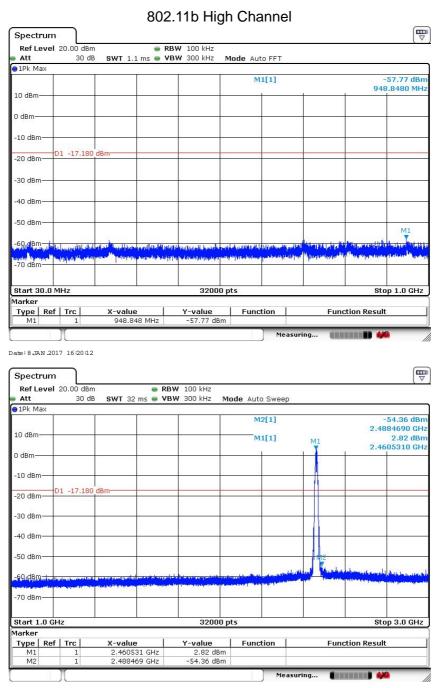


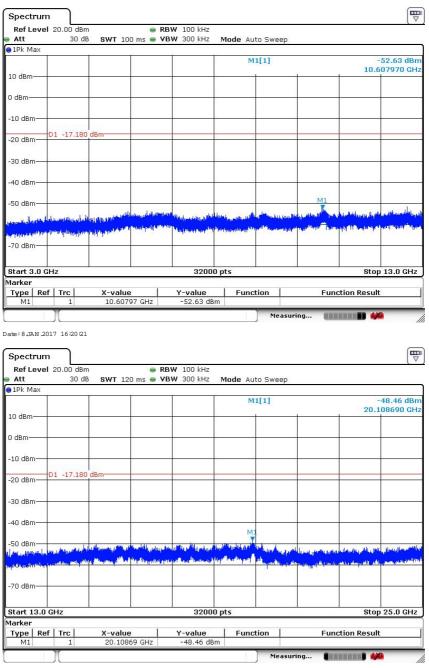
Report No. ATT-2016SZ1219182F - Page 39 of 76 -



Date: 8 JAN .2017 16:19:55



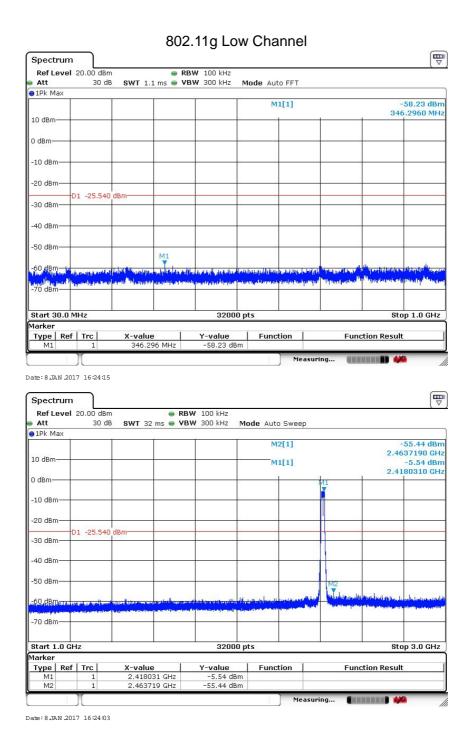
Report No. ATT-2016SZ1219182F - Page 40 of 76 -



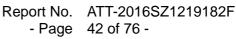
Date: 8 JAN .2017 16:20:34



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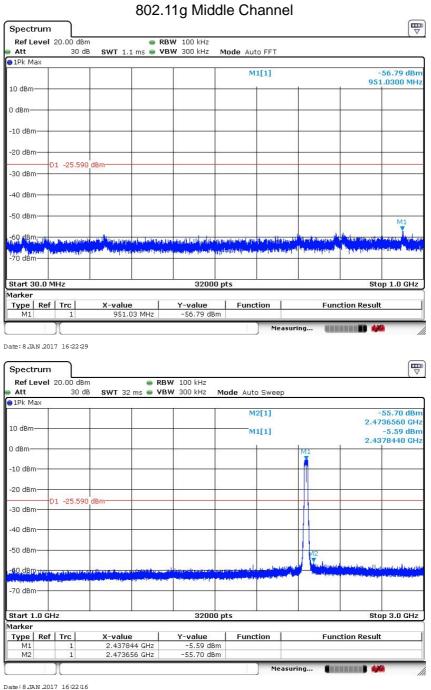


Spectrum RBW 100 kHz Ref Level 20.00 dBm Att 30 dB SWT 100 ms 👄 VBW 300 kHz Mode Auto Sweep • 1Pk Max M1[1] -52.89 dBm 6.976090 GHz 10 dBr 0 dBm -10 dBm -20 dBm D1 -25,540 -30 dBm -40 dBm -50 dBm 1000 -70 dBm Start 3.0 GHz 32000 pts Stop 13.0 GHz Marker Type Ref Trc X-value Y-value Function Function Result Date: 8 JAN .2017 16:24:26 Spectrum Ref Level 20.00 dBm RBW 100 kHz Att 30 dB SWT 120 ms 👄 VBW 300 kHz Mode Auto Sweep • 1Pk Max M1[1] -49.13 dBm 20.115440 GHz 10 dBm 0 dBm -10 dBm -20 dBm D1 -25.540 dBr -30 dBm -40 dBm -50 dBm -70 dBm Start 13.0 GHz 32000 pts Stop 25.0 GHz Marker Type Ref Trc X-value 20.11544 GHz Y-value -49.13 d Function Function Result Measu

Date: 8 JAN .2017 16:24:38



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ate: 8.JAN .2017 16:22:16



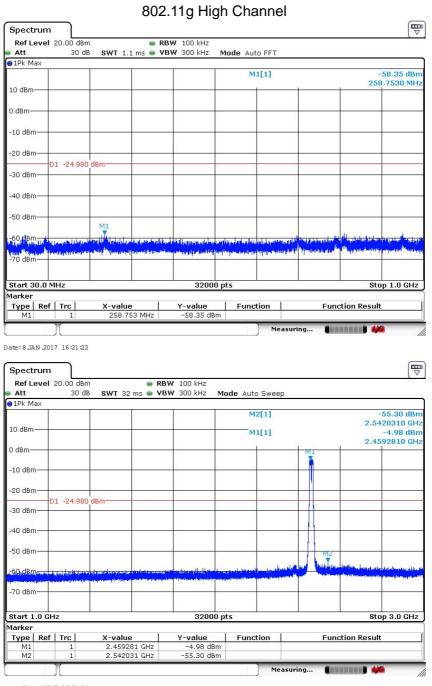
Report No. ATT-2016SZ1219182F - Page 44 of 76 -

Spectrum								
Ref Level 20.00			RBW 100 kHz					
Att 3	0 dB SWT 10	10 ms 👄	VBW 300 kHz	Mode Auto	Sweep			
TEK Max	Ť	1	Ĩ	M1[11		6	-52.46 dBn
				WITL.	11			587340 GHz
10 dBm								
0 dBm								
-10 dBm								
-20 dBm								
-30 dBm	590 dBm							
-40 dBm								
						M1		
-50 dBm		10 C (2000)	ana tan ana a	1 - N. 1774 - M	e contra est	1	enter unter a	
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-70 dBm								-
-2545-1016-1229-1549-151								
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larker			02000	5 PC3			0(0	p 10.0 di 12
Type Ref Trc	X-value	e	Y-value	Functio	n	Fund	tion Resul	t
M1 1	10.687	34 GHz	-52.46 dB	m				
八]	Measuri	ng 🚺		·
ate: 8 JAN 2017 16:2	3:02				Measuri	ng 📲		. .
	3:02				Measuri	ng 🔳	*****	•
Spectrum Ref Level 20.00	dBm		RBW 100 kHz		Measuri	ng a		
Spectrum Ref Level 20.00 Att 3	dBm		RBW 100 kHz VBW 300 kHz	Mode Auto		ng a		
Spectrum Ref Level 20.00 Att 3	dBm				Sweep	ng		[\(\neq \)
Spectrum Ref Level 20.00 Att 3	dBm			Mode Auto	Sweep	ng		(⊽ -48.87 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max	dBm				Sweep	ng		(⊽ -48.87 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 dBm	dBm				Sweep	ng		(⊽ -48.87 dBm
Spectrum	dBm				Sweep	ng		(⊽ -48.87 dBm
Spectrum Ref.Level 20.00 Att 30 1Pk Max 30 10 dBm 0 -10 dBm -10 dBm	dBm				Sweep	ng		(⊽ -48.87 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 dBm 0 dBm	dBm 0 dB SWT 12				Sweep	ng Q		(⊽ -48.87 dBm
Att 3i 1Pk Max 10 dBm 10 dBm	dBm				Sweep	ng		-48.87 dBm 115810 GHz
Spectrum Ref Level 20.00 Att 3 1Pk Max 3 10 dBm 0 -10 dBm -20 dBm	dBm 0 dB SWT 12			M1[:	Sweep	ng		(⊽ -48.87 dBm
Spectrum Ref Level 20.00 Att 3 1PK Max 10 dBm 10 dBm - -10 dBm - -30 dBm - -40 dBm -	dBm 0 dB SWT 12			M1[:	Sweep 1]		20	-48.87 dBm 115810 GHz
Spectrum Ref Level 20.00 Att 31 1Pk Max 31 10 dBm 0 -10 dBm	dBm 0 dB SWT 12	0 ms		M1[:	Sweep 1]		20	(⊽ -48.87 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 0 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm -	dBm 0 dB SWT 12 590 dBm 590 dBm	0 ms •	VBW 300 kHz	M1[Sweep 1]		20	-48.87 dBm 115810 GHz
Spectrum Ref Level 20.00 Att 31 1Pk Max 31 10 dBm 30 -10 dBm	dBm 0 dB SWT 12 590 dBm 590 dBm	0 ms •	VBW 300 kHz	M1[Sweep 1]		20.3	(♥
Spectrum Ref Level 20.00 Att 31 1Pk Max 10 10 dBm 0 -10 dBm	dBm 0 dB SWT 12 590 dBm 590 dBm	0 ms •	VBW 300 kHz	M1[Sweep 1]		20.3	(♥
Spectrum Ref Level 20.00 Att 3i 1Pk Max 10 10 dBm	dBm 0 dB SWT 12 590 dBm 590 dBm	0 ms •	VBW 300 kHz	M1[: M1: M1: M1: M1: M1: M1: M1: M1: M1: M1	Sweep 1]		20.	-48.87 dBm 115810 GHz
Spectrum Ref Level 20.00 Att 3i 1Pk Max 10 dBm 10 dBm	dBm 0 dB SWT 12		VBW 300 kHz		Sweep 1]		20.3	(♥
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 10 dBm 0 -10 dBm - -30 dBm - -30 dBm - -40 dBm - -50 dBm - -70 dBm -	dBm 0 dB SWT 12 590 dBm 590 dBm 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		VBW 300 kHz	M1[M1]	Sweep 1]		20.	(♥

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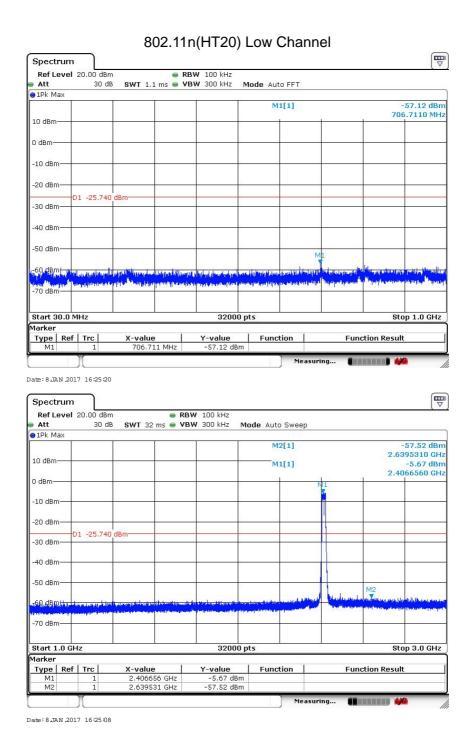
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Spectrum								[₩
Ref Level 20.00	dBm	. F	RBW 100 kHz					(*
10,10-33,962 (I	0 dB SWT 10	00 ms 👄	VBW 300 kHz	Mode Aut	o Sweep)		
1Pk Max		ř.	Ť					
				M1	[1]			-52.73 dBn 689530 GH:
10 dBm		-					10.	689530 GH
104 90500								
0 dBm				· · · · · · · ·				
3 94.94.00								
-10 dBm		-		2 2				-
20 dBm				2				
D1 -24	.980 dBm			S				
-30 dBm								
-40 dBm								
						M1		
50 dBm					A 201			Concernation Income
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70 dBm								
-70 uBin								
Start 3.0 GHz			3200	0 pts			Sto	p 13.0 GHz
larker								
Type Ref Trc M1 1	X-valu	e S3 GHz	<u>Y-value</u> -52,73 dB	Funct	ion	Fun	ction Resu	t
MII I								
te:8.JAN 2017 16:2			-52.73 dB	9m	Meas	suring 側		× ×
tte: 8 JAN .2017 16 % Spectrum Ref Level 20.00	1:34 dBm		RBW 100 kHz					×
tte:8.JAN .2017 16 Spectrum Ref Level 20.00 Att 3	1:34 dBm			Mode Aut				
Atte: 8 JAN 2017 16 %	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			
att 3	1:34 dBm		RBW 100 kHz	Mode Aut				-49.03 dBn
Atte: 8 JAN 2017 16 2 Spectrum Ref Level 20.00 Att 3 1Pk Max	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBn
Ite: 8 JAN 2017 16 42 Spectrum 10 Ref Level 20.00 Att 3 11Pk Max 3 10 dBm 10	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBn
Ite: 8 JAN 2017 16 42 Spectrum 10 Ref Level 20.00 Att 3 11Pk Max 3 10 dBm 10	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
Atte: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 J1Pk Max 3 L0 dBm 0	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBn
Atte: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 J1Pk Max 3 L0 dBm 0	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
te: 8 JAN 2017 16:2 Spectrum Ref Level 20.00 Att 3 1Pk Max 0 dBm 10 dBm 10 dBm	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
te: 8 JAN 2017 16 2 Spectrum Ref Level 20.00 Att 3 1Pk Max 0 dBm 10 dBm 20 dBm	dBm 0 dB SWT 1/		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
te: 8 JAN 2017 163 Spectrum Ref Level 20.00 Att 3 1PK Max 0 dBm 10 dBm 20 dBm D1 -24	1:34 dBm		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
Atte: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 J1PK Max 3 10 dBm 0 10 dBm 20 dBm 20 dBm D1 -24	dBm 0 dB SWT 1/		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBn
atte: 8 JAN 2017 16:2 Spectrum Ref Level 20.00 Att 3 p1Pk Max 3 0 dBm 10 dBm 10 dBm 20 dBm 20 dBm D1 -24 30 dBm 30 dBm	dBm 0 dB SWT 1/		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBn
te: 8 JAN 2017 16:2 Spectrum Ref Level 20.00 Att 3 10Pk Max 0 dBm 10 dBm 20 dBm D1 -24 30 dBm	dBm 0 dB SWT 1/		RBW 100 kHz	Mode Aut	o Sweep			-49.03 dBr
te: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 1Pk Max 0 dBm 10 dBm 20 dBm D1 -24 30 dBm 40 dBm	134 dBm 0 dB SWT 1; 980 dBm	20 ms • \	88W 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBr 113940 GH
te: 8 JAN 2017 163 Spectrum Ref Level 20.00 Att 31Pk Max 0 dBm 10 dBm 20 dBm 20 dBm 10 dBm 20 dBm 20 dBm 50 dBm 50 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz YBW 300 kHz	Mode Aut	o Sweep			-49.03 dBr 113940 GH
te: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 1Pk Max 0 dBm 10 dBm 20 dBm 10 dBm 20 dBm 50 dBm 50 dBm 50 dBm	134 dBm 0 dB SWT 1; 980 dBm	20 ms • \	88W 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBr 113940 GH
te: 8 JAN 2017 16 2 Spectrum Ref Level 20.00 Att 3 11Pk Max 0 dBm 10 dBm 20 dBm 10 dBm 20 dBm 50 dBm 50 dBm 50 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBr 113940 GH
Atte: 8 JAN 2017 163 Spectrum Ref Level 20.00 Att 3 11Pk Max 10 dBm 10 dBm 20 dBm 10 dBm 20 dBm 40 dBm 40 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBn 113940 GH
Atte: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 33 10 dBm 10 dBm 10 dBm 10 dBm 20 dBm D1 -24 30 dBm 40 dBm 40 dBm 50 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBr 113940 GH
te: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 iPk Max 3 0 dBm 0 10 dBm 20 20 dBm 01 -24 30 dBm 50 dBm 40 dBm 50 dBm 70 dBm 70 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz VBW 300 kHz	Mode Aut	o Sweep		20.	-49.03 dBr 113940 GH
Atte: 8 JAN 2017 16 3 Spectrum Ref Level 20.00 Att 3 JIPK Max 3 10 dBm 3 10 dBm 10 dBm 20 dBm 01 -24 30 dBm 01 -24 30 dBm 30 dBm 40 dBm 10 dBm 70 dBm 30 dBm 70 dBm 31 dBm 33 data 31 dBm	dBm 0 dB SWT 1: 980 dBm	20 ms • \	RBW 100 kHz YBW 300 kHz	Mode Aut	o Sweep		20.	
Atte: 8 JAN 2017 16 32 Spectrum Ref Level 20.000 Att 3 10 dBm 10 dBm 10 dBm 10 dBm 20 dBm D1 -24 30 dBm 50 dBm 40 dBm 50 dBm 50 dBm 70 dBm 70 dBm 10 dBm 31 dBm 10 dBm 32 dBm 50 dBm 33 dBm 50 dBm 50 dBm 50 dBm 50 dBm 50 dBm 30 dBm 50 dBm 30 dBm 50 dBm 50 dBm 50 dBm 50 dBm 50 dBm 70 dBm 51 dBm 31 dBm 51 dBm 51 dBm 51 dBm <	134 dBm 0 dB SWT 1; 980 dBm 980 dBm	20 ms • 1	RBW 100 kHz VBW 300 kHz Image: state st	Mode Aut M1	0 Sweet		20.	-49.03 dBm 113940 GH
te: 8 JAN 2017 163 Spectrum Ref Level 20.00 Att 3 1PK Max 0 dBm 10 dBm 20 dBm 20 dBm 20 dBm 50 dBm 50 dBm 50 dBm 70 dBm 70 dBm ttart 13.0 GHz	134 dBm 0 dB SWT 12 980 dBm 980 dBm 980 dBm 1, 24 dttor, 41 dt 1, 24 d	20 ms • 1	RBW 100 kHz VBW 300 kHz	Mode Aut	0 Sweet		20.	-49.03 dBr 113940 GH

Date: 8.JAN.2017 16:21:47



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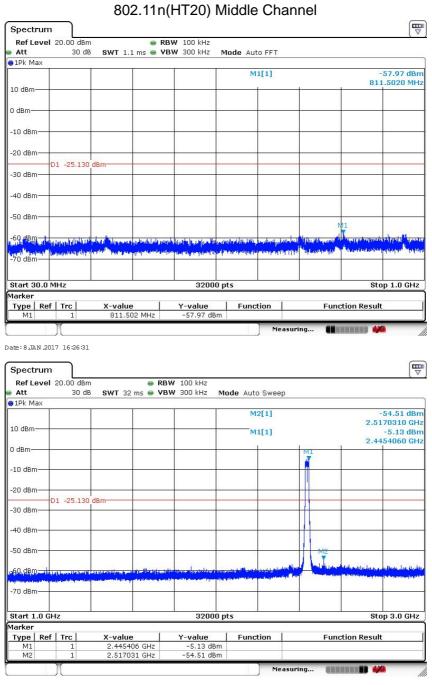
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Spectrum								
Ref Level 20.00	dBm	-	RBW 100 kHz					
Att 3	0 dB SWT 10	00 ms 👄	VBW 300 kHz	Mode Auto	Sweep			
1Pk Max		*						
				M1[1]			-52.87 dBm
10 dBm							10	.598280 GHz
Lo dom								
dom								
D dBm								
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00.10								
-20 dBm	18							
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-70 dBm								
Start 3.0 GHz		1	32000) pts		-1	Sto	p 13.0 GHz
1arker				•				•
Type Ref Trc	X-valu	e l	Y-value	Functio	on I	Fun	ction Resu	lt
M1 1	10.598	328 GHz	-52.87 dB					
)(Meacu	ring 🚺		M4
te:8JAN 2017 16:2	5-32				ricasa	ing		
Spectrum			RBW 100 kHz		Ticasa			
Spectrum Ref Level 20.00	dBm		RBW 100 kHz VBW 300 kHz	Mode Auto		- Ingini a		
Spectrum Ref Level 20.00 Att 3	dBm		RBW 100 kHz VBW 300 kHz	Mode Auto				(The second seco
Spectrum Ref Level 20.00 Att 3	dBm			Mode Auto	Sweep			
Spectrum Ref Level 20.00 Att 3 1Pk Max	dBm				Sweep			-48.72 dBm
	dBm				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 01Pk Max	dBm				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 91Pk Max	dBm				Sweep			-48.72 dBn
Spectrum	dBm				Sweep			-48.72 dBm
Spectrum	dBm				Sweep			-48.72 dBm
Spectrum 3 Ref Level 20.00 Att 3 1Pk Max 3 10 dBm 3 -10 dBm -10 dBm	dBm				Sweep			-48.72 dBm
Spectrum 3 Ref Level 20.00 Att 3 1Pk Max 3 10 dBm 3 -10 dBm -10 dBm	dBm				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 01Pk Max 10 dBm 10 dBm 20 dBm 20 dBm 120 dBm	dBm				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 10 dBm	dBm 0 dB SWT 12				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 3 1Pk Max 3 10 dBm	dBm 0 dB SWT 12				Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 01Pk Max 10 dBm -10 dBm -20 dBm -20 dBm	dBm 0 dB SWT 12			M1[Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 01Pk Max 3 10 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm -	dBm 0 dB SWT 12			M1[Sweep			-48.72 dBm
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 10 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm -	dBm 0 dB SWT 12	20 ms •	VBW 300 kHz		1]		20	-48.72 dBm 107560 GH2
Spectrum Ref Level 20.00 Att 3 1Pk Max 3 10 dBm - -10 dBm - -20 dBm D1 -25 -30 dBm - -40 dBm -	dBm 0 dB swr 12	20 ms	VBW 300 kHz	M1[1]		20	-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -20 dBm -20 dBm -20 dBm -20 dBm -30 dBm	dBm 0 dB swr 12	20 ms	VBW 300 kHz	M1[1]		20	-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 1Pk Max 3 10 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm - -50 dBm - -50 dBm -	dBm 0 dB swr 12	20 ms	VBW 300 kHz	M1[1]		20	-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 1Pk Max 3 10 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm - -50 dBm - -50 dBm -	dBm 0 dB swr 12	20 ms	VBW 300 kHz	M1[1]		20	-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 1Pk Max 3 10 dBm - -10 dBm - -20 dBm - -30 dBm - -40 dBm - -50 dBm - -50 dBm -	dBm 0 dB swr 12	20 ms	VBW 300 kHz	M1[1]		20	-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 91Pk Max 10 10 dBm - -10 dBm - -30 dBm - -40 dBm - -50 dBm - -70 dBm -	dBm 0 dB swr 12	20 ms	VBW 300 kHz		1]			The particular sector of the s
Spectrum Ref Level 20.00 Att 3 10 km 3 10 dBm 3 10 dBm 3 10 dBm 3 10 dBm 3 30 dBm 3 30 dBm 3 40 dBm 3 50 dBm 3 70 dBm 3 70 dBm 3 313.0 GHz 3	dBm 0 dB swr 12	20 ms	VBW 300 kHz		1]			-48.72 dBm 107560 GH:
Spectrum Ref Level 20.00 Att 3 1Pk Max 10 10 dBm - -10 dBm - -20 dBm - -30 dBm - -10 dBm - -20 dBm - -30 dBm - -20 dBm - -20 dBm - -20 dBm - -20 dBm - -70 dBm - -70 dBm - -70 dBm - -30 dBm -	dBm 0 dB SWT 12 	20 ms	VBW 300 kHz	M1[Sweep 1]		20	-48.72 dBm 107560 GHz
Spectrum Ref Level 20.00 Att 3 10Pk Max .0 dBm 0 dBm 10 dBm 20 dBm 20 dBm 30 dBm 40 dBm 50 dBm 50 dBm 70 dBm 70 dBm 30 dBm	dBm 0 dB SWT 12 	20 ms	VBW 300 kHz	M1[Sweep 1]			-48.72 dBn 107560 GH:

Date:8.JAN.2017 16:25:42

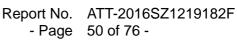


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Date:8.JAN.2017 16:26:12



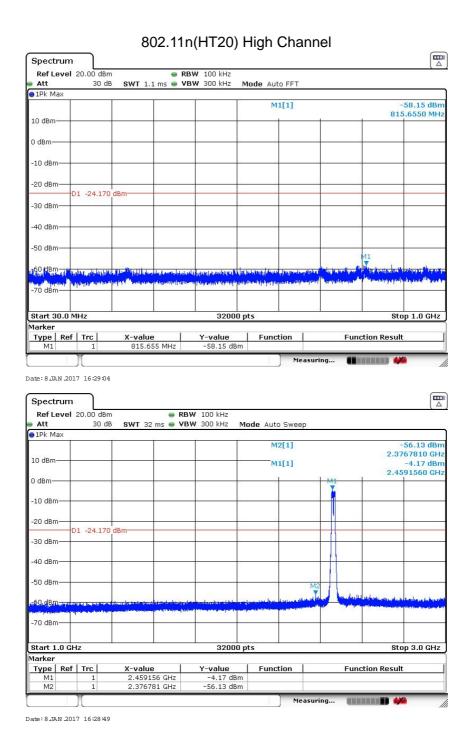


Spectrum RBW 100 kHz Ref Level 20.00 dBm Att 30 dB SWT 100 ms 👄 VBW 300 kHz Mode Auto Sweep • 1Pk Max M1[1] -52.38 dBn 10.577660 GHz 10 dBr 0 dBm -10 dBm -20 dBm D1 -25.130 -30 dBm -40 dBm -50 dBm -70 dBm-Start 3.0 GHz 32000 pts Stop 13.0 GHz Marker Type Ref Trc X-value Y-value Function Function Result Date: 8 JAN .2017 16:26:41 Spectrum Ref Level 20.00 dBm RBW 100 kHz Att 30 dB SWT 120 ms 👄 VBW 300 kHz Mode Auto Sweep • 1Pk Max M1[1] -49.39 dBm 20.154060 GHz 10 dBm 0 dBm -10 dBm -20 dBm D1 -25.130 dBr -30 dBm -40 dBm -50 dBm -70 dBm Start 13.0 GHz 32000 pts Stop 25.0 GHz Marker Type Ref Trc X-value 20.15406 GHz Y-value Function Function Result 9.39 Measu .

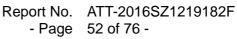
Date: 8 JAN .2017 16:26:51



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Spectrum 🖷 RBW 100 kHz Ref Level 20.00 dBm Att 30 dB **SWT** 100 ms 🔵 VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -52.31 dBn 12.537030 GH 10 dBr 0 dBn -10 dBm -20 dBm-D1 -24.170 dB -30 dBm -40 dBm -50 dBn 11 L 11 -70 dBm-Stop 13.0 GHz Start 3.0 GHz 32000 pts Marker X-value 12.53703 GHz **Y-value** -52.31 dB Type Ref Trc Function Function Result Μ1 Measuring CONTRACTOR OF AN ADDRESS Date: 8 JAN .2017 16:29:15 Spectrum Ref Level 20.00 dBm RBW 100 kHz Att 30 dB SWT 120 ms 👄 VBW 300 kHz Mode Auto Sweep 1Pk Ma M1[1] -48.61 dBn 20.128560 GHz 10 dBm 0 dBm -10 dBm -20 dBm D1 -24.170 -30 dBm -40 dBm -50 dBm -70 dBm Start 13.0 GHz 32000 pts Stop 25.0 GHz Marker Type Ref Trc M1 1 X-value 20.12856 GHz Y-value -48.61 dBm Function Function Result Measuring... finnen an 🖬 🚧

Date: 8 JAN .2017 16:29:27



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4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

	FCC Part15 (15.247), Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result			
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS			

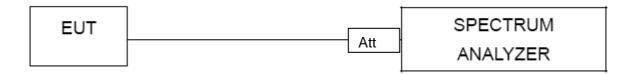
4.1.1 TEST PROCEDURE

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times DTS bandwith.
- 3. Set the RBW \geq 3 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.



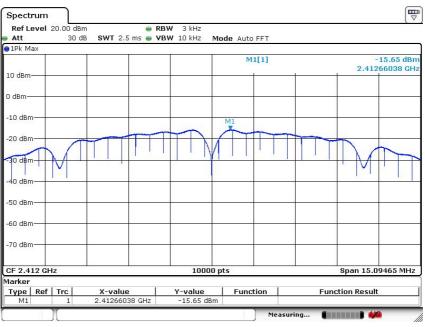
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4.1.5 TEST RESULTS

EUT:	Inventor II (3D printer)	Model Name :	INVENTOR II		
Temperature :	25 ℃	Relative Humidity :	56%		
Pressure :	1015 hPa		DC 24V from adapter AC 120V/60Hz		
Test Mode :	TX b Mode /CH01, CH06, CH11				

Note: The relevant measured result has the offset with cable loss already.

Frequency	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-15.65	8	PASS
2437 MHz	-16.02	8	PASS
2462 MHz	-15.77	8	PASS

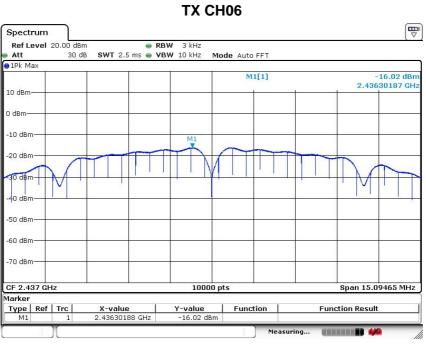


TX CH01

Date:23.JAN.2017 15:56:56

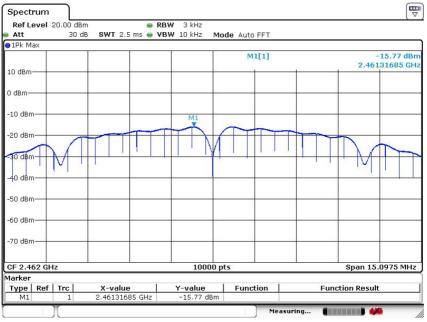


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Date: 23 JAN 2017 15:57:34





Date: 23 JAN .2017 15:58:29

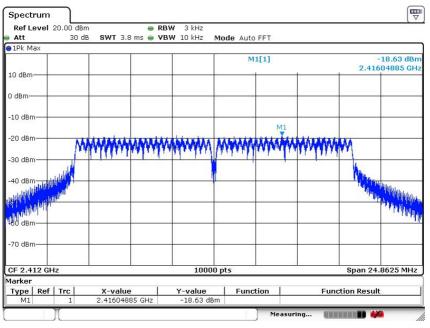


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EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II		
Temperature :	25 ℃	Relative Humidity :	56%		
Pressure :	1015 hPa	Test vollage .	DC 24V from adapter AC 120V/60Hz		
Test Mode :	TX g Mode /CH01, CH06, CH11				

Note: The relevant measured result has the offset with cable loss already.

Frequency	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-18.63	8	PASS
2437 MHz	-17.92	8	PASS
2462 MHz	-17.83	8	PASS

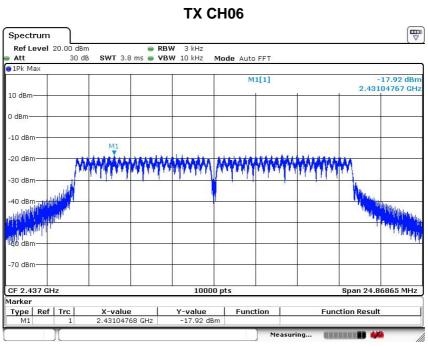


TX CH01

Date: 23 JAN .2017 16:00:18

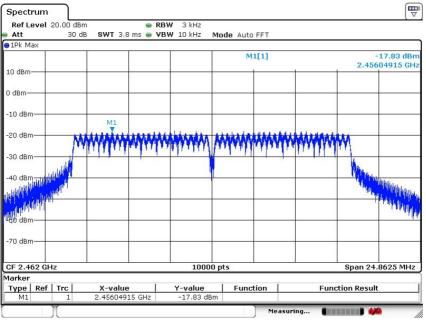


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Date:23.JAN.2017 16:01:11





Date: 23 JAN .2017 16:01:32

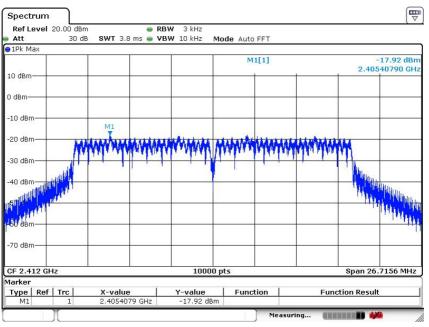


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EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II		
Temperature :	25 ℃	Relative Humidity :	56%		
Pressure :	1015 hPa	Test vollade .	DC 24V from adapter AC 120V/60Hz		
Test Mode :	TX n(HT20) Mode /CH01, CH06, CH11				

Note: The relevant measured result has the offset with cable loss already.

Frequency	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-17.92	8	PASS
2437 MHz	-17.66	8	PASS
2462 MHz	-17.42	8	PASS

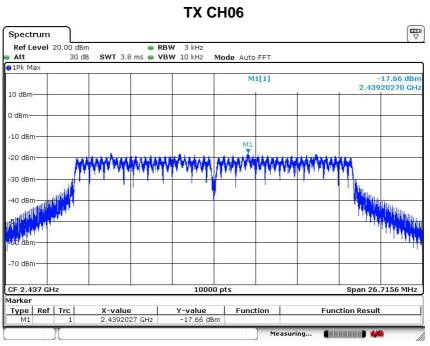


TX CH01

Date: 23 JAN .2017 16:02:47

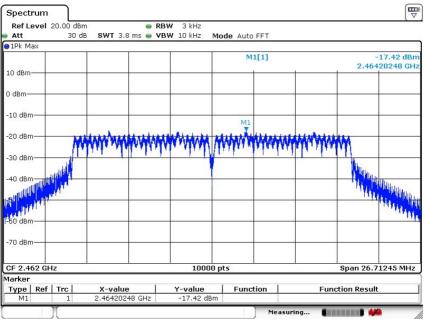


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Date:23.JAN.2017 16:03:13





Date: 23 JAN .2017 16:04:22



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5. BANDWIDTH TEST

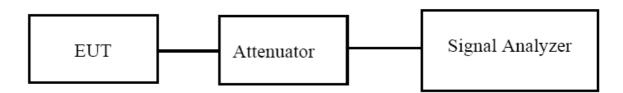
5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS		

5.1.1 TEST PROCEDURE

According to KDB 558074 D01 DTS Meas Guidance v03r03

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.



5.1.2 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

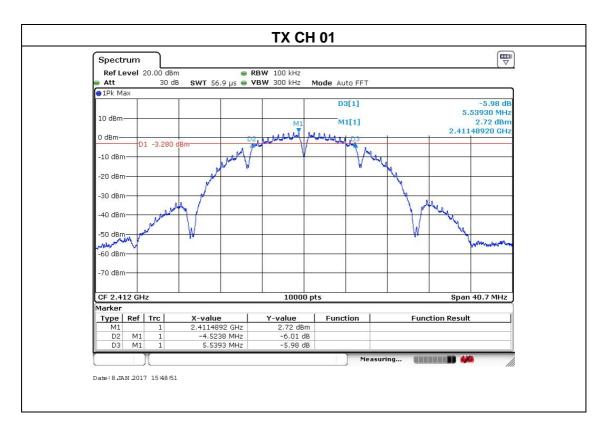


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5.1.3 TEST RESULTS

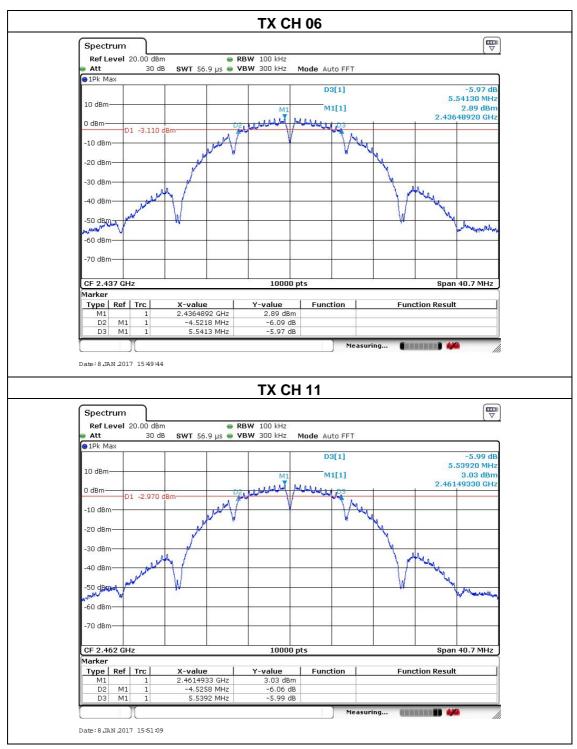
EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II		
Temperature :	25 ℃	Relative Humidity :	56%		
Pressure :	1012 hPa	Test Voltage :	DC 24V from adapter AC 120V/60Hz		
Test Mode :	TX b Mode /CH01, CH06, CH11				

Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	10.063	500	Pass
Middle	2437	10.063	500	Pass
High	2462	10.065	500	Pass





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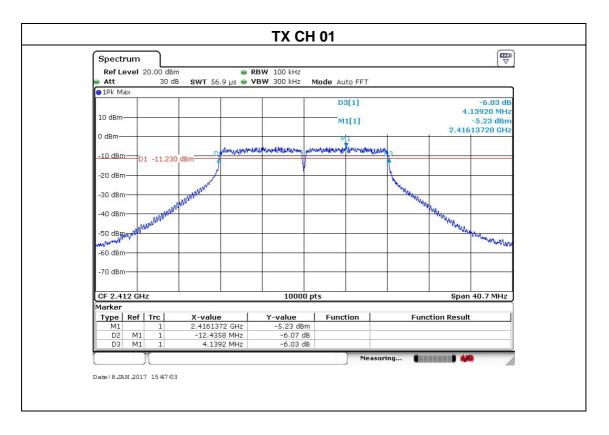




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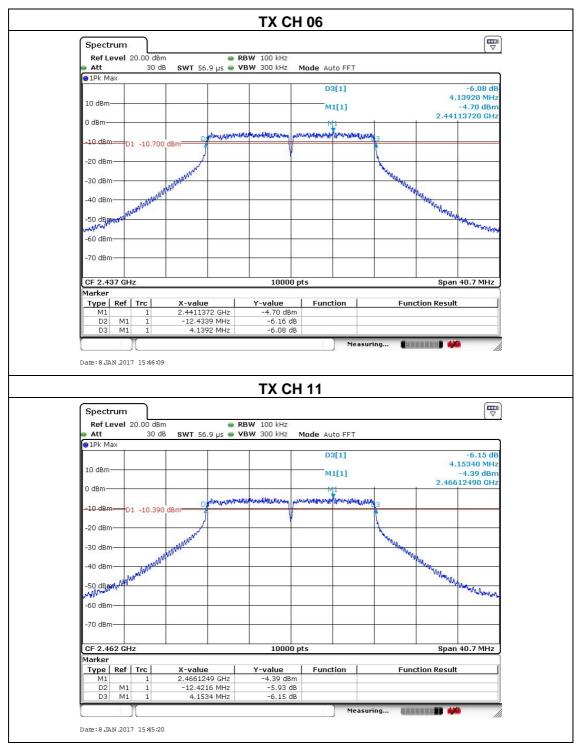
EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II	
Temperature :	25 ℃	Relative Humidity :	60%	
Pressure :	1012 hPa	Test vollage .	DC 24V from adapter AC 120V/60Hz	
Test Mode : TX g Mode /CH01, CH06, CH11				

Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	16.575	500	Pass
Middle	2437	16.573	500	Pass
High	2462	16.575	500	Pass





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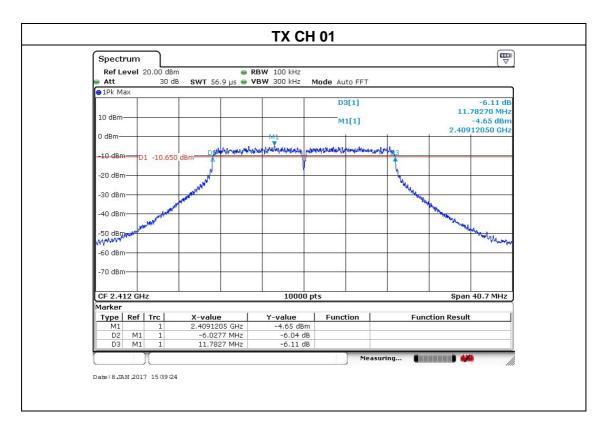




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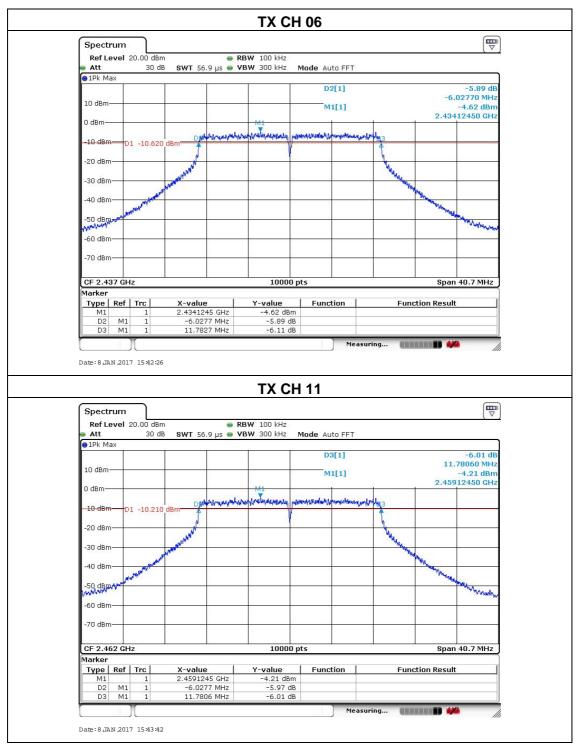
EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II	
Temperature :	25 ℃	Relative Humidity :	60%	
Pressure :	1012 hPa	Test vollage .	DC 24V from adapter AC 120V/60Hz	
Test Mode : TX n(HT20) Mode /CH01, CH06, CH11				

Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.810	500	Pass
Middle	2437	17.805	500	Pass
High	2462	17.808	500	Pass





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6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C					
Section Test Item Limit Frequency Range (MHz) Res					
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS	

6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



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6.1.5 TEST RESULTS

EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II
Temperature :	25 ℃	Relative Humidity :	60%
Pressure :	1012 hPa		DC 24V from adapter AC 120V/60Hz
Test Mode :	TX b/g/n Mode		

Test Channe	Frequency	Maximum Conducted Output Power(PK)	Max. Tune up Power	LIMIT		
	(MHz)	(dBm)	(dBm)	(dBm)		
		802	.11b			
CH01	2412	15.51	17.00	30		
CH06	2437	16.19	17.00	30		
CH11	2462	16.68	17.00	30		
		802	.11g			
CH01	2412	16.59	17.00	30		
CH06	2437	16.34	17.00	30		
CH11	2462	16.76	17.00	30		
	802.11n(HT20)					
CH01	2412	14.15	15.00	30		
CH06	2437	14.33	15.00	30		
CH11	2462	14.19	15.00	30		

Note: the highest powers for:

802.11b: 1Mbps

802.11g: 6Mbps

802.11n(HT20):11Mbps



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7. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

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

- a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- c) Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- d) 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.
- e) Repeat above procedures until all measured frequencies were complete.

7.1 DEVIATION FROM STANDARD

No deviation.

7.2 TEST SETUP



7.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



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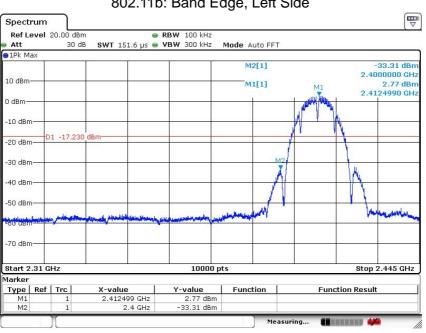
7.4 TEST RESULTS

EUT :	Inventor II (3D printer)	Model Name :	INVENTOR II
Temperature :	25 ℃	Relative Humidity :	56%
Pressure :	1012 hPa	lest voltade .	DC 24V from adapter AC 120V/60Hz

	Meter		Emission				
Frequency	Reading	Factor	Level	Limits	Margin	Detector	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Comment
			802	.11b			
2390	41.26	9.86	51.12	74	-22.88	Pk	Vertical
2390	30.58	9.86	40.44	54	-13.56	Av	Vertical
2483.5	43.69	10.14	53.83	74	-20.17	Pk	Vertical
2483.5	31.12	10.14	41.26	54	-12.74	Av	Vertical
			802	.11g			
2390	41.19	9.86	51.05	74	-22.95	Pk	Vertical
2390	29.82	9.86	39.68	54	-14.32	Av	Vertical
2483.5	42.33	10.14	52.47	74	-21.53	Pk	Vertical
2483.5	30.14	10.14	40.28	54	-13.72	Av	Vertical
			802.11	n(HT20)			
2390	40.42	9.86	50.28	74	-23.72	Pk	Vertical
2390	29.18	9.86	39.04	54	-14.96	Av	Vertical
2483.5	40.59	10.14	50.73	74	-23.27	Pk	Vertical
2483.5	28.66	10.14	38.8	54	-15.2	Av	Vertical



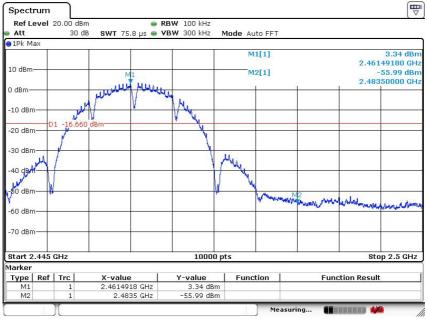
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802.11b: Band Edge, Left Side

Date: 8 JAN .2017 16:03:19

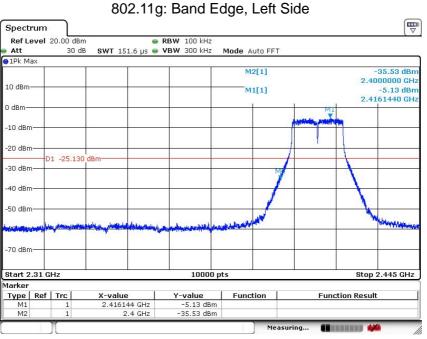




Date: 8 JAN .2017 16:04:15

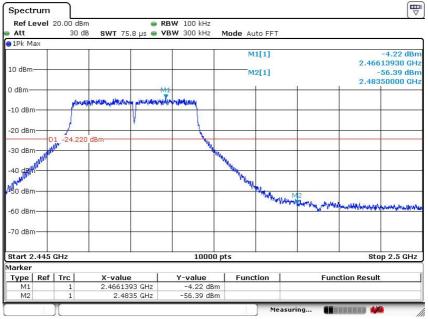


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Date:8JAN.2017 16:05:48

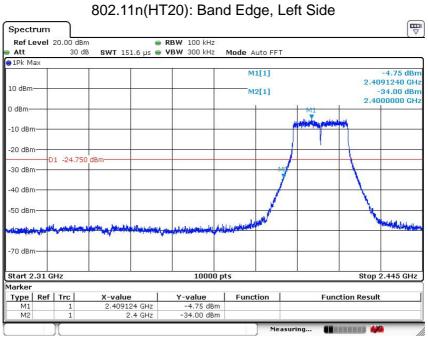




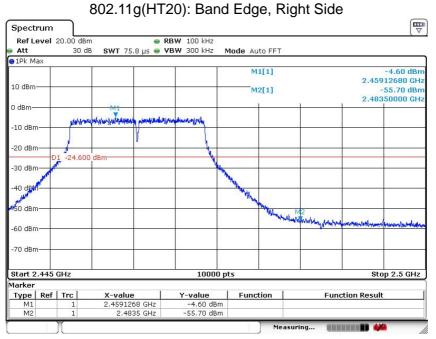
Date: 8 JAN .2017 16:05:05



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Date: 8 JAN .2017 16:06:14



Date: 8 JAN .2017 16:06:56



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8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

8.2 EUT ANTENNA

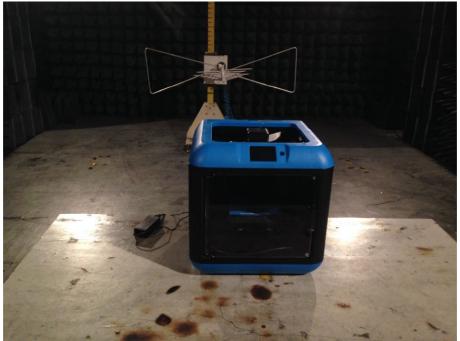
The EUT antenna is PCB antenna. It comply with the standard requirement.



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9. EUT TEST PHOTO

Radiated Measurement Photos







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Conducted Measurement Photos

