RETLIF

## FCC Part 15, Subpart C, Section 15.247

## **Test Report**

On

Kuvee Smart Bottle FCC ID: 2AIDY-SBK-07

Customer Name: Kuvee, Inc.

**Customer P.O:** Trans ID# 32D218963W764582D

**Date of Report Revision:** June 15, 2016

Test Report No: R-6096N-2, Rev. A

**Test Start Date:** May 9, 2016

Test Finish Date: May 13, 2016

**Test Technicians:** M. Seamans, T. Hannemann

Report Revision Approved By: T. Hannemann

Report Revision Prepared By: J. Ramsey

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**Technical Information** 

Report Number: R-6096N-2, Rev. A

**Customer:** Kuvee, Inc.

Address: 125 Kingston, St.

Boston, MA 02111

Manufacturer: Plexus Manufacturing Solutions

Manufacturer Address: Paseo del Norte 4640 Technology Park

45010 Zapopan, JAL, Mexico

**Test Sample:** Kuvee Smart Bottle

Model Number: SBK-07

Serial Number: KV16050003

FCC ID: 2AIDY-SBK-07

Digital Transmission – Direct Sequence Spread Spectrum

**Type:** Transmitter

Power Requirements: 120 VAC, 60 Hz

Power Supply: AC Adapter, Motorolla, SSW-2222US

Frequency of Operation: 2402.0 to 2480.0 MHz

**Equipment Class:** DTS

Antenna Type: Internal Antenna, No External Antenna Port

**Equipment Use:** Internet Connected Smart Bottle

#### **Test Specification:**

FCC Rules and Regulations Part 15, Subpart C, Section 15.247

#### **Test Procedure:**

ANSI C63.4:2009

#### **Test Facility:**

Retlif Testing Laboratories 101 New Boston Road Goffstown, NH 03045

FCC Registered Test Site Number: 90899



## **Retlif Testing Laboratories**

### Table 1 – Tests Performed

FCC Part 15, Subpart C	Test Method			
15.207(a)	Conducted Emissions, Power Leads, 150 kHz to 30 MHz			
15.247(b)(3) Power Output				
15.247(a)(2)	Occupied Bandwidth			
15.247(d)	Antenna Terminal Out of Band/Band Edge Conducted Emissions (30 MHz – 25 GHz)			
15.247(d)	Spurious Emissions, 30 MHz to 10 GHz			
15.247(e)	Power Density			

Table 2 – Support Equipment

Description	Manufacturer	Part Number	Model Number	Serial Number
Laptop PC	Lenovo	20ED-001HUS	11e	LR-04EB2V 15110

## **EUT Operation:**

The EUT was evaluated in all possible data rates. The highest output power and worst case emissions are reported, OFDM modulation was utilized at 54 Mbps for 802.11g (20 MHz Channels), and 65 Mbps was utilized for 802.11n (40 MHz channels).



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## **Certification and Signatures**

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.

Todd Hannemann EMC Test Engineer

iNARTE Certified Technician ATL-0255-T

#### Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

#### Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.



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## **Revision History**

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document:

Revision -	<b>Date</b> May 25, 2016	Pages Affected Original Release
A	June 15, 2016	<ul> <li>Global Changes: <ul> <li>Document Changed from: R-6092N-2 to R-6092N-2, Rev A</li> </ul> </li> <li>Revised EUT operation with WIFI protocol and data rate, Per TCB Comments</li> </ul> <li>12: <ul> <li>Added Equipment List for 40 MHz WIFI channel RF Power Output</li> </ul> </li> <li>32: <ul> <li>Revised the 40 MHz RF Power Output test setup photograph</li> </ul> </li> <li>40: <ul> <li>Revised the test data with retest data</li> </ul> </li>

89, 90, 98 & 107:

 Added a note showing compliance with the peak emission limit, Per TCB Comments



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#### Requirements and Test Results

#### FCC Section 15.247 (a)(2) - Bandwidth

For systems using digital modulation techniques operating in the 902-928 MHz, 2400-2483.5 MHz, and 5725 – 5850 MHz bands the minimum 6 dB bandwidth shall be at least 500 kHz.

• **Results**: The minimum 6dB bandwidth measured while transmitting a Bluetooth signal was 733.47 kHz. The minimum 6 dB Bandwidth measured while transmitting a 20 MHz Wifi signal was 15.43 MHz. The minimum 6 dB Bandwidth measured while transmitting a 40 MHz Wifi signal was 35.27 MHz. The device was found to meet the requirement of 15.247 (a)(2).

#### FCC Section 15.247 (b)(3) - Power Output

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g.: alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

• **Results**: The maximum measured peak conducted output power when transmitting a Bluetooth signal was 0.0054 mW. The maximum measured peak conducted output power when transmitting a Wifi signal was 95.41 mW. The maximum antenna gain of the antenna is 2.8 dB. The device was found to meet the power output requirements of 15.247 (b)(3) including de facto EIRP.



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## Requirements and Test Results (con't)

### FCC Section 15.247(d) – Unwanted Emissions

### **Antenna Terminal Out of Band/Band Edge Conducted Emissions**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Paragraph (b)(3) of Section 15.247, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

• **Results**: All measured out of band/band edge conducted emissions were below the specified limits and the device was found to meet the requirements of 15.247 (d).

### FCC Section 15.247(d) - Unwanted Emissions

### Radiated Spurious Emissions/Restricted Bands/Band Edge

Emissions which fall into restricted bands, as defined in 15.205(a) must comply with the radiated emissions limits specified in 15.209(a) and shown below in Table 1. Emissions emanating from the EUT cabinet and cables must also comply with the radiated emissions limits. Radiated emissions measurements were also performed at the band edges to ensure band edge compliance.

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 to 88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960	500	3

Table 3 - Radiated Emission Limits

#### Results:

All spurious emissions were measured and found to be in compliance with the limits specified in 15.209(a). Band edge emissions were also found to be in compliance with the limits specified in 15.209(a).



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### Requirements and Test Results (con't)

## FCC Section 15.247(e) – Power Spectral Density

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

• **Results**: The measured peak conducted output power complied with the power spectral density limit and actual power spectral density measurements were not required. The device was found to meet the requirements of 15.247 (e).

### FCC Section 15.207(a) - Conducted Limits

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 shown in Table 4, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of the 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.

 Table 4 \* Conducted Emission Emission

 Conducted Limit (dBμV)

 Quasi-Peak
 Average

 0.15 to 0.5
 66 to 56\*
 56 to 46\*

 0.5 to 5
 56
 46

 5 to 30
 60
 50

 \*Decreases due to logarithm of the frequency

Table 4 - Conducted Emission Limits

#### Results:

The conducted emissions observed did not exceed the limits specified in Table 4.



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Field Strength Calculation/Conversion:

The maximized field strength of the emission was obtained as follows:

 $C_R = M_R + C_F$ 

Where:

C<sub>R</sub> = Corrected Reading in dBµV/m

M<sub>R</sub> = Uncorrected Meter Reading in dBμV

C<sub>F</sub> = Correction Factor in dB (Antenna Factor, Pre-amp + Cable Loss)

Example:

 $M_R = 15.35 \text{ dB}\mu\text{V}$ 

 $C_F = 16.85 \text{ dB}$ 

 $C_R = 15.35 \text{ dBuV} + 16.85 = 32.2 \text{ dB}\mu\text{V/m}$ 

dBµV/M is converted to uV/M for comparison to the specified limit using the formula:

invLog dBµV/M/20

32.2 dBuV/m = 40.74 uV/m

RF Power Conversion:

Power readings in dBm may be converted to mW using the formula:

InvLog dBm/10

Example: 20dBm = 100mW



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## FCC Section 15.247 (i) RF Exposure Limits

Spread Spectrum Transmitters operating under 15.247 must be operated in a manner that ensures the public is not exposed to RF energy levels in access of the commission's guidelines. Based on the transmitter power and maximum antenna gain (see calculation below) the minimum separation distance was calculated to determine the distance for acceptable MPE power density levels to meet both the Occupational/Controlled Exposure and the General Population/Uncontrolled Exposure requirements of FCC Part 1.1310. The calculation below uses the more stringent General Population MPE Limits.

$$S = \frac{PG}{4 \prod Dsq}$$

D = Minimum Separation Distance in cm

S = Max allowed Power Density in mW/cmsq

Per 1.1310 For the Frequency of 2400 MHz S = 1 mW/cmsq

Power = Max Power Input to Antenna = 95.41 mW

Gain = Max Power Gain of Antenna = 2.8 dBi = 1.905 numeric

1.0 mW/cmsq = 
$$\frac{95.41x1.905}{4x(3.14)xD^2}$$
 =  $\frac{181.75}{12.56xD^2}$ 

$$D^2 = \frac{181.75}{12.56x1.0}$$

$$D = )14.47 = 3.8 \text{ cm}$$

The calculation above uses the highest power level for the device in this band.



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## **Equipment List**

## FCC Section 15.247(a)(2) Occupied Bandwidth

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5026A	NARDA MICROWAV	E ATTENUATOR, COAXIAL	20 dB, DC - 11 GHz, 20\	N 768-20	1/14/2016	1/31/2017
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/29/2014	10/31/2016

# FCC Section 15.247 (d) Band Edge Conducted Emissions, 30 MHz to 25 GHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5026A	NARDA MICROWAVI	E ATTENUATOR, COAXIAL	20 dB, DC - 11 GHz, 20V	V 768-20	1/14/2016	1/31/2017
5070	ROHDE &	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/29/2014	10/31/2016

# FCC Section 15.247(b)(3) Power Output

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5026A	NARDA MICROWAVE	E ATTENUATOR, COAXIAL	20 dB, DC - 11 GHz, 20W	768-20	1/14/2016	1/31/2017
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/29/2014	10/31/2016
5127	BOONTON ELECTRONICS	METER, RF POWER	10 KHz - 100 GHz	4532	3/7/2016	3/31/2017

## FCC Section 15.247 (d) Spurious Radiated Emissions, 30 MHz to 25 GHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5 GHz	8449B	6/17/2015	6/30/2016
3258	ETS / EMCO	ANTENNA, DOUBLE RIDGED GUIDE	1 - 18 GHz	3115	3/24/2015	9/30/2016
3430	MCS	ANTENNA, HORN	18 - 26.5 GHz	K-5039	No Calibrati	on Required
4029	RETLIF	OPEN AREA TEST SITE, FILING	3 / 10 Meters	RNH	5/15/2013	5/31/2016
4984G	MICROLAB / FXR	ANTENNA, HIGH GAIN HORN	12.4 - 18 GHz	Y638A	No Calibrati	on Required
5053	ETS / EMCO	ANTENNA, BICONILOG	26 MHz - 3 GHz	3142C	2/24/2015	8/31/2016
5133	NARDA MICROWAVE	E ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	10/28/2015	10/31/2016
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	11/17/2015	11/30/2016



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# FCC Section 15.247(e) Power Density

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5026A	NARDA MICROWAVI	E ATTENUATOR, COAXIAL	20 dB, DC - 11 GHz, 20V	V 768-20	1/14/2016	1/31/2017
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/29/2014	10/31/2016

# FCC Section 15.207 (a) AC Line Conducted Emissions, 150 kHz to 30 MHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
4027	SOLAR ELECTRONICS	LISN	50 uH, 10 kHz - 50 MHz	9252-50-R-24-BN0	2/29/2016	2/28/2017
4028	ACME	TRANSFORMER, ISOLATION		120X240	No Calibrat	ion Required
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/29/2014	10/31/2016
5133	NARDA MICROWAV	E ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	10/28/2015	10/31/2016
5151	DELL	COMPUTER, CONTROL	N/A	OPTIPLEX 755	No Calibrat	ion Required

## FCC Section 15.247(b)(3) 40 MHz WIFI Power Output

EN	Manufacturer	Description	Range	Model No.	Cal Date Due Date
3128B	LUCAS WEINSCHEL	ATTENUATOR, COAXIAL	22 dB, DC - 18 GHz	2	11/24/2015 11/30/2016
R471	AGILENT / HP	SENSOR, WIDEBAND PEAK POWER	50 MHz - 18 GHz	N1923A	8/13/2015 8/13/2016
R472	AGILENT / HP	ANALYZER, PEAK POWER	50 MHz - 40 GHz	8990B	8/17/2015 8/17/2016



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# Test Photographs AC Line Conducted Emissions



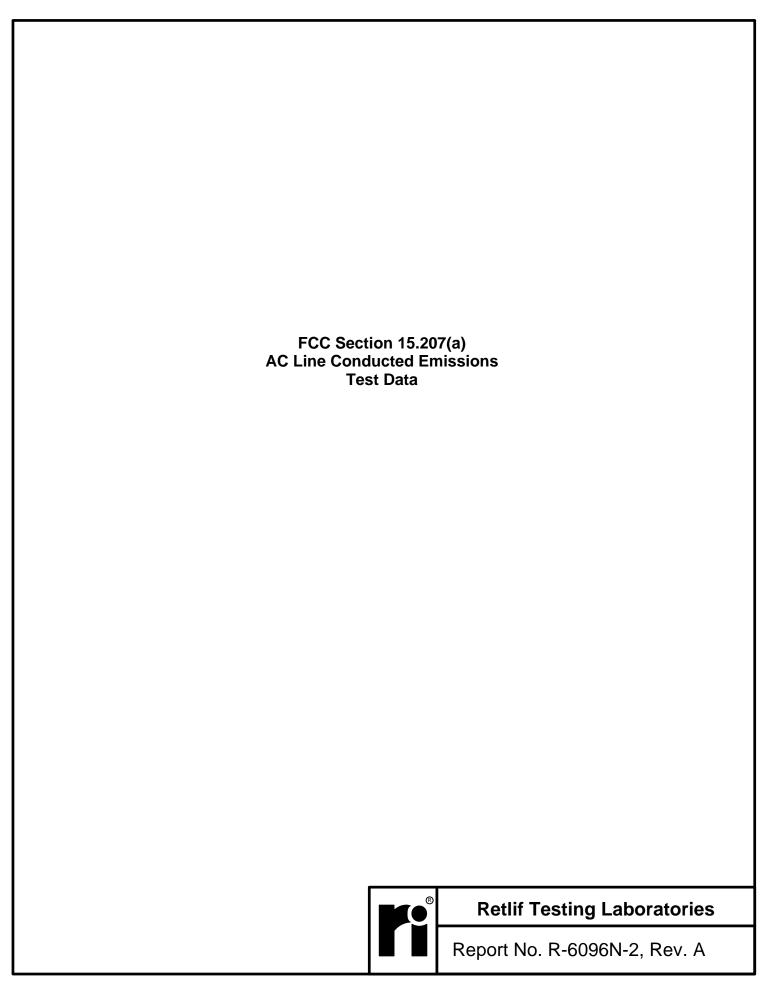
**EUT** Configuration



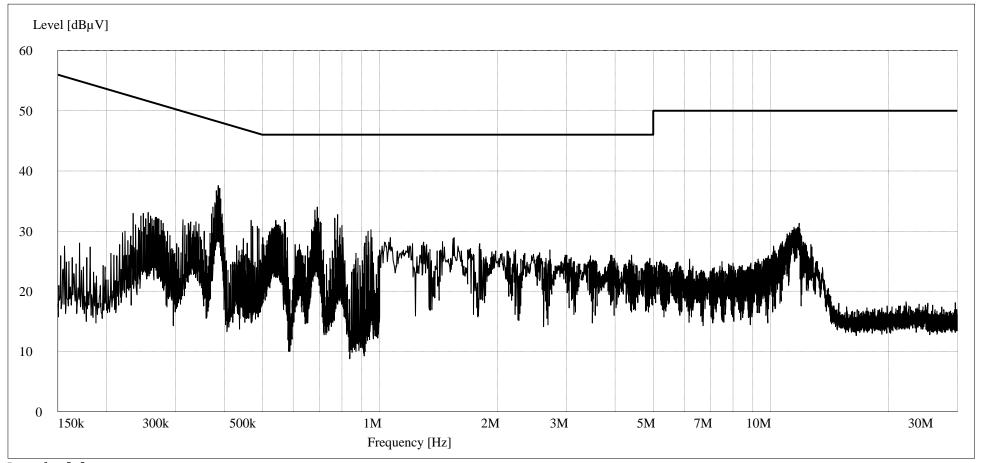
Test Setup



## **Retlif Testing Laboratories**

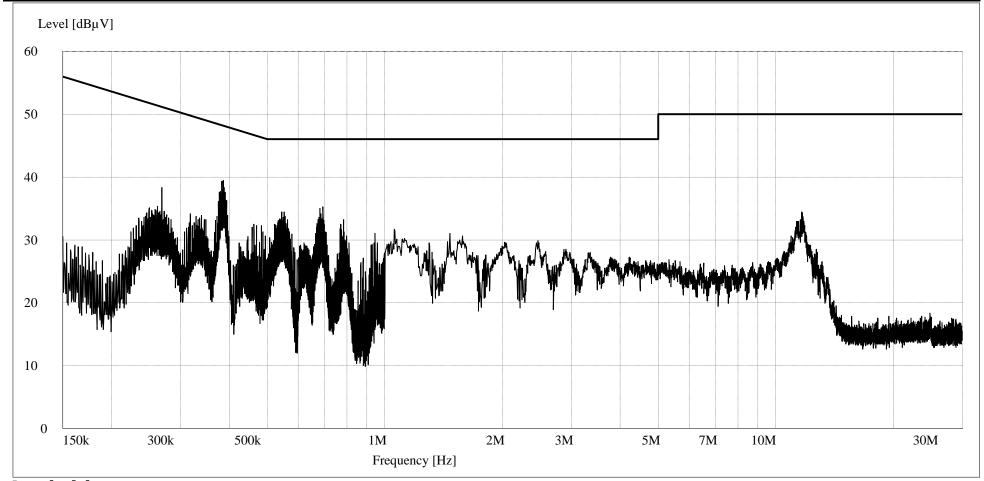


	RETLIF TESTING LABORATORIES					
Test Method	Conducted Emissions 150 kHz to 30 MHz					
Customer	Kuvee, Inc.	Job No.	R-6096N-2			
Test Sample	Kuvee Smart Bottle					
Model No.	SBK-07	Serial No.	KV16050003			
Operating Mode	Transmitting modulated signal, charging					
Test Specification	FCC Part 15. 207(a)					
Technician	M. Seamans	Date	May 13 <sup>th</sup> , 2016			
Climatic Conditions	Temp: 19.5 °C Relative Humidity: 30.0 %					
Lead Tested	120 VAC 60 Hz Hot Peak Readings to Average Limits.					



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RETLIF TESTING LABORATORIES								
Test Method	Conducted Emissions 150 kHz to 30 MHz							
Customer	Kuvee, Inc.	Job No.	R-6096N-2					
Test Sample	Kuvee Smart Bottle							
Model No.	SBK-07	Serial No.	KV16050003					
Operating Mode	Transmitting modulated signal, charging							
Test Specification	FCC Part 15. 207(a)							
Technician	M. Seamans	Date	May 13 <sup>th</sup> , 2016					
Climatic Conditions	Temp: 19.5 °C Relative Humidity: 30.0 %							
Lead Tested	120 VAC 60 Hz Neutral Peak Readings to Average Limits.							



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# Test Photographs Occupied Bandwidth



Test Setup, Bluetooth Bandwidth



Test Setup, Wifi Bandwidth, 20 MHz



## **Retlif Testing Laboratories**

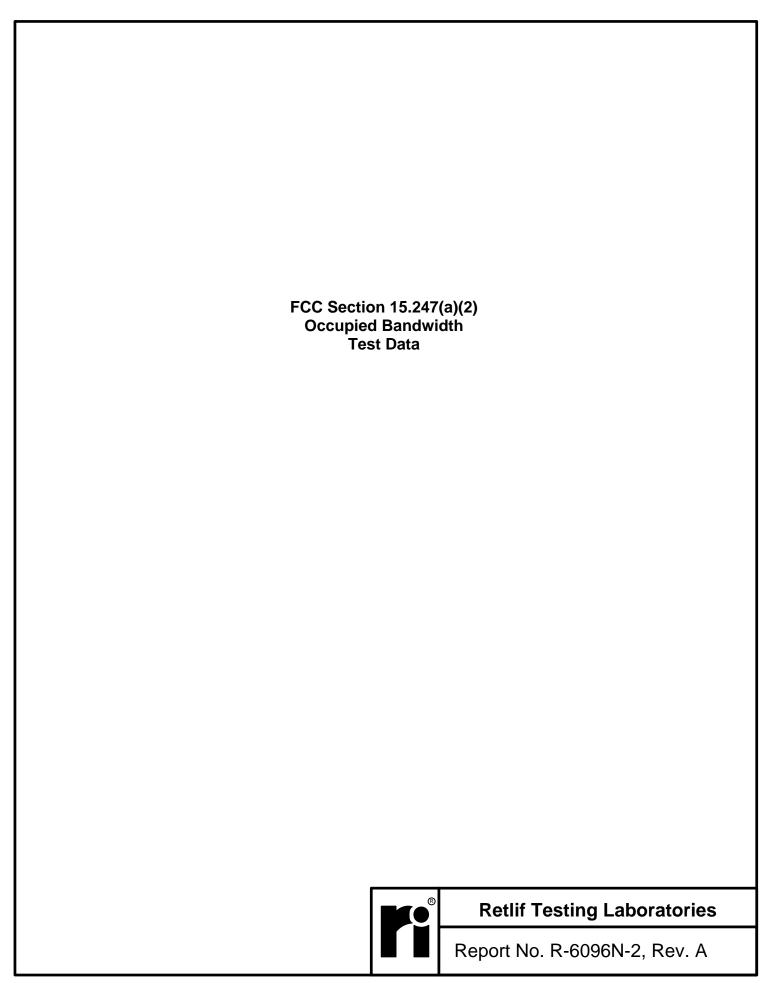
## Test Photographs Occupied Bandwidth



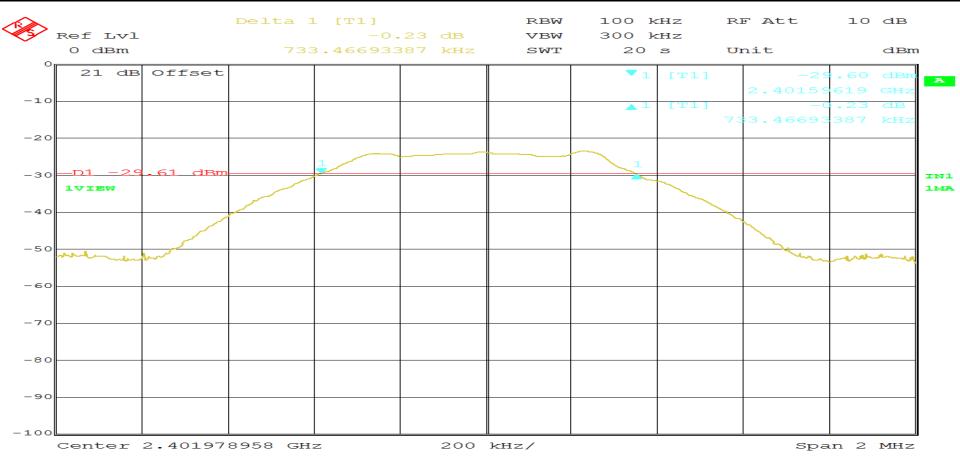
Test Setup, Wifi Bandwidth, 40 MHz



## **Retlif Testing Laboratories**

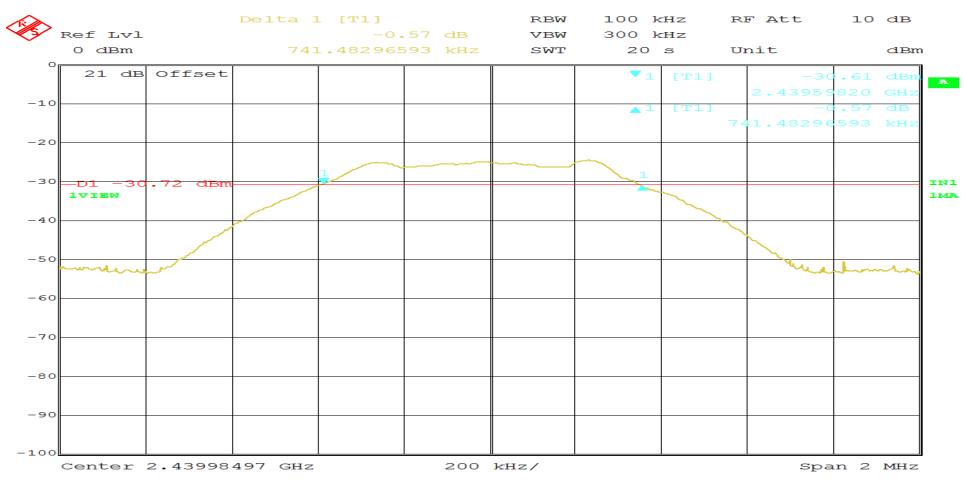


	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 733.47 kHz								

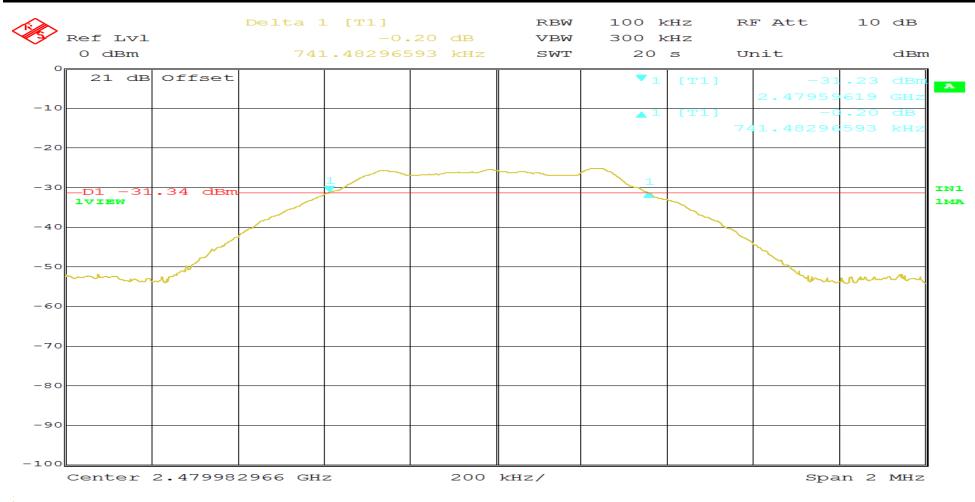


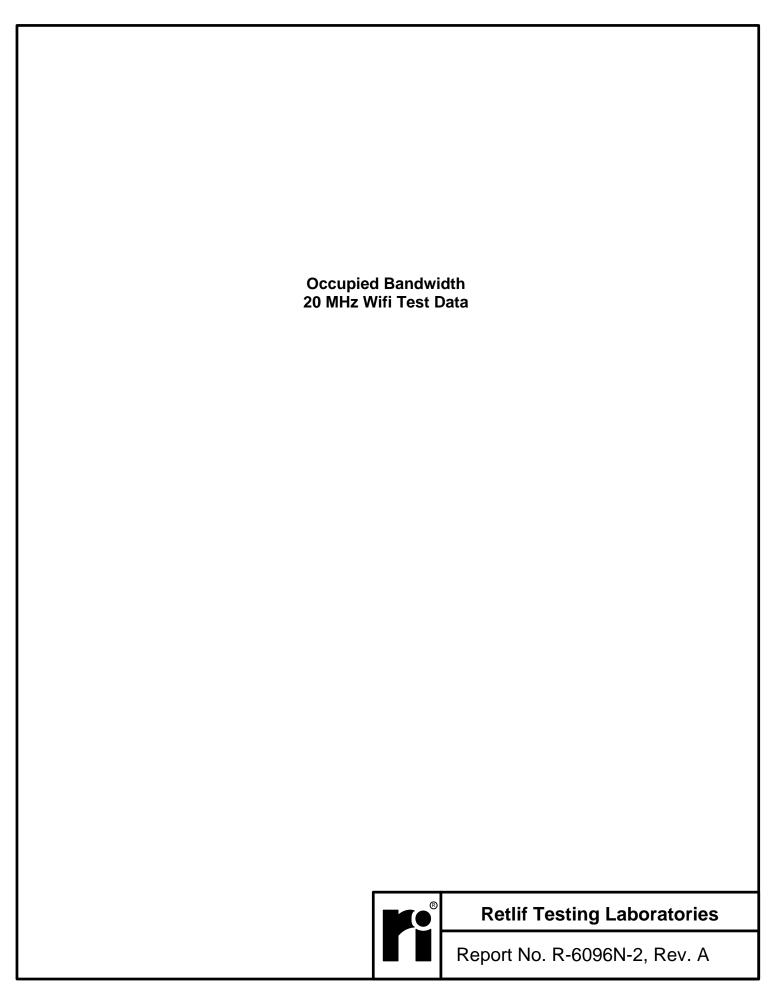
Page 1 of 3

	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting Bluetooth signal at 2.440 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 741.48 kHz								

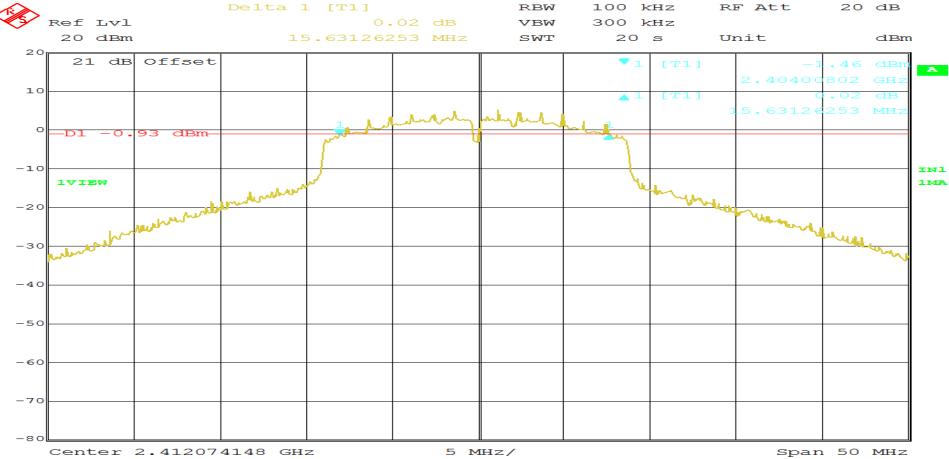


	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting Bluetooth signal at 2.480 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 741.48 kHz								



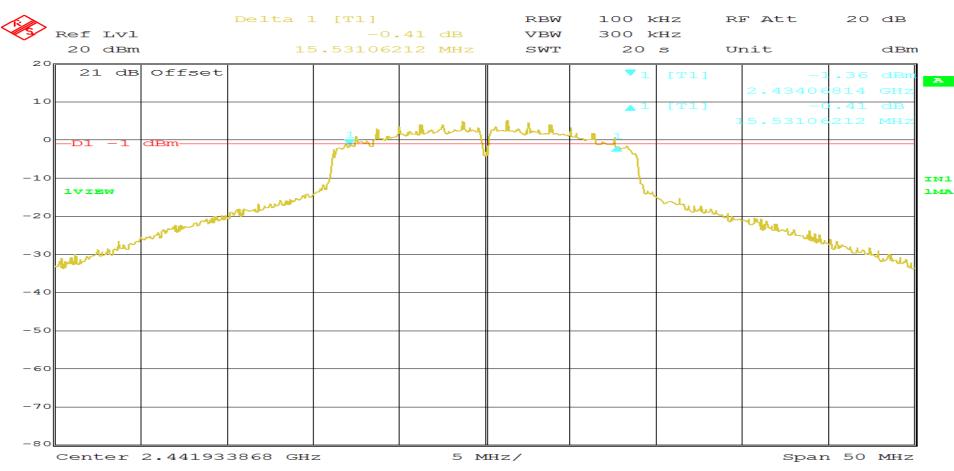


RETLIF TESTING LABORATORIES							
Test Method:	6dB Bandwidth						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting 20 MHz WiFi signal at 2.412 GHz						
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Occupied Bandwidth: 15.63 MHz						



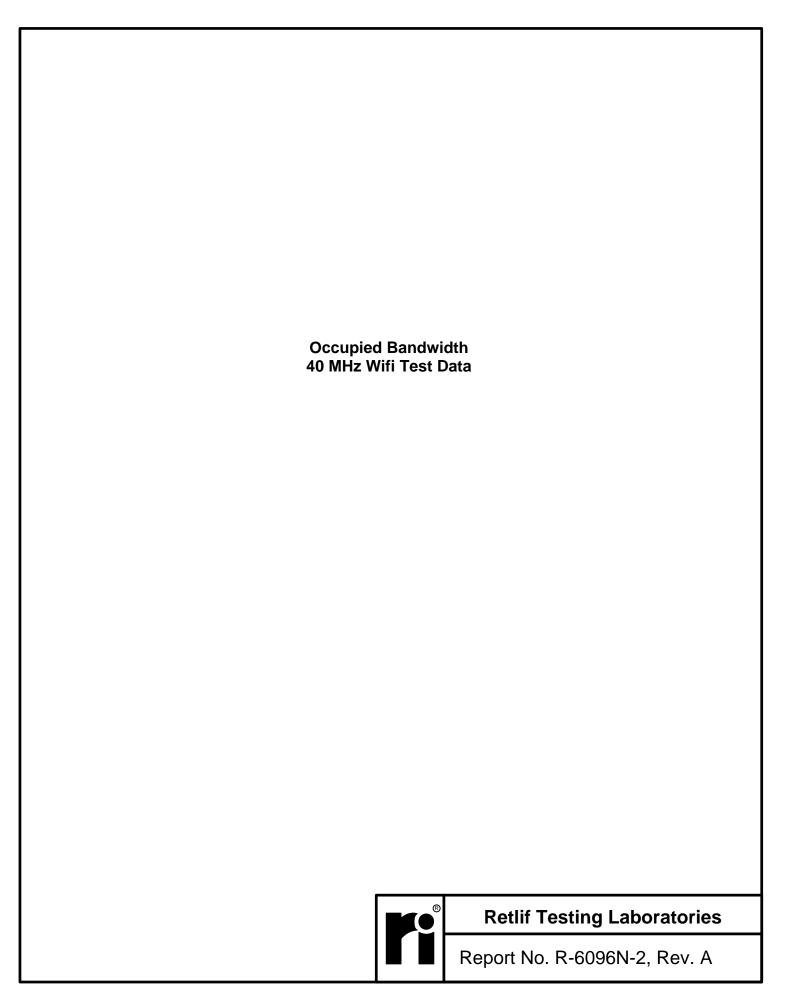
Page 1 of 3

	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 20 MHz WiFi signal at 2.440 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 15.53 MHz								

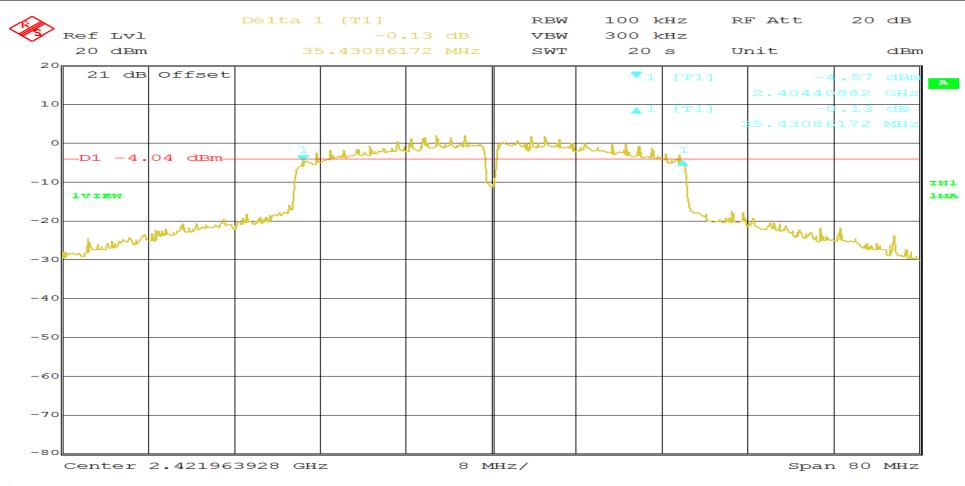


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		R	ETLIF '	TESTIN	G LABO	RATOR	RIES				
<b>Test Method:</b>	6dB Bandwidt	th					•				
Customer	Kuvee, Inc.					Job No.	R-6096N-2				
<b>Test Sample</b>	Kuvee Smart Bottle						<u>-</u>				
Model Number	SBK-07					Serial No.	KV16050	0003			
<b>Operating Mode</b>	Transmitting 2	20 MHz WiFi sig	gnal at 2.462 GF	Нz		-	-				
<b>Test Specification</b>	FCC Part 15, S	Subpart C Para	agraph: 15.247	(a)(2)							
Technician	M. Seamans					Date	May 9 <sup>th</sup> , 2	2016			
<b>Climatic Conditions</b>	Temp: 18.3	°C Relative	e Humidity: 30	0.6 %							
Notes	Occupied Ban	dwidth: 15.43 M	Hz								
		Delta 1			RBW		HZ	RF Att	20 0	dB	
Ref Lvl				39 dB	VBW	300 k				10	
20 dBm		15	.430861	1/2 MHZ	SWT	20	s 	Unit		dBm	
21 dB	Offset					▼1	[T1]	-2	.22	dBm	A
10								2.45421		SHZ	
						<b>1</b>	[T1]	-C			
			- I	March	mlylal.			15.43086	1 / 2 1	MHZ	
OD1 -1.	66 dBm—		The state of the s	1		M					
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	MANUAL							markey			
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P. Calleton											
-40											
-50											
-60											
-70											
-80											
Center :	2.46188	3768 GH2	Z	5 M	Hz/			Span	50 N	MHZ	

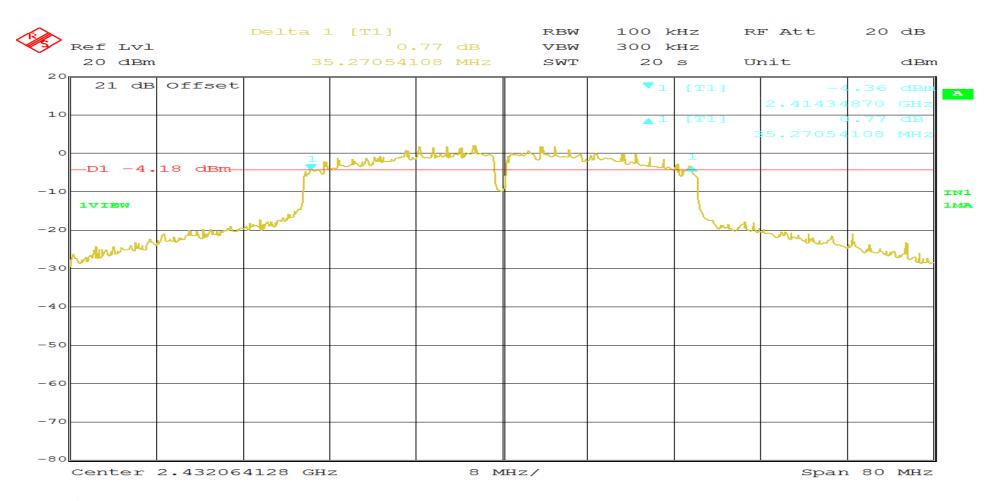


	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 40 MHz WiFi signal at 2.422 GHz								
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 35.43 MHz								

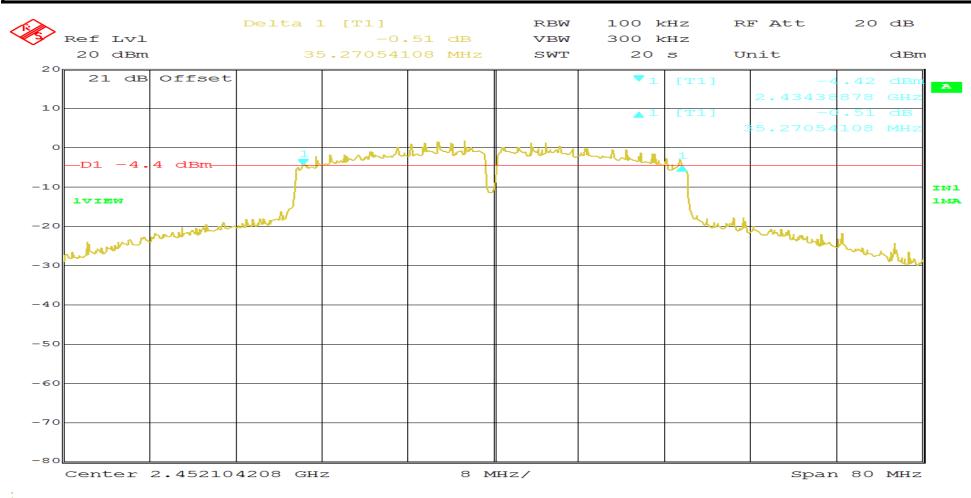


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	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 40 MHz WiFi signal at 2.432 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %	_							
Notes	Occupied Bandwidth: 35.27 MHz								



	RETLIF TESTING LABORATORIES								
Test Method:	6dB Bandwidth								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 40 MHz WiFi signal at 2.452 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Occupied Bandwidth: 35.27 MHz								



# Test Photographs Power Output



Test Setup, Bluetooth

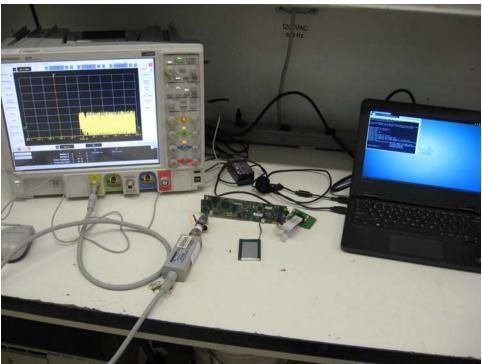


Test Setup, Wifi, 20 MHz



## **Retlif Testing Laboratories**

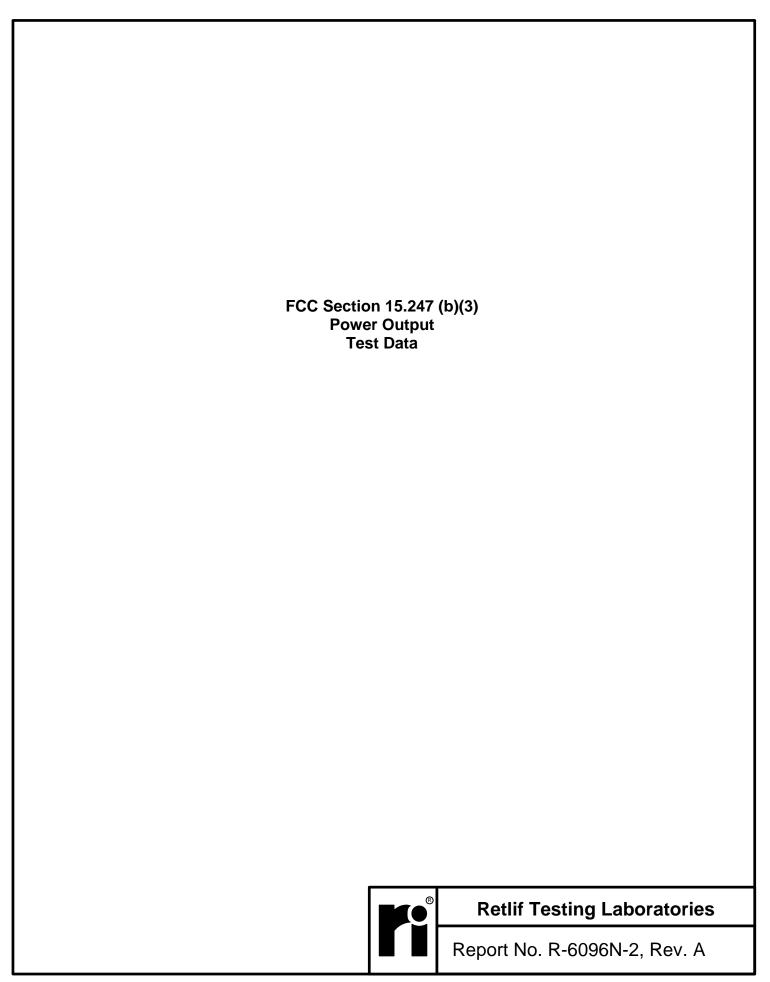
# Test Photographs Power Output



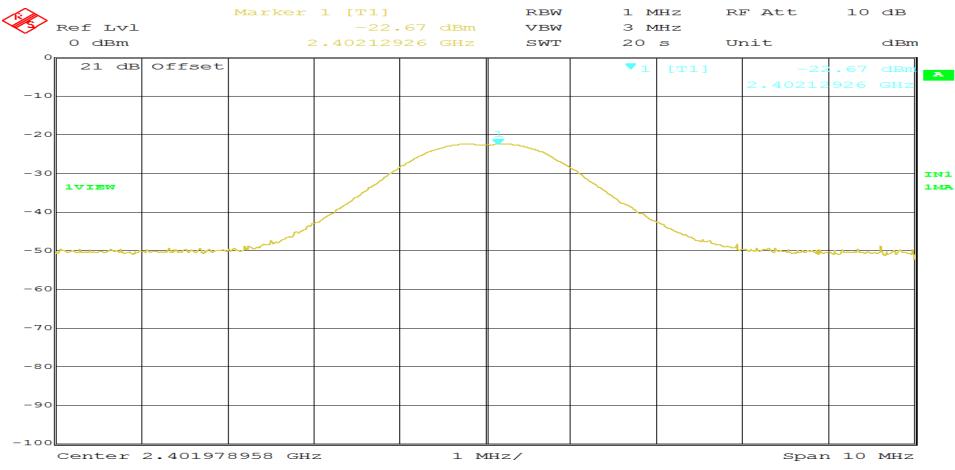
Test Setup, Wifi, 40 MHz



## **Retlif Testing Laboratories**



RETLIF TESTING LABORATORIES							
<b>Test Method:</b>	Conducted Peak Power Output						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz						
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
<b>Climatic Conditions</b>	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Peak Power Output: -22.67 dBm						

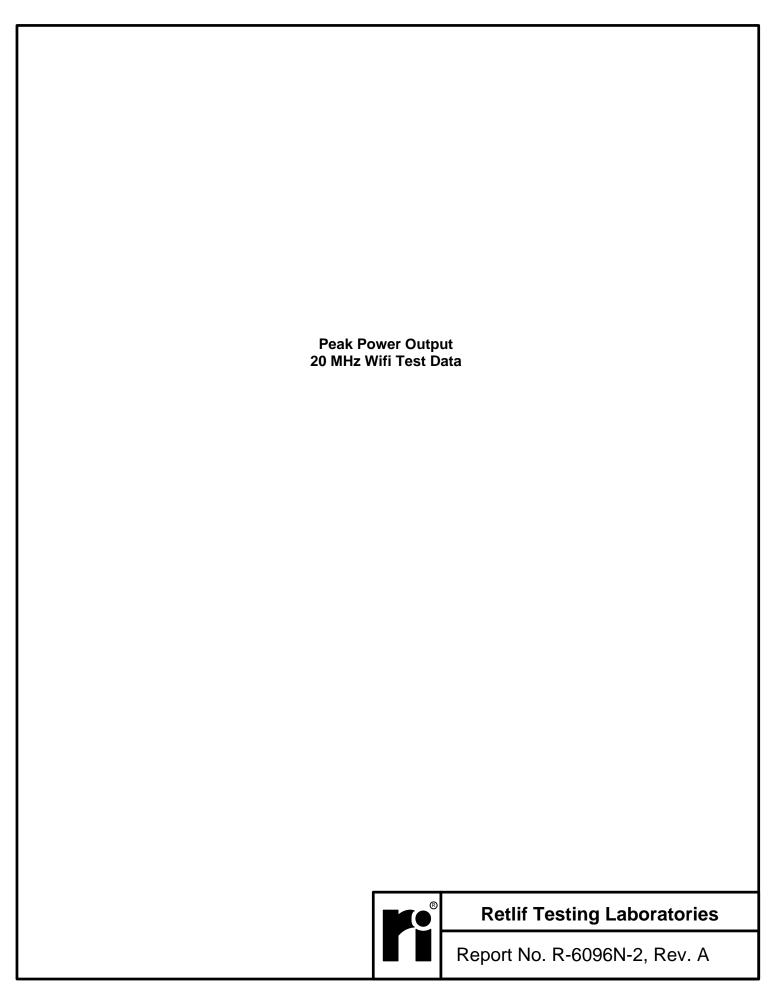


Page 1 of 3

				TESTIN	G LABO	<b>PRATOI</b>	RIES			
<b>Test Method:</b>	Conducted Pe	ak Power Outpu	t							
Customer	Kuvee, Inc.					Job No.	R-6096N	[-2		
Test Sample	Kuvee Smart Bottle									
Model Number	SBK-07					Serial No.	KV16050	0003		
<b>Operating Mode</b>	Transmitting l	Bluetooth signal	at 2.440 GHz				_ <b>-</b>			
<b>Test Specification</b>	FCC Part 15,	Subpart C Par	agraph: 15.247	(b)(3)						
Technician	M. Seamans	-				Date	May 9 <sup>th</sup> ,	2016		
<b>Climatic Conditions</b>	Temp: 18.3 °C	C Relative	Humidity: 30.6	6 %		<b>=</b>				
Notes		utput: -23.82 dI								
<b>F</b>		Marker	1 [T1]		RBW	1 N	1HZ	RF Att	10 dB	
Ref Lvl			-23	.82 dBm	VBW	3 N	MHZ			
0 dBm		2	2.440155	531 GHz	SWT	20	s	Unit	dBr	n
0 21 dB	Offset					<b>v</b> <sub>1</sub>	[T1]	-2	3.82 dBn	A
								2.4401	5531 GHz	
-10										1
-20					1					1
-30										IN1
1VIEW										1MA
-40										4
-50	· · · · · · · · · · · · · · · · · · ·	AD-LOVE - CONTRACTOR - CONTRACT					- Carrotte	<u> </u>	A	_
0,00000	20020								and the same	1
-60										
-60										
-70										1
-80										1
-90									1	$\parallel$
-100	2 43000			1 1					n 10 MHz	

Page 2 of 3

				<b>TESTIN</b>	G LABO	ORATO:	RIES			
<b>Test Method:</b>	Conducted Peak Power Output					Job No.				
Customer	Kuvee, Inc.						R-6096N-	-2		
Test Sample	Kuvee Smart									
Model Number							KV16050003			
Operating Mode	Transmitting Bluetooth signal at 2.480 GHz									
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)									
Technician	M. Seamans Temp: 18.3 °C Relative Humidity: 30.6 %					Date	May 9 <sup>th</sup> , 2016			
<b>Climatic Conditions</b>										
Notes	Peak Power C	output: -24.36 d	lBm							
		Marker	1 [T1]		RBW	1 1	MHZ	RF Att	10 dB	
Ref Lvl	-24.36 dBm VBW						MHZ			
0 dBm		2	2.479732	246 GHz	SWT	20	s	Unit	dBn	n
21 dB	Offset					▼1	[T1]	-2	4.36 dBm	A
								2.4797	3246 GHz	2
-10										1
-20				1						1
-30										IN1
1VIEW										1MA
-40			_/							4
		ر ا	~~							
-50		and the same					market 1	<u> </u>		_
		[ ]							- Waynes	1
-60										
-60										1
-70										1
-80										1
-90									-	-
-100										_



	======================================					
	EMISSIONS TEST DATA SHEET					
Test Method	Peak Power Output					
Customer	Kuvee, Inc.					
Job Number	R-6096N-2					
Test Sample	Kuvee Smart Bottle					
Model Number	SBK-07					
Serial Number	KV16050003					
Test Specification	FCC Part 15, Subpart C Paragraph 15.247 (b)(3)					
Operating Mode	Transmitting 20 MHz WiFi signal					
Technician	M. Seamans					
Date	May 9 <sup>th</sup> , 2016					

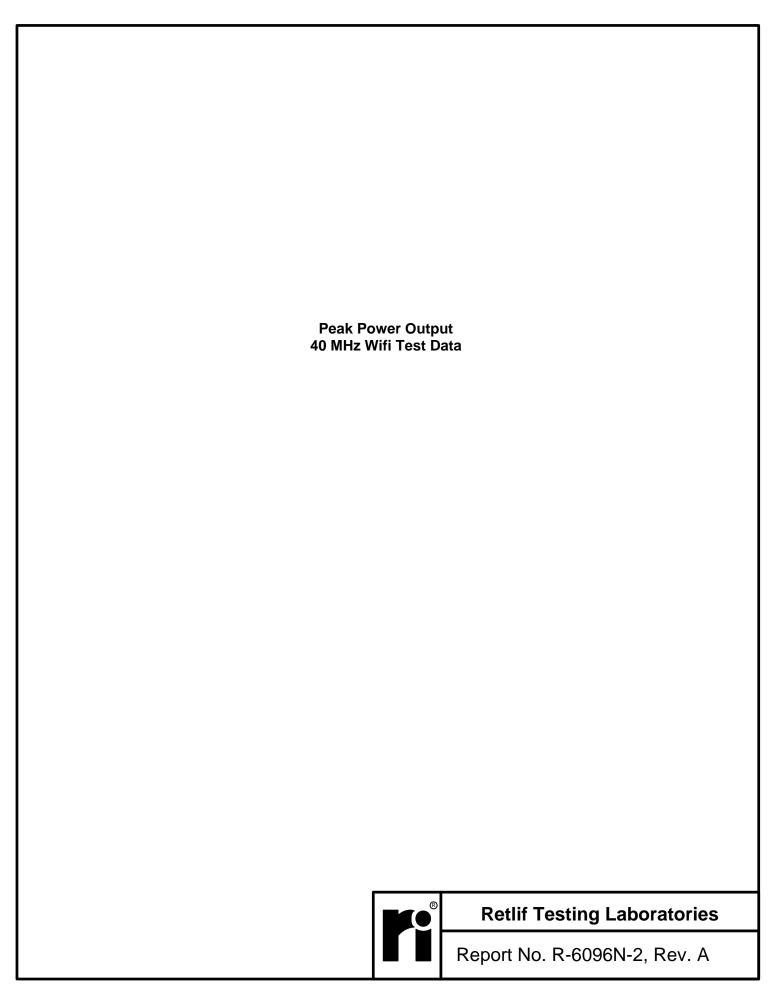
Notes: Measurement method: 9.1.2, PKPM1 Broadband RF Peak Power Meter

Transmit Frequency	Power Meter Reading	Cable Loss	Corrected Reading	Converted Reading	Limit
MHz	dBm	dB	dBM	mW	mW
2412	18.71	1.00	19.71	93.541	1000.00
2440	18.55	1.00	19.55	90.157	1000.00
2462	18.28	1.00	19.28	84.723	1000.00
				1	Data Sheet 1 of 1

Data Sheet 1 of 1



## **Retlif Testing Laboratories**



	====== RETLIF TESTING LABORATORIES =======					
	EMISSIONS TEST DATA SHEET					
Test Method	Peak Power Output					
Customer	Kuvee, Inc.					
Job Number	R-6096N-2					
Test Sample	Kuvee Smart Bottle					
Model Number	SBK-07					
Serial Number	KV16050003					
Test Specification	FCC Part 15, Subpart C Paragraph 15.247 (b)(3)					
Operating Mode	Transmitting 40 MHz WiFi signal					
Technician	T. Hannemann					
Date	June 15, 2016					

Notes: Measurement method: 9.1.2, PKPM1 Broadband RF Peak Power Meter

Transmit Frequency	Power Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit
MHz	dBm	dB	dBM	mW	mW
2422	-3.88	23	19.12	81.66	1000.00
2432	-3.9	23	19.1	81.28	1000.00
2452	-3.95	23	19.05	80.35	1000.00
	<u> </u>		1	L	Data Sheet 1 of 1

Data Sheet 1 of 1



## **Retlif Testing Laboratories**

## Test Photographs Antenna Terminal Out of Band/Band Edge Conducted Emissions (30 MHz to 25 GHz)



Test Setup, Bluetooth



Test Setup, Wifi, 20 MHz



#### **Retlif Testing Laboratories**

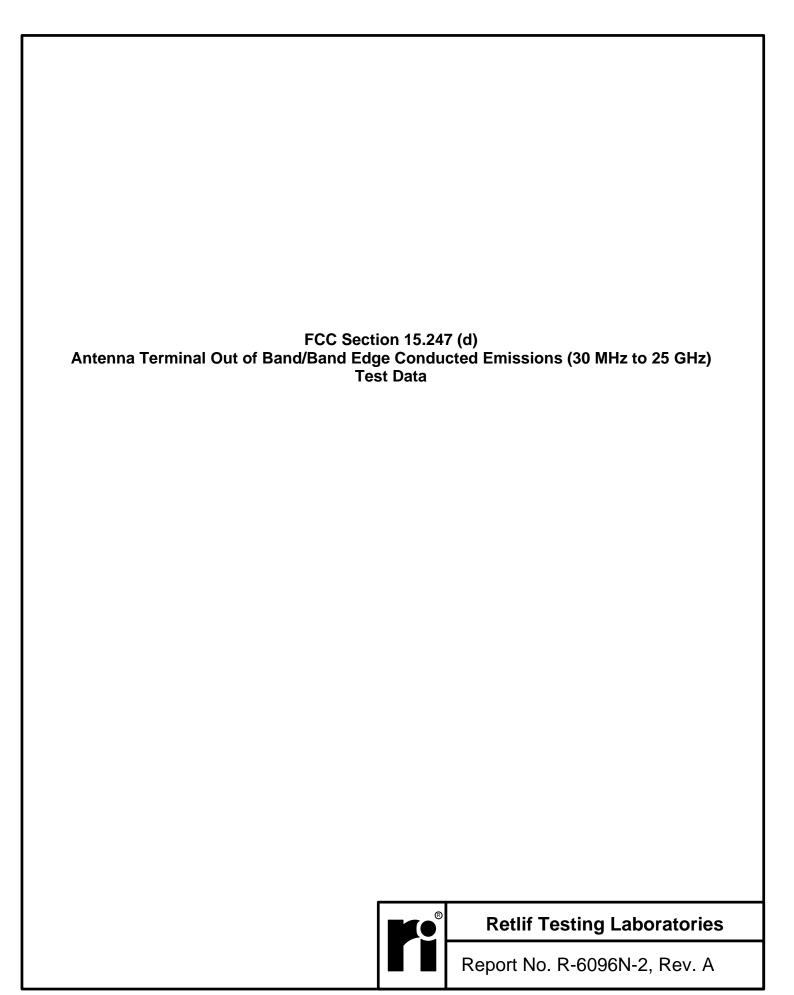
# Test Photographs Antenna Terminal Out of Band/Band Edge Conducted Emissions (30 MHz to 25 GHz)



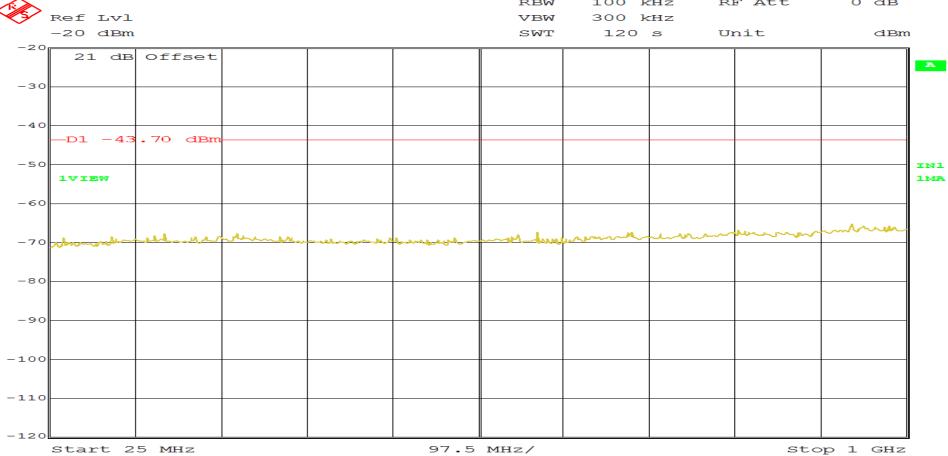
Test Setup, Wifi, 40 MHz



#### **Retlif Testing Laboratories**

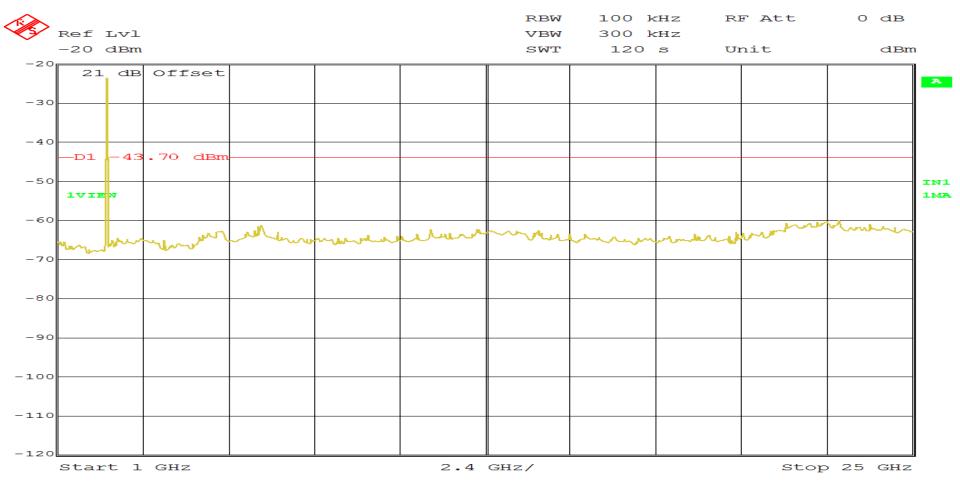


RETLIF TESTING LABORATORIES						
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz		-			
Customer	Kuvee, Inc.	Job No.	R-6096N-2			
Test Sample	Kuvee Smart Bottle	·				
Model Number	SBK-07	Serial No.	KV16050003			
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz					
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)					
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016			
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %					
Notes	Limit:-43.70 dBm Limit based off the PSD Level of -23.70 dBm					
	RB	w 100	kHz RF Att 0 dB			



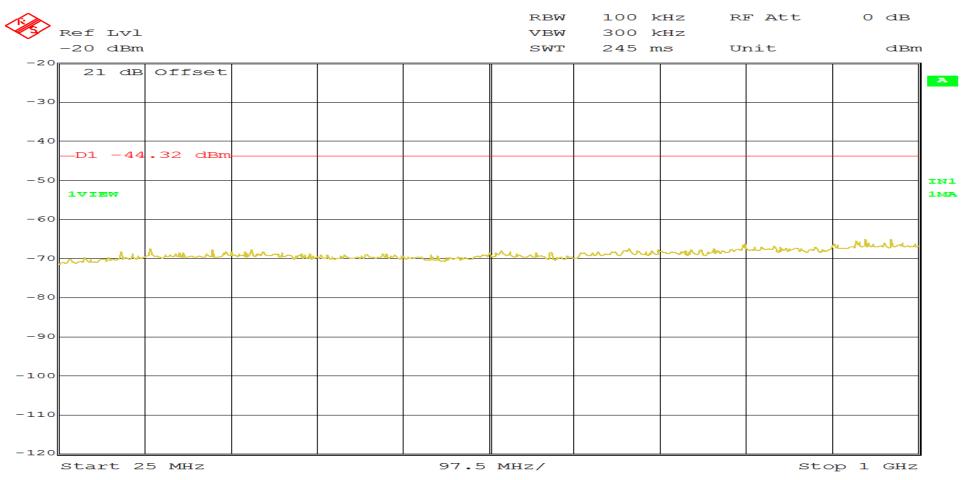
Page 1 of 6

	RETLIF TESTING LABORATORIES						
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz						
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit:-43.70 dBm Limit based off the PSD Level of -23.70 dBm						

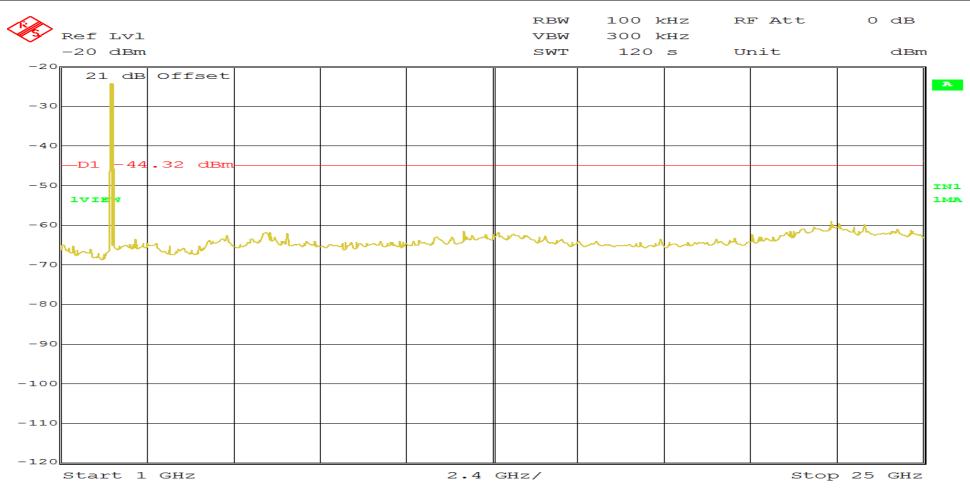


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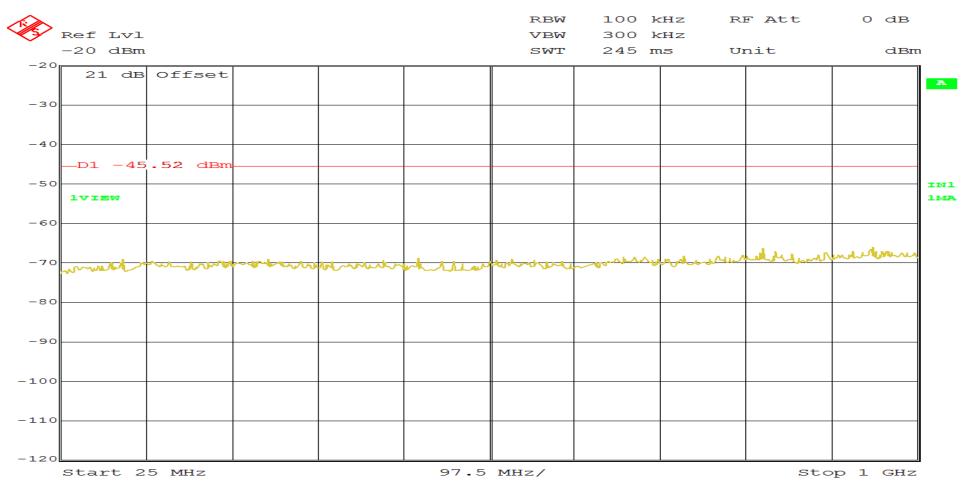
	RETLIF TESTING LABORATORIES						
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.440 GHz						
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit:-44.32 dBm Limit based off the PSD Level of -24.32 dBm						



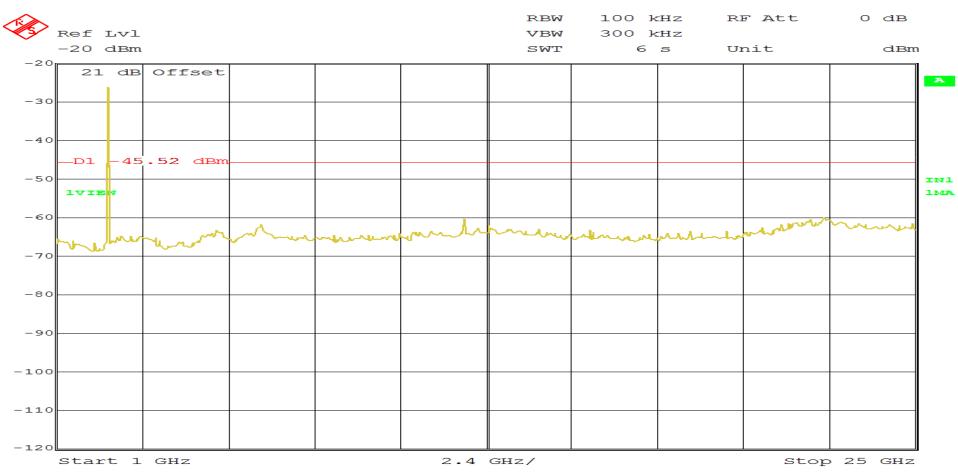
	RETLIF TESTING LABORATORIES						
<b>Test Method:</b>	Out of Band Conducted Emissions 25 MHz to 25 GHz						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
<b>Operating Mode</b>	Transmitting Bluetooth signal at 2.440 GHz						
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
<b>Climatic Conditions</b>	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit:-44.32 dBm Limit based off the PSD Level of -24.32 dBm						

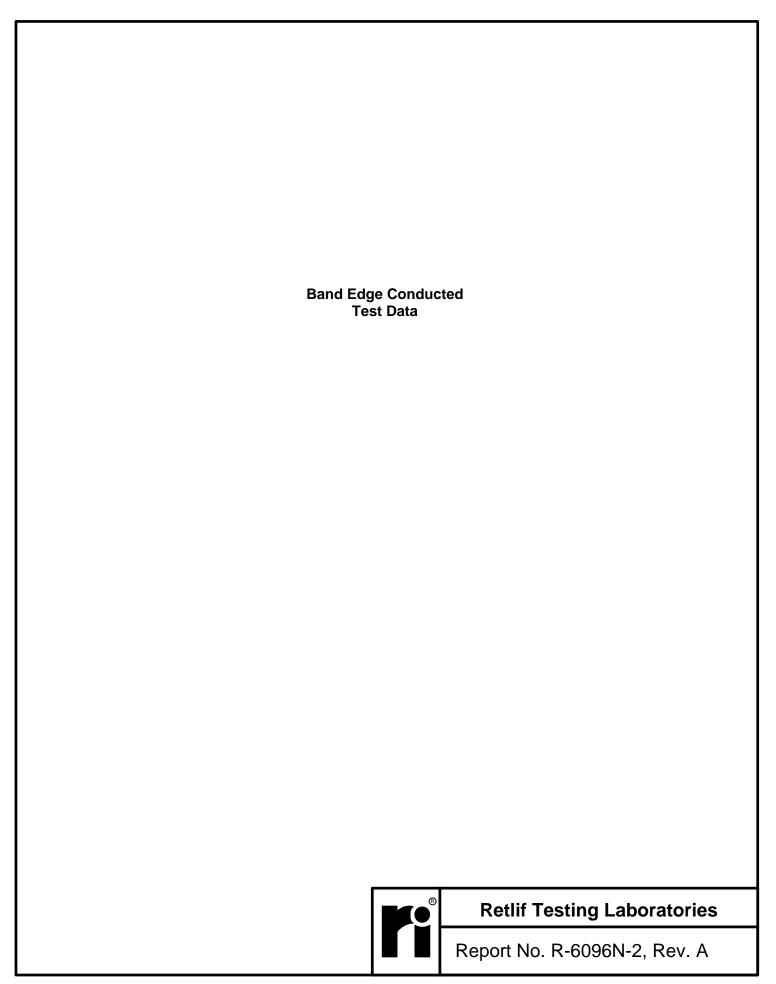


	RETLIF TESTING LABORATORIES						
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.480 GHz						
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit:-45.52 dBm Limit based off the PSD Level of -45.52 dBm						

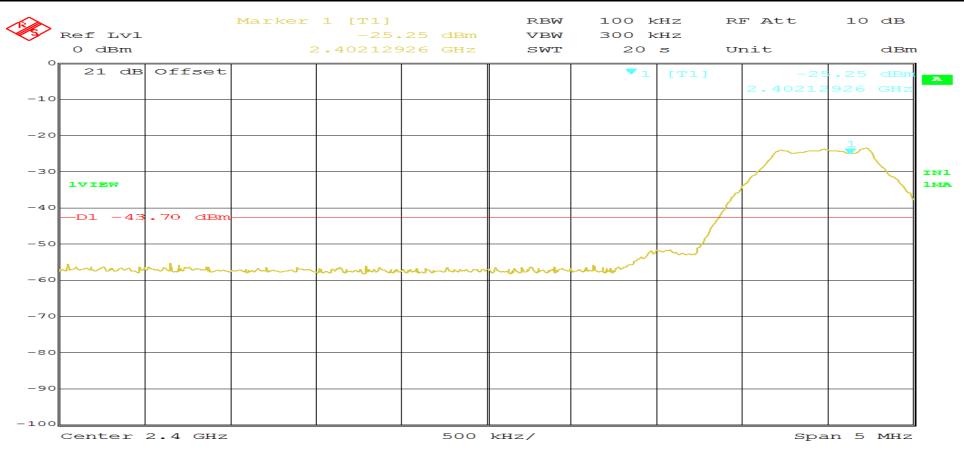


	RETLIF TESTING LABORATORIES						
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.480 GHz						
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit:-45.52 dBm Limit based off the PSD Level of -45.52 dBm						





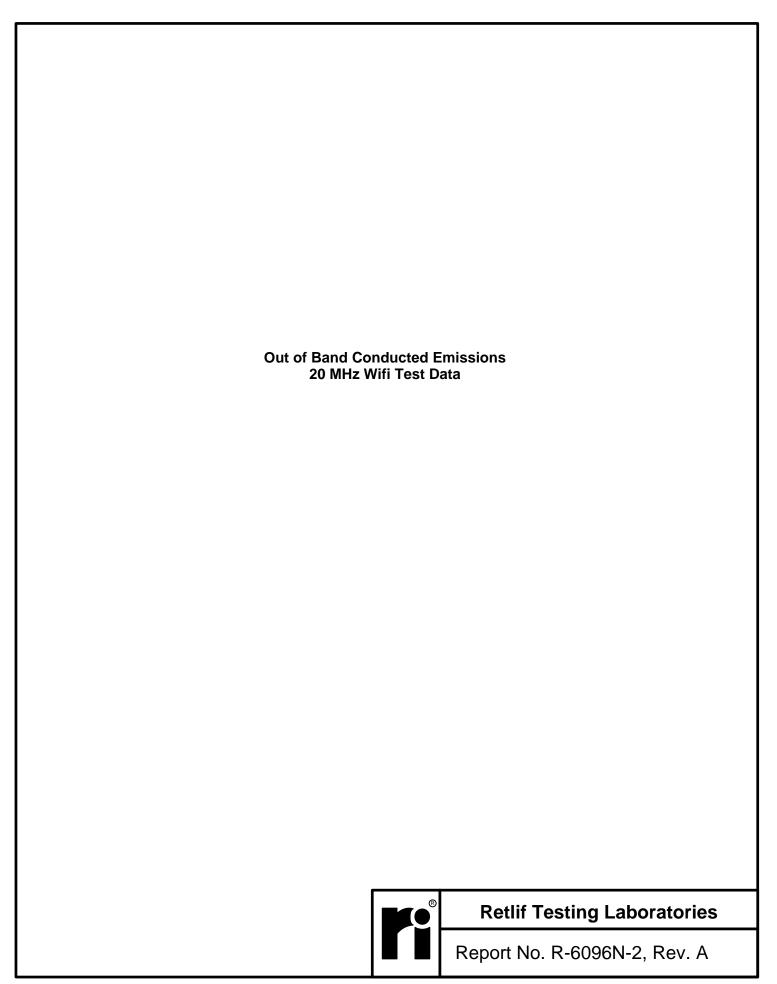
	RETLIF TESTING LABORATORIES						
Test Method:	Band Edge Conducted						
Customer	Kuvee, Inc.	Job No.	R-6096N-2				
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07	Serial No.	KV16050003				
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz						
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)						
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016				
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %						
Notes	Limit: -43.70 dBm Limit based off the PSD Level of -23.70 dBm						



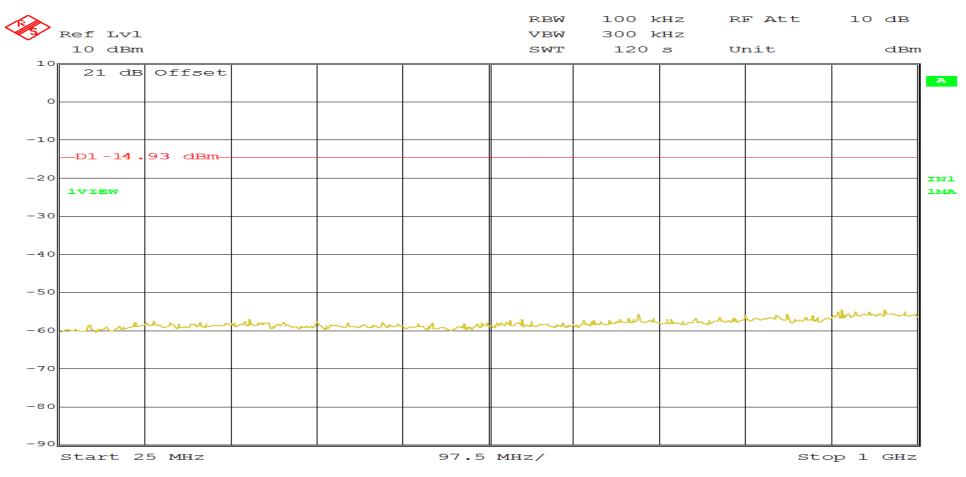
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Foot Mothod:	Dand Edit C			<b>TESTIN</b>	J LIDO				
Test Method:	Band Edge Co	onducted				7	7. 100		
Customer	Kuvee, Inc.					Job No.	R-609	6N-2	
est Sample	Kuvee Smart l	Bottle				<u> </u>			
lodel Number	SBK-07					Serial No.	KV16	050003	
perating Mode		Bluetooth signal							
est Specification		Subpart C Par	ragraph: 15.247	(d)					
echnician	M. Seamans					Date	May 9	<sup>th</sup> , 2016	
limatic Conditions	Temp: 18.3 °C	C Relative	Humidity: 30.6	5 %					
otes	Limit: -45.52	dBm Limit ba	ased off the PSE	D Level of -25.52	dBm				
12					RBW	100 }	(HZ	RF Att	10 dB
Ref Lvl					VBW		<hz< td=""><td></td><td></td></hz<>		
0 dBm					SWT	5 n	ns	Unit	dBm
21 dB	Offset								
-10									
-10									
-20									
	my								
-30 1VIEW									
-40		\							
D1 -4/5	.52 dBm	1							
-50		100							
Almost Co.		Walter at	ary all allower	MARKA	March	باد والعام العام	بالبين ووا	American warm	المستحددة والم
-60			(7 mg)(755 - G		TO CONTROL OF CO.	The same of the		The Color of California	1,000
-70									
-80									
-90							1		+
-100 Center					<u> </u> 1Hz/				n 10 MHz

Page 2 of 2



	RETLIF TESTING LABORATORIES							
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz							
Customer	Kuvee, Inc.	Job No.	R-6096N-2					
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07	Serial No.	KV16050003					
Operating Mode	Transmitting 20 MHz WiFi signal at 2.412 GHz							
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)							
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016					
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %							
Notes	Limit: -14.93 dBm Limit based off the PSD Level of 5.07 dBm							



Page 1 of 6

				<b>TESTIN</b>	G LABC	<u>PRATOI</u>	RIES			<u> </u>
Test Method:		onducted Emiss	ions 25 MHz to	25 GHz		_				
Customer	Kuvee, Inc.					Job No.	R-6096	6N-2		
Test Sample	Kuvee Smart B	ottle				_				
Model Number	SBK-07					Serial No.	KV160	050003		
Operating Mode	Transmitting 20	0 MHz WiFi sig	gnal at 2.412 GF	łz						
Test Specification	FCC Part 15, S	ubpart C Para	agraph: 15.247 (	(d)						
Technician	M. Seamans					Date	May 9 <sup>t</sup>	<sup>th</sup> , 2016		
Climatic Conditions	Temp: 18.3 °C	Relative	Humidity: 30.0	5 %						
Notes	Limit: -14.93 d	Bm Limit ba	sed off the PSD	Level of 5.07 d	Bm					
					RBW	100 ]	KHZ	RF Att	10 dB	
Ref Lvl					VBW	300 ]		_		
10 dBm					SWT	120	S	Unit	dBr	m
21 dB	Offset									A
0										1
-10										$\parallel$
—D1 -14.	93 dBm-									1
-20										IN1
1VIEW										1MA
-30										4
-40										1
-50										
-30	M	~~~		k Nanna	homelus.	.ba . s s.	- 10		and mark	1
was with	James J.									
-60										1
-70							1			1
-80							-			-
-90										

Page 2 of 6

Fest Method:	Out of Band	l Conducted E	RETLIF missions 25 MHz to							
Customer	Kuvee, Inc.					Job No.	R-609	96N-2		
Гest Sample	Kuvee Smar	rt Bottle				!		<u> </u>		
Model Number	SBK-07					Serial No.	KV16	5050003		
Operating Mode	Transmitting	g 20 MHz Wil	Fi signal at 2.440 G	Hz			L			
Test Specification	FCC Part 15	FCC Part 15, Subpart C Paragraph: 15.247 (d)								
Technician	M. Seamans	S				Date	May	9 <sup>th</sup> , 2016		
Climatic Condition	Temp: 18.3	°C Rela	tive Humidity: 30	.6 %						
Notes	Limit: -15.0	0 dBm Lim	it based off the PSI	Level of 5.00 d	Bm					
ria de la constante de la cons					RBW	100 }	KHZ	RF Att	10 dB	
Ref I					VBW	300 }	(HZ			
10 0	Bm				SWT	120	s	Unit	dBm	n
21	dB Offset	t								A
0										1
-10										1
—D1 -:	15.00 dBm									1
-20										1M2
lVIEW										1142
-30		_								1
-40		+								-
-50										-
									- mmen	4
-60 mmlu	e menus		workthen	Maryallo	whenh	~~~	the work	William Charles	Ţ	1
-70										4
-80										
-90										

Page 3 of 6

est Method:	Out of Dand		Sions 25 MHz to		G LABU	JKATUI	VIE 2		
		Londucted Ellis	SIONS 23 IVITIZ 10	) 23 GHZ		Job No.	D 600	CN 2	
ustomer	Kuvee, Inc.	D . 441.				J00 N0.	R-609	96IN-2	
est Sample	Kuvee Smart Bottle  SBK-07  Serial No. KV16050003								
lodel Number	SBK-07	т	Serial No.	KVI	0050003				
perating Mode			gnal at 2.440 GI						
est Specification	ř	Subpart C Pa	ragraph: 15.247	(d)		15.	3.6	oth 2016	
echnician	M. Seamans	~ ~				Date	May	9 <sup>th</sup> , 2016	
limatic Conditions	Temp: 18.3 °		Humidity: 30.						
otes	Limit: -15.00	dBm Limit b	ased off the PSD	Level of 5.00 d	Bm				
					RBW		(HZ	RF Att	10 dB
Ref Lvl					VBW		CHZ	IIm i +	dD.m.
10 dBm	ı				SWT	120	5	Unit	dBm
21 dE	Offset								
0									
-10									
D1 -15	00 dBm-								
-20									
1VIEW									
-30									
-40									
-50								N. A.	N .
Im	my wh	more	mun -	mener	while	Mun	سلسر	melmore	- many
-60	~~~								
7.0									
-70									
-80									1
-90 Start 1			<u> </u>		GHz/	<u>I</u>	<u> </u>		 p 25 GHz

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				<b>TESTIN</b>	<u>G LABC</u>	<u> DRATO</u>	<u>RIES</u>				
est Method:	Out of Band (	Conducted Emiss	sions 25 MHz to	25 GHz							
Customer	Kuvee, Inc.					Job No.	R-609	6N-2			
est Sample	Kuvee Smart	Bottle									
lodel Number	SBK-07	SBK-07					KV16	050003			
perating Mode	Transmitting	20 MHz WiFi si	gnal at 2.462 GF	łz			-				
st Specification	FCC Part 15,	Subpart C Par	agraph: 15.247 (	(d)							
chnician	M. Seamans					Date	May 9	<sup>oth</sup> , 2016			
imatic Conditions	Temp: 18.3 °	C Relative	Humidity: 30.6	5 %		_					
otes	Limit: -15.66		sed off the PSD	Level of 4.34 dl	Bm						
					RBW	100	kHz	RF Att	10	0 dB	
Ref Lvl					VBW	300					
10 dBm	ı				SWT	120	s	Unit		dBm	n
21 dE	Offset						T				]_
											-
0											1
-10											1
—D1 −15	.66 dBm-						+				1
-20							+				┨ェ
1VIEW											1
-30											1
-40											
-50											
-60 book address	mour	worken	where	mare	menone	monte	me	mount	me - en		1
7.0											
-70											
-80							1				1
-90 Start 2	<u> </u>	<u> </u>	l	07.5	MHz/	<u> </u>	<u> </u>	l	Stop 1		П

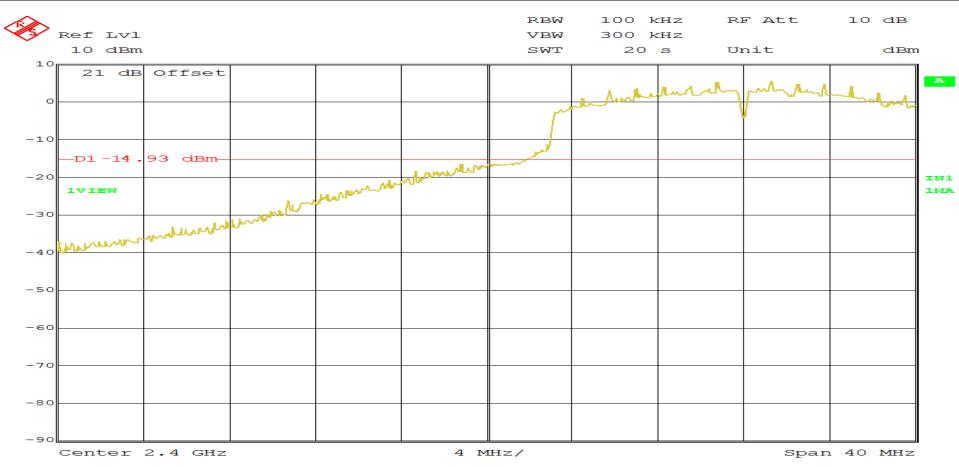
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_				RETLIF '		G LABO	<u>DRATO</u>	RIES			
<b>Test Method:</b>		Out of Band	Conducted Emis	sions 25 MHz to	25 GHz		_				
Customer		Kuvee, Inc.					Job No.	R-6096	5N-2		
Test Sample		Kuvee Smart	Bottle				_				
<b>Model Number</b>		SBK-07					Serial No.	KV160	)50003		
<b>Operating Mode</b>		Transmitting	20 MHz WiFi si	ignal at 2.462 GI	łz						
Test Specificatio	n	FCC Part 15,	Subpart C Pa	ragraph: 15.247	(d)						
Technician		M. Seamans					Date	May 9 <sup>th</sup>	h, 2016		
Climatic Conditi	ons	Temp: 18.3 °	C Relative	Humidity: 30.	6 %						
Notes		Limit: -15.66		ased off the PSD		Bm					
√£ C						RBW	100 ]	<hz< td=""><td>RF Att</td><td>10 dB</td><td></td></hz<>	RF Att	10 dB	
Ref						VBW	300 ]				
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	1										
-10	-										
D1	15.	66 dBm-									
-20	-							-			IN
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-30											
	1										
-40	Ш										
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-50	1										
-50	114		J. M.		her while	human		A	ma warner	muner	
m	) want										
-60											
-70								+			
-80								-			
-90											

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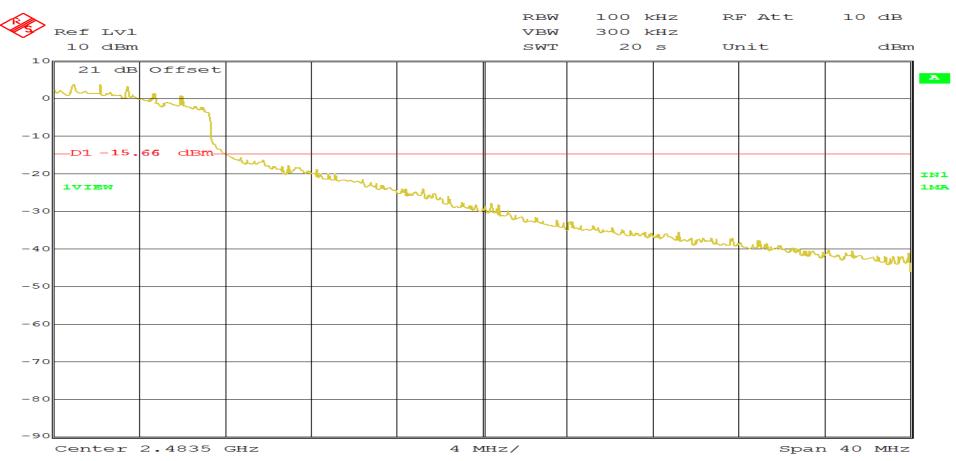


	RETLIF TESTING LABORATORIES							
Test Method:	Band Edge Conducted							
Customer	Kuvee, Inc.	Job No.	R-6096N-2					
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07	Serial No.	KV16050003					
Operating Mode	Transmitting 20 MHz WiFi signal at 2.412 GHz							
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)							
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016					
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %							
Notes	Limit: -14.93 dBm Limit based off the PSD Level of 5.07 dBm							

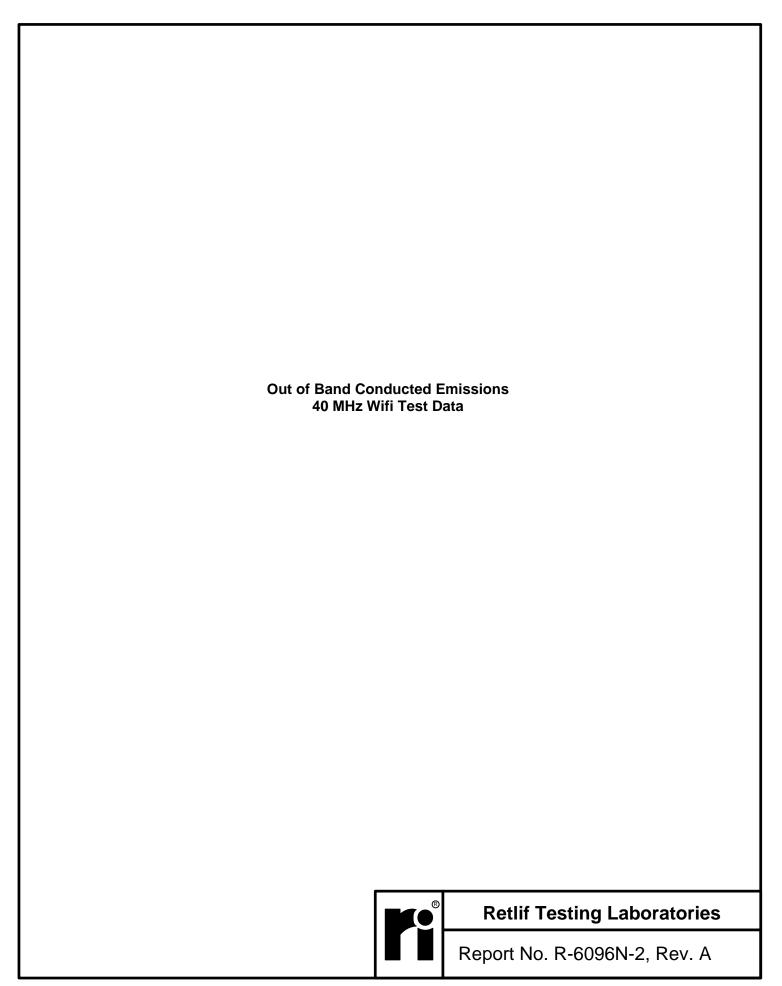


Page 1 of 2

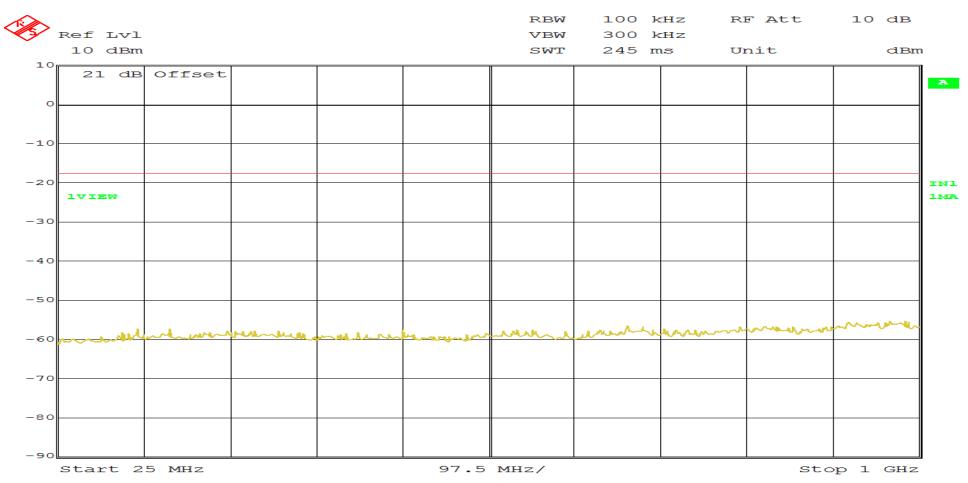
	RETLIF TESTING LABORATORIES								
Test Method:	Band Edge Conducted								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 20 MHz WiFi signal at 2.462 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Limit: -15.66 dBm Limit based off the PSD Level of 4.34 dBm								



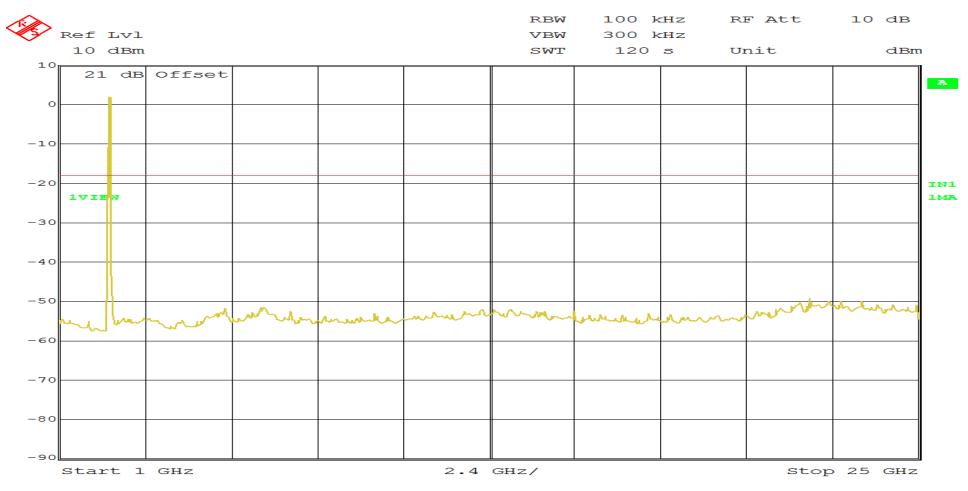
Page 2 of 2



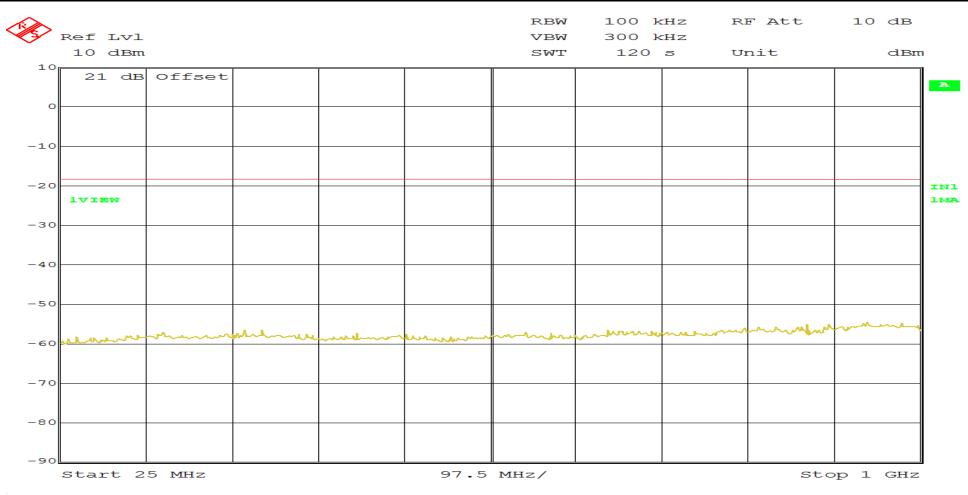
	RETLIF TESTING LABORATORIES								
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 40 MHz WiFi signal at 2.422 GHz								
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Limit: -18.04 dBm Limit based off the PSD Level of 1.96 dBm								



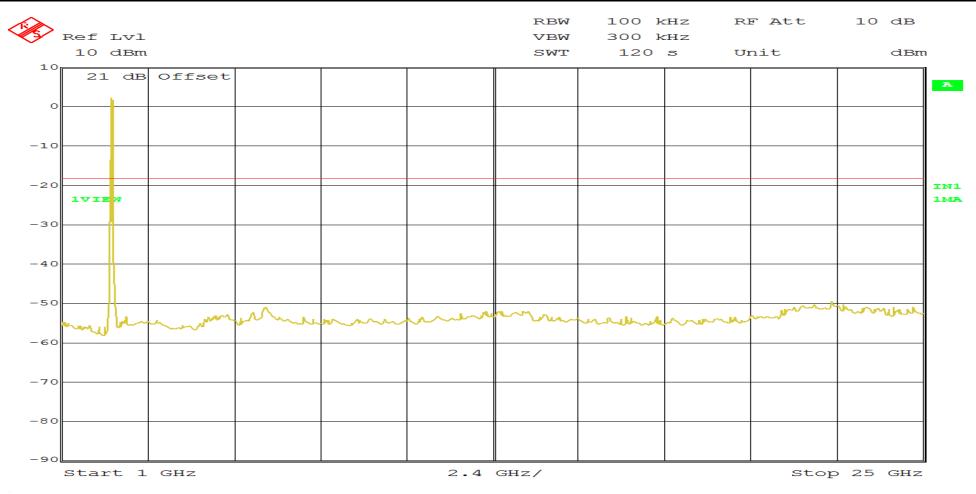
	RETLIF TESTING LABORATORIES								
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz								
Customer	Kuvee, Inc.	Job No.	R-6096N-2						
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07	Serial No.	KV16050003						
Operating Mode	Transmitting 40 MHz WiFi signal at 2.422 GHz								
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)								
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016						
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %								
Notes	Limit: -18.04 dBm Limit based off the PSD Level of 1.96 dBm								



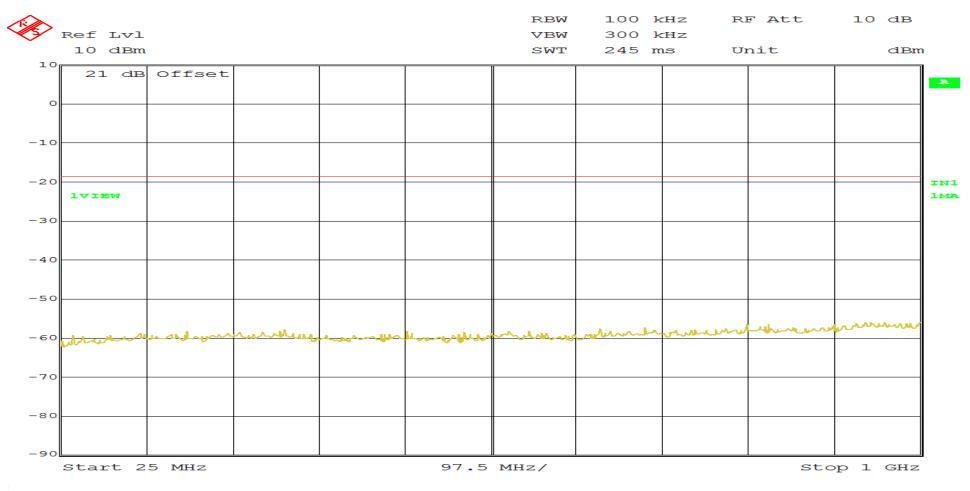
RETLIF TESTING LABORATORIES								
<b>Test Method:</b>	Out of Band Conducted Emissions 25 MHz to 25 GHz							
Customer	Kuvee, Inc.	Job No.	R-6096N-2					
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07	Serial No.	KV16050003					
Operating Mode	Transmitting 40 MHz WiFi signal at 2.432 GHz							
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)							
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016					
<b>Climatic Conditions</b>	Temp: 18.3 °C Relative Humidity: 30.6 %							
Notes	Limit: -18.18 dBm Limit based off the PSD Level of 1.82 dBm							



RETLIF TESTING LABORATORIES								
<b>Test Method:</b>	Out of Band Conducted Emissions 25 MHz to 25 GHz							
Customer	Kuvee, Inc.	Job No.	R-6096N-2					
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07	Serial No.	KV16050003					
Operating Mode	Transmitting 40 MHz WiFi signal at 2.432 GHz							
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)							
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016					
<b>Climatic Conditions</b>	Temp: 18.3 °C Relative Humidity: 30.6 %							
Notes	Limit: -18.18 dBm Limit based off the PSD Level of 1.82 dBm							

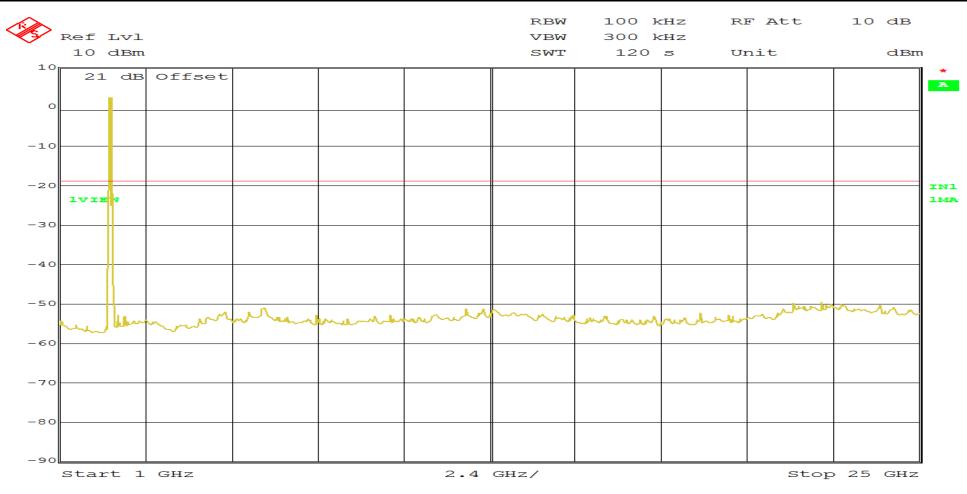


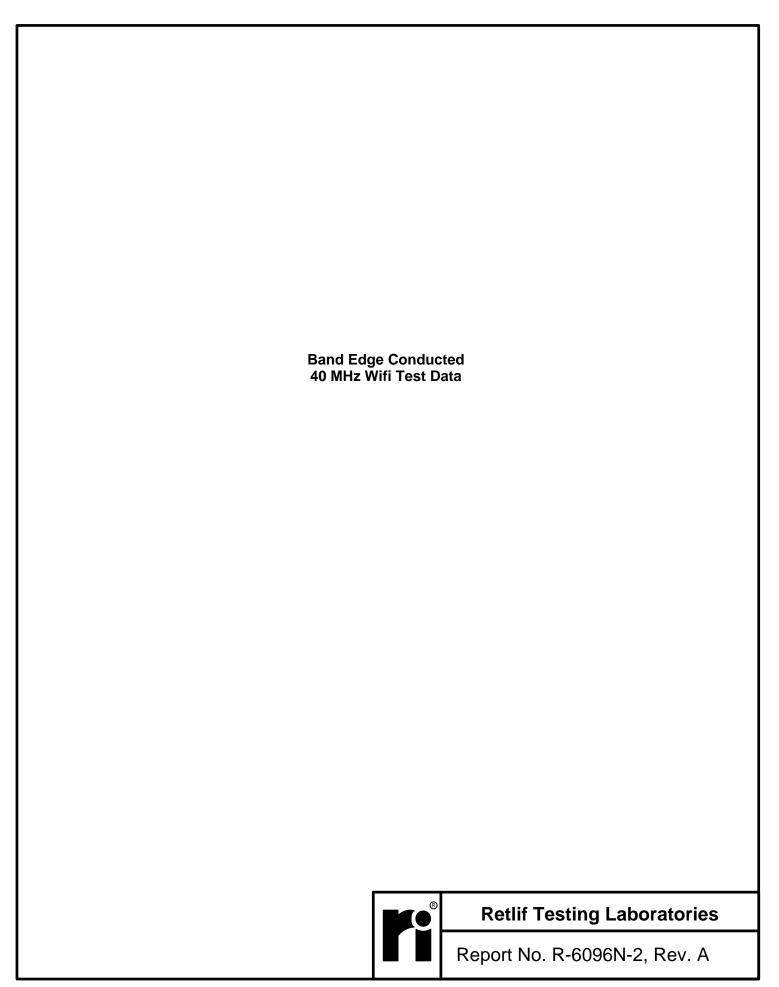
RETLIF TESTING LABORATORIES				
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz			
Customer	Kuvee, Inc.	Job No.	R-6096N-2	
Test Sample	Kuvee Smart Bottle			
Model Number	SBK-07	Serial No.	KV16050003	
Operating Mode	Transmitting 40 MHz WiFi signal at 2.452 GHz			
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)			
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016	
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %			
Notes	Limit: -18.40 dBm Limit based off the PSD Level of 1.60 dBm			



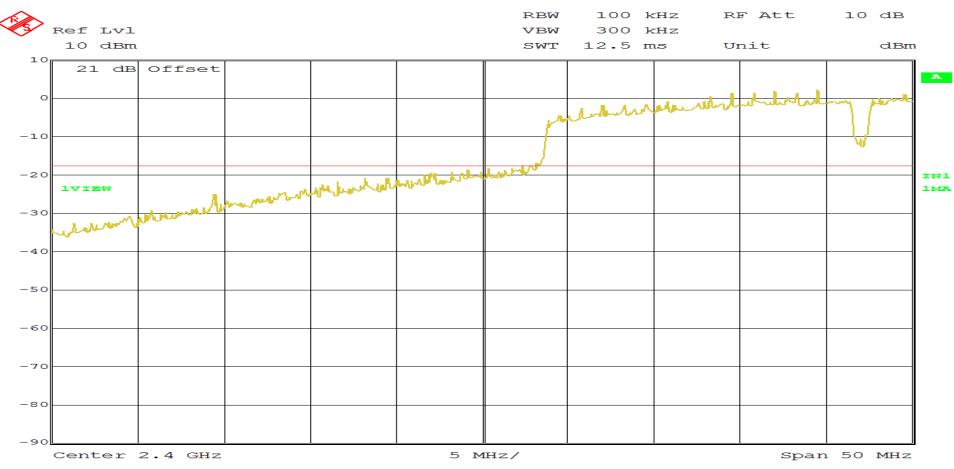
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RETLIF TESTING LABORATORIES					
Test Method:	Out of Band Conducted Emissions 25 MHz to 25 GHz		·		
Customer	Kuvee, Inc.	Job No.	R-6096N-2		
Test Sample	Kuvee Smart Bottle				
Model Number	SBK-07	Serial No.	KV16050003		
Operating Mode	Transmitting 40 MHz WiFi signal at 2.452 GHz				
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)				
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016		
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %				
Notes	Limit: -18.40 dBm Limit based off the PSD Level of 1.60 dBm				



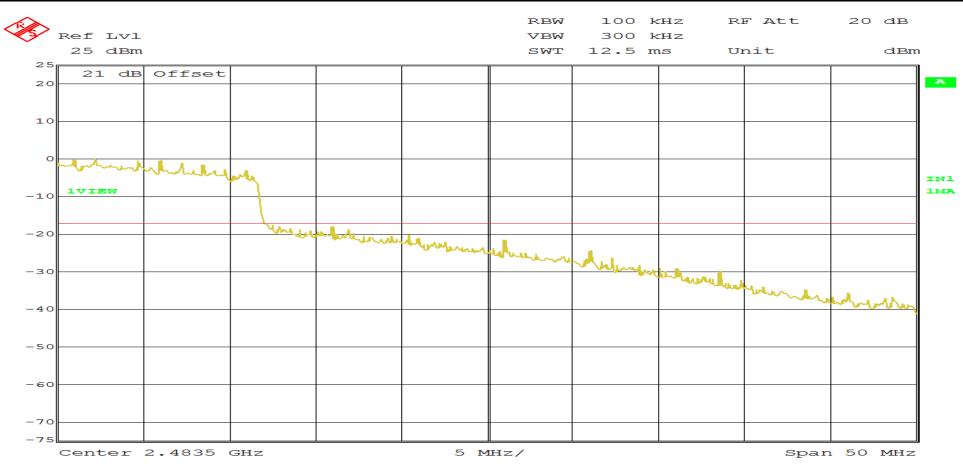


RETLIF TESTING LABORATORIES					
Test Method:	Band Edge Conducted				
Customer	Kuvee, Inc.	Job No.	R-6096N-2		
Test Sample	Kuvee Smart Bottle				
Model Number	SBK-07	Serial No.	KV16050003		
Operating Mode	Transmitting 40 MHz WiFi signal at 2.422 GHz				
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (d)				
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016		
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %				
Notes	Limit: -18.04 dBm Limit based off the PSD Level of 1.96 dBm				



Page 1 of 2

RETLIF TESTING LABORATORIES					
Test Method:	Band Edge Conducted				
Customer	Kuvee, Inc.	Job No.	R-6096N-2		
Test Sample	Kuvee Smart Bottle				
Model Number	SBK-07	Serial No.	KV16050003		
Operating Mode	Transmitting 40 MHz WiFi signal at 2.452 GHz				
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)				
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016		
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %				
Notes	Limit: -18.40 dBm Limit based off the PSD Level of 1.60 dBm				



Page 2 of 2



Test Setup, Bluetooth



## **Retlif Testing Laboratories**



Bluetooth, Horizontal Antenna Polarization, 30 MHz to 1 GHz



Bluetooth, Vertical Antenna Polarization, 30 MHz to 1 GHz



## **Retlif Testing Laboratories**



Bluetooth, Horizontal Antenna Polarization, 1 GHz to 12 GHz



Bluetooth, Vertical Antenna Polarization, 1 GHz to 12 GHz



## **Retlif Testing Laboratories**



Bluetooth, Horizontal Antenna Polarization, 12 GHz to 18 GHz



Bluetooth, Vertical Antenna Polarization, 12 GHz to 18 GHz



## **Retlif Testing Laboratories**



Bluetooth, Horizontal Antenna Polarization, 18 GHz to 25 GHz



Bluetooth, Vertical Antenna Polarization, 18 GHz to 25 GHz



## **Retlif Testing Laboratories**



Test Setup, Wifi



## **Retlif Testing Laboratories**



Wifi, Horizontal Antenna Polarization, 30 MHz to 1 GHz



Wifi, Vertical Antenna Polarization, 30 MHz to 1 GHz



## **Retlif Testing Laboratories**



Wifi, Horizontal Antenna Polarization, 1 GHz to 12 GHz



Wifi, Vertical Antenna Polarization, 1 GHz to 12 GHz



## **Retlif Testing Laboratories**



Wifi, Horizontal Antenna Polarization, 12 GHz to 18 GHz



Wifi, Vertical Antenna Polarization, 12 GHz to 18 GHz



## **Retlif Testing Laboratories**



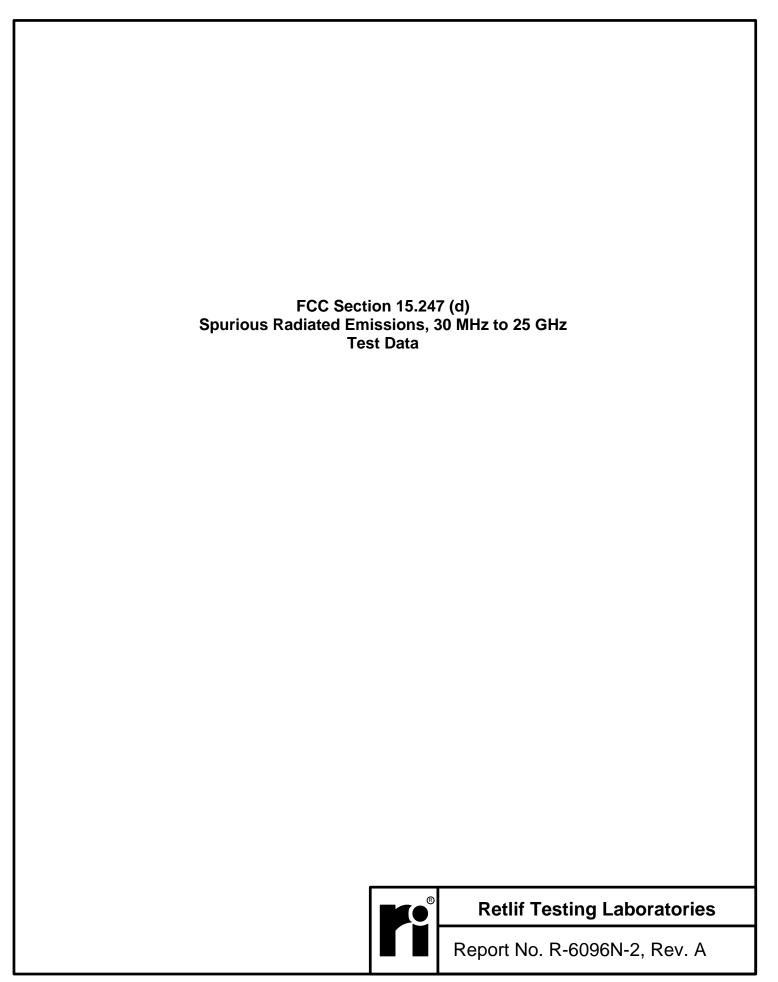
Wifi, Horizontal Antenna Polarization, 18 GHz to 25 GHz



Wifi, Vertical Antenna Polarization, 18 GHz to 25 GHz



## **Retlif Testing Laboratories**



RETLIF TESTING LABORATORIES							
EMISSIONS TEST DATA SHEET							
<b>Test Method</b>	Unwanted Emissions into Restricted Frequency Bands						
Customer	Kuvee, Inc.						
Job Number	R-6096N-2						
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07						
Serial Number	KV16050003						
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)					
Operating Mode	Transmitting Bluetooth signal						
Technician	M. Seamans						
Date	May 12 <sup>th</sup> , 2016						

TEST PARAMETERS

Detector: Quasi-Peak <1GHz, Average >1GHz

**Notes:** Antenna Test Distance: 3 meters

121.94

123.00

Restricted Measured Meter Correction Corrected Converted Limit at Reading **Factor** Reading Reading 3MBand Frequency MHz MHz dBuV $d\mathbf{B}$ dBuV/m uV/m uV/m 37.50 100.00 38.00 13.60 14..20 27.80 24.55 Ι 38.25 100.00 73.00 100.00 73.50 14.80 \* 8.36 23.16 14.39 I 74.60 100.00 74.80 100.00 75.00 7.83 7.73 15.56 6.00 75.20 100.00 108.00 150.00 116.30 22.45 32.05 40.04 9.60

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

9.08

24.37

137.80

Data Sheet 1 of 8

47.04

150.00

150.00



33.45

### **Retlif Testing Laboratories**

RETLIF TESTING LABORATORIES							
	EMISSIONS TEST DATA SHEET						
Test Method	Unwanted Emissions into Restricted Frequency Bands						
Customer	Kuvee, Inc.						
Job Number	R-6096N-2						
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07						
Serial Number	KV16050003						
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)					
Operating Mode	Transmitting Bluetooth signal						
Technician	M. Seamans						
Date	May 12 <sup>th</sup> , 2016						

	TEST PARAMETERS								
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M		
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m		
	-	-	-	-		-			
138.00	-	-	-	-		-	150.00		
149.90	-	-	-	-		-	150.00		
	150.00	10.82	11.17	21.99	*	12.57			
150.05	-	-	-	-		-	150.00		
156.52	-	-	-	-		-	150.00		
	156.525	2.18	12.08	14.26	*	5.16			
156.52	-	-	-	-		-	150.00		
156.70	-	-	-	-		-	150.00		
	156.80	2.16	12.12	14.28	*	5.18			
156.90	-	-	-	-		-	150.00		
162.01	-	-	-	-		-	150.00		
	164.00	2.35	12.66	15.01	*	5.63			
167.17	-	-	-	-		-	150.00		
167.72	-	-	-	-		-	150.00		
	170.00	21.60	10.69	32.29		41.16			

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 2 of 8



### **Retlif Testing Laboratories**

RETLIF TESTING LABORATORIES							
EMISSIONS TEST DATA SHEET							
<b>Test Method</b>	Unwanted Emissions into Restricted Frequency Bands						
Customer	Kuvee, Inc.						
Job Number	R-6096N-2						
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07						
Serial Number	KV16050003						
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)					
Operating Mode	Transmitting Bluetooth signal						
Technician	M. Seamans						
Date	May 12 <sup>th</sup> , 2016						

	TEST PARAMETERS									
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M			
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m			
173.20	-	-	-	-		-	150.00			
240.00	-	-	-	-			200.00			
	249.25	23.93	16.59	40.52		106.17				
285.00	-	-	-	-		-	200.00			
322.80	-		-	-			200.00			
	330.00	1.34	17.65	18.99	*	8.90				
335.40	-	-	-	-		-	200.00			
399.90	_		-	_		_	200.00			
399.90	409.00	0.05	21.60	21.65	*	12.09	200.00			
410.00	-	-	-	-		-	200.00			
608.00	_		_	_			200.00			
	611.00	0.47	27.34	27.81	*	24.58	200.00			
614.00	-	-	-	-		-	200.00			
960.00	-	-	-	-			500.00			
	980.00	4.55	28.96	33.51	*	47.37				
1240.00	-	-	-	-		-	500.00			

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 3 of 8



### **Retlif Testing Laboratories**

RETLIF TESTING LABORATORIES							
EMISSIONS TEST DATA SHEET							
Test Method	Unwanted Emissions into Restricted Frequency Bands						
Customer	Kuvee, Inc.						
Job Number	R-6096N-2						
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07						
Serial Number	KV16050003						
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)					
Operating Mode	Transmitting Bluetooth signal						
Technician	M. Seamans						
Date	May 12 <sup>th</sup> , 2016						
Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz							

TEST PARAMETERS								
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M	
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m	
1300.00	-	-	-	-		-	500.00	
	1350.00	31.10	-9.50	21.60	*	12.02		
1427.00	-	-	-	-		-	500.00	
1435.00	-	-	-	-		-	500.00	
	1500.00	30.52	-7.50	23.02	*	14.16		
1646.50	-	-	-	-		-	500.00	
1660.00	-	-	-	-		-	500.00	
	1680.00	30.34	-7.00	23.34	*	14.69		
1710.00	-	-	-	-		-	500.00	
1718.80	_		-	-		-	500.00	
	1720.00	30.35	-6.50	23.85	*	15.58		
1722.20	-	-	-	-		-	500.00	
2200.00	-	-	-	-		-	500.00	
	2250.00	30.05	-5.20	24.85	*	17.48		
2300.00	-	-	-	-		-	500.00	
2310.00	-		-	-		-	500.00	

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 4 of 8



## **Retlif Testing Laboratories**

RETLIF TESTING LABORATORIES							
	EMISSIONS TEST DATA SHEET						
Test Method	Unwanted Emissions into Restricted Frequency Bands						
Customer	Kuvee, Inc.						
Job Number	R-6096N-2						
Test Sample	Kuvee Smart Bottle						
Model Number	SBK-07						
Serial Number	KV16050003						
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)					
Operating Mode	Transmitting Bluetooth signal						
Technician	M. Seamans						
Date	May 12 <sup>th</sup> , 2016						

	TEST PARAMETERS								
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M		
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m		
	2360.00	29.88	-5.00	24.88	*	17.54			
2390.00	-	-	-	-		-	500.00		
2483.50	-	-	-	-		-	500.00		
	2490.00	29.93	-4.60	25.33	*	18.47			
2500.00	-	-	-	-		-	500.00		
2690.00	-	-	-	-		-	500.00		
	-	-	-	-		-			
2900.00	-	-	-	-		-	500.00		
3260.00	-	-	-	-		-	500.00		
	3263.00	29.41	-2.00	27.41	*	23.47			
3267.00	-	-	-	-		-	500.00		
3332.00	-	-	-	-		-	500.00		
	3336.00	29.42	-1.60	27.82	*	24.60			
3339.00	-	-	-	-		-	500.00		
3345.00	-	-	-	-		-	500.00		
	-	-	-	-		-			

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 5 of 8



### **Retlif Testing Laboratories**

	RETLIF TESTING LABORATORIES							
EMISSIONS TEST DATA SHEET								
Test Method	Unwanted Emissions into Restricted Frequency Bands							
Customer	Kuvee, Inc.							
Job Number	R-6096N-2							
Test Sample	Kuvee Smart Bottle							
Model Number SBK-07								
Serial Number	KV16050003							
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)						
Operating Mode	Transmitting Bluetooth signal							
Technician	M. Seamans							
Date	May 12 <sup>th</sup> , 2016							
Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz								
Peak readings of EUT emi	Peak readings of EUT emissions were less than 20 dB above the average limit.							

			TEST P.	ARAMETERS	3		
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
3358.00	-	-	-	-		-	500.00
3600.00	-	-	-	-		-	500.00
	-	-	-	-		-	
4400.00	-	-	-	-		-	500.00
4500.00	-	-	-	-		-	500.00
	4804.00	49.70	1.05	50.75		344.75	
	4880.00	47.25	1.15	48.40		263.03	
	4960.00	49.13	1.25	50.38		330.37	
5150.00	-	-	-	-		-	500.00
5350.00	-	-	-	-		-	500.00
	5400.00	27.94	2.50	30.44	*	33.27	
5460.00	-	-	-	-		-	500.00
7250.00	-	-	-	-		-	500.00
	7320.00	47.05	4.45	51.50		389.05	
	7440.00	46.30	4.55	50.85		348.74	
7750.00	-	-	-	-		-	500.00
8025.00	-	-	-	-		-	500.00
	-	-	-	-		-	
8500.00	-	-	-	-		-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 6 of 8



## **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET Test Method** Unwanted Emissions into Restricted Frequency Bands Customer Kuvee, Inc. Job Number R-6096N-2 Kuvee Smart Bottle **Test Sample Model Number SBK-07** KV16050003 **Serial Number Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting Bluetooth signal Technician M. Seamans May 12<sup>th</sup>, 2016

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz Peak readings of EUT emissions were less than 20 dB above the average limit.

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m	uV/m	uV/m
9000.00	-	-	-	-	-	500.00
1	-	-	-	-	-	
9200.00	-	-	-	-	-	500.00
9300.00	-	-	-	-		500.00
	-	-	-	-	-	
9500.00	-	-	-	-	-	500.00
10600.00	-		-	-	-	500.00
	12010.00	40.97	8.8	49.77	307.96	
	12200.00	40.97	9.0	49.97	315.14	
	12400.00	40.69	9.2	49.89	312.25	
12700.00	-	-	-	-	-	500.00
13250.00	-	-	-	-	-	500.00
	-	-	-	-	-	
13400.00	-	-	-	-	-	500.00
14470.00	-	-	-	-	-	500.00
	-	-	-	-	-	
14500.00	-	-	-	-	-	500.00
15350.00	-	-	-	-	-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet.

Data Sheet 7 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET** Unwanted Emissions into Restricted Frequency Bands **Test Method** Customer Kuvee, Inc. R-6096N-2 Job Number Kuvee Smart Bottle **Test Sample Model Number SBK-07 Serial Number** KV16050003 **Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting Bluetooth signal Technician M. Seamans May 12<sup>th</sup>, 2016 Date

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### TEST PARAMETERS

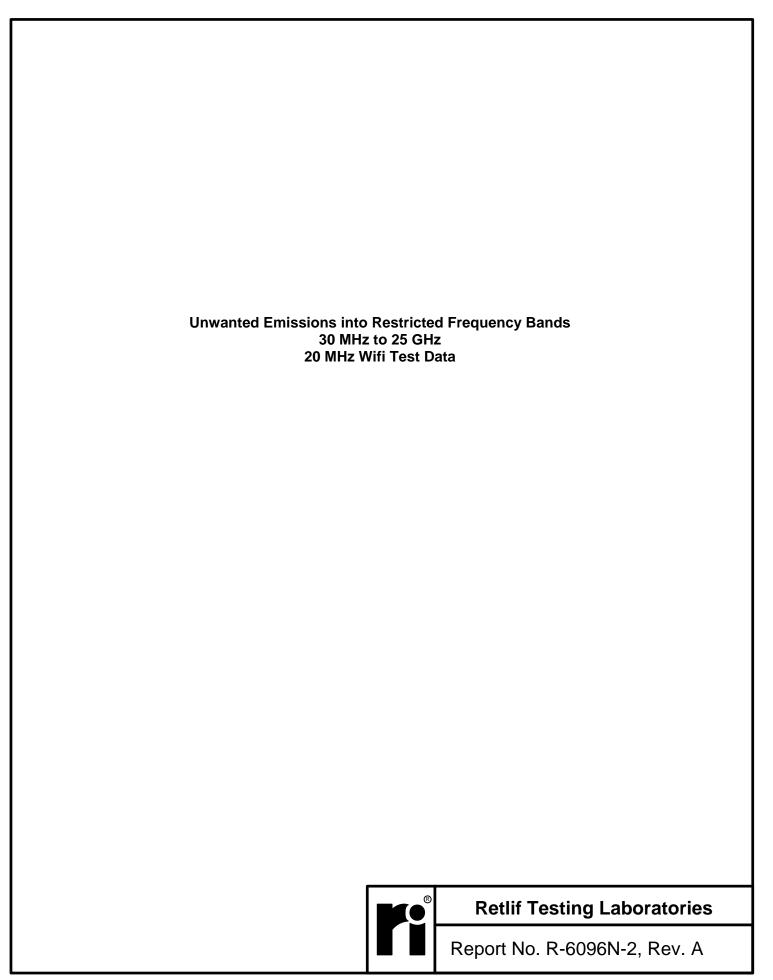
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	-	-	-	-		-	
16200.00	-	-	-	-		-	500.00
17700.00	-	-	-	-		-	500.00
	19216.00	32.40	-7.8	24.60	*	16.98	
	19520.00	32.22	-7.6	24.62	*	17.02	
	19840.00	32.23	-7.4	24.83	*	17.44	
21400.00	-	-	-	-		-	500.00
22010.00	-	-	-	-		-	500.00
	22320.00	33.29	-5.9	27.39	*	23.42	
23120.00	-	-	-	-		-	500.00
23600.00	_	_	_	_			500.00
23000.00	_	_	_	_		_	300.00
24000.00	-		_	_			500.00
24000.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 8 of 8



### **Retlif Testing Laboratories**



	RETLIF TESTING LABORATORIES								
EMISSIONS TEST DATA SHEET									
Test Method	Unwanted Emissions into Restricted Frequency Bands								
Customer	Kuvee, Inc.								
Job Number	R-6096N-2								
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07								
Serial Number	KV16050003								
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)							
Operating Mode	Transmitting 20MHz WiFi signal								
Technician	M. Seamans								
Date	May 12 <sup>th</sup> , 2016	_							

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
37.50	-	-	-	-		-	100.00
	38.00	13.60	1420	27.80	*	24.55	I
38.25	-	-	-	-		-	100.00
73.00	-	-	-	-		-	100.00
	73.50	14.80	8.36	23.16	*	14.39	I
74.60	-	-	-	-		-	100.00
74.80	-	-	-	-			100.00
	-	-	-	-		-	I
	75.00	7.83	7.73	15.56	*	6.00	
[	-	-	-	-		-	
75.20	-	-	-	-		-	100.00
108.00	-	-	-	-		-	150.00
	116.30	22.45	9.60	32.05		40.04	
121.94	-	-	-	-		-	150.00
123.00	-	-	-	-		-	150.00
	-	-	-	-		-	
1	137.80	24.37	9.08	33.45		47.04	i

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 1 of 8



### **Retlif Testing Laboratories**

	RETLIF TESTING LABORATORIES								
EMISSIONS TEST DATA SHEET									
Test Method	Unwanted Emissions into Restricted Frequency Bands								
Customer	Kuvee, Inc.								
Job Number	R-6096N-2								
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07								
Serial Number	KV16050003								
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)							
Operating Mode	Transmitting 20MHz WiFi signal								
Technician	M. Seamans								
Date	May 12 <sup>th</sup> , 2016								

#### **TEST PARAMETERS**

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	-	-	-	-		-	
138.00	-	-	-	-		-	150.00
149.90	-	-	-	-		-	150.00
1	150.00	10.82	11.17	21.99	*	12.57	
150.05	-	-	-	-		-	150.00
156.52	_	_	_	-			150.00
130.32	156.525	2.18	12.08	14.26	*	5.16	130.00
156.52	-	-	-	-		-	150.00
156.70	-	-	-	-		-	150.00
	156.80	2.16	12.12	14.28	*	5.18	
156.90	-	-	-	-		-	150.00
162.01	_	_	_	-			150.00
	164.00	2.35	12.66	15.01	*	5.63	130.00
167.17	-	-	-	-		-	150.00
167.72	-	-	-	-		-	150.00
	170.00	21.60	10.69	32.29		41.16	

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 2 of 8



### **Retlif Testing Laboratories**

	====== RETLIF TESTING LABORATORIES =======								
EMISSIONS TEST DATA SHEET									
Test Method	Unwanted Emissions into Restricted Frequency Bands								
Customer	Kuvee, Inc.								
Job Number	R-6096N-2								
Test Sample	Kuvee Smart Bottle								
Model Number	SBK-07								
Serial Number	KV16050003								
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)							
Operating Mode	Transmitting 20MHz WiFi signal								
Technician	M. Seamans								
Date	May 12 <sup>th</sup> , 2016								

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
173.20	-	-	-	-		-	150.00
240.00	-	-	_	-		-	200.00
	249.25	23.93	16.59	40.52		106.17	
285.00	-	-	-	-		-	200.00
322.80	-	-	-	-			200.00
[	330.00	1.34	17.65	18.99	*	8.90	
335.40	-	-	-	-		-	200.00
399.90	-	-	-	-		-	200.00
	409.00	0.05	21.60	21.65	*	12.09	
410.00	-	-	-	-		-	200.00
608.00	-	-	-	-		-	200.00
	611.00	0.47	27.34	27.81	*	24.58	
614.00	-	-	-	-		-	200.00
960.00	-	-	-	-		-	500.00
	980.00	4.55	28.96	33.51	*	47.37	
1240.00	-	-	-	-		-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 3 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET Test Method** Unwanted Emissions into Restricted Frequency Bands Customer Kuvee, Inc. Job Number R-6096N-2 Kuvee Smart Bottle **Test Sample Model Number SBK-07** KV16050003 **Serial Number Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 20MHz WiFi signal Technician M. Seamans May 12<sup>th</sup>, 2016 Date

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
1300.00	-	-	-	-		-	500.00
1	1350.00	31.10	-9.50	21.60	*	12.02	
1427.00	-	-	-	-		-	500.00
1435.00	-	<u>-</u>	-	-		-	500.00
1	1500.00	30.52	-7.50	23.02	*	14.16	1
1646.50	-	-	-	-		-	500.00
1660.00	-		-	-		-	500.00
1	1680.00	30.34	-7.00	23.34	*	14.69	
1710.00	-	-	-	-		-	500.00
1718.80	-	-	-	-		-	500.00
I	1720.00	30.35	-6.50	23.85	*	15.58	
1722.20	-	-	-	-		-	500.00
2200.00	-	-	-	-		-	500.00
	2250.00	30.05	-5.20	24.85	*	17.48	
2300.00	-	-	-	-		-	500.00
2310.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 4 of 8



### **Retlif Testing Laboratories**

	RETLIF TESTING LABORATORIES ==							
EMISSIONS TEST DATA SHEET								
Test Method	Unwanted Emissions into Restricted Frequency Bands							
Customer	Kuvee, Inc.							
Job Number	R-6096N-2							
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07							
Serial Number	KV16050003							
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)						
Operating Mode	Transmitting 20MHz WiFi signal							
Technician	M. Seamans							
Date	May 12 <sup>th</sup> , 2016							

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	2360.00	29.88	-5.00	24.88	*	17.54	
2390.00	-	-	-	-		-	500.00
2483.50	-	-	-	-		-	500.00
1	2490.00	29.93	-4.60	25.33	*	18.47	
2500.00	-	-	-	-		-	500.00
2690.00	-	-	-	-		-	500.00
	-	-	-	-		-	
2900.00	-	-	-	-		-	500.00
3260.00	_		_	-			500.00
	3263.00	29.41	-2.00	27.41	*	23.47	300.00
3267.00	-	-	-	-		-	500.00
3332.00	_	-	_	_		_	500.00
3332.00	3336.00	29.42	-1.60	27.82	*	24.60	500.00
3339.00	-	-	-1.00	-		24.00	500.00
2227.00							500.00
3345.00	-	-	-	-		-	500.00
	-	-	-	-		-	

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 5 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET** Unwanted Emissions into Restricted Frequency Bands **Test Method** Customer Kuvee, Inc. R-6096N-2 Job Number Kuvee Smart Bottle **Test Sample Model Number SBK-07 Serial Number** KV16050003 **Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 20MHz WiFi signal **Technician** M. Seamans May 12<sup>th</sup>, 2016 **Date** Detector: Quasi-Peak <1GHz, Average >1GHz **Notes:** Antenna Test Distance: 3 meters

Peak readings of EUT emissions were less than 20 dB above the average limit.

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
3358.00	-	-	-	-		-	500.00
3600.00	-	-	-	-		-	500.00
	-	-	-	-		-	
4400.00	-	-	-	-		-	500.00
4500.00	-	_	_	_		_	500.00
	4824.00	44.11	1.05	45.16		181.13	300.00
	4880.00	44.31	1.15	45.46		187.50	İ
	4924.00	45.11	1.25	46.36		207.97	i
5150.00	-	-	-	-		-	500.00
5250.00							
5350.00	-	<del>-</del>	-	-		-	500.00
	5400.00	27.94	2.50	30.44	*	33.27	
5460.00	-	-	-	-		-	500.00
7250.00	-	_	-	-		_	500.00
	7320.00	39.84	4.45	44.29	*	163.87	
	7386.00	40.82	4.55	45.37	*	185.57	i
7750.00	-	-	-	-		-	500.00
8025.00	-	_	_	_			500.00
	-	-	_	_		-	300.00
8500.00	-	-	-	-		-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 6 of 8



### **Retlif Testing Laboratories**

RETLIF TESTING LABORATORIES								
EMISSIONS TEST DATA SHEET								
Test Method	Unwanted Emissions into Restricted Frequency Bands							
Customer	Kuvee, Inc.							
Job Number	R-6096N-2							
Test Sample	Test Sample Kuvee Smart Bottle							
Model Number	SBK-07							
Serial Number	KV16050003							
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)						
Operating Mode	Transmitting 20MHz WiFi signal							
Technician M. Seamans								
Date	May 12 <sup>th</sup> , 2016							

			TEST P	ARAMETERS	S		
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
9000.00	-	-	-	-		-	500.00
	-	-	-	-		-	
9200.00	-	-	-	-		-	500.00
9300.00	-	-	-	-		-	500.00
	-	-	-	-		-	
9500.00	-	-	-	-		-	500.00
10600.00	-	-	-	ı		-	500.00
	12060.00	32.08	8.8	40.88	*	110.66	
	12200.00	33.78	9.0	42.78	*	137.72	
	12310.00	33.16	9.2	42.36	*	131.22	
12700.00	-	-	-	ı		-	500.00
13250.00	-	-	-	-		-	500.00
	-	-	-	-		-	
13400.00	-	-	-	-		-	500.00
14470.00	-	-	-	-		-	500.00
	-	-	-	-		-	
14500.00	-	-	-	-		-	500.00
15350.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 7 of 8



## **Retlif Testing Laboratories**

	RETLIF TESTING LABORATORIES =	
	EMISSIONS TEST DATA SHEET	
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Kuvee, Inc.	
Job Number	R-6096N-2	
Test Sample	Kuvee Smart Bottle	
Model Number	SBK-07	
Serial Number	KV16050003	
<b>Test Specification</b>	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting 20MHz WiFi signal	
Technician	M. Seamans	
Date	May 12 <sup>th</sup> , 2016	

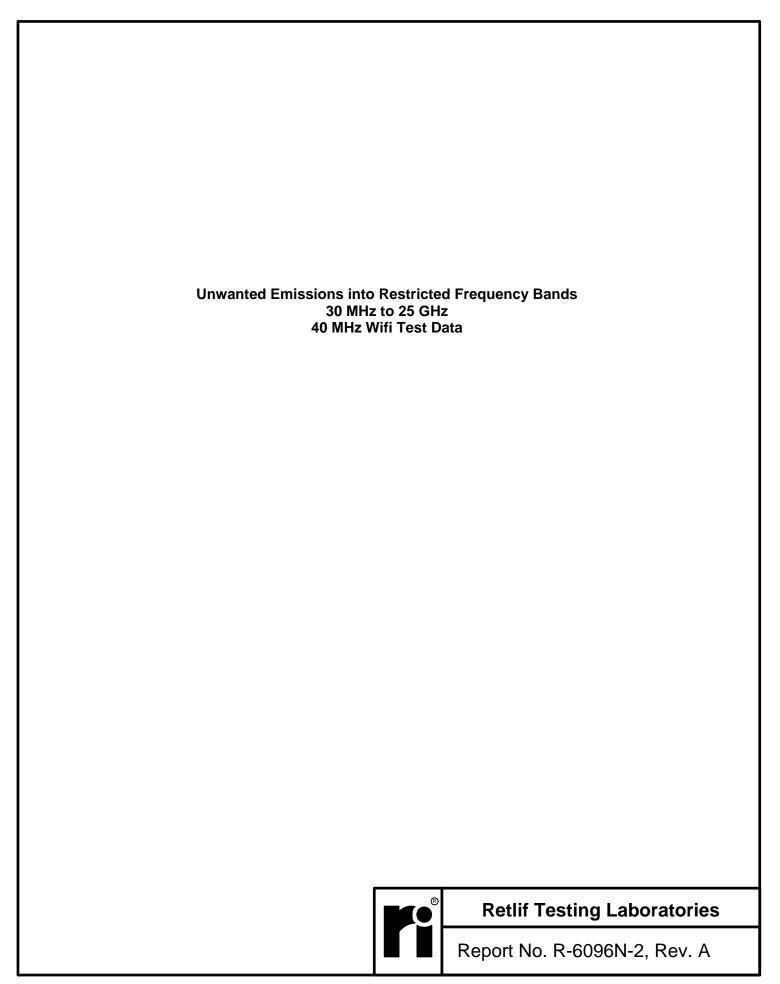
			TEST P	ARAMETER!	S		
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	-	-	-	-		-	
16200.00	-	-	-	-		-	500.00
17700.00	_		_	_			500.00
1,,,,,,,,,	19296.00	33.82	-7.8	26.02	*	20.00	300.00
	19520.00	32.23	-7.6	24.63	*	17.04	
	19696.00	32.68	-7.4	25.28	*	18.37	
21400.00	-	-	-	-		-	500.00
22010.00	-	-	-	-		-	500.00
	22158.00	33.15	-5.9	27.25	*	23.04	
23120.00	-	-	-	-		-	500.00
23600.00	_	_	_	_		_	500.00
23000.00	_		_	_		_	300.00
24000.00	_	-	-	-		-	500.00
		-					
		·		-			

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 8 of 8



### **Retlif Testing Laboratories**



	= RETLIF TESTING LABORATORIES ==	
	EMISSIONS TEST DATA SHEET	
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Kuvee, Inc.	
Job Number	R-6096N-2	
Test Sample	Kuvee Smart Bottle	
Model Number	SBK-07	
Serial Number	KV16050003	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
<b>Operating Mode</b>	Transmitting 40MHz WiFi signal	
Technician	M. Seamans	
Date	May 12 <sup>th</sup> , 2016	

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
37.50	-	-	-	-		-	100.00
	38.00	13.60	1420	27.80	*	24.55	I
38.25	-	-	-	-		-	100.00
73.00	_	_	_	_			100.00
	73.50	14.80	8.36	23.16	*	14.39	I
74.60	-	-	-	-		-	100.00
74.80	_		_	_		_	100.00
	-	-	-	-		-	I
<u> </u>	75.00	7.83	7.73	15.56	*	6.00	
	-	-	-	-		-	İ
75.20	-	-	-	-		-	100.00
108.00	_	_	_	_			150.00
1	116.30	22.45	9.60	32.05		40.04	
121.94	-	-	-	-		-	150.00
123.00	-	-	-	-		-	150.00
-	-	-	-	-		-	
	137.80	24.37	9.08	33.45		47.04	i

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 1 of 8



### **Retlif Testing Laboratories**

	■ RETLIF TESTING LABORATORIES =	
	EMISSIONS TEST DATA SHEET	
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Kuvee, Inc.	
Job Number	R-6096N-2	
Test Sample	Kuvee Smart Bottle	
Model Number	SBK-07	
Serial Number	KV16050003	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting 40MHz WiFi signal	
Technician	M. Seamans	
Date	May 12 <sup>th</sup> , 2016	
	·	

			TEST P	ARAMETERS			
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	-	-	-	-		-	
138.00	-	-	-	-		-	150.00
149.90	_		_	_		_	150.00
149.90	150.00	10.82	11.17	21.99	*	12.57	150.00
150.05	-	-	-	-		-	150.00
156.52	-	_	-	-		-	150.00
	156.525	2.18	12.08	14.26	*	5.16	
156.52	-	-	-	-		-	150.00
156.70	-	-	-	-		_	150.00
	156.80	2.16	12.12	14.28	*	5.18	
156.90	-	-	-	-		-	150.00
162.01	-		-	-		-	150.00
	164.00	2.35	12.66	15.01	*	5.63	
167.17	-	-	-	-		-	150.00
167.72	-		-	-		-	150.00
	170.00	21.60	10.69	32.29		41.16	

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 2 of 8



## **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET Test Method** Unwanted Emissions into Restricted Frequency Bands Customer Kuvee, Inc. Job Number R-6096N-2 Kuvee Smart Bottle **Test Sample Model Number SBK-07** KV16050003 **Serial Number Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 40MHz WiFi signal Technician M. Seamans May 12<sup>th</sup>, 2016 Date

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### **TEST PARAMETERS**

				AKAMETEKS			
Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
173.20	-	-	-	-		-	150.00
240.00	-	-	-	-		-	200.00
	249.25	23.93	16.59	40.52		106.17	
285.00	-	-	-	-		-	200.00
322.80	-	-	-	-			200.00
	330.00	1.34	17.65	18.99	*	8.90	
335.40	-	-	-	-		-	200.00
399.90	-	-	-	-			200.00
	409.00	0.05	21.60	21.65	*	12.09	
410.00	-	-	-	-		-	200.00
608.00	-	-	-	-			200.00
	611.00	0.47	27.34	27.81	*	24.58	
614.00	-	-	-	-		-	200.00
960.00	-	-	-	-		-	500.00
	980.00	4.55	28.96	33.51	*	47.37	1
1240.00	-	-	-	-		-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 3 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET** Unwanted Emissions into Restricted Frequency Bands **Test Method** Customer Kuvee, Inc. R-6096N-2 Job Number Kuvee Smart Bottle **Test Sample Model Number SBK-07 Serial Number** KV16050003 **Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 40MHz WiFi signal M. Seamans **Technician** May 12<sup>th</sup>, 2016 Date

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
1300.00	-	-	-	-		-	500.00
	1350.00	31.10	-9.50	21.60	*	12.02	
1427.00	-	=	-	-		-	500.00
1435.00	-	-	-	-		-	500.00
1	1500.00	30.52	-7.50	23.02	*	14.16	
1646.50	-	-	-	-		-	500.00
1660.00	-		-	-		-	500.00
1	1680.00	30.34	-7.00	23.34	*	14.69	
1710.00	-	-	-	-		-	500.00
1718.80	-	-	-	-		-	500.00
	1720.00	30.35	-6.50	23.85	*	15.58	
1722.20	-	-	-	-		-	500.00
2200.00	-	-	-	-		-	500.00
	2250.00	30.05	-5.20	24.85	*	17.48	
2300.00	-	-	-	-		-	500.00
2310.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 4 of 8



### **Retlif Testing Laboratories**

	<b>RETLIF TESTING LABORATORIES</b>	
	EMISSIONS TEST DATA SHEET	
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Kuvee, Inc.	
Job Number	R-6096N-2	
Test Sample	Kuvee Smart Bottle	
Model Number	SBK-07	
Serial Number	KV16050003	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting 40MHz WiFi signal	
Technician	M. Seamans	
Date	May 12 <sup>th</sup> , 2016	

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	2360.00	29.88	-5.00	24.88	*	17.54	
2390.00	-	-	-	-		-	500.00
2483.50	-	-	-	-		-	500.00
1	2490.00	29.93	-4.60	25.33	*	18.47	
2500.00	-	-	-	-		-	500.00
2690.00	-	-	-	-		-	500.00
	-	-	-	-		-	
2900.00	-	-	-	-		-	500.00
3260.00	_		_	-			500.00
	3263.00	29.41	-2.00	27.41	*	23.47	300.00
3267.00	-	-	-	-		-	500.00
3332.00	_	-	_	_		_	500.00
3332.00	3336.00	29.42	-1.60	27.82	*	24.60	500.00
3339.00	-	-	-1.00	-		24.00	500.00
2227.00							500.00
3345.00	-	-	-	-		-	500.00
	-	-	-	-		-	

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 5 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET** Unwanted Emissions into Restricted Frequency Bands **Test Method** Customer Kuvee, Inc. R-6096N-2 Job Number Kuvee Smart Bottle **Test Sample Model Number SBK-07 Serial Number** KV16050003 **Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 40MHz WiFi signal **Technician** M. Seamans May 12<sup>th</sup>, 2016 **Date** Detector: Quasi-Peak <1GHz, Average >1GHz

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1 GHz, A Peak readings of EUT emissions were less than 20 dB above the average limit.

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
3358.00	-	-	-	-		-	500.00
3600.00	-	-	-	-		-	500.00
	-	-	-	-		-	
4400.00	-	-	-	-		-	500.00
4500.00	_	_	_	_			500.00
4300.00	4844.00	44.62	1.05	45.67		192.09	300.00
	4864.00	45.13	1.15	46.28		206.06	
1	4904.00	45.13	1.25	46.52		211.84	
5150.00	-	-	-	-		-	500.00
3130.00	-		-	_		_	300.00
5350.00	-	-	-	-		-	500.00
	5400.00	27.94	2.50	30.44	*	33.27	
5460.00	-	-	-	-		-	500.00
7250.00	-	-	-	-		-	500.00
	7266.00	42.05	4.45	46.50	*	211.35	
	7296.00	42.08	4.55	46.63	*	214.54	
7750.00	-	-	-	-		-	500.00
8025.00	-	-	-	-		-	500.00
	-	-	-	-		-	
8500.00	-	-	-	-		-	500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 6 of 8



### **Retlif Testing Laboratories**

#### **RETLIF TESTING LABORATORIES EMISSIONS TEST DATA SHEET** Unwanted Emissions into Restricted Frequency Bands **Test Method** Customer Kuvee, Inc. R-6096N-2 Job Number Kuvee Smart Bottle **Test Sample Model Number SBK-07 Serial Number** KV16050003 **Test Specification** FCC Part 15 Subpart C Paragraph: 15.247(d) **Operating Mode** Transmitting 40MHz WiFi signal **Technician** M. Seamans May 12<sup>th</sup>, 2016 Date

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### **TEST PARAMETERS**

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
9000.00	-	-	_	-		-	500.00
	-	-	-	-		-	
9200.00	-	-	-	-		-	500.00
9300.00	-	-	-	-		-	500.00
	-	-	-	-		-	
9500.00	-	-	-	-		-	500.00
10600.00	-	-	-	-		-	500.00
	12110.00	32.75	8.8	41.55	*	119.54	
	12160.00	33.19	9.0	42.19	*	128.68	i
	12260.00	33.29	9.2	42.49	*	133.20	i
12700.00	-	-	-	-		-	500.00
13250.00	-	-	-	-		-	500.00
	-	-	-	-		-	
13400.00	-	-	-	-		-	500.00
14470.00	-	-	-	-		-	500.00
	-	-	-	-		-	
14500.00	-	-	-	-		-	500.00
15350.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 7 of 8



### **Retlif Testing Laboratories**

	<b>RETLIF TESTING LABORATORIES</b>							
EMISSIONS TEST DATA SHEET								
Test Method	Unwanted Emissions into Restricted Frequency Bands							
Customer	Kuvee, Inc.							
Job Number	R-6096N-2							
Test Sample	Kuvee Smart Bottle							
Model Number	SBK-07							
Serial Number	KV16050003							
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)						
Operating Mode	Transmitting 40MHz WiFi signal							
Technician	M. Seamans							
Date	May 12 <sup>th</sup> , 2016							

**Notes:** Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

#### TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
	-	-	-	-		-	
16200.00	-	-	-	-		-	500.00
17700.00							
17700.00	-	<del>-</del>	-	-		-	500.00
	19616.00	33.01	-7.8	25.21	*	18.22	
	19376.00	33.72	-7.6	26.12	*	20.23	
	19456.00	33.13	-7.4	25.73	*	19.34	
21400.00	-	-	-	-		-	500.00
22010.00	-	-	-	-		-	500.00
	22068.00	32.89	-5.9	26.99	*	22.36	
23120.00	-	-	-	-		-	500.00
23600.00	_	_	-	_		_	500.00
	-	-	-	-		-	
24000.00	-	-	-	-		-	500.00
			1	l			L

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. \* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 8 of 8



#### **Retlif Testing Laboratories**

Report No. R-6096N-2, Rev. A

## Test Photographs Power Density



Test Configuration, Bluetooth



Test Configuration, Wifi, 20 MHz



#### **Retlif Testing Laboratories**

Report No. R-6096N-2, Rev. A

# Test Photographs Power Density

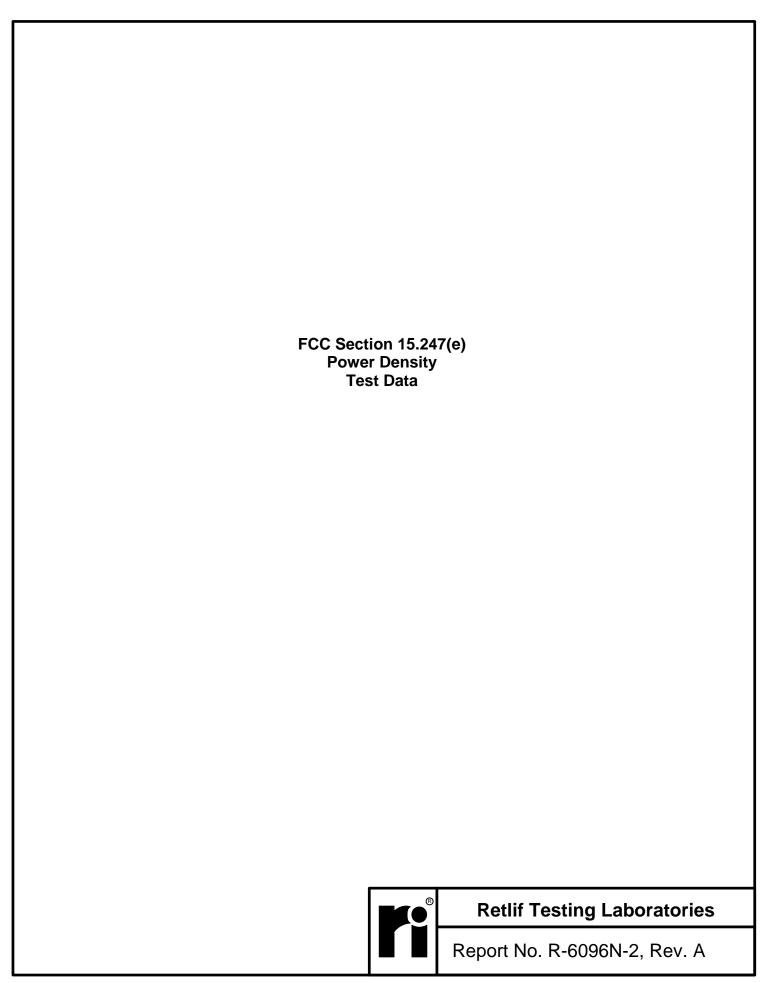


Test Configuration, Wifi, 40 MHz

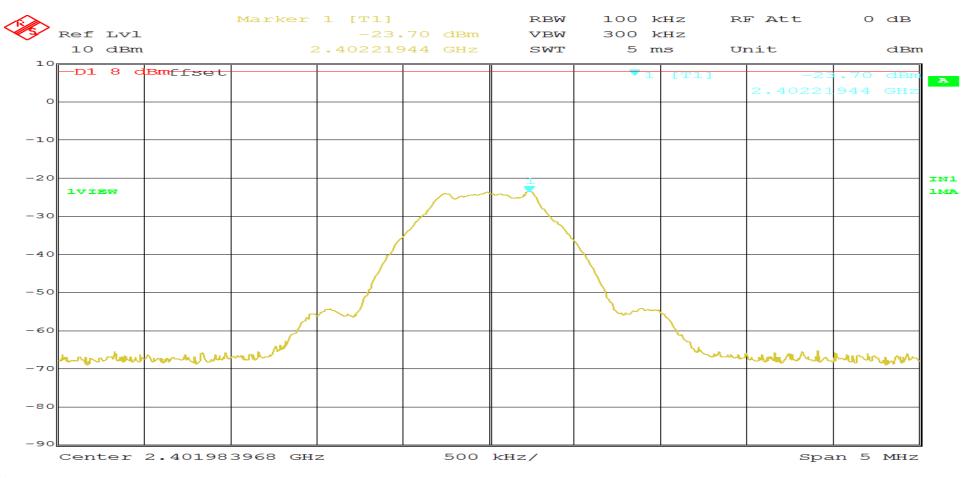


### **Retlif Testing Laboratories**

Report No. R-6096N-2, Rev. A



	RETLIF TESTING LABO	RATOR	IES
Test Method:	Power Spectral Density		
Customer	Kuvee, Inc.	Job No.	R-6096N-2
Test Sample	Kuvee Smart Bottle		
Model Number	SBK-07	Serial No.	KV16050003
Operating Mode	Transmitting Bluetooth signal at 2.402 GHz		
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (e)		
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %		
Notes	Power Spectral Density: -23.70 dBm Limit: 8 dBm		



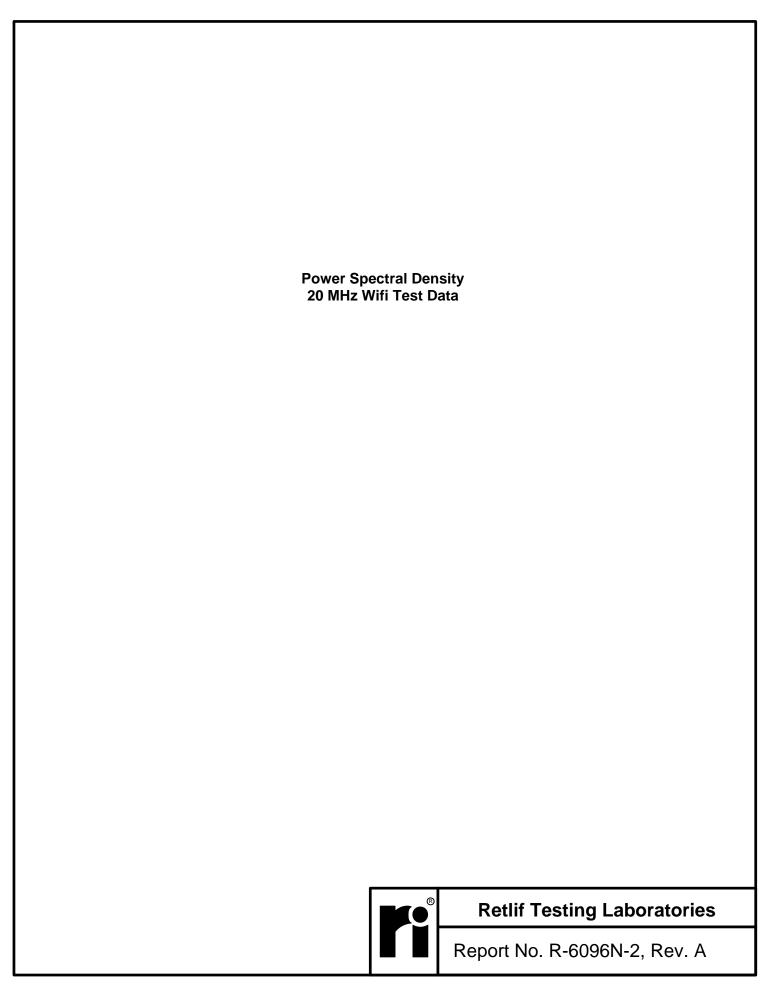
Page 1 of 3

		R	ETLIF '	TESTIN	G LABC	RATOR	RIES			
Test Method:	Power Spectra									
Customer	Kuvee, Inc.	•				Job No.	R-6096N-2			
Test Sample	Kuvee Smart I	Bottle				<del>-</del>				
Model Number	SBK-07					Serial No.	KV16050003			
<b>Operating Mode</b>	Transmitting I	Bluetooth signal	at 2.440 GHz			<del>-</del>	-			
<b>Test Specification</b>	FCC Part 15, S	Subpart C Para	agraph: 15.247 (	(e)						
Technician	M. Seamans					<b>Date</b>	May 9 <sup>th</sup> , 2016	j		
<b>Climatic Conditions</b>	Temp: 18.3 °	C Relative	Humidity: 30.	.6 %						
Notes	Power Spectra	l Density: -24.32	2 dBm Limit:	8 dBm						
		Marker			RBW			F Att	0 dB	
Ref Lvl			-24.		VBW		HZ		-1-0	
10 dBm			2.440230	J46 GHZ	SWT	5 m	is U	nit	dBm	n =1
—D1 8 d	Bmffset					71	[T1]	-24	.32 dBm	A
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-10										
-10										
-20 1VIEW					<del>_</del>					IN1 1MA
-30										
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-50						<b>\</b>				1
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-90										
	2.43998	497 GHz		500	kHz/			Spa	n 5 MHz	<del>-</del> :

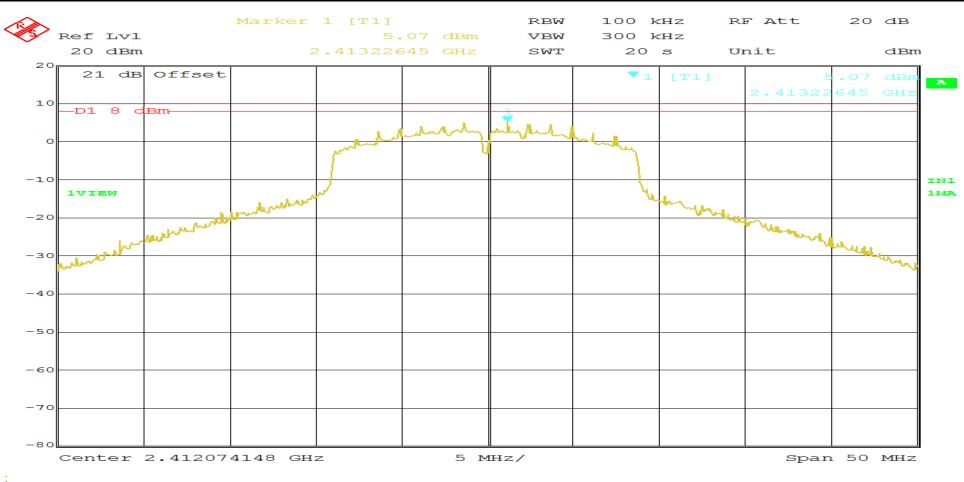
Page 2 of 3

			KETLIF	<u>TESTIN</u>	<u>G LABC</u>	<u>)KATOI</u>	KIES				
Test Method:	Power Spectra	al Density				7					
Customer	Kuvee, Inc.					Job No.	R-6096N-2	2			
Test Sample	Kuvee Smart	Bottle				_					
Model Number	SBK-07					Serial No.	KV160500	003			
Operating Mode	Transmitting	Bluetooth signal	at 2.480 GHz								
Cest Specification	FCC Part 15,	Subpart C Par	ragraph: 15.247	(e)							
Technician Technician	M. Seamans					Date	May 9 <sup>th</sup> , 20	016			
Climatic Conditions	Temp: 18.3 °	°C Relativo	e Humidity: 30	.6 %							
lotes	Power Spectra	al Density: -25.5	2 dBm Limit:	8 dBm							
1		Marker	1 [T1]		RBW	100 }	<hz< td=""><td>RF Att</td><td>10</td><td>dВ</td><td></td></hz<>	RF Att	10	dВ	
Ref Lvl			-25		VBW		<hz< td=""><td></td><td></td><td></td><td></td></hz<>				
10 dBm		2	2.480218	844 GHZ	SWT	5 r	ns	Unit		dBm	1
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	RETLIF TESTING LABO	RATOR	IES
Test Method:	Power Spectral Density		
Customer	Kuvee, Inc.	Job No.	R-6097N-2
Test Sample	Kuvee Smart Bottle		
Model Number	SBK-07	Serial No.	KV16050003
Operating Mode	Transmitting 20 MHz WiFi signal at 2.412 GHz		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (e)		
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %		
Notes	Power Spectral Density: 5.07 dBm Limit: 8 dBm		

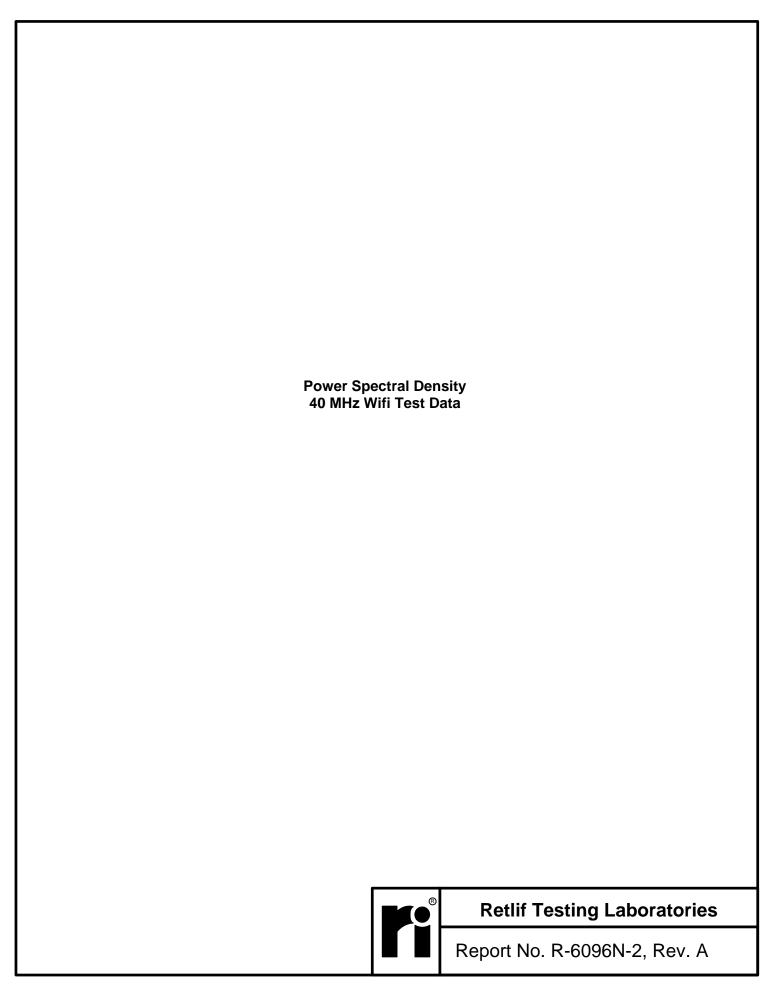


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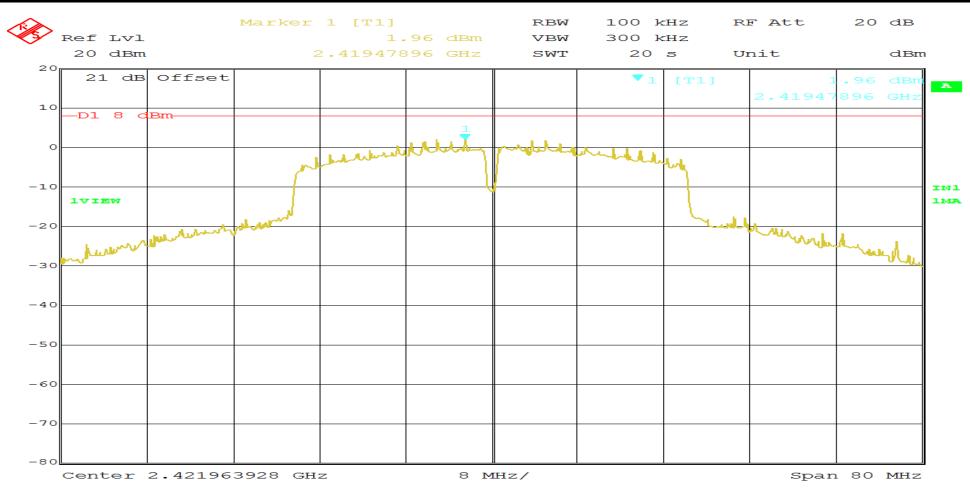
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<b>Test Method:</b>	Power Spectra	al Density								
Customer	Kuvee, Inc.					Job No.	R-6097N-2			
Test Sample	Kuvee Smart l	Bottle								
<b>Model Number</b>	SBK-07					Serial No.	KV160500	03		
<b>Operating Mode</b>	Transmitting 2	20 MHz WiFi sig	gnal at 2.440 GF	łz			-			
<b>Test Specification</b>	FCC Part 15, S	Subpart C Para	agraph: 15.247 (	(e)						
Technician	M. Seamans					Date	May 9 <sup>th</sup> , 20	)16		
<b>Climatic Conditions</b>	Temp: 18.3 °C	C Relative	Humidity: 30.6	6 %						
Notes	Power Spectra	al Density: 5.00 c	dBm Limit: 8	dBm						
ria de la companya de		Marker	1 [T1]		RBW	100 k	HZ	RF Att	20 dB	
Ref Lvl				.00 dBm	VBW		HZ			
20 dBm		2	2.443286	557 GHZ	SWT	20	s	Unit	dBı	m
21 dB	Offset					<b>v</b> <sub>1</sub>	[T1]		5.00 dBr	n A
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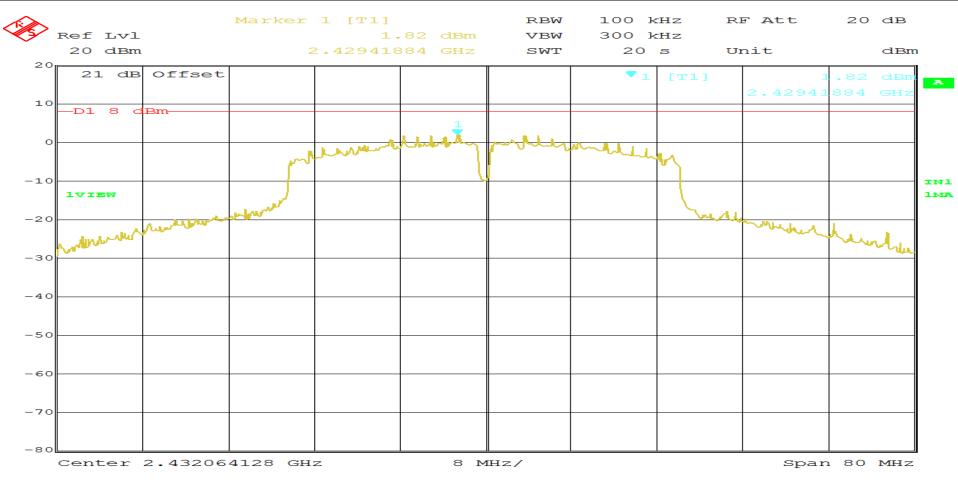
				ETLIF	<b>TESTIN</b>	G LABO	<u> PRATOI</u>	RIES			
<b>Test Method:</b>		Power Spectra	al Density				_				
Customer		Kuvee, Inc.					Job No.	R-6097N-2	,		
Test Sample		Kuvee Smart	Bottle								
<b>Model Number</b>		SBK-07					Serial No.	KV160500	03		
<b>Operating Mode</b>		Transmitting 2	20 MHz WiFi siş	gnal at 2.462 G	Hz						
<b>Test Specificatio</b>	n	FCC Part 15,	Subpart C Par	agraph: 15.247	(e)		_				
Technician		M. Seamans					Date	May 9 <sup>th</sup> , 20	16		
Climatic Conditi	ons	Temp: 18.3 °	C Relative	Humidity: 30	.6 %						
Notes		Power Spectra	al Density: 4.34	dBm Limit: 8	dBm						
			Marker	1 [T1]		RBW			RF Att	20 dB	
~	Lvl				.34 dBm	VBW		HZ	_		
20	dBm		2	463236	647 GHZ	SWT	20	s t	Jnit	dBm	n _
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	RETLIF TESTING LABO	RATOR	IES
Test Method:	Power Spectral Density		
Customer	Kuvee, Inc.	Job No.	R-6097N-2
Test Sample	Kuvee Smart Bottle		
Model Number	SBK-07	Serial No.	KV16050003
Operating Mode	Transmitting 40 MHz WiFi signal at 2.422 GHz		
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (e)		
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %		
Notes	Power Spectral Density: 1.96 dBm Limit: 8 dBm		



	RETLIF TESTING LABO	RATOR	IES
Test Method:	Power Spectral Density		
Customer	Kuvee, Inc.	Job No.	R-6097N-2
Test Sample	Kuvee Smart Bottle		
Model Number	SBK-07	Serial No.	KV16050003
Operating Mode	Transmitting 40 MHz WiFi signal at 2.432 GHz		
<b>Test Specification</b>	FCC Part 15, Subpart C Paragraph: 15.247 (e)		
Technician	M. Seamans	Date	May 9 <sup>th</sup> , 2016
Climatic Conditions	Temp: 18.3 °C Relative Humidity: 30.6 %		
Notes	Power Spectral Density: 1.82 dBm Limit: 8 dBm		



			ETLIF T	TESTIN(	G LABO	<u> PRATOR</u>	RIES			<b>=</b>
Test Method:	Power Spectra	al Density				7				
Customer	Kuvee, Inc.					Job No.	R-6097N-2			
Test Sample	Kuvee Smart	Bottle								
Model Number	SBK-07					Serial No.	KV16050003	3		
Operating Mode	Transmitting 4	40 MHz WiFi si	gnal at 2.452 GF	łz						
<b>Test Specification</b>		Subpart C Par	agraph: 15.247 (	(e)						
'echnician	M. Seamans					Date	May 9 <sup>th</sup> , 201	6		
Climatic Conditions	Temp: 18.3 °C	C Relative	Humidity: 30.0	6 %						
lotes	Power Spectra	al Density: 1.60	dBm Limit: 8	dBm						
r)		Marker	1 [T1]		RBW	100 k	HZ R	F Att	20 di	В
Ref Lvl				.60 dBm	VBW		HZ			
20 dBm		2	2.449458	392 GHz	SWT	20	s U	nit	di	Bm
21 dB	Offset					▼1	[T1]		1.60 di	3m
								2.4494	5892 GE	
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