

99dBw Occupied Channel Bandwidth 99%

Modulation: BT (GFSK 1-DH5)

Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	0.860000
2441.00000	0.865000
2480.00000	0.860000

Verdict

Pass

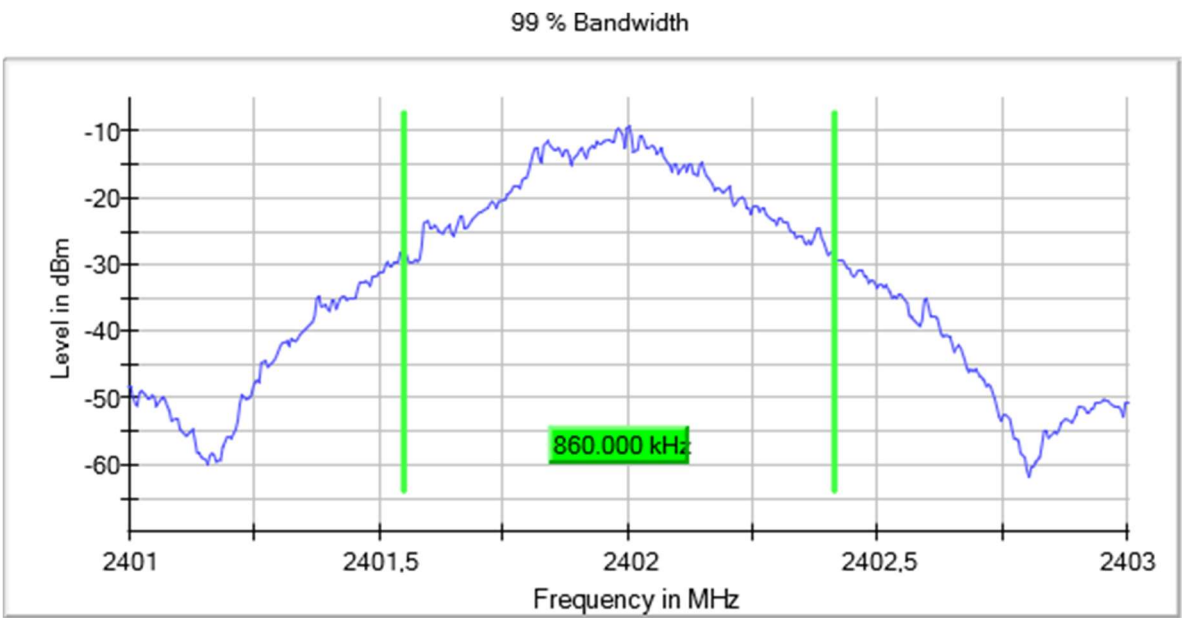
Uncertainty

Measurement uncertainty (%) <±1.24

Attachments

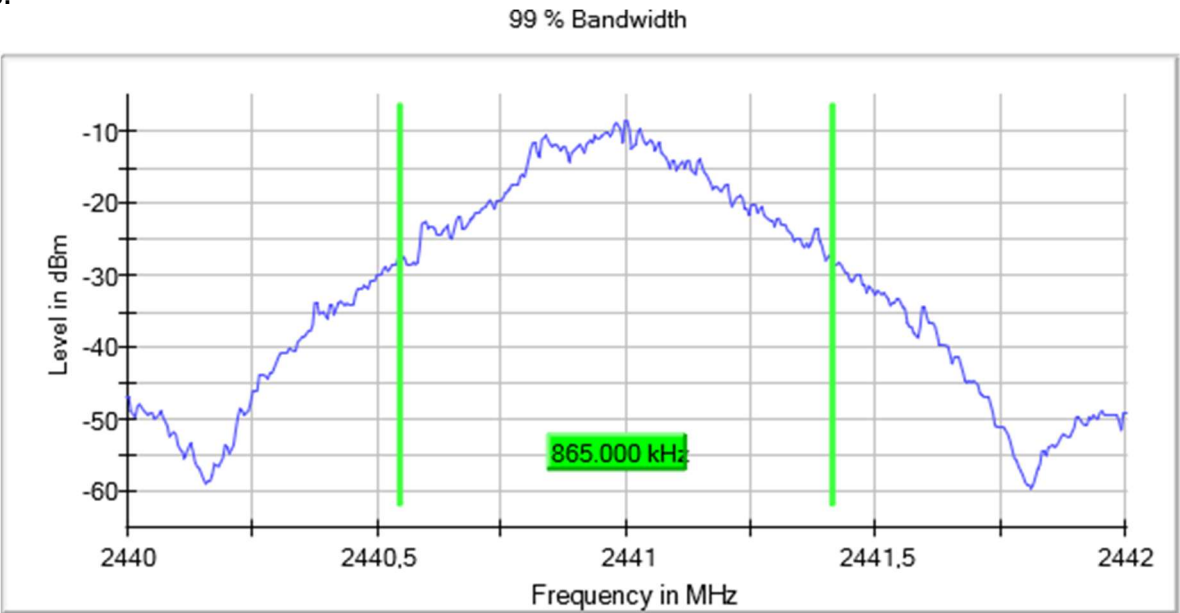
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



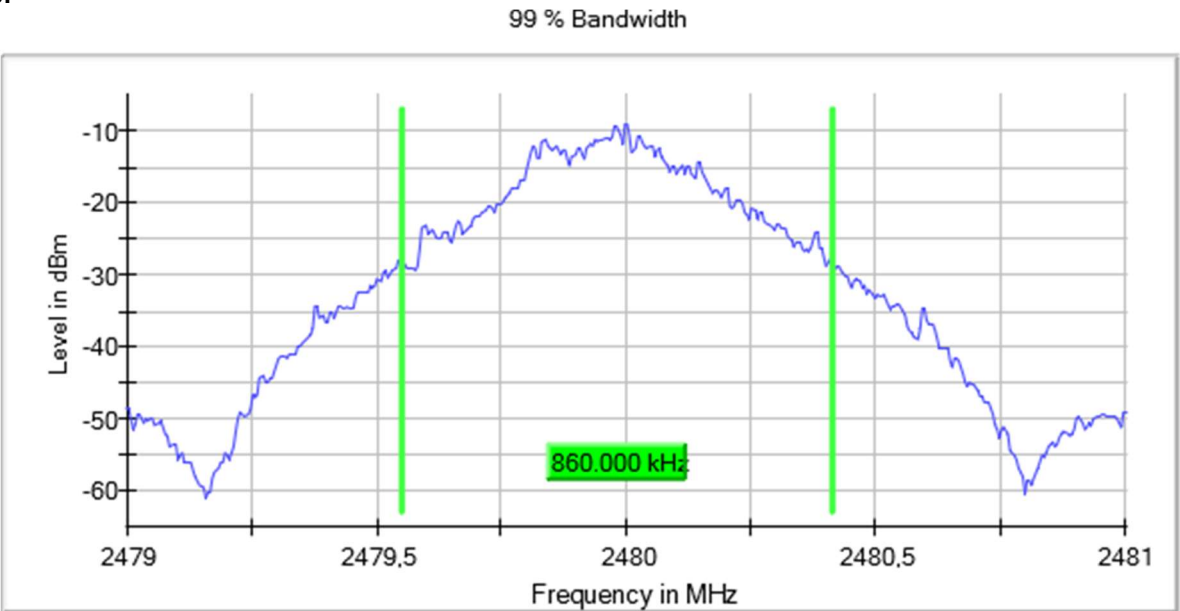
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2441.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2480.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	1.170000
2441.00000	1.175000
2480.00000	1.170000

Verdict

Pass

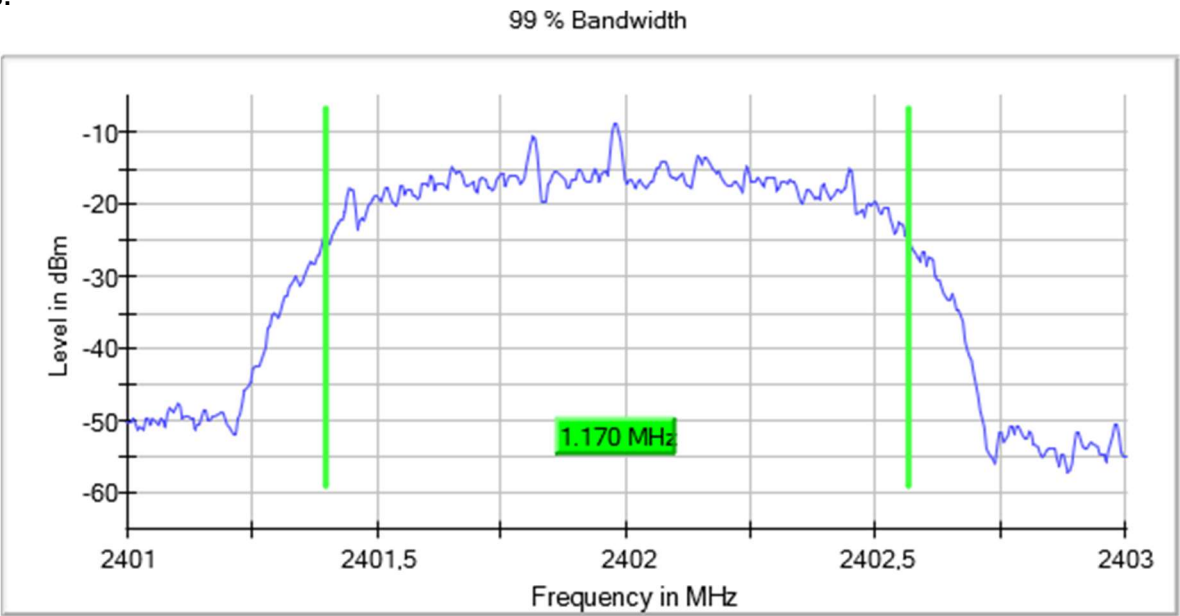
Uncertainty

Measurement uncertainty (%) <±1.24

Attachments

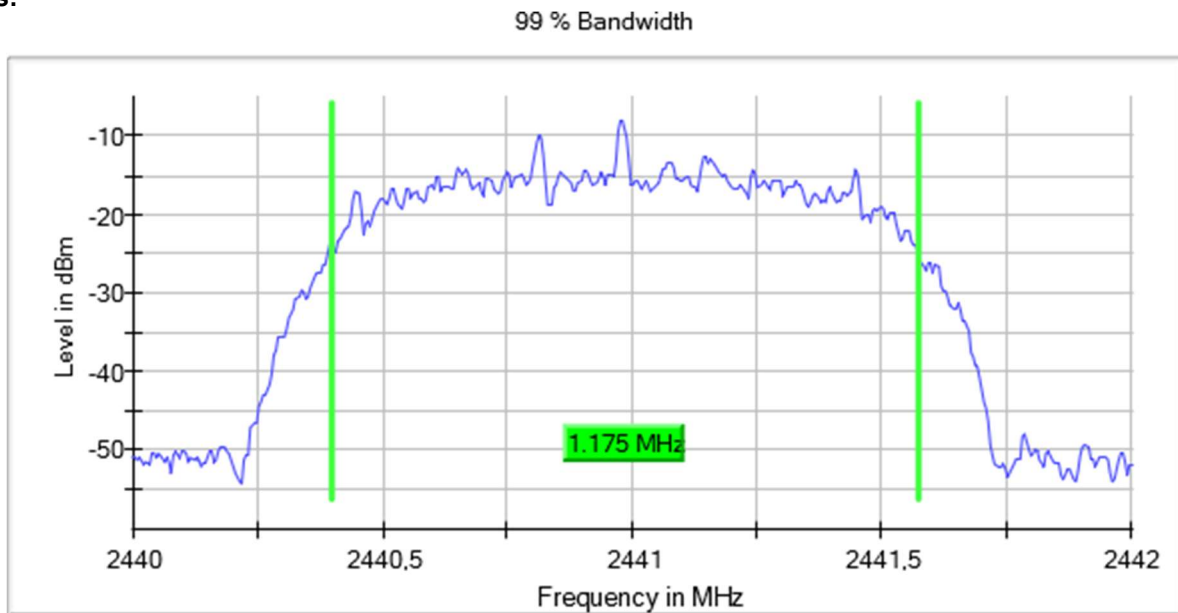
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



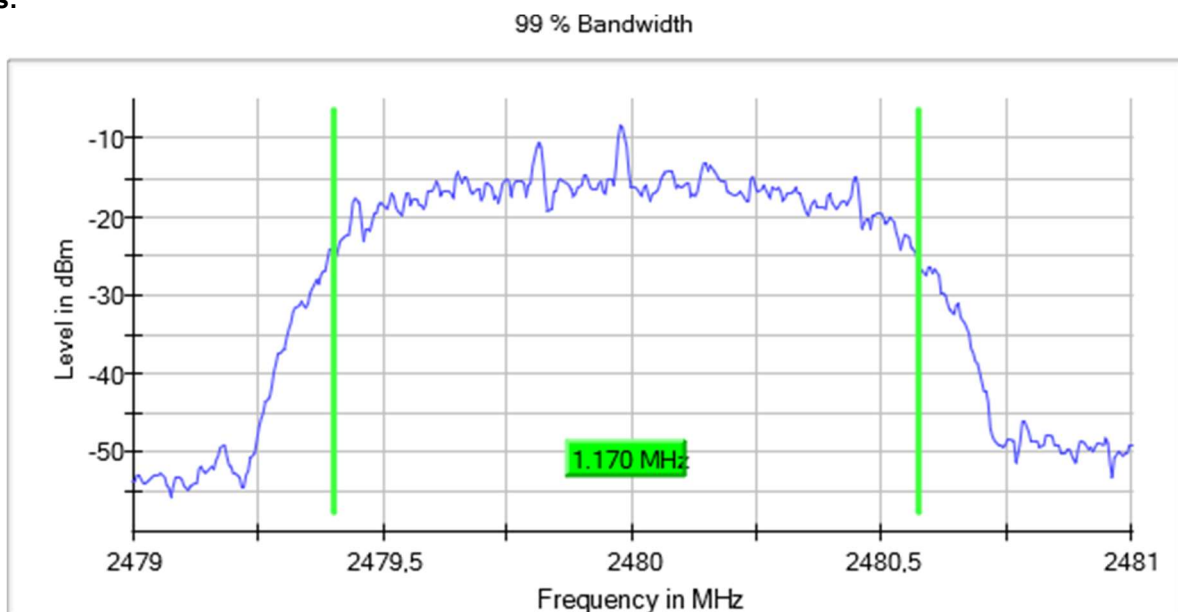
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2441.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2480.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Modulation: BT (8DPSK 3-DH5)

Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	1.175000
2441.00000	1.180000
2480.00000	1.180000

Verdict

Pass

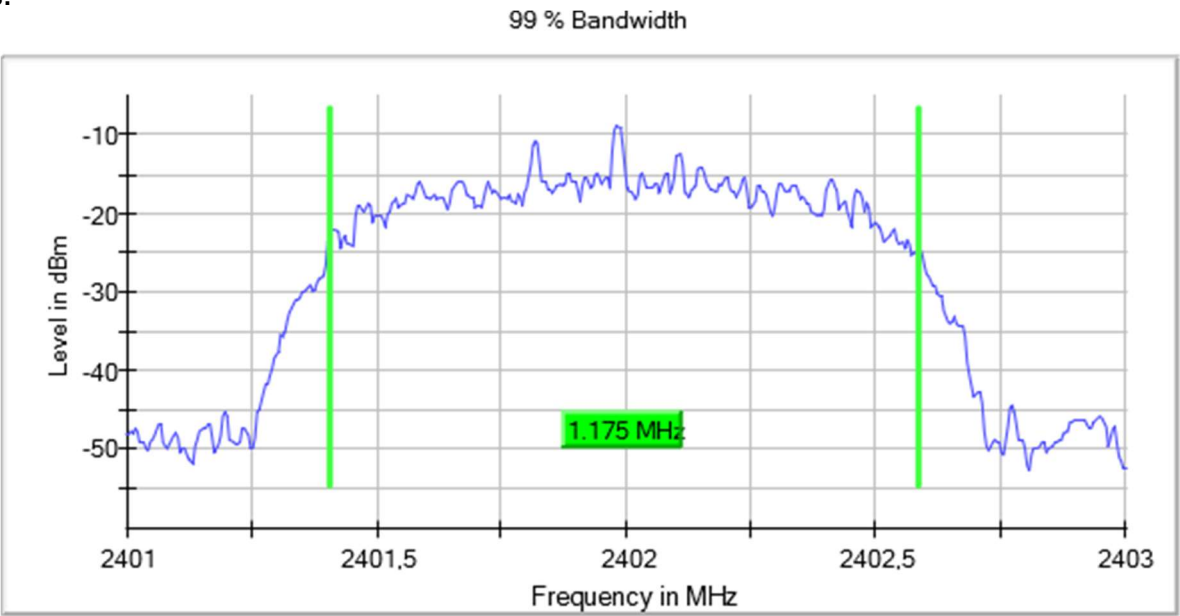
Uncertainty

Measurement uncertainty (%) <±1.24

Attachments

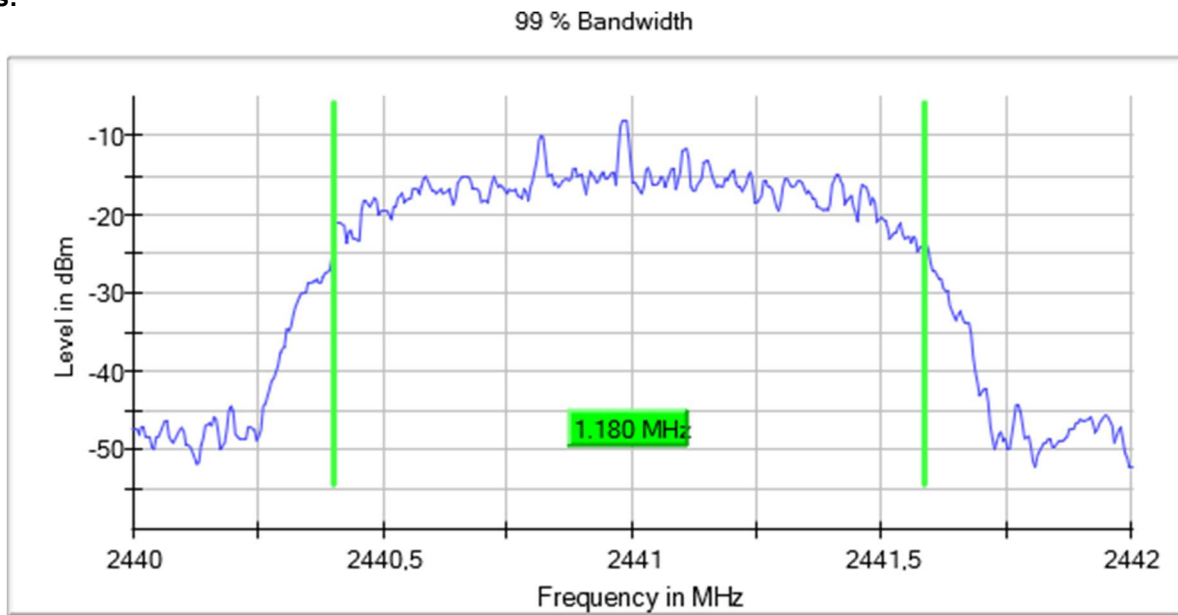
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



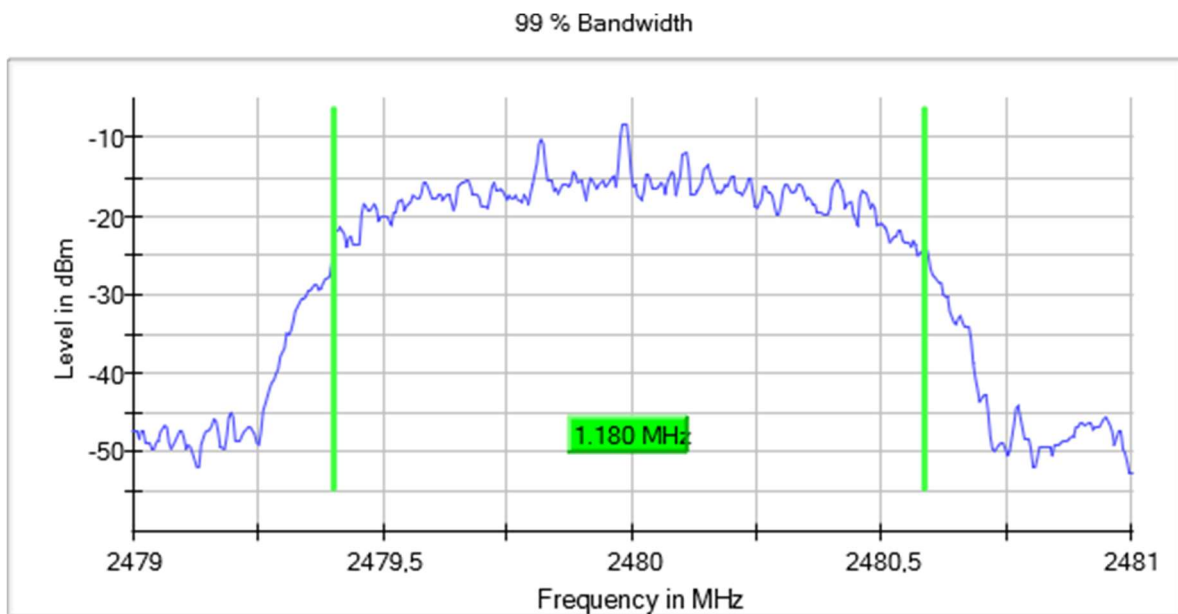
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2441.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2480.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



RSS-247 5.1 (b) / FCC 15.247 (a) (1) [CFS] Carrier Frequency Separation

Modulation: BT (GFSK 1-DH5)

Results

Freq Sep (MHz)
1.009901

Verdict

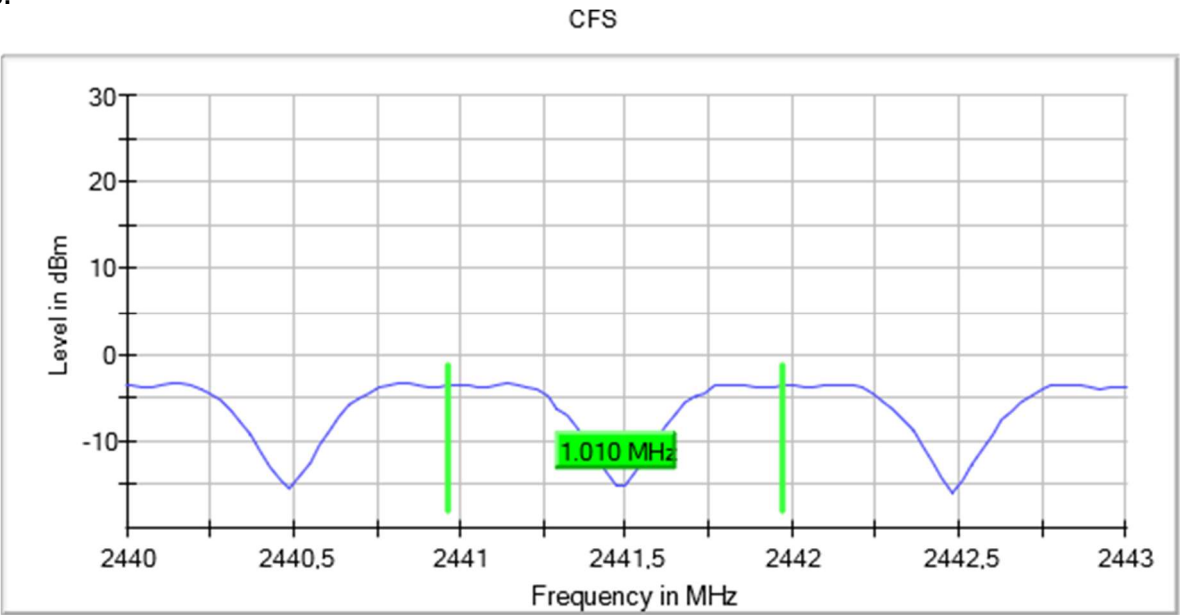
Pass

The hopping channel carrier frequencies are separated by a minimum two-thirds of the 20 dB bandwidth of the hopping channel.

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Freq Sep (MHz)
0.9500

Verdict

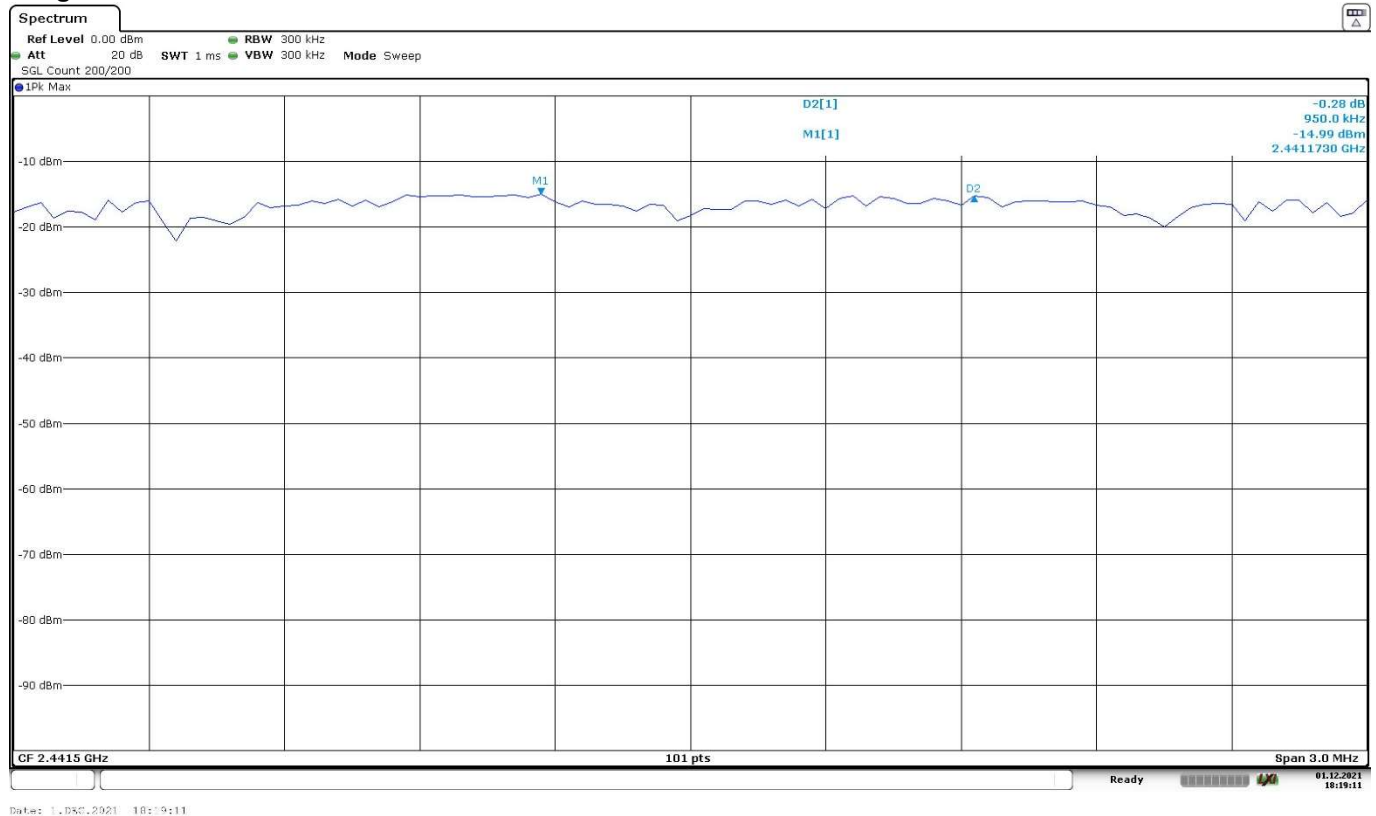
Pass

The hopping channel carrier frequencies are separated by a minimum two-thirds of the 20 dB bandwidth of the hopping channel.

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Modulation: BT (8DPSK 3-DH5)

Freq Sep (MHz)
0.98000

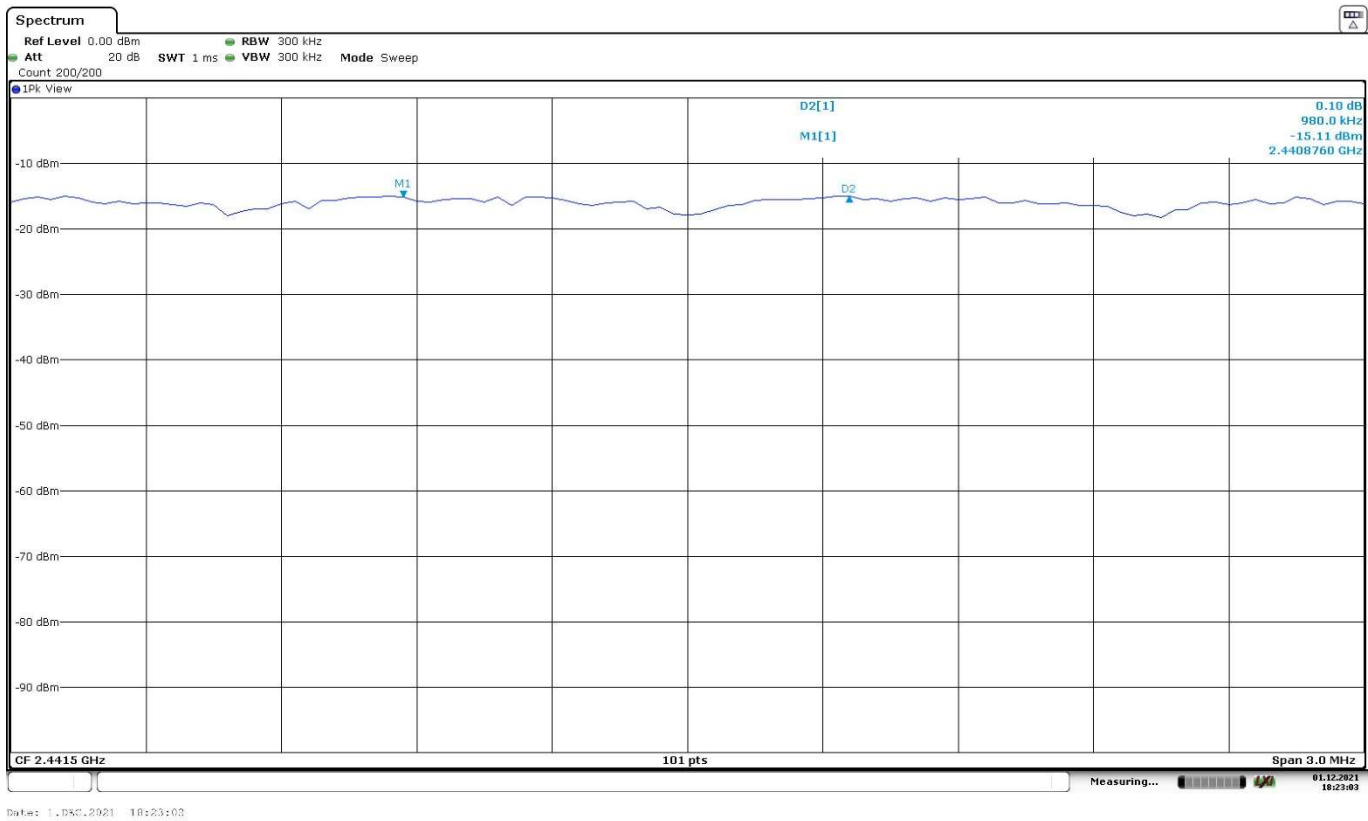
Verdict

Pass
The hopping channel carrier frequencies are separated by a minimum two-thirds of the 20 dB bandwidth of the hopping channel.

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



RSS-247 5.1 (d) / FCC 15.247 (a) (1) (iii) [DwT] Time of Occupancy
(Dwell Time)

Limits

The average time of occupancy on any channel shall not be greater than 0.4 seconds (400 ms) within a period of 0.4 seconds multiplied by the number of hopping channels employed = 0.4 x 79= 31.6 seconds.

Modulation: BT (GFSK 1-DH5)

Results

NHp	Avg COT (ms)
113	330.430

Verdict

Pass

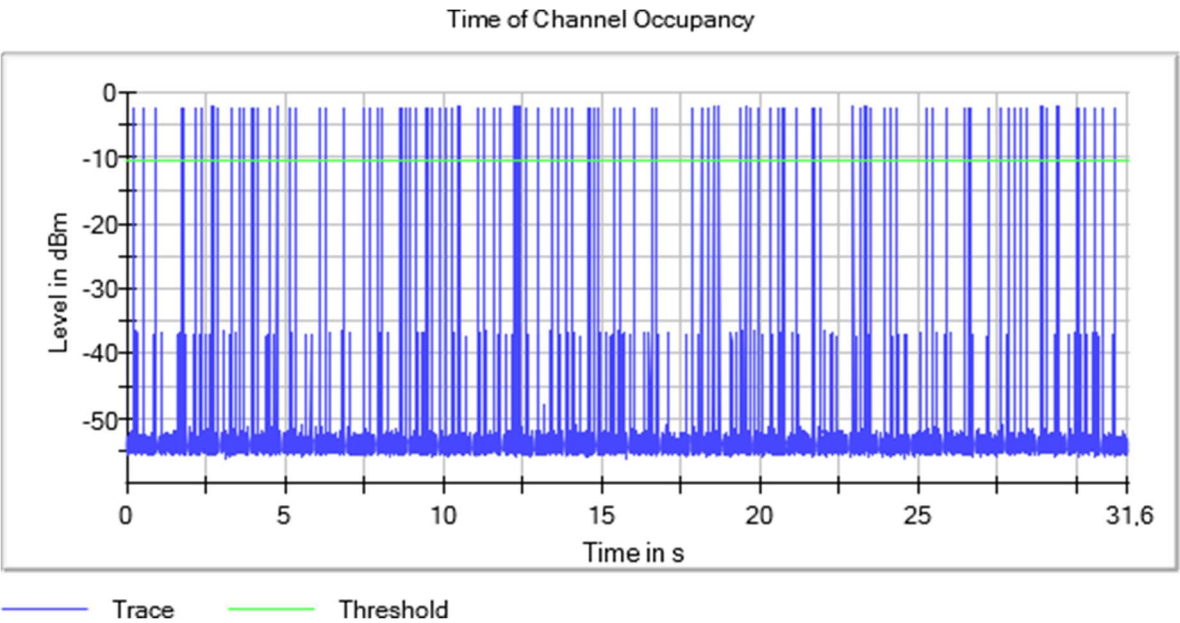
Uncertainty

Measurement uncertainty (%) <±0.53

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

NHp	Avg COT (ms)
109	306.590

Verdict

Pass

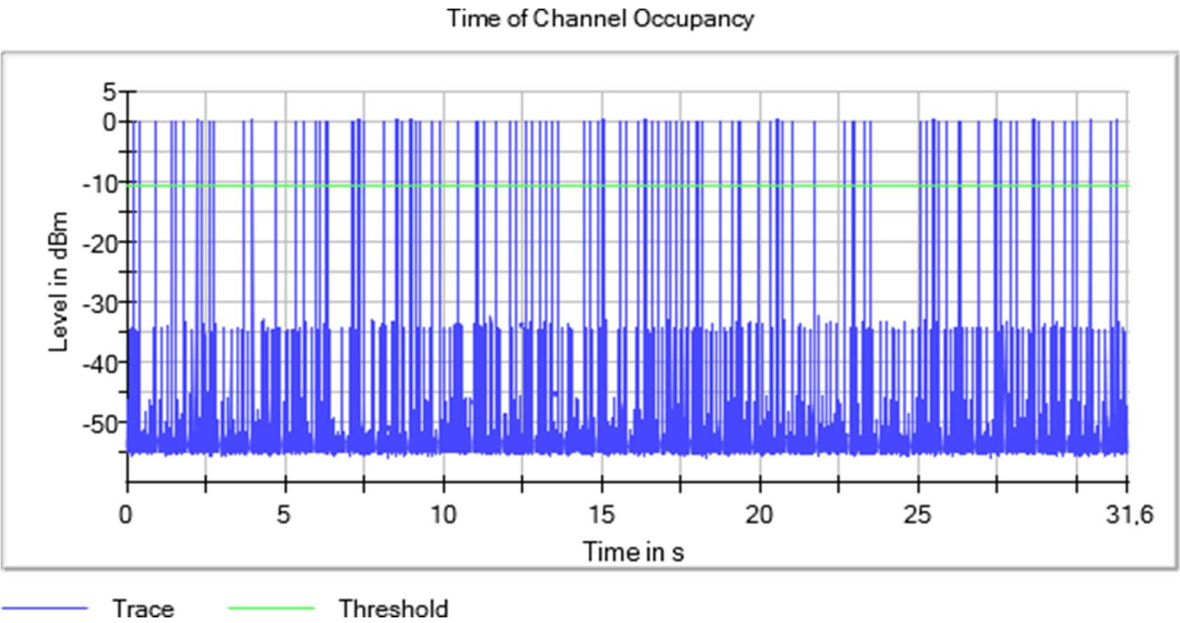
Uncertainty

Measurement uncertainty (%) <±0.53

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Modulation: BT (8DPSK 3-DH5)

Results

NHp	Avg COT (ms)
106	298.970

Verdict

Pass

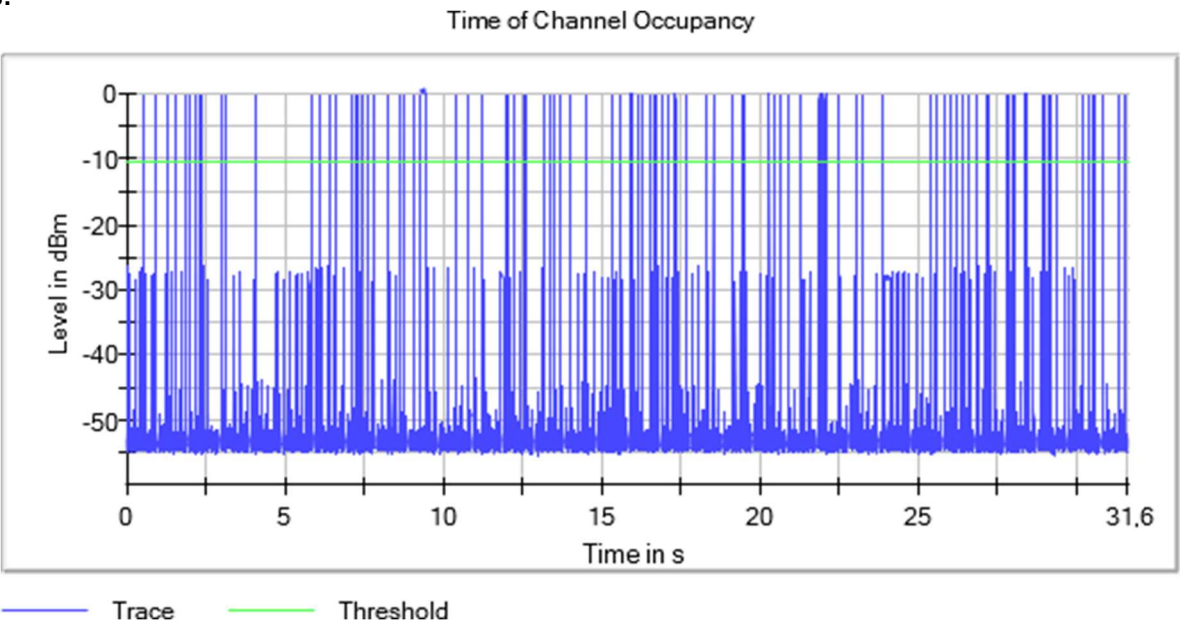
Uncertainty

Measurement uncertainty (%) <±0.53

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



RSS-247 5.1 (d) / FCC 15.247 (a) (1) (iii) [NHC] Number of hopping channels

Limits

Frequency hopping system in the 2400-2483.5 MHz band shall use at least 15 channels.

Modulation: BT (GFSK 1-DH5)

Results

NHC
79

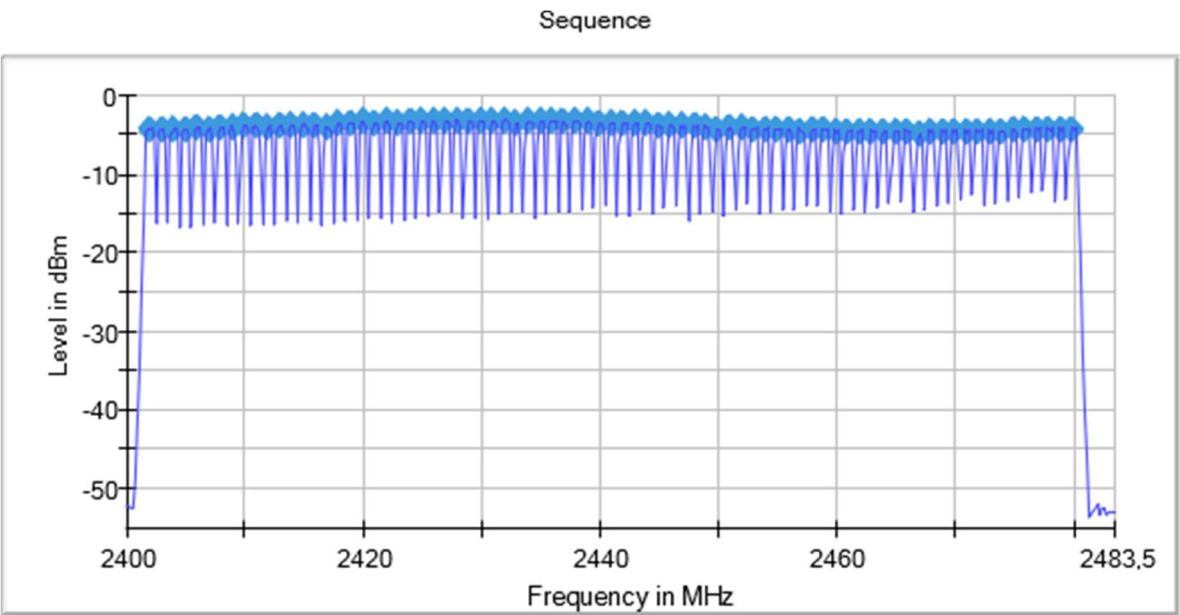
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

NHC
79

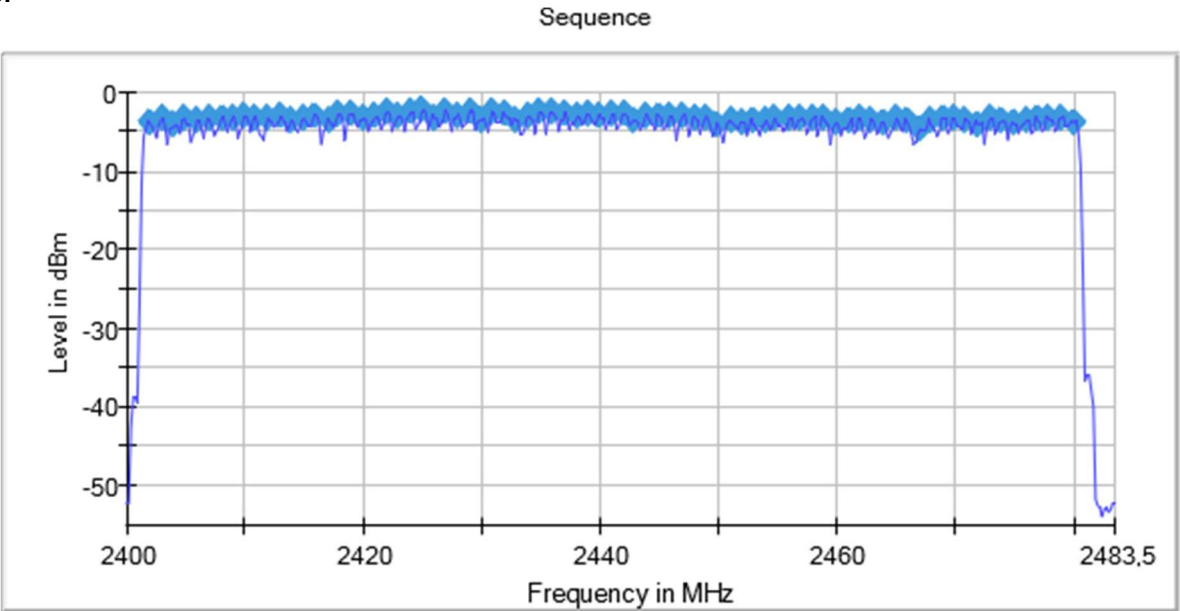
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Modulation: BT (8DPSK 3-DH5)

Results

NHC
79

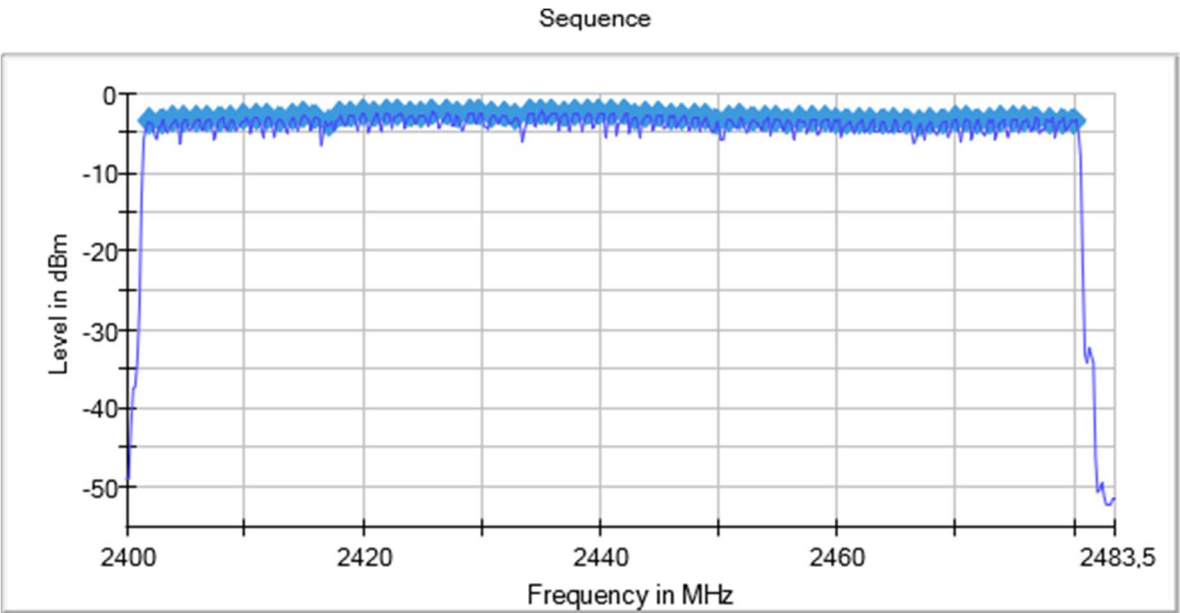
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5], Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (8DPSK 3-DH5)

Images:



FCC 15.247 (b) / RSS-247 5.4 (b) Maximum peak output power and antenna gain

SPECIFICATION:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels: 1 watt (30 dBm). The e.i.r.p. shall not exceed 4 W (RSS-247).

RESULTS:

The EIRP power (dBm) is calculated by adding the maximum declared antenna gain to the measured conducted power.

Maximum Declared Antenna Gain: 0.7 dBi

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Freq (MHz)	Maximum EIRP Power (dBm)	Maximum Conducted Power (dBm)
2402.00000	-4.1	-4,8
2441.00000	-3.3	-4
2480.00000	-3.9	-4,6

Verdict

Pass

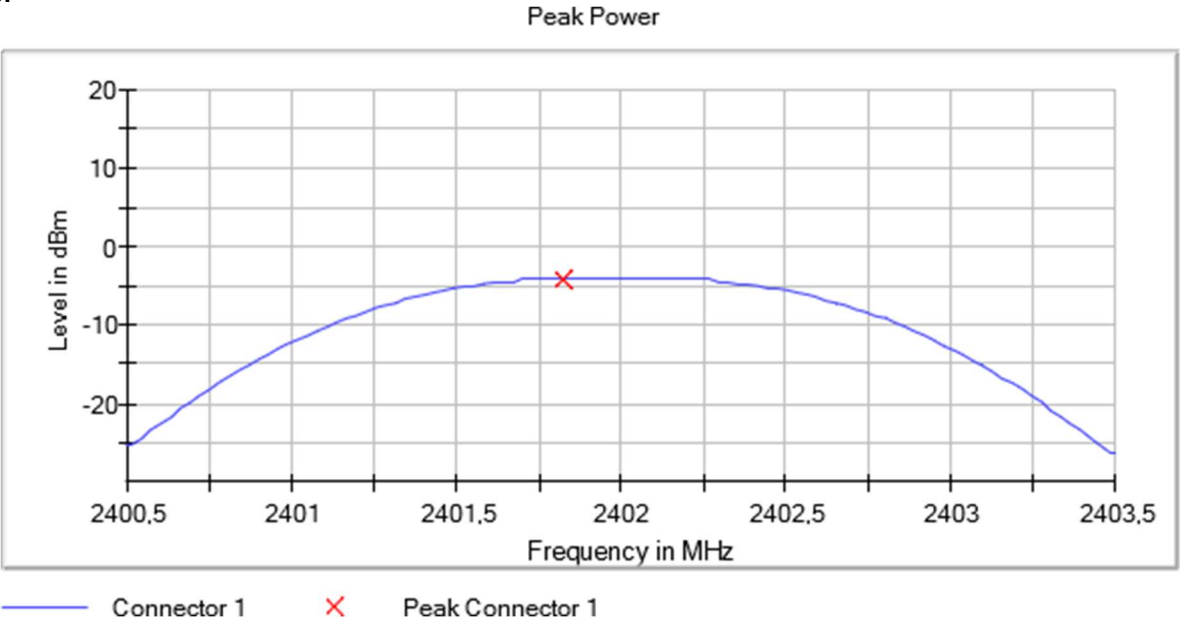
Uncertainty

Measurement uncertainty (dB) < ±0.80

Attachments

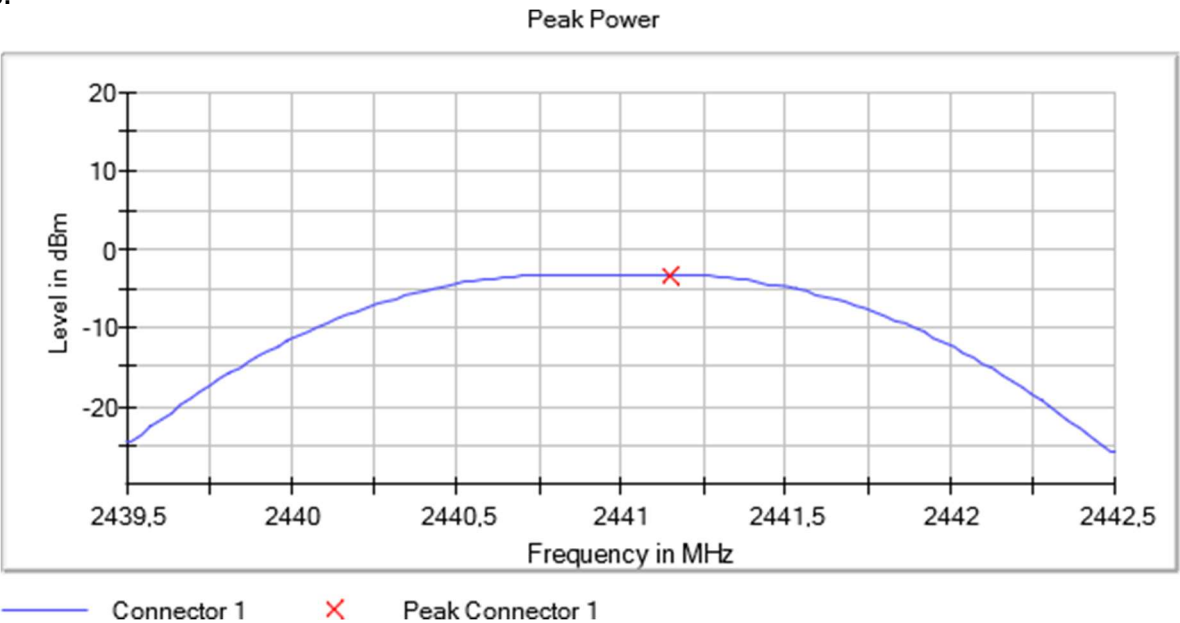
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



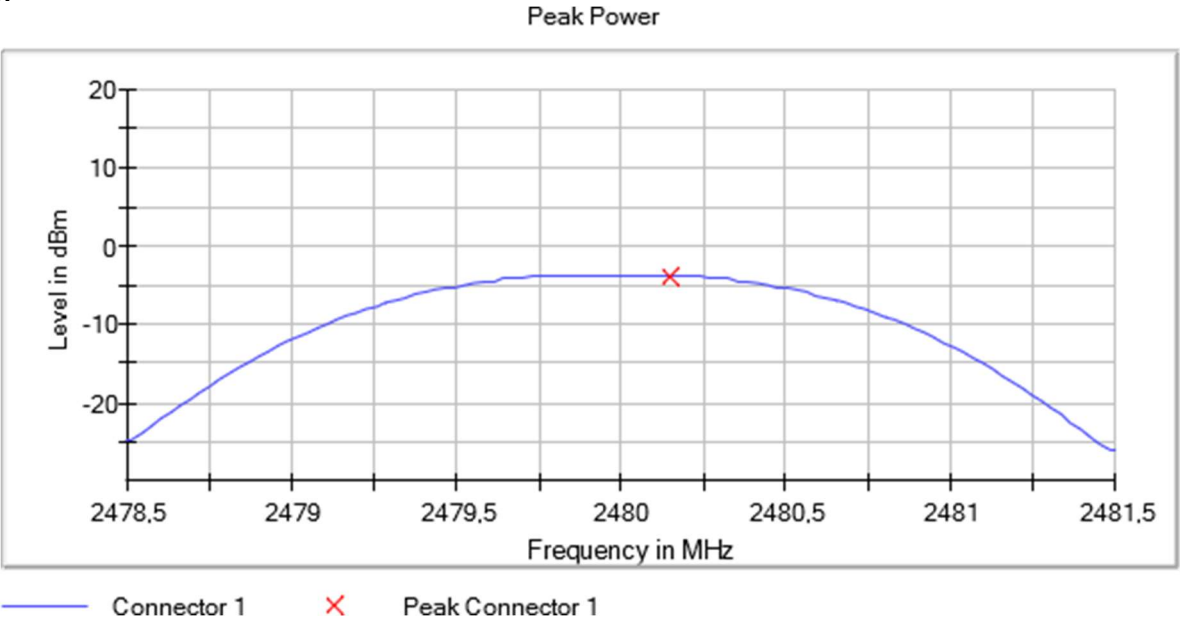
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2441.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2480.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Freq (MHz)	Maximum EIRP Power (dBm)	Maximum Conducted Power (dBm)
2402.00000	-1.4	-2,1
2441.00000	-0.6	-1,3
2480.00000	-1.1	-1,8

Verdict

Pass

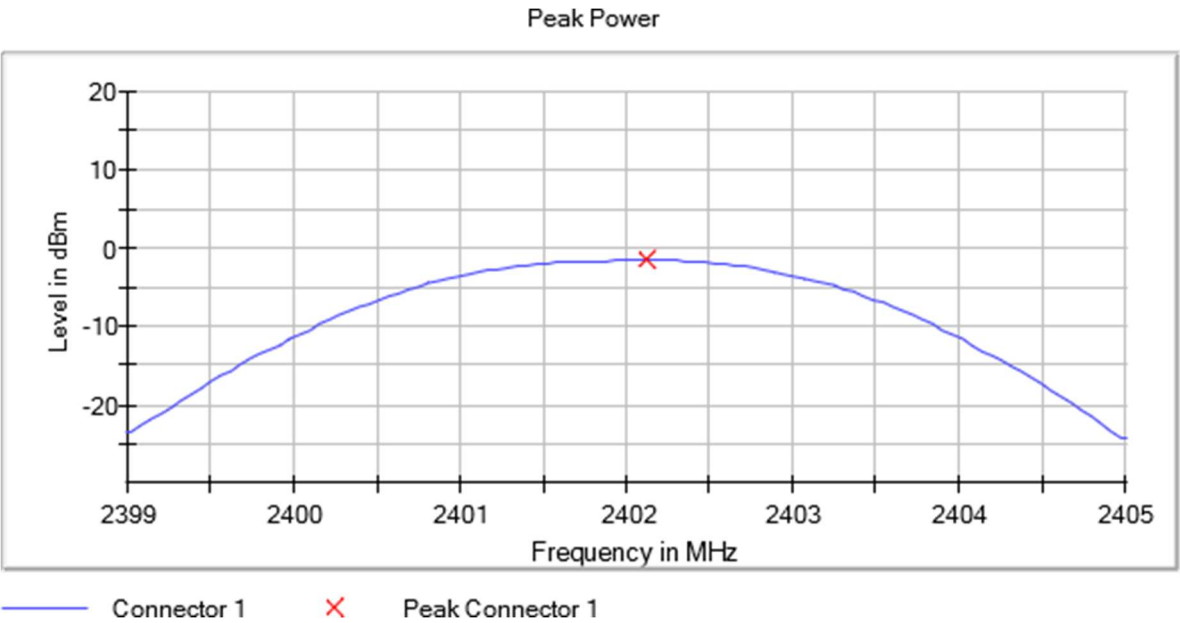
Uncertainty

Measurement uncertainty (dB) < ±0.80

Attachments

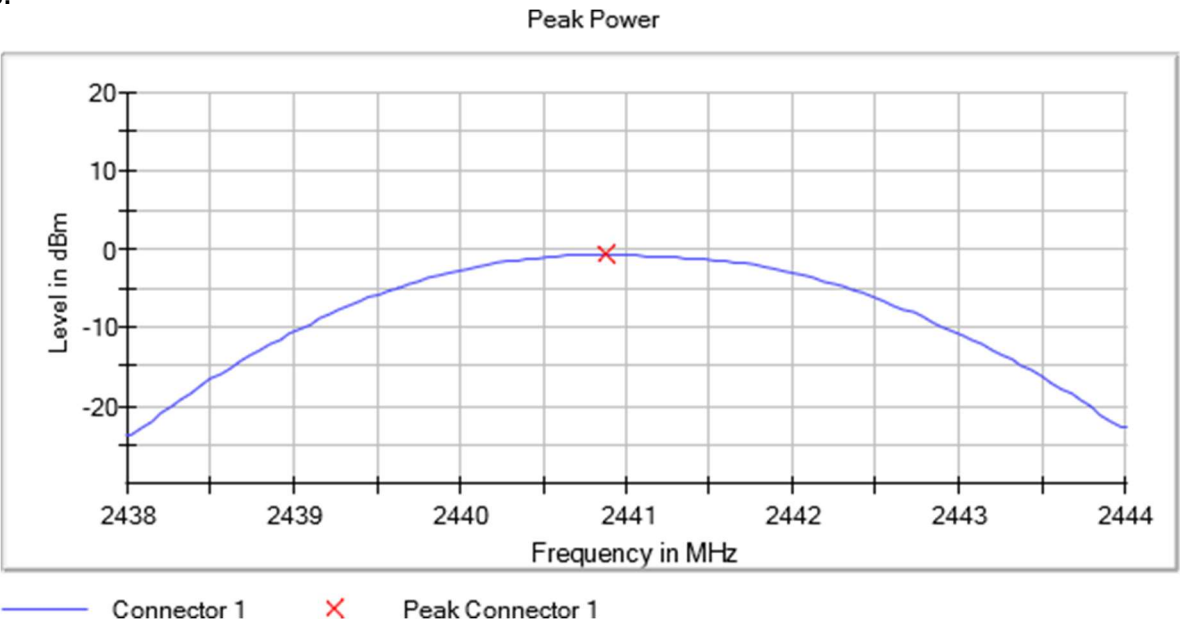
Operation Band MHz = [2400, 2483.5], Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2441.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:



Operation Band MHz = [2400, 2483.5], Frequency MHz = 2480.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS), Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:

