



FCC Test Report FCC ID:YH5-7DTB35

Product: Titan3

Trade Name: **hipstreet**

Model Number: HS-7DTB35

Serial Model: HYPERION35

Report No.: NTEK-2014NT0919451F2

Prepared for

Kobian Canada Inc.

560 Denison Street, Unit 5.Markham, Ontario, L3R 2M8.Canada

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China

Tel.: +86-0755-61156588 Fax.: +86-0755-61156599 Website: www.ntek.org.cn



TEST RESULT CERTIFICATION

Report No.: NTEK-2014NT0919451F2

Applicant's name:	Kobian C	anada Inc.	
Address:	560 Denis	son Street, Unit 5.Markham, Ontario, L3	R 2M8.Canada
Manufacturer's Name:	Kobian C	anada Inc.	
Address:	560 Denis	son Street, Unit 5.Markham, Ontario, L3	R 2M8.Canada
Product description			
Product name:	Titan3		
Model and/or type reference :	HS-7DTB	335	
Standards:	FCC Part ANSI C63	:15B:01 Oct.2013 3.4:2003	
	complian	sted by NTEK, and the test results show ace with Part 15 of FCC Rules. And it is a	
document may be altered or rev the document.	ised by N⁻	t in full, without the written approval of N TEK, personal only, and shall be noted i	
Date of Test		19 Sep. 2014 ~10 Oct. 2014	
Date (s) of performance of tests. Date of Issue		19 Ост. 2014 10 Ост. 2014	
Test Result		Pass	
Test Result		rass	
Testing Engine	er :	Danny Grany	
		Denny Huang	
Technical Man	ager :	Brown Lu	
		(Brown Lu)	
Authorized Sig	natory:	(Bill Yao)	



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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission							
Standard	Test Item	Limit	Judgment	Remark			
FCC Part15B:2013 ANSI C63.4: 2003	Conducted Emission	Class B	PASS				
	Radiated Emission	Class B	PASS				

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report
- (2) For client's request and manual description, the test will not be executed.



1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd

Add.: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

Report No.: NTEK-2014NT0919451F2

FCC Registration Number:238937; IC Registration Number:9270A-1

CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 %.

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
NTEKC01	ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.7	
		1GHz ~12.4GHz	5.0	



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Titan3				
Model Name	HS-7DTB35				
Additional Model Number(s)	HYPERION35				
Model Difference	All the model are the same circuit and RF module, except the model name and colour.				
	The EUT is a Titan3 .				
	Connecting I/O port:	USB, DC in ,HDMI			
	Operation Frequency:	WIFI: 802.11b/g/n(20MHz):			
		2412~2462MHz			
		802.11n(40MHz):2422~2452MHz			
Product Description					
	Modulation Type:	WIFI: CCK/OFDM/DBPSK/DAPSK			
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.				
Power Source	DC Voltage				
	Model: CS18M050200FUSB				
Adapter	Input: 100-240V,50/60 Hz,0.45A				
	Output: 5.0V, 2A				
Battery	DC 3.7V,2500mAh				



2.1.1 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

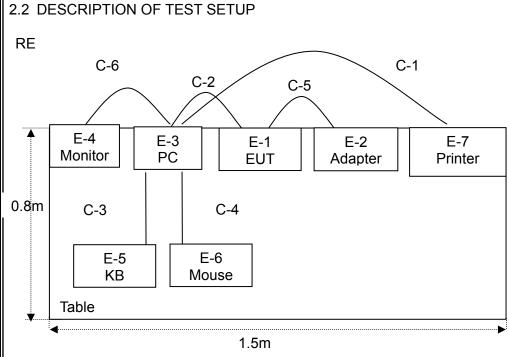
Pretest Mode	Description
Mode 1	Playing+chagring
Mode 2	HDMI
Mode 3	Data Exchange
Mode 4	REC Mode

For Conducted Test					
Final Test Mode	Description				
Mode 1	Playing+chagring				
Mode 2	HDMI				
Mode 3	Data Exchange				
Mode 4	REC Mode				

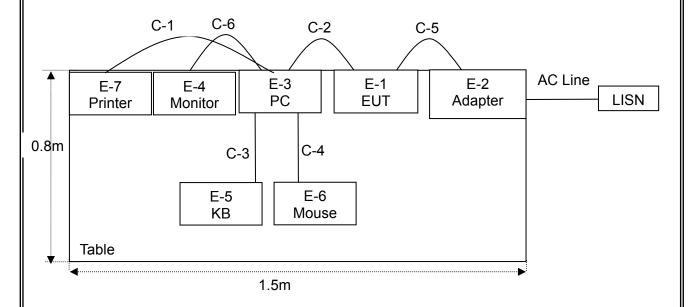
For Radiated Test				
Final Test Mode	Description			
Mode 1	Playing+chagring			
Mode 2	HDMI			
Mode 3	Data Exchange			
Mode 4	REC Mode			

Note: Final Test Mode: Through Pre-scan, find the mode 3 is the worse case. Only the worst case mode is recorded in the report.





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2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	Titan3	hipstreet	HS-7DTB35	N/A	EUT
E-2	ADAPTER	N/A	CS18M050200 FUSB	N/A	
E-3	Personal computer	DELL	FT4Y23X	34413561645	
E-4	Monitor	DELL	IN2020MB	cn-0y6mhx-74261-11f- 67es	
E-5	Keyboard	DELL	SK-8185	OY526KUS	
E-6	Mouse	DELL	MS111-P	cn-011d3v-71581-11e- 1th7	
E-7	Printer	Canon	L11121E	LBP2900	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1.2m	
C-2	NO	NO	1.0m	
C-3	NO	NO	1.0m	
C-4	NO	NO	1.0m	
C-5	NO	NO	1.0m	
C-6	NO	NO	1.0m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>[Length_]</code> column.
- (3) "YES" means "shielded" "with core"; "NO" means "unshielded" "without core".



2.4 MEASUREMENT INSTRUMENTS LIST

2.4.1 CONDUCTED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibra tion period
1	LISN	R&S	ENV216	101313	Jul. 06, 2014	Jul. 05, 2015	1 year
2	LISN	SCHWARZBE CK	NNLK 8129	8129245	Dec. 25, 2013	Dec. 24, 2014	1 year
3	Pulse Limiter	SCHWARZBE CK	VTSD 9561F	9716	Dec. 25, 2013	Dec. 24, 2014	1 year
4	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2014	Jul. 05, 2015	1 year
5	Test Cable	N/A	C01	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
6	Test Cable	N/A	C02	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
7	Test Cable	N/A	C03	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
8	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2014	Jul. 07, 2015	1 year

2.4.2 RADIATED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibra tion period
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2014	Jul. 05, 2015	1 year
2	Test Cable	N/A	R-01	N/A	Dec. 25, 2013	Dec. 24, 2014	1 year
3	Test Cable	N/A	R-02	N/A	Dec. 25, 2013	Dec. 24, 2014	1 year
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2014	Jul. 05, 2015	1 year
5	Antenna Mast	EM	SC100_1	N/A	N/A	N/A	N/A
6	Turn Table	EM	SC100	060531	N/A	N/A	N/A
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2014	Jul. 05, 2015	1 year
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2014	Jul. 05, 2015	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06, 2014	Jul. 05, 2015	1 year



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
PREQUENCY (MHZ)	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

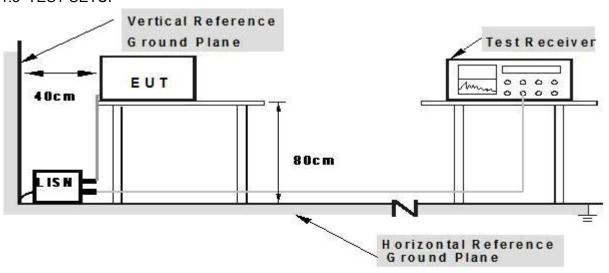
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.3 TEST SETUP



Note: 1. Support units were connected to second LISM.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



3.1.5 TEST RESULTS

EUT:	Titan3	Model Name. :	HS-7DTB35	
Temperature:	26 ℃	Relative Humidity:	54%	
Pressure :	1010hPa	Test Date :	2014-09-28	
Test Mode:	Mode 3	Phase :	L	
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz			

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1539	38.39	9.62	48.01	65.78	-17.77	QP
0.1539	9.22	9.62	18.84	55.78	-36.94	AVG
0.2020	32.91	9.49	42.40	63.52	-21.12	QP
0.2020	30.21	9.49	39.70	53.52	-13.82	AVG
2.8300	38.70	9.57	48.27	56.00	-7.73	QP
2.8300	24.97	9.57	34.54	46.00	-11.46	AVG
5.2219	40.03	9.61	49.64	60.00	-10.36	QP
5.2219	28.08	9.61	37.69	50.00	-12.31	AVG
12.6299	25.97	9.79	35.76	60.00	-24.24	QP
12.6299	9.48	9.79	19.27	50.00	-30.73	AVG
24.6060	34.07	10.19	44.26	60.00	-15.74	QP
24.6060	23.59	10.19	33.78	50.00	-16.22	AVG

Remark:

^{2.} Factor = Insertion Loss + Cable Loss.



^{1.} All readings are Quasi-Peak and Average values.



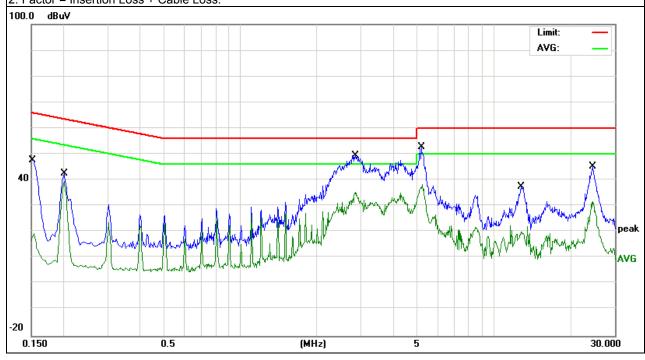
EUT:	Titan3	Model Name. :	HS-7DTB35		
Temperature :	26 ℃	Relative Humidity:	54%		
Pressure:	1010hPa	Test Date :	2014-09-28		
Test Mode:	Mode 3 Phase : N				
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz				

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Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1539	38.44	9.65	48.09	65.78	-17.69	QP
0.1539	9.84	9.65	19.49	55.78	-36.29	AVG
0.2020	33.18	9.50	42.68	63.52	-20.84	QP
0.2020	30.08	9.50	39.58	53.52	-13.94	AVG
2.8540	39.83	9.58	49.41	56.00	-6.59	QP
2.8540	25.66	9.58	35.24	46.00	-10.76	AVG
5.2379	42.46	9.61	52.07	60.00	-7.93	QP
5.2379	28.60	9.61	38.21	50.00	-11.79	AVG
12.8299	24.77	9.80	34.57	60.00	-25.43	QP
12.8299	10.24	9.80	20.04	50.00	-29.96	AVG
24.5740	33.89	10.29	44.18	60.00	-15.82	QP
24.5740	21.56	10.29	31.85	50.00	-18.15	AVG

Remark:

- All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

	Class A (at 10m)	Class B (at 3m)
FREQUENCY (MHz)	dBuV/m	dBuV/m
30 ~ 88	39.0	40.0
88 ~ 216	43.5	43.5
216 ~ 960	46.5	46.0
Above 960	49.5	54.0

Notes:

- (1) The limit for radiated test was performed according to as following: FCC PART 15B /ICES-003.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

3.2.2 TEST PROCEDURE

Test Arrangement for Radiated Emissions up to 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency below 1GHz.

Test Arrangement for Radiated Emissions above 1 GHz.

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength.Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.



e. The spectrum analyzer system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

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Note: For the hand-held device, the EUT should be measured for all 3 axes and only the worst case is recorded in the report

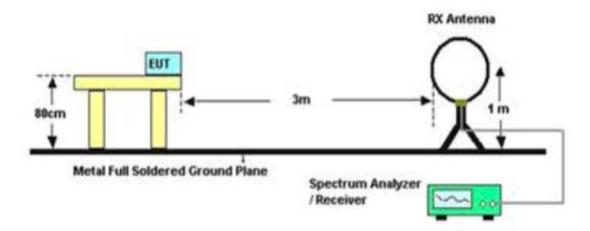
During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
	Peak	1 MHz	1 MHz
Above 1000	Peak	1 MHz	10 Hz

3.2.3 TEST SETUP

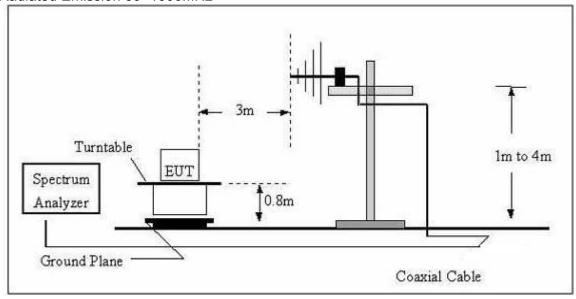
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz

For radiated emissions below 30MHz

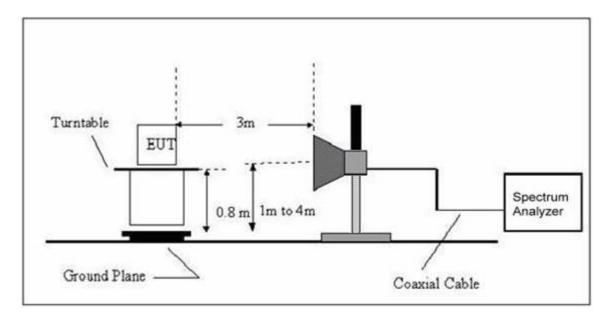




For Radiated Emission 30~1000MHz



(B) Radiated Emission Test Set-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



3.2.5 TEST RESULTS
TEST RESULTS (Below 30 MHz)

EUT:	Titan3	Model Name :	HS-7DTB35
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	
Test Mode :	TX	Polarization :	

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				Р
				Р

NOTE:

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

Distance extrapolation factor =20 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



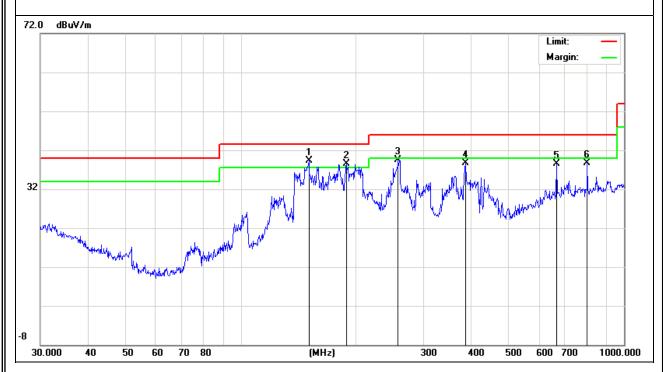
TEST RESULTS (30~1000 MHz)

	,				
EUT:	Titan3	Model Name :	HS-7DTB35		
Temperature :	24 ℃	Relative Humidity:	54%		
Pressure :	1010 hPa	Test Date :	2014-09-28		
Test Mode :	Mode 3 Polarization : Horizontal				
Test Power :	DC 5V From ADAPTER AC 120V/60Hz				

Freq.	Reading	Factor	Measurement	Limit	Over	Remark
(MHz)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	Remark
150.5378	27.56	11.71	39.27	43.50	-4.23	QP
188.4122	27.61	10.89	38.50	43.50	-5.00	QP
257.4221	25.78	13.63	39.41	46.00	-6.59	QP
386.6338	22.85	15.91	38.76	46.00	-7.24	QP
665.8034	15.54	22.97	38.51	46.00	-7.49	QP
801.7862	13.64	25.07	38.71	46.00	-7.29	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.





EUT: Titan3 Model Name : HS-7DTB35 Temperature: **24** ℃ Relative Humidity: 54% Pressure: 1010 hPa Test Date: 2014-09-28 Test Mode : Mode 3 Polarization: Vertical Test Power : DC 5V From Notebook AC 120V/60Hz

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Freq.	Reading	Factor	Measurement	Limit	Over	Remark	
(MHz)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	Remark	
145.3505	22.11	12.00	34.11	43.50	-9.39	QP	
155.3644	26.20	11.47	37.67	43.50	-5.83	QP	
169.0054	22.75	11.78	34.53	43.50	-8.97	QP	
191.7450	22.42	10.21	32.63	43.50	-10.87	QP	
258.3264	19.25	13.66	32.91	46.00	-13.09	QP	
668.1423	18.97	23.01	41.98	46.00	-4.02	QP	

Remark:

- 1. All readings are Peak and Average values.
- 2. Factor = Antenna Factor + Cable Loss Amplifier.
- 3. N/A means All Data have pass Limit





3.2.6 TEST RESULTS(1000~12400MHz)

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark	
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		
V	1146.142	64.38	-17.85	46.53	74	-27.47	peak	
V	1146.142	41.98	-17.85	24.13	54	-29.87	AVG	
V	1958.233	62.65	-12.88	49.77	74	-24.23	peak	
V	1958.233	41.2	-12.88	28.32	54	-25.68	AVG	
V	2283.619	62.19	-12.63	49.56	74	-24.44	peak	
V	2283.619	39.6	-12.63	26.97	54	-27.03	AVG	
V	2683.426	62.31	-11.36	50.95	74	-23.05	peak	
V	2683.426	39.92	-11.36	28.56	54	-25.44	AVG	
V	2883.514	61.57	-11.54	50.03	74	-23.97	peak	
V	2883.514	41.56	-11.54	30.02	54	-23.98	AVG	
V	4008.328	58.39	-5.56	52.83	74	-21.17	peak	
V	4008.328	36.97	-5.56	31.41	54	-22.59	AVG	
Н	1346.632	59.21	-17.01	42.2	74	-31.8	peak	
Н	1346.632	39.02	-17.01	22.01	54	-31.99	AVG	
Н	1546.258	59.6	-16.08	43.52	74	-30.48	peak	
Н	1546.258	39.79	-16.08	23.71	54	-30.29	AVG	
Н	1958.147	57.97	-12.88	45.09	74	-28.91	peak	
Н	1958.147	37.4	-12.88	24.52	54	-29.48	AVG	
Н	2733.526	57.81	-11.19	46.62	74	-27.38	peak	
Н	2733.526	36.53	-11.19	25.34	54	-28.66	AVG	
Н	3821.311	54.45	-6.83	47.62	74	-26.38	peak	
Н	3821.311	32.85	-6.83	26.02	54	-27.98	AVG	
Н	4796.155	52.31	-3.13	49.18	74	-24.82	peak	
Н	4796.155	31.25	-3.13	28.12	54	-25.88	AVG	

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



4. EUT TEST PHOTO





