



<b>Prüfbericht - Nr.: 14031623 001</b> <i>Test Report No.:</i>			<b>Seite 1 von 15</b> <i>Page 1 of 15</i>				
<b>Auftraggeber:</b> <i>Client:</i>			<b>Sports Tracking Technologies Ltd.</b> <b>Teollisuuskatu 21</b> <b>00510 Helsinki</b> <b>Finland</b>				
<b>Gegenstand der Prüfung:</b> <b>Bluetooth Heart Rate Monitor</b> <i>Test Item:</i>							
<b>Bezeichnung:</b> <i>Identification:</i>		<b>Sports Tracker HRM2</b>		<b>Serien-Nr.:</b> <i>Serial No.:</i>			
<b>Wareneingangs-Nr.:</b> <i>Receipt No.:</i>		<b>00121204152-002</b>		<b>Eingangsdatum:</b> <b>04.12.2012</b> <i>Date of Receipt:</i>			
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of test item at delivery:</i>				Test sample(s) is/are not damaged and suitable for testing.			
<b>Prüfort:</b> <i>Testing Location:</i>		<b>Global United Technology Services Co., Ltd.</b> 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, China					
<b>Prüfgrundlage:</b> <i>Test Specification:</i>		<b>FCC Part 15 Subpart C</b> <b>ANSI C63.4-2009</b> <b>CISPR 22:2003</b>					
<b>Prüfergebnis:</b> <i>Test Results:</i>		<b>Das vorstehend beschriebene Gerät wurde geprüft und entspricht oben genannter Prüfgrundlage.</b>  The above mentioned product was tested and <b>passed</b> .					
<b>Prüflaboratorium:</b> <i>Testing Laboratory:</i>		<b>TÜV Rheinland Hong Kong Ltd.</b> 8 - 10/F., Goldin Financial Global Square, 7 Wang Tai Road, Kowloon Bay, Kowloon, Hong Kong					
<b>geprüft/ tested by:</b>			<b>kontrolliert/ reviewed by:</b>				
13.05.2013 Joey Leung Test Engineer 			13.05.2013 Sharon Li Section Manager 				
<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>	<b>Unterschrift</b> <i>Signature</i>		
<b>Sonstiges:</b> <b>FCCID: ZXU-STHRM2</b> <i>Other Aspects</i>							
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Abkürzungen:</b>  <i>P(ass) = entspricht Prüfgrundlage</i>  <i>F(ail) = entspricht nicht Prüfgrundlage</i>  <i>N/A = nicht anwendbar</i>  <i>N/T = nicht getestet</i> </td> <td style="width: 50%; vertical-align: top;"> <b>Abbreviations:</b>  <i>P(ass) = passed</i>  <i>F(ail) = failed</i>  <i>N/A = not applicable</i>  <i>N/T = not tested</i> </td> </tr> </table>						<b>Abkürzungen:</b> <i>P(ass) = entspricht Prüfgrundlage</i> <i>F(ail) = entspricht nicht Prüfgrundlage</i> <i>N/A = nicht anwendbar</i> <i>N/T = nicht getestet</i>	<b>Abbreviations:</b> <i>P(ass) = passed</i> <i>F(ail) = failed</i> <i>N/A = not applicable</i> <i>N/T = not tested</i>
<b>Abkürzungen:</b> <i>P(ass) = entspricht Prüfgrundlage</i> <i>F(ail) = entspricht nicht Prüfgrundlage</i> <i>N/A = nicht anwendbar</i> <i>N/T = nicht getestet</i>	<b>Abbreviations:</b> <i>P(ass) = passed</i> <i>F(ail) = failed</i> <i>N/A = not applicable</i> <i>N/T = not tested</i>						
<b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b> <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>							

## Table of Content

	Page
<b>Cover Page .....</b>	<b>1</b>
<b>Table of Content .....</b>	<b>2</b>
<b>Product information .....</b>	<b>3</b>
Manufacturers declarations.....	3
Product function and intended use .....	4
Submitted documents.....	4
Remark.....	4
Special accessories and auxiliary equipment .....	4
<b>List of Test and Measurement Instruments.....</b>	<b>5</b>
<b>Results FCC Part 15 – Subpart C .....</b>	<b>6</b>
Subclause 15.203 – Antenna Information.....	Pass.....6
Subclause 15.204 – Antenna Information.....	Pass.....6
Subclause 15.207 – Disturbance Voltage on AC Mains .....	N/A.....6
Subclause 15.247 (a)(1) – Carrier Frequency Separation .....	Pass.....6
Subclause 15.247 (a)(1)(iii) – Number of hopping channels.....	Pass.....7
Subclause 15.247 (a)(1)(iii) – Time of Occupancy (Dwell Time).....	Pass.....8
Subclause 15.247 (a) – 20 dB Bandwidth .....	Pass.....8
Subclause 15.247 (a) – Hopping Sequence.....	Pass.....9
Subclause 15.247 (a) – Equal Hopping Frequency Use .....	Pass.....10
Subclause 15.247 (a) – Receiver Input Bandwidth .....	Pass.....11
Subclause 15.247 (a) – Receiver Hopping Capability .....	Pass.....11
Subclause 15.247 (b)(1) – Peak Output Power.....	Pass.....11
Subclause 15.247 (d) – Band edge compliance of conducted emissions .....	Pass.....12
Subclause 15.205 – Band edge compliance of radiated emissions .....	Pass.....12
Subclause 15.247 (d) – Spurious Conducted Emissions.....	Pass.....13
Subclause 15.247 (c) – Spurious Radiated Emissions .....	Pass.....14
<b>Appendix 1 – Test protocols .....</b>	<b>20 pages</b>
<b>Appendix 2 – Test setup .....</b>	<b>2 pages</b>
<b>Appendix 3 – Photo documentation .....</b>	<b>6 pages</b>
<b>Appendix 4 – Product documentation .....</b>	<b>12 pages</b>

www.tuv.com

## Product information

### Manufacturers declarations

	Transceiver
Operating frequency range	2402 - 2480 MHz
Type of modulation	GFSK; Pi/4 DQPSK; 8 DPSK
Number of channels	79
Channel separation	1 MHz
Type of antenna	PCB antenna
Antenna gain (dBi)	-2.14
Power level	variable
Type of equipment	stand alone radio device
Connection to public utility power line	No
Nominal voltage	V <sub>nom</sub> : 3.7V
Independent Operation Modes	Page scan Inquiry scan Connection state - ACL Link Connection state - SCO Link

## Product function and intended use

The test item is a Bluetooth heart rate monitor based on the Bluetooth technology.

Bluetooth is a short-range radio link intended to be a cable replacement between portable and/or fixed electronic devices.

Bluetooth operates in the unlicensed ISM Band at 2.4GHz. With the introduction of the enhanced data rate (EDR) feature, the data rates can be up to 3 Mb/s.

An increase in the peak data rate beyond the basic rate of 1 Mb/s is achieved by modulating the RF carrier using phase shift keying (PSK) techniques, resulting in an increase of two to three times the number of bits per symbol. The 2 Mb/s EDR packets use a Pi/4-DQPSK modulation and the 3 Mb/s EDR packets use 8DPSK modulation.

## Submitted documents

Circuit Diagram  
Block Diagram  
Bill of material  
User Manual  
Label Artwork

## Remark

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases.

## Special accessories and auxiliary equipment

### Additional accessory used for testing

The product has been tested together with the following additional accessory:

- None

## List of Test and Measurement Instruments

**Global United Technology Services Co., Ltd. (Registration number: 600491)**

Equipment	Manufacturer	Type	Due Date
3m Semi- Anechoic Chamber	ZhongYu Electron	9.0(L)*6.0(W)* 6.0(H)	April. 5 2015
Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	N/A
ESU EMI Test Receiver	R&S	ESU26	Jul. 06 2013
Loop Antenna	Zhinan	ZN30900A	Jul. 25 2013
Bi-log Hybrid Antenna	SCHWARZBECK	VULB9163	Mar. 17 2014
Double-ridged horn antenna	SCHWARZBECK	9120D	Mar. 17 2014
Horn Antenna	ETS-LINDGREN	3160-09	Mar. 17 2014
RF Amplifier	HP	8347A	Jul. 06 2013
RF Amplifier	HP	8349B	Jul. 06 2013
EMI Test Software	AUDIX	E3	N/A
Coaxial cable	GTS	N/A	Jul. 06 2013
Coaxial Cable	GTS	N/A	Jul. 06 2013
Thermo meter	N/A	N/A	Jul. 05 2013

## Results FCC Part 15 – Subpart C

<b>Subclause 15.203 – Antenna Information</b>		<b>Pass</b>
<b>Requirement:</b>	No antenna other than that furnished by the responsible party shall be used with the device	
<b>Results:</b>	Permanent attached antenna	
<b>Verdict:</b>	Pass	

<b>Subclause 15.204 – Antenna Information</b>		<b>Pass</b>
<b>Requirement:</b>	Provide information for every antenna proposed for the use with the EUT	
<b>Results:</b>	a) Antenna type: Chip antenna b) Manufacturer and model no: N.A. c) Gain with reference to an isotropic radiator: -2.14 dBi	
<b>Verdict:</b>	Pass	

<b>Subclause 15.207 – Disturbance Voltage on AC Mains</b>		<b>N/A</b>
The EUT could not be operated during charging battery.		

Subclause 15.247 (a)(1) – Carrier Frequency Separation		Pass
Requirement:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 2/3*20dB bandwidth of the hopping channel, whichever is greater.	
Test Specification : FCC Part 15 Subpart A – Subclause 15.31 Mode of operation : Tx mode (hopping on), 8DPSK Port of testing : Temporary antenna port Detector : Peak RBW/VBW : 100 kHz / 300 kHz Supply voltage : 3.7V from internal battery Temperature : 23°C Humidity : 50%		
Results:	Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.  The centre frequencies of the hopping channels are separated by more than the 2/3*20dB bandwidth. For test Results plots refer to Appendix 1, page 2.	
Verdict:	Pass	

Subclause 15.247 (a)(1)(iii) – Number of hopping channels		Pass
Requirement:	Frequency hopping systems operating in the 2400MHz-2483.5MHz bands shall use at least 15 hopping frequencies.	
Test Specification : FCC Part 15 Subpart A – Subclause 15.31 Mode of operation : Tx mode (hopping on), 8DPSK Port of testing : Temporary antenna port Detector : Peak RBW/VBW : 1 MHz / 3 MHz Supply voltage : 3.7V from internal battery Temperature : 23°C Humidity : 50%		
Results:	The total number of hopping frequencies is more than 15. For test Results plots refer to Appendix 1, page 3.	
Verdict:	Pass	

Subclause 15.247 (a)(1)(iii) – Time of Occupancy (Dwell Time)		Pass
Requirement:	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.	
Test Specification :	FCC Part 15 Subpart A – Subclause 15.31	
Mode of operation :	Tx mode (hopping on), DH5 packet	
Port of testing :	Temporary antenna port	
Detector :	Peak	
RBW/VBW :	1 MHz / 3 MHz	
Supply voltage :	3.7V from internal battery	
Temperature :	23°C	
Humidity :	50%	
Results:	Time period calculation = 0.4 x 79 = 31.6s Dwell time = 64 x 2.92 x 10 <sup>-3</sup> = 186.88 x 10 <sup>-3</sup> s 	

Subclause 15.247 (a) – 20 dB Bandwidth		Pass	
Requirement:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 2/3*20dB bandwidth of the hopping channel, whichever is greater.		
Test Specification :	FCC Part 15 Subpart A – Subclause 15.31		
Mode of operation :	Tx mode (2402MHz, 2441MHz, 2480MHz)		
Port of testing :	Temporary antenna port		
Detector :	Peak		
RBW/VBW :	30 kHz / 100 kHz		
Supply voltage :	3.7V from internal battery		
Temperature :	23°C		
Humidity :	50%		
Results:	Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.  For test protocols refer to Appendix 1, page 5-7.		
GFSK Modulation			
Frequency (MHz)	20 dB left (MHz)	20 dB right (MHz)	20dB bandwidth (MHz)
2402	0.474	0.480	0.954
2441	0.468	0.486	0.954
2480	0.462	0.486	0.948



### 8DPSK Modulation

Frequency (MHz)	20 dB left (MHz)	20 dB right (MHz)	20dB bandwidth (MHz)
2402	0.660	0.612	1.272
2441	0.660	0.618	1.278
2480	0.660	0.612	1.272

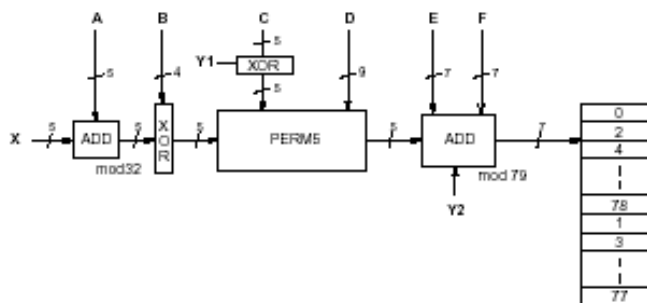
### Subclause 15.247 (a) – Hopping Sequence

Pass

Requirement: The hopping sequence is generated and provided with an example.

#### Hopping sequence

The channel is represented by a pseudo-random hopping sequence hopping through the 79 RF channels. The hopping sequence is unique for the piconet and is determined by the Bluetooth device address of the master. The X input determines the phase in the 32-hop segment, whereas Y1 and Y2 selects between master-to-slave and slave-to-master transmission. The inputs A to D determine the ordering within the segment, the inputs E and F determine the mapping onto the hop frequencies.



www.tuv.com

Example data:

Hop sequence {k} for CONNECTION STATE:

CLK start: 0x0000010

ULAP: 0x00000000

#ticks: 00 02 | 04 06 | 08 0a | 0c 0e | 10 12 | 14 16 | 18 1a | 1c 1e |

0x0000010:	08 66	10 70	12 19	14 23	16 01	18 05	20 33	22 37
0x0000030:	24 03	26 07	28 35	30 39	32 72	34 76	36 25	38 29
0x0000050:	40 74	42 78	44 27	46 31	48 09	50 13	52 41	54 45
0x0000070:	56 11	58 15	60 43	62 47	32 17	36 19	34 49	38 51
0x0000090:	40 21	44 23	42 53	46 55	48 33	52 35	50 65	54 67
0x00000b0:	56 37	60 39	58 69	62 71	64 25	68 27	66 57	70 59
0x00000d0:	72 29	76 31	74 61	78 63	01 41	05 43	03 73	07 75
0x00000f0:	09 45	13 47	11 77	15 00	64 49	66 53	68 02	70 06
0x0000110:	01 51	03 55	05 04	07 08	72 57	74 61	76 10	78 14
0x0000130:	09 59	11 63	13 12	15 16	17 65	19 69	21 18	23 22
0x0000150:	33 67	35 71	37 20	39 24	25 73	27 77	29 26	31 30
0x0000170:	41 75	43 00	45 28	47 32	17 02	21 04	19 34	23 36
0x0000190:	33 06	37 08	35 38	39 40	25 10	29 12	27 42	31 44
0x00001b0:	41 14	45 16	43 46	47 48	49 18	53 20	51 50	55 52
0x00001d0:	65 22	69 24	67 54	71 56	57 26	61 28	59 58	63 60
0x00001f0:	73 30	77 32	75 62	00 64	49 34	51 42	57 66	59 74
0x0000210:	53 36	55 44	61 68	63 76	65 50	67 58	73 03	75 11
0x0000230:	69 52	71 60	77 05	00 13	02 38	04 46	10 70	12 78
0x0000250:	06 40	08 48	14 72	16 01	18 54	20 62	26 07	28 15
0x0000270:	22 56	24 64	30 09	32 17	02 66	06 74	10 19	14 27
0x0000290:	04 70	08 78	12 23	16 31	18 03	22 11	26 35	30 43
0x00002b0:	20 07	24 15	28 39	32 47	34 68	38 76	42 21	46 29
0x00002d0:	36 72	40 01	44 25	48 33	50 05	54 13	58 37	62 45
0x00002f0:	52 09	56 17	60 41	64 49	34 19	36 35	50 51	52 67
0x0000310:	38 21	40 37	54 53	56 69	42 27	44 43	58 59	60 75
0x0000330:	46 29	48 45	62 61	64 77	66 23	68 39	03 55	05 71
0x0000350:	70 25	72 41	07 57	09 73	74 31	76 47	11 63	13 00
0x0000370:	78 33	01 49	15 65	17 02	66 51	70 67	03 04	07 20
0x0000390:	68 55	72 71	05 08	09 24	74 59	78 75	11 12	15 28
0x00003b0:	76 63	01 00	13 16	17 32	19 53	23 69	35 06	39 22
0x00003d0:	21 57	25 73	37 10	41 26	27 61	31 77	43 14	47 30
0x00003f0:	29 65	33 02	45 18	49 34	19 04	21 08	23 20	25 24

#### Subclause 15.247 (a) – Equal Hopping Frequency Use

Pass

Requirement: Each of the transmitter's hopping channels is used equally on average.

Equal hopping frequency use

The EUT complies with the Bluetooth RF specifications. For details refer to the Bluetooth standard.

Subclause 15.247 (a) – Receiver Input Bandwidth	Pass
Requirement: The associated receiver(s) complies with the requirement that its input bandwidth matches the bandwidth of the transmitted signal.	
Receiver input bandwidth The receiver bandwidth is equal to the receiver bandwidth in the 79 hopping channel mode, which is 1 MHz. The receiver bandwidth was verified during Bluetooth RF conformance testing.	

Subclause 15.247 (a) – Receiver Hopping Capability	Pass
Requirement: The associated receiver has the ability to shift frequencies in synchronisation with the transmitted signals.	
Receiver hopping Capability The EUT complies with the Bluetooth RF specifications. For details refer to the Bluetooth standard.	

Subclause 15.247 (b)(1) – Peak Output Power					Pass
Test Specification : FCC Part 15 Subpart A – Subclause 15.31 Mode of operation : Tx mode (2402MHz, 2441MHz, 2480MHz) Port of testing : Temporary antenna port Detector : Peak RBW/VBW : 3 MHz / 10 MHz Supply voltage : 3.7V from internal battery Temperature : 23°C Humidity : 50%					
Requirement: For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 Watt. For all other frequency hopping systems in the 2400 – 2483.5 MHz band: 0.125 Watts.					
Results: For test protocols please refer to Appendix 1, page 8-12.					
GFSK Modulation					
Frequency (MHz)	Maximum peak output power (dBm)	Cable attenuation (dB)	Output power (dBm)	Limit (W/dBm)	Verdict
2402	2.22	0.00	2.220	1 / 30.0	Pass
2441	1.94	0.00	1.940	1 / 30.0	Pass
2480	1.12	0.00	1.120	1 / 30.0	Pass
Pi/4 DQPSK Modulation					
Frequency (MHz)	Maximum peak output power (dBm)	Cable attenuation (dB)	Output power (dBm)	Limit (W/dBm)	Verdict
2402	5.18	0.00	5.180	1 / 30.0	Pass

2441	4.57	0.00	4.570	1 / 30.0	Pass
2480	3.53	0.00	3.530	1 / 30.0	Pass
<b>8DPSK Modulation</b>					
Frequency (MHz)	Maximum peak output power (dBm)	Cable attenuation (dB)	Output power (dBm)	Limit (W/dBm)	Verdict
2402	5.39	0.00	5.390	1 / 30.0	Pass
2441	4.75	0.00	4.750	1 / 30.0	Pass
2480	3.65	0.00	3.650	1 / 30.0	Pass

**Subclause 15.247 (d) – Band edge compliance of conducted emissions**
**Pass**

Test Specification : FCC Part 15 Subpart A – Subclause 15.31  
 Mode of operation : Tx mode (2402MHz, 2480MHz), 8DPSK  
 Port of testing : Temporary antenna port  
 Detector : Peak  
 RBW/VBW : 100 kHz / 300 kHz  
 Supply voltage : 3.7V from internal battery  
 Temperature : 23°C  
 Humidity : 50%

**Requirement:** 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.

**Results:** Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.  
  
 There is no peak found outside any 100 kHz bandwidth of the operating frequency band. For test protocols refer to Appendix 1, page 13-14.

**Subclause 15.205 – Band edge compliance of radiated emissions**
**Pass**

Test Specification : FCC Part 15 Subpart A – Subclause 15.31  
 Mode of operation : Tx mode (2402MHz, 2480MHz), 8DPSK  
 Port of testing : Temporary antenna port  
 Detector : Peak  
 RBW/VBW : 1 MHz / 3 MHz  
 Supply voltage : 3.7V from internal battery  
 Temperature : 23°C  
 Humidity : 50%

**Requirement:** Radiated emissions which fall in the restricted bands, as defined in 15.205 (a), must also comply with the radiated emission limits specified in 15.209(a).

**Results:** There is no peak found in the restricted bands. For test protocols refer to Appendix 1, page 15-18.

Subclause 15.247 (d) – Spurious Conducted Emissions					Pass
Test Specification : FCC Part 15 Subpart A – Subclause 15.31 Mode of operation : Tx mode (2402MHz, 2441MHz, 2480MHz), 8DPSK Port of testing : Temporary antenna port Detector : Peak RBW/VBW : 100 kHz / 300 kHz Supply voltage : 3.7V from internal battery Temperature : 23 °C Humidity : 50 %					
<b>Requirement:</b> 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.					
<b>Results:</b> Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.  There is no peak found outside any 100kHz bandwidth of the operating frequency band in the three transmit frequency. All three transmit frequency modes comply with the limit stated in subclause 15.247(d). For test protocols refer to Appendix 1, page 19-20.					
Operating frequency (MHz)	Spurious frequency (MHz)	Spurious Level (dBm)	Reference value (dBm)	Delta (dB)	Verdict
2402	3200	-53.22	4.01	-57.23	Pass
	4800	-50.70	4.01	-54.71	Pass
2441	3250	-52.26	3.62	-55.88	Pass
	4850	-52.92	3.62	-56.54	Pass
2480	3300	-54.99	2.15	-57.14	Pass
	4100	-57.25	2.15	-59.40	Pass

<b>Subclause 15.247 (c) – Spurious Radiated Emissions</b>		<b>Pass</b>
Test Specification : ANSI C63.4 – 2003 Mode of operation : Tx mode (2402MHz, 2441MHz, 2480MHz), 8DPSK Port of testing : Enclosure Detector : Peak RBW/VBW : 100 kHz / 300 kHz for f < 1 GHz 1 MHz / 3 MHz for f > 1 GHz Supply voltage : 3.7V from internal battery Temperature : 23°C Humidity : 50%		
Requirement: In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. 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 15.205(c).		
<b>Results:</b> Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.  All three transmit frequency modes comply with the field strength within the restricted bands. There is no spurious found below 30MHz.		
Tx frequency 2402MHz Vertical Polarization		
Freq MHz	Level dBuV/m	Limit/ Detector dBuV/m
61.132	25.31	40.0 / QP
4804.000	47.27	74.0 / PK
4804.000	37.54	54.0 / AV
7206.000	52.59	74.0 / PK
7206.000	33.50	54.0 / AV
9608.000	55.87	74.0 / PK
9608.000	36.00	54.0 / AV
Tx frequency 2402MHz Horizontal Polarization		
Freq MHz	Level dBuV/m	Limit/ Detector dBuV/m
143.830	27.93	43.5 / QP
272.278	33.08	46.0 / QP
4804.000	46.32	74.0 / PK
4804.000	33.32	54.0 / AV
7206.000	52.96	74.0 / PK
7206.000	34.23	54.0 / AV
9608.000	54.81	74.0 / PK
9608.000	35.99	54.0 / AV
Tx frequency 2441MHz Vertical Polarization		
Freq MHz	Level dBuV/m	Limit/ Detector dBuV/m
61.132	25.31	40.0 / QP
4882.000	47.56	74.0 / PK
4882.000	32.90	54.0 / AV

7323.000	53.13	74.0 / PK
7323.000	34.39	54.0 / AV
9764.000	53.05	74.0 / PK
9764.000	33.57	54.0 / AV
Tx frequency 2441MHz Horizontal Polarization		
<b>Freq MHz</b>	<b>Level dBuV/m</b>	<b>Limit/ Detector dBuV/m</b>
143.830	27.93	43.5 / QP
272.278	33.08	46.0 / QP
4882.000	44.97	74.0 / PK
4882.000	33.96	54.0 / AV
7323.000	52.62	74.0 / PK
7323.000	33.50	54.0 / AV
9764.000	53.92	74.0 / PK
9764.000	34.48	54.0 / AV
Tx frequency 2480MHz Vertical Polarization		
<b>Freq MHz</b>	<b>Level dBuV/m</b>	<b>Limit/ Detector dBuV/m</b>
61.132	25.31	40.0 / QP
4960.000	45.53	74.0 / PK
4960.000	31.22	54.0 / AV
7440.000	51.74	74.0 / PK
7440.000	32.35	54.0 / AV
9920.000	52.07	74.0 / PK
9920.000	32.81	54.0 / AV
Tx frequency 2480MHz Horizontal Polarization		
<b>Freq MHz</b>	<b>Level dBuV/m</b>	<b>Limit/ Detector dBuV/m</b>
143.830	27.93	43.5 / QP
272.278	33.08	46.0 / QP
4960.000	45.33	74.0 / PK
4960.000	32.96	54.0 / AV
7440.000	52.41	74.0 / PK
7440.000	31.79	54.0 / AV
9920.000	52.77	74.0 / PK
9920.000	34.23	54.0 / AV