

Report No. : FR430452-02AN

FCC Test Report

Equipment : Set-Top Box

Brand Name : CISCO

Model No. : IPV50xy, IPV60xy

(X=5, Y can be 0, 3, 5, 6)

FCC ID : VUI-IPV5K6KUSWIFI

Standard : 47 CFR FCC Part 15.407

Operating Band : 5150 MHz - 5250 MHz

5250 MHz - 5350 MHz 5470 MHz - 5725 MHz 5725 MHz - 5850 MHz

FCC Classification: UNII

Applicant : PEGATRON CORPORATION

5F No. 76, Ligong St., Beitou District,

Taipei City 112 Taiwan

Manufacturer : Maintek Computer (Suzhou) Co., Ltd

233 Jin Feng Rd New District Suzhou

Jiangsul 215011 China

Function : ☐ Outdoor AP; ☐ Indoor AP; ☐ Fixed P2P AP

☐ Portable Client

The product sample received on Mar. 05, 2014 and completely tested on Aug. 24, 2014. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Vic Hsiao / Supervisor

Testing Laboratory
1190

SPORTON INTERNATIONAL INC. Page No. : 1 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information	5
1.2	Accessories and Support Equipment	
1.3	Testing Applied Standards	
1.4	Testing Location Information	
1.5	Measurement Uncertainty	
2	TEST CONFIGURATION OF EUT	10
2.1	The Worst Case Modulation Configuration	10
2.2	The Worst Case Power Setting Parameter	10
2.3	The Worst Case Measurement Configuration	12
2.4	Test Setup Diagram	14
3	TRANSMITTER TEST RESULT	16
3.1	AC Power-line Conducted Emissions	16
3.2	Emission Bandwidth	19
3.3	RF Output Power	24
3.4	Peak Power Spectral Density	32
3.5	Transmitter Bandedge Emissions	38
3.6	Transmitter Unwanted Emissions	44
3.7	Frequency Stability	115
4	TEST EQUIPMENT AND CALIBRATION DATA	117

APPENDIX A. TEST PHOTOS

APPENDIX B. PHOTOGRAPHS OF EUT

Report No.: FR430452-02AN



Summary of Test Result

Report No.: FR430452-02AN

	Conformance Test Specifications					
Report Clause	· I DESCRIPTION					
0	15.203	Antenna Requirement	Complied			
3.1	15.207	AC Power-line Conducted Emissions	Complied			
3.2	15.407(a)	Emission Bandwidth	Complied			
3.3	15.407(a)	RF Output Power (Maximum Conducted Output Power)	Complied			
3.4	15.407(a)	Peak Power Spectral Density	Complied			
3.5	15.407(b)	Transmitter Bandedge Emissions	Complied			
3.6	15.407(b)	Transmitter Unwanted Emissions	Complied			
3.7	15.407(g)	Frequency Stability	Complied			

SPORTON INTERNATIONAL INC. Page No. : 3 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Revision History

Report No.: FR430452-02AN

Report No.	Version	Description	Issued Date
FR430452-02AN	Rev. 01	Initial issue of report	Dec. 4, 2014

SPORTON INTERNATIONAL INC. Page No. : 4 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



1 General Description

1.1 Information

1.1.1 RF General Information

	RF General Information						
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)	Co-location	
5150-5250	а	5180-5240	36-48 [4]	2	22.13	Yes	
5250-5350		5260-5320	52-64 [4]	2	21.52	Yes	
5470-5725		5500-5700	100-140 [8]	2	21.19	Yes	
5725-5850		5745-5825	149-165 [5]	2	24.23	Yes	
5150-5250	n (HT20)	5180-5240	36-48 [4]	2	22.11	Yes	
5250-5350		5260-5320	52-64 [4]	2	21.76	Yes	
5470-5725		5500-5700	100-140 [8]	2	21.38	Yes	
5725-5850		5745-5825	149-165 [5]	2	24.15	Yes	
5150-5250	n (HT40)	5190-5230	38-46 [2]	2	23.75	Yes	
5250-5350		5270-5310	54-62 [2]	2	22.57	Yes	
5470-5725		5510-5670	102-134 [3]	2	22.49	Yes	
5725-5850		5755-5795	151-159 [2]	2	23.75	Yes	

Report No.: FR430452-02AN

Note 1: RF output power specifies that Maximum Conducted Output Power.

Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

Note 3: The WLAN and Bluetooth can transmit simultaneously.

Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)

 SPORTON INTERNATIONAL INC.
 Page No.
 : 5 of 118

 TEL: 886-3-327-3456
 Report Version
 : Rev. 01



1.1.2 Antenna Information

	Antenna Category				
\boxtimes	Integral antenna (antenna permanently attached)				
	☐ Temporary RF connector provided				
	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.				

Report No.: FR430452-02AN

	Antenna General Information						
Ant. Cat. Ant. Type Ant. Port Gain (dBi) Rem							
	PCB	1	1.62	TX/RX			
lategral		2	1.66	TX/RX			
Integral		3	1.66	RX			
		4	1.69	RX			

1.1.3 Type of EUT

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		Identify EUT			
EU	T Serial Number	N/A			
Pre	sentation of Equipment				
		Type of EUT			
\boxtimes	Stand-alone Stand-alone				
	Combined (EUT where the radio part is fully integrated within another device)				
	Combined Equipment - Brand Name / Model No.:				
	Plug-in radio (EUT intended for a variety of host systems)				
	Host System - Brand Name / Model No.:				
	Other:				

SPORTON INTERNATIONAL INC. Page No. : 6 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



1.1.4 Test Signal Duty Cycle

	Operated Mode for Worst Duty Cycle					
	Operated normally mode for worst duty cycle					
\boxtimes	Operated test mode for worst duty cycle					
	Test Signal Duty Cycle (x)	Power Duty Factor [dB] – (10 log 1/x)				
\boxtimes	100% - IEEE 802.11a	0				
\boxtimes	100% - IEEE 802.11n (HT20)	0				
	100% - IEEE 802.11n (HT40)	0				

Report No.: FR430452-02AN

1.1.5 EUT Operational Condition

Supply Voltage		☐ DC	
Type of DC Source	☐ Internal DC supply		☐ From Host System
Test Voltage			
Test Climatic			☐ Tmin (-20°C)

SPORTON INTERNATIONAL INC. Page No. : 7 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report No.: FR430452-02AN

1.2 Accessories and Support Equipment

Accessories Information					
AC Adoptor 1	Brand Name	I.T.E	Model Name	ML18-A120150-A1	
AC Adapter 1	Power Rating	I/P: 100-120V~ 5	0/60Hz 0.6A; O	/P: 12V===1.5A	
AC Adoptor 2	Brand Name	Chicony	Model Name	W13-018N1A	
AC Adapter 2	Power Rating	I/P: 100-120V~ 6	0Hz 0.5A; O/P:	12V === 1.5A	

Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment - AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	
1	Notebook	DELL	E5530	DoC	

	Support Equipment - RF Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID		
1	Notebook	DELL	E5500	DoC		

		Support Equipment - R	adiated Emission	
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook (Remote)	DELL	E5530	DoC

1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 789033 D02 v01
- FCC KDB 644545 D03 v01
- FCC KDB 662911 v02r01
- ◆ FCC-14-30A1-UNII

1.4 Testing Location Information

	Testing Location					
\boxtimes	HWA YA	ADD	:	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.		
		TEL	:	886-3-327-3456 FAX	886-3-327-0973	
	Test Condi	ition		Test Site No.	Test Engineer	Test Environment
	AC Conduc	tion		CO04-HY	Zeus	22°C / 53%
	RF Conduc	cted		TH01-HY	lan	24.1°C / 64%
F	Radiated Em	ission		03CH03-HY	Hunter	24°C / 60%

SPORTON INTERNATIONAL INC. : 8 of 118
TEL: 886-3-327-3456 : Report Version : Rev. 01



1.5 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Report No.: FR430452-02AN

Me	easurement Uncertainty	
Test Item	Uncertainty	
AC power-line conducted emissions Emission bandwidth, 26dB bandwidth RF output power, conducted		±2.3 dB
		±1.4 %
		±0.6 dB
Power density, conducted		±0.8 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.5 dB
	1 – 18 GHz	±0.7 dB
	18 – 40 GHz	±0.8 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±3 %
DC and low frequency voltages		±3 %
Time		±1.4 %
Duty Cycle		±1.4 %

SPORTON INTERNATIONAL INC. Page No. : 9 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing				
Modulation Mode	Transmit Chains (N _{TX})	Data Rate / MCS	Worst Data Rate / MCS	
11a	2	6-54Mbps	6 Mbps	
HT20	2	MCS 0-15	MCS 0	
HT40	2	MCS 0-15	MCS 0	

Report No.: FR430452-02AN

2.2 The Worst Case Power Setting Parameter

The W	orst (Case Power	Setting Par	ameter (515	0-5250MHz band)	
Test Software Version				PuTT	Y	
		Test Frequency (MHz)				
Modulation Mode	N _{TX}		NCB: 20MHz		NCB: 40MHz	
		5180	5200	5240	5190	5230
11a	2	20	20	20	-	-
HT20	2	18	19	20	-	-
HT40	2	-	-	-	16	22

The W	orst (Case Power Se	etting Paramet	er (5250-5350N	lHz band)		
Test Software Version				PuTTY			
		Test Frequency (MHz)					
Modulation Mode	N _{TX}		NCB: 20MHz NC			3: 40MHz	
		5260	5300	5320	5270	5310	
11a	2	20	20	20	-	-	
HT20	2	20	20	17	-	-	
HT40	2	-	-	=	21	16	

SPORTON INTERNATIONAL INC. Page No. : 10 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



The W	orst (Case Power	Setting Para	ameter (547	0-5725MHz b	and)	
Test Software Version				PuTT	Y		
		Test Frequency (MHz)					
Modulation Mode	N _{TX}	l	NCB: 20MHz		NCB: 40MHz		
		5500	5580	5700	5510	5550	5670
11a	2	20	20	19	-	-	-
HT20	2	18	20	18	-	-	-
HT40	2	-	-	-	16	21	21

Report No. : FR430452-02AN

The W	orst (Case Power	Setting Par	ameter (572	5-5850MHz band)	
Test Software Version		PuTTY				
		Test Frequency (MHz)				
Modulation Mode	N_{TX}		NCB: 20MHz		NCB: 40MHz	
		5745	5785	5825	5755	5795
11a	2	21	22	22	-	-
HT20	2	20	22	22	-	-
HT40	2	-	-	-	18	22

SPORTON INTERNATIONAL INC. Page No. : 11 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

2.3 The Worst Case Measurement Configuration

Th	e Worst Case Mode for Fo	ollowing Conformance Tes	sts		
Tests Item	AC power-line conducted emissions				
Condition	AC power-line conducted r Test Voltage: 120Vac / 60H	measurement for line and no tz	eutral		
Operating Mode	Operating Mode Description	on			
1	AC Mode & Radio link (Ad	AC Mode & Radio link (Adapter 1)			
2	AC Mode & Radio link (Ad	apter 2)			
The operating	ng mode 2 is the worst cas	se and it was record in this	s test report.		
	☐ EUT will be placed in	fixed position.			
User Position		mobile position and operation of the control of the			
	EUT will be a hand-he operating multiple pos	eld or body-worn battery-pov sitions.	wered devices and		
	X Plane	Y Plane	Z Plane		
Orthogonal Planes of EUT					

Report No.: FR430452-02AN

The Worst Case Mode for Following Conformance Tests		
Tests Item	RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Peak Excursion, Transmitter Conducted Unwanted Emissions Transmitter Conducted Bandedge Emissions	
Test Condition	Conducted measurement at transmit chains	
Modulation Mode	11a, HT20, HT40	

SPORTON INTERNATIONAL INC. Page No. : 12 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Th	e Worst Case Mode for Fo	ollowing Conformance Tes	sts
Tests Item	Transmitter Radiated Unwa Transmitter Radiated Band		
Test Condition	regardless of spatial multip	antenna assembly (multiple plexing MIMO configuration antenna gain of each anten	n), the radiated test should
	☐ EUT will be placed in	fixed position.	
User Position		mobile position and operation ee orthogonal planes. The	
	EUT will be a hand-he operating multiple pos	eld or body-worn battery-pov sitions.	wered devices and
Operating Mode < 1GHz	Operating Mode Description	on	
1	AC Mode & Radio link (Ad	apter 1)	
2	AC Mode & Radio link (Adapter 2)		
The operating	g mode 2 is the worst cas	se and it was record in this	s test report.
Operating Mode > 1GHz	Operating Mode Description	on	
2	AC Mode & Radio link (Ad	apter 2)	
Modulation Mode	11a, HT20, HT40		
	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

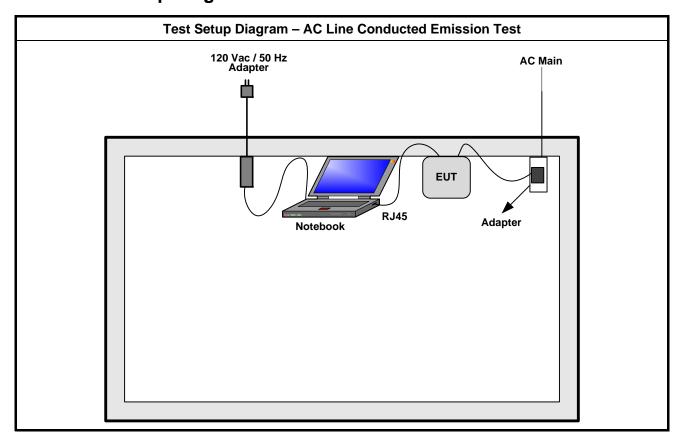
Report No. : FR430452-02AN

SPORTON INTERNATIONAL INC. Page No. : 13 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Report No.: FR430452-02AN

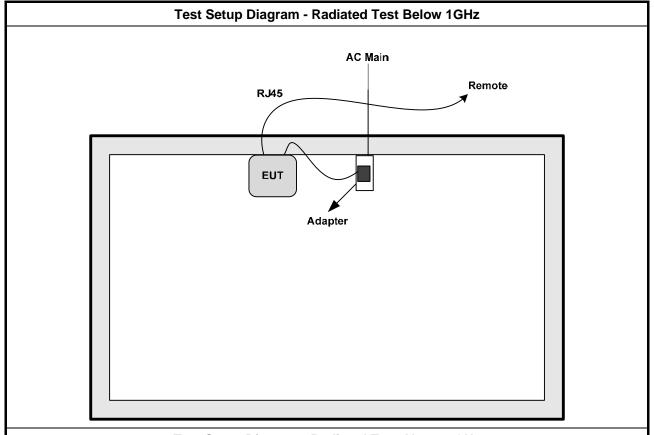
Test Setup Diagram 2.4



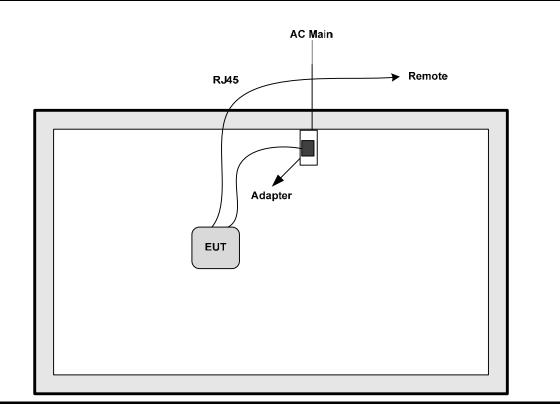
SPORTON INTERNATIONAL INC. Page No. : 14 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01



Report No.: FR430452-02AN



Test Setup Diagram - Radiated Test Above 1GHz



SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : 15 of 118

Report Version

: Rev. 01



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

ıasi-Peak	Average
	, o g c
66 - 56 *	56 - 46 *
56	46
60	50
	56

Report No.: FR430452-02AN

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

	Test Method
\boxtimes	Refer as ANSI C63.10-2009, clause 6.2 for AC power-line conducted emissions.

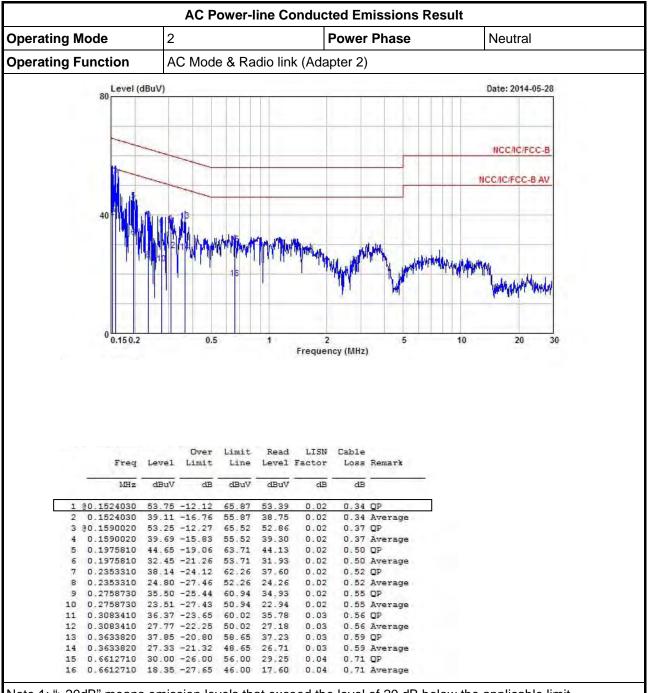
3.1.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 16 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



3.1.5 Test Result of AC Power-line Conducted Emissions



Report No.: FR430452-02AN

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

SPORTON INTERNATIONAL INC. Page No. : 17 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

AC Power-line Conducted Emissions Result Operating Mode Power Phase Line AC Mode & Radio link (Adapter 2) **Operating Function** Date: 2014-05-28 Level (dBuV) NCC/IC/FCC-B NCC/IC/FCC-B AV 0.15 0.2 0.5 5 10 20 30 Frequency (MHz) Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dBuV dB dBuV dBuV dB 1 80.1598470 50.59 -14.88 65.47 0.03 0.37 QP 50.19 0.1598470 38.15 -17.32 55.47 37.75 0.03 0.37 Average 0.1965370 45.65 -18.11 63.76 45.13 0.49 OP 0.03 0.1965370 33.00 -20.76 53.76 32.48 0.03 0.49 Average 0.2817820 25.60 -25.16 50.76 25.02 0.03 0.55 Average 0.2817820 36.99 -23.77 6 60.76 36.41 0.03 0.55 QP 0.3216920 37.72 -21.94 59.66 37.12 0.03 0.57 OP

Report No.: FR430452-02AN

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

28.48

0.03

0.03

0.03

0.07

0.07

0.10

0.10

0.57 Average

0.59 Average

0.80 Average

0.71 Average

0.59 QP

0.80 QP

0.71 QP

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

8 0.3216920 29.29 -20.37 49.66 28.69

10 0.3672530 38.64 -19.92 58.56 38.02

3.760 29.29 -26.71 56.00

0.3672530 27.74 -20.82 48.56 27.12

1.730 27.80 -28.20 56.00 26.93

1.730 19.29 -26.71 46.00 18.42

3,760 22.55 -23.45 46.00 21.74

SPORTON INTERNATIONAL INC. Page No. : 18 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

FAX: 886-3-327-0973

9

11

12

13

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit							
UN	UNII Devices							
\boxtimes	For the 5.15-5.25 GHz band, N/A							
\boxtimes	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.							
\boxtimes	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.							
\boxtimes	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.							

Report No.: FR430452-02AN

3.2.2 Measuring Instruments

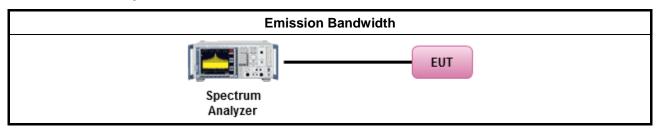
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

	Test Method									
\boxtimes	For	the e	mission bandwidth shall be measured using one of the options below:							
	\boxtimes	Ref	er as FCC KDB 789033 D02 v01, clause C for EBW and clause D for OBW measurement.							
		Ref	er as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.							
		Ref	er as IC RSS-Gen, clause 4.6 for bandwidth testing.							
\boxtimes	For	cond	ucted measurement.							
		The	EUT supports single transmit chain and measurements performed on this transmit chain.							
		The	EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.							
	\boxtimes	The	EUT supports multiple transmit chains using options given below:							
			Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 1.							
			Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains.							

SPORTON INTERNATIONAL INC. Page No. : 19 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.2.4 Test Setup



Report No.: FR430452-02AN

3.2.5 Test Result of Emission Bandwidth

UNII Emission Bandwidth Result (5150-5250MHz band)									
Condit	ion			Emission Bandwidth (MHz)					
Modulation Mode	N _{TX}	Freq.	99% Ba	ndwidth	26dB Ba	ındwidth			
modulation mode	IVIX	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2			
11a	2	5180	16.74	16.79	22.77	21.95			
11a	2	5200	16.69	16.99	22.95	23.30			
11a	2	5240	16.79	16.76	23.12	22.27			
HT20	2	5180	17.86	17.89	22.10	22.02			
HT20	2	5200	17.84	18.11	24.25	24.90			
HT20	2	5240	18.34	18.26	24.75	24.35			
HT40	2	5190	36.50	36.58	43.80	43.80			
HT40	2	5230	36.62	36.86	45.96	46.84			
Resu	lt		Complied						

UNII Emission Bandwidth Result (5250-5350MHz band)									
Conditi	ion			Emission Bandwidth (MHz)					
Modulation Mode	N	Freq.	99% Ba	ndwidth	26dB Ba	ndwidth			
Modulation Mode	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2			
11a	2	5260	17.11	17.06	23.90	24.30			
11a	2	5300	16.71	16.79	21.00	21.07			
11a	2	5320	16.54	17.01	21.30	24.97			
HT20	2	5260	18.24	18.06	23.82	25.55			
HT20	2	5300	18.09	18.14	24.22	22.77			
HT20	2	5320	17.96	17.96	23.92	23.05			
HT40	2	5270	36.50	36.66	44.52	47.52			
HT40	2	5310	36.66	36.74	43.40	43.72			
Resu	lt		Complied						

SPORTON INTERNATIONAL INC. Page No. : 20 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

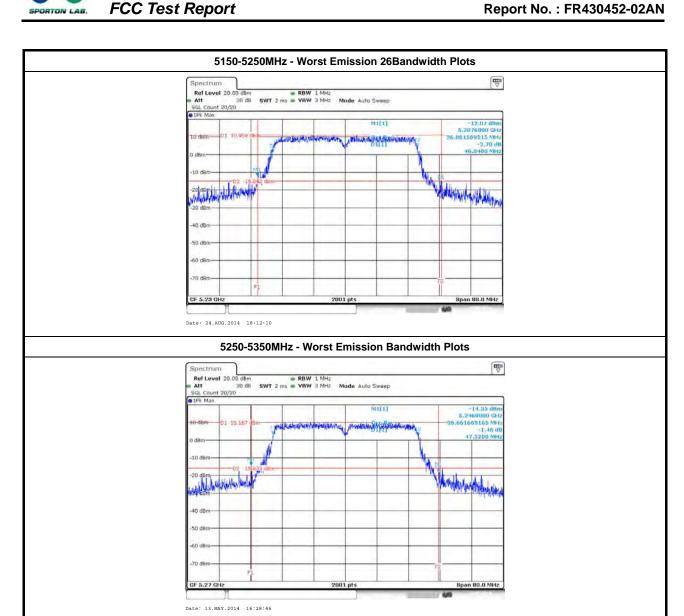


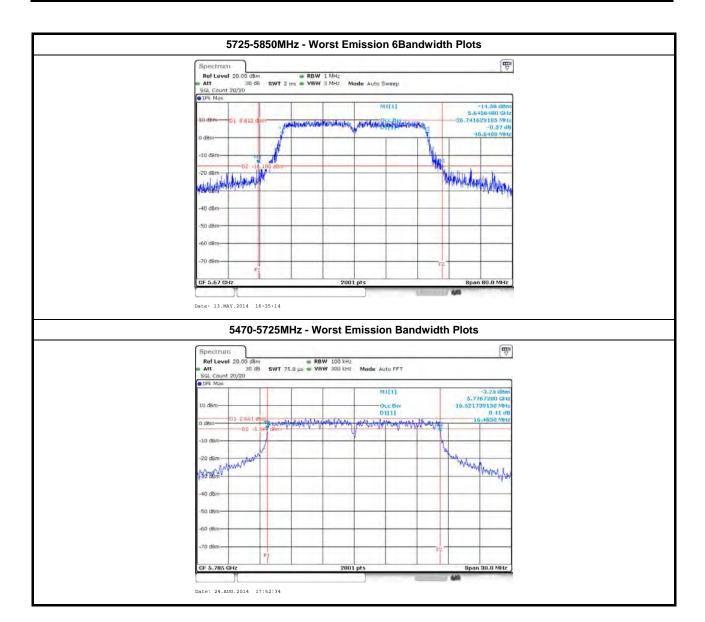
UNII Emission Bandwidth Result (5470-5725MHz band)									
Condit	ion			Emission Bandwidth (MHz)					
Modulation Mode	N _{TX}	Freq.	99% Ba	ndwidth	26dB Ba	andwidth			
Modulation Mode	INTX	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2			
11a	2	5500	17.09	17.09	21.97	21.75			
11a	2	5580	16.99	16.81	21.17	21.45			
11a	11a 2 5700		16.91	16.84	21.75	23.27			
HT20	2	5500	18.01	17.89	23.82	21.82			
HT20	2	5580	17.74	17.84	23.40	21.00			
HT20	2	5700	17.89	18.26	23.47	23.65			
HT40	2	5510	36.50	36.66	43.44	43.60			
HT40	2	5550	36.54	36.66	44.60	45.96			
HT40	2	5670	36.58	36.74	45.40	46.64			
Resu	lt			Con	plied	•			

Report No. : FR430452-02AN

UNII Emission Bandwidth Result (5725-5850MHz band)									
Conditi	ion			Emission Bandwidth (MHz)					
Modulation Mode		Freq.	99% Ba	ndwidth	6dB Ba	ndwidth			
Modulation Mode	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2			
11a	2	5745	16.62	16.50	16.51	16.54			
11a	2	5785	16.52	16.55	16.48	16.48			
11a	11a 2		16.52	16.53	16.54	16.54			
HT20	2	5745	17.73	17.84	17.56	17.80			
HT20	2	5785	17.70	17.73	17.76	17.73			
HT20	2	5825	17.76	17.78	17.80	17.73			
HT40	2	5755	36.14	36.18	36.32	36.28			
HT40 2 5795		36.18	36.22	36.28	36.36				
Limit				-	≥ 500 kHz				
Resu	lt		Complied						

SPORTON INTERNATIONAL INC. Page No. : 21 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01





Report No.: FR430452-02AN

3.3 RF Output Power

3.3.1 RF Output Power Limit

	Maximum Conducted Output Power Limit								
UNI	Devices								
\boxtimes	For the 5.15-5.25 GHz band:								
	Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees \leq 125mW [21dBm]								
	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$								
	Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.								
	Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.								
\boxtimes	for the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 50 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 - (P_{TX} - 6).								
	for the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser f 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 - (G_{TX} - 6).								
\boxtimes	or the 5.725-5.85 GHz band:								
	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.								
	Point-to-point systems (P2P): the maximum conducted output power (P _{Out}) shall not exceed the lesser of 1 W.								
	maximum conducted output power in dBm, the maximum transmitting antenna directional gain in dBi.								

Report No.: FR430452-02AN

3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

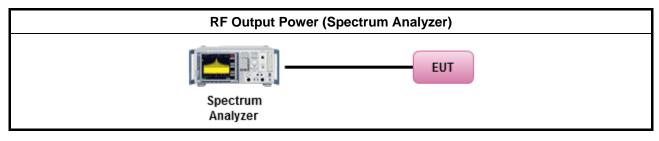
SPORTON INTERNATIONAL INC. Page No. : 24 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.3.3 Test Procedures

		Test Method							
\boxtimes	Max	rimum Conducted Output Power							
	[dut	y cycle ≥ 98% or external video / power trigger]							
	Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 (spectral trace averaging).								
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)							
	duty	cycle < 98% and average over on/off periods with duty factor							
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 (spectral trace averaging).							
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)							
	Wid	eband RF power meter and average over on/off periods with duty factor							
		Refer as FCC KDB 789033 D02 v01, clause E Method PM (using an RF average power meter).							
\boxtimes	For	conducted measurement.							
		The EUT supports single transmit chain and measurements performed on this transmit chain.							
		The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.							
		The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.							
		If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$							

Report No.: FR430452-02AN

3.3.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 25 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.3.5 Directional Gain for Power Measurement

Directional Gain (DG) Result										
Modulation Mode	N _{TX}	N _{SS} Transmit Chains T		Transmit Chains No. 2	DG (dBi)	Array Gain (dB)				
11a	2	1	1.62	1.66	1.64	-				
HT20	2	1	1.62	1.66	1.64	-				
HT40	2	1	1.62	1.66	1.64	-				

Report No.: FR430452-02AN

Note 1: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{TX};

3.3.6 Test Result of Maximum Conducted Output Power

Maximum Conducted Output Power (5150-5250MHz band)										
Condition	on			RF Output Power (dBm)						
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	2	5180	19.10	19.09	22.11	24.00	1.64	23.75		
11a	2	5200	18.92	19.31	22.13	24.00	1.64	23.77		
11a	2	5240	19.16	19.02	22.10	24.00	1.64	23.74		
HT20	2	5180	16.96	16.95	19.97	24.00	1.64	21.61		
HT20	2	5200	18.00	18.23	21.13	24.00	1.64	22.77		
HT20	2	5240	19.16	19.04	22.11	24.00	1.64	23.75		
HT40	2	5190	14.66	15.00	17.84	24.00	1.64	19.48		
HT40	2	5230	20.54	20.93	23.75	24.00	1.64	25.39		
Resul		Complied								

Maximum Conducted Output Power (5250-5350MHz band)										
Condition	on			RF Output Power (dBm)						
Modulation Mode N ₁		Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	2	5260	18.43	18.42	21.44	24.00	1.64	23.08		
11a	2	5300	18.56	18.42	21.50	24.00	1.64	23.14		
11a	2	5320	18.53	18.49	21.52	24.00	1.64	23.16		
HT20	2	5260	18.85	18.65	21.76	24.00	1.64	23.40		
HT20	2	5300	18.59	18.54	21.58	24.00	1.64	23.22		
HT20	2	5320	15.92	15.94	18.94	24.00	1.64	20.58		
HT40	2	5270	19.54	19.57	22.57	24.00	1.64	24.21		
HT40	2	5310	14.43	14.66	17.56	24.00	1.64	19.20		
Resul	t			•	Cor	nplied		•		

SPORTON INTERNATIONAL INC. Page No. : 26 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Maximum Conducted Output Power (5470-5725MHz band)									
Condition	on			RF Output Power (dBm)					
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power	
11a	2	5500	18.19	18.05	21.13	24.00	1.64	22.77	
11a	2	5580	18.16	18.20	21.19	24.00	1.64	22.83	
11a	2	5700	17.22	17.89	20.58	24.00	1.64	22.22	
HT20	2	5500	16.33	16.09	19.22	24.00	1.64	20.86	
HT20	2	5580	18.38	18.35	21.38	24.00	1.64	23.02	
HT20	2	5700	16.57	16.95	19.77	24.00	1.64	21.41	
HT40	2	5510	14.23	14.57	17.41	24.00	1.64	19.05	
HT40	2	5550	19.66	19.30	22.49	24.00	1.64	24.13	
HT40	2	5670	19.43	19.28	22.37	24.00	1.64	24.01	
Resul				Cor	mplied				

Report No. : FR430452-02AN

		Maxim	um Conducted C	Output Power (572	25-5850MHz band	i)		
Conditi	on			RF Output Power (dBm)				
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	
11a	2	5745	19.27	20.31	22.83	30.00	1.64	
11a	2	5785	20.77	21.48	24.15	30.00	1.64	
11a	2	5825	20.88	21.54	24.23	30.00	1.64	
HT20	2	5745	18.59	19.19	21.91	30.00	1.64	
HT20	2	5785	20.56	21.65	24.15	30.00	1.64	
HT20	2	5825	20.49	20.89	23.70	30.00	1.64	
HT40	2	5755	16.16	16.78	19.49	30.00	1.64	
HT40	2	5795	20.31	21.13	23.75	30.00	1.64	
Resul	t			•	Complied			

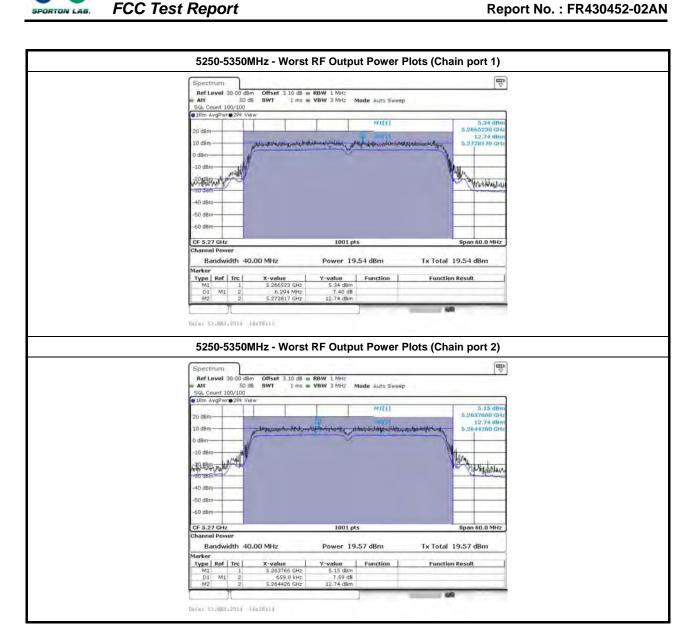
SPORTON INTERNATIONAL INC. Page No. : 27 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Report No.: FR430452-02AN

: 28 of 118

: Rev. 01

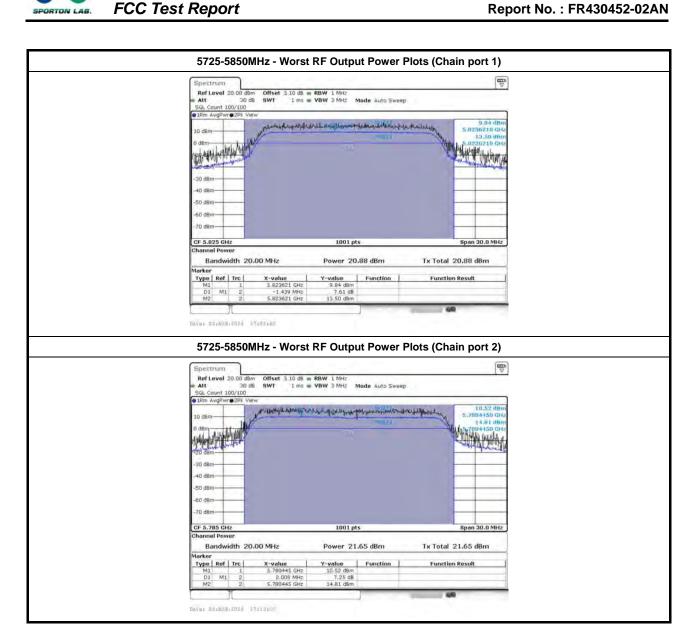


SPORTON INTERNATIONAL INC. Page No. : 29 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



SPORTON INTERNATIONAL INC. Page No. : 30 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Date: 13.889.1914 16:35:14



SPORTON INTERNATIONAL INC. Page No. : 31 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

	Peak Power Spectral Density Limit
HINI	Il Devices
OIVI	ii Devices
\boxtimes	For the 5.15-5.25 GHz band:
	Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – $(G_{TX} - 6)$
\boxtimes	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – ($G_{TX} - 6$).
\boxtimes	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – ($G_{TX} - 6$).
\boxtimes	For the 5.725-5.85 GHz band:
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) \leq 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$.
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
pow	SD = peak power spectral density that he same method as used to determine the conducted output ver shall be used to determine the power spectral density. And power spectral density in dBm/MHz = the maximum transmitting antenna directional gain in dBi.

Report No.: FR430452-02AN

3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

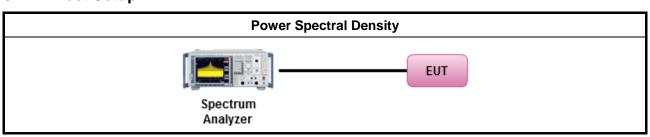
SPORTON INTERNATIONAL INC. Page No. : 32 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.4.3 Test Procedures

	Test Method
outpo funct	c power spectral density procedures that the same method as used to determine the conducted ut power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density be measured using below options:
	Refer as FCC KDB 789033 D02 v01, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty	cycle ≥ 98% or external video / power trigger]
\boxtimes	Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 (spectral trace averaging).
	Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty	cycle < 98% and average over on/off periods with duty factor
	Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 (spectral trace averaging).
	Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
For c	conducted measurement.
	The EUT supports single transmit chain and measurements performed on this transmit chain.
	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
	The EUT supports multiple transmit chains using options given below:
	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
\boxtimes	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $
	Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots.

Report No.: FR430452-02AN

3.4.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 33 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.4.5 Directional Gain for Power Spectral Density Measurement

Directional Gain (DG) Result									
Modulation Mode	N _{TX}	N _{SS}	Transmit Chains No. 1	Transmit Chains No. 2	DG (dBi)	Array Gain (dB)			
11a	2	1	1.62	1.66	4.65	3.01			
HT20	2	1	1.62	1.66	4.65	3.01			
HT40	2	1	1.62	1.66	4.65	3.01			

Report No.: FR430452-02AN

Note 1: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths \geq 40 MHz for any N_{TX};

3.4.6 Test Result of Peak Power Spectral Density

	Peak Power Spectral Density Result (5150-5250MHz band)								
Condition	on		Peak Power Spectral Density (dBm/MHz)						
Modulation Mode	N _{TX}	Freq. (MHz)	PSD (dBm)	PSD Limit	DG (dBi)				
11a	2	5180	10.95	17.00	4.65				
11a	2	5200	10.91	17.00	4.65				
11a	2	5240	10.95	17.00	4.65				
HT20	2	5180	8.56	17.00	4.65				
HT20	2	5200	9.69	17.00	4.65				
HT20	2	5240	10.74	17.00	4.65				
HT40	2	5190	3.46	17.00	4.65				
HT40	2	5230	9.24	17.00	4.65				
Result				Complied					

	Peak Power Spectral Density Result (5250-5350MHz band)								
Conditi	on		Peak	Peak Power Spectral Density (dBm/MHz)					
Modulation Mode	N _{TX}	Freq. (MHz)	PSD (dBm)	PSD Limit	DG (dBi)				
11a	2	5260	10.14	11.00	4.65				
11a	2	5300	10.26	11.00	4.65				
11a	2	5320	10.32	11.00	4.65				
HT20	2	5260	10.21	11.00	4.65				
HT20	2	5300	10.05	11.00	4.65				
HT20	2	5320	7.39	11.00	4.65				
HT40	2	5270	8.04	11.00	4.65				
HT40	2	5310	3.12	11.00	4.65				
Result				Complied					

SPORTON INTERNATIONAL INC. Page No. : 34 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



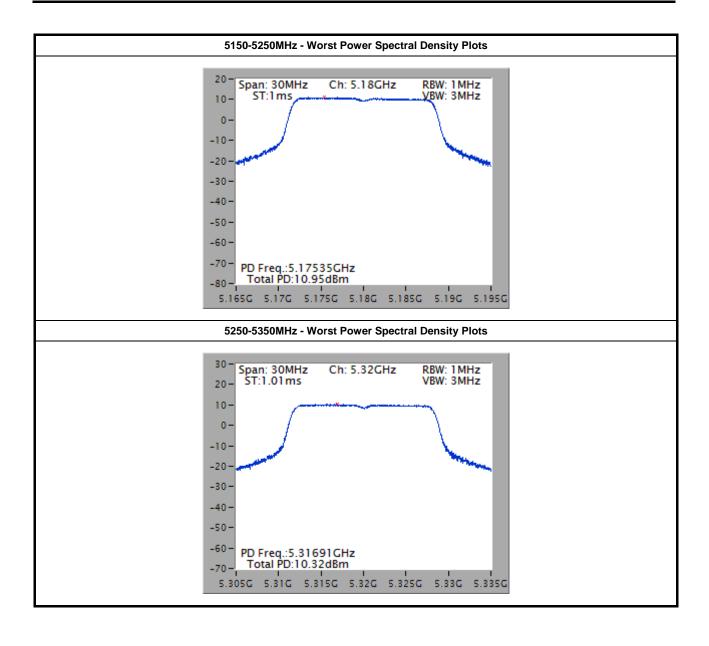
	Peak Power Spectral Density Result (5470-5725MHz band)								
Condi	tion		Peak Power Spectral Density (dBm/MHz)						
Modulation Mode	Modulation Mode N _{TX} Freq. (MHz)		PSD (dBm)	PSD Limit	DG (dBi)				
11a	2	5500	9.90	11.00	4.65				
11a	2	5580	10.12	11.00	4.65				
11a	2	5700	9.62	11.00	4.65				
HT20	2	5500	7.66	11.00	4.65				
HT20	2	5580	10.02	11.00	4.65				
HT20	2	5700	8.54	11.00	4.65				
HT40	2	5510	2.83	11.00	4.65				
HT40	2	5550	8.02	11.00	4.65				
HT40	2	5670	8.07	11.00	4.65				
Result				Complied					

Report No. : FR430452-02AN

Peak Power Spectral Density Result (5725-5850MHz band)								
Condit	tion		Peak Power Spectral Density (dBm/500kHz)					
Modulation Mode N _{TX} Freq. (MHz)		PSD (dBm)	PSD Limit	DG (dBi)				
11a	2	5745	15.47	30.00	4.65			
11a	2	5785	15.96	30.00	4.65			
11a	2	5825	16.43	30.00	4.65			
HT20	2	5745	14.35	30.00	4.65			
HT20	2	5785	15.82	30.00	4.65			
HT20	2	5825	15.87	30.00	4.65			
HT40	2	5755	8.22	30.00	4.65			
HT40	2	5795	12.87	30.00	4.65			
Resu	ılt			Complied				

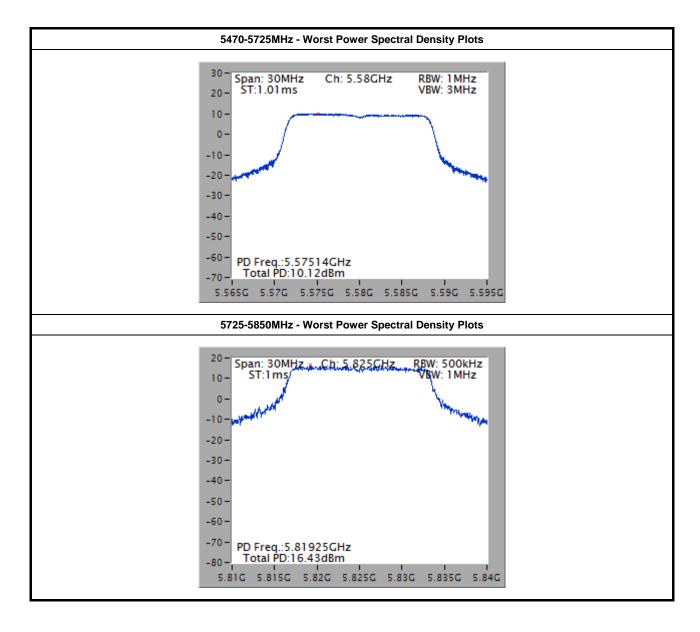
SPORTON INTERNATIONAL INC. Page No. : 35 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01





SPORTON INTERNATIONAL INC. Page No. : 36 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

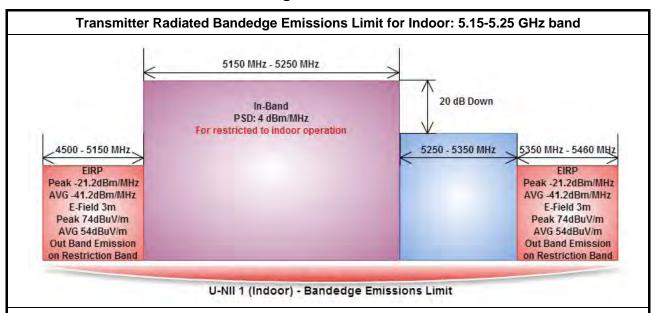






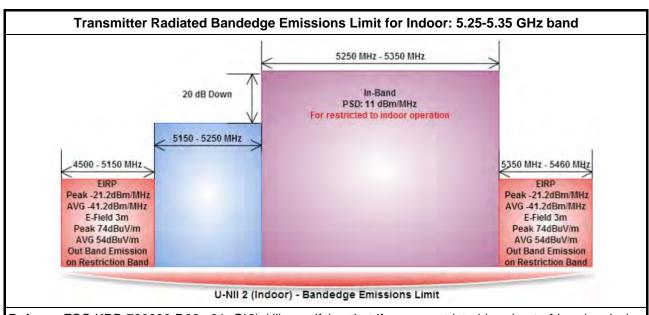
3.5 Transmitter Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit



Report No.: FR430452-02AN

Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.



Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.

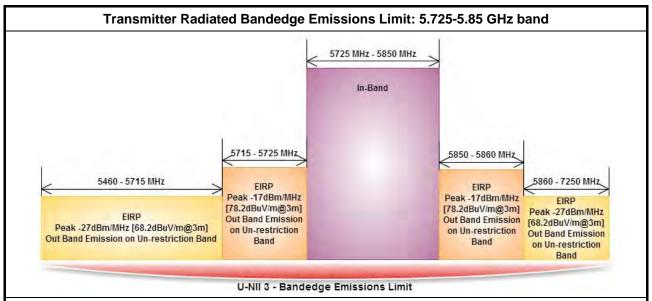
SPORTON INTERNATIONAL INC. Page No. : 38 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



Transmitter Radiated Bandedge Emissions Limit: 5.47-5.725 GHz band 5470 MHz - 5725 MHz In-Band PSD: 11 dBm/MHz 5460 - 5470 MHz 5725 - 7250 MHz To relax restrictions EIRP To relax restrictions EIRP Peak -21.2dBm/MHz (Peak 74dBuV/m@3m) Peak -21,2dBm/MHz (Peak 74dBuV/m@3m) AVG -41.2dBm/MHz (AVG 54dBuV/m@3m) AVG -41.2dBm/MHz (AVG 54dBuV/m@3m) Out Band Emission on Restriction Band Out Band Emission on Restriction Band Original FIRP Original FIRP Peak -27dBm/MHz [68.2dBuV/m@3m] Peak -27dBm/MHz [68.2dBuV/m@3m] Out Band Emission on Un-restriction Band Out Band Emission on Un-restriction Band U-NII 2ext - Bandedge Emissions Limit

Report No.: FR430452-02AN

Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.



Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.

3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

SPORTON INTERNATIONAL INC. Page No. : 39 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



3.5.3 Test Procedures

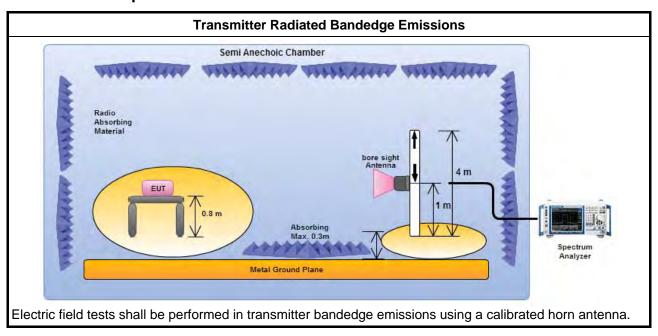
		Test Method
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
\boxtimes		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	char will d at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency need at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel ower-band and highest frequency channel at higher-band in-band emissions will consist of two cent contiguous bands.)
		Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
		Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
	char	JT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency nnel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac 160)
		Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
		Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
\boxtimes	Fort	the transmitter unwanted emissions shall be measured using following options below:
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause H)2) for unwanted emissions into non-restricted bands.
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause H)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033 D02 v01, H)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033 D02 v01, H)6) Method VB (Reduced VBW).
		Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		Refer as FCC KDB 789033 D02 v01, clause H)5) measurement procedure peak limit.
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
	Fort	the transmitter bandedge emissions shall be measured using following options below:
		Refer as FCC KDB 789033 D02 v01, clause H)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
		Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
		Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.
\boxtimes	For	radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
	perfo equi extra dista mea	surements may be performed at a distance other than the limit distance provided they are not ormed in the near field and the emissions to be measured can be detected by the measurement pment. When performing measurements at a distance other than that specified, the results shall be applied to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ance for field-strength measurements, inverse of linear distance-squared for power-density surements). Measurements in the bandedge are typically made at a closer distance 3m, because instrumentation noise floor is typically close to the radiated emission limit.

Report No.: FR430452-02AN

SPORTON INTERNATIONAL INC. Page No. : 40 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



3.5.4 Test Setup



Report No.: FR430452-02AN

SPORTON INTERNATIONAL INC. Page No. : 41 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report Report No.: FR430452-02AN

3.5.5 Transmitter Radiated Bandedge Emissions (with Antenna)

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5180	3	5147.10	69.55	74.00	5150.00	52.67	54.00	Н
11a	2	5240	3	5367.30	62.82	74.00	5392.20	51.01	54.00	Н
HT20	2	5180	3	5147.10	68.01	74.00	5150.00	52.64	54.00	Н
HT20	2	5240	3	5392.50	64.95	74.00	5392.20	52.64	54.00	Н
HT40	2	5190	3	5141.69	68.20	74.00	5142.02	52.63	54.00	Н
HT40	2	5230	3	5397.00	64.89	74.00	5398.20	52.64	54.00	Н

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5260	3	5371.50	62.64	74.00	5371.80	49.90	54.00	Н
11a	2	5320	3	5350.53	69.08	74.00	5351.09	52.39	54.00	Н
HT20	2	5260	3	5388.60	67.73	74.00	5372.10	52.53	54.00	Н
HT20	2	5320	3	5357.25	65.91	74.00	5353.26	52.04	54.00	Н
HT40	2	5270	3	5357.70	65.01	74.00	5381.70	52.05	54.00	Н
HT40	2	5310	3	5353.99	66.28	74.00	5355.70	52.30	54.00	Н

SPORTON INTERNATIONAL INC. Page No. : 42 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5500	3	5459.68	63.52	74.00	5470.00	52.84	54.00	Н
11a	2	5700	3	5725.00	66.44	68.20	-	-	-	Н
HT20	2	5500	3	5467.04	67.10	74.00	5469.92	52.37	54.00	Н
HT20	2	5700	3	5725.00	67.02	68.20	-	-	-	Н
HT40	2	5510	3	5460.70	66.69	74.00	5470.00	52.73	54.00	Н
HT40	2	5670	3	5733.10	66.69	68.20	-	-	-	Н

Report No. : FR430452-02AN

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
11a	2	5745	3	5724.97	75.84	78.2	Н
11a	2	5825	3	5854.27	69.58	78.2	Н
HT20	2	5745	3	5724.76	76.64	78.2	Н
HT20	2	5825	3	5850.07	75.43	78.2	Н
HT40	2	5755	3	5714.48	67.09	78.2	Н
HT40	2	5795	3	5850.70	67.22	78.2	Н

SPORTON INTERNATIONAL INC. Page No. : 43 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



3.6 Transmitter Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emiss	Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit												
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)										
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300										
0.490~1.705	24000/F(kHz)	33.8 - 23	30										
1.705~30.0	30	29	30										
30~88	100	40	3										
88~216	150	43.5	3										
216~960	200	46	3										
Above 960	500	54	3										

Report No.: FR430452-02AN

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

	Un-restricted band emissions above 1GHz Limit
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.715 5.725 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] 5.85 5.86 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

SPORTON INTERNATIONAL INC. Page No. : 44 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report Report No.: FR430452-02AN

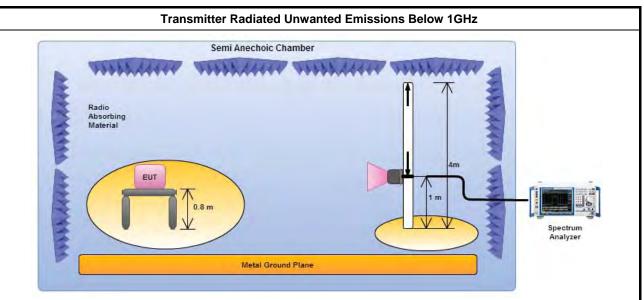
3.6.3 Test Procedures

	l est Method										
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].											
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].											
For	the transmitter unwanted emissions shall be measured using following options below:										
	Refer as FCC KDB 789033 D02 v01, clause G)2) for unwanted emissions into non-restricted bands.										
\boxtimes	Refer as FCC KDB 789033 D02 v01, clause G)1) for unwanted emissions into restricted bands.										
	Refer as FCC KDB 789033 D02 v01, G)6) Method AD (Trace Averaging).										
	Refer as FCC KDB 789033 D02 v01, G)6) Method VB (Reduced VBW).										
	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.										
	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.										
	Refer as FCC KDB 789033 D02 v01, clause G)5) measurement procedure peak limit.										
	Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.										
For	radiated measurement.										
\boxtimes	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.										
\boxtimes	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.										
\boxtimes	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. For 1 GHz to 5 GHz, test distance is 3m; For 5 GHz to 40 GHz, test distance is 3m.										
The	any unwanted emissions level shall not exceed the fundamental emission level.										
	amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value no need to be reported.										

SPORTON INTERNATIONAL INC. Page No. : 45 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report

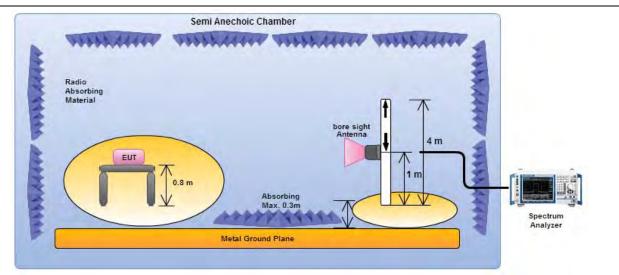
3.6.4 Test Setup



Report No.: FR430452-02AN

Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna.

Transmitter Radiated Unwanted Emissions Above 1GHz



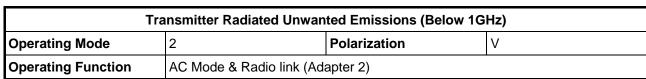
Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Transmitter Radiated Unwanted Emissions-with Antenna (Below 30MHz)

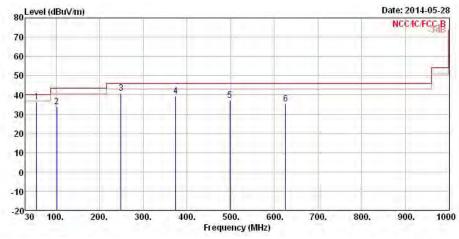
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

SPORTON INTERNATIONAL INC. Page No. : 46 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)



Report No.: FR430452-02AN



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
2	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	55.22	36.34	-3.66	40.00	55.59	6.93	1.18	27.36	Peak		
2	101.78	33.71	-9.79	43.50	48.07	11.22	1.61	27.19	Peak	222	222
3	249.22	40.71	-5.29	46.00	52.38	12.64	2.60	26.91	Peak		
4	374.35	39.28	-6.72	46.00	48.40	14.80	3.23	27.15	Peak		222
5	498.51	37.33	-8.67	46.00	44.37	17.14	3.77	27.95	Peak		
6	625.58	35.23	-10.77	46.00	40.08	18.67	4.25	27.77	Peak	222	222

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

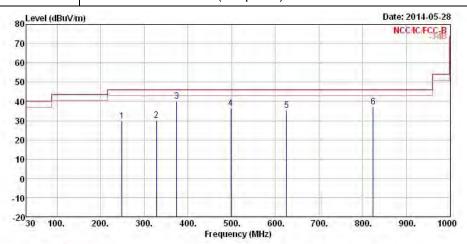
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 47 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Below 1GHz)										
Operating Mode	2	Н								
Operating Function AC Mode & Radio link (Adapter 2)										



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	249.22	29.92	-16.08	46.00	41.59	12.64	2.60	26.91	Peak		
2	327.79	30.03	-15.97	46.00	40.13	13.73	3.02	26.85	Peak	222	222
3	374.35	40.25	-5.75	46.00	49.37	14.80	3.23	27.15	Peak		
4	498.51	36.59	-9.41	46.00	43.63	17.14	3.77	27.95	Peak	444	
5	625.58	35.32	-10.68	46.00	40.17	18.67	4.25	27.77	Peak		444
6	824.43	37.34	-8.66	46.00	39.90	20.07	4.92	27.55	Peak	222	222

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

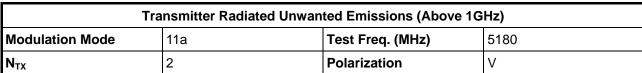
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

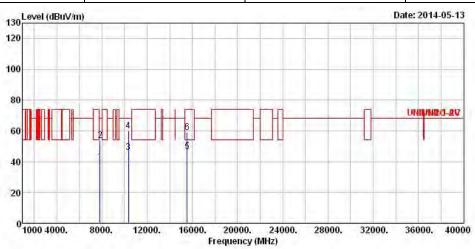
Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 48 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5150-5250MHz

Report No.: FR430452-02AN



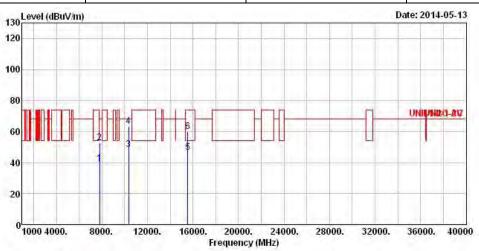


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Le∨el	Limit	Line	Le∨el	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7842.000	40.02	-28.18	68.20	27.96	36.83	8.00	32.77	Average	1222	1224
2	7842.000	53.84	-14.36	68.20	41.78	36.83	8.00	32.77	Peak		
3	10360.000	46.27	-21.93	68.20	31.17	38.95	8.92	32.77	Average	222	222
4	10360.000	60.00	-8.20	68.20	44.90	38.95	8.92	32.77	Peak		
5	15540.000	46.37	-7.63	54.00	29.25	37.73	11.59	32.20	Average	244	224
6	15540.000	59.11	-14.89	74.00	41.99	37.73	11.59	32.20	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 49 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode11aTest Freq. (MHz)5180									
N _{TX} 2 Polarization H									

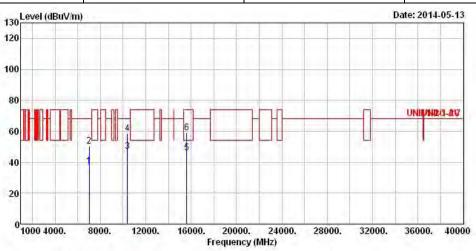


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7818.000	39.40	-28.80	68.20	27.35	36.82	8.00	32.77	Average	1.644	1444
2	7818.000	52.82	-15.38	68.20	40.77	36.82	8.00	32.77	Peak		
3	10360.000	48.54	-19.66	68.20	33.44	38.95	8.92	32.77	Average	555	
4	10360.000	63.29	-4.91	68.20	48.19	38.95	8.92	32.77	Peak		
5	15540.000	46.68	-7.32	54.00	29.56	37.73	11.59	32.20	Average		
6	15540.000	59.81	-14.19	74.00	42.69	37.73	11.59	32.20	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 50 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode 11a Test Freq. (MHz) 5200									
N _{TX} 2 Polarization V									

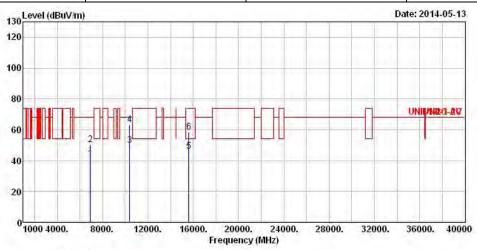


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7008.000	37.42	-30.78	68.20	27.66	35.30	7.05	32.59	Average	1.666	1666
2	7008.000	50.44	-17.76	68.20	40.68	35.30	7.05	32.59	Peak		
3	10400.000	46.93	-21.27	68.20	31.78	38.94	8.94	32.73	Average		
4	10400.000	58.67	-9.53	68.20	43.52	38.94	8.94	32.73	Peak		
5	15600.000	46.03	-7.97	54.00	29.07	37.59	11.59	32.22	Average		
6	15600.000	58.80	-15.20	74.00	41.84	37.59	11.59	32.22	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 51 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode 11a Test Freq. (MHz) 5200								
N _{TX} 2 Polarization H								



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6930.000	41.07	-27.13	68.20	31.47	35.18	6.99	32.57	Average	1.666	1.666
2	6930.000	50.30	-17.90	68.20	40.70	35.18	6.99	32.57	Peak		
3	10400.000	49.72	-18.48	68.20	34.57	38.94	8.94	32.73	Average		
4	10400.000	63.55	-4.65	68.20	48.40	38.94	8.94	32.73	Peak		
5	15600.000	46.06	-7.94	54.00	29.10	37.59	11.59	32.22	Average		
6	15600.000	58.53	-15.47	74.00	41.57	37.59	11.59	32.22	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 52 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

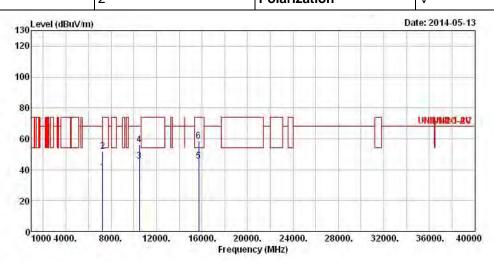
FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

N_{TX} 2 Polarization V

Report No.: FR430452-02AN

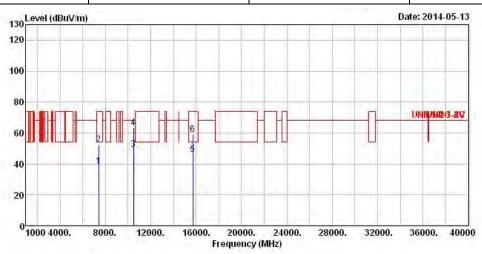


			Over	Limit	Reada	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7248.000	38.34	-29.86	68.20	27.84	35.92	7.23	32.65	Average	444	444
2	7248.000	51.66	-16.54	68.20	41.16	35.92	7.23	32.65	Peak		
3	10480.000	45.50	-22.70	68.20	30.27	38.91	8.99	32.67	Average		444
4	10480.000	56.36	-11.84	68.20	41.13	38.91	8.99	32.67	Peak		
5	15720.000	45.34	-8.66	54.00	28.65	37.35	11.59	32.25	Average	1245	224
6	15720.000	58.36	-15.64	74.00	41.67	37.35	11.59	32.25	Peak	777	222

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 53 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5240									
N_{TX}	N _{TX} 2 Polarization H									

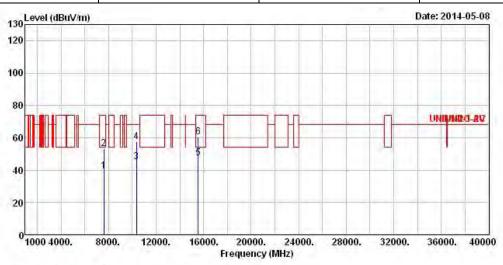


			Over	Limit	Reada	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Le∨el	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7398.000	38.28	-15.72	54.00	27.38	36.25	7.34	32.69	Average	1222	222
2	7398.000	52.28	-21.72	74.00	41.38	36.25	7.34	32.69	Peak		
3	10480.000	49.60	-18.60	68.20	34.37	38.91	8.99	32.67	Average		224
4	10480.000	63.13	-5.07	68.20	47.90	38.91	8.99	32.67	Peak	****	
5	15720.000	46.17	-7.83	54.00	29.48	37.35	11.59	32.25	Average	225	
6	15720.000	58.93	-15.07	74.00	42.24	37.35	11.59	32.25	Peak	444	1.664

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 54 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT20 Test Freq. (MHz) 5180									
N _{TX} 2 Polarization V									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7602.000	39.55	- 14.45	54.00	28.12	36.60	7.57	32.74	Average		***
2	7602.000	53.31	-20.69	74.00	41.88	36.60	7.57	32.74	Peak	444	
3	10360.000	44.93	-23.27	68.20	29.83	38.95	8.92	32.77	Average		
4	10360.000	57.54	-10.66	68.20	42.44	38.95	8.92	32.77	Peak	1222	222
5	15540.000	47.64	-6.36	54.00	30.52	37.73	11.59	32.20	Average		***
6	15540.000	60.39	-13.61	74.00	43.27	37.73	11.59	32.20	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

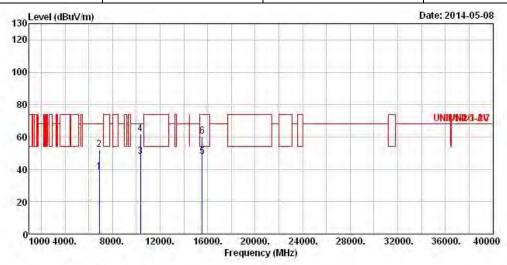
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 55 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation ModeHT20Test Freq. (MHz)5180								
N _{TX} 2 Polarization H									



	Freq	Level	Over Limit	24,000 5		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
		JD: Al for	— in	JD: Al (m	an. W	an (002
	MHZ	dBuV/m	ab	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	6906.000	38.41	-29.79	68.20	28.90	35.11	6.96	32.56	Average	1444	
2	6906.000	52.26	-15.94	68.20	42.75	35.11	6.96	32.56	Peak		
3	10360.000	48.14	-20.06	68.20	33.04	38.95	8.92	32.77	Average		
4	10360.000	61.83	-6.37	68.20	46.73	38.95	8.92	32.77	Peak	1.666	1.666
5	15540.000	47.86	-6.14	54.00	30.74	37.73	11.59	32.20	Average		
6	15540.000	60.65	-13.35	74.00	43.53	37.73	11.59	32.20	Peak	-555	-555

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

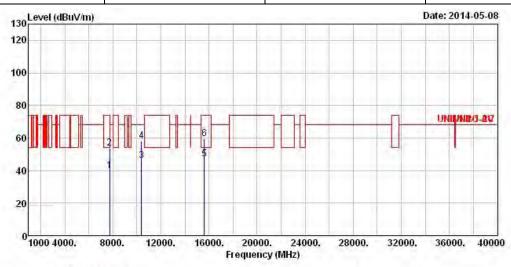
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 56 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5200						
N _{TX}	2	Polarization	V						



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7740.000	39.77	-14.23	54.00	27.94	36.73	7.86	32.76	Average	-222	222
2	7740.000	53.61	-20.39	74.00	41.78	36.73	7.86	32.76	Peak	.+++	Leter
3	10400.000	46.22	-21.98	68.20	31.07	38.94	8.94	32.73	Average	222	444
4	10400.000	58.16	-10.04	68.20	43.01	38.94	8.94	32.73	Peak		
5	15600.000	47.15	-6.85	54.00	30.19	37.59	11.59	32.22	Average	1222	1222
6	15600.000	59.50	-14.50	74.00	42.54	37.59	11.59	32.22	Peak	+4+	+++

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

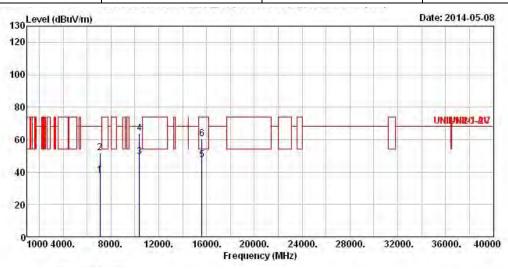
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 57 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5200						
N _{TX}	2	Polarization	Н						



	Fund	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	Freq	rever	LIMIT	rine	rever	Factor	LOSS	ractor.	Kemark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7086.000	37.82	-30.38	68.20	27.81	35.51	7.11	32.61	Average	444	442
2	7086.000	51.81	-16.39	68.20	41.80	35.51	7.11	32.61	Peak	277	
3	10400.000	49.27	-18.93	68.20	34.12	38.94	8.94	32.73	Average	222	222
4	10400.000	63.71	-4.49	68.20	48.56	38.94	8.94	32.73	Peak	1444	
5	15600.000	47.26	-6.74	54.00	30.30	37.59	11.59	32.22	Average	444	444
6	15600.000	60.25	-13.75	74.00	43.29	37.59	11.59	32.22	Peak	777	777

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

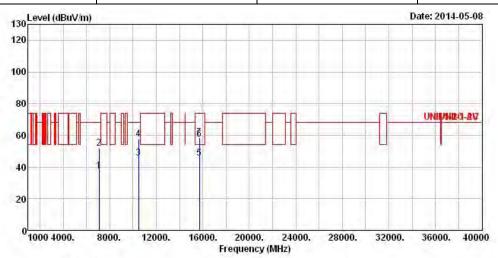
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 58 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Test Freq. (MHz)	5240							
N _{TX} 2 Polarization V									

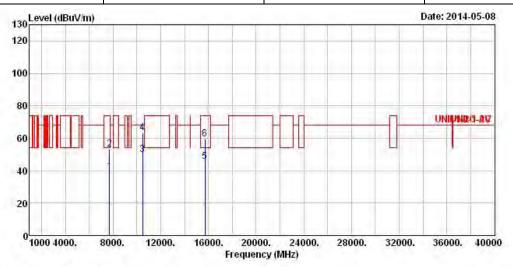


-	10		0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line		Factor		7 - 7 - 7		140	244)
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7092.000	37.33	-30.87	68.20	27.32	35.51	7.11	32.61	A∀erage	1444	
2	7092.000	51.60	-16.60	68.20	41.59	35.51	7.11	32.61	Peak		
3	10480.000	45.48	-22.72	68.20	30.25	38.91	8.99	32.67	Average		
4	10480.000	57.34	-10.86	68.20	42.11	38.91	8.99	32.67	Peak	1.666	1444
5	15720.000	45.58	-8.42	54.00	28.89	37.35	11.59	32.25	Average		
6	15720.000	57.48	-16.52	74.00	40.79	37.35	11.59	32.25	Peak		
7	15720.000	58.68	-15.32	74.00	41.99	37.35	11.59	32.25	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 59 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT20 Test Freq. (MHz) 5240									
N _{TX} 2 Polarization H									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7692.000	39.50	-14.50	54.00	27.77	36.70	7.78	32.75	Average	1444	
2	7692.000	53.06	-20.94	74.00	41.33	36.70	7.78	32.75	Peak		
3	10480.000	49.66	-18.54	68.20	34.43	38.91	8.99	32.67	Average		
4	10480.000	63.30	-4.90	68.20	48.07	38.91	8.99	32.67	Peak	1.666	1 4 4 4
5	15720.000	45.65	-8.35	54.00	28.96	37.35	11.59	32.25	Average		
6	15720.000	59.62	-14.38	74.00	42.93	37.35	11.59	32.25	Peak	-556	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

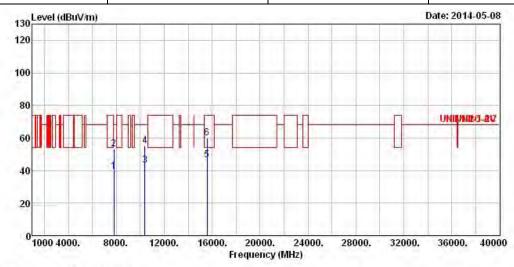
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 60 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5190									
N _{TX} 2 Polarization V									



	Freq	Le∨el	0∨er Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7812.000	39.42	-28.78	68.20	27.37	36.82	8.00	32.77	Average	1222	222
2	7812.000	53.33	-14.87	68.20	41.28	36.82	8.00	32.77	Peak		Leter
3	10380.000	43.00	-25.20	68.20	27.86	38.95	8.94	32.75	Average	444	444
4	10380.000	55.37	-12.83	68.20	40.23	38.95	8.94	32.75	Peak		1777
5	15570.000	46.72	-7.28	54.00	29.67	37.66	11.59	32.20	Average	1222	222
6	15570.000	59.83	-14.17	74.00	42.78	37.66	11.59	32.20	Peak	-5-	***

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

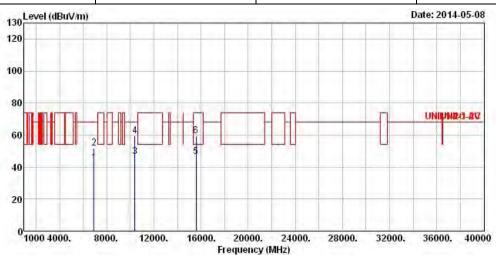
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 61 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5190									
N_{TX}	2	Polarization	Н						



A/Pos	T/Pos
cm	deg
1.666	1.666

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

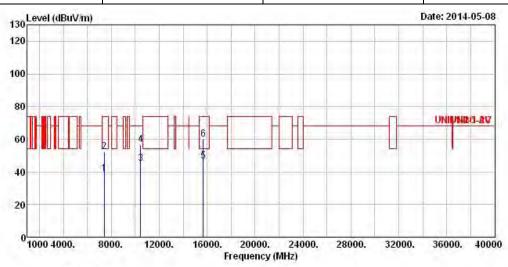
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 62 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5230								
N_{TX}	N _{TX} 2 Polarization V								



	Face	1	0ver	32.30.25		Antenna		00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		A/Pos	T/Pos
	Freq	Level	Limit	Line	rever	Factor	Loss	Factor	Kemark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7422.000	38.68	-15.32	54.00	27.68	36.33	7.37	32.70	A∨erage	1444	
2	7422.000	52.19	-21.81	74.00	41.19	36.33	7.37	32.70	Peak		
3	10460.000	45.13	-23.07	68.20	29.91	38.92	8.99	32.69	Average		
4	10460.000	56.64	-11.56	68.20	41.42	38.92	8.99	32.69	Peak	1.666	1.666
5	15690.000	46.63	-7.37	54.00	29.86	37.42	11.59	32.24	Average		
6	15690.000	59.94	-14.06	74.00	43.17	37.42	11.59	32.24	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

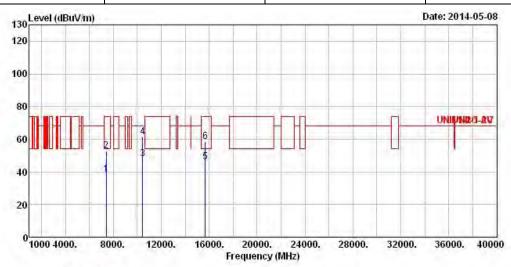
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 63 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode HT40 Test Freq. (MHz) 5230							
N _{TX}	2	Polarization	Н				



	Freq	Le∨el	Over Limit	34,000		Antenna Factor		7		A/Pos	T/Pos
	4,77	-35,000			.00,000	2000-1000					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
i	7422.000	38.56	-15.44	54.00	27.56	36.33	7.37	32.70	A∨erage	1444	
2	7422.000	52.61	-21.39	74.00	41.61	36.33	7.37	32.70	Peak		
3	10460.000	48.14	-20.06	68.20	32.92	38.92	8.99	32.69	Average		
4	10460.000	61.22	-6.98	68.20	46.00	38.92	8.99	32.69	Peak	1.666	1.666
5	15690.000	45.82	-8.18	54.00	29.05	37.42	11.59	32.24	Average		1444
6	15690.000	58.48	-15.52	74.00	41.71	37.42	11.59	32.24	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

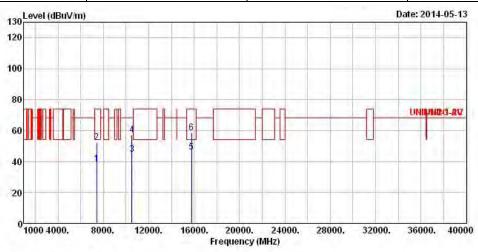
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 64 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

3.6.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5250-5350MHz

Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode 11a Test Freq. (MHz) 5260							
N _{TX}	Polarization	V					

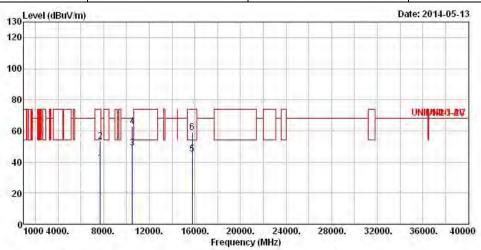


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Le∨el	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7398.000	38.42	-15.58	54.00	27.52	36.25	7.34	32.69	Average	424	1224
2	7398.000	52.36	-21.64	74.00	41.46	36.25	7.34	32.69	Peak		
3	10524.000	44.43	-23.77	68.20	29.17	38.89	9.02	32.65	Average		222
4	10524.000	56.85	-11.35	68.20	41.59	38.89	9.02	32.65	Peak		1666
5	15780.000	46.24	-7.76	54.00	29.67	37.25	11.59	32.27	Average	244	244
6	15780.000	58.56	-15.44	74.00	41.99	37.25	11.59	32.27	Peak	***	***

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 65 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode11aTest Freq. (MHz)5260							
N_{TX}	Н						

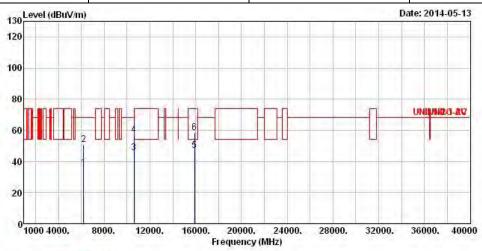


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7704.000	39.34	-14.66	54.00	27.61	36.70	7.78	32.75	Average	1.666	1,646
2	7704.000	53.10	-20.90	74.00	41.37	36.70	7.78	32.75	Peak		
3	10520.000	49.14	-19.06	68.20	33.88	38.89	9.02	32.65	Average		
4	10520.000	62.97	-5.23	68.20	47.71	38.89	9.02	32.65	Peak		
5	15780.000	45.32	-8.68	54.00	28.75	37.25	11.59	32.27	Average		
6	15780.000	58.87	-15.13	74.00	42.30	37.25	11.59	32.27	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 66 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode11aTest Freq. (MHz)5300								
N _{TX} 2 Polarization V								

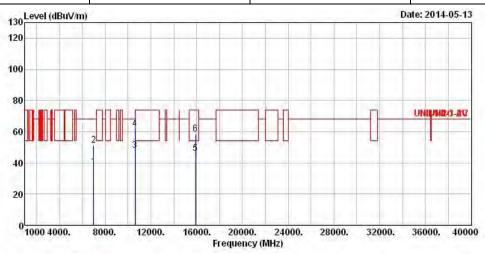


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Le∨el	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6198.000	35.76	-32.44	68.20	27.31	34.28	6.63	32.46	Average	442	
2	6198.000	50.64	-17.56	68.20	42.19	34.28	6.63	32.46	Peak	255	222
3	10600.000	45.48	-8.52	54.00	30.19	38.84	9.06	32.61	Average	222	222
4	10600.000	57.05	-16.95	74.00	41.76	38.84	9.06	32.61	Peak	450	
5	15900.000	47.08	-6.92	54.00	30.78	37.01	11.59	32.30	Average		
6	15900.000	58.72	-15.28	74.00	42.42	37.01	11.59	32.30	Peak	227	

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 67 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode11aTest Freq. (MHz)5300								
N_{TX}	N _{TX} 2 Polarization H								

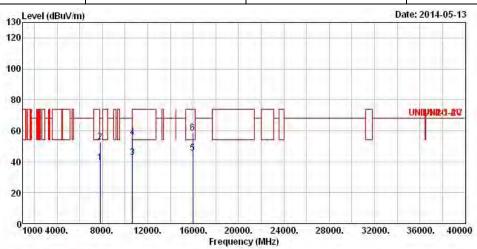


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7002.000	37.38	-30.82	68.20	27.61	35.30	7.05	32.58	Average		
2	7002.000	51.40	-16.80	68.20	41.63	35.30	7.05	32.58	Peak	1.666	
3	10600.000	47.86	-6.14	54.00	32.57	38.84	9.06	32.61	Average		
4	10600.000	62.08	-11.92	74.00	46.79	38.84	9.06	32.61	Peak	444	
5	15900.000	46.11	-7.89	54.00	29.81	37.01	11.59	32.30	Average		
6	15900.000	58.74	-15.26	74.00	42.44	37.01	11.59	32.30	Peak		222

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 68 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz) Modulation Mode 11a Test Freq. (MHz) 5320									
Modulation Mode	11a	Test Freq. (MHz)	5320							
N _{TX}	2	Polarization	V							

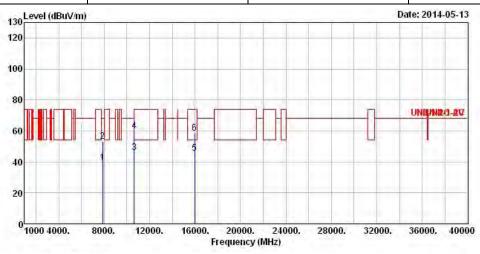


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7812.000	39.29	-28.91	68.20	27.24	36.82	8.00	32.77	Average		
2	7812.000	52.58	-15.62	68.20	40.53	36.82	8.00	32.77	Peak	1.666	1666
3	10640.000	42.75	-11.25	54.00	27.44	38.82	9.07	32.58	Average		
4	10640.000	55.66	-18.34	74.00	40.35	38.82	9.07	32.58	Peak	488	
5	15960.000	45.72	-8.28	54.00	29.58	36.87	11.59	32.32	Average		
6	15960.000	58.60	-15.40	74.00	42.46	36.87	11.59	32.32	Peak		-66

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 69 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz) Modulation Mode 11a Test Freq. (MHz) 5320									
Modulation Mode	11a	Test Freq. (MHz)	5320							
N _{TX}	2	Polarization	Н							

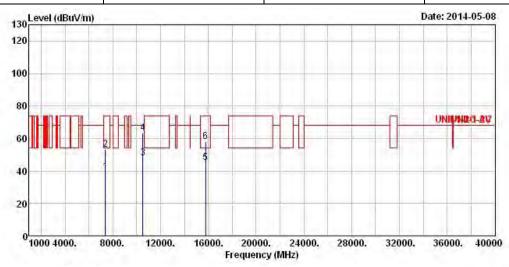


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7884.000	39.53	-28.67	68.20	27.29	36.88	8.14	32.78	Average		
2	7884.000	53.27	-14.93	68.20	41.03	36.88	8.14	32.78	Peak	1.666	1666
3	10640.000	46.25	-7.75	54.00	30.94	38.82	9.07	32.58	Average	1	
4	10640.000	60.02	-13.98	74.00	44.71	38.82	9.07	32.58	Peak	1.664	
5	15960.000	45.79	-8.21	54.00	29.65	36.87	11.59	32.32	Average		
6	15960.000	58.53	-15.47	74.00	42.39	36.87	11.59	32.32	Peak	1995	

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 70 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz) Modulation Mode HT20 Test Freq. (MHz) 5260							
Modulation Mode	HT20	Test Freq. (MHz)	5260					
N_{TX}	2	Polarization	V					



	Freq	Le∀el	Over Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7392.000	39.12	-14.88	54.00	28.22	36.25	7.34	32.69	Average	1444	444
2	7392.000	53.18	-20.82	74.00	42.28	36.25	7.34	32.69	Peak		
3	10520.000	48.16	-20.04	68.20	32.90	38.89	9.02	32.65	Average		
4	10520.000	63.40	-4.80	68.20	48.14	38.89	9.02	32.65	Peak	1.444	444
5	15780.000	45.32	-8.68	54.00	28.75	37.25	11.59	32.27	Average		
6	15780.000	58.28	-15.72	74.00	41.71	37.25	11.59	32.27	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

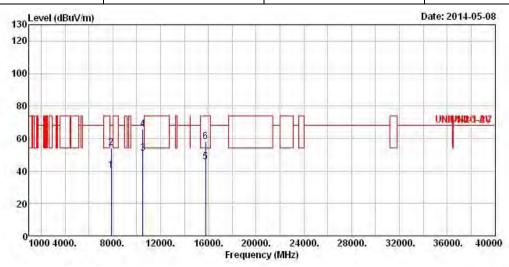
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 71 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz) Modulation Mode HT20 Test Freq. (MHz) 5260						
Modulation Mode	HT20	Test Freq. (MHz)	5260			
N _{TX}	2	Polarization	Н			



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7872.000	40.38	-27.82	68.20	28.22	36.87	8.07	32.78	Average	1444	444
2	7872.000	54.06	-14.14	68.20	41.90	36.87	8.07	32.78	Peak		
3	10520.000	50.93	-17.27	68.20	35.67	38.89	9.02	32.65	Average		
4	10520.000	65.75	-2.45	68.20	50.49	38.89	9.02	32.65	Peak	1.666	1.666
5	15780.000	45.45	-8.55	54.00	28.88	37.25	11.59	32.27	Average		
6	15780.000	58.28	-15.72	74.00	41.71	37.25	11.59	32.27	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

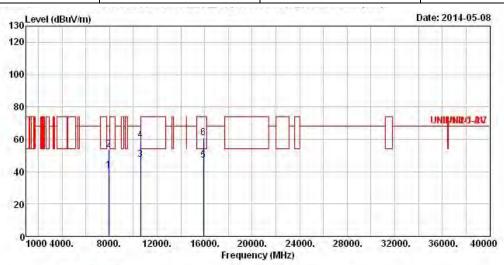
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 72 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	HT20	Test Freq. (MHz)	5300
N _{TX}	2	Polarization	V



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7932.000	40.54	-27.66	68.20	28.19	36.93	8.21	32.79	Average	444	
2	7932.000	53.56	-14.64	68.20	41.21	36.93	8.21	32.79	Peak		
3	10600.000	47.50	-6.50	54.00	32.21	38.84	9.06	32.61	Average	222	222
4	10600.000	59.59	-14.41	74.00	44.30	38.84	9.06	32.61	Peak	.+++	.+++
5	15900.000	47.11	-6.89	54.00	30.81	37.01	11.59	32.30	Average	222	444
6	15900.000	60.82	-13.18	74.00	44.52	37.01	11.59	32.30	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

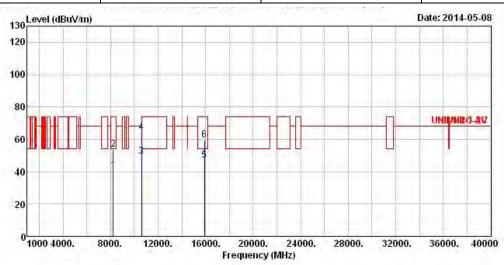
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 73 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5300								
N_{TX}	2	Polarization	Н								



- MACO			0ver	Limit	The same of the	Antenna		Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8232.000	40.93	-13.07	54.00	28.08	37.49	8.16	32.80	Average	444	444
2	8232.000	53.93	-20.07	74.00	41.08	37.49	8.16	32.80	Peak		
3	10600.000	49.64	-4.36	54.00	34.35	38.84	9.06	32.61	Average	222	222
4	10600.000	64.36	-9.64	74.00	49.07	38.84	9.06	32.61	Peak	.+++	
5	15900.000	47.11	-6.89	54.00	30.81	37.01	11.59	32.30	Average	444	444
6	15900.000	59.64	-14.36	74.00	43.34	37.01	11.59	32.30	Peak	1777	777

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

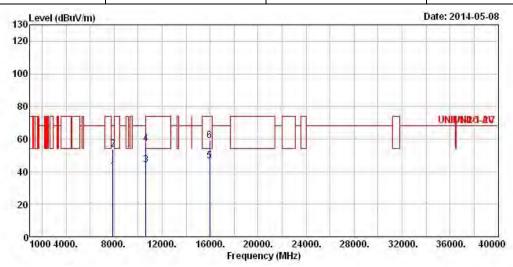
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 74 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5320						
N_{TX}	2	Polarization	V						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7896.000	40.53	-27.67	68.20	28.27	36.90	8.14	32.78	Average	1222	1444
2	7896.000	53.59	-14.61	68.20	41.33	36.90	8.14	32.78	Peak		
3	10640.000	44.02	-9.98	54.00	28.71	38.82	9.07	32.58	Average		
4	10640.000	56.87	-17.13	74.00	41.56	38.82	9.07	32.58	Peak	1.666	1.666
5	15960.000	46.44	-7.56	54.00	30.30	36.87	11.59	32.32	Average		1000
6	15960.000	59.09	-14.91	74.00	42.95	36.87	11.59	32.32	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

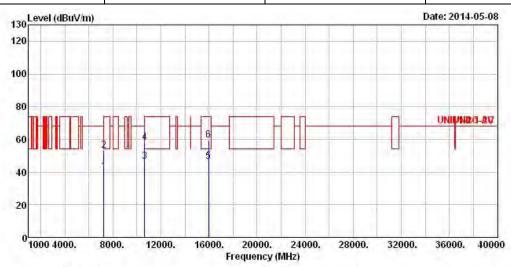
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 75 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5320						
N _{TX}	2	Polarization	Н						



	Freq	Le∨el	0∨er Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7254.000	40.10	-13.90	54.00	29.60	35.92	7.23	32.65	Á∀erage	1444	444
2	7254.000	53.32	-20.68	74.00	42.82	35.92	7.23	32.65	Peak		
3	10640.000	46.77	-7.23	54.00	31.46	38.82	9.07	32.58	Average		
4	10640.000	58.02	-15.98	74.00	42.71	38.82	9.07	32.58	Peak	1.666	
5	15960.000	46.47	-7.53	54.00	30.33	36.87	11.59	32.32	Average		
6	15960.000	59.44	-14.56	74.00	43.30	36.87	11.59	32.32	Peak	666	1.666

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

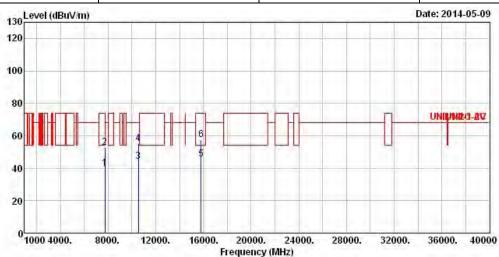
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 76 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT40	Test Freq. (MHz)	5270								
N_{TX}	2	Polarization	V								



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	CIII	deg
1	7734.000	39.79	-14.21	54.00	27.96	36.73	7.86	32.76	Average	1.444	
2	7734.000	52.95	-21.05	74.00	41.12	36.73	7.86	32.76	Peak		
3	10540.000	44.22	-23.98	68.20	28.94	38.88	9.04	32.64	Average		555
4	10540.000	55.36	-12.84	68.20	40.08	38.88	9.04	32.64	Peak		
5	15810.000	45.63	-8.37	54.00	29.14	37.18	11.59	32.28	Average	1.666	1.666
6	15810.000	57.41	-16.59	74.00	40.92	37.18	11.59	32.28	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

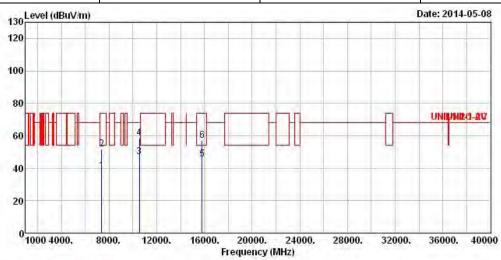
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 77 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT40	Test Freq. (MHz)	5270								
N_{TX}	2	Polarization	Н								



	1000		0√er			Antenna		the second second		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7386.000	38.45	-15.55	54.00	27.55	36.25	7.34	32.69	Average	1.444	
2	7386.000	51.79	-22.21	74.00	40.89	36.25	7.34	32.69	Peak		
3	10540.000	46.81	-21.39	68.20	31.53	38.88	9.04	32.64	Average		
4	10540.000	58.33	-9.87	68.20	43.05	38.88	9.04	32.64	Peak		
5	15810.000	45.56	-8.44	54.00	29.07	37.18	11.59	32.28	Average	1.666	
6	15810.000	57.21	-16.79	74.00	40.72	37.18	11.59	32.28	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

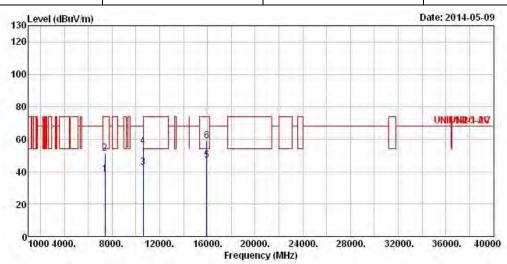
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 78 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5310									
N _{TX}	N _{TX} 2 Polarization V									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7416.000	38.41	-15.59	54.00	27.45	36.29	7.37	32.70	A∨erage	1444	
2	7416.000	51.54	-22.46	74.00	40.58	36.29	7.37	32.70	Peak		
3	10620.000	42.92	-11.08	54.00	27.61	38.83	9.07	32.59	Average		
4	10620.000	55.80	-18.20	74.00	40.49	38.83	9.07	32.59	Peak	1.666	1.444
5	15930.000	46.78	-7.22	54.00	30.56	36.94	11.59	32.31	Average		
6	15930.000	58.79	-15.21	74.00	42.57	36.94	11.59	32.31	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

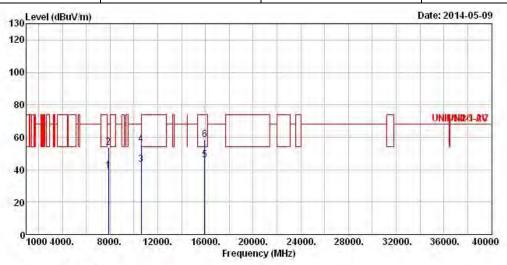
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 79 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5310									
N _{TX} 2 Polarization H									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7884.000	39.36	-28.84	68.20	27.12	36.88	8.14	32.78	Average	1444	
2	7884.000	53.69	-14.51	68.20	41.45	36.88	8.14	32.78	Peak		
3	10620.000	43.25	-10.75	54.00	27.94	38.83	9.07	32.59	Average		
4	10620.000	55.67	-18.33	74.00	40.36	38.83	9.07	32.59	Peak	1.644	1.644
5	15930.000	45.99	-8.01	54.00	29.77	36.94	11.59	32.31	Average		
6	15930.000	58.73	-15.27	74.00	42.51	36.94	11.59	32.31	Peak	***	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

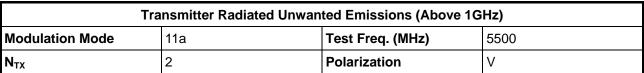
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

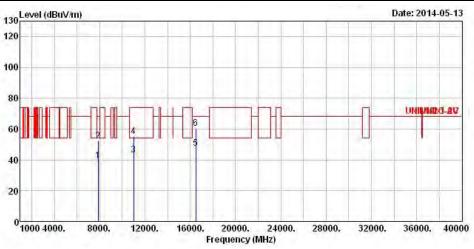
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 80 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5470-5725MHz

Report No.: FR430452-02AN



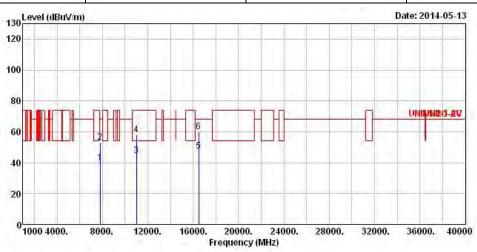


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7878.000	39.40	-28.80	68.20	27.23	36.88	8.07	32.78	Average	422	
2	7878.000	52.47	-15.73	68.20	40.30	36.88	8.07	32.78	Peak		
3	11000.000	43.22	-10.78	54.00	27.76	38.60	9.23	32.37	Average	222	444
4	11000.000	54.98	-19.02	74.00	39.52	38.60	9.23	32.37	Peak		
5	16500.000	47.55	-20.65	68.20	29.41	37.90	12.18	31.94	Average	245	244
6	16500.000	60.45	-7.75	68.20	42.31	37.90	12.18	31.94	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 81 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5500								
N _{TX} 2 Polarization H									

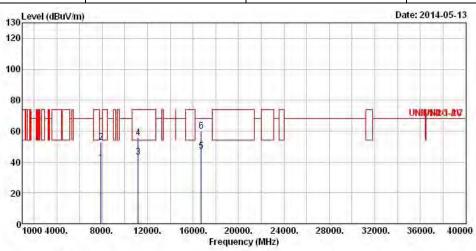


		Over	Limit	Reada	Antenna	Cable	Preamp		A/Pos	T/Pos
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
7800.000	39.84	-28.36	68.20	27.88	36.80	7.93	32.77	Average	444	
7800.000	53.18	-15.02	68.20	41.22	36.80	7.93	32.77	Peak	554	444
11000.000	44.57	-9.43	54.00	29.11	38.60	9.23	32.37	Average		222
11000.000	58.09	-15.91	74.00	42.63	38.60	9.23	32.37	Peak	222	***
16500.000	47.65	-20.55	68.20	29.51	37.90	12.18	31.94	Average	245	224
16500.000	60.00	-8.20	68.20	41.86	37.90	12.18	31.94	Peak		
	7800.000 7800.000 11000.000 11000.000 16500.000	7800.000 39.84 7800.000 53.18 11000.000 44.57 11000.000 58.09 16500.000 47.65	Freq Level Limit MHz dBuV/m dB 7800.000 39.84 -28.36 7800.000 53.18 -15.02 11000.000 44.57 -9.43 11000.000 58.09 -15.91 16500.000 47.65 -20.55	Freq Le√el Limit Line MHz dBuV/m dB dBuV/m 7800.000 39.84 -28.36 68.20 7800.000 53.18 -15.02 68.20 11000.000 44.57 -9.43 54.00 11000.000 58.09 -15.91 74.00 16500.000 47.65 -20.55 68.20	Freq Level Limit Line Level MHz dBuV/m dB dBuV/m dBuV/m dBuV 7800.000 39.84 -28.36 68.20 27.88 7800.000 53.18 -15.02 68.20 41.22 11000.000 44.57 -9.43 54.00 29.11 11000.000 58.09 -15.91 74.00 42.63 16500.000 47.65 -20.55 68.20 29.51	Freq Level Limit Line Level Factor MHz dBuV/m dB dBuV/m dBuV dBuV dB/m 7800.000 39.84 -28.36 68.20 27.88 36.80 7800.000 53.18 -15.02 68.20 41.22 36.80 11000.000 44.57 -9.43 54.00 29.11 38.60 11000.000 58.09 -15.91 74.00 42.63 38.60 16500.000 47.65 -20.55 68.20 29.51 37.90	Freq Level Limit Line Level Factor Loss MHz dBuV/m dB dBuV/m dBuV/m dBuV dB/m dB 7800.000 39.84 -28.36 68.20 27.88 36.80 7.93 7800.000 53.18 -15.02 68.20 41.22 36.80 7.93 11000.000 44.57 -9.43 54.00 29.11 38.60 9.23 11000.000 58.09 -15.91 74.00 42.63 38.60 9.23 16500.000 47.65 -20.55 68.20 29.51 37.90 12.18	Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 7800.000 39.84 -28.36 68.20 27.88 36.80 7.93 32.77 7800.000 53.18 -15.02 68.20 41.22 36.80 7.93 32.77 11000.000 44.57 -9.43 54.00 29.11 38.60 9.23 32.37 11000.000 58.09 -15.91 74.00 42.63 38.60 9.23 32.37 16500.000 47.65 -20.55 68.20 29.51 37.90 12.18 31.94	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB dB 7800.000 39.84 -28.36 68.20 27.88 36.80 7.93 32.77 Average 7800.000 53.18 -15.02 68.20 41.22 36.80 7.93 32.77 Peak 11000.000 44.57 -9.43 54.00 29.11 38.60 9.23 32.37 Average 11000.000 58.09 -15.91 74.00 42.63 38.60 9.23 32.37 Peak 16500.000 47.65 -20.55 68.20 29.51 37.90 12.18 31.94 Average	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 82 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode 11a Test Freq. (MHz) 5580									
N _{TX} 2 Polarization V									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7889.000	39.50	-28.70	68.20	27.26	36.88	8.14	32.78	Average	1444	1.646
2	7889.000	52.54	-15.66	68.20	40.30	36.88	8.14	32.78	Peak		
3	11160.000	43.09	-10.91	54.00	27.14	38.77	9.54	32.36	Average		
4	11160.000	55.77	-18.23	74.00	39.82	38.77	9.54	32.36	Peak		
5	16740.000	46.90	-21.30	68.20	27.85	39.11	11.58	31.64	Average		
6	16740.000	60.17	-8.03	68.20	41.12	39.11	11.58	31.64	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

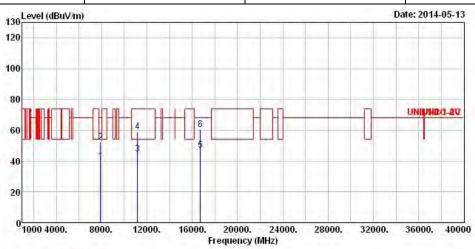
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 83 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode 11a Test Freq. (MHz) 5580								
N _{TX} 2 Polarization H								



	Freq	Le∨el	Over Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7914.000	39.86	-28.34	68.20	27.58	36.92	8.14	32.78	Average		
2	7914.000	52.43	-15.77	68.20	40.15	36.92	8.14	32.78	Peak	1.666	
3	11160.000	44.76	-9.24	54.00	28.81	38.77	9.54	32.36	Average		
4	11160.000	59.23	-14.77	74.00	43.28	38.77	9.54	32.36	Peak	1.664	
5	16740.000	47.01	-21.19	68.20	27.96	39.11	11.58	31.64	Average		
6	16740.000	60.67	-7.53	68.20	41.62	39.11	11.58	31.64	Peak	-66	-886

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

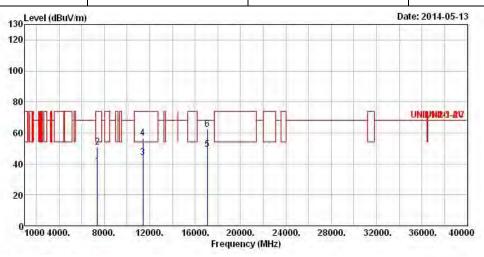
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 84 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5700								
N _{TX} 2 Polarization V									



	Freq	Le∨el	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7380.000	38.28	-15.72	54.00	27.42	36.21	7.34	32.69	Average		
2	7380.000	50.66	-23.34	74.00	39.80	36.21	7.34	32.69	Peak	1.666	
3	11400.000	44.29	-9.71	54.00	27.72	39.00	9.92	32.35	Average		
4	11400.000	56.53	-17.47	74.00	39.96	39.00	9.92	32.35	Peak		
5	17100.000	49.35	-18.85	68.20	28.20	41.16	11.33	31.34	Average		
6	17100.000	62.55	-5.65	68.20	41.40	41.16	11.33	31.34	Peak	-99-	999

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

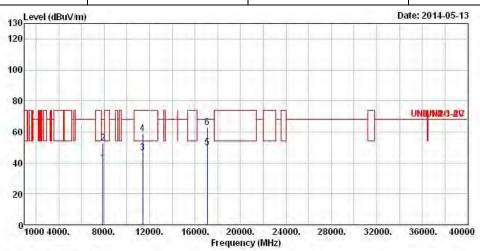
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 85 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	11a	Test Freq. (MHz)	5700
N_{TX}	2	Polarization	Н

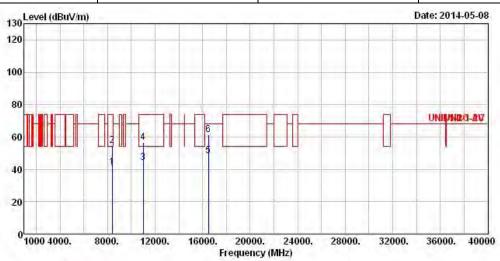


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7908.000	40.00	-28.20	68.20	27.74	36.90	8.14	32.78	Average		
2	7908.000	52.72	-15.48	68.20	40.46	36.90	8.14	32.78	Peak	1.666	
3	11400.000	46.54	-7.46	54.00	29.97	39.00	9.92	32.35	Average		
4	11400.000	59.22	-14.78	74.00	42.65	39.00	9.92	32.35	Peak	444	
5	17100.000	49.91	-18.29	68.20	28.76	41.16	11.33	31.34	Average		
6	17100.000	62.93	-5.27	68.20	41.78	41.16	11.33	31.34	Peak	1000	1000

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 86 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5500							
N_{TX}	2	Polarization	V							



		Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
8382.000	41.06	-12.94	54.00	27.97	37.83	8.07	32.81	A∀erage	1444	
8382.000	54.88	-19.12	74.00	41.79	37.83	8.07	32.81	Peak		
11000.000	44.13	-9.87	54.00	28.67	38.60	9.23	32.37	Average		
11000.000	56.43	-17.57	74.00	40.97	38.60	9.23	32.37	Peak	1.666	1.666
16500.000	48.32	-19.88	68.20	30.18	37.90	12.18	31.94	Average	1444	
16500.000	61.35	-6.85	68.20	43.21	37.90	12.18	31.94	Peak		
	MHz 8382,000 8382,000 11000,000 11000,000 16500,000	MHz dBuV/m 8382.000 41.06 8382.000 54.88 11000.000 44.13 11000.000 56.43 16500.000 48.32	Freq Level Limit MHz dBuV/m dB 8382.000 41.06 -12.94 8382.000 54.88 -19.12 11000.000 44.13 -9.87 11000.000 56.43 -17.57 16500.000 48.32 -19.88	Freq Level Limit Line MHz dBuV/m dB dBuV/m 8382.000 41.06 -12.94 54.00 8382.000 54.88 -19.12 74.00 11000.000 44.13 -9.87 54.00 11000.000 56.43 -17.57 74.00 16500.000 48.32 -19.88 68.20	Freq Level Limit Line Level MHz dBuV/m dB dBuV/m dBuV 8382.000 41.06 -12.94 54.00 27.97 8382.000 54.88 -19.12 74.00 41.79 11000.000 44.13 -9.87 54.00 28.67 11000.000 56.43 -17.57 74.00 40.97 16500.000 48.32 -19.88 68.20 30.18	Freq Level Limit Line Level Factor MHz dBuV/m dB dBuV/m dBuV dBuV	Freq Level Limit Line Level Factor Loss MHz dBuV/m dB dBuV/m dBuV dB/m dB/m dB 8382.000 41.06 -12.94 54.00 27.97 37.83 8.07 8382.000 54.88 -19.12 74.00 41.79 37.83 8.07 11000.000 44.13 -9.87 54.00 28.67 38.60 9.23 11000.000 56.43 -17.57 74.00 40.97 38.60 9.23 16500.000 48.32 -19.88 68.20 30.18 37.90 12.18	Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8382.000 41.06 -12.94 54.00 27.97 37.83 8.07 32.81 8382.000 54.88 -19.12 74.00 41.79 37.83 8.07 32.81 11000.000 44.13 -9.87 54.00 28.67 38.60 9.23 32.37 11000.000 56.43 -17.57 74.00 40.97 38.60 9.23 32.37 16500.000 48.32 -19.88 68.20 30.18 37.90 12.18 31.94	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8382.000 41.06 - 12.94 54.00 27.97 37.83 8.07 32.81 Average 8382.000 54.88 - 19.12 74.00 41.79 37.83 8.07 32.81 Peak 11000.000 44.13 -9.87 54.00 28.67 38.60 9.23 32.37 Average 11000.000 56.43 - 17.57 74.00 40.97 38.60 9.23 32.37 Peak 16500.000 48.32 - 19.88 68.20 30.18 37.90 12.18 31.94 Average	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dB/m dB dB dB cm 8382.000 41.06 -12.94 54.00 27.97 37.83 8.07 32.81 Average 8382.000 54.88 -19.12 74.00 41.79 37.83 8.07 32.81 Peak 11000.000 44.13 -9.87 54.00 28.67 38.60 9.23 32.37 Average 11000.000 56.43 -17.57 74.00 40.97 38.60 9.23 32.37 Peak 16500.000 48.32 -19.88 68.20 30.18 37.90 12.18 31.94 Average

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 87 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

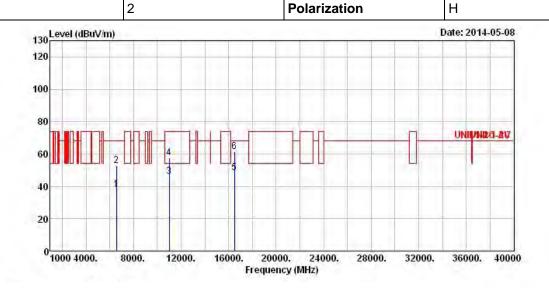
 N_{TX}

FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5500

Report No.: FR430452-02AN



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6564.000	37.83	-30.37	68.20	29.13	34.49	6.70	32.49	Average	lege	1444
2	6564.000	52.54	-15.66	68.20	43.84	34.49	6.70	32.49	Peak		
3	11000.000	46.11	-7.89	54.00	30.65	38.60	9.23	32.37	Average		
4	11000.000	57.33	-16.67	74.00	41.87	38.60	9.23	32.37	Peak	1.666	1.644
5	16500.000	48.29	-19.91	68.20	30.15	37.90	12.18	31.94	Average	1444	
6	16500.000	61.61	-6.59	68.20	43.47	37.90	12.18	31.94	Peak	1666	-555

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

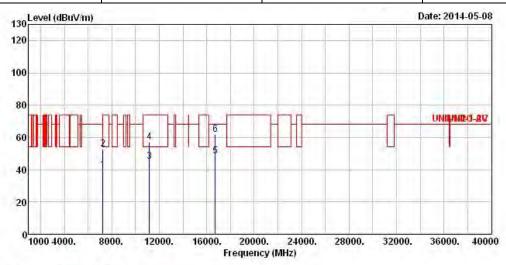
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 88 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5580							
N_{TX}	2	Polarization	V							



	Freq	Level	0∨er Limit			Antenna Factor		1000		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7248.000	40.04	-28.16	68.20	29.54	35.92	7.23	32.65	Average	***	
2	7248.000	52.76	-15.44	68.20	42.26	35.92	7.23	32.65	Peak	444	
3	11160.000	44.90	-9.10	54.00	28.95	38.77	9.54	32.36	Average		
4	11160.000	56.95	-17.05	74.00	41.00	38.77	9.54	32.36	Peak	1222	222
5	16740.000	48.26	-19.94	68.20	29.21	39.11	11.58	31.64	Average	***	***
6	16740.000	61.80	-6.40	68.20	42.75	39.11	11.58	31.64	Peak	442	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

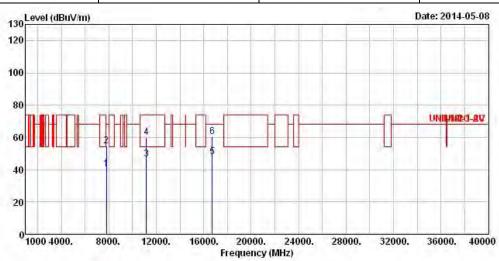
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 89 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	iHz)
Modulation Mode	HT20	Test Freq. (MHz)	5580
N_{TX}	2	Polarization	Н



	Freq	Level	0∨er Limit			Antenna Factor		100		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7818.000	40.18	-28.02	68.20	28.13	36.82	8.00	32.77	Average		
2	7818.000	54.59	-13.61	68.20	42.54	36.82	8.00	32.77	Peak	444	
3	11160.000	46.45	-7.55	54.00	30.50	38.77	9.54	32.36	Average		
4	11160.000	59.87	-14.13	74.00	43.92	38.77	9.54	32.36	Peak	1444	222
5	16740.000	48.08	-20.12	68.20	29.03	39.11	11.58	31.64	Average	***	***
6	16740.000	60.23	-7.97	68.20	41.18	39.11	11.58	31.64	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

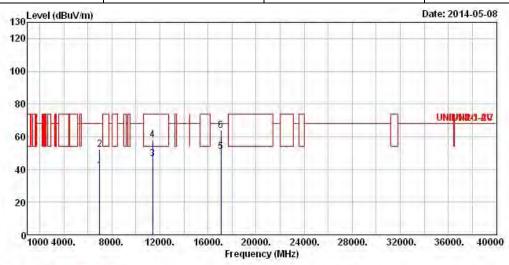
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 90 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5700							
N_{TX}	2	Polarization	V							



	Freq	Level	0√er Limit			Antenna Factor		Acres of the same		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6996.000	39.22	-28.98	68.20	29.45	35.30	7.05	32.58	Average		
2	6996.000						7.05	32.58	Peak		
3	11400.000	46.37	-7.63	54.00	29.80	39.00	9.92	32.35	Average		
4	11400.000	58.03	-15.97	74.00	41.46	39.00	9.92	32.35	Peak		
5	17100.000	50.71	-17.49	68.20	29.56	41.16	11.33	31.34	Average	1.666	
6	17100.000	63.57	-4.63	68.20	42.42	41.16	11.33	31.34	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

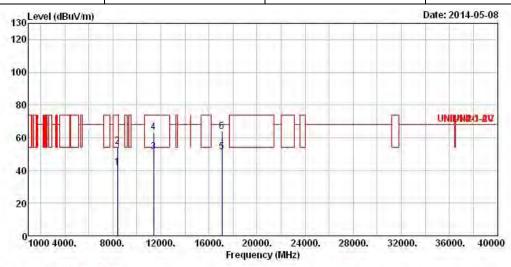
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 91 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5700							
N _{TX}	2	Polarization	Н							



	Freq	Level	0√er Limit			Antenna Factor		the second second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	8400.000	41.51	-12.49	54.00	28.40	37.87	8.05	32.81	Average	1.666	1.444
2	8400.000	54.49	-19.51	74.00	41.38	37.87	8.05	32.81	Peak		
3	11400.000	51.25	-2.75	54.00	34.68	39.00	9.92	32.35	Average		444
4	11400.000	63.44	-10.56	74.00	46.87	39.00	9.92	32.35	Peak		
5	17100.000	51.36	-16.84	68.20	30.21	41.16	11.33	31.34	Average	1.666	1.666
6	17100.000	63.59	-4.61	68.20	42.44	41.16	11.33	31.34	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

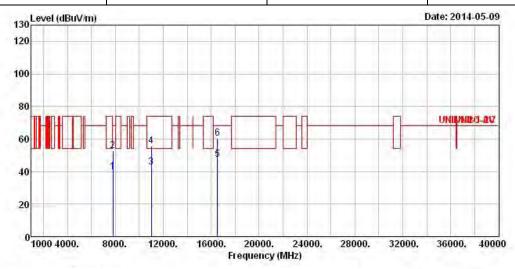
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 92 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT40	Test Freq. (MHz)	5510							
N_{TX}	2	Polarization	V							



	Freq	Le∨el	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7818.000	39.91	-28.29	68.20	27.86	36.82	8.00	32.77	Average	1222	222
2	7818.000	53.00	-15.20	68.20	40.95	36.82	8.00	32.77	Peak	.+++	1.444
3	11020.000	42.74	-11.26	54.00	27.20	38.62	9.29	32.37	Average	444	444
4	11020.000	55.50	-18.50	74.00	39.96	38.62	9.29	32.37	Peak		
5	16530.000	47.63	-20.57	68.20	29.38	38.07	12.09	31.91	Average	222	222
6	16530.000	60.52	-7.68	68.20	42.27	38.07	12.09	31.91	Peak		***

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

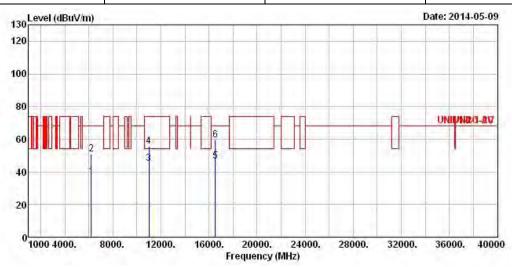
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 93 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5510							
N_{TX}	2	Polarization	Н							



	Freq	Level.	0∨er Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
ī	6210.000	36.95	-31.25	68.20	28.50	34.28	6.63	32.46	Average		
2	6210.000			68.20				32.46			
3	11020.000	45.12	-8.88	54.00	29.58	38.62	9.29	32.37	Average		
4	11020.000	55.62	-18.38	74.00	40.08	38.62	9.29	32.37	Peak	1.644	1.644
5	16530.000	46.74	-21.46	68.20	28.49	38.07	12.09	31.91	Average		
6	16530.000	59.70	-8.50	68.20	41.45	38.07	12.09	31.91	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

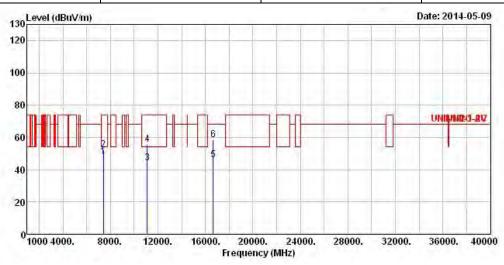
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 94 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5550							
N_{TX}	2	Polarization	V							



	Freq	Level	0∨er Limit			Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	——dB	dBuV/m	dBuV	dB/m	dB	——dB			deg
1	7398.000	47.82	-6.18	54.00	36.92	36.25	7.34	32.69	Average		
2	7398.000	52.48	-21.52	74.00	41.58	36.25	7.34	32.69	Peak	444	442
3	11100.000	44.16	-9.84	54.00	28.40	38.70	9.42	32.36	Average		
4	11100.000	55.79	-18.21	74.00	40.03	38.70	9.42	32.36	Peak	1222	222
5	16650.000	45.94	-22.26	68.20	27.16	38.68	11.84	31.74	Average	.+++	***
6	16650.000	58.68	-9.52	68.20	39.90	38.68	11.84	31.74	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

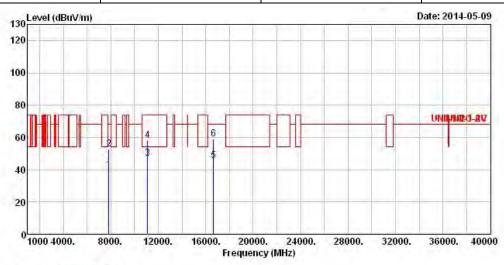
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 95 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5550						
N_{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7824.000	39.94	-28.26	68.20	27.89	36.82	8.00	32.77	Average		***
2	7824.000	52.68	-15.52	68.20	40.63	36.82	8.00	32.77	Peak		
3	11100.000	46.94	-7.06	54.00	31.18	38.70	9.42	32.36	Average		
4	11100.000	57.98	-16.02	74.00	42.22	38.70	9.42	32.36	Peak	1222	222
5	16650.000	45.68	-22.52	68.20	26.90	38.68	11.84	31.74	Average	+++	***
6	16650.000	59.02	-9.18	68.20	40.24	38.68	11.84	31.74	Peak	222	

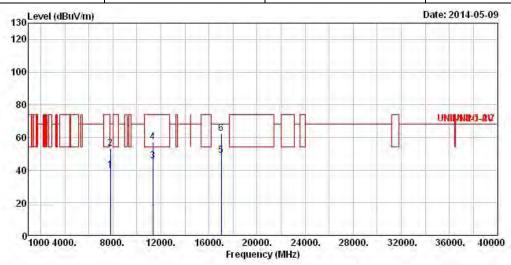
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 96 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report

Report No.: FR430452-02AN

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT40	Test Freq. (MHz)	5670							
N_{TX}	2	Polarization	V							



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Le∨el	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7812.000	39.93	-28.27	68.20	27.88	36.82	8.00	32.77	Average	222	222
2	7812.000	53.11	-15.09	68.20	41.06	36.82	8.00	32.77	Peak		1,444
3	11340.000	45.75	-8.25	54.00	29.38	38.93	9.79	32.35	Average	444	1444
4	11340.000	57.29	-16.71	74.00	40.92	38.93	9.79	32.35	Peak		
5	17010.000	49.08	-19.12	68.20	28.71	40.53	11.16	31.32	Average	1222	222
6	17010.000	62.23	-5.97	68.20	41.86	40.53	11.16	31.32	Peak	+++	+++

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

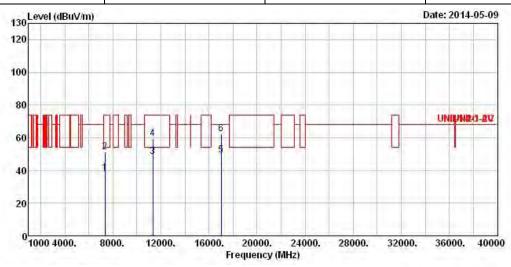
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 97 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT40 Test Freq. (MHz) 5670								
N _{TX} 2 Polarization H								



	Freq	Level	0√er Limit			Antenna Factor		Act of the second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7350.000	38.46	-15.54	54.00	27.66	36.17	7.31	32.68	Average	1.666	1.666
2	7350.000	51.36	-22.64	74.00	40.56	36.17	7.31	32.68	Peak		
3	11340.000	48.48	-5.52	54.00	32.11	38.93	9.79	32.35	Average		555
4	11340.000	59.50	-14.50	74.00	43.13	38.93	9.79	32.35	Peak		
5	17010.000	49.37	-18.83	68.20	29.00	40.53	11.16	31.32	Average	1.666	
6	17010.000	62.33	-5.87	68.20	41.96	40.53	11.16	31.32	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

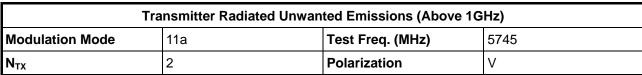
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

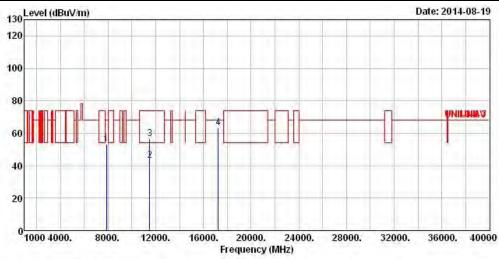
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 98 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

3.6.10 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5725-5850MHz

Report No.: FR430452-02AN



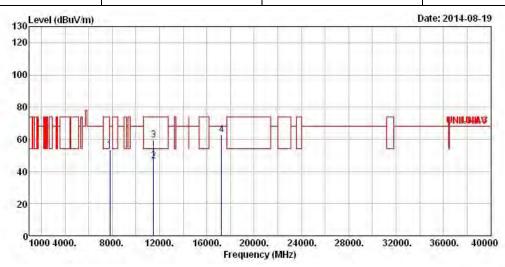


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7878.00	53.23	-14.97	68.20	41.06	36.88	8.07	32.78	Peak		
2	11490.00	43.39	-10.61	54.00	26.61	39.08	10.04	32.34	Average	1.666	1.888
3	11490.00	56.59	-17.41	74.00	39.81	39.08	10.04	32.34	Peak		
4	17235.00	63.40	-4.80	68.20	41.02	42.17	11.59	31.38	Peak		999

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 99 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode 11a Test Freq. (MHz) 5745									
N _{TX}	N _{TX} 2 Polarization H								



	Freq	Level	0∨er Limit			Antenna Factor		the second second second		A/Pos	T/Pos
0	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7818.00	53.14	-15.06	68.20	41.09	36.82	8.00	32.77	Peak	1.644	1,646
2	11490.00	46.64	-7.36	54.00	29.86	39.08	10.04	32.34	Average		
3	11490.00								7 A. C.		
4	17235.00	62.71	-5.49	68.20	40.33	42.17	11.59	31.38	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

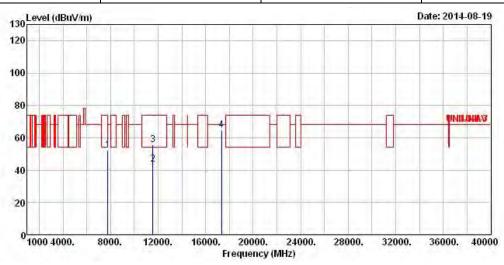
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 100 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode 11a Test Freq. (MHz) 5785								
N _{TX} 2 Polarization V								

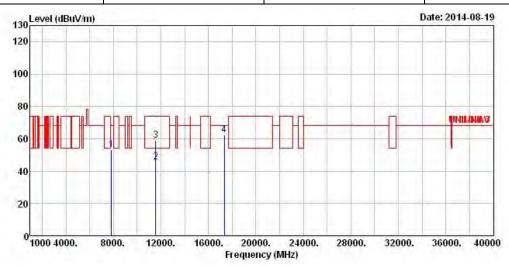


	Freq	Level	O∨er Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7776.00	52.51	-15.69	68.20	40.56	36.78	7.93	32.76	Peak	(2)22	922
2	11570.00	43.51	-10.49	54.00	26.68	39.14	10.04	32.35	Average		
3	11570.00	55.66	-18.34	74.00	38.83	39.14	10.04	32.35	Peak	222	222
4	17355.00	64.64	-3.56	68.20	41.14	43.06	11.85	31.41	Peak		222

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 101 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode 11a Test Freq. (MHz) 5785								
N _{TX} 2 Polarization H								

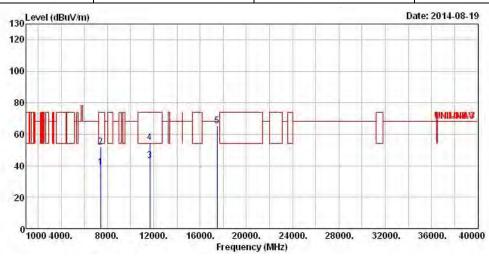


	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	——dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7836.00	53.15	-15.05	68.20	41.09	36.83	8.00	32.77	Peak	1222	222
2	11570.00	45.66	-8.34	54.00	28.83	39.14	10.04	32.35	Average		
3	11570.00	58.86	-15.14	74.00	42.03	39.14	10.04	32.35	Peak	222	
4	17355.00	62.16	-6.04	68.20	38.66	43.06	11.85	31.41	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 102 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode11aTest Freq. (MHz)5825								
N _{TX} 2 Polarization V								

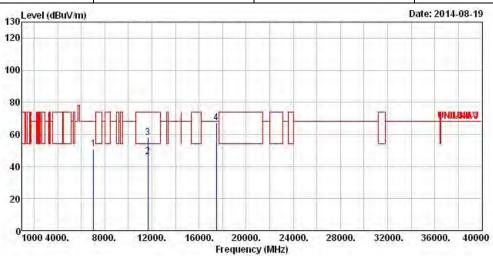


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7422.00	38.63	-15.37	54.00	27.63	36.33	7.37	32.70	Average	422	1222
2	7422.00	52.02	-21.98	74.00	41.02	36.33	7.37	32.70	Peak		
3	11650.00	43.00	-11.00	54.00	26.15	39.18	10.03	32.36	Average	222	222
4	11650.00	54.89	-19.11	74.00	38.04	39.18	10.03	32.36	Peak		
5	17475.00	65.26	-2.94	68.20	40.65	43.95	12.11	31.45	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 103 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode 11a Test Freq. (MHz) 5825								
N _{TX} 2 Polarization H								



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7050.00	51.01	-17.19	68.20	41.10	35.42	7.08	32.59	Peak		
2	11650.00	46.14	-7.86	54.00	29.29	39.18	10.03	32.36	Average	1.666	1.000
3	11650.00	57.97	-16.03	74.00	41.12	39.18	10.03	32.36	Peak		
4	17475.00	67.09	-1.11	68.20	42.48	43.95	12.11	31.45	Peak	999	444

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

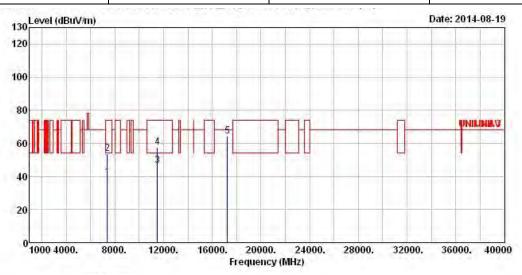
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 104 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	Modulation Mode HT20 Test Freq. (MHz) 5745							
N _{TX} 2 Polarization V								

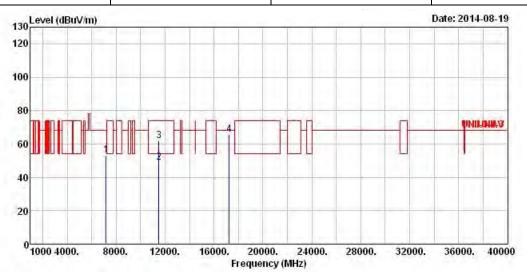


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	3,040	3035
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7392.00	39.28	-14.72	54.00	28.38	36.25	7.34	32.69	Average	444	
2	7392.00	53.52	-20.48	74.00	42.62	36.25	7.34	32.69	Peak		
3	11490.00	46.64	-7.36	54.00	29.86	39.08	10.04	32.34	Average	222	222
4	11490.00	57.67	-16.33	74.00	40.89	39.08	10.04	32.34	Peak	+++	
5	17235.00	64.06	-4.14	68.20	41.68	42.17	11.59	31.38	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 105 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation ModeHT20Test Freq. (MHz)5745								
N _{TX} 2 Polarization H									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		2000
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7198.00	53.39	-14.81	68.20	43.03	35.80	7.20	32.64	Peak		
2	11490.00	48.95	-5.05	54.00	32.17	39.08	10.04	32.34	Average	444	222
3	11490.00	62.09	-11.91	74.00	45.31	39.08	10.04	32.34	Peak	-	1999
4	17235.00	65.55	-2.65	68.20	43.17	42.17	11.59	31.38	Peak	1222	222

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

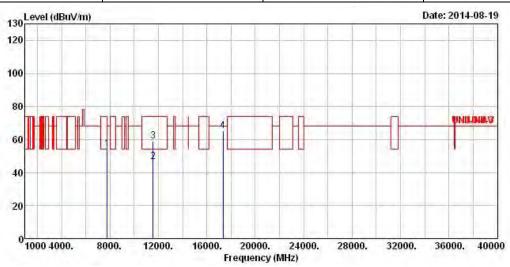
SPORTON INTERNATIONAL INC. Page No. : 106 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT20 Test Freq. (MHz) 5785								
N_{TX}	2	Polarization	V					

Report No.: FR430452-02AN



	Freq	Level		Limit Line						A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7758.00	53.99	-14.21	68.20	42.12	36.77	7.86	32.76	Peak		***
2	11570.00	46.31	-7.69	54.00	29.48	39.14	10.04	32.35	Average	444	222
3	11570.00	58.81	-15.19	74.00	41.98	39.14	10.04	32.35	Peak		
4	17355.00	65.27	-2.93	68.20	41.77	43.06	11.85	31.41	Peak	1222	022

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

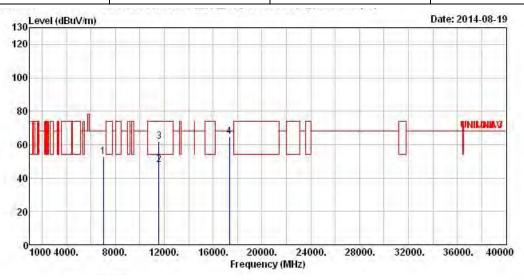
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 107 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT20 Test Freq. (MHz) 5785								
N _{TX} 2 Polarization H								



	Freq	Level	0∨er Limit			Antenna Factor				A/Pos	T/Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7020.00	52.69	-15.51	68.20	42.89	35.34	7.05	32.59	Peak	222	-222
2	11570.00	48.11	-5.89	54.00	31.28	39.14	10.04	32.35	Average		
3	11570.00									222	222
4	17355.00	64.80	-3.40	68.20	41.30	43.06	11.85	31.41	Peak	+++	555

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

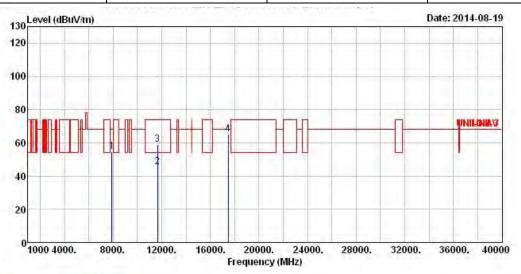
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 108 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT20 Test Freq. (MHz) 5825								
N_{TX}	V							

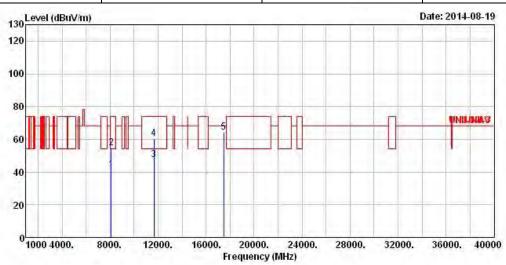


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7890.00	54.62	-13.58	68.20	42.38	36.88	8.14	32.78	Peak	444	222
2	11650.00	45.42	-8.58	54.00	28.57	39.18	10.03	32.36	Average		-
3	11650.00	59.17	-14.83	74.00	42.32	39.18	10.03	32.36	Peak	222	1222
4	17475.00	65.45	-2.75	68.20	40.84	43.95	12.11	31.45	Peak	+++	+++

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 109 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT20 Test Freq. (MHz) 5825								
N _{TX} 2 Polarization H								



	Freq	Level	O∨er Limit			Antenna Factor		The second second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	8100.00	41.09	-12.91	54.00	28.44	37.23	8.22	32.80	Average		
2	8100.00	54.89	-19.11	74.00	42.24	37.23	8.22	32.80	Peak	444	442
3	11650.00	47.72	-6.28	54.00	30.87	39.18	10.03	32.36	Average		****
4	11650.00	60.63	-13.37	74.00	43.78	39.18	10.03	32.36	Peak	444	222
5	17475.00	64.29	-3.91	68.20	39.68	43.95	12.11	31.45	Peak		+++

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

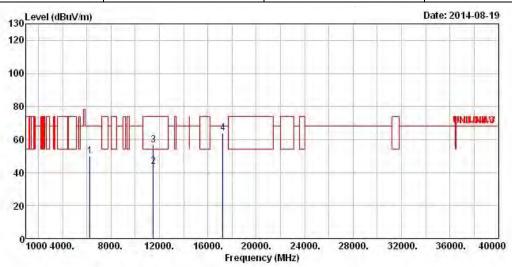
SPORTON INTERNATIONAL INC. Page No. : 110 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT40	Test Freq. (MHz)	5755						
N_{TX}	2	Polarization	V						

Report No.: FR430452-02AN



-10-20-5	Freq	Level	Over Limit			Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	6270.00	49.92	-18.28	68.20	41.44	34.31	6.63	32.46	Peak	***	+++
2	11510.00	43.57	-10.43	54.00	26.77	39.10	10.04	32.34	Average	444	
3	11510.00	56.66	-17.34	74.00	39.86	39.10	10.04	32.34	Peak	****	
4	17265.00	63.94	-4.26	68.20	41.22	42.43	11.68	31.39	Peak	222	022

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

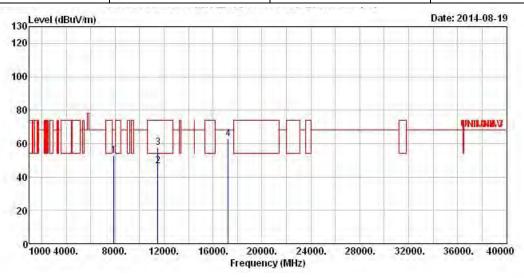
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 111 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT40	Test Freq. (MHz)	5755					
N _{TX}	2	Polarization	Н					



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7896.00	52.90	-15.30	68.20	40.64	36.90	8.14	32.78	Peak	444	
2	11510.00	46.35	-7.65	54.00	29.55	39.10	10.04	32.34	Average		
3	11510.00	57.61	-16.39	74.00	40.81	39.10	10.04	32.34	Peak	222	222
4	17265.00	63.00	-5.20	68.20	40.28	42.43	11.68	31.39	Peak	+++	***

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

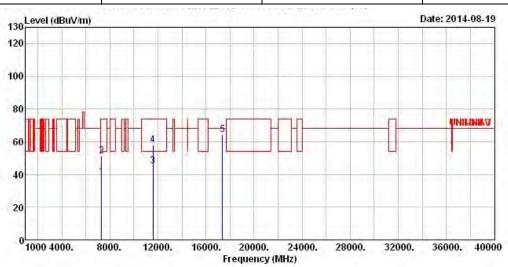
SPORTON INTERNATIONAL INC. Page No. : 112 of 118 TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT40	Test Freq. (MHz)	5795						
N _{TX}	2	Polarization	V						

Report No.: FR430452-02AN

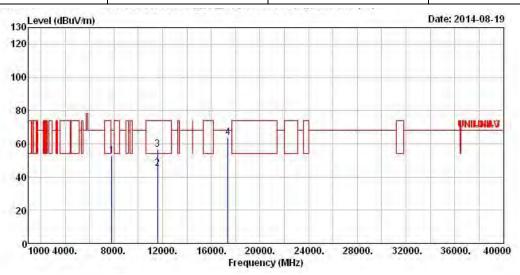


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7314.00	38.33	- 15 . 67	54.00	27.68	36.04	7.28	32.67	Average	222	-222
2	7314.00	51.24	-22.76	74.00	40.59	36.04	7.28	32.67	Peak		
3	11590.00	45.26	-8.74	54.00	28.43	39.15	10.03	32.35	Average	222	222
4	11590.00	57.95	-16.05	74.00	41.12	39.15	10.03	32.35	Peak		
5	17385.00	64.48	-3.72	68.20	40.66	43.31	11.94	31.43	Peak		

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 113 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT40	Test Freq. (MHz)	5795					
N_{TX}	2	Polarization	Н					



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Le∨el	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7842.00	52.77	-15.43	68.20	40.71	36.83	8.00	32.77	Peak	222	1224
2	11590.00	44.98	-9.02	54.00	28.15	39.15	10.03	32.35	Average	***	***
3	11590.00	56.66	-17.34	74.00	39.83	39.15	10.03	32.35	Peak	222	222
4	17385.00	63.62	-4.58	68.20	39.80	43.31	11.94	31.43	Peak	555	555

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

SPORTON INTERNATIONAL INC. Page No. : 114 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit UNII Devices In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. ### IEEE Std. 802.11n-2009 | The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

Report No.: FR430452-02AN

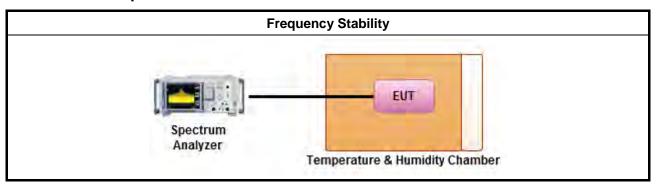
3.7.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

	Test Method									
\boxtimes	Refe	er as ANSI C63.10, clause 6.8 for frequency stability tests								
	\boxtimes	Frequency stability with respect to ambient temperature								
	\boxtimes	Frequency stability when varying supply voltage								
\boxtimes	For	conducted measurement.								
		For conducted measurements on devices with multiple transmit chains: Measurements need only to be performed on one of the active transmit chains (antenna outputs)								
		radiated measurement. The equipment to be measured and the test antenna shall be oriented to in the maximum emitted power level.								

3.7.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 115 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



3.7.5 Test Result of Frequency Stability

Frequency Stability Result									
Мо	de	Frequency Stability (ppm)							
Condition	Freq. (MHz)	Test Frequency (MHz)	Frequency Stability (ppm)						
T _{20°C} Vmax	5180	5180.00300	0.5792						
T _{20°C} Vmin	5180	5180.00300	0.5792						
T _{50°C} Vnom 5180 T _{40°C} Vnom 5180 T _{30°C} Vnom 5180		5179.98080	-3.7066						
		5179.98260	-3.3591						
		5179.99280	-1.3900						
T _{20°C} Vnom	5180	5180.00300	0.5792						
T _{10°C} Vnom	5180	5180.01620	3.1274						
T _{0°C} Vnom	5180	5180.02520	4.8649						
T _{-10°C} Vnom	5180	5180.02640	5.0965						
T _{-20°C} Vnom	5180	5180.02880	5.5598						
Limit (ppm)	20							
Res	ult	Complied							

Report No.: FR430452-02AN

Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

SPORTON INTERNATIONAL INC. Page No. : 116 of 118 Report Version TEL: 886-3-327-3456 : Rev. 01

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	EMC Receiver R&S		100174	9kHz ~ 2.75GHz	Mar. 26, 2014	AC Conduction
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2014	AC Conduction
LISN	EMCO	3810/2NM	9703-1839	9kHz ~ 30MHz	Apr. 21, 2014	AC Conduction
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 30, 2013	AC Conduction

Report No.: FR430452-02AN

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSV 40	101013	9kHz ~ 40GHz	Jan. 25, 2014	RF conducted
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jul. 15, 2014	RF conducted
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-00 7	-20 ~ 100°C	Nov. 20, 2013	RF conducted
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 31, 2014	RF conducted

Note: Calibration Interval of instruments listed above is one year.

<For Bnad 1~Band 3 Test use>

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 30, 2013	Radiation
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 05, 2014	Radiation
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Aug. 20, 2013	Radiation
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 27, 2014	Radiation
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 21, 2013	Radiation
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 31, 2013	Radiation
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 10, 2014	Radiation
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 16, 2013	Radiation
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 11, 2013	Radiation
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation

Note: Calibration Interval of instruments listed above is one year.

SPORTON INTERNATIONAL INC. Page No. : 117 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report

<For Band 4 Test use>

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 30, 2013	Radiation
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 05, 2014	Radiation
Amplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	Aug. 28, 2013	Radiation
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 27, 2014	Radiation
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 21, 2013	Radiation
Horn Antenna	ETS · LINDGREN	3115	6741	1GHz ~ 18GHz	Jun. 11, 2014	Radiation
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 10, 2014	Radiation
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 16, 2013	Radiation
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 11, 2013	Radiation
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation

Report No.: FR430452-02AN

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EM	EM18G40G	060604	18GHz ~ 40GHz	Oct. 17, 2013	Radiation
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz - 30 MHz	Dec. 02, 2012	Radiation

Note: Calibration Interval of instruments listed above is two year.

SPORTON INTERNATIONAL INC. Page No. : 118 of 118
TEL: 886-3-327-3456 Report Version : Rev. 01