November 2, 2011

KATAMY Corporation
302 E. Ohmer Rd., Mayville, Michigan, 48744, United States

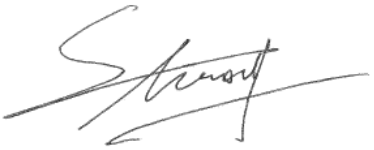
Dear Jim R Brozovich,

Enclosed you will find your file copy of a Part 15 Certification (FCC ID: Z4Y-KINGPOLAR211R).

For your reference, TCB review normally takes 1 week. Approval will then be granted when no query is sorted.

Please contact me if you have any questions regarding the enclosed material.

Sincerely,



Shawn Xing
Manager

Enclosure

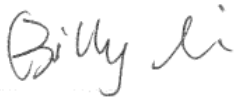
Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

KATAMY Corporation

Application
For
Certification
(FCC ID: Z4Y-KINGPOLAR211R)

Superregenerative Receiver

Sample Description: Display Device
Model: ACC147
Additional Model: ACC163, ACC189



SZ11090259-2
Billy Li
November 2, 2011

TRF no.: FCC 15C_RX-Sra
FCC ID: Z4Y-KINGPOLAR211R

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LIST OF EXHIBITS

MEASUREMENT/TECHNICAL REPORT

KATAMY Corporation - MODEL: ACC147
Additional Model: ACC163, ACC189
FCC ID: Z4Y-KINGPOLAR211R

This report concerns (check one:) Original Grant __X__ Class II Change _____

Equipment Type: Superregenerative Receiver

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes_____ No__X__

If yes, defer until: _____ date

Company Name agrees to notify the Commission by: _____ date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes_____ No__X__

If no, assumed Part 15, Subpart B for unintentional radiator - the new 47 CFR [10-1-10 Edition] provision.

Report prepared by:

Shawn Xing
Intertek Testing Services Shenzhen Ltd.
Kejiyuan Branch
6/F, Block D, HuaHan Building, Longshan Road, Nanshan District, Shenzhen, China.
Phone: (86 755) 86016288
Fax: (86 755) 86016751

Table of Contents

List of attached file

Exhibit type	File Description	filename
Test Report	Test Report	report.pdf
Operation Description	Technical Description	descri.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
Test Setup Photo	Conducted Emission	conducted photos.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Test Report	Stabilization Waveform	superreg.pdf
Cover Letter	Letter of Agency	agency.pdf

EXHIBIT 1

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

The equipment under test (EUT) is a receiver for a Display Device operating at 433.93 MHz. The EUT is power by 2 x 6Vdc Lead-acid rechargeable batteries or powered by ac/dc adapter (Input: 100-240Vac, 50/60Hz; Output: 13.8Vdc, 0.8A). The EUT will emit an audible beep & flash light when the user presses the corresponding one of the two keys of the transmitter.

The Model: ACC163, ACC189 are the same as the Model: ACC147 in hardware aspect. The models are difference in packaging and marketing purpose only.

Antenna Type: Integral Antenna.

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is a single application for certification of a receiver. The transmitter, associated with this receiver, has FCC ID: Z4Y-KINGPOLAR113T and has been filed at the same time.

1.3 Test Methodology

Radiated emission measurement was performed according to the procedures in ANSI C63.4 (2003). All radiated measurements were performed in a Semi-anechoic Chamber. Preliminary scans were performed in the Semi-anechoic Chamber only to determine worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the **"Justification Section"** of this Application.

1.4 Test Facility

The Semi-anechoic facility used to collect the radiated data is **Interterk Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC.

EXHIBIT 2

SYSTEM TEST CONFIGURATION

2.0 System Test Configuration

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.4 (2003).

The device was powered from Full charging 2 x 6Vdc Lead-acid rechargable batteries or powered by ac/dc adapter (Input: 100-240Vac, 50/60Hz; Output: 13.8Vdc, 0.8A) when testing.

For maximizing emissions, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. The step by step procedure for maximizing emissions led to the data reported in Exhibit 3.0.

The unit was operated with ac/dc adapter and placed at the edge of the turntable.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was mounted to a cardboard box, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

2.2 EUT Exercising Software

There was no special software to exercise the device. Once the unit is powered up, it received continuously.

2.3 Special Accessories

There are no special accessories necessary for compliance of this product.

2.4 Equipment Modification

Any modifications installed previous to testing by KATAMY Corporation will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd Kejiyuan Branch.

2.5 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

2.6 Support Equipment List and Description

Description	Manufacturer	Model No.
AC/DC Adapter	KATAMY	Model: 3P10-A1015 Input: 100-240Vac, 50/60Hz; Output: 13.8Vdc, 0.8A

All the items listed under section 2.0 of this report are

Confirmed by:

Shawn Xing
Manager
Intertek Testing Services Shenzhen Ltd Kejiyuan Branch.
Agent for KATAMY Corporation

Signature

November 2, 2011 Date

EXHIBIT 3

EMISSION RESULTS

3.0 **Emission Results**

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CF - AG

where FS = Field Strength in dBµV/m
RA = Receiver Amplitude (including preamplifier) in dBµV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:

FS = RR + LF

where FS = Field Strength in dBµV/m
RR = RA - AG in dBµV
LF = CF + AF in dB

Assume a receiver reading of 52.0 dBµV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB are added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dBµV/m. This value in dBµV/m was converted to its corresponding level in µV/m.

RA = 52.0 dBµV/m
AF = 7.4 dB RR = 23.0 dBµV
CF = 1.6 dB LF = 9.0 dB
AG = 29.0 dB
FS = RR + LF
FS = 23 + 9 = 32 dBµV/m

Level in µV/m = Common Antilogarithm [(32 dBµV/m)/20] = 39.8 µV/m

3.2 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
at
433.820 MHz

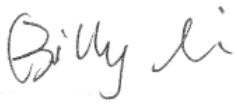
For electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.doc.

3.3 Radiated Emission Data

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgement: Passed by 4.5 dB

TEST PERSONNEL:



Signature

Billy Li, Team Leader
Typed/Printed Name

November 2, 2011
Date

Applicant: KATAMY Corporation Date of Test: November 2, 2011
Model: ACC147
Test Mode: Receive

Table 1

FCC Class B Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
H	433.600	39.4	20.0	16.5	35.9	46.0	-10.1
H	433.713	43.3	20.0	16.5	39.8	46.0	-6.2
H	433.820	44.9	20.0	16.6	41.5	46.0	-4.5
H	434.040	44.5	20.0	16.6	41.1	46.0	-4.9
H	434.150	42.1	20.0	16.7	38.8	46.0	-7.2
H	434.263	38.5	20.0	16.7	35.2	46.0	-10.8
H	435.368	31.4	20.0	25.3	36.7	46.0	-9.3
H	864.382	33.4	20.0	25.5	38.9	46.0	-7.1
H	869.658	30.7	20.0	26.1	36.8	46.0	-9.2

NOTES:
1. Peak Detector Data unless otherwise stated.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative sign in the column shows value below limit.
4. All emissions below 1000MHz are below the QP limit and all emissions above 1000MHz are below the AV limit.
5. Peak detector was used when the frequency above 1000MHz.

Test Engineer: Billy Li

3.4 Conducted Emissions Configuration Photograph

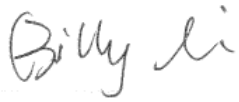
For electronic filing, the worst case conducted emission configuration photograph is saved with filename: conducted photo.pdf.

3.5 Conducted Emissions Data

Worst Case Neutral-Conducted Configuration
at
3.894 MHz

Judgement: Passed by 4.6 dB margin

TEST PERSONNEL:



Billy Li, Team Leader
Typed/Printed Name

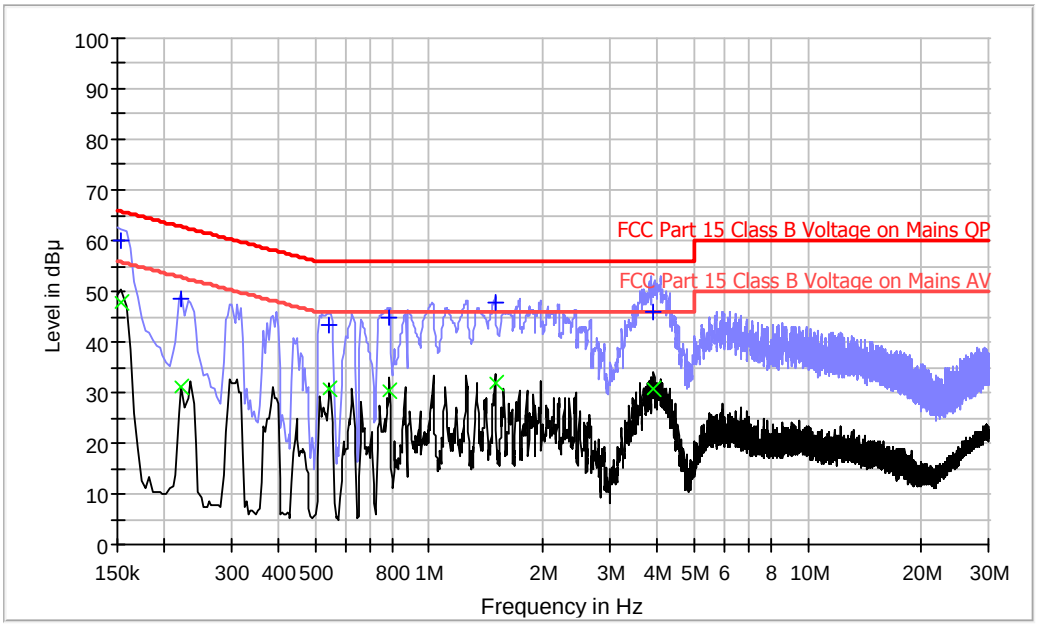
November 2, 2011
Date

Applicant: KATAMY Corporation
Model: ACC147
Test Mode: Receive

Date of Test: November 2, 2011

Graph & Table 2
Conducted Emissions

Live Line



Result Table QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.154	59.8	L1	9.6	6.0	65.8
0.222	48.6	L1	9.7	14.1	62.7
0.542	43.5	L1	9.6	12.5	56.0
0.786	44.7	L1	9.7	11.3	56.0
1.494	47.6	L1	9.7	8.4	56.0
3.922	45.8	L1	9.8	10.2	56.0

Result Table AV

Frequency (MHz)	CAverage (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.154	47.8	L1	9.6	8.0	55.8
0.222	31.1	L1	9.7	21.6	52.7
0.542	30.8	L1	9.6	15.2	46.0
0.786	30.3	L1	9.7	15.7	46.0
1.494	31.9	L1	9.7	14.1	46.0
3.922	30.8	L1	9.8	15.2	46.0

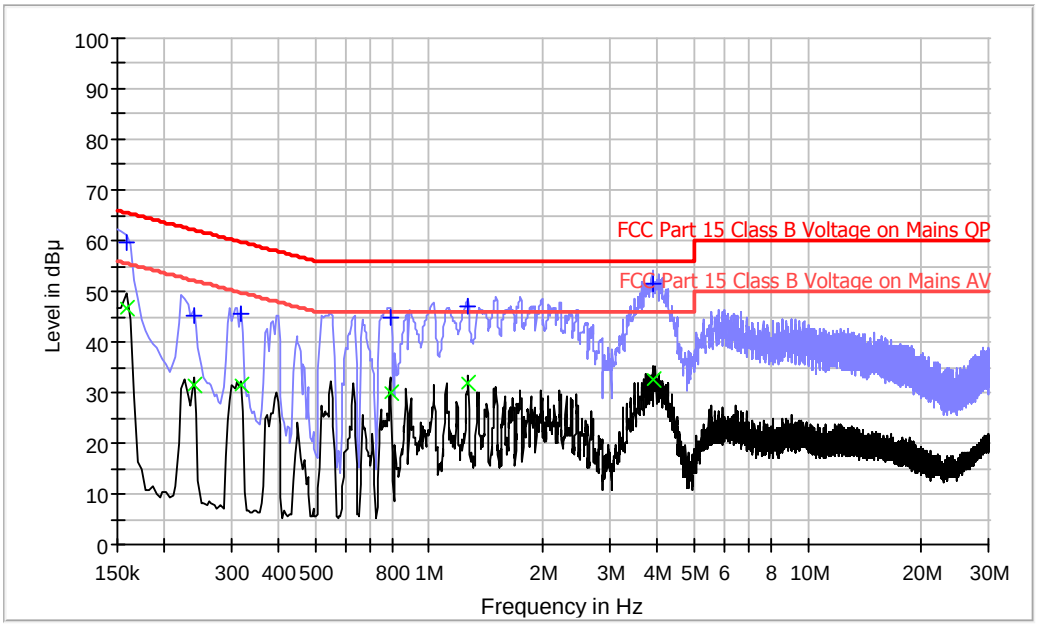
Test Engineer: Billy Li

Applicant: KATAMY Corporation
Model: ACC147
Test Mode: Receive

Date of Test: November 2, 2011

Graph & Table 3
Conducted Emissions

Neutral Line



Result Table QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.158	59.7	N	9.6	5.9	65.6
0.238	45.2	N	9.6	17.0	62.2
0.318	45.7	N	9.7	14.1	59.8
0.790	44.7	N	9.7	11.3	56.0
1.266	47.2	N	9.8	8.8	56.0
3.894	51.4	N	9.8	4.6	56.0

Result Table AV

Frequency (MHz)	CAverage (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.158	46.6	N	9.6	9.0	55.6
0.238	31.5	N	9.6	20.7	52.2
0.318	31.6	N	9.7	18.2	49.8
0.790	30.1	N	9.7	15.9	46.0
1.266	31.8	N	9.8	14.2	46.0
3.894	32.5	N	9.8	13.6	46.0

Test Engineer: Billy Li

EXHIBIT 4

EQUIPMENT PHOTOGRAPHS

4.0 Equipment Photographs

For electronic filing, the photographs are saved with filename: external photos.doc and internal photos.doc.

EXHIBIT 5

PRODUCT LABELLING

5.0 **Product Labelling**

For electronics filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

EXHIBIT 6

TECHNICAL SPECIFICATIONS

6.0 Technical Specifications

For electronic filing, the block diagram and schematic of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

EXHIBIT 7

INSTRUCTION MANUAL

7.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

EXHIBIT 8

MISCELLANEOUS INFORMATION

8.0 Miscellaneous Information

This miscellaneous information includes details of the stabilizing process (including a plot of the stabilized waveform) and the test procedure.

8.1 Stabilization Waveform

Previous to the testing, the superregenerative receiver was stabilized as outlined in the test procedure. For the electronic filing, the plot saved with filename: superreg.pdf shows the fundamental emission when a signal generator was used to stabilize the receiver. Please note that the antenna was placed as close as possible to the EUT for clear demonstration of the waveform and that accurate readings are not possible from this plot.

8.2 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services Shenzhen Ltd. Kejiyuan Brach in the measurements of superregenerative receivers operating under the Part 15, Subpart B rules.

The test set-up and procedures described below are designed to meet the requirements of ANSI C63.4 - 2003. Superregenerative receivers are stabilized prior to measurement by generating a signal well above the receiver threshold whose frequency is tuned until the emissions stabilize into a line spectrum. The signal is usually generated as CW with a R&S SML03 signal generator and a short whip antenna and is at a level of several hundred to several thousand mV/m. Plots of the stabilized signal will be shown. If a modulated signal is used, it will be noted.

The equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately one meter in height above the groundplane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axis to obtain maximum emission levels. The antenna height and polarization are also varied during the testing to search for maximum signal levels. The height of the antenna is varied from one to four meters.

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings.

The frequency range scanned is from 30MHz to 2000MHz. For line conducted emissions, the range scanned is 150 kHz to 30 MHz.

8.2 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements were made as described in ANSI C63.4 - 2003.

The IF bandwidth used for measurement of radiated signal strength was 100 kHz or greater when frequency is below 1000 MHz. Above 1000 MHz, a resolution bandwidth of 1 MHz is used.

Measurements are normally conducted at a measurement distance of three meters. All measurements are extrapolated to three meters using inverse scaling, unless otherwise reported. Measurements taken at a closer distance are so marked.

EXHIBIT 9

TEST EQUIPMENT LIST

9.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ061-03	BiConiLog Antenna	ETS	3142C	00066460	02-Jul-11	02-Jul-12
SZ061-08	Horn Antenna	ETS	3115	00092346	15-Oct-11	15-Oct-12
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	17-May-11	17-May-12
SZ185-01	EMI Receiver	R&S	ESCI	100547	08-Mar-11	08-Mar-12
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	06-Mar-11	06-Mar-12
SZ062-02	RF Cable	RADIALL	RG 213U	--	24-Sep-11	24-Mar-12
SZ062-06	RF Cable	RADIALL	0.04-26.5GHz	--	03-Sep-11	03-Mar-12
SZ056-03	Spectrum Analyzer	R&S	FSP 30	101148	08-Mar-11	08-Mar-12
SZ187-01	LISN	R & S	ENV216	100072	12-Nov-10	12-Nov-11
SZ187-02	LISN	R & S	ENV216	100073	12-Nov-10	12-Nov-11
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	12-Nov-10	12-Nov-11
SZ188-03	Shielding Room	ETS	RFD-100	4100	10-Sep-11	10-Sep-12
SZ180-01	Signal Generator	R&S	SML03	103286	08-Mar-11	08-Mar-12
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	08-Mar-11	08-Mar-12