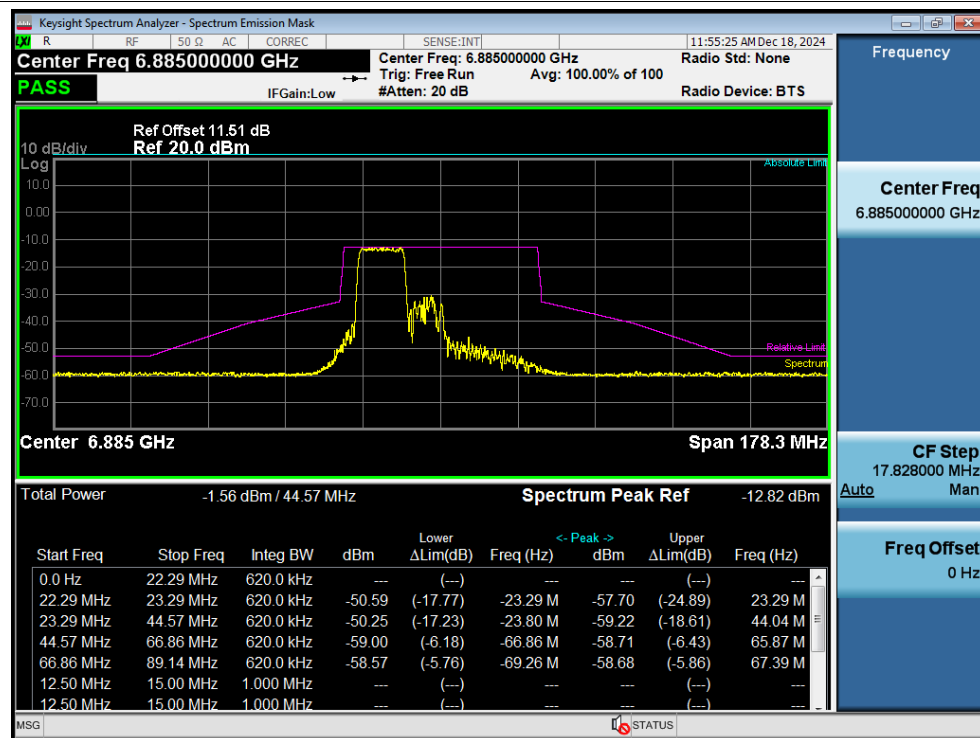
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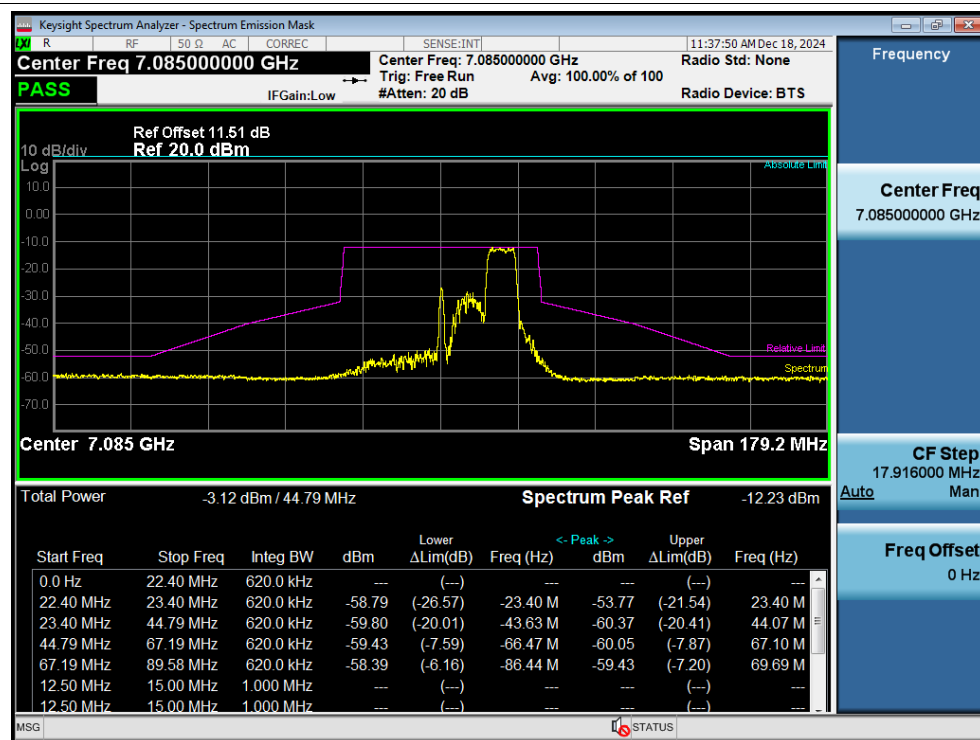
Power spectral mask 802.11be EHT40 106+26-Tones HIGH 7085MHz



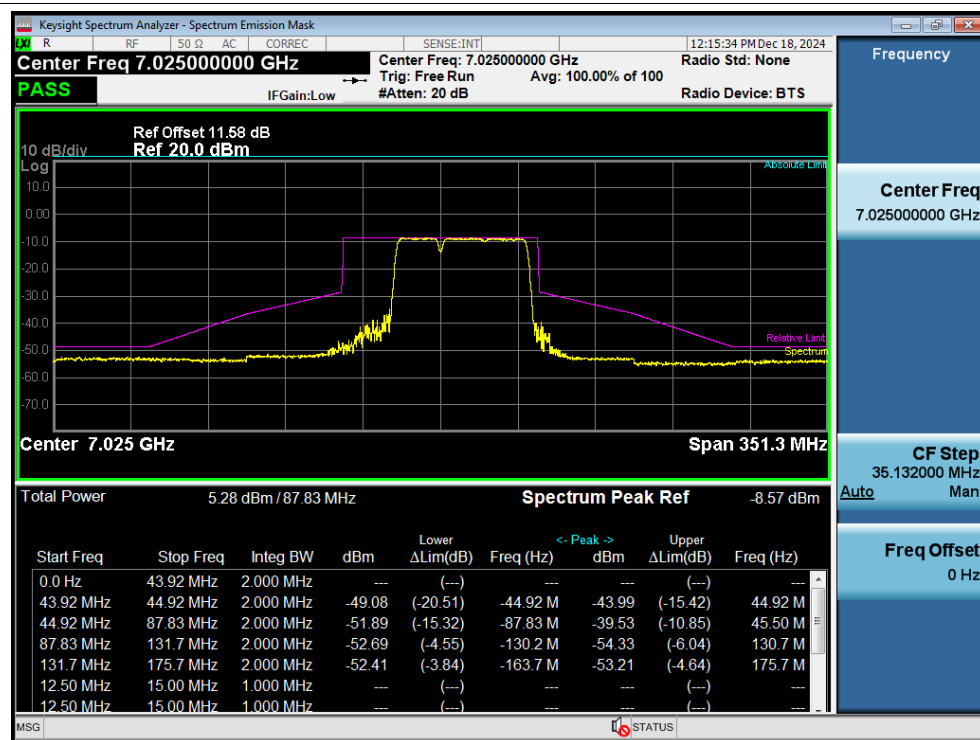
Power spectral mask 802.11be EHT40 106+26-Tones LOW 6885MHz



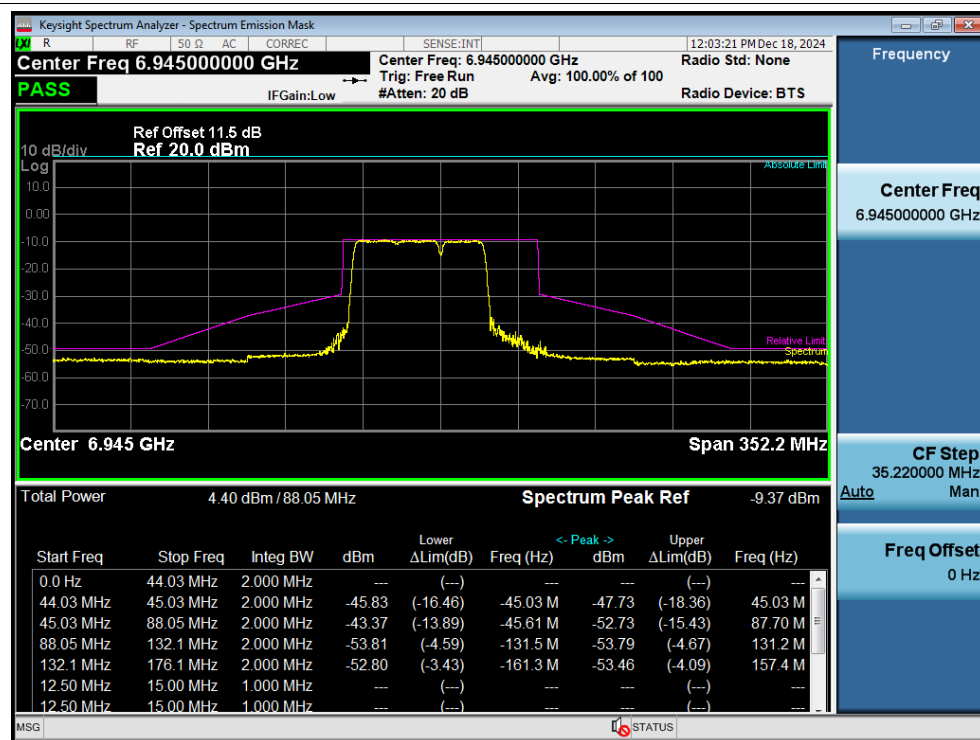
Power spectral mask 802.11be EHT40 52+26-Tones HIGH 7085MHz



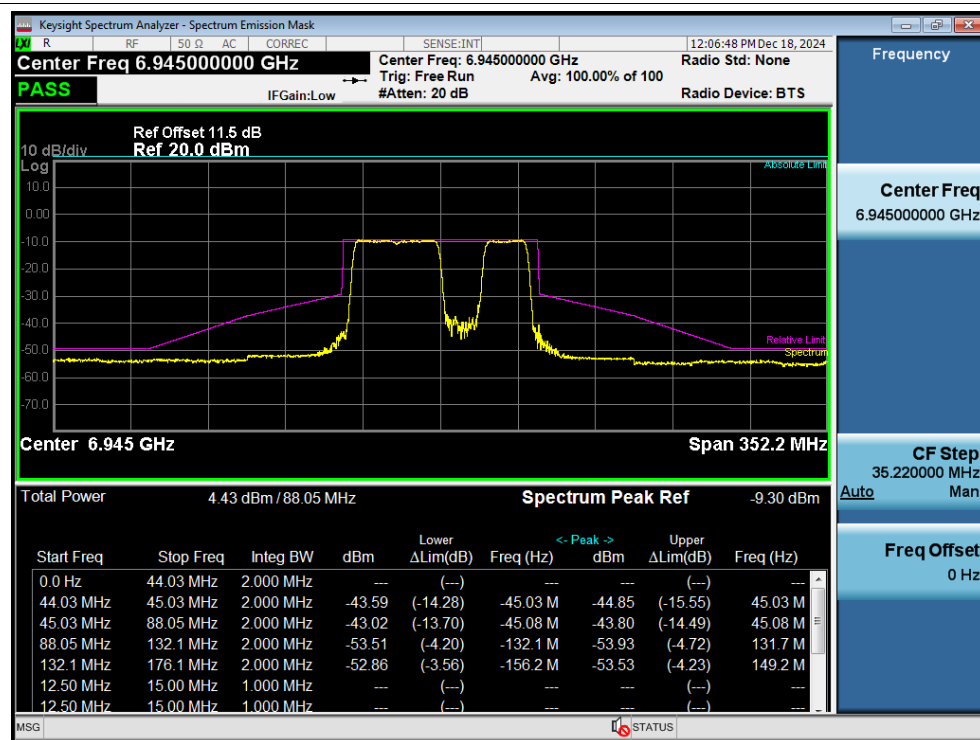
Power spectral mask 802.11be EHT80 484+242-Tones HIGH 7025MHz



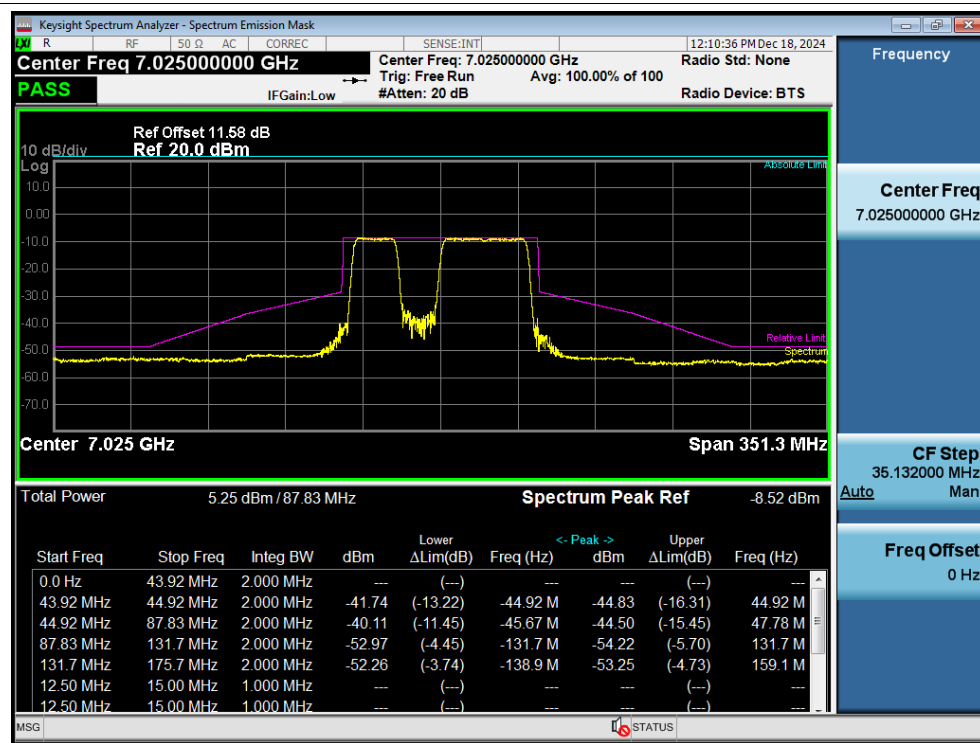
Power spectral mask 802.11be EHT80 484+242-Tones LOW 6945MHz



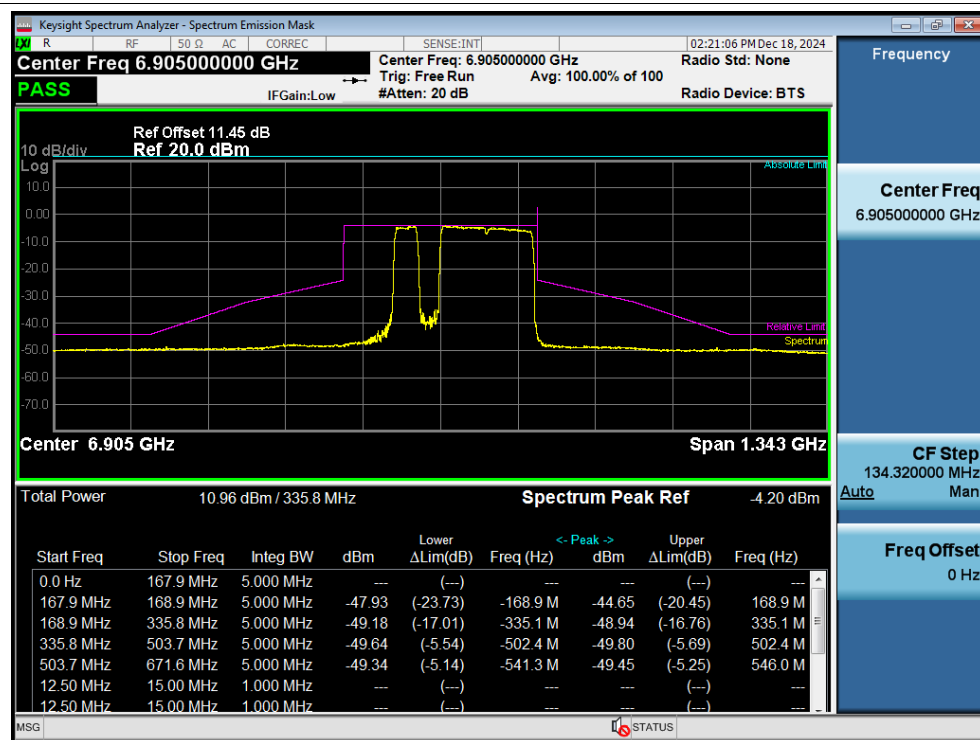
Power spectral mask 802.11be EHT(80-20) 242+484 Tone INDEX 3 6945MHz



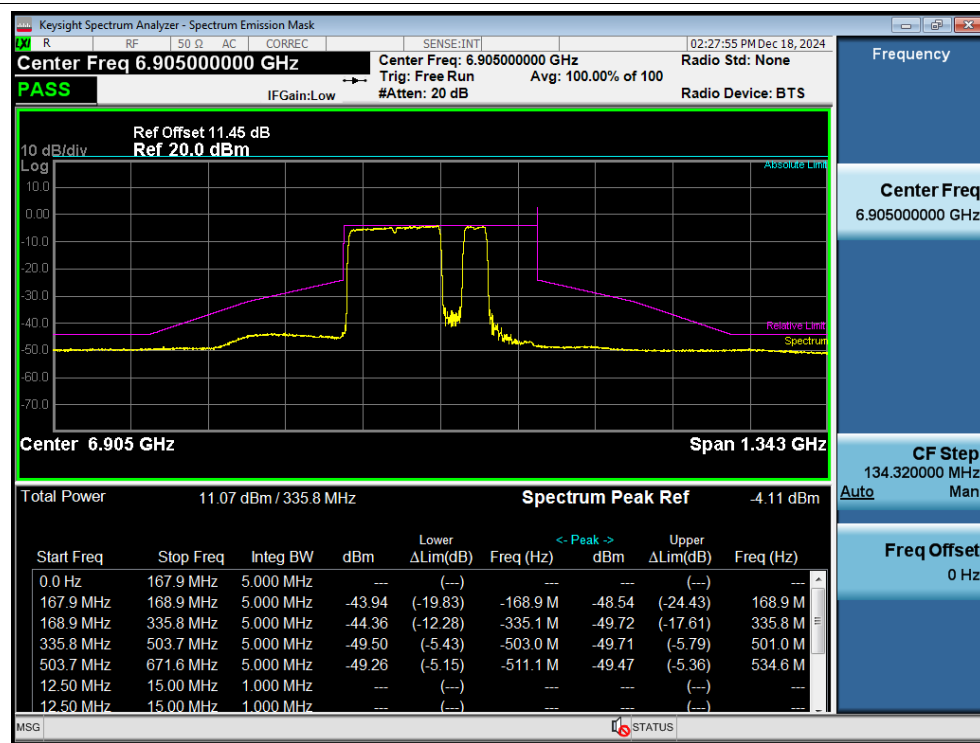
Power spectral mask 802.11be EHT(80-20) 242+484 Tone INDEX 2 7025MHz



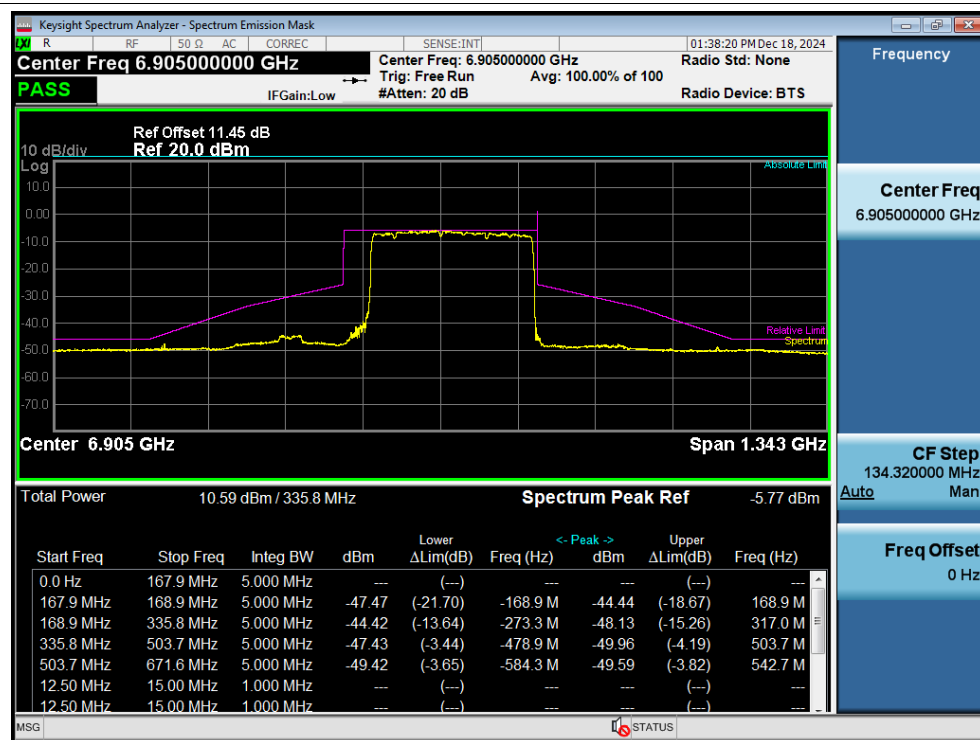
Power spectral mask 802.11be(320-120)996x2+484 Tone INDEX 8 6905MHz



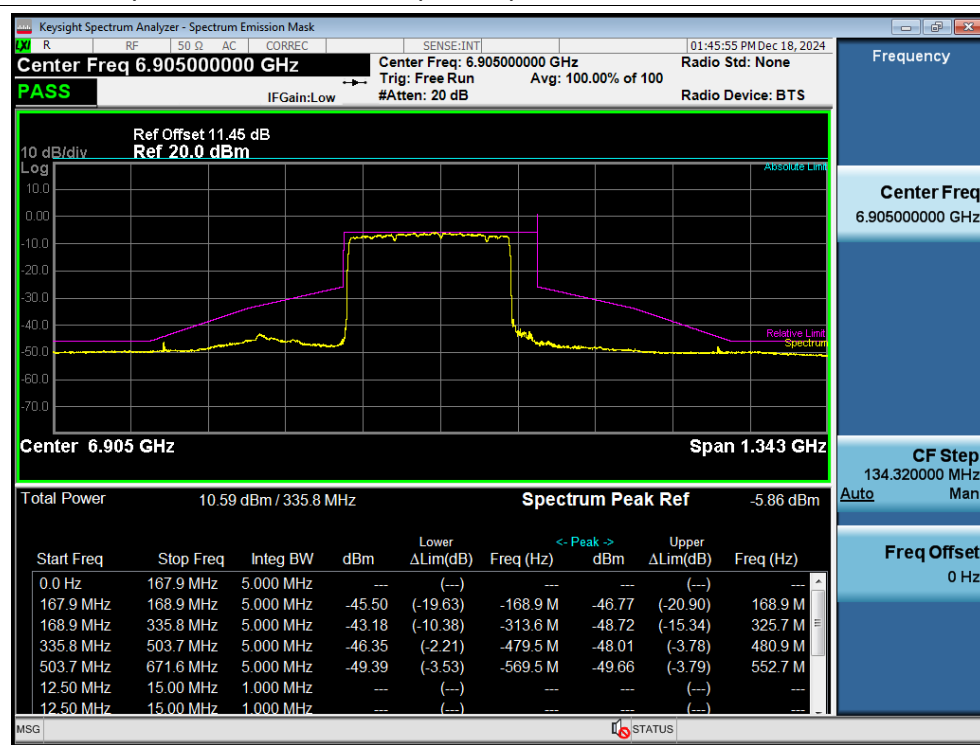
Power spectral mask 802.11be(320-120)996x2+484 Tone INDEX 8 6905MHz



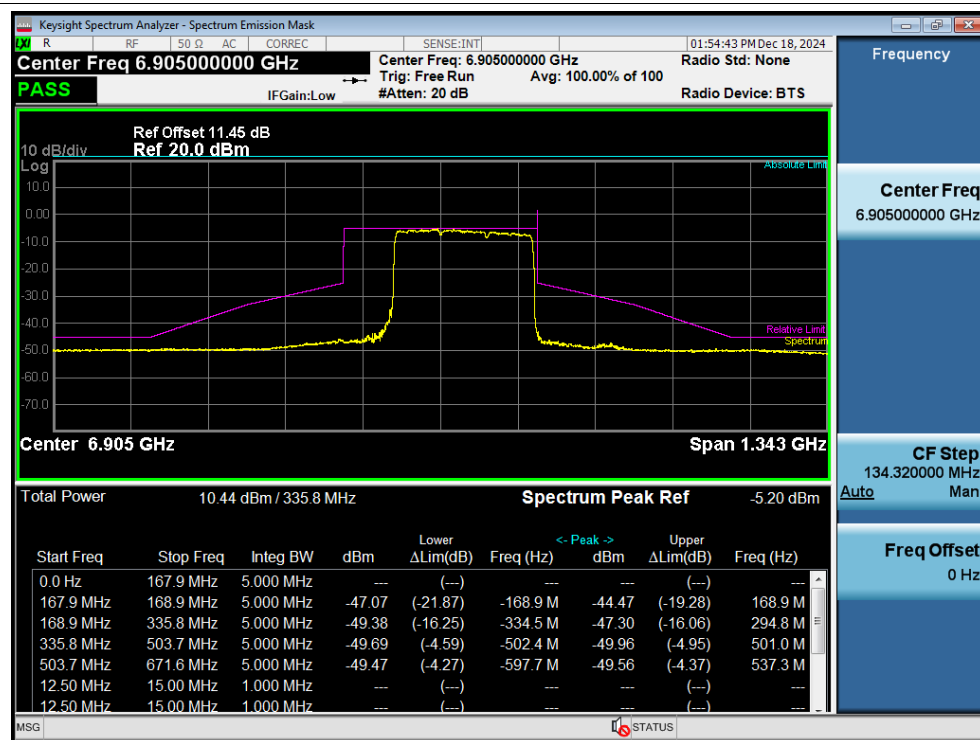
Power spectral mask 802.11be(320-40)484+996x3 Tone INDEX 1 6905MHz



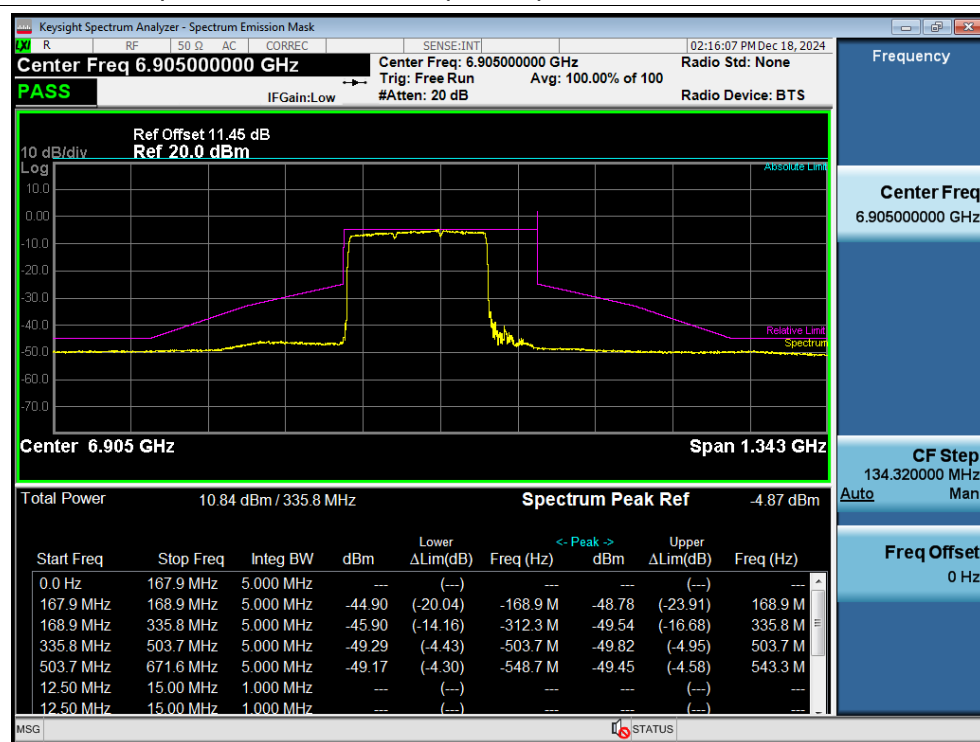
Power spectral mask 802.11be(320-40)484+996x3 Tone INDEX 8 6905MHz



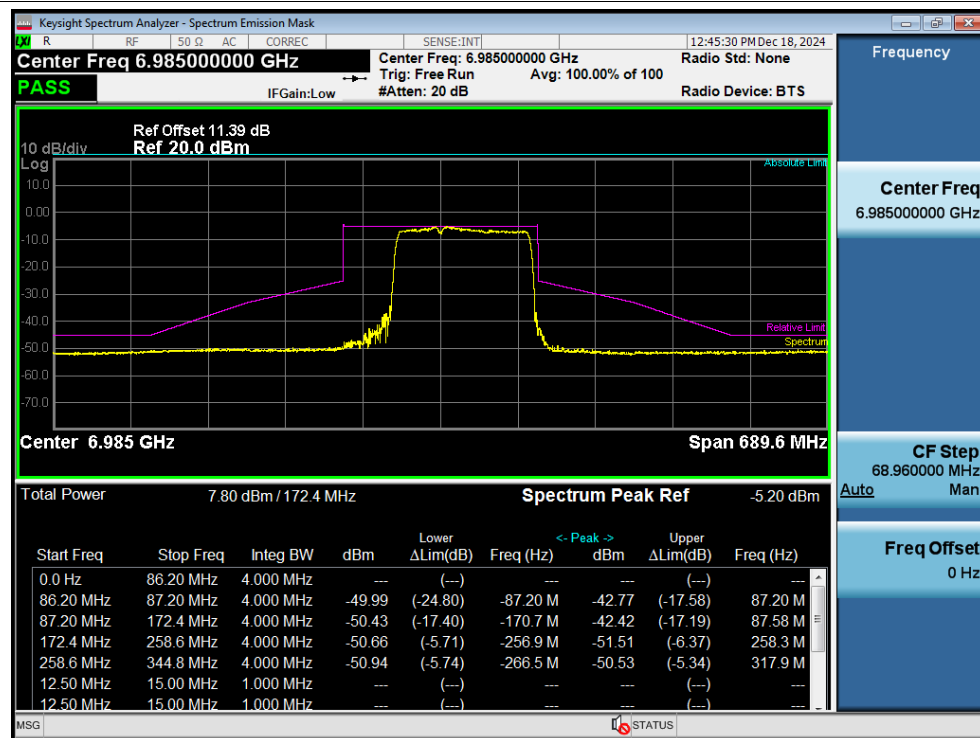
Power spectral mask 802.11be(320-80) 996x3 Tone INDEX 1 6905MHz



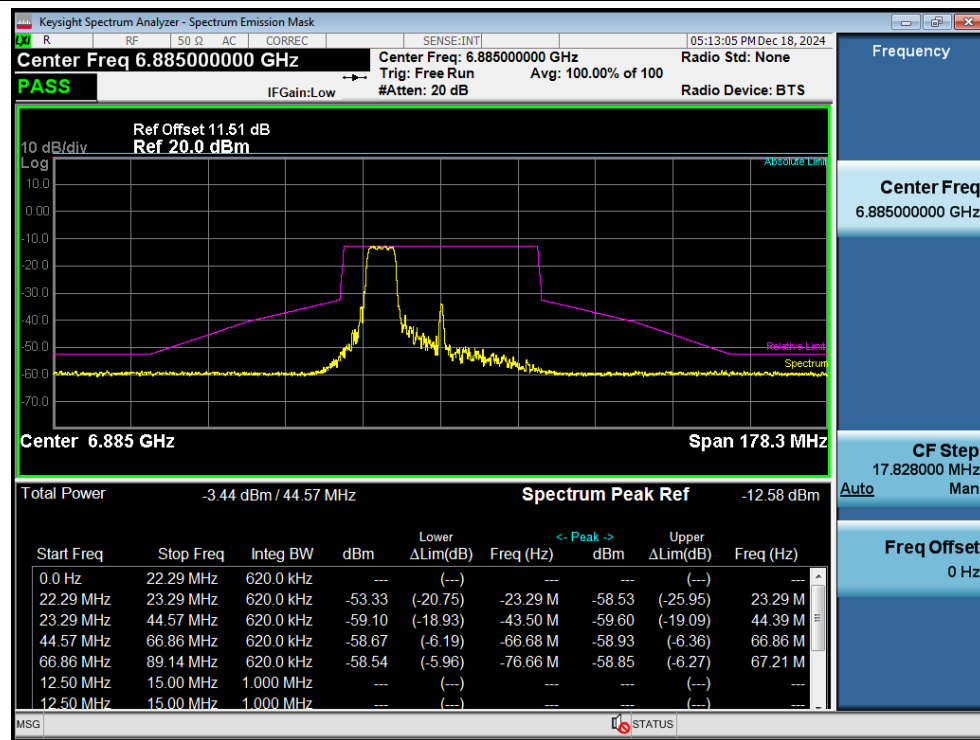
Power spectral mask 802.11be(320-80) 996x3 Tone INDEX 4 6905MHz



Power spectral mask 802.11be EHT160 996+484-Tones HIGH 6985MHz



Power spectral mask 802.11be EHT40 52+26-Tones LOW 6885MHz



5.6. Contention-Based Protocol

Ambient Condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

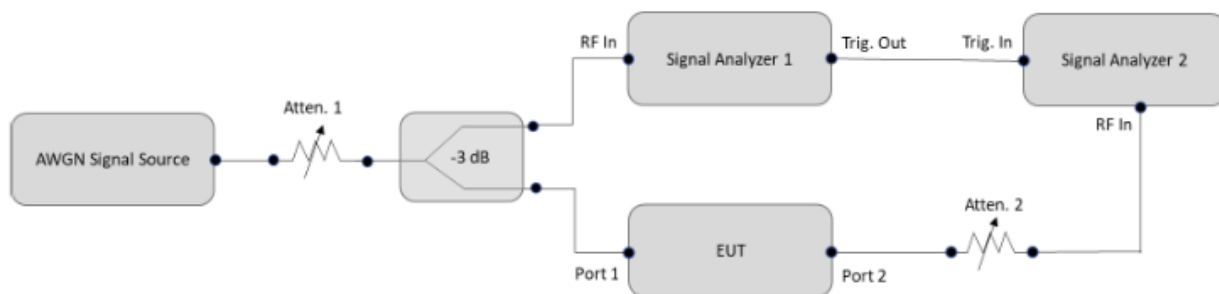
Method of Measurement

- Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation o not overload the signal analyzer 2 receiver.
- Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2 \times BW_{Inc}$	Once	Contained within BW_{EUT}
$2 \times BW_{Inc} < BW_{EUT} \leq 4 \times BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4 \times BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- (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 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

Test Setup



Limits

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62dBm (The threshold is referenced to a 0dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

Test Results:
U-NII-5

Wi-Fi CBP															
Mode	UNII BAND	EUT frequency	BW EUT	Incumbent frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limit	Verdict
		Fc1[MHz]	[MHz]	Fc2[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				p/f
11be	U-NII-5	ch73/6315	20	6315	10	OFF	-55	2.52	-16.26	-73.78	-62	10/10	100	90%	p
						Minimal	-56	2.52	-16.26	-74.78	-62	10/10	100	90%	p
						ON	-59	2.52	-16.26	-77.78	-62	10/10	100	90%	p
11be	U-NII-6	ch101/6455	20	6455	10	OFF	-55.5	2.53	-15.67	-73.7	-62	10/10	100	90%	p
						Minimal	-56.5	2.53	-15.67	-74.7	-62	10/10	100	90%	p
						ON	-59.5	2.53	-15.67	-77.7	-62	10/10	100	90%	p
11be	U-NII-7	ch149/6695	20	6695	10	OFF	-56	2.66	-14.95	-73.61	-62	10/10	100	90%	p
						Minimal	-57	2.66	-14.95	-74.61	-62	10/10	100	90%	p
						ON	-58	2.66	-14.95	-75.61	-62	10/10	100	90%	p
11be	U-NII-8	ch213/7015	20	7015	10	OFF	-56.5	2.7	-15.11	-74.31	-62	10/10	100	90%	p
						Minimal	-58.5	2.7	-15.11	-76.31	-62	10/10	100	90%	p
						ON	-61	2.7	-15.11	-78.81	-62	10/10	100	90%	p

Note :

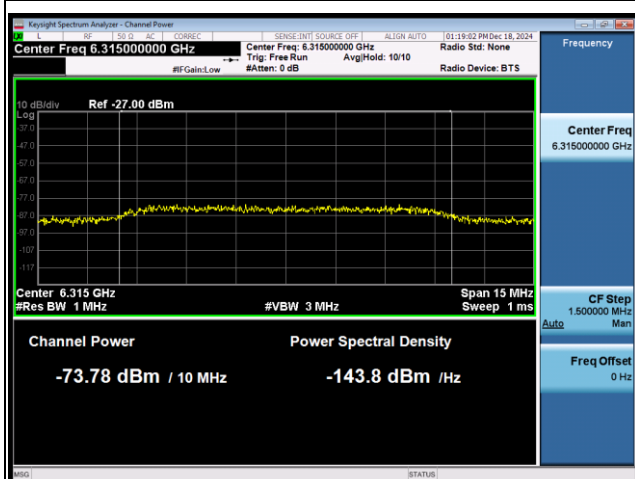
- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

Wi-Fi CBP															
Mode	UNII BAND	EUT frequency	BW EUT	Incumbent frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limt	Verdict
		Fc1[MHz]	[MHz]	Fc2[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				p/f
11be	U-NII-5	ch63/6265	320	6110	10	OFF	-46	2.52	-15.81	-64.33	-62	10/10	100	90%	p
						Minimal	-47	2.52	-15.81	-65.33	-62	10/10	100	90%	p
						ON	-51.5	2.52	-15.81	-69.83	-62	10/10	100	90%	p
				6265	10	OFF	-45	2.52	-15.09	-62.61	-62	10/10	100	90%	p
						Minimal	-46	2.52	-15.09	-63.61	-62	10/10	100	90%	p
						ON	-49.5	2.52	-15.09	-67.11	-62	10/10	100	90%	p
				6420	10	OFF	-45.5	2.52	-15.84	-63.86	-62	10/10	100	90%	p
						Minimal	-46.5	2.52	-15.84	-64.86	-62	10/10	100	90%	p
						ON	-50	2.52	-15.84	-68.36	-62	10/10	100	90%	p
11be	U-NII-7	ch95/6425	320	6270	10	OFF	-48.5	2.52	-14.95	-65.97	-62	10/10	100	90%	p
						Minimal	-50	2.52	-14.95	-67.47	-62	10/10	100	90%	p
						ON	-52	2.52	-14.95	-69.47	-62	10/10	100	90%	p
				6425	10	OFF	-45.5	2.52	-15.85	-63.87	-62	10/10	100	90%	p
						Minimal	-47	2.52	-15.85	-65.37	-62	10/10	100	90%	p
						ON	-50	2.52	-15.85	-68.37	-62	10/10	100	90%	p
				6580	10	OFF	-48	2.66	-14.94	-65.6	-62	10/10	100	90%	p
						Minimal	-49	2.66	-14.94	-66.6	-62	10/10	100	90%	p
						ON	-52.5	2.66	-14.94	-70.1	-62	10/10	100	90%	p
11be	U-NII-8	ch159/6745	320	6590	10	OFF	-53	2.66	-14.92	-70.58	-62	10/10	100	90%	p
						Minimal	-54	2.66	-14.92	-71.58	-62	10/10	100	90%	p
						ON	-56	2.66	-14.92	-73.58	-62	10/10	100	90%	p
				6745	10	OFF	-47	2.66	-16.05	-65.71	-62	10/10	100	90%	p
						Minimal	-48	2.66	-16.05	-66.71	-62	10/10	100	90%	p
						ON	-51.5	2.66	-16.05	-70.21	-62	10/10	100	90%	p
				6900	10	OFF	-52	2.7	-15.37	-70.07	-62	10/10	100	90%	p
						Minimal	-53	2.7	-15.37	-71.07	-62	10/10	100	90%	p
						ON	-56	2.7	-15.37	-74.07	-62	10/10	100	90%	p

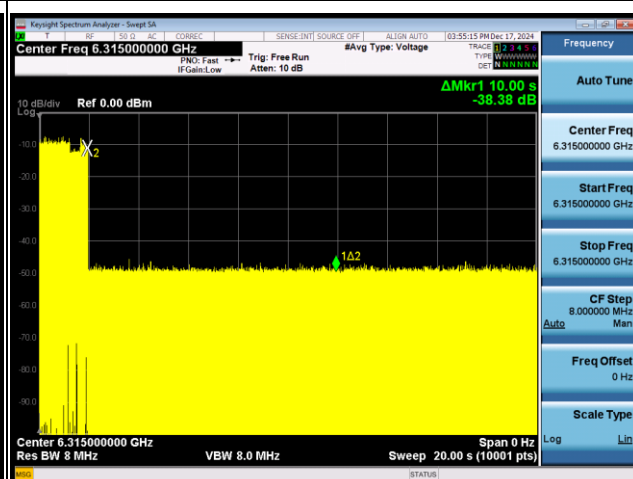
Note :

- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

802.11be HE20 CH73 Middle 6315 MHz

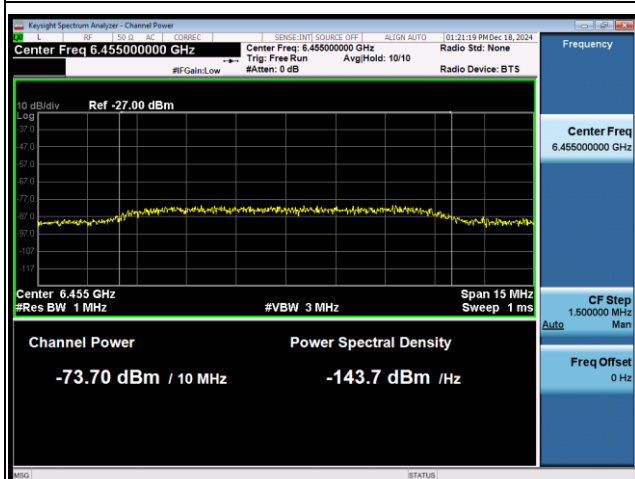


Detection Power

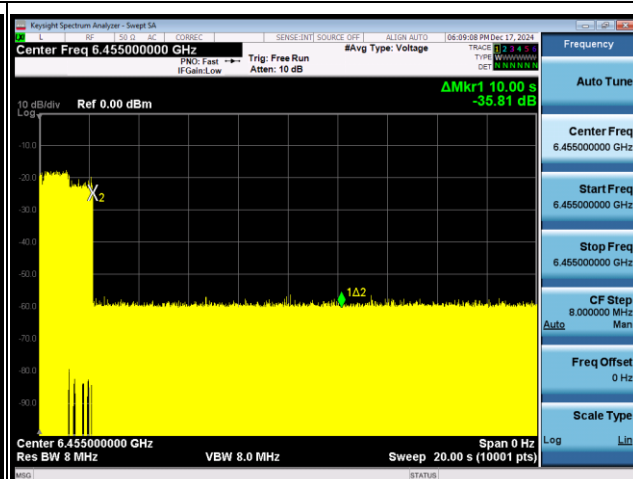


EUT ceased transmission

802.11be HE20 CH101 Middle 6455 MHz

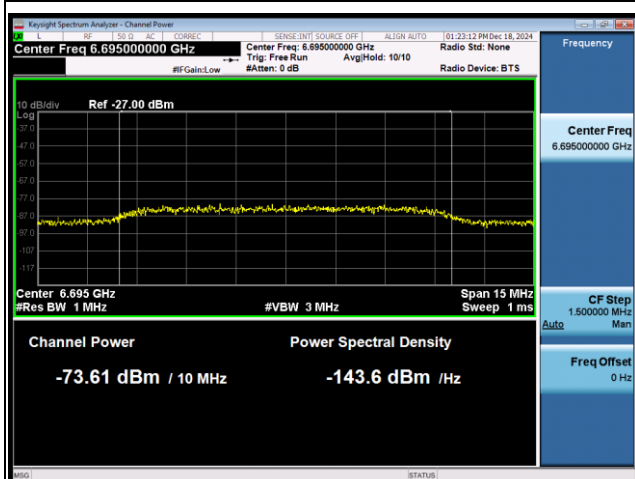


Detection Power

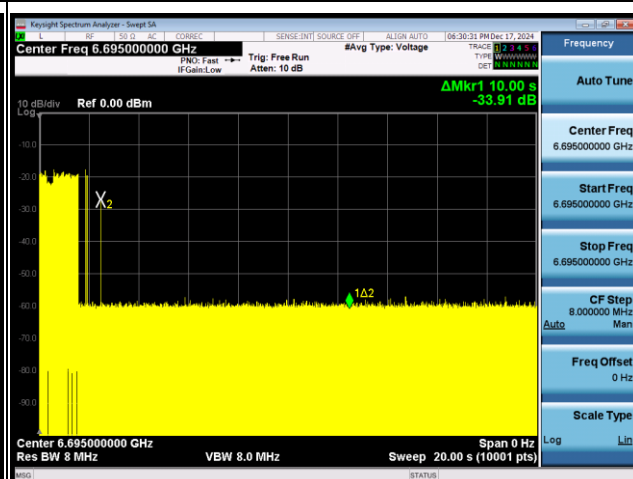


EUT ceased transmission

802.11be HE20 CH149 Middle 6695 MHz

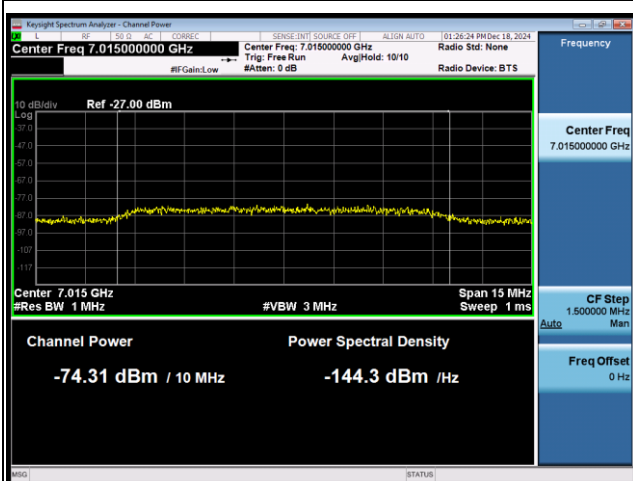


Detection Power

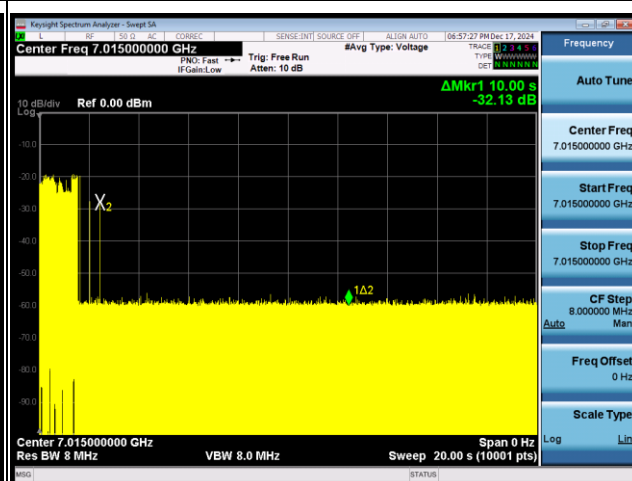


EUT ceased transmission

802.11be HE20 CH213 Middle 7015 MHz

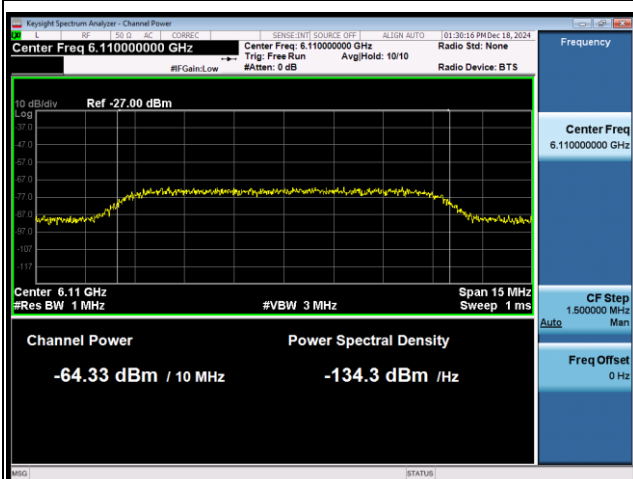


Detection Power

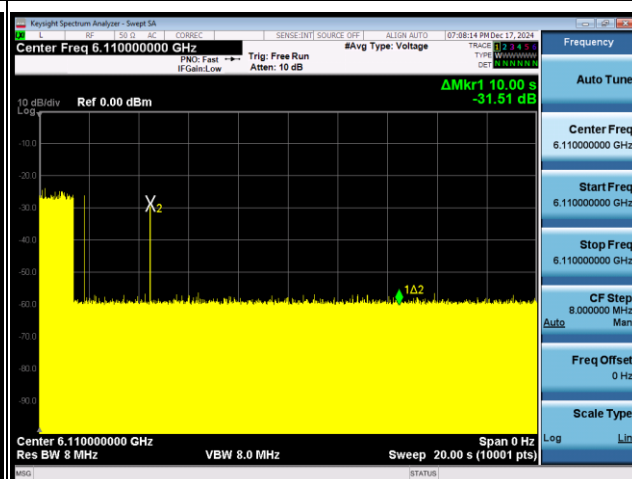


EUT ceased transmission

802.11be HE320 CH63 Low Edge 6110 MHz

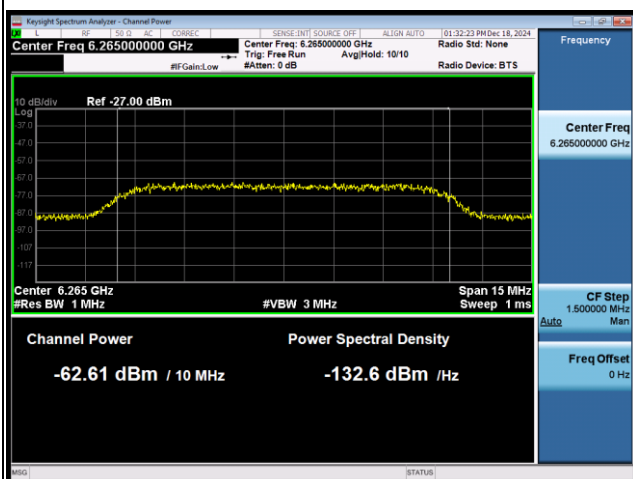


Detection Power

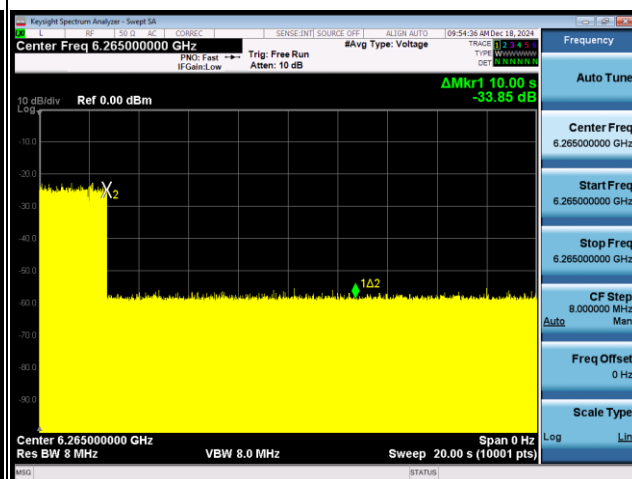


EUT ceased transmission

802.11be HE320 CH63 Middle 6265 MHz

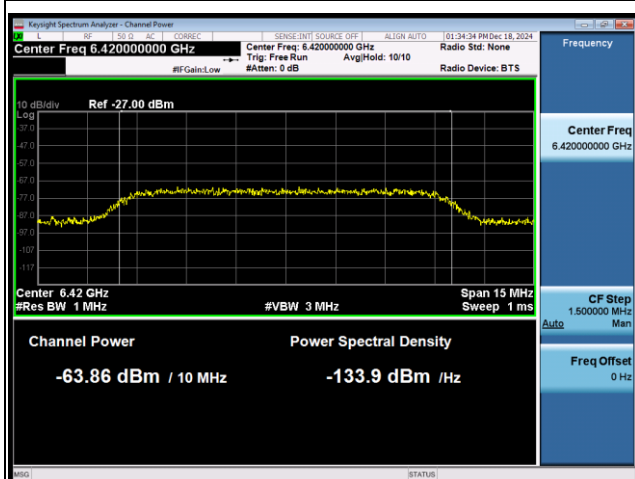


Detection Power

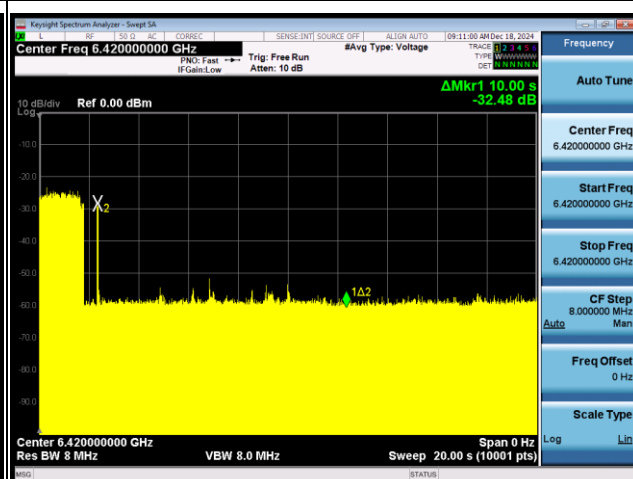


EUT ceased transmission

802.11be HE320 CH63 High Edge 6420 MHz

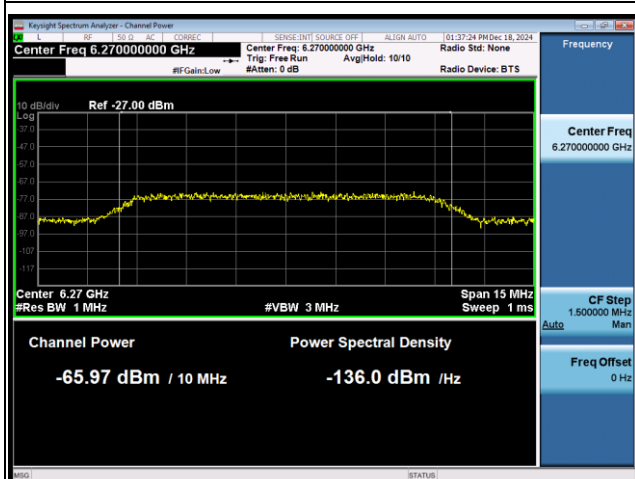


Detection Power

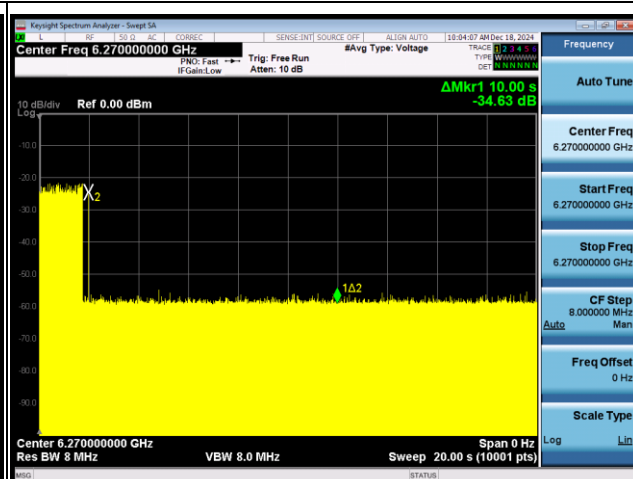


EUT ceased transmission

802.11be HE320 CH95 Low Edge 6270 MHz

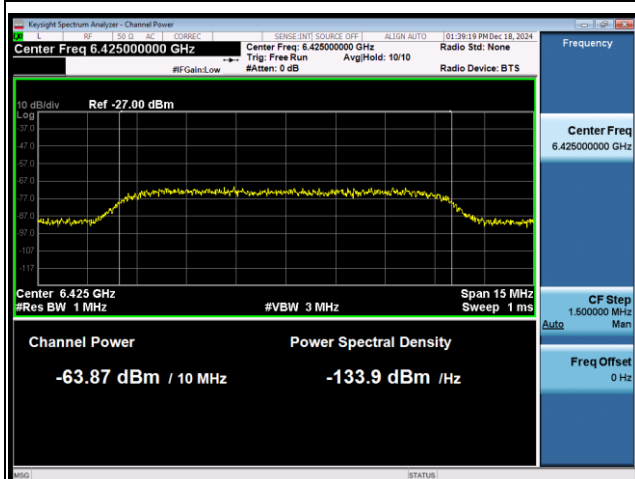


Detection Poer

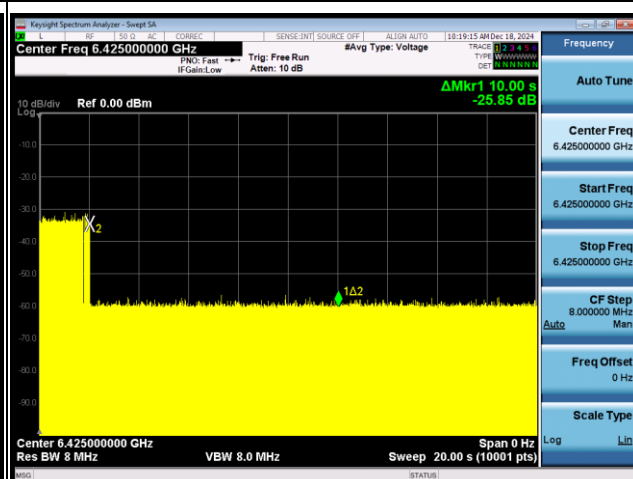


EUT ceased transmission

802.11be HE320 CH95 Middle 6425 MHz

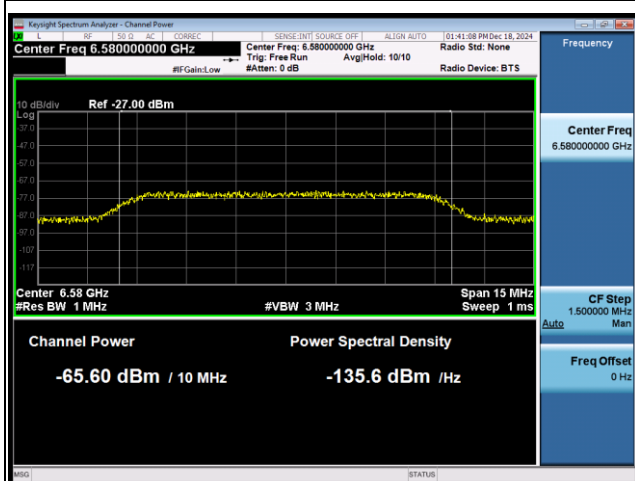


Detection Power

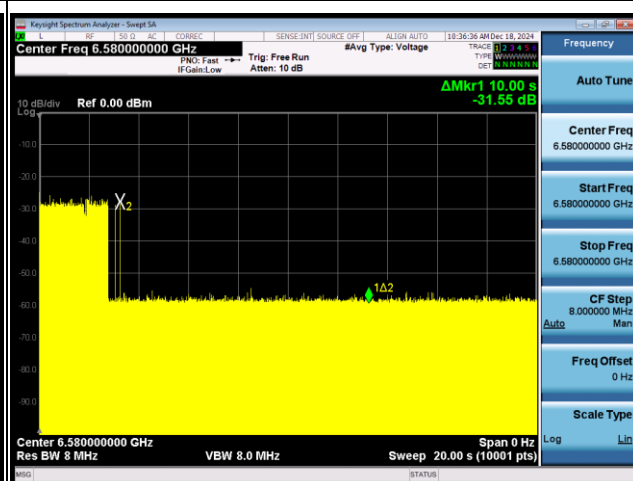


EUT ceased transmission

802.11be HE320 CH95 High Edge 6580 MHz

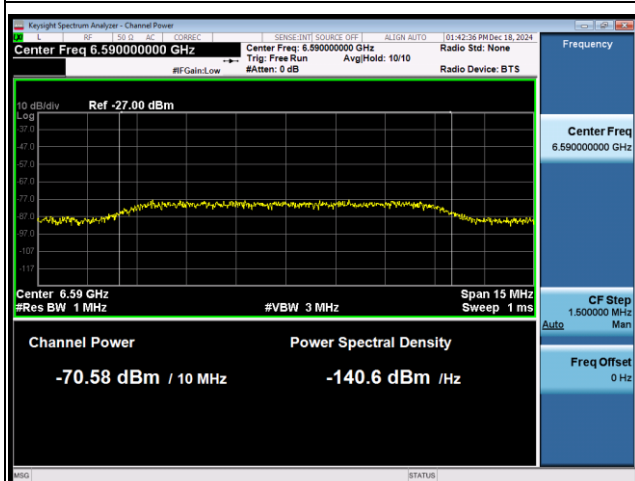


Detection Power

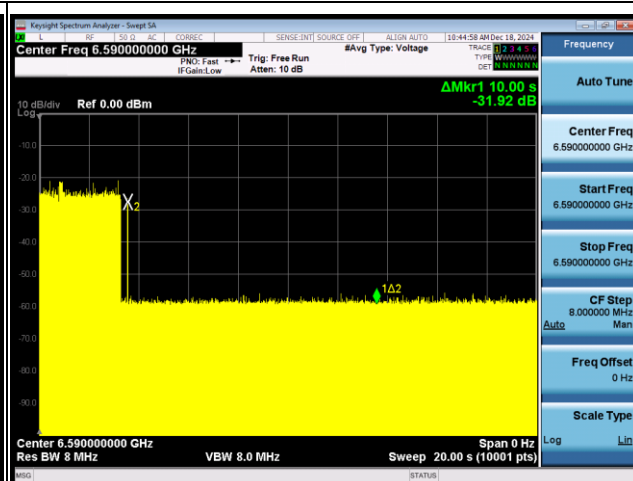


EUT ceased transmission

802.11be HE320 CH159 Low Edge 6590 MHz

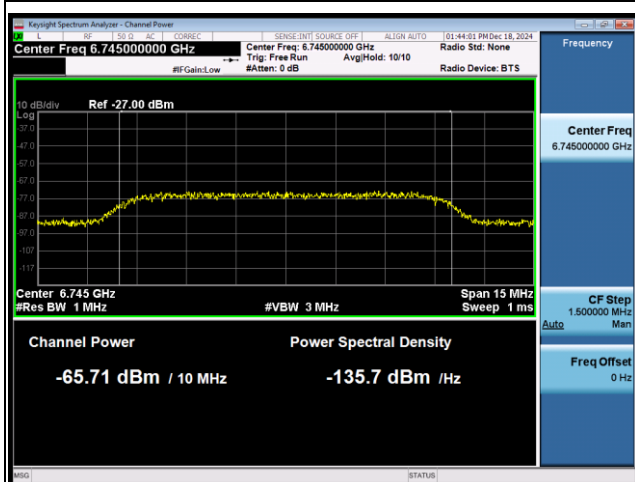


Detection Power

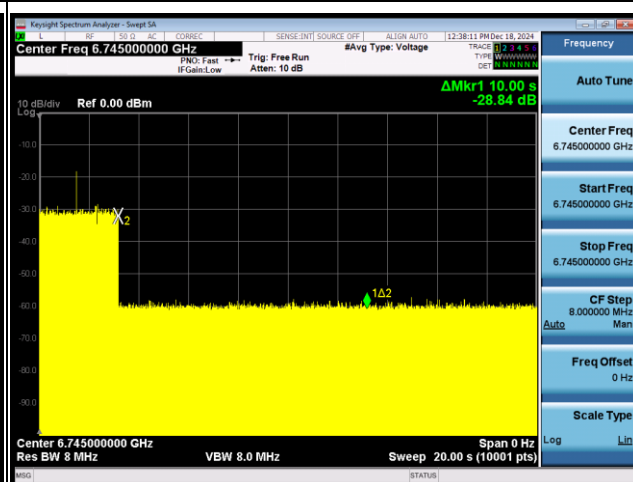


EUT ceased transmission

802.11be HE320 CH159 Middle 6745 MHz



Detection Power



EUT ceased transmission