

Report No.: FR3O2401-02AI

FCC Test Report

: Access Point Equipment

Brand Name : UBIQUITI

Model No. : RM5-AC-PTP-Lite

FCC ID : SWX-RM5ACL

Standard 47 CFR FCC Part 15.247

Operating Band : 5725 MHz – 5850 MHz

Equipment Class: DTS

Applicant : Ubiquiti Networks,Inc.

Manufacturer 12F, No. 105, Song Ren Rd., Sin Yi District,

Taipei 110, Taiwan

The product sample received on Oct. 23, 2013 and completely tested on Mar. 17, 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:

1190

SPORTON INTERNATIONAL INC. Page No. : 1 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information	5
1.2	Accessories	
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	
3	TRANSMITTER TEST RESULT	19
3.1	AC Power-line Conducted Emissions	19
3.2	6dB Bandwidth	26
3.3	RF Output Power	30
3.4	Power Spectral Density	37
3.5	Transmitter Bandedge Emissions	41
3.6	Transmitter Unwanted Emissions	46
4	TEST EQUIPMENT AND CALIBRATION DATA	139

APPENDIX A. TEST PHOTOS

APPENDIX B. PHOTOGRAPHS OF EUT

Report No.: FR3O2401-02AI

Summary of Test Result

Report No.: FR3O2401-02AI

	Conformance Test Specifications									
Report Ref. Std. Clause Description Measured		Measured	Limit	Result						
1.1.3	15.203	Antenna Requirement	Antenna connector mechanism complied	FCC 15.203	Complied					
3.1	15.207	AC Power-line Conducted Emissions	[dBuV]: 0.1632710MHz 38.78 (Margin 16.52dB) - AV 55.32(Margin 9.98dB) - QP	FCC 15.207	Complied					
3.2	15.247(a)	Bandwidth	6dB Bandwidth [MHz] a / n(HT20):16.41 n(HT40):35.04 ac(VHT20):17.62 ac(VHT40):35.68 ac(VHT80): 75.04	≥500kHz	Complied					
3.3	15.247(b)	RF Output Power (Maximum Peak Conducted Output Power)	Power [dBm]:29.90	Power [dBm]:30	Complied					
3.4	15.247(d)	Power Spectral Density	PSD [dBm/100kHz]:-2.09	PSD [dBm/MHz]:17 replace 8dBm/3kHz	Complied					
3.5	15.247(c)	Transmitter Bandedge Emissions	Non-Restricted Bands: 5724.970MHz: 24.24dB	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied					
3.6	15.247(c)	Transmitter Radiated Unwanted Emissions	Restricted Bands [dBuV/m at 1m]:11570MHz 76.80 (Margin 6.74dB) - PK 62.51 (Margin 1.03dB) - AV	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied					

SPORTON INTERNATIONAL INC. Page No. : 3 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



Revision History

Report No.: FR3O2401-02AI

Report No.	Version	Description	Issued Date
FR3O2401-02AI	Rev. 01	Initial issue of report	Apr. 07, 2014

SPORTON INTERNATIONAL INC. Page No. : 4 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



1 General Description

1.1 Information

1.1.1 Product Details

The equipment is Access Point. There are three samples of EUT. The difference are the outward appearances and antenna gain. In this report, the EUT have three antenna gain to test. For more detailed features description, please refer to the specifications or user's manual.

Report No.: FR3O2401-02AI

1.1.2 RF General Information

RF General Information (Antenna Gain :13dBi)								
Frequency IEEE Std. Range (MHz) 802.11		Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)			
5725-5850	а	5745-5825	149-165 [5]	1	27.29			
5725-5850	n(HT20)	5745-5825	149-165 [5]	2	29.66			
5725-5850	n(HT40)	5755-5795	151-159 [2]	2	29.90			
5725-5850	ac(VHT20)	5745-5825	149-165 [5]	2	29.79			
5725-5850	ac(VHT40)	5755-5795	151-159 [2]	2	29.80			
5725-5850	ac(VHT80)	5775	155 [1]	2	28.56			

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

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

Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

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.)

RF General Information (Antenna Gain :20dBi)								
Frequency IEEE Std. Range (MHz) 802.11		Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)			
5725-5850	а	5745-5825	149-165 [5]	1	29.47			
5725-5850	n(HT20)	5745-5825	149-165 [5]	2	29.90			
5725-5850	n(HT40)	5755-5795	151-159 [2]	2	29.90			
5725-5850	ac(VHT20)	5745-5825	149-165 [5]	2	29.88			
5725-5850	ac(VHT40)	5755-5795	151-159 [2]	2	29.80			
5725-5850	ac(VHT80)	5775	155 [1]	2	28.56			

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

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

Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

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 140
TEL: 886-3-327-3456 Report Version : Rev. 01



RF General Information (Antenna Gain :34dBi)								
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)			
5725-5850	а	5745-5825	149-165 [5]	1	29.47			
5725-5850	n(HT20)	5745-5825	149-165 [5]	2	29.90			
5725-5850	n(HT40)	5755-5795	151-159 [2]	2	29.90			
5725-5850	ac(VHT20)	5745-5825	149-165 [5]	2	29.88			
5725-5850	ac(VHT40)	5755-5795	151-159 [2]	2	29.80			
5725-5850	ac(VHT80)	5775	155 [1]	2	28.56			

Report No.: FR3O2401-02AI

- Note 1: RF output power specifies that Maximum Peak Conducted Output Power.
- Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- 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.)

1.1.3 Antenna Information

Antenna Category						
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.					

	Antenna General Information						
No.	No. Ant. Cat. Ant. Type Gain (dBi)						
1	Integral	Omni	13.00				
2	Integral	Sector	20.00				
3	Integral	Dish	34.00				

Reminder: The EUT was pre-tested Antenna Port 1 and Antenna Port 2 for single chain, the worst case was Antenna Port 2. Therefore only the test data recorded in this report.

SPORTON INTERNATIONAL INC. Page No. : 6 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



1.1.4 Type of EUT

	,,,,,					
	Identify EUT					
EU	Γ Serial Number	N/A				
Pre	sentation of Equipment	☐ Production ; ☐ Pre-Production ; ☐ Prototype				
		Type of EUT				
\boxtimes	Stand-alone					
	Combined (EUT where the	ne radio part is fully integrated within another device)				
	Combined Equipment - Brand Name / Model No.:					
	Plug-in radio (EUT intend	led for a variety of host systems)				
	Host System - Brand Name / Model No.:					
	Other:					
1.1.	1.1.5 Test Signal Duty Cycle					
	Operated Mode for Worst Duty Cycle					
	0	Conservation of the second				

Report No.: FR3O2401-02AI

	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) N _{TX} Power Duty Factor [dB] – (10 log 1/x)						
\boxtimes	98.61% - IEEE 802.11a	1	0.06				
\boxtimes	98.51% - IEEE 802.11n (HT20)	2	0.07				
	94.73% - IEEE 802.11n (HT40)	2	0.23				
	98.52% - IEEE 802.11ac (VHT20)	2	0.06				
\boxtimes	97.10% - IEEE 802.11ac (VHT40)	2	0.13				
\boxtimes	92.30% - IEEE 802.11ac (VHT80)	2	0.35				

Note 1: RF Output Power Plots w/o Duty Factor

1.1.6 EUT Operational Condition

Supply Voltage	☐ AC mains	□ DC	System
Type of DC Source	☐ Internal DC supply		☐ Battery

SPORTON INTERNATIONAL INC. Page No. : 7 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



1.2 Accessories

Accessories Information							
PoE	Brand Name	UBIQUITI	Model Name	GP-A240-050			
FUE	Power Rating	I/P: 100-240V ~ 50/60Hz 0.3A; O/P: 24V===0.5A		P: 24V===0.5A			

Report No.: FR3O2401-02AI

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

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 558074
- FCC KDB 789033
- FCC KDB 644545 D01
- FCC KDB 644545 D02
- FCC KDB 662911

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 Condition			Test Site No. Test Engineer		Test Environment		
	AC Conduction			CO04-HY	Zeus	20.6°C / 44%		
RF Conducted				TH01-HY	Cain	22.3°C / 61%		
Radiated Emission				03CH03-HY	Allen 20.6°C / 44%			

SPORTON INTERNATIONAL INC. Page No. : 8 of 140
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.: FR3O2401-02AI

М	easurement Uncertainty	
Test Item		Uncertainty
AC power-line conducted emissions		±2.26 dB
Emission bandwidth, 6dB bandwidth		±1.42 %
RF output power, conducted		±0.63 dB
Power density, conducted		±0.81 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.38 dB
	0.15 – 30 MHz	±0.42 dB
	30 – 1000 MHz	±0.51 dB
	1 – 18 GHz	±0.67 dB
	18 – 40 GHz	±0.83 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.49 dB
	0.15 – 30 MHz	±2.28 dB
	30 – 1000 MHz	±2.56 dB
	1 – 18 GHz	±3.59 dB
	18 – 40 GHz	±3.82 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±3 %
DC and low frequency voltages		±3 %
Time		±1.42 %
Duty Cycle		±1.42 %

SPORTON INTERNATIONAL INC. Page No. : 9 of 140
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	Modulation Mode Transmit Chains (N _{TX}) Data Rate / MCS Worst Data Rate / M								
11a,6-54Mbps	1	6-54Mbps	6 Mbps						
HT20,M8-15	2	M8-15	MCS 8						
HT40,M8-15	2	M8-15	MCS 8						
VHT20,M0-8	2	M0-8	MCS 0						
VHT40,M0-9	2	M0-9	MCS 0						
VHT80,M0-9	2	M0-9	MCS 0						

Report No.: FR3O2401-02AI

2.2 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (5725-5850MHz band) / (Antenna Gain :13dBi)								
Test Software Version	Athe	Atheros Radio Test 2 (ART2-GUI)_ 2.3						
		Test Frequency (MHz)						
Modulation Mode	N _{TX}		NCB: 20MHz		NCB: 40MHz		NCB: 80MHz	
		5745	5785	5825	5755	5795	5775	
11a,6-54Mbps	1	19	19	19	-	-	-	
HT20,M8-15	2	18.5	18.5	18.5	-	-	-	
HT40,M8-15	2	-	-	-	19	19	-	
VHT20,M0-8	2	18.5	18.5	18.5	-	-	-	
VHT40,M0-9	2	-	-	-	18.5	19	-	
VHT80,M0-9	2	-	-	-	-	-	19.5	

SPORTON INTERNATIONAL INC. Page No. : 10 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



The Worst Case Power Setting Parameter (5725-5850MHz band) / (Antenna Gain :20dBi)								
Test Software Version	Athe	Atheros Radio Test 2 (ART2-GUI)_ 2.3						
		Test Frequency (MHz)						
Modulation Mode	N _{TX}	NCB: 20N		CB: 20MHz		40MHz	NCB: 80MHz	
		5745	5785	5825	5755	5795	5775	
11a,6-54Mbps	1	20.5	20.5	19.5	-	-	-	
HT20,M8-15	2	18.5	19	18.5	-	-	-	
HT40,M8-15	2	-	-	-	19	19	-	
VHT20,M0-8	2	18.5	18.5	19	-	-	-	
VHT40,M0-9	2	-	-	-	18.5	19	-	
VHT80,M0-9	2	-	-	-	-	-	19.5	

Report No.: FR3O2401-02AI

The Worst Case Power Setting Parameter (5725-5850MHz band) / (Antenna Gain :34dBi)								
Test Software Version	Athe	ros Radio T	est 2 (ART2	2-GUI)_ 2.3				
		Test Frequency (MHz)						
Modulation Mode	N _{TX}	NCB: 20MHz			NCB: 40MHz		NCB: 80MHz	
		5745	5785	5825	5755	5795	5775	
11a,6-54Mbps	1	20.5	20.5	21	-	-	-	
HT20,M8-15	2	18.5	19	19	-	-	-	
HT40,M8-15	2	-	-	-	19	19	-	
VHT20,M0-8	2	18.5	18.5	19	-	-	-	
VHT40,M0-9	2	-	-	-	18.5	19	-	
VHT80,M0-9	2	-	-	-	-	-	19.5	

SPORTON INTERNATIONAL INC. Page No. : 11 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests					
Tests Item	AC power-line conducted emissions				
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz				
Operating Mode	Operating Mode Description				
1	PoE Power & Radio link (WLAN) / Antenna Gain :13dBi				
2	PoE Power & Radio link (WLAN) / Antenna Gain :20dBi				
3	PoE Power & Radio link (WLAN) / Antenna Gain :34dBi				

Report No.: FR3O2401-02AI

The Worst Case Mode for Following Conformance Tests				
Tests Item	RF Output Power, Power Spectral Density, 6 dB Bandwidth			
Test Condition	Conducted measurement at transmit chains			
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT80			

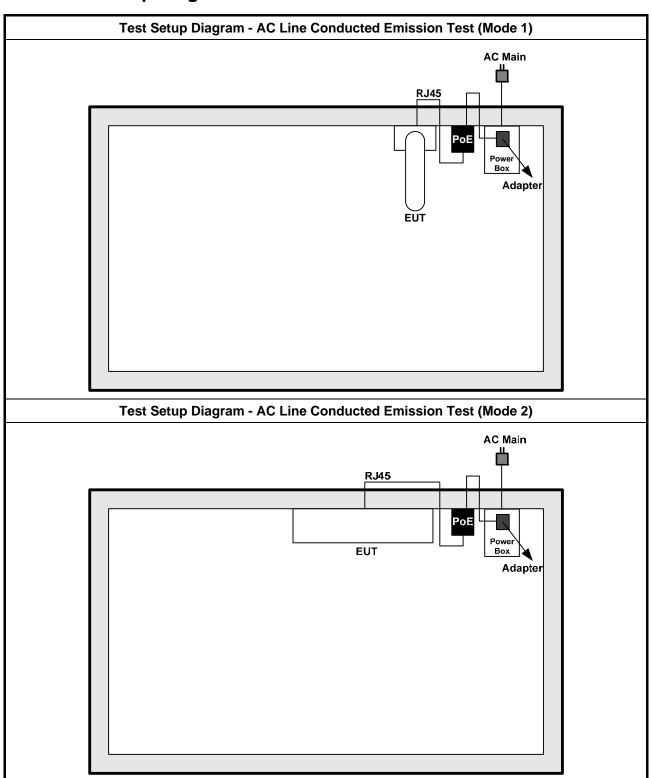
Th	ne Worst Case Mode for Fo	ollowing Conformance Te	sts		
Tests Item	Transmitter Radiated Unwanted Emissions Transmitter Radiated Bandedge Emissions				
Test Condition	Radiated measurement				
	EUT will be placed in fixed position. Antenna Gain :13dBi :The worst planes is X. Antenna Gain :20dBi / 34dBi :The worst planes is Z.				
User Position	EUT will be placed in mobile position and operating multiple positions. EUT shall be performed two orthogonal planes.				
	EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions. EUT shall be performed two or three orthogonal planes.				
Operating Mode					
Modulation Mode	11a, HT20, HT40, VHT20,	VHT40, VHT80			
	X Plane	Y Plane	Z Plane		
Orthogonal Planes of EUT					

SPORTON INTERNATIONAL INC. Page No. : 12 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



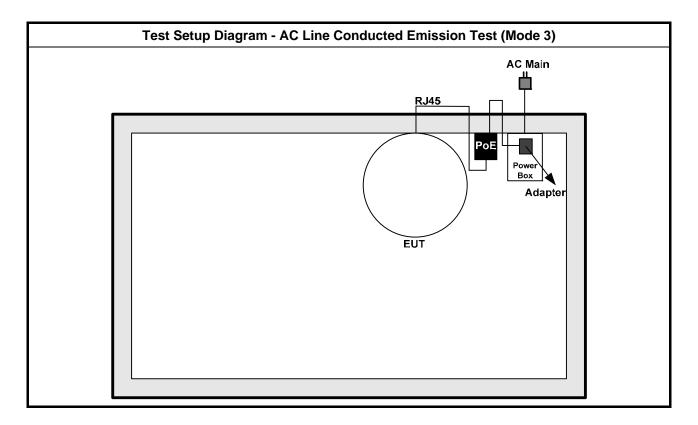
Report No. : FR3O2401-02AI

2.4 Test Setup Diagram



SPORTON INTERNATIONAL INC. Page No. : 13 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

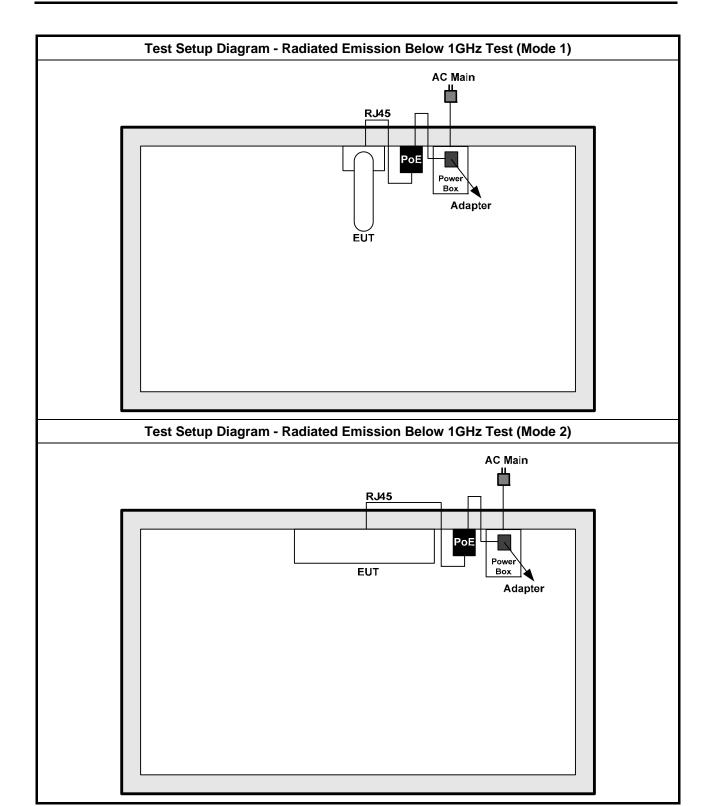
Report No. : FR3O2401-02AI



SPORTON INTERNATIONAL INC. Page No. : 14 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



Report No. : FR3O2401-02AI



SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : 15 of 140

Report Version

: Rev. 01

Test Setup Diagram - Radiated Emission Below 1GHz Test (Mode 3)

AC Main

Power

Box

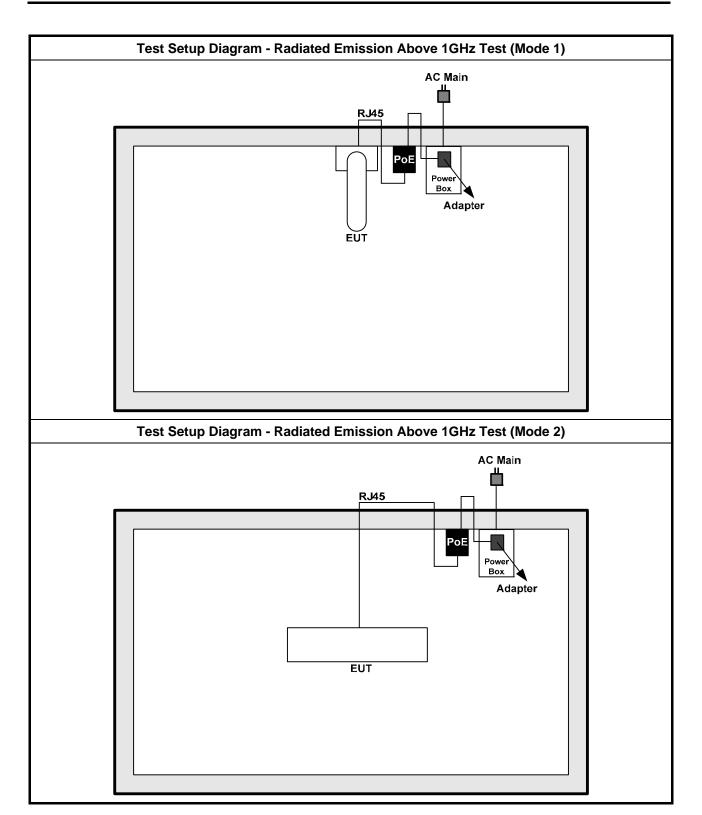
Adapter

Report No.: FR3O2401-02AI

SPORTON INTERNATIONAL INC. Page No. : 16 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



Report No.: FR3O2401-02AI



SPORTON INTERNATIONAL INC.

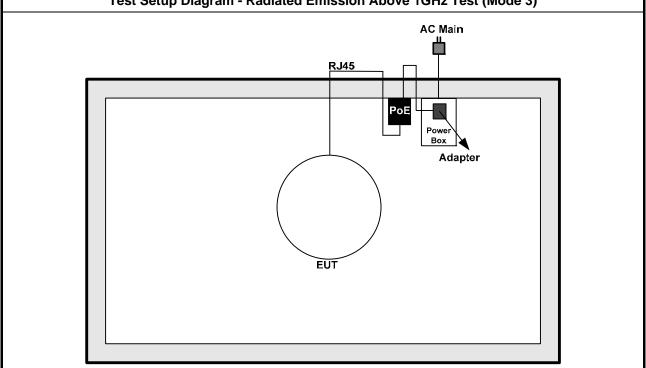
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : 17 of 140 Report Version : Rev. 01

Test Setup Diagram - Radiated Emission Above 1GHz Test (Mode 3) AC Main

Report No.: FR3O2401-02AI

: 18 of 140

: Rev. 01



SPORTON INTERNATIONAL INC. Page No. TEL: 886-3-327-3456 Report Version



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.: FR3O2401-02AI

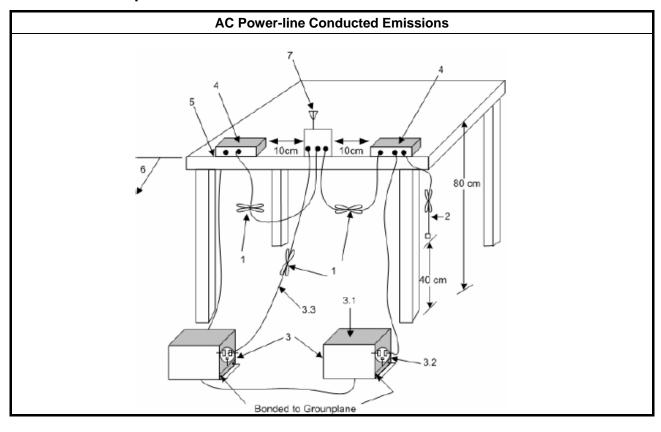
3.1.2 Measuring Instruments

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.

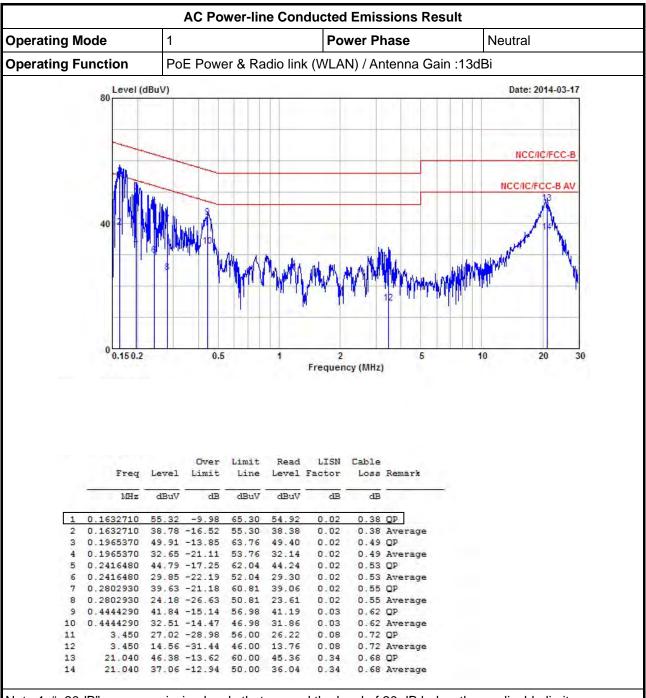
3.1.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 19 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



3.1.5 Test Result of AC Power-line Conducted Emissions



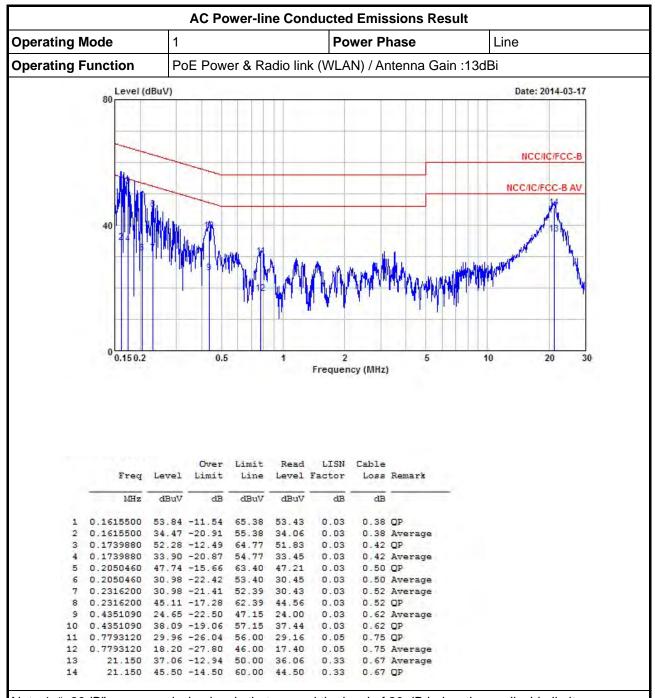
Report No.: FR3O2401-02AI

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. : 20 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

CC Test Report No.: FR3O2401-02AI



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. : 21 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

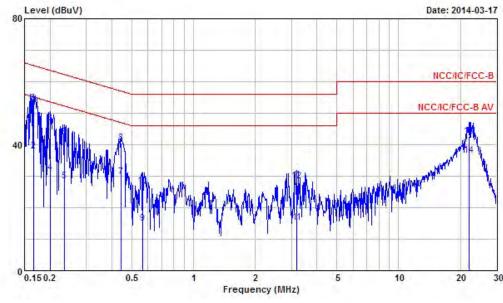
AC Power-line Conducted Emissions Result

Operating Mode 2 Power Phase Neutral

Operating Function PoE Power & Radio link (WLAN) / Antenna Gain :20dBi

Date: 2014-03-17

Report No.: FR3O2401-02AI



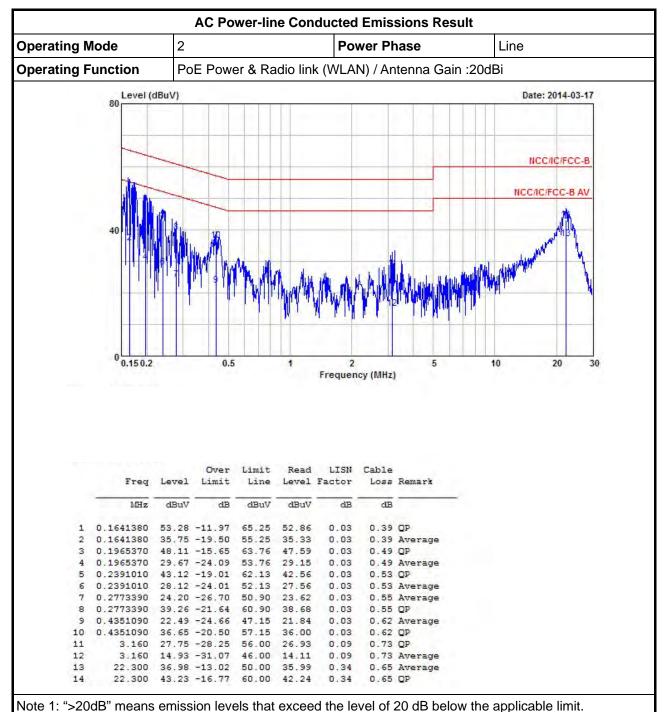
			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1658860	52.61	-12.55	65.16	52.20	0.02	0.39	QP
2	0.1658860	38.01	-17.15	55.16	37.60	0.02	0.39	Average
3	0.2007470	46.80	-16.78	63.58	46.28	0.02	0.50	QP
4	0.2007470	31.17	-22.41	53.58	30.65	0.02	0.50	Average
5	0.2353310	28.53	-23.73	52.26	27.99	0.02	0.52	Average
6	0.2353310	42.44	-19.82	62.26	41.90	0.02	0.52	QP
7	0.4420810	29.64	-17.38	47.02	28.99	0.03	0.62	Average
8	0.4420810	40.46	-16.56	57.02	39.81	0.03	0.62	QP
9	0.5640910	15.02	-30.98	46.00	14.31	0.04	0.67	Average
10	0.5640910	26.91	-29.09	56.00	26.20	0.04	0.67	QP
11	3.190	15.33	-30.67	46.00	14.52	0.08	0.73	Average
12	3.190	28.43	-27.57	56.00	27.62	0.08	0.73	QP
13	21.950	42.58	-17.42	60.00	41.57	0.35	0.66	QP
14	21.950	36.51	-13.49	50.00	35.50	0.35	0.66	Average

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. : 22 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

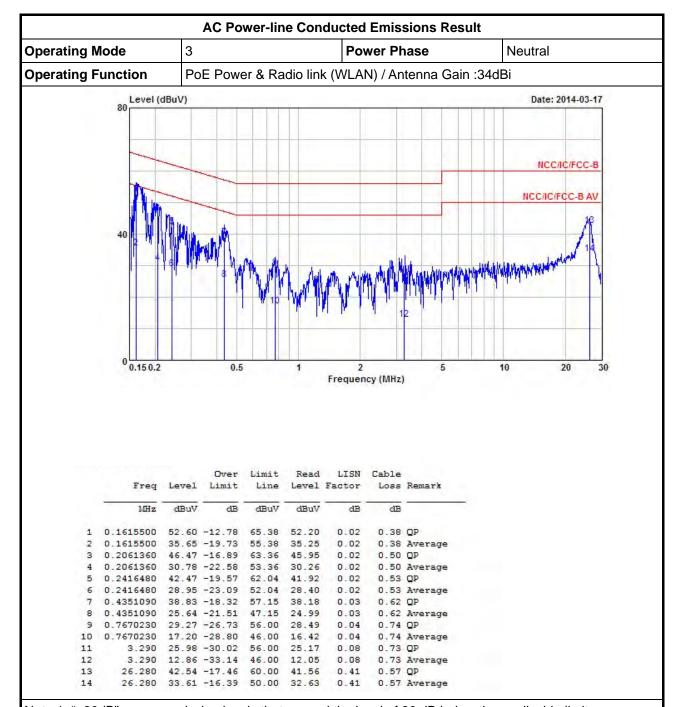
CC Test Report No.: FR3O2401-02AI



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

SPORTON INTERNATIONAL INC. Page No. : 23 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

CC Test Report No.: FR3O2401-02AI



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. : 24 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

AC Power-line Conducted Emissions Result Operating Mode Power Phase Line PoE Power & Radio link (WLAN) / Antenna Gain :34dBi **Operating Function** Level (dBuV) Date: 2014-03-17 80 NCC/IC/FCC-B NCC/IC/FCC-B AV 0.5 1 2 5 10 20 30 Frequency (MHz) Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark MHz dB dBuV dBuV dB dBuV dB 1 0.1606960 51.55 -13.88 65.43 51.15 0.03 0.37 QP 0.1606960 32.97 -22.46 55.43 32.57 0.03 0.37 Average 3 0.1721540 35.54 -19.32 54.86 35.09 0.03 0.42 Average 4 0.1721540 51.41 -13.45 64.86 50.96 0.03 0.42 QP 0.2028850 30.14 -23.35 53.49 29.61 0.50 Average 0.03 6 0.2028850 45.54 -17.95 63.49 45.01 0.03 0.50 QP 0.2429320 25.99 -26.01 52.00 25.43 0.03 0.53 Average 8 0.2429320 41.62 -20.38 62.00 41.06 0.03 0.53 OP 9 0.4305230 19.90 -27.34 47.24 19.25 0.03 0.62 Average 0.03 10 0.4305230 33.54 -23.70 57.24 32.89 0.62 QP 3.210 16.44 -29.56 46.00 15.62 0.73 Average 11 0.09

Report No.: FR3O2401-02AI

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.)

0.09

0.38

0.38

0.73 QP

0.59 QP

0.59 Average

3.210 29.50 -26.50 56.00 28.68

25.730 41.80 -18.20 60.00 40.83

25.730 35.26 -14.74 50.00 34.29

SPORTON INTERNATIONAL INC. Page No. : 25 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

FAX: 886-3-327-0973

12

13

3.2 6dB Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
6 dB bandwidth ≥ 500 kHz.

Report No.: FR3O2401-02AI

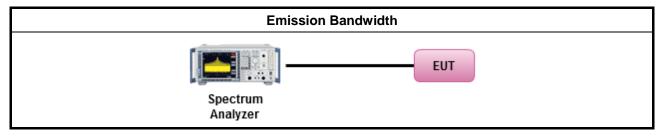
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

			Test Method
\boxtimes	For	he emission	on bandwidth shall be measured using one of the options below:
	\boxtimes	Refer as	FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
		Refer as	FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
		Refer as	ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
\boxtimes	For	conducted	measurement.
		The EUT	supports single transmit chain and measurements performed on this transmit chain.
	\boxtimes	The EUT	supports diversity transmitting and the results on transmit chain port 2 is the worst case.
	\boxtimes	The EUT	supports multiple transmit chains using options given below:
			on 1: Multiple transmit chains measurements need to be performed on one of the active smit chains (antenna outputs). All measurement had be performed on transmit chains 2.
			on 2: Multiple transmit chains measurements need to be performed on each transmit ns individually (antenna outputs). All measurement had be performed on all transmit ns.

3.2.4 Test Setup



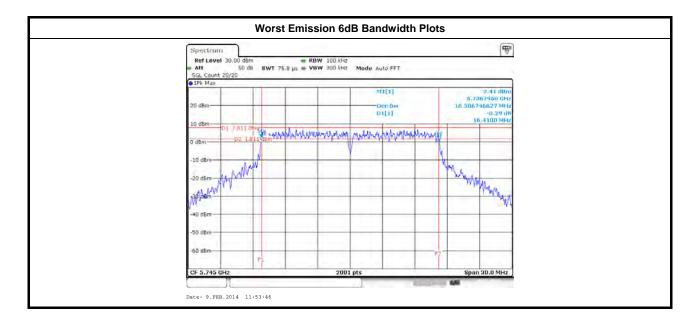
SPORTON INTERNATIONAL INC. Page No. : 26 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



3.2.5 Test Result of Emission Bandwidth

		E	mission Bandwidth R	esult / Antenna Gain :	13dBi			
Condit	ion		Emission Bandwidth (MHz)					
Madulatian Mada	N	Freq.	99% Ba	ndwidth	6dB Bandwidth			
Modulation Mode	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2		
11a	1	5745	-	16.50	-	16.41		
11a	1	5785	-	16.50	-	16.50		
11a	1	5825	-	16.52	-	16.48		
HT20,M8-15	2	5745	17.70	17.70	17.62	17.71		
HT20,M8-15	2	5785	17.67	17.69	17.70	17.56		
HT20,M8-15	2	5825	17.67	17.70	17.62	17.61		
HT40,M8-15	2	5755	36.26	36.26	35.36	35.72		
HT40,M8-15	2	5795	36.26	36.22	35.80	35.04		
VHT20,M0-8	2	5745	17.75	17.76	17.73	17.77		
VHT20,M0-8	2	5785	17.75	17.66	17.74	17.62		
VHT20,M0-8	2	5825	17.73	17.67	17.71	17.68		
VHT40,M0-9	2	5755	36.22	36.22	36.32	35.68		
VHT40,M0-9	2	5795	36.22	36.18	35.68	36.04		
VHT80,M0-9	2	5775	75.64	75.48	75.68	75.04		
Limi	t	Ī	N/A ≥500 kHz					
Resu	lt		Complied					
ote 1: N _{TX} = Number	of Tran	smit Chains						

Report No.: FR3O2401-02AI

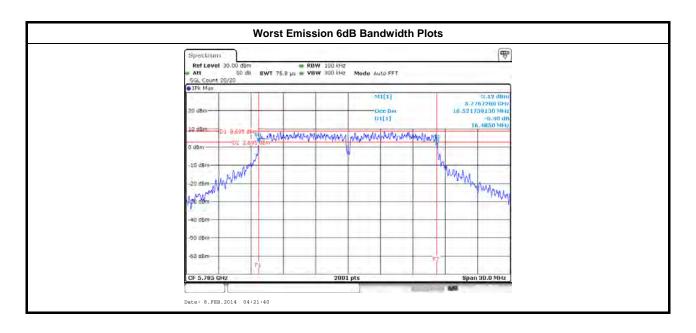


SPORTON INTERNATIONAL INC. Page No. : 27 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



FCC Test Report Report No.: FR3O2401-02AI

Condit	ion		Emission Bandwidth (MHz)					
		Freg.	99% Ba	99% Bandwidth 6di				
Modulation Mode	N _{TX}	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2	
11a	1	5745	-	16.52	-	16.53		
11a	1	5785	-	16.52	-	16.48		
11a	1	5825	-	16.53	-	16.50		
HT20,M8-15	2	5745	17.70	17.70	17.62	17.71		
HT20,M8-15	2	5785	17.78	17.75	17.73	17.59		
HT20,M8-15	2	5825	17.67	17.70	17.62	17.61		
HT40,M8-15	2	5755	36.26	36.26	35.36	35.72		
HT40,M8-15	2	5795	36.26	36.22	35.80	35.04		
VHT20,M0-8	2	5745	17.75	17.76	17.73	17.77		
VHT20,M0-8	2	5785	17.75	17.66	17.74	17.62		
VHT20,M0-8	2	5825	17.73	17.73	17.71	17.71		
VHT40,M0-9	2	5755	36.22	36.22	36.32	35.68		
VHT40,M0-9	2	5795	36.22	36.18	35.68	36.04		
VHT80,M0-9	2	5775	75.64	75.48	75.68	75.04		
Limi	t		N	/A	≥500	kHz		
Resu	lt			Com	plied			

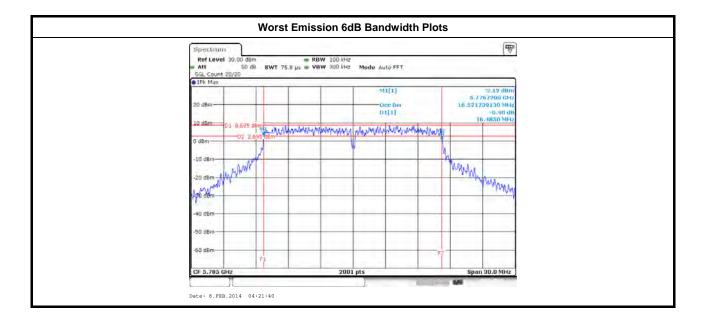


SPORTON INTERNATIONAL INC. Page No. : 28 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



Condit	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	1	5745	-	16.52	-	16.53		
11a	1	5785	-	16.52	-	16.48		
11a	1	5825	-	16.52	-	16.50		
HT20,M8-15	2	5745	17.70	17.70	17.62	17.71		
HT20,M8-15	2	5785	17.78	17.75	17.73	17.59		
HT20,M8-15	2	5825	17.72	17.69	17.56	17.59		
HT40,M8-15	2	5755	36.26	36.26	35.36	35.72		
HT40,M8-15	2	5795	36.26	36.22	35.80	35.04		
VHT20,M0-8	2	5745	17.75	17.76	17.73	17.77		
VHT20,M0-8	2	5785	17.75	17.66	17.74	17.62		
VHT20,M0-8	2	5825	17.73	17.73	17.71	17.71		
VHT40,M0-9	2	5755	36.22	36.22	36.32	35.68		
VHT40,M0-9	2	5795	36.22	36.18	35.68	36.04		
VHT80,M0-9	2	5775	75.64	75.48	75.68	75.04		
Limi	t		N	/A	≥500) kHz		
Resu	lt			Com	plied			

Report No.: FR3O2401-02AI



SPORTON INTERNATIONAL INC. Page No. : 29 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

3.3 RF Output Power

3.3.1 RF Output Power Limit

		RF Output Power Limit
Max	imum	Peak Conducted Output Power or Maximum Conducted Output Power Limit
\boxtimes	5725	-5850 MHz Band:
		$f G_{TX} \le 6 dBi$, then $P_{Out} \le 30 dBm (1 W)$
	F	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	⊠ I	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30$ dBm
e.i.r	.p. Po	wer Limit:
\boxtimes	5725	-5850 MHz Band
		Point-to-multipoint systems (P2M): P _{eirp} ≤ 36 dBm (4 W)
	\boxtimes	Point-to-point systems (P2P): N/A
G_{TX}	= the	ximum peak conducted output power or maximum conducted output power in dBm, maximum transmitting antenna directional gain in dBi. r.p. Power in dBm.

Report No.: FR3O2401-02AI

3.3.2 Measuring Instruments

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

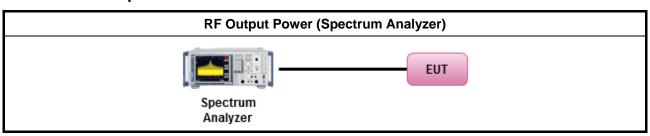
SPORTON INTERNATIONAL INC. Page No. : 30 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

3.3.3 Test Procedures

	Test Method
Max	imum Peak Conducted Output Power
	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
\boxtimes	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (integrated band power method).
	Refer as FCC KDB 558074, clause 9.1.3 Option 2 (peak power meter for VBW ≥ DTS BW)
Max	imum Conducted Output Power
[dut	y cycle ≥ 98% or external video / power trigger]
\boxtimes	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty	cycle < 98% and average over on/off periods with duty factor
	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF	power meter and average over on/off periods with duty factor or gated trigger
	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM (using an RF average power meter).
For	conducted measurement.
	The EUT supports single transmit chain and measurements performed on this transmit chain.
\boxtimes	The EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.
\boxtimes	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.
\boxtimes	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.: FR3O2401-02AI

3.3.4 Test Setup



SPORTON INTERNATIONAL INC. Page No. : 31 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

3.3.5 Test Result of Maximum Peak Conducted Output Power

	Maximum Peak Conducted Output Power Result / Antenna Gain :13dBi										
Condit	ion		RF Output Power (dBm)								
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power			
11a	1	5745	-	27.19	27.19	30.00	13.00	40.19			
11a	1	5785	-	27.29	27.29	30.00	13.00	40.29			
11a	1	5825	-	26.90	26.90	30.00	13.00	39.90			
HT20,M8-15	2	5745	25.64	27.47	29.66	30.00	13.00	42.66			
HT20,M8-15	2	5785	25.36	27.30	29.45	30.00	13.00	42.45			
HT20,M8-15	2	5825	25.08	26.86	29.07	30.00	13.00	42.07			
HT40,M8-15	2	5755	25.71	27.81	29.90	30.00	13.00	42.90			
HT40,M8-15	2	5795	25.76	27.66	29.82	30.00	13.00	42.82			
VHT20,M0-8	2	5745	25.54	27.70	29.76	30.00	13.00	42.76			
VHT20,M0-8	2	5785	25.61	27.70	29.79	30.00	13.00	42.79			
VHT20,M0-8	2	5825	24.97	26.73	28.95	30.00	13.00	41.95			
VHT40,M0-9	2	5755	25.44	27.50	29.60	30.00	13.00	42.60			
VHT40,M0-9	2	5795	25.71	27.65	29.80	30.00	13.00	42.80			
VHT80,M0-9	2	5775	25.55	25.55	28.56	30.00	13.00	41.56			
Resu	ılt										

Report No.: FR3O2401-02AI

	Ма	ximum Pe	ak Conducted	Output Power	Result / Anten	na Gain :20dB	i					
Condit	Condition				RF Output Power (dBm)							
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power				
11a	1	5745	-	29.47	29.47	30.00	20.00	49.47				
11a	1	5785	-	29.06	29.06	30.00	20.00	49.06				
11a	1	5825	-	27.76	27.76	30.00	20.00	47.76				
HT20,M8-15	2	5745	25.64	27.47	29.66	30.00	20.00	49.66				
HT20,M8-15	2	5785	25.71	27.82	29.90	30.00	20.00	49.90				
HT20,M8-15	2	5825	25.08	26.86	29.07	30.00	20.00	49.07				
HT40,M8-15	2	5755	25.71	27.81	29.90	30.00	20.00	49.90				
HT40,M8-15	2	5795	25.76	27.66	29.82	30.00	20.00	49.82				
VHT20,M0-8	2	5745	25.54	27.70	29.76	30.00	20.00	49.76				
VHT20,M0-8	2	5785	25.61	27.70	29.79	30.00	20.00	49.79				
VHT20,M0-8	2	5825	25.81	27.72	29.88	30.00	20.00	49.88				
VHT40,M0-9	2	5755	25.44	27.50	29.60	30.00	20.00	49.60				
VHT40,M0-9	2	5795	25.71	27.65	29.80	30.00	20.00	49.80				
VHT80,M0-9	2	5775	25.55	25.55	28.56	30.00	20.00	48.56				
Resu	ılt											

SPORTON INTERNATIONAL INC. Page No. : 32 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



	Ma	ximum Pe	ak Conducted	Output Power	Result / Anten	na Gain :34dB	i			
Condi	tion			RF Output Power (dBm)						
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	1	5745	-	29.47	29.47	30.00	34.00	63.47		
11a	1	5785	-	29.06	29.06	30.00	34.00	63.06		
11a	1	5825	-	29.22	29.22	30.00	34.00	63.22		
HT20,M8-15	2	5745	25.64	27.47	29.66	30.00	34.00	63.66		
HT20,M8-15	2	5785	25.71	27.82	29.90	30.00	34.00	63.90		
HT20,M8-15	2	5825	25.96	27.62	29.88	30.00	34.00	63.88		
HT40,M8-15	2	5755	25.71	27.81	29.90	30.00	34.00	63.90		
HT40,M8-15	2	5795	25.76	27.66	29.82	30.00	34.00	63.82		
VHT20,M0-8	2	5745	25.54	27.70	29.76	30.00	34.00	63.76		
VHT20,M0-8	2	5785	25.61	27.70	29.79	30.00	34.00	63.79		
VHT20,M0-8	2	5825	25.81	27.72	29.88	30.00	34.00	63.88		
VHT40,M0-9	2	5755	25.44	27.50	29.60	30.00	34.00	63.60		
VHT40,M0-9	2	5795	25.71	27.65	29.80	30.00	34.00	63.80		
VHT80,M0-9	2	5775	25.55	25.55	28.56	30.00	34.00	62.56		
Resi	ult			•						

Report No. : FR3O2401-02AI

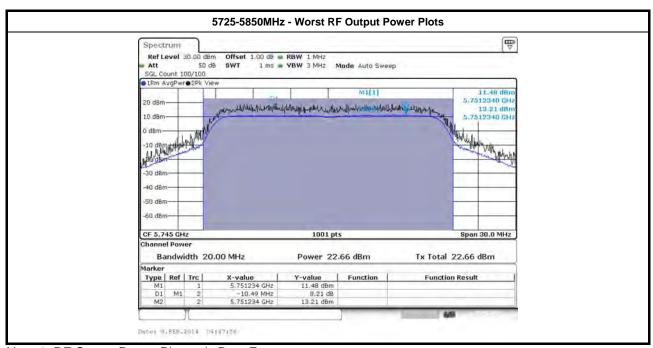
SPORTON INTERNATIONAL INC. Page No. : 33 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



3.3.6 Test Result of Maximum Conducted Output Power

		Maximum	Conducted Ou	tput Power Re	sult / Antenna	Gain :13dBi			
Condit		RF Output Power (dBm)							
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power	
11a	1	5745	-	22.24	22.24	30.00	13.00	35.24	
11a	1	5785	-	22.33	22.33	30.00	13.00	35.33	
11a	1	5825	-	21.99	21.99	30.00	13.00	34.99	
HT20,M8-15	2	5745	20.59	22.52	24.67	30.00	13.00	37.67	
HT20,M8-15	2	5785	20.44	22.33	24.49	30.00	13.00	37.49	
HT20,M8-15	2	5825	20.12	22.08	24.22	30.00	13.00	37.22	
HT40,M8-15	2	5755	20.58	22.61	24.73	30.00	13.00	37.73	
HT40,M8-15	2	5795	20.72	22.43	24.67	30.00	13.00	37.67	
VHT20,M0-8	2	5745	20.45	22.72	24.75	30.00	13.00	37.75	
VHT20,M0-8	2	5785	20.63	22.67	24.78	30.00	13.00	37.78	
VHT20,M0-8	2	5825	20.05	21.84	24.05	30.00	13.00	37.05	
VHT40,M0-9	2	5755	20.34	22.41	24.51	30.00	13.00	37.51	
VHT40,M0-9	2	5795	20.60	22.73	24.80	30.00	13.00	37.80	
VHT80,M0-9	2	5775	20.52	22.56	24.67	30.00	13.00	37.67	
Resu	lt								

Report No.: FR3O2401-02AI



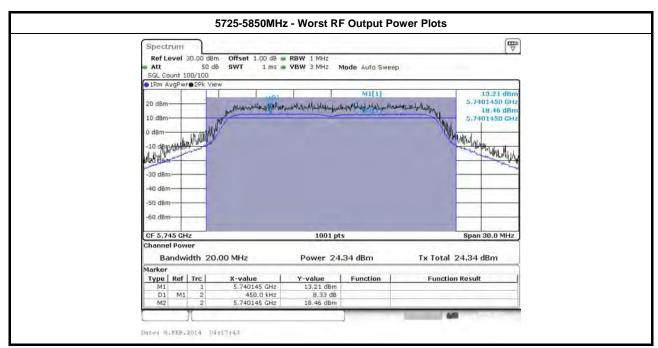
Note 1: RF Output Power Plots w/o Duty Factor

SPORTON INTERNATIONAL INC. Page No. : 34 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



Maximum Conducted Output Power Result / Antenna Gain :20dBi										
Condit	tion		RF Output Power (dBm)							
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	1	5745	-	24.40	24.40	30.00	20.00	44.40		
11a	1	5785	-	24.14	24.14	30.00	20.00	44.14		
11a	1	5825	-	22.75	22.75	30.00	20.00	42.75		
HT20,M8-15	2	5745	20.59	22.52	24.67	30.00	20.00	44.67		
HT20,M8-15	2	5785	20.85	22.89	24.99	30.00	20.00	44.99		
HT20,M8-15	2	5825	20.12	22.08	24.22	30.00	20.00	44.22		
HT40,M8-15	2	5755	20.58	22.61	24.73	30.00	20.00	44.73		
HT40,M8-15	2	5795	20.72	22.43	24.67	30.00	20.00	44.67		
VHT20,M0-8	2	5745	20.45	22.72	24.75	30.00	20.00	44.75		
VHT20,M0-8	2	5785	20.63	22.67	24.78	30.00	20.00	44.78		
VHT20,M0-8	2	5825	20.83	22.69	24.87	30.00	20.00	44.87		
VHT40,M0-9	2	5755	20.34	22.41	24.51	30.00	20.00	44.51		
VHT40,M0-9	2	5795	20.60	22.73	24.80	30.00	20.00	44.80		
VHT80,M0-9	2	5775	20.52	22.56	24.67	30.00	20.00	44.67		
Resu	ılt									

Report No.: FR3O2401-02AI



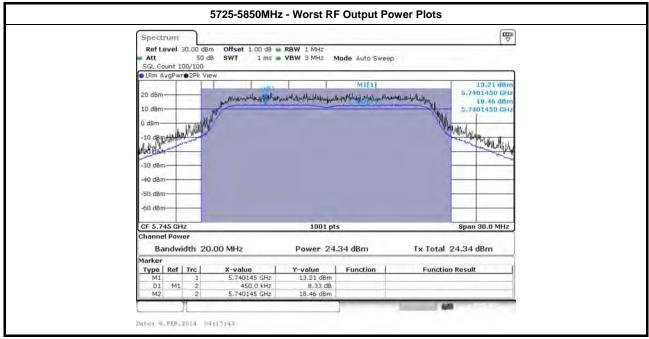
Note 1: RF Output Power Plots w/o Duty Factor

SPORTON INTERNATIONAL INC. Page No. : 35 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



Maximum Conducted Output Power Result / Antenna Gain :34dBi								
Condition			RF Output Power (dBm)					
Modulation Mode	NTX	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power
11a	1	5745	-	24.40	24.40	30.00	34.00	58.40
11a	1	5785	-	24.14	24.14	30.00	34.00	58.14
11a	1	5825	-	24.32	24.32	30.00	34.00	58.32
HT20,M8-15	2	5745	20.59	22.52	24.67	30.00	34.00	58.67
HT20,M8-15	2	5785	20.85	22.89	24.99	30.00	34.00	58.99
HT20,M8-15	2	5825	20.83	22.62	24.82	30.00	34.00	58.82
HT40,M8-15	2	5755	20.58	22.61	24.73	30.00	34.00	58.73
HT40,M8-15	2	5795	20.72	22.43	24.67	30.00	34.00	58.67
VHT20,M0-8	2	5745	20.45	22.72	24.75	30.00	34.00	58.75
VHT20,M0-8	2	5785	20.63	22.67	24.78	30.00	34.00	58.78
VHT20,M0-8	2	5825	20.83	22.69	24.87	30.00	34.00	58.87
VHT40,M0-9	2	5755	20.34	22.41	24.51	30.00	34.00	58.51
VHT40,M0-9	2	5795	20.60	22.73	24.80	30.00	34.00	58.80
VHT80,M0-9	2	5775	20.52	22.56	24.67	30.00	34.00	58.67
Result								

Report No.: FR3O2401-02AI



Note 1: RF Output Power Plots w/o Duty Factor

SPORTON INTERNATIONAL INC. Page No. : 36 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

	Power Spectral Density Limit
\boxtimes	Power Spectral Density (PSD) ≤ 8 dBm/3kHz

Report No.: FR3O2401-02AI

3.4.2 Measuring Instruments

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

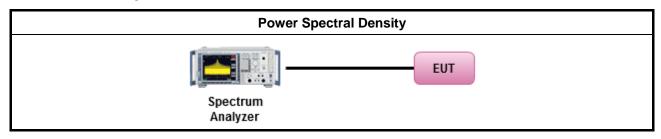
3.4.3 Test Procedures

		Test Method
	outp the c cond of th	k power spectral density procedures that the same method as used to determine the conducted out power. If maximum peak conducted output power was measured to demonstrate compliance to output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum ducted output power was measured to demonstrate compliance to the output power limit, then one we average PSD procedures shall be used, as applicable based on the following criteria (the peak procedure is also an acceptable option).
	\boxtimes	Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz;detector=peak)
	[dut	/ cycle ≥ 98% or external video / power trigger]
	\boxtimes	Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).
		Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-1 Alt. (slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-2 (spectral trace averaging).
		Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)
\boxtimes	For	conducted measurement.
		The EUT supports single transmit chain and measurements performed on this transmit chain.
	\boxtimes	The EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.
	\boxtimes	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 spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N _{TX} output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		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.

SPORTON INTERNATIONAL INC. Page No. : 37 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



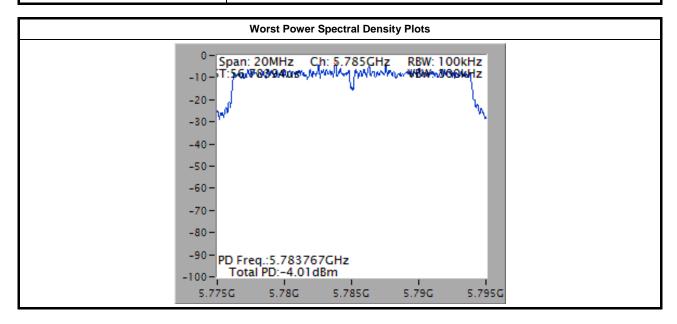
3.4.4 Test Setup



Report No.: FR3O2401-02AI

3.4.5 Test Result of Power Spectral Density

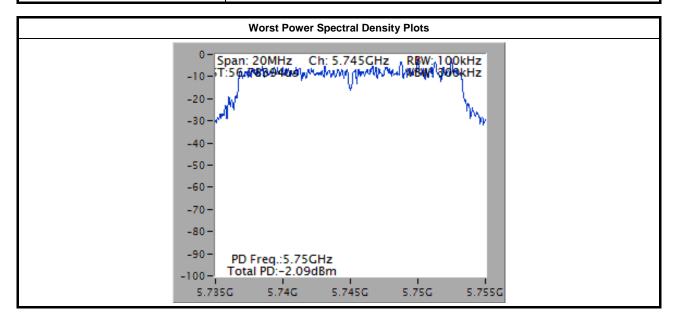
	Power Spectral Density Result / Antenna Gain :13dBi							
Condition			Power Spectral Density					
Modulation Mode	N _{TX}	Freq. (MHz)	Power Spectral Density (dBm/100kHz)	Power Limit (dBm/3kHz)				
11a	1	5745	-7.19	8.00				
11a	1	5785	-6.89	8.00				
11a	1	5825	-7.77	8.00				
HT20,M8-15	2	5745	-4.45	8.00				
HT20,M8-15	2	5785	-4.01	8.00				
HT20,M8-15	2	5825	-4.72	8.00				
HT40,M8-15	2	5755	-6.00	8.00				
HT40,M8-15	2	5795	-6.80	8.00				
VHT20,M0-8	2	5745	-4.10	8.00				
VHT20,M0-8	2	5785	-5.56	8.00				
VHT20,M0-8	2	5825	-4.26	8.00				
VHT40,M0-9	2	5755	-7.26	8.00				
VHT40,M0-9	2	5795	-8.75	8.00				
VHT80,M0-9	2	5775	-9.34	8.00				
Resi	ılt		Compl	lied				



SPORTON INTERNATIONAL INC. Page No. : 38 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report	Report No. : FR3O2401-02AI
	_

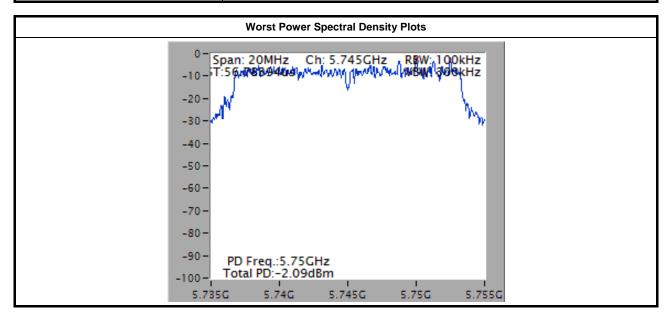
	Power Spectral Density Result / Antenna Gain :20dBi							
Condition			Power Spectral Density					
Modulation Mode	N _{TX}	Freq. (MHz)	Power Spectral Density (dBm/100kHz)	Power Limit (dBm/3kHz)				
11a	1	5745	-2.09	8.00				
11a	1	5785	-5.26	8.00				
11a	1	5825	-6.79	8.00				
HT20,M8-15	2	5745	-4.45	8.00				
HT20,M8-15	2	5785	-4.96	8.00				
HT20,M8-15	2	5825	-4.72	8.00				
HT40,M8-15	2	5755	-6.00	8.00				
HT40,M8-15	2	5795	-6.80	8.00				
VHT20,M0-8	2	5745	-4.10	8.00				
VHT20,M0-8	2	5785	-5.56	8.00				
VHT20,M0-8	2	5825	-3.49	8.00				
VHT40,M0-9	2	5755	-7.26	8.00				
VHT40,M0-9	2	5795	-8.75	8.00				
VHT80,M0-9	2	5775	-9.34	8.00				
Resi	ılt		Compli	ed				



SPORTON INTERNATIONAL INC. Page No. : 39 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report Report No.: FR3O2401-02AI

		Powe	r Spectral Density Result / Antenna Gain :34	dBi			
Condition			Power Spectral Density				
Modulation Mode	N _{TX}	Freq. (MHz)	Power Spectral Density (dBm/100kHz)	Power Limit (dBm/3kHz)			
11a	1	5745	-2.09	8.00			
11a	1	5785	-5.26	8.00			
11a	1	5825	-5.30	8.00			
HT20,M8-15	2	5745	-4.45	8.00			
HT20,M8-15	2	5785	-4.96	8.00			
HT20,M8-15	2	5825	-5.36	8.00			
HT40,M8-15	2	5755	-6.00	8.00			
HT40,M8-15	2	5795	-6.80	8.00			
VHT20,M0-8	2	5745	-4.10	8.00			
VHT20,M0-8	2	5785	-5.56	8.00			
VHT20,M0-8	2	5825	-3.49	8.00			
VHT40,M0-9	2	5755	-7.26	8.00			
VHT40,M0-9	2	5795	-8.75	8.00			
VHT80,M0-9	2	5775	-9.34	8.00			
Resi	ult		Compli	ed			

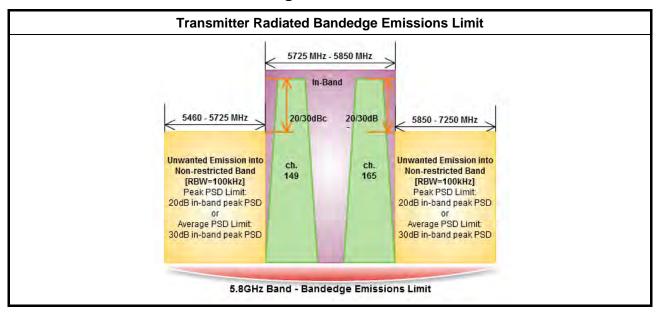


SPORTON INTERNATIONAL INC. Page No. : 40 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



3.5 Transmitter Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit



Report No.: FR3O2401-02AI

3.5.2 Measuring Instruments

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

SPORTON INTERNATIONAL INC. Page No. : 41 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



3.5.3 Test Procedures

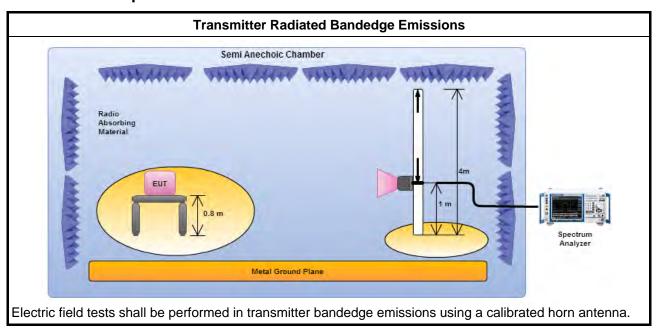
		Test Method						
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].						
\boxtimes		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.						
\boxtimes	For the transmitter unwanted emissions shall be measured using following options below:							
	\boxtimes	Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.						
	\boxtimes	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.						
		Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)						
		Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).						
		Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).						
		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 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.						
\boxtimes	For	the transmitter bandedge emissions shall be measured using following options below:						
		Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).						
	\boxtimes	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		radiated measurement, refer as FCC KDB 558074, clause 12.2.7 and ANSI C63.10, clause 6.6. distance is 1m.						

Report No.: FR3O2401-02AI

SPORTON INTERNATIONAL INC. Page No. : 42 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



3.5.4 Test Setup



Report No.: FR3O2401-02AI

SPORTON INTERNATIONAL INC. Page No. : 43 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

3.5.5 Transmitter Radiated Bandedge Emissions

5725-5850MHz Transmitter Radiated Bandedge Emissions - Mode 1								
Modulation	N _{TX}	Test Freq. (MHz)	In-band PSD [i] (dBuV/100kHz)	Freq. (MHz)	Out-band PSD [o] (dBuV/100kHz)	[i] – [o] (dB)	Limit (dB)	Pol.
11a	1	5720	127.74	5725.000	86.78	40.96	20	Н
11a	1	5825	128.81	5852.130	75.86	52.95	20	Н
HT20,M8-15	2	5720	128.19	5725.000	85.02	43.17	20	Н
HT20,M8-15	2	5825	130.33	5850.090	82.55	47.78	20	Н
HT40,M8-15	2	5710	127.17	5719.900	95.72	31.45	20	Н
HT40,M8-15	2	5795	128.41	5851.400	76.53	51.88	20	Н
VHT20,M0-8	2	5720	129.05	5724.410	85.11	43.94	20	Н
VHT20,M0-8	2	5825	129.92	5850.090	78.90	51.02	20	Н
VHT40,M0-9	2	5710	127.47	5720.200	95.81	31.66	20	Н
VHT40,M0-9	2	5795	127.59	5852.600	75.83	51.76	20	Н
VHT80,M0-9	2	5775	127.26	5850.000	96.64	30.62	20	Н
Note 1: Measure	ment wo	rst emission	s of receive ante	nna polarization		•		•

Report No.: FR3O2401-02AI

	5725-5850MHz Transmitter Radiated Bandedge Emissions - Mode 2								
Modulation	N _{TX}	Test Freq. (MHz)	In-band PSD [i] (dBuV/100kHz)	Freq. (MHz)	Out-band PSD [o] (dBuV/100kHz)	[i] – [o] (dB)	Limit (dB)	Pol.	
11a	1	5720	133.95	5724.970	93.06	40.89	20	Н	
11a	1	5825	123.66	5860.870	81.28	42.38	20	Н	
HT20,M8-15	2	5720	135.22	5723.220	95.83	39.39	20	Н	
HT20,M8-15	2	5825	132.21	5856.530	91.87	40.34	20	Н	
HT40,M8-15	2	5710	128.83	5719.930	95.39	33.44	20	Н	
HT40,M8-15	2	5795	132.40	5861.900	92.84	39.56	20	Н	
VHT20,M0-8	2	5720	140.01	5724.970	115.77	24.24	20	Н	
VHT20,M0-8	2	5825	132.84	5858.670	92.03	40.81	20	Н	
VHT40,M0-9	2	5710	131.53	5719.900	100.45	31.08	20	Н	
VHT40,M0-9	2	5795	131.86	5866.300	91.29	40.57	20	Н	
VHT80,M0-9	2	5775	131.20	5851.470	98.37	32.83	20	Н	
Note 1: Measure	ment wo	rst emission	s of receive ante	nna polarization					

SPORTON INTERNATIONAL INC. Page No. : 44 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



Modulation	N _{TX}	Test Freq. (MHz)	In-band PSD [i] (dBuV/100kHz)	Freq. (MHz)	Out-band PSD [o] (dBuV/100kHz)	[i] – [o] (dB)	Limit (dB)	Pol.
11a	1	5720	132.23	5724.410	93.88	38.35	20	Н
11a	1	5825	132.81	5856.690	91.99	40.82	20	Н
HT20,M8-15	2	5720	135.95	5724.690	94.55	41.40	20	Н
HT20,M8-15	2	5825	135.18	5860.930	91.92	43.26	20	Н
HT40,M8-15	2	5710	133.86	5719.900	103.34	30.52	20	Н
HT40,M8-15	2	5795	132.71	5869.800	91.68	41.03	20	Н
VHT20,M0-8	2	5720	135.15	5724.410	93.82	41.33	20	Н
VHT20,M0-8	2	5825	134.12	5864.170	92.13	41.99	20	Н
VHT40,M0-9	2	5710	132.88	5723.800	103.10	29.78	20	Н
VHT40,M0-9	2	5795	132.83	5869.800	91.57	41.26	20	Н
VHT80,M0-9	2	5775	130.07	5850.110	94.16	35.91	20	Н

Report No. : FR3O2401-02AI

SPORTON INTERNATIONAL INC. Page No. : 45 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



3.6 Transmitter Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

Restricted Band Emissions 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.: FR3O2401-02AI

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 Limit				
RF output power procedure	Limit (dB)			
Peak output power procedure	20			
Average output power procedure	30			

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.6.2 Measuring Instruments

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

SPORTON INTERNATIONAL INC. Page No. : 46 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



3.6.3 Test Procedures

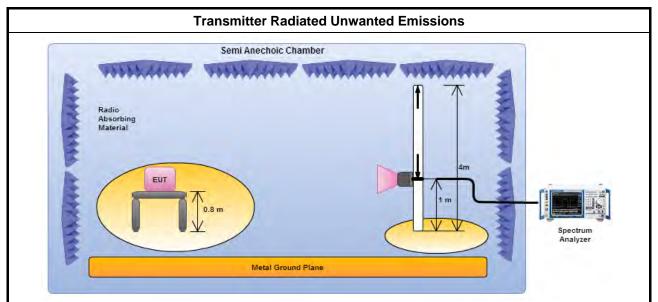
		Test Method
	perf equi extra dista	isurements may be performed at a distance other than the limit distance provided they are not formed in the near field and the emissions to be measured can be detected by the measurement pment. When performing measurements at a distance other than that specified, the results shall be appointed 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 issurements).
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
\boxtimes	For	the transmitter unwanted emissions shall be measured using following options below:
	\boxtimes	Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.
	\boxtimes	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
		Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☐ Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		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 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.
		Refer as FCC KDB 558074, clause 12.2.3 measurement procedure Quasi-Peak limit.
\boxtimes	For	radiated measurement, refer as FCC KDB 558074, clause 12.2.7.
	\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 1m.
\boxtimes	The	any unwanted emissions level shall not exceed the fundamental emission level.
		implitude of spurious emissions that are attenuated by more than 20 dB below the permissible value no need to be reported.

Report No.: FR3O2401-02AI

SPORTON INTERNATIONAL INC. Page No. : 47 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



3.6.4 Test Setup



Report No.: FR3O2401-02AI

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 and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.

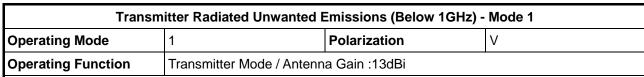
3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

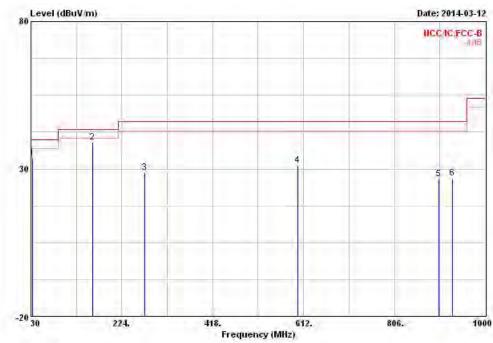
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

SPORTON INTERNATIONAL INC. Page No. : 48 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report No.: FR3O2401-02AI

3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)





	200	20.00	Over			Antenna	6000	Preamp	2000	Ant	Table
	Freq	Level	Limit	Line	rever	Factor	Loss	Factor	Kemark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
18	32.910	33.74	-6.26	40.00	43.23	17.22	0.90	27.61	Peak		
2 @	160.950	39.17	-4.33	43.50	54.22	10.00	2.10	27.15	QP		
3	273.470	28.88	-17.12	46.00	39.97	12.92	2.74	26.75	Peak		
4	599.390	31.17	-14.83	46.00	36.57	18.44	4.15	27.99	Peak		
5	901.060	26.73	-19.27	46.00	28.56	20.53	5.19	27.55	Peak		-
6	929.190	26.83	-19.17	46.00	28.31	20.72	5.27	27.47	Peak		-

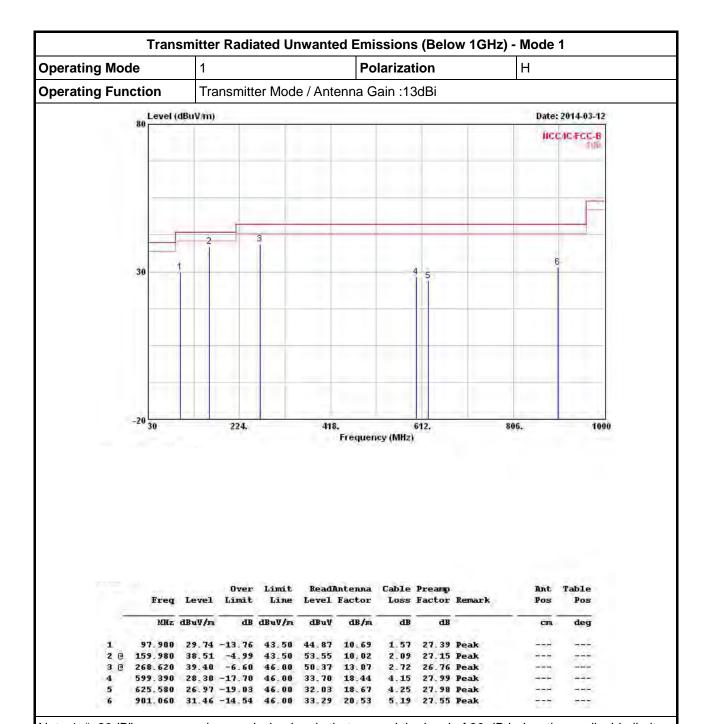
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

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

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

SPORTON INTERNATIONAL INC. Page No. : 49 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report No.: FR3O2401-02AI



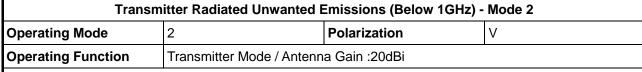
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

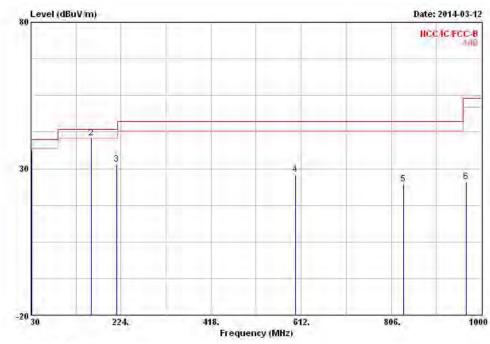
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

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

SPORTON INTERNATIONAL INC. Page No. : 50 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

FCC Test Report No.: FR3O2401-02AI





	Freq	Level	Over Limit		110000000000000000000000000000000000000	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	con	deg
. 19	31.940	36.49	-3.51	40.00	45.47	17.76	0.87	27.61	Peak		966
19	159.980	40.49	-3.01	43.50	55.53	10.02	2.09	27.15	OP	нен	
200	215.270	31.43	-12.07	43.50	46.46	9.51	2.41	26.95	Peak		3444
	599.390	28.05	-17.95	46.00	33.45	18.44	4.15	27.99	Peak		
	832.190	24.84	-21.16	46.00	27.48	20.15	4.93	27.72	Peak		
0	967.020	25.52	-28.48	54.00	26.30	21.19	5.39	27.36	Peak		

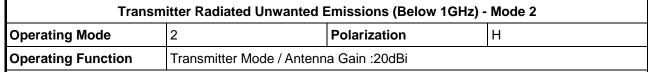
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

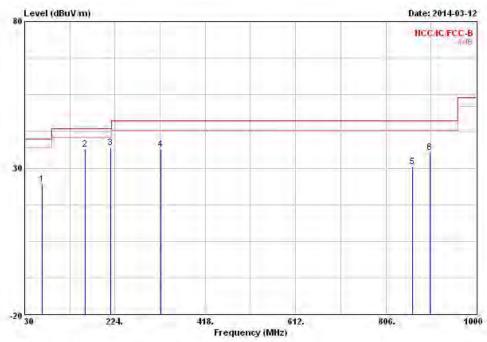
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

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

SPORTON INTERNATIONAL INC. Page No. : 51 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI





	Freq	Level	Over Limit		-	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
-	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	67.830	24.44	-15.56	40.00	43.98	6.65	1.32	27.51	Peak	->-	1424
2	159.980	36.45	-7.05	43.50	51.49	10.02	2.09	27.15	Peak		1777
3 @	215.270	36.79	-6.71	43.50	51.82	9.51	2.41	26.95	Peak	294	1220
4	322.940	36.30	-9.70	46.00	46.40	13.70	3.00	26.80	Peak		
5	863.230	30.47	-15.53	46.00	32.69	20.42	5.00	27.64	Peak	->-	1-2-
6	901.060	35.42	-10.58	46.00	37.25	20.53	5.19	27.55	Peak		1975

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)

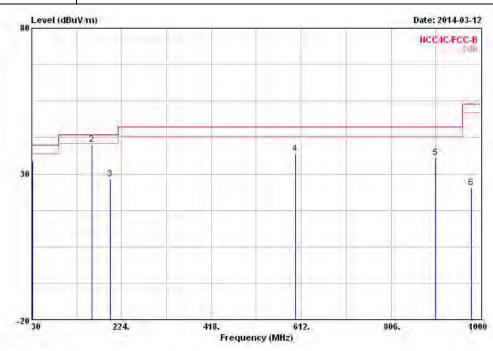
SPORTON INTERNATIONAL INC. Page No. : 52 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Below 1GHz) - Mode 3

Operating Mode 3 Polarization V

Report No.: FR3O2401-02AI

Operating Function Transmitter Mode / Antenna Gain :34dBi



2 @ 159 3 198 4 599	Freq	Freq	Freq	Freq		Limit	Line	Level	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
2 @ 159 3 198 4 599	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg			
3 198 4 599	1.940	34.57	-5.43	40.00	43.55	17.76	0.87	27.61	Peak					
4 599	9.980	40.11	-3.39	43.50	55.15	10.02	2.09	27.15	QP	9996				
R 700	8.780	28.21	-15.29	43.50	43.67	9.22	2.32	27.00	Peak					
	9.390	36.88	-9.12	46.00	42.28	18.44	4.15	27.99	Peak		324			
5 902	2.030	35.51	-10.49	46.00	37.32	20.53	5.20	27.54	Peak					
6 978	8.660	25.39	-28.61	54.00	26.10	21.19	5.43	27.33	Peak					

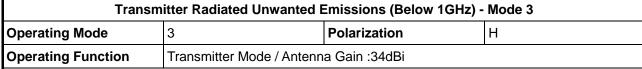
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

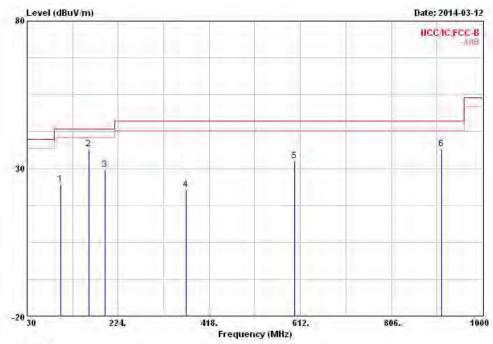
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

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

SPORTON INTERNATIONAL INC. Page No. : 53 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

CC Test Report No. : FR3O2401-02AI





	Freq	Level	Over Limit	200		Antenna Factor	200	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	101.780	24.68	-18.82	43.50	39.23	11.22	1.61	27.38	Peak		
2	160.950	36.61	-6.89	43.50	51.66	10.00	2.10	27.15	Peak		244
3	195.870	29.69	-13.81	43.50	45.23	9.17	2.30	27.01	Peak		
4	369.500	22.95	-23.05	46.00	32.13	14.74	3.20	27.12	Peak	-345-4	200
5	599.390	32.71	-13.29	46.00	38.11	18.44	4.15	27.99	Peak		777
6	912.700	36.74	-9.26	46.00	38.42	20.60	5.23	27.51	Peak		12.22

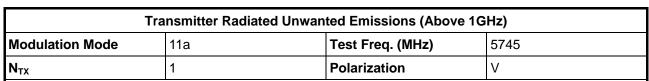
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

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

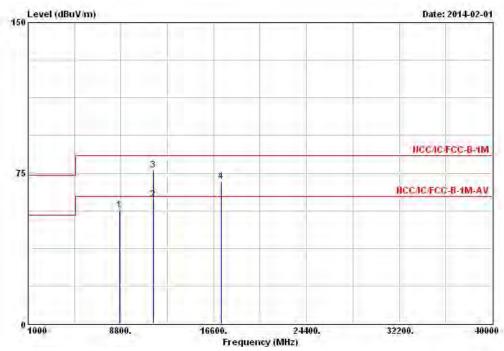
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

SPORTON INTERNATIONAL INC. Page No. : 54 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) - Mode 1



Report No.: FR3O2401-02AI



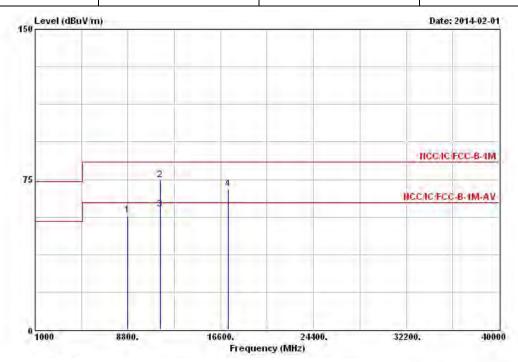
	Freq	Freq Leve		Over Limit			Antenna Factor		3.00		Ant Pos	Table Pos
	MORE		z dBuV/m	BuV/m dB	dBuV/m dl	dBuV	ıV dB/m	dB	dB	-	can	deg
1	8700.	000	56.51			43.02	38.46	7.91	32.88	Peak		
2	@11490.	000	61.94	-1.60	63.54	44.17	40.07	10.04	32.34	Average		
3	11490.	000	76.28	-7.26	83.54	58.51	40.07	10.04	32.34	Peak	9-6	
4	17235	000	70 71			46 69	43 81	11 59	31 38	Dook		

- 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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (136.86 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 55 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI

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



	Freq	Level	Over Limit			Antenna Factor	5500	Preamp Factor		Ant Pos	Table Pos
	Muz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8744.000	57.12			43.74	38.40	7.88	32.90	Peak		1335
2	11490.000	74.74	-8.80	83.54	56.97	40.07	10.04	32.34	Peak	-04	-2-
3	811490.000	60.09	-3.45	63.54	42.32	40.07	10.04	32.34	Average		
4	17235.000	70.36			46.34	43.81	11.59	31.38	Peak	->-	200

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)

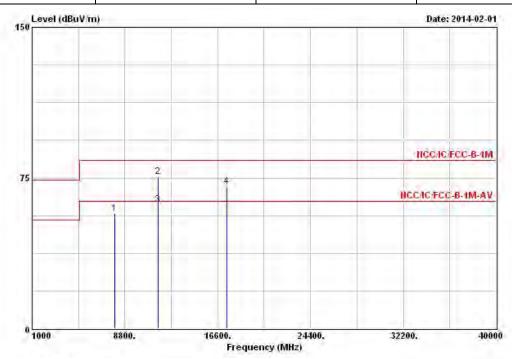
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (136.86 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 56 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI

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



	Freq	Level	Over Limit		- December	Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	can	deg
1	7932.000	57.32			44.17	37.73	8.21	32.79	Peak		
2	11570.000	75.63	-7.91	83.54	57.90	40.04	10.04	32.35	Peak		-2-
3	@11570.000	61.64	-1.90	63.54	43.91	40.04	10.04	32.35	Average		1
4	17355.000	70.59			45.34	44.81	11.85	31.41	Peak		224

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)

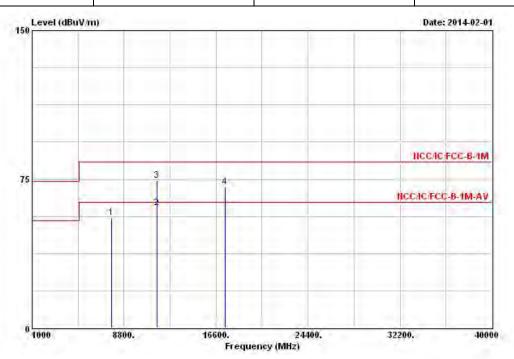
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.78 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 57 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



			Over	Limit	Pondi	Antenna	Cable	Preamo		Ant	Table
	Freq	Level	Limit	100	700000	Factor	-		Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7772.000	55.72			42.98	37.57	7.93	32.76	Peak		224
2	@11570.000	60.38	-3.16	63.54	42.65	40.04	10.04	32.35	Average	-,	77-
3	11570.000	74.57	-8.97	83.54	56.84	40.04	10.04	32.35	Peak		5-4
4	17355.000	71.12			45.87	44.81	11.85	31.41	Peak		5-4

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)

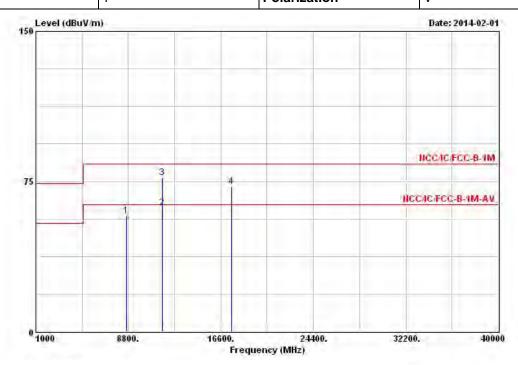
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.78 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 58 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Tı	ansmitter Radiated Unwar	Insmitter Radiated Unwanted Emissions (Above 1G						
Modulation Mode	11a	Test Freq. (MHz)	5825					
N _{TV}	1	Polarization	V					

Report No.: FR3O2401-02AI



	Freq		Level	Over Limit ReadAntenna Cable Preamp Level Limit Line Level Factor Loss Factor Re	Remark	Ant Pos	Table Pos					
		MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	8656	.000	57.74			44.15	38.52	7.93	32.86	Peak		
2	@11650	. 000	61.91	-1.63	63.54	44.25	39.99	10.03	32.36	Average		
3	11650	. 000	76.68	-6.86	83.54	59.02	39.99	10.03	32.36	Peak		
4	17475	. 000	72.23			45.76	45.81	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.)

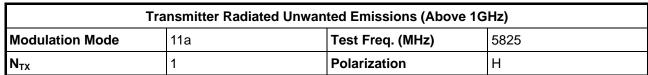
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

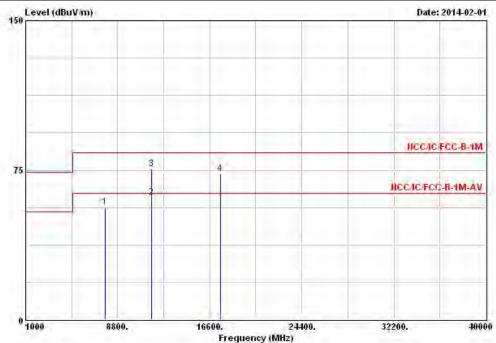
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.23 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 59 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI





	Freq	Level	Over Limit			Antenna Factor	and the same of th	Preamp Factor		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg
1	7736.000	56.60			43.97	37.53	7.86	32.76	Peak		
2	@11650.000	61.22	-2.32	63.54	43.56	39.99	10.03	32.36	Average	224	
3	11650.000	75.49	-8.05	83.54	57.83	39.99	10.03	32.36	Peak		
4	17475.000	73.26			46.79	45.81	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)

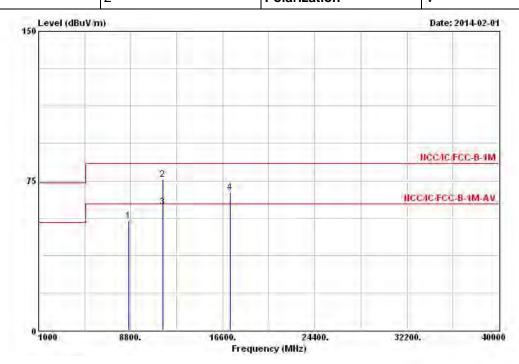
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.23dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 60 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Т	ransmitter Radiated Unwar	ansmitter Radiated Unwanted Emissions (Above 1GI						
Modulation Mode	HT20	Test Freq. (MHz)	5745					
N _{TV}	2	Polarization	V					

Report No.: FR3O2401-02AI



		Level	Over Limit	- Carrier 20 - 0		Antenna Factor		The same of the same		Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8618.000	54.68			41.02	38.56	7.95	32.85	Peak		
2	11490.000	75.47	-8.07	83.54	57.70	40.07	10.04	32.34	Peak		
3	11490.000	61.64	-1.90	63.54	43.87	40.07	10.04	32.34	Average		
4	17235.000	69.24			45.22	43.81	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)

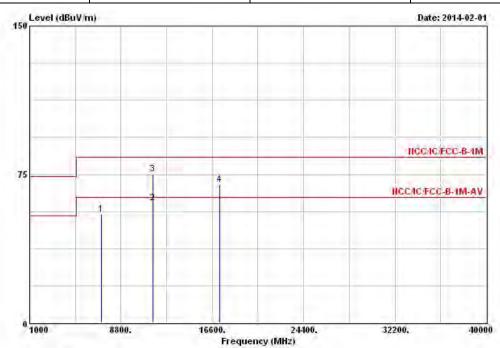
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.09 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 61 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5745								
N_{TX}	2	Polarization	Н								

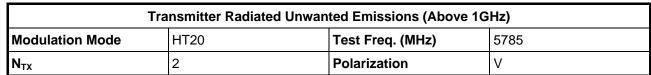


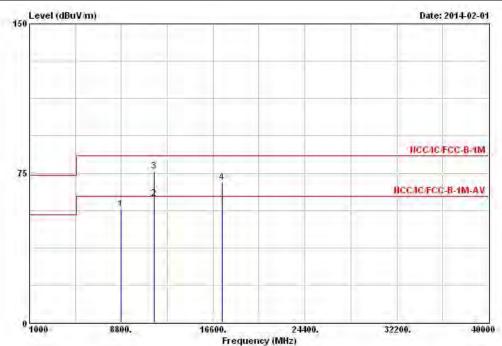
		Level	Over Limit	Limit Line	200	Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos	
	10	ĺz i	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7124.00	0	54.89			43.60	36.77	7.14	32.62	Peak		
2	@11490.00	0	60.73	-2.81	63.54	42.96	40.07	10.04	32.34	Average	-94	
3	11490.00	0	75.26	-8.28	83.54	57.49	40.07	10.04	32.34	Peak		
4	17235.00	0	69.94			45.92	43.81	11.59	31.38	Peak		1204

- 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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.09 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 62 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report	Report No. : FR3O2401-02AI





	9018	Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos	
	. M	Otz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con	deg
1	8760.0	100	56.99			43.61	38.40	7.88	32.90	Peak		
2	@11570.0	00	62.06	-1.48	63.54	44.33	40.04	10.04	32.35	Average		
3	11570.0	000	75.82	-7.72	83.54	58.09	40.04	10.04	32.35	Peak		
4	17355.0	000	70.25			45.00	44.81	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)

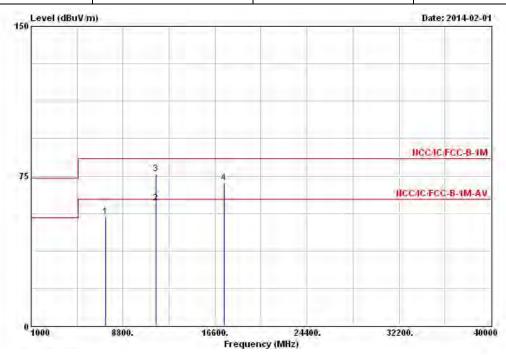
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.72 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 63 of 140
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	Н						

Report No.: FR3O2401-02AI



		Level	Over Limit	Committee of		Antenna Factor		Preamp Factor		Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7308.000	54.44			42.79	37.03	7.28	32.66	Peak		
2	@11570.000	61.50	-2.04	63.54	43.77	40.04	10.04	32.35	Average		
3	11570.000	76.07	-7.47	83.54	58.34	40.04	10.04	32.35	Peak		
4	17355.000	71.73			46.48	44.81	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.)

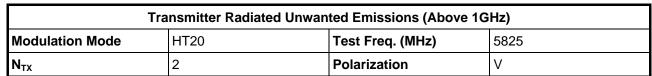
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

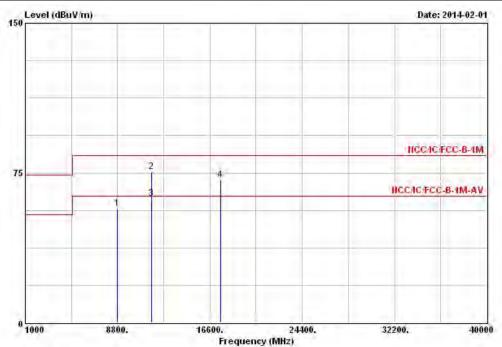
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.72 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 64 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





	Freq	Level	Over Limit	Limit Line		Antenna Factor	200	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8772.000	57.51	=		44.15	38.38	7.88	32.90	Peak		
2	11650.000	75.74	-7.80	83.54	58.08	39.99	10.03	32.36	Peak	224	-2-
3	B11650.000	62.12	-1.42	63.54	44.46	39.99	10.03	32.36	Average		
4	17475.000	71.42			44.95	45.81	12.11	31.45	Peak		200

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)

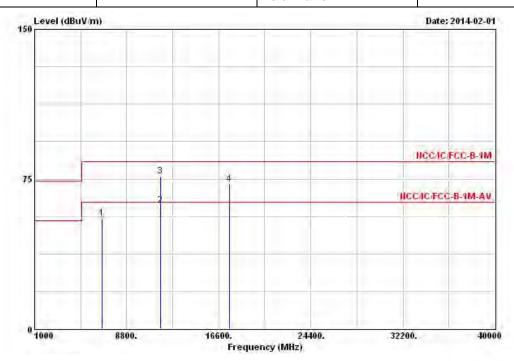
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.67 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 65 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor		Ant Pos	Table Pos
	M(z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	- cm	deg
1	6742.000	55.31			45.03	35.98	6.83	32.53	Peak		
2	11650.000	61.86	-1.68	63.54	44.20	39.99	10.03	32.36	Average		
3	11650.000	76.61	-6.93	83.54	58.95	39.99	10.03	32.36	Peak		
4	17475.000	72.29			45.82	45.81	12.11	31.45	Peak		44-

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.)

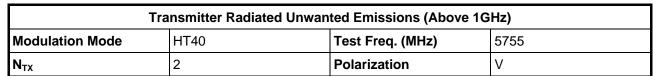
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

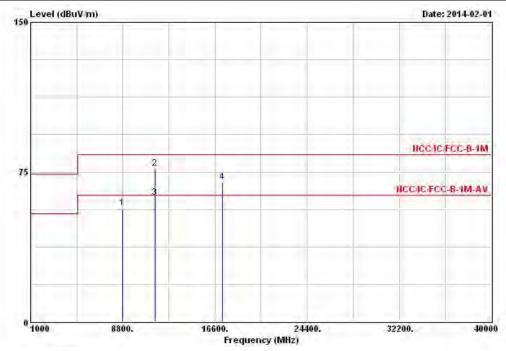
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.67 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 66 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





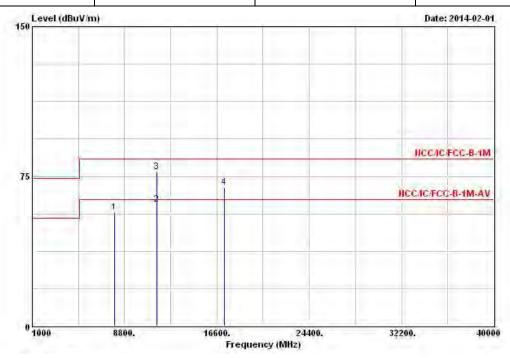
	Fr	eq	Level	Over Limit	- Carlina A		Antenna Factor		Section with the party		Ant Pos	Table Pos
	М.	Иz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	8788.0	00	56.74			43.42	38.36	7.86	32.90	Peak		
2	11510.0	00	76.77	-6.77	83.54	58.97	40.10	10.04	32.34	Peak		
3	@11510.0	00	62.09	-1.45	63.54	44.29	40.10	10.04	32.34	Average		
4	17265.0	00	69.84			45.46	44.09	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (101.67 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 67 of 140 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							

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit		-WORTH	Antenna Factor		100		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7916.000	57.00			43.92	37.72	8.14	32.78	Peak		
2	@11510.000	60.99	-2.55	63.54	43.19	40.10	10.04	32.34	Average		
3	11510.000	77.26	-6.28	83.54	59.46	40.10	10.04	32.34	Peak		
4	17265.000	69.69	W 100000		45.31	44.09	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)

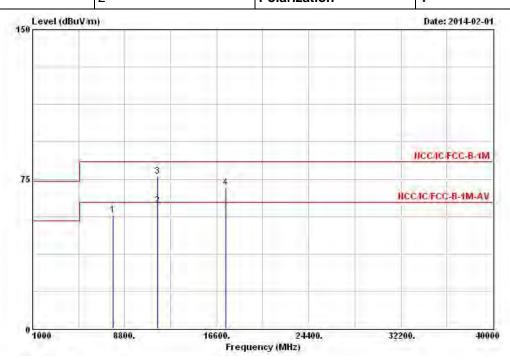
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (101.67 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 68 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Т	ransmitter Radiated Unwar	nted Emissions (Above 1G	iHz)
Modulation Mode	HT40	Test Freq. (MHz)	5795
N _{TV}	2	Polarization	V

Report No.: FR3O2401-02AI



	7.4		Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7796.000	56.76			44.00	37.60	7.93	32.77	Peak		
2	@11590.000	61.59	-1.95	63.54	43.88	40.03	10.03	32.35	Average		
3	11590.000	76.34	-7.20	83.54	58.63	40.03	10.03	32.35	Peak		
4	17385.000	70.67			45.06	45.10	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)

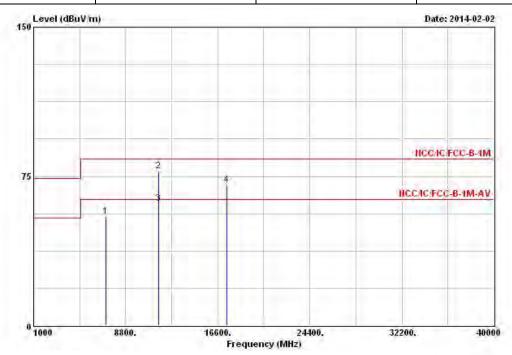
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.41 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 69 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI

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



	200	. amiliar	Over		200	Antenna	200	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7128.000	54.77			43.48	36.77	7.14	32.62	Peak		
2	11590.000	77.50	-6.04	83.54	59.79	40.03	10.03	32.35	Peak		2.25
3	@11590.000	61.39	-2.15	63.54	43.68	40.03	10.03	32.35	Average		
4	17385.000	70.93			45.32	45.10	11.94	31.43	Peak		1200

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)

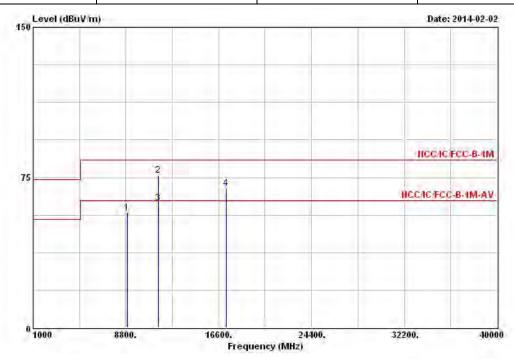
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.41 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 70 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02Al

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT20	Test Freq. (MHz)	5745								
N _{TX}	2	Polarization	V								



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	8880.000	57.25			44.13	38.24	7.82	32.94	Peak		
2	11490.000	76.16	-7.38	83.54	58.39	40.07	10.04	32.34	Peak		224
3	@11490.000	62.11	-1.43	63.54	44.34	40.07	10.04	32.34	Average		
4	17235.000	69.63			45.61	43.81	11.59	31.38	Peak	-)+(-,	200

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)

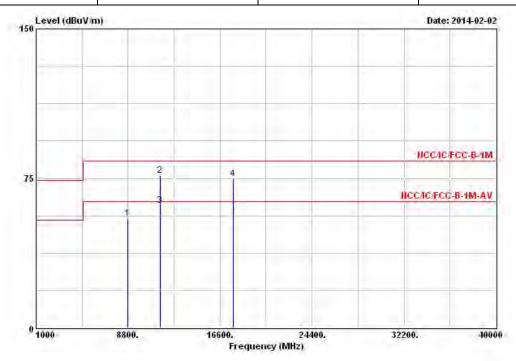
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.00 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 71 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report No. : FR3O2401-02AI

Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode	VHT20	Test Freq. (MHz)	5745				
N_{TX}	2	Polarization	Н				



	Freq	Level	Over Limit			Antenna Factor	and the same of th	3.00		Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8798.000	54.68			41.39	38.34	7.86	32.91	Peak		
2	11490.000	76.41	-7.13	83.54	58.64	40.07	10.04	32.34	Peak		
3	11490.000	61.47	-2.07	63.54	43.70	40.07	10.04	32.34	Average		3
4	17680.000	74.80			46.92	47.31	12.08	31.51	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)

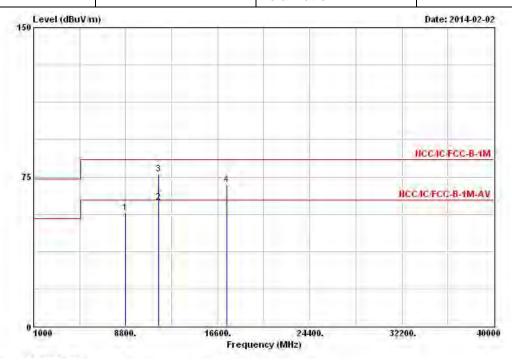
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.00 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 72 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

	Transmitter Radiat	ed Unwanted Emissions (Above	1GHz)
Modulation Mode	VHT20	Test Freq. (MHz)	5785
N _T x	2	Polarization	V

Report No.: FR3O2401-02AI



			Over	Limit	Readi	Intenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	8752.000	56.72			43.34	38.40	7.88	32.90	Peak		-
2	@11570.000	62.02	-1.52	63.54	44.29	40.04	10.04	32.35	Average		
3	11570.000	76.29	-7.25	83.54	58.56	40.04	10.04	32.35	Peak		
4	17355.000	70.95			45.70	44.81	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)

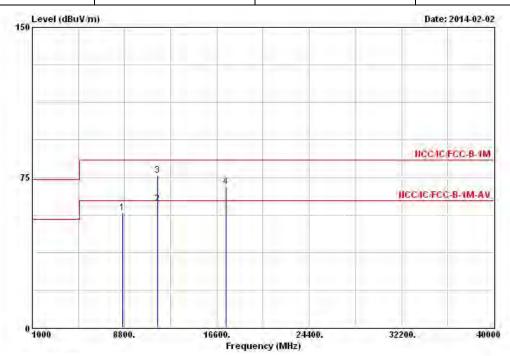
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.05 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 73 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT20	Test Freq. (MHz)	5785								
N _{TX}	2	Polarization	Н								

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	- Carl 10-2		Antenna Factor	4000	Preamp Factor		Ant Pos	Table Pos
	MO(z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	8636.000	57.29			43.67	38.54	7.93	32.85	Peak		
2	@11570.000	61.66	-1.88	63.54	43.93	40.04	10.04	32.35	Average		
3	11570.000	76.00	-7.54	83.54	58.27	40.04	10.04	32.35	Peak		
4	17355.000	70.49			45.24	44.81	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.

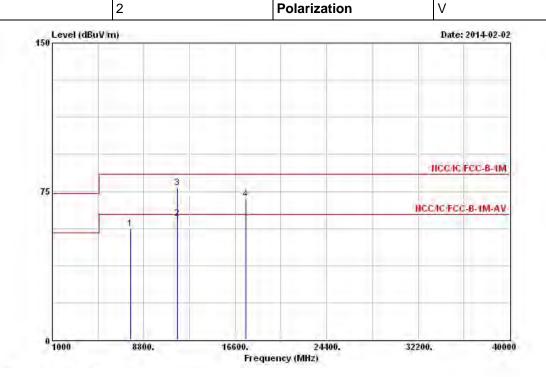
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.05 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 74 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

 N_{TX}

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5825						

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	Limit Line		Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7704.000	56.13			43.60	37.50	7.78	32.75	Peak		
2	@11650.000	61.56	-1.98	63.54	43.90	39.99	10.03	32.36	Average		-2-
3	11650.000	76.65	-6.89	83.54	58.99	39.99	10.03	32.36	Peak		
4	17475.000	71.15			44.68	45.81	12.11	31.45	Peak		224

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)

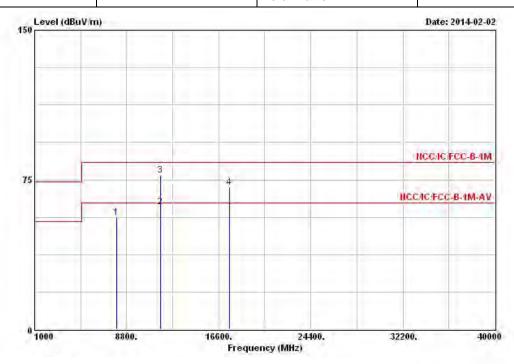
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.47 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 75 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT20	Test Freq. (MHz)	5825							
N _{TX}	2	Polarization	Н							

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	7		Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7920.000	55.96			42.88	37.72	8.14	32.78	Peak	-,-,-	
2	@11650.000	61.22	-2.32	63.54	43.56	39.99	10.03	32.36	Average	224	
3	11650.000	77.17	-6.37	83.54	59.51	39.99	10.03	32.36	Peak		
4	17475.000	71.25	2017		44.78	45.81	12.11	31.45	Peak	->+	3-4

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)

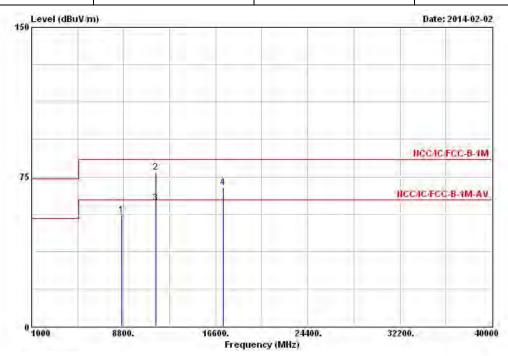
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.47 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 76 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Tr	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5755								
N _{TX}	2	Polarization	V								

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	- California S. "	0.010-011	Antenna Factor	400000	Preamp Factor	Remark	Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm.	deg
1	8666.000	55.85			42.31	38.50	7.91	32.87	Peak		
2	11510.000	77.14	-6.40	83.54	59.34	40.10	10.04	32.34	Peak		
3	11510.000	61.76	-1.78	63.54	43.96	40.10	10.04	32.34	Average		
4	17265.000	69.63			45.25	44.09	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)

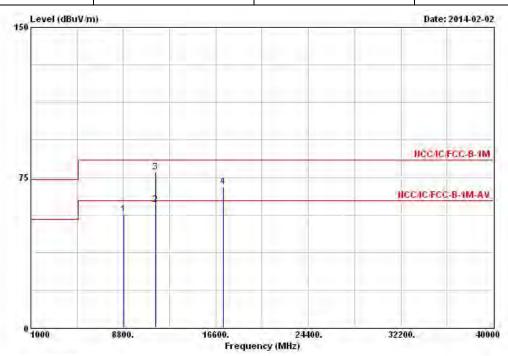
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (101.77 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 77 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Tr	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5755								
N _{TX}	2	Polarization	Н								

Report No.: FR3O2401-02AI



275	Freq	Level	Over Limit	- Care No. 4	0010-00	Antenna Factor		Preamp Factor		Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg
1	8868.000	56.67			43.53	38.26	7.82	32.94	Peak	444	
2	@11510.000	61.21	-2.33	63.54	43.41	40.10	10.04	32.34	Average		
3	11510.000	77.78	-5.76	83.54	59.98	40.10	10.04	32.34	Peak		
4	17265.000	70.37			45.99	44.09	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)

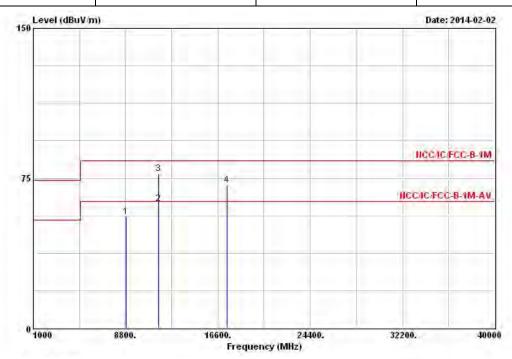
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (101.77 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 78 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5795						
N _{TX}	2	Polarization	V						

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	Carlina o.		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		con.	deg
1	8875.000	55.55			42.41	38.26	7.82	32.94	Peak		
2	11590.000	62.11	-1.43	63.54	44.40	40.03	10.03	32.35	Average		
3	11590.000	77. 19	-6.35	83.54	59.48	40.03	10.03	32.35	Peak		
4	17385.000	71.41			45.80	45.10	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.)

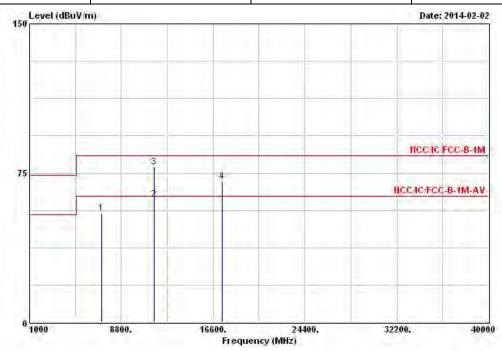
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.24 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 79 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5795						
N _{TX} 2 Polarization H									



	Freq	Level	Over Limit	1000000		Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7140.000	54.74			43.43	36.79	7.14	32.62	Peak		
2	@11590.000	61.77	-1.77	63.54	44.06	40.03	10.03	32.35	Average		
3	11590.000	78.16	-5.38	83.54	60.45	40.03	10.03	32.35	Peak		
4	17385.000	70.70	1.476.11		45.09	45.10	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.)

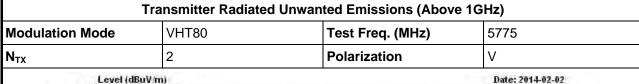
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

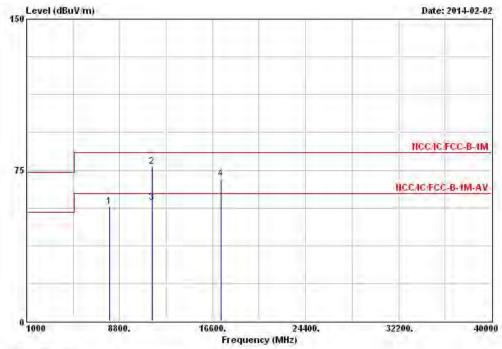
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.24 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 80 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





	Freq	Level	Over Limit	Limit Line		Antenna Factor	2000	Preamp	Remark	Ant	Table Pos
			22.20		LLILL	1110001	2000	200002	200	100	1.00
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7924.000	56.94			43.80	37.72	8.21	32.79	Peak		
2	11550.000	77.01	-6.53	83.54	59.26	40.06	10.04	32.35	Peak		1444
3	@11550.000	58.82	-4.72	63.54	41.07	40.06	10.04	32.35	Average		1777
4	17325.000	70.57			45.61	44.52	11.85	31.41	Peak		2-4

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)

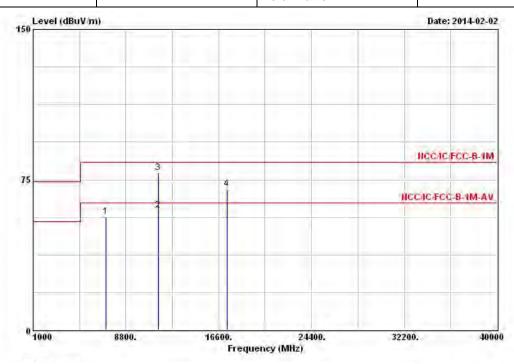
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (136.95 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 81 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT80	Test Freq. (MHz)	5775							
N _{TX}	2	Polarization	Н							

Report No.: FR3O2401-02AI



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- Cm	deg
1	7125.000	56.39			45.10	36.77	7.14	32.62	Peak		
2	11550.000	59.90	-3.64	63.54	42.15	40.06	10.04	32.35	Average		
3	11550.000	78.38	-5.16	83.54	60.63	40.06	10.04	32.35	Peak		
4	17325.000	70.48			45.52	44.52	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.)

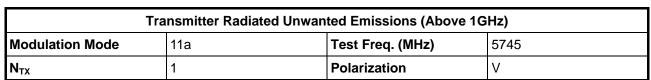
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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.

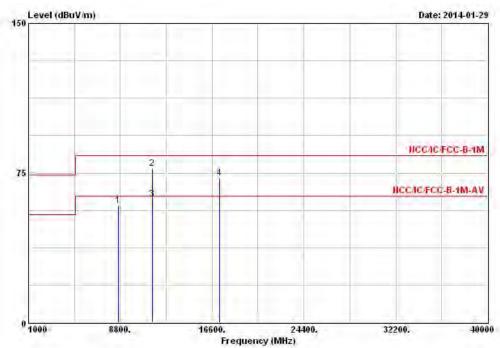
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (136.95 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 82 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz) - Mode 2



Report No.: FR3O2401-02AI



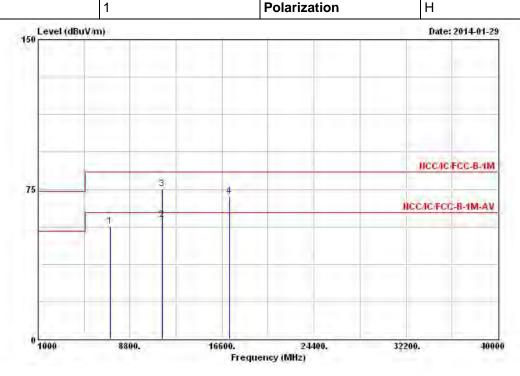
JACK.		Freq	Level	Over Limit				A CONTRACTOR OF THE PARTY OF			Ant Pos	Table Pos
	-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	863	1.000	58.48			44.86	38.54	7.93	32.85	Peak		
2	1149	0.000	77.16	-6.38	83.54	59.39	40.07	10.04	32.34	Peak		
3	@1149	0.000	61.98	-1.56	63.54	44.21	40.07	10.04	32.34	Average		
4	1723	5.000	72.37			48.35	43.81	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.78 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 83 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



77			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7112.000	56.52			45.23	36.77	7.14	32.62	Peak		
2	11490.000	59.57	-3.97	63.54	41.80	40.07	10.04	32.34	Average		
3	11490.000	75.10	-8.44	83.54	57.33	40.07	10.04	32.34	Peak		
4	17235.000	71.45			47.43	43.81	11.59	31.38	Peak		

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

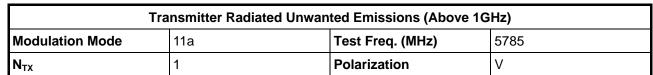
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

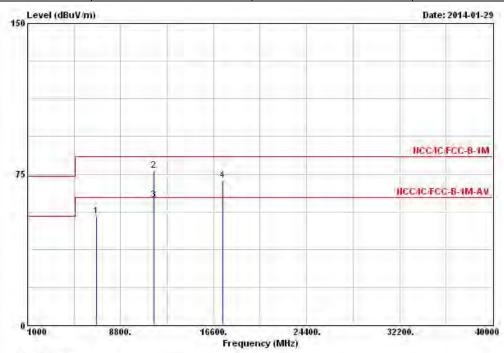
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.78 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 84 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





	F	Freq		Over Limit	- Carried a.		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
		MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6810.	000	54.16			43.67	36.14	6.89	32.54	Peak		
2	11570.	000	76.67	-6.87	83.54	58.94	40.04	10.04	32.35	Peak		
3	@11570.	000	62.36	-1.18	63.54	44.63	40.04	10.04	32.35	Average		
4	17355.	000	71.83			46.58	44.81	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)

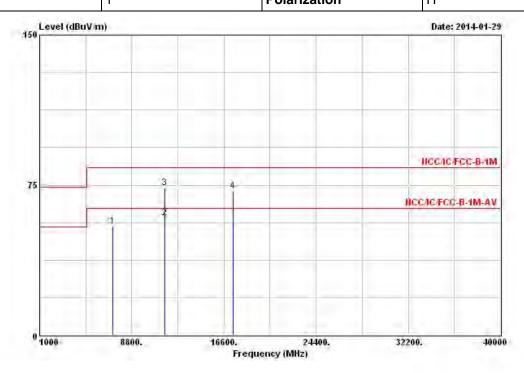
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.28 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 85 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



04.72	27			Over	Limit	Read	Antenna	Cable	Preamp	100	Ant	Table
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	-	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7158	3.000	54.54	-29.00	83.54	43.17	36.82	7.17	32.62	Peak		
2	@11570	. 000	58.71	-4.83	63.54	40.98	40.04	10.04	32.35	Average		
3	11570	. 000	73.75	-9.79	83.54	56.02	40.04	10.04	32.35	Peak	9-6	900
4	17355	5.000	72.03			46.78	44.81	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)

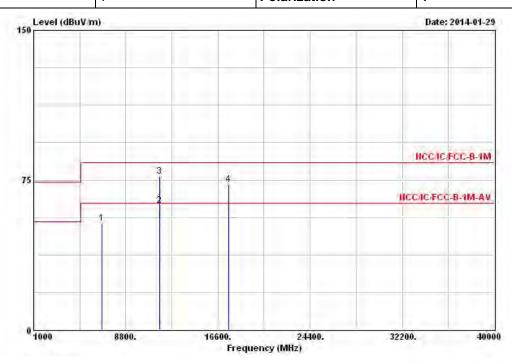
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.28 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 86 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit			Antenna Factor		The same of the same	Remark	Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	can.	deg
1	6810.000	53.40			42.91	36.14	6.89	32.54	Peak		
2	@11650.000	62.06	-1.48	63.54	44.40	39.99	10.03	32.36	Average		
3	11650.000	76.73	-6.81	83.54	59.07	39.99	10.03	32.36	Peak		
4	17475.000	72.60			46.13	45.81	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)

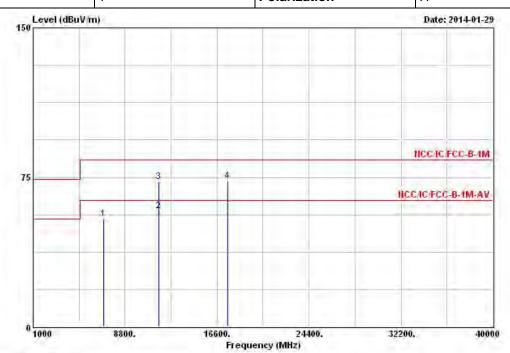
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.90 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 87 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



Line Level	Factor Los	ss Factor	Remark	Pos	Pos
					rus
dBuV/m dBuV	dB/m	dB dB		cm	deg
43.18	36.60 7.	05 32.58	Peak		
63.54 40.50	39.99 10.	03 32.36	Average		
83.54 55.27	39.99 10.	03 32.36	Peak		
46.50	45.81 12.	11 31.45	Peak		
	63.54 40.50 83.54 55.27	63.54 40.50 39.99 10. 83.54 55.27 39.99 10.	63.54 40.50 39.99 10.03 32.36 83.54 55.27 39.99 10.03 32.36	63.54 40.50 39.99 10.03 32.36 Average 83.54 55.27 39.99 10.03 32.36 Peak	63.54 40.50 39.99 10.03 32.36 Average 83.54 55.27 39.99 10.03 32.36 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.)

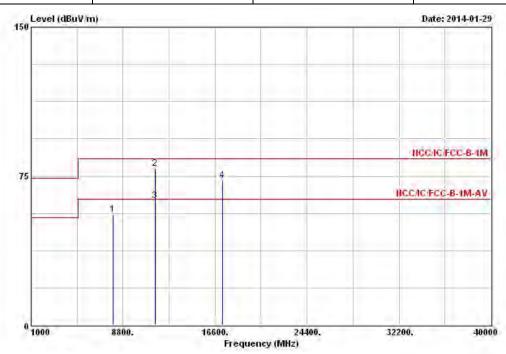
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.90dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 88 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	5745							
N_{TX}	2	Polarization	V					



				Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	E	req	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	- 1	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	7980.	000	55.64			42.38	37.78	8.28	32.80	Peak		
2	@11490.	000	78.75	-4.79	83.54	60.98	40.07	10.04	32.34	Peak		224
3	B11490.	000	62.50	-1.04	63.54	44.73	40.07	10.04	32.34	Average		
4	17235.	000	72.92			48.90	43.81	11.59	31.38	Peak		1200

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.)

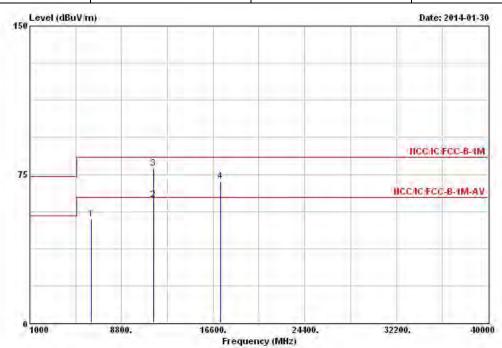
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (144.37dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 89 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	Test Freq. (MHz)	5745						
N_{TX}	2	Polarization	Н					



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	can	deg
1	6198.000	52.54			43.21	35.16	6.63	32.46	Peak		
2	@11490.000	62.04	-1.50	63.54	44.27	40.07	10.04	32.34	Average		444
3	11490.000	78.17	-5.37	83.54	60.40	40.07	10.04	32.34	Peak		
4	17235.000	71.60			47.58	43.81	11.59	31.38	Peak		324

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.

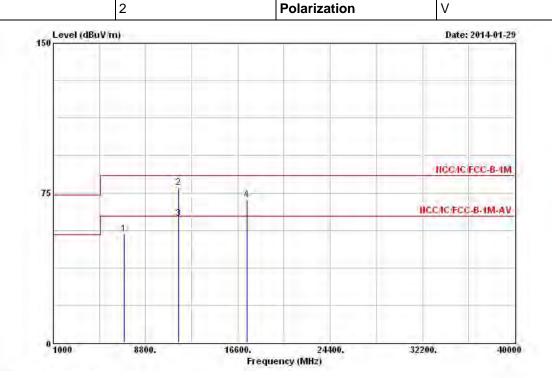
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (144.37 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 90 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

 N_{TX}

Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode	HT20	Test Freq. (MHz)	5785				

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	Limit Line		Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	6987.000	54.66			43.63	36.56	7.05	32.58	Peak		
2	11570.000	77.78	-5.76	83.54	60.05	40.04	10.04	32.35	Peak	224	-2-
3	@11570.000	62.18	-1.36	63.54	44.45	40.04	10.04	32.35	Average		
4	17355.000	71.75			46.50	44.81	11.85	31.41	Peak		1224

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.)

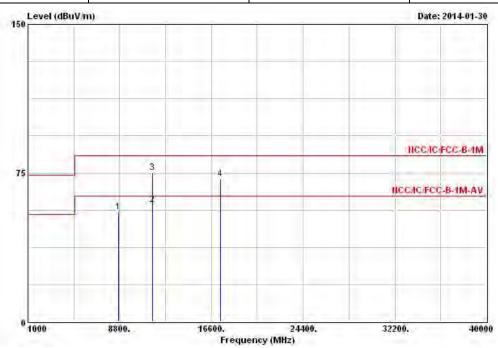
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.35 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 91 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

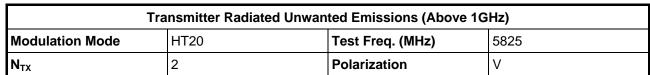


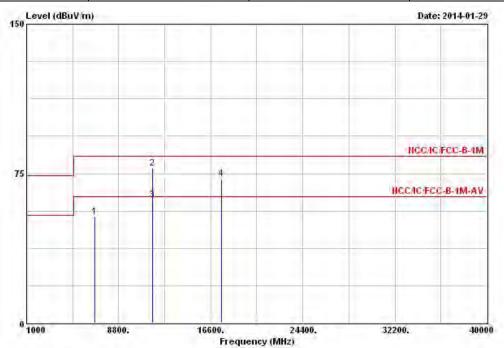
	-	10° m 10°	0ver	Limit		Antenna		Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8676.000	55.35			41.83	38.48	7.91	32.87	Peak		
2	@11570.000	59.08	-4.46	63.54	41.35	40.04	10.04	32.35	Average		
3	11570.000	75.18	-8.36	83.54	57.45	40.04	10.04	32.35	Peak		200
4	17355.000	71.95			46.70	44.81	11.85	31.41	Peak		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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.35 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 92 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





	Freq	Level	Over Limit	200		Antenna Factor	200	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6792.000	53.16			42.71	36.10	6.89	32.54	Peak		
2	11650.000	77.52	-6.02	83.54	59.86	39.99	10.03	32.36	Peak		44.4
3	811650.000	61.87	-1.67	63.54	44.21	39.99	10.03	32.36	Average		
4	17475.000	72.29			45.82	45.81	12.11	31.45	Peak		1200

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

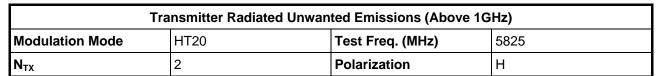
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

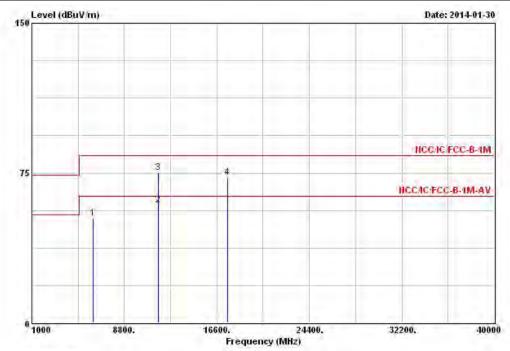
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.16 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 93 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6144.000	52.35			43.05	35.12	6.63	32.45	Peak		
2	@11650.000	58.74	-4.80	63.54	41.08	39.99	10.03	32.36	Average	-94	-2-
3	11650.000	75.33	-8.21	83.54	57.67	39.99	10.03	32.36	Peak		
4	17475.000	72.66			46.19	45.81	12.11	31.45	Peak		1224

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.)

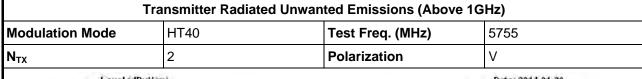
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

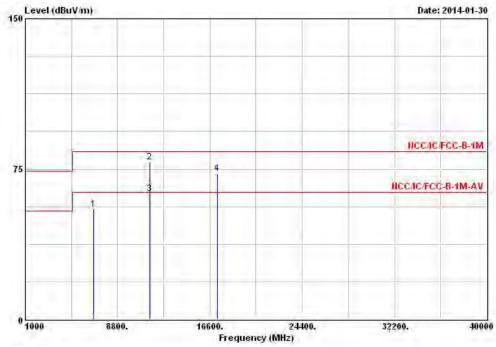
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.16 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 94 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





79	Freq	Level	Over Limit		- VODO	Antenna Factor				Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	6810.000	54.80			44.31	36.14	6.89	32.54	Peak		
2	@11510.000	78.51	-5.03	83.54	60.71	40.10	10.04	32.34	Peak	944	
3	@11510.000	62.42	-1.12	63.54	44.62	40.10	10.04	32.34	Average		
4	17265.000	72.60			48.22	44.09	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.)

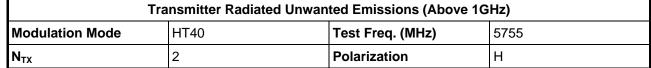
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

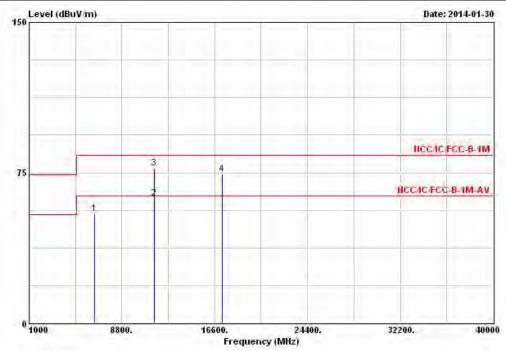
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.46 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 95 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Report No.: FR3O2401-02AI





			Over	Limit		Antenna		The second second		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6528.000	54.35			44.73	35.44	6.67	32.49	Peak		
2	@11510.000	62.27	-1.27	63.54	44.47	40.10	10.04	32.34	Average		
3	11510.000	77. 15	-6.39	83.54	59.35	40.10	10.04	32.34	Peak		
4	17265.000	74.52			50.14	44.09	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)

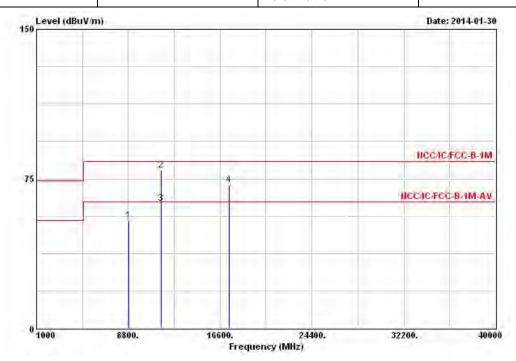
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (138.46 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 96 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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

Report No.: FR3O2401-02AI



	Freq	Freq Lev		Over Limit		A	2000	Preamp Factor	Remark Pos	Ant Pos	Table Pos	
	м	О(z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- Cm	deg
1	8844.0	00	53.92			40.71	38.30	7.84	32.93	Peak		
2	@11590.0	00	79.07	-4.47	83.54	61.36	40.03	10.03	32.35	Peak		
3	@11590.0	00	62.41	-1.13	63.54	44.70	40.03	10.03	32.35	Average		
4	17385.0	00	72.01			46.40	45.10	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.)

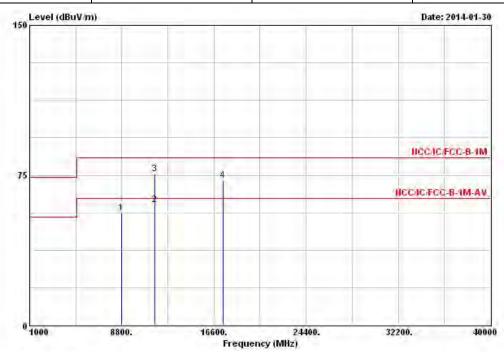
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.76 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 97 of 140
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						



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	8766.000	55.96			42.60	38.38	7.88	32.90	Peak	444	
2	@11590.000	60.15	-3.39	63.54	42.44	40.03	10.03	32.35	Average		
3	11590.000	75.73	-7.81	83.54	58.02	40.03	10.03	32.35	Peak		
4	17385.000	72.35			46.74	45.10	11.94	31.43	Peak		1994

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)

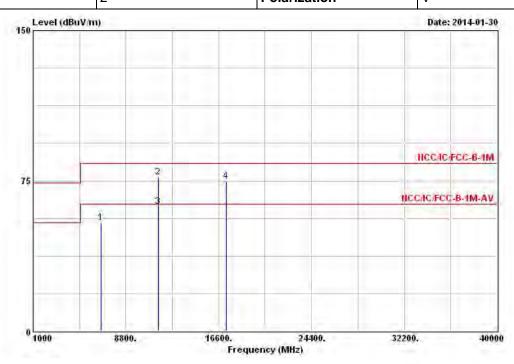
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.76 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 98 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tr	ansmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	VHT20	Test Freq. (MHz)	5745
N _{TV}	2	Polarization	V

Report No.: FR3O2401-02AI



	Freç	Level	Over Limit	70.7		Antenna Factor	and the same of	Preamp Factor	Remark	Ant Pos	Table Pos
	MH2	dBuV/m	- dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6714.000	54.12			43.91	35.90	6.83	32.52	Peak		
2	11490.000	76.85	-6.69	83.54	59.08	40.07	10.04	32.34	Peak		
3	@11490.000	62.27	-1.27	63.54	44.50	40.07	10.04	32.34	Average		200
4	17235.000	74.91			50.89	43.81	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.)

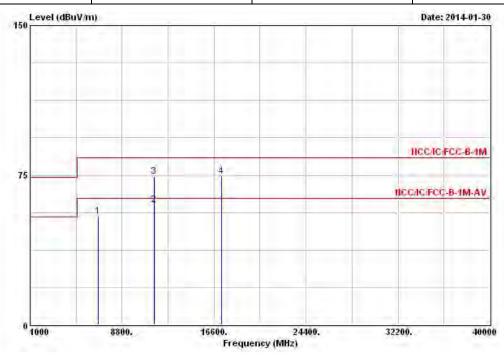
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (147.94 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 99 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5745						
N_{TX}	2	Polarization	Н						



	Freq	Level	Over Limit		_	Antenna Factor	-	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6792.000	54.34			43.89	36.10	6.89	32.54	Peak		244
2	@11490.000	60.14	-3.40	63.54	42.37	40.07	10.04	32.34	Average		
3	11490.000	74.36	-9.18	83.54	56.59	40.07	10.04	32.34	Peak		200
4	17235.000	74.25			50.23	43.81	11.59	31.38	Peak		775

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.)

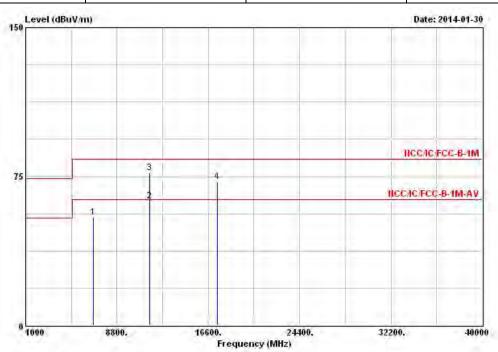
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (147.94dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 100 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT20 Test Freq. (MHz) 5785									
N _{TX} 2 Polarization V									



	Patricia	2	Over	7.7		Antenna		Preamp		Ant	Table
	Freq	Level	Limit	Line	rever	Factor	Loss	ractor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6810.000	54.34			43.85	36.14	6.89	32.54	Peak		224
2	@11570.000	62.51	-1.03	63.54	44.78	40.04	10.04	32.35	Average	-,	777
3	11570.000	76.80	-6.74	83.54	59.07	40.04	10.04	32.35	Peak		5-4
4	17355.000	72.55			47.30	44.81	11.85	31.41	Peak		5-7

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.)

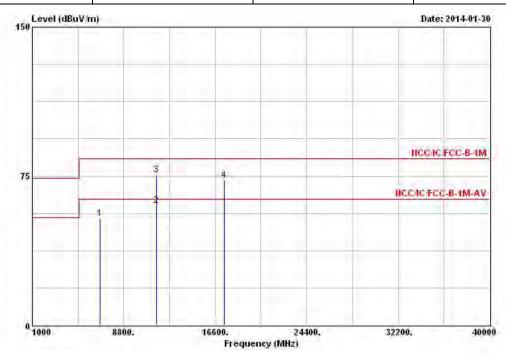
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.64 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 101 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT20 Test Freq. (MHz) 5785									
N _{TX} 2 Polarization H									



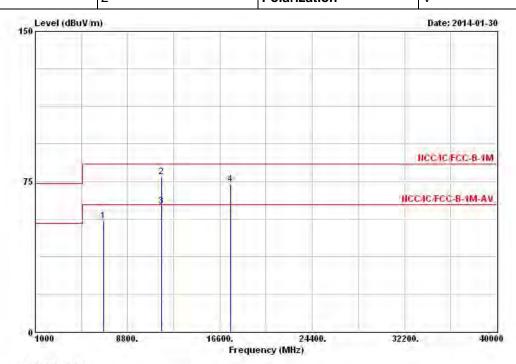
			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6768.000	53.80			43.45	36.02	6.86	32.53	Peak		
2	@11570.000	60.24	-3.30	63.54	42.51	40.04	10.04	32.35	Average		20.24
3	11570.000	75.64	-7.90	83.54	57.91	40.04	10.04	32.35	Peak		
4	17355.000	72.86			47.61	44.81	11.85	31.41	Peak		1200

- 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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.64 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 102 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tı	ansmitter Radiated Unwar	nted Emissions (Above 1G	Hz)
Modulation Mode	VHT20	Test Freq. (MHz)	5825
N _{TV}	2	Polarization	V

Report No.: FR3O2401-02AI



			Over	- Carlo No. 1	0.010-10	Antenna	2000	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Mz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6810.000	55.46			44.97	36.14	6.89	32.54	Peak		
2	11650.000	77.31	-6.23	83.54	59.65	39.99	10.03	32.36	Peak		
3	@11650.000	62.44	-1.10	63.54	44.78	39.99	10.03	32.36	Average		
4	17475.000	73.70			47.23	45.81	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.)

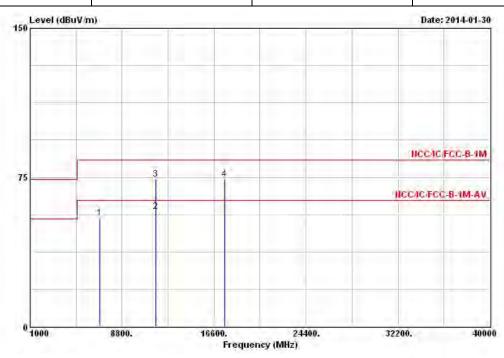
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.05 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 103 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode VHT20 Test Freq. (MHz) 5825									
N _{TX}	N _{TX} 2 Polarization H									



	Freq	Level	Over Limit	- Carrier 10 - 1	021037	Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6936.000	54.54			43.69	36.43	6.99	32.57	Peak		
2	11650.000	57.86	-5_68	63.54	40.20	39.99	10.03	32.36	Average		
3	11650.000	73.97	-9.57	83.54	56.31	39.99	10.03	32.36	Peak		
4	17475.000	74.08			47.61	45.81	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.)

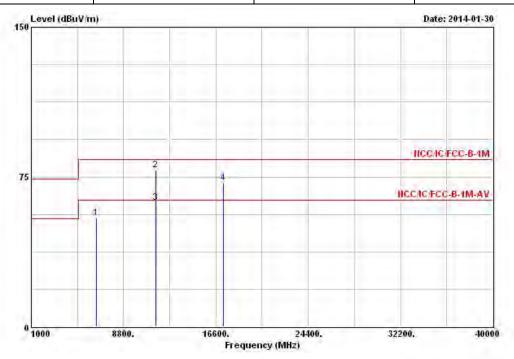
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.05 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 104 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode VHT40 Test Freq. (MHz) 5755								
N _{TX} 2 Polarization V									



	Freq	Level	Over Limit	100000000000000000000000000000000000000		Antenna Factor	200	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cam	deg
1	6516.000	54.32			44.76	35.40	6.64	32.48	Peak		
2	11510.000	78.30	-5.24	83.54	60.50	40.10	10.04	32.34	Peak	204	444
3	811510.000	62.10	-1.44	63.54	44.30	40.10	10.04	32.34	Average		
4	17265.000	72.14			47.76	44.09	11.68	31.39	Peak		300

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.)

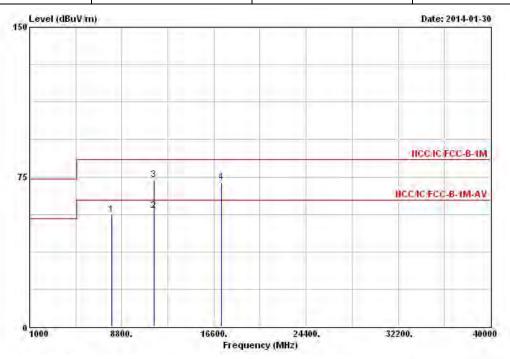
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.10 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 105 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT40 Test Freq. (MHz) 5755									
N _{TX} 2 Polarization H									



	Freq	Freq	Over Level Limit	The state of the s	Call articles of the call	Preamp Factor		Ant Pos	Table Pos		
	SHM	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cam	deg
1	7926.000	56.03			42.89	37.72	8.21	32.79	Peak		
2	11510.000	58.02	-5.52	63.54	40.22	40.10	10.04	32.34	Average		
3	11510.000	73.47	-10.07	83.54	55.67	40.10	10.04	32.34	Peak		
4	17265.000	72.28			47.90	44.09	11.68	31.39	Peak		300

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.)

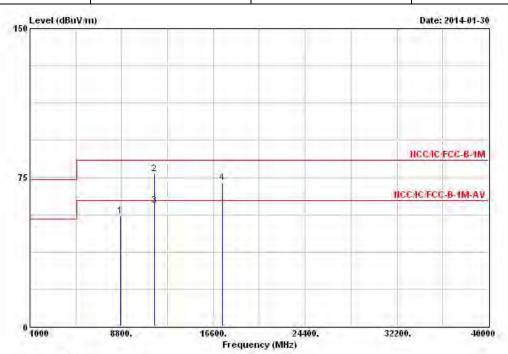
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.10 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 106 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	VHT40	Test Freq. (MHz)	5795					
N_{TX}	2	Polarization	V					



	Freq	Över Level Limit			Preamp Factor		Ant Pos	Table Pos			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8689.000	55.78			42.27	38.48	7.91	32.88	Peak		222
2	11590.000	77.02	-6.52	83.54	59.31	40.03	10.03	32.35	Peak		777
3	@11590.000	61.07	-2.47	63.54	43.36	40.03	10.03	32.35	Average		5.5
4	17385.000	72.56			46.95	45.10	11.94	31.43	Peak		5-4

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.)

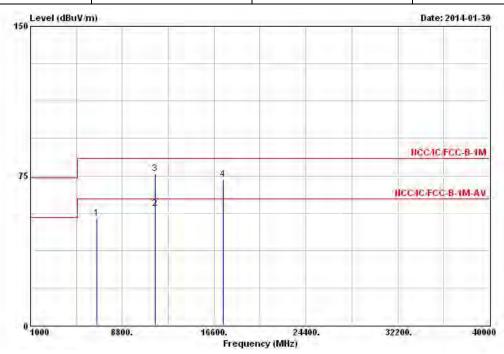
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.55 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 107 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	VHT40	Test Freq. (MHz)	5795					
N_{TX}	2	Polarization	Н					



	Freq		Over Limit		ReadAntenna Level Factor	2000	Preamp Factor		Ant Pos	Table Pos	
	M(z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
1	6612.000	53.67			43.79	35.65	6.73	32.50	Peak		
2	@11590.000	58.58	-4.96	63.54	40.87	40.03	10.03	32.35	Average		
3	11590.000	75.84	-7.70	83.54	58.13	40.03	10.03	32.35	Peak		
4	17385.000	73.22			47.61	45.10	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.)

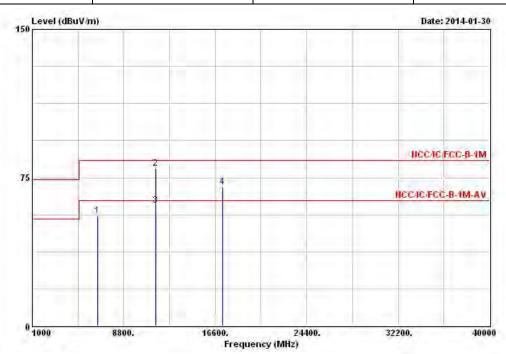
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.55 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 108 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT80	Test Freq. (MHz)	5775								
N_{TX}	2	Polarization	V								



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6600.000	55.57			45.73	35.61	6.73	32.50	Peak		
2	@11550.000	79.58	-3.96	83.54	61.83	40.06	10.04	32.35	Peak		-
3	@11550.000	60.87	-2.67	63.54	43.12	40.06	10.04	32.35	Average		
4	17235.000	70.43			46.41	43.81	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.)

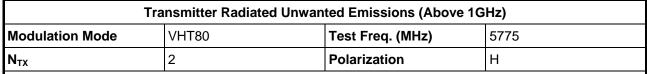
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

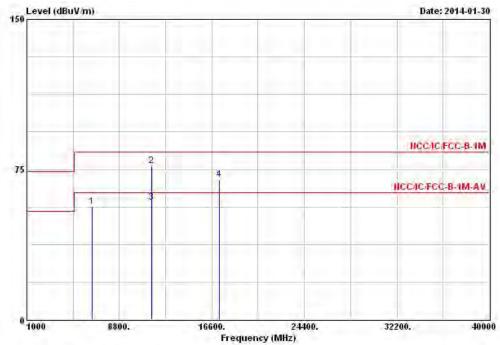
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.47 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 109 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

st Report No. : FR3O2401-02AI





	Freq	Level	Over Limit	- Care The A. V.		Antenna Factor	2000	Preamp Factor		Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB			deg
1	6504.000	56.52			46.96	35.40	6.64	32.48	Peak	444	
2	11550.000	76.77	-6.77	83.54	59.02	40.06	10.04	32.35	Peak		
3	@11550.000	58.38	-5 16	63 54	40.63	40.06	10.04	32.35	Average		
4	17235.000	69.97			45.95	43.81	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)

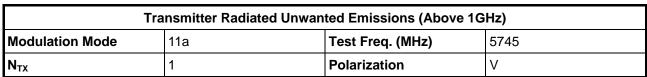
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

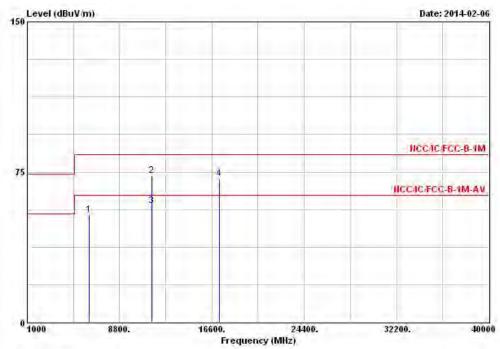
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.47 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 110 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz) - Mode 3

Report No.: FR3O2401-02AI



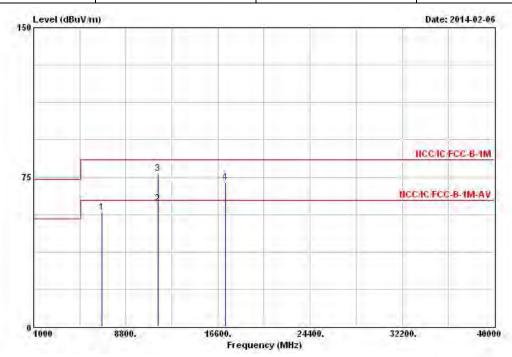


	Freq	Level	Over Limit	Complete or	0.010-10	Antenna Factor		Section with the party	Remark	Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg
1	6234.000	53.54			44.18	35. 19	6.63	32.46	Peak		
2	11490.000	73.29	-10.25	83.54	55.52	40.07	10.04	32.34	Peak		
3	11490.000	58.01	-5.53	63.54	40.24	40.07	10.04	32.34	Average		
4	17235.000	71.52			47.50	43.81	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.25 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 111 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5745									
N_{TX}												



			Over	Limit	Readi	intenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6810.000	57.17			46.68	36.14	6.89	32.54	Peak		
2	11490.000	61.77	-1.77	63.54	44.00	40.07	10.04	32.34	Average		
3	11490.000	76.85	-6.69	83.54	59.08	40.07	10.04	32.34	Peak		2-4
4	17235.000	72.26			48.24	43.81	11.59	31.38	Peak		5-4

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)

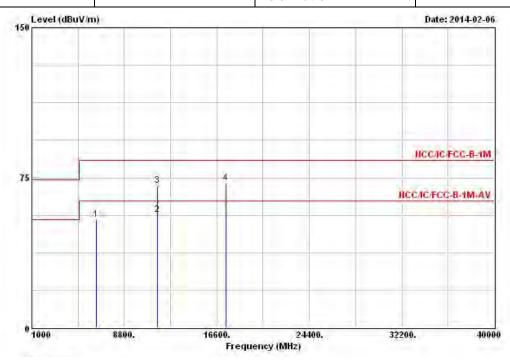
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.25 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 112 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	ınsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	11a	Test Freq. (MHz)	5785
N _{TX}	1	Polarization	V

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6420.000	53.95			44.45	35.33	6.64	32.47	Peak		
2	11570.000	56.40	-7.14	63.54	38.67	40.04	10.04	32.35	Average	224	
3	11570.000	70.97	-12.57	83.54	53.24	40.04	10.04	32.35	Peak		
4	17355.000	72.47			47.22	44.81	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.48 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 113 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	ınsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)	
Modulation Mode	11a	Test Freq. (MHz)	5785	
N _{TX}	1	Polarization	Н	

Report No.: FR3O2401-02AI



	Freq	Level	Over Limit	700		Antenna Factor	2000	Preamp	Remark	Ant Pos	Table Pos
	rred	rever	LLILLO	Dirine	Dever	Lactor	ДОЗЗ	ractor	Kenark	FUS	rus
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6936.000	55.62			44.77	36.43	6.99	32.57	Peak		
2	11570.000	61.86	-1.68	63.54	44.13	40.04	10.04	32.35	Average		-2-
3	11570.000	76.76	-6.78	83.54	59.03	40.04	10.04	32.35	Peak		
4	17355.000	72.56			47.31	44.81	11.85	31.41	Peak		1200

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)

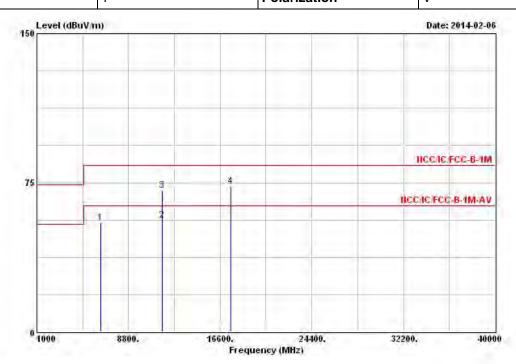
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.48 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 114 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

	Transmitter Rad	diated Unwanted Emissions (Above	IGHz)
Modulation Mode	11a	Test Freq. (MHz)	5825
N _{TV}	1	Polarization	V

Report No.: FR3O2401-02AI



Death.	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6456.000	54.77			45.25	35.36	6.64	32.48	Peak		
2	11650.000	56.21	-7.33	63.54	38.55	39.99	10.03	32.36	Average		
3	11650.000	70.98	-12.56	83.54	53.32	39.99	10.03	32.36	Peak		2-5
4	17475.000	73.10			46.63	45.81	12.11	31.45	Peak		5-4

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

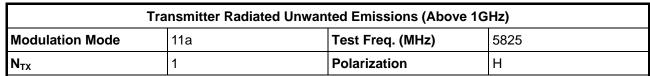
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

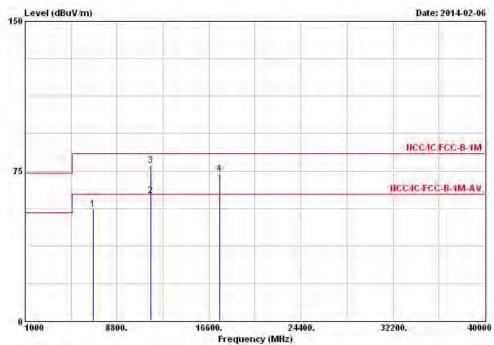
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.36 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 115 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





270		Level	Over Limit			Antenna Factor		The second second		Ant Pos	Table Pos	
	М	z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6810.00	0	55.75			45.26	36.14	6.89	32.54	Peak		
2	11650.00	0	62.41	-1.13	63.54	44.75	39.99	10.03	32.36	Average		
3	11650.00	0	77.48	-6.06	83.54	59.82	39.99	10.03	32.36	Peak		
4	17475.00	0	73.57			47.10	45.81	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.)

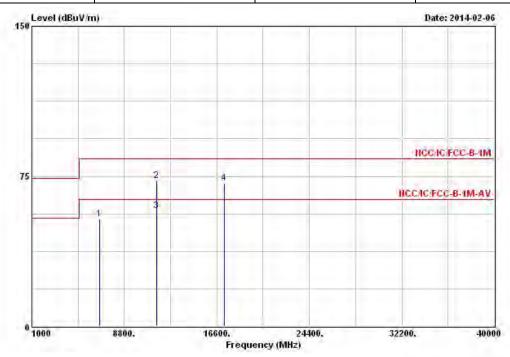
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.36dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 116 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	6720.000	53.60			43.39	35.90	6.83	32.52	Peak		
2	11490.000	72.86	-10.68	83.54	55.09	40.07	10.04	32.34	Peak		
3	11490.000	57.85	-5.69	63.54	40.08	40.07	10.04	32.34	Average		
4	17235.000	71.34			47.32	43.81	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.)

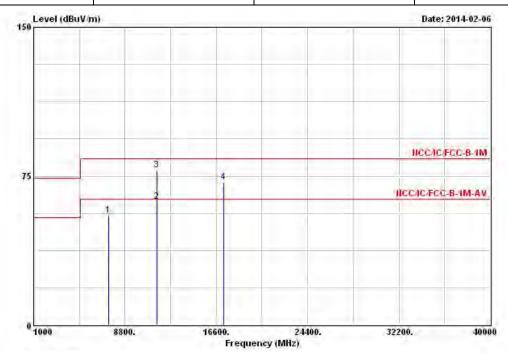
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.54 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 117 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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



		Level	Over Limit	- Carrier 10-10 co.		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
		dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	Cm.	deg
1	7422.000	55.31			43.44	37.20	7.37	32.70	Peak		
2	11490.000	62.31	-1.23	63.54	44.54	40.07	10.04	32.34	Average		
3	11490.000	78.03	-5.51	83.54	60.26	40.07	10.04	32.34	Peak		
4	17235.000	71.89			47.87	43.81	11.59	31.38	Peak		144-

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.)

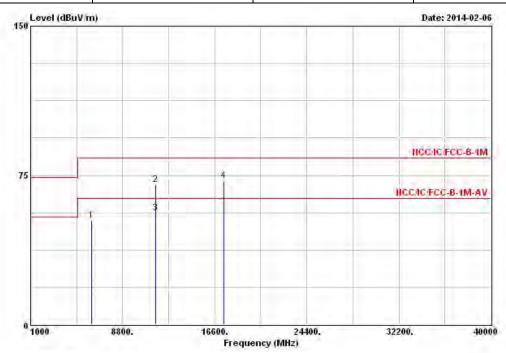
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.54 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 118 of 140 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	V							



		Level	Over Limit		The same	Antenna Factor	22.00	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	6192.000	52.33			43.01	35.15	6.63	32.46	Peak		
2	11570.000	70.51	-13.03	83.54	52.78	40.04	10.04	32.35	Peak		222
3	11570.000	56.15	-7.39	63.54	38.42	40.04	10.04	32.35	Average		
4	17355.000	72.22			46.97	44.81	11.85	31.41	Peak		1200

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.)

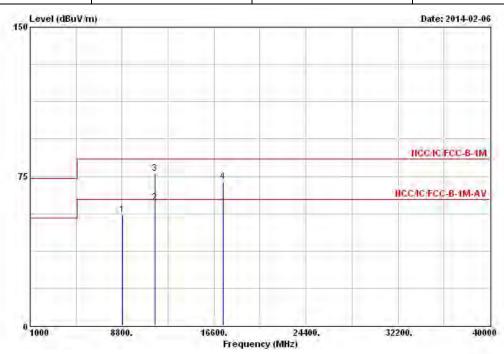
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.24 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 119 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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



	Freq	Level	Over Limit	Limit Line	200	Intenna Factor	65.400	Preamp Factor	Remark	Ant Pos	Table Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg
1	8832.000	55.83			42.61	38.30	7.84	32.92	Peak		
2	11570.000	61.82	-1.72	63.54	44.09	40.04	10.04	32.35	Average	224	224
3	11570.000	76.53	-7.01	83.54	58.80	40.04	10.04	32.35	Peak		
4	17355.000	72.24			46.99	44.81	11.85	31.41	Peak	-144	1200

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

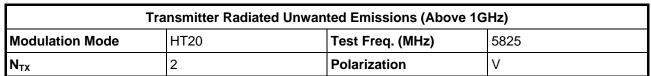
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

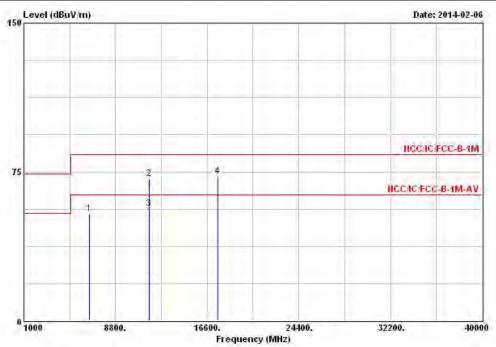
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (143.24 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 120 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Mez	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	6576.000	54.04			44.27	35.57	6.70	32.50	Peak		
2	11650.000	71.58	-11.96	83.54	53.92	39.99	10.03	32.36	Peak		222
3	11650.000	56.60	-6.94	63.54	38.94	39.99	10.03	32.36	Average		
4	17475.000	72.74	2 10 319 10	* 2-16.71	46.27	45.81	12.11	31.45	Peak		1200

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.)

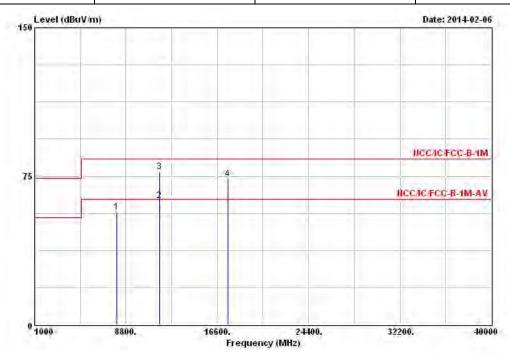
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.49 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 121 of 140 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	Н							

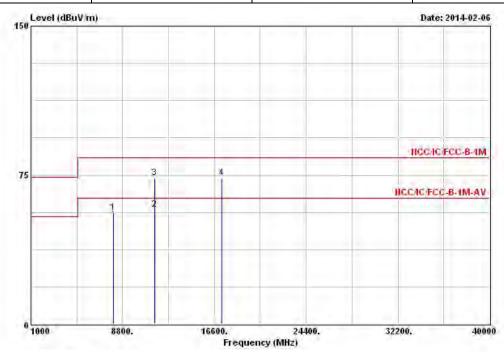


	-	Level	Over Limit	1000		Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos	
	MON	z	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7992.00	0	56.89			43.63	37.78	8.28	32.80	Peak		
2	11650.00	0	62.46	-1.08	63.54	44.80	39.99	10.03	32.36	Average		
3	11650.00	0	77.10	-6.44	83.54	59.44	39.99	10.03	32.36	Peak	9-6	
4	17475.00	0	73.70			47.23	45.81	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.49 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 122 of 140 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 V							



	Freq	Level	Over Limit			Antenna Factor	2000	Preamp Factor		Ant Pos	Table Pos
	ME	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	can	deg
1	7998.000	56.10			42.82	37.80	8.28	32.80	Peak		
2	11510.000	57.84	-5.70	63.54	40.04	40.10	10.04	32.34	Average		2.25
3	11510.000	73.72	-9.82	83.54	55.92	40.10	10.04	32.34	Peak		
4	17265.000	73.45			49.07	44.09	11.68	31.39	Peak		1200

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.)

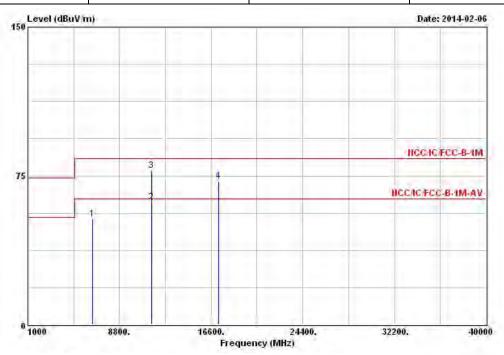
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.44 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 123 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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



	Freq	Level	Over Limit			Antenna Factor	5000	Preamp Factor	Remark	Ant Pos	Table Pos
	ME	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6480.000	53.17			43.64	35.37	6.64	32.48	Peak		
2	11510.000	61.78	-1.76	63.54	43.98	40.10	10.04	32.34	Average	204	222
3	11510.000	77.49	-6.05	83.54	59.69	40.10	10.04	32.34	Peak		
4	17265.000	72.27		- tabili	47.89	44.09	11.68	31.39	Peak		200

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

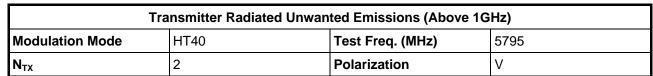
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

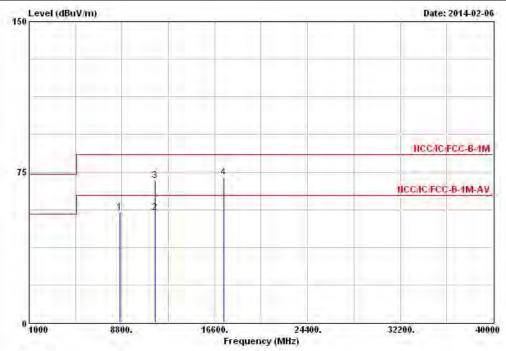
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.44 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 124 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01



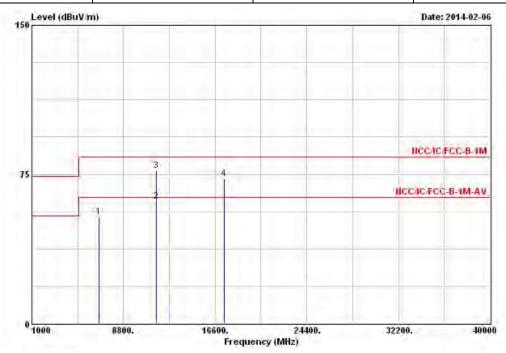


	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	8628.000	54.73			41.11	38.54	7.93	32.85	Peak		
2	11590.000	54.84	-8.70	63.54	37.13	40.03	10.03	32.35	Average		
3	11590.000	70.93	-12.61	83.54	53.22	40.03	10.03	32.35	Peak		200
4	17385.000	72.30			46.69	45.10	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.64 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 125 of 140 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				



		Town 6	Over	- California a	V 610-30	Antenna	2000	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	con	deg
1	6726.000	53.67			43.43	35.94	6.83	32.53	Peak		
2	11590.000	61.26	-2.28	63.54	43.55	40.03	10.03	32.35	Average		
3	11590.000	76.63	-6.91	83.54	58.92	40.03	10.03	32.35	Peak		
4	17385.000	72.64			47.03	45.10	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.)

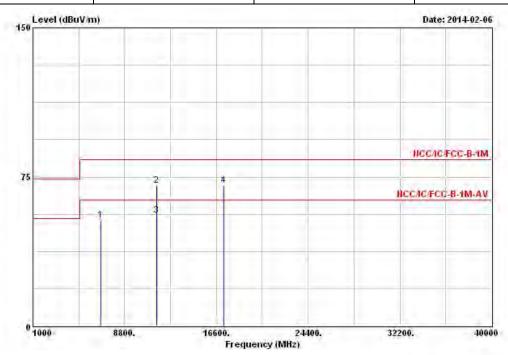
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.64 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 126 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode VHT20 Test Freq. (MHz) 5745								
N_{TX}	N _{TX} 2 Polarization V								



Andrew .	Freq	Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	-dB		- cm	deg
1	6750.000	53.26			42.98	35.98	6.83	32.53	Peak		
2	11490.000	70.66	-12.88	83.54	52.89	40.07	10.04	32.34	Peak		
3	11490.000	55.67	-7.87	63.54	37.90	40.07	10.04	32.34	Average	9-6	
4	17235.000	70.57			46.55	43.81	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.)

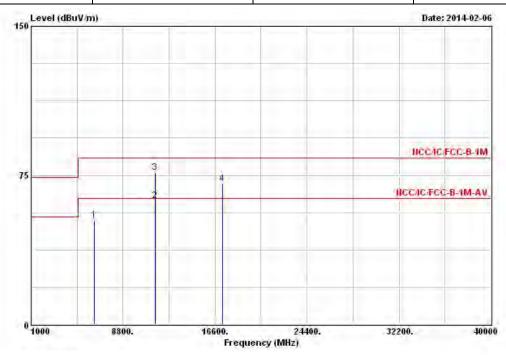
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.08 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 127 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation ModeVHT20Test Freq. (MHz)5745								
N _{TX}	N _{TX} 2 Polarization H								



e and			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6378.000	52.59			43.13	35.29	6.64	32.47	Peak		
2	11490.000	62.04	-1.50	63.54	44.27	40.07	10.04	32.34	Average		
3	11490.000	76.34	-7 20	83 54	58.57	40.07	10.04	32.34	Peak		
4	17235.000	70.84			46.82	43.81	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.)

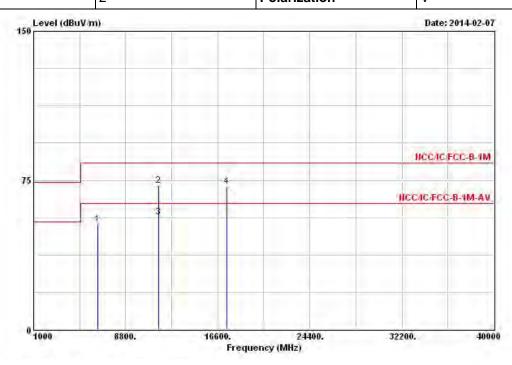
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.08 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 128 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	VHT20	Test Freq. (MHz)	5785
N _{TV}	2	Polarization	V



	·		Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6438.000	52.74			43.22	35.35	6.64	32.47	Peak		
2	11570.000	72.26	-11.28	83.54	54.53	40.04	10.04	32.35	Peak		
3	11570.000	56.45	-7.09	63.54	38.72	40.04	10.04	32.35	Average		
4	17355.000	71.91			46.66	44.81	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.)

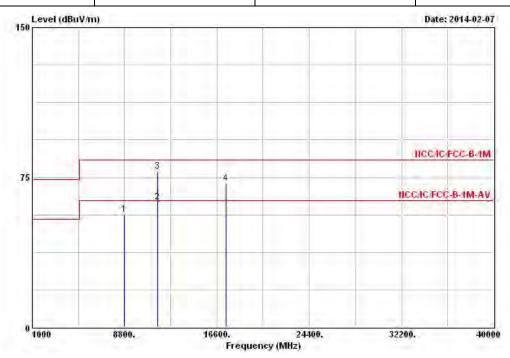
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.79 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 129 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5785							
N _{TX}	2	Polarization	Н							



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Remark	Ant Pos	Table Pos
	MLZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8796.000	56.69			43.40	38.34	7.86	32.91	Peak		
2	11570.000	62.46	-1.08	63.54	44.73	40.04	10.04	32.35	Average		
3	11570.000	78.04	-5.50	83.54	60.31	40.04	10.04	32.35	Peak		-
4	17355.000	71.92			46.67	44.81	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.)

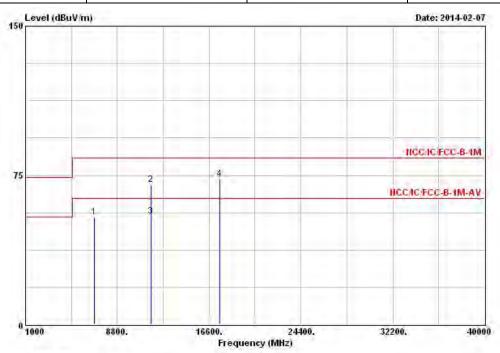
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (142.79 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 130 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5825							
N_{TX}	2	Polarization	V							



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6828.000	54.07			43.54	36.19	6.89	32.55	Peak		
2	11650.000	70.12	-13.42	83.54	52.46	39.99	10.03	32.36	Peak		
3	11650.000	54.30	-9.24	63.54	36.64	39.99	10.03	32.36	Average		
4	17475.000	73.07			46.60	45.81	12.11	31.45	Peak		12-1-

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

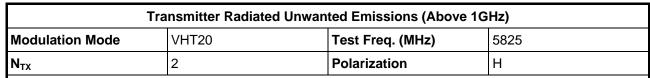
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

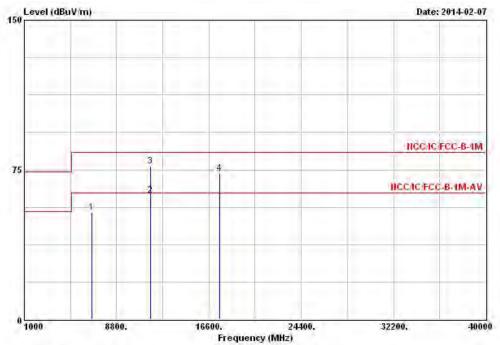
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.53 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 131 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





		Freq Level Limit Line Lev					Preamp Factor	Remark	Ant Pos	Table Pos	
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	6732.000	53.76			43.52	35.94	6.83	32.53	Peak		
2	11650.000	62.01	-1.53	63.54	44.35	39.99	10.03	32.36	Average	224	444
3	11650.000	76.80	-6.74	83.54	59.14	39.99	10.03	32.36	Peak		
4	17475.000	73.33	2.7		46.86	45.81	12.11	31.45	Peak	->+(-)	1200

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.)

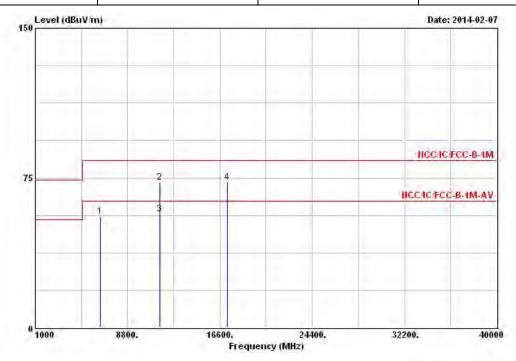
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (141.53 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 132 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5755								
N_{TX}	2	Polarization	V								



	Freq	Level	Over Limit	2000		Antenna Factor	200	Preamp Factor		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can	deg
1	6486.000	55.81			46.26	35.39	6.64	32.48	Peak		
2	11510.000	72.92	-10.62	83.54	55.12	40.10	10.04	32.34	Peak		4.24
3	11510.000	56.94	-6.60	63.54	39.14	40.10	10.04	32.34	Average		
4	17265.000	72.62	7-1		48.24	44.09	11.68	31.39	Peak	->-	1200

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.)

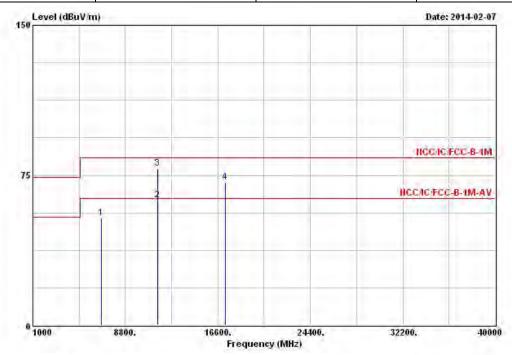
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.62 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 133 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5755						
N _{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	6762.000	53.52			43.17	36.02	6.86	32.53	Peak		
2	11510.000	62.42	-1.12	63.54	44.62	40.10	10.04	32.34	Average		-2-
3	11510.000	78.55	-4.99	83.54	60.75	40.10	10.04	32.34	Peak		
4	17265.000	71.64			47.26	44.09	11.68	31.39	Peak		1200

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.)

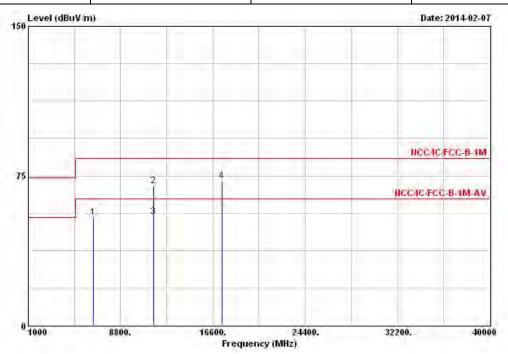
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.62 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 134 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5795							
N_{TX}	2	Polarization	V							



	Freq	Level	Over Limit	- California 2.		Antenna Factor	4000	Preamp Factor	Remark	Ant Pos	Table Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	6498.000	53.96			44.41	35.39	6.64	32.48	Peak		
2	11590.000	70.04	-13.50	83.54	52.33	40.03	10.03	32.35	Peak		
3	11590.000	54.34	-9.20	63.54	36.63	40.03	10.03	32.35	Average		
4	17385.000	72.50			46.89	45.10	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.)

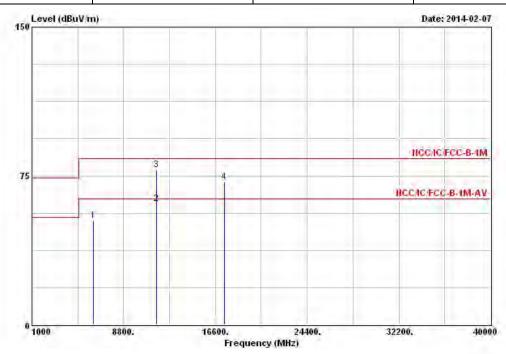
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.40 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 135 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

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



		Freq	Level	Over Limit			Antenna Factor	2000	Preamp Factor	Remark	Ant Pos	Table Pos
		Miz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
	1	6198.000	52.32			42.99	35.16	6.63	32.46	Peak		
	2	11590.000	60.95	-2.59	63.54	43.24	40.03	10.03	32.35	Average	-24	2.24
1	3	11590.000	77.85	-5.69	83.54	60.14	40.03	10.03	32.35	Peak		
ó	4	17385.000	71.90			46.29	45.10	11.94	31.43	Peak		200

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

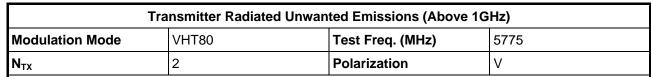
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

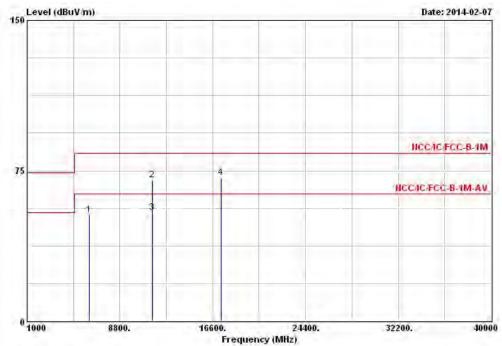
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (140.40 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 136 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01





			Over	Limit	Read	Antenna		Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MIZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6198.000	52.93			43.60	35.16	6.63	32.46	Peak		
2	11550.000	70.13	-13.41	83.54	52.38	40.06	10.04	32.35	Peak		
3	11550.000	53.90	-9.64	63.54	36.15	40.06	10.04	32.35	Average		
4	17325.000	71.74			46.78	44.52	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.)

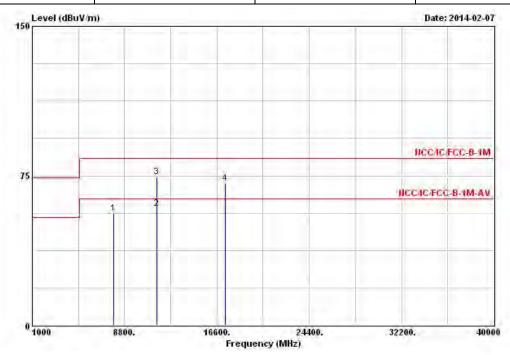
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.44 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 137 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode VHT80 Test Freq. (MHz) 5775								
N_{TX}	N _{TX} 2 Polarization H								



200	i)	Freq	Level	Over Limit		0010000	Antenna Factor				Ant Pos	Table Pos
	-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7866	.000	56.16			43.20	37.67	8.07	32.78	Peak		
2	11550	.000	58.41	-5.13	63.54	40.66	40.06	10.04	32.35	Average		
3	11550	. 000	74.59	-8.95	83.54	56.84	40.06	10.04	32.35	Peak		
4	17325	. 000	71.24			46.28	44.52	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, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (137.44 dBuV/m).

SPORTON INTERNATIONAL INC. Page No. : 138 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01

4 Test Equipment and Calibration Data

< Conduction Emission>

< Oonduction E						
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz ~ 2.75GHz	Mar. 25, 2013	Conduction (CO04-HY)
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2014	Conduction (CO04-HY)
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 30, 2013	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	Conduction (CO04-HY)

Report No.: FR3O2401-02AI

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

< RF Conducted>

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSV 40	101013	9KHz~40GHz	Jan. 25, 2014	Conducted (TH01-HY)
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jul. 16, 2013	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100℃	Nov. 21, 2013	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jun. 27, 2013	Conducted (TH01-HY)
RF Cable-2m	HUBER+SUHNER	SUCOFLEX_104	SN 345675/4	30MHz ~ 26.5GHz	Dec. 02, 2013	Conducted (TH01-HY)

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

SPORTON INTERNATIONAL INC. Page No. : 139 of 140
TEL: 886-3-327-3456 Report Version : Rev. 01



< Radiated Emission below 1GHz >

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 (03CH03-HY)
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May. 03, 2013	Radiation (03CH03-HY)
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 11, 2013	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 21, 2013	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 16, 2013	Radiation (03CH03-HY)
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)

Report No.: FR3O2401-02AI

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

< Radiated Emission above 1GHz >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Aug. 20, 2013	Radiation (03CH03-HY)
Spectrum	R&S	FSP30	100023	9kHz ~ 30GHz	Jul. 20, 2013	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 31, 2013	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 10, 2014	Radiation (03CH03-HY)
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 11, 2013	Radiation (03CH03-HY)
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)

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 (03CH03-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	Dec. 02, 2012	Radiation (03CH03-HY)

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

SPORTON INTERNATIONAL INC. Page No. : 140 of 140 TEL: 886-3-327-3456 Report Version : Rev. 01