

2.1033 (b) (6) Report of Measurements

15.207 Conducted Emissions (General Provisions)

Test Procedure:

To measure conducted emissions, the EUT was set upon a wooden table in the shielded enclosure. AC power was fed into the EUT from the Artificial Mains Network. With the Artificial Mains Network connected to an HP 8568B Spectrum Analyzer, and using the HP 9825 Computer/Controller and the HP 85864B EMI Measurement Software, the spectrum was searched from 0.15 - 30 MHz for emissions emanating from the EUT.

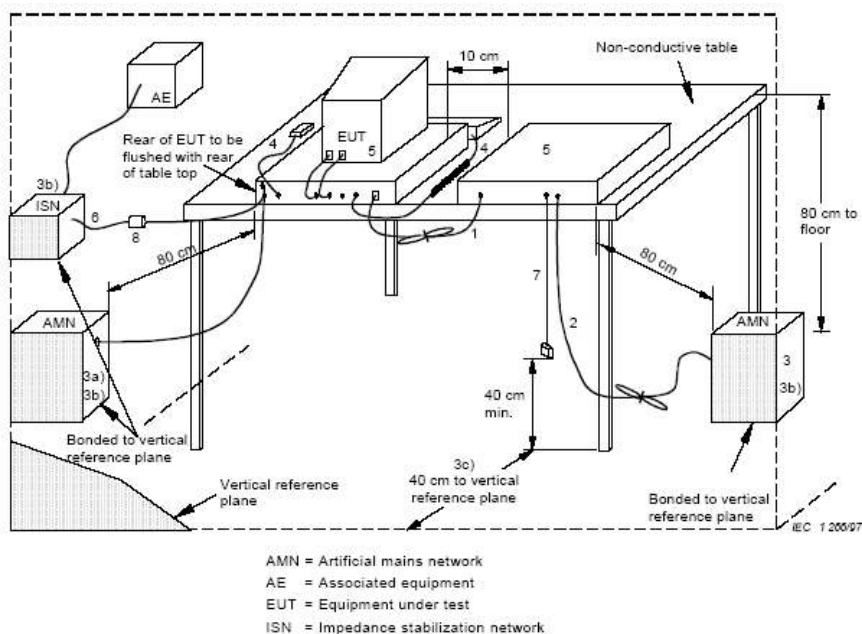
Frequency of emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

* Decreases with the logarithm of the frequency.

EUT operating conditions:

The software provided by the client to enable the EUT to transmit continuously.

Test Set Up:



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704	Conducted Emissions			
DNB Job Number:	68012	Date:	31 Aug 2005	Specification [X] 15.207	
Customer:	ConectiSys Corp.				
Model Number:	HNET 5.0-BS8	Serial Number:	Proto		
Description:	RF Transmitter				
	Set Up				

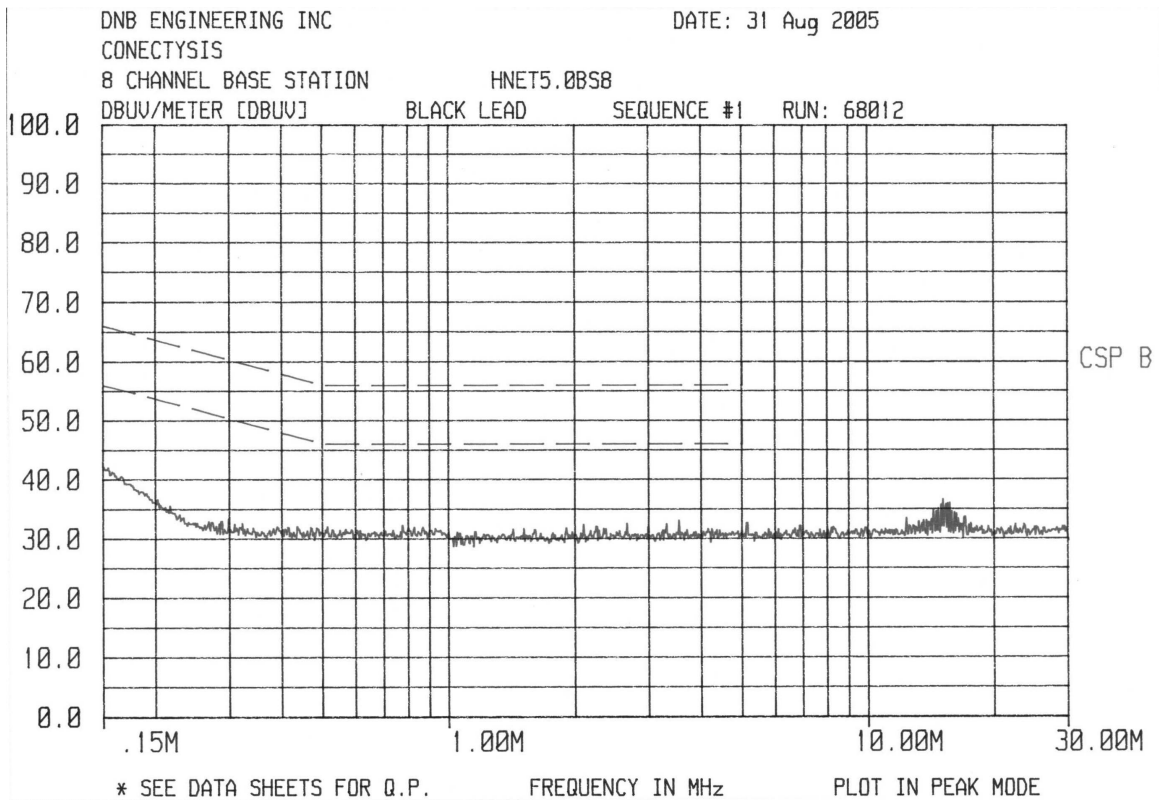




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Conducted Emissions

DNB Job Number:	68012	Date:	31 Aug 2005	Specification [X] 15.207
Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	RF Transmitter			
	Line - Peak			

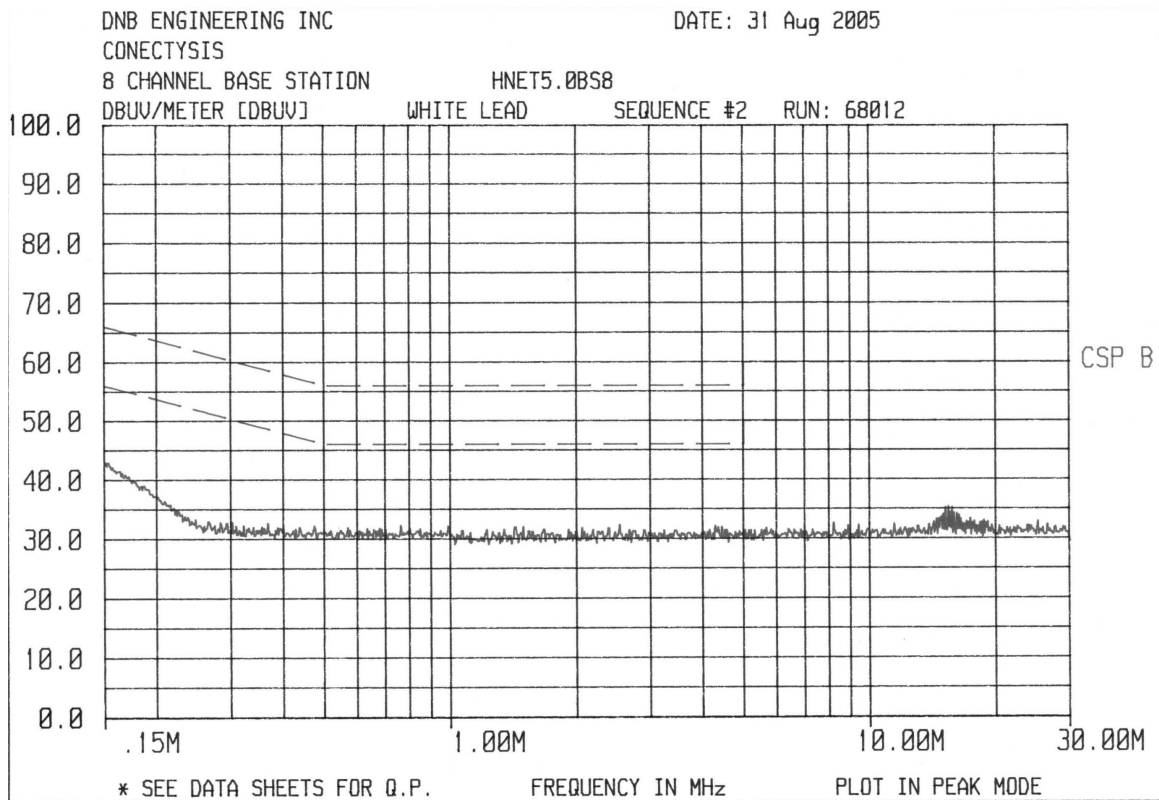




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Conducted Emissions

DNB Job Number:	68012	Date:	31 Aug 2005	Specification [X] 15.207
Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Neutral - Peak			



15.209 Radiated Emissions (General Provisions)

Test Procedure:

The EUT was measured on an open area test site (OATS).

A measuring distance of at least 3 m shall be used for measurements at frequencies up to 1 GHz. For frequencies above 1 GHz, any suitable measuring distance may be used. The equipment size (excluding the antenna) shall be less than 20 % of the measuring distance.

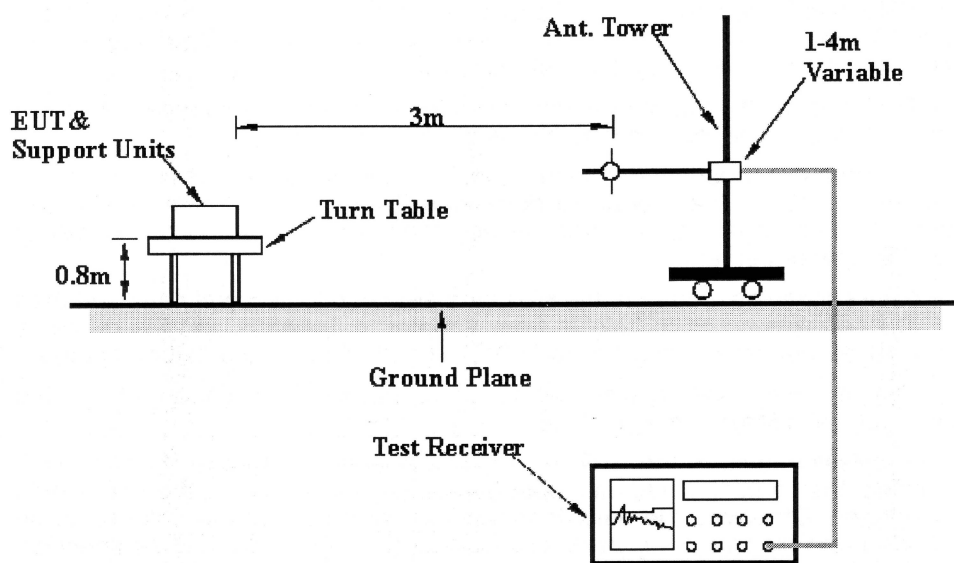
Sufficient precautions shall be taken to ensure that reflections from extraneous objects adjacent to the site do not degrade the measurement results, in particular:

- no extraneous conducting objects having any dimension in excess of a quarter wavelength of the highest frequency tested shall be in the immediate vicinity of the site;
- all cables shall be as short as possible; as much of the cables as possible shall be on the ground plane or preferably below; and the low impedance cables shall be screened.

The EUT shall be placed upon a non-conductive table 1.5 meters above the ground plane and shall be placed in the “worst case” transmitting mode. The EUT shall be rotated 360 degrees to find the azimuth maxima. The receive antenna shall then be raised and lowered between 1 to 4 meters to find the maximum signal emanating from the EUT. This signal strength is then recorded on the data sheets.

Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measurement Distance (meters)
.0009 - 0.490	2400/F(kHz)	$20 * (\text{Log}_{10}(2400/F(\text{kHz})))$	300
0.490 - 1.705	24000/F(kHz)	$20 * (\text{Log}_{10}(24000/F(\text{kHz})))$	30
1.705 - 30.0	30	29.5	30
30 - 88	100	40.0	3
88 - 216	150	43.5	3
216 - 960	200	46.0	3
Above 960	500	54.0	3

	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704	Radiated Emissions (Spurious)		
DNB Job Number:	68012	Date:	21 Oct 2005	Specification [X] 15.209
Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Test Set Up			



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions (Spurious)	
DNB Job Number:	68012	Date:	21 Oct 2005	Specification [X] 15.209	
Customer:	ConectiSys Corp.				
Model Number:	HNET 5.0-BS8	Serial Number:	Proto		
Description:	Wireless Power Usage Monitoring System				
Test Set Up - Bicon Antenna					



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions (Spurious)	
DNB Job Number:		68012	Date: 21 Oct 2005		Specification [X] 15.209
Customer:		ConectiSys Corp.			
Model Number:		HNET 5.0-BS8	Serial Number: Proto		
Description:		Wireless Power Usage Monitoring System			
Test Set Up - Log Periodic					



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions (Spurious)	
DNB Job Number:	68012	Date:	21 Oct 2005	Specification [X] 15.209
Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
Test Set Up - DRG Horn				



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions (General)												
DNB Job Number:		68012		Date:		21 Oct 2005		Specification [X] 15.209								
Customer:		ConectiSys Corp.														
Model Number:		HNET 5.0-BS8		Serial Number:		Proto										
Description:		Wireless Power Usage Monitoring System														
		Correction Factors														
EUT is in conformance with FCC 15.209								X	YES		NO	Signed	Tom Elders			
Freq	Meter	Bcn	Log	Cbl	Amp	in dBuV/m			in uV/m			Positions				
						Corr	Limit	Delta	Corr	Lim	Delta	Table	Typ	Pol	Hgt	
143.986	46.0	11.6	0	1.7	-24.2	35.1	43.5	-8.4	57	150	-93	271	PK	H	2.65	
225.024	43.3	0	12.4	2.2	-24.2	33.7	46.0	-12.3	48	200	-152	0	PK	H	1.04	
229.079	45.7	0	12.4	2.2	-24.2	36.1	46.0	-9.9	64	200	-136	92	PK	H	4.00	
230.415	47.9	0	12.4	2.2	-24.2	38.3	46.0	-7.7	82	200	-118	92	PK	H	4.00	
233.325	54.2	0	12.3	2.3	-24.2	44.6	46.0	-1.4	170	200	-30	82	QP	H	4.00	
239.991	54.2	0	12.3	2.3	-24.3	44.5	46.0	-1.5	168	200	-32	249	QP	H	3.61	
241.619	51.5	0	12.3	2.3	-24.3	41.8	46.0	-4.2	123	200	-77	249	PK	H	3.61	
249.632	49.6	0	12.2	2.3	-24.3	39.8	46.0	-6.2	98	200	-102	249	PK	H	3.61	
253.972	46.9	0	12.3	2.3	-24.3	37.2	46.0	-8.8	72	200	-128	249	PK	H	3.61	
258.321	52.8	0	12.3	2.4	-24.3	43.2	46.0	-2.8	145	200	-55	249	PK	H	3.61	
266.653	49.3	0	12.5	2.4	-24.4	39.8	46.0	-6.2	98	200	-102	272	PK	H	3.61	
274.979	49.1	0	12.6	2.4	-24.4	39.7	46.0	-6.3	97	200	-103	272	PK	H	3.61	
282.197	43.0	0	13.0	2.4	-24.4	34	46.0	-12	50	200	-150	272	PK	H	3.61	
44.187	41.5	11.1	0	0.7	-24.3	29	40	-11	28	100	-72	228	PK	V	1.00	
109.687	44.5	10.1	0	1.4	-24.2	31.8	43.5	-11.7	39	150	-111	184	PK	V	1.00	
141.110	44.8	11.6	0	1.7	-24.2	33.9	43.5	-9.6	50	150	-100	255	PK	V	1.00	
143.987	47.2	11.6	0	1.7	-24.2	36.3	43.5	-7.2	65	150	-85	106	QP	V	1.00	
225.793	43.6	0	12.4	2.2	-24.2	34	46.0	-12	50	200	-150	18	PK	V	1.00	
229.085	47.6	0	12.4	2.2	-24.2	38	46.0	-8.0	79	200	-121	162	PK	V	1.00	
233.335	45.3	0	12.3	2.3	-24.2	35.7	46.0	-10.3	61	200	-139	198	PK	V	1.26	
240.026	46.4	0	12.3	2.3	-24.3	36.7	46.0	-9.3	68	200	-132	213	PK	V	1.00	
241.713	44.6	0	12.3	2.3	-24.3	34.9	46.0	-11.1	56	200	-144	213	PK	V	1.00	
249.580	45.1	0	12.2	2.3	-24.3	35.3	46.0	-10.7	58	200	-142	204	PK	V	1.32	
253.977	48.7	0	12.3	2.3	-24.3	39	46.0	-7.0	89	200	-111	162	PK	V	1.00	
258.358	52.5	0	12.3	2.4	-24.3	42.9	46.0	-3.1	140	200	-60	321	PK	V	1.02	
266.629	50.3	0	12.5	2.4	-24.4	40.8	46.0	-5.2	110	200	-90	127	PK	V	1.00	
274.976	54.3	0	12.6	2.4	-24.4	44.9	46.0	-1.1	176	200	-24	127	PK	V	1.00	
299.986	51.9	0	13.8	2.5	-24.4	43.8	46.0	-2.2	155	200	-45	127	PK	V	1.00	

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Spurious - Restricted Bands				
DNB Job Number:		68012				Date: 14 Dec 2005		Specification [X] 15.209
Customer:		ConectiSys Corp.						
Model Number:		HNET 5.0-BS8				Serial Number: Proto		
Description:		Wireless Power Usage Monitoring System						

15.205 Transmitter Radiated Spurious - Restricted Bands

The following table identifies harmonics of the fundamental and the associated restricted bands as defined in 15.205(a) of the FCC Rules. Offset is defined as Ant+Cbl-Amp and is used on the spectrum analyzer to display the corrected reading.

For measurements above 1GHz the following instrument settings are used:

For Peak readings RBW=1MHz VBW=1MHZ or 3MHz

For Average readings RBW=1MHz VBW=10Hz

Basic test procedure is in accordance with 15.209

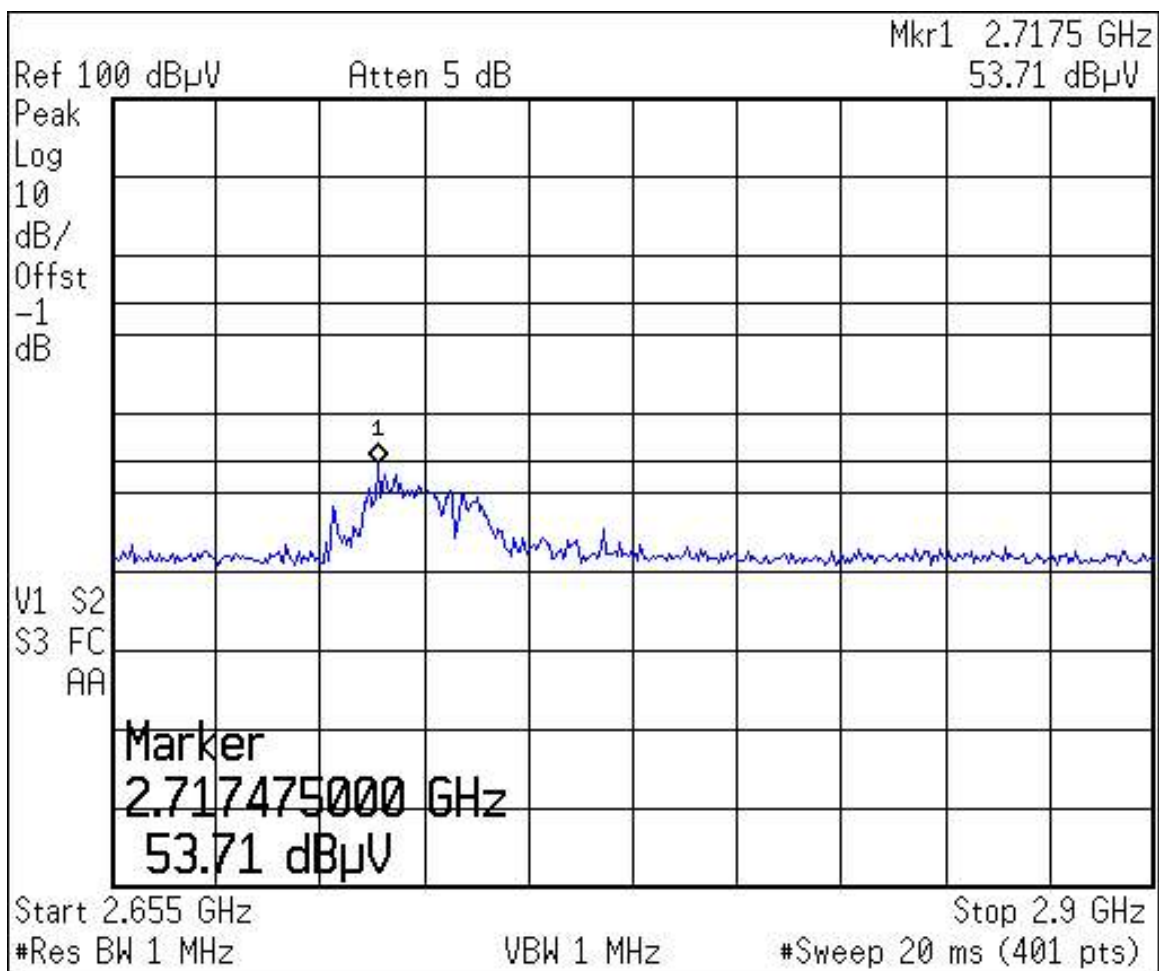
	Channels			Restricted		Limit		Factors			
	Lo	Mid	Hi	Bands		Peak	Average	Ant	Cbl	Amp	Offset
1	902	915	928			Fund	Fund				
2	1804	1830	1856	N/A	N/A						
3	2706	2745	2784	2655	2900	74	54	29.5	0.8	31.3	-1.0
4	3608	3660	3712	3600	4400	74	54	32.1	0.9	30.6	2.4
5	4510	4575	4640	4500	5150	74	54	32.9	1.2	27.4	6.7
6	5412	5490	5568	5350	5460	74	54	34.2	1.4	28.9	6.7
7	6314	6405	6496	N/A	N/A						
8	7216	7320	7424	7250	7750	74	54	36.5	1.6	28.7	9.4
9	8118	8235	8352	8025	8500	74	54	37.5	2.1	27.0	12.6
10	9020	9150	9280	9000	9200	74	54	37.9	2.7	21.3	19.3



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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Horizontal - Peak			

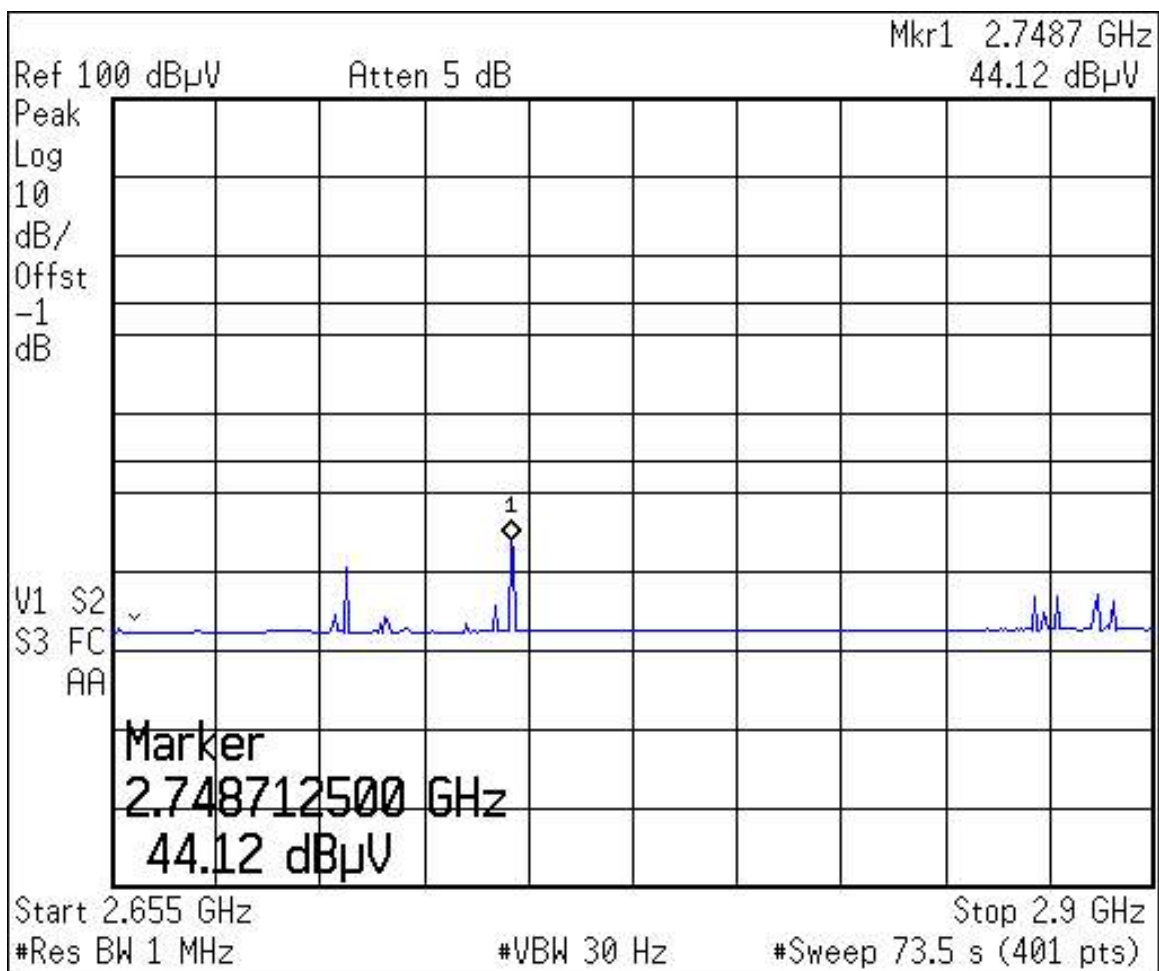




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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Horizontal - Average			

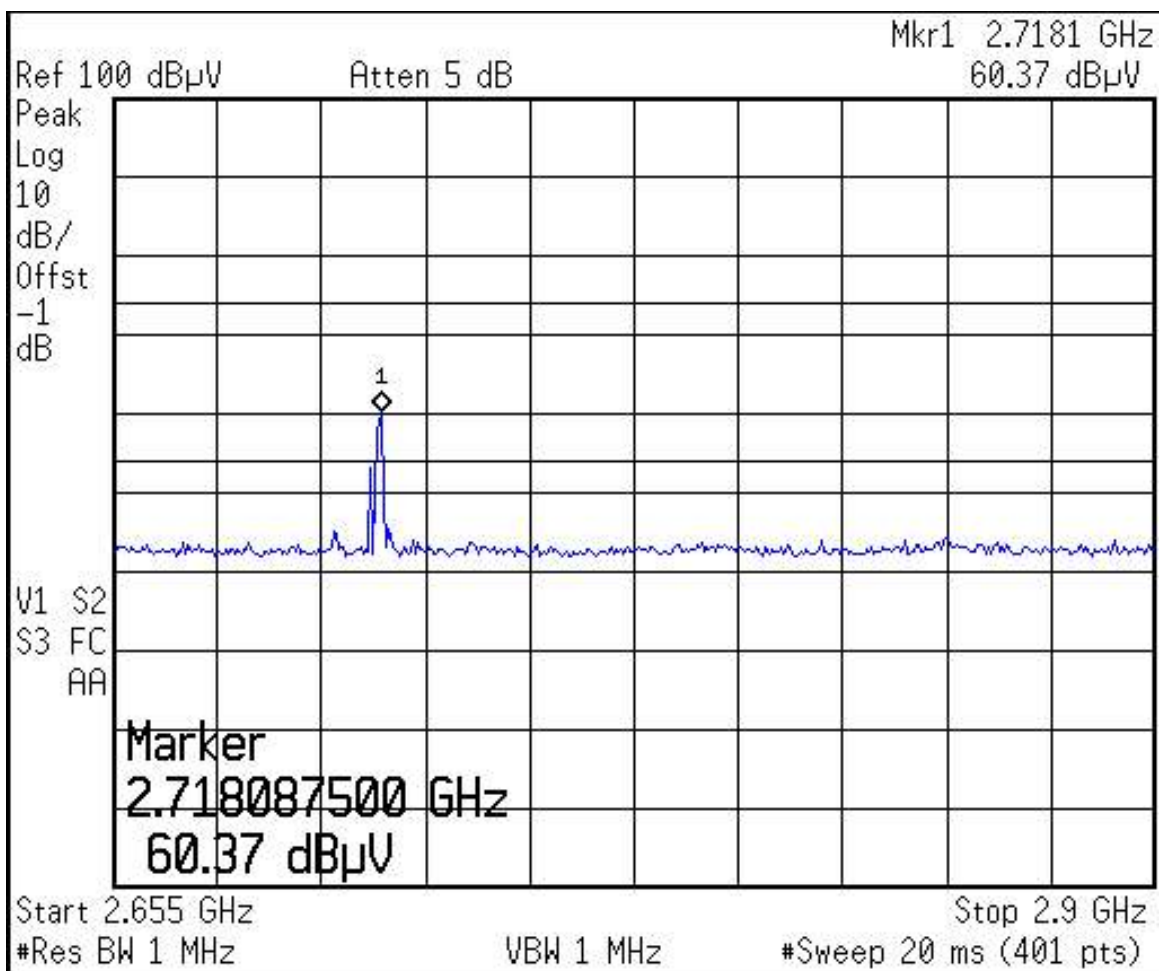




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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Vertical - Peak			

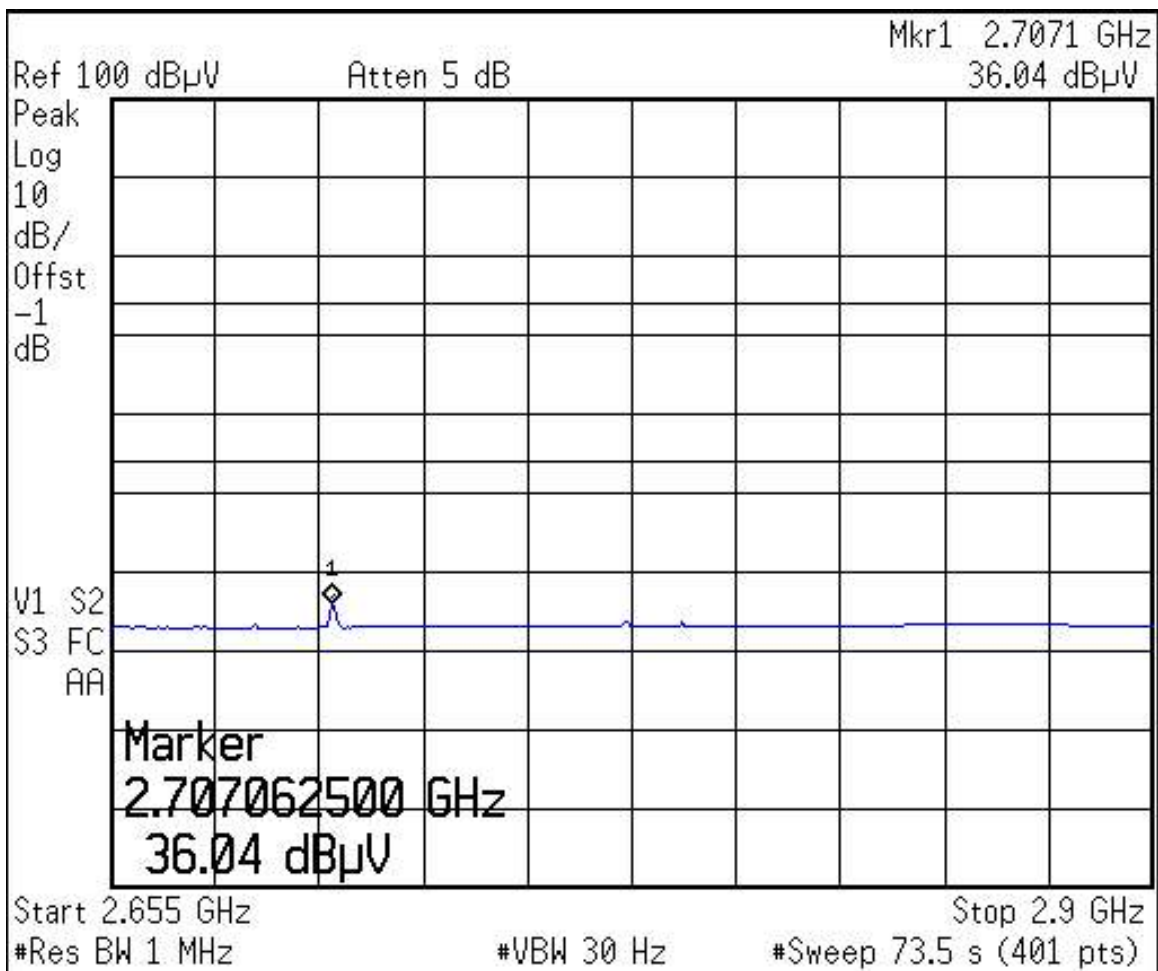




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Spurious - Restricted Bands

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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Vertical - Average			

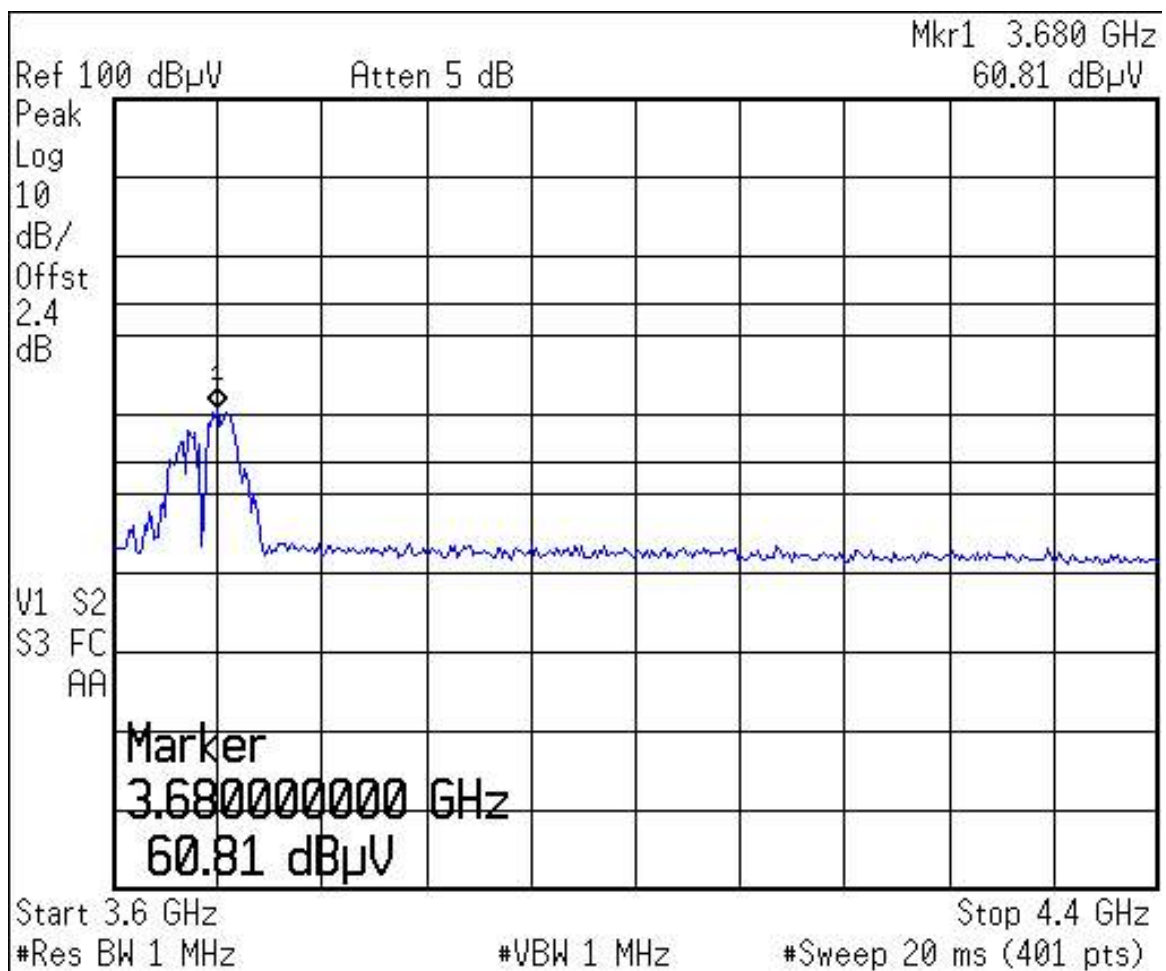




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	Horizontal - Average			

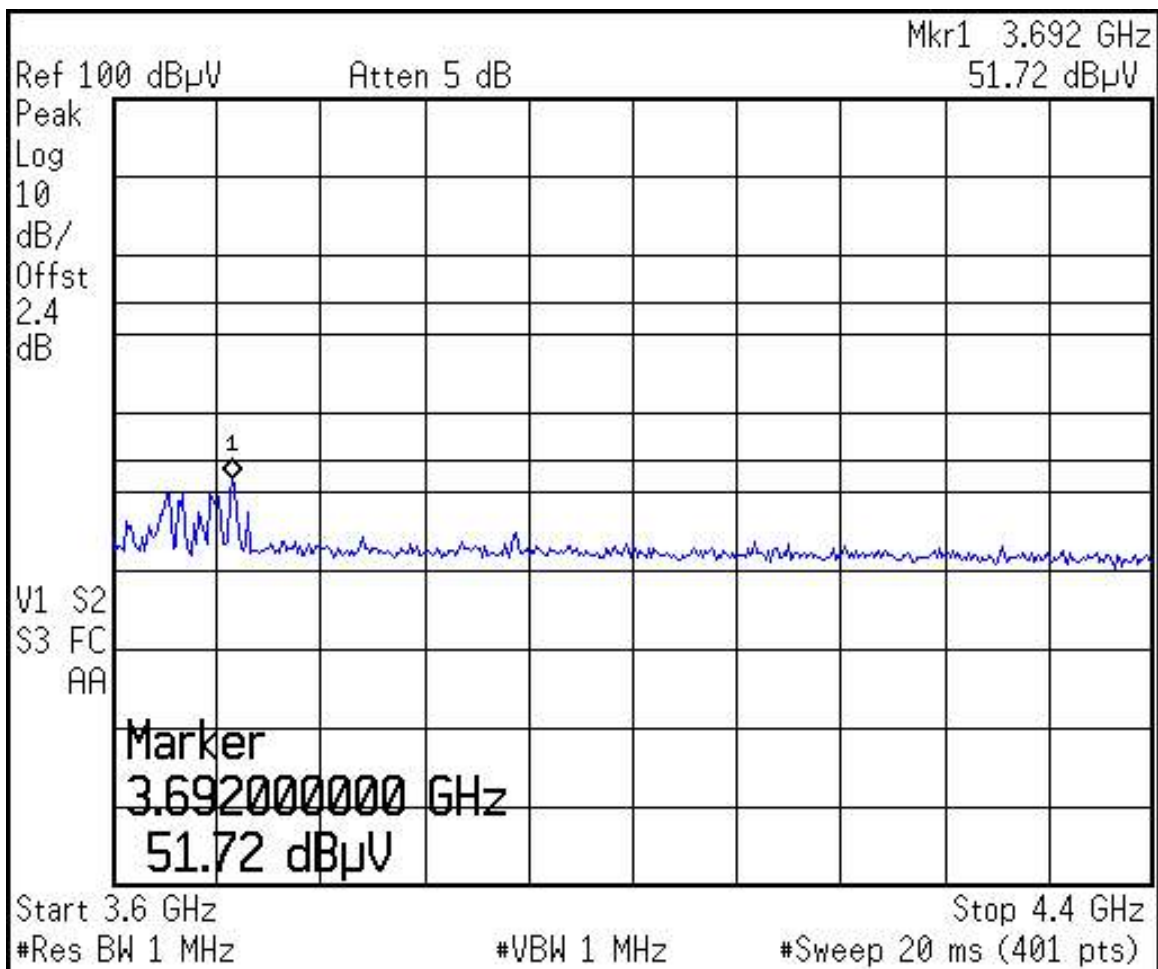




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Spurious - Restricted Bands

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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Vertical - Peak (Peak below average limit)			

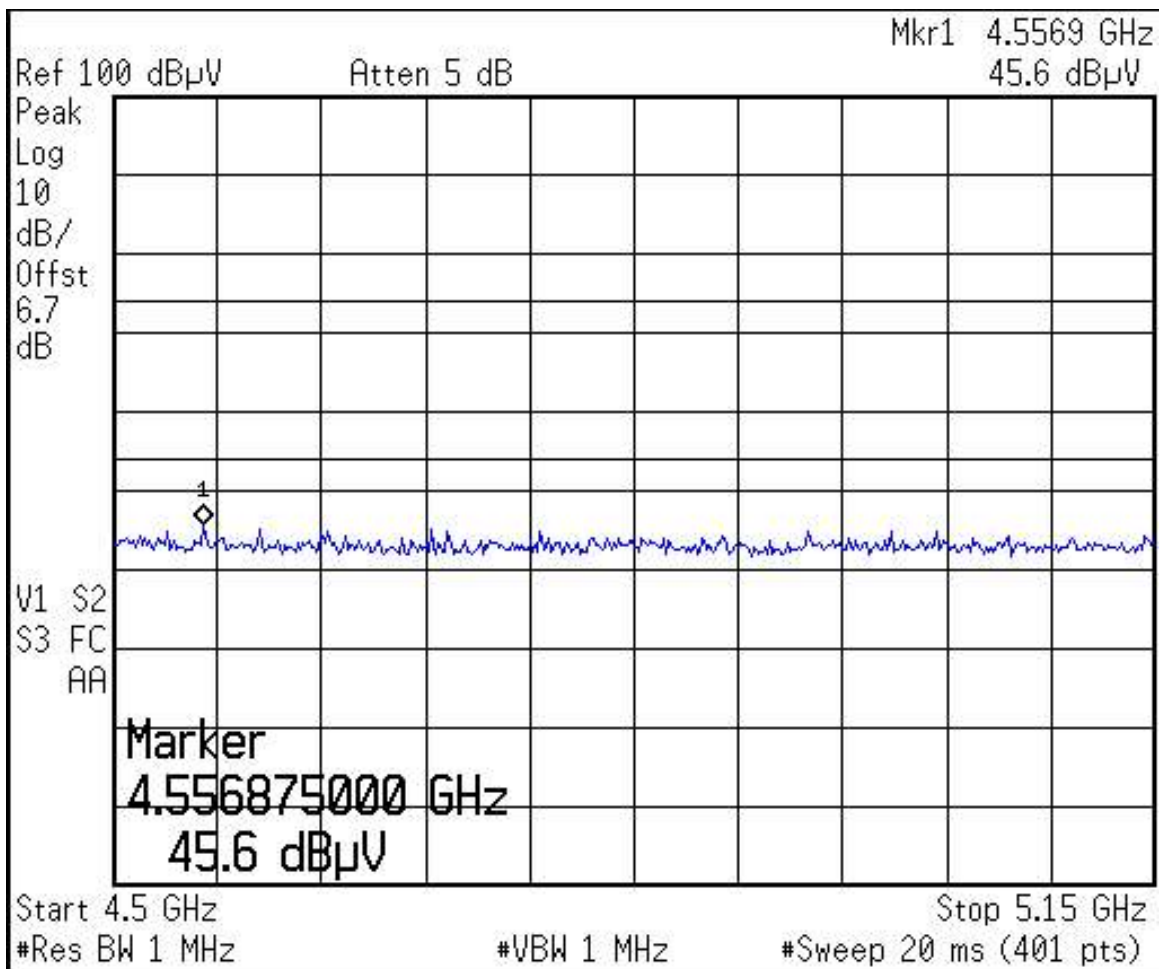




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Spurious - Restricted Bands

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Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Horizontal - Peak (Peak below average limit)			

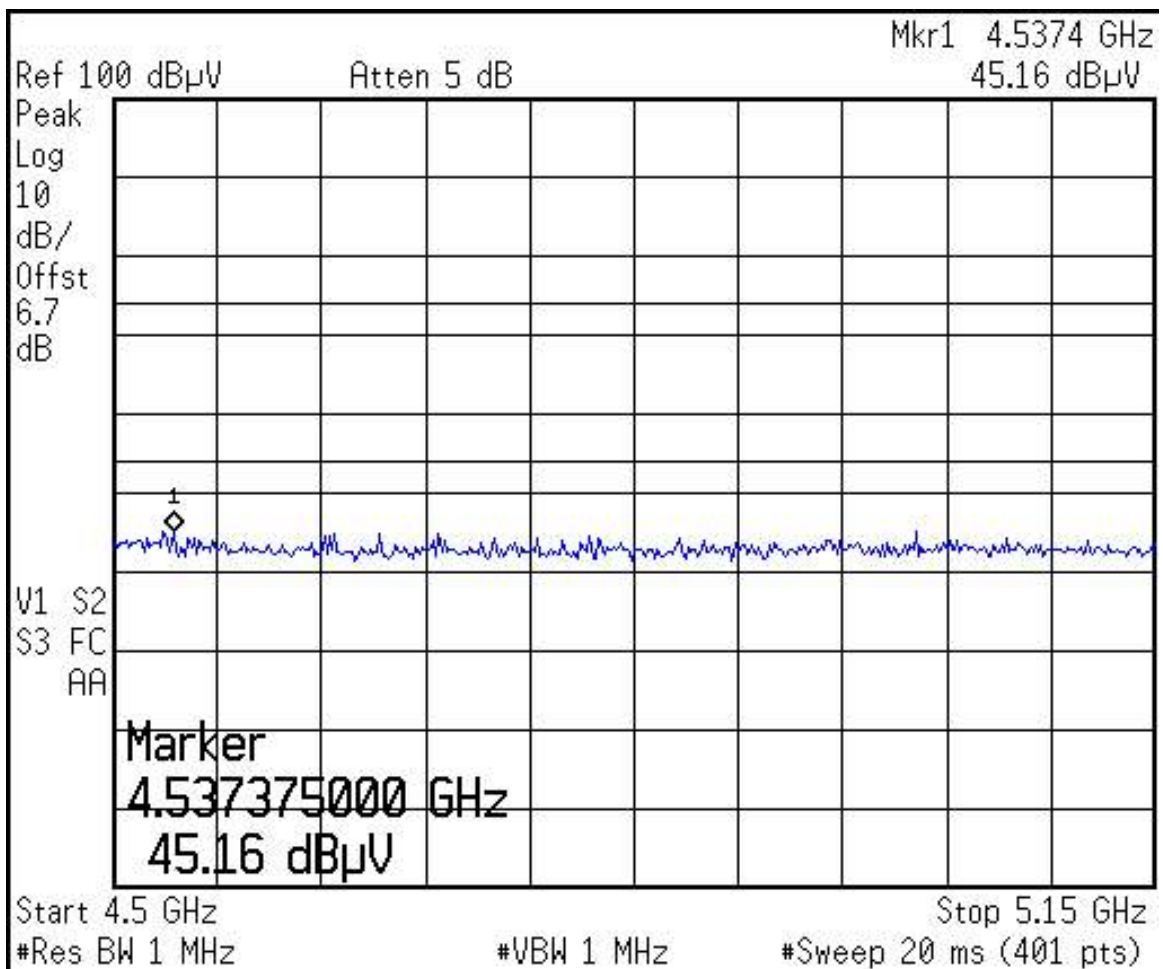




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Spurious - Restricted Bands

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Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
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	Vertical - Peak (Peak below average limit)			

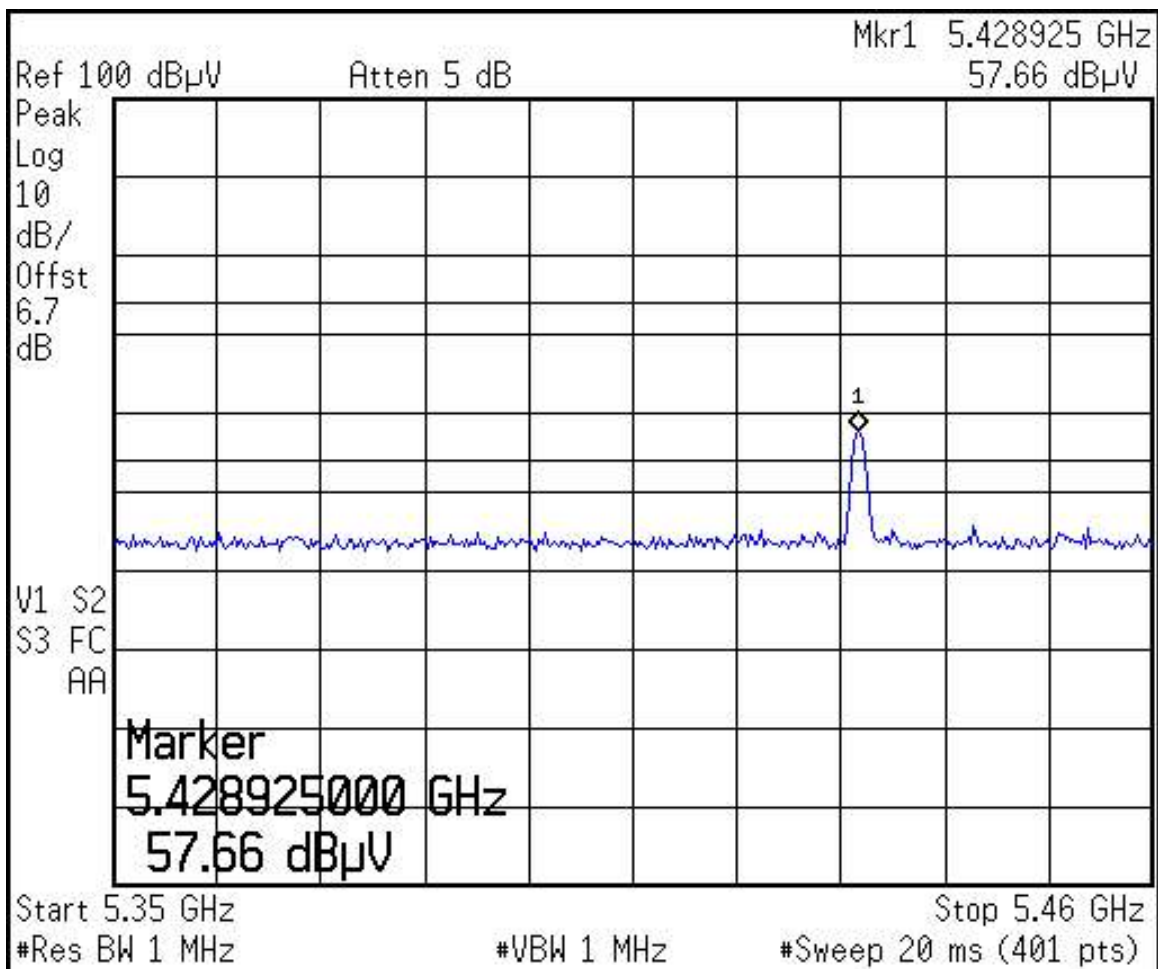




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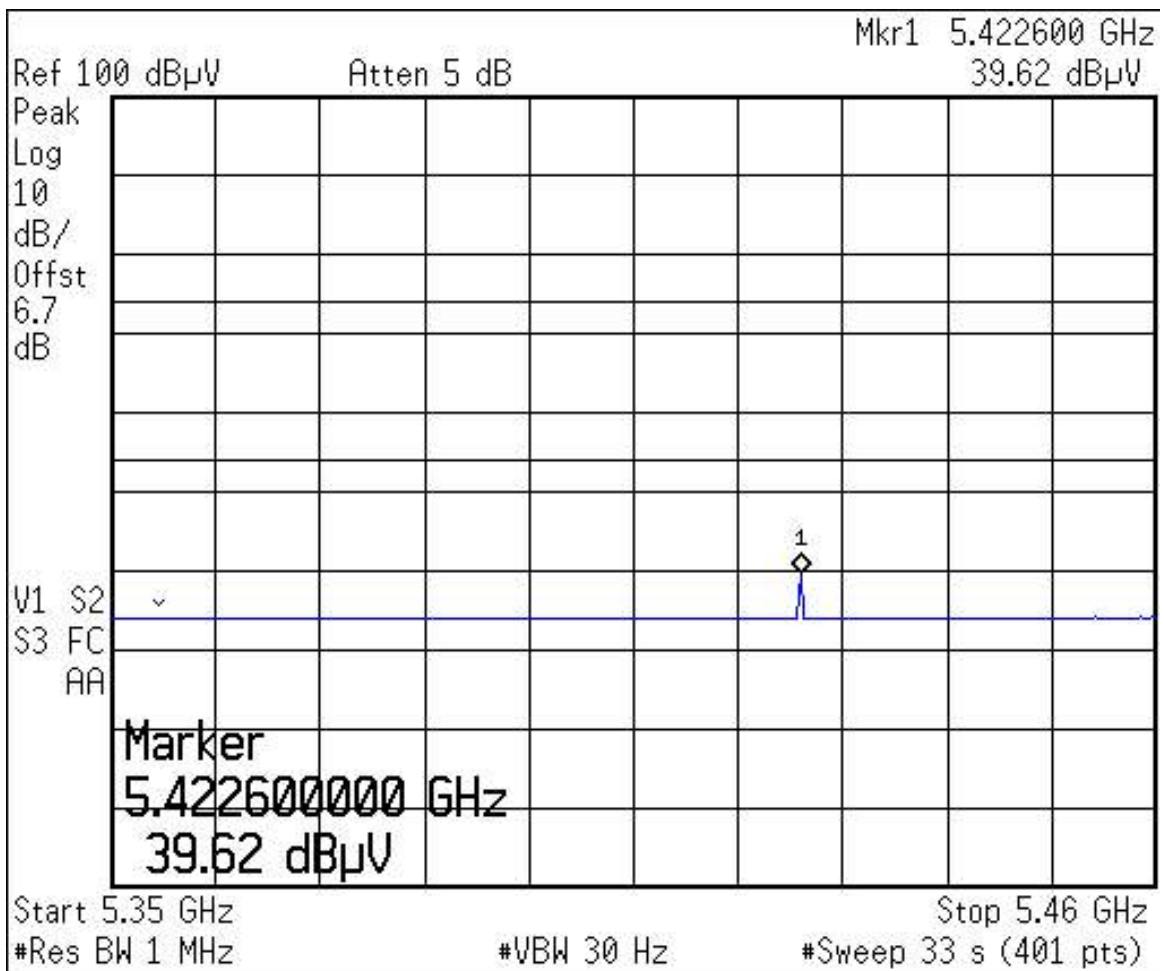




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Customer:	ConectiSys Corp.			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	
Description:	Wireless Power Usage Monitoring System			
	Horizontal - Average			

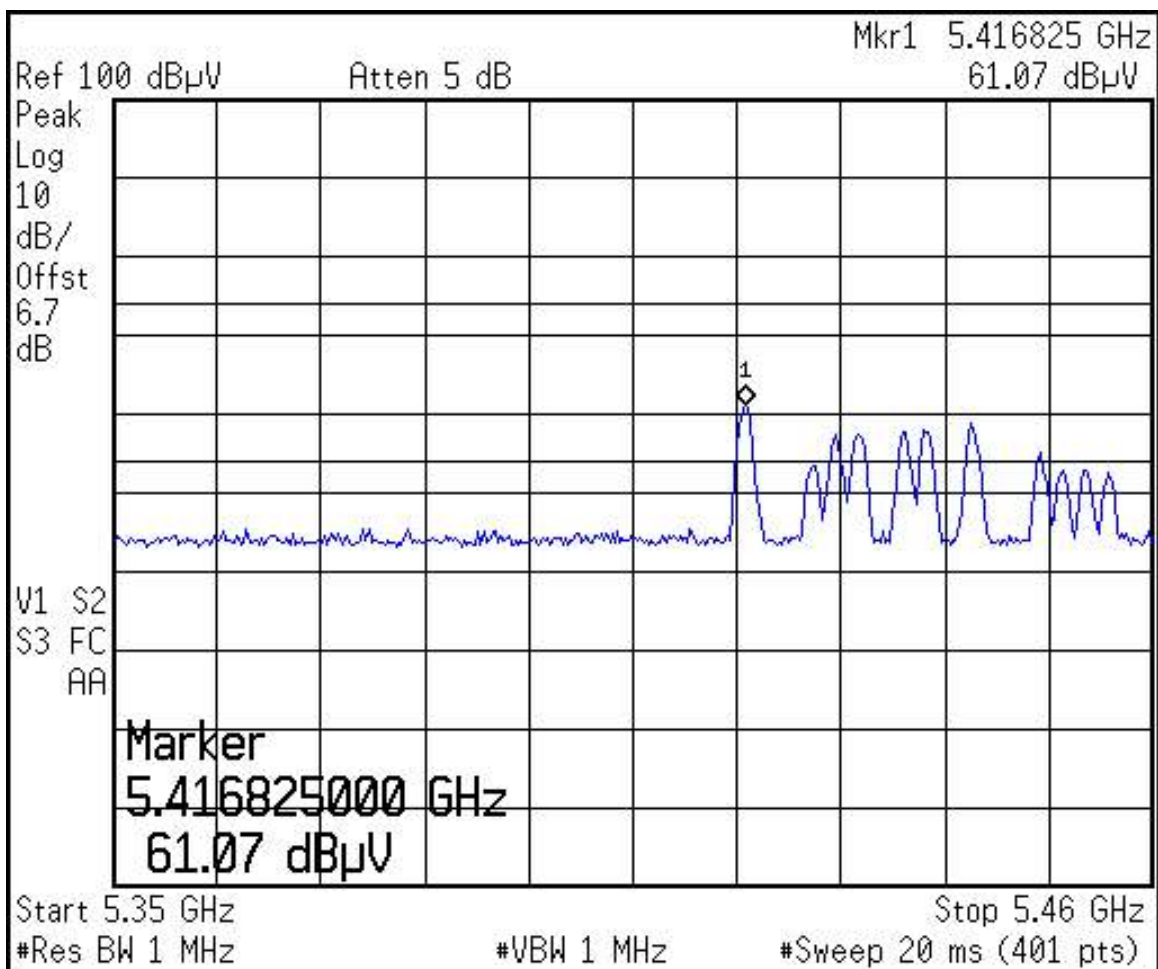




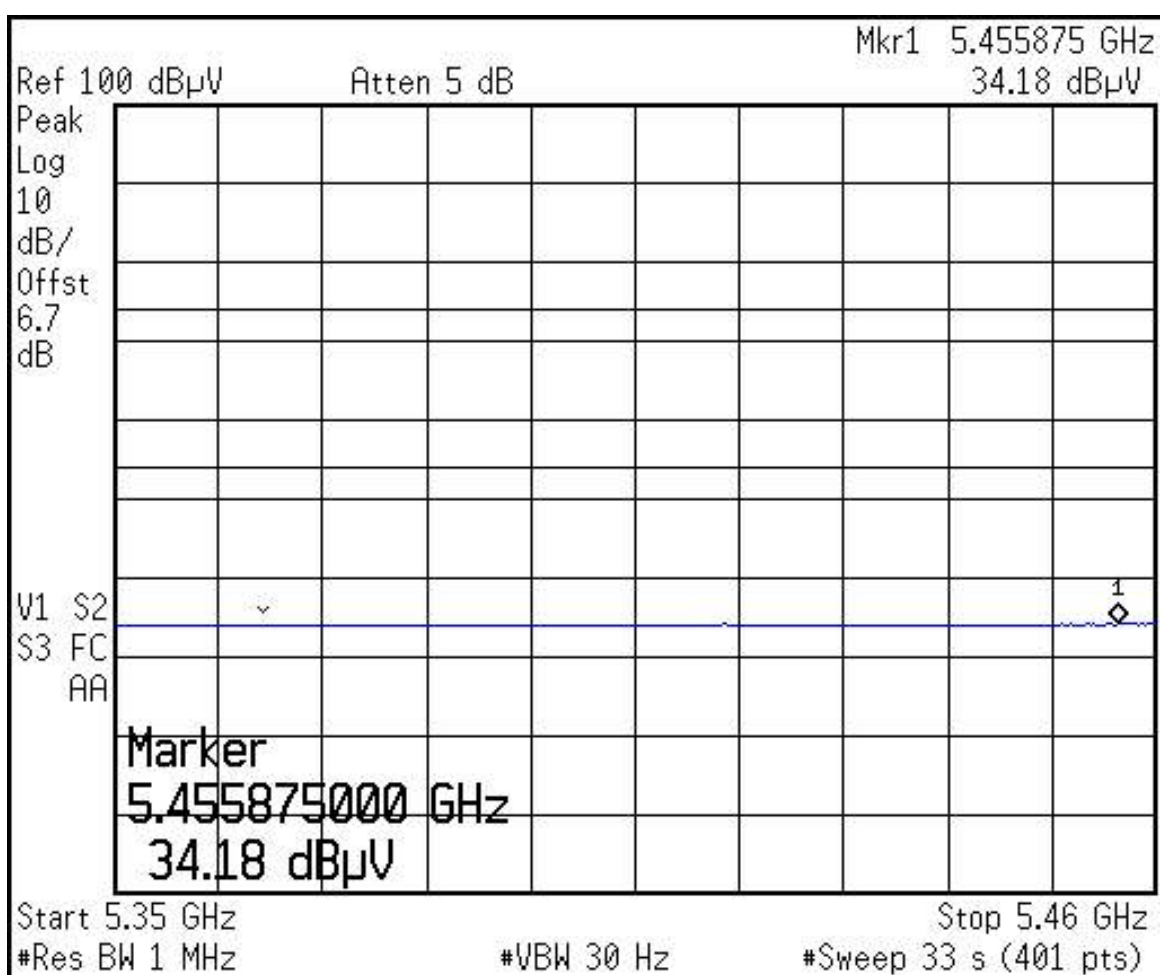
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	Vertical - Peak			



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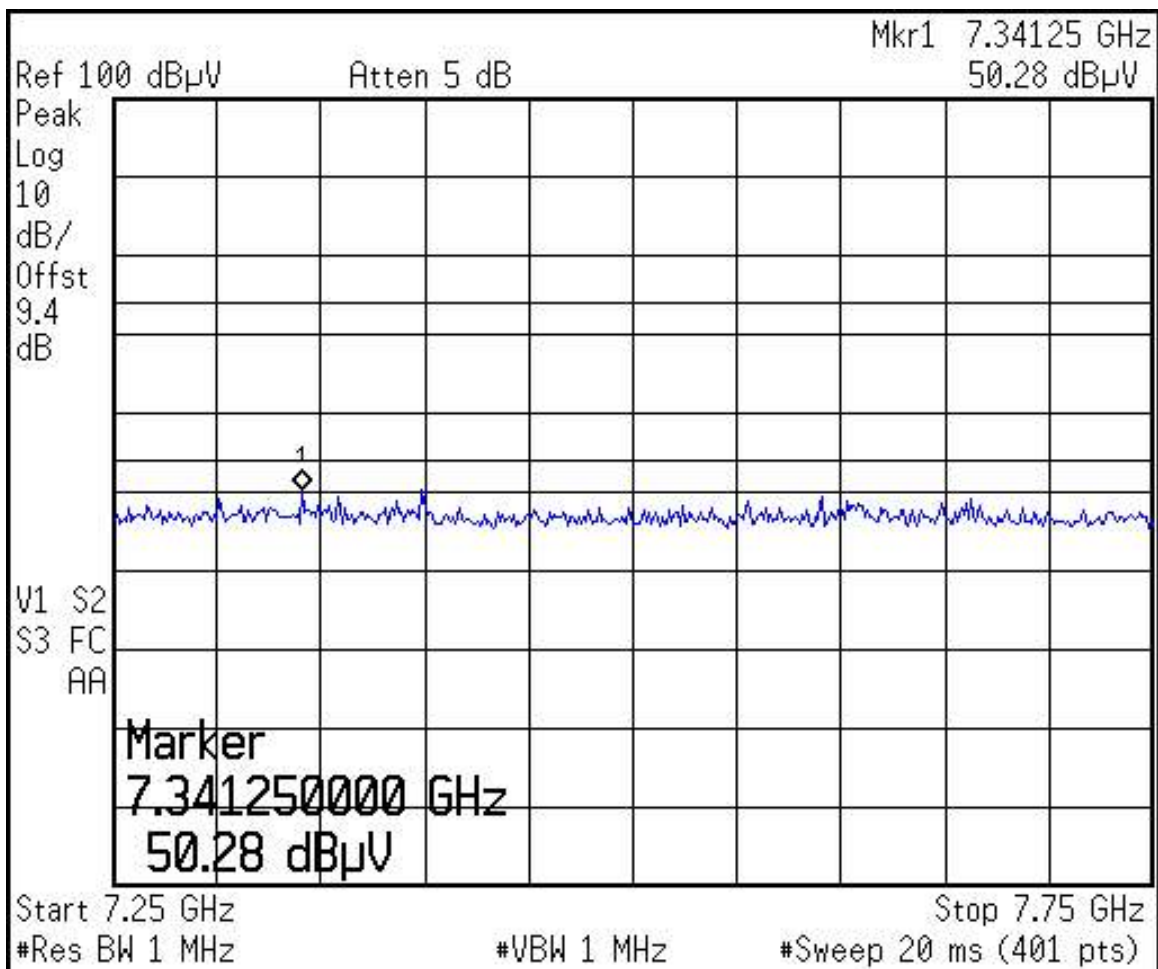




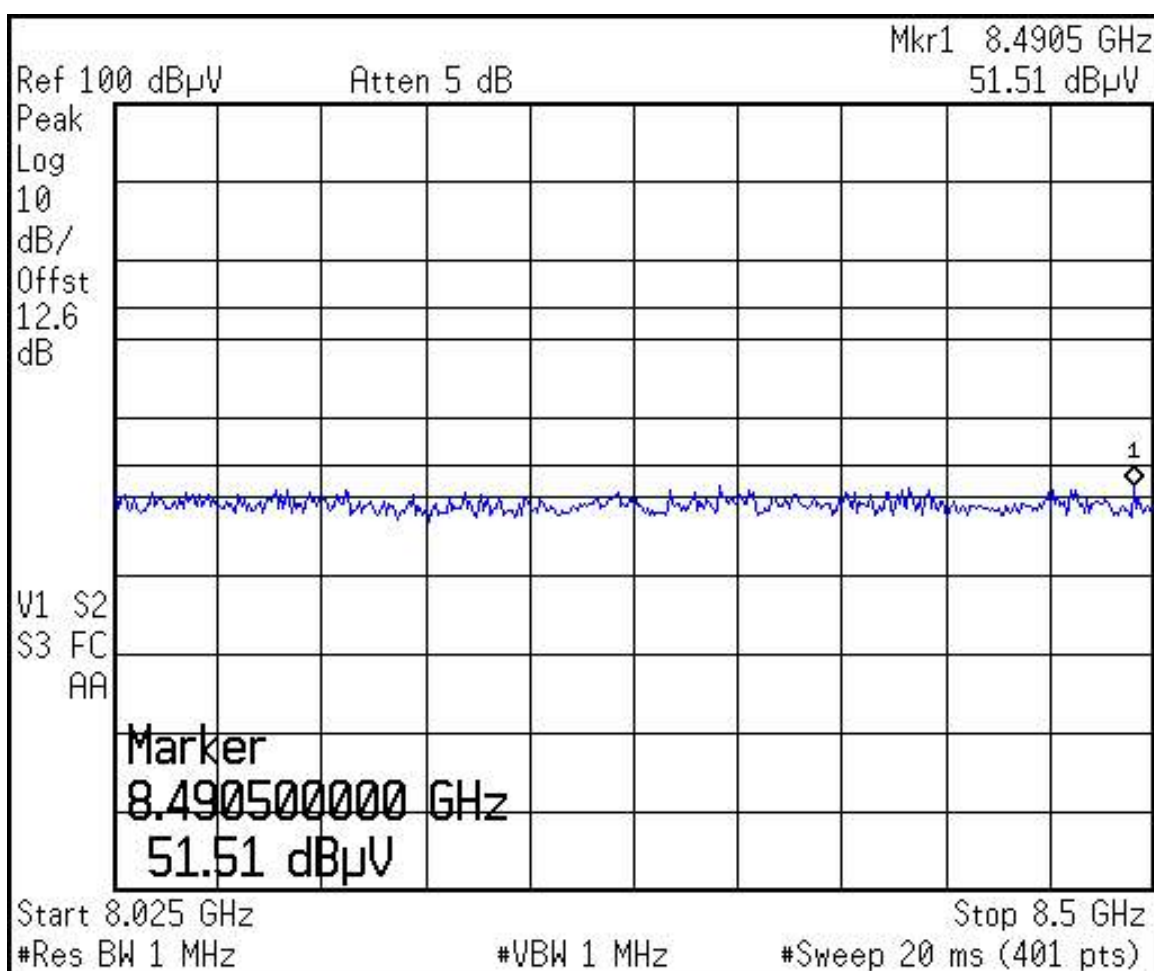
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Description:	Wireless Power Usage Monitoring System			
	Horizontal - Peak (Peak below average limit)			



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	Vertical - Peak (Peak below average limit)			

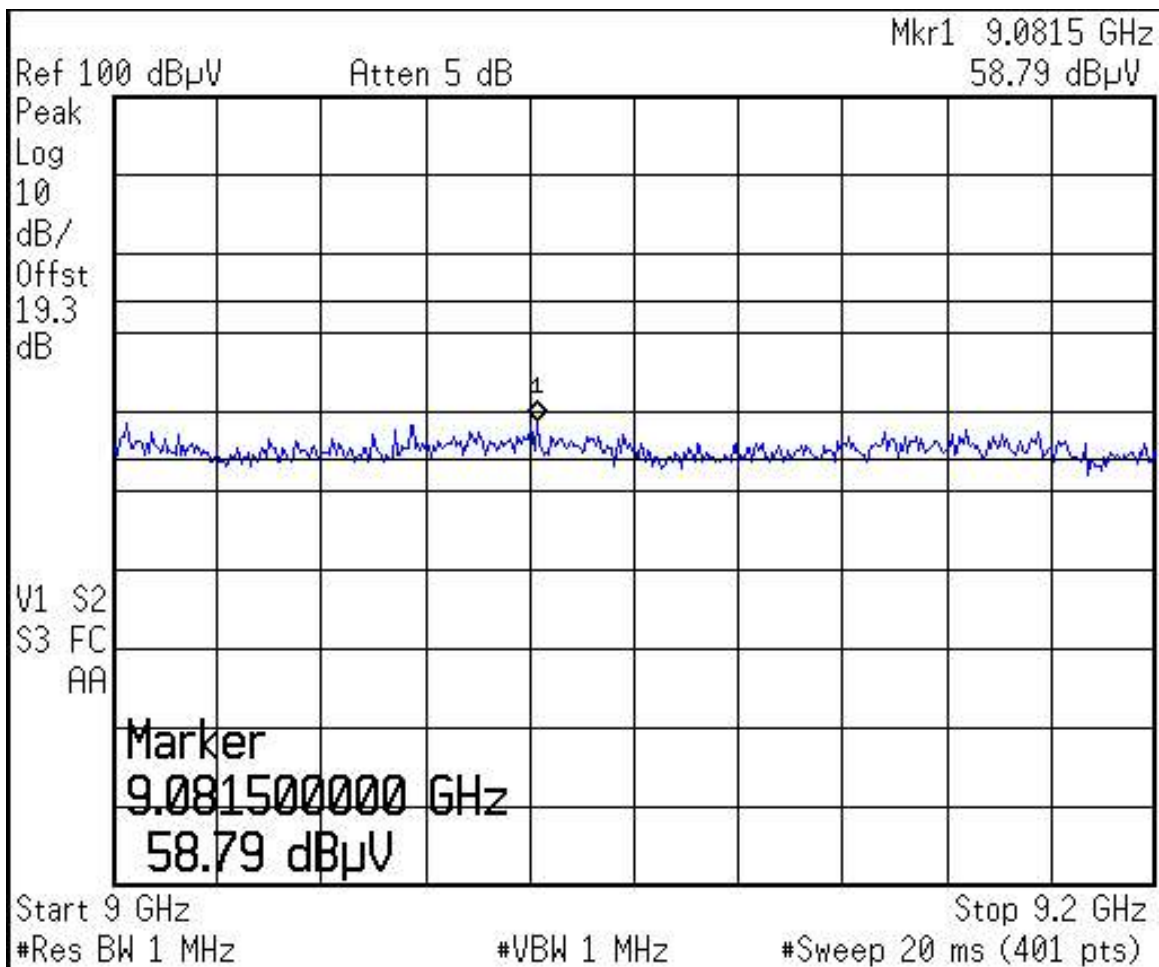




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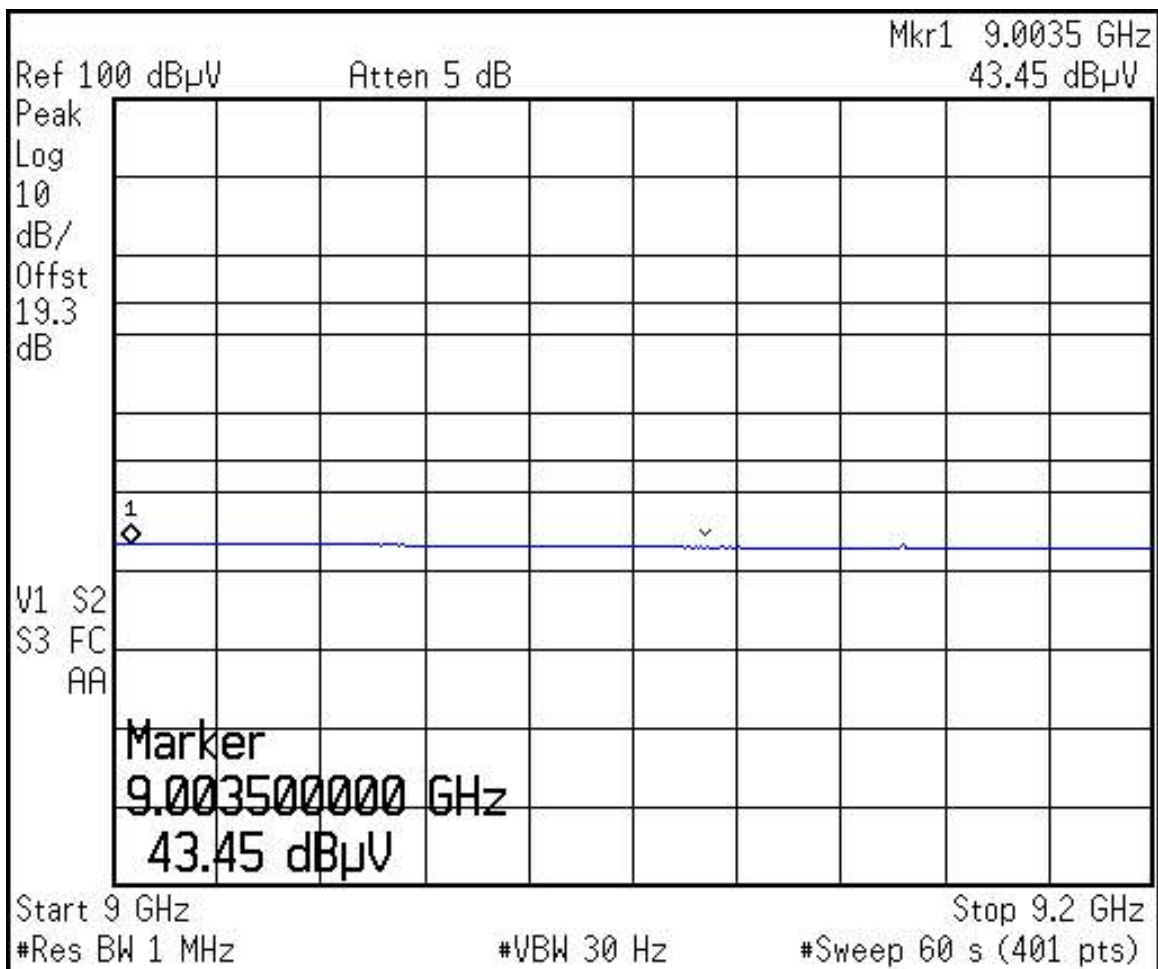




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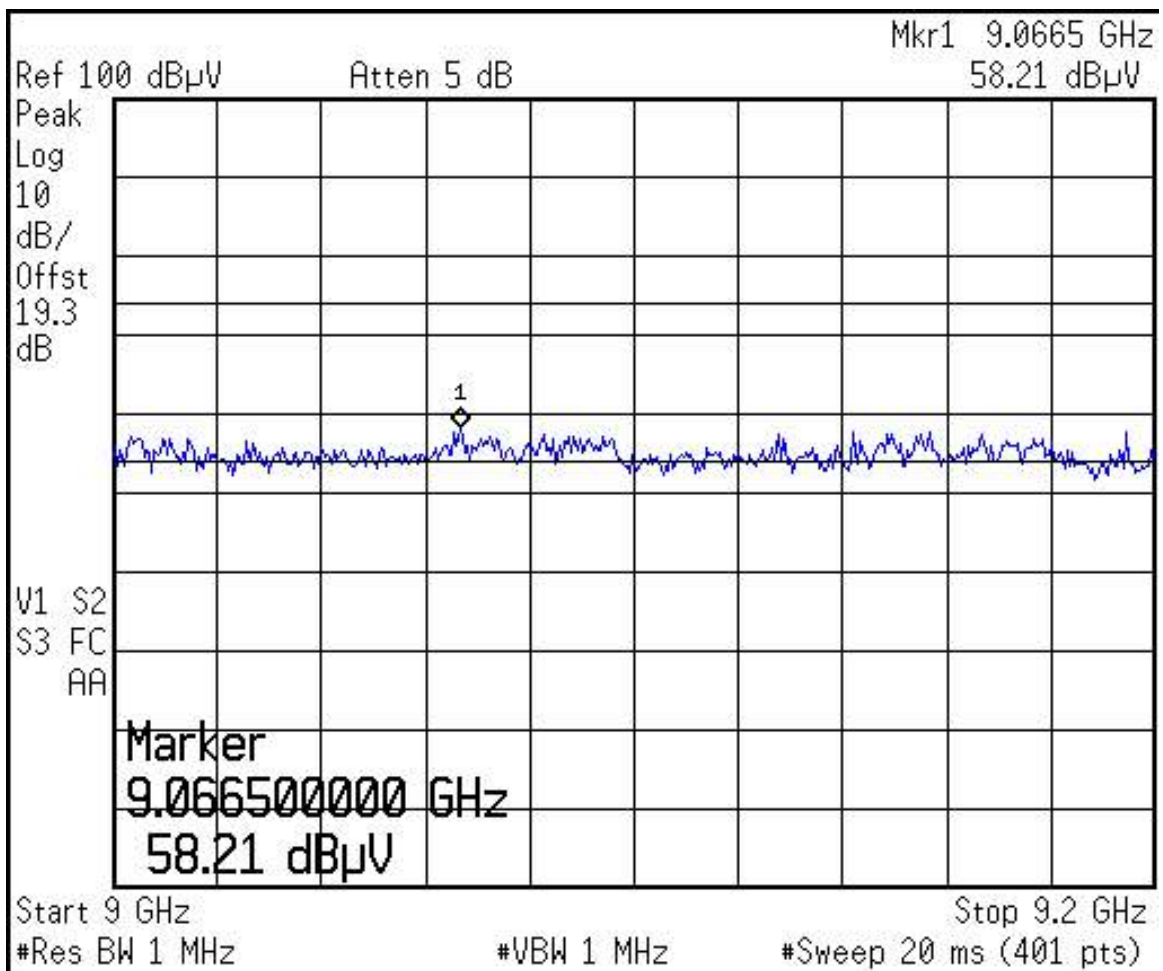




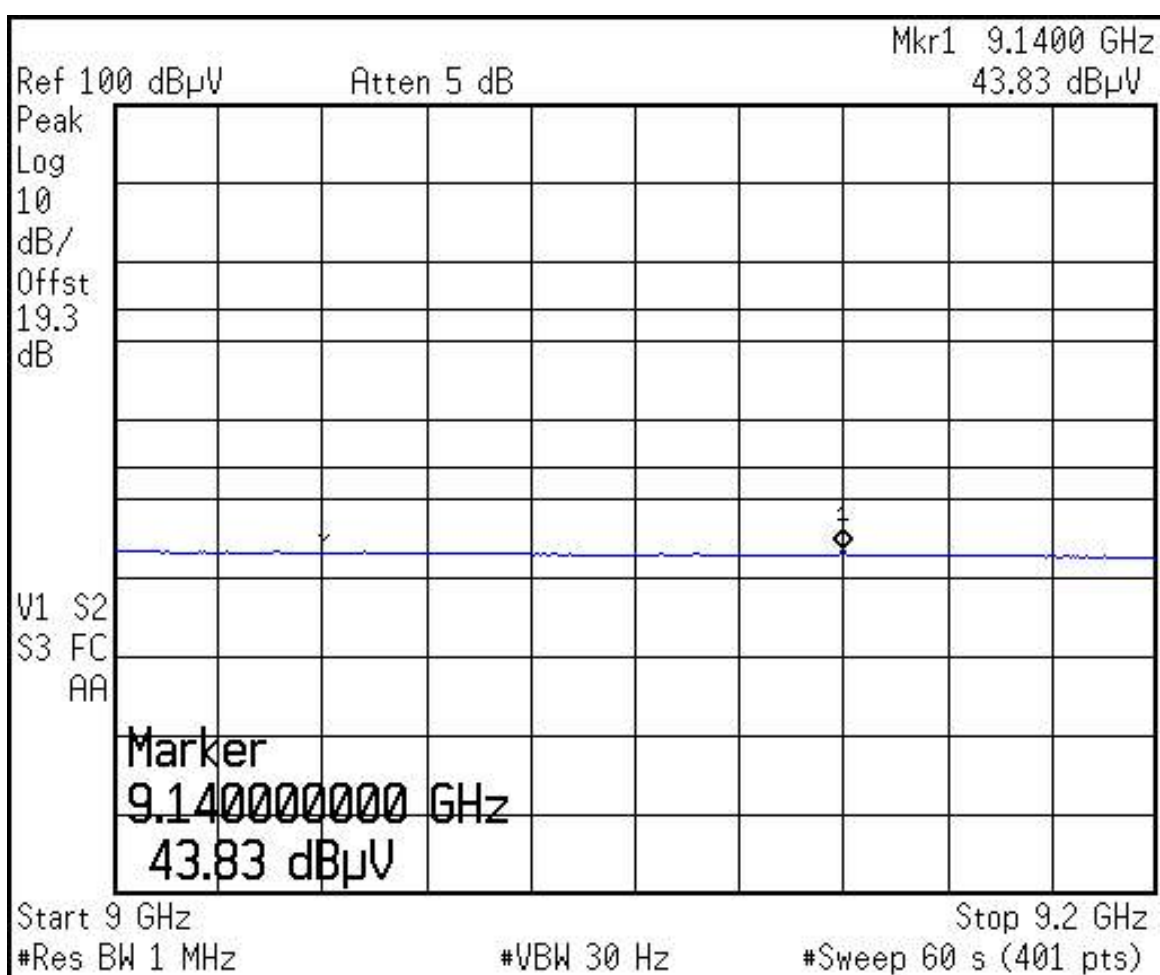
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	Vertical - Peak			



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Spurious - Restricted Bands		
DNB Job Number:		68012		Date: 14 Dec 2005		Specification [X] 15.209
Customer:		ConectiSys Corp.				
Model Number:		HNET 5.0-BS8		Serial Number: Proto		
Description:		Wireless Power Usage Monitoring System				
		Vertical - Average				



15.247 (a,1) Channel Separation

Test Procedure:

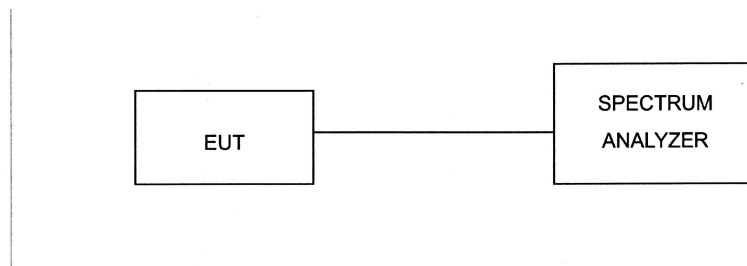
The transmitter output was connected to the spectrum analyzer. The bandwidth of the single hopping channel frequency was measured with a 100kHz RBW and a 100kHz VBW.

Requirement: Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

EUT operating conditions:

The software provided by the client to enable the EUT to hop stop on the appropriate channel..

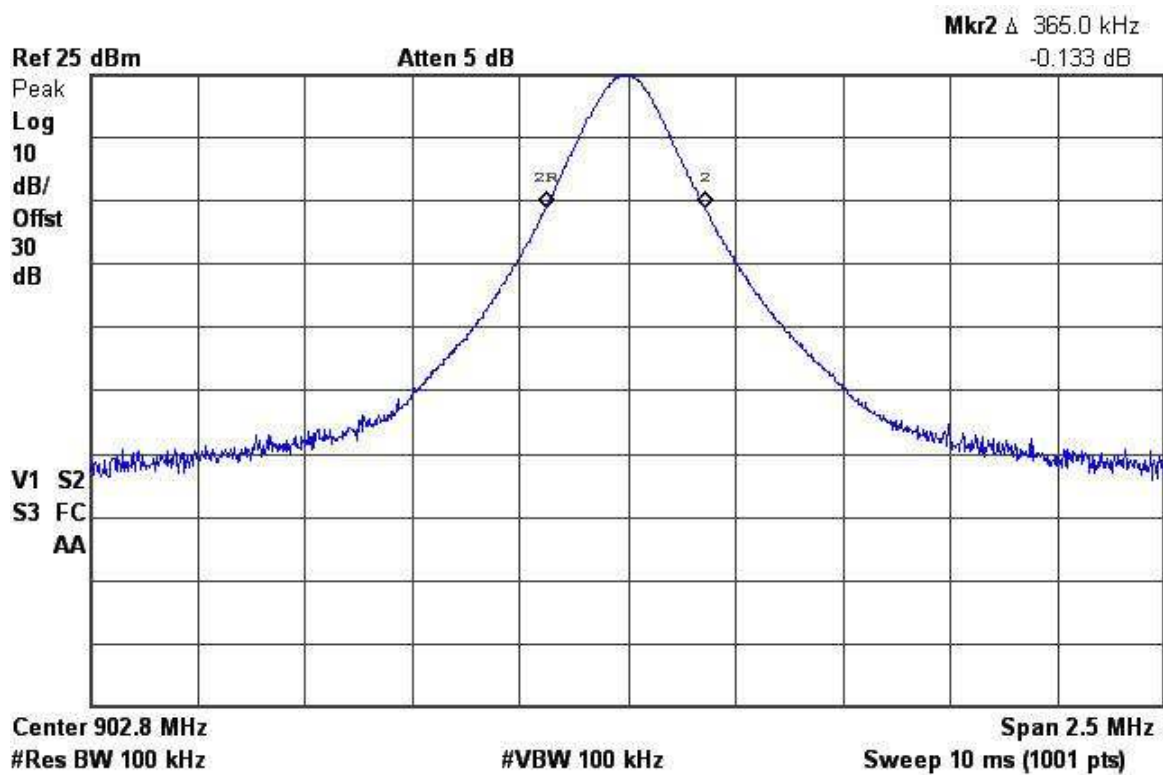
Test Set Up: (Note following set up was used for all antenna conducted measurements)



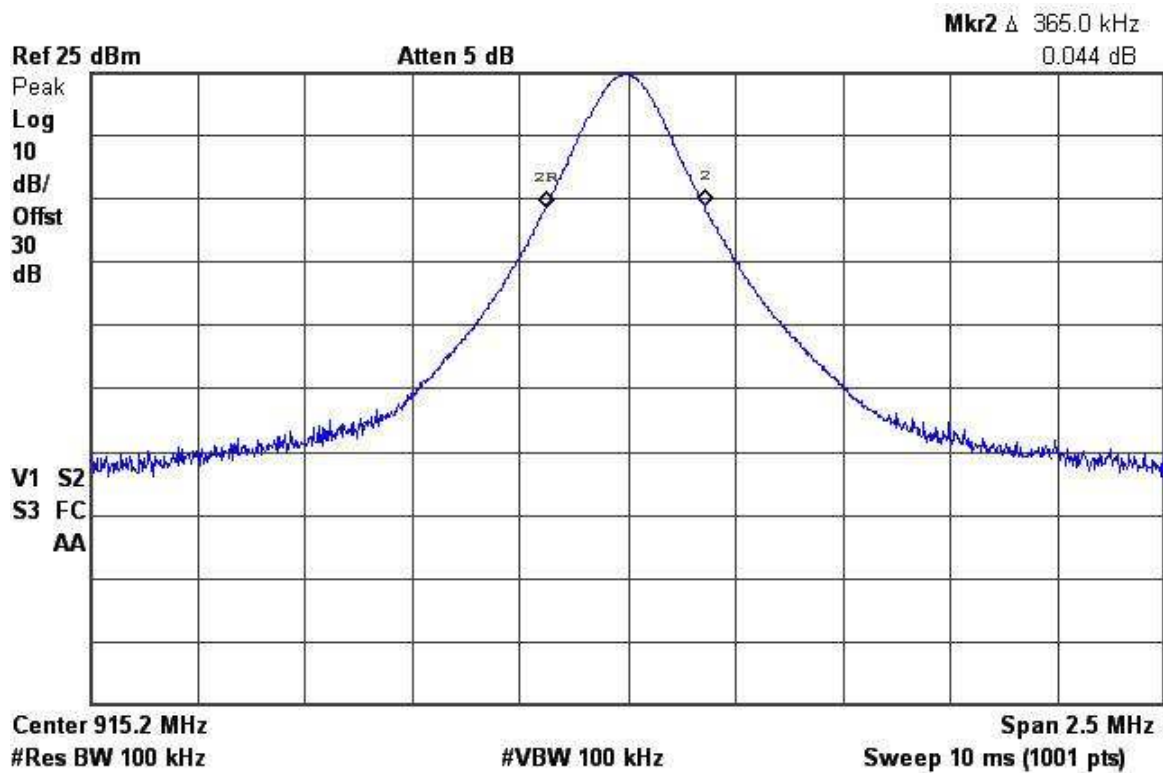
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Measurement Test Set Up	
DNB Job Number:	68012	Date:	10 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247
Antenna Conducted Measurement Set Up				



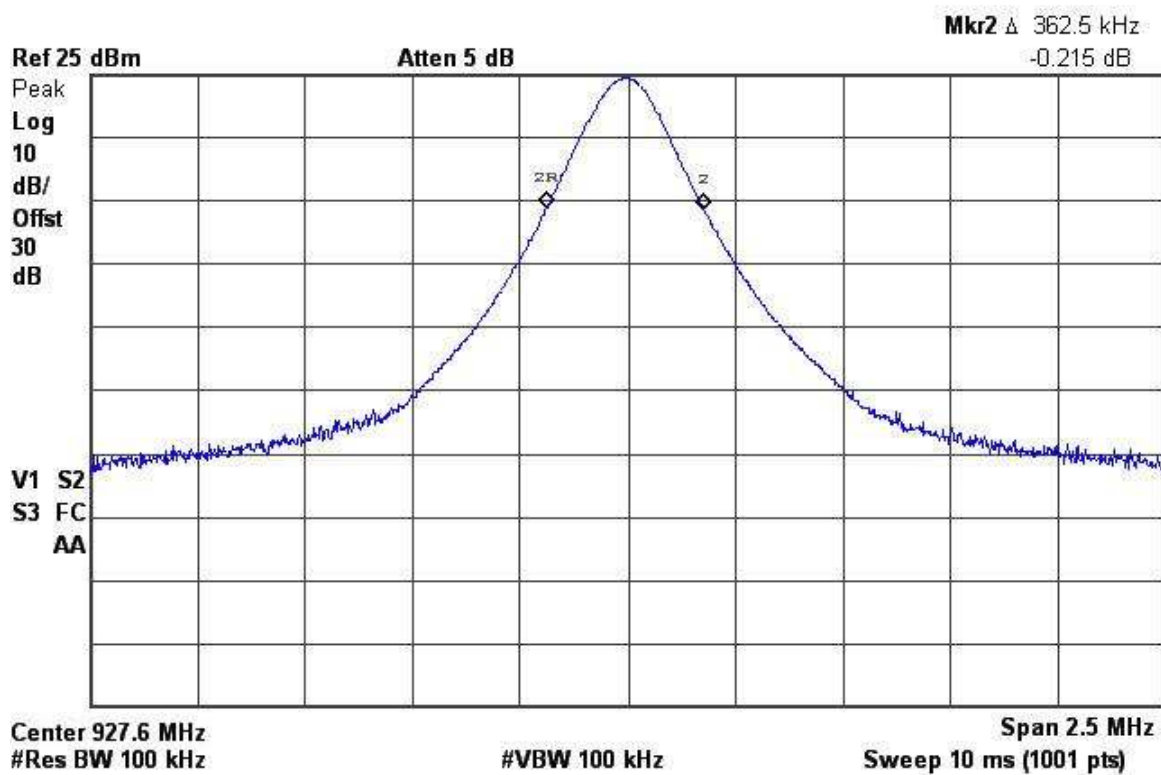
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		20 dB Single Channel Bandwidth	
DNB Job Number:		68012		Date: 10 Nov 2005	
Customer:		ConectiSys Corp. Inc			
Model Number:		HNET 5.0-BS8		Serial Number: Proto	
Description:		Wireless Power Usage Monitoring System			
Conformance Standard FCC Part 15 Clause 15.247(a,1)					
Environmental Conditions					
Ambient Temperature		Relative Humidity		Barometric Pressure	
22 °C		51 %		101.7 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Channel	Chl Freq (MHz)	20dB BW (kHz)	Limit	Pass/Fail	
1 (Low)	902.8	365	500 kHz	Pass	



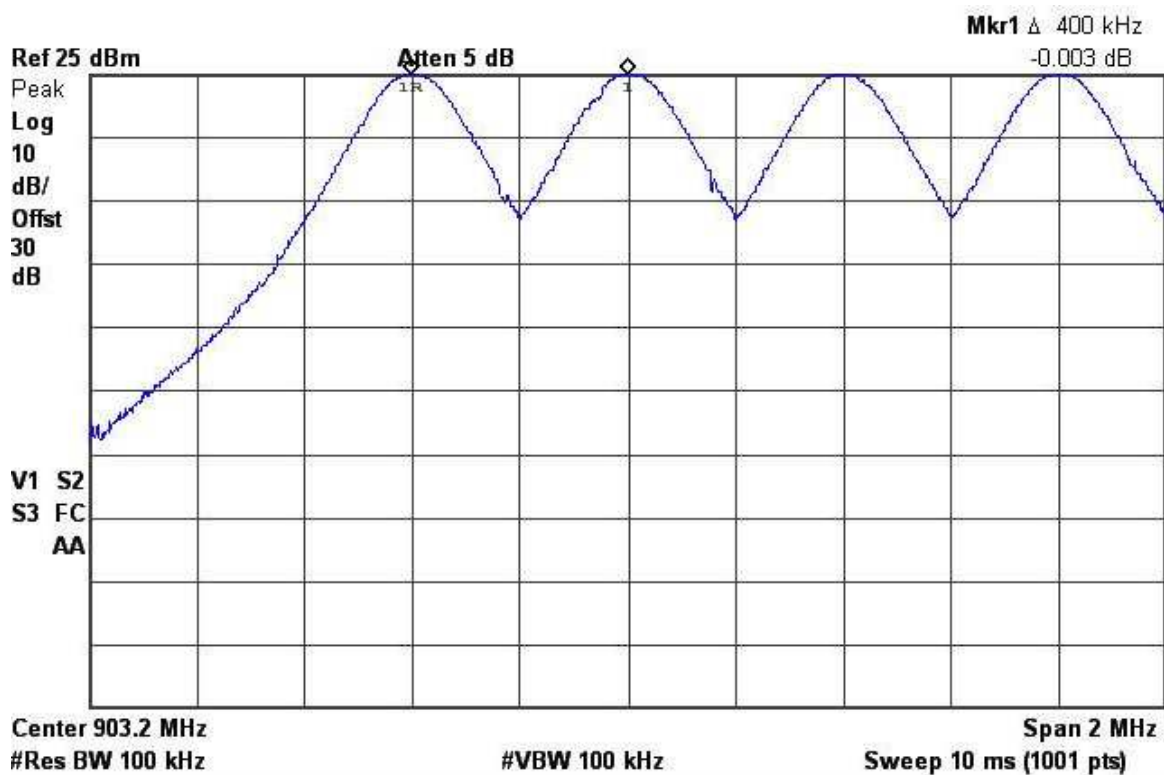
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		20 dB Single Channel Bandwidth	
DNB Job Number:	68012	Date:	10 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247(a,1)
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
22 °C		51 %		101.7 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Channel	Chl Freq (MHz)	20dB BW (kHz)	Limit	Pass/Fail
32 (Mid)	915.2	365	500 kHz	Pass



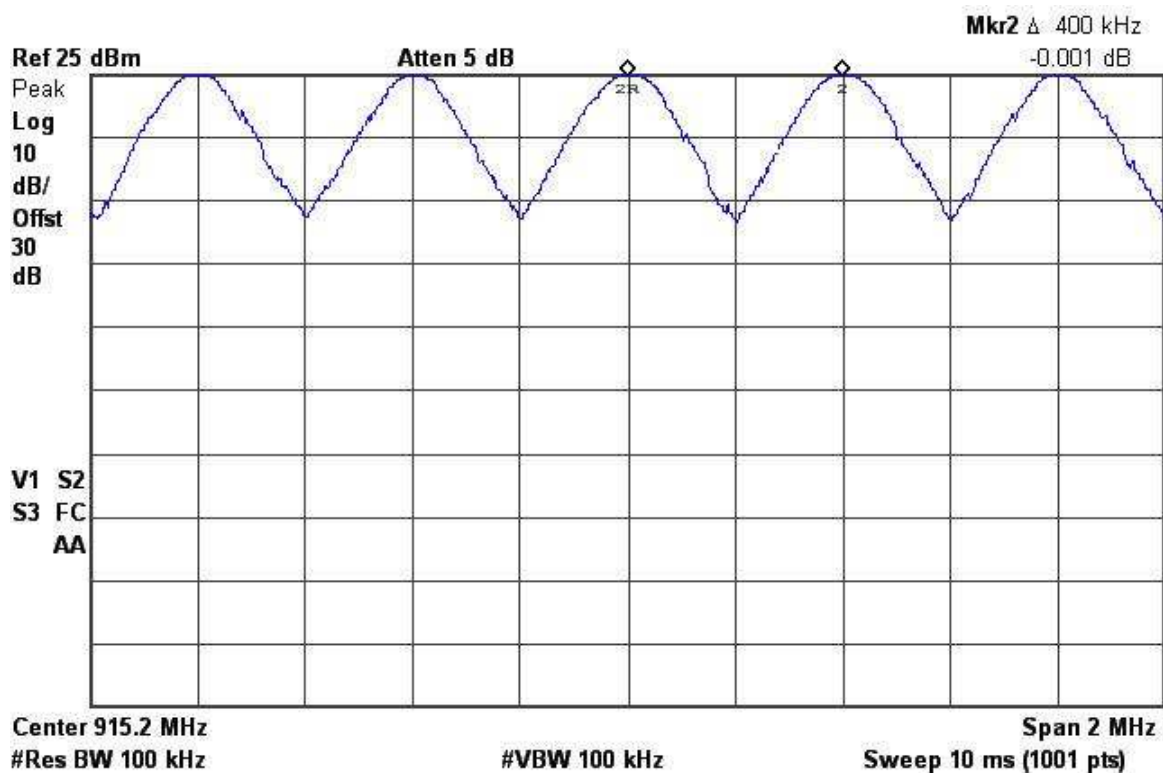
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		20 dB Single Channel Bandwidth	
	DNB Job Number: 68012		Date: 10 Nov 2005	
Customer: ConectiSys Corp. Inc		Serial Number: Proto		Conformance Standard FCC Part 15
Model Number: HNET 5.0-BS8				
Description: Wireless Power Usage Monitoring System				Clause 15.247(a,1)
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
22 °C		51 %		101.7 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Channel	Chl Freq (MHz)	20dB BW (kHz)	Limit	Pass/Fail
63 (High)	927.6	362.5	500 kHz	Pass



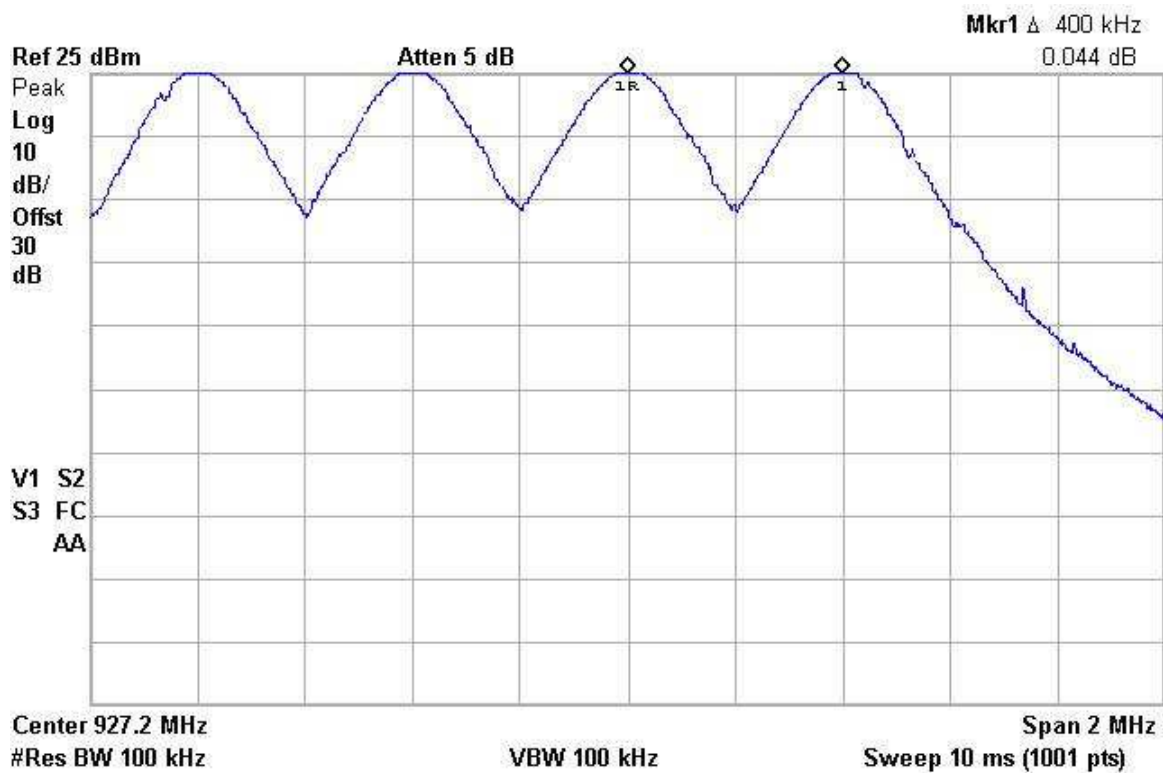
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Channel Separation	
DNB Job Number:	68012	Date:	10 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247(a,1)
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
22 °C		51 %		101.7 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Hopping Channel	Hopping Channel	Delta	Limit	Pass/Fail
1	2	404 kHz	386 kHz	Pass



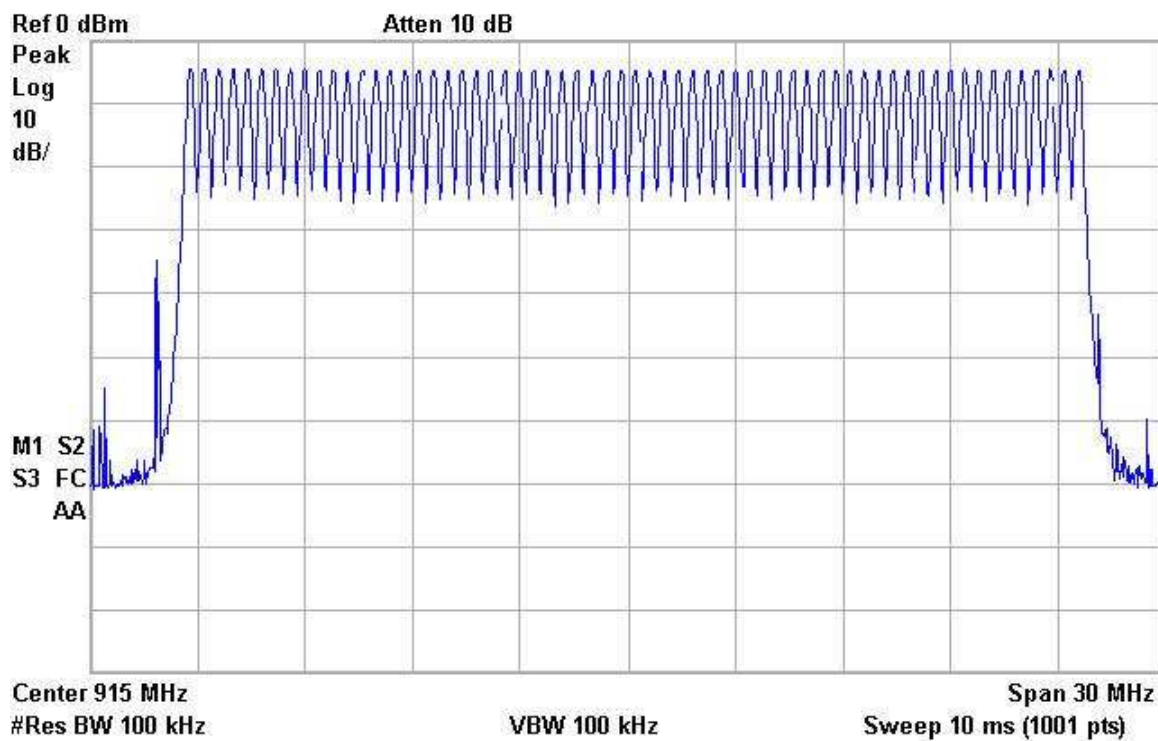
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Channel Separation	
DNB Job Number:	68012	Date:	10 Nov 2005	Conformance Standard FCC Part 15 Clause 15.247(a,1)	
Customer:	ConectiSys Corp. Inc				
Model Number:	HNET 5.0-BS8	Serial Number:	Proto		
Description:	Wireless Power Usage Monitoring System				
Environmental Conditions					
Ambient Temperature		Relative Humidity		Barometric Pressure	
22 °C		51 %		101.7 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Hopping Channel	Hopping Channel	Delta	Limit	Pass/Fail	
32	33	400 kHz	386 kHz	Pass	



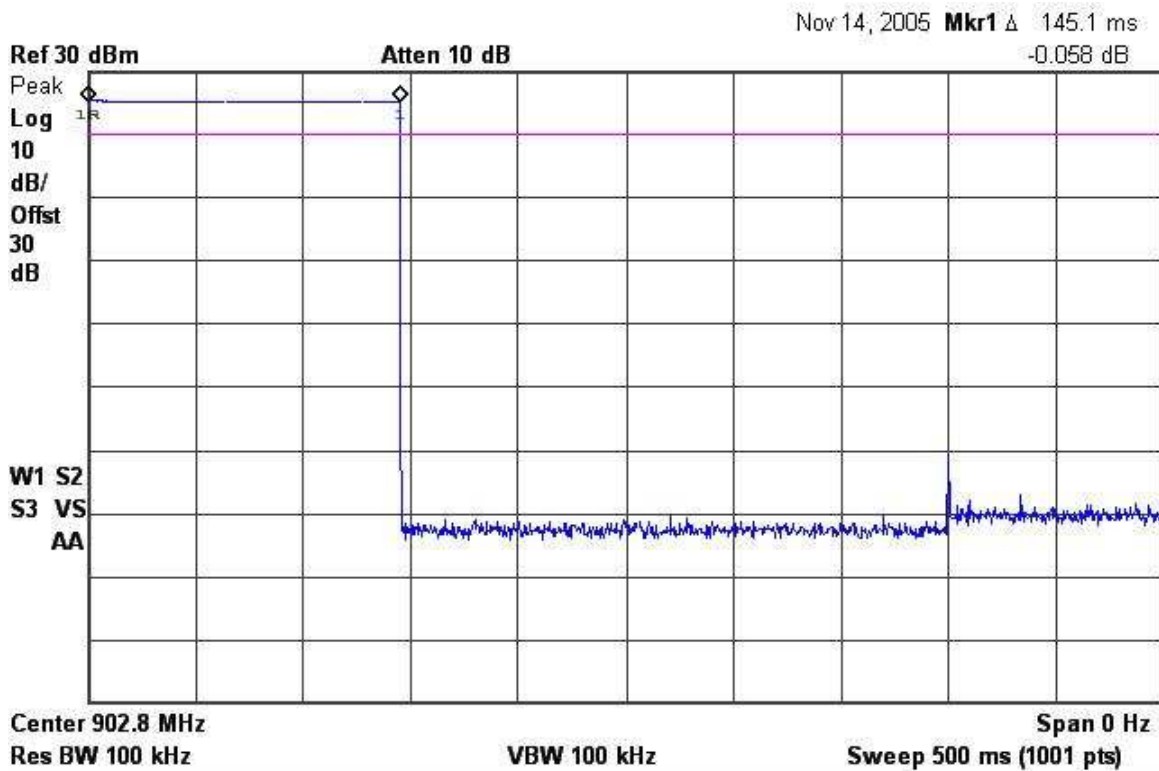
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Channel Separation	
DNB Job Number:	68012	Date:	10 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247(a,1)
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
22 °C		51 %		101.7 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Hopping Channel	Hopping Channel	Delta	Limit	Pass/Fail
62	63	400 kHz	386 kHz	Pass



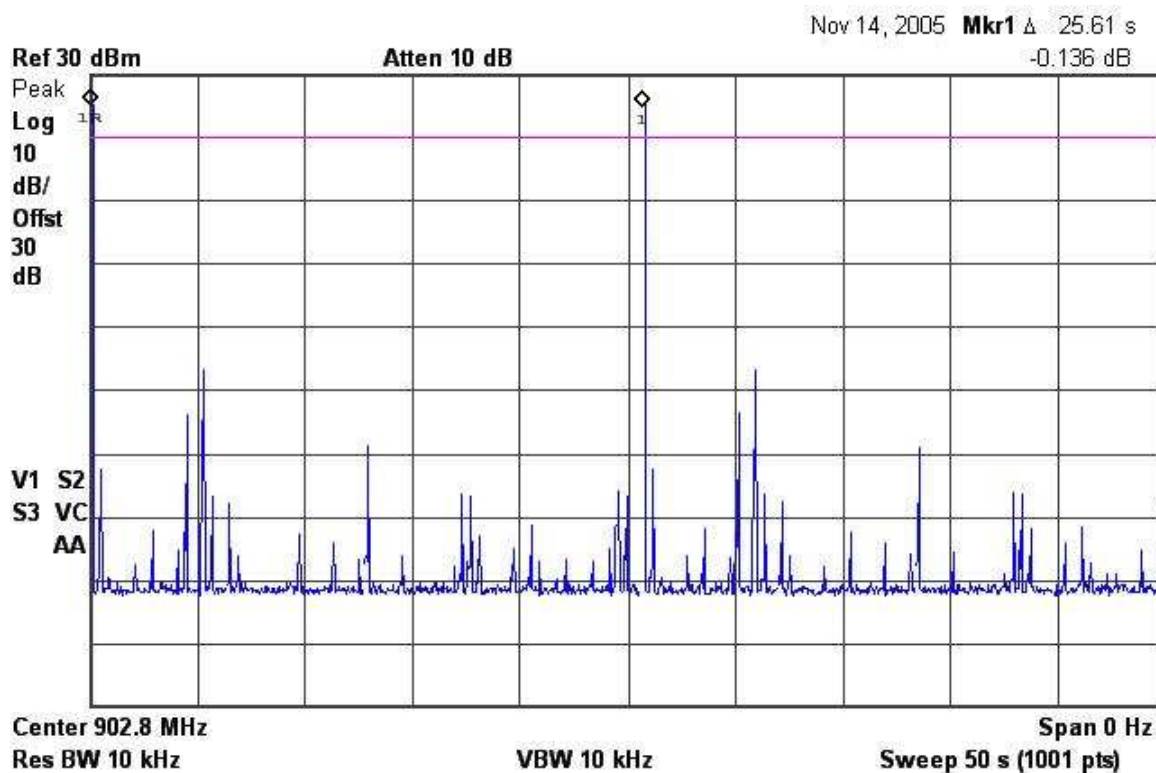
	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Hopping Channels	
DNB Job Number:	68012	Date:	9 Dec 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247(a,1,i)
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
20 °C		45 %		100.2 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Center Frequency	Frequency Span	Hopping Channels	Min Limit	Pass/Fail
915.000 MHz	30.000 MHz	63	25	Pass



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Max Time on Channel Freq	
DNB Job Number:		68012		Date: 14 Nov 2005	
Customer:		ConectiSys Corp. Inc			
Model Number:		HNET 5.0-BS8		Serial Number: Proto	
Description:		Wireless Power Usage Monitoring System			
Conformance Standard FCC Part 15 Clause 15.247(a,1,i)					
Environmental Conditions					
Ambient Temperature		Relative Humidity		Barometric Pressure	
22 °C		53 %		101.8 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Center Freq Ch1	On Duration	Time to Next Channel	Allowed On Time	Pass/Fail	
902.8 MHz	0.1451 Sec	0.2549 Sec	0.4 Sec / 10 Sec	Pass	



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Max Time on Channel Freq Conformance Standard FCC Part 15 Clause 15.247(a,1,i)
DNB Job Number:	68012	Date: 14 Nov 2005	
Customer:	ConectiSys Corp. Inc		
Model Number:	HNET 5.0-BS8	Serial Number: Proto	
Description:	Wireless Power Usage Monitoring System		
Environmental Conditions			
Ambient Temperature	Relative Humidity	Barometric Pressure	
22 °C	53 %	101.8 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>			
Center Freq Chl	On Duration	Allowed On Time	Pass/Fail
902.8 MHz	0.1451 Sec	0.4 Sec / 10 Sec	Pass



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704	Hopping Sequence	
DNB Job Number:	68012	Date:	14 Nov 2005
Customer:	ConectiSys Corp. Inc	M/N:	HNET 5.0-BS8
Description:	Wireless Power Usage Monitoring System	S/N:	Proto

Hopping sequence is software controlled with the following parameters:

0.1451 sec on time per channel
0.2549 sec dwell time between channel
63 Total channels

The worst case timing scenario would be the following theoretical example.

Channel “X” activates as the last channel of Pattern “A” and the first channel of Pattern “B” and the first channel of Pattern “C”.

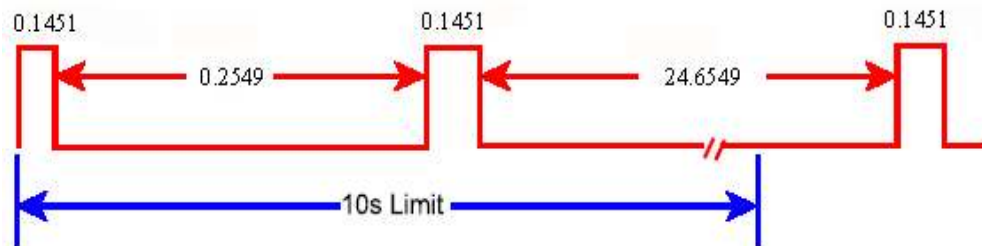
Channel “X” has an on time of 0.1451 seconds

Dwell time before next channel is activate is 0.2549 seconds

Total time per pattern is 63 channels + 63 dwell times or 9.1413 seconds + 16.0587 seconds or 25.2 seconds.

Therefore Channel X could be on for 0.1451 seconds off for 0.2549 seconds on for 0.1451 seconds and the off for 24.6549 seconds.

By calculation the maximum on time in any 10 seconds window is 0.2902 seconds



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704				Hopping Sequence		
DNB Job Number:		68012					Date:	14 Nov 2005
Customer:		ConectiSys Corp. Inc					M/N:	HNET 5.0-BS8
Description:		Wireless Power Usage Monitoring System					S/N:	Proto
Frequency Hopping Channels and patterns - Hops from top to bottom								
Channel #	Frequency in MHz							
	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Pattern 7	Pattern 8
16	908.8	908.85	908.9	908.95	909	909.05	909.1	909.15
37	917.2	917.25	917.3	917.35	917.4	917.45	917.5	917.55
21	910.8	910.85	910.9	910.95	911	911.05	911.1	911.15
3	903.6	903.65	903.7	903.75	903.8	903.85	903.9	903.95
5	904.4	904.45	904.5	904.55	904.6	904.65	904.7	904.75
1	902.8	902.85	902.9	902.95	903	903.05	903.1	903.15
8	905.6	905.65	905.7	905.75	905.8	905.85	905.9	905.95
	49	922	922.05	922.1	922.15	922.2	922.25	922.35
31	914.8	914.85	914.9	914.95	915	915.05	915.1	915.15
59	926	926.05	926.1	926.15	926.2	926.25	926.3	926.35
26	912.8	912.85	912.9	912.95	913	913.05	913.1	913.15
54	924	924.05	924.1	924.15	924.2	924.25	924.3	924.35
15	908.4	908.45	908.5	908.55	908.6	908.65	908.7	908.75
40	918.4	918.45	918.5	918.55	918.6	918.65	918.7	918.75
62	927.2	927.25	927.3	927.35	927.4	927.45	927.5	927.55
24	912	912.05	912.1	912.15	912.2	912.25	912.3	912.35
	4	904	904.05	904.1	904.15	904.2	904.25	904.35
42	919.2	919.25	919.3	919.35	919.4	919.45	919.5	919.55
2	903.2	903.25	903.3	903.35	903.4	903.45	903.5	903.55
9	906	906.05	906.1	906.15	906.2	906.25	906.3	906.35
56	924.8	924.85	924.9	924.95	925	925.05	925.1	925.15
11	906.8	906.85	906.9	906.95	907	907.05	907.1	907.15
14	908	908.05	908.1	908.15	908.2	908.25	908.3	908.35
	38	917.6	917.65	917.7	917.75	917.8	917.85	917.95
60	926.4	926.45	926.5	926.55	926.6	926.65	926.7	926.75
47	921.2	921.25	921.3	921.35	921.4	921.45	921.5	921.55
39	918	918.05	918.1	918.15	918.2	918.25	918.3	918.35
48	921.6	921.65	921.7	921.75	921.8	921.85	921.9	921.95
63	927.6	927.65	927.7	927.75	927.8	927.85	927.9	927.95
17	909.2	909.25	909.3	909.35	909.4	909.45	909.5	909.55
50	922.4	922.45	922.5	922.55	922.6	922.65	922.7	922.75

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704			Hopping Sequence			
DNB Job Number:		68012				Date:	14 Nov 2005	
Customer:		ConectiSys Corp. Inc				M/N:	HNET 5.0-BS8	
Description:		Wireless Power Usage Monitoring System				S/N:	Proto	
Frequency Hopping Channels and patterns - Hops from top to bottom								
Channel #	Frequency in MHz							
	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Pattern 7	Pattern 8
29	914	914.05	914.1	914.15	914.2	914.25	914.3	914.35
43	919.6	919.65	919.7	919.75	919.8	919.85	919.9	919.95
19	910	910.05	910.1	910.15	910.2	910.25	910.3	910.35
33	915.6	915.65	915.7	915.75	915.8	915.85	915.9	915.95
41	918.8	918.85	918.9	918.95	919	919.05	919.1	919.15
22	911.2	911.25	911.3	911.35	911.4	911.45	911.5	911.55
6	904.8	904.85	904.9	904.95	905	905.05	905.1	905.15
61	926.8	926.85	926.9	926.95	927	927.05	927.1	927.15
57	925.2	925.25	925.3	925.35	925.4	925.45	925.5	925.55
27	913.2	913.25	913.3	913.35	913.4	913.45	913.5	913.55
20	910.4	910.45	910.5	910.55	910.6	910.65	910.7	910.75
51	922.8	922.85	922.9	922.95	923	923.05	923.1	923.15
36	916.8	916.85	916.9	916.95	917	917.05	917.1	917.15
34	916	916.05	916.1	916.15	916.2	916.25	916.3	916.35
52	923.2	923.25	923.3	923.35	923.4	923.45	923.5	923.55
25	912.4	912.45	912.5	912.55	912.6	912.65	912.7	912.75
23	911.6	911.65	911.7	911.75	911.8	911.85	911.9	911.95
10	906.4	906.45	906.5	906.55	906.6	906.65	906.7	906.75
7	905.2	905.25	905.3	905.35	905.4	905.45	905.5	905.55
12	907.2	907.25	907.3	907.35	907.4	907.45	907.5	907.55
46	920.8	920.85	920.9	920.95	921	921.05	921.1	921.15
58	925.6	925.65	925.7	925.75	925.8	925.85	925.9	925.95
45	920.4	920.45	920.5	920.55	920.6	920.65	920.7	920.75
18	909.6	909.65	909.7	909.75	909.8	909.85	909.9	909.95
55	924.4	924.45	924.5	924.55	924.6	924.65	924.7	924.75
13	907.6	907.65	907.7	907.75	907.8	907.85	907.9	907.95
30	914.4	914.45	914.5	914.55	914.6	914.65	914.7	914.75
53	923.6	923.65	923.7	923.75	923.8	923.85	923.9	923.95
32	915.2	915.25	915.3	915.35	915.4	915.45	915.5	915.55
28	913.6	913.65	913.7	913.75	913.8	913.85	913.9	913.95
44	920	920.05	920.1	920.15	920.2	920.25	920.3	920.35
35	916.4	916.45	916.5	916.55	916.6	916.65	916.7	916.75

15.247 (b,2) Maximum Peak Output Power (Conducted)

Test Procedure:

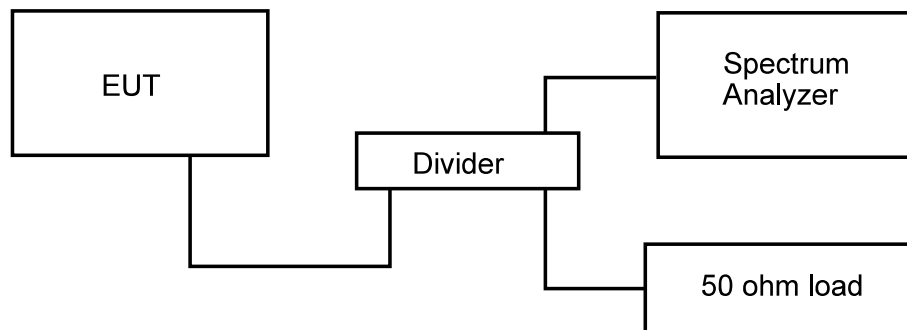
The transmitter output was connected to a spectrum analyzer.

Requirement: The maximum peak output power shall not exceed 1W (30dBm)

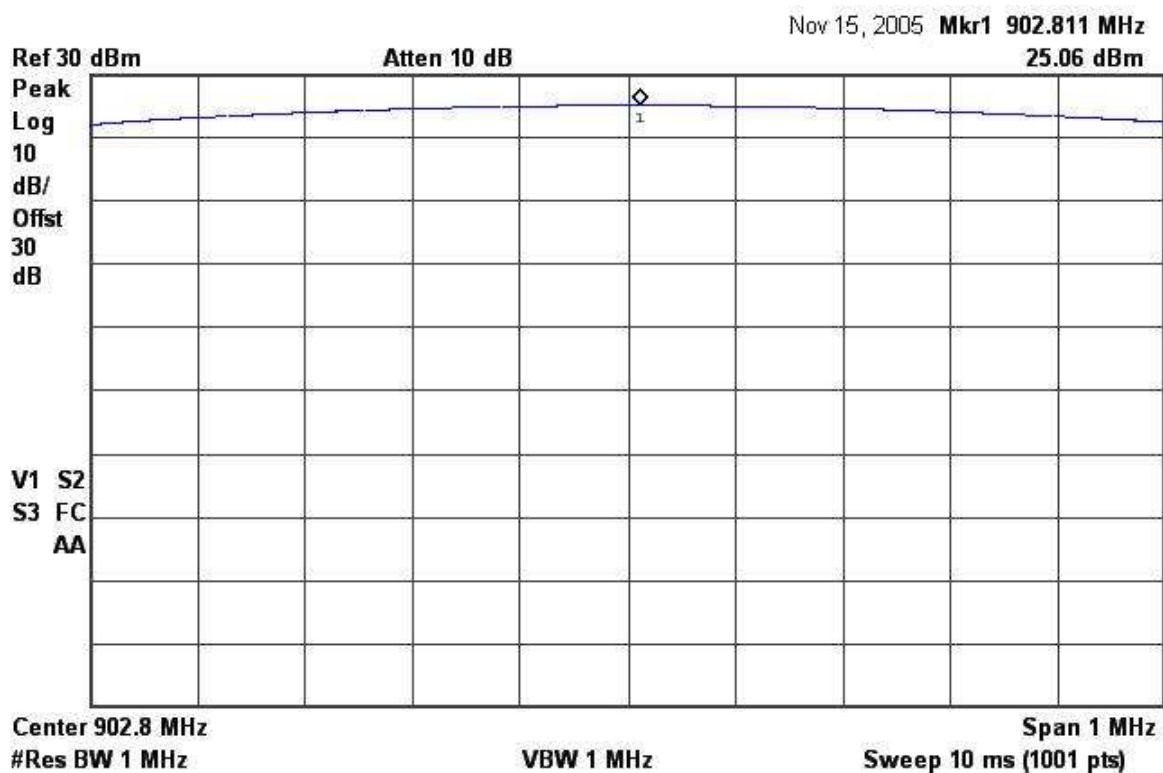
EUT operating conditions:

The software provided by the client to enable the EUT to hop stop on the applicable channel and transmit.

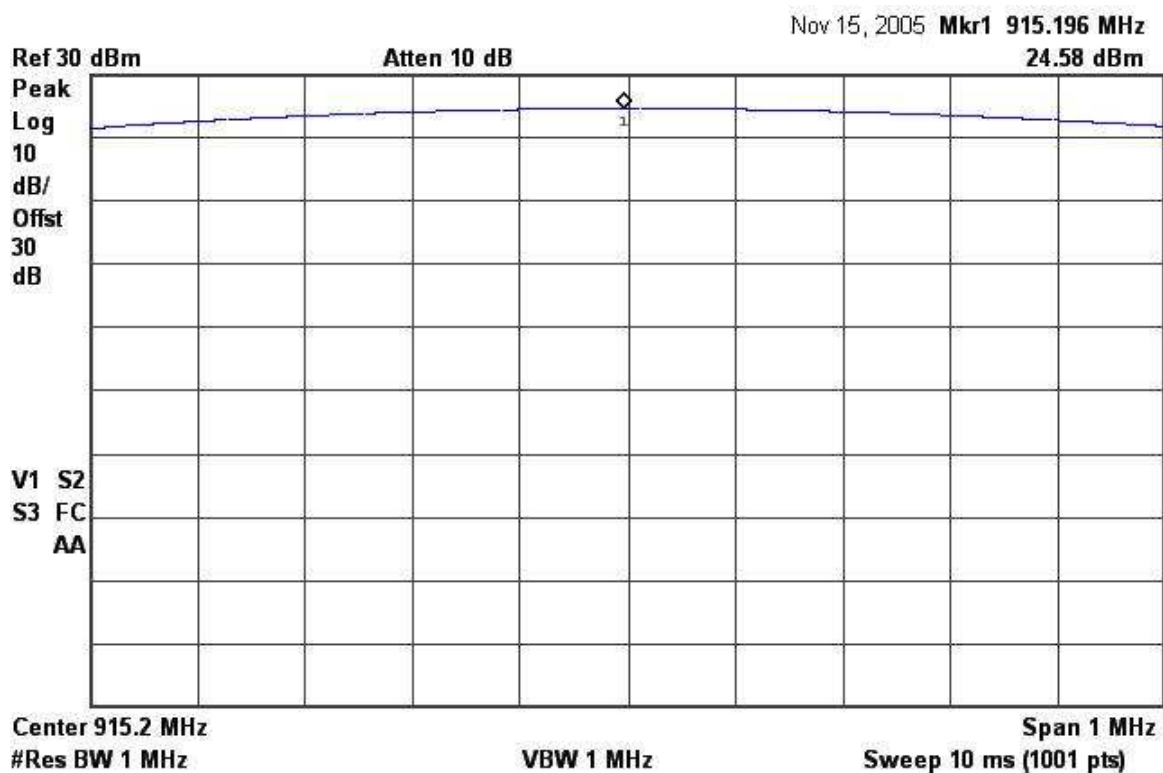
Test Set Up:



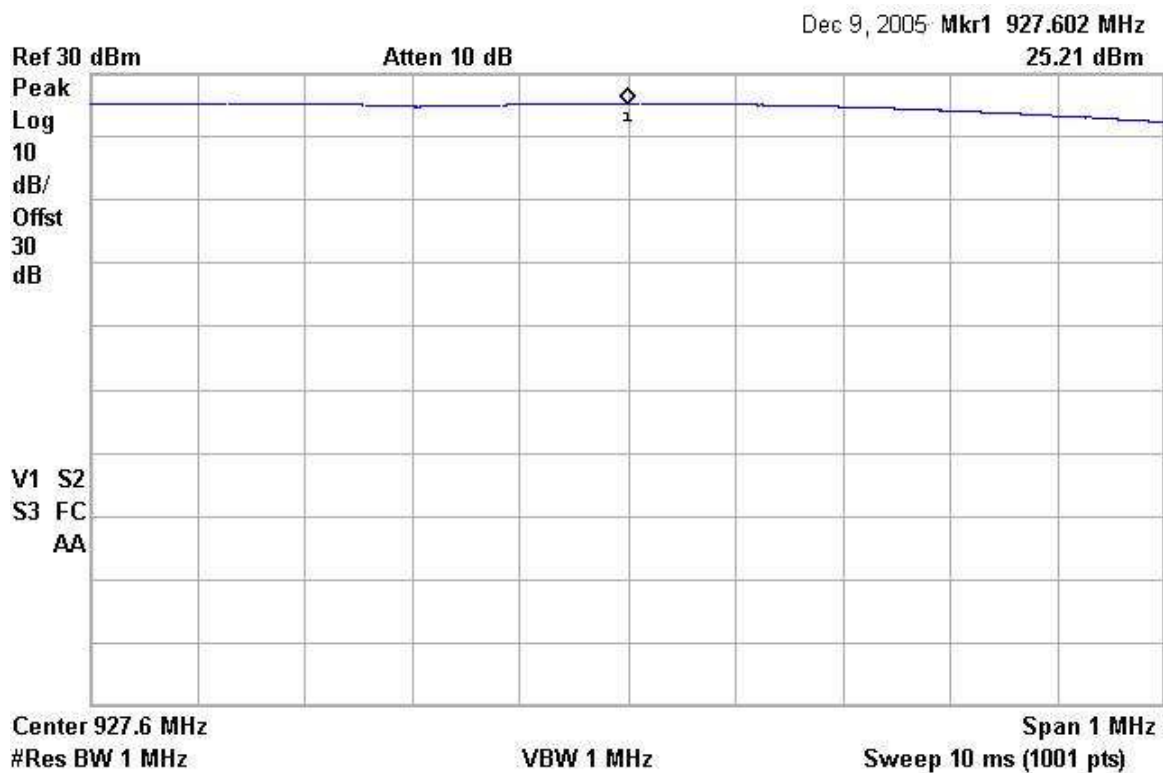
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Peak Output Power (Cond)			
DNB Job Number:		68012		Date: 15 Nov 2005			
Customer:		ConectiSys Corp. Inc					
Model Number:		HNET 5.0-BS8		Serial Number: Proto			
Description:		Wireless Power Usage Monitoring System					
Environmental Conditions							
Ambient Temperature		Relative Humidity		Barometric Pressure			
23 °C		57 %		102.0 kPa			
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>							
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (W)	Limit (W)	Delta (W)	Pass/Fail
902.8	25.06	30.0	-4.94	0.321	1	-0.679	Pass



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Peak Output Power (Cond)			
DNB Job Number:		68012		Date: 15 Nov 2005		Conformance Standard	
Customer:		ConectiSys Corp. Inc					
Model Number:		HNET 5.0-BS8		Serial Number: Proto		FCC Part 15	
Description:		Wireless Power Usage Monitoring System				Clause 15.247(b,2)	
Environmental Conditions							
Ambient Temperature		Relative Humidity		Barometric Pressure			
23 °C		57 %		102.0 kPa			
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>							
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (W)	Limit (W)	Delta (W)	Pass/Fail
915.2	24.58	30.0	-5.42	0.288	1	-0.712	Pass



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Peak Output Power (Cond)			
DNB Job Number:		68012		Date: 09 Dec 2005			
Customer:		ConectiSys Corp. Inc					
Model Number:		HNET 5.0-BS8		Serial Number: Proto			
Description:		Wireless Power Usage Monitoring System					
Environmental Conditions							
Ambient Temperature		Relative Humidity		Barometric Pressure			
23 °C		57 %		102.0 kPa			
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>							
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (W)	Limit (W)	Delta (W)	Pass/Fail
927.6	25.21	30.0	-4.79	0.332	1	-0.668	Pass



15.247 (c) Conducted Band Edge Measurements and Out of Band Emissions

The antenna was disconnected and a fifty ohm load was installed. The signal was then directly coupled into a spectrum analyzer. The output signal from 902 to 928MHz was transmitted so that the fundamental frequency could be observed.

B/E	=	Band Edge
R/B	=	Restricted Band
ME R/B	=	Maximum Emission Restricted Band
Rdg	=	Conducted emission into 50 ohm load
RFS	=	Maximum radiated field strength from 15.209 data on fundamental
RFS-Rdg	=	Maximum field strength minus the delta between the peak conducted and the conducted spurious marker data

$$\text{Formula} = \text{RFS} - (\text{Rdg} - \text{marker data})$$

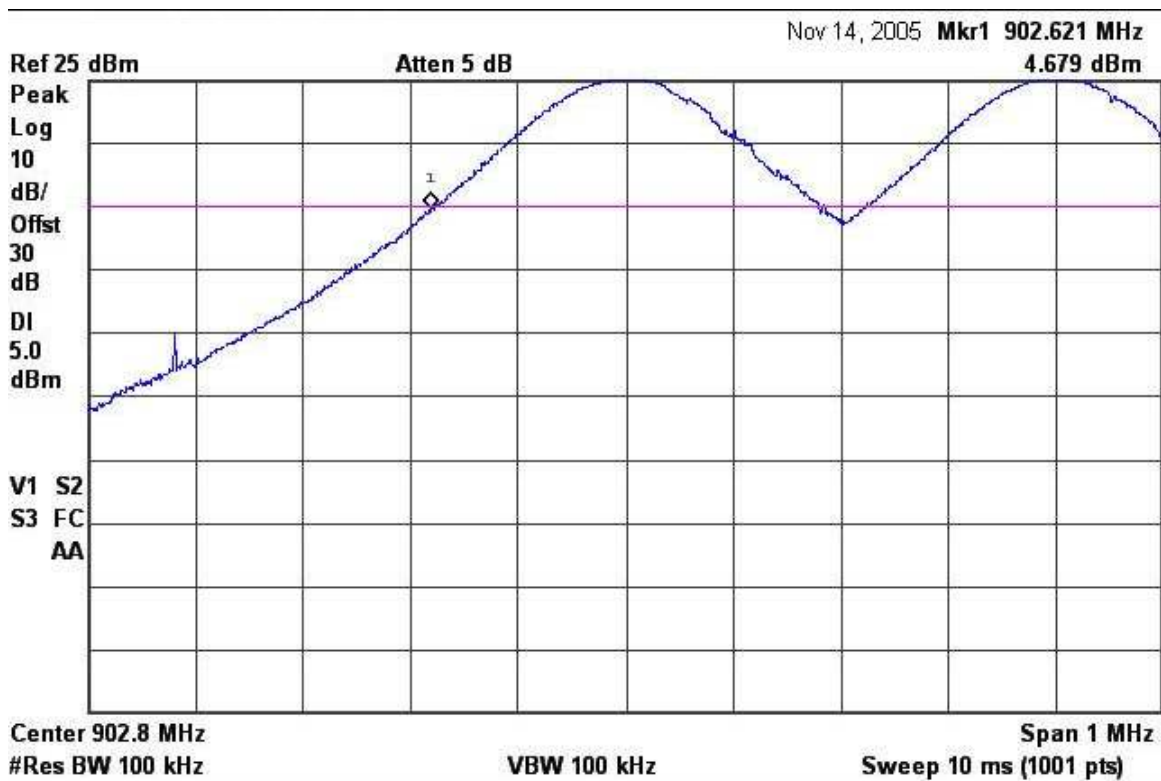
Example

$$46.16\text{dBuV/m} = 81.8\text{dBuV/m} - (7.11\text{dBm} - (-28.53\text{dBm}))$$

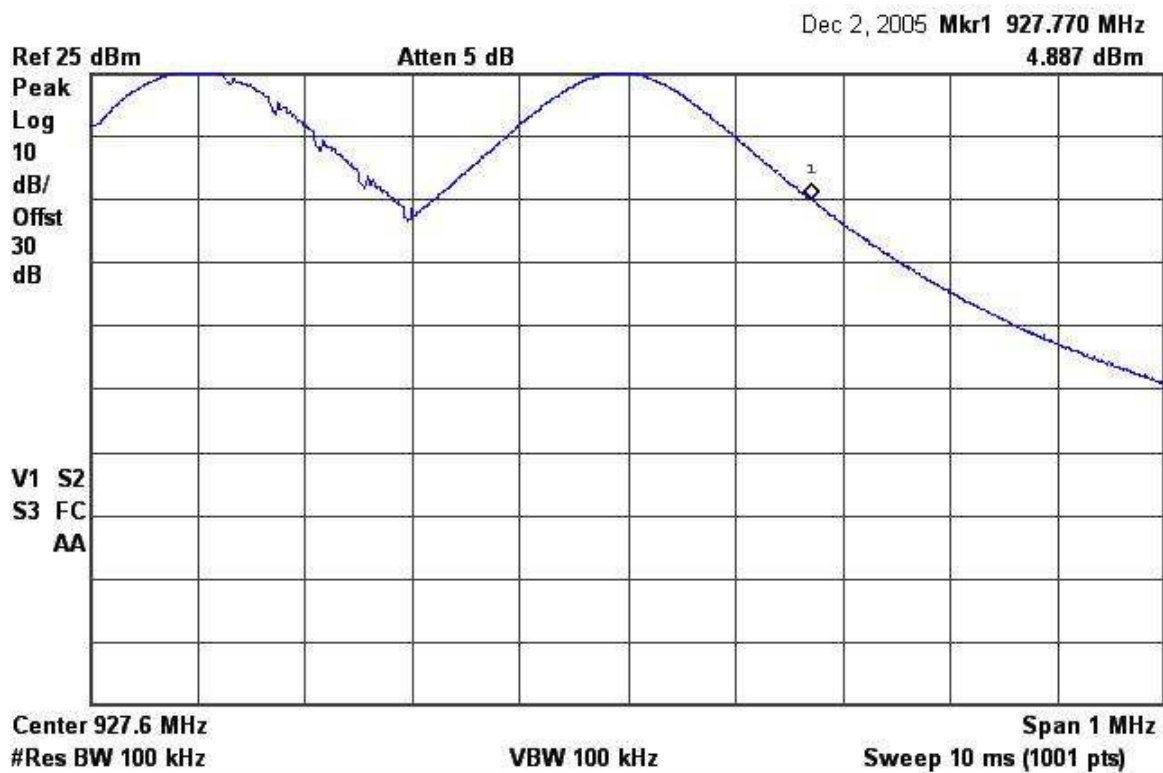
D1	=	Display line at maximum conducted emission
D2	=	-20dB down point

Test Set Up: Same as 15.247 (a,2) 20 dB Emission Bandwidth

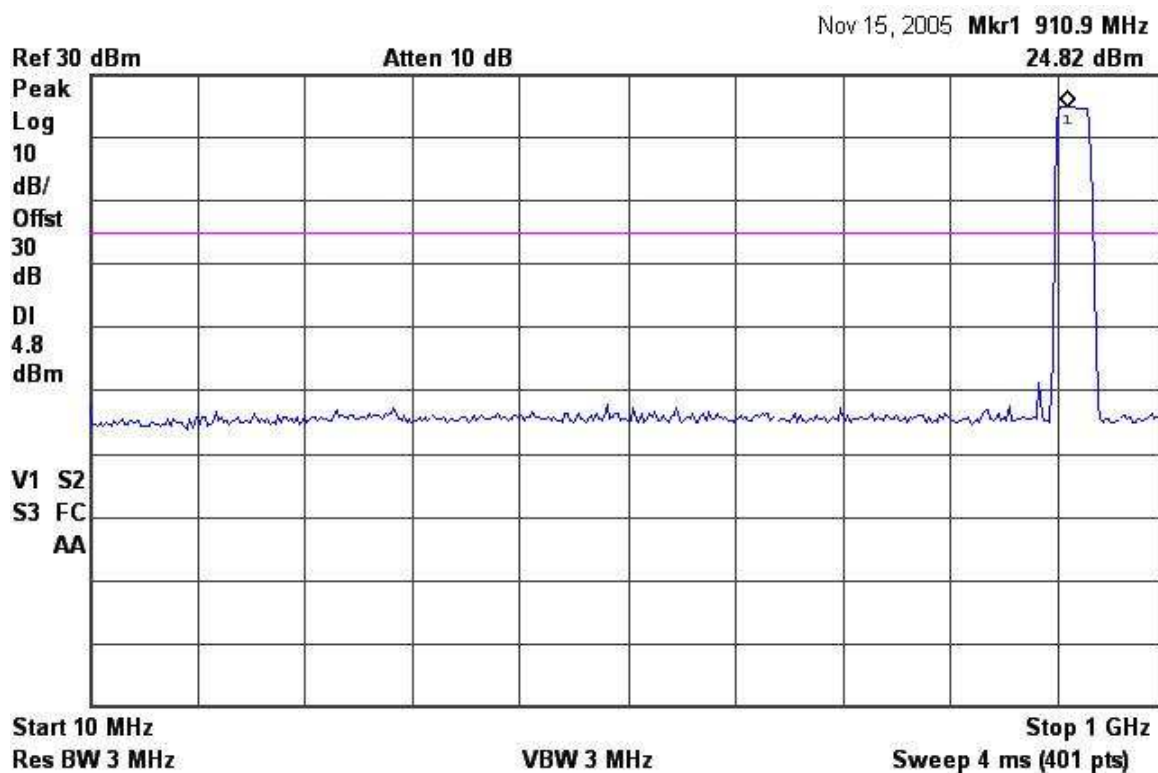
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Band Edge Measurements	
DNB Job Number:		68012		Date: 14 Nov 2005	
Customer:		ConectiSys Corp. Inc			
Model Number:		HNET 5.0-BS8		Serial Number: Proto	
Description:		Wireless Power Usage Monitoring System			
Ambient Temperature		Relative Humidity		Barometric Pressure	
22 °C		53 %		101.8 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Band Edge		Limit Lower Band Edge		Pass/Fail	
Low Channel	Freq in MHz				
1	902.621	902.00		Pass	



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Band Edge Measurements	
DNB Job Number:		68012		Date: 2 Dec 2005	
Customer:		ConectiSys Corp. Inc			
Model Number:		HNET 5.0-BS8		Serial Number: Proto	
Description:		Wireless Power Usage Monitoring System			
Ambient Temperature		Relative Humidity		Barometric Pressure	
20 °C		45 %		100.2 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Band Edge		Limit Upper Band Edge		Pass/Fail	
High Channel	Freq in MHz				
63	927.770	928.00		Pass	



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Conducted Spurious		
DNB Job Number:	68012		Date:	15 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc				
Model Number:	HNET 5.0-BS8		Serial Number: Proto		FCC Part 15
Description:	Wireless Power Usage Monitoring System				Clause 15.247(c)
Ambient Temperature		Relative Humidity		Barometric Pressure	
23 °C		57 %		102.0 kPa	
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>					
Peak Output Power	Reading		-20dBc		Pass/Fall
24.8 dBm	24.8 dBm		4.8 dBm		Pass



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Conducted Spurious	
DNB Job Number:	68012	Date:	15 Nov 2005	Conformance Standard
Customer:	ConectiSys Corp. Inc			
Model Number:	HNET 5.0-BS8	Serial Number:	Proto	FCC Part 15
Description:	Wireless Power Usage Monitoring System			Clause 15.247(c)
Ambient Temperature		Relative Humidity		Barometric Pressure
23 °C		57 %		102.0 kPa
EUT performed within the requirements of the applicable standard ☒ Yes ☐ No <i>Tom Elders</i>				
Peak Output Power	Reading	-20dBc		Pass/Fall
24.8 dBm	24.8 dBm	4.8 dBm		Pass

