2DH3_Hop



Date: 17.MAY.2022 15:01:46



Date: 17.MAY.2022 15:40:32

2DH5_Hop



Date: 17.MAY.2022 15:07:25



Date: 17.MAY.2022 15:39:47



3DH1_Hop

Date: 17.MAY.2022 15:12:32



Date: 17.MAY.2022 15:39:10





Date: 17.MAY.2022 15:21:08



Date: 17.MAY.2022 15:38:35

3DH5_Hop



Date: 17.MAY.2022 15:22:48



Date: 11.JUN.2022 09:41:52

FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

Test Procedure

- 1. Place the EUT on a bench and set in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- 3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	27.9 °C			
Relative Humidity:	52 %			
ATM Pressure:	101.0 kPa			

The testing was performed by Andy Yu on 2022-05-17.

EUT operation mode: Transmitting

Test Result: Compliant.

Mode	Channel	Frequency	Peak Output Power	Limit (dBm)	
	Chunner	(MHz)	(dBm)		
BDR (GFSK)	Low	2402	6.98	21	
	Middle	2441	6.85	21	
	High	2480	6.52	21	
EDR (π/4-DQPSK)	Low	2402	8.43	21	
	Middle	2441	8.23	21	
	High	2480	7.94	21	
EDR (8DPSK)	Low	2402	8.84	21	
	Middle	2441	8.65	21	
	High	2480	8.63	21	

Report No.: SZNS220428-17186E-RF-00A



DH1_2402

Date: 17.MAY.2022 09:18:35



Spectrum Offset 10.50 dB ● RBW 3 MHz SWT 1.3 µs VBW 3 MHz Ref Level 30.50 dBm Att 30 dB Mode Auto FFT 😑 1Pk Max 6.85 dBm 2.4407830 GHz M1[1] 20 dBm-10 dBm T 0 dBm--10 dBm -20 dBm -30 dBm -40 dBm--50 dBm--60 dBm-Span 10.0 MHz CF 2.441 GHz 691 pts Date: 17.MAY.2022 09:24:11

Report No.: SZNS220428-17186E-RF-00A



DH1_2480

Date: 17.MAY.2022 09:25:32



2DH1_2402

Report No.: SZNS220428-17186E-RF-00A



2DH1_2441

Date: 17.MAY.2022 09:36:39



Spectrum Offset 10.50 dB ● RBW 3 MHz SWT 1.3 µs VBW 3 MHz Ref Level 30.50 dBm Att 30 dB Mode Auto FFT 😑 1Pk Max 7.94 dBm 2.4804050 GHz M1[1] 20 dBm-10 dBm 0 dBm--10 dBm -20 dBm--30 dBm -40 dBm--50 dBm--60 dBm-Span 10.0 MHz CF 2.48 GHz 691 pts Date: 17.MAY.2022 09:38:58

Report No.: SZNS220428-17186E-RF-00A



3DH1_2402

Date: 17.MAY.2022 09:41:25



3DH1_2441

Report No.: SZNS220428-17186E-RF-00A



3DH1_2480

Date: 17.MAY.2022 09:44:35

FCC §15.247(d) - BAND EDGES TESTING

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in \$15.209(a) is not required. 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)).

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.



Test Data

Environmental Conditions

Temperature:	27.9 °C
Relative Humidity:	52 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu on 2022-05-17.

EUT operation mode: Transmitting

Test Result: Compliant.

Conducted Band Edge Result:



DH1_Low_2402MHz

Date: 17.MAY.2022 10:16:04

DH1_High_2480MHz





DH1_Low_Hop_2402MHz

Date: 17.MAY.2022 16:10:43

DH1_High_Hop_2480MHz



Date: 17.MAY.2022 16:16:41



2DH1_Low_2402MHz

Date: 17.MAY.2022 10:12:36

2DH1_High_2480MHz





2DH1_Low_Hop_2402MHz

Date: 17.MAY.2022 16:07:17

2DH1_High_Hop_2480MHz





3DH1_Low_2402MHz

Date: 17.MAY.2022 10:55:17

3DH1_High_2480MHz



Spectrum	r)								
Ref Level	22.00 dBm	Offset	10.50 dB 👄	RBW 100	kHz				
Att	35 dB	🔵 SWT	20 ms 👄	VBW 300	kHz Mode	auto Swe	эр		
😑 1Pk Max									
20 dBm					M	1[1]	1	2.3	42.30 dBm 17800 GHz
10 dBm	D1 6 580 de	300							
0 dBm					1004/14/14/14	dinik (khara)	IN MARIAN	MANANA	
-10 dBm	D2 -13	.420 dBm							
-20 dBm									
-30 dBm					P				
-40 dBm <u>M1</u>	-war the war	www.	munuluus	Junpunn					humanopatra
-50 dBm			Contract in 1992						
-60 dBm									
-70 dBm									
CF 2.4 GHz 691 pts Span 200.0 MHz									

3DH1_Low_Hop_2402MHz

Date: 17.MAY.2022 16:22:41





***** END OF REPORT *****