

Fig.40. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 1GHz - 3GHz

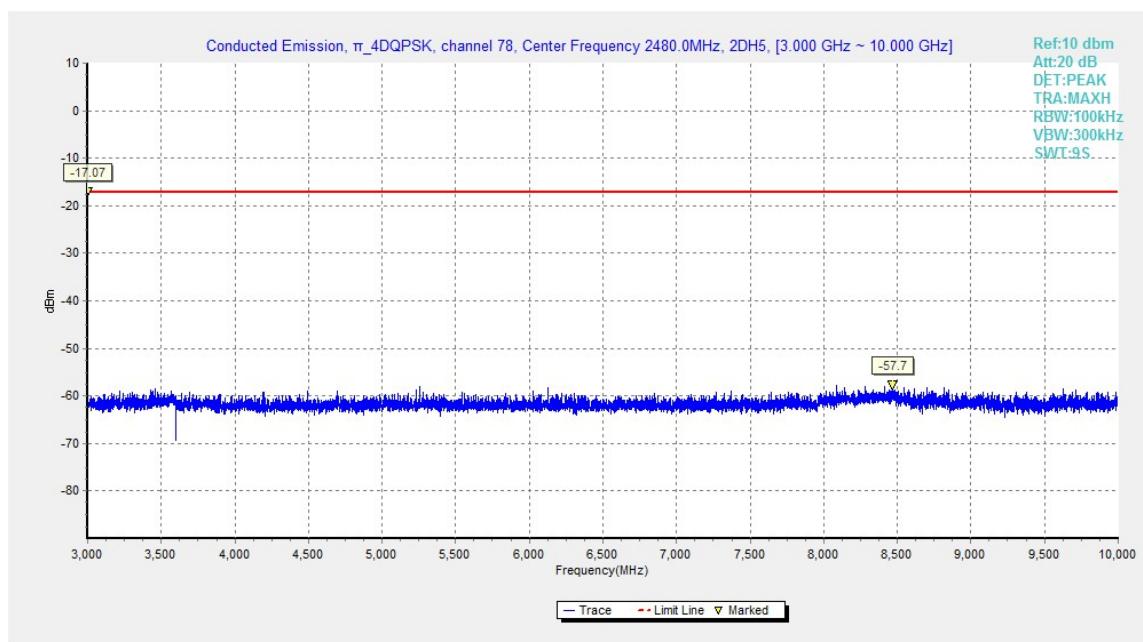


Fig.41. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 3GHz - 10GHz

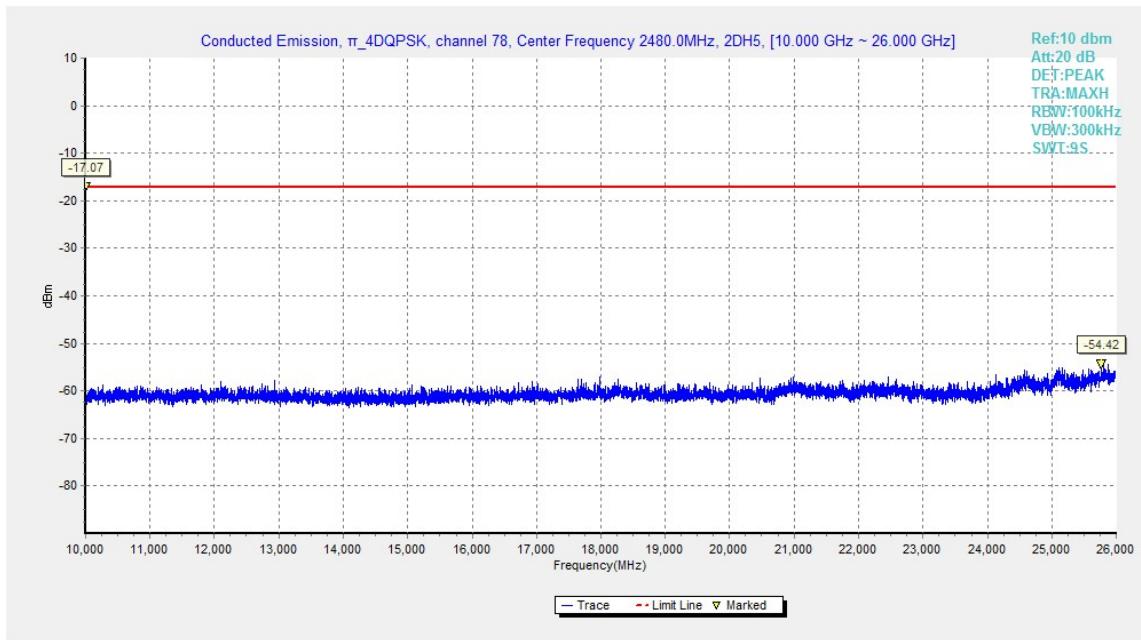


Fig.42. Fig.30 Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 10GHz - 26GHz

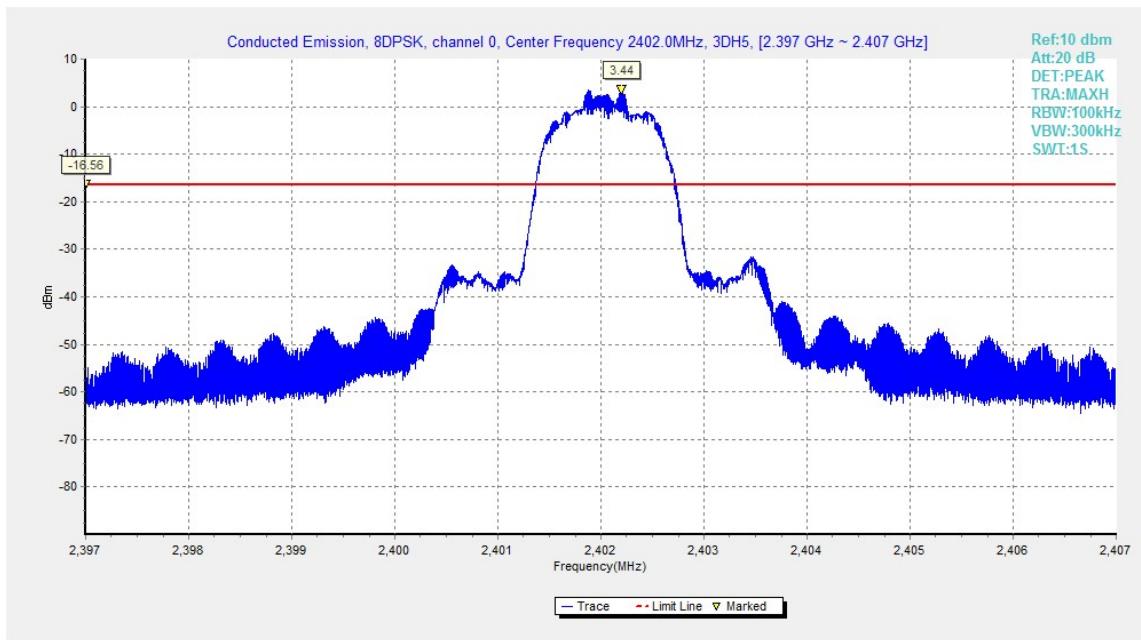


Fig.43. Conducted spurious emission: 8DPSK, Channel 0, 2402MHz

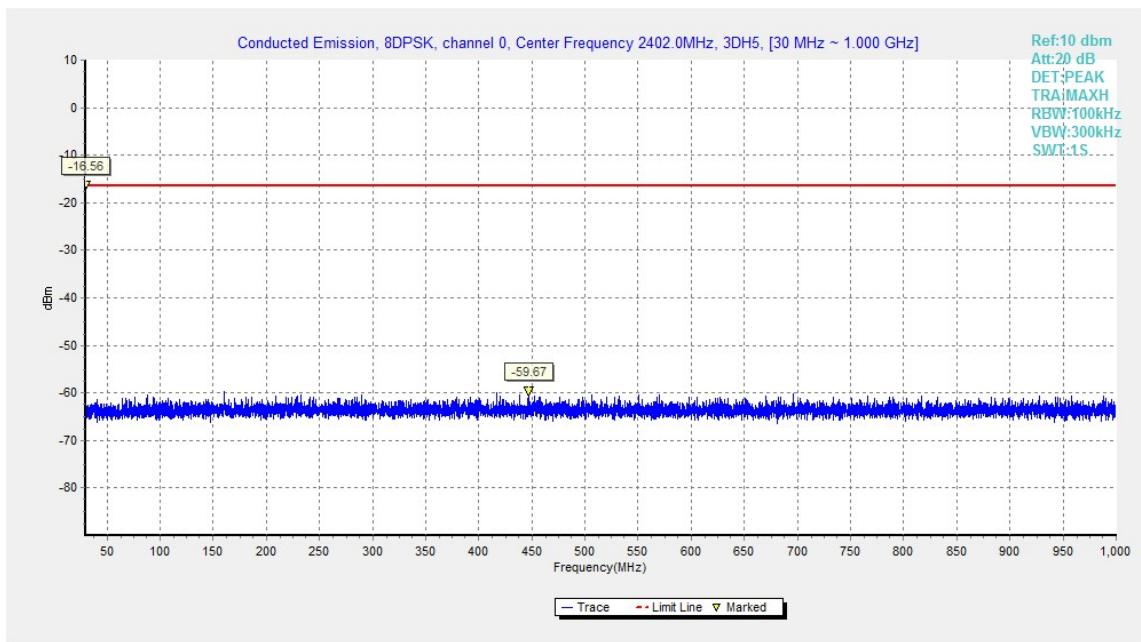


Fig.44. Conducted spurious emission: 8DPSK, Channel 0, 30MHz - 1GHz

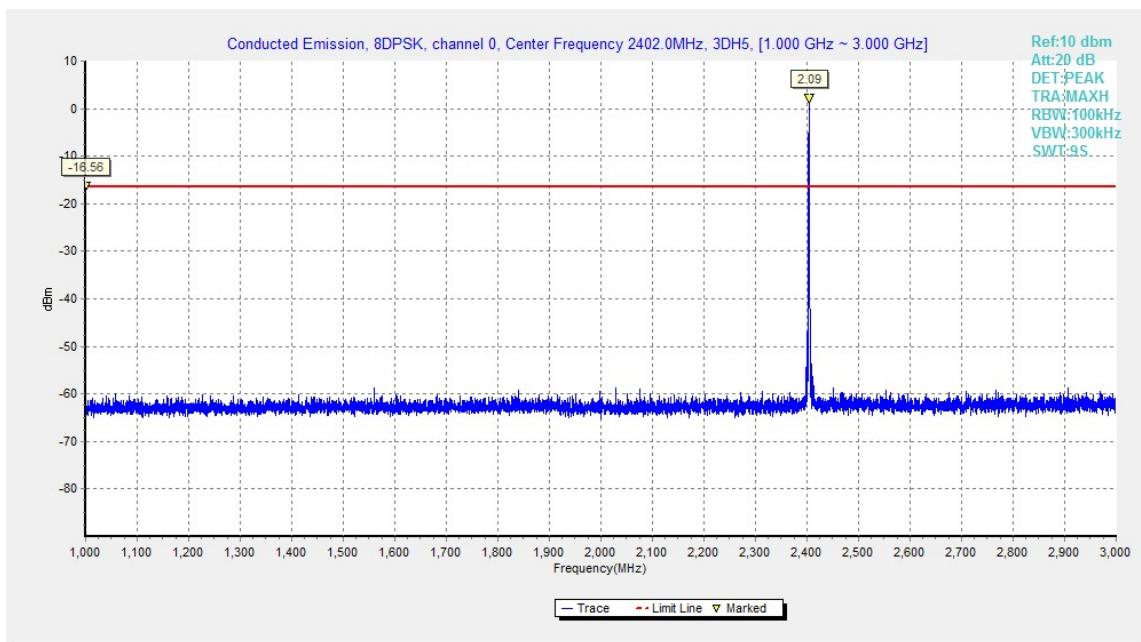


Fig.45. Conducted spurious emission: 8DPSK, Channel 0, 1GHz - 3GHz

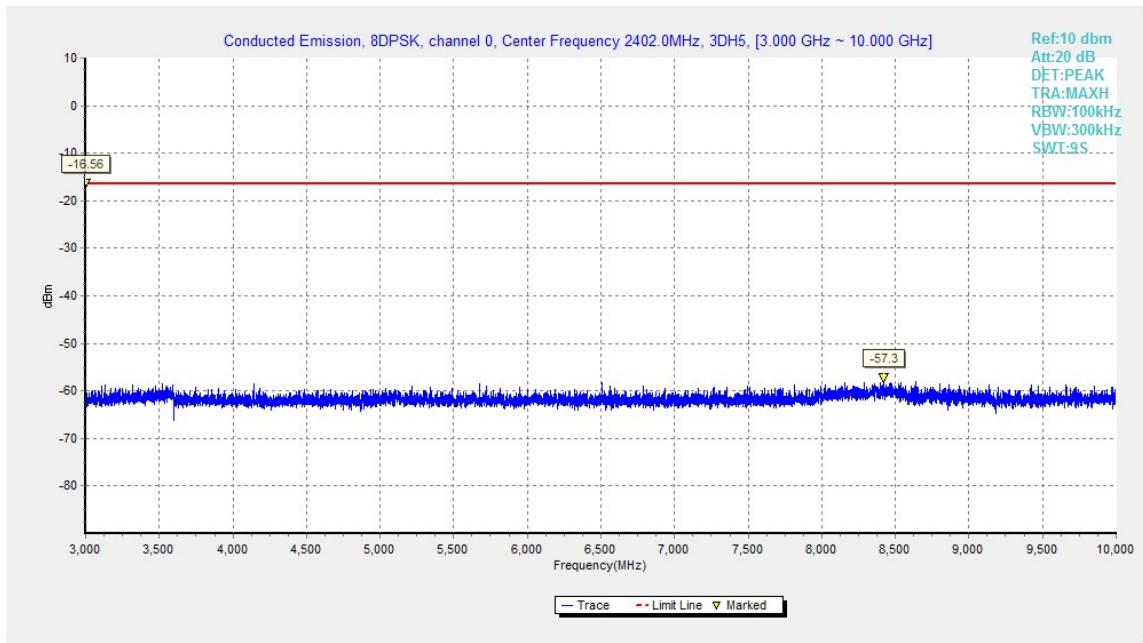


Fig.46. Conducted spurious emission: 8DPSK, Channel 0, 3GHz - 10GHz

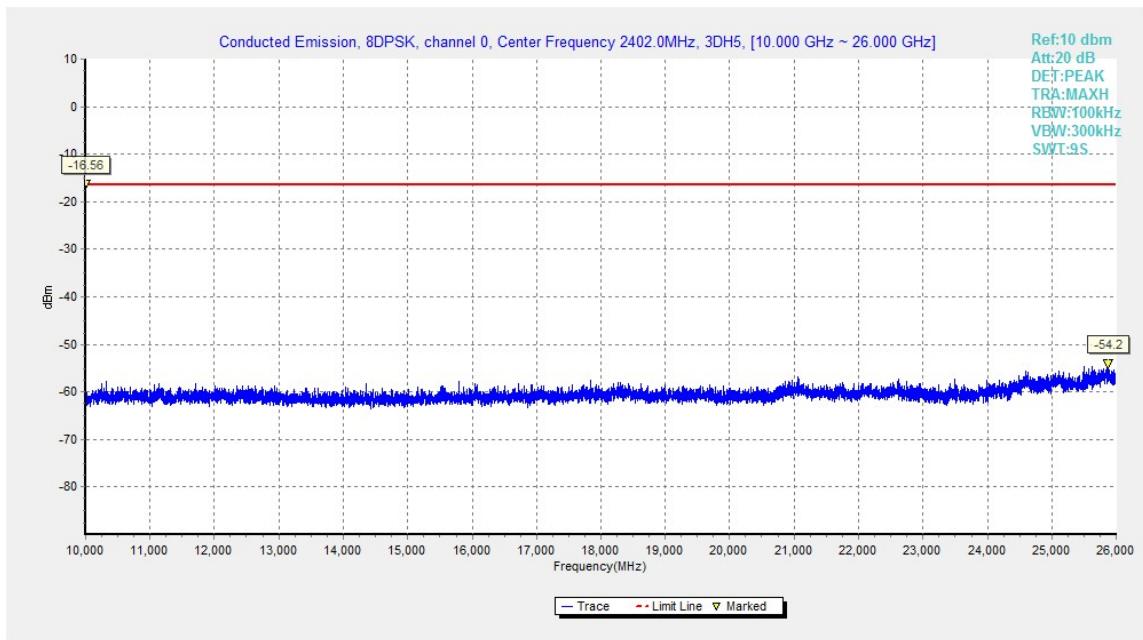


Fig.47. Conducted spurious emission: 8DPSK, Channel 0, 10GHz - 26GHz

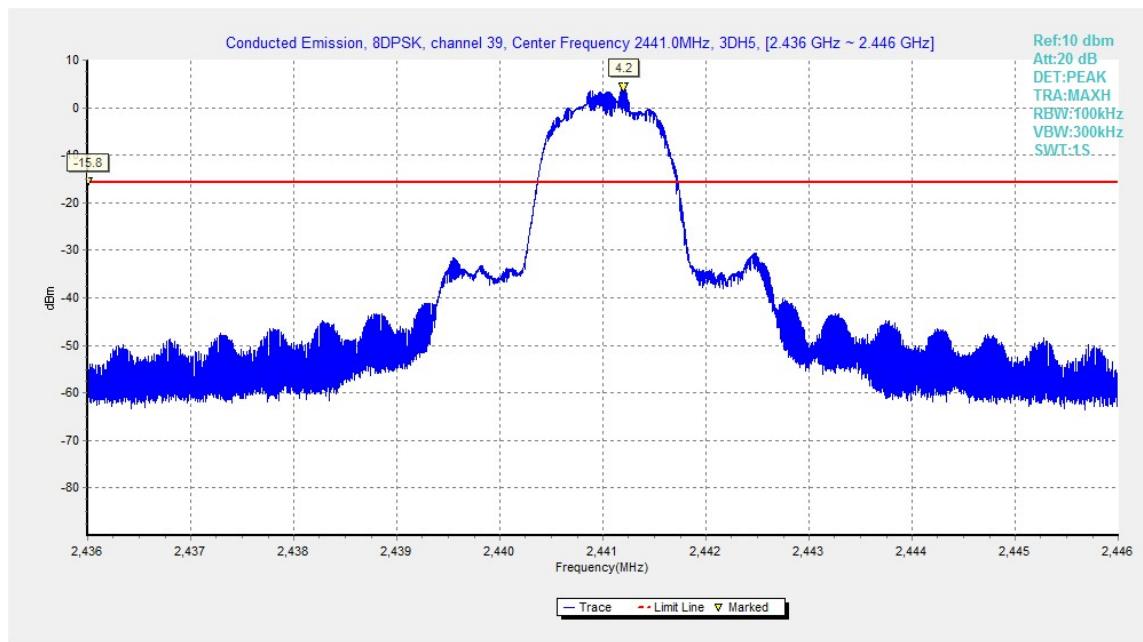


Fig.48. Conducted spurious emission: 8DPSK, Channel 39, 2441MHz

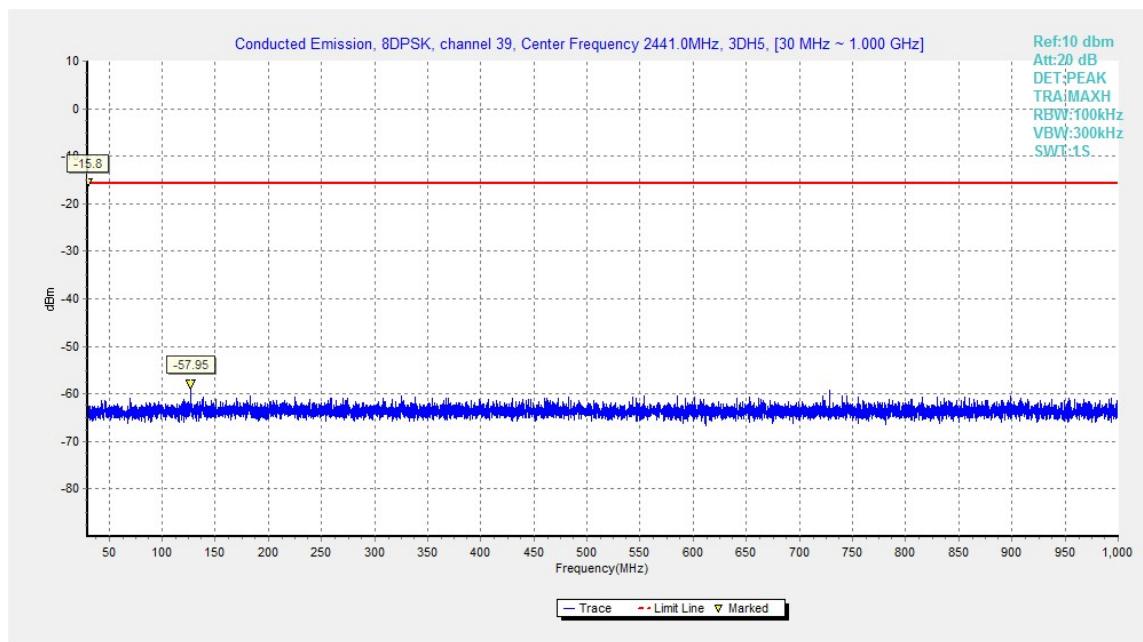


Fig.49. Conducted spurious emission: 8DPSK, Channel 39, 30MHz - 1GHz

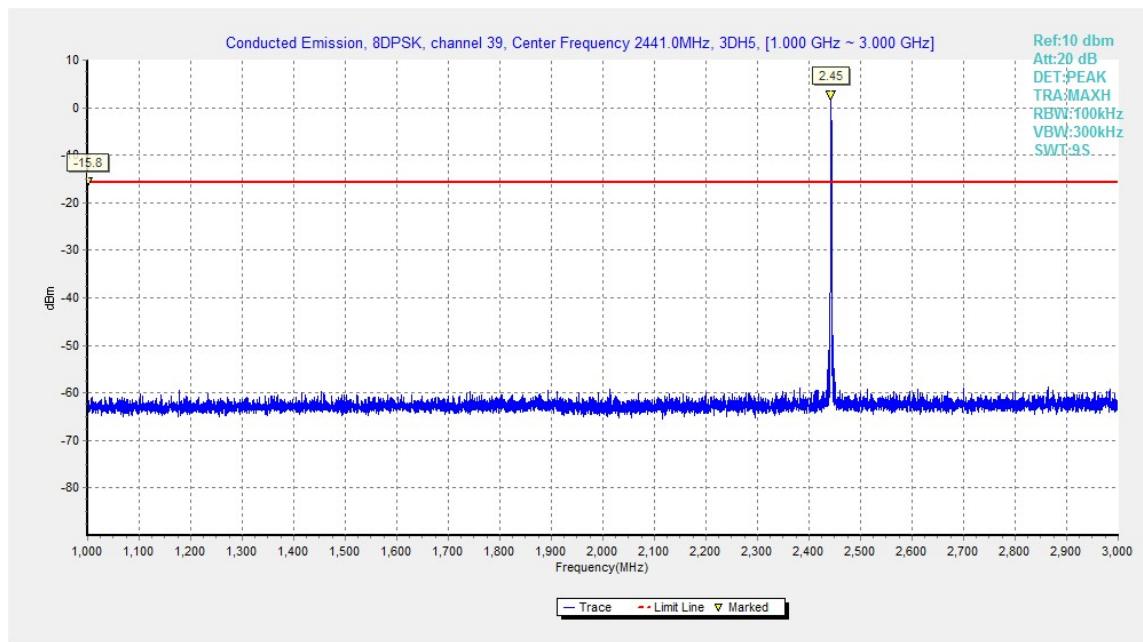


Fig.50. Conducted spurious emission: 8DPSK, Channel 39, 1GHz - 3GHz

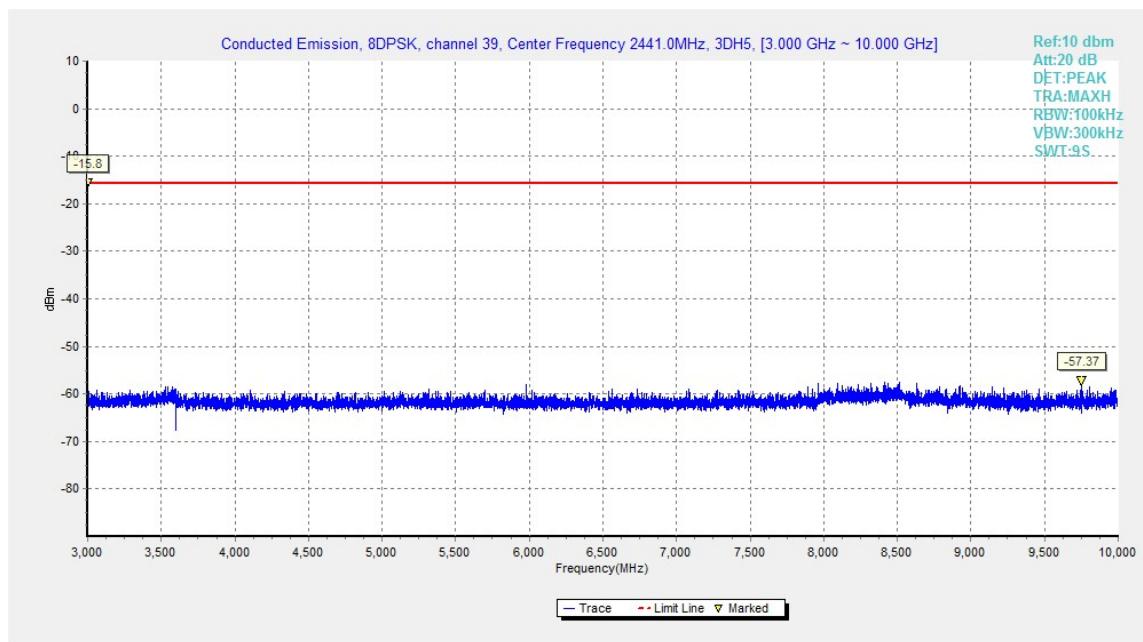


Fig.51. Conducted spurious emission: 8DPSK, Channel 39, 3GHz - 10GHz

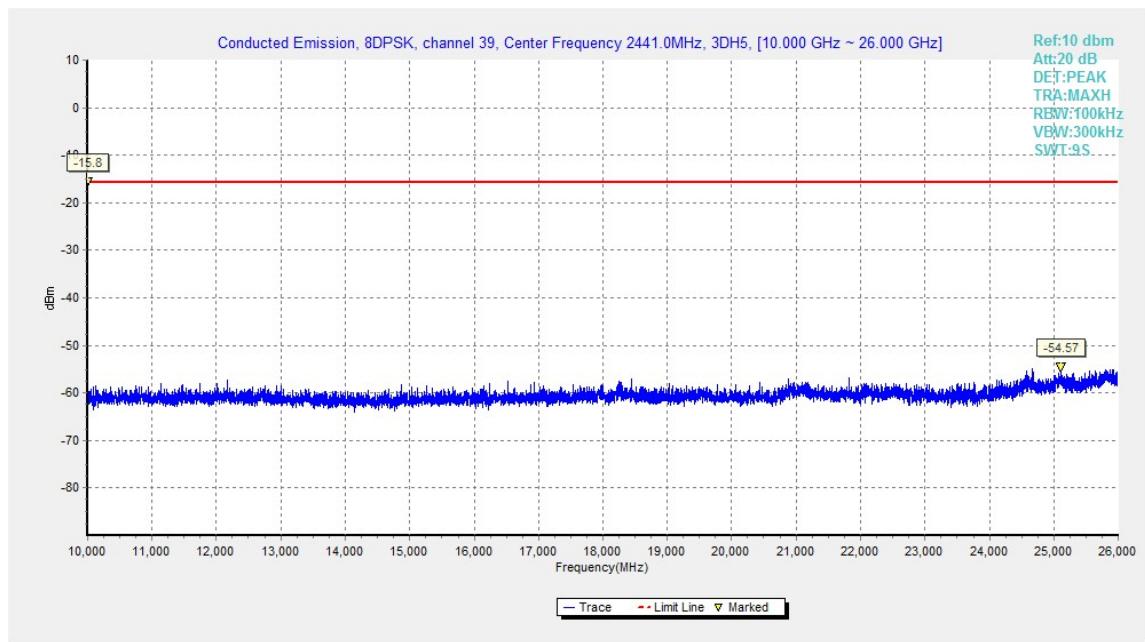


Fig.52. Conducted spurious emission: 8DPSK, Channel 39, 10GHz – 26GHz

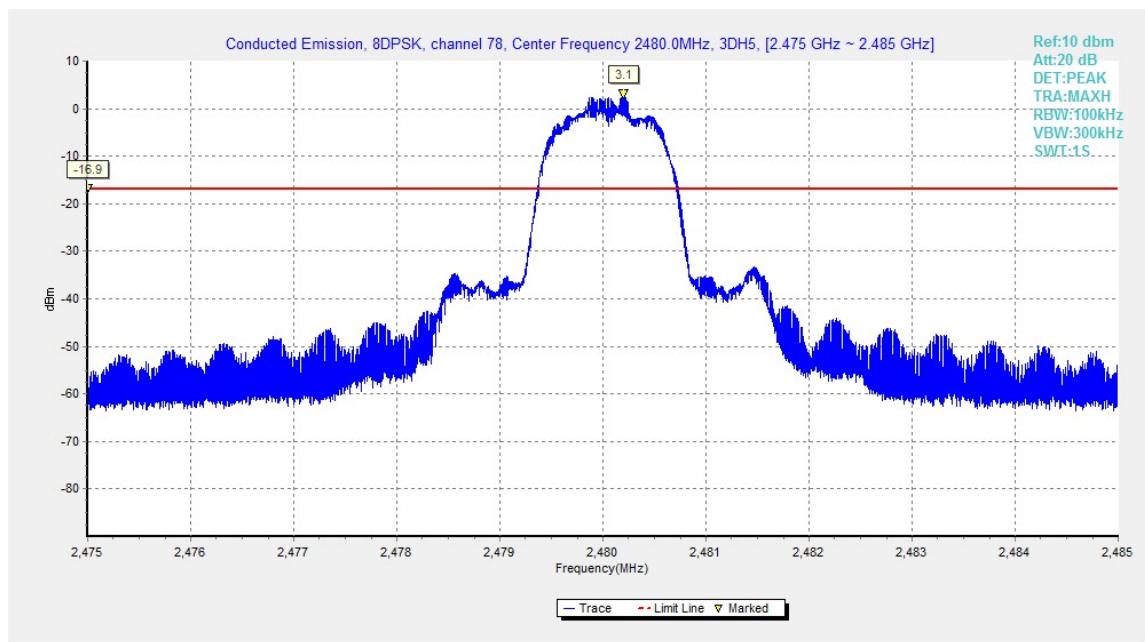


Fig.53. Conducted spurious emission: 8DPSK, Channel 78, 2480MHz

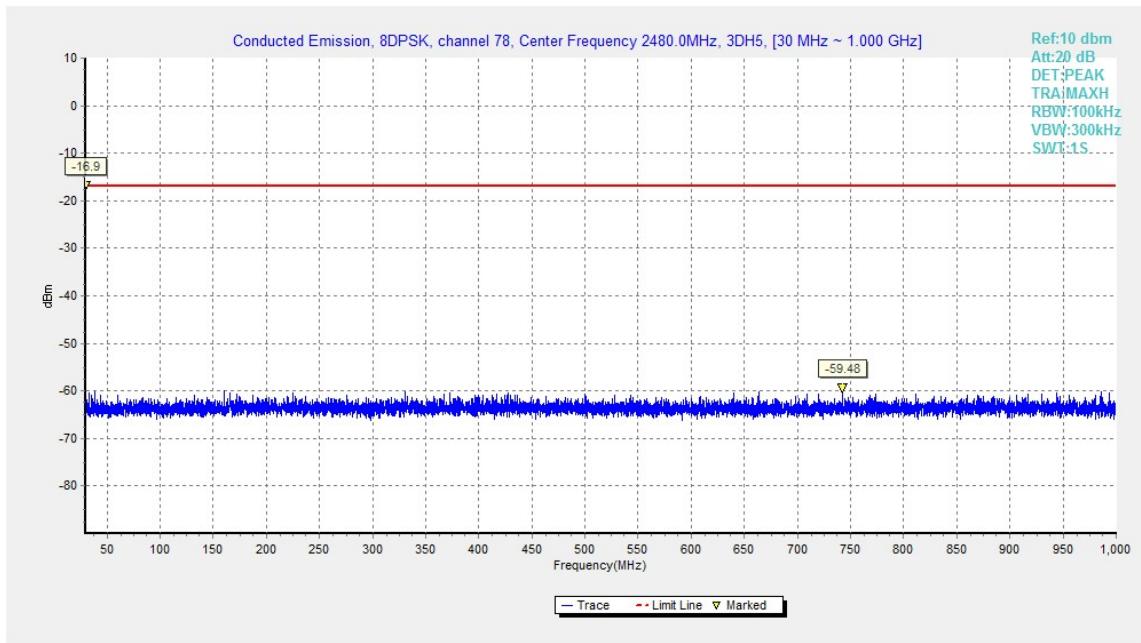


Fig.54. Conducted spurious emission: 8DPSK, Channel 78, 30MHz - 1GHz

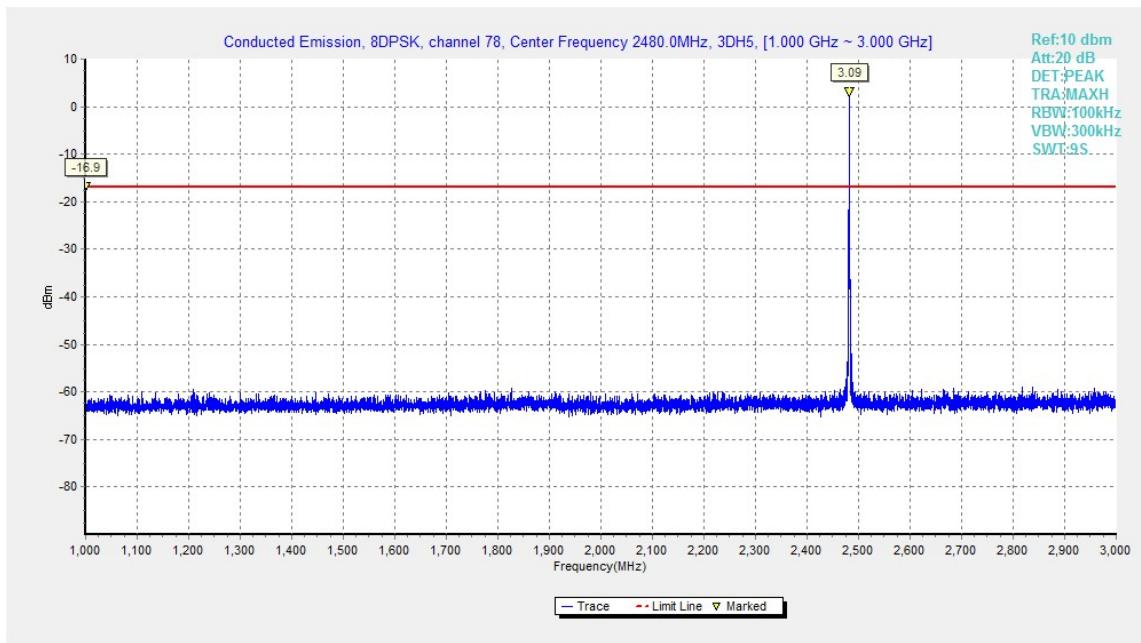


Fig.55. Conducted spurious emission: 8DPSK, Channel 78, 1GHz - 3GHz

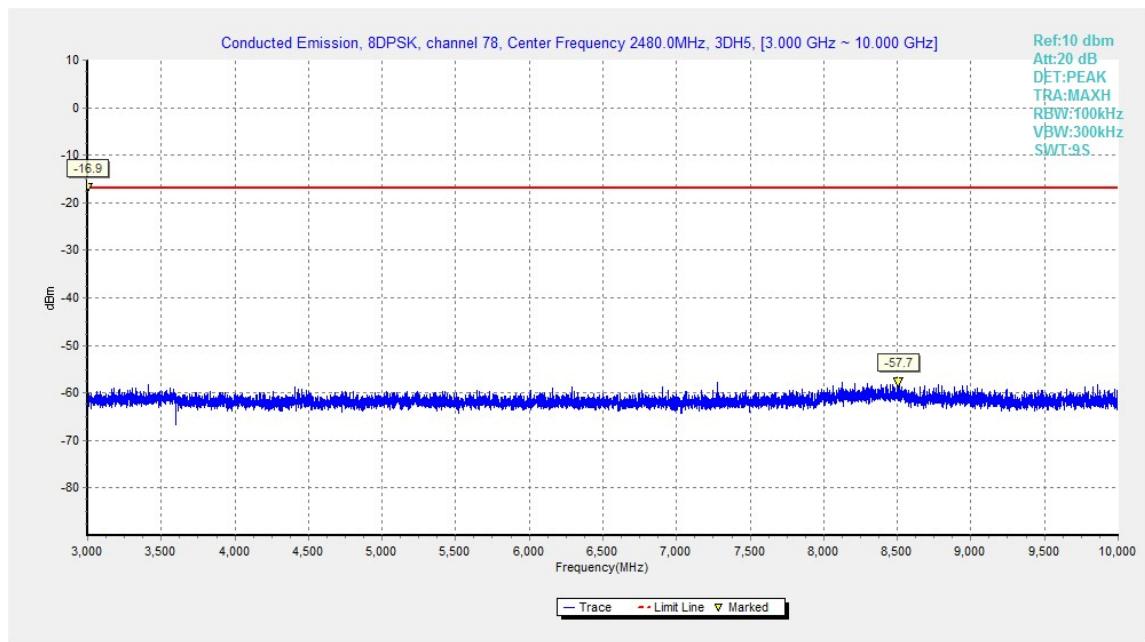


Fig.56. Conducted spurious emission: 8DPSK, Channel 78, 3GHz - 10GHz

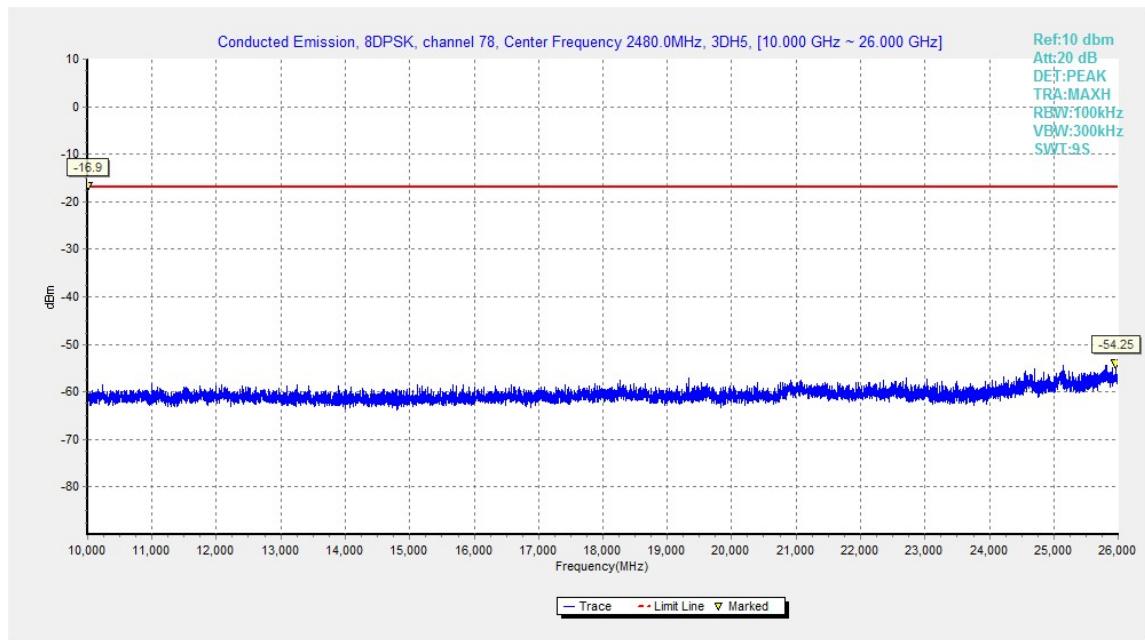


Fig.57. Conducted spurious emission: 8DPSK, Channel 78, 10GHz - 26GHz

A.5. Radiated Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

The measurement is made according to ANSI C63.10

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

Measurement Results:

$$\text{Result} = P_{\text{Mea}} + \text{ARPL}$$

For GFSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	Fig.58	P
	3 GHz ~ 18 GHz	Fig.59	P
Ch 39 2441 MHz	9 kHz ~ 30 MHz	Fig.60	P
	30 MHz ~ 1 GHz	Fig.61	P
	1 GHz ~ 3 GHz	Fig.62	P
	3 GHz ~ 18 GHz	Fig.63	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	Fig.64	P
	3 GHz ~ 18 GHz	Fig.65	P
Power	2.38GHz~2.4GHz---L	Fig.66	P
Power	2.45GHz~2.5GHz---H	Fig.67	P

For all channels	18 GHz ~ 26 GHz	Fig.68	P
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For π/4 DQPSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	Fig.69	P
	3 GHz ~ 18 GHz	Fig.70	P
Ch 39 2441 MHz	30 MHz ~ 1 GHz	Fig.71	P
	1 GHz ~ 3 GHz	Fig.72	P
	3 GHz ~ 18 GHz	Fig.73	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	Fig.74	P
	3 GHz ~ 18 GHz	Fig.75	P
Power	2.38GHz~2.4GHz---L	Fig.76	P
Power	2.45GHz~2.5GHz---H	Fig.77	P
For all channels	18 GHz ~ 26 GHz	Fig.78	P

For 8DPSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	Fig.79	P
	3 GHz ~ 18 GHz	Fig.80	P
Ch 39 2441 MHz	30 MHz ~ 1 GHz	Fig.81	P
	1 GHz ~ 3 GHz	Fig.82	P
	3 GHz ~ 18 GHz	Fig.83	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	Fig.84	P
	3 GHz ~ 18 GHz	Fig.85	P
Power	2.38GHz~2.4GHz---L	Fig.86	P
Power	2.45GHz~2.5GHz---H	Fig.87	P
For all channels	18 GHz ~ 26 GHz	Fig.88	P

GFSK Ch 0 – Average

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2384.400	47.1	2.9	32.0	12.174	54.0	6.9	H
2387.200	47.1	2.9	32.0	12.205	54.0	6.9	H
4804.500	37.7	-17.3	34.5	20.437	54.0	16.3	H
7206.000	39.8	-16.4	36.1	20.059	54.0	14.2	H
9607.500	38.7	-18.2	37.0	20.019	54.0	15.3	H
12010.500	41.5	-17.4	39.3	19.597	54.0	12.5	H

GFSK Ch 39 - Average

Frequency (MHz)	Measurement Result	Cable loss (dB)	Antenna Factor	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol.
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	(dB μ V/m)		(dB/m)				(H/V)
2384.800	47.1	2.9	32.0	12.217	54.0	6.9	H
2483.500	48.0	2.9	32.8	12.307	54.0	6.0	H
4882.500	36.4	-18.5	34.5	20.413	54.0	17.6	H
7323.000	37.5	-18.5	36.1	19.903	54.0	16.5	H
9763.500	39.3	-17.8	37.2	19.879	54.0	14.7	H
12205.500	40.8	-17.8	39.2	19.318	54.0	13.2	H

GFSK Ch 78 - Average

Frequen cy (MHz)	Measureme nt Result (dB μ V/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenn a Pol. (H/V)
2483.800	48.4	2.9	32.8	12.715	54.0	5.6	H
2484.600	48.1	2.9	32.7	12.437	54.0	5.9	H
4960.500	37.0	-18.2	34.5	20.713	54.0	17.0	H
7440.000	39.3	-16.9	36.0	20.144	54.0	14.7	H
9919.500	40.2	-17.1	37.4	19.863	54.0	13.8	H
12400.500	41.0	-17.5	39.1	19.348	54.0	13.0	H

 $\pi/4$ DQPSK Ch 0 - Average

Frequen cy (MHz)	Measureme nt Result (dB μ V/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenn a Pol. (H/V)
2385.400	47.0	2.9	32.0	12.121	54.0	7.0	H
2390.000	47.1	2.9	32.0	12.255	54.0	6.9	H
4804.500	37.6	-17.3	34.5	20.355	54.0	16.4	H
7206.000	39.8	-16.4	36.1	20.060	54.0	14.2	H
9607.500	38.8	-18.2	37.0	20.049	54.0	15.2	H
12010.500	41.6	-17.4	39.3	19.643	54.0	12.4	H

 $\pi/4$ DQPSK Ch 39 - Average

Frequen cy (MHz)	Measureme nt Result (dB μ V/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenn a Pol. (H/V)
2382.200	47.0	2.9	32.0	12.098	54.0	7.0	H
2485.000	48.1	2.9	32.7	12.448	54.0	5.9	H
4882.500	36.4	-18.5	34.5	20.461	54.0	17.6	H

7323.000	37.5	-18.5	36.1	19.937	54.0	16.5	H
9763.500	39.5	-17.8	37.2	20.016	54.0	14.5	H
12205.500	40.8	-17.8	39.2	19.349	54.0	13.2	H

π/4 DQPSK Ch 78 - Average

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	48.4	2.9	32.8	12.667	54.0	5.6	H
2492.600	48.0	2.9	32.5	12.555	54.0	6.0	H
4960.500	37.0	-18.2	34.5	20.679	54.0	17.0	H
7440.000	39.3	-16.9	36.0	20.213	54.0	14.7	H
9919.500	40.2	-17.1	37.4	19.855	54.0	13.8	H
12400.500	41.0	-17.5	39.1	19.400	54.0	13.0	H

8DPSK Ch 0 - Average

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2380.000	47.0	2.9	32.1	12.081	54.0	7.0	H
2388.000	47.1	2.9	32.0	12.240	54.0	6.9	H
4804.500	37.7	-17.3	34.5	20.474	54.0	16.3	H
7206.000	39.7	-16.4	36.1	20.032	54.0	14.3	H
9607.500	38.6	-18.2	37.0	19.912	54.0	15.4	H
12010.500	41.5	-17.4	39.3	19.577	54.0	12.5	H

8DPSK Ch 39 - Average

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2384.600	47.0	2.9	32.0	12.115	54.0	7.0	H
2484.000	48.1	2.9	32.7	12.421	54.0	5.9	H
4882.500	36.4	-18.5	34.5	20.435	54.0	17.6	H
7323.000	37.5	-18.5	36.1	19.884	54.0	16.5	H
9763.500	39.4	-17.8	37.2	19.979	54.0	14.6	H
12205.500	40.7	-17.8	39.2	19.286	54.0	13.3	H

8DPSK Ch 78 - Average

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	48.4	2.9	32.8	12.707	54.0	5.6	H
2485.000	48.1	2.9	32.7	12.448	54.0	5.9	H
4960.500	37.0	-18.2	34.5	20.638	54.0	17.0	H
7440.000	39.3	-16.9	36.0	20.202	54.0	14.7	H
9919.500	40.2	-17.1	37.4	19.926	54.0	13.8	H
12400.500	40.9	-17.5	39.1	19.279	54.0	13.1	H

GFSK Ch 0 – Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2385.300	60.0	2.9	32.0	25.168	74.0	14.0	H
2389.352	60.4	2.9	32.0	25.501	74.0	13.6	H
17642.250	60.2	-13.0	41.1	32.146	74.0	13.8	H
17527.500	59.8	-14.2	41.2	32.733	74.0	14.2	H
17489.250	59.6	-14.6	41.2	32.931	74.0	14.4	V
17942.250	59.5	-13.6	40.8	32.295	74.0	14.5	V

GFSK Ch 39 - Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2376.200	51.7	-26.6	32.1	46.224	74.0	22.3	H
2510.400	51.4	-26.5	32.5	45.400	74.0	22.6	H
17893.500	60.4	-13.5	40.9	33.013	74.0	13.6	V
17303.250	59.7	-14.0	41.2	32.482	74.0	14.3	H
17990.250	59.5	-13.6	40.8	32.339	74.0	14.5	V
17570.250	59.4	-13.7	41.1	31.986	74.0	14.6	V

GFSK Ch 78 - Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	66.3	2.9	32.8	30.607	74.0	7.7	H
2485.100	65.3	2.9	32.7	29.644	74.0	8.7	H
17794.500	60.9	-13.4	41.0	33.348	74.0	13.1	H
17248.500	60.7	-14.2	41.2	33.626	74.0	13.3	H
17805.750	59.9	-13.5	41.0	32.409	74.0	14.1	V
17641.500	59.7	-13.0	41.1	31.684	74.0	14.3	H

 $\pi/4$ DQPSK Ch 0 - Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2382.996	59.8	2.9	32.0	24.857	74.0	14.2	H
2388.848	60.2	2.9	32.0	25.387	74.0	13.8	H
17563.500	59.6	-13.8	41.1	32.250	74.0	14.4	V
17301.000	59.4	-14.0	41.2	32.243	74.0	14.6	V
17797.500	59.4	-13.4	41.0	31.845	74.0	14.6	H
17337.750	59.3	-14.2	41.2	32.373	74.0	14.7	V

 $\pi/4$ DQPSK Ch 39 - Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2374.000	50.2	-26.7	32.1	44.852	74.0	23.8	H
2511.200	51.0	-26.5	32.5	44.989	74.0	23.1	H
17289.750	60.2	-13.9	41.2	32.957	74.0	13.8	H
17884.500	60.2	-13.5	40.9	32.815	74.0	13.8	H
17293.500	60.0	-14.0	41.2	32.737	74.0	14.0	V

17666.25 0	59.7	-13.1	41.1	31.691	74.0	14.3	V
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π/4 DQPSK Ch 78 - Peak

Frequen cy (MHz)	Measureme nt Result (dBµV/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/ m)	Margin (dB)	Antenn a Pol. (H/V)
2483.500	64.9	2.9	32.8	29.207	74.0	9.1	H
2484.710	63.9	2.9	32.7	28.213	74.0	10.1	H
17317.50 0	60.4	-14.1	41.2	33.259	74.0	13.6	H
17973.00 0	60.0	-13.6	40.8	32.795	74.0	14.0	H
17630.25 0	59.8	-13.0	41.1	31.733	74.0	14.2	V
17320.50 0	59.8	-14.1	41.2	32.679	74.0	14.2	H

8DPSK Ch 0 - Peak

Frequen cy (MHz)	Measureme nt Result (dBµV/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/ m)	Margin (dB)	Antenn a Pol. (H/V)
2387.154	59.8	2.9	32.0	24.953	74.0	14.2	H
2389.156	60.0	2.9	32.0	25.158	74.0	14.0	H
17186.25 0	60.4	-14.6	41.3	33.789	74.0	13.6	H
17759.25 0	60.3	-13.3	41.0	32.631	74.0	13.7	V
17458.50 0	59.6	-14.9	41.2	33.354	74.0	14.4	H
17767.50 0	59.6	-13.4	41.0	31.918	74.0	14.4	H

8DPSK Ch 39 - Peak

Frequen cy (MHz)	Measureme nt Result (dBµV/m)	Cable loss (dB)	Antenn a Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/ m)	Margin (dB)	Antenn a Pol. (H/V)
2375.600	50.2	-26.6	32.1	44.712	74.0	23.8	H
2545.200	52.2	-26.8	33.0	45.954	74.0	21.8	H
17643.75 0	60.8	-13.0	41.1	32.795	74.0	13.2	V

17973.75 0	60.2	-13.6	40.8	32.975	74.0	13.8	V
17313.00 0	59.5	-14.1	41.2	32.343	74.0	14.5	V
17621.25 0	59.4	-13.1	41.1	31.410	74.0	14.6	V

8DPSK Ch 78 - Peak

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	63.8	2.9	32.8	28.107	74.0	10.2	H
2484.160	64.2	2.9	32.7	28.527	74.0	9.8	H
17727.00 0	60.4	-13.2	41.0	32.650	74.0	13.6	V
17603.25 0	60.4	-13.3	41.1	32.590	74.0	13.6	H
17862.00 0	60.0	-13.5	40.9	32.571	74.0	14.0	H
17291.25 0	59.8	-14.0	41.2	32.575	74.0	14.2	V

Conclusion: PASS
Test graphs as below:

RE - TX - WLAN BT +AV+PK_1GHz-3GHz

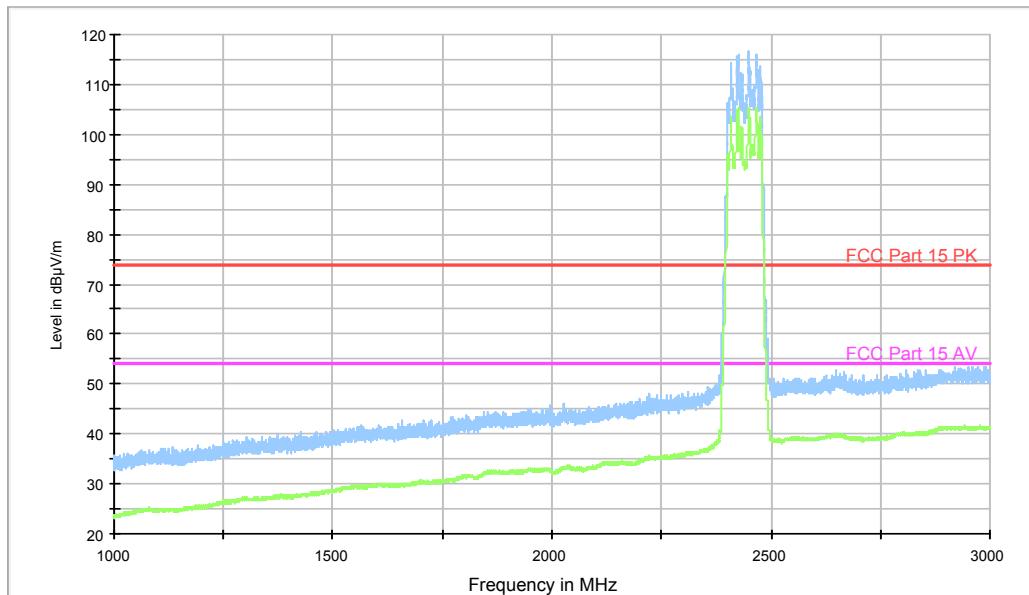


Fig.58. Radiated emission: GFSK, Channel 0, 1 GHz - 3 GHz

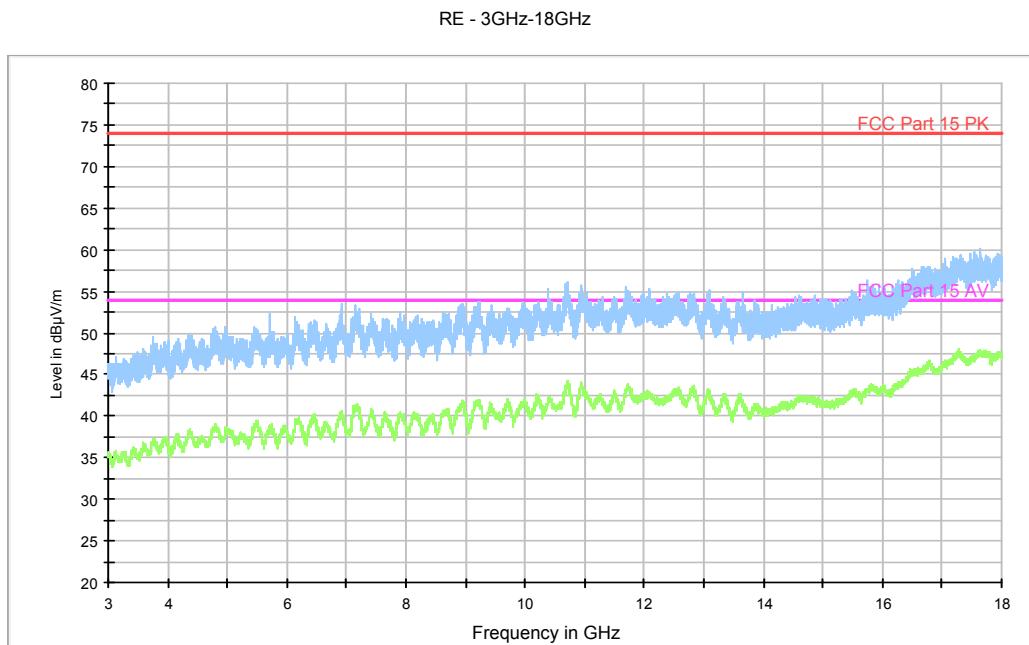


Fig.59. Radiated emission: GFSK, Channel 0, 3 GHz - 18 GHz

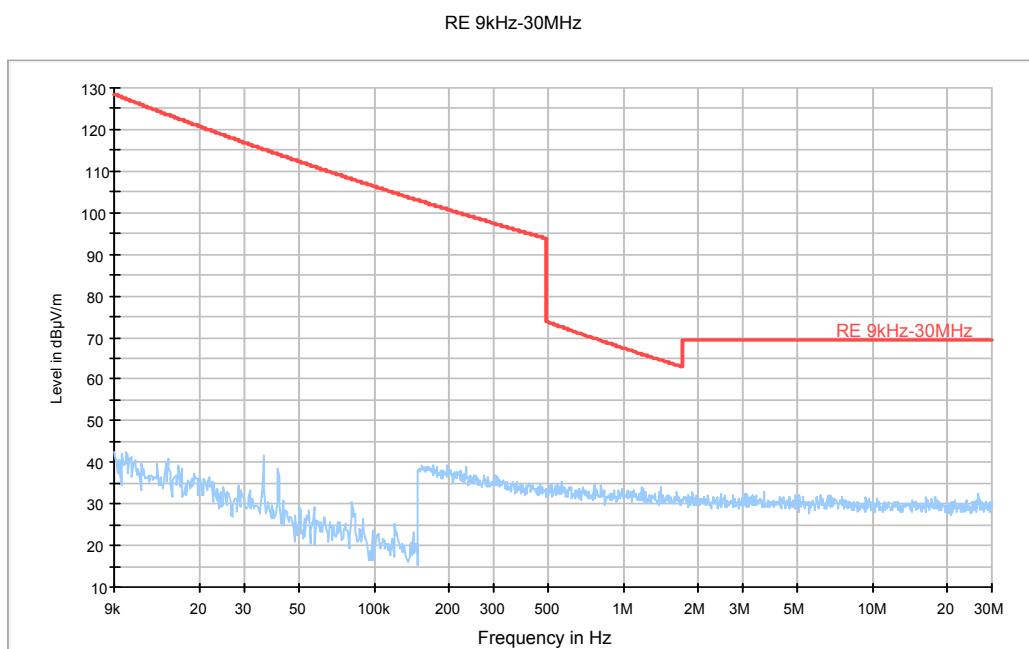


Fig.60. Radiated emission: GFSK, Channel 39, 9 kHz - 30 MHz

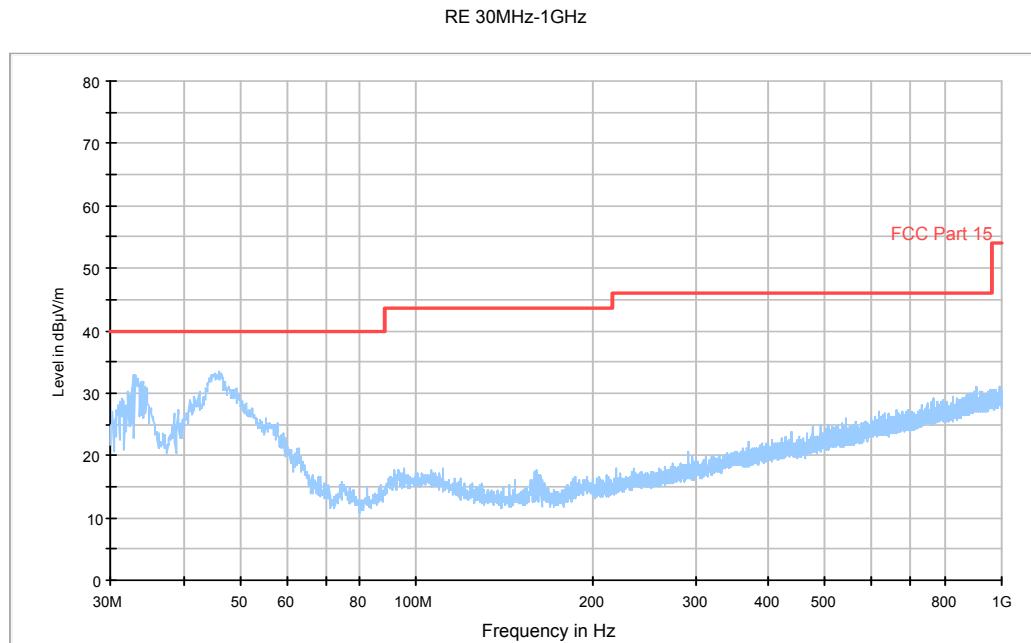


Fig.61. Radiated emission: GFSK, Channel 39, 30 MHz - 1 GHz

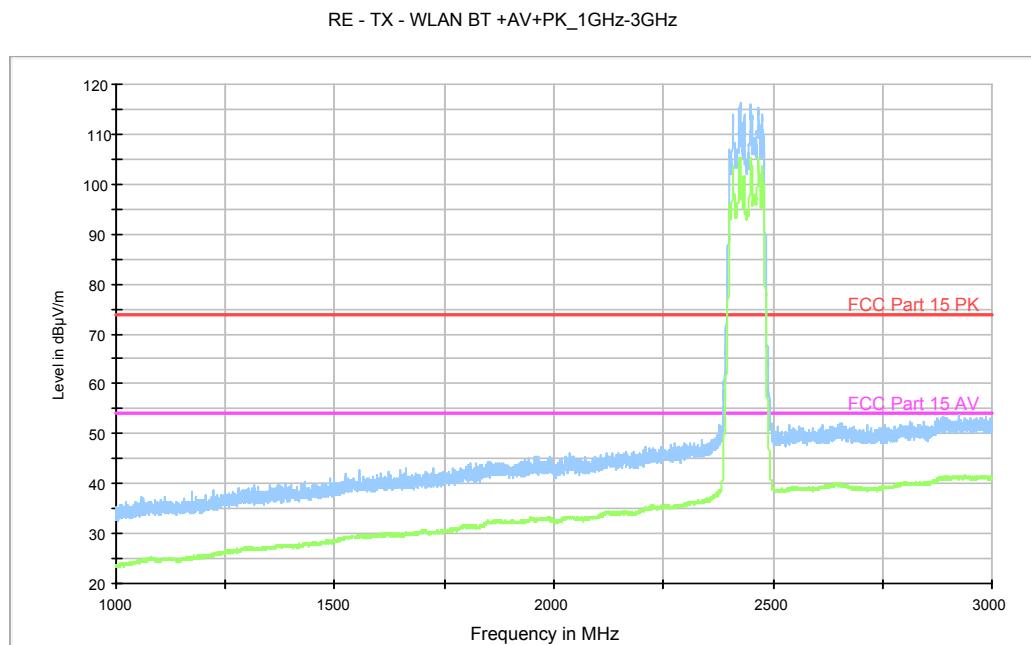


Fig.62. Radiated emission: GFSK, Channel 39, 1 GHz - 3 GHz

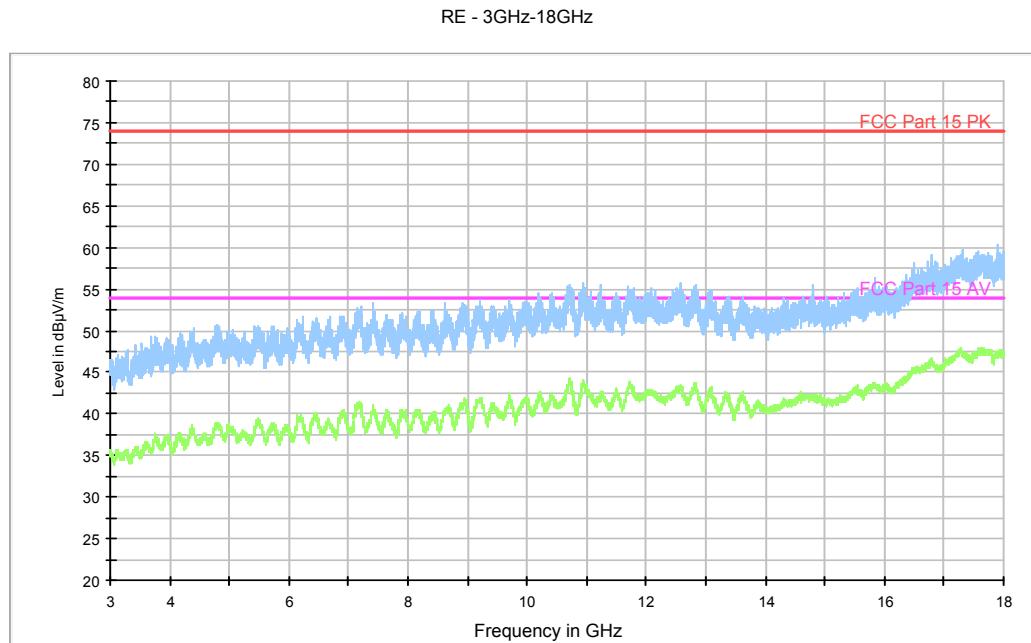


Fig.63. Radiated emission: GFSK, Channel 39, 3 GHz - 18 GHz

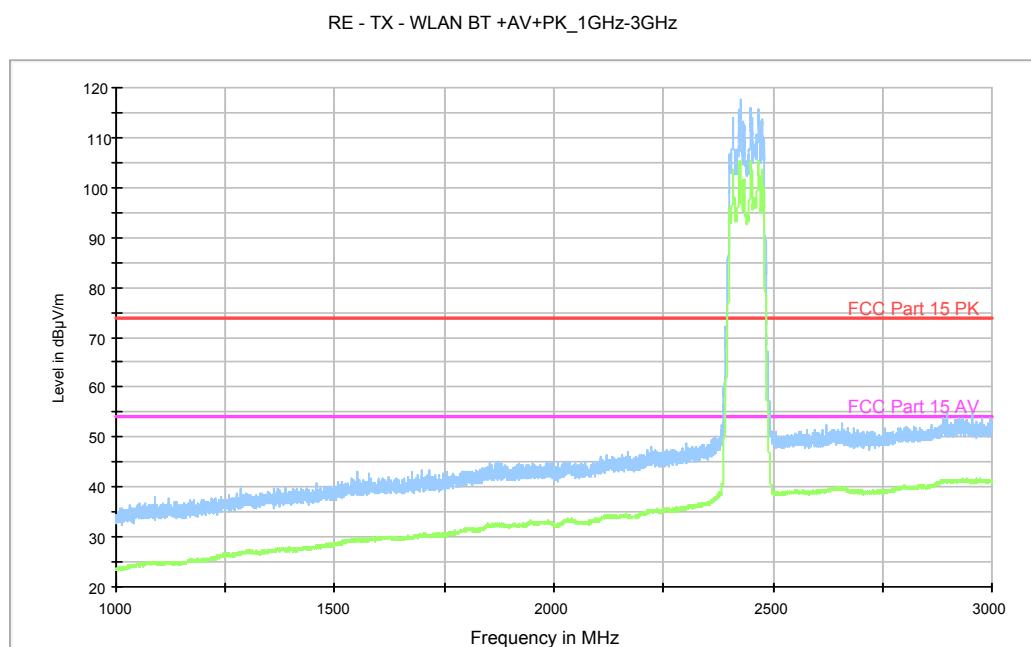


Fig.64. Radiated emission: GFSK, Channel 78, 1 GHz - 3 GHz

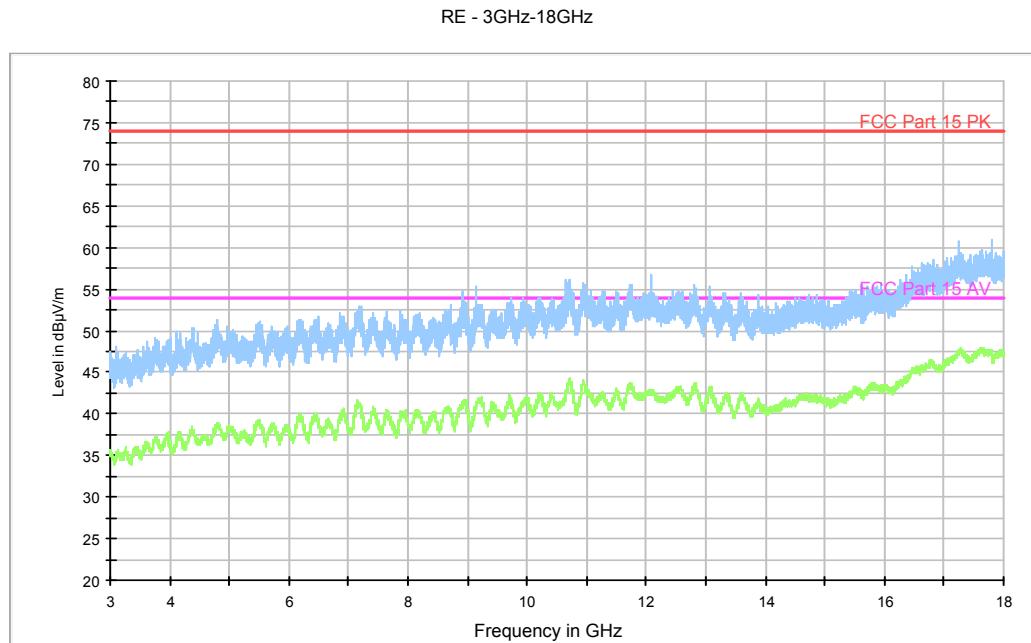


Fig.65. Radiated emission: GFSK, Channel 78, 3 GHz - 18 GHz

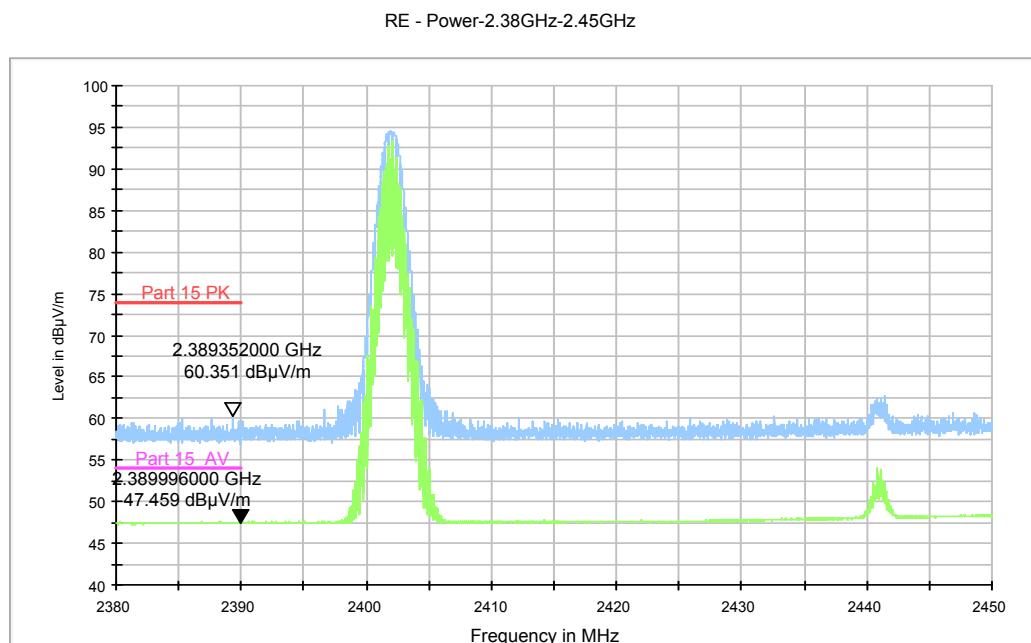


Fig.66. Radiated emission (Power): GFSK, low channel

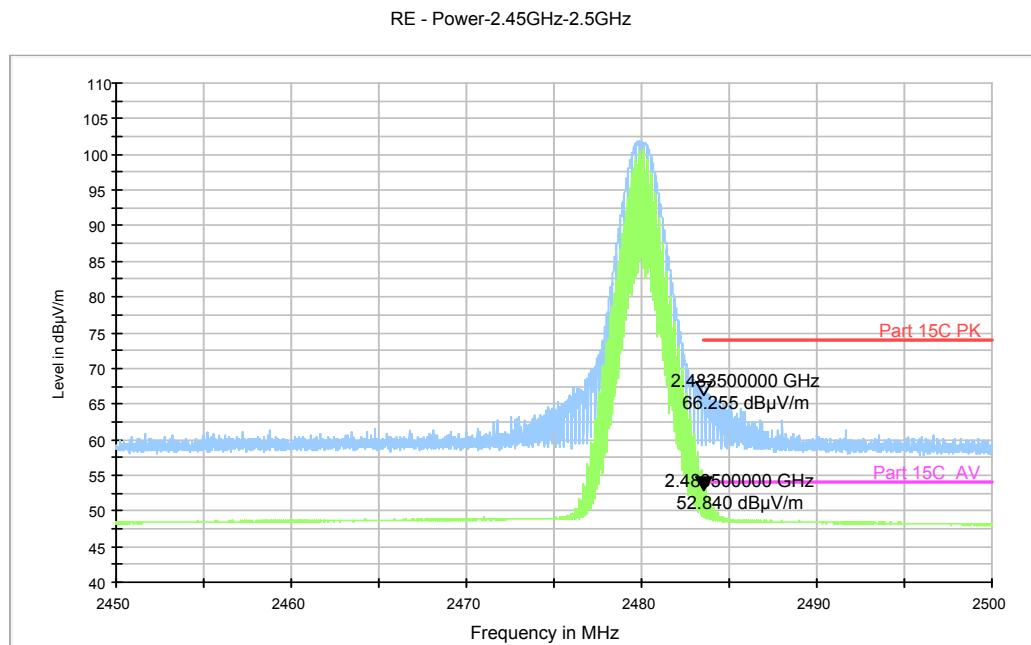


Fig.67. Radiated emission (Power) GFSK, high channel

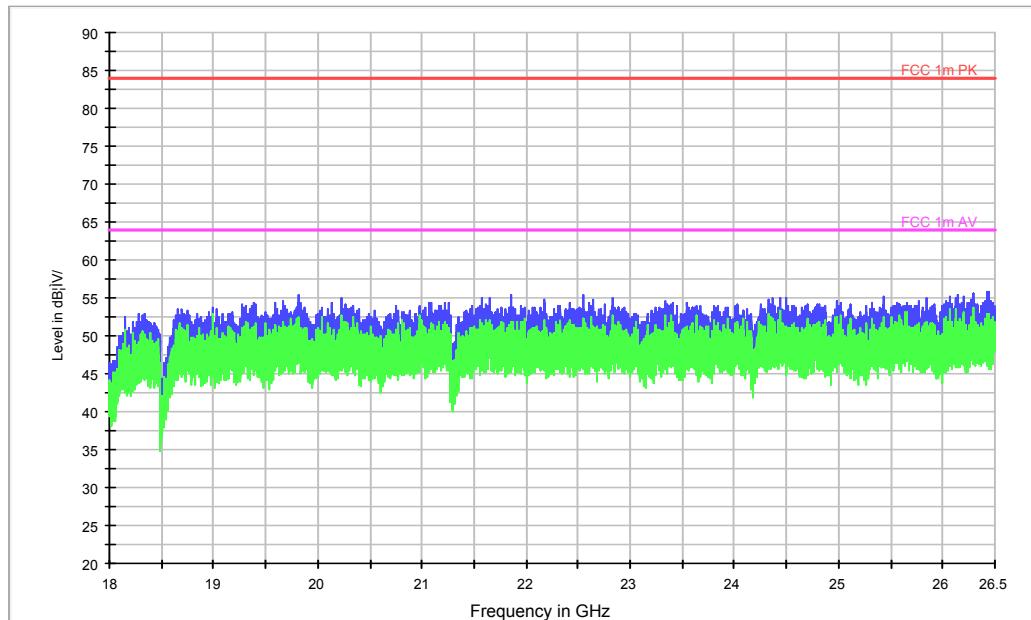


Fig.68. Radiated emission: GFSK, 18 GHz - 26 GHz

RE - TX - WLAN BT +AV+PK_1GHz-3GHz

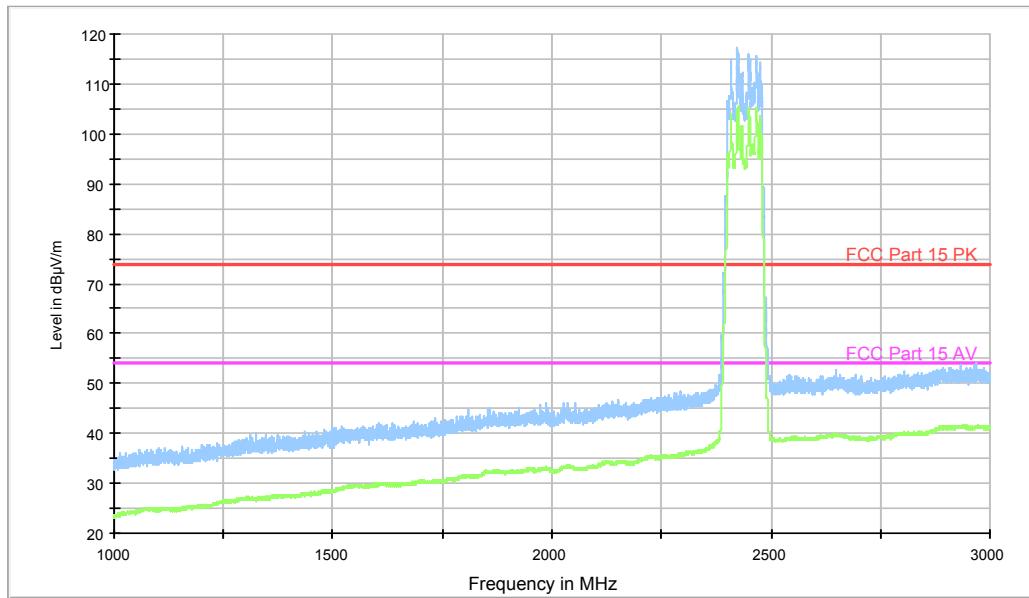


Fig.69. Radiated emission: $\pi/4$ DQPSK, Channel 0, 1 GHz - 3 GHz

RE - 3GHz-18GHz

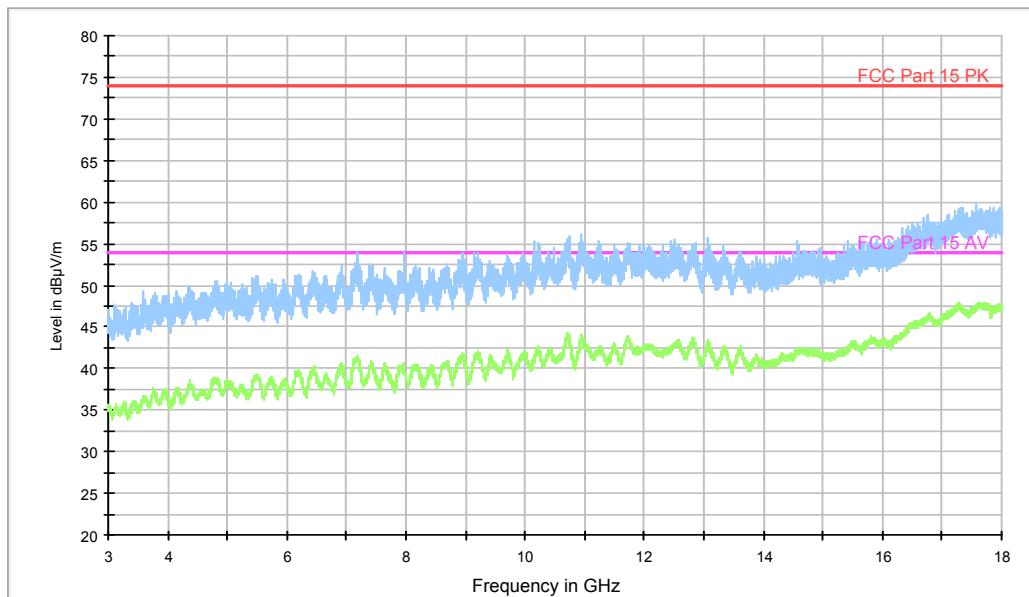


Fig.70. Radiated emission: $\pi/4$ DQPSK, Channel 0, 3 GHz - 18 GHz

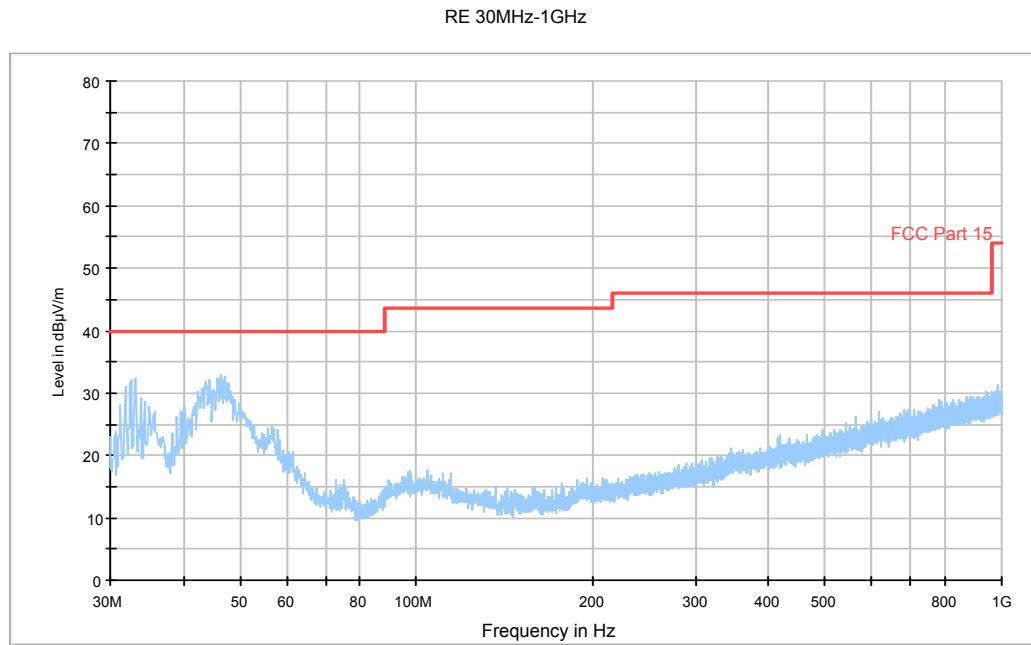


Fig.71. Radiated emission: $\pi/4$ DQPSK, Channel 39, 30 MHz - 1 GHz

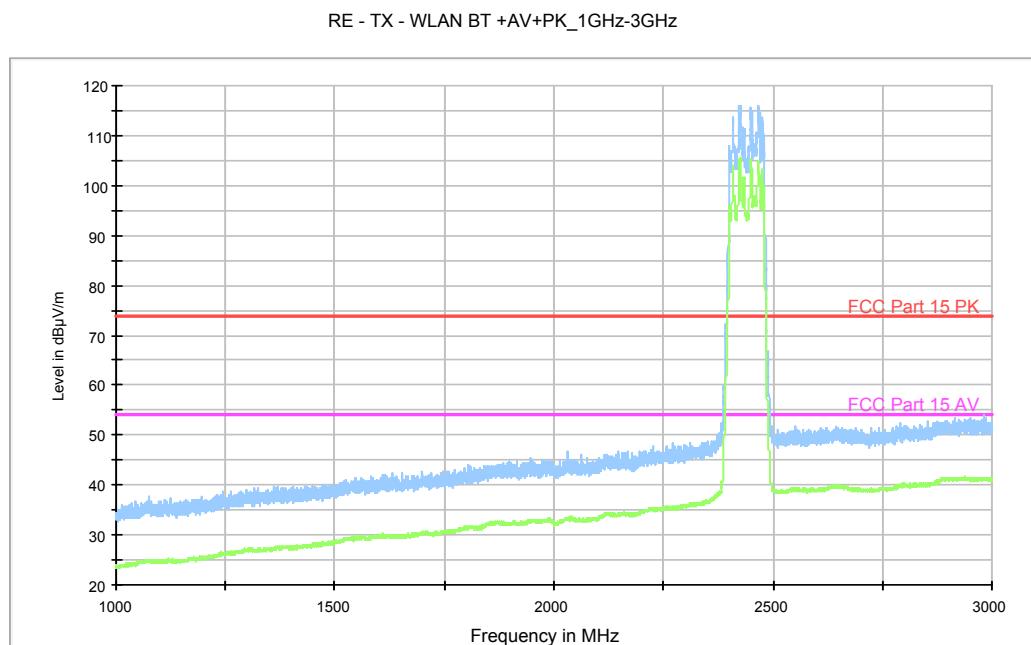


Fig.72. Radiated emission: $\pi/4$ DQPSK, Channel 39, 1 GHz - 3 GHz

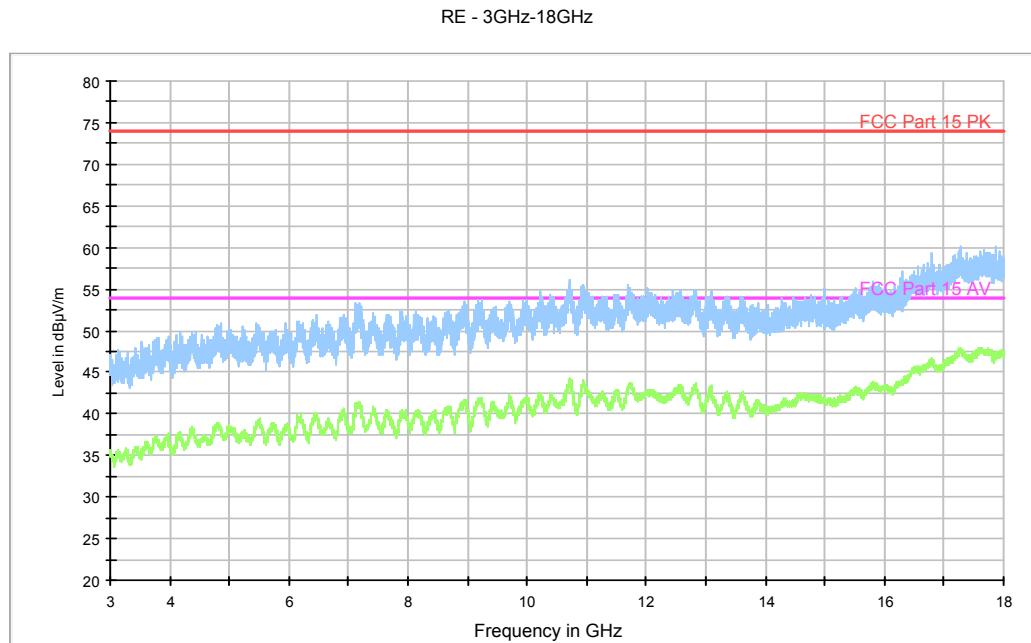


Fig.73. Radiated emission: $\pi/4$ DQPSK, Channel 39, 3 GHz - 18 GHz

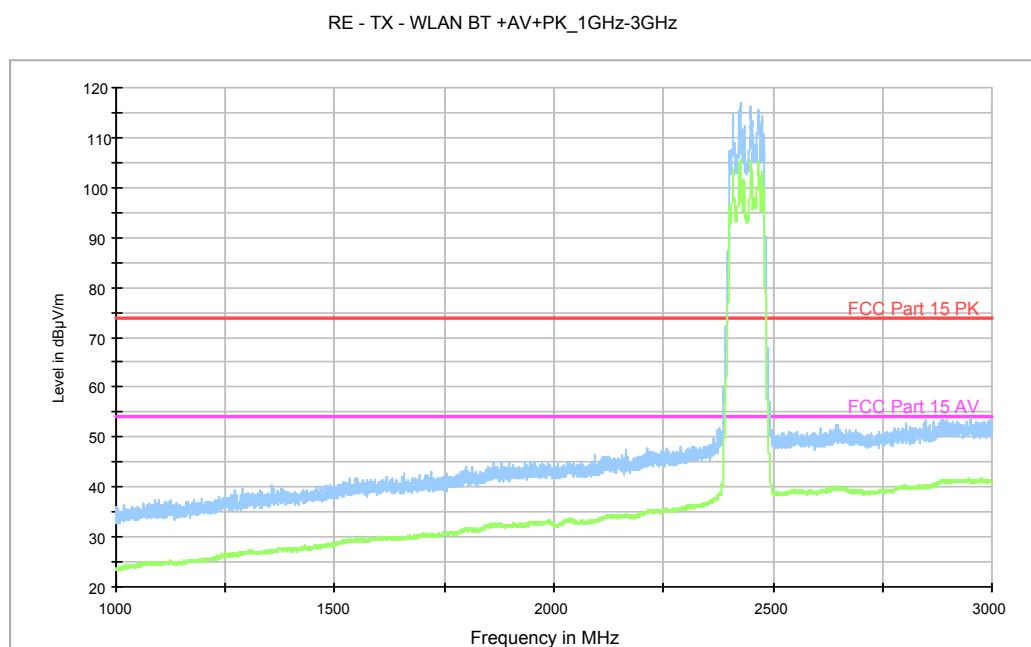


Fig.74. Radiated emission: $\pi/4$ DQPSK, Channel 78, 1 GHz - 3 GHz

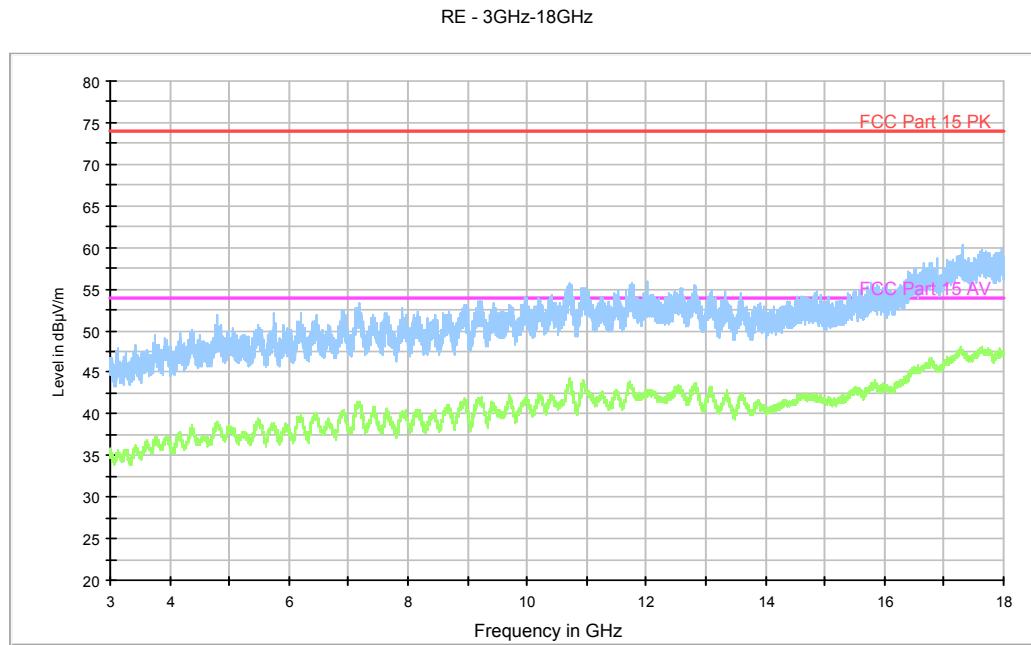


Fig.75. Radiated emission: $\pi/4$ DQPSK, Channel 78, 3 GHz - 18 GHz

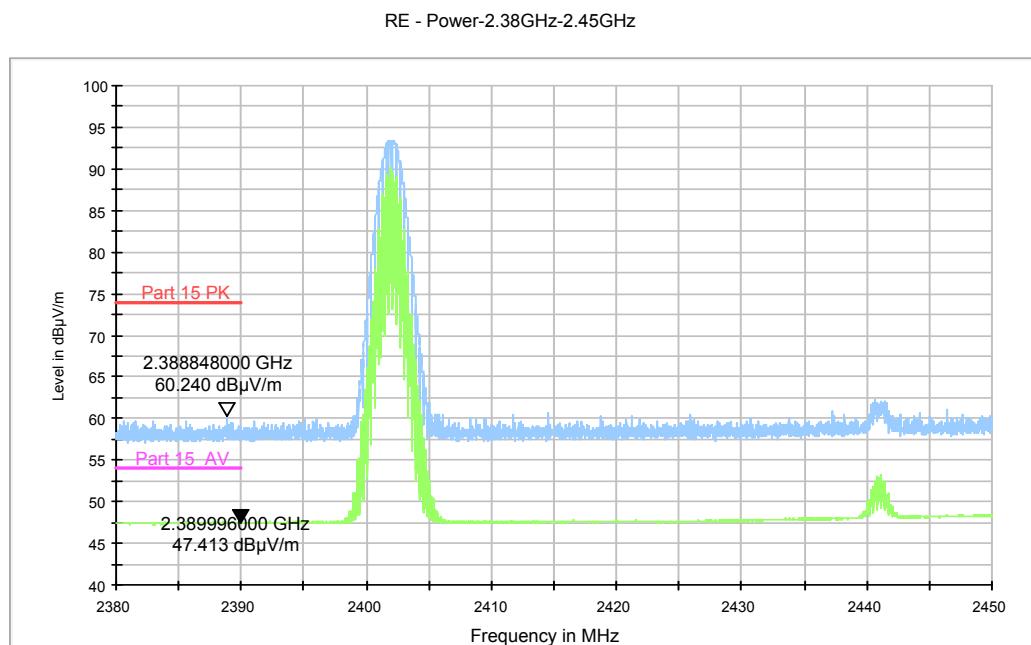


Fig.76. Radiated emission (Power): $\pi/4$ DQPSK, low channel

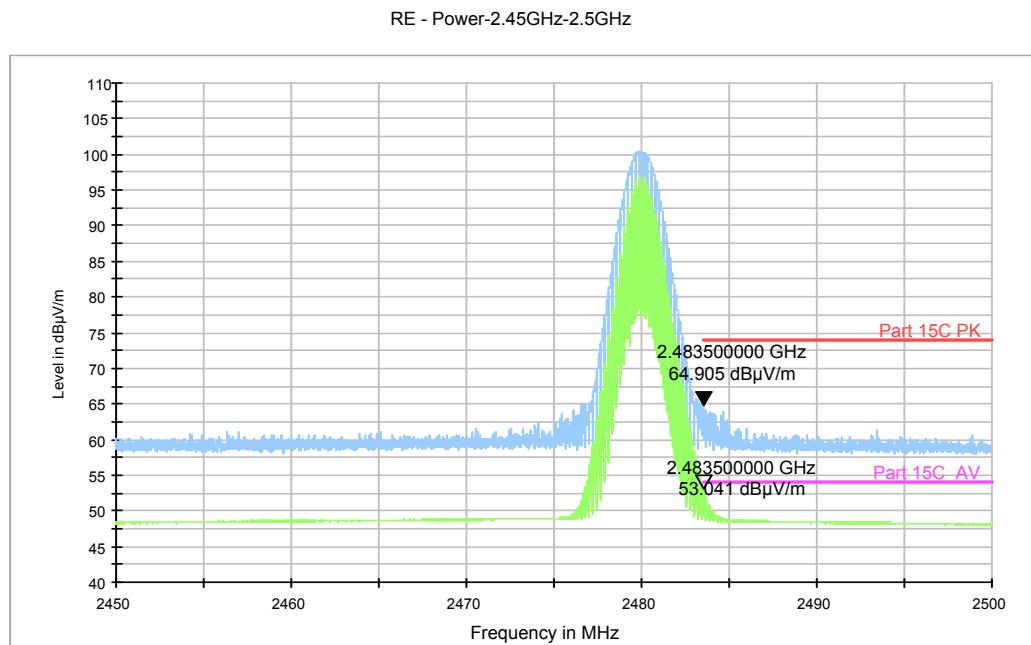


Fig.77. Radiated emission (Power): $\pi/4$ DQPSK, high channel

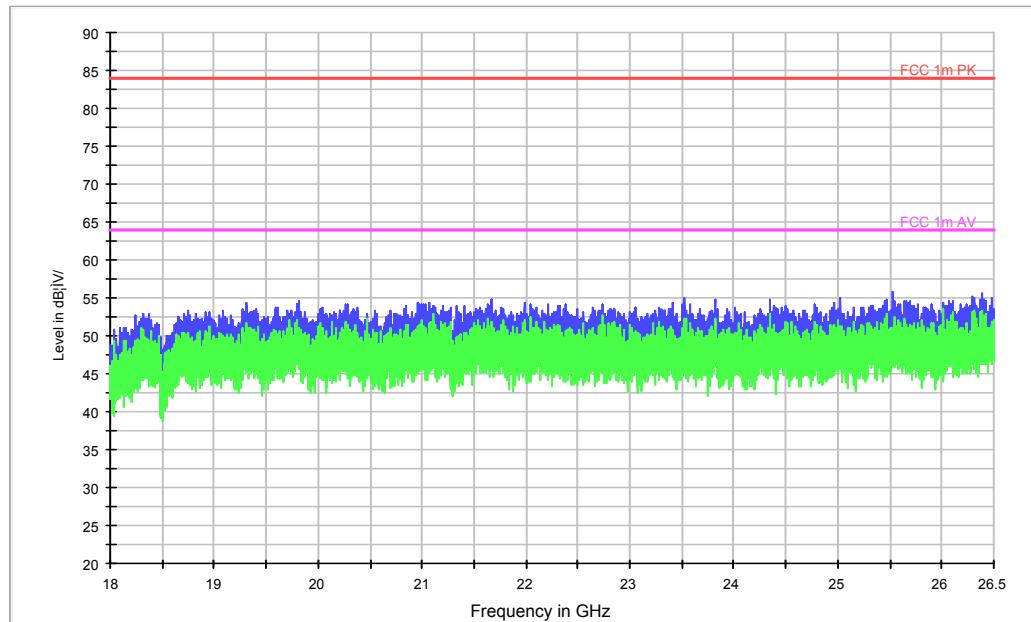


Fig.78. Radiated emission: $\pi/4$ DQPSK, 18 GHz - 26 GHz

RE - TX - WLAN BT +AV+PK_1GHz-3GHz

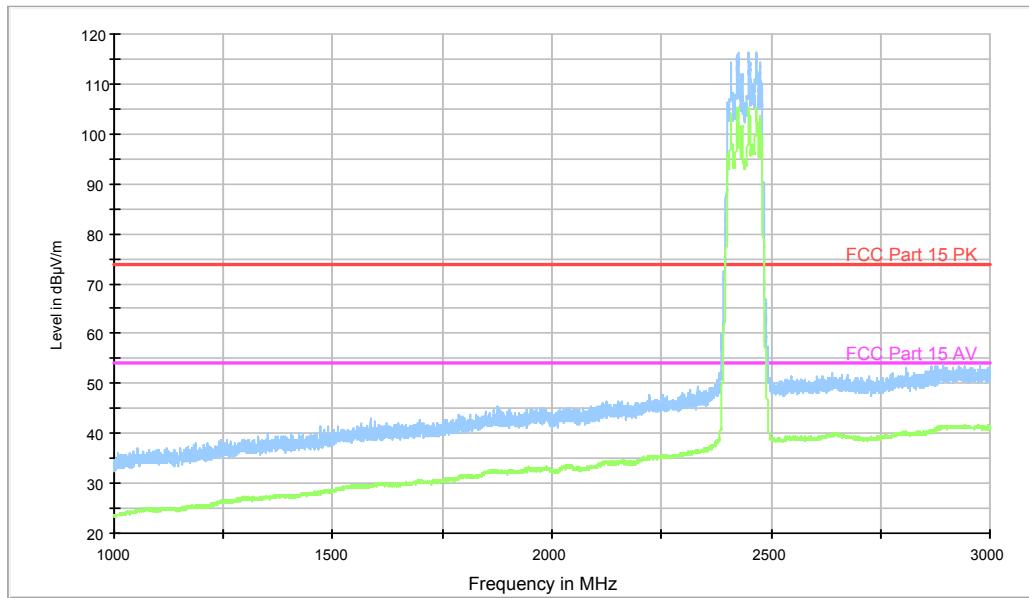


Fig.79. Radiated emission: 8DPSK, Channel 0, 1 GHz - 3 GHz

RE - 3GHz-18GHz

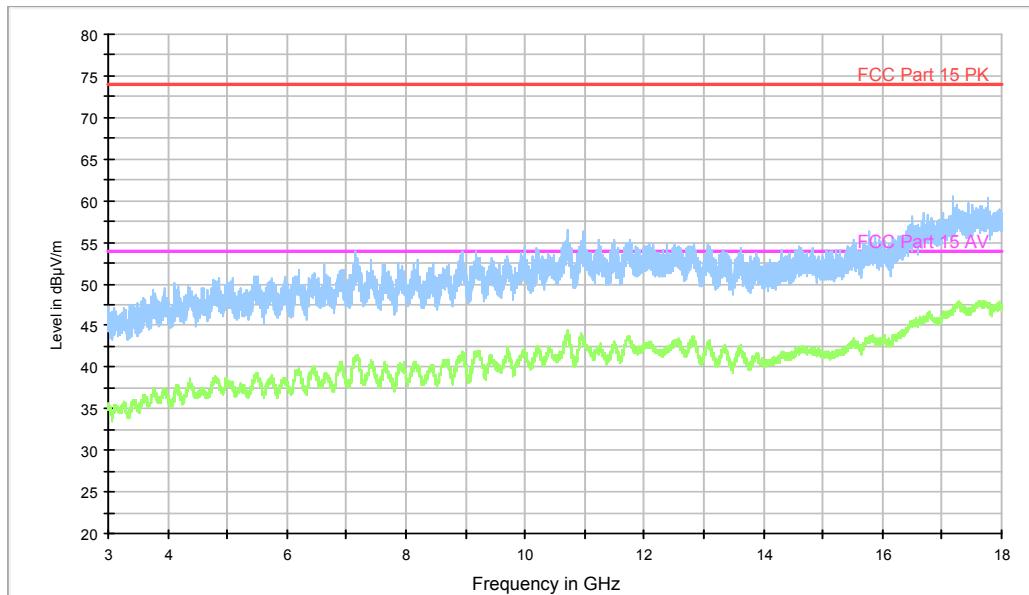


Fig.80. Radiated emission: 8DPSK, Channel 0, 3 GHz - 18 GHz

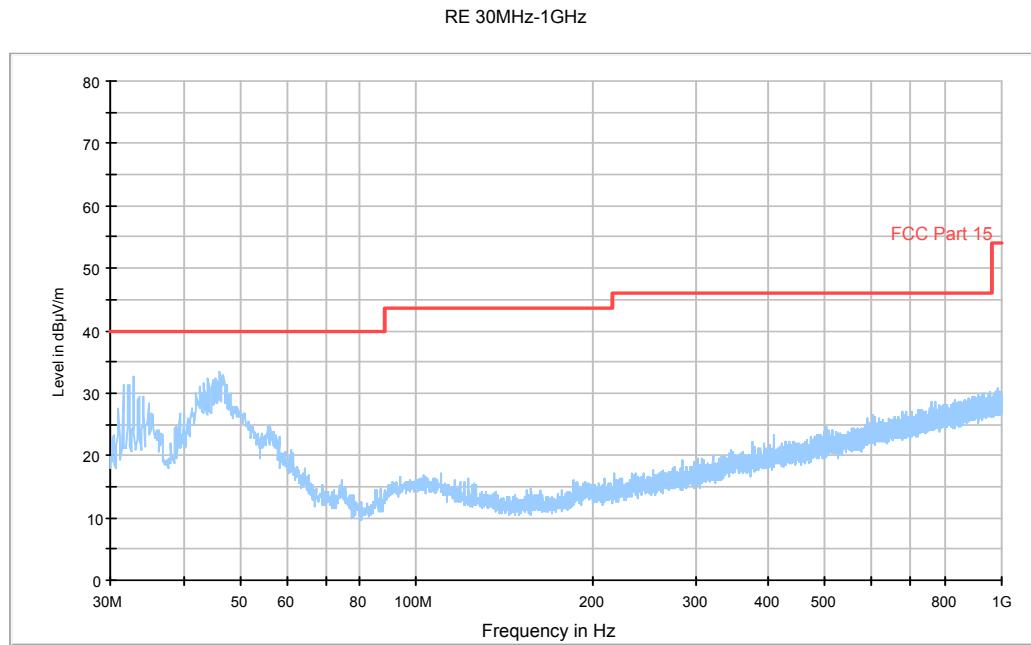


Fig.81. Radiated emission: 8DPSK, Channel 39, 30 MHz - 1 GHz

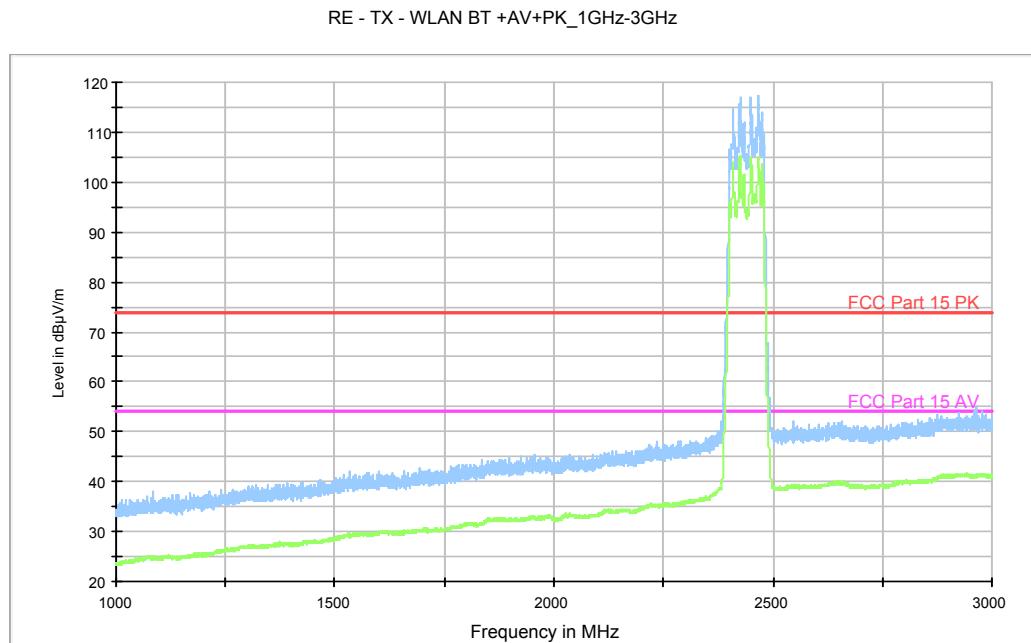


Fig.82. Radiated emission: 8DPSK, Channel 39, 1 GHz - 3 GHz

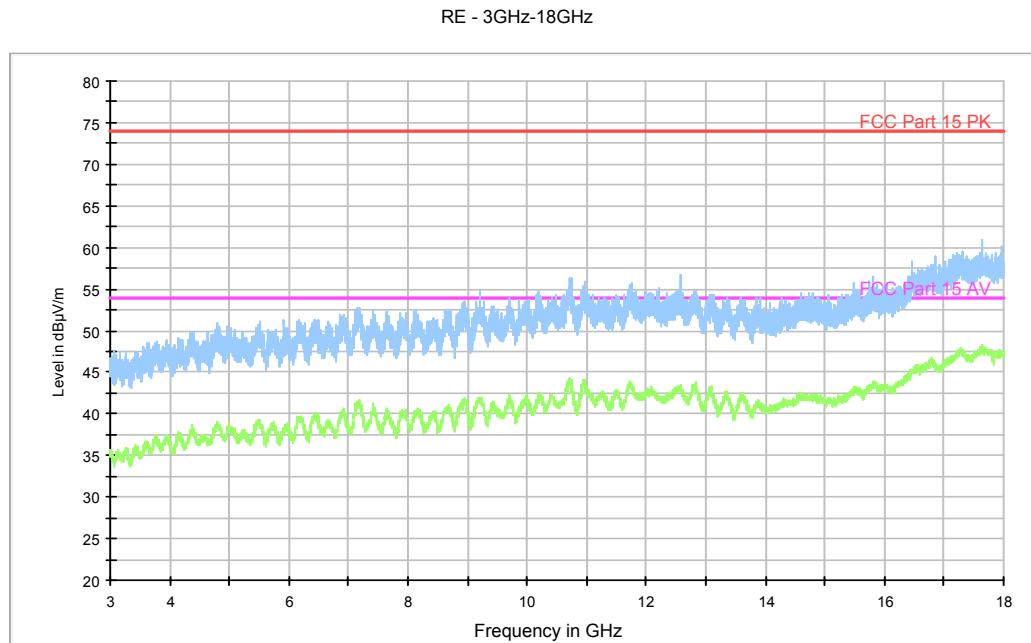


Fig.83. Radiated emission: 8DPSK, Channel 39, 3 GHz - 18 GHz

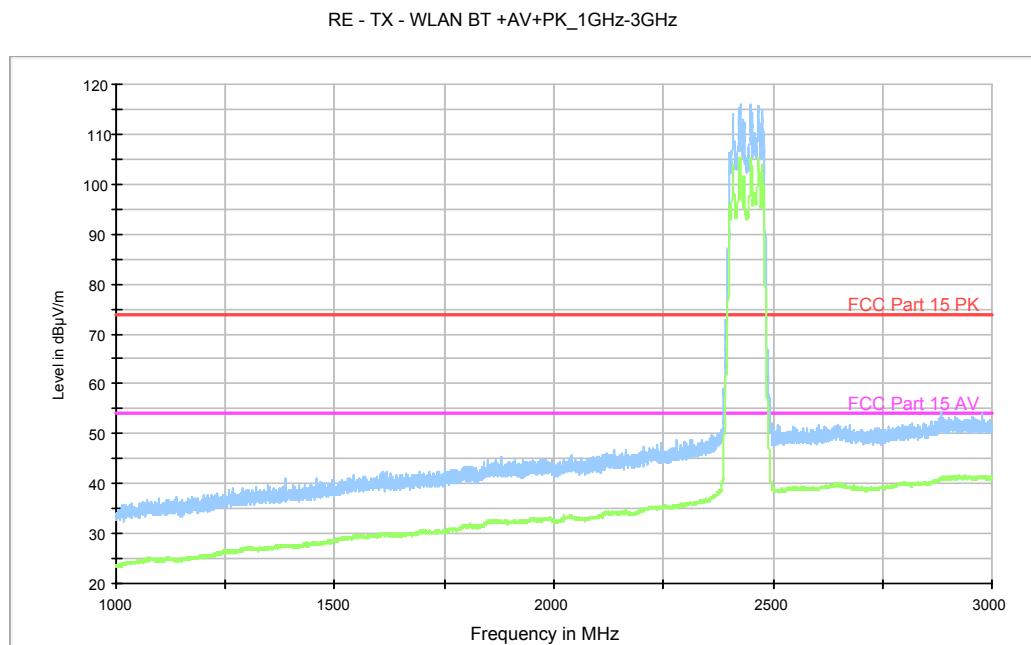


Fig.84. Radiated emission: 8DPSK, Channel 78, 1 GHz - 3 GHz

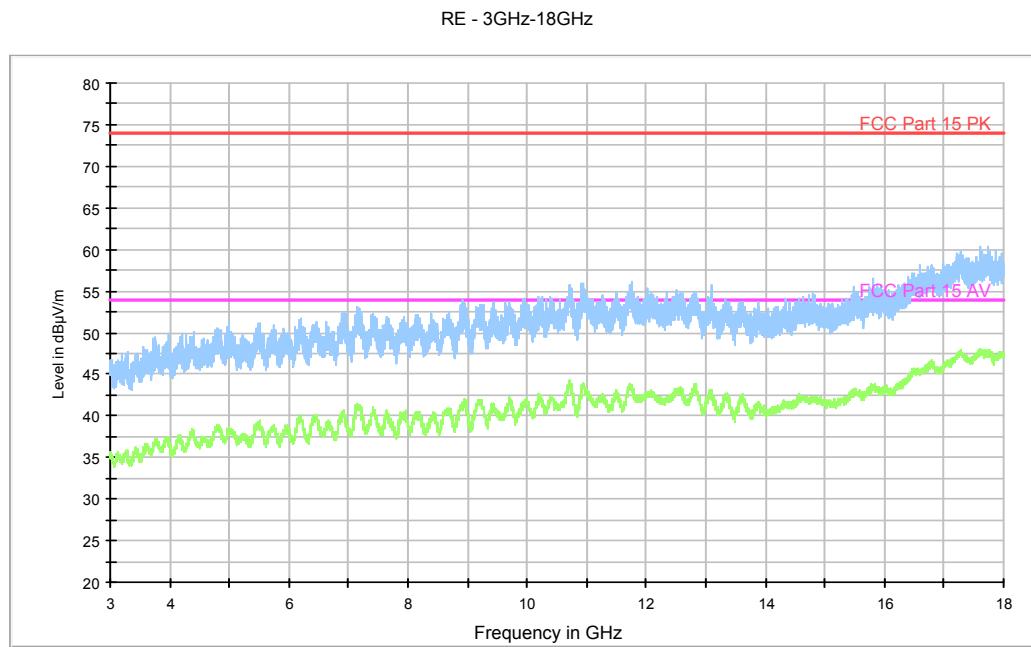


Fig.85. Radiated emission: 8DPSK, Channel 78, 3 GHz - 18 GHz

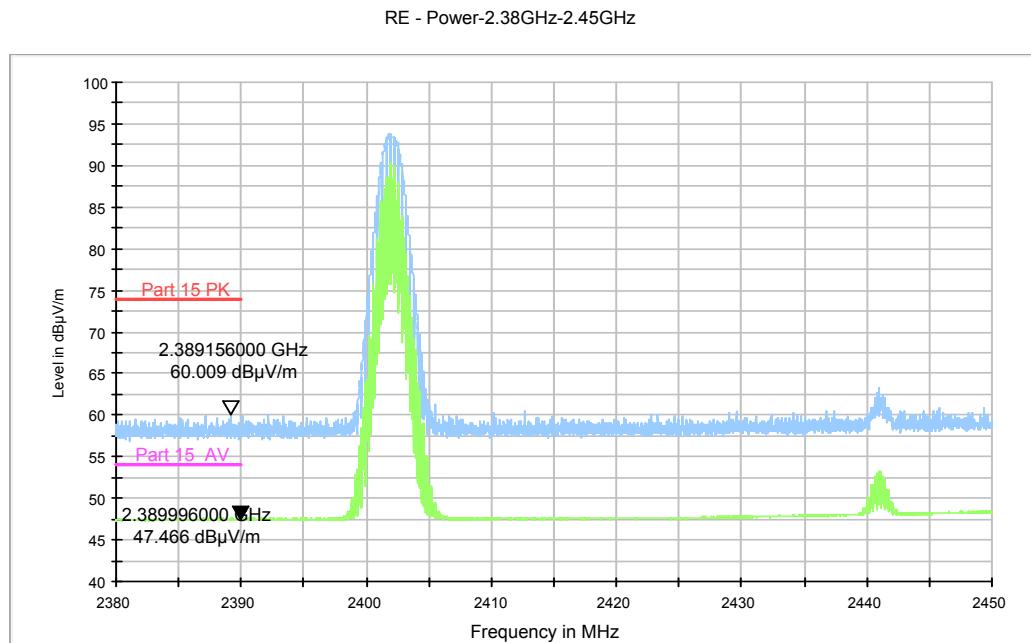


Fig.86. Radiated emission (Power): 8DPSK, low channel

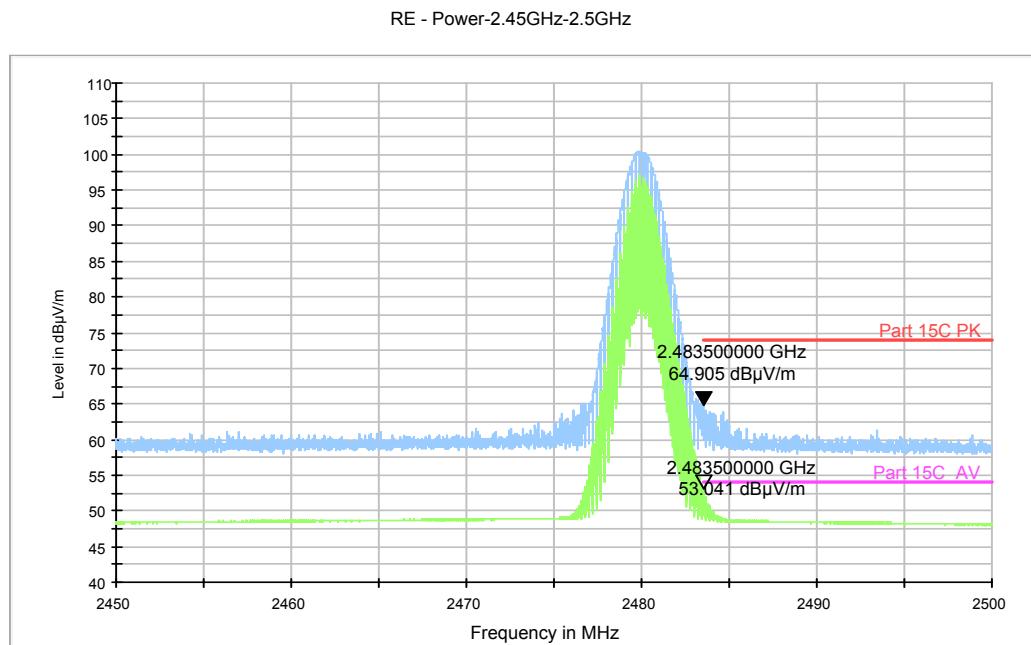


Fig.87. Radiated emission (Power): 8DPSK, high channel

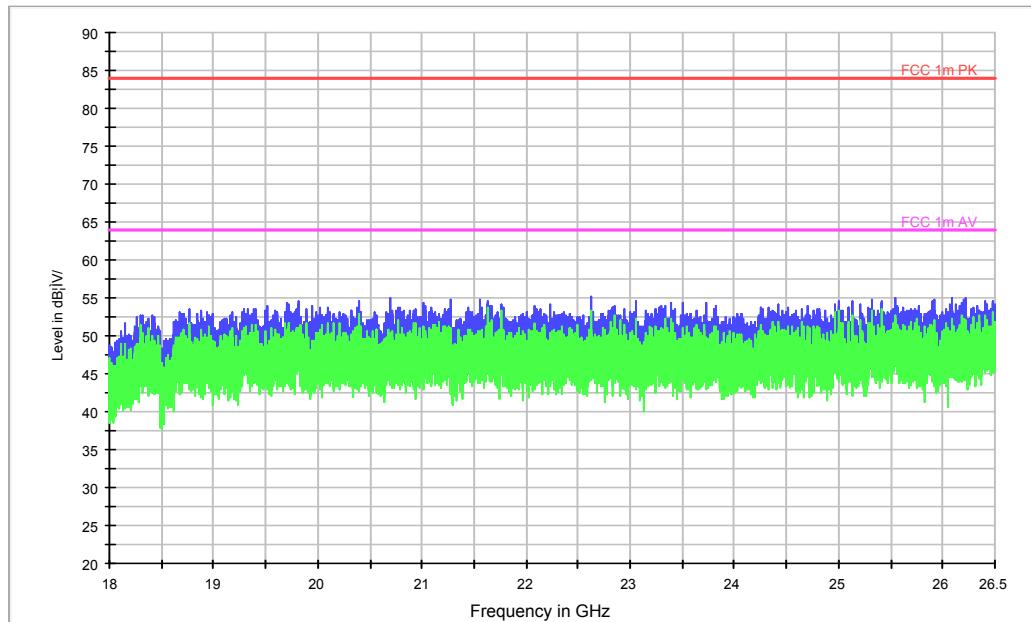


Fig.88. Radiated emission: 8DPSK, 18 GHz - 26 GHz

A.6. Time of Occupancy (Dwell Time)

Method of Measurement: See ANSI C63.10-clause 7.8.4

The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:

- Span = zero span, centered on a hopping channel
- RBW = 1 MHz
- VBW \geq RBW
- Sweep = as necessary to capture the entire dwell time per hopping channel
- Detector function = peak
- Trace = max hold

Measure a pulse time in time domain at middle frequency and then count the hopping number in 31.6s(which equals with 0.4 multiply 79) of middle frequency ,then multiply the pulse time and hopping number and record them.

Measurement Limit:

Standard	Limit (ms)
FCC 47 CFR Part 15.247(a) (1)(iii)	< 400

Measurement Result:

For GFSK

Channel	Packet	Dwell Time (ms)	Conclusion
39	DH1	Fig.89	118.27
	DH3	Fig.90	260.12
	DH5	Fig.91	306.50

For $\pi/4$ DQPSK

Channel	Packet	Dwell Time (ms)	Conclusion
39	DH1	Fig.92	120.54
	DH3	Fig.93	260.62
	DH5	Fig.94	306.87

For 8DPSK

Channel	Packet	Dwell Time (ms)	Conclusion
39	DH1	Fig.95	120.91

	DH3	Fig.96	260.46	P
	DH5	Fig.97	306.70	P

Conclusion: PASS

Test graphs as below:

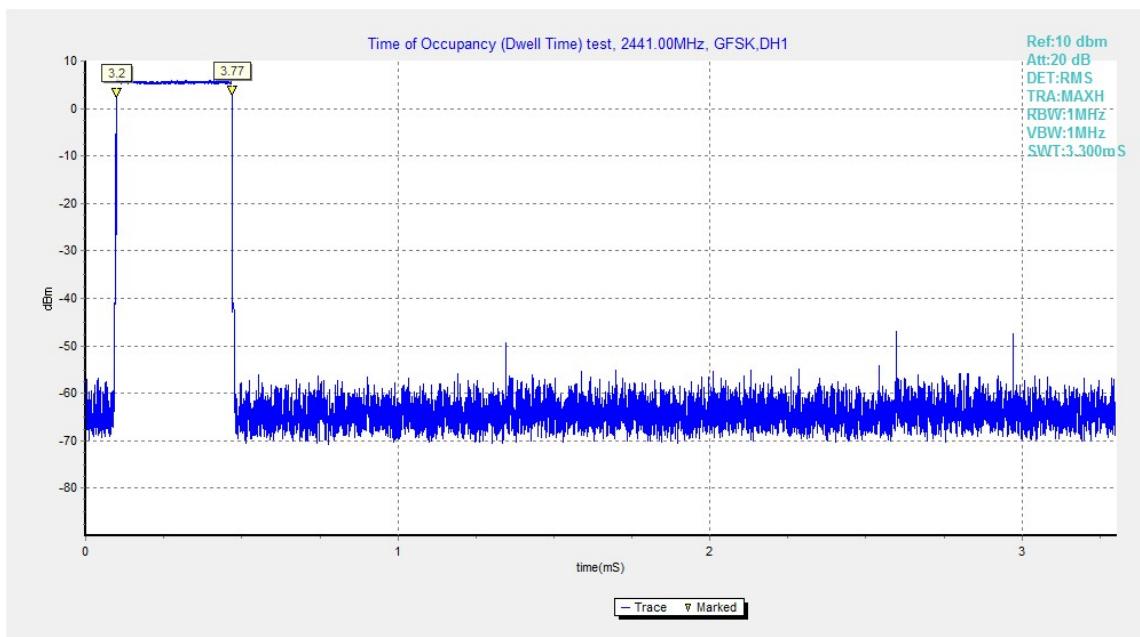


Fig.89. Time of occupancy (Dwell Time): Channel 39, Packet DH1

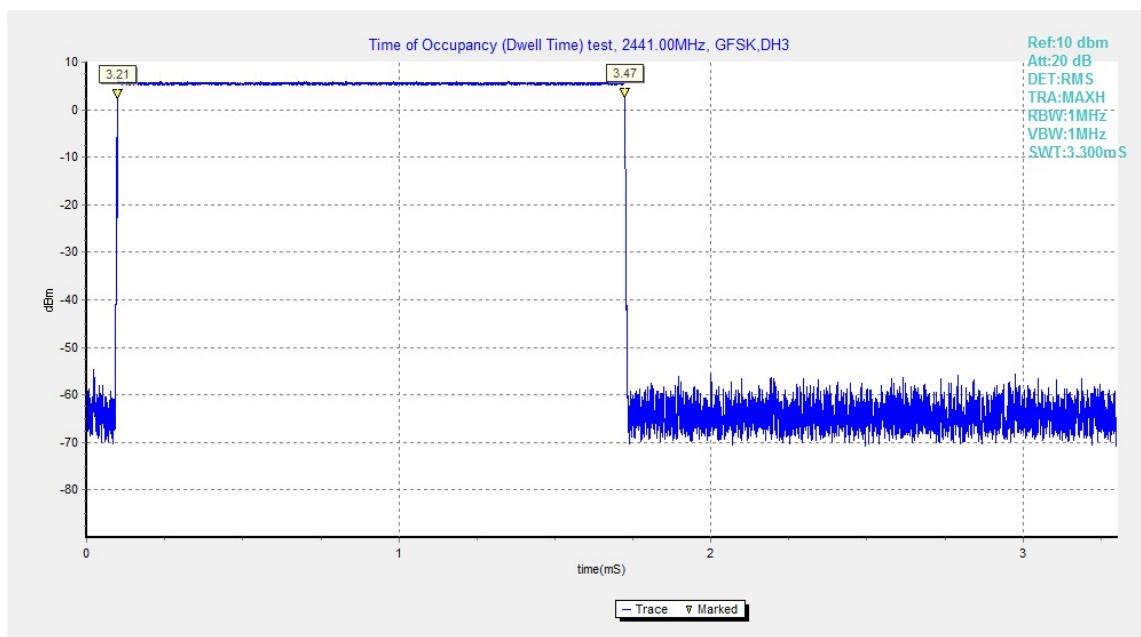


Fig.90. Time of occupancy (Dwell Time): Channel 39, Packet DH3



Fig.91. Time of occupancy (Dwell Time): Channel 39, Packet DH5

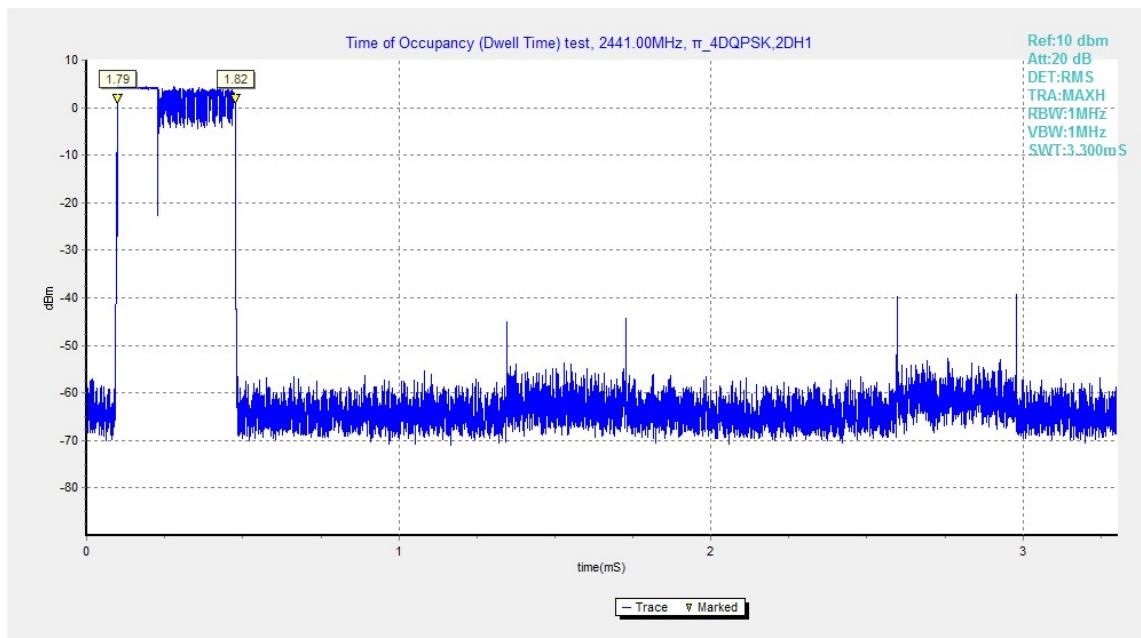


Fig.92. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH1

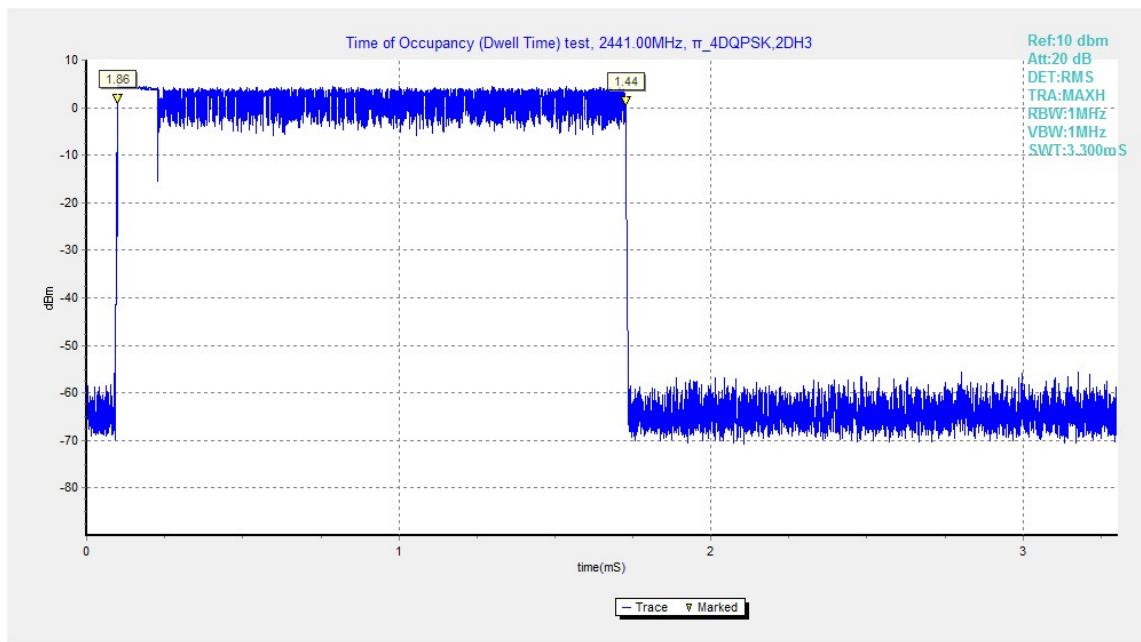


Fig.93. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH3

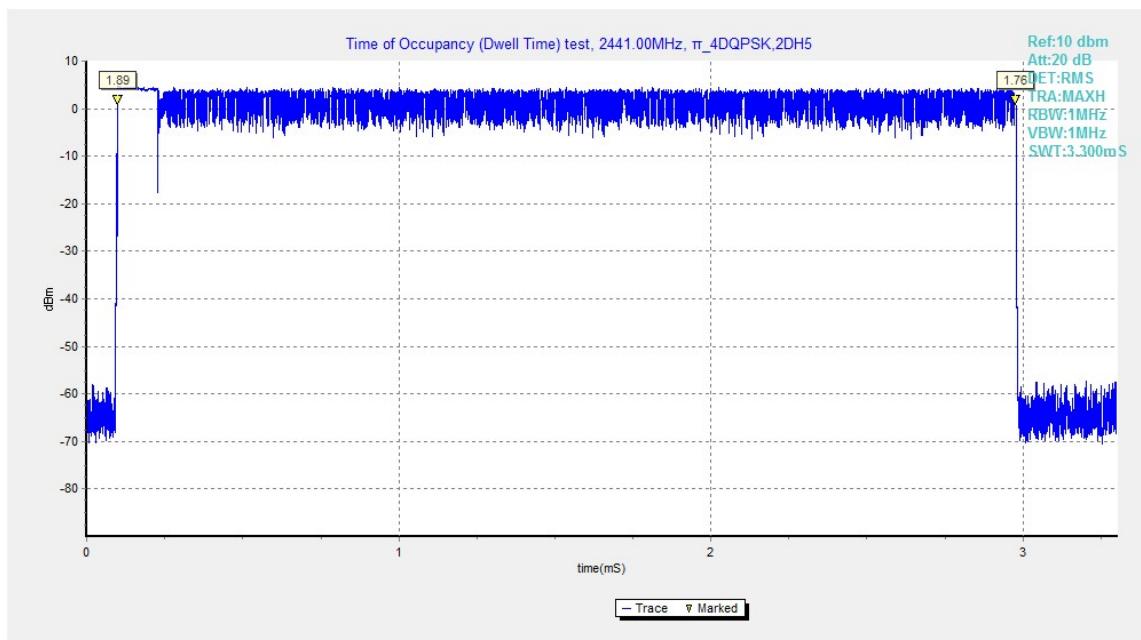


Fig.94. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH5

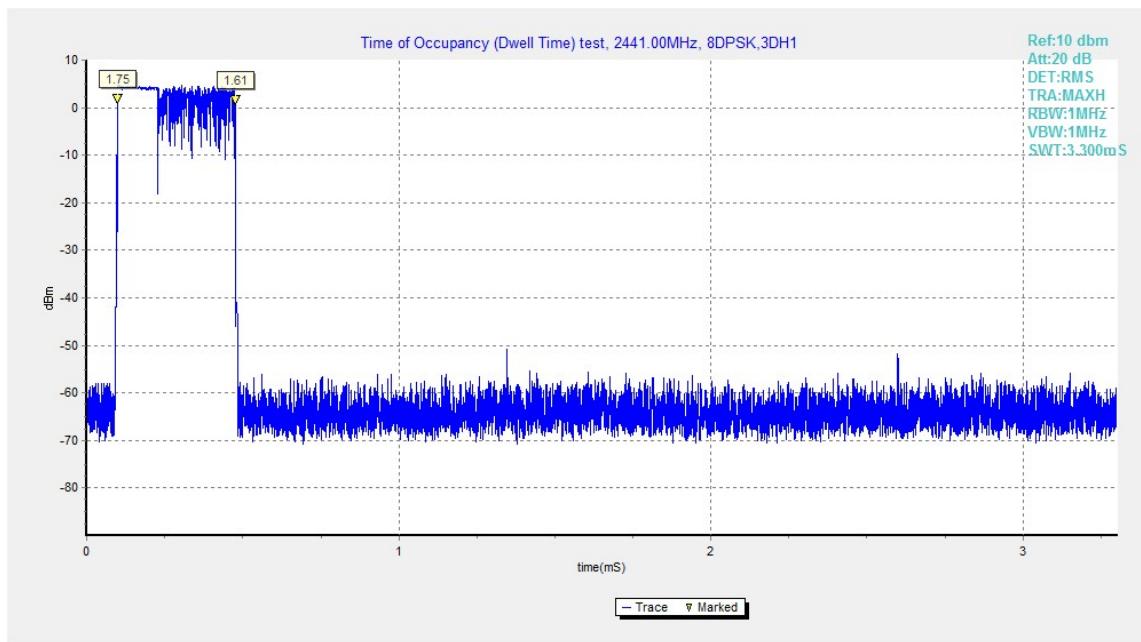


Fig.95. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH1

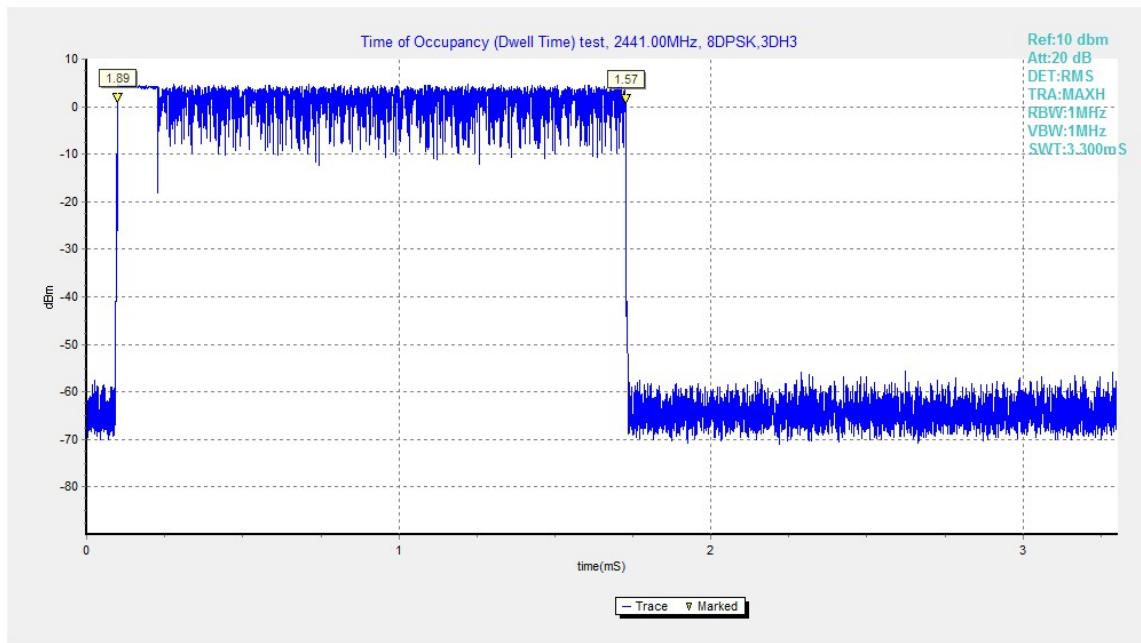


Fig.96. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH3

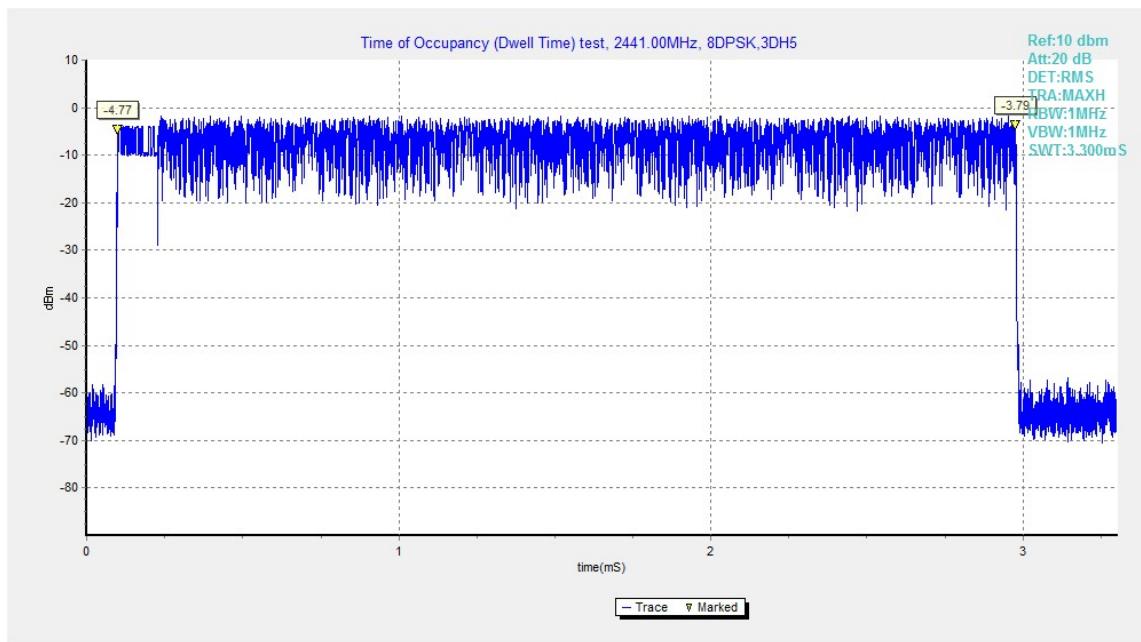


Fig.97. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH5

A.7. 20dB Bandwidth

Method of Measurement: See ANSI C63.10-clause 6.9.2

Measurement Procedure - Unwanted Emissions

1. Set RBW = 30kHz.
2. Set VBW = 100 kHz.
3. Set span to 3MHz
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize (this may take some time, depending on the extent of the span).

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(a)(1)	NA *

Use NdB Down function of the SA to measure the 20dB Bandwidth

* Comment: This test case is not required according to the latest FCC 47 CFR Part 15.247. But the test results are necessary for “carrier frequency separation” test case, in Annex A.8.

Measurement Results:

For GFSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.98	942.00	NA
39	Fig.99	968.00	NA
78	Fig.100	938.00	NA

For π/4 DQPSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.101	1268.00	NA
39	Fig.102	1264.00	NA
78	Fig.103	1263.00	NA

For 8DPSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.104	1289.00	NA
39	Fig.105	1263.00	NA
78	Fig.106	1263.00	NA

Conclusion: NA

Test graphs as below:

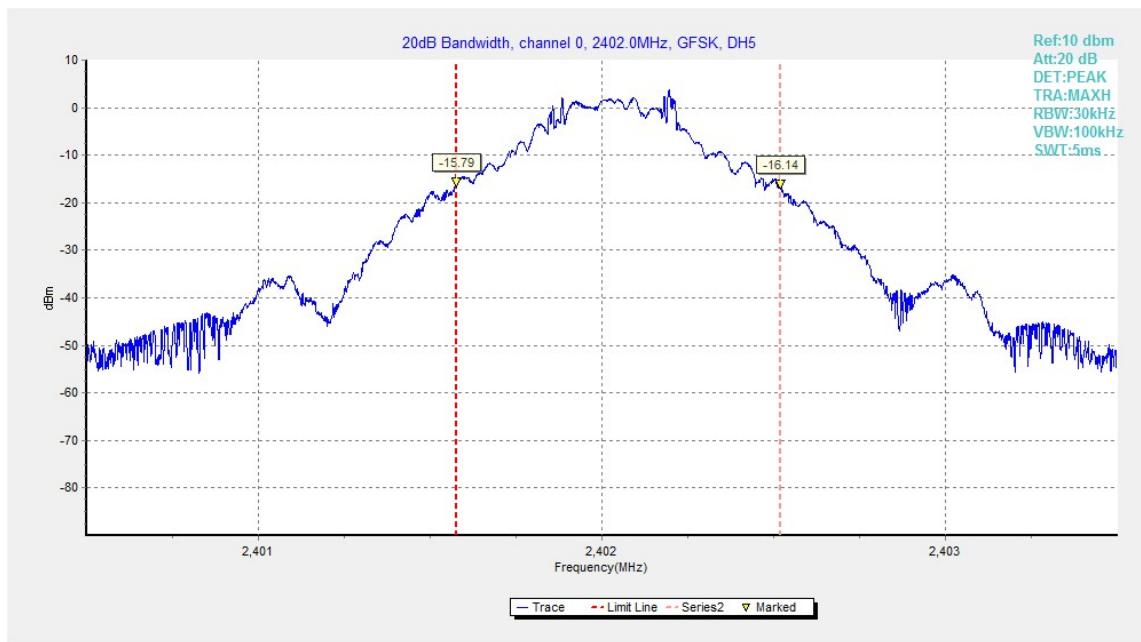


Fig.98. 20dB Bandwidth: GFSK, Channel 0

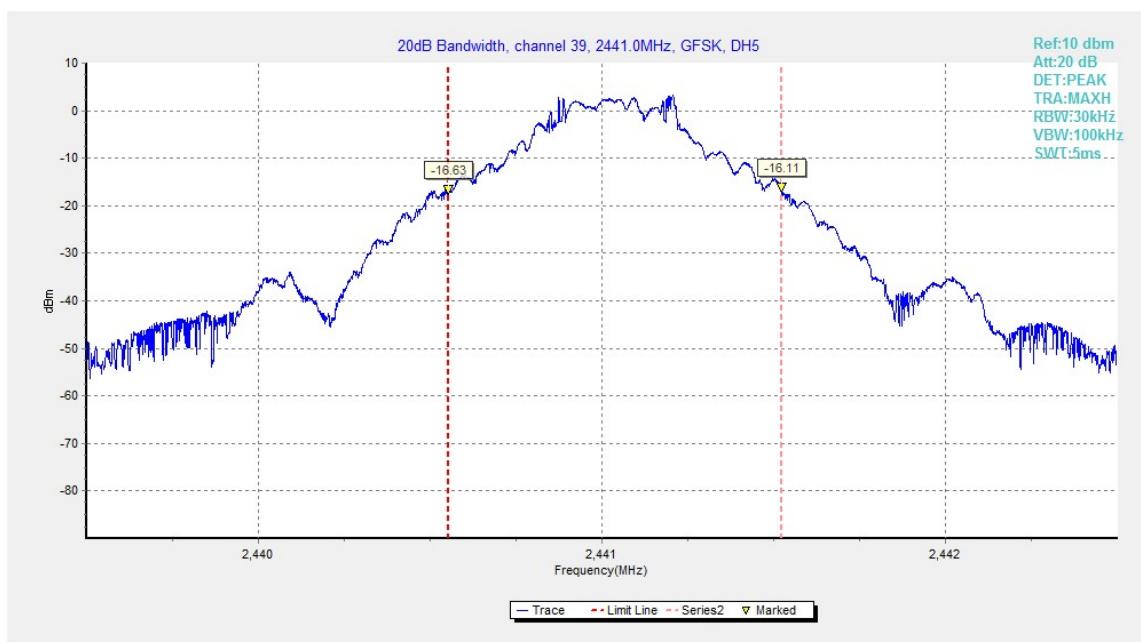


Fig.99. 20dB Bandwidth: GFSK, Channel 39

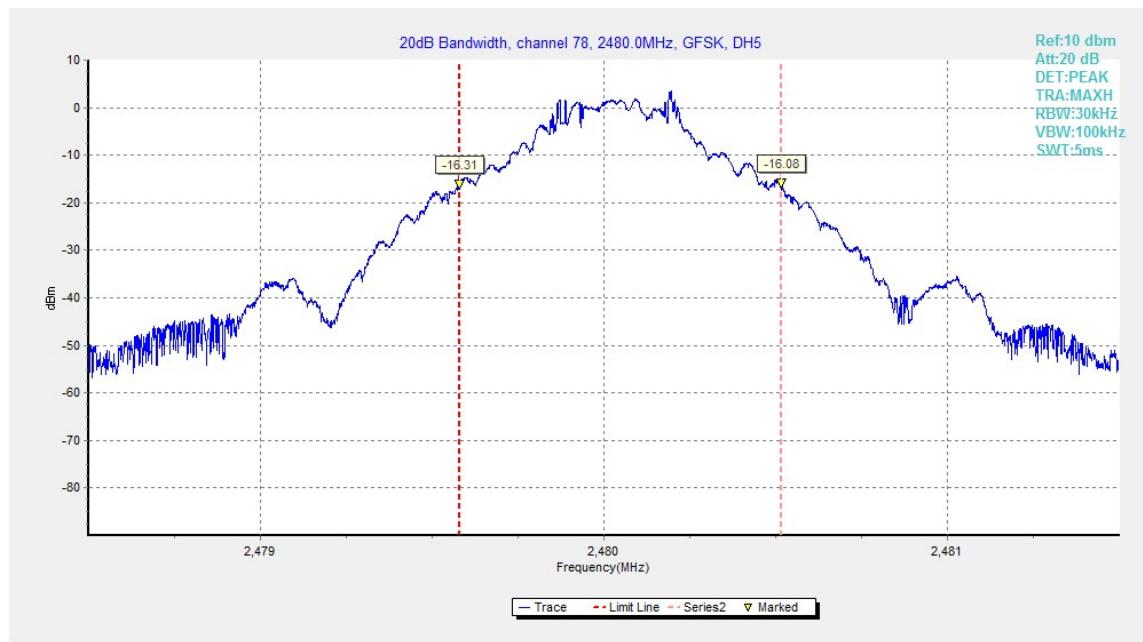


Fig.100. 20dB Bandwidth: GFSK, Channel 78

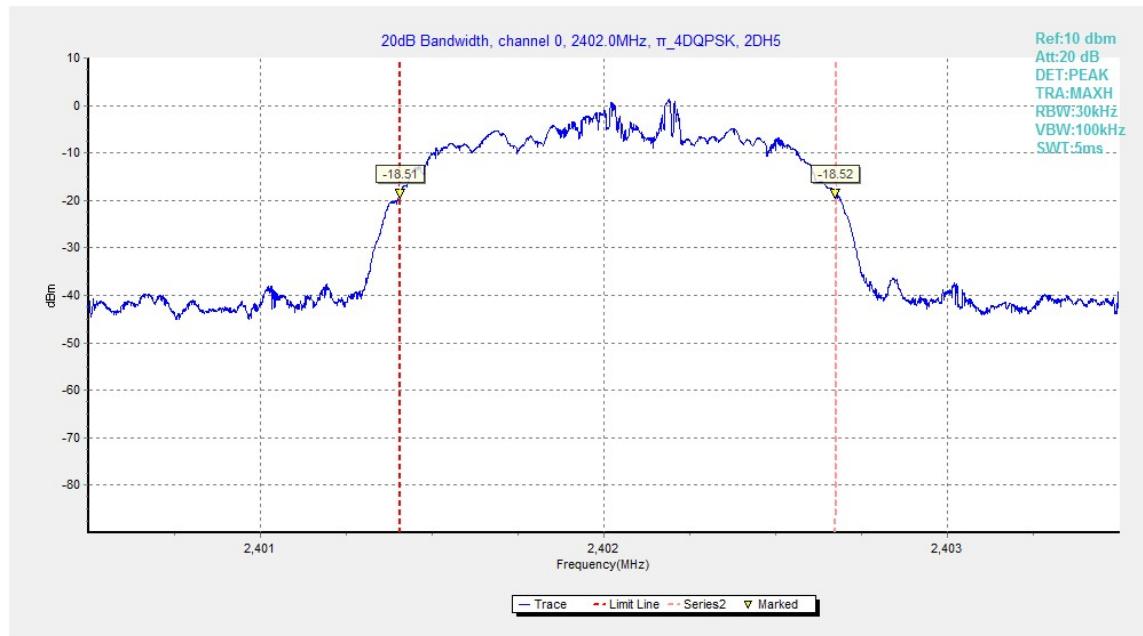


Fig.101. 20dB Bandwidth: π/4 DQPSK, Channel 0

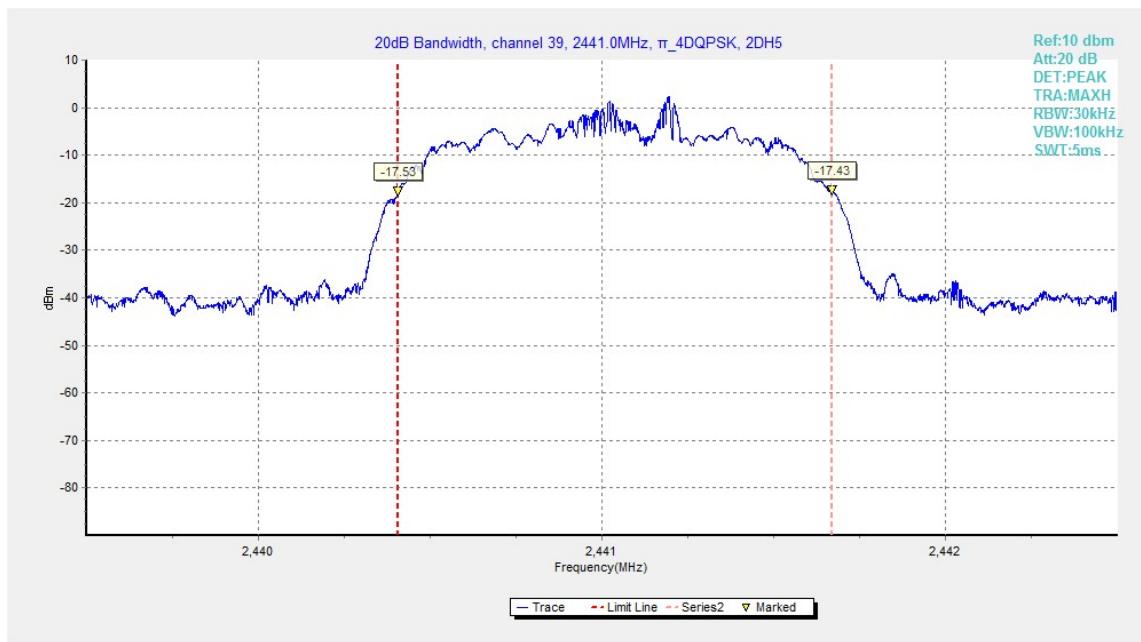


Fig.102. 20dB Bandwidth: $\pi/4$ DQPSK, Channel 39

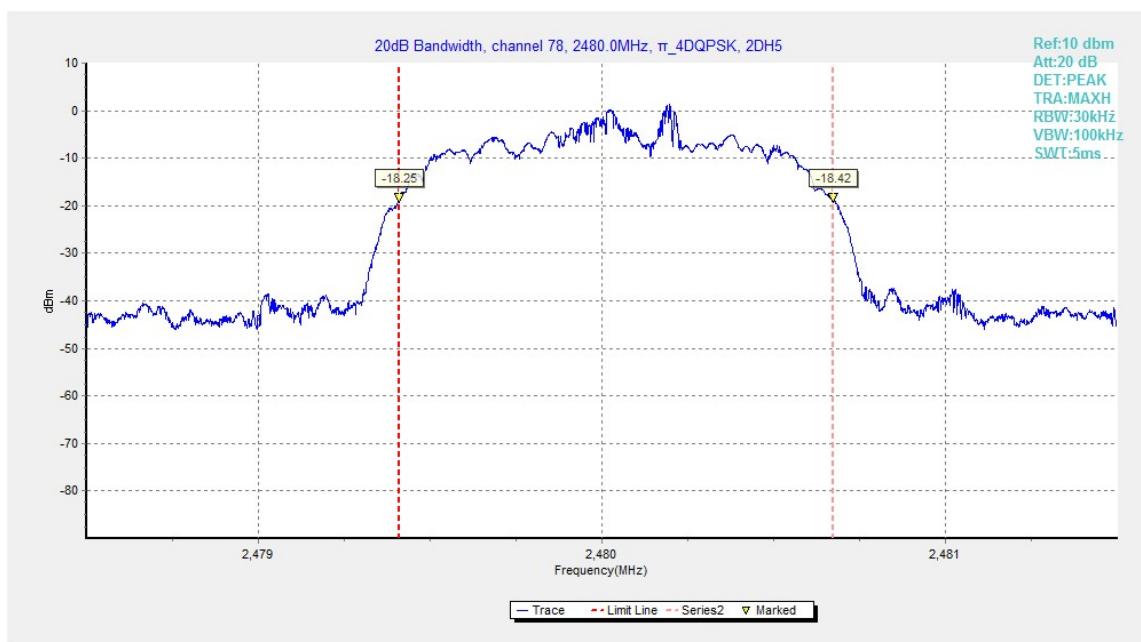


Fig.103. 20dB Bandwidth: $\pi/4$ DQPSK, Channel 78