

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC145567 1 of 96 Page:

FCC Radio Test Report FCC ID: 2ABEPTW1066

Original Grant

TB-FCC145567 Report No.

Shenzhen Tianzheng Hongye Technology Co.Ltd **Applicant**

Equipment Under Test (EUT)

EUT Name : 10.1 inch MID

TM101A550L Model No.

Series No. TM101A530L, TM101A520L, TW1066G

Brand Name NuVision

Receipt Date 2015-09-29

Test Date 2015-09-30 to 2015-11-18

Issue Date 2015-11-18

: FCC Part 15, Subpart C (15.247:2015) **Standards**

Test Method ANSI C63.10:2013

Conclusions PASS

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC requirements

Test/Witness Engineer

Approved& Authorized

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant: Shenzhen Tianzheng Hongye Technology Co.Ltd.

Address : Building C, Guancheng High-tech Science and Technology Park,

Zhenxing Road, Carp River Industrial Zone, Lou Village, Gongming Town, Guangming New District, Shenzhen City, Guangdong Province,

China

Manufacturer : Shenzhen Tianzheng Hongye Technology Co.Ltd.

Address: Building C, Guancheng High-tech Science and Technology Park,

Zhenxing Road, Carp River Industrial Zone, Lou Village, Gongming Town, Guangming New District, Shenzhen City, Guangdong Province,

China

1.2 General Description of EUT (Equipment Under Test)

EUT Name		: 10.1 inch MID			
Models No.		TM101A550L, TM101A530L, TM101A520L, TW1066G			
Model Difference		All models are identical in the same PCB layout, interior structure and electrical circuits, The only difference is model name for commercial purpose.			
TODY OF		Operation Frequency: BT: 2402MHz~2480MHz BLE: 2402MHz~2480MHz WIFI: 2412~2462 MHz ₍₂₎			
Product Description		Number of Channel:	Bluetooth:79 Channels see note (3)		
Description		Max Peak Output Power:	GFSK: 4.745 dBm		
		Antenna Gain:	2.09 dBi FPC Antenna		
		Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)		
Power Supply		DC Voltage supplied from	` ' '		
		DC power by Li-ion Battery			
Power Rating		Adapter 1#(TEKA018-0502500UK 1509): Input: AC 100~240V 50/60Hz 0.5A Output: 5V/2.5A Adapter 2#(TEKA018-0502500UK 1510): Input: AC 100~240V 50/60Hz 0.5A Output: 5V/2.5A DC 3.7V from 45.6Wh Li-ion battery			
Connecting I/O Port(S)	:	Please refer to the User's Manual			

Note:



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(1) This Test Report is FCC Part 15.247 for Bluetooth, and test procedure in accordance with Public Notice: DA 00-705...

- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. The EUT has also been tested and complied the FCC 15C for BLE and WIFI function, and recorded in the separate test report.
- (3) Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454	THUE	
26	2428	53	2455	011	Call Des

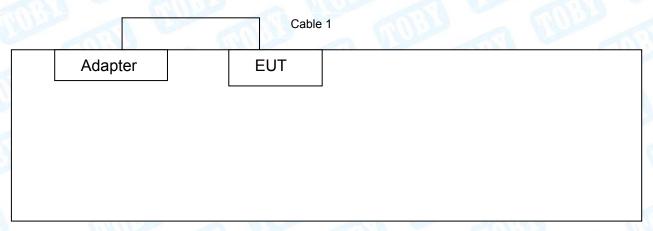
(4) The Antenna information about the equipment is provided by the applicant.



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1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

Equipment Information								
Name Model FCC ID/DOC Manufacturer Used "√"								
A HULL		W. S.	4000	ALIO:				
	Cable Information							
Number Shielded Type Ferrite Core Length Note								
Cable 1	NO	NO	0.8M	Accessory				

1.5 Description of Test Mode

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 follow was evaluated respectively.

For Conducted Test			
Final Test Mode Description			
Mode 1	AC Charging with TX GFSK Mode		

For Radiated Test	
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Final Test Mode	Description
Mode 1	AC Charging with TX GFSK Mode
Mode 2	TX Mode(GFSK) Channel 00/39/78
Mode 3	TX Mode(π /4-DQPSK) Channel 00/39/78
Mode 4	TX Mode(8-DPSK) Channel 00/39/78
Mode 5	Hopping Mode(GFSK)
Mode 6	Hopping Mode(π /4-DQPSK)
Mode 7	Hopping Mode(8-DPSK)

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate. We have pretested all the test mode above.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

TX Mode: GFSK (1 Mbps)
TX Mode: 8-DPSK (3 Mbps)

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on Z-plane as the normal use. Therefore only the test data of this Z-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of Bluetooth mode.

Test Software Version		RF KPI Test		
Frequency	2402 MHz	2441MHz	2480 MHz	
GFSK	DEF	DEF	DEF	
π /4-DQPSK	DEF	DEF	DEF	
8-DPSK	DEF	DEF	DEF	

1.7 Measurement Uncertainty

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



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Test Item	Parameters	Expanded Uncertainty (U _{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz	±3.42 dB
Conducted Emission	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

May 22, 2014 certificated by TUV Rheinland(China) Co., Ltd. with TUV certificate No.: UA 50282953 0001 and report No.: 17026822 002. The certificate is valid until the next scheduled audit or up to 18 months, at the discretion of TUV Rhineland.



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2. Test Summary

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1						
Standard S	ection	-				
FCC	IC	Test Item	Judgment	Remark		
15.203	٠.	Antenna Requirement	PASS	N/A		
15.207	RSS-GEN 7.2.2	Conducted Emission	PASS	N/A		
15.205	RSS-Gen 7.2.3	Restricted Bands	PASS	N/A		
15.247(a)(1)	RSS 247 5.1 (2)	Hopping Channel Separation	PASS	N/A		
15.247(a)(1)	RSS 247 5.1 (4)	Dwell Time	PASS	N/A		
15.247(b)(1)	RSS 247 5.4 (2)	Peak Output Power	PASS	N/A		
15.247(b)(1)	RSS 247 5.1 (4)	Number of Hopping Frequency	PASS	N/A		
15.247(c)	RSS 247 5.5	Radiated Spurious Emission	PASS	N/A		
15.247(a)	RSS 247 5.1 (1)	99% Occupied Bandwidth & 20dB Bandwidth	PASS	99%OBW GFSK:838.9044kHz π /4-DQPSK: 909.8529kHz 8-DPSK:1135.40kHz		

Note: N/A is an abbreviation for Not Applicable.



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3. Test Equipment

AC Main C	onducted Emis	sion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	ROHDE& SCHWARZ	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
50ΩCoaxial Switch	Anritsu	MP59B	X10321	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
Radiation Description	Spurious Emiss Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Aug. 28, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	Sonoma	310N	185903	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	HP	8447B	3008A00849	Mar. 28, 2015	Mar. 27, 2016
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 28, 2015	Mar. 27, 2016
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	onducted Emis	sion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Aug. 28, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC 15.207

4.1.2 Test Limit

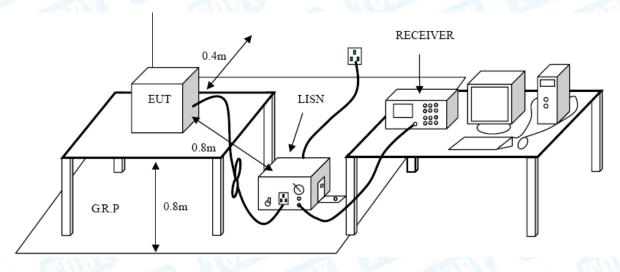
Conducted Emission Test Limit

Eroguanov	Maximum RF Line Voltage (dBμV)				
Frequency	Quasi-peak Level	Average Level			
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

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.

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.



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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.

LISN at least 80 cm from nearest part of EUT chassis

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

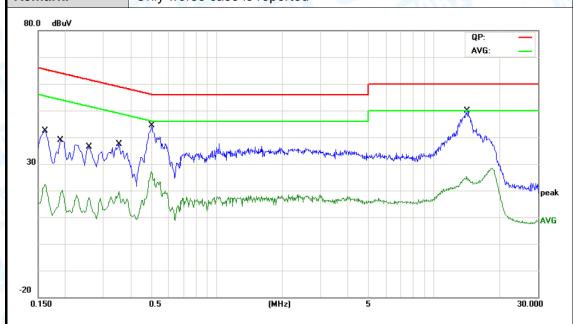
4.5 Test Data

Please see the next page.



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		13.0
Terminal:	Line		
Test Mode:	AC Charging with TX GFSK M	lode 2402 MHz (Adap	ter 1#)
Remark:	Only worse case is reported	U CO	



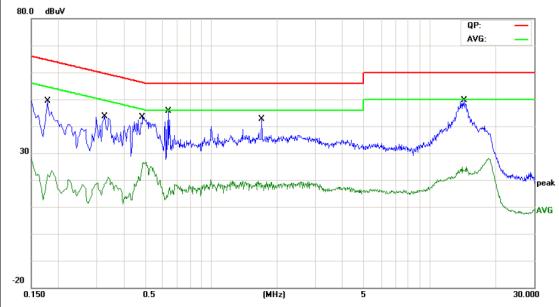
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBuV	dBuV	dB	Detector
1		0.1620	28.78	9.94	38.72	65.36	-26.64	QP
2		0.1620	10.76	9.94	20.70	55.36	-34.66	AVG
3		0.1900	24.35	10.00	34.35	64.03	-29.68	QP
4		0.1900	7.51	10.00	17.51	54.03	-36.52	AVG
5		0.2580	22.54	10.02	32.56	61.49	-28.93	QP
6		0.2580	6.08	10.02	16.10	51.49	-35.39	AVG
7		0.3540	23.10	10.02	33.12	58.87	-25.75	QP
8		0.3540	8.89	10.02	18.91	48.87	-29.96	AVG
9	*	0.5020	29.79	10.02	39.81	56.00	-16.19	QP
10		0.5020	15.67	10.02	25.69	46.00	-20.31	AVG
11		14.1540	31.91	10.24	42.15	60.00	-17.85	QP
12		14.1540	12.68	10.24	22.92	50.00	-27.08	AVG

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX G	FSK Mode 2402 MHz (Adap	ter 1#)
Remark:	Only worse case is repo	orted	1
80.0 dBuV			0.0
			QP: —



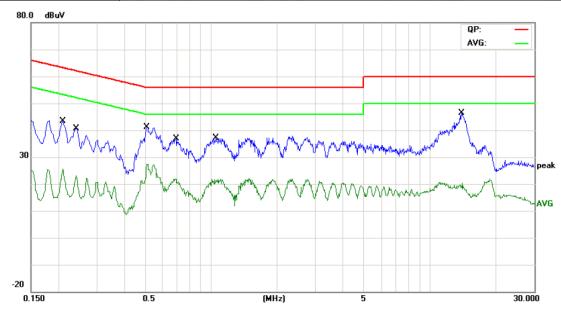
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1780	18.01	10.12	28.13	64.57	-36.44	QP
2		0.1780	1.54	10.12	11.66	54.57	-42.91	AVG
3		0.3260	19.06	10.08	29.14	59.55	-30.41	QP
4		0.3260	6.07	10.08	16.15	49.55	-33.40	AVG
5	*	0.4860	26.65	10.02	36.67	56.24	-19.57	QP
6		0.4860	13.01	10.02	23.03	46.24	-23.21	AVG
7		0.6340	12.09	10.02	22.11	56.00	-33.89	QP
8		0.6340	-0.02	10.02	10.00	46.00	-36.00	AVG
9		1.7060	20.10	10.09	30.19	56.00	-25.81	QP
10		1.7060	6.15	10.09	16.24	46.00	-29.76	AVG
11		14.3340	30.20	10.07	40.27	60.00	-19.73	QP
12		14.3340	12.05	10.07	22.12	50.00	-27.88	AVG

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 240V/60 Hz		13.0
Terminal:	Line		
Test Mode:	AC Charging with TX GFSK N	Mode 2402 MHz (Adap	ter 1#)
Remark:	Only worse case is reported		



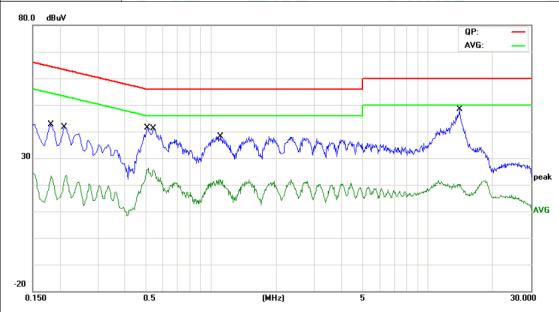
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2100	28.65	10.02	38.67	63.20	-24.53	QP
2		0.2100	12.25	10.02	22.27	53.20	-30.93	AVG
3		0.2420	27.01	10.02	37.03	62.02	-24.99	QP
4		0.2420	11.61	10.02	21.63	52.02	-30.39	AVG
5	*	0.5100	27.62	10.02	37.64	56.00	-18.36	QP
6		0.5100	15.71	10.02	25.73	46.00	-20.27	AVG
7		0.6900	22.46	10.11	32.57	56.00	-23.43	QP
8		0.6900	10.17	10.11	20.28	46.00	-25.72	AVG
9		1.0500	22.03	10.06	32.09	56.00	-23.91	QP
10		1.0500	9.80	10.06	19.86	46.00	-26.14	AVG
11		13.9220	27.79	10.24	38.03	60.00	-21.97	QP
12		13.9220	6.35	10.24	16.59	50.00	-33.41	AVG

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 240V/60 Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX GFSK I	Mode 2402 MHz (Adap	ter 1#)
Remark:	Only worse case is reported		



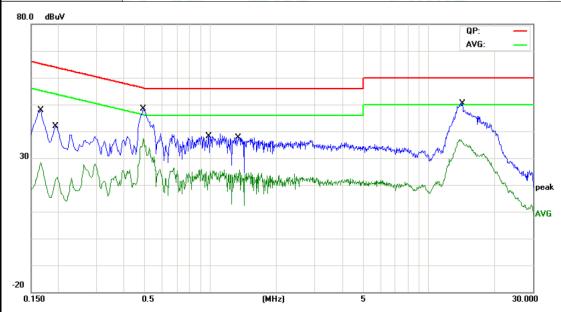
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBuV	dBuV	dB	Detector
1		0.1819	29.05	10.12	39.17	64.39	-25.22	QP
2		0.1819	11.60	10.12	21.72	54.39	-32.67	AVG
3		0.2100	26.25	10.12	36.37	63.20	-26.83	QP
4		0.2100	9.93	10.12	20.05	53.20	-33.15	AVG
5	*	0.5100	28.20	10.02	38.22	56.00	-17.78	QP
6		0.5100	15.15	10.02	25.17	46.00	-20.83	AVG
7		0.5420	27.60	10.02	37.62	56.00	-18.38	QP
8		0.5420	15.00	10.02	25.02	46.00	-20.98	AVG
9		1.1060	22.86	10.15	33.01	56.00	-22.99	QP
10		1.1060	9.82	10.15	19.97	46.00	-26.03	AVG
11		13.9940	27.80	10.08	37.88	60.00	-22.12	QP
12		13.9940	7.35	10.08	17.43	50.00	-32.57	AVG

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		18.0
Terminal:	Line		
Test Mode:	AC Charging with TX GFSK I	Mode 2402 MHz (Adap	ter 2#)
Remark:	Only worse case is reported	The same of the sa	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1660	32.16	9.95	42.11	65.15	-23.04	QP
2		0.1660	17.29	9.95	27.24	55.15	-27.91	AVG
3		0.1940	25.16	10.01	35.17	63.86	-28.69	QP
4		0.1940	10.75	10.01	20.76	53.86	-33.10	AVG
5	*	0.4900	35.74	10.02	45.76	56.17	-10.41	QP
6		0.4900	25.71	10.02	35.73	46.17	-10.44	AVG
7		0.9820	22.51	10.06	32.57	56.00	-23.43	QP
8		0.9820	11.45	10.06	21.51	46.00	-24.49	AVG
9		1.3380	23.23	10.06	33.29	56.00	-22.71	QP
10		1.3380	12.24	10.06	22.30	46.00	-23.70	AVG
11		14.2700	32.72	10.25	42.97	60.00	-17.03	QP
12		14.2700	23.00	10.25	33.25	50.00	-16.75	AVG

^{*:}Maximum data x:Over limit !:over margin



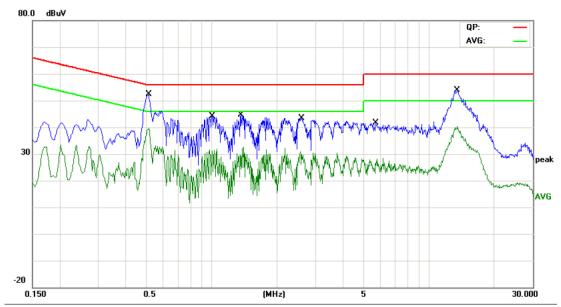
Page: 18 of 96

UT:	10	0.1 inch MII	D	Mo	odel Na	me :	TM10	1A550L
Temperature	e: 25	5 ℃		Re	elative H	lumidity	55%	HAI
est Voltage	: A	C 120V/60	Hz				11/19	
Terminal:	N	eutral	_ 0	MILES OF		1 80		ATT
Test Mode:	A	C Charging	with TX C	SFSK Mod	e 2402 I	MHz (Ada	pter 2#)	
Remark:	0	nly worse o	ase is rep	orted	300		18	
80.0 dBuV								
							QP: AVG:	
X	+	X.					A. Walter	
/\ _M .	л Л	1 Managarath	. Malanda Malanasa.	ill and A. X.			1	\vdash
30 1	1 12 MI W	1 m / m / m - 1	אור ב. נאלימה של אילוונאל	Hall Mater and a server	Children and Printers and	bearing or the second	J January	
\bigwedge	1/MVV/V	The boundary		May of high and had a start of the section	والإنهام والمعالق الموالية والمواجه	Mary Mary and the property of the party of t	√`	/ NAME
L Alaa	1.14		אור אויי אורואיוןיו	111				May a
								~
-20 0.150		0.5	9	(Hz)	5			30.000
0.150		0.5	M)	inzj	5			30.000
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
- INO. IVIK.	MHz	dBuV	dB	dBuV	dBu∀		Detector	
1	0.1620	29.25	9.94	39.19		-26.17	QP	
	0.1620	14.86	9.94	24.80		-30.56	AVG	
	0.1620	35.61	10.02	45.63		-30.56	QP	
	0.4860	25.82	10.02	35.84		-10.40	AVG	
	0.9100	24.11	10.08	34.19		-21.81	QP	
	0.9100	12.98	10.08	23.06		-22.94	AVG	
7	1.3260	23.50	10.06	33.56		-22.44	QP	
	1.3260	12.86	10.06	22.92		-23.08	AVG	
8	1.3200			32.06	56.00	-23.94	QP	
8	2.7020	22.02	10.04	32.00				
8 9		22.02 10.78	10.04 10.04	20.82	46.00	-25.18	AVG	
8 9 10	2.7020					-25.18 -15.56	AVG QP	



Page: 19 of 96

EUT:	10.1 inch MID	Model Name :	TM101A550L						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	AC 240V/60 Hz		33.9						
Terminal:	Line	The same of the							
Test Mode:	AC Charging with TX C	AC Charging with TX GFSK Mode 2402 MHz (Adapter 2#)							
Remark:	Only worse case is rep	orted							
80.0 dBuV	'								
			QP: — AVG: —						



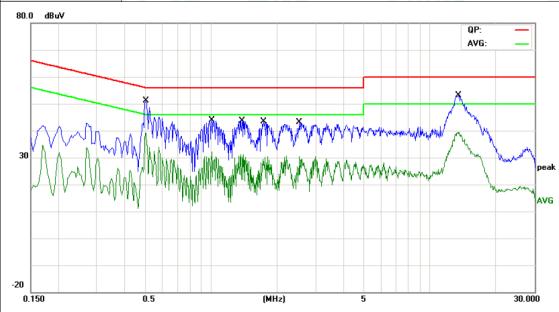
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBu∀	dB	dBuV	dBuV	dB	Detector
1 *	0.5140	38.02	10.03	48.05	56.00	-7.95	QP
2	0.5140	25.94	10.03	35.97	46.00	-10.03	AVG
3	1.0100	30.15	10.06	40.21	56.00	-15.79	QP
4	1.0100	17.99	10.06	28.05	46.00	-17.95	AVG
5	1.3619	29.56	10.06	39.62	56.00	-16.38	QP
6	1.3619	17.41	10.06	27.47	46.00	-18.53	AVG
7	2.6060	28.65	10.04	38.69	56.00	-17.31	QP
8	2.6060	16.41	10.04	26.45	46.00	-19.55	AVG
9	5.7100	25.74	10.00	35.74	60.00	-24.26	QP
10	5.7100	12.43	10.00	22.43	50.00	-27.57	AVG
11	13.5340	37.36	10.23	47.59	60.00	-12.41	QP
12	13.5340	25.29	10.23	35.52	50.00	-14.48	AVG

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	AC 240V/60 Hz								
Terminal:	Neutral	Neutral							
Test Mode:	AC Charging with TX GFSK N	AC Charging with TX GFSK Mode 2402 MHz (Adapter 2#)							
Remark:	Only worse case is reported								



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.5060	38.49	10.02	48.51	56.00	-7.49	QP
2		0.5060	26.39	10.02	36.41	46.00	-9.59	AVG
3		1.0060	29.43	10.06	39.49	56.00	-16.51	QP
4		1.0060	17.39	10.06	27.45	46.00	-18.55	AVG
5		1.3820	29.68	10.06	39.74	56.00	-16.26	QP
6		1.3820	17.38	10.06	27.44	46.00	-18.56	AVG
7		1.7380	28.15	10.06	38.21	56.00	-17.79	QP
8		1.7380	15.84	10.06	25.90	46.00	-20.10	AVG
9		2.5300	27.91	10.04	37.95	56.00	-18.05	QP
10		2.5300	14.91	10.04	24.95	46.00	-21.05	AVG
11		13.5060	37.26	10.23	47.49	60.00	-12.51	QP
12		13.5060	25.18	10.23	35.41	50.00	-14.59	AVG

^{*:}Maximum data x:Over limit !:over margin



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC 15.209

5.1.2 Test Limit

Radiated Emission Limit (9 kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)		
0.009~0.490	2400/F(KHz)	300		
0.490~1.705	24000/F(KHz)	30		
1.705~30.0	30	30		
30~88	100	3		
88~216	150	3		
216~960	200	3		
Above 960	500	3		

Radiated Emission Limit (Above 1000MHz)

Frequency	(dBuV/m)(a	t 3m)
(MHz)	Peak	Average
Above 1000	74	54

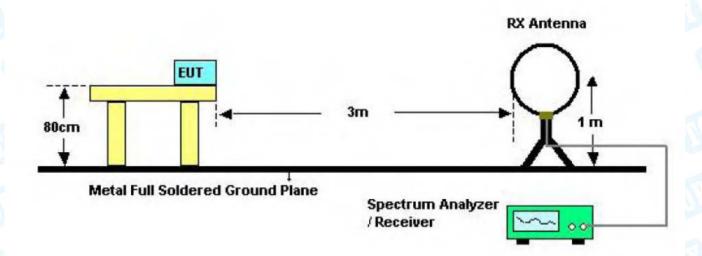
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m)

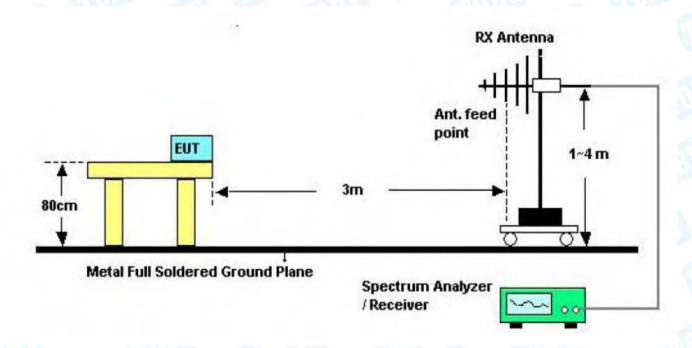


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5.2 Test Setup



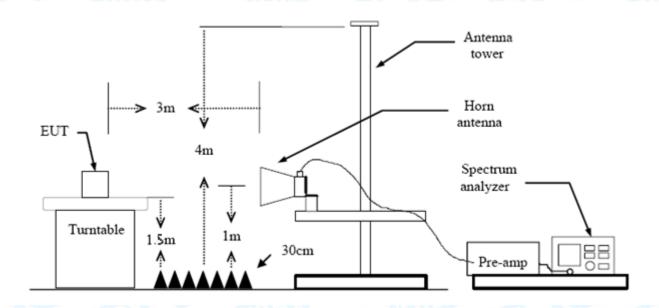
Bellow 30MHz Test Setup



Bellow 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.



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5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power in TX mode.

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 KHz with Peak Detector for Average Values.

Test data please refer the following pages.



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	10.1 iı	10.1 inch MID			Model Name :			
emperature:	25 ℃			Relative	Humidity	umidity: 55		
est Voltage:	AC 12	20V/60 Hz	CIII)		- OH			
nt. Pol.	Horizo	ontal					Miles	
est Mode:	TX G	FSK Mode 2	Mode 2402MHz (Adapter 1#)					
emark:	Only	worse case	is reported		BILL			
80.0 dBuV/m								
					FCC	15B 3M Radiati		
						Margin -6	5 dB	
		3			5	6 X		
30	2		. 4		×	Ţ		
Maria X	Mar. All		may of my	A compression of the contract	Market	John James Pringer of	لبالمالمهاييه	
washing and a second	M V	,	Marine "	'nΨ	, chedile			
30.000 40 50	60 70	80	(MHz)	300	400 5	00 600 700	1000.000	
			0	M				
		D - 1	Correct I	Measure-				
No. Mk. F	rea.	Reading Level			Limit	Over		
	req.	Level	Factor	ment			Detecto	
N	·ИНz	Level dBuV	Factor dB/m	ment dBuV/m	dBuV/m	dB	Detecto	
1 42.4	ИНZ 4508	dBuV 43.93	Factor dB/m -21.19	ment dBuV/m 22.74	dBuV/m 40.00	dB -17.26	peak	
1 42.4 2 63.3	4508 3132	dBuV 43.93 51.06	dB/m -21.19 -24.22	ment dBuV/m 22.74 26.84	dBuV/m 40.00 40.00	dB -17.26 -13.16	peak peak	
1 42.4 2 63.3 3 90.8	4508 3132 8554	dBuV 43.93 51.06 54.23	dB/m -21.19 -24.22 -22.61	ment dBuV/m 22.74 26.84 31.62	dBuV/m 40.00	dB -17.26	peak peak	
1 42.4 2 63.3 3 90.8	4508 3132	dBuV 43.93 51.06	dB/m -21.19 -24.22	ment dBuV/m 22.74 26.84	dBuV/m 40.00 40.00	dB -17.26 -13.16	peak peak peak	
1 42.4 2 63.3 3 90.8 4 150.	4508 3132 8554	dBuV 43.93 51.06 54.23	dB/m -21.19 -24.22 -22.61	ment dBuV/m 22.74 26.84 31.62	dBuV/m 40.00 40.00 43.50	dB -17.26 -13.16 -11.88	peak peak peak peak	
1 42.4 2 63.3 3 90.8 4 150. 5 350.	4508 3132 8554 .0108	dBuV 43.93 51.06 54.23 46.87	Factor dB/m -21.19 -24.22 -22.61 -21.17	ment dBuV/m 22.74 26.84 31.62 25.70	dBuV/m 40.00 40.00 43.50 43.50	dB -17.26 -13.16 -11.88 -17.80	peak peak peak peak peak	



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EUT	Γ:			10	.1 ir	inch MID Model Name :			TN L	1101	A55						
Гeп	npera	atur	e:	25	$^{\circ}$ C	1	01/1	James .		8	Relati	ve Hur	nidit	y:	55%		
Гes	t Vol	tage) :	AC	12	:0V/	60 H	z 🦿					1//				9
4nt	. Pol			Ve	Vertical												
Гes	t Mo	de:		TX	GF	SK	Mod	e 2402MHz (Adapter 1#)									
Ren	nark:			Or	ıly v	vors	e cas	se is re	ported			(1)					
80.0) dBu\	V/m		·													
													FC	15B 3	M Radia	ation	
															Margin	-6 dB	
			2		1									£			
30	Δη		May Control	~~~~	A. Lilland		$\overline{}$					5 X		×			
00	$M_{M'}$	ham					\\			.					المالم	human	Ander
-20	0.000	40	50	60	70	80		w.c.	(MHz)		2	300 4	00	500	600 7 0	ın 1	000.00
	J. UUU	40	50	, pn	70	80			(MHZ)		J	5UU 4	UU	200	500 70	ı ı	000.00
	No.	Mk.	F	req.			adin evel	-	rrect actor		easure ment	e- Lir	nit	C	ver		
				MHz		d	lBu∀	dl	B/m	(dBuV/m	dB	uV/m		dB	De	tecto
1			42.	.1542	2	5	4.47	-2	1.07		33.40	40	0.00	-	6.60		QΡ
2		ļ	47.	.6586	3	6	0.99	-23	3.41		37.58	40	0.00	-	2.42	p	eak
3		ļ	66.	.0342	2	6	1.12	-23	3.98		37.14	40	0.00	-	2.86	p	eak
4	,	k	87.	.7248	3	6	1.25	-22	2.82		38.43	40	0.00	-	1.57	p	eak
5			350	.476	8	4	5.25	-14	4.61		30.64	46	3.00	-	15.36	3 p	eak
6			550	.948	0	4	6.49	-10	0.12		36.37	46	3.00	-	9.63	p	eak



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EUT:	10.1 ir	nch MID	a W	М	odel l	Name :	TM1	01A550
Temperature:	25 ℃	CALL !		R	elativ	e Humidity:	55%	
Test Voltage:	AC 12	0V/60 Hz	CALL:	100		AND		
Ant. Pol.	Horizo	ntal		A	TIN.	3	61	Miles Control
Test Mode:	TX GF	SK Mode 2	402MHz (A	dapter	2#)		No.	
Remark:	Only v	vorse case i	s reported		A	ann.		
80.0 dBuV/m								
30	3					6	8M Radiation Margin -6 o	
-20 30.000 40 50	NA, Or		(MHz)	Massentra	300		600 700	1000.000
No. Mk.	Freq.	Reading Level	Correct Factor	Meas me		Limit (Over	
	MHz	dBuV	dB/m	dBu\	//m	dBuV/m	dB	Detecto
1 30	.6379	37.17	-14.35	22.	82	40.00 -	17.18	peak
2 43	3.5057	36.80	-21.64	15.	16	40.00 -	24.84	peak
3 65	5.8031	46.10	-23.99	22.	11	40.00 -	17.89	peak
4 204	4.2377	44.62	-20.20	24.	42	43.50 -	19.08	peak
5 350	0.4768	43.60	-14.61	28.	99	46.00 -	17.01	peak
6 * 550	0.9480	43.03	-10.12	32.	91	46.00 -	13.09	peak
6 * 550								

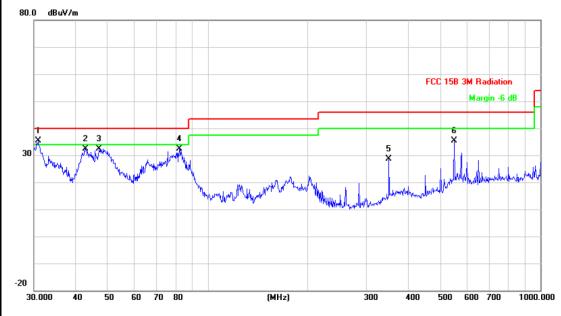
Emission Level= Read Level+ Correct Factor

TB-RF-074-1.0



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EUT:	10.1 inch MID	Model Name :	TM101A550 L				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical						
Test Mode:	TX GFSK Mode 2402MHz (Adapter 2#)						
Remark:	Only worse case is reported						



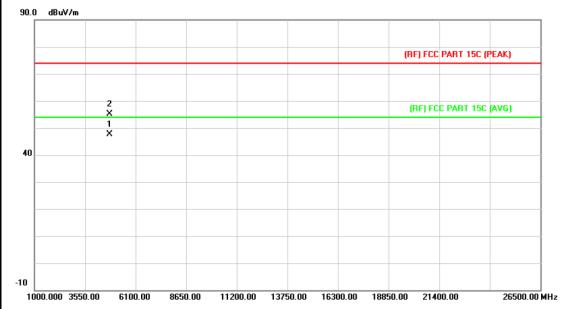
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	30.8535	49.89	-14.49	35.40	40.00	-4.60	peak
2		42.8998	53.83	-21.39	32.44	40.00	-7.56	peak
3		47.1599	55.52	-23.19	32.33	40.00	-7.67	peak
4		82.0706	55.48	-23.16	32.32	40.00	-7.68	peak
5		350.4768	43.31	-14.61	28.70	46.00	-17.30	peak
6		550.9480	45.39	-10.12	35.27	46.00	-10.73	peak

^{*:}Maximum data x:Over limit !:over margin



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EUT:	10.1 inch MID	Model Name :	TM101A550L						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	AC 120V/60 Hz								
Ant. Pol.	Horizontal								
Test Mode:	TX GFSK Mode 2402MHz (A	dapter 1#)	CHILL STREET						
Remark:	No report for the emission who prescribed limit.	No report for the emission which more than 10 dB below the prescribed limit.							

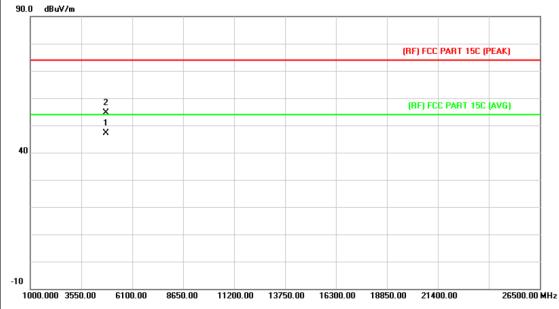


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.925	39.33	8.18	47.51	54.00	-6.49	AVG
2		4804.326	46.92	8.18	55.10	74.00	-18.90	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550 L				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical						
Test Mode:	TX GFSK Mode 2402MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

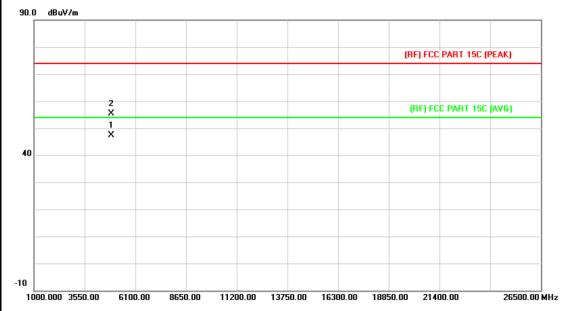


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.326	38.83	8.18	47.01	54.00	-6.99	AVG
2		4803.582	46.51	8.18	54.69	74.00	-19.31	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550 L					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz						
Ant. Pol.	Horizontal		WILLIAM STATE					
Test Mode:	TX GFSK Mode 2441MHz	The second						
Remark:	No report for the emission which prescribed limit.	ch more than 10 dB belo	ow the					

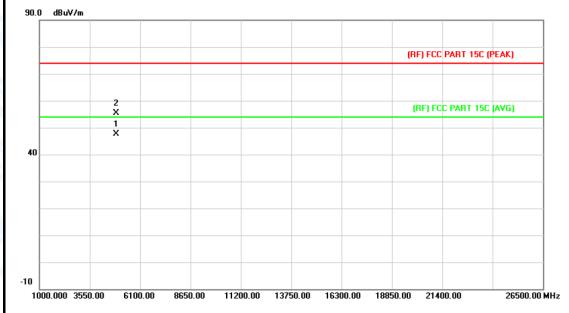


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4881.314	39.11	8.21	47.32	54.00	-6.68	AVG
2		4882.568	47.07	8.21	55.28	74.00	-18.72	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60 Hz				
Ant. Pol.	Vertical				
Test Mode:	TX GFSK Mode 2441MHz	A STATE OF THE PARTY OF THE PAR			
Remark: No report for the emission which more than 10 dB below the prescribed limit.					

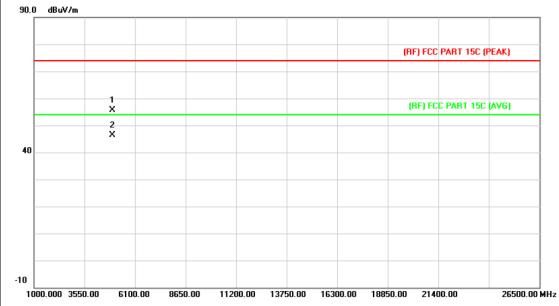


No	o. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4881.935	39.40	8.21	47.61	54.00	-6.39	AVG
2		4882.032	47.24	8.21	55.45	74.00	-18.55	peak



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EUT:	10.1 inch MID	Model Name :						
Temperature:	25 ℃	Relative Humidity: 55%						
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz						
Ant. Pol.	Horizontal							
Test Mode:	TX GFSK Mode 2480MHz		OM.					
Remark:	emark: No report for the emission which more than 10 dB below the prescribed limit.							

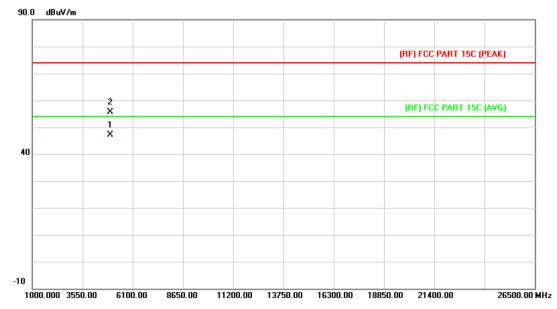


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4959.332	47.44	8.23	55.67	74.00	-18.33	peak
2	*	4959.842	38.18	8.23	46.41	54.00	-7.59	AVG



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EUT:	10.1 inch MID	Model Name :	TM101A550L						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz							
Ant. Pol.	Vertical								
Test Mode:	TX GFSK Mode 2480MHz		LINE .						
Remark: No report for the emission which more than 10 dB below the prescribed limit.									

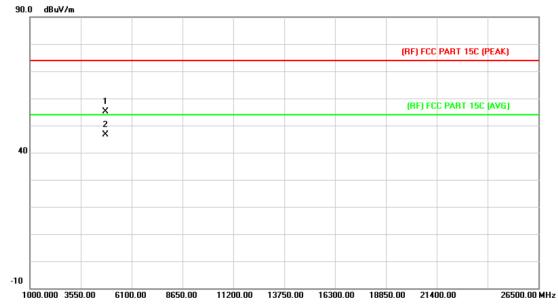


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.635	38.88	8.23	47.11	54.00	-6.89	AVG
2		4960.235	47.38	8.23	55.61	74.00	-18.39	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550 L				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Horizontal		CHILD STATE				
Test Mode:	TX 8-DPSK Mode 2402MHz	The same of the sa					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.324	46.97	8.18	55.15	74.00	-18.85	peak
2	*	4803.923	38.41	8.18	46.59	54.00	-7.41	AVG



Report No.: TB-FCC145567 Page: 36 of 96

THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM			I I LO
EUT:	10.1 inch MID	Model Name :	TM101A550 L
Temperature:	25 ℃	Relative Humidity:	55%
	10100110011		

Test Voltage: AC 120V/60 Hz

Ant. Pol. Vertical

Test Mode: TX 8-DPSK Mode 2402MHz

Remark: No report for the emission which more than 10 dB below the prescribed limit.

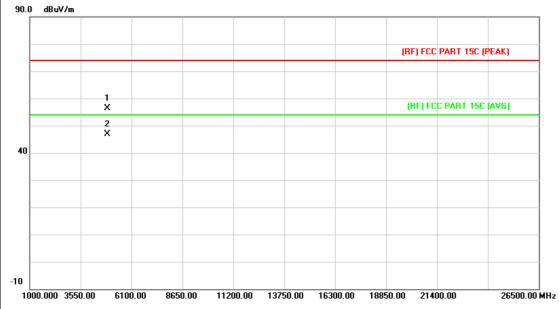


No	o. Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.624	47.63	8.18	55.81	74.00	-18.19	peak
2	*	4803.928	39.18	8.18	47.36	54.00	-6.64	AVG



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EUT:	10.1 inch MID	Model Name :	TM101A55 0L			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60 Hz					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2441MHz	The same				
Remark:	No report for the emission which	h more than 10 dB below	the			
	prescribed limit.					

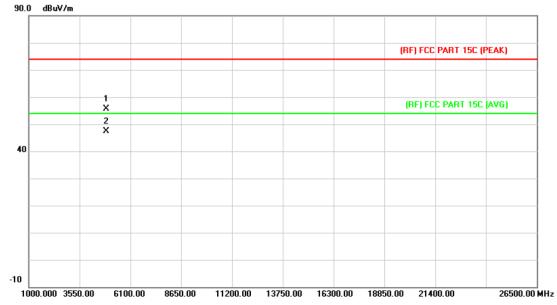


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4882.032	48.16	8.21	56.37	74.00	-17.63	peak
2	*	4882.348	38.60	8.21	46.81	54.00	-7.19	AVG



Page: 38 of 96

EUT:	10.1 inch MID	Model Name :	TM101A550L					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz						
Ant. Pol.	Vertical	Vertical						
Test Mode:	TX 8-DPSK Mode 2441MHz	CU1372	LINE .					
Remark:	rk: No report for the emission which more than 10 dB below the prescribed limit.							
00 0 db VI								

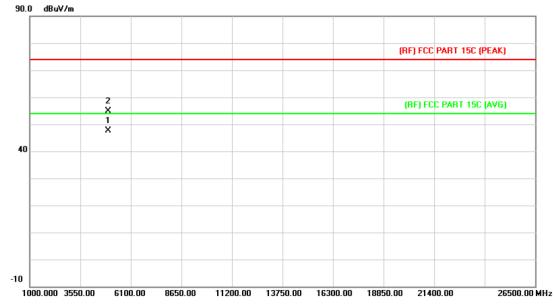


No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.358	47.31	8.21	55.52	74.00	-18.48	peak
2	*	4881.523	39.18	8.21	47.39	54.00	-6.61	AVG



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EUT:	10.1 inch MID	Model Name :	TM101A550L					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz						
Ant. Pol.	Horizontal							
Test Mode:	TX 8-DPSK Mode 2480MHz	CO 133	L. C. L.					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.							

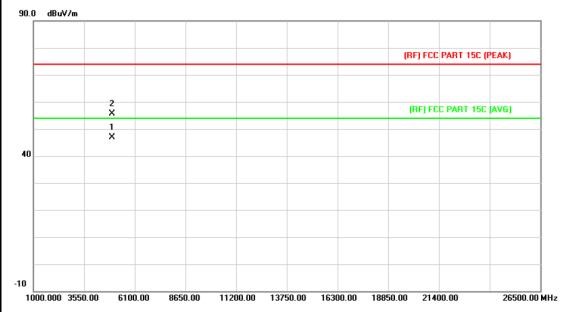


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.156	39.38	8.23	47.61	54.00	-6.39	AVG
2		4959.635	46.63	8.23	54.86	74.00	-19.14	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550L				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical						
Test Mode:	TX 8-DPSK Mode 2480MHz		LITTLE OF				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						



No	o. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.355	38.66	8.23	46.89	54.00	-7.11	AVG
2		4959.659	47.33	8.23	55.56	74.00	-18.44	peak



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6. Restricted Bands Requirement

6.1 Test Standard and Limit

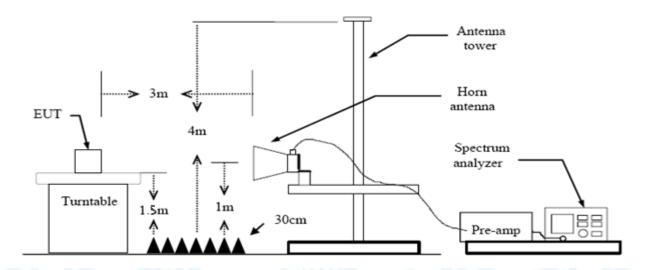
6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dE	BuV/m)(at 3m)
Band (MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

Note: All restriction bands have been tested, only the worst case is reported.

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.



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(4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 KHz with Peak Detector for Average Values.

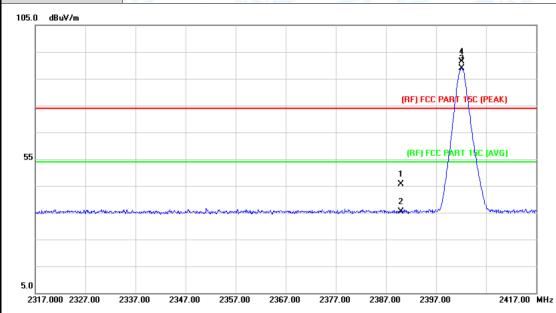
All restriction bands have been tested, only the worst case is reported.



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(1) Radiation Test

EUT:	10.1 inch MID	Model Name :	TM101A550L				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Horizontal		MILLER				
Test Mode:	TX GFSK Mode 2402MHz						
Remark:	N/A	The same					

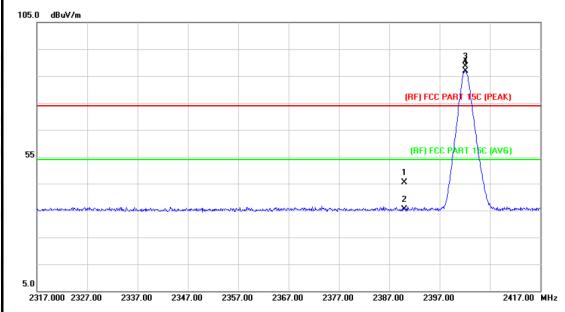


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	44.91	0.77	45.68	74.00	-28.32	peak
2		2390.000	34.49	0.77	35.26	54.00	-18.74	AVG
3	*	2402.100	88.13	0.82	88.95	Fundamenta	I Frequency	AVG
4	Χ	2402.200	90.50	0.82	91.32	Fundamenta	I Frequency	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550L					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60 Hz	AC 120V/60 Hz						
Ant. Pol.	Vertical							
Test Mode:	TX GFSK Mode 2402MHz		LINE TO					
Remark:	Remark: N/A							
105.0 dBuV/m								



No	. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	44.59	0.77	45.36	74.00	-28.64	peak
2		2390.000	34.72	0.77	35.49	54.00	-18.51	AVG
3	Χ	2402.100	87.87	0.82	88.69	Fundamental	Frequency	peak
4	*	2402.200	85.94	0.82	86.76	Fundamental	Frequency	AVG



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		333
Ant. Pol.	Horizontal		
Test Mode:	TX GFSK Mode 2480 N	ЛНz	- Chillian
Remark:	N/A		
105.0 dBuV/m			
\$			

		2											
		Λ									(RF) FCC	PART 15C	(PEAK)
		$T \setminus$											
55			3								(RF) FC	C PART 150	(AVG)
	1		* *										
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5.0													

No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2480.000	87.69	1.15	88.84	Fundamental	Frequency	AVG
2	Χ	2480.100	89.64	1.15	90.79	Fundamental	Frequency	peak
3		2483.500	51.19	1.17	52.36	74.00	-21.64	peak
4		2483.500	47.39	1.17	48.56	54.00	-5.44	AVG



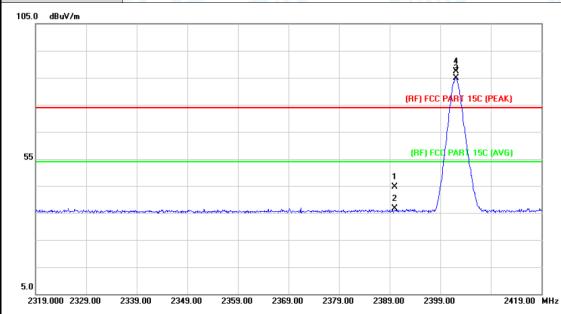
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EUT: Temperature:			10.1	inch MII	D	· 6	1//	Mo	del Na	ıme :		TM10	TM101A550L	
Tem	peratu	re:	25 °	С				Rel	ative l	Humid	ity:	55%	MA.	þ
Test	Voltag	e:	AC 1	120V/60	Hz						36	(M)		
Ant.	Pol.		Verti	cal		UM.				3 N			4	
Test	Mode:		TX	TX GFSK Mode 2480 MHz										
Rem	ark:		N/A	AMA			1	V						-
110.0	dBuV/m													
		2												
		×												1
		$+ \wedge$								(DE)	ECC D	ART 15C (PEA	רא	
		+								(1117)	reci	ATT 13C (FEA	N)	
60		$\parallel \parallel \parallel$												
60			,							(RF) FCC	PART 15C (AV	G)	
		}	(1
			 											-
			Managem			ktorensktotskoorenskel	Variety of the State of the Sta	~~~~~	Arrest Carlet Carles and the	Market Company		and the second s	and the state of the	1
10.0														
	67.000 247	77.00	2487.00	2497.00	2507.0	0 2517	.00	2527.	00 25	37.00	2547.0	00	2567.00	MHz
				Readi	ina	Correc	et .	Mea	sure-					
١	lo. Mk	. F	req.	Leve		Facto		me		Limi	t	Over		
		N	1Hz	dBu\	/	dB/m		dBu	ıV/m	dBu\	//m	dB	Dete	ctor
1	*	2480	0.100	84.7	9	1.15		85	.94	Fundan	nenta	I Frequency	A۷	/G
2	Х	2480	0.200	88.5	4	1.15		89	.69	Fundan	nenta	l Frequency	pe	ak
3		2483	3.500	49.1	4	1.17		50	.31	74.0	00	-23.69	pe	ak
			3.500	45.0		1.17		46		54.0		-7.76	ΑV	



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EUT:	10.1 inch MID	Model Name :	TM101A550L					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60 Hz							
Ant. Pol.	Horizontal	Horizontal						
Test Mode:	TX 8-DPSK Mode 2402MHz		CHILL					
Remark:	N/A							

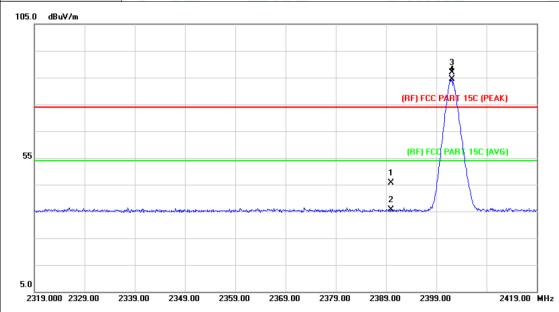


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.91	0.77	44.68	74.00	-29.32	peak
2		2390.000	35.80	0.77	36.57	54.00	-17.43	AVG
3	*	2402.100	84.03	0.82	84.85	Fundamental	Frequency	AVG
4	Χ	2402.200	86.49	0.82	87.31	Fundamenta	I Frequency	peak



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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		33
Ant. Pol.	Vertical		
Test Mode:	TX 8-DPSK Mode 2402MHz		LITTLE TO
Remark:	N/A		

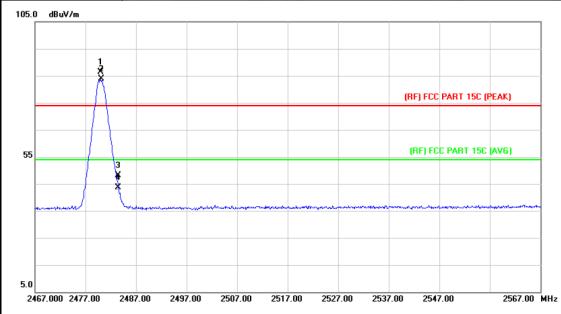


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	44.82	0.77	45.59	74.00	-28.41	peak
2		2390.000	34.74	0.77	35.51	54.00	-18.49	AVG
3	Χ	2402.100	86.02	0.82	86.84	Fundamental	Frequency	peak
4	*	2402.200	83.60	0.82	84.42	Fundamental	Frequency	AVG



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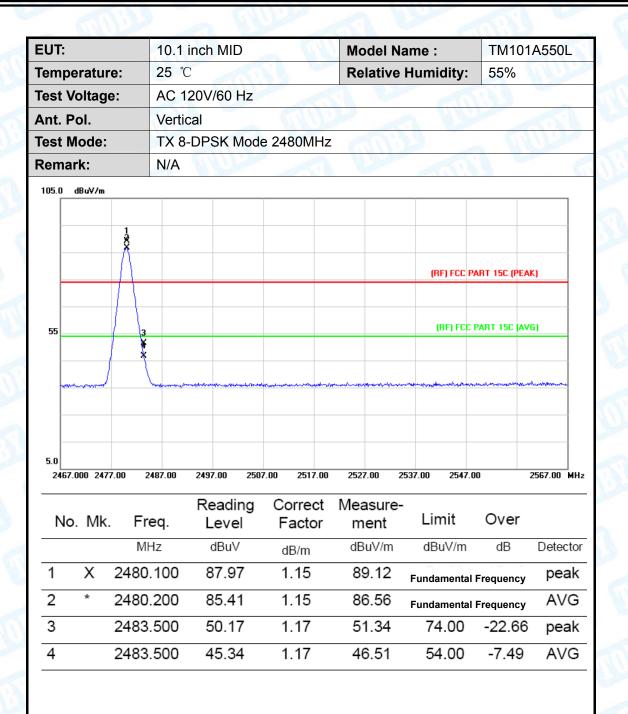
EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		18.0
Ant. Pol.	Horizontal		
Test Mode:	TX 8-DPSK Mode 2480MHz		LINE TO SERVICE
Remark:	N/A		
105 C 10 111			



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2480.000	85.16	1.15	86.31	Fundamenta	I Frequency	peak
2	*	2480.200	82.67	1.15	83.82	Fundamenta	I Frequency	AVG
3		2483.500	46.99	1.17	48.16	74.00	-25.84	peak
4		2483.500	42.44	1.17	43.61	54.00	-10.39	AVG



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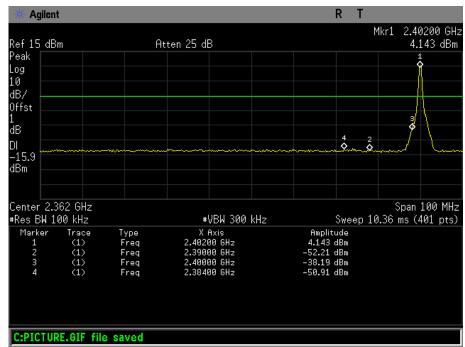


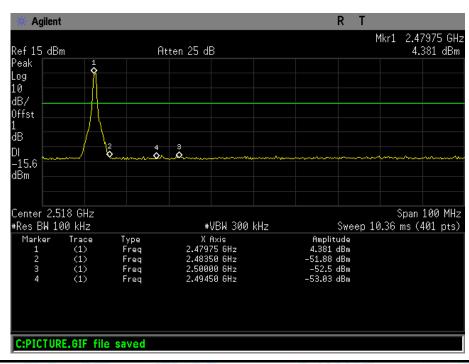




(2) Conducted Test

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX GFSK Mode 2402MHz / 2	480 MHz	
Remark:	N/A	The same of the sa	
₩ Agilent		R T	







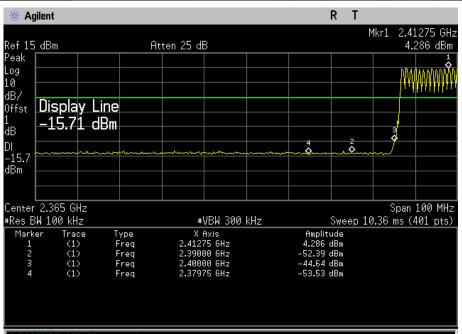
EUT: 10.1 inch MID Model Name: TM101A550L

Temperature: 25 ℃ Relative Humidity: 55%

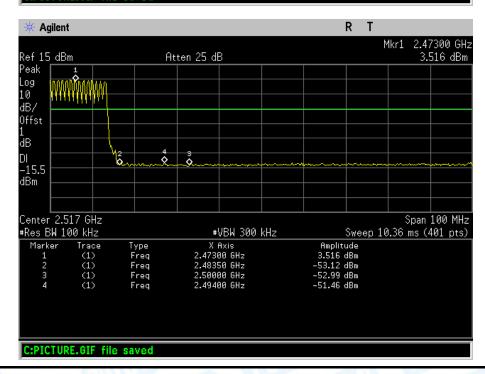
Test Voltage: AC 120V/60 Hz

Test Mode: GFSK Hopping Mode

Remark: N/A



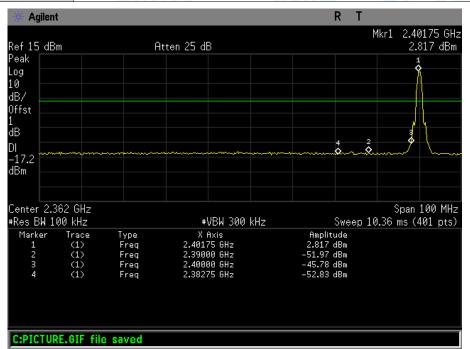
C:PICTURE.GIF file saved

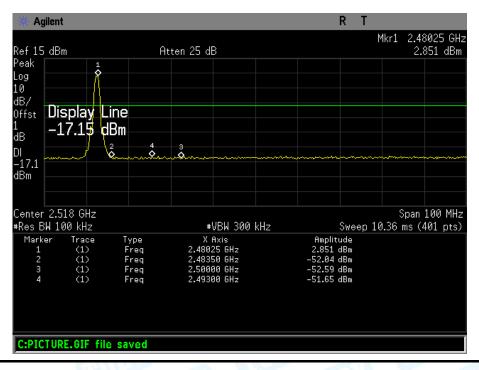




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EUT:	10.1 inch MID	Model Name :	TM101A550L		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60 Hz				
Test Mode:	TX 8-DPSK Mode 2402MHz /	2480 MHz			
Remark:	N/A		CALL STATE		

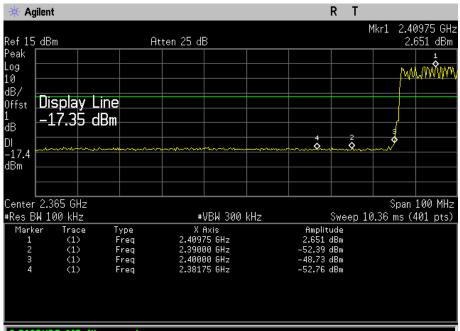




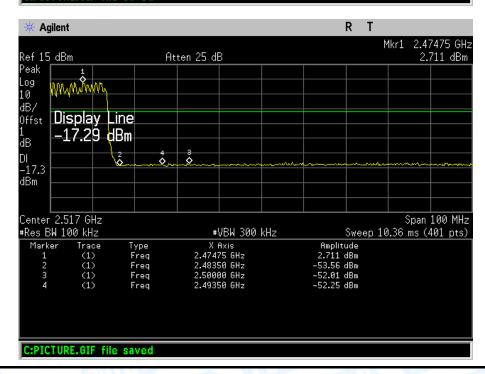


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EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz	V CO	33
Test Mode:	8-DPSK Hopping Mode		
Remark:	N/A		CALL TO SERVICE



C:PICTURE.GIF file saved





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7. Number of Hopping Channel

7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(1)

7.1.2 Test Limit

Section	Test Item	Limit
15.247	Number of Hopping Channel	>15

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=100 KHz, VBW=100 KHz, Sweep time= Auto.

7.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

7.5 Test Data

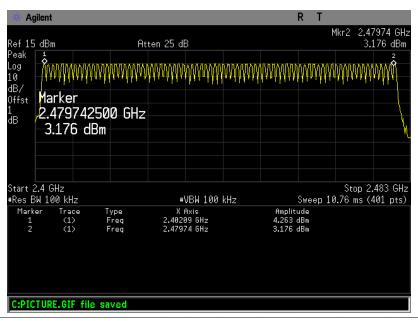


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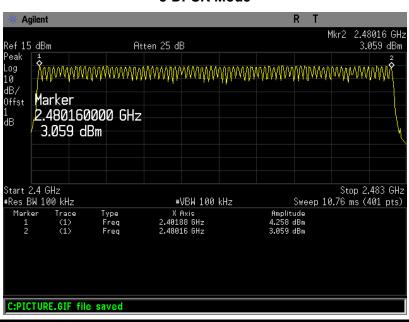
EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		33
Test Mode:	Hopping Mode (GFSK/ 8-DPS	SK)	

Frequency Range	Quantity of Hopping Channel	Limit
2402MHz~2480MHz	79	>15
2402WH2~246UWH2	79	>15

GFSK Mode



8-DPSK Mode





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8. Average Time of Occupancy

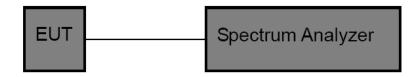
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (a)(1)

8.1.2 Test Limit

Section	Test Item	Limit
15.247(a)(1)/ RSS-210	Average Time of	0.4.000
Annex 8(A8.1d)	Occupancy	0.4 sec

8.2 Test Setup



8.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=1MHz, VBW=1MHz.
- (3) Use video trigger with the trigger level set to enable triggering only on full pulses.
- (4) Sweep Time is more than once pulse time.
- (5) Set the center frequency on any frequency would be measure and set the frequency span to zero.
- (6) Measure the maximum time duration of one single pulse.
- (7) Set the EUT for packet transmitting.
- (8) Measure the maximum time duration of one single pulse.

8.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

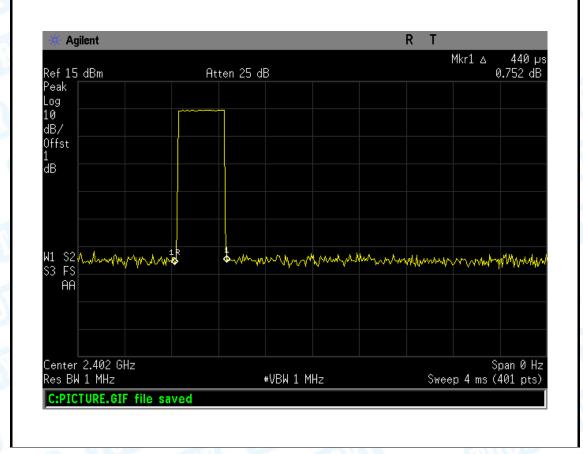


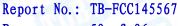
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8.5 Test Data

EUT:	: 10.1 inch MID Model Name : TM10				TM101A550L	
Temperature		25 ℃		Relative Humidity: 55%		
Test Voltage:		AC 120V/	60 Hz			
Test Mode:		Hopping I	Mode (GFSK DH1)	CHILL ST		Hilliam
Channel	Pu	Pulse Time Total of Dwell		Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		0.440	140.80			
2441		0.440	140.80	31.60	400	PASS
2480		0.440 140.80				
CESK Hopping Mode DU1						

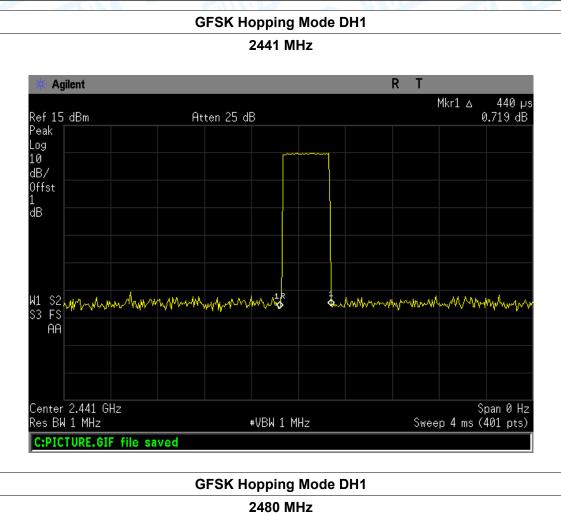
GFSK Hopping Mode DH1







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Agilent R Mkr1 ∆ 440 µs -0.177 dB Ref 15 dBm Atten 25 dB Peak Log 10 dB/ Offst đΒ ₩1 S2 S3 FS agage and a second a complete for the following for the following the complete for the following the AΑ Center 2.48 GHz Res BW 1 MHz Span 0 Hz #VBW 1 MHz Sweep 4 ms (401 pts) C:PICTURE.GIF file saved



2441

2480

1.720

1.720

Report No.: TB-FCC145567

PASS

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EUT:	10	0.1 inch	MID	Model Name	:	TM101A5 50L
Temperature	: 25	5 ℃		Relative Hur	nidity:	55%
Test Voltage:	A	C 120V/	60 Hz		AND	
Test Mode:	Н	opping N	Mode (GFSK DH3)	2000		
Channel	Pulse	Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(m	ıs)	(ms)	(s)	(ms)	Nesuit
2402	1.7	'20	275.20			

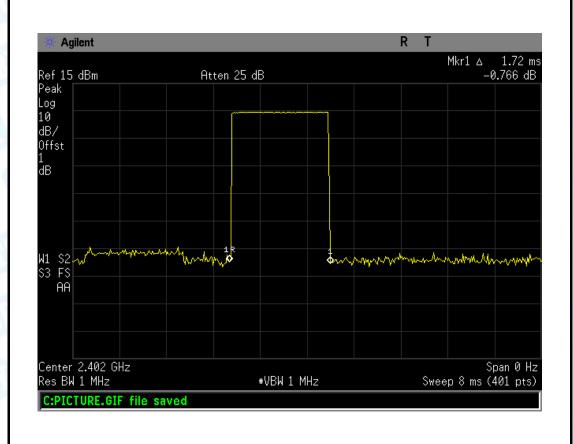
GFSK Hopping Mode DH3

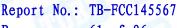
275.20

275.20

31.60

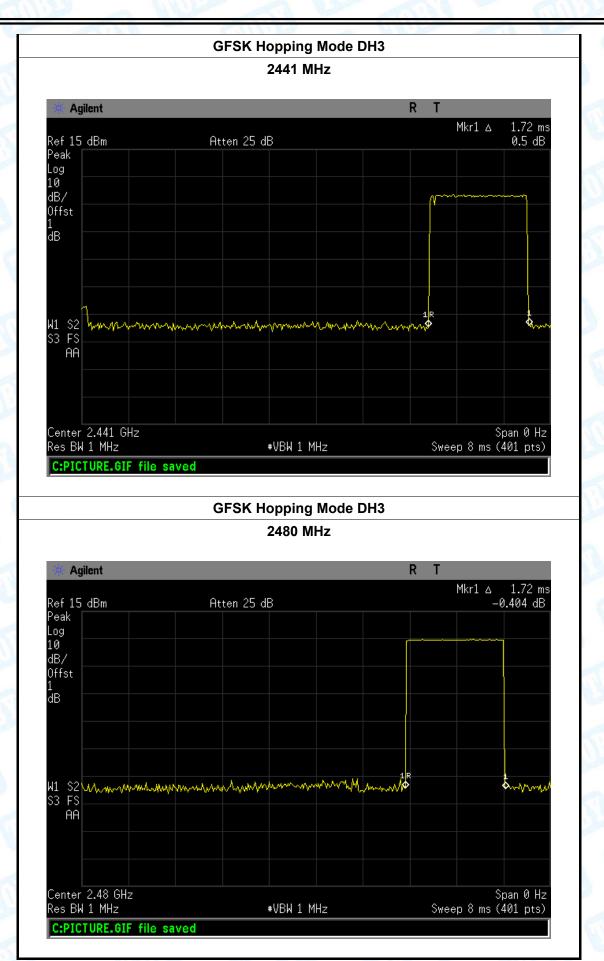
400







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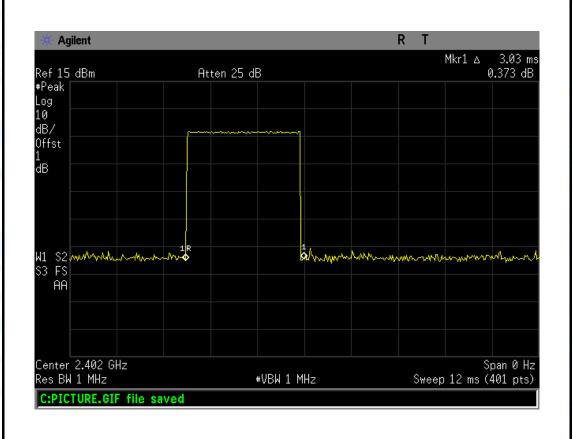


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EUT:	10.1 inch MID	Model Name :	TM101A550 L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	Hopping Mode (GFSK DH5)		

iest woue.	i lopping i	Mode (GI SK DI IS)	CILLID		M. W. Land
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Popult
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	3.030	323.20			
2441	3.030	323.20	31.60	400	PASS
2480	3 030	323 20			

GFSK Hopping Mode DH5

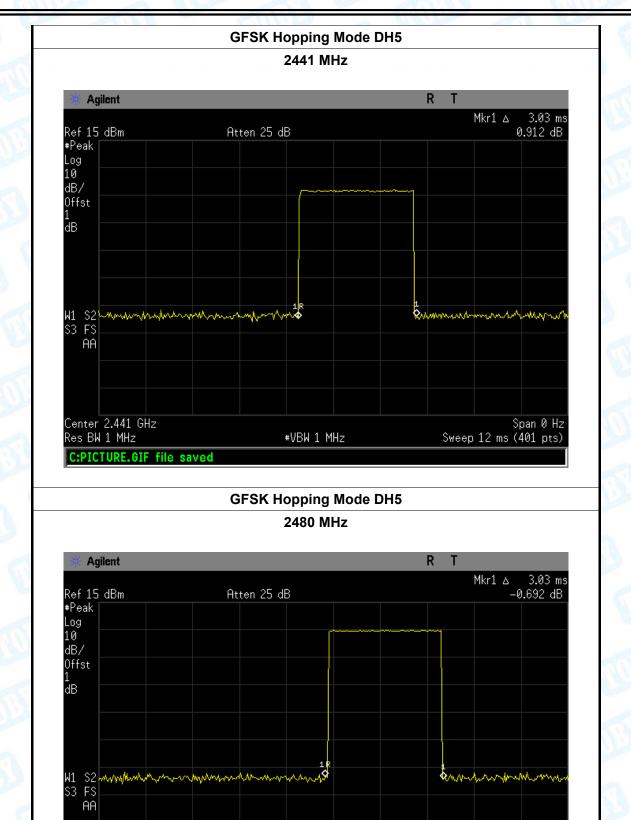






Center 2.48 GHz Res BW 1 MHz

C:PICTURE.GIF file saved



#VBW 1 MHz

Span 0 Hz

Sweep 12 ms (401 pts)



2480

0.440

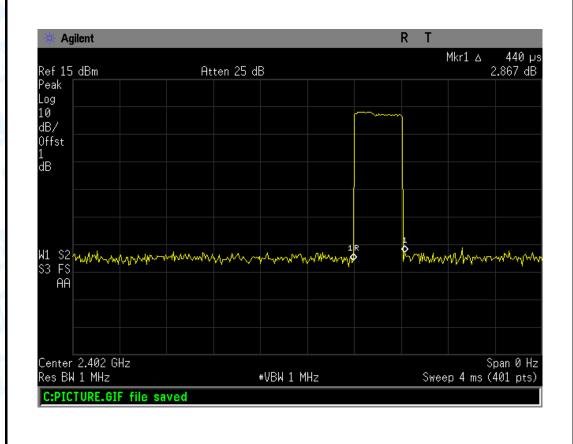
Report No.: TB-FCC145567

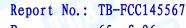
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EUT:		10.1 inch MID Model Name :		Model Name :		TM101A55 0L
Temperature	:	25 ℃	25 ℃ Relative Humidity:			55%
Test Voltage:		AC 120V/60 Hz				
Test Mode:		Hopping Mode (π /4-DQPSK DH1)				
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		0.440	140.80			
2441		0.440	140.80	31.60	400	PASS

π /4-DQPSK Hopping Mode DH1

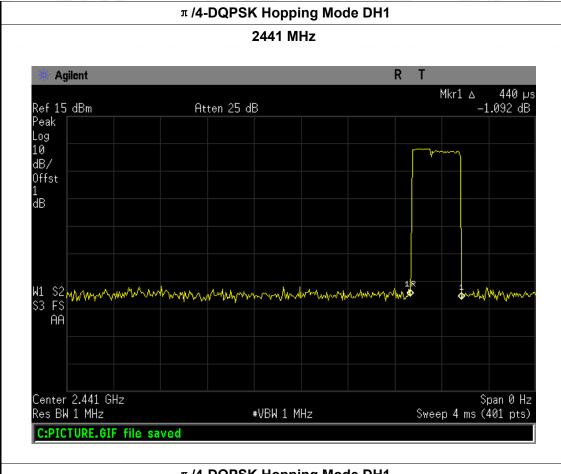
140.80



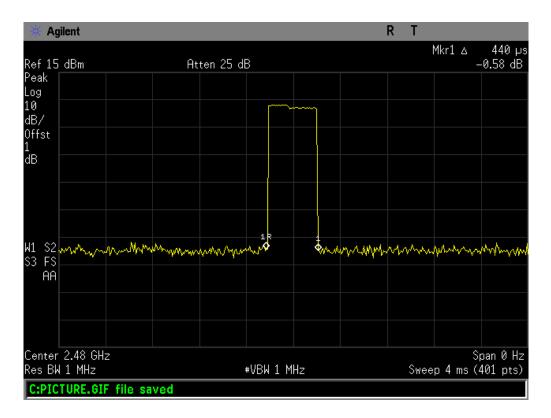




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π /4-DQPSK Hopping Mode DH1





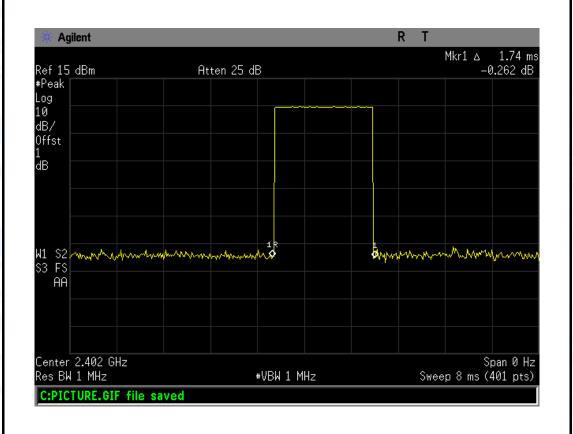
66 of 96 Page:

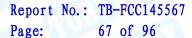
EUT:	10.1 inch MID	Model Name :	TM101A550 L	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60 Hz			
Test Mode:	Hopping Mode (л /4-DQPSK DH3)			

Test Mode:	Hopping I	Mode (π	/4-DQPSK	DH3)

	Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
	(MHz)	(ms)	(ms)	(s)	(ms)	Result
١	2402	1.740	278.40			
	2441	1.740	278.40	31.60	400	PASS
	2480	1.740	278.40			

π /4-DQPSK Hopping Mode DH3







Center 2.48 GHz Res BW 1 MHz

C:PICTURE.GIF file saved

 π /4-DQPSK Hopping Mode DH3 2441 MHz R Agilent Mkr1 Δ 1.74 ms Ref 15 dBm #Peak Atten 25 dB -0.449 dB Log 10 dB/ Offst đΒ W1 S2 S3 FS AA Center 2.441 GHz Span 0 Hz Sweep 8 ms (401 pts) Res BW 1 MHz #VBW 1 MHz C:PICTURE.GIF file saved π /4-DQPSK Hopping Mode DH3 2480 MHz Agilent R Mkr1 ∆ 1.74 ms Ref 15 dBm #Peak Atten 25 dB -0.168 dB Log 10 dB/ Offst ďΒ W1 S2 S3 FS AA Engraphy many phopped the many papers

#VBW 1 MHz

Span 0 Hz

Sweep 8 ms (401 pts)



2441

2480

3.030

3.030

Report No.: TB-FCC145567

PASS

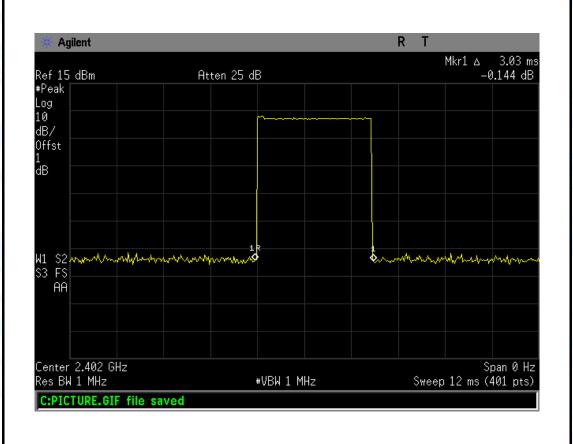
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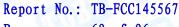
EUT:		10.1 inch MID		Model Name :		TM101A550 L
Temperature		25 ℃	THE PARTY OF THE P	Relative Hum	idity:	55%
Test Voltage:		AC 120V/	60 Hz	3	BRIDE	
Test Mode:	Hopping Mode (π /4-DQPSK DH5)			CHILL STORY		
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		3.030	323.20			

π/4-DQPSK Hopping Mode DH5

323.20 323.20 31.60

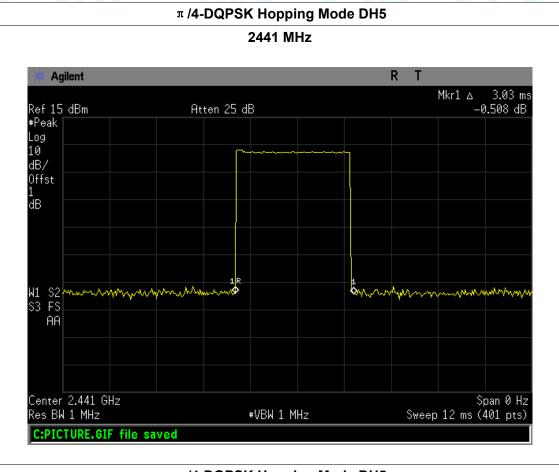
400



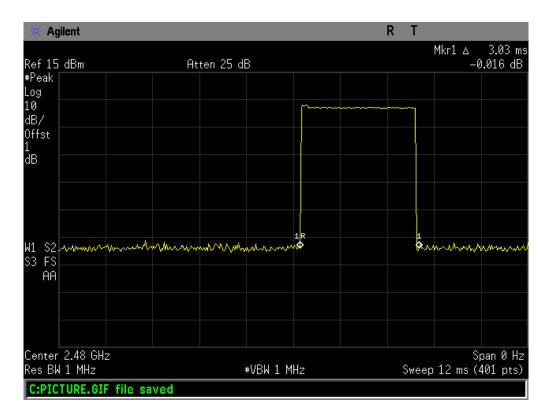




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2480

0.440

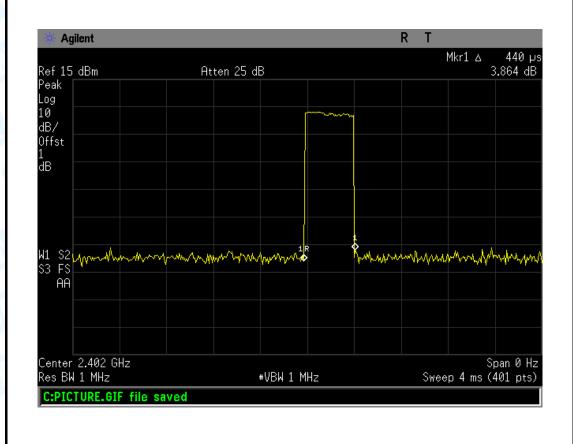
Report No.: TB-FCC145567

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EUT:		10.1 inch	10.1 inch MID Model Na		:	TM101A550 L
Temperature	:	25 ℃	CALL TO THE PARTY OF THE PARTY	Relative Humidity:		55%
Test Voltage:		AC 120V/	60 Hz		BROS	
Test Mode:		Hopping I	Mode (8-DPSK DH1)		
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		0.440	140.80			
2441		0.440	140.80	31.60	400	PASS

8-DPSK Hopping Mode DH1

140.80







8-DPSK Hopping Mode DH1 2441 MHz Agilent R Mkr1 Δ 440 µs Ref 15 dBm Peak Atten 25 dB 0.13 dB Log 10 dB/ Offst đΒ W1 S2 S3 FS AA Center 2.441 GHz Span 0 Hz Sweep 4 ms (401 pts) Res BW 1 MHz #VBW 1 MHz C:PICTURE.GIF file saved 8-DPSK Hopping Mode DH1 2480 MHz Agilent R 440 µs Mkr1 ∆ Ref 15 dBm Atten 25 dB 1.87 dB Peak Log 10 dB/ Offst đΒ

#VBW 1 MHz

AΑ

Center 2.48 GHz Res BW 1 MHz

C:PICTURE.GIF file saved

Span 0 Hz

Sweep 4 ms (401 pts)

Andrew Market State of the Stat

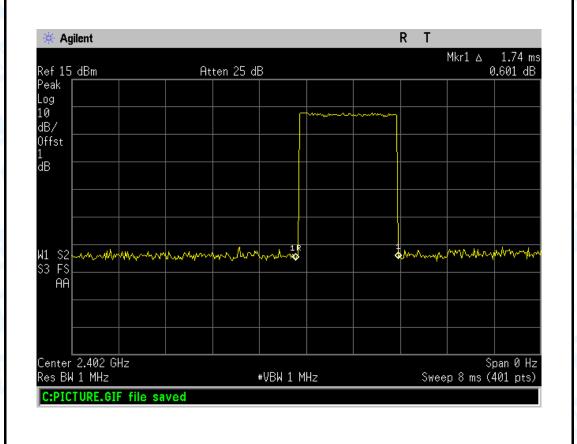


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EUT:		10.1 inch	MID	Model Name :		TM101A550	
Temperature:		25 ℃	CALL TO SERVICE STATE OF THE PARTY OF THE PA	Relative Hum	idity:	55%	
Test Voltage:		AC 120V/	60 Hz		Alton		
Test Mode:		Hopping I	Mode (8-DPSK DH3	3)		CHILL STORY	
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)		(ms)	(ms)	(s)	(ms)	Result	

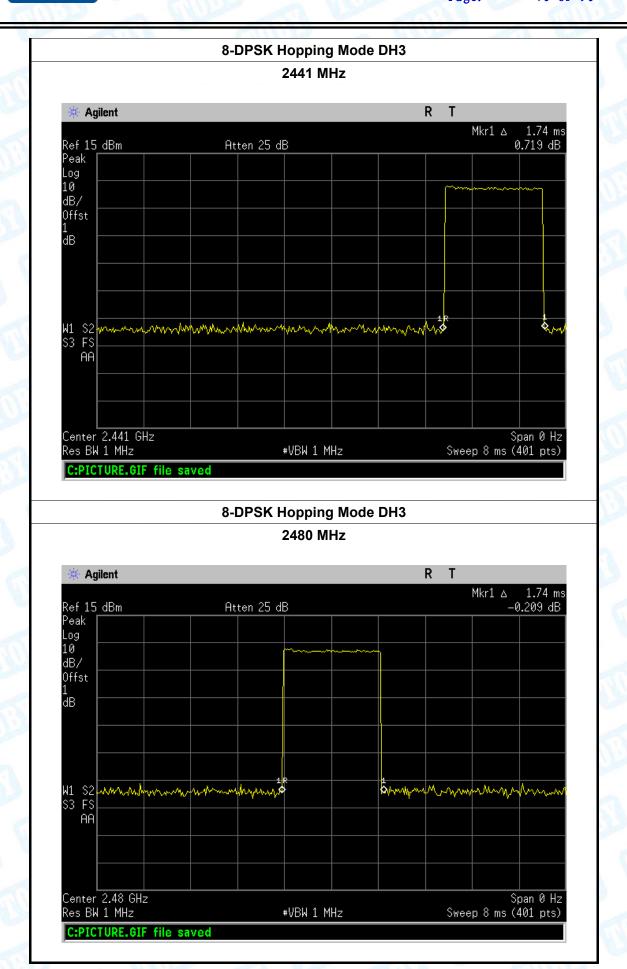
Channel (MHz)	Pulse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
2402	1.740	278.40			
2441	1.740	278.40	31.60	400	PASS
2480	1.740	278.40			

8-DPSK Hopping Mode DH3





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2441 2480 Report No.: TB-FCC145567

PASS

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EUT:		10.1 inch	MID	Model Name	:	TM101A550 L
Temperature		25 ℃	CALL TO THE PARTY OF THE PARTY	Relative Hum	idity:	55%
Test Voltage:		AC 120V/	60 Hz		BROKE	
Test Mode:	Test Mode: Hopping Mode (8-DPSK DH5)		5)		CHILL STORY	
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Nesuit
2402		3.030	323.20			

8-DPSK Hopping Mode DH5

31.60

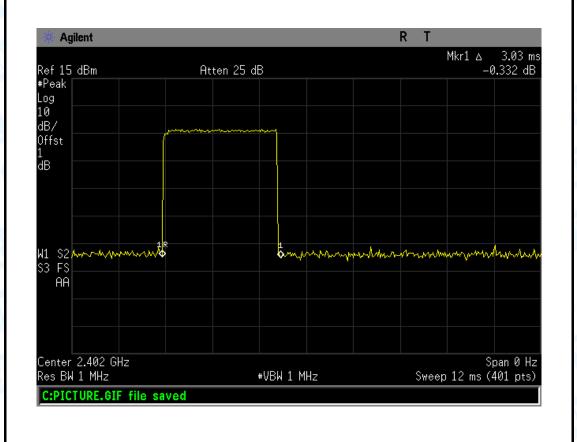
400

323.20

323.20

3.030

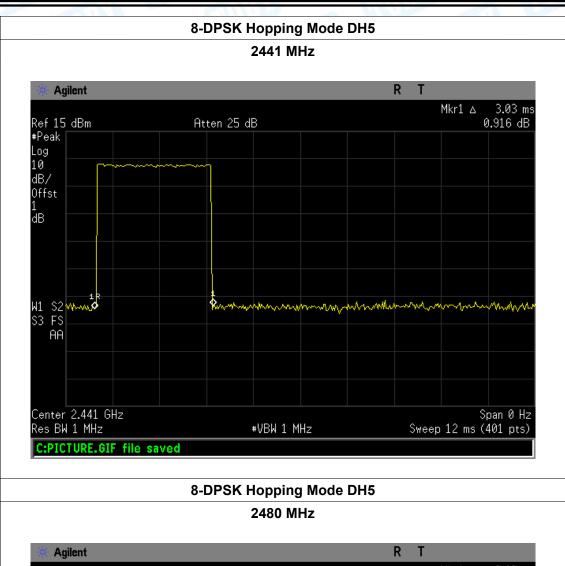
3.030

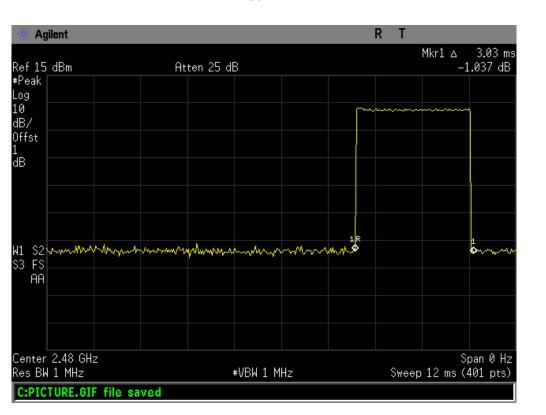






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9. Channel Separation and Bandwidth Test

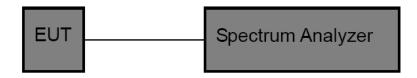
9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Bandwidth	<=1 MHz (20dB bandwidth)	2400~2483.5
Channel Separation	>25KHz or >two-thirds of the 20 dB bandwidth Which is greater	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Channel Separation: RBW=30 kHz, VBW=100 kHz.

Bandwidth: RBW=30 kHz, VBW=100 kHz.

- (3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
 - (4) Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:30 kHz, and Video Bandwidth:100 kHz. Sweep Time set auto.

9.4 EUT Operating Condition

The EUT was set to the Hopping Mode for Channel Separation Test and continuously transmitting for the Bandwidth Test.

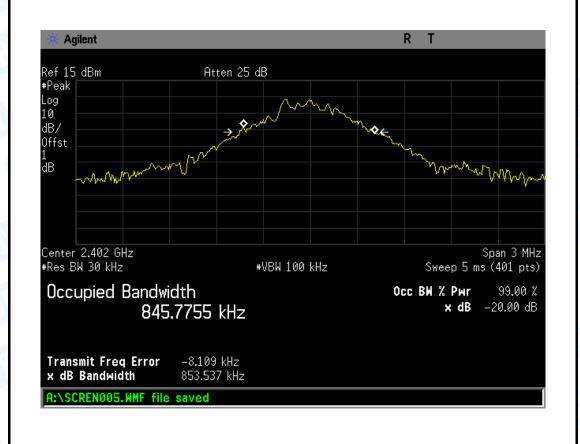


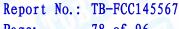
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9.5 Test Data

EUT:	10.1 inch MID	Model Name :	TM101A550L		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60 Hz				
Test Mode:	TX Mode (GFSK)				
Channel frequence	cy 99% OBW	20dB Bandwidth	20dB Bandwidth		
(MHz)	(kHz)	(kHz)	*2/3 (kHz)		
2402	845.7755	853.537			
2441	838.9044	858.971			
2480	835.1074	855.771			

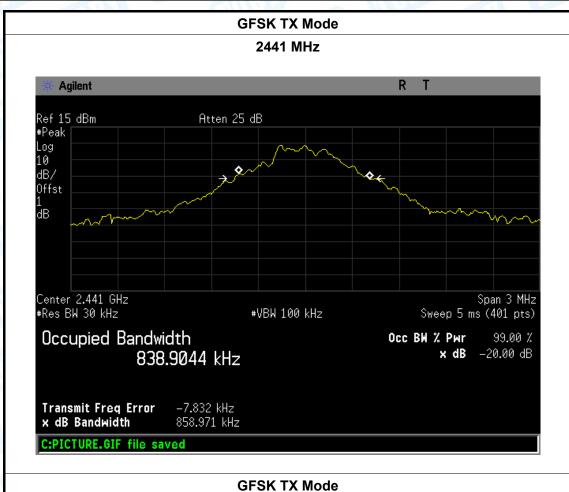
GFSK TX Mode







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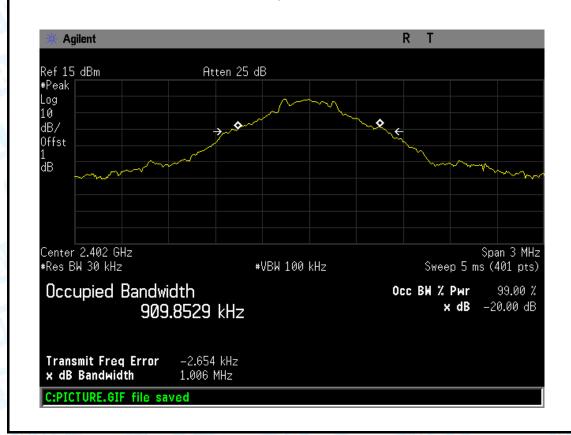
2480 MHz R Agilent Ref 15 dBm #Peak Atten 25 dB Log 10 dB/ Offst đΒ Center 2.48 GHz #Res BW 30 kHz Span 3 MHz Sweep 5 ms (401 pts) #VBW 100 kHz Occupied Bandwidth Occ BW % Pwr 99.00 % -20.00 dB 835.1074 kHz x dB Transmit Freq Error x dB Bandwidth -8.569 kHz 855.771 kHz C:PICTURE.GIF file saved

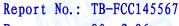


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EUT:	10	0.1 inch MID	Model Name :	TM101A550L		
Temperature:	25	5 °C	Relative Humidity:	55%		
Test Voltage:	AC	C 120V/60 Hz		33		
Test Mode:	TX Mode (π /4-DQPSK)					
Channel frequency		99% OBW	20dB Bandwidth	20dB		
(MHz)		(kHz)	(kHz)	Bandwidth		
				*2/3 (kHz)		
2402		909.8529	1006.000	670.67		
2441		908.6102	1003.000	668.67		
2480 903.4369		983.835	655.89			
π /4-DOPSK TX Mode						

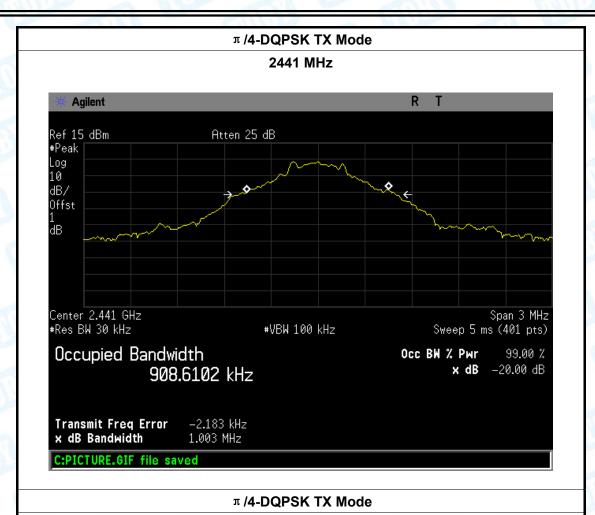
π/4-DQPSK TX Mode

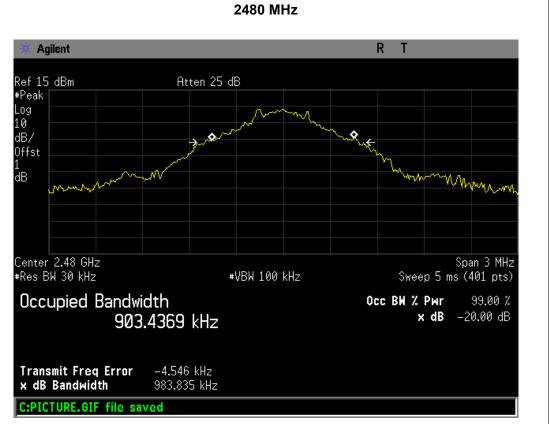






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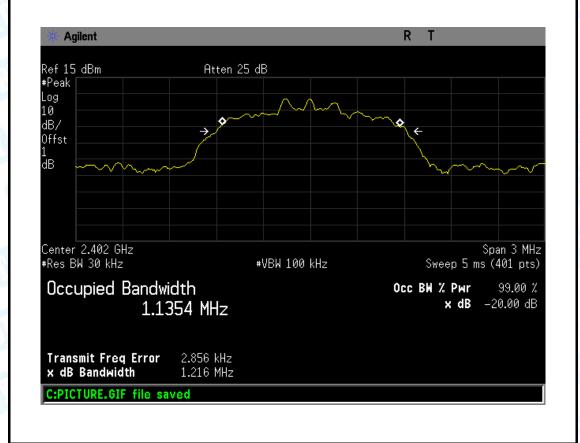


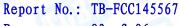


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EUT:	10.1 inch MID	Model Name :	TM101A550L	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60 Hz		133	
Test Mode:	TX Mode (8-DPSK)			
Channel frequence	ey 99% OBW	20dB Bandwidth	20dB Bandwidth	
(MHz)	(kHz)	(kHz)	*2/3 (kHz)	
2402	1135.40	1216.00	810.67	
2441	1132.00	1215.00	810.00	
2480	1131.20	1220.00	813.33	

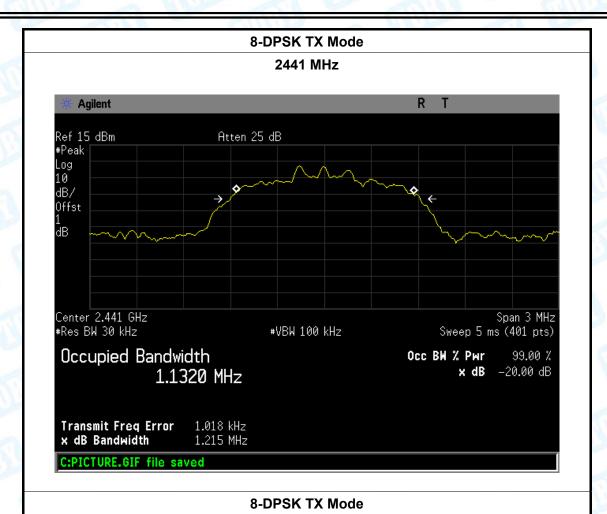
8-DPSK TX Mode 2402 MHz

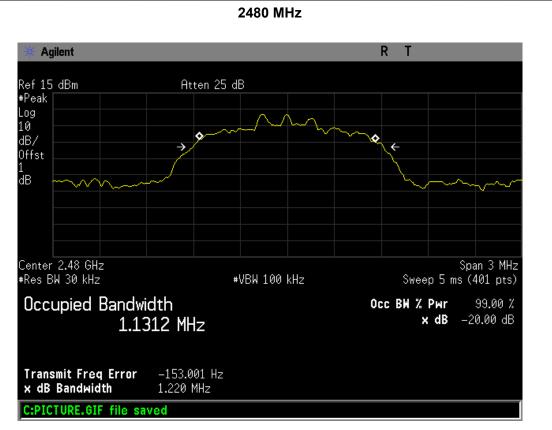






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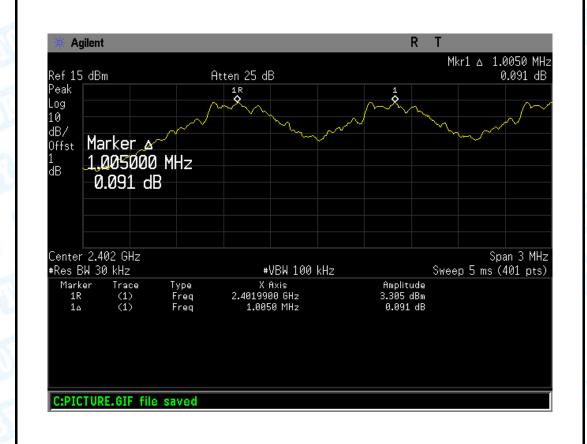
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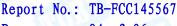
EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		A HILL

Test Mode: Hopping Mode (GFSK)

Channel frequency	Separation Read Value	Separation Limit
(MHz)	(kHz)	(kHz)
2402	1005.00	853.537
2441	1005.00	858.971
2480	1005.00	855.771

GFSK Hopping Mode



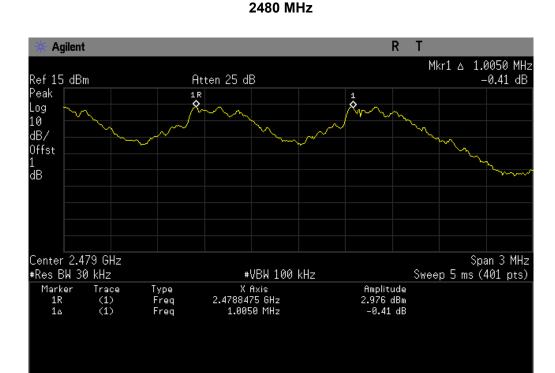




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GFSK Hopping Mode



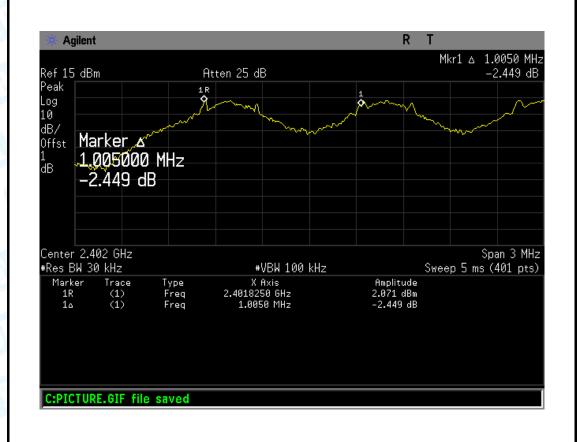
C:PICTURE.GIF file saved

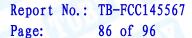


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EUT:	10.1 inch	10.1 inch MID		ime :	TM101A550L
Temperature:	25 ℃	Relative Humidity		Humidity:	55%
Test Voltage:	AC 120V/60 Hz			18.0	
Test Mode:	Hopping Mode (π /4-DQPSK)				
Channel frequency		Separation Read Value Sepa		ration Limit	
(MHz)		(kHz)			(kHz)
2402		1005.00			670.67
2441		1005.00			668.67
2480		1005.00			655.89

π /4-DQPSK Hopping Mode







π /4-DQPSK Hopping Mode

2441 MHz

Agilent

R T

Mkr1 Δ 1.0050 MHz

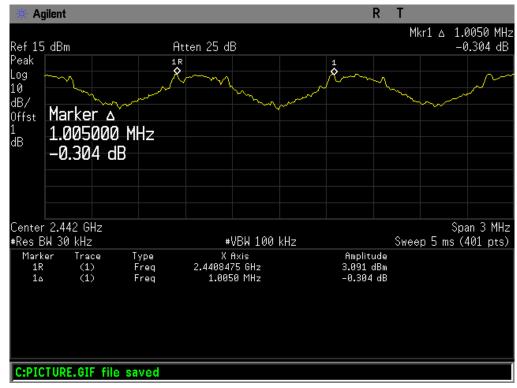
Ref 15 dBm

Atten 25 dB

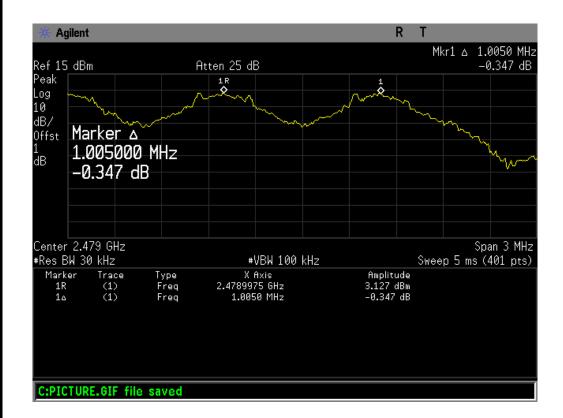
Peak

18

1



π /4-DQPSK Hopping Mode

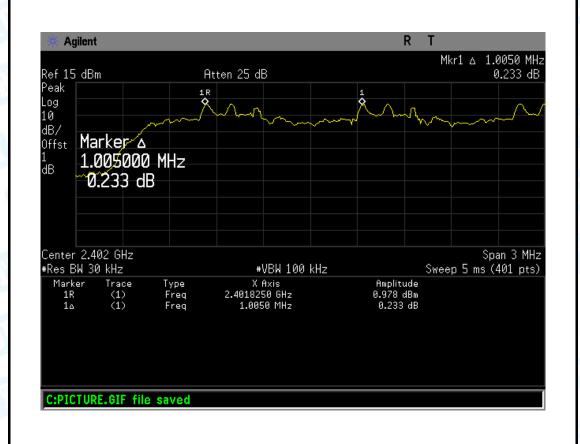


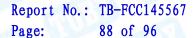


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EUT:	10.1 inch MID		Model Name :		TM101A550L
Temperature:	25 ℃	25 ℃		Relative Humidity: 55%	
Test Voltage:	AC 120V/60 Hz		1 6		18.0
Test Mode:	Hopping I	Mode (8-DPSK)		I Billion	
Channel frequency		Separation Read	ad Value Separa		ration Limit
(MHz)		(kHz)			(kHz)
2402		1005.00			810.67
2441		1005.00			810.00
2480		1005.00			813.33

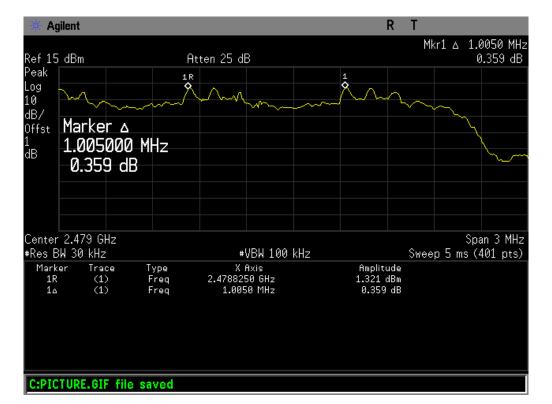
8-DPSK Hopping Mode







8-DPSK Hopping Mode 2441 MHz R Agilent Mkr1 A 1.0050 MHz -0.923 dB Ref 15 dBm Atten 25 dB Peak Log 10 dB/ Offst ďΒ Center 2.442 GHz #Res BW 30 kHz Span 3 MHz Sweep 5 ms (401 pts) #VBW 100 kHz Marker 1R 1۵ Trace (1) (1) Amplitude 1.343 dBm -0.923 dB Type Freq Freq X Axis 2.4408250 GHz 1.0050 MHz C:PICTURE.GIF file saved 8-DPSK Hopping Mode 2480 MHz Agilent





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10. Peak Output Power Test

10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.247 (b) (1)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	Hopping Channels>75 Power<1W(30dBm) Other <125 mW(21dBm)	2400~2483.5

10.2 Test Setup



10.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Peak Detector: RBW=1 MHz, VBW=3 MHz for bandwidth less than 1MHz. RBW=3 MHz, VBW=3 MHz for bandwidth more than 1MHz.

10.4 EUT Operating Condition

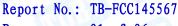
The EUT was set to continuously transmitting in the max power during the test.



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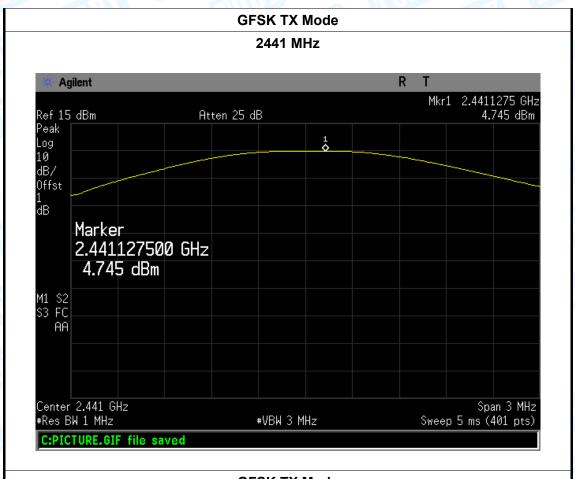
10.5 Test Data

		MID	Model N	iaiiie .	TM101A550L
emperature:	25 ℃	Z OHI	Relative	Humidity:	55%
est Voltage:	AC 120V/	60 Hz	Hz		· GIVE
est Mode:	TX Mode	(GFSK)	1 6	100	
hannel frequ	ency (MHz)	Test Resu	lt (dBm)	Lin	nit (dBm)
240	2	4.56	64		
244	1	4.74	ŀ5		30
248	0	4.72	24		
		GFSK TX	Mode		
		2402	ИНz		
No.				DΤ	_
* Agilent		_		R T	2.4021125 GHz
Ref 15 dBm		Atten 25 dB		11811	4.564 dBm
Peak Log			1		
10 dB/					
Offst					
dB					
Mark					
	2112500 GI	Hz			
4.5	64 dBm				
M1 S2 S3 FC					
AA					
Center 2.402 #Res BW 1 MH		#VBW 3	MHz	Sween	Span 3 MHz 5 ms (401 pts)





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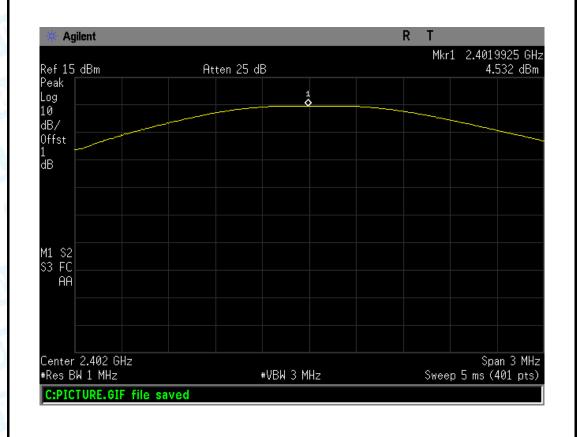
GFSK TX Mode 2480 MHz





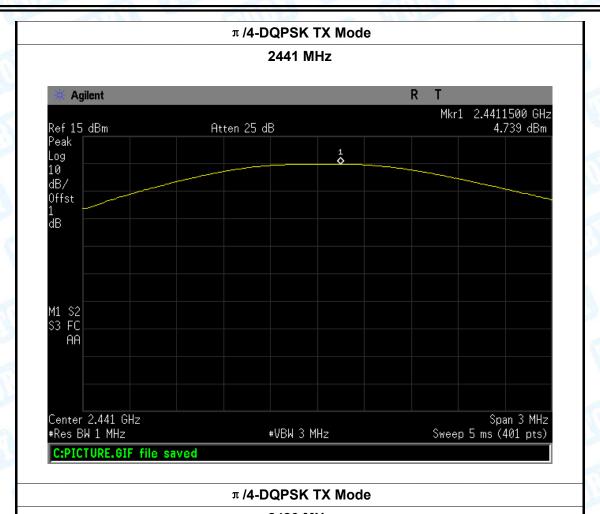
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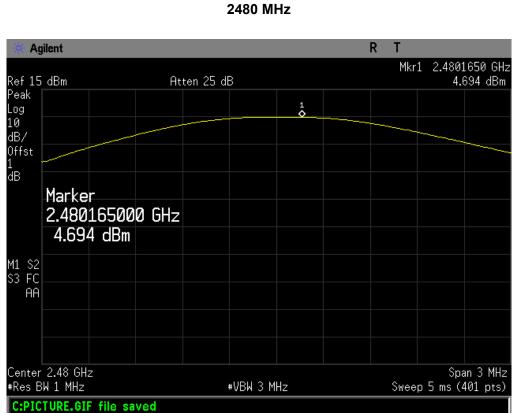
EUT:	10.1 inch	MID	Model Name :	TM101A550L	
Temperature:	25 ℃		Relative Humidity:	55%	
Test Voltage:	AC 120V/	60 Hz		(32)	
Test Mode:	TX Mode	(π /4-DQPSK)			
Channel frequency (MHz)		Test Result (dBm) Lin		mit (dBm)	
2402		4.532			
2441		4.739		21	
2480		4.694			
π /4-DQPSK TX Mode					







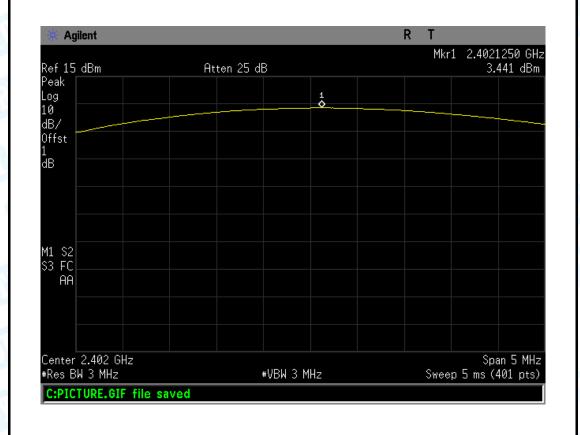






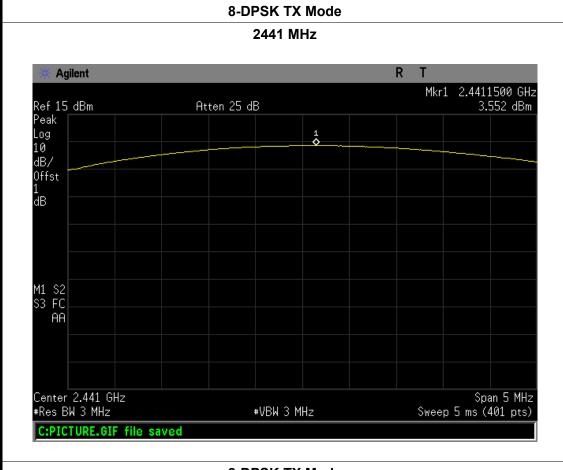
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EUT:	10.1 inch MID		Model Name :	TM101A550L	
Temperature:	25 ℃		Relative Humidity:	55%	
Test Voltage:	AC 120V/60 Hz				
Test Mode:	TX Mode (8-DPSK)				
Channel frequency (MHz)		Test Result (dBm) Li		nit (dBm)	
2402		3.441			
2441		3.552		21	
2480		3.454			
8-DPSK TX Mode					

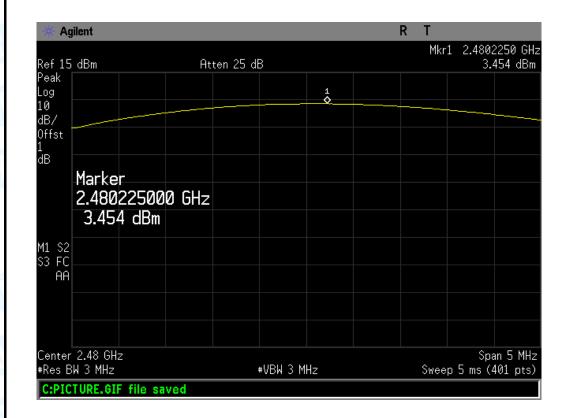




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11. Antenna Requirement

11.1 Standard Requirement

11.1.1 Standard FCC Part 15.203

11.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 2.09 dBi, and the antenna connector is de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is an FPC Antenna. It complies with the standard requirement.

Antenna Type			
000	▼ Permanent attached antenna		
33	□ Unique connector antenna		
400	□ Professional installation antenna		