7.4. Test Results

Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

7.4.1. Left

7.4.1.1. Packet Type: DH1, 3DH1

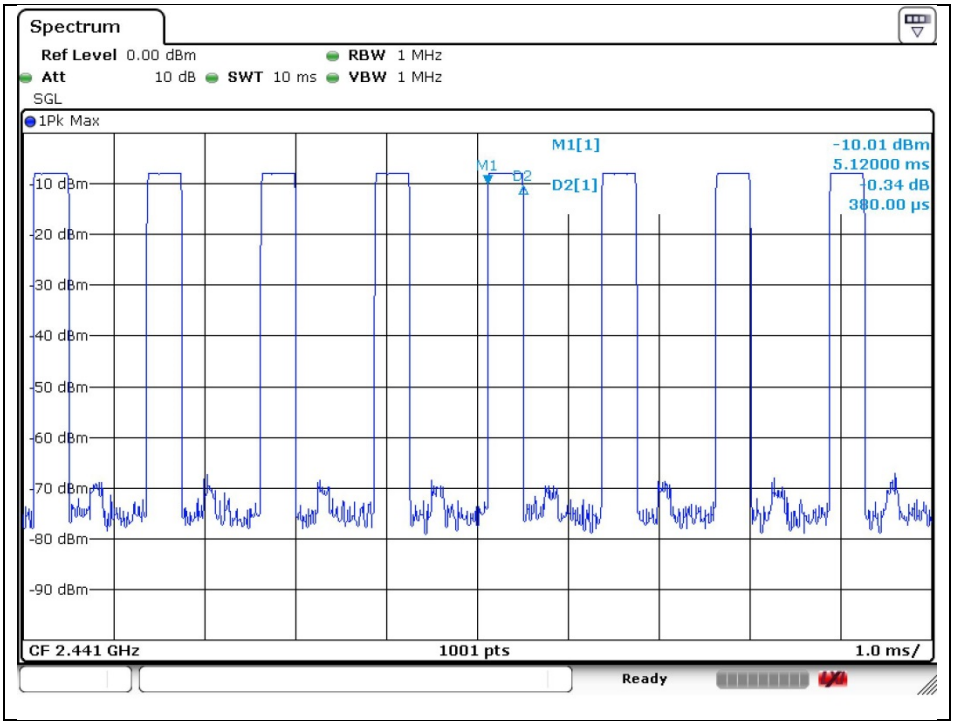
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	0.38	121.60	400
8DPSK	2 441	0.39	124.80	400

Remark;

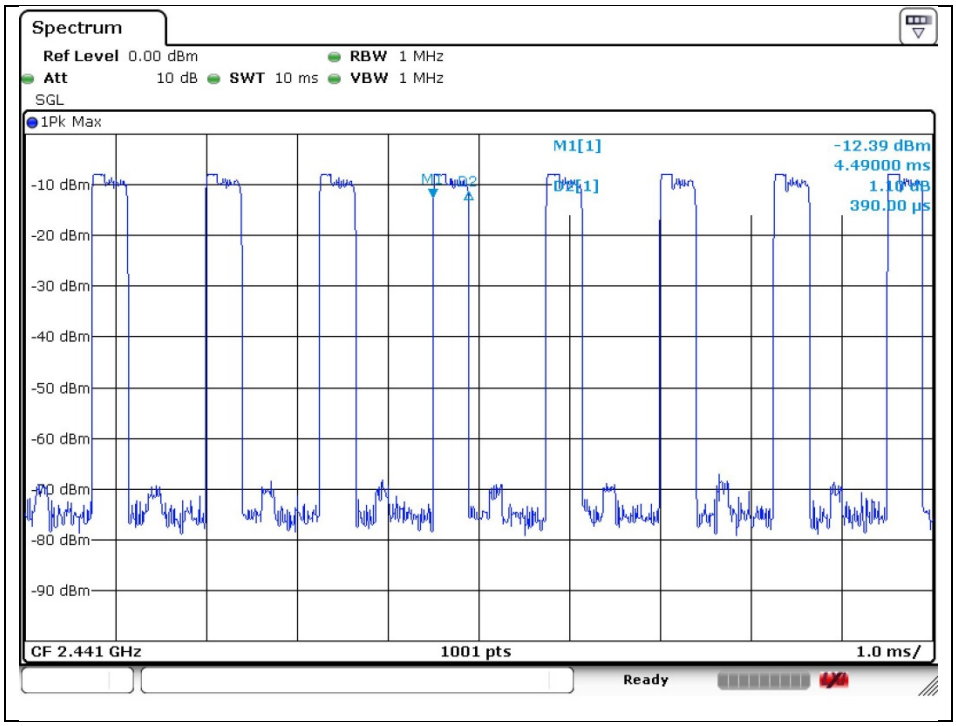
Time of occupancy on the TX channel in 31.6 sec
In case of GFSK: 0.38 × {(1 600 ÷ 2) / 79} × 31.6 = 121.60 ㎳
In case of 8DPSK: 0.39 × {(1 600 ÷ 2) / 79} × 31.6 = 124.80 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.1.2. Packet Type: DH3, 3DH3

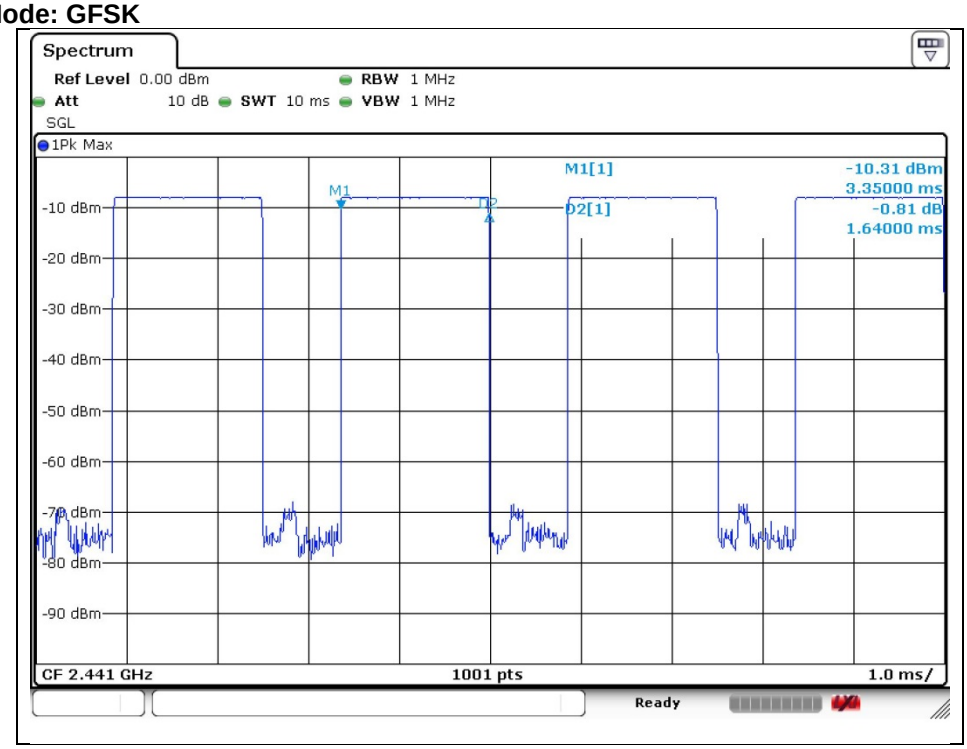
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	1.64	262.40	400
8DPSK	2 441	1.65	264.00	400

Remark;

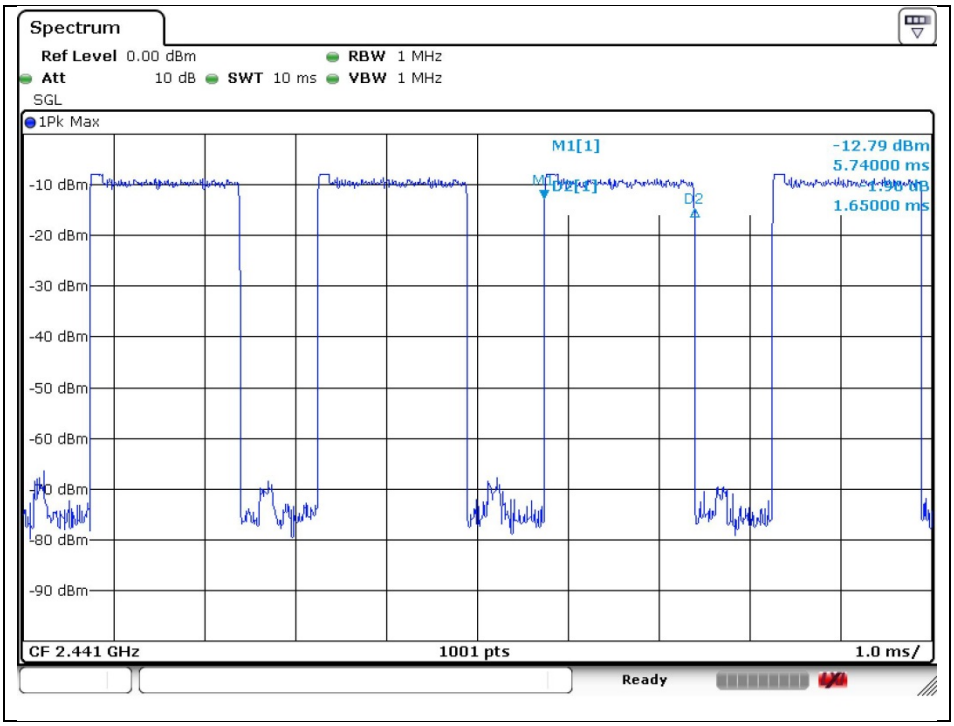
Time of occupancy on the TX channel in 31.6 sec
In case of GFSK: 1.64 × {(1 600 ÷ 4) / 79} × 31.6 = 262.40 ㎳
In case of 8DPSK: 1.65 × {(1 600 ÷ 4) / 79} × 31.6 = 264.00 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.1.3. Packet Type: DH5, 3DH5

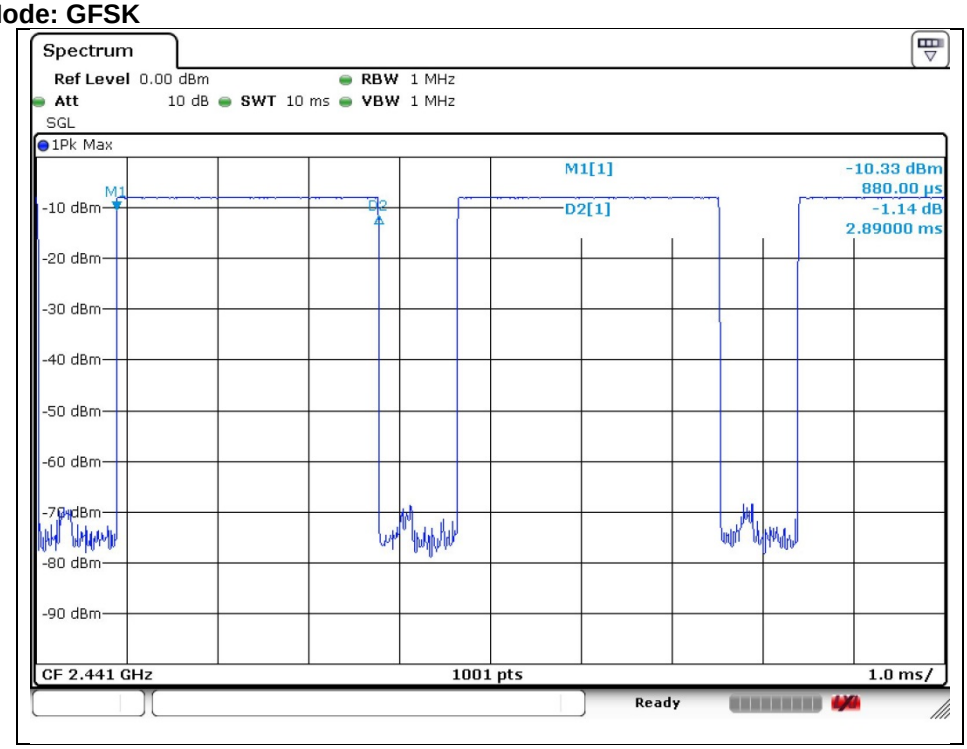
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	2.89	308.27	400
8DPSK	2 441	2.90	309.33	400

Remark;

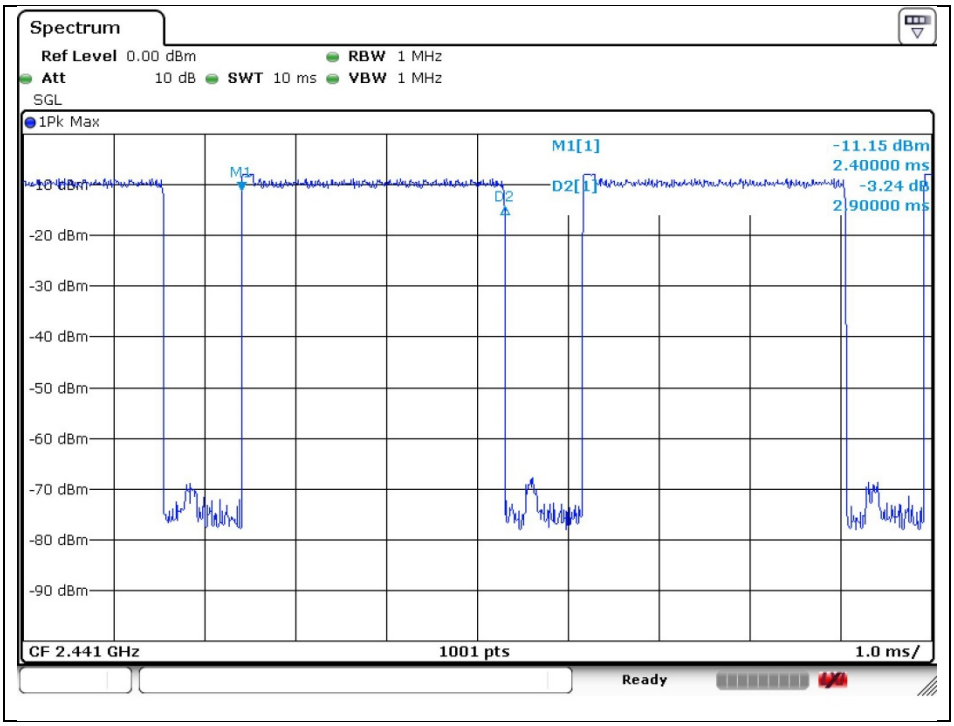
Time of occupancy on the TX channel in 31.6 sec
In case of GFSK: 2.89 × {(1 600 ÷ 6) / 79} × 31.6 = 308.27 ㎳
In case of 8DPSK: 2.90 × {(1 600 ÷ 6) / 79} × 31.6 = 309.33 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.1.4. Packet Type: DH1, 3DH1 (Adaptive Frequency Hopping)

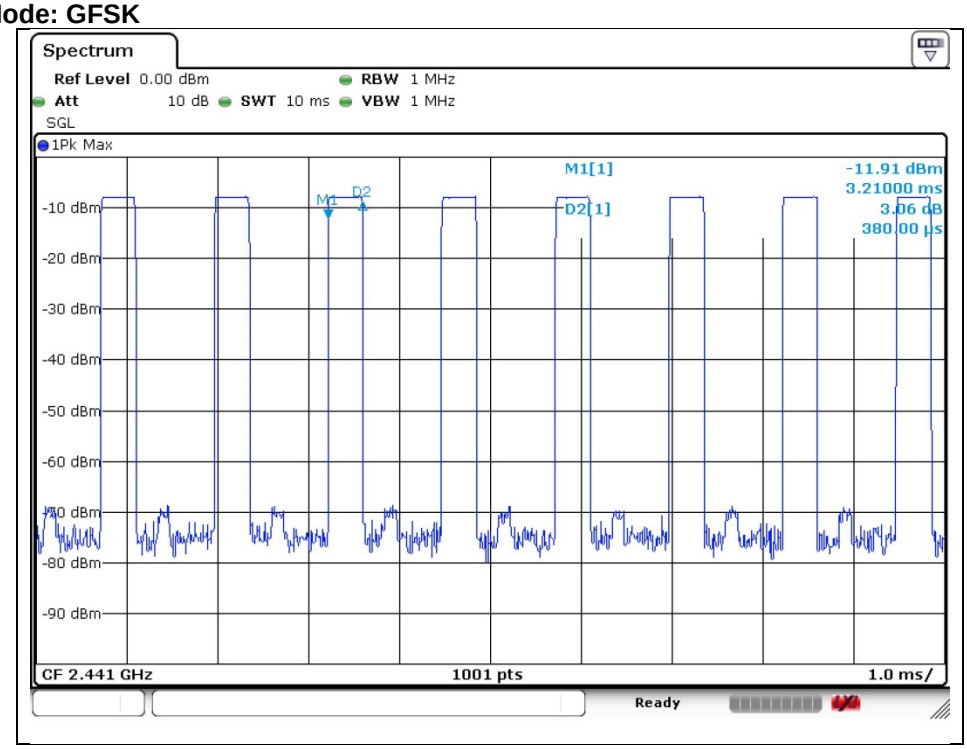
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	0.38	60.80	400
8DPSK	2 441	0.40	64.00	400

Remark;

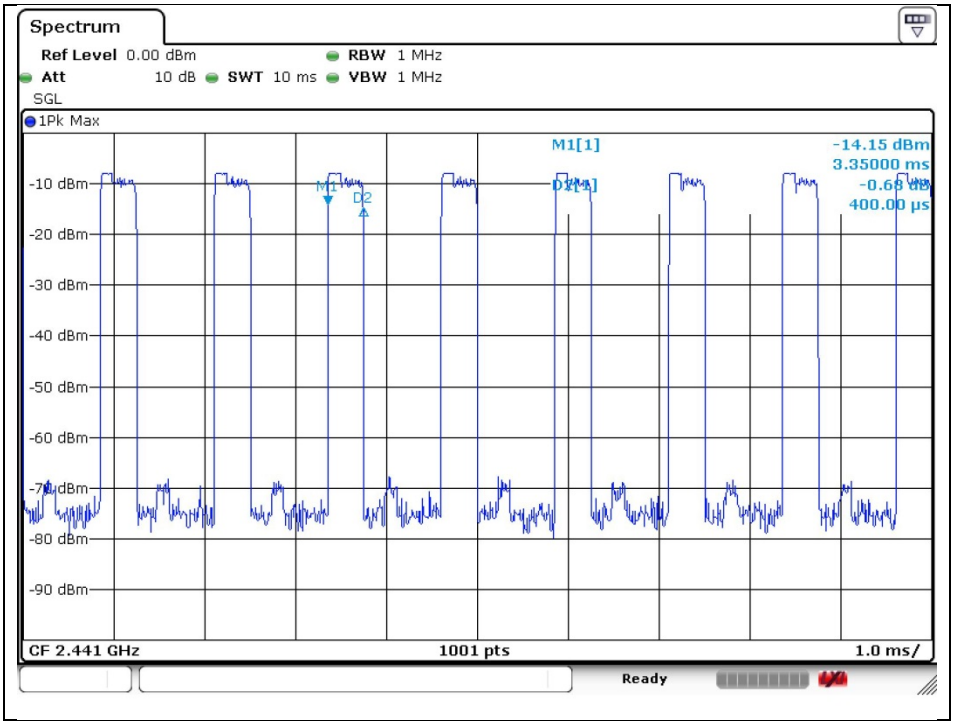
Time of occupancy on the TX channel in 8 sec
In case of GFSK: 0.38 × {(800 ÷ 2) / 20} × 8 = 60.80 ㎳
In case of 8DPSK: 0.40 × {(800 ÷ 2) / 20} × 8 = 64.00 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.1.5. Packet Type: DH3, 3DH3 (Adaptive Frequency Hopping)

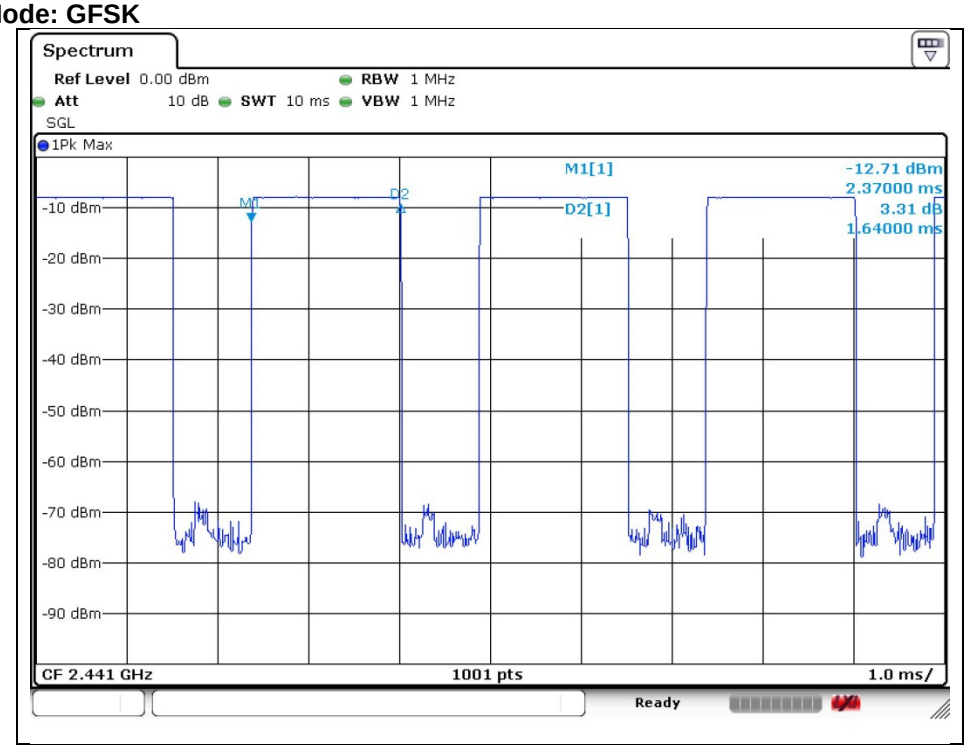
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	1.64	131.20	400
8DPSK	2 441	1.65	132.00	400

Remark;

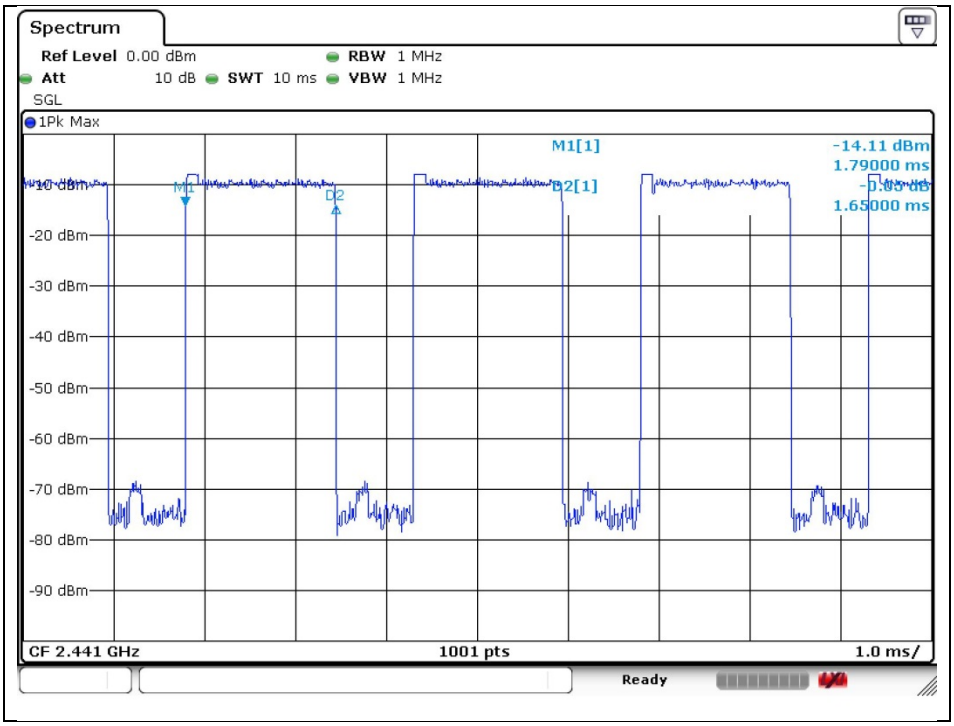
Time of occupancy on the TX channel in 8 sec
In case of GFSK: 1.64 × {(800 ÷ 4) / 20} × 8 = 131.20 ㎳
In case of 8DPSK: 1.65 × {(800 ÷ 4) / 20} × 8 = 132.00 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.1.6. Packet Type: DH5, 3DH5 (Adaptive Frequency Hopping)

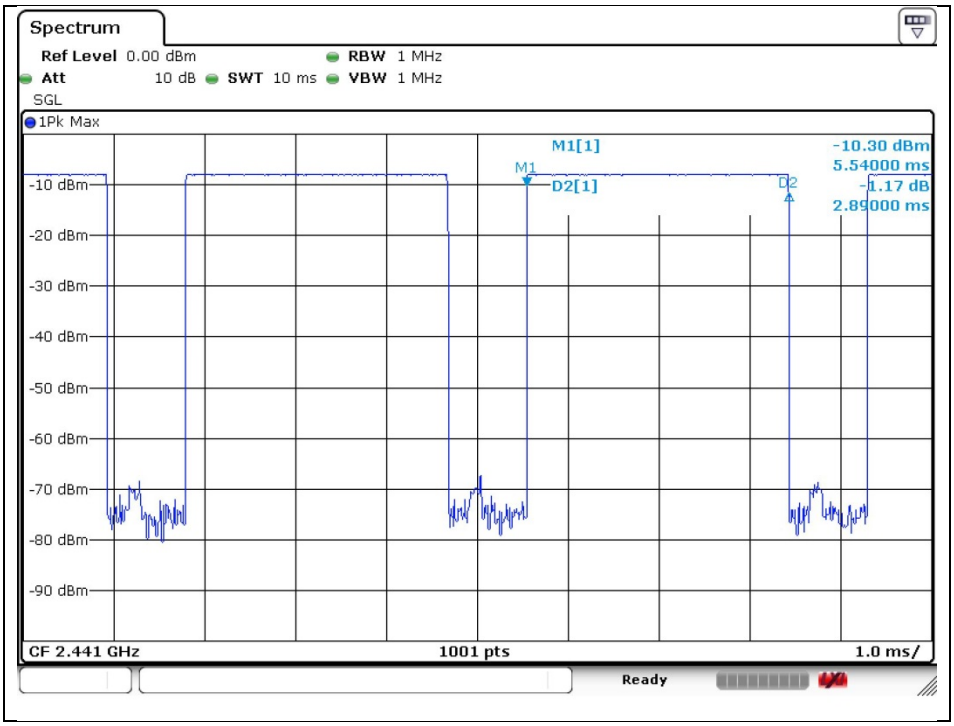
Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	2.89	154.13	400
8DPSK	2 441	2.90	154.67	400

Remark;

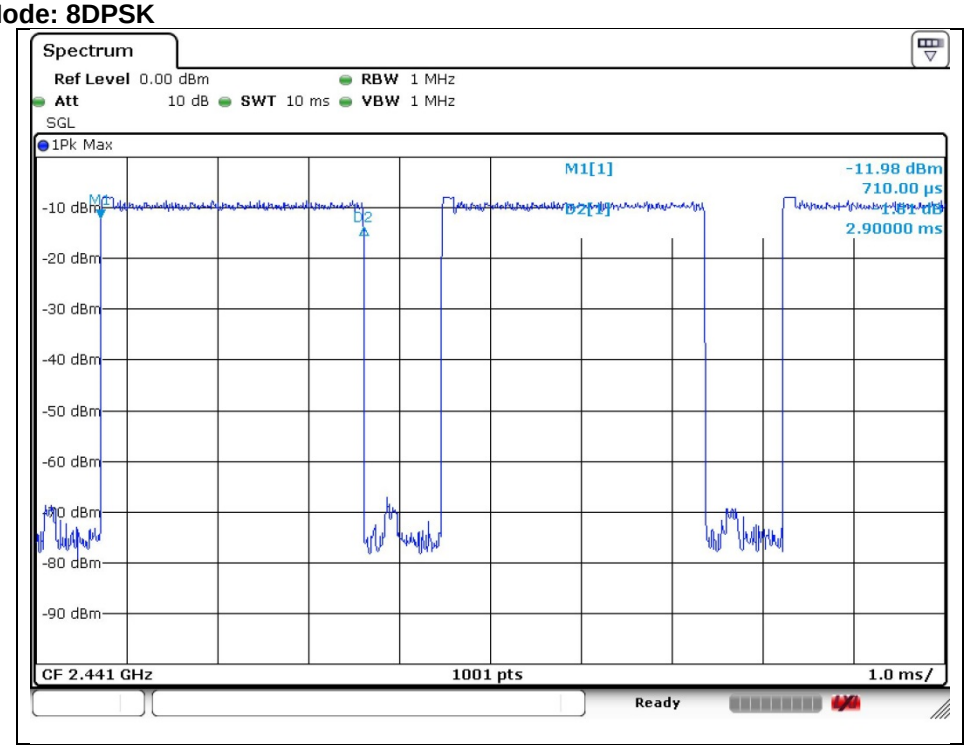
Time of occupancy on the TX channel in 8 sec
In case of GFSK: 2.89 × {(800 ÷ 6) / 20} × 8 = 154.13 ㎳
In case of 8DPSK: 2.90 × {(800 ÷ 6) / 20} × 8 = 154.67 ㎳

- Test plots

Operating Mode: GFSK



Operating Mode: 8DPSK



7.4.2. Right

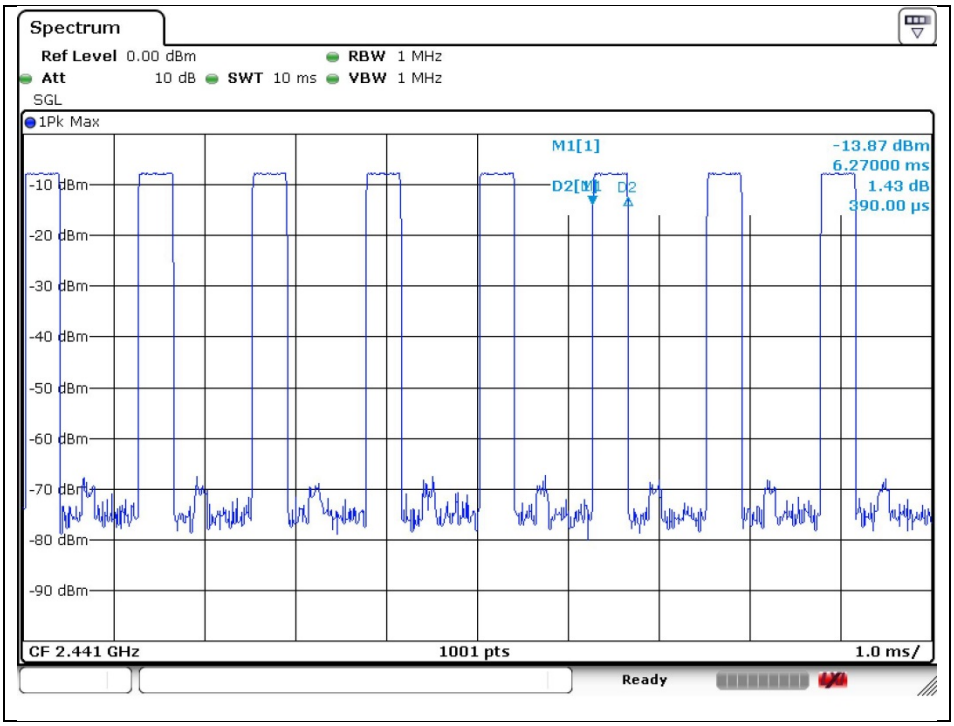
7.4.2.1. Packet Type: DH1, 3DH1

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	0.39	124.80	400
8DPSK	2 441	0.39	124.80	400

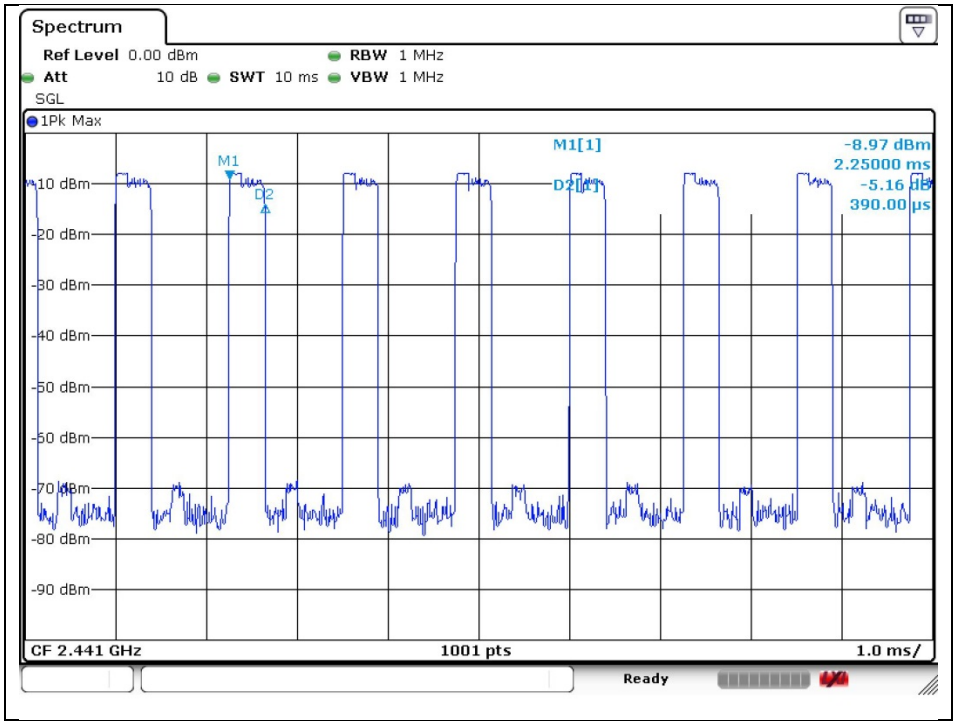
Remark;

Time of occupancy on the TX channel in 31.6 sec
In case of GFSK and 8DPSK: 0.39 × {(1 600 ÷ 2) / 79} × 31.6 = 124.80 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



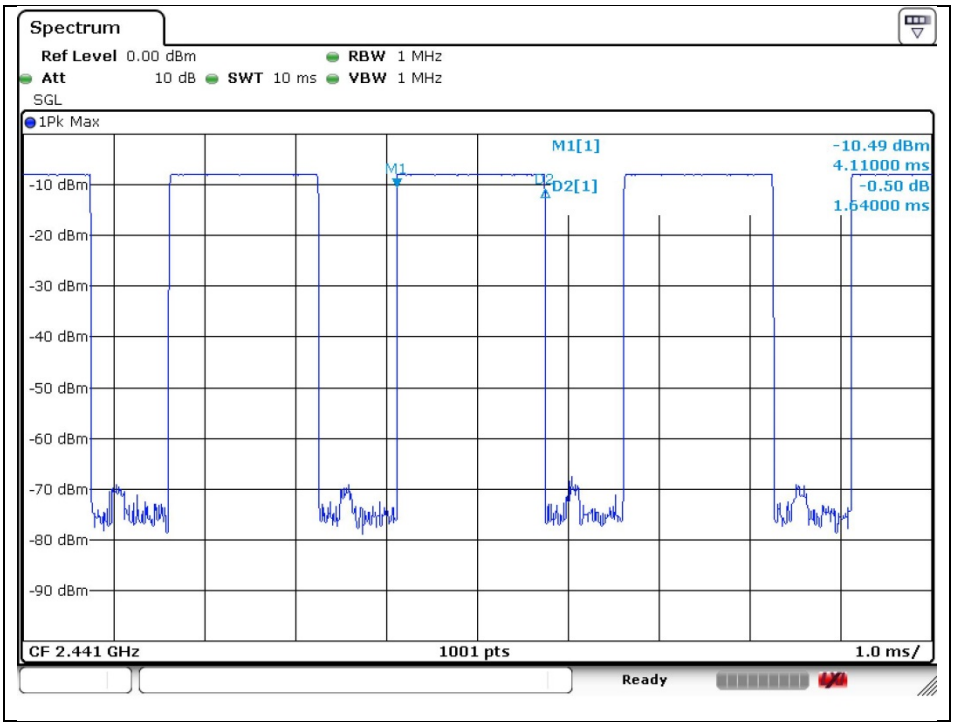
7.4.2.2. Packet Type: DH3, 3DH3

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	1.64	262.40	400
8DPSK	2 441	1.65	264.00	400

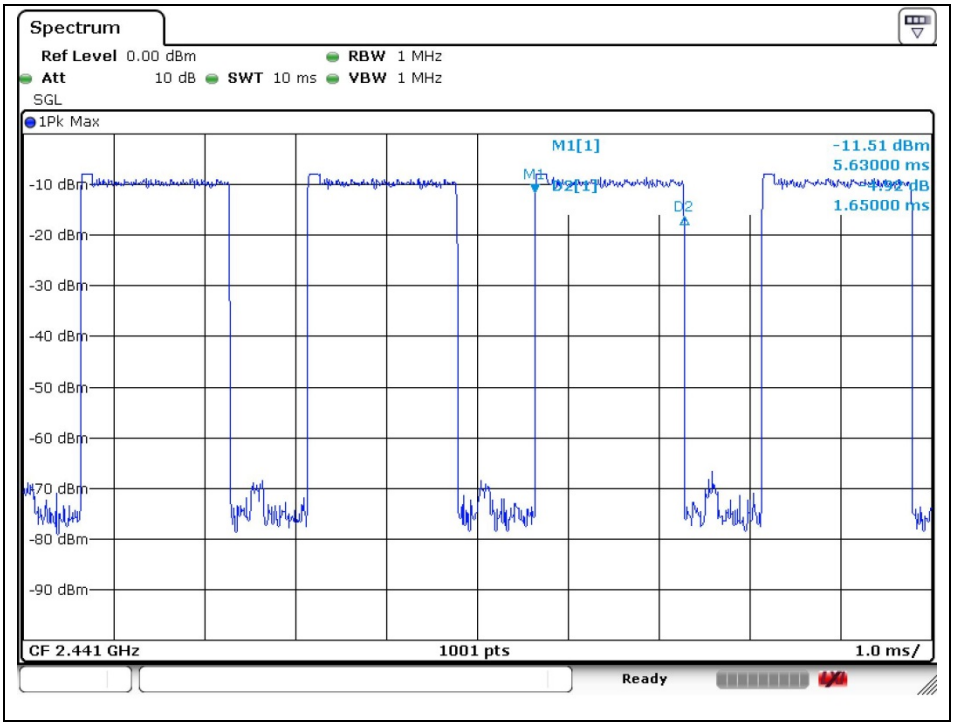
Remark;

Time of occupancy on the TX channel in 31.6 sec
In case of GFSK: 1.64 × {(1 600 ÷ 4) / 79} × 31.6 = 262.40 ㎳
In case of 8DPSK: 1.65 × {(1 600 ÷ 4) / 79} × 31.6 = 264.00 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



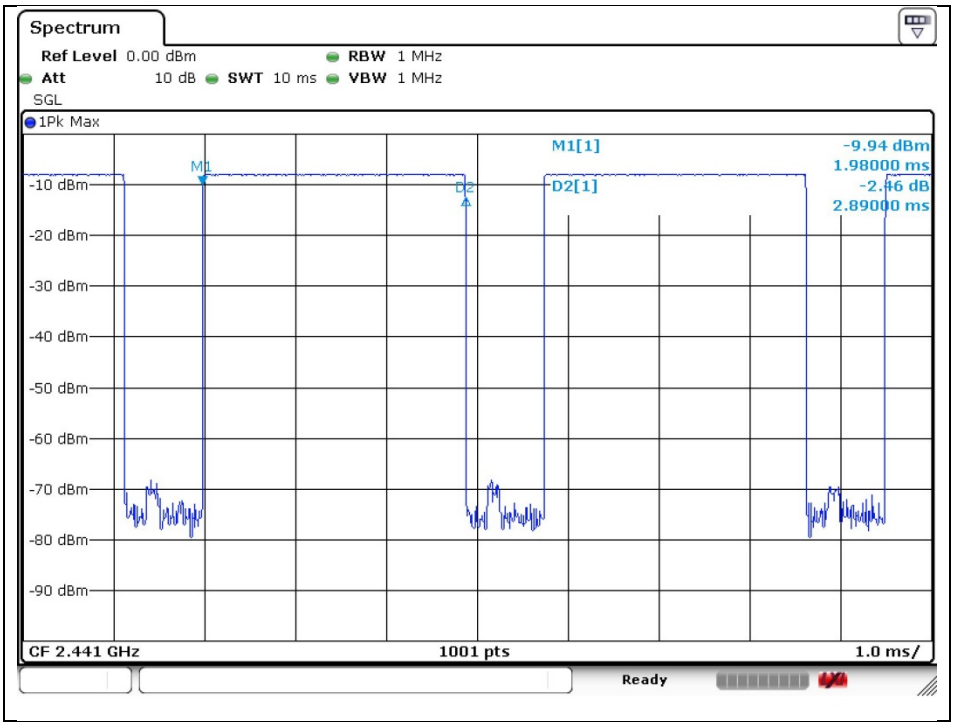
7.4.2.3. Packet Type: DH5, 3DH5

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 31.6 sec (㎳)	Limit for time of occupancy on the Tx Channel in 31.6 sec (㎳)
GFSK	2 441	2.89	308.27	400
8DPSK	2 441	2.90	309.33	400

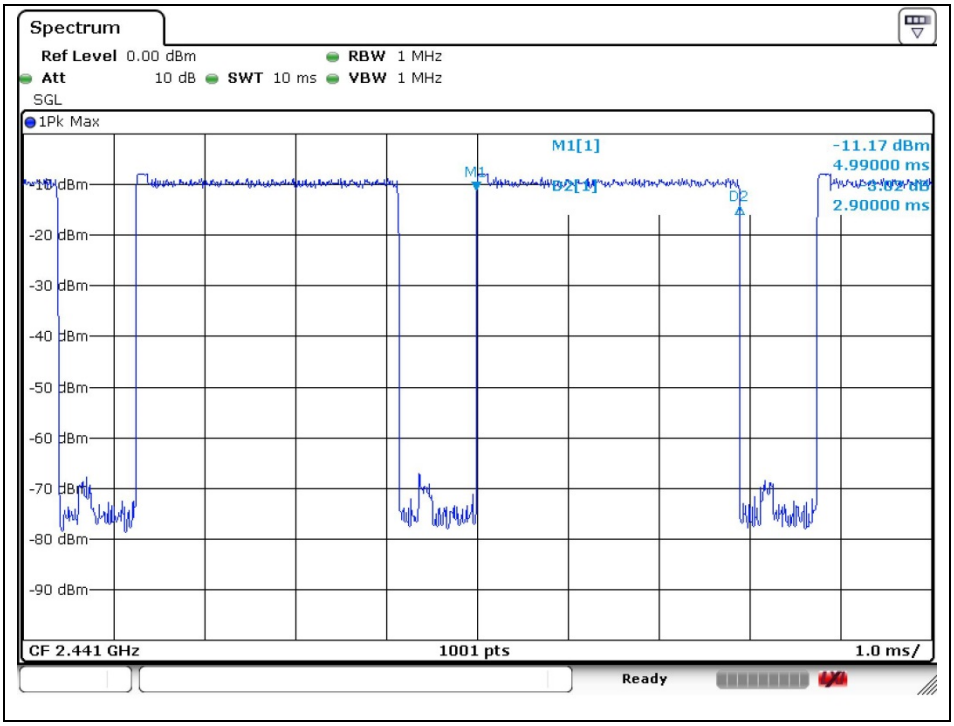
Remark;

Time of occupancy on the TX channel in 31.6 sec
In case of GFSK: 2.89 × {(1 600 ÷ 6) / 79} × 31.6 = 308.27 ㎳
In case of 8DPSK: 2.90 × {(1 600 ÷ 6) / 79} × 31.6 = 309.33 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



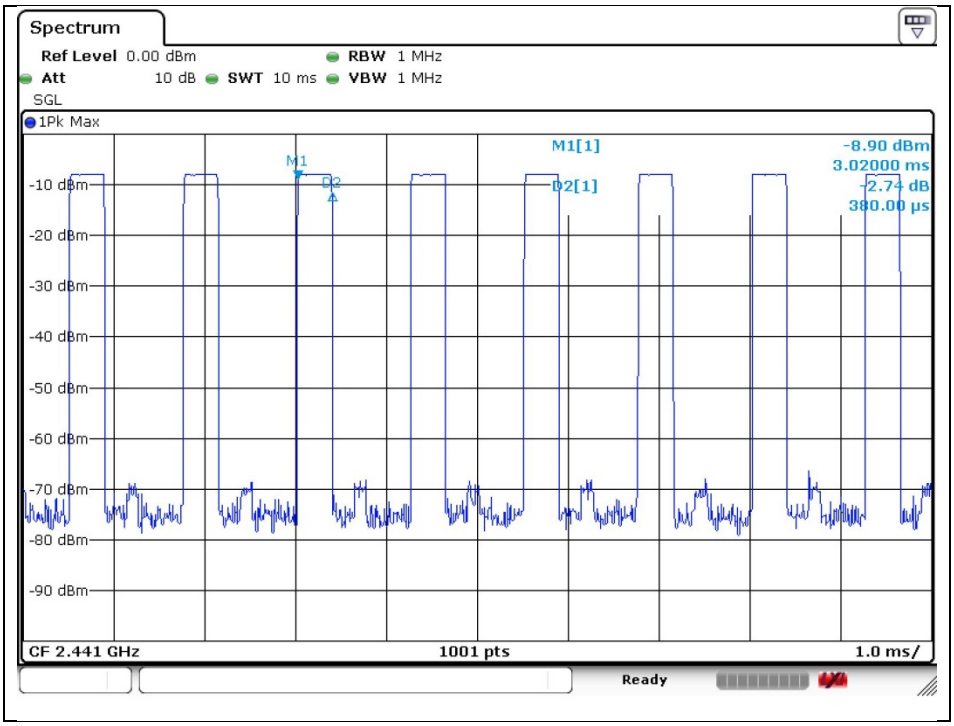
7.4.2.4. Packet Type: DH1, 3DH1 (Adaptive Frequency Hopping)

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	0.38	60.80	400
8DPSK	2 441	0.39	62.40	400

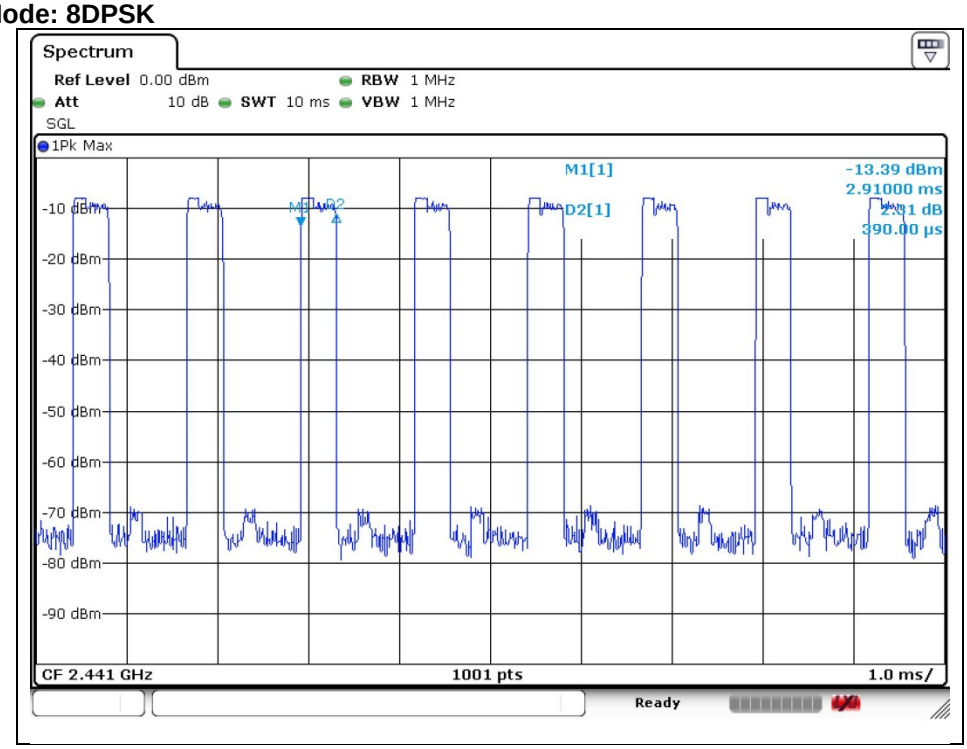
Remark;

Time of occupancy on the TX channel in 8 sec
In case of GFSK: 0.38 × {(800 ÷ 2) / 20} × 8 = 60.80 ㎳
In case of 8DPSK: 0.39 × {(800 ÷ 2) / 20} × 8 = 62.40 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



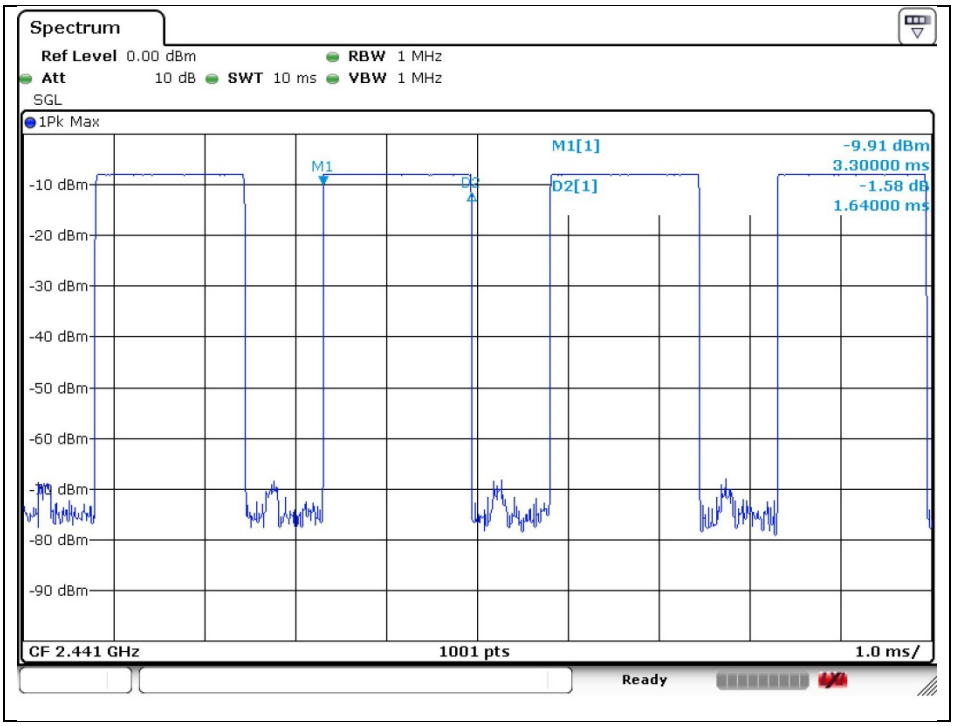
7.4.2.5. Packet Type: DH3, 3DH3 (Adaptive Frequency Hopping)

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	1.64	131.20	400
8DPSK	2 441	1.65	132.00	400

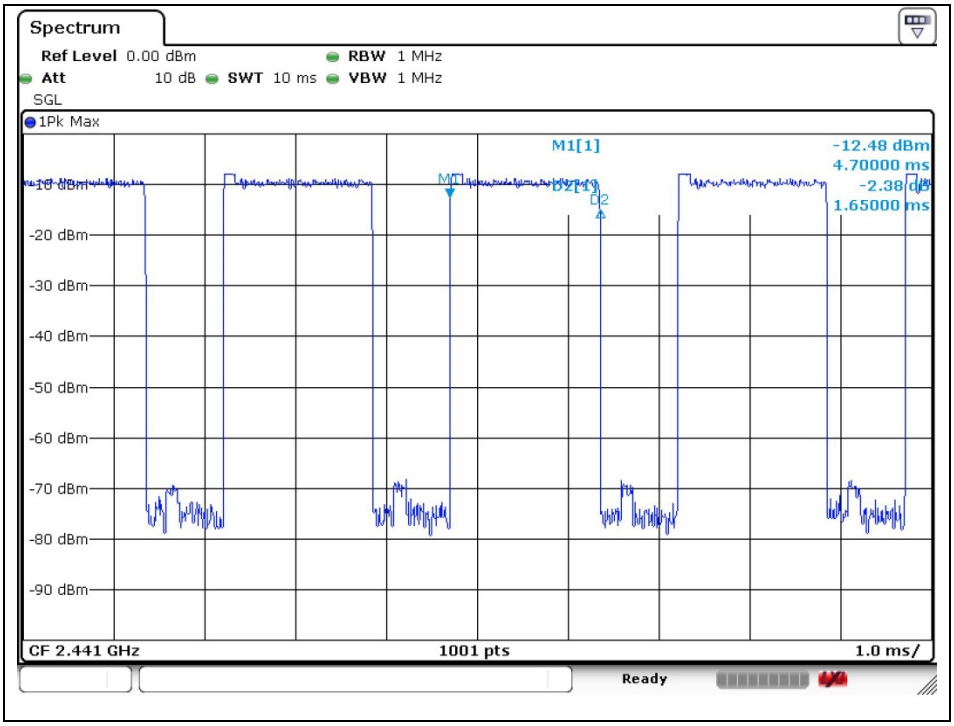
Remark;

Time of occupancy on the TX channel in 8 sec
In case of GFSK: 1.64 × {(800 ÷ 4) / 20} × 8 = 131.20 ㎳
In case of 8DPSK: 1.65 × {(800 ÷ 4) / 20} × 8 = 132.00 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



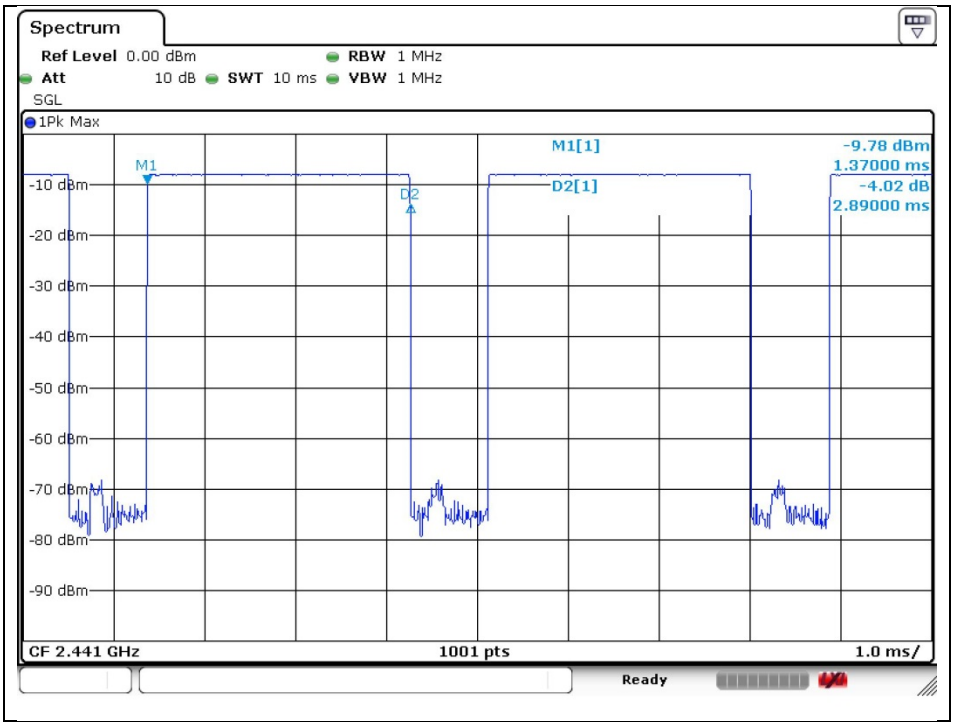
7.4.2.6. Packet Type: DH5, 3DH5 (Adaptive Frequency Hopping)

Operation Mode	Frequency (㎒)	Dwell Time (㎳)	Time of occupancy on the Tx Channel in 8 sec (㎳)	Limit for time of occupancy on the Tx Channel in 8 sec (㎳)
GFSK	2 441	2.89	154.13	400
8DPSK	2 441	2.90	154.67	400

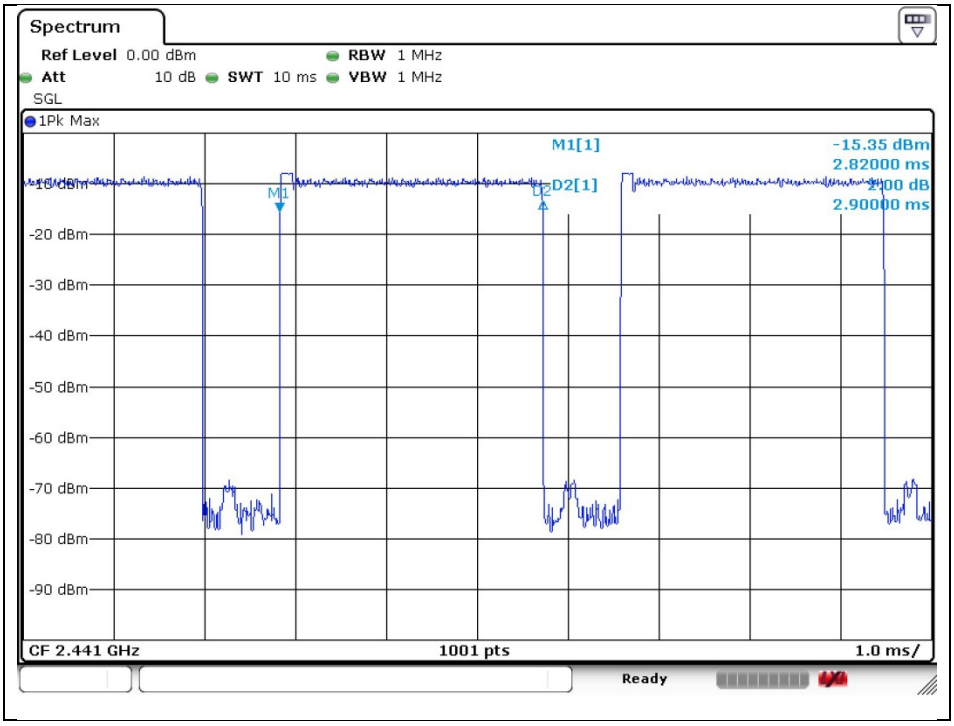
Remark;

Time of occupancy on the TX channel in 8 sec
In case of GFSK: 2.89 × {(800 ÷ 6) / 20} × 8 = 154.13 ㎳
In case of 8DPSK: 2.90 × {(800 ÷ 6) / 20} × 8 = 154.67 ㎳

Operating Mode: GFSK



Operating Mode: 8DPSK



8. Antenna Requirement

8.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section §15.247(b) if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the gain of the antenna exceeds 6 dBi.

8.2. Antenna Connected Construction

Antenna used in this product is FPC antenna and peak max gain of antenna as below.

Type	Left	Right
Gain	-3.58 dBi	-3.36 dBi

- End of the Test Report -