

FCC ID: 2AF20-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

Intentional Radiator Test Report

Test Standards:
FCC Part 15.223 (Subpart C – Intentional Radiators)
Industry Canada RSS-210, Issue 8

Prepared For:
Fullpower Technologies, Inc.
1200 Pacific Ave, Ste 300
Santa Cruz, CA 95060
USA

Product Name :
SleepTracker

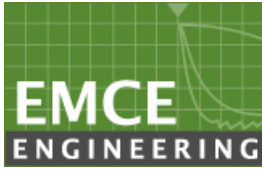
Model Name :
STS-10

Application Purpose : Original

Prepared by:

EMCE Engineering, Inc.
44366 S. Grimmer Blvd.
Fremont, CA 94538
USA

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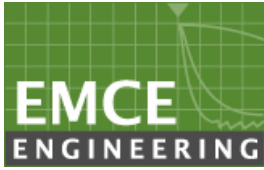


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Revision History

Rev.	Issue Date	Description
0	11/3/15	Initial Issue

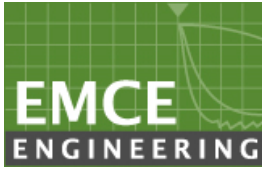


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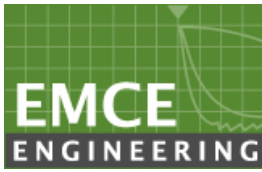
1.0 GENERAL INFORMATION

Test Laboratory:	EMCE Engineering 44366 S. Grimmer Blvd. Fremont, CA 94538 USA Tel: 510-490-4307, Fax: 510-490-3441 bob@universalcompliance.com
	FCC registration number : 743299
	Test Site : FCC : US5291, IC : 3324A
Applicant Name :	Fullpower Technologies, Inc. 1200 Pacific Ave, Ste 300 Santa Cruz, CA 95060 Tel: (831) 459-0447
	Contact Person: Louis Bouchard
Application Purpose :	Original
EUT Description	Intentional Radiator 1.705 – 10 MHz Range
Product Name	SleepTracker
Model Name :	STS-10
Applied Standards :	47 CFR §15.207, 15.209, 15.223: 2010 & Canadian Standards RSS-GEN Issue 3, RSS-210 Issue 8
FCC ID :	2AF2O-STO-10
IC :	20700-STO-10
RF Operating Frequency (ies)	2.45 – 3.40 MHz
Modulation	N/A
Emission Designator	N0N
Receipt of EUT :	10/16/15
Date of Testing :	10/16/15 – 10/29/15
Date of Report :	11/3/15

The tests listed in this report have been completed to demonstrate compliance to the CFR 47 Section 15.223, as well as Industry Canada Radio Standard RSS-210, Issue 8.

Contents approved:


Name: Bob Cole Title: President

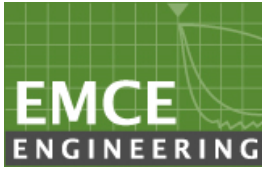


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2.0 EUT AND ACCESSORY INFORMATION

EUT				
Model name:	STS-10			
Description:	SleepTracker			
Manufacturer:	Fullpower Technologies, Inc.			
Support Equipment				
Description	Model Number	Serial Number	Manufacturer	Power Cable Description
AC Adapter	PSM10R-050	N/A	PhiHong	N/A
Cable Description				
From	To	Length (Meters)	Shielded (Y/N)	Ferrite Loaded (Y/N)
AC Adapater	EUT Processor	0.5	N	N



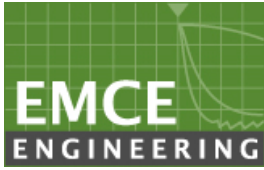
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3.0 SUMMARY OF TEST RESULTS

Test Standard		Description	Pass / Fail
47 CFR Part 15.223: 2010	RSS 210 Issue 8		
15.203		Antenna Requirement	Pass
15.207(a)	RSS Gen(7.2.2)	Conducted Emissions Voltage	Pass
15.223(a)	RSS210(A2.3)	Peak Power Limit in the band of 1.705 - 10 MHz	Pass
15.223(a)	RSS210(A2.3)	Occupied BW Limit in the band of 1.705 - 10 MHz	Pass
15.223(b)	RSS210(A2.3)	Radiated Spurious Emissions Limit in the band of 1.705 - 10 MHz	Pass
	RSS-GEN(6.6)	Occupied Bandwidth	Pass
ANSI C63.4: 2009/ RSS-Gen Issue 4			
PS: All measurement uncertainties are not taken into consideration for all presented test result.			

PASS The EUT passed that particular test.
FAIL The EUT failed that particular test.
N/A Not Applicable due to product type.



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4.0 MODIFICATIONS

There were no modifications.

5.0 TEST RESULTS

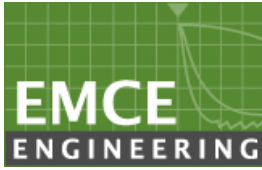
5.1 Antenna Requirement

Requirement(s): 47 CFR §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.

Antenna requirement must meet at least one of the following:

- a) Antenna must be permanently attached to the device.
 - b) Antenna must use a unique type of connector to attach to the device.
 - c) Device must be professionally installed. Installer shall be responsible for ensuring that the correct antenna is employed with the device.
-
- 1) The antenna is integral to the main board permanently to the device which meets the requirement (See Internal Photographs submitted as another Exhibit).



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5.2 Conducted Emissions Voltage

Requirement(s): 47 CFR §15.207

Requirement:

Frequency of emission (MHz)	Conducted limit (dBμV)	
	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.

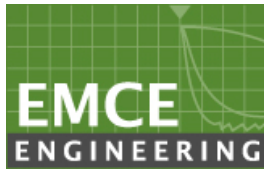
Procedures:

1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR and Average detectors, are reported. All other emissions were relatively insignificant.
2. "Ave" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
3. Conducted Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of measurement at a confidence level of approximately 95% (in the case where distributions normal), with a coverage factor of 2, in the range 9kHz – 30MHz (Average & Quasi-peak) $\pm 3.5\text{dB}$.
4. Environmental Conditions Temperature 24°C
 Relative Humidity 45%
 Atmospheric Pressure 1010mbar

Test Date : 10/16/2015

Tested By : Bob Cole

Results: Pass



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FCC Part 15.207 Line Conducted Emissions
120V / 60 Hz - Line 1
150kHz – 30 MHz

Test Location: EMCE Engineering • 44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: **FullPower**
Specification: **EN55022 B COND**
Work Order #: **4170**
Test Type: **Conducted Emissions**
Equipment: **SleepTracker**
Manufacturer: Fullpower Technologies
Model: STS-10
S/N: N/A

Date: 10/16/2015
Time: 15:04:38
Sequence#: 11
Tested By: Bob Cole
120V 60Hz

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
SleepTracker	Fullpower Technologies	STS-10	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

Reworked PCB A - 2 Sensors

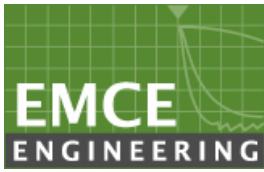
Transducer Legend:

T1=25' LMR #001	T2=EMCO 3810-2 LISN S/N 9807-1988
T3=HP 11947A Trans. Limiter TL1	

Ext Attn: 0 dB

Measurement Data: Reading listed by frequency. Test Lead: Line 1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	Dist dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	927.720k	29.4	+0.1	+0.5	+9.9		+0.0	39.9	56.0	-16.1	Line
QP											
2	927.720k	21.3	+0.1	+0.5	+9.9		+0.0	31.8	46.0	-14.2	Line
Ave											
3	1.346M	28.0	+0.1	+0.5	+9.9		+0.0	38.5	56.0	-17.5	Line
QP											
4	1.346M	23.5	+0.1	+0.5	+9.9		+0.0	34.0	46.0	-12.0	Line
Ave											
5	8.968M	32.7	+0.1	+0.8	+10.0		+0.0	43.6	60.0	-16.4	Line
QP											
6	8.968M	9.9	+0.1	+0.8	+10.0		+0.0	20.8	50.0	-29.2	Line
Ave											
7	9.566M	31.0	+0.1	+0.8	+10.0		+0.0	41.9	60.0	-18.1	Line
QP											
8	9.566M	9.1	+0.1	+0.8	+10.0		+0.0	20.0	50.0	-30.0	Line
Ave											

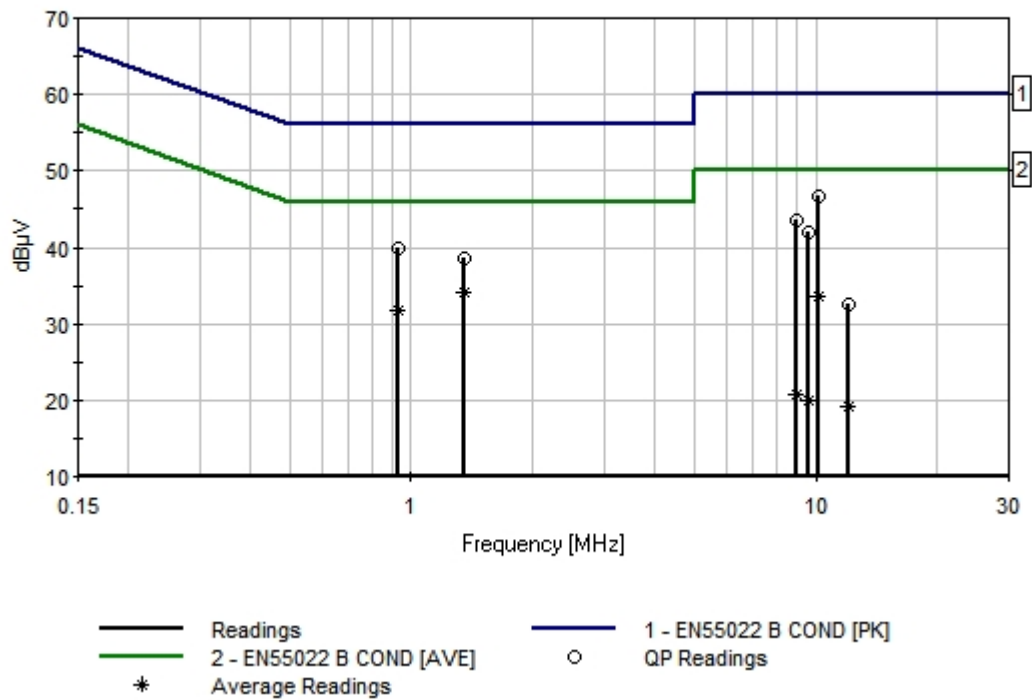


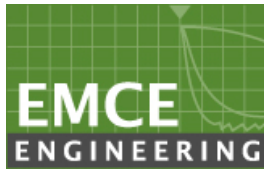
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9	10.114M	35.7	+0.1	+0.8	+10.0	+0.0	46.6	60.0	-13.4	Line
QP										
10	10.114M	22.8	+0.1	+0.8	+10.0	+0.0	33.7	50.0	-16.3	Line
Ave										
11	12.108M	21.6	+0.1	+0.9	+10.0	+0.0	32.6	60.0	-27.4	Line
QP										
12	12.108M	8.1	+0.1	+0.9	+10.0	+0.0	19.1	50.0	-30.9	Line
Ave										

EMCE Engineering Date: 10/16/2015 Time: 15:04:38 FullPower WO#: 4170
EN55022 B COND [AVE] Test Lead: Line 1 120V 60Hz Sequence#: 11 Ext ATTN: 0 dB





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FCC Part 15.207 Line Conducted Emissions
120V / 60 Hz - Line 2
150kHz – 30 MHz

Test Location: EMCE Engineering • 44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: **FullPower**
Specification: **EN55022 B COND**
Work Order #: **4170**
Test Type: **Conducted Emissions**
Equipment: **SleepTracker**
Manufacturer: Fullpower Technologies
Model: STS-10
S/N: N/A

Date: 10/16/2015
Time: 15:16:07
Sequence#: 12
Tested By: Bob Cole
120V 60Hz

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
SleepTracker	Fullpower Technologies	STS-10	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

Reworked PCB A - 2 Sensors

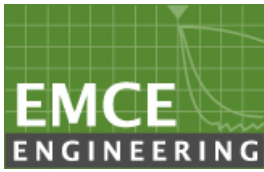
Transducer Legend:

T1=25' LMR #001	T2=EMCO 3810-2 LISN S/N 9807-1988
T3=HP 11947A Trans. Limiter TL1	

Ext Attn: 0 dB

Measurement Data: Reading listed by frequency. Test Lead: Line 2

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	Dist dB	Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	1.184M	10.7	+0.1	+0.5	+9.9		+0.0	21.2	56.0	-34.8	Line
QP											
2	1.184M	4.0	+0.1	+0.5	+9.9		+0.0	14.5	46.0	-31.5	Line
Ave											
3	1.287M	11.0	+0.1	+0.5	+9.9		+0.0	21.5	56.0	-34.5	Line
QP											
4	1.287M	2.5	+0.1	+0.5	+9.9		+0.0	13.0	46.0	-33.0	Line
Ave											
5	1.346M	10.4	+0.1	+0.5	+9.9		+0.0	20.9	56.0	-35.1	Line
QP											
6	1.346M	0.1	+0.1	+0.5	+9.9		+0.0	10.6	46.0	-35.4	Line
Ave											
7	1.406M	9.6	+0.1	+0.6	+9.9		+0.0	20.2	56.0	-35.8	Line
QP											
8	1.406M	-0.8	+0.1	+0.6	+9.9		+0.0	9.8	46.0	-36.2	Line
Ave											

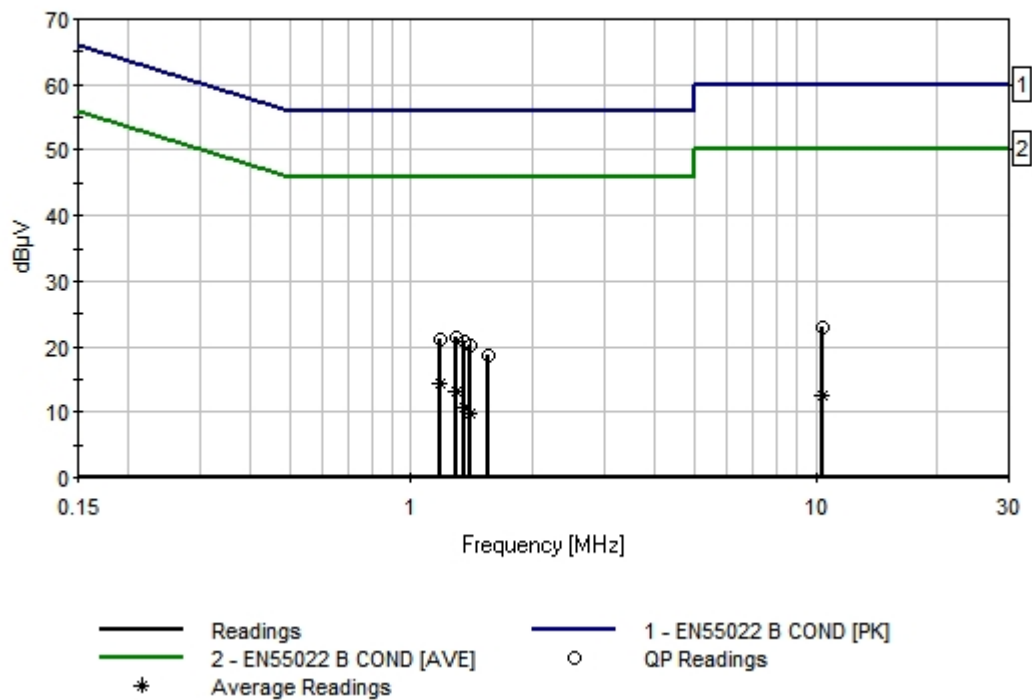


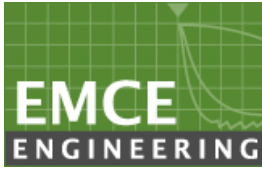
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9	1.559M	8.2	+0.1	+0.6	+9.9	+0.0	18.8	56.0	-37.2	Line
QP										
10	10.351M	12.0	+0.1	+0.8	+10.0	+0.0	22.9	60.0	-37.1	Line
QP										
11	10.351M	1.5	+0.1	+0.8	+10.0	+0.0	12.4	50.0	-37.6	Line
Ave										

EMCE Engineering Date: 10/16/2015 Time: 15:16:07 FullPower WO#: 4170
EN55022 B COND [AVE] Test Lead: Line 2 120V 60Hz Sequence#: 12 Ext ATTN: 0 dB





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IC: 20700-SAS-10

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5.3 Peak Power Limit in the band of 1.705 - 10 MHz

Requirement(s): 47 CFR §15.223(a) & RSS-210 (A2.3)

Procedures: For < 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power.

- After exploratory readings at 3 meters failed to detect a signal, the EUT was set 1 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the centre of the loop.
- The measuring bandwidth was set to 9 kHz. (Note: During testing the receive antenna was rotated about its axis to maximize the emission from the EUT.)
- CISPR Average Detector was used for Peak Power and OBW measurements

Sample Calculation: The limit is converted from microvolt/meter to decibel microvolt/meter.

Corrected Amplitude = Raw Amplitude (dBμV/m) + ACF (dB) + Cable Loss (dB) – Distance Correction Factor

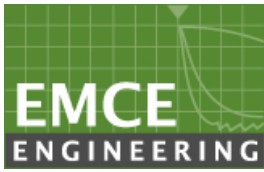
NOTE: Distance Correction factor of 40 dB/decade was used per ANSI 63.10, section 6.4.4

Limit per CFR 47 15.223 (a): The field strength of any emission within the band 1.705-10.0 MHz shall not exceed 100 microvolts/meter at a distance of 30 meters. However, if the bandwidth of the emission is less than 10% of the center frequency, the field strength shall not exceed 15 microvolts/meter or (the bandwidth of the device in kHz) divided by (the center frequency of the device in MHz) microvolts/meter at a distance of 30 meters, whichever is the higher level.

OBW Center Frequency
10.275 [kHz] / 2.4956 [MHz] = 4.117

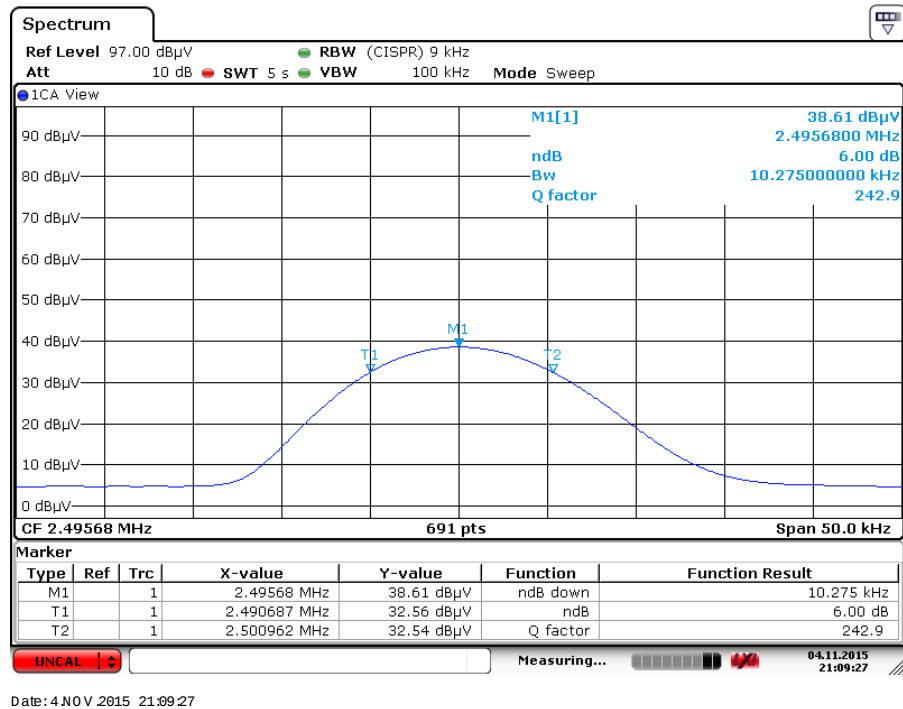
4.117 < 15

Therefore, limit is 15 uV @ 30M, or 23.52 dBuV/m



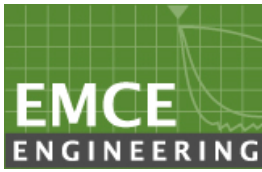
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Raw Amp Cable Factor Antenna Factor Pre-Amp Gain Distance Factor Peak Power
38.61 + 0.1 + 48.4 - 25.4 - 59.08 = 2.63 dBuV/m

EUT Peak Power passes by 20.89 dB



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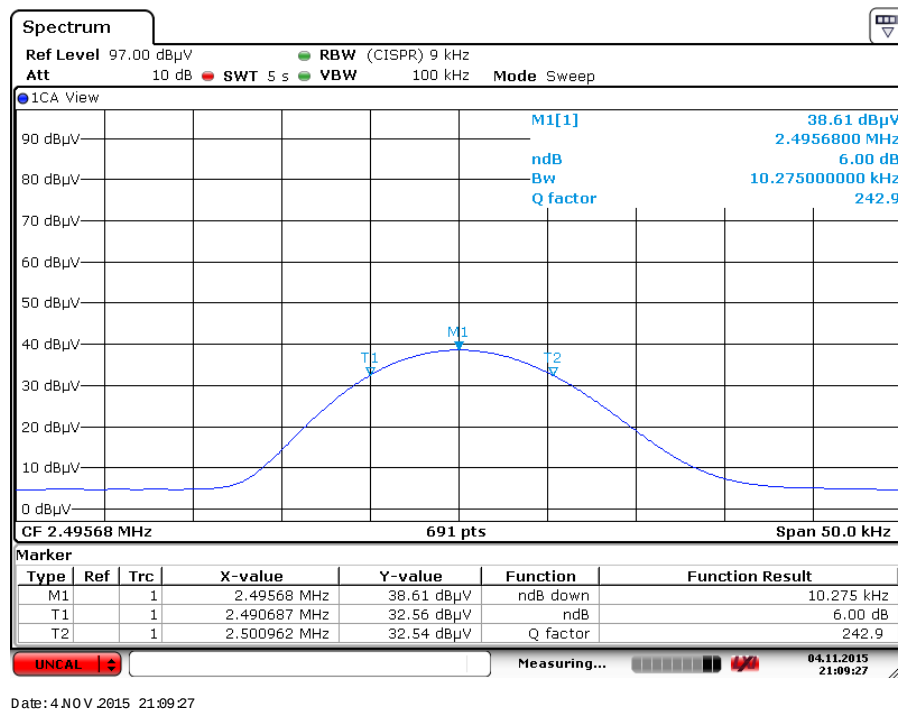
5.3 Occupied BW in the band of 1.705 - 10 MHz

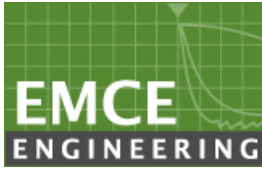
Requirement(s): 47 CFR §15.223(a) & RSS-210 (A2.3)

Procedures: For < 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power.

- After exploratory readings at 3 meters failed to detect a signal, the EUT was set 1 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the centre of the loop.
- The measuring bandwidth was set to 9 kHz. (Note: During testing the receive antenna was rotated about its axis to maximize the emission from the EUT.)
- CISPR Average Detector was used for Peak Power and OBW measurements

Limit per CFR 47 15.223 (a): For the purposes of this section, bandwidth is determined at the points 6 dB down from the modulated carrier.





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5.4 Radiated Emission < 30MHz (9kHz - 30MHz, H-Field)

Requirement(s): 47 CFR §15.223 & RSS-210 (A2.3) & RSS-310 (3.7)

Procedures: For < 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power. The EUT was set 3 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the centre of the loop. The measuring bandwidth was set to 10 kHz. (Note: During testing the receive antenna was rotated about its axis to maximize the emission from the EUT.)

The limit is converted from microvolt/meter to decibel microvolt/meter.

Sample Calculation: Corrected Amplitude = Raw Amplitude (dBμV/m) + ACF (dB) + Cable Loss (dB) – Distance Correction Factor

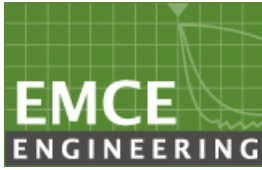
1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
2. A negative margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
3. Radiated Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, is +/-4.77 dB.
4. Environmental Conditions

Temperature	24°C
Relative Humidity	45%
Atmospheric Pressure	1010mbar

Test Date : 10/29/15

Tested By : Bob Cole

Results: Pass



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FCC Part 15.209 Radiated Emissions 9 kHz – 30 MHz

Test Location: EMCE Engineering • 44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: **FullPower**
Specification: **15.209 9k-30M FCC Limits 10M**
Work Order #: **4170**
Test Type: **Radiated Scan**
Equipment: **SleepTracker**
Manufacturer: Fullpower Technologies
Model: STS-10
S/N: N/A

Date: 10/29/2015
Time: 14:34:34
Sequence#: 1
Tested By: Bob Cole

Equipment Under Test (* = EUT):

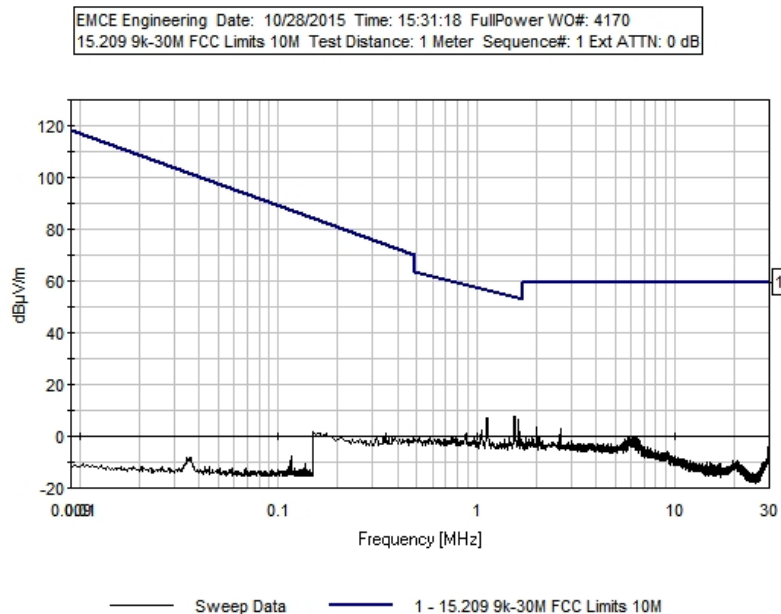
Function	Manufacturer	Model #	S/N
SleepTracker	Fullpower Technologies	STS-10	N/A

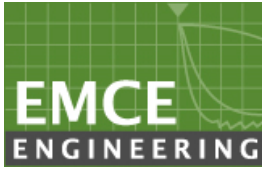
Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

No Signals Within 20 dB of Limit





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5.5 Radiated Emissions > 30 MHz (30MHz – 1 GHz, E-Field)

Requirement(s): 47 CFR §15.209; 47 CFR §15.223(d) & RSS-210 (A2.3)

Procedures: **For > 30MHz,** Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power. The EUT was set 10 meter away from the measuring antenna. The Log periodic antenna was positioned 1 meter above the ground from the centre of the antenna. The measuring bandwidth was set to 120 kHz. (Note: During testing the receive antenna was raised from 1~4 meters to maximize the emission from the EUT.)

The limit is converted from microvolt/meter to decibel microvolt/meter.

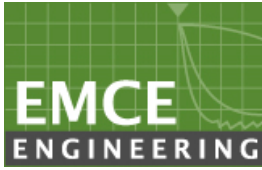
Sample Calculation: Corrected Amplitude = Raw Amplitude (dBμV/m) + ACF (dB) + Cable Loss(dB) – Distance Correction Factor

1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
2. A “-ve” margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
3. Radiated Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, is +/-4.96dB.
4. Environmental Conditions Temperature 25.5°C
 Relative Humidity 41.4%
 Atmospheric Pressure 1074mbar

Test Date : 10/16/15

Tested By : Bob Cole

Results: Pass



FCC ID: 2AF20-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

FCC Part 15B Radiated Emissions
30 MHz – 1 GHz
Horizontal Polarization

Test Location: EMCE Engineering • 44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: **FullPower**
Specification: **FCC B RADIATED 1 GHz**
Work Order #: **4170**
Test Type: **Radiated Scan**
Equipment: **SleepTracker**
Manufacturer: Fullpower Technologies
Model: STS-10
S/N: N/A

Date: 10/16/2015
Time: 15:57:56
Sequence#: 9
Tested By: Bob Cole

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
SleepTracker	Fullpower Technologies	STS-10	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
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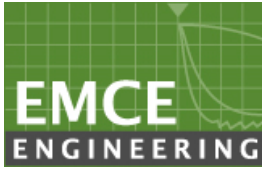
Test Conditions / Notes:

Reworked PCB A - 2 Sensors

Transducer Legend:

T1=8447 Pre-Amp Asset 377	T2=Sunol JB6 S/N A42610
T3=25' LMR #001	

Ext Attn: 0 dB



FCC ID: 2AF2O-SAS-10
IC: 20700-SAS-10

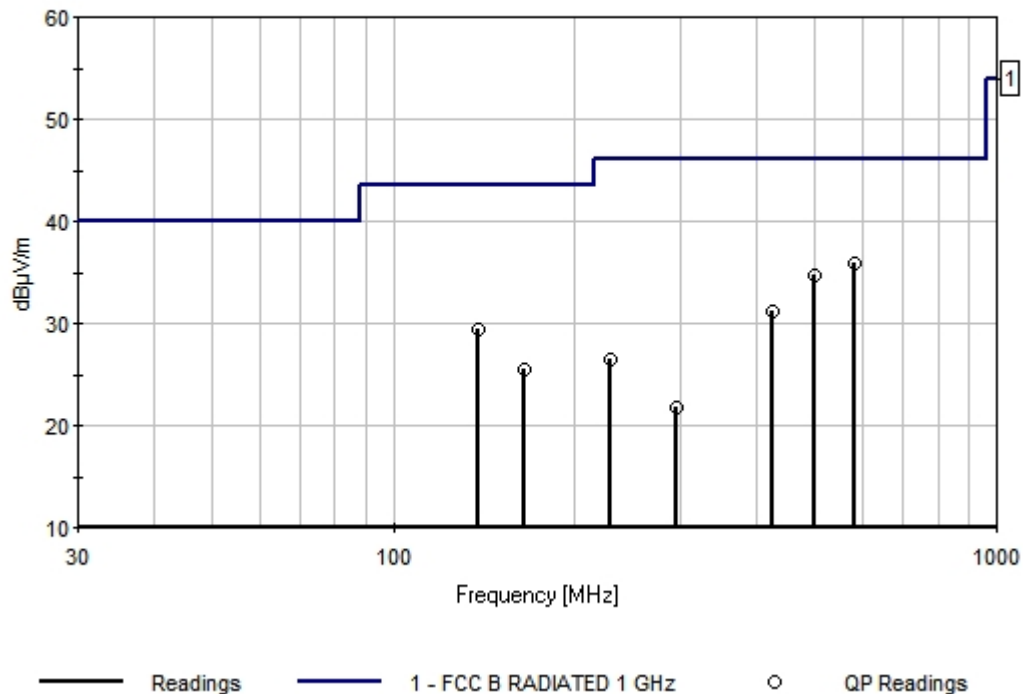
Test Report # 4170-1
Dated: 11/3/15

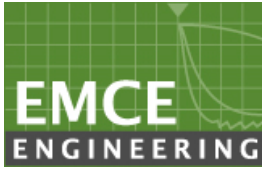
Measurement Data: Reading listed by margin.

Test Distance: 10 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	582.960M QP	33.4	+27.0	+19.0	+0.5		+10.0 180	35.9	46.0	-10.1	Horiz 150
2	499.930M QP	33.4	+26.9	+17.9	+0.4		+10.0 154	34.8	46.0	-11.2	Horiz 145
3	138.656M QP	32.8	+26.7	+13.2	+0.1		+10.0 154	29.4	43.5	-14.1	Horiz 150
4	425.860M QP	31.5	+26.9	+16.3	+0.3		+10.0 154	31.2	46.0	-14.8	Horiz 150
5	165.050M QP	30.0	+26.8	+12.1	+0.1		+10.0 210	25.4	43.5	-18.1	Horiz 122
6	229.359M QP	32.2	+26.9	+11.1	+0.1		+10.0 352	26.5	46.0	-19.5	Horiz 118
7	294.363M QP	25.1	+27.0	+13.5	+0.1		+10.0 180	21.7	46.0	-24.3	Horiz 118

EMCE Engineering Date: 10/16/2015 Time: 15:57:56 FullPower WO#: 4170
FCC B RADIATED 1 GHz Test Distance: 10 Meters Sequence#: 9 Ext ATTN: 0 dB





FCC ID: 2AF20-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

FCC Part 15B Radiated Emissions
30 MHz – 1 GHz
Vertical Polarization

Test Location: EMCE Engineering • 44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: **FullPower**
Specification: **FCC B RADIATED 1 GHz**
Work Order #: **4170**
Test Type: **Radiated Scan**
Equipment: **SleepTracker**
Manufacturer: Fullpower Technologies
Model: STS-10
S/N: N/A

Date: 10/16/2015
Time: 15:39:42
Sequence#: 10
Tested By: Bob Cole

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
SleepTracker	Fullpower Technologies	STS-10	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
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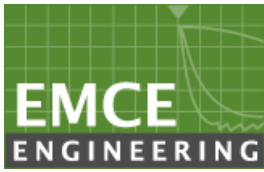
Test Conditions / Notes:

Reworked PCB A - 2 Sensors

Transducer Legend:

T1=8447 Pre-Amp Asset 377	T2=Sunol JB6 S/N A42610
T3=100' LMR 900 Rad Cable	

Ext Attn: 0 dB



FCC ID: 2AF2O-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

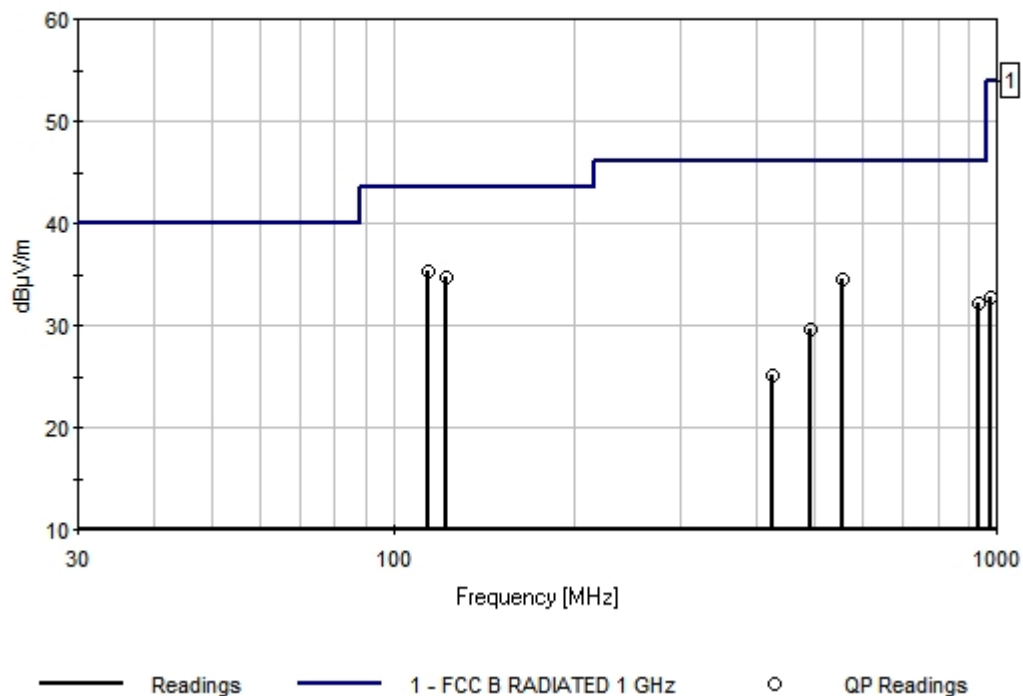
Measurement Data:

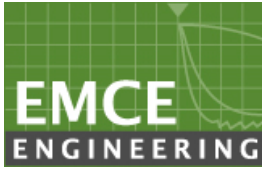
Reading listed by margin.

Test Distance: 10 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	114.409M QP	39.1	+26.8	+13.0	-0.1		+10.0 180	35.2	43.5	-8.3	Vert 120
2	122.324M QP	38.1	+26.7	+13.4	-0.1		+10.0 170	34.7	43.5	-8.8	Vert 122
3	557.047M QP	32.3	+27.0	+18.2	+1.1		+10.0 180	34.6	46.0	-11.4	Vert 142
4	937.009M QP	24.6	+26.9	+22.4	+2.1		+10.0	32.2	46.0	-13.8	Vert 122
5	491.384M QP	27.8	+26.9	+17.8	+0.9		+10.0 90	29.6	46.0	-16.4	Vert 120
6	426.052M QP	24.9	+26.9	+16.3	+0.8		+10.0 180	25.1	46.0	-20.9	Vert 128
7	980.641M QP	24.2	+26.8	+22.8	+2.5		+10.0	32.7	54.0	-21.3	Vert 122

EMCE Engineering Date: 10/16/2015 Time: 15:39:42 FullPower WO#: 4170
FCC B RADIATED 1 GHz Test Distance: 10 Meters Sequence#: 10 Ext ATTN: 0 dB





FCC ID: 2AF2O-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

5.7 Occupied Bandwidth (99%)

Requirement(s): RSS-210 (5.9.1)

Procedures: Occupied Bandwidth was measured according to RSS-210 (5.9.1). Measurement was taken with spectrum analyzer. The spectrum analyzer bandwidth and span was set to read in hertz.

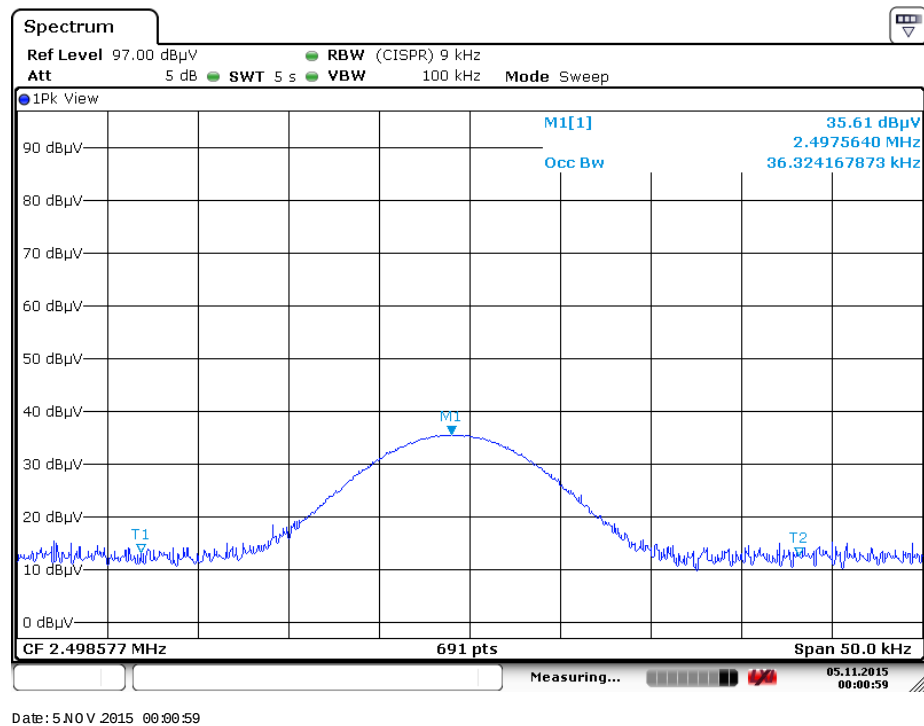
Environmental Conditions	Temperature	24.4°C
	Relative Humidity	51.6%
	Atmospheric Pressure	101026mbar

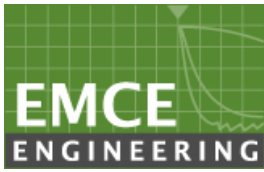
Test Date : 10/29/15

Tested By : Bob Cole

Results: Pass

Frequency	Occupied Bandwidth (99%)
2.497 MHz	36.32 kHz





FCC ID: 2AF2O-SAS-10
IC: 20700-SAS-10

Test Report # 4170-1
Dated: 11/3/15

6.0 TEST EQUIPMENT

Line Conducted Emissions Measurements:

Equipment	Type	Manufacturer	Calibration Date	Calibration Due Date
Spectrum Analyzer	FSV40	Rohde & Schwarz	7/27/14	7/27/16
Transient Limiter	11947A	Hewlett-Packard	5/2/15	5/2/17
Cable	N – N, 25 ft	LMR	5/10/15	5/10/17

Radiated Emissions Measurements:

Equipment	Type	Manufacturer	Calibration Date	Calibration Due Date
Spectrum Analyzer	FSV40	Rohde & Schwarz	7/27/14	7/27/16
Antenna	JB6 BiConiLog	Sunol Sciences	2/17/15	2/17/17
Loop Antenna	LP-105	Empire Devices	10/27/15	10/27/17
Cable	N – N, 100 ft	LMR	5/10/15	5/10/17