



RFWORLD

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无线 FSK 模块

(WM1101S02V9)

用户指南

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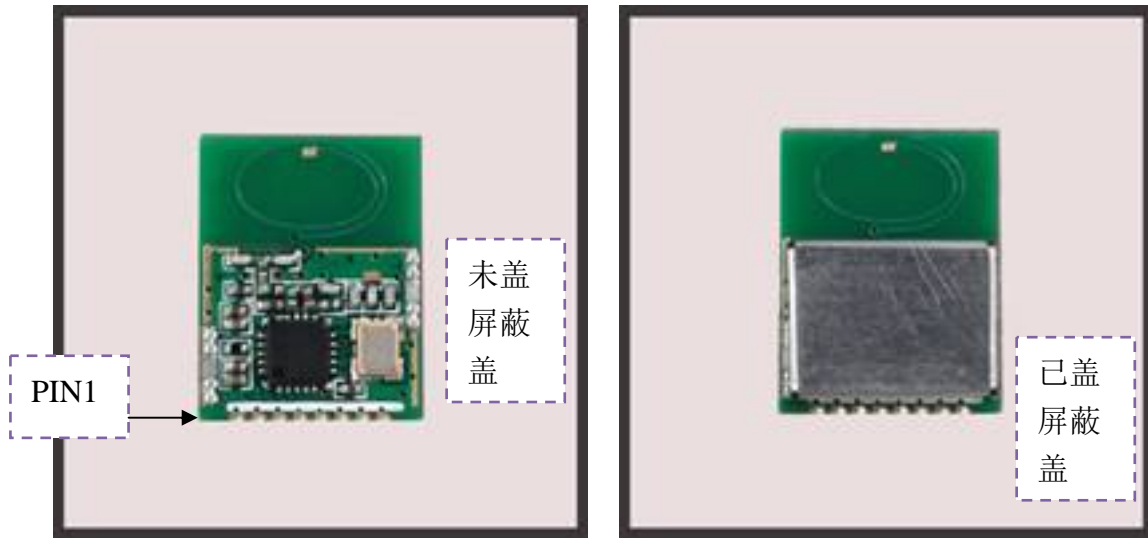
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概述:

WM1101S02V9 射频模块, 基于 Chipcon, TI CC1101 SUB 1G 数字无线收发一体FSK芯片, 设计人员可以把整个无线模块作为一个嵌入式的元件, 天线已经内置, 从而不需要考虑无线的模拟部分: 例如阻抗匹配.



SUB1G FSK 模块 (内置天线)

频率: 868M/915M

最大速率: 500K

RF 输出功率: 12dBm (MAX)

接受灵敏度 -110dBm /1.2K 速率

编程接口: SPI 数字接口

最大功耗: 30MA

最大距离: 200meter /1.2K Baudrate (12BBM OUTPUT)

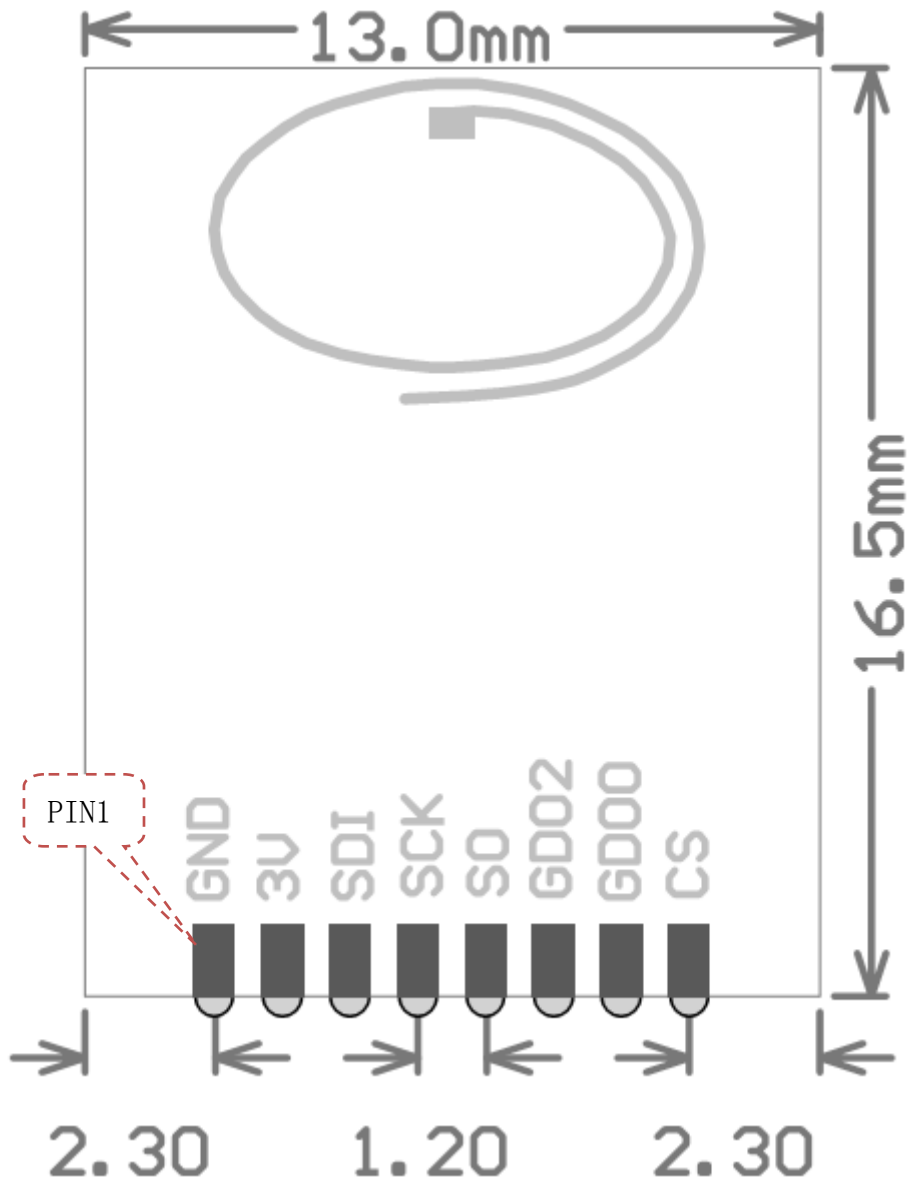
尺寸: 13*16.5*3.6mm

应用范围

数据传输, 工业控制, 智能控制, 玩具, 家具智能, 自动化, , 以及各种小型应用

KEYWORD: 超小型带天线 868M, 915M 模块

管脚描述和尺寸：



Pin	Symbol	Function
1	RFMOD_GND	Ground
2	RFMOD_VDD	RF module supply voltage
3	SI	serial configuration interface,data input
4	SCLK	serial configuration interface,clock output
5	GDO1/SO	serial configuration interface,data output
6	GDO2	clock output
7	Rx/Tx Data(GDO0)	serial output Rx data/serial input Tx data

8	Csn	serial configuration interface,chip select

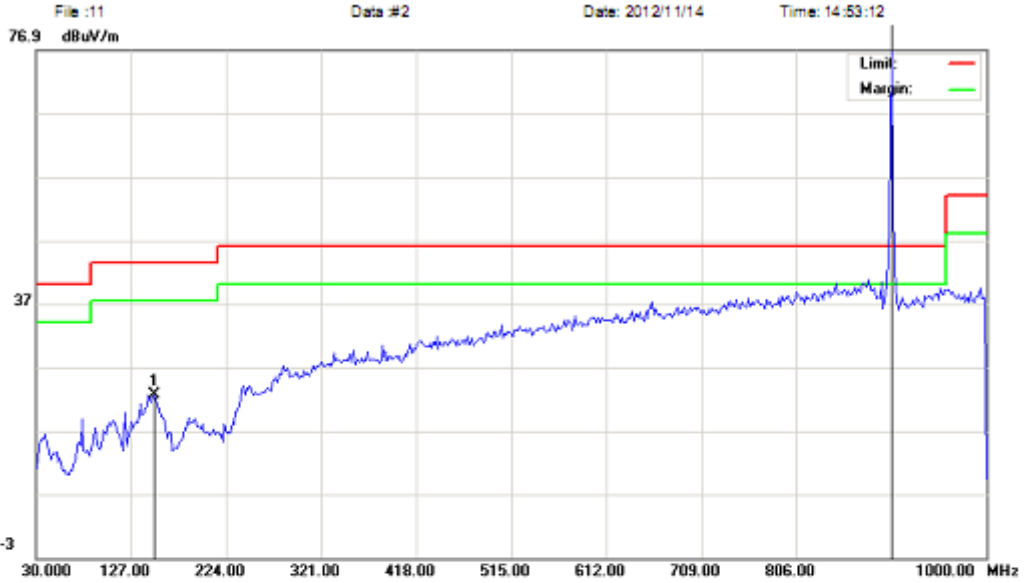
FCC . Part.15.249 预测结果

测试条件 1: 250K 速率 12DBM 发射功率 PASS

NO	频率	测试波形	结果																																																																																				
1	903	<div style="text-align: center;"> Radiated Emission Measurement File :11 Data #1 Date: 2012/11/14 Time: 14:50:12 76.9 dBuV/m </div> <p>Site: site #1 Polarization: <i>Horizontal</i> Temperature: 26 Limit: FCC Class B 3M Radiation Power: Humidity: 60 % EUT: Distance: 3m M/N: Mode: Note:</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Mk</th> <th>Freq. MHz</th> <th>Reading dBuV</th> <th>Factor dBm</th> <th>Measurement dBuV/m</th> <th>Limit dBuV/m</th> <th>Over dB</th> <th>Detector</th> <th>Antenna Height cm</th> <th>Table Degree degree</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>215.9167</td> <td>16.79</td> <td>10.93</td> <td>27.72</td> <td>43.50</td> <td>-15.78</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>272.5000</td> <td>11.34</td> <td>17.21</td> <td>28.55</td> <td>46.00</td> <td>-17.45</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td>437.4000</td> <td>12.22</td> <td>21.34</td> <td>33.56</td> <td>46.00</td> <td>-12.44</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td>502.0667</td> <td>11.02</td> <td>22.68</td> <td>33.70</td> <td>46.00</td> <td>-12.30</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td>608.7667</td> <td>10.72</td> <td>24.98</td> <td>35.70</td> <td>46.00</td> <td>-10.30</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>*</td> <td>903.0000</td> <td>65.67</td> <td>26.62</td> <td>92.29</td> <td>46.00</td> <td>46.29</td> <td>peak</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	No.	Mk	Freq. MHz	Reading dBuV	Factor dBm	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment	1		215.9167	16.79	10.93	27.72	43.50	-15.78	peak				2		272.5000	11.34	17.21	28.55	46.00	-17.45	peak				3		437.4000	12.22	21.34	33.56	46.00	-12.44	peak				4		502.0667	11.02	22.68	33.70	46.00	-12.30	peak				5		608.7667	10.72	24.98	35.70	46.00	-10.30	peak				6	*	903.0000	65.67	26.62	92.29	46.00	46.29	peak				PASS
No.	Mk	Freq. MHz	Reading dBuV	Factor dBm	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment																																																																												
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Radiated Emission Measurement



Site: site #1 Polarization: *Vertical* Temperature: 26
 Limit: FCC Class B 3M Radiation Power: Humidity: 60 %
 EUT: Distance: 3m
 M/N:
 Mode:
 Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna	Table	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		Height	Degree	
1		151.2500	8.99	13.67	22.66	43.50	-20.84	peak			
2	*	903.0000	61.24	25.97	87.21	46.00	41.21	peak			

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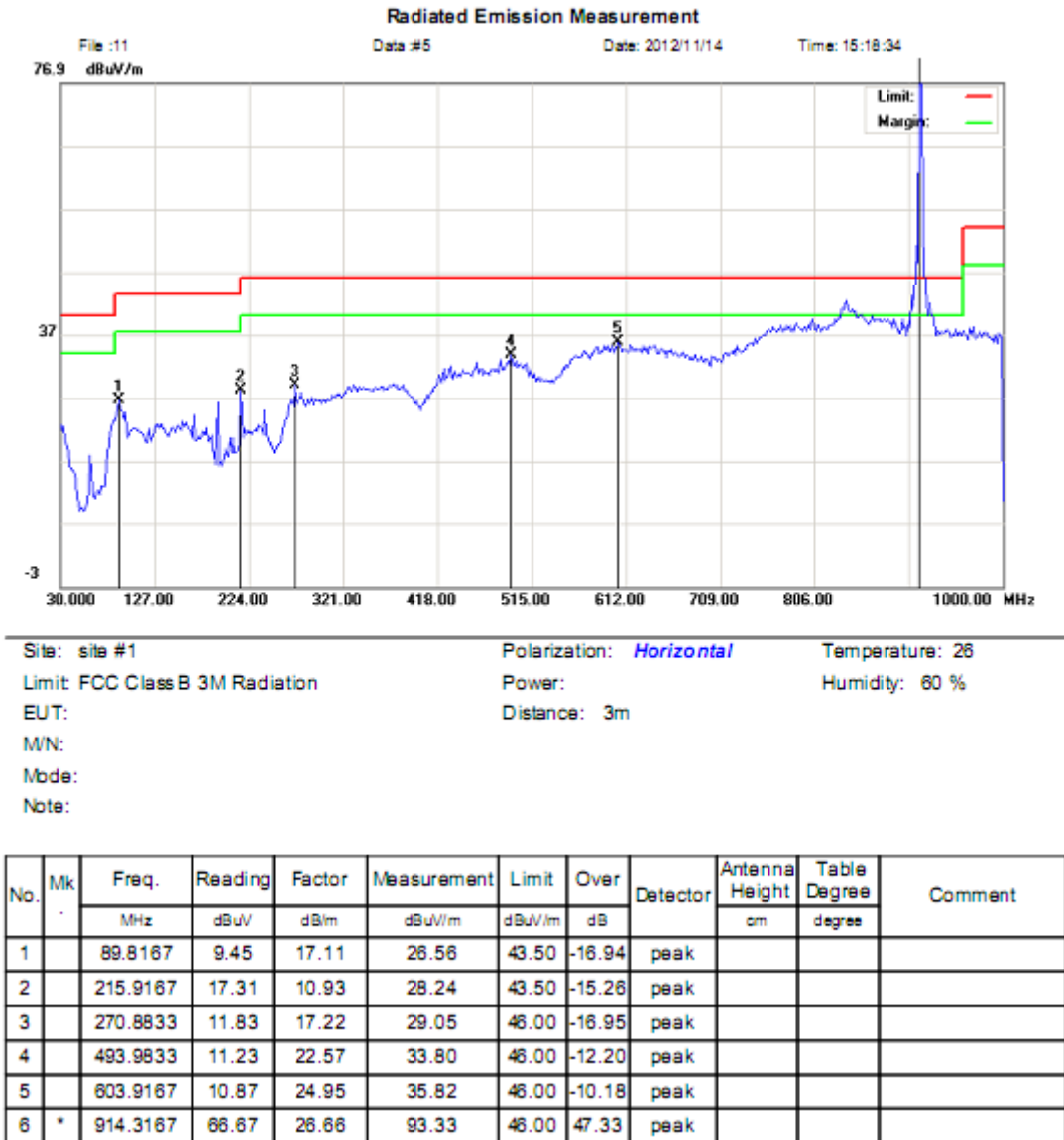
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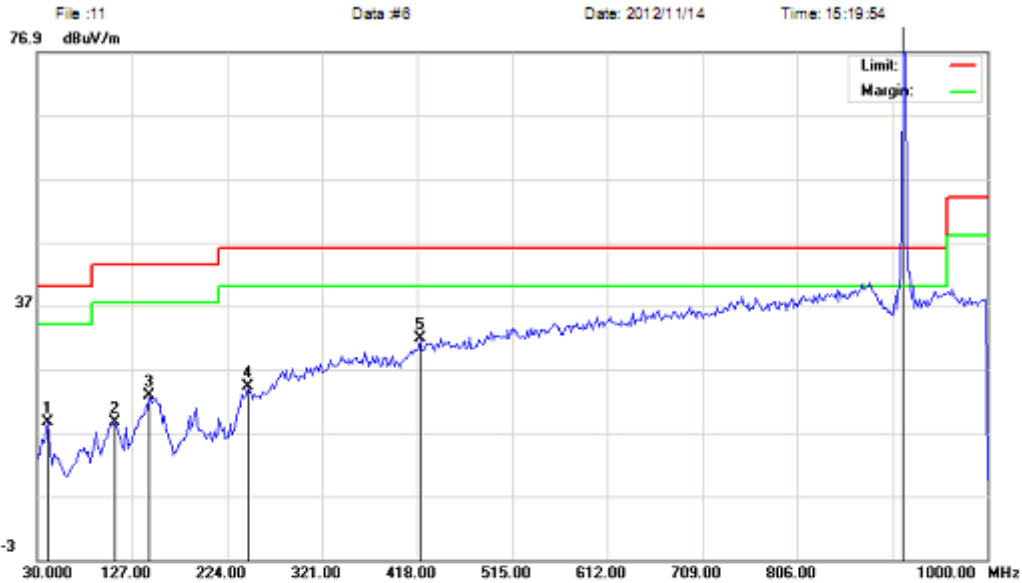
2
9
1
4

PASS





Radiated Emission Measurement



Site: site #1 Polarization: *Vertical* Temperature: 26
 Limit: FCC Class B 3M Radiation Power: Humidity: 60 %
 EUT: Distance: 3m
 MN:
 Mode:
 Note:

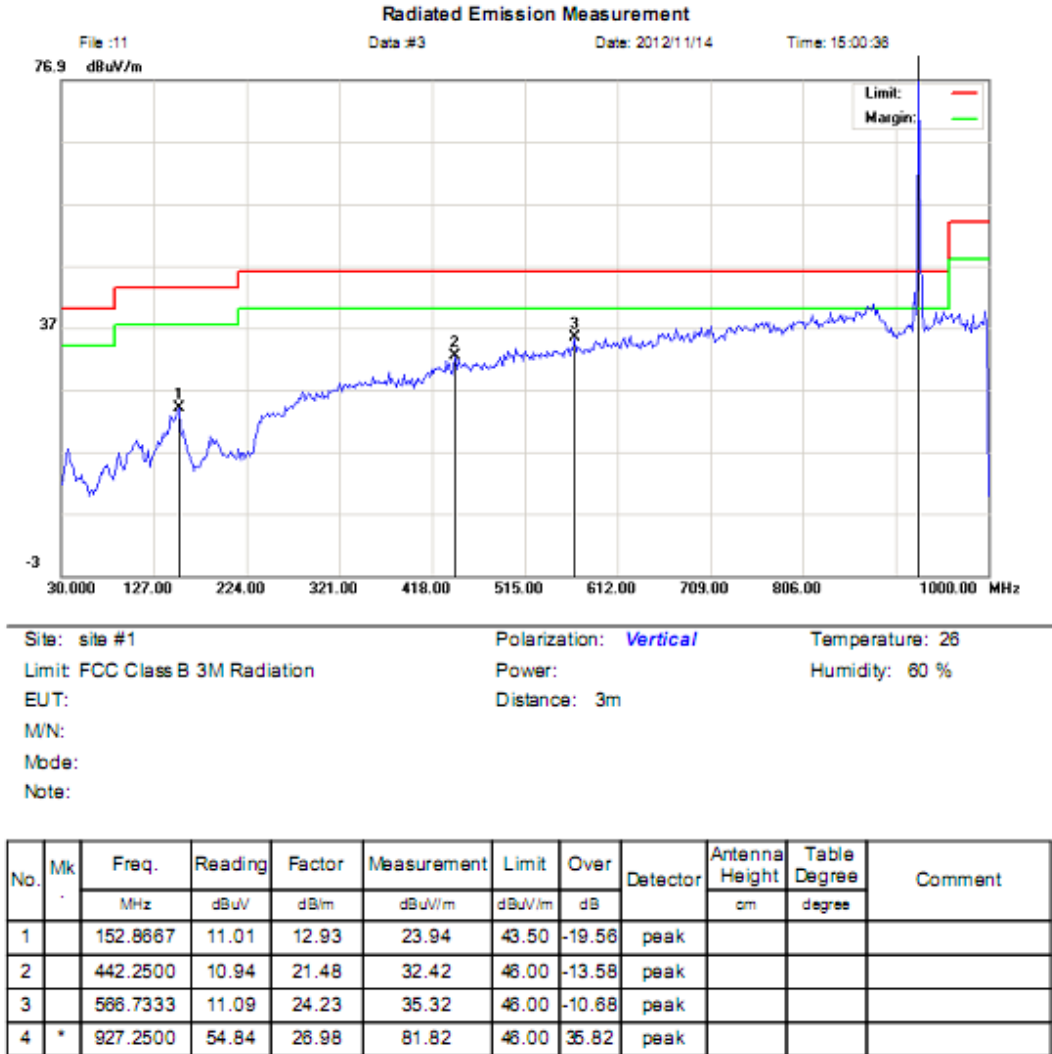
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna	Table	Comment
		MHz	dBuV	dBm	dBuV/m	dBuV/m	dB		Height	Degree	
									cm	degree	
1		41.3167	11.82	6.79	18.61	40.00	-21.39	peak			
2		109.2167	8.51	10.19	18.70	43.50	-24.80	peak			
3		144.7833	9.96	12.85	22.81	43.50	-20.69	peak			
4		245.0167	9.98	14.23	24.21	46.00	-21.79	peak			
5		421.2333	10.31	21.44	31.75	46.00	-14.25	peak			
6	*	914.3167	60.58	26.59	87.17	46.00	41.17	peak			



3

9
2
7

PASS





测试条件 2: 38.4K 速率 7DBM 发射功率 903-927M 发射频率 PASS

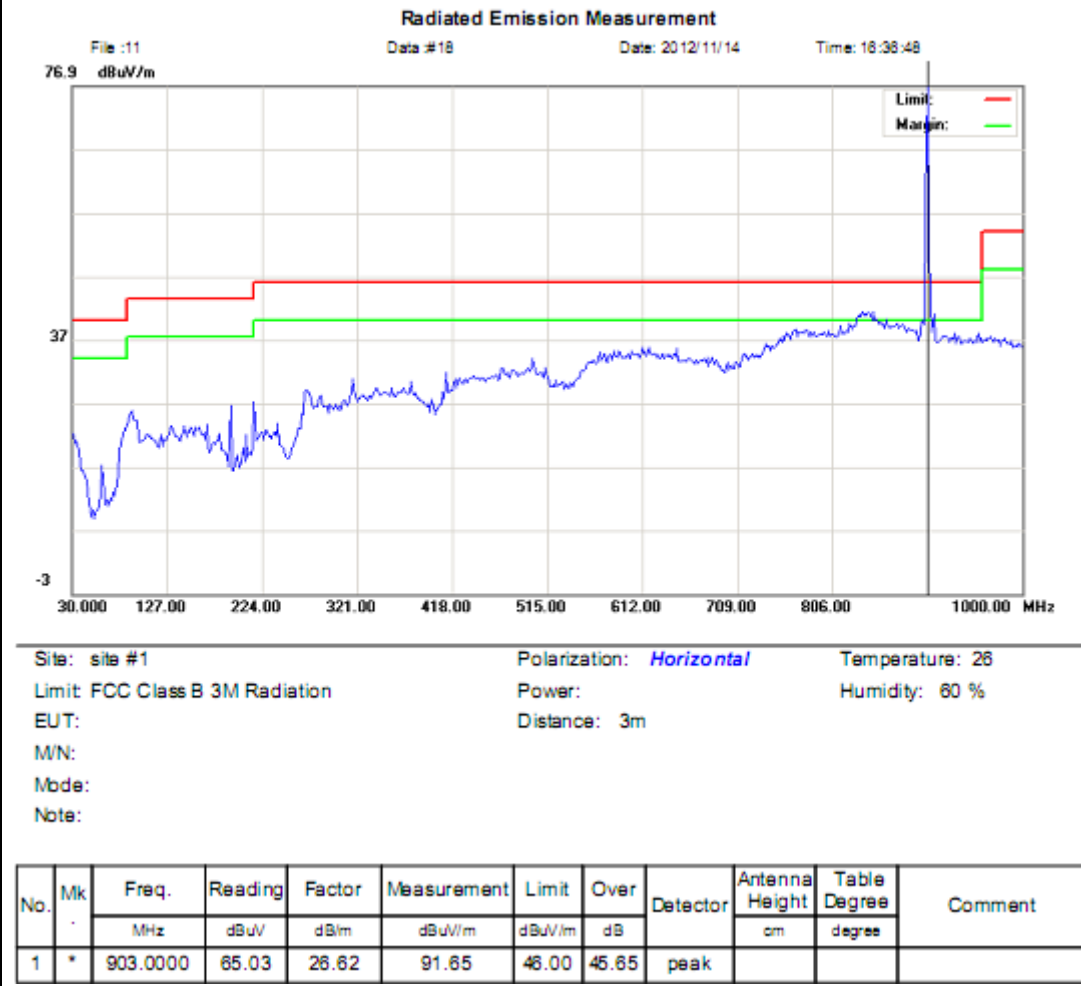
NO	频 率	测试波形	结果
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1

9
0
3

PASS





Radiated Emission Measurement

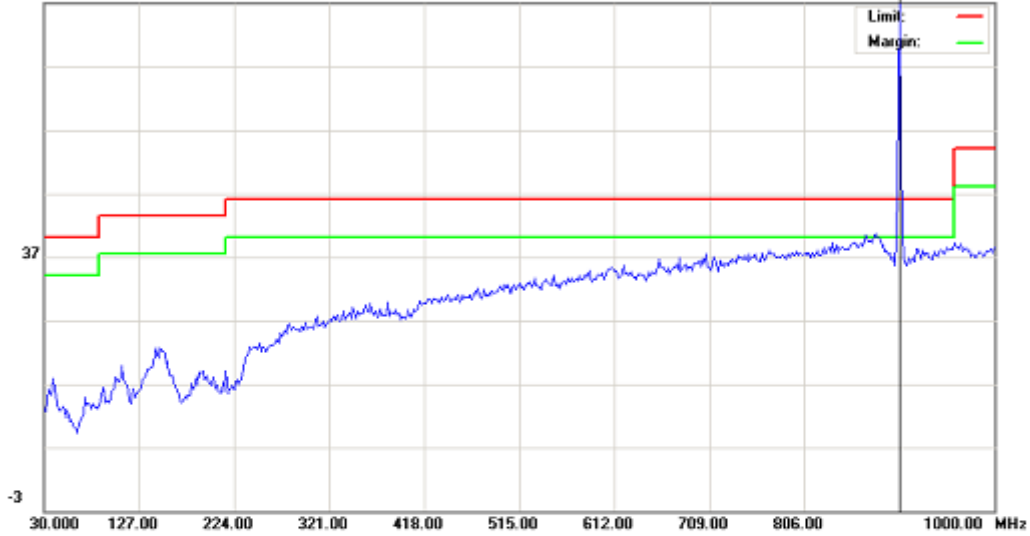
File :11

Data #19

Date: 2012/11/14

Time: 16:37:58

76.9 dBuV/m



Site: site #1

Polarization: *Vertical*

Temperature: 26

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N:

Mode:

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna	Table	Comment
		MHz	dBuV	dBm	dBuV/m	dBuV/m	dB		Height	Degree	
									cm	degree	
1	*	903.0000	57.57	25.97	83.54	46.00	37.54	peak			

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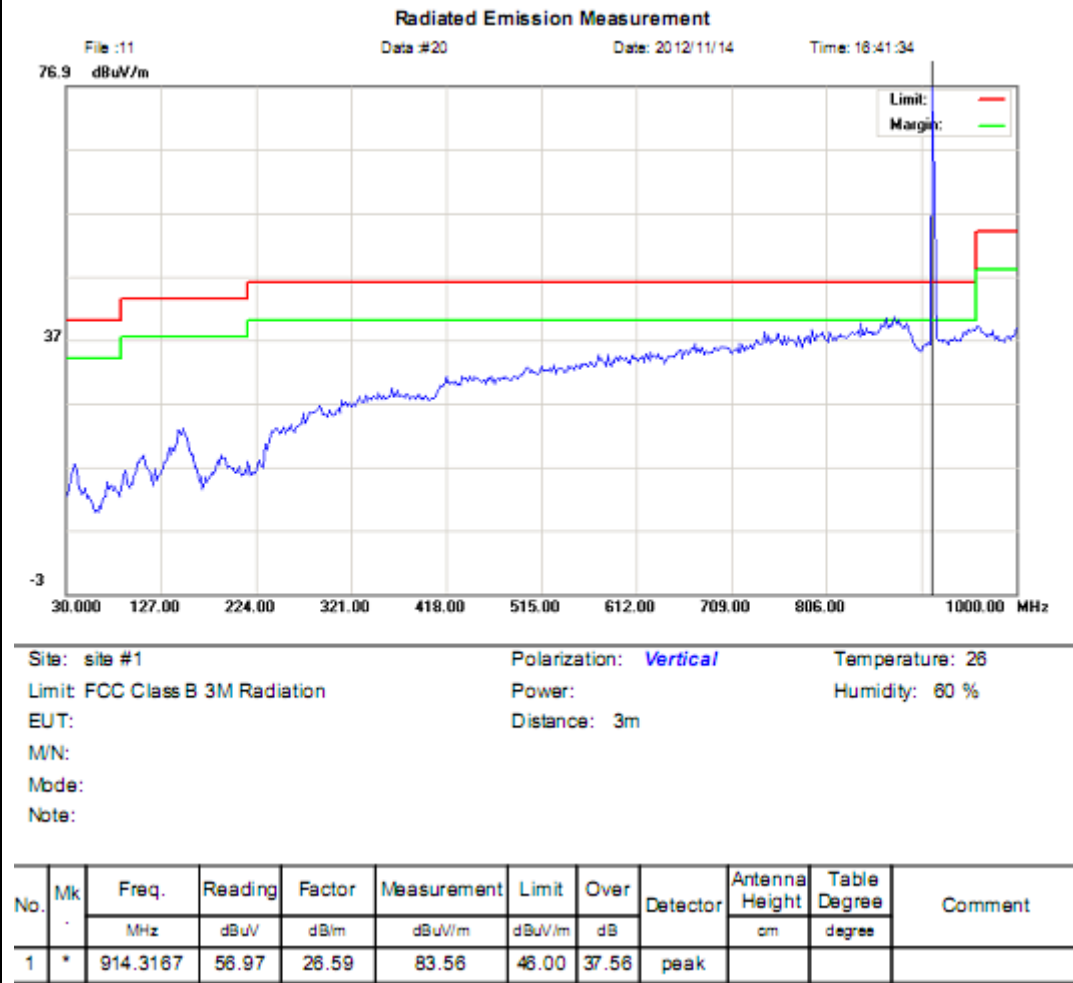
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2

9
1
4

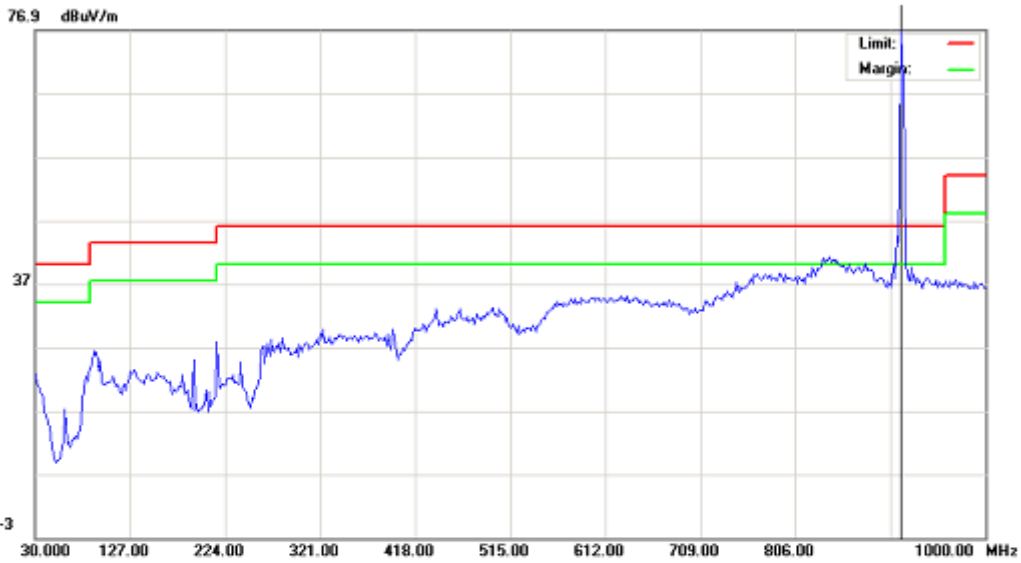
PASS





Radiated Emission Measurement

File :11 Data #21 Date: 2012/11/14 Time: 16:44:45



Site: site #1 Polarization: *Horizontal* Temperature: 26
 Limit: FCC Class B 3M Radiation Power: Humidity: 60 %
 EUT: Distance: 3m
 M/N:
 Mode:
 Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dBm	dBuV/m	dBuV/m	dB		cm	degree	
1	*	914.3167	64.26	26.66	90.92	46.00	44.92	peak			

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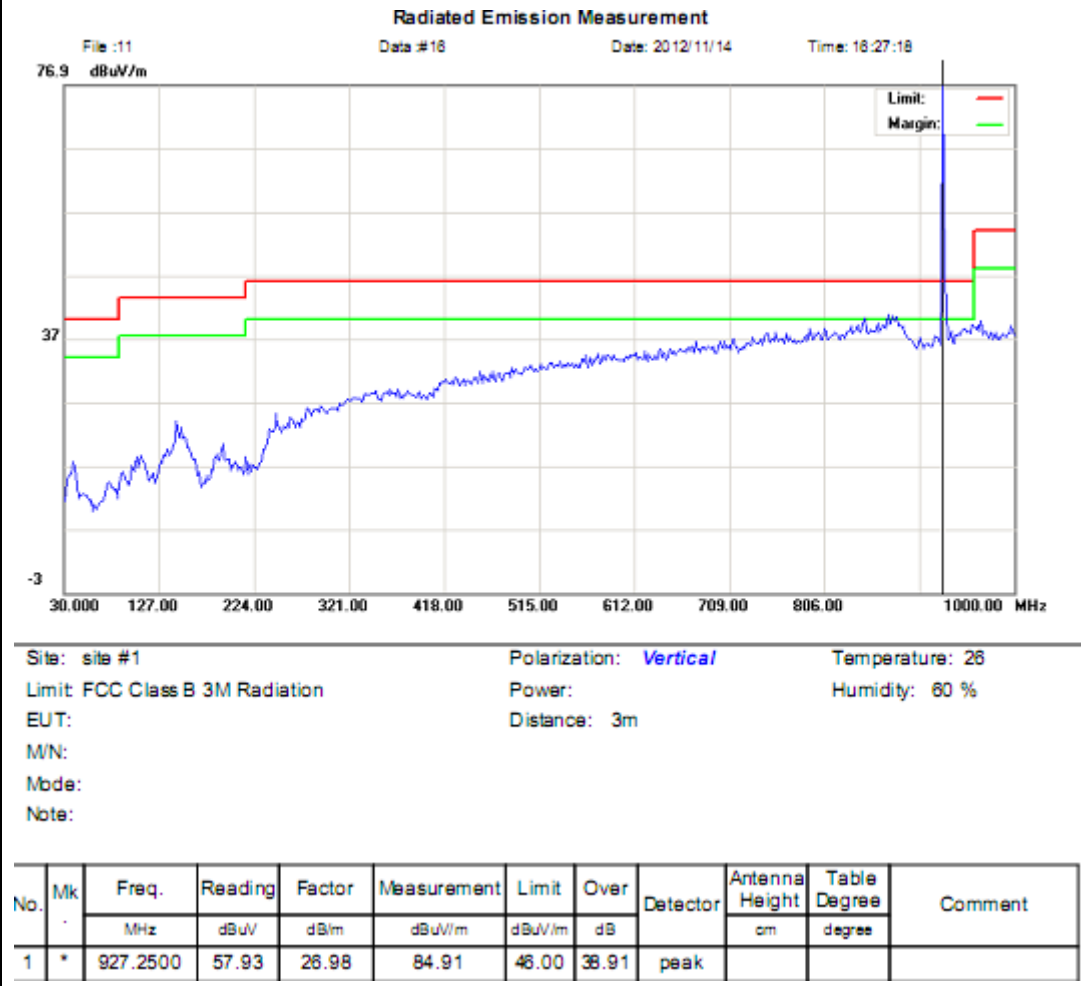
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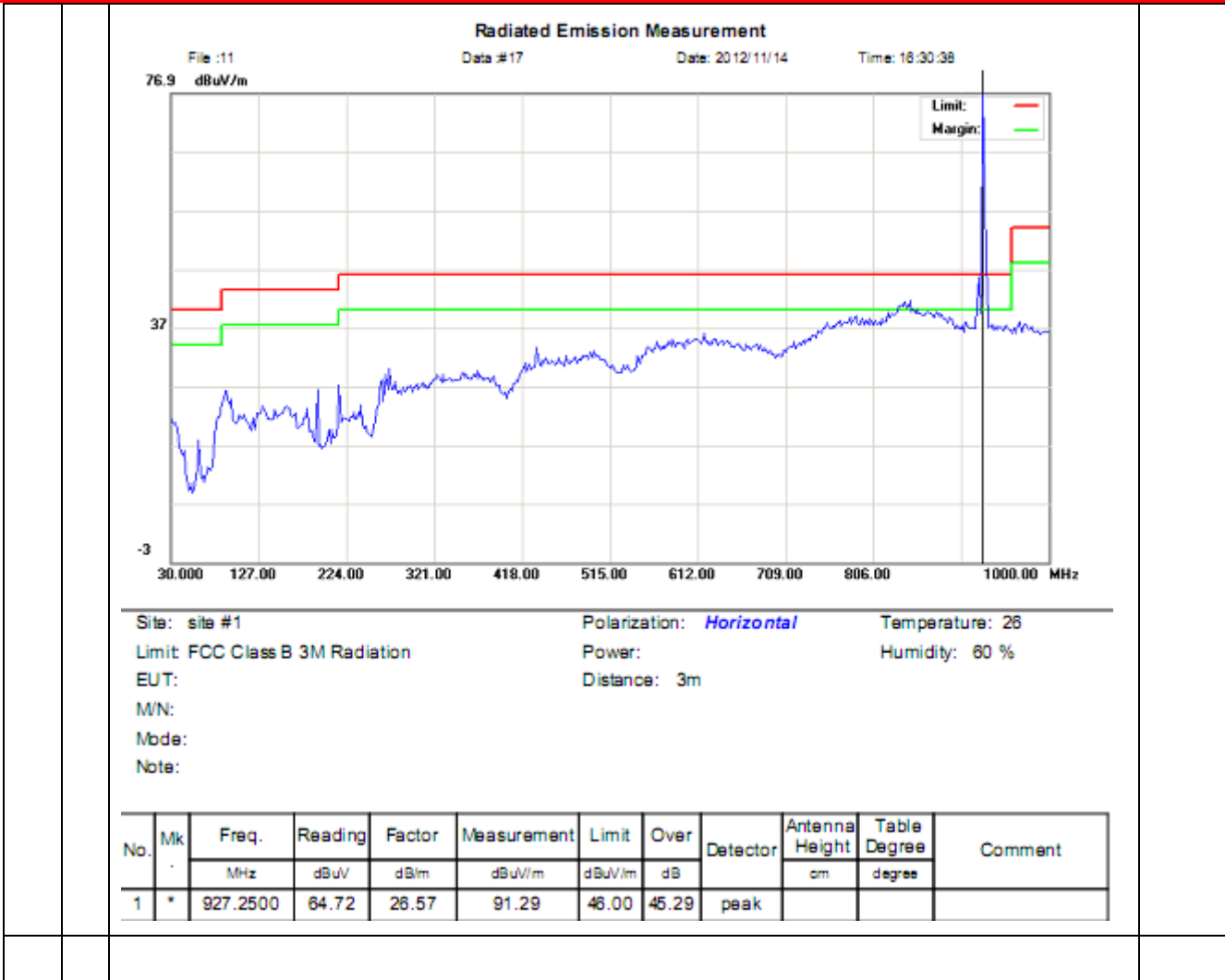


3

9
2
7

PASS





Order Information

WM1101SV9