



**F2 Labs**  
16740 Peters Road  
Middlefield, Ohio 44062  
United States of America  
[www.f2labs.com](http://www.f2labs.com)

## CERTIFICATION TEST REPORT

**Manufacturing Address:** Beijing Jia An Electronics Technology Co., Ltd.  
No. 19 Gu Cheng West Street  
Shi Jing Shan District  
Beijing 100043, China

**Applicant:** BEA Incorporated  
RIDC Park West  
100 Enterprise Drive  
Pittsburgh, Pennsylvania 15275 USA

**Product Name:** 900 MHz Touchless Retrofit Transmitter

**Product Description:** Transmitter operating in the ISM band (902-928) MHz, compatible with BEA 10RD900 Receiver, implementing frequency hopping, intended to be connected (retrofit) to touchless pushplates to allow wireless door activation in the pedestrian automatic door industry.

**Model(s):** **10TD900TR**

**FCC ID:** **2ABWS-10TD900TR**

**Testing Commenced:** Feb. 9, 2016

**Testing Ended:** May 5, 2016

**Summary of Test Results:** In Compliance

The EUT complies with the FCC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

**Standards:**

- ❖ **FEDERAL REGISTER CFR 47, PART 15 – RADIO FREQUENCY DEVICES**
  - Part 15 Subpart C, Section 15.231 - Periodic operation in the band 40.66–40.70 MHz and above 70 MHz
  - Part 15 Subpart C, Section 15.209 - Radiated emissions limits; general requirements
  - Part 15 Subpart C, Section 15.35 - Measurement detector functions and bandwidths
  - Part 15 Subpart C, Section 15.207 - Conducted Limits
- ❖ **ANSI C63.10:2013 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz**

**Evaluation Conducted by:**

Joe Knepper, EMC Proj. Eng.

**Report Reviewed by:**

Ken Littell, Director of EMC &amp; Wireless Operations

F2 Labs  
26501 Ridge Road  
Damascus, MD 20872  
Ph 301.253.4500  
Fax 301.253.5179

F2 Labs  
16740 Peters Road  
Middlefield, OH 44062  
Ph 440.632.5541  
Fax 440.632.5542

This test report may be reproduced in full; partial reproduction only may be made with the written consent of F2 Labs. The results in this report apply only to the equipment tested.



## TABLE OF CONTENTS

Section	Title	Page
1	ADMINISTRATIVE INFORMATION	4
2	SUMMARY OF TEST RESULTS/MODIFICATIONS	5
3	ENGINEERING STATEMENT	6
4	EUT INFORMATION AND DATA	7
5	LIST OF MEASUREMENT INSTRUMENTATION	8
6	FCC PART 15.231(a)(1)	9
7	FCC PART 15.231(b)	16
8	FCC PART 15.231(b)(3)(c)	29
9	FCC PART 15.35(c)	33
10	FCC PART 15.207(a)	37
11	PHOTOGRAPHS	40



## 1 ADMINISTRATIVE INFORMATION

### 1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

### 1.2 Measurement Procedure:

All measurements were performed according to the 2013 version of ANSI C63.10 and recommended FCC procedure of measurement for Intermittent Transmitters and Receivers operating under Section 15.231. A list of the measurement equipment can be found in Section 6.

### 1.3 Uncertainty Budget:

The uncertainty in EMC measurements arises from several factors which affect the results, some associated with environmental conditions in the measurement room, the test equipment being used and the measurement techniques adopted.

The measurement uncertainty budgets detailed below are calculated from the test and calibration data, and are expressed with a 95% confidence factor. Note: Only measurements listed below which relate to tests included in this Test Report are applicable to it.

Measurement Range	Expanded Uncertainty	Combined Uncertainty
Radiated Emissions <1 GHz @ 3m	±5.07dB	±2.54
Radiated Emissions <1 GHz @ 10m	±5.09dB	±2.55
Radiated Emissions 1 GHz to 2.7 GHz	±3.62dB	±1.81
Radiated Emissions 2.7 GHz to 18 GHz	±3.10dB	±1.55
AC Power Line Conducted Emissions, 150kHz to 30 MHz	±2.76dB	±1.38

This Uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 1.4 Document History

Document Number	Description	Issue Date	Approved By
F2LQ8134-01E	First Issue	June 6, 2016	K. Littell



## 2 SUMMARY OF TEST RESULTS

Standard(s)	Results
CFR 47 Part 15.231(a)(1)	Complies
CFR 47 Part 15.231(b) / Part 15.209	Complies
CFR 47 Part 15.231(b)(3)(c)	Complies
CFR 47 Part 15.31	Complies*
CFR 47 Part 15.207(a)	Complies

*\*To meet the requirements of 15.31, voltage was varied 85% and 115% of rated supply voltage and EUT showed no change in field strength. Worst case voltage was 100% of rated supply voltage and the data following was taken at 100%.*

Modifications Made to the Equipment
No modifications were made to the EUT



Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

### 3 ENGINEERING STATEMENT

This report has been prepared on behalf of BEA Incorporated to provide documentation for the testing described herein. This equipment has been tested and found to comply with Part 15.231 of the FCC Rules, using ANSI C63.10:2013 standards, with the modifications noted in Section 2 of this Test report. The test results found in this test report relate only to the items tested.



## 4 EUT INFORMATION AND DATA

### 4.1 Equipment Under Test:

Product: 9900 MHz Touchless Retrofit Transmitter

Model: 10TD900TR

Serial Nos.: ENG001985, ENG001986, ENG001987

FCC ID: 2ABWS-10TD900TR

### 4.2 Trade Name: BEA Incorporated

### 4.3 Power Supply:

Typical AC Supply.

### 4.4 Applicable Rules:

CFR 47, Part 15.231, subpart C

### 4.5 Equipment Category:

Intermittent Transceiver

### 4.6 Antenna:

Internal wire coil with gain of -2.1 dBi at 908 MHz; -2.4 dBi at 913 MHz; -2.8 dBi at 918 MHz.

### 4.7 Accessories:

N/A

### 4.8 Test Item Condition:

The equipment to be tested was received in good condition.

### 4.9 Testing Algorithm:

The EUT was set up in a normal operating manner, transmitting at low (908 MHz), mid (913 MHz) and high (918 MHz) channels. Powered via a typical AC supply at 120V, 60Hz.



Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

## 5 LIST OF MEASUREMENT INSTRUMENTATION

Equipment Type	Asset Number	Manufacturer	Model	Serial Number	Calibration Due Date
Shielded Chamber	CL166	AlbatrossProjects	B83117-DF435-T261	US140023	June 30, 2016
Shield Room	0175-3V	Ray Proof	N/A	11645	Dec. 16, 2016
Temp/Hum. Recorder	CL137	Extech	RH520	CH16992	June 30, 2016
Spectrum Analyzer	CL138	Agilent Technologies	E4407B	US41192779	Nov. 13, 2016
Receiver	CL151	Rohde & Schwarz	ESU40	100319	Nov. 25, 2016
Antenna 1-Chamber	0142	ETS/EMCO	3142B	9811-1330	Verified
Active 18" Loop Antenna	CL163	A.H. Systems, Inc.	EHA-52B	100	May 2, 2017
Antenna, JB3 Combination	CL175	Sunol Sciences	JB3	A030315	Apr. 1, 2017
Horn Antenna	CL098	Emco	3115	9809-5580	Dec. 10, 2016
Software:	EMC 32, Version 5.20.2			Software Verified: May 5, 2016	
Pre-Amplifier	CL153	Agilent	83006-69007	MY39500900	June 6, 2016
LISN	CL184	Com-Power	LI-125A	191213	June 9, 2018
LISN	CL185	Com-Power	LI-125A	191214	June 9, 2018
Transient Limiter	0202	Hewlett Packard	11947A	3107A00729	Verified
Cable	CL068CM	Times Microwave Systems	CM	None Spec.	Dec. 8, 2016



Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

## 6 FCC PART 15.231(a)(1)

### 6.1 Requirements:

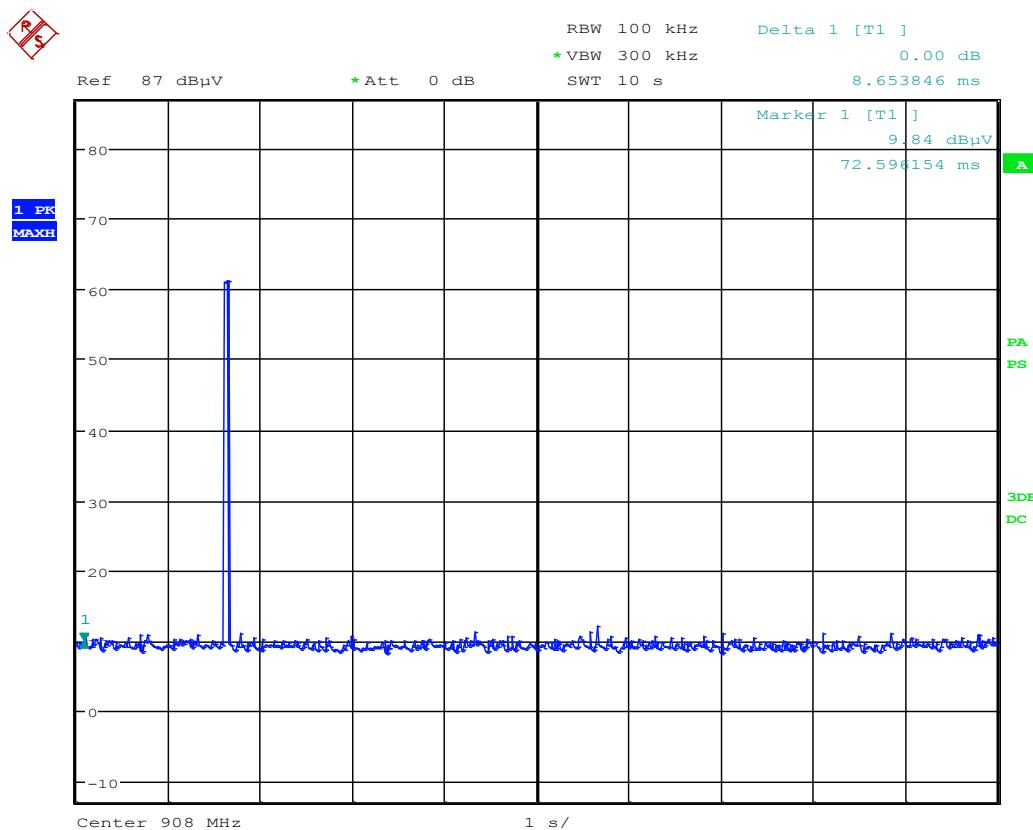
A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter with not more than 5 seconds of being released.

## 6.2 Test Data

<b>Test Date:</b>	Feb. 9, 2016	<b>Test Engineer(s):</b>	J. Knepper
<b>Standards:</b>	CFR 47 Part 15.231(a)(1);	<b>Air Temperature:</b>	19.5°C

### Low Channel

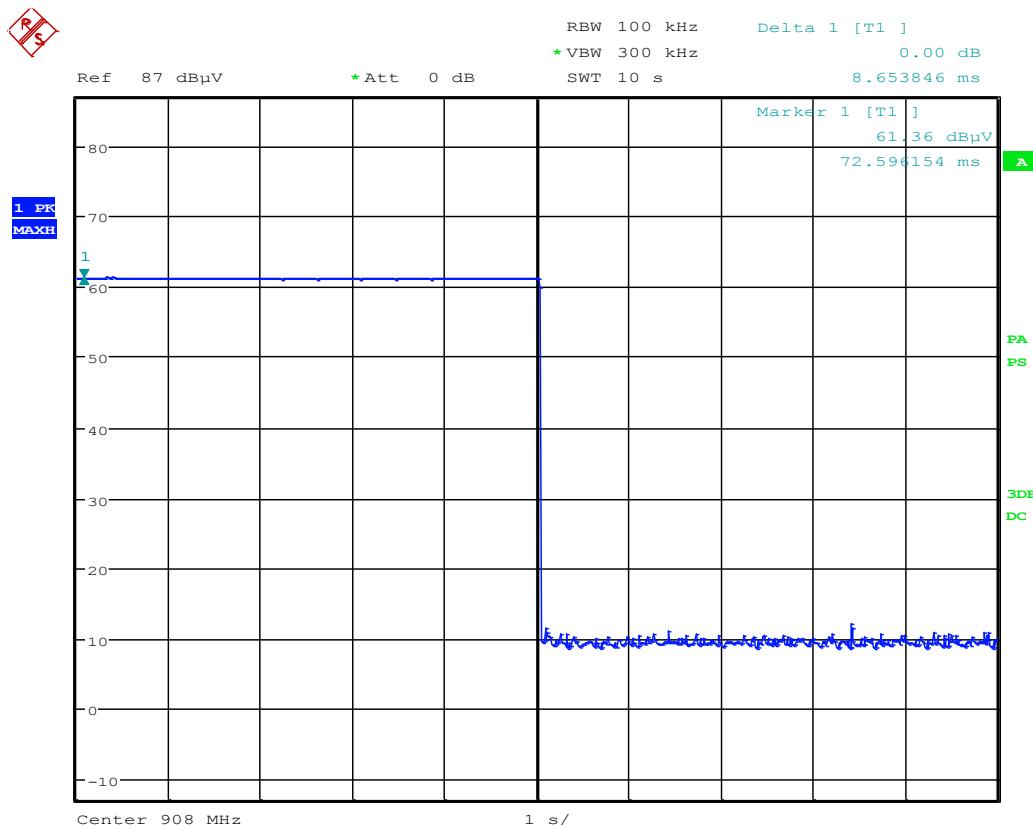
The following plot is of a single press and release of the manual push button. This is to show that the transmission ceased in less than 5 seconds of release.



Date: 9.FEB.2016 10:40:48

### Low Channel, cont'd

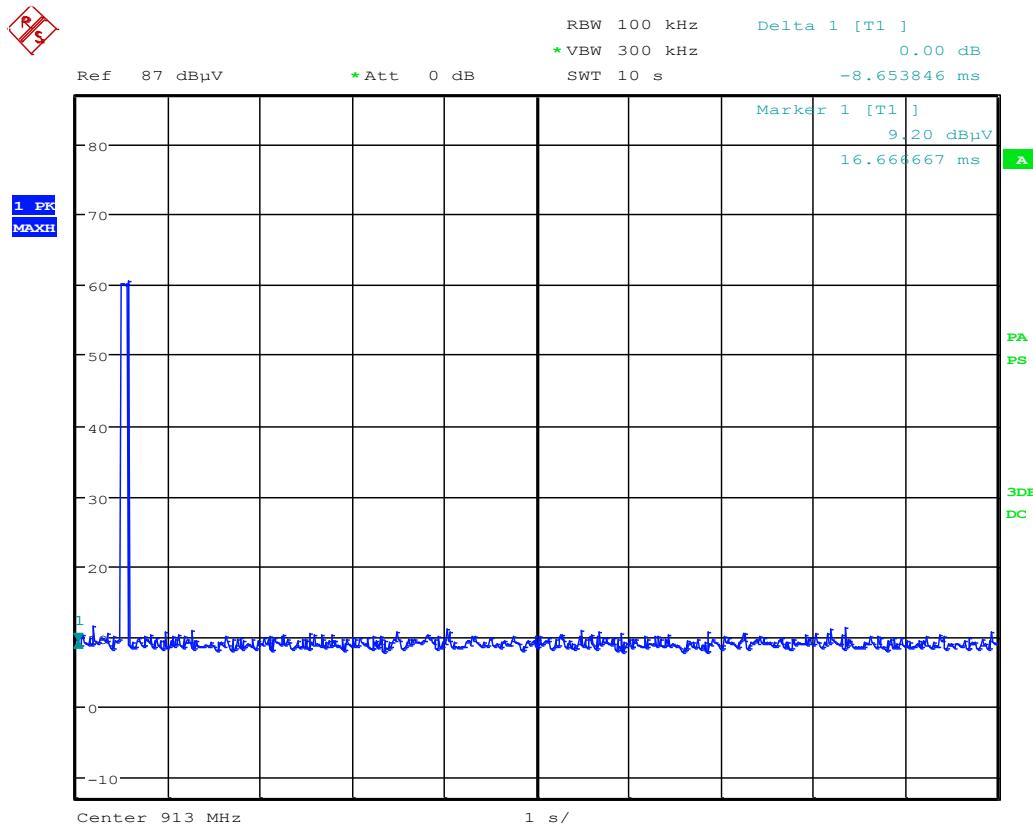
The following plot is of a press and hold for five seconds then release of the manual push button, showing that the transmission ceased prior to 5 seconds of release.



Date: 9.FEB.2016 10:41:43

### Mid Channel

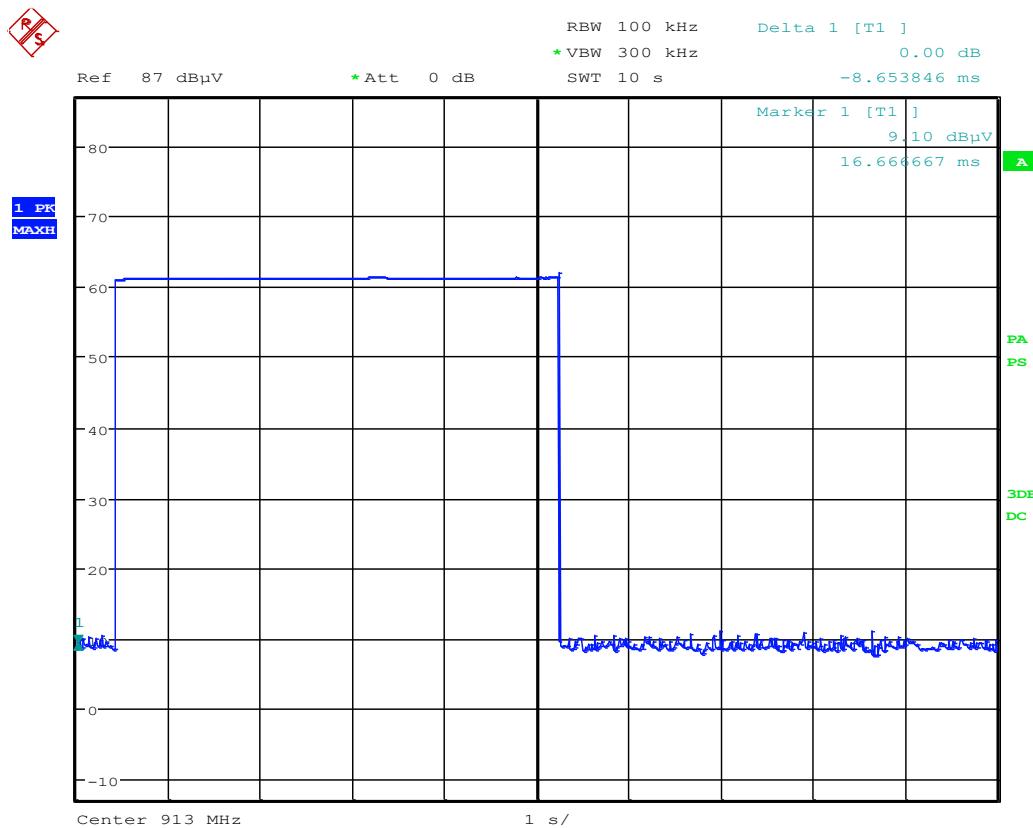
The following plot is of a single press and release of the manual push button, showing that the transmission ceased prior to 5 seconds of release.



Date: 9.FEB.2016 11:15:42

### Mid Channel, cont'd

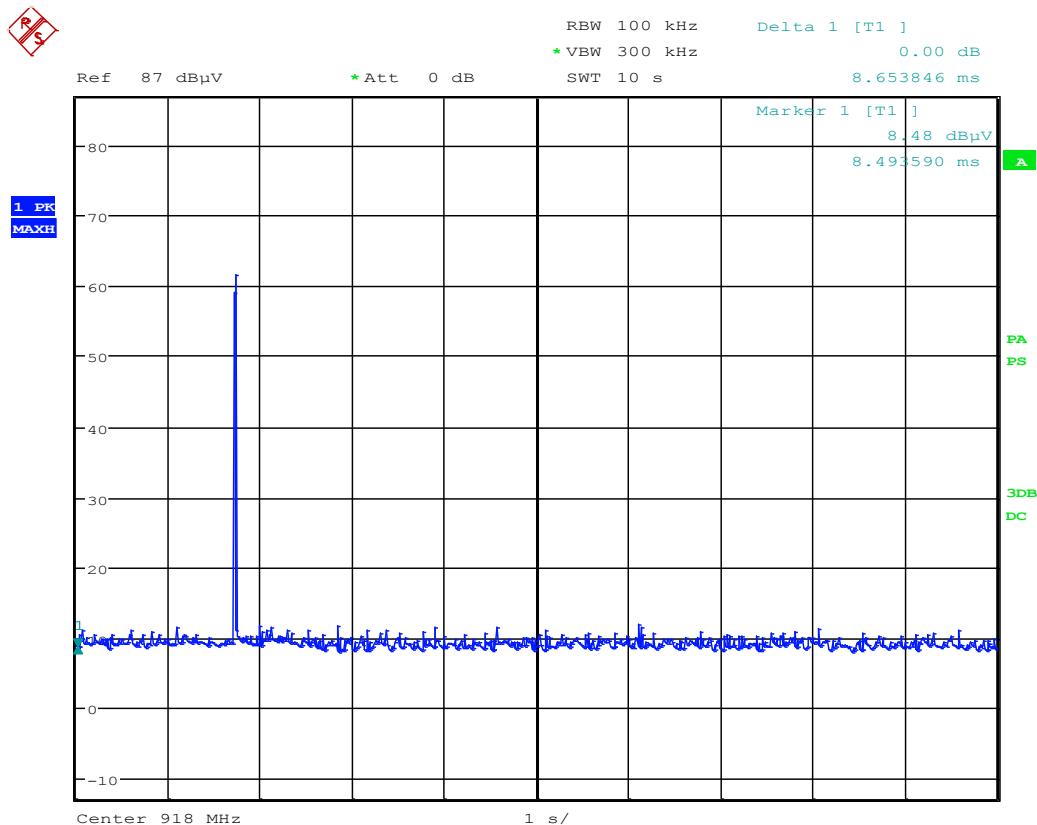
The following plot is of a press and hold for five seconds, then release of the manual push button. This is to show that the transmission ceased in less than 5 seconds of release.



Date: 9.FEB.2016 11:15:27

### High Channel

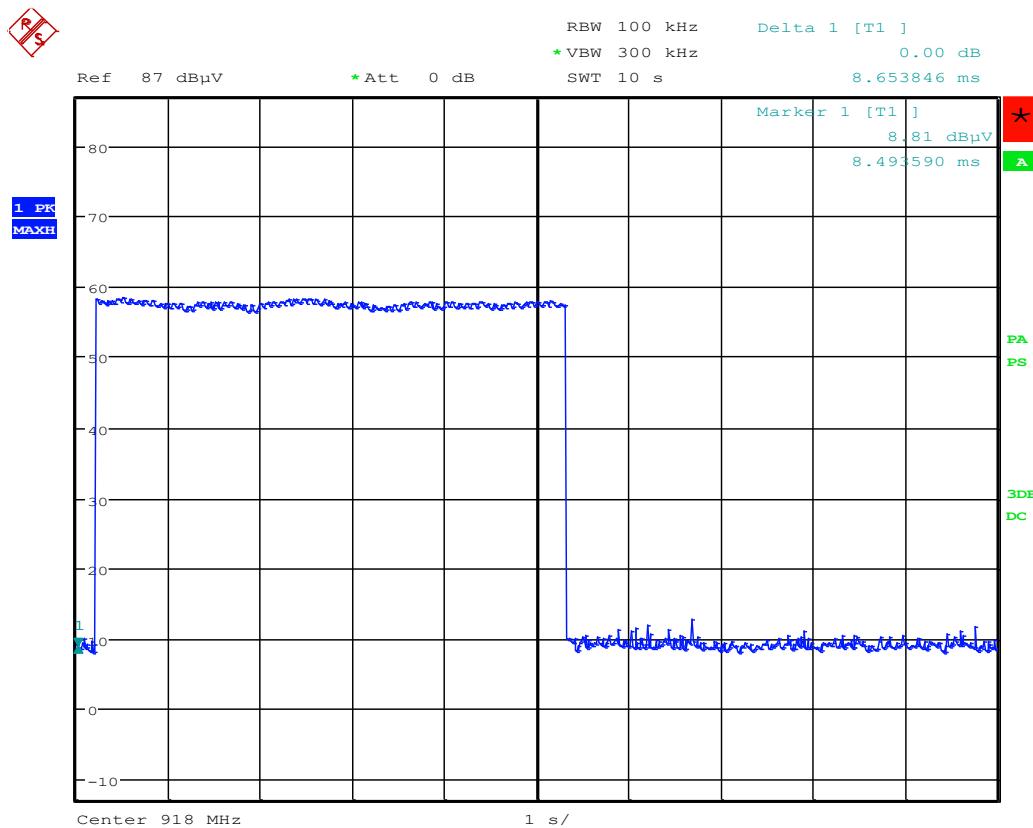
The following plot is of a single press and release of the manual push button, showing that the transmission ceased prior to 5 seconds of release.



Date: 9.FEB.2016 11:31:49

### High Channel, cont'd

The following plot is of a press and hold for five seconds, then release of the manual push button. This is to show that the transmission ceased in less than 5 seconds of release.



Date: 9.FEB.2016 11:32:04



## 7 FCC PART 15.231(b)

### 7.1 Requirements:

Field strength of emissions, fundamental and spurious using quasi peak detector.

Limit for fundamental frequency above 470 MHz is: 12,500  $\mu$ V/m.

Limits for spurious emissions were those specified in 15.209 and 15.231.

While the equipment was energized, the receiving antenna was scanned from 1.0 meter to 4.0 meters in both vertical and horizontal polarities while the turntable was adjusted 360 degrees to determine the maximum field strength.

The equipment was fully exercised and was positioned for maximum emissions in all 3 orthogonal positions with the maximum wire length of 30ft paralleled to the red and black wires that were 1 meter in length, and the typical 7.5 - 8" of wire length for the green and white wires that would go to the touchless plate. The EUT antenna was positioned flat against the plastic tabletop and it was verified, by placing a foam support between the table and the antenna, that the table had no effect on the emissions at these frequency ranges.



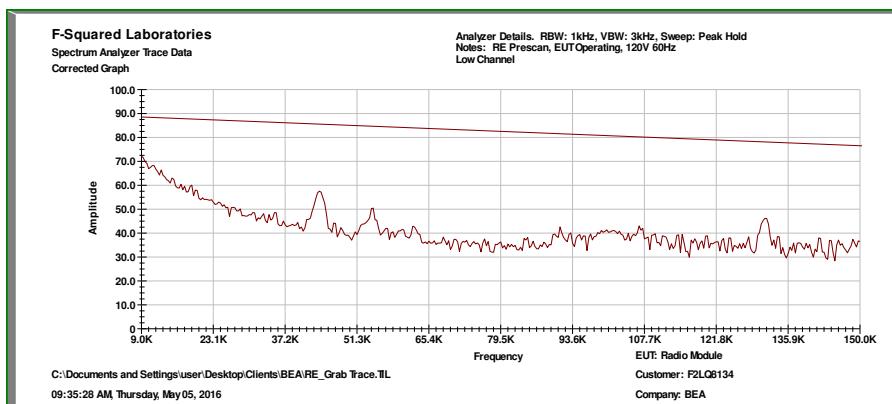
Order Number: F2LQ8134

Client: BEA Incorporated  
Model: 10TD900TR

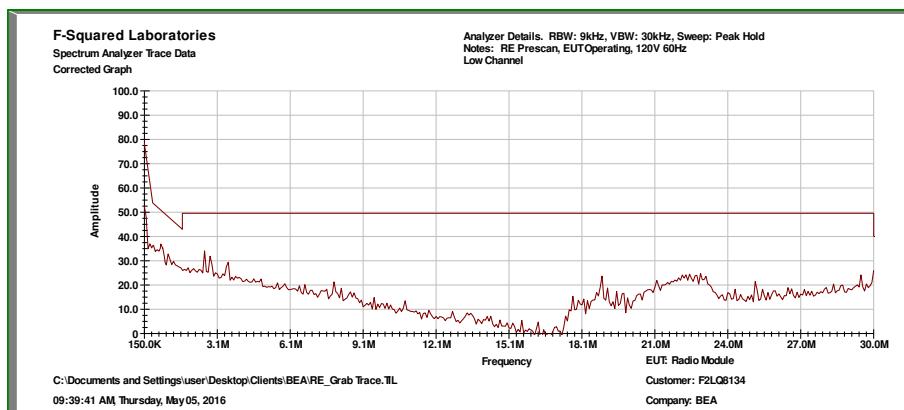
## 7.2 Test Data

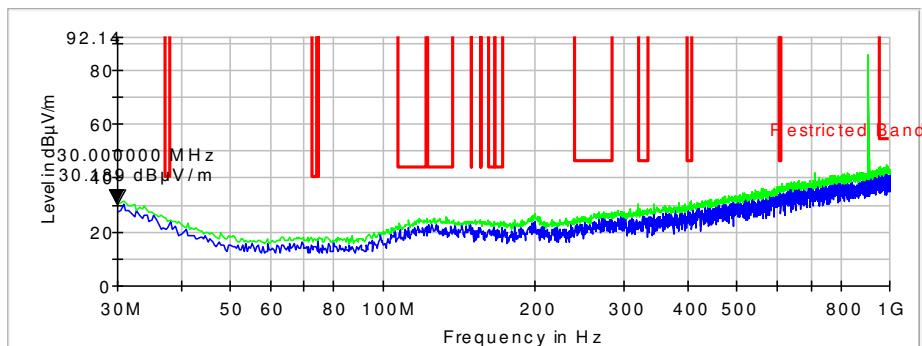
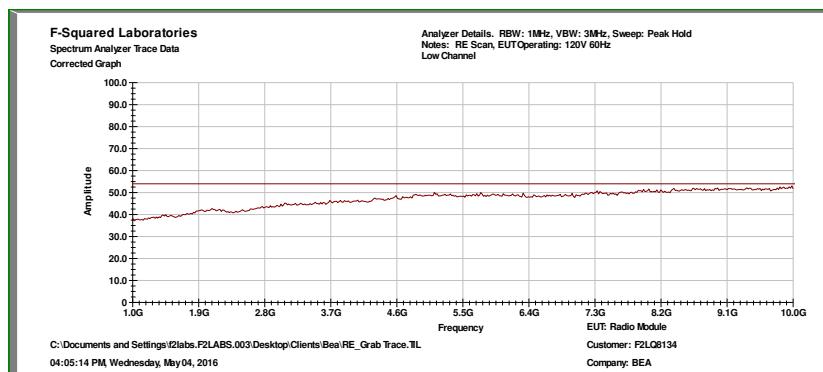
<b>Test Date(s):</b>	May 4-5, 2016	<b>Test Engineer(s):</b>	J. Knepper
<b>Standards:</b>	CFR 47 Part 15.231(b); 15.209; C63.10:2013, Section 13.3	<b>Air Temperature:</b>	21.5°C
		<b>Relative Humidity:</b>	42%

### Low Channel: 9 kHz to 150 kHz

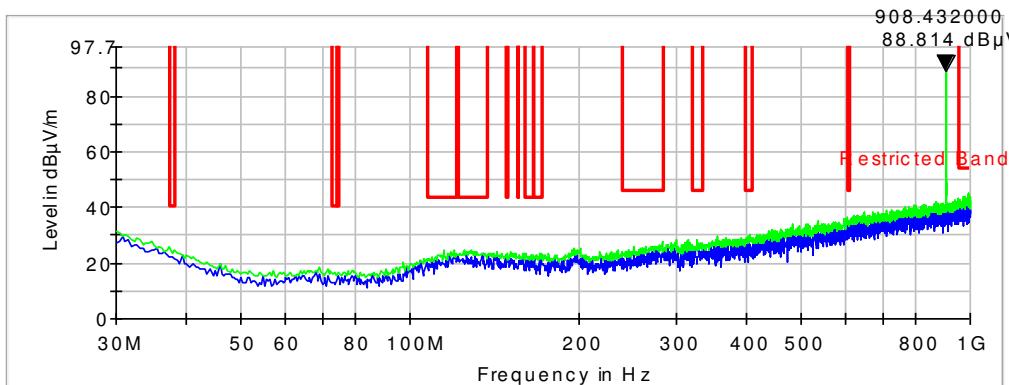


### Low Channel: 150 kHz to 30 MHz

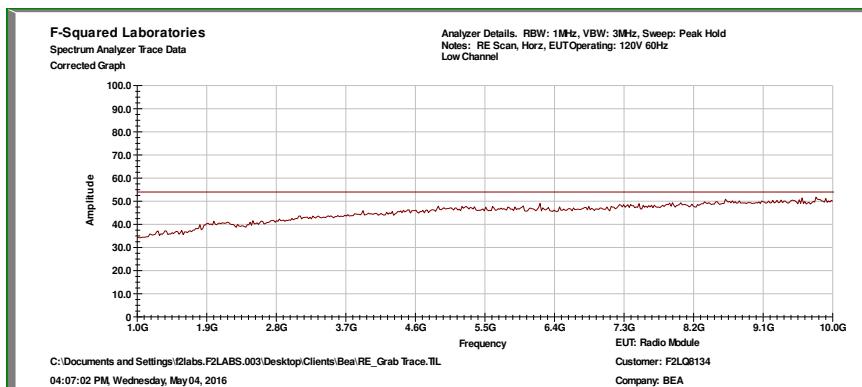


**Low Channel: 30 MHz to 1 GHz, Vertical**

**Low Channel: 1 GHz to 10 GHz, Vertical**


## Low Channel: 30 MHz to 1 GHz, Horizontal



## Low Channel: 1 GHz to 10 GHz, Horizontal





Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

### Low Channel

Frequency (MHz)	Polarity	Corr. (dB)	QuasiPeak (dB $\mu$ V/m)	QuasiPeak (dB $\mu$ V/m) Limit	QuasiPeak Margin	Bandwidth (kHz)
32.328000	H	20.4	18.3	40	-21.7	120.000
33.880000	V	19.2	17.1	40	-22.9	120.000
73.844000	H	8.4	5.9	40	-34.1	120.000
112.256000	V	13.3	17.1	43.52	-26.4	120.000
118.852000	H	14.6	12	43.52	-31.5	120.000
193.348000	H	12.2	11.2	43.52	-32.3	120.000
199.556000	V	13.5	12.4	43.52	-31.1	120.000
902.000000	H	22.9	23.4	46	-22.6	120.000
902.000000	V	22.9	23.5	46	-22.5	120.000
928.000000	V	23.1	23.8	46	-22.2	120.000
928.000000	H	23.1	23.8	46	-22.2	120.000

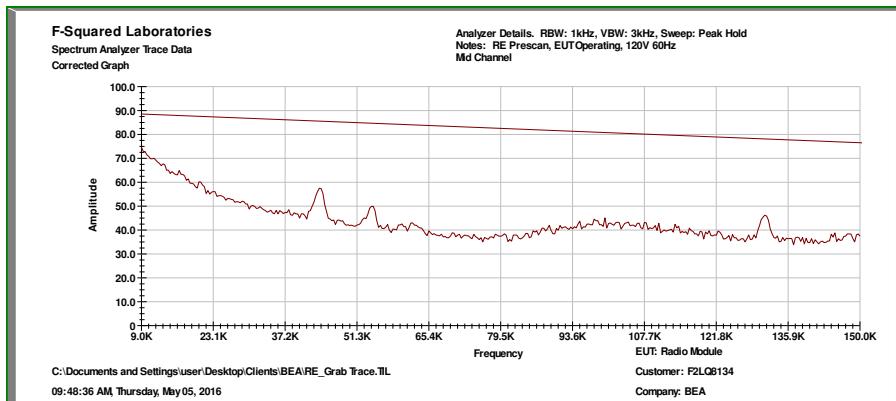
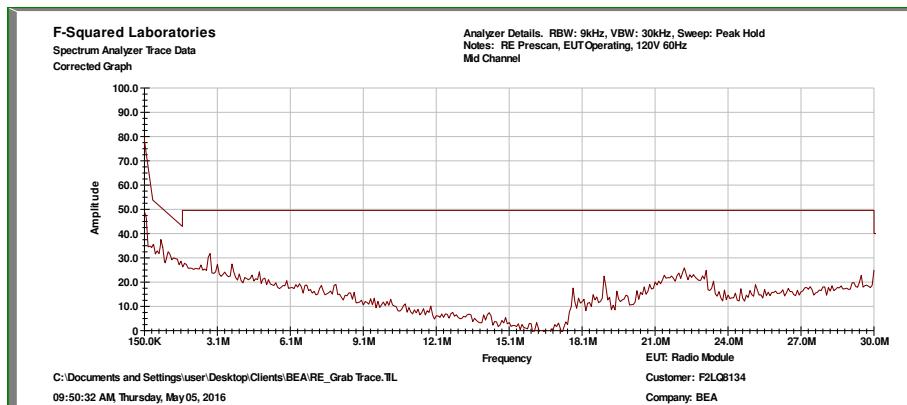
### MaxPeak

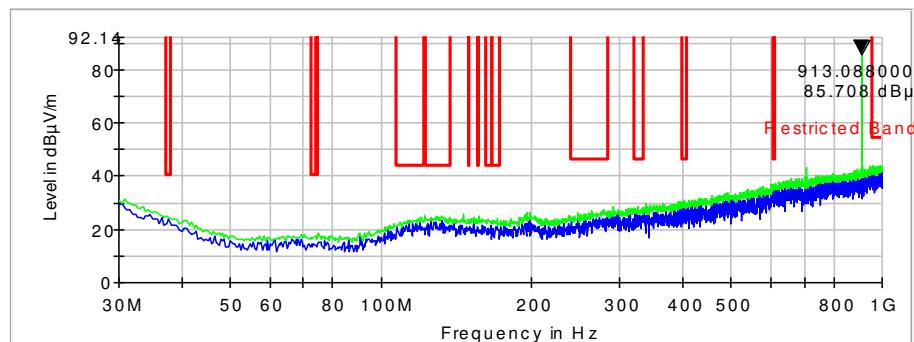
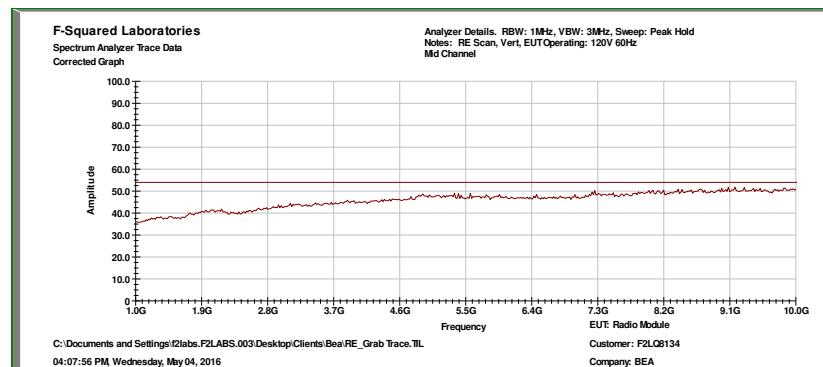
Frequency (MHz)	Antenna Polarization	Reading (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
908.000000	V	56.1	31.8	87.90	102.0	-14.1
908.000000	H	59.7	31.8	91.50	102.0	-10.5

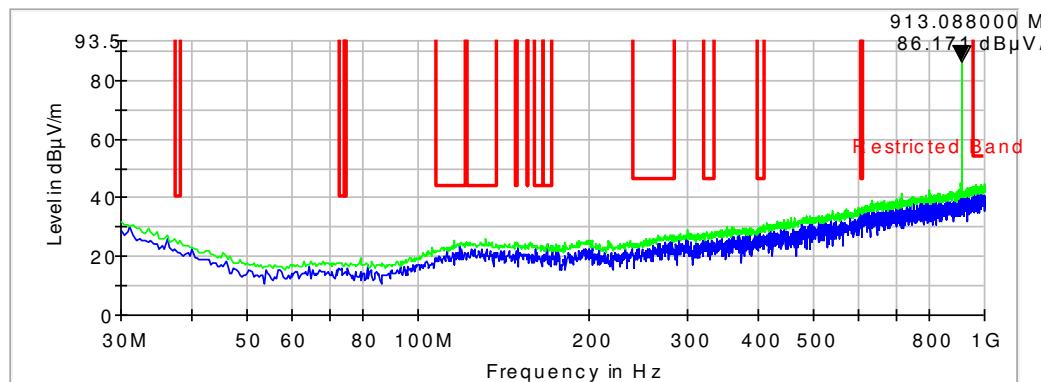
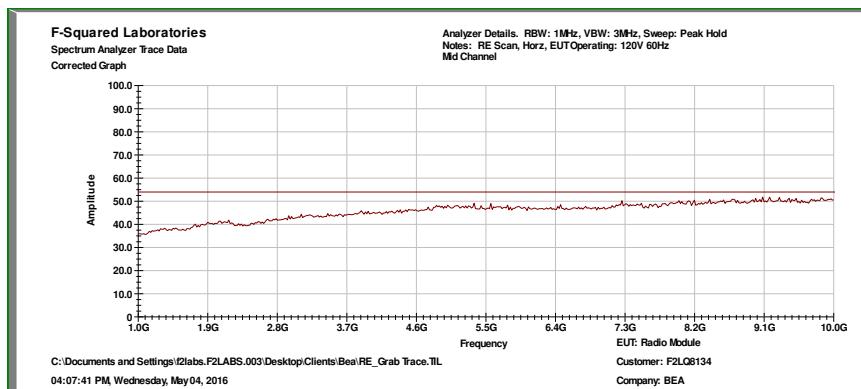
### Average with DCCF

Frequency (MHz)	Antenna Polarization	Reading* (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
908.000000	V	30.8	31.8	62.59	82.0	-19.4
908.000000	H	34.0	31.8	65.79	82.0	-16.2

\*DCCF of -20.915dB applied.

**Mid Channel: 9 kHz to 150 kHz****Mid Channel: 150 kHz to 30 MHz**

**Mid Channel: 30 MHz to 1 GHz, Vertical**

**Mid Channel: 1 GHz to 10 MHz, Vertical**


**Mid Channel: 30 MHz to 1 GHz, Horizontal**

**Mid Channel: 1 GHz to 10 GHz, Horizontal**




Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

### Mid Channel

Frequency (MHz)	Polarity	Corr. (dB)	QuasiPeak (dB $\mu$ V/m)	QuasiPeak (dB $\mu$ V/m) Limit	QuasiPeak Margin	Bandwidth (kHz)
30.776000	V	21.6	19.6	40	-20.4	120.000
32.328000	H	20.4	18.3	40	-21.7	120.000
48.236000	H	9.4	6.8	40	-33.2	120.000
57.160000	V	7.7	5.3	40	-34.7	120.000
119.628000	H	14.5	12.1	43.52	-31.4	120.000
121.180000	V	14.3	12.2	43.52	-31.3	120.000
199.944000	H	13.5	12.3	43.52	-31.2	120.000
200.332000	V	13.4	12.4	43.52	-31.1	120.000
477.364000	H	18.0	16.9	46	-29.1	120.000
535.952000	V	18.5	17.6	46	-28.4	120.000

### MaxPeak

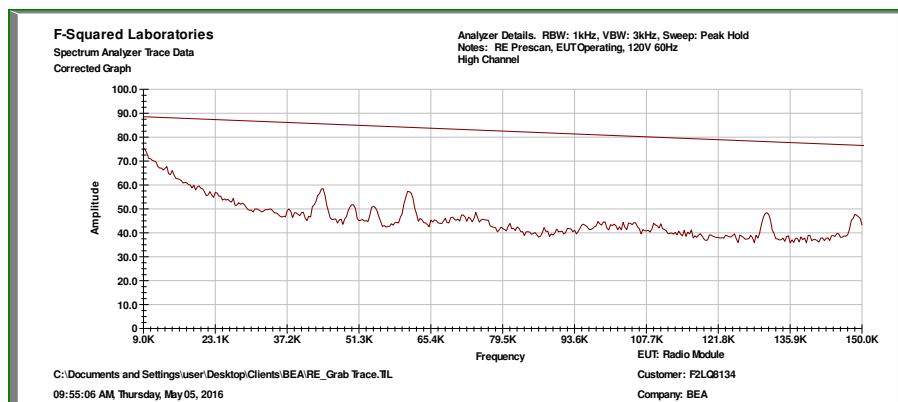
Frequency (MHz)	Antenna Polarization	Reading (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
913.000000	H	56.1	31.9	88.00	102.0	-14.0
913.000000	V	56.4	31.9	88.30	102.0	-13.7

### Average with DCCF

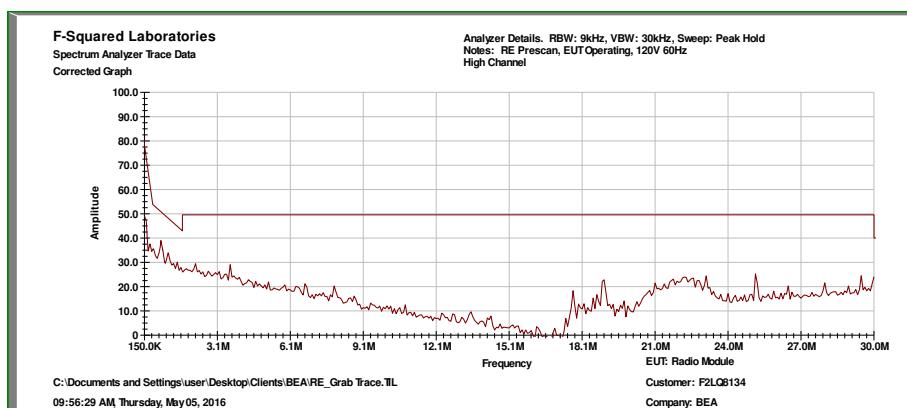
Frequency (MHz)	Antenna Polarization	Reading* (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
913.000000	H	30.7	31.9	62.59	82.0	-19.4
913.000000	V	31.2	31.9	63.09	82.0	-18.9

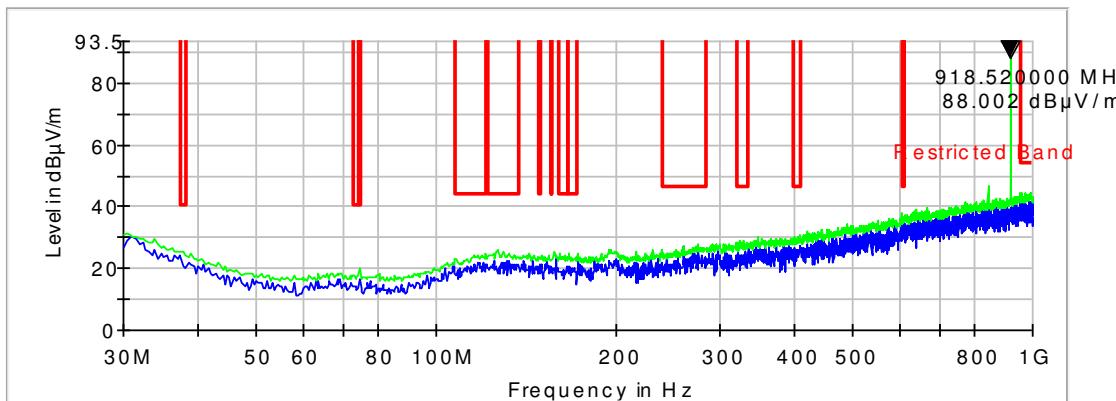
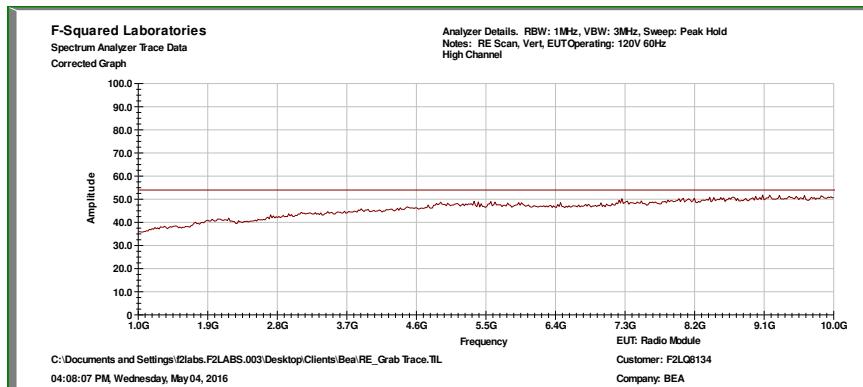
\*DCCF of -20.915dB applied.

### High Channel: 9 kHz to 150 kHz

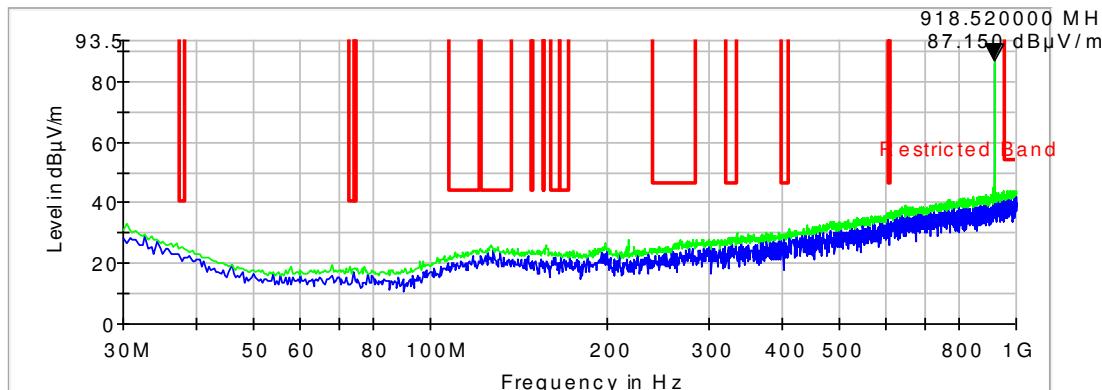


### High Channel: 150 kHz to 30 MHz

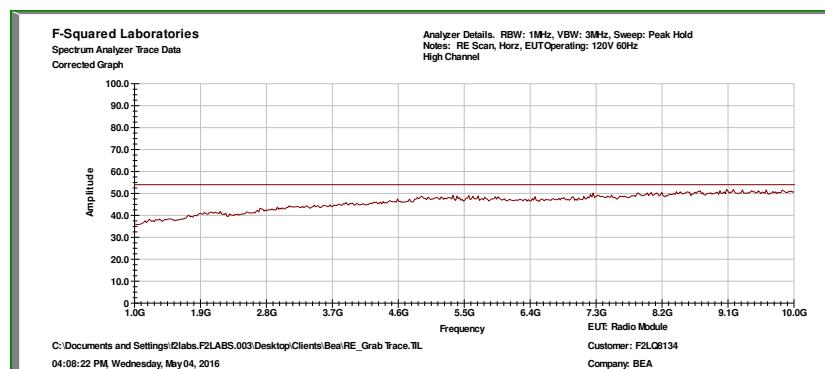


**High Channel: 30 MHz to 1 GHz, Vertical**

**High Channel: 1 GHz to 10 GHz, Vertical**


### High Channel: 30 MHz to 1 GHz, Horizontal



### High Channel: 1 GHz to 10 GHz, Horizontal





Order Number: F2LQ8134

Client: BEA Incorporated

Model: 10TD900TR

### High Channel

Frequency (MHz)	Polarity	Corr. (dB)	QuasiPeak (dB $\mu$ V/m)	QuasiPeak (dB $\mu$ V/m) Limit	QuasiPeak Margin	Bandwidth (kHz)
31.552000	H	21.0	18.7	40	-21.3	120.000
32.716000	V	20.1	18	40	-22.0	120.000
45.132000	H	10.9	8.5	40	-31.5	120.000
59.488000	V	7.7	5.3	40	-34.7	120.000
118.076000	H	14.5	12.1	43.52	-31.4	120.000
121.180000	V	14.3	12.1	43.52	-31.4	120.000
199.168000	H	13.4	12.2	43.52	-31.3	120.000
199.168000	V	13.4	12.5	43.52	-31.0	120.000
364.456000	V	15.7	14	46	-32.0	120.000
630.236000	V	20.0	20.6	46	-25.4	120.000
902.000000	H	22.9	23.6	46	-22.4	120.000
902.000000	V	22.9	23.4	46	-22.6	120.000
928.000000	V	23.1	23.8	46	-22.2	120.000

### MaxPeak

Frequency (MHz)	Antenna Polarization	Reading (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
918.000000	V	52.8	32.0	84.80	102.0	-17.2
918.000000	H	55.7	32.0	87.70	102.0	-14.3

### Average with DCCF

Frequency (MHz)	Antenna Polarization	Reading* (dB $\mu$ V)	Cable Loss & Antenna Factor (dB)	Emission (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
918.000000	V	27.2	32.0	59.19	82.0	-22.8
918.000000	H	30.2	32.0	62.19	82.0	-19.8

\*DCCF of -20.915dB applied.



## 8 FCC PART 15.231(b)(3)(c)

### 8.1 Requirements:

The bandwidth of the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20dB down from the modulated carrier. 908 MHz bandwidth must be no wider than 4.54 MHz; 913 MHz no wider than 4.566 MHz, and 918 MHz no wider than 4.59 MHz.

## 8.2 Test Data

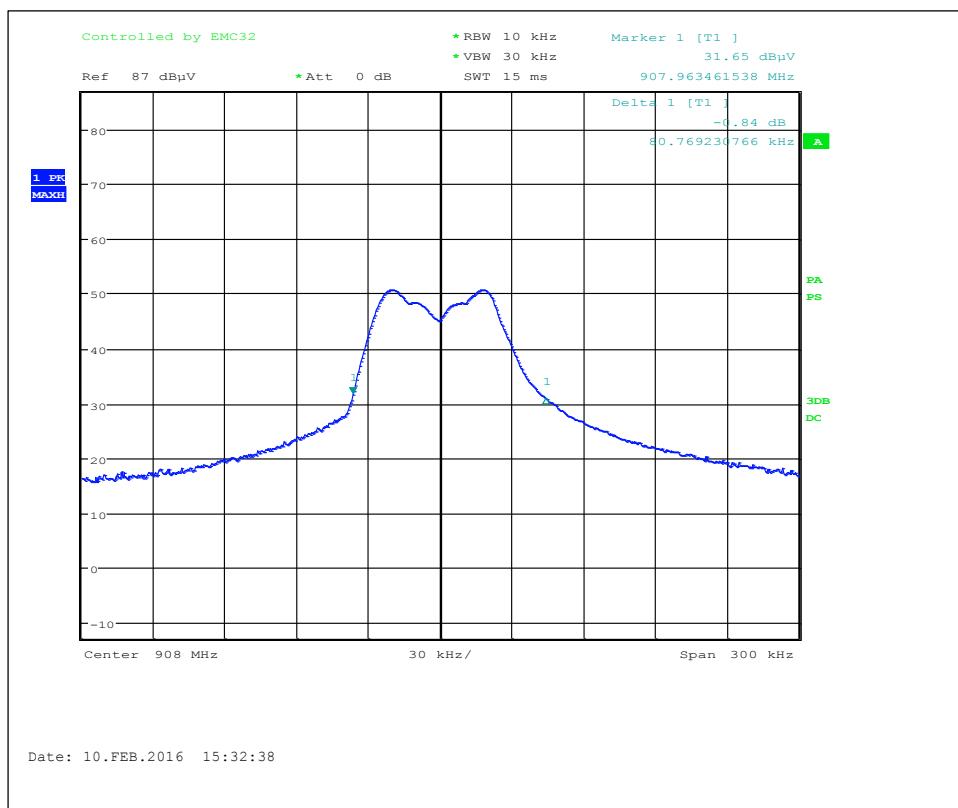
<b>Test Date:</b>	Feb. 9, 2016	<b>Test Engineer:</b>	J. Knepper
<b>Standards:</b>	CFR 47 Part 15.231(b)(3)(c)	<b>Air Temperature:</b>	20.2°C
		<b>Relative Humidity:</b>	35%

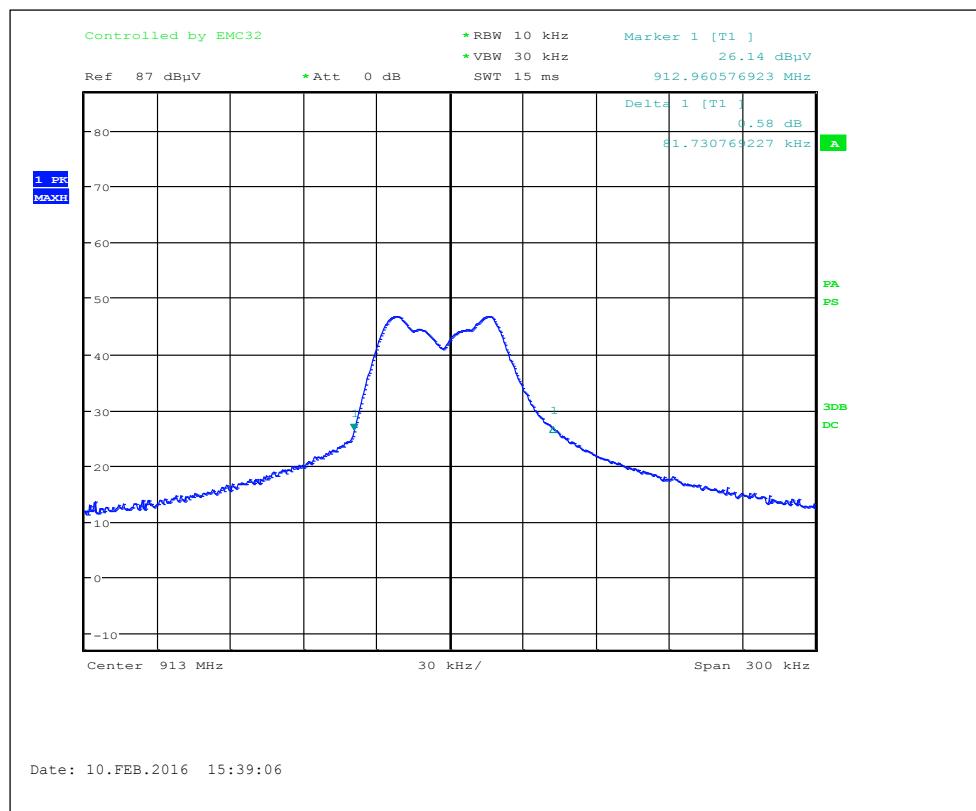
Occupied Bandwidth, Low Channel: 80.769 kHz

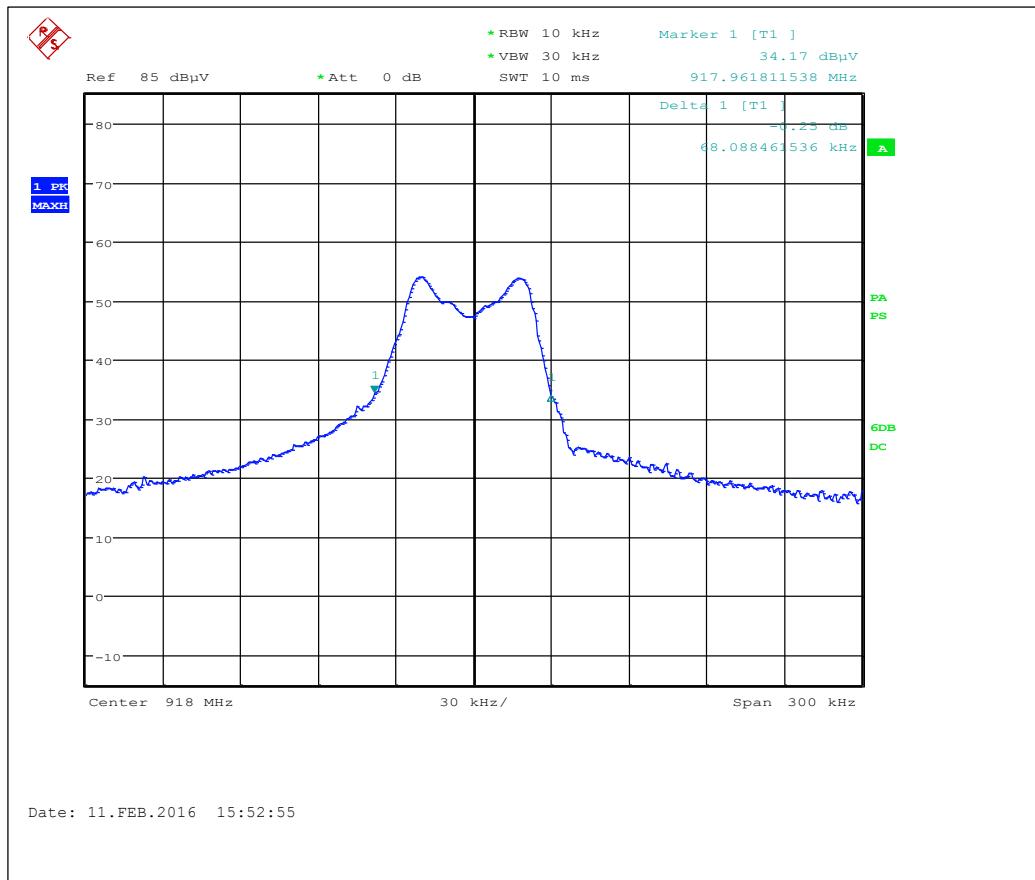
Occupied Bandwidth, Mid Channel: 81.730 kHz

Occupied Bandwidth, High Channel: 68.088 kHz

### Low Channel



**Mid Channel**

**High Channel**



## 9 FCC PART 15.35(c) - DUTY CYCLE

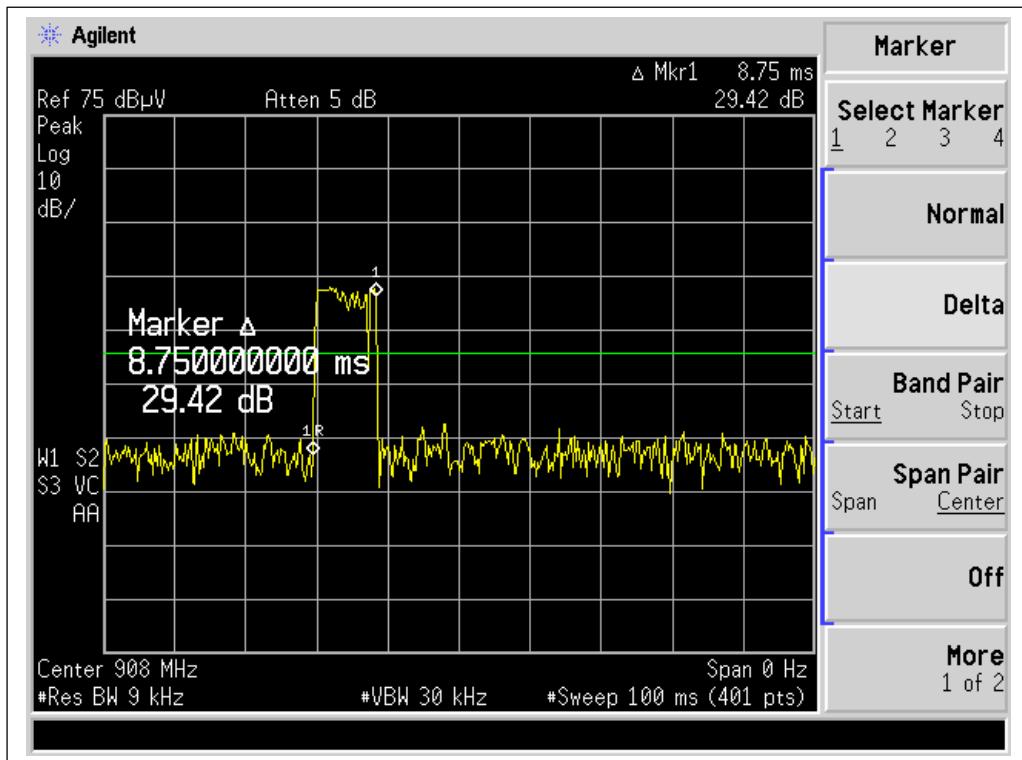
### 9.1 Requirements

A duty cycle correction of 20.915dB was added to the field strength measured because the EUT has a 9% duty cycle. One transmission was on for 9.00ms, in a 100ms sweep.

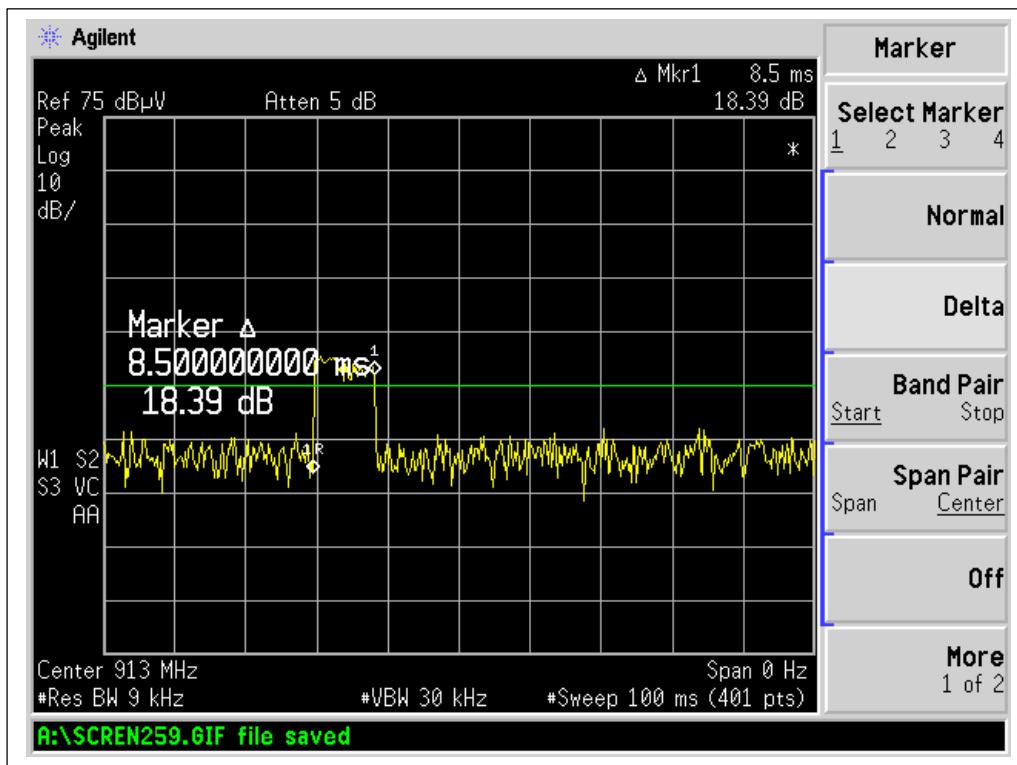
The formula used was:  $DCCF = 20 \log\left(\frac{9.0ms}{100ms}\right) = -20.915$

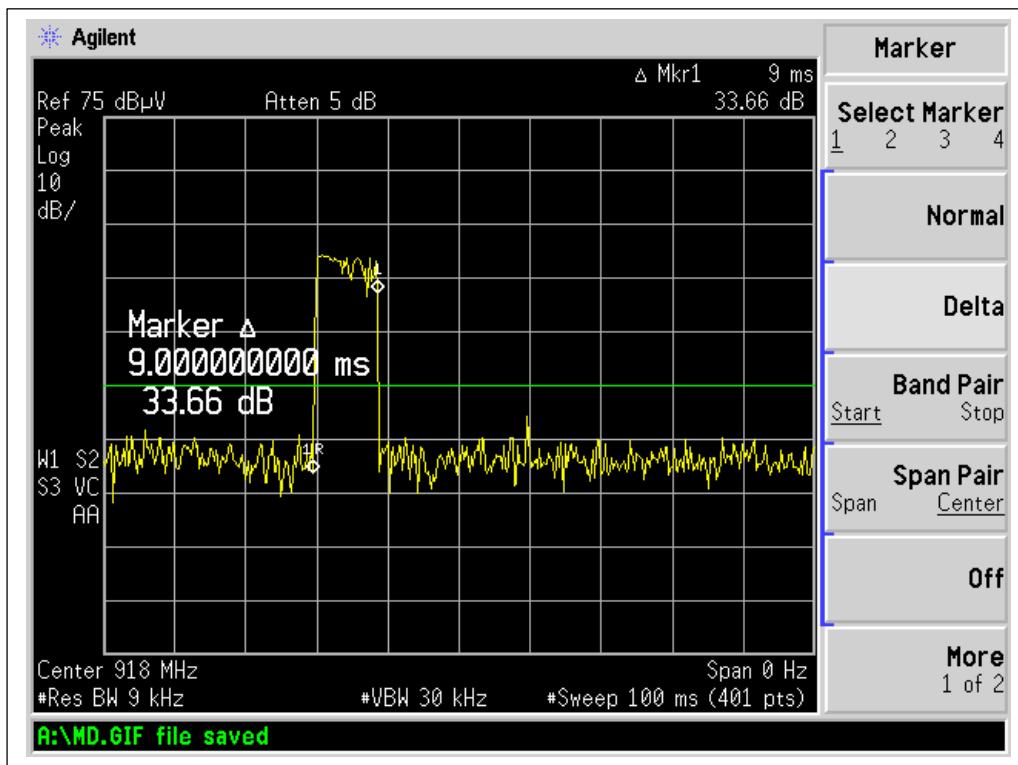
## 9.2 Test Data

### Low Channel



## Mid Channel



**High Channel**

## 10 CONDUCTED EMISSIONS

### 10.1 Requirements

In accordance with FCC CFR 47 Part 15.207(a), "Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dB $\mu$ V)	
	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.

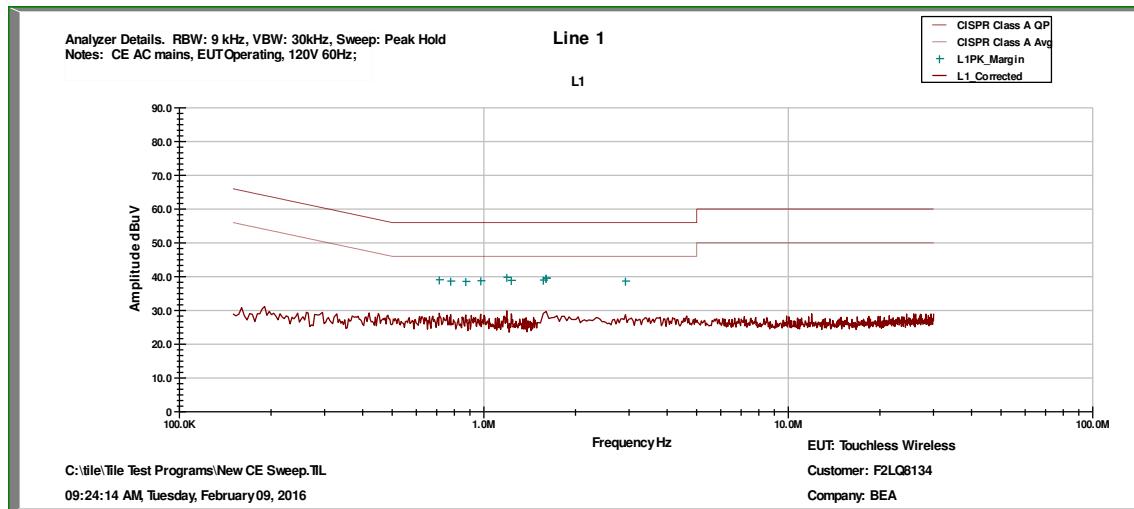
### 10.2 Procedure

The EUT was placed on a 1.0 x 1.5 meter non-conductive table, 0.8 meter above a horizontal ground plane and 0.4 meter from a vertical ground plane. Power was provided to the EUT through a LISN bonded to a 3 x 2 meter ground plane. The LISN and peripherals were supplied power through a filtered AC power source. The output of the LISN was connected to the input of the receiver via a transient limiter, and emissions in the range 150 kHz to 30 MHz were measured. The measurements were recorded using the quasi-peak and average detectors as directed by the standard, and the resolution bandwidth during testing was 9 kHz. The raw measurements were corrected to allow for attenuation from the LISN, transient limiter and cables.

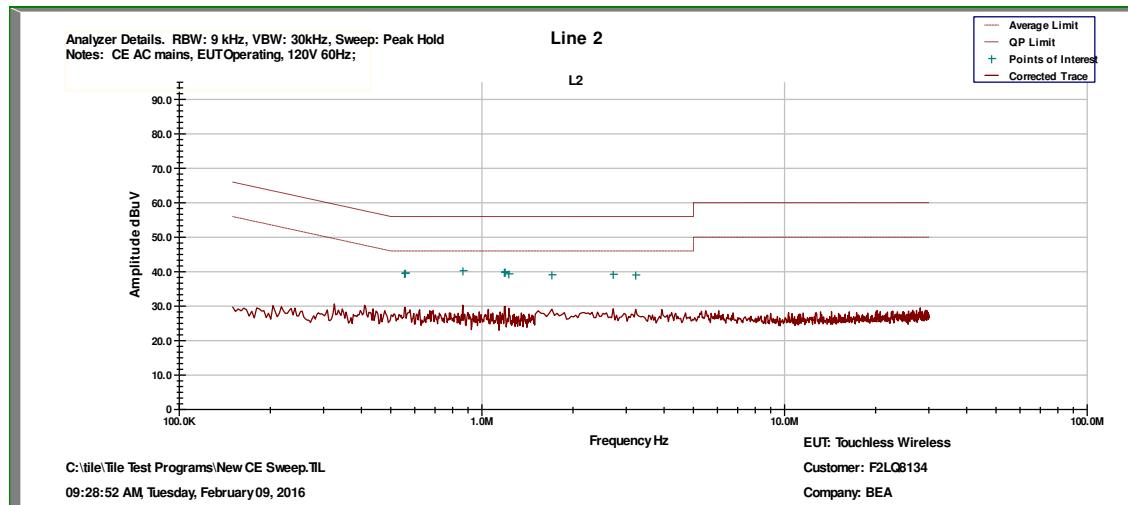
### 10.3 Conducted Emissions Test Data

<b>Test Date:</b>	Feb. 9, 2016	<b>Test Engineer:</b>	J. Knepper
<b>Rule:</b>	15.207(a)	<b>Air Temperature:</b>	19.5° C
<b>Test Results:</b>	Pass	<b>Relative Humidity:</b>	45%

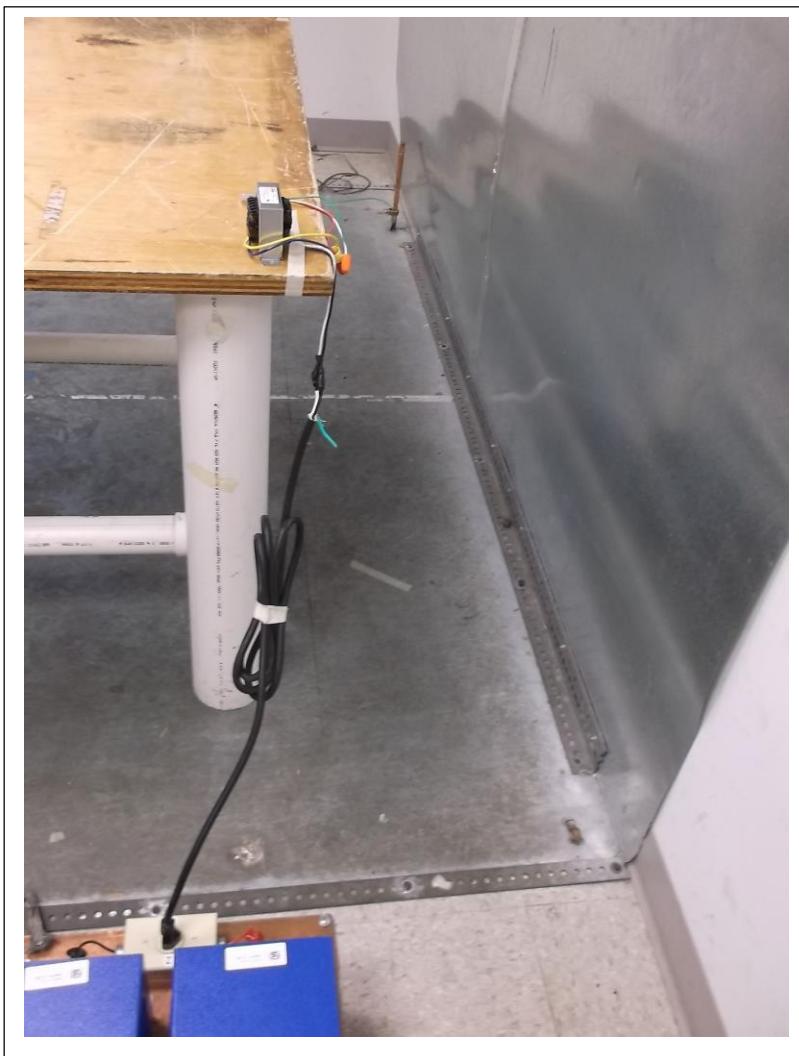
#### Conducted Test – Line 1: 0.15 MHz to 30.0 MHz

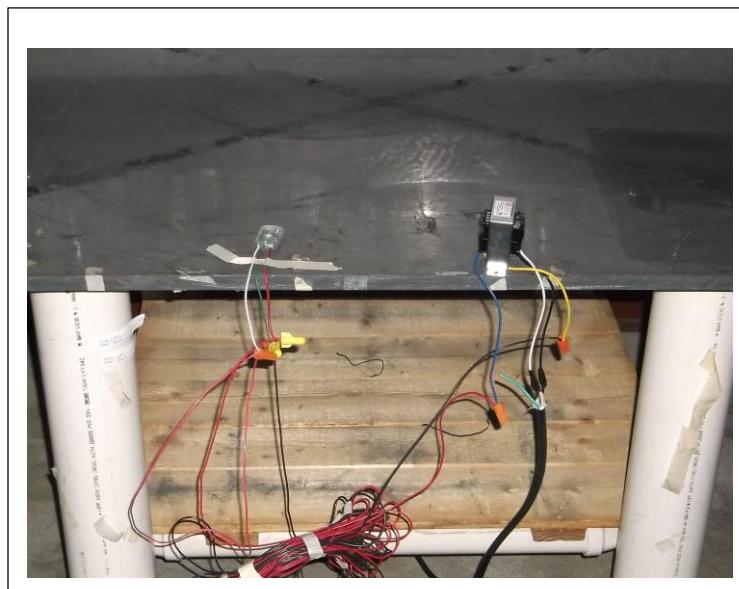


Top Discrete Measurements								
No.	Conductor	Frequency (MHz)	Detector	Level (dB $\mu$ V)	Adjustment (dB)	Results (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)
1	Line 1	0.713625	Quasi-Peak	12.630	10.330	22.960	56.000	-33.040
		0.713625	Average	6.818	10.330	17.148	46.000	-28.852
2	Line 1	0.777775	Quasi-Peak	12.584	10.330	22.914	56.000	-33.086
		0.777775	Average	6.757	10.330	17.087	46.000	-28.913
3	Line 1	0.87225	Quasi-Peak	12.486	10.308	22.794	56.000	-33.206
		0.87225	Average	6.299	10.308	16.607	46.000	-29.393
4	Line 1	0.976875	Quasi-Peak	12.440	10.300	22.740	56.000	-33.260
		0.976875	Average	6.370	10.300	16.670	46.000	-29.330
5	Line 1	1.1895	Quasi-Peak	12.333	10.289	22.622	56.000	-33.38
		1.1895	Average	6.365	10.289	16.654	46.000	-29.346
6	Line 1	1.23	Quasi-Peak	12.360	10.293	22.653	56.000	-33.347
		1.23	Average	6.564	10.293	16.857	46.000	-29.143
7	Line 1	1.5675	Quasi-Peak	12.169	10.290	22.459	56.000	-33.541
		1.5675	Average	6.512	10.290	16.802	46.000	-29.198
8	Line 1	1.6	Quasi-Peak	12.003	10.280	22.283	56.0	-33.717
		1.6	Average	6.109	10.280	16.389	46.0	-29.611
9	Line 1	1.60125	Quasi-Peak	12.208	10.280	22.488	56.0	-33.512
		1.60125	Average	6.397	10.280	16.677	46.0	-29.323
10	Line 1	2.9175	Quasi-Peak	11.560	10.263	21.823	56.0	-34.177
		2.9175	Average	5.394	10.263	15.657	46.0	-30.343

**Conducted Test – Line 2: 0.15 MHz to 30.0 MHz**


Top Discrete Measurements									
No.	Conductor	Frequency (MHz)	Detector	Level (dB $\mu$ V)	Adjustment (dB)	Results (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	
1	Line 1	0.555	Quasi-Peak	13.024	10.389	23.413	56.0	-32.587	
		0.555	Average	7.407	10.389	17.796	46.0	-28.204	
2	Line 1	0.558375	Quasi-Peak	12.904	10.388	23.292	56.0	-32.708	
		0.5589375	Average	7.691	10.388	18.079	46.0	-27.921	
3	Line 1	0.8655	Quasi-Peak	12.620	10.310	22.930	56.0	-33.070	
		0.8655	Average	7.381	10.310	17.691	46.0	-28.309	
4	Line 1	1.18613	Quasi-Peak	12.434	10.289	22.723	56.0	-33.277	
		1.18613	Average	6.523	10.289	16.812	46.0	-29.188	
5	Line 1	1.895	Quasi-Peak	12.453	10.289	22.742	56.0	-33.26	
		1.1895	Average	6.671	10.289	16.960	46.0	-29.040	
6	Line 1	1.19288	Quasi-Peak	12.559	10.289	22.848	56.0	-33.152	
		1.19288	Average	6.657	10.289	16.946	46.0	-29.054	
7	Line 1	1.22662	Quasi-Peak	12.418	10.293	22.711	56.0	-33.289	
		1.22662	Average	6.902	10.293	17.195	46.0	-28.805	
8	Line 1	1.7025	Quasi-Peak	12.129	10.300	22.429	56.0	-33.571	
		1.7025	Average	6.063	10.300	16.363	46.0	-29.637	
9	Line 1	2.715	Quasi-Peak	11.460	10.247	21.707	56.0	-34.293	
		2.715	Average	5.812	10.247	16.059	46.0	-29.941	
10	Line 1	3.22125	Quasi-Peak	11.254	10.270	21.524	56.0	-34.476	
		3.22125	Average	5.905	10.270	16.175	46.0	-29.825	

**11 PHOTOGRAHPS****AC Port Conducted Emissions**

**Radiated Spurious Emissions, <1 GHz  
Occupied Bandwidth****Radiated Spurious Emissions, >1 GHz**