

**Application for Certification
For a Modular Transceiver**

Icon Health and Fitness, Inc.
1500 South 1000 West
Logan, UT 81321

Modular Transceiver for use in Icon products
M/N: IABR12

FCC ID: OMCIABR12

REPORT # UT36045B-002

This report was prepared in accordance with the requirements of the FCC Rules and Regulations Part 2, Subpart J, 2.1033, Part 15.247, and other applicable sections of the rules as indicated herein.

Prepared By:

DNB Engineering, Inc.
1100 E Chalk Creek Road
Coalville, UT 84017

24 Sep 2012

TABLE OF CONTENTS

Paragraph numbers in this report follow the application section numbers found in the FEDERAL COMMUNICATIONS COMMISSION Rules and Regulations, Part 2, Subpart J for Certification of electronic equipment.

TABLE OF CONTENTS.....	2
1.0 ADMINISTRATIVE DATA.....	3
1.1 Certifications and Qualifications.....	3
1.2 Measurement Repeatability Information.....	3
2.1033 (b) (1) Application for Certification.....	4
2.1033 (b) (2) FCC Identifier.....	5
2.1033 (b) (3) Installation and Operating Instructions.....	6
2.1033 (b) (4) Brief Description of Circuit Function.....	7
2.1033 (b) (5) Block Diagram.....	8
2.1033 (b) (6) Report of Measurements.....	9
15.207 Conducted Emissions (General Provisions).....	10
15.209 Radiated Emissions (General Provisions).....	14
15.247 (c) Spurious Radiated Emissions.....	19
15.247 (a,2) 6 dB Bandwidth.....	32
15.247 (b) Maximum Peak Output Power (Conducted).....	38
15.247 (d) Conducted Band Edge Measurements and Out of Band Emissions.....	42
Spurious RF Conducted Emissions.....	71
15.247(d): Power spectral density(PSD)..	75
2.1055 Frequency stability.....	79
2.1033 (b) (7) Equipment Photographs.....	82
15.247 (b) (5) RF Exposure Requirements.....	86
End of Report UT36045B-002.....	87

1.0 ADMINISTRATIVE DATA

1.1 Certifications and Qualifications

I certify that DNB Engineering, Inc conducted the tests performed in order to obtain the technical data presented in this application. Also, based on the results of the enclosed data, I have concluded that the equipment tested meets or exceeds the requirements of the Rules and Regulations governing this application.

1.2 Measurement Repeatability Information

The test data presented in this report has been acquired using the guidelines set forth in FCC Part 2.1031 through 2.1057, Part 15. The test results presented in this document are valid only for the equipment identified herein under the test conditions described. Repeatability of these test results will only be achieved with identical measurement conditions. These conditions include: The same test distance, EUT Height, Measurement Site Characteristics, and the same EUT System Components. The system must have the same Interconnecting Cables arranged in identical placement to that in the test set-up, with the system and/or EUT functioning in the identical mode of operation (i.e. software and so on) as on the date of the test. Any deviation from the test conditions and the environment on the date of the test may result in measurement repeatability difficulties.

All changes made to the EUT during the course of testing as identified in this test report must be incorporated into the EUT or identical models to ensure compliance with the FCC regulations.



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2.1033 (b) (1) Application for Certification

Name of Applicant: Icon Health and Fitness, Inc.
1500 South 1000 West
Logan, UT 81321

FRN Number: 0009109950

Applicant is: X Icon Health and Fitness, Inc.
Vendor
Licensee
Prospective Licensee
Other

Name of Manufacturer #1: ATR Manufacturing Co.LTD.
Pingshan 188 Industrial Zone, Tangxia, 51170
Dongguan People's Republic of China

Name of Manufacturer #2: Chang Chen Instrument Co.
No. 342 Tatung Road, Taiwan ROC Taoyuan Hsien
Koeishang Hsiang

Description: Modular Transceiver for use in Icon products

Part Number: IABR12

Anticipated Production Quantity: Multiple Units

Frequency Band: 2401.3 - 2480.7 MHz

Rated Power: 1 mW

Type of Signal: Digital Transmission System (DTS)

Hopping Channels: 40

Max Data Rate: 1Mpbs (mega-bit) - Data transmission is not continuous, it happens for short intervals for short periods of time.

2.1033 (b) (2) FCC Identifier

FCC ID: OMCIABR12

Figure 1 - Label and location



Label Material:

THERMLfilm SELECT® 22970 TTR(W/R&R)
2MIL GLOSS TC SILVER MTE POLY PERM ADH UL REC
Product ID #:FLX000471

The adhesive used in this label material is a permanent type.

2.1033 (b) (3) Installation and Operating Instructions

Supplied separately.

2.1033 (b) (4) Brief Description of Circuit Function

The BLE Transceiver is a customized module designed to interface wireless devices with electronic consoles in Icon's fitness products. It will be installed by the manufacturer inside the fitness product and will not be visible or accessible to the user. Depending on the transceiver configuration it will manage and maintain connections with wireless products using the BLE protocol at 2.4GHz. It will read data from these devices. This data will be passed up to the electronic console via a UART interface. The transceiver will act as a slave device in the console-to- transceiver relationship so data will only be sent to the electronic console when it is requested by the console.

There are currently two devices that the Icon BLE Transceiver will interface. One is a BLE Heart Rate Monitor, and the other is small remote control that is worn on the users finger, (Speed Ring Remote), that will adjust the speed o f the user' treadmill.

BLE Heart Rate Monitors - The Icon BLE Transceiver will interface with BLE heart rate monitoring devices. These devices are made by various manufactures that comply with the Bluetooth SIG's specification. The icon receiver will comply with the Bluetooth SIG's mandatory requirements for heart rate monitors.

Icon Speed Ring Remote Control - The Icon BLE Speed Ring Remote Control is a small remote control worn on the user's finger that can control the speed of that user's treadmill.

2.1033 (b) (5) Block Diagram

Supplied separately for confidentiality.

2.1033 (b) (6) Report of Measurements

15.207 Conducted Emissions (General Provisions)

Test Procedure: As specified in IEEE C63.10

To measure conducted emissions, the EUT was set upon a wooden table in the shielded enclosure. AC power was fed into the EUT from the Artificial Mains Network. With the Artificial Mains Network connected to an Rhode & Schwarz FSV Signal and Spectrum Analyzer, and using Personal Computer with TILES Measurement Software, the spectrum was searched from 0.15 - 30 MHz for emissions emanating from the EUT.

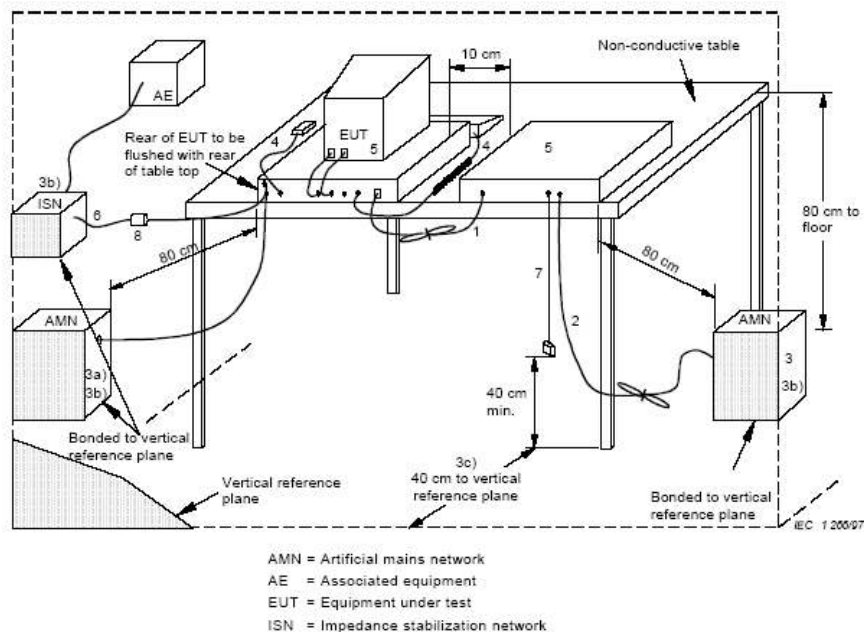
Frequency of emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5	56	46
5 - 30	60	50


* Decreases with the logarithm of the frequency.

EUT operating conditions:

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

Test Set Up:



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436
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Conducted Emissions

DNB Job Number:	36045	Date: 18 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		[X] 15.207
Model Number:	IABR12		[X] IEEE C63.10
Description:	Modular Transceiver		
	Set Up		



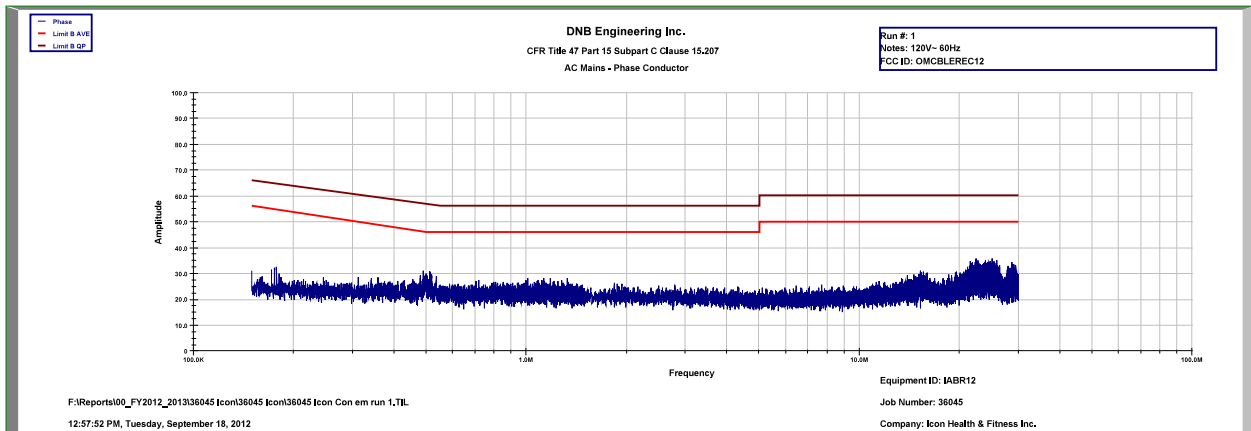


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Conducted Emissions

DNB Job Number:	36045	Date:	18 Sep 2012	Specification <input checked="" type="checkbox"/> 15.207 <input checked="" type="checkbox"/> IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver Phase Conductor			

Freq in Mhz	Raw Meter Reading	Correction Factors			Corrected Reading dBuV	Limit dBuV	Delta	Limit Type	Detector Type
		LISN	Cable	Total					
		dB	dB	dB					
0.178	32.38	-0.20	0.00	-0.20	32.18	55.00	-22.82	AVE	PK
0.512	30.79	-0.10	0.00	-0.10	30.69	46.00	-15.31	AVE	PK
15.210	30.95	-0.50	0.70	0.20	31.15	50.00	-18.85	AVE	PK
22.470	35.82	-0.70	0.90	0.20	36.02	50.00	-13.98	AVE	PK
24.960	35.55	-0.80	1.00	0.20	35.75	50.00	-14.25	AVE	PK
28.790	34.17	-0.90	1.10	0.20	34.37	50.00	-15.63	AVE	PK



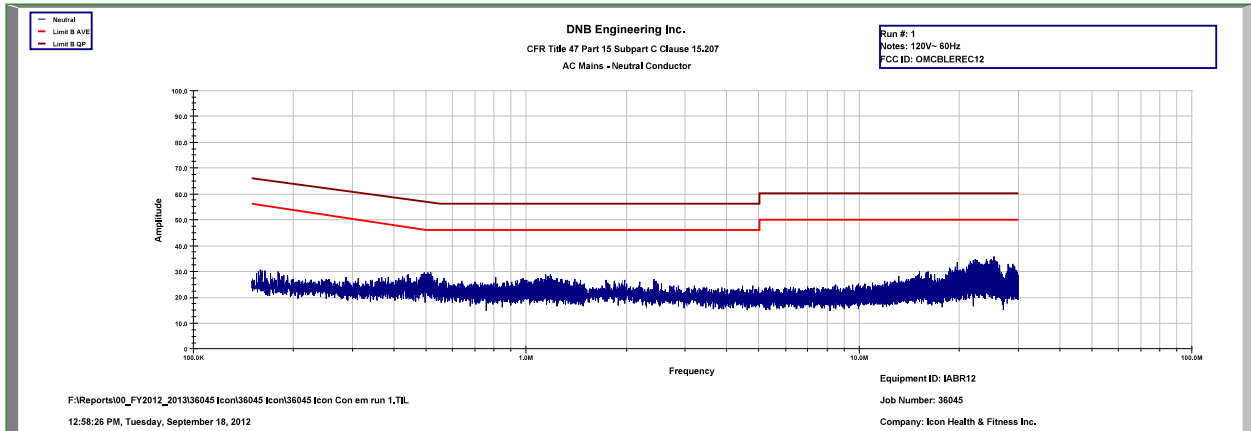


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Conducted Emissions

DNE Job Number:	36045	Date:	18 Sep 2012	Specification <input checked="" type="checkbox"/> 15.207 <input checked="" type="checkbox"/> IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Neutral Conductor			

Freq in Mhz	Raw Meter Reading	Correction Factors			Corrected Reading dBuV	Limit dBuV	Delta	Limit Type	Detector Type
		LISN	Cable	Total					
		dB	dB	dB					
0.159	30.73	-0.10	0.00	-0.10	30.63	56.00	-25.37	AVE	PK
0.505	29.52	0.00	0.00	0.00	29.52	46.00	-16.49	AVE	PK
1.178	28.99	-0.10	0.00	-0.10	28.89	46.00	-17.11	AVE	PK
2.420	26.97	-0.10	0.10	0.00	26.97	46.00	-19.03	AVE	PK
15.170	29.98	-0.30	0.70	0.40	30.38	50.00	-19.62	AVE	PK
25.290	35.87	-0.70	1.00	0.30	36.17	50.00	-13.83	AVE	PK



15.209 Radiated Emissions (General Provisions)

Test Procedure: IEEE C63.10

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

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

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

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

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

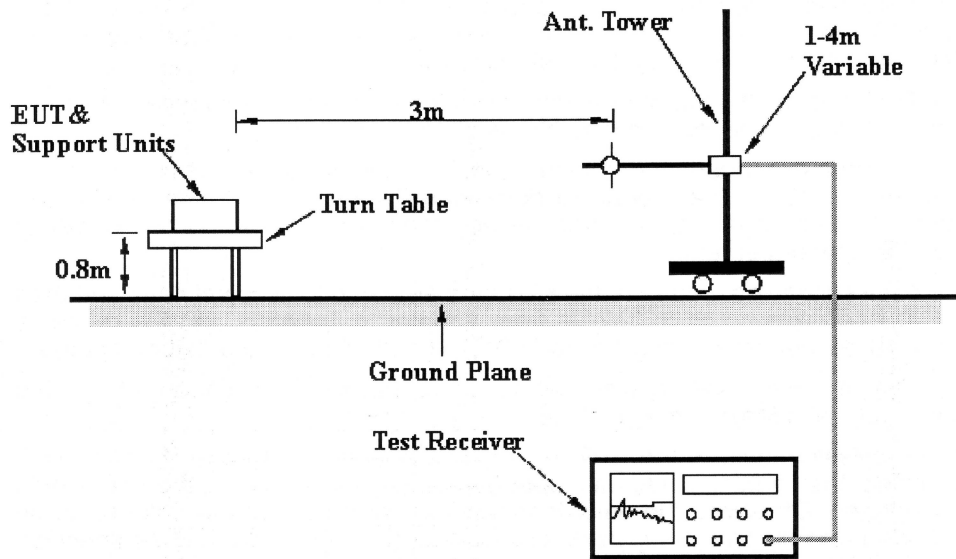
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measurement Distance (meters)
.0009 - 0.490	2400/F(kHz)	20*(Log ₁₀ (2400/F(kHz)))	300
0.490 - 1.705	24000/F(kHz)	20*(Log ₁₀ (24000/F(kHz)))	30
1.705 - 30.0	30	29.5	30
30 - 88	100	40.0	3
88 - 216	150	43.5	3
216 - 960	200	46.0	3
Above 960	500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




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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date: 20 Sep 2012	Specification [X] 15.209 [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.		
Model Number:	IABR12		
Description:	Modular Transceiver for use in Icon products Test Set Up		



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	Radiated Emissions (General)	
DNB Job Number:	36045	Date: 18 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		<input checked="" type="checkbox"/> 15.209 <input checked="" type="checkbox"/> IEEE C63.10
Model Number:	IABR12		
Description:	Modular Transceiver for use in Icon products		
Test Set Up - Bicon - Vertical			



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	Radiated Emissions (General)	
DNB Job Number:	36045	Date: 18 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		<input checked="" type="checkbox"/> 15.209
Model Number:	IABR12		<input checked="" type="checkbox"/> IEEE C63.10
Description:	Modular Transceiver for use in Icon products		
Test Set Up - Log Periodic - Vertical			





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Radiated Emissions (General)

DNR Job Number:		36045			Date:		18 Sep 2012		Specification				
Customer:		Icon Health and Fitness, Inc.											
Model Number:		IABR12											
Description:		Modular Transceiver for use in Icon products											
EUT is in conformance with FCC 15.209					X	YES		NO	Signed	<i>G Staples</i>			
FREQ (Mhz)	Meter	Correction Factors			dBuV/m			Positions					
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	Axis	
49.001	23.10	11.90	1.70	26.20	10.50	40.00	-29.50	QP	14	H	2.00	X	
123.454	21.80	12.80	2.60	26.10	11.12	43.50	-32.38	QP	166	H	4.00	X	
249.045	27.40	16.60	3.40	25.60	21.84	46.00	-24.16	QP	338	H	4.00	X	
329.087	21.10	17.30	4.40	25.70	17.05	46.00	-28.95	QP	185	H	4.00	X	
502.000	24.60	19.90	5.50	26.90	23.06	46.00	-22.94	QP	55	H	4.00	X	
53.531	38.10	10.30	1.70	26.20	23.93	40.00	-16.07	QP	178	V	1.00	X	
141.037	22.00	13.90	2.80	25.90	12.77	43.50	-30.73	QP	150	V	1.00	X	
184.000	22.00	16.10	3.30	25.60	15.81	43.50	-27.69	QP	109	V	1.00	X	
416.000	25.40	18.00	5.00	26.30	22.05	46.00	-23.95	QP	41	V	1.00	X	
864.000	26.70	24.30	7.30	26.80	31.54	46.00	-14.46	QP	264	V	1.00	X	
137.245	24.10	14.10	2.80	25.90	15.07	43.50	-28.43	QP	156	H	4.00	Y	
248.991	27.90	16.60	3.40	25.60	22.30	46.00	-23.70	QP	203	H	4.00	Y	
325.780	21.10	17.30	4.40	25.70	17.05	46.00	-28.95	QP	-16	H	4.00	Y	
49.830	31.90	11.60	1.70	26.20	18.96	40.00	-21.04	QP	106	V	1.00	Y	
144.314	22.00	14.00	2.80	25.90	12.92	43.50	-30.58	QP	56	V	1.00	Y	
176.000	21.90	14.60	3.00	25.80	13.73	43.50	-29.77	QP	174	V	1.00	Y	
467.964	21.30	19.10	5.30	26.70	19.03	46.00	-26.97	QP	86	V	1.00	Y	
50.573	23.50	11.30	1.70	26.20	10.33	40.00	-29.67	QP	224	H	4.00	Z	
137.550	29.90	14.10	2.80	25.90	20.85	43.50	-22.65	QP	63	H	4.00	Z	
502.640	22.70	19.90	5.50	26.90	21.24	46.00	-24.76	QP	222	H	4.00	Z	
853.391	30.70	24.00	7.30	26.80	35.17	46.00	-10.83	QP	73	H	4.00	Z	
50.000	34.20	11.50	1.70	26.20	21.21	40.00	-18.79	QP	210	V	1.00	Z	
137.550	30.70	14.10	2.80	25.90	21.72	43.50	-21.78	QP	172	V	1.00	Z	
180.000	22.80	15.40	3.20	25.70	15.72	43.50	-27.78	QP	220	V	1.00	Z	
413.000	21.10	18.00	5.00	26.30	17.79	46.00	-28.21	QP	130	V	1.00	Z	

15.247 (c) Spurious Radiated Emissions


This test is required for any spurious emission or modulation product that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz
VBW = RBW
Sweep = auto
Detector function = peak
Trace = max hold


Follow the guidelines in ANSIC63.4-1992 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

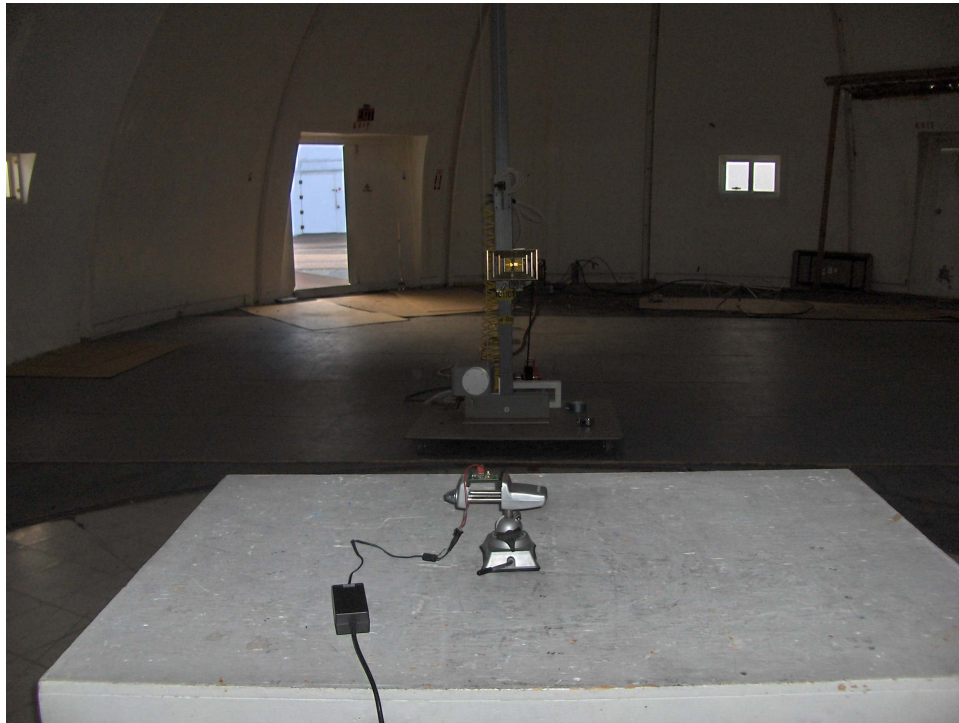
Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a “duty cycle correction factor”, derived from $20\log(\text{dwell time}/100 \text{ ms})$, in an effort to demonstrate compliance with the 15.209 limit. Submit this data.


If the emission on which a radiated measurement must be made is located at the edge of the authorized band of operation, then the alternative “marker-delta” method, listed at the end of this document, may be employed.

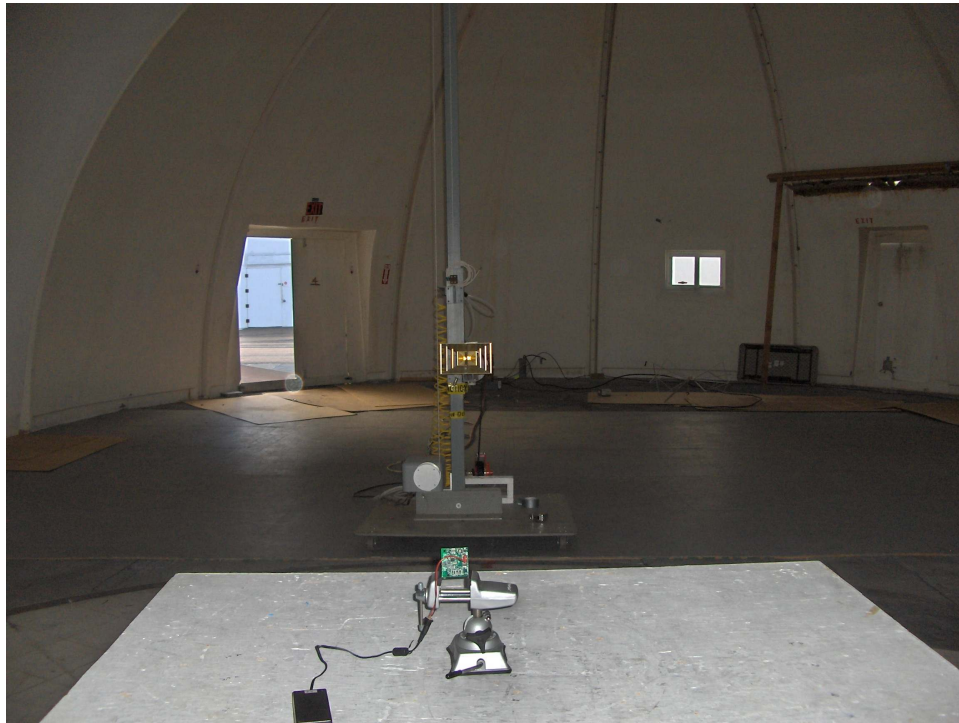
	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	Radiated Emissions (Spurious)	
DNB Job Number:	36045	Date: 20 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		<input checked="" type="checkbox"/> 15.247 (c) <input checked="" type="checkbox"/> IEEE C63.10
Model Number:	IABR12		
Description:	Modular Transceiver for use in Icon products		
Test Set Up - X-Axis (Horizontal/ Vertical - Bicon / Log Periodic / DRG)			



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	Radiated Emissions (Spurious)	
DNB Job Number:	36045	Date: 20 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		<input checked="" type="checkbox"/> 15.247 (c) <input checked="" type="checkbox"/> IEEE C63.10
Model Number:	IABR12		
Description:	Modular Transceiver for use in Icon products		
Test Set Up - Y-Axis (Horizontal/ Vertical - Bicon / Log Periodic / DRG)			



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	Radiated Emissions (Spurious)	
DNB Job Number:	36045	Date: 20 Sep 2012	Specification
Customer:	Icon Health and Fitness, Inc.		<input checked="" type="checkbox"/> 15.247 (c) <input checked="" type="checkbox"/> IEEE C63.10
Model Number:	IABR12		
Description:	Modular Transceiver for use in Icon products		
Test Set Up - Z-Axis (Horizontal/ Vertical - Bicon / Log Periodic / DRG)			





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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Low Channel - X-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2402.229	73.31	29.45	4.18	41.11	65.83	114.00	-48.17	Peak	217	H	1.00	N
2402.229	71.76	29.45	4.18	41.11	64.28	114.00	-49.72	AVE	217	H	1.00	N
4805.399	48.70	33.00	6.34	41.48	46.57	74.00	-27.43	Peak	114	H	1.00	N
4805.399	37.54	33.00	6.34	41.48	35.41	54.00	-18.59	AVE	114	H	1.00	N
7207.569	31.29	37.18	8.51	39.54	37.44	74.00	-36.56	Peak	0	H	1.00	Y
7207.569	17.62	37.18	8.51	39.54	23.77	54.00	-30.23	AVE	0	H	1.00	Y
9613.995	32.52	37.85	11.66	36.14	45.88	74.00	-28.12	Peak	306	H	1.00	Y
9613.995	18.77	37.85	11.66	36.14	32.13	54.00	-21.87	AVE	306	H	1.00	Y
12010.044	30.65	39.73	14.40	28.53	56.24	74.00	-17.76	Peak	119	H	1.00	Y
12010.044	17.41	39.73	14.40	28.53	43.00	54.00	-11.00	AVE	119	H	1.00	Y
14415.226	33.91	41.52	14.75	39.74	50.43	74.00	-23.57	Peak	238	H	1.00	Y
14415.226	20.78	41.52	14.75	39.74	37.30	54.00	-16.70	AVE	238	H	1.00	Y
16811.738	33.85	41.91	16.06	40.04	51.79	74.00	-22.21	Peak	189	H	1.00	Y
16811.738	20.11	41.91	16.06	40.04	38.05	54.00	-15.95	AVE	189	H	1.00	Y
2401.766	76.92	29.44	4.18	41.11	69.44	114.00	-44.56	Peak	0	V	1.00	N
2401.766	75.29	29.44	4.18	41.11	67.81	114.00	-46.19	AVE	0	V	1.00	N
4806.208	48.12	33.00	6.34	41.48	45.99	74.00	-28.01	Peak	236	V	1.00	N
4806.208	35.71	33.00	6.34	41.48	33.58	54.00	-20.42	AVE	236	V	1.00	N
7205.484	30.85	37.18	8.51	39.54	36.99	74.00	-37.01	Peak	0	V	1.00	Y
7205.484	17.62	37.18	8.51	39.54	23.76	54.00	-30.24	AVE	0	V	1.00	Y
9613.197	32.14	37.85	11.65	36.14	45.50	74.00	-28.50	Peak	225	V	1.00	Y
9613.197	18.75	37.85	11.65	36.14	32.11	54.00	-21.89	AVE	225	V	1.00	Y
12016.210	31.47	39.75	14.39	28.53	57.08	74.00	-16.92	Peak	340	V	1.00	Y
12016.210	17.39	39.75	14.39	28.53	43.00	54.00	-11.00	AVE	340	V	1.00	Y
14421.760	34.23	41.52	14.76	39.76	50.75	74.00	-23.25	Peak	201	V	1.00	Y
14421.760	20.74	41.52	14.76	39.76	37.26	54.00	-16.74	AVE	201	V	1.00	Y
16820.028	31.49	41.93	16.05	40.05	49.43	74.00	-24.57	Peak	213	V	1.00	Y
16820.028	20.11	41.93	16.05	40.05	38.05	54.00	-15.95	AVE	213	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Low Channel - Y-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 3rd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2402.228	77.34	29.45	4.18	41.11	69.86	114.00	-44.14	Peak	37	H	1.00	N
2402.228	75.83	29.45	4.18	41.11	68.35	114.00	-45.65	AVE	37	H	1.00	N
4806.193	47.95	33.00	6.34	41.48	45.82	74.00	-28.18	Peak	44	H	1.00	N
4806.193	37.19	33.00	6.34	41.48	35.06	54.00	-18.94	AVE	44	H	1.00	N
7204.152	31.02	37.18	8.50	39.54	37.16	74.00	-36.84	Peak	38	H	1.00	Y
7204.152	17.66	37.18	8.50	39.54	23.80	54.00	-30.20	AVE	38	H	1.00	Y
9610.273	32.43	37.84	11.64	36.14	45.78	74.00	-28.22	Peak	32	H	1.00	Y
9610.273	18.82	37.84	11.64	36.14	32.17	54.00	-21.83	AVE	32	H	1.00	Y
12008.376	31.21	39.72	14.40	28.53	56.80	74.00	-17.20	Peak	41	H	1.00	Y
12008.376	17.44	39.72	14.40	28.53	43.03	54.00	-10.97	AVE	41	H	1.00	Y
14415.727	34.39	41.52	14.75	39.74	50.91	74.00	-23.09	Peak	39	H	1.00	Y
14415.727	20.85	41.52	14.75	39.74	37.37	54.00	-16.63	AVE	39	H	1.00	Y
16812.630	33.61	41.91	16.06	40.04	51.55	74.00	-22.45	Peak	43	H	1.00	Y
16812.630	20.11	41.91	16.06	40.04	38.05	54.00	-15.95	AVE	43	H	1.00	Y
2402.229	70.34	29.45	4.18	41.11	62.86	114.00	-51.14	Peak	353	V	1.00	N
2402.229	68.38	29.45	4.18	41.11	60.90	114.00	-53.10	AVE	353	V	1.00	N
4806.064	47.67	33.00	6.34	41.48	45.54	74.00	-28.46	Peak	360	V	1.00	N
4806.064	36.42	33.00	6.34	41.48	34.29	54.00	-19.71	AVE	360	V	1.00	N
7210.870	31.71	37.17	8.51	39.53	37.86	74.00	-36.14	Peak	353	V	1.00	Y
7210.870	17.72	37.17	8.51	39.53	23.87	54.00	-30.13	AVE	353	V	1.00	Y
9610.436	31.77	37.84	11.64	36.14	45.12	74.00	-28.88	Peak	355	V	1.00	Y
9610.436	18.80	37.84	11.64	36.14	32.15	54.00	-21.85	AVE	355	V	1.00	Y
12015.675	30.91	39.74	14.39	28.53	56.52	74.00	-17.48	Peak	360	V	1.00	Y
12015.675	17.44	39.74	14.39	28.53	43.05	54.00	-10.95	AVE	360	V	1.00	Y
14411.537	34.05	41.51	14.74	39.73	50.57	74.00	-23.43	Peak	362	V	1.00	Y
14411.537	20.87	41.51	14.74	39.73	37.39	54.00	-16.61	AVE	362	V	1.00	Y
16816.761	33.69	41.92	16.06	40.04	51.63	74.00	-22.37	Peak	360	V	1.00	Y
16816.761	20.12	41.92	16.06	40.04	38.06	54.00	-15.94	AVE	360	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Low Channel - Z-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 4th harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2402.243	74.94	29.45	4.18	41.11	67.46	114.00	-46.54	Peak	342	H	1.00	N
2402.243	73.31	29.45	4.18	41.11	65.83	114.00	-48.17	AVE	342	H	1.00	N
4806.020	47.76	33.00	6.34	41.48	45.63	74.00	-28.37	Peak	342	H	1.00	N
4806.020	35.40	33.00	6.34	41.48	33.27	54.00	-20.73	AVE	342	H	1.00	N
7212.619	31.89	37.17	8.51	39.53	38.04	74.00	-35.96	Peak	338	H	1.00	Y
7212.619	17.67	37.17	8.51	39.53	23.82	54.00	-30.18	AVE	338	H	1.00	Y
9609.177	31.91	37.84	11.64	36.14	45.25	74.00	-28.75	Peak	343	H	1.00	Y
9609.177	18.77	37.84	11.64	36.14	32.11	54.00	-21.89	AVE	343	H	1.00	Y
12015.036	31.01	39.74	14.39	28.53	56.62	74.00	-17.38	Peak	342	H	1.00	Y
12015.036	17.44	39.74	14.39	28.53	43.05	54.00	-10.95	AVE	342	H	1.00	Y
14410.361	34.69	41.51	14.74	39.73	51.21	74.00	-22.79	Peak	341	H	1.00	Y
14410.361	20.85	41.51	14.74	39.73	37.37	54.00	-16.63	AVE	341	H	1.00	Y
16814.529	34.48	41.92	16.06	40.04	52.42	74.00	-21.58	Peak	343	H	1.00	Y
16814.529	20.15	41.92	16.06	40.04	38.09	54.00	-15.91	AVE	343	H	1.00	Y
2402.229	72.07	29.45	4.18	41.11	64.59	114.00	-49.41	Peak	325	V	1.00	N
2402.229	70.23	29.45	4.18	41.11	62.75	114.00	-51.25	AVE	325	V	1.00	N
4800.811	47.33	32.98	6.34	41.48	45.18	74.00	-28.82	Peak	322	V	1.00	N
4800.811	34.01	32.98	6.34	41.48	31.86	54.00	-22.14	AVE	322	V	1.00	N
7204.372	31.10	37.18	8.50	39.54	37.24	74.00	-36.76	Peak	324	V	1.00	Y
7204.372	17.73	37.18	8.50	39.54	23.87	54.00	-30.13	AVE	324	V	1.00	Y
9614.474	32.31	37.85	11.66	36.14	45.68	74.00	-28.32	Peak	321	V	1.00	Y
9614.474	18.77	37.85	11.66	36.14	32.14	54.00	-21.86	AVE	321	V	1.00	Y
12016.384	31.13	39.75	14.39	28.53	56.74	74.00	-17.26	Peak	320	V	1.00	Y
12016.384	17.45	39.75	14.39	28.53	43.06	54.00	-10.94	AVE	320	V	1.00	Y
14411.493	32.39	41.51	14.74	39.73	48.91	74.00	-25.09	Peak	324	V	1.00	Y
14411.493	20.88	41.51	14.74	39.73	37.40	54.00	-16.60	AVE	324	V	1.00	Y
16812.420	34.07	41.91	16.06	40.04	52.01	74.00	-21.99	Peak	322	V	1.00	Y
16812.420	20.14	41.91	16.06	40.04	38.08	54.00	-15.92	AVE	322	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Middle Channel - X-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2439.726	80.97	29.54	4.23	41.14	73.60	114.00	-40.40	Peak	118	H	1.00	N
2439.726	79.57	29.54	4.23	41.14	72.20	114.00	-41.80	AVE	118	H	1.00	N
4883.663	46.56	33.28	6.41	41.49	44.75	74.00	-29.25	Peak	120	H	1.00	N
4883.663	33.41	33.28	6.41	41.49	31.60	54.00	-22.40	AVE	120	H	1.00	N
7318.801	32.89	37.11	8.62	39.44	39.18	74.00	-34.82	Peak	121	H	1.00	Y
7318.801	19.30	37.11	8.62	39.44	25.59	54.00	-28.41	AVE	121	H	1.00	Y
9758.527	32.68	37.90	12.23	36.10	46.72	74.00	-27.28	Peak	123	H	1.00	Y
9758.527	19.33	37.90	12.23	36.10	33.37	54.00	-20.63	AVE	123	H	1.00	Y
12196.487	31.32	40.25	14.32	28.53	57.36	74.00	-16.64	Peak	125	H	1.00	Y
12196.487	17.63	40.25	14.32	28.53	43.67	54.00	-10.33	AVE	125	H	1.00	Y
14633.869	34.31	41.79	14.55	40.01	50.64	74.00	-23.36	Peak	124	H	1.00	Y
14633.869	21.25	41.79	14.55	40.01	37.58	54.00	-16.42	AVE	124	H	1.00	Y
17077.748	32.56	42.52	15.97	40.33	50.73	74.00	-23.27	Peak	122	H	1.00	Y
17077.748	18.96	42.52	15.97	40.33	37.13	54.00	-16.87	AVE	122	H	1.00	Y
2439.740	83.84	29.54	4.23	41.14	76.47	114.00	-37.53	Peak	212	V	1.00	N
2439.740	82.23	29.54	4.23	41.14	74.86	114.00	-39.14	AVE	212	V	1.00	N
4882.085	46.79	33.28	6.41	41.49	44.98	74.00	-29.02	Peak	207	V	1.00	N
4882.085	33.18	33.28	6.41	41.49	31.37	54.00	-22.63	AVE	207	V	1.00	N
7315.978	32.90	37.11	8.62	39.44	39.18	74.00	-34.82	Peak	210	V	1.00	Y
7315.978	19.27	37.11	8.62	39.44	25.55	54.00	-28.45	AVE	210	V	1.00	Y
9756.833	34.44	37.90	12.23	36.10	48.47	74.00	-25.53	Peak	215	V	1.00	Y
9756.833	19.34	37.90	12.23	36.10	33.37	54.00	-20.63	AVE	215	V	1.00	Y
12198.670	30.82	40.26	14.32	28.53	56.87	74.00	-17.13	Peak	213	V	1.00	Y
12198.670	17.61	40.26	14.32	28.53	43.66	54.00	-10.34	AVE	213	V	1.00	Y
14635.705	34.62	41.79	14.55	40.01	50.94	74.00	-23.06	Peak	211	V	1.00	Y
14635.705	21.24	41.79	14.55	40.01	37.56	54.00	-16.44	AVE	211	V	1.00	Y
17077.688	33.20	42.52	15.97	40.33	51.37	74.00	-22.63	Peak	208	V	1.00	Y
17077.688	18.93	42.52	15.97	40.33	37.10	54.00	-16.90	AVE	208	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Middle Channel - Y-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2439.740	83.72	29.54	4.23	41.14	76.35	114.00	-37.65	Peak	53	H	1.00	N
2439.740	82.21	29.54	4.23	41.14	74.84	114.00	-39.16	AVE	53	H	1.00	N
4882.244	47.90	33.28	6.41	41.49	46.09	74.00	-27.91	Peak	50	H	1.00	N
4882.244	35.81	33.28	6.41	41.49	34.00	54.00	-20.00	AVE	50	H	1.00	N
7324.039	32.42	37.11	8.62	39.43	38.71	74.00	-35.29	Peak	53	H	1.00	Y
7324.039	19.36	37.11	8.62	39.43	25.65	54.00	-28.35	AVE	53	H	1.00	Y
9765.573	33.57	37.91	12.26	36.10	47.64	74.00	-26.36	Peak	56	H	1.00	Y
9765.573	19.39	37.91	12.26	36.10	33.46	54.00	-20.54	AVE	56	H	1.00	Y
12202.868	31.25	40.27	14.32	28.53	57.31	74.00	-16.69	Peak	55	H	1.00	Y
12202.868	17.60	40.27	14.32	28.53	43.66	54.00	-10.34	AVE	55	H	1.00	Y
14639.424	35.06	41.80	14.54	40.01	51.38	74.00	-22.62	Peak	54	H	1.00	Y
14639.424	21.45	41.80	14.54	40.01	37.77	54.00	-16.23	AVE	54	H	1.00	Y
17084.041	33.37	42.53	15.98	40.33	51.56	74.00	-22.44	Peak	56	H	1.00	Y
17084.041	18.97	42.53	15.98	40.33	37.16	54.00	-16.84	AVE	56	H	1.00	Y
2440.247	77.66	29.54	4.23	41.14	70.29	114.00	-43.71	Peak	327	V	1.00	N
2440.247	76.15	29.54	4.23	41.14	68.78	114.00	-45.22	AVE	327	V	1.00	N
4881.753	46.59	33.27	6.41	41.49	44.78	74.00	-29.22	Peak	326	V	1.00	N
4881.753	33.80	33.27	6.41	41.49	31.99	54.00	-22.01	AVE	326	V	1.00	N
7321.349	32.86	37.11	8.62	39.44	39.15	74.00	-34.85	Peak	325	V	1.00	Y
7321.349	19.32	37.11	8.62	39.44	25.61	54.00	-28.39	AVE	325	V	1.00	Y
9764.910	32.37	37.91	12.26	36.10	46.44	74.00	-27.56	Peak	326	V	1.00	Y
9764.910	19.35	37.91	12.26	36.10	33.42	54.00	-20.58	AVE	326	V	1.00	Y
12202.436	31.30	40.27	14.32	28.53	57.36	74.00	-16.64	Peak	333	V	1.00	Y
12202.436	17.60	40.27	14.32	28.53	43.66	54.00	-10.34	AVE	333	V	1.00	Y
14641.352	34.83	41.80	14.53	40.01	51.15	74.00	-22.85	Peak	325	V	1.00	Y
14641.352	21.32	41.80	14.53	40.01	37.64	54.00	-16.36	AVE	325	V	1.00	Y
17086.013	32.44	42.54	15.99	40.33	50.64	74.00	-23.36	Peak	326	V	1.00	Y
17086.013	18.96	42.54	15.99	40.33	37.16	54.00	-16.84	AVE	326	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products Middle Channel - Z-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2440.233	82.59	29.54	4.23	41.14	75.22	114.00	-38.78	Peak	308	H	1.00	N
2440.233	81.24	29.54	4.23	41.14	73.87	114.00	-40.13	AVE	308	H	1.00	N
4881.884	47.34	33.27	6.41	41.49	45.53	74.00	-28.47	Peak	310	H	1.00	N
4881.884	33.56	33.27	6.41	41.49	31.75	54.00	-22.25	AVE	310	H	1.00	N
7320.163	32.93	37.11	8.62	39.44	39.22	74.00	-34.78	Peak	301	H	1.00	Y
7320.163	19.42	37.11	8.62	39.44	25.71	54.00	-28.29	AVE	301	H	1.00	Y
9762.350	33.46	37.90	12.25	36.10	47.52	74.00	-26.48	Peak	300	H	1.00	Y
9762.350	19.44	37.90	12.25	36.10	33.50	54.00	-20.50	AVE	300	H	1.00	Y
12207.576	31.28	40.28	14.32	28.53	57.35	74.00	-16.65	Peak	305	H	1.00	Y
12207.576	17.65	40.28	14.32	28.53	43.72	54.00	-10.28	AVE	305	H	1.00	Y
14642.599	34.71	41.80	14.53	40.01	51.02	74.00	-22.98	Peak	303	H	1.00	Y
14642.599	21.50	41.80	14.53	40.01	37.81	54.00	-16.19	AVE	303	H	1.00	Y
17080.618	32.44	42.53	15.98	40.33	50.62	74.00	-23.38	Peak	309	H	1.00	Y
17080.618	18.99	42.53	15.98	40.33	37.17	54.00	-16.83	AVE	309	H	1.00	Y
2440.233	75.77	29.54	4.23	41.14	68.40	114.00	-45.60	Peak	319	V	1.00	N
2440.233	74.02	29.54	4.23	41.14	66.65	114.00	-47.35	AVE	319	V	1.00	N
4876.370	46.84	33.25	6.40	41.49	45.00	74.00	-29.00	Peak	317	V	1.00	N
4876.370	34.86	33.25	6.40	41.49	33.02	54.00	-20.98	AVE	317	V	1.00	N
7317.067	32.56	37.11	8.62	39.44	38.85	74.00	-35.15	Peak	320	V	1.00	Y
7317.067	19.35	37.11	8.62	39.44	25.64	54.00	-28.36	AVE	320	V	1.00	Y
9763.740	33.02	37.91	12.25	36.10	47.08	74.00	-26.92	Peak	317	V	1.00	Y
9763.740	19.33	37.91	12.25	36.10	33.39	54.00	-20.61	AVE	317	V	1.00	Y
12199.183	31.37	40.26	14.32	28.53	57.42	74.00	-16.58	Peak	319	V	1.00	Y
12199.183	17.63	40.26	14.32	28.53	43.68	54.00	-10.32	AVE	319	V	1.00	Y
14643.873	34.70	41.80	14.53	40.01	51.01	74.00	-22.99	Peak	315	V	1.00	Y
14643.873	21.31	41.80	14.53	40.01	37.62	54.00	-16.38	AVE	315	V	1.00	Y
17085.409	32.40	42.54	15.99	40.33	50.60	74.00	-23.40	Peak	317	V	1.00	Y
17085.409	18.97	42.54	15.99	40.33	37.17	54.00	-16.83	AVE	317	V	1.00	Y



1100 E Chalk Creek Road
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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products High Channel - X-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2479.718	83.50	29.65	4.28	41.17	76.25	114.00	-37.75	Peak	121	H	1.00	N
2479.718	81.16	29.65	4.28	41.17	73.91	114.00	-40.09	AVE	121	H	1.00	N
4962.250	48.01	33.56	6.47	41.51	46.53	74.00	-27.47	Peak	124	H	1.00	N
4962.250	33.93	33.56	6.47	41.51	32.45	54.00	-21.55	AVE	124	H	1.00	N
7441.368	31.54	37.04	8.74	39.33	37.98	74.00	-36.02	Peak	123	H	1.00	Y
7441.368	18.01	37.04	8.74	39.33	24.45	54.00	-29.55	AVE	123	H	1.00	Y
9915.760	32.20	37.97	12.86	36.05	46.98	74.00	-27.02	Peak	126	H	1.00	Y
9915.760	18.88	37.97	12.86	36.05	33.66	54.00	-20.34	AVE	126	H	1.00	Y
12400.413	30.83	40.82	14.24	28.53	57.36	74.00	-16.64	Peak	122	H	1.00	Y
12400.413	17.50	40.82	14.24	28.53	44.03	54.00	-9.97	AVE	122	H	1.00	Y
14877.309	34.75	42.13	13.92	40.04	50.76	74.00	-23.24	Peak	128	H	1.00	Y
14877.309	21.50	42.13	13.92	40.04	37.51	54.00	-16.49	AVE	128	H	1.00	Y
17355.030	33.52	42.97	16.58	40.38	52.69	74.00	-21.31	Peak	124	H	1.00	Y
17355.030	20.19	42.97	16.58	40.38	39.36	54.00	-14.64	AVE	124	H	1.00	Y
2479.704	77.76	29.65	4.28	41.17	70.51	114.00	-43.49	Peak	203	V	1.00	N
2479.704	76.11	29.65	4.28	41.17	68.86	114.00	-45.14	AVE	203	V	1.00	N
4958.149	48.00	33.55	6.47	41.51	46.51	74.00	-27.49	Peak	205	V	1.00	N
4958.149	36.83	33.55	6.47	41.51	35.34	54.00	-18.66	AVE	205	V	1.00	N
7442.556	32.22	37.03	8.74	39.33	38.67	74.00	-35.33	Peak	207	V	1.00	Y
7442.556	18.02	37.03	8.74	39.33	24.47	54.00	-29.53	AVE	207	V	1.00	Y
9917.528	32.05	37.97	12.87	36.05	46.83	74.00	-27.17	Peak	203	V	1.00	Y
9917.528	18.88	37.97	12.87	36.05	33.66	54.00	-20.34	AVE	203	V	1.00	Y
12397.232	31.01	40.81	14.24	28.53	57.53	74.00	-16.47	Peak	204	V	1.00	Y
12397.232	17.53	40.81	14.24	28.53	44.05	54.00	-9.95	AVE	204	V	1.00	Y
14874.867	34.88	42.12	13.93	40.04	50.89	74.00	-23.11	Peak	206	V	1.00	Y
14874.867	21.42	42.12	13.93	40.04	37.43	54.00	-16.57	AVE	206	V	1.00	Y
17365.640	33.45	42.99	16.60	40.38	52.66	74.00	-21.34	Peak	209	V	1.00	Y
17365.640	20.19	42.99	16.60	40.38	39.40	54.00	-14.60	AVE	209	V	1.00	Y



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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products High Channel - Y-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2497.320	83.18	29.69	4.30	41.19	75.98	114.00	-38.02	Peak	67	H	1.00	N
2497.320	81.46	29.69	4.30	41.19	74.26	114.00	-39.74	AVE	67	H	1.00	N
4957.930	47.78	33.55	6.47	41.51	46.28	74.00	-27.72	Peak	68	H	1.00	N
4957.930	34.21	33.55	6.47	41.51	32.71	54.00	-21.29	AVE	68	H	1.00	N
7440.064	31.50	37.04	8.74	39.33	37.94	74.00	-36.06	Peak	70	H	1.00	Y
7440.064	18.04	37.04	8.74	39.33	24.48	54.00	-29.52	AVE	70	H	1.00	Y
9916.439	33.18	37.97	12.87	36.05	47.96	74.00	-26.04	Peak	65	H	1.00	Y
9916.439	18.91	37.97	12.87	36.05	33.69	54.00	-20.31	AVE	65	H	1.00	Y
12400.570	31.12	40.82	14.24	28.53	57.65	74.00	-16.35	Peak	66	H	1.00	Y
12400.570	17.53	40.82	14.24	28.53	44.06	54.00	-9.94	AVE	66	H	1.00	Y
14873.225	35.36	42.12	13.93	40.04	51.37	74.00	-22.63	Peak	72	H	1.00	Y
14873.225	21.48	42.12	13.93	40.04	37.49	54.00	-16.51	AVE	72	H	1.00	Y
17356.662	33.51	42.97	16.58	40.38	52.68	74.00	-21.32	Peak	67	H	1.00	Y
17356.662	20.23	42.97	16.58	40.38	39.40	54.00	-14.60	AVE	67	H	1.00	Y
2479.731	82.90	29.65	4.28	41.17	75.65	114.00	-38.35	Peak	344	V	1.00	N
2479.731	81.40	29.65	4.28	41.17	74.15	114.00	-39.85	AVE	344	V	1.00	N
4958.059	47.92	33.55	6.47	41.51	46.42	74.00	-27.58	Peak	340	V	1.00	N
4958.059	34.52	33.55	6.47	41.51	33.02	54.00	-20.98	AVE	340	V	1.00	N
7437.603	32.62	37.04	8.74	39.33	39.06	74.00	-34.94	Peak	341	V	1.00	Y
7437.603	18.02	37.04	8.74	39.33	24.46	54.00	-29.54	AVE	341	V	1.00	Y
9913.875	32.57	37.97	12.86	36.05	47.34	74.00	-26.66	Peak	340	V	1.00	Y
9913.875	18.93	37.97	12.86	36.05	33.70	54.00	-20.30	AVE	340	V	1.00	Y
12399.960	30.79	40.82	14.24	28.53	57.32	74.00	-16.68	Peak	342	V	1.00	Y
12399.960	17.53	40.82	14.24	28.53	44.06	54.00	-9.94	AVE	342	V	1.00	Y
14877.260	35.43	42.13	13.92	40.04	51.44	74.00	-22.56	Peak	344	V	1.00	Y
14877.260	21.53	42.13	13.92	40.04	37.54	54.00	-16.46	AVE	344	V	1.00	Y
17358.033	33.55	42.97	16.59	40.38	52.73	74.00	-21.27	Peak	346	V	1.00	Y
17358.033	20.21	42.97	16.59	40.38	39.39	54.00	-14.61	AVE	346	V	1.00	Y



1100 E Chalk Creek Road
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Radiated Emissions (Spurious)

DNB Job Number:	36045	Date:	20 Sep 2012	Specification [X] 15.247 (c) [X] IEEE C63.10
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products High Channel - Z-Axis			

Note 1: GF = Ground Floor = If Y reading was at ground floor, If N reading was identifiable signal

Note 2: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note3: Highest frequency investigated was the tenth harmonic of the fundamental, no emissions were detected above the 2nd harmonic. Only data to the 7th harmonic has been provided.

FREQ (Mhz)	Meter	Correction Factors (dB)			dBuV/m			Positions				G F
		Ant	Cbl	Amp	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	
2479.732	71.27	29.65	4.28	41.17	64.02	114.00	-49.98	Peak	0	H	1.00	N
2479.732	69.39	29.65	4.28	41.17	62.14	114.00	-51.86	AVE	0	H	1.00	N
4958.031	48.47	33.55	6.47	41.51	46.97	74.00	-27.03	Peak	37	H	1.00	N
4958.031	34.76	33.55	6.47	41.51	33.26	54.00	-20.74	AVE	37	H	1.00	N
7433.118	31.90	37.04	8.73	39.34	38.33	74.00	-35.67	Peak	0	H	1.00	Y
7433.118	18.03	37.04	8.73	39.34	24.46	54.00	-29.54	AVE	0	H	1.00	Y
9914.456	32.38	37.97	12.86	36.05	47.15	74.00	-26.85	Peak	0	H	1.00	Y
9914.456	18.91	37.97	12.86	36.05	33.68	54.00	-20.32	AVE	0	H	1.00	Y
12402.220	31.51	40.83	14.24	28.53	58.05	74.00	-15.95	Peak	0	H	1.00	Y
12402.220	17.50	40.83	14.24	28.53	44.04	54.00	-9.96	AVE	0	H	1.00	Y
14879.115	34.96	42.13	13.91	40.04	50.97	74.00	-23.03	Peak	0	H	1.00	Y
14879.115	21.55	42.13	13.91	40.04	37.56	54.00	-16.44	AVE	0	H	1.00	Y
17359.904	33.66	42.98	16.59	40.38	52.85	74.00	-21.15	Peak	0	H	1.00	Y
17359.904	20.20	42.98	16.59	40.38	39.39	54.00	-14.61	AVE	0	H	1.00	Y
2479.746	67.79	29.65	4.28	41.17	60.54	114.00	-53.46	Peak	321	V	1.00	N
2479.746	65.54	29.65	4.28	41.17	58.29	114.00	-55.71	AVE	321	V	1.00	N
4957.669	47.87	33.55	6.47	41.51	46.37	74.00	-27.63	Peak	322	V	1.00	N
4957.669	34.35	33.55	6.47	41.51	32.85	54.00	-21.15	AVE	322	V	1.00	N
7436.344	31.25	37.04	8.74	39.34	37.69	74.00	-36.31	Peak	327	V	1.00	Y
7436.344	18.02	37.04	8.74	39.34	24.46	54.00	-29.54	AVE	327	V	1.00	Y
9916.972	32.96	37.97	12.87	36.05	47.74	74.00	-26.26	Peak	324	V	1.00	Y
9916.972	18.90	37.97	12.87	36.05	33.68	54.00	-20.32	AVE	324	V	1.00	Y
12401.928	31.22	40.83	14.24	28.53	57.75	74.00	-16.25	Peak	328	V	1.00	Y
12401.928	17.50	40.83	14.24	28.53	44.03	54.00	-9.97	AVE	328	V	1.00	Y
14875.654	35.62	42.13	13.92	40.04	51.63	74.00	-22.37	Peak	320	V	1.00	Y
14875.654	21.55	42.13	13.92	40.04	37.56	54.00	-16.44	AVE	320	V	1.00	Y
17356.934	33.93	42.97	16.59	40.38	53.10	74.00	-20.90	Peak	322	V	1.00	Y
17356.934	20.21	42.97	16.59	40.38	39.38	54.00	-14.62	AVE	322	V	1.00	Y

15.247 (a,2) 6 dB Bandwidth

Test Procedure: IEEE C63.10

6 dB Bandwidth

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 6 dB bandwidth, centered on a hopping channel

RBW 1% of the 6 dB bandwidth

VBW RBW

Sweep = auto

Detector function = peak

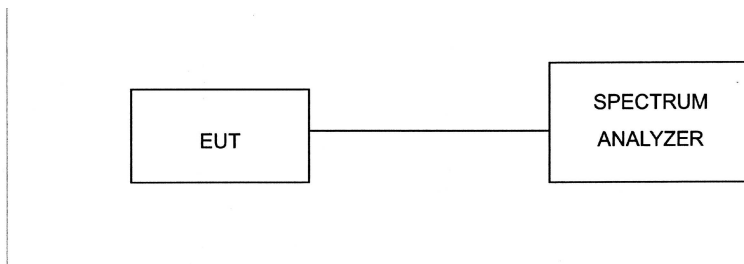
Trace = max hold


The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 6 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 6 dB bandwidth of the emission. If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s).

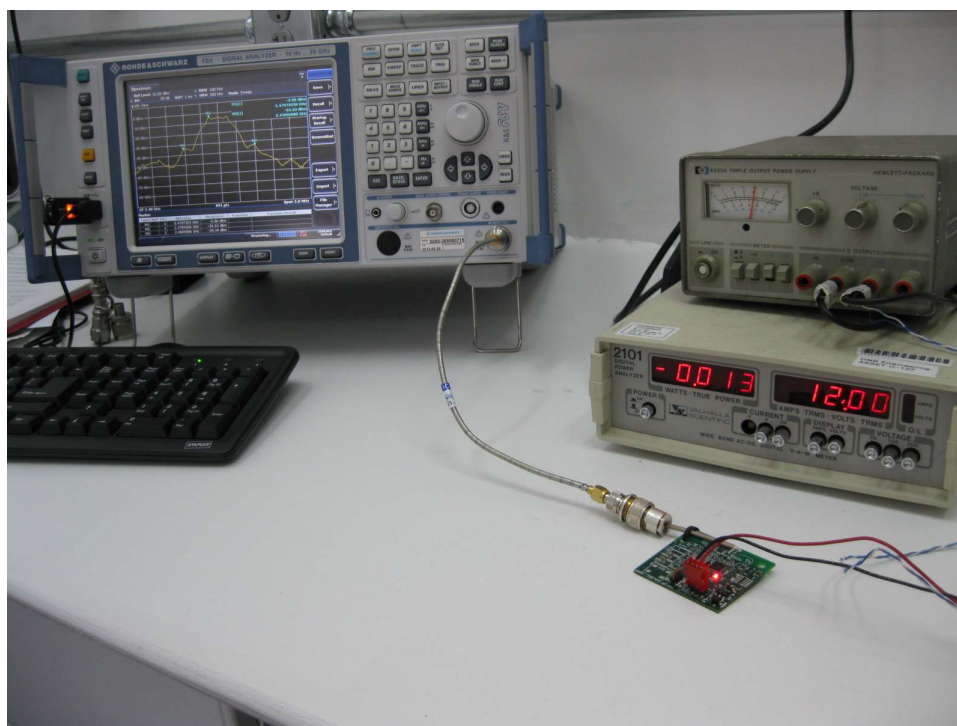
EUT operating conditions:


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

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



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		Measurement Test Set Up	
DNB Job Number:	36045	Date:	15 Oct 2012	Conformance Standard FCC Part 15 Clause 15.247
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products			
Antenna Conducted Measurement Set Up				



	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		6 dB Single Channel Bandwidth	
DNB Job Number:	36045	Date:	15 Oct 2012	Conformance Standard FCC Part 15
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products			Clause 15.247(a,2)
	Test Procedure			
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
21 °C		25 %		101.2 kPa
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>				

6 dB Bandwidth

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 6dB bandwidth, centered on a hopping channel

RBW = 1% of the 6dB bandwidth


VBW = RBW

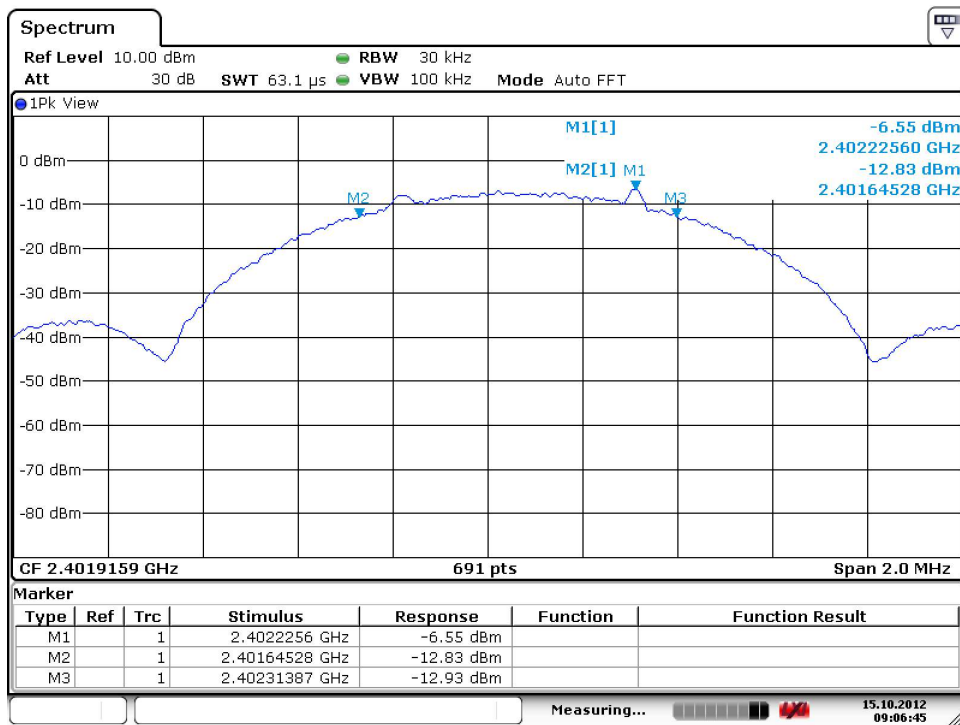
Sweep = auto

Detector function = peak


Trace = max hold

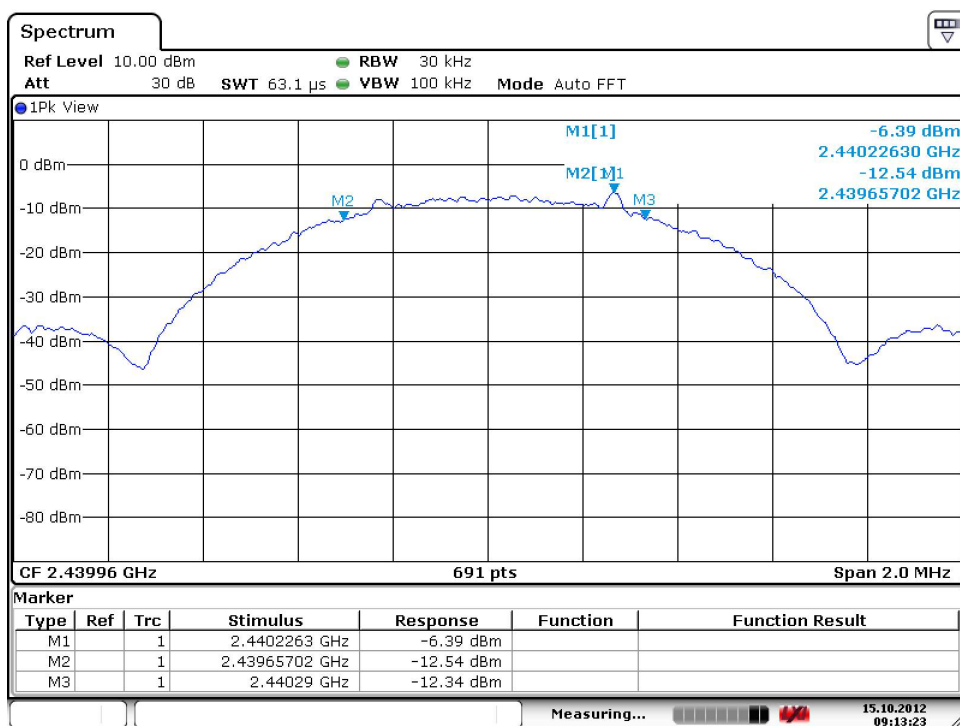
The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 6 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 6 dB bandwidth of the emission. If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s).

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		6 dB Single Channel Bandwidth	
	DNB Job Number:	36045	Date:	15 Oct 2012
Customer:	Icon Health and Fitness, Inc.			
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products 1Mbps data rate (Basic data rate)			
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
21 °C		25 %		101.2 kPa
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>				
Channel	Chl Freq (MHz)	6dB BW (kHz)	Limit	Pass/Fail
Low	2402	658.590	> 500 kHz	Pass




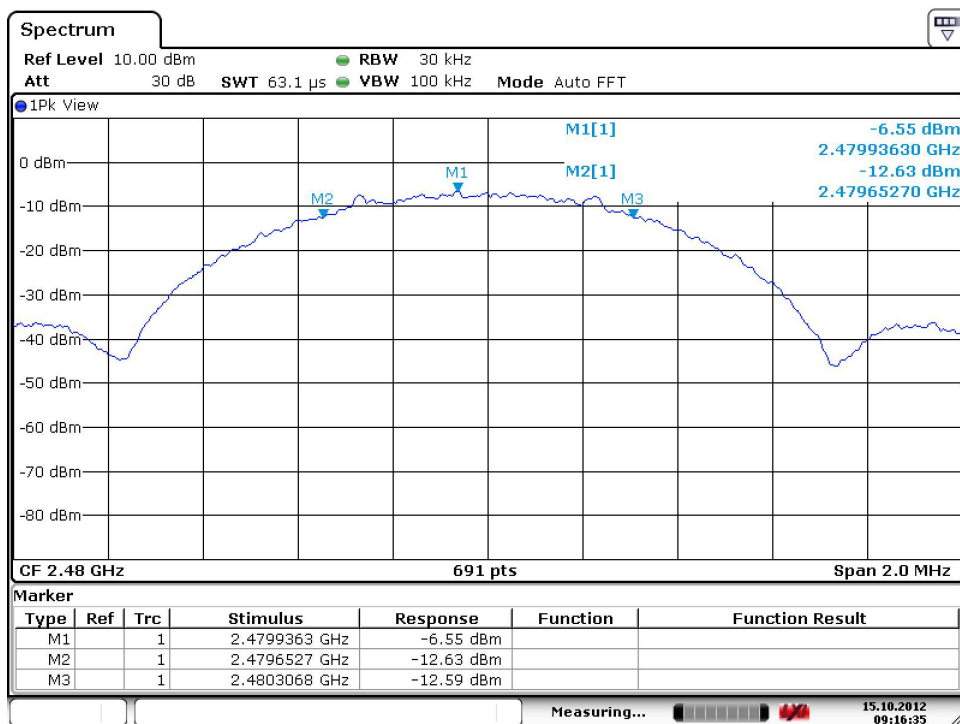
Date: 15.OCT.2012 09:06:46

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		6 dB Single Channel Bandwidth	
	DNB Job Number:	36045	Date:	15 Oct 2012
Customer:	Icon Health and Fitness, Inc.			Conformance Standard FCC Part 15
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products			Clause 15.247(a,2)
	1Mbps data rate (Basic data rate)			
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
21 °C		25 %		101.2 kPa
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>				
Channel	Chl Freq (MHz)	6dB BW (kHz)	Limit	Pass/Fail
Middle	2440	632.980	> 500 kHz	Pass



Date: 15.OCT.2012 09:13:23

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		6 dB Single Channel Bandwidth	
	DNB Job Number:	36045	Date:	15 Oct 2012
Customer:	Icon Health and Fitness, Inc.			Conformance Standard FCC Part 15
Model Number:	IABR12			
Description:	Modular Transceiver for use in Icon products			Clause 15.247(a,2)
	1Mbps data rate (Basic data rate)			
Environmental Conditions				
Ambient Temperature		Relative Humidity		Barometric Pressure
21 °C		25 %		101.2 kPa
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>				
Channel	Chl Freq (MHz)	6dB BW (MHz)	Limit	Pass/Fail
High	2480	654.100	> 500 kHz	Pass



Date: 15.OCT.2012 09:16:35

15.247 (b) Maximum Peak Output Power (Conducted)

Test Procedure: IEEE C63.10

Peak Output Power

Use the following spectrum analyzer settings:

Span = approximately 5 times the 6 B bandwidth, centered on a hopping channel

RBW > the 6 dB bandwidth of the emission being measured

VBW RBW

Sweep = auto

Detector function = peak

Trace = max hold

Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power (see the NOTE above regarding external attenuation and cable loss). The limit is specified in one of the subparagraphs of this Section. Submit this plot. A peak responding power meter may be used instead of a spectrum analyzer.

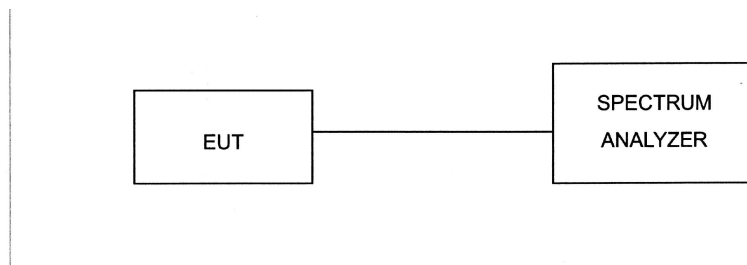
The transmitter output was connected to a spectrum analyzer.


Requirement: The maximum peak output power shall not exceed .125W (21dBm)

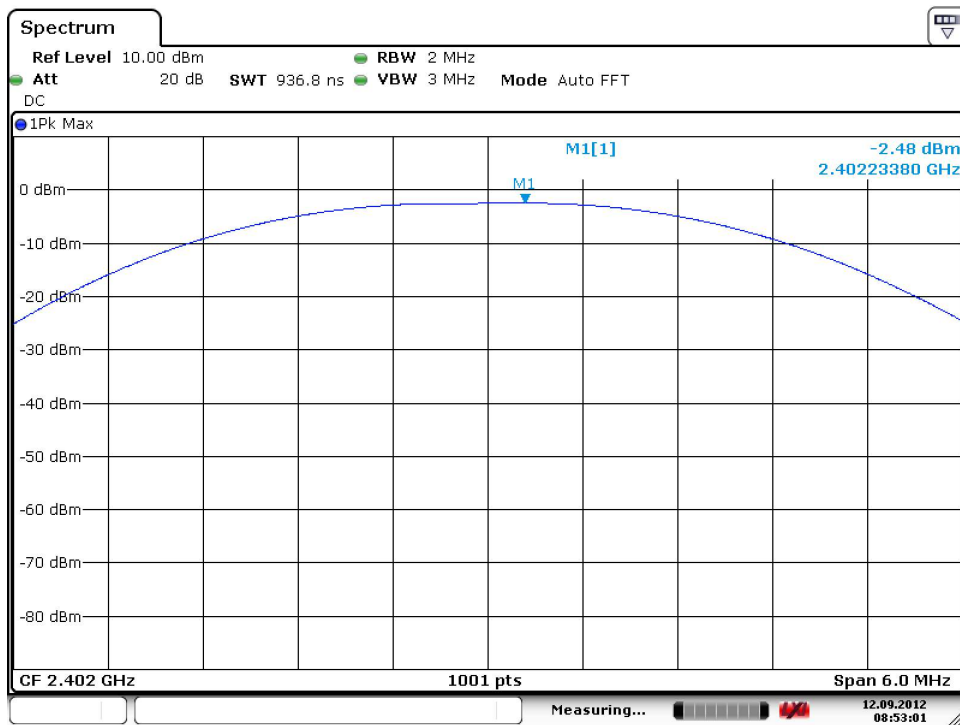
EUT operating conditions:

The software provided by the client to enable the EUT to transmit continuously at the low, mid, and upper channels respectively.


Test Set Up:

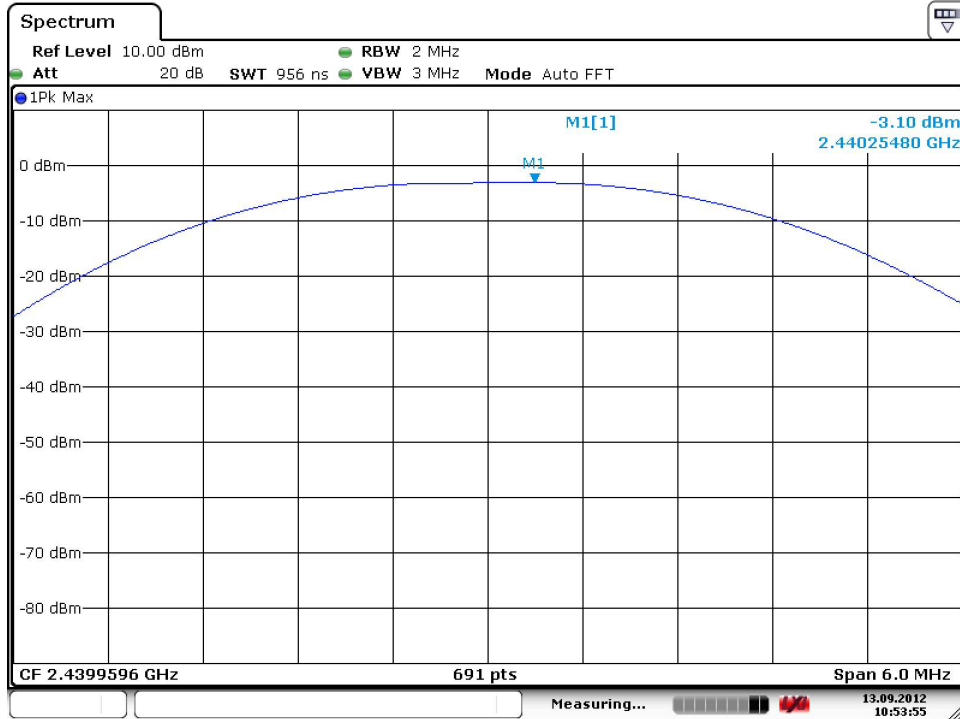


		1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		Peak Output Power (Cond)				
DNB Job Number:		36045		Date:		13 Sep 2012		Conformance Standard FCC Part 15
Customer:		Icon Health and Fitness, Inc.						
Model Number:		IABR12						
Description:		Modular Transceiver for use in Icon products						Clause 15.247(b)
		1Mbps data rate (Basic data rate) - Low Channel						
Environmental Conditions								
Ambient Temperature			Relative Humidity			Barometric Pressure		
21 °C			25 %			101.2 kPa		
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>								
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Limit (mW)	Delta (mW)	Pass/Fail	
2402	- 2.48	20.97	-23.45	0.565	125	-124.435	Pass	



Date: 12.SEP.2012 08:53:01

		1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		Peak Output Power (Cond)			
DNB Job Number:		36045		Date:		13 Sep 2012	
Customer:		Icon Health and Fitness, Inc.					
Model Number:		IABR12					
Description:		Modular Transceiver for use in Icon products					
		1Mbps data rate (Basic data rate) - Mid Channel					
Environmental Conditions							
Ambient Temperature			Relative Humidity			Barometric Pressure	
21 °C			25 %			101.2 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>							
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Limit (mW)	Delta (mW)	Pass/Fail
2440	-3.10	20.97	-24.07	0.490	125	-124.510	Pass



Date: 13.SEP.2012 10:53:54