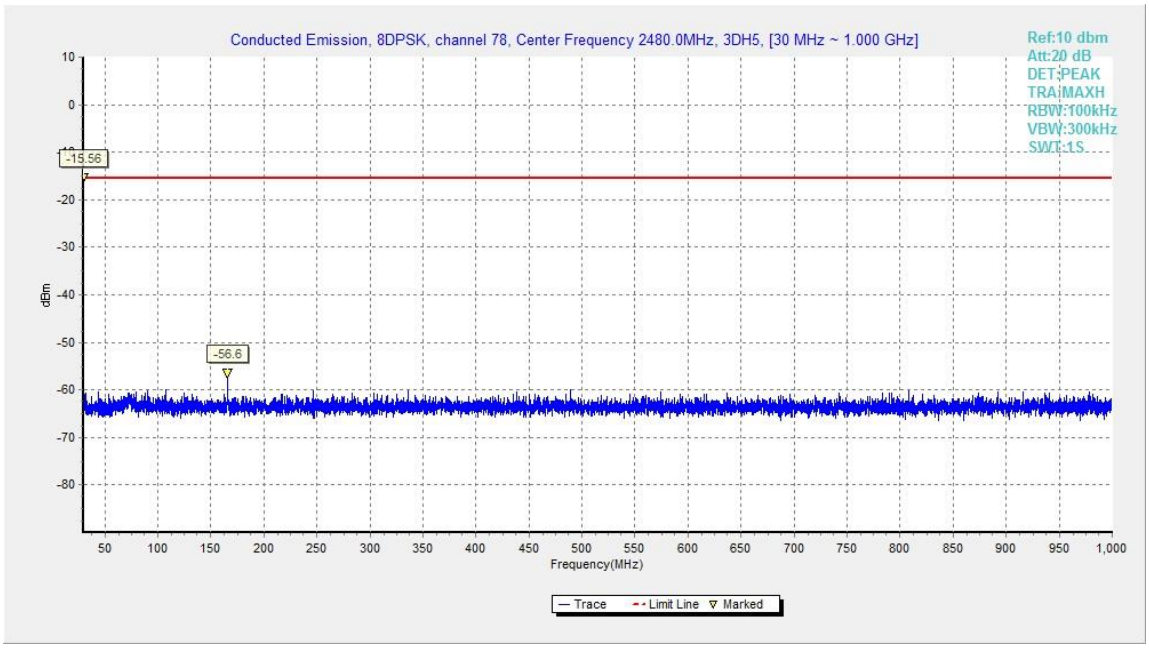

Fig.54. Conducted spurious emission: 8DPSK, Channel 78, 30MHz - 1GHz

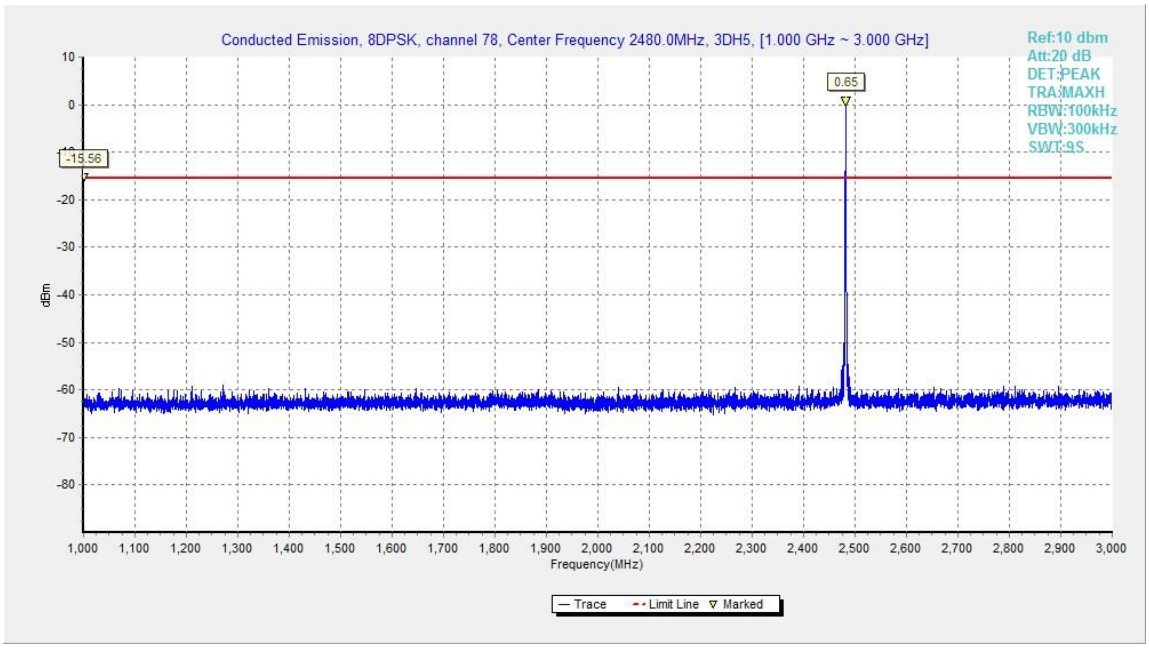

Fig.55. Conducted spurious emission: 8DPSK, Channel 78, 1GHz - 3GHz

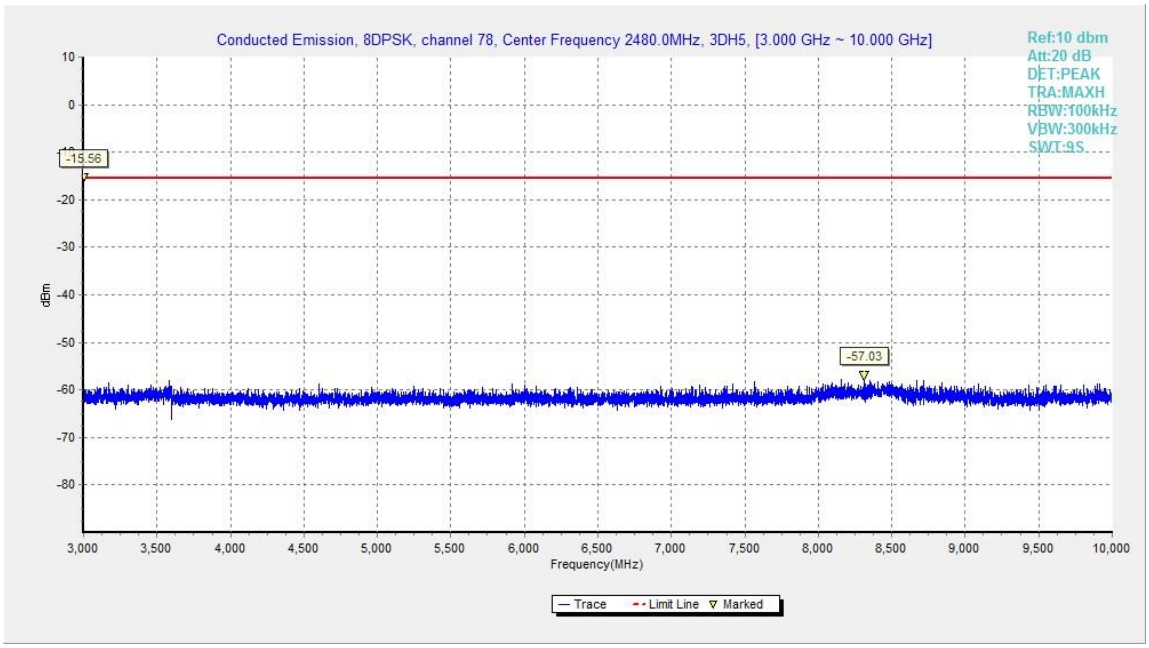

Fig.56. Conducted spurious emission: 8DPSK, Channel 78, 3GHz - 10GHz

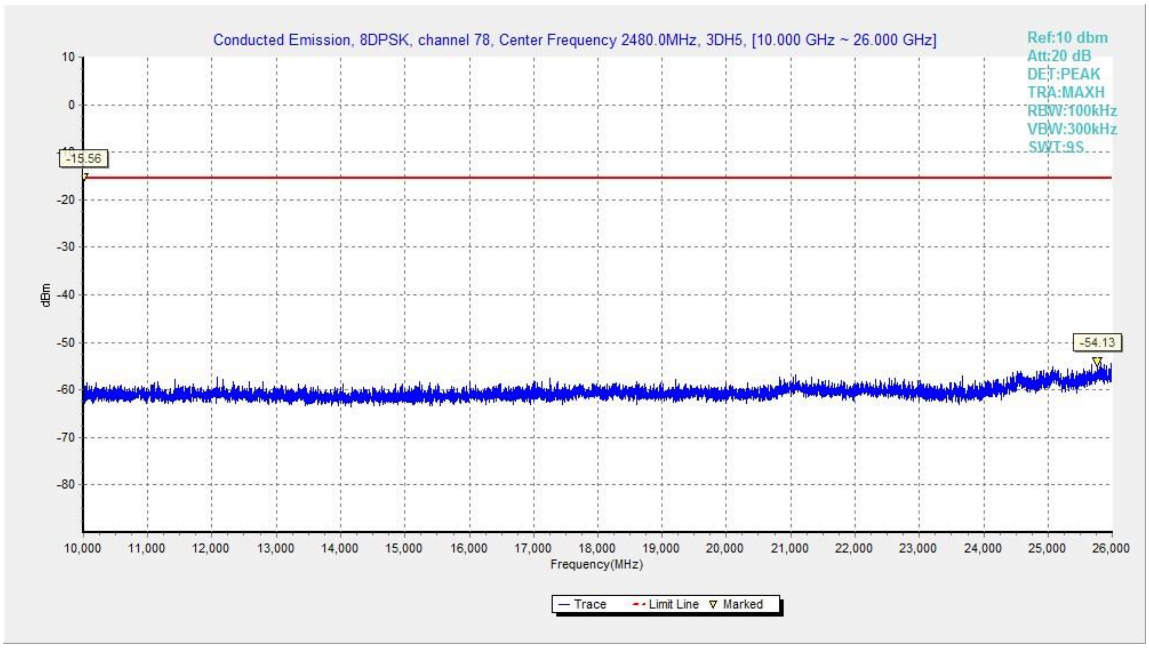

Fig.57. Conducted spurious emission: 8DPSK, Channel 78, 10GHz - 26GHz

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:

Result=P_{Mea}+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

Forπ/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)
2378.600	46.8	2.9	32.1	11.893	54.0	7.2	H
2386.510	46.8	2.9	32.0	11.901	54.0	7.2	H
4804.000	37.5	-17.3	34.5	20.300	54.0	16.5	H
7206.000	39.7	-16.4	36.1	20.028	54.0	14.3	H
9608.000	38.5	-18.2	37.0	19.793	54.0	15.5	H
12010.000	41.6	-17.4	39.3	19.643	54.0	12.4	H

GFSK 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)
2390.000	46.8	2.9	32.0	11.955	54.0	7.2	H
2485.000	47.9	2.9	32.7	12.217	54.0	6.1	H

4882.500	36.3	-18.5	34.5	20.362	54.0	17.7	H
7323.000	37.5	-18.5	36.1	19.912	54.0	16.5	H
9764.000	39.4	-17.8	37.2	19.938	54.0	14.6	H
12205.000	40.7	-17.8	39.2	19.257	54.0	13.3	H

GFSK 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	49.4	2.9	32.8	13.709	54.0	4.6	H
2484.300	48.1	2.9	32.7	12.399	54.0	5.9	H
4960.500	36.9	-18.2	34.5	20.593	54.0	17.1	H
7440.000	39.2	-16.9	36.0	20.095	54.0	14.8	H
9920.000	40.2	-17.1	37.4	19.910	54.0	13.8	H
12400.000	40.9	-17.5	39.1	19.279	54.0	13.1	H

π/4 DQPSK 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)
2380.100	46.7	2.9	32.1	11.782	54.0	7.3	H
2388.652	46.8	2.9	32.0	11.945	54.0	7.2	H
4804.000	37.6	-17.3	34.5	20.408	54.0	16.4	H
7206.000	39.8	-16.4	36.1	20.084	54.0	14.2	H
9608.000	38.6	-18.2	37.0	19.899	54.0	15.4	H
12010.000	41.6	-17.4	39.3	19.689	54.0	12.4	H

π/4 DQPSK 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)
2375.400	46.8	2.9	32.1	11.815	54.0	7.2	H
2484.400	48.0	2.9	32.7	12.306	54.0	6.0	H
4882.500	36.4	-18.5	34.5	20.466	54.0	17.6	H
7323.000	37.6	-18.5	36.1	19.961	54.0	16.4	H
9464.000	39.4	-17.2	36.8	19.759	54.0	14.6	H
12205.000	40.7	-17.8	39.2	19.306	54.0	13.3	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)
2483.520	48.7	2.9	32.8	12.976	54.0	5.3	H
2484.700	48.0	2.9	32.7	12.342	54.0	6.0	H
4960.500	36.9	-18.2	34.5	20.605	54.0	17.1	H