

FCC Part 47 §15.247 2400-2483.5 MHz 2021

Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer: SA FSV3044 (SA FSV3044) @ VISA (ADR
TCPIP::192.168.48.148::inst0::instr), SN 1330.5000K43/101255, FW
1.60SP1

OSP: OSP-B157W8PLUS (OSP-B157W8PLUS) @ VISA (ADR
TCPIP::192.168.48.157::inst0::instr), SN 1527.1144.05 / 100850, FW
2.10.0.23

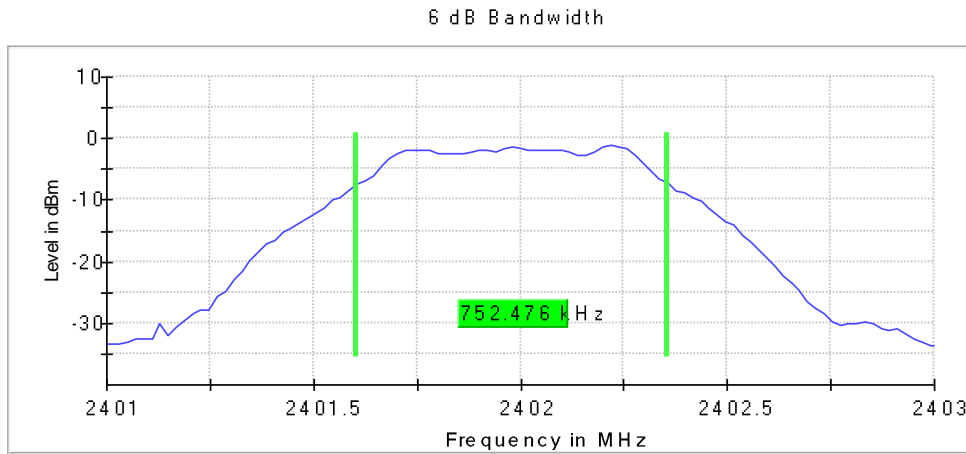
Minimum Emission Bandwidth 6 dB (2402 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.752476	0.500000	---	2401.603960	2402.356436

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-1.2	PASS



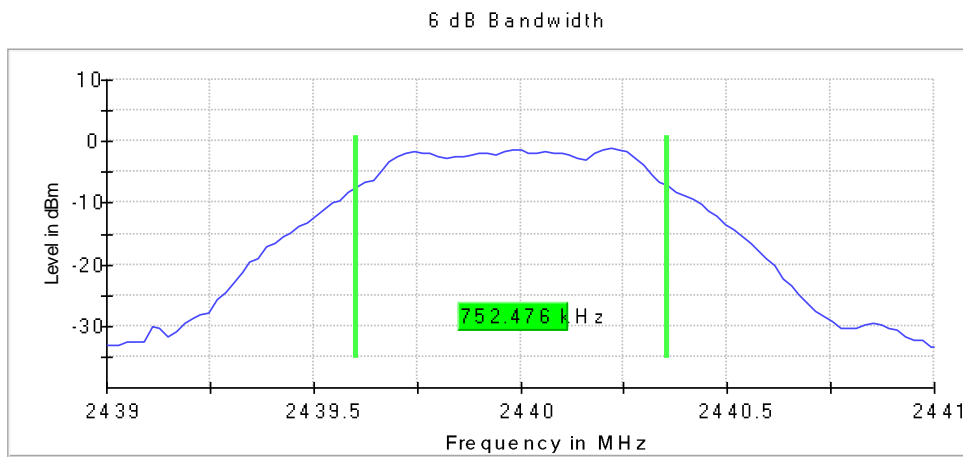
Minimum Emission Bandwidth 6 dB (2440 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	0.752476	0.500000	---	2439.603960	2440.356436

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2440.000000	-1.1	PASS



Minimum Emission Bandwidth 6 dB (2480 MHz)

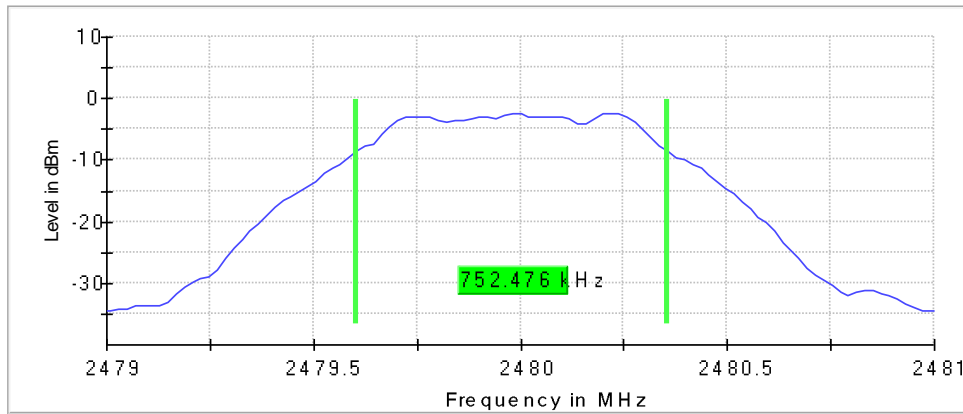
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.752476	0.500000	---	2479.603960	2480.356436

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-2.3	PASS

6 dB Bandwidth



Peak Power Spectral Density (2402 MHz)

RBW:100 kHz ; VBW:300 kHz

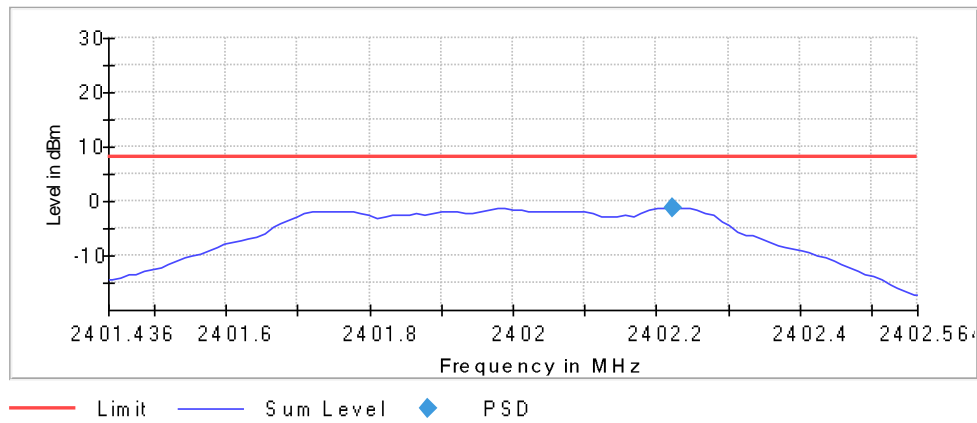
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2402.223508	-1.137	8.0	PASS

Ports

Port	State
1	used

Peak Power Spectral Density



Peak Power Spectral Density (2440 MHz)

RBW:100 kHz ; VBW:300 kHz

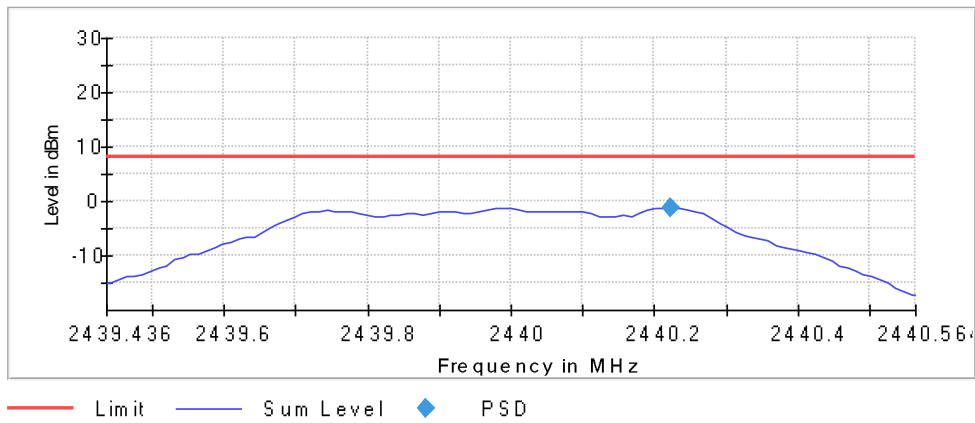
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2440.223508	-1.134	8.0	PASS

Ports

Port	State
1	used

Peak Power Spectral Density



Peak Power Spectral Density (2480 MHz)

RBW:100 kHz ; VBW:300 kHz

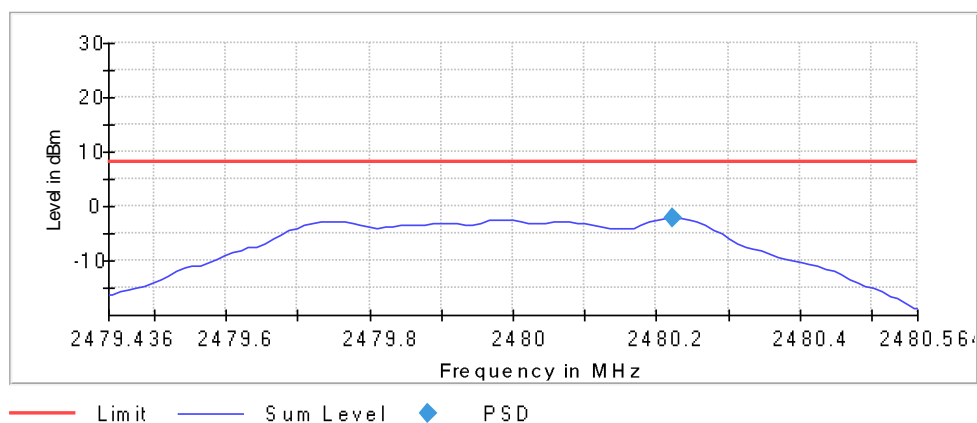
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2480.223508	-2.295	8.0	PASS

Ports

Port	State
1	used

Peak Power Spectral Density



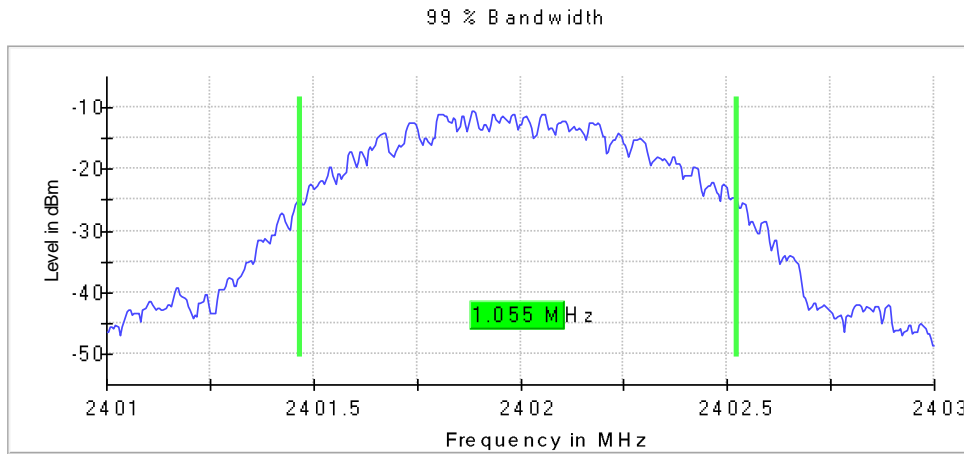
Occupied Channel Bandwidth 99% (2402 MHz)

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.055000	---	---	2401.467500	2402.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



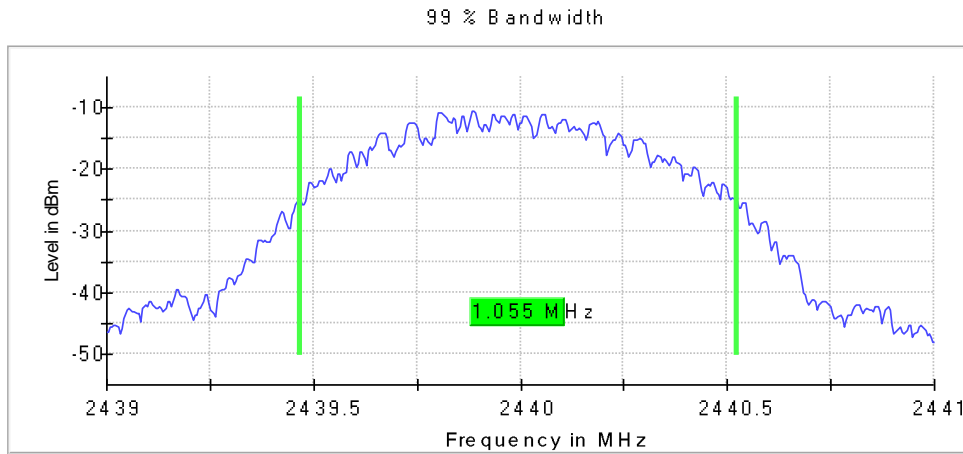
Occupied Channel Bandwidth 99% (2440 MHz)

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	1.055000	---	---	2439.467500	2440.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS



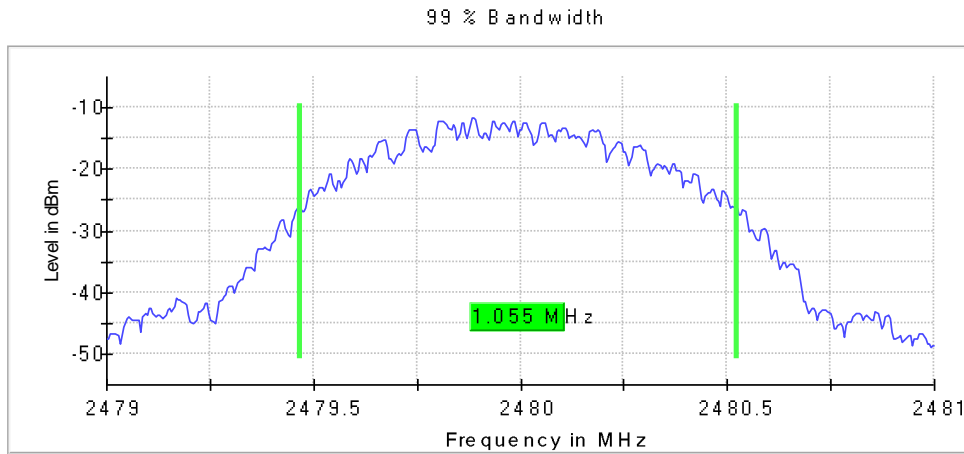
Occupied Channel Bandwidth 99% (2480 MHz)

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.055000	---	---	2479.467500	2480.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



Band Edge low (2402 MHz)

Customized settings.

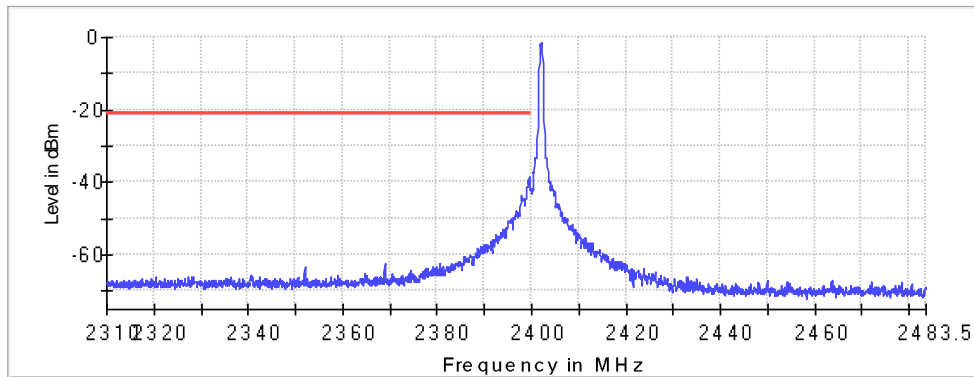
Result

DUT Frequency (MHz)	Result
2402.000000	PASS

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.525000	-38.5	17.3	-21.1	PASS
2399.475000	-38.6	17.4	-21.1	PASS
2399.575000	-39.0	17.9	-21.1	PASS
2399.275000	-39.3	18.1	-21.1	PASS
2399.225000	-39.5	18.4	-21.1	PASS
2399.425000	-39.6	18.5	-21.1	PASS
2399.325000	-39.6	18.5	-21.1	PASS
2399.625000	-39.8	18.7	-21.1	PASS
2399.675000	-40.3	19.1	-21.1	PASS
2399.375000	-40.3	19.1	-21.1	PASS
2399.725000	-40.8	19.7	-21.1	PASS
2399.175000	-41.0	19.9	-21.1	PASS
2399.125000	-41.2	20.0	-21.1	PASS
2399.075000	-41.4	20.2	-21.1	PASS
2399.975000	-41.8	20.6	-21.1	PASS

Band Edge



— Limit — Sum Level × Fail

Band Edge high (2480 MHz)

Customized settings.

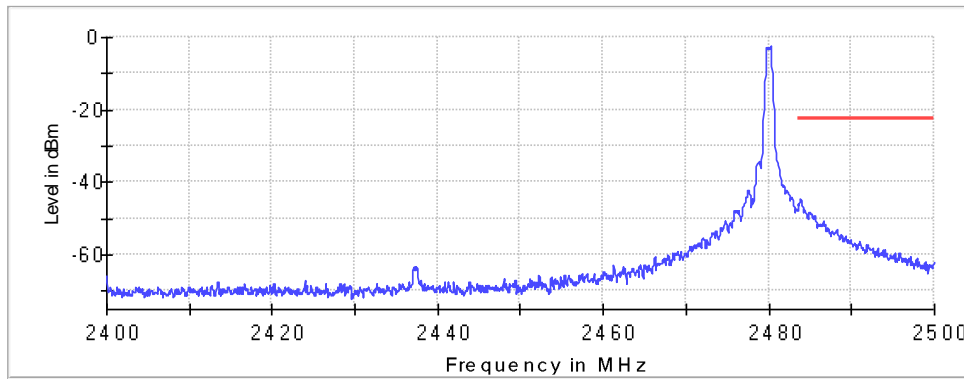
Result

DUT Frequency (MHz)	Result
2480.000000	PASS

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.825000	-44.6	22.2	-22.4	PASS
2483.875000	-44.6	22.2	-22.4	PASS
2483.775000	-44.8	22.3	-22.4	PASS
2483.925000	-44.9	22.5	-22.4	PASS
2483.725000	-45.2	22.8	-22.4	PASS
2483.975000	-45.8	23.4	-22.4	PASS
2483.675000	-45.8	23.4	-22.4	PASS
2483.525000	-46.0	23.6	-22.4	PASS
2484.025000	-46.1	23.7	-22.4	PASS
2483.575000	-46.1	23.7	-22.4	PASS
2483.625000	-46.2	23.8	-22.4	PASS
2484.075000	-46.4	23.9	-22.4	PASS
2484.125000	-46.6	24.2	-22.4	PASS
2484.175000	-47.4	25.0	-22.4	PASS
2484.275000	-47.5	25.1	-22.4	PASS

Band Edge



— Limit — Sum Level × Fail

Tx Spurious Emission (2402 MHz)

Customized settings.

Result

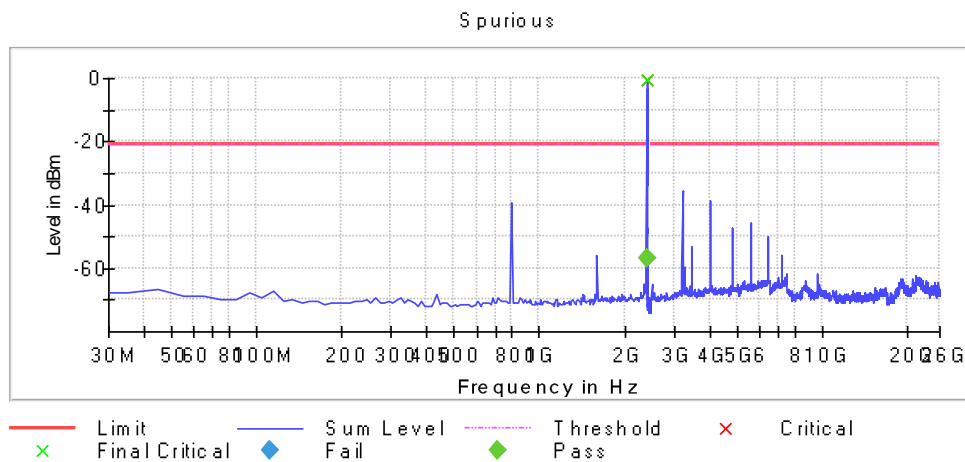
DUT Frequency (MHz)	Result
2402.000000	PASS

Final measurements

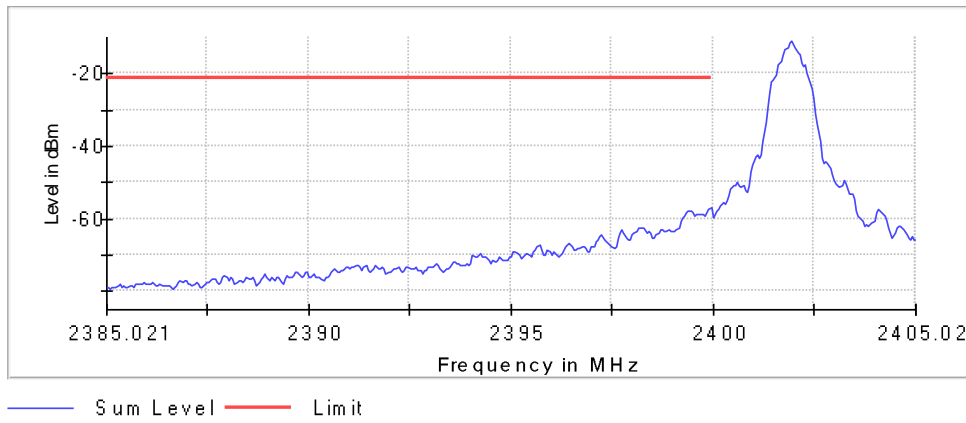
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2399.958664	-2.7	-56.9	-21.1	35.8	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2395.021008	-0.7	-20.4	-21.1
3198.089779	-35.6	14.5	-21.1
4007.625053	-38.5	17.4	-21.1
791.785714	-39.0	17.9	-21.1
3208.084042	-45.2	24.0	-21.1
5606.707076	-45.7	24.6	-21.1
4807.166065	-47.2	26.1	-21.1
6406.248088	-50.1	29.0	-21.1
3447.946345	-53.3	32.2	-21.1
2385.063025	-55.1	34.0	-21.1
1598.382353	-55.8	34.7	-21.1
7205.789099	-56.1	34.9	-21.1
3258.055355	-59.7	38.6	-21.1
3188.095516	-59.8	38.7	-21.1
7485.628453	-61.6	40.5	-21.1



Final Meas_2395021008Hz



Tx Spurious Emission (2440 MHz)

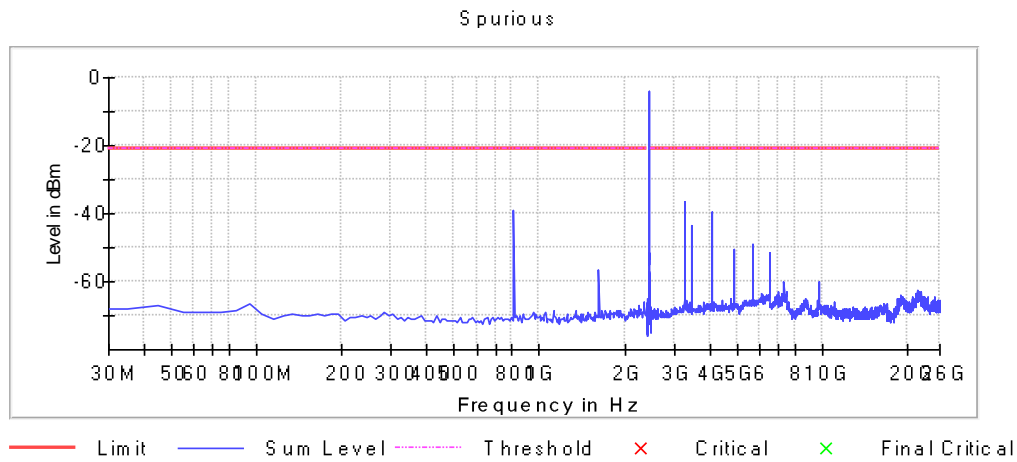
Customized settings.

Result

DUT Frequency (MHz)	Result
2440.000000	PASS

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3258.055355	-36.3	15.2	-21.1
811.701681	-38.8	17.7	-21.1
4067.590629	-39.5	18.4	-21.1
3447.946345	-43.3	22.2	-21.1
5696.655440	-49.1	28.0	-21.1
4877.125903	-50.4	29.3	-21.1
6506.190714	-51.7	30.5	-21.1
1618.298319	-56.7	35.6	-21.1
9764.320336	-59.8	38.7	-21.1
7325.720251	-60.1	38.9	-21.1
7315.725988	-60.7	39.6	-21.1
21577.538780	-62.4	41.3	-21.1
6965.926796	-62.8	41.7	-21.1
21757.435508	-62.9	41.8	-21.1
7485.628453	-63.1	42.0	-21.1



Tx Spurious Emission (2480 MHz)

Customized settings.

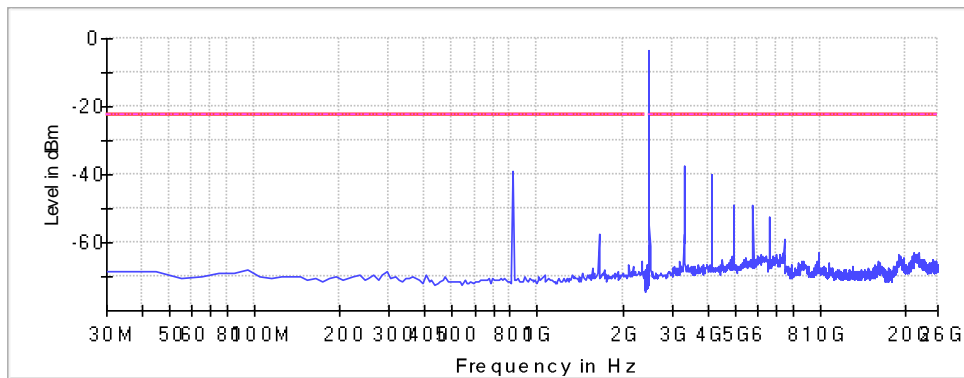
Result

DUT Frequency (MHz)	Result
2480.000000	PASS

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3308.026668	-37.4	15.1	-22.3
821.659664	-38.9	16.6	-22.3
4137.550467	-39.8	17.5	-22.3
4957.080004	-48.8	26.5	-22.3
5786.603804	-49.2	26.9	-22.3
6616.127603	-52.5	30.2	-22.3
2488.497131	-54.5	32.2	-22.3
3288.038143	-57.7	35.4	-22.3
1648.172269	-57.7	35.4	-22.3
7435.657140	-59.0	36.7	-22.3
3298.032405	-59.9	37.6	-22.3
2498.491394	-61.2	39.0	-22.3
7445.651402	-61.5	39.2	-22.3
22217.171589	-62.8	40.5	-22.3
21467.601891	-63.0	40.7	-22.3

Spurious



— Limit — Sum Level - - - - Threshold × Critical × Final Critical