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*APPENDIX A*

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# APPDNDIX A

## TEST PLOTS

(Model: FXE3000-US)

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*File Number: C1M1603182*

*Report Number: EM-EM-F160207*

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## A.1 EMISSION BANDWIDTH MEASUREMENT

Test Date	2016/03/26 ~ 07/15	Temp./Hum.	25 ~ 26°C/54 ~ 60%
Cable Loss	N/A	Test Voltage	DC 3.3V

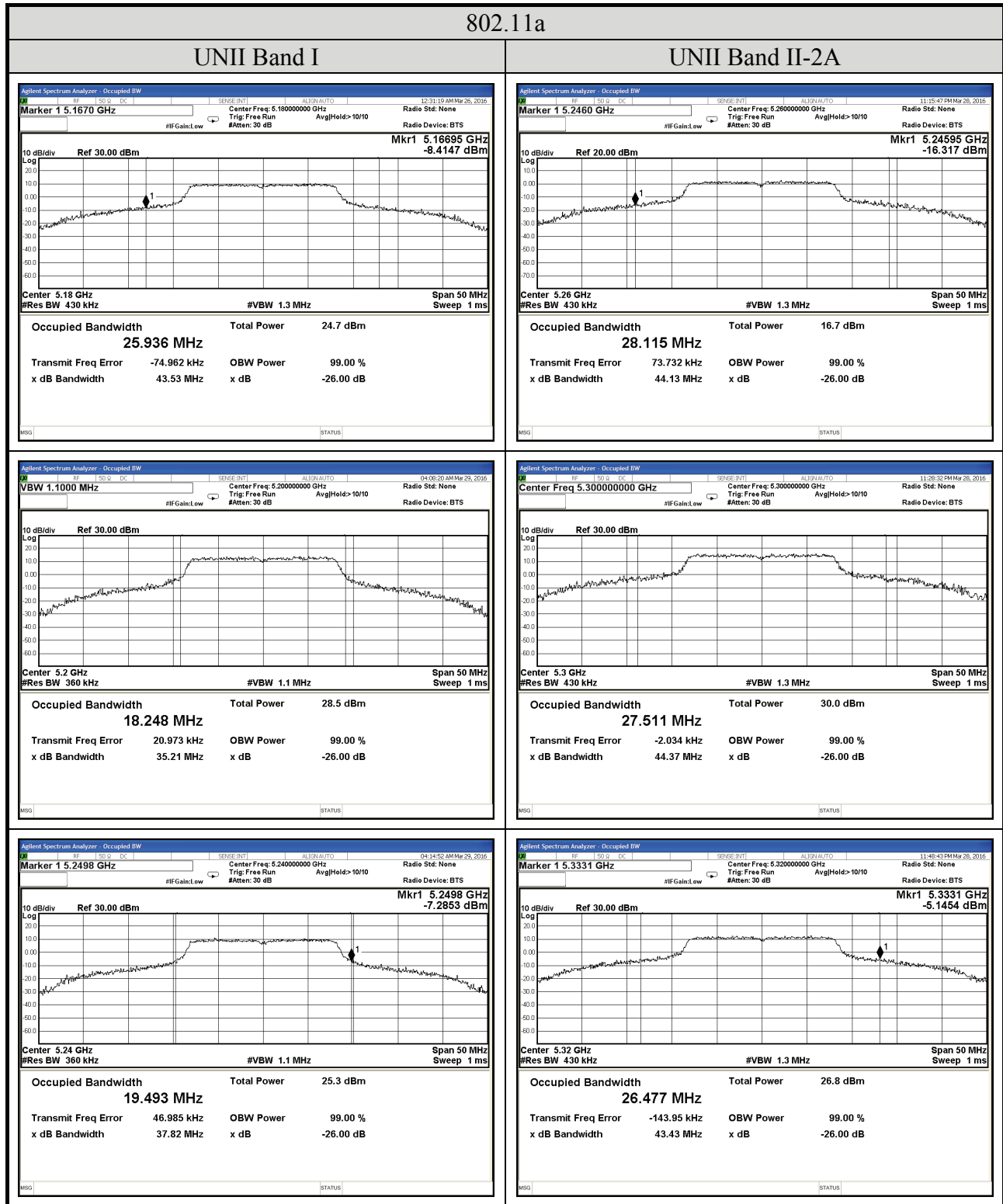
### A.1.1 Emission Bandwidth Result

Modulation Type	UNII Band	Centre Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit
802.11a	I	5180	43.53	25.936	Reference only
		5200	35.21	18.248	
		5240	37.82	19.493	
	II-2A	5260	44.13	28.118	
		5300	44.37	27.511	
		5320	43.43	26.477	
	II-2C	5500	37.97	18.729	
		5580	41.87	23.751	
		5700	35.97	18.489	
802.11n-HT20	I	5180	30.00	18.306	Reference only
		5200	25.37	18.041	
		5240	24.08	18.042	
	II-2A	5260	24.30	18.079	
		5300	24.98	18.034	
		5320	24.69	18.002	
	II-2C	5500	24.35	18.053	
		5580	24.53	18.032	
		5700	26.03	18.120	
802.11n-HT40	I	5190	48.60	37.009	Reference only
		5230	68.86	37.671	
	II-2A	5270	51.55	37.356	
		5310	49.23	37.106	
	II-2C	5510	47.11	36.619	
		5670	66.46	37.595	

Modulation Type	UNII Band	Centre Frequency (MHz)	6dB Bandwidth (MHz)	Limit
802.11a	III	5745	16.61	≥ 500kHz
		5785	16.62	
		5825	16.63	
802.11n- HT20	III	5745	17.84	
		5785	17.87	
		5825	17.87	
802.11n- HT40	III	5755	36.59	
		5795	36.57	

A.1.2 Measurement Plots

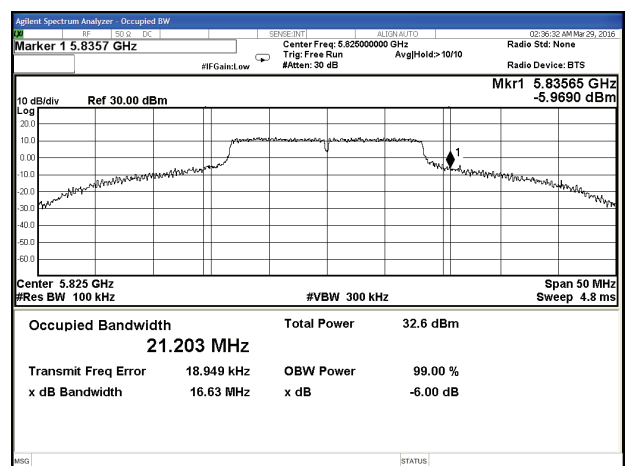
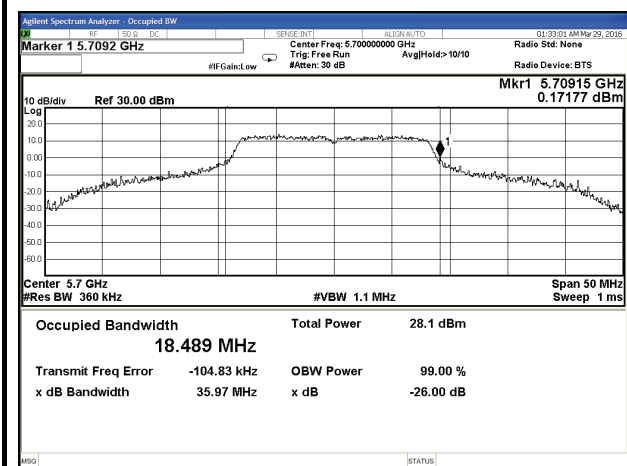
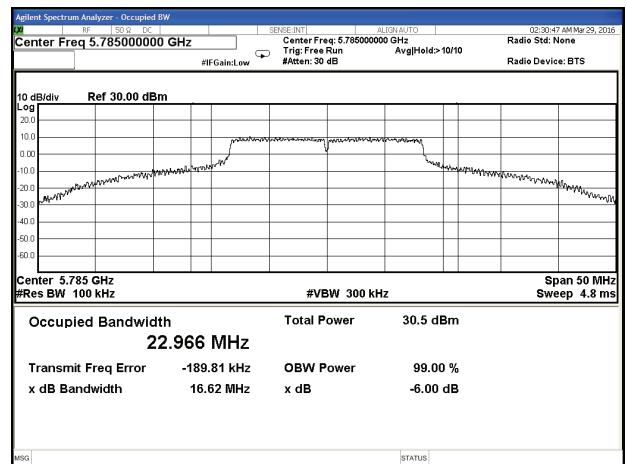
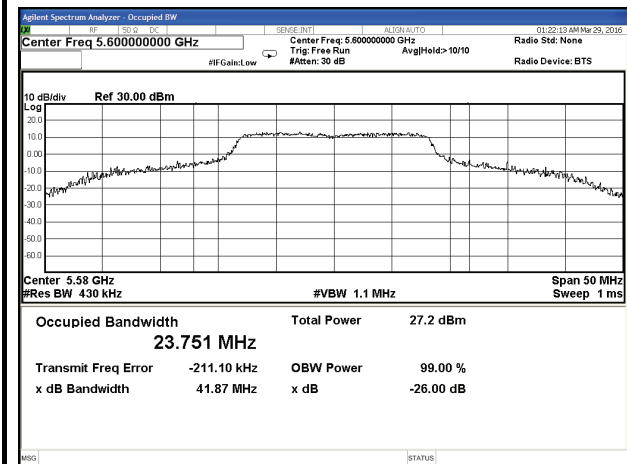
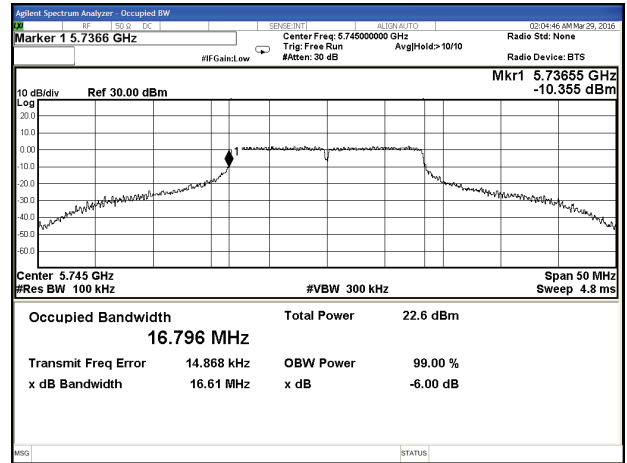
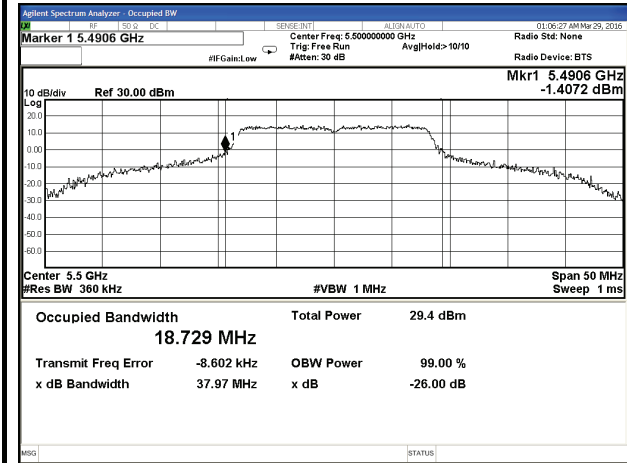
802.11a



802.11a

UNII Band II-2C

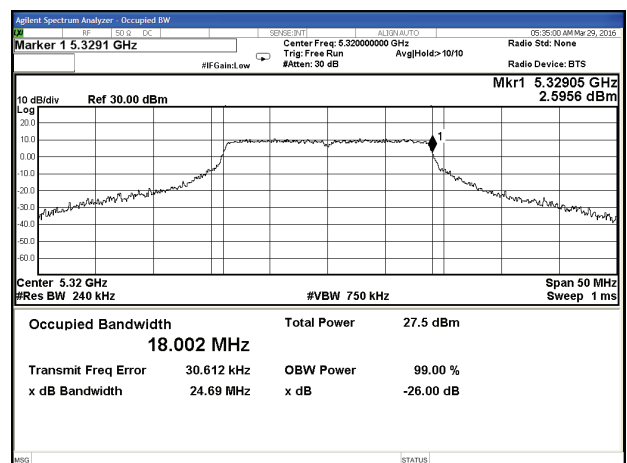
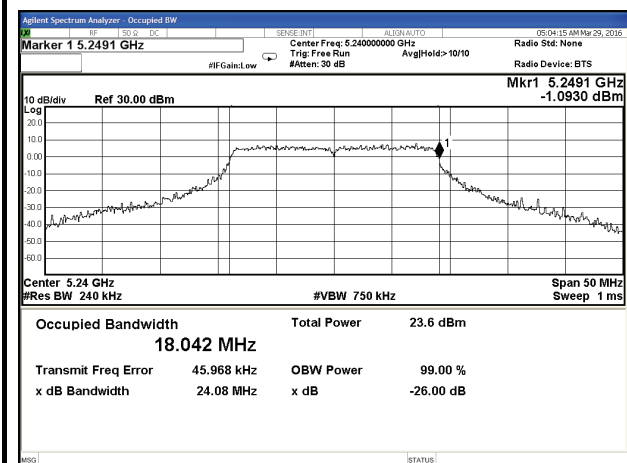
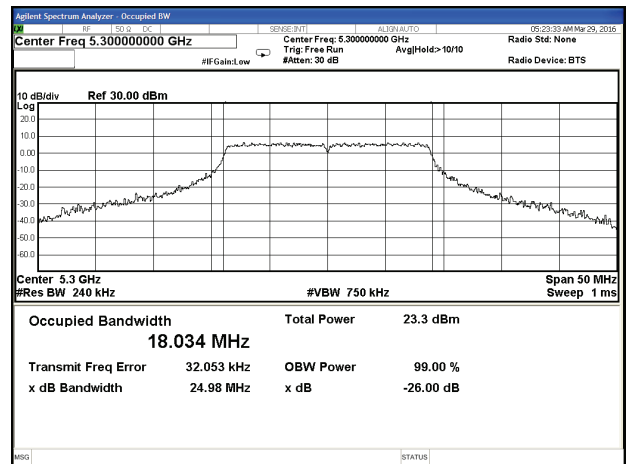
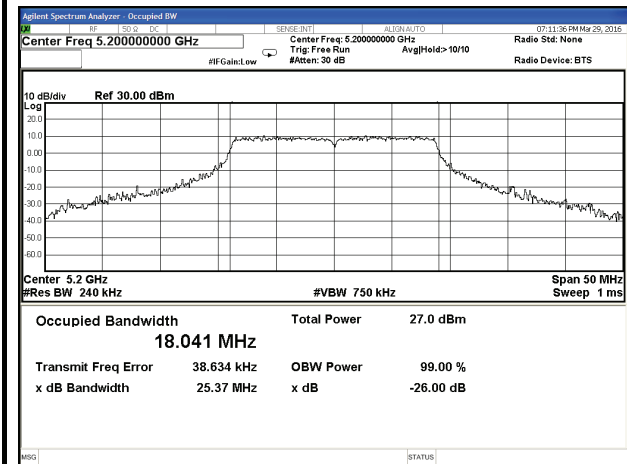
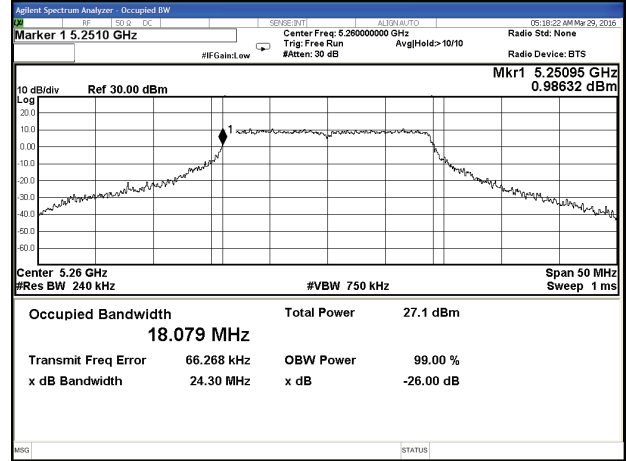
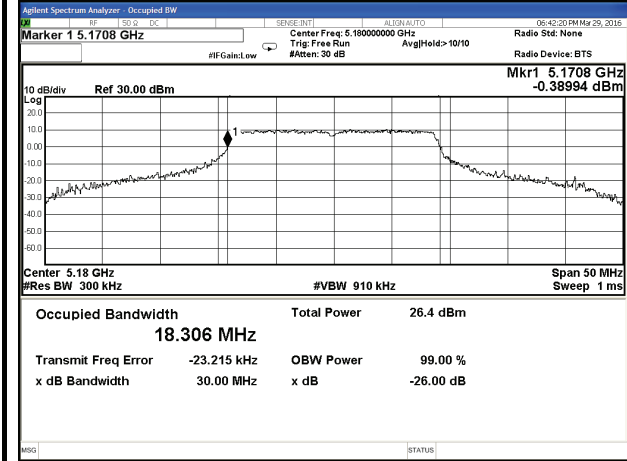
UNII Band III



802.11n-HT20

UNII Band I

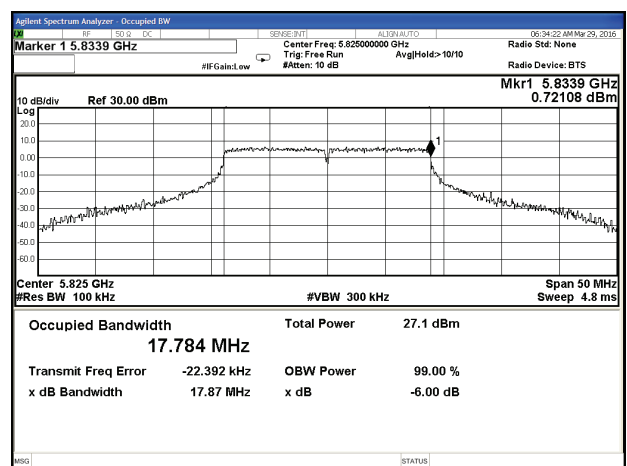
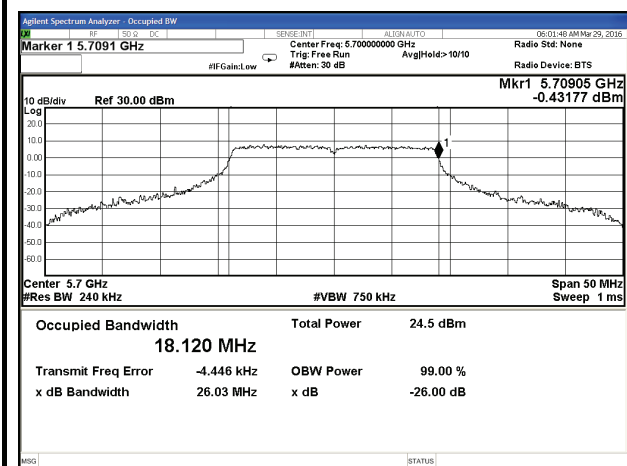
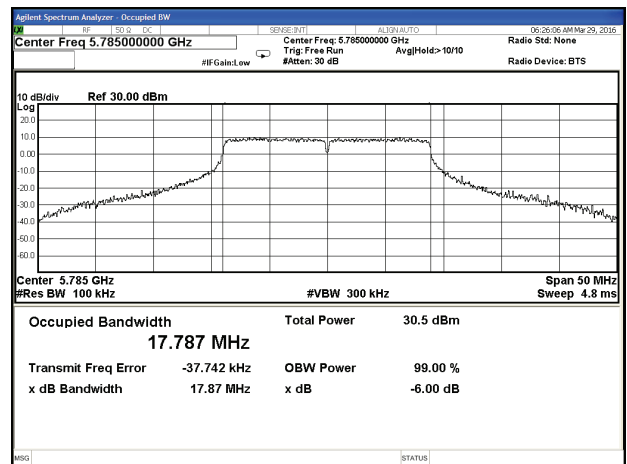
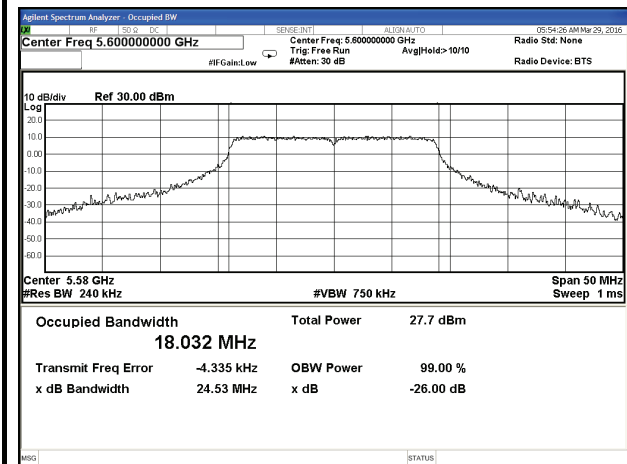
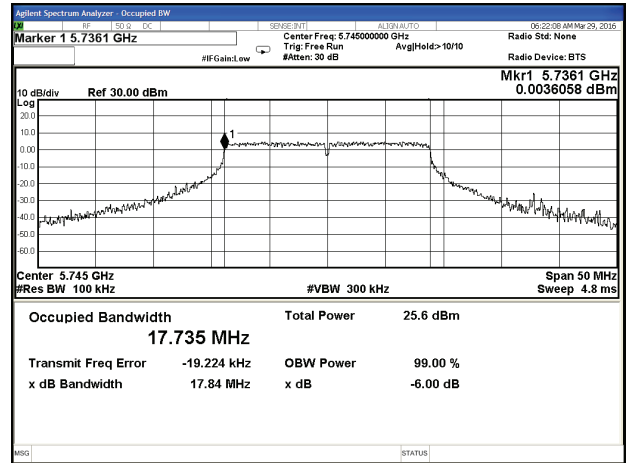
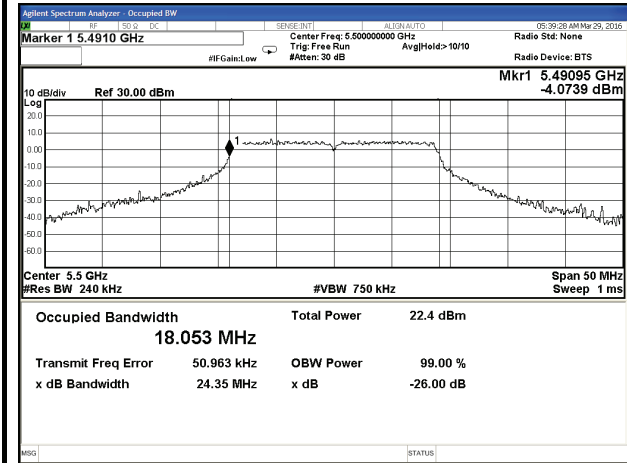
UNII Band II-2A



802.11n-HT20

UNII Band II-2C

UNII Band III



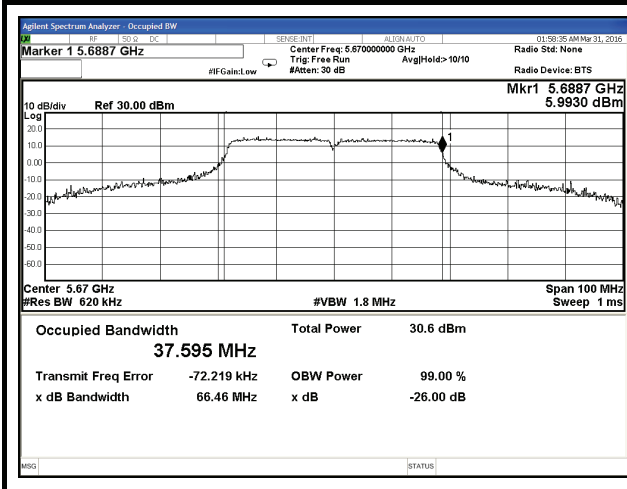
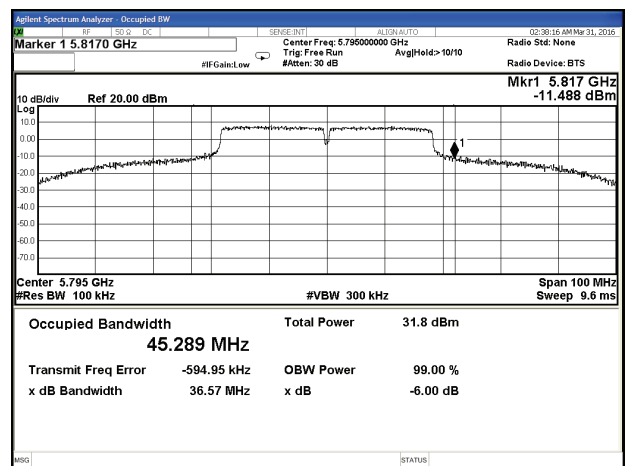
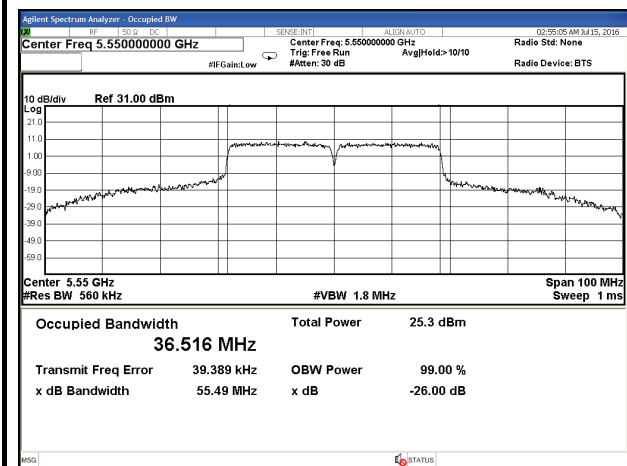
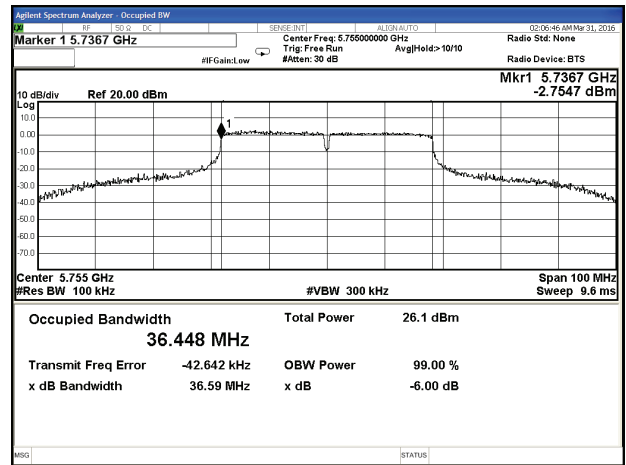
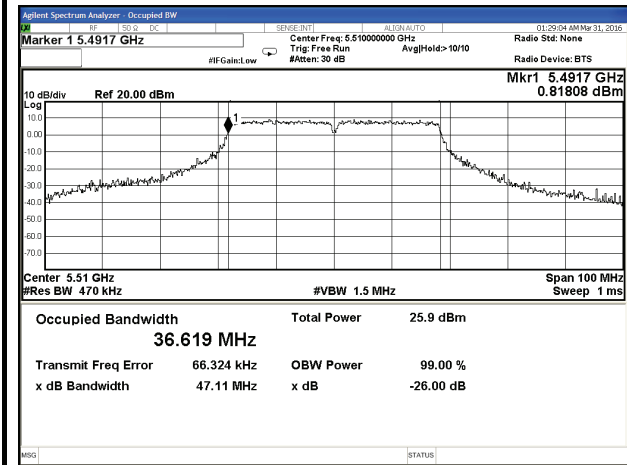




802.11n-HT40

UNII Band II-2C

UNII Band III



## A.2 MAXIMUM OUTPUT POWER MEASUREMENT

### A.2.1 Emission Bandwidth Result

Test Date	2016/03/26 ~ 07/15	Temp./Hum.	25°C/54%
Cable Loss	N/A	Test Voltage	DC 3.3V

Modulation Type	UNII Band	Centre Frequency (MHz)	Output Power		Limit
			(dBm)	(W)	
802.11a	I	5180	<b>20.02</b>	0.100	< 250 mW (24 dBm)
		5200	<b>18.29</b>	0.067	
		5240	<b>18.21</b>	0.066	
	II-2A	5260	<b>22.13</b>	0.163	< 250 mW (24 dBm)
		5300	<b>22.08</b>	0.161	
		5320	<b>20.74</b>	0.119	
	II-2C	5500	<b>20.91</b>	0.123	
		5580	<b>21.79</b>	0.151	
		5700	<b>19.14</b>	0.082	
	III	5745	<b>17.72</b>	0.059	< 1 W (30 dBm)
		5785	<b>21.26</b>	0.134	
		5825	<b>20.35</b>	0.108	

Note: The results have been included cable loss.

Modulation Type	UNII Band	Centre Frequency (MHz)	Output Power				Limit
			(dBm)			(W)	
			Chain 0	Chain 1	Total		
802.11n-HT20	I	5180	19.81	19.34	<b>22.59</b>	0.182	<0.199 W (22.99 dBm) Note 2
		5200	19.42	19.51	<b>22.48</b>	0.177	
		5240	19.20	20.03	<b>22.65</b>	0.184	
	II-2A	5260	19.02	20.07	<b>22.59</b>	0.182	<0.199 W (22.99 dBm) Note 2
		5300	19.08	19.82	<b>22.48</b>	0.177	
		5320	19.23	20.13	<b>22.71</b>	0.187	
	II-2C	5500	19.07	19.79	<b>22.46</b>	0.176	
		5580	19.45	19.91	<b>22.70</b>	0.186	
		5700	18.62	19.14	<b>21.90</b>	0.155	
	III	5745	17.54	18.19	<b>20.89</b>	0.123	< 0.793 W (28.99 dBm) Note 3
		5785	18.80	19.55	<b>22.20</b>	0.166	
		5825	18.52	19.34	<b>21.96</b>	0.157	
802.11n-HT40	I	5190	14.66	14.02	<b>17.36</b>	0.054	<0.199 W (22.99 dBm) Note 2
		5230	19.54	19.87	<b>22.72</b>	0.187	
	II-2A	5270	19.01	19.72	<b>22.39</b>	0.173	<0.199 W (22.99 dBm) Note 2
		5310	17.97	19.39	<b>21.75</b>	0.150	
	II-2C	5510	15.58	16.44	<b>19.04</b>	0.080	
		5550	19.07	19.32	<b>22.21</b>	0.166	
		5670	19.03	19.22	<b>22.14</b>	0.164	
	III	5755	17.13	18.33	<b>20.78</b>	0.120	
		5795	20.56	21.08	<b>23.84</b>	0.242	

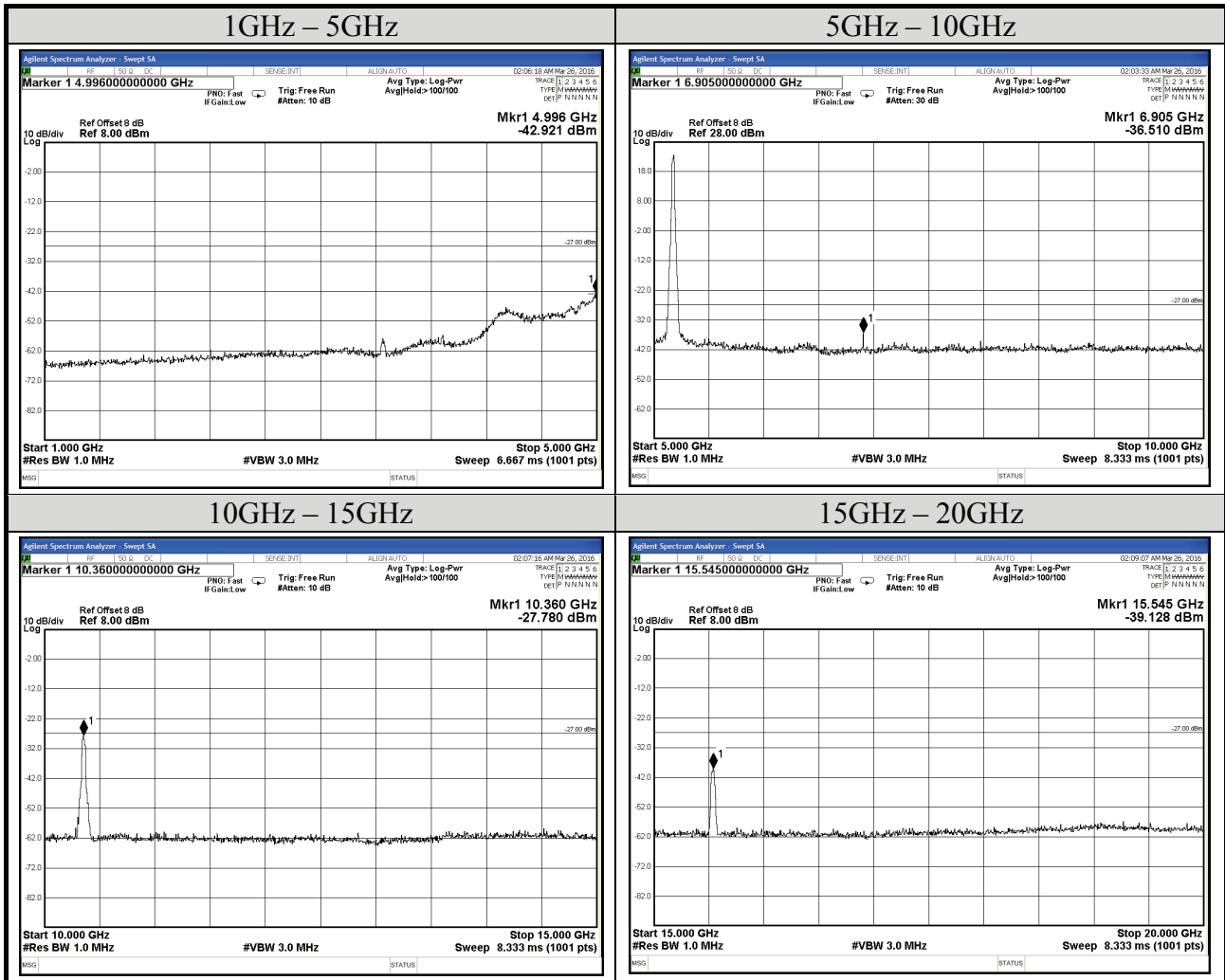
Note 1: The results have been included cable loss.

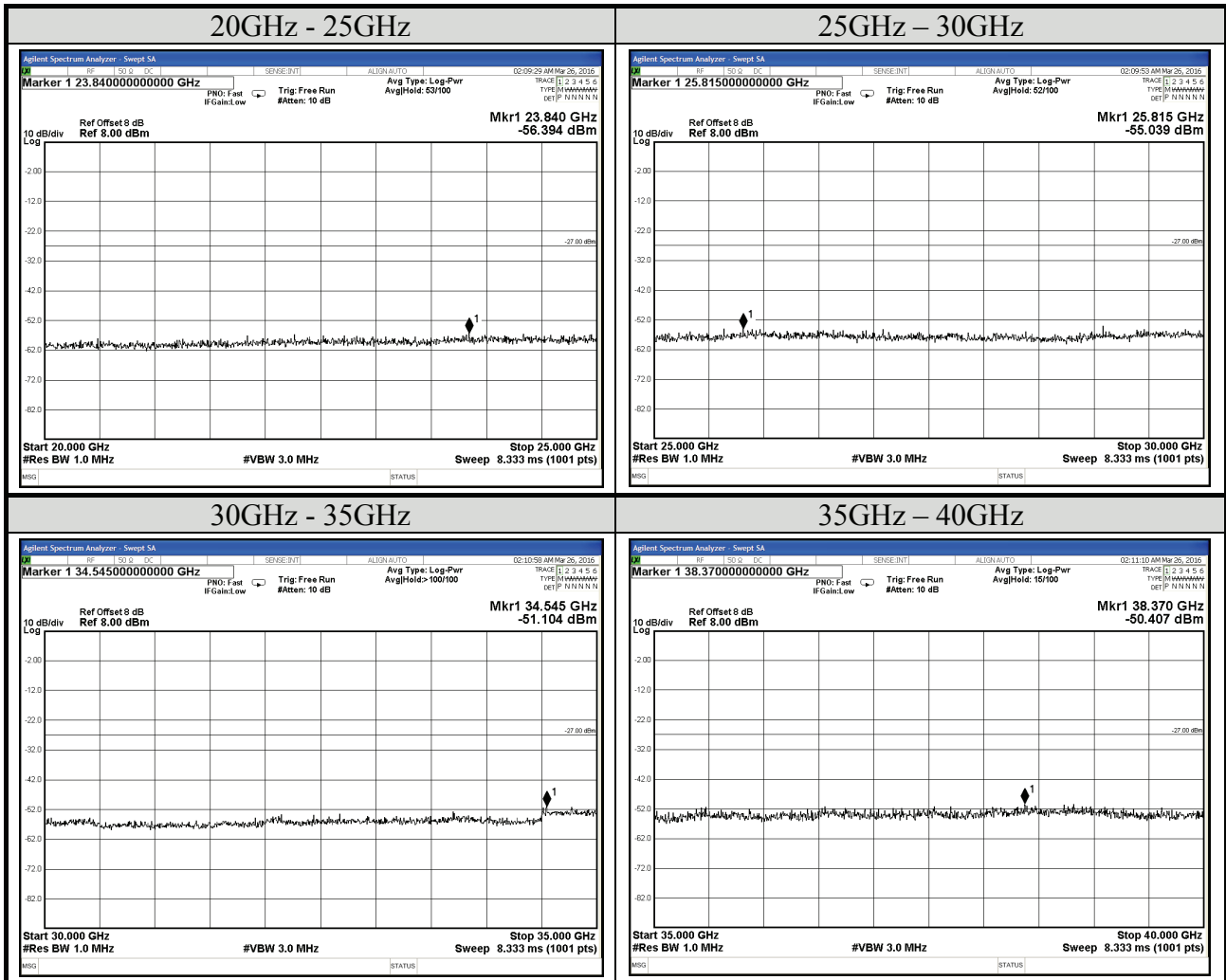
Note 2: 802.11n Directional gain is 7.01dBi > 6dBi, the Limit is 24 – (7.01-6) = 22.99 dBm

Note 3: 802.11n Directional gain is 7.01dBi > 6dBi, the Limit is 30 – (7.01-6) = 28.99 dBm

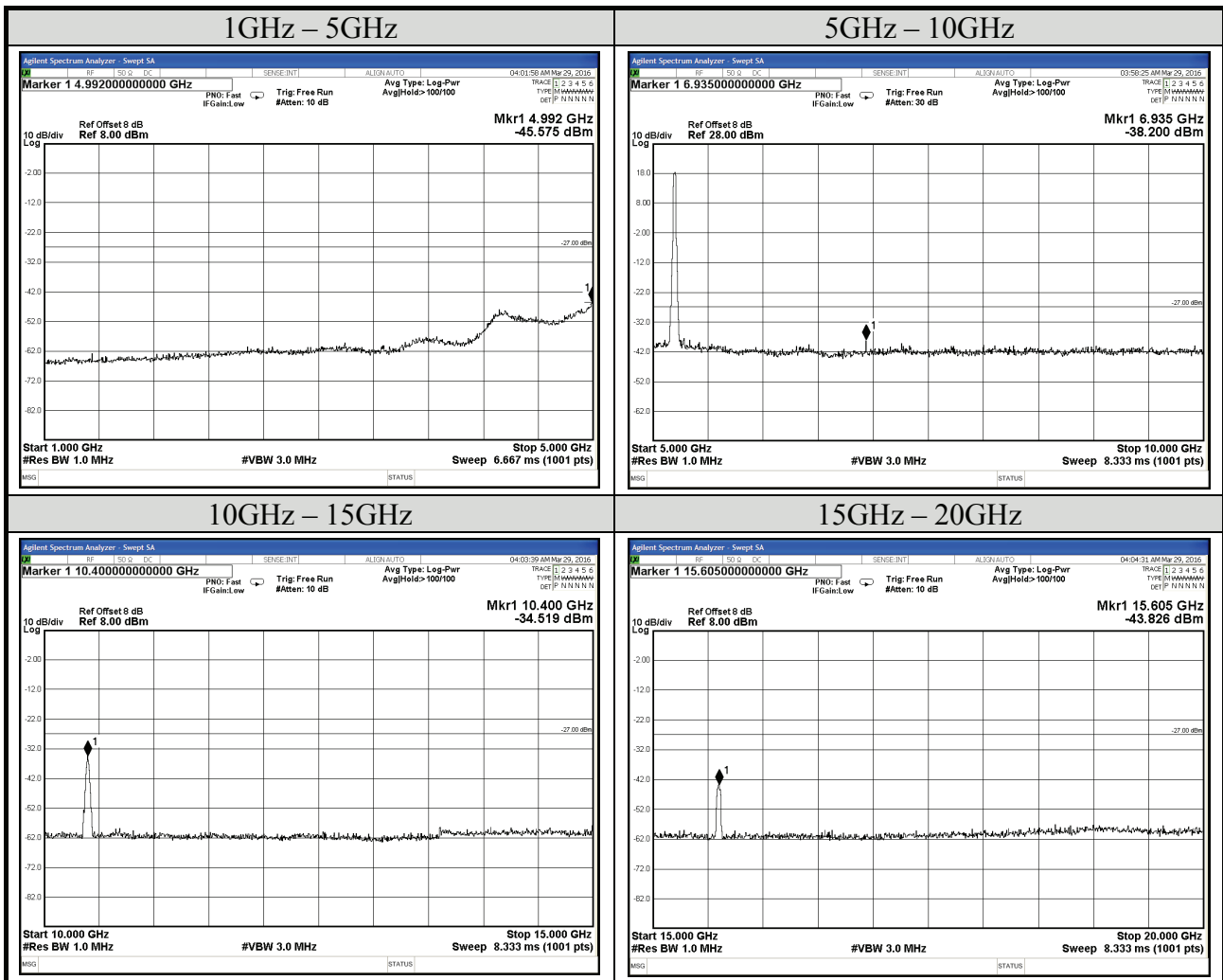
### A.3 EMISSION LIMITATIONS MEASUREMENT

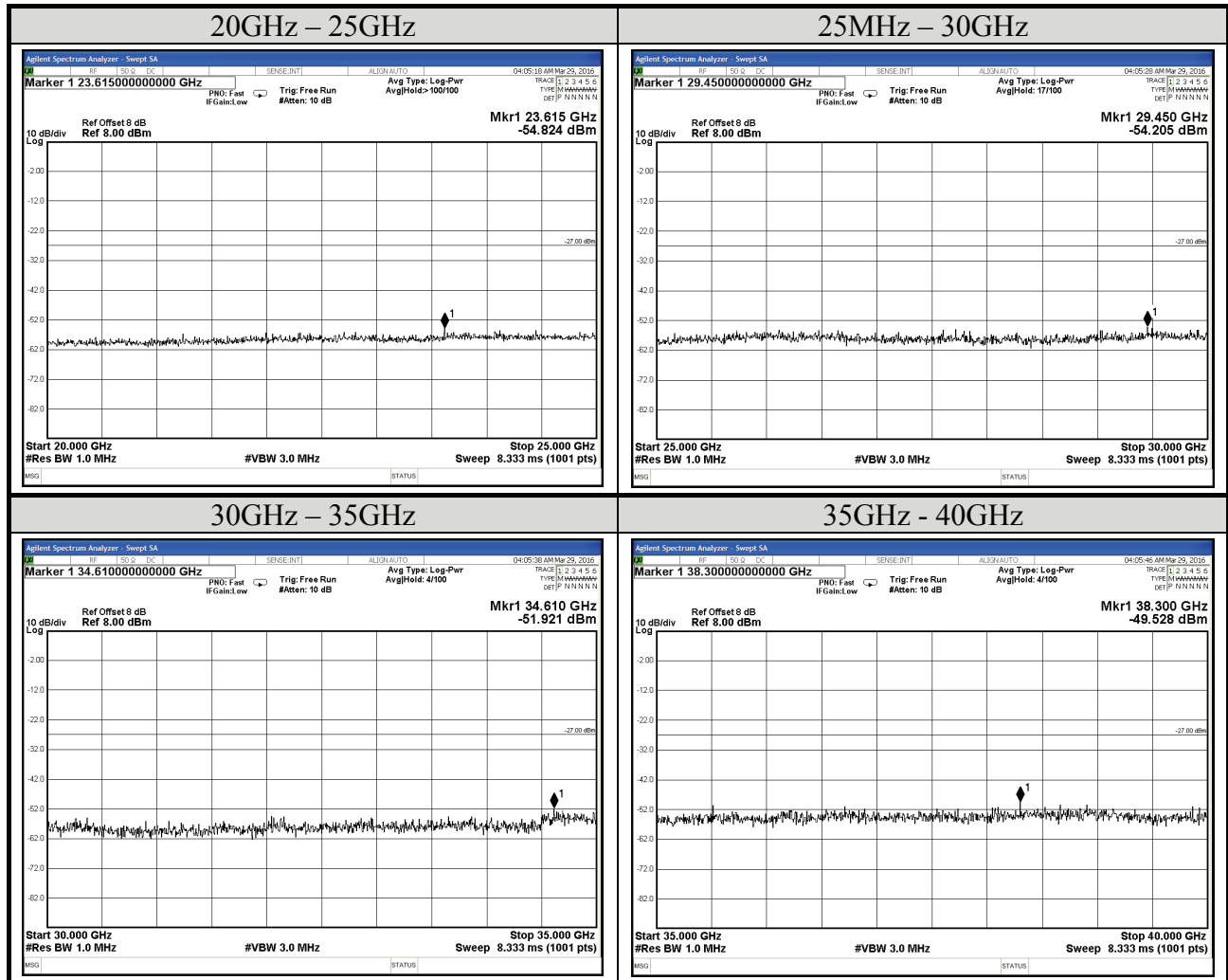
Test Date	2015/03/26	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	I
		Frequency	TX 5180MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	





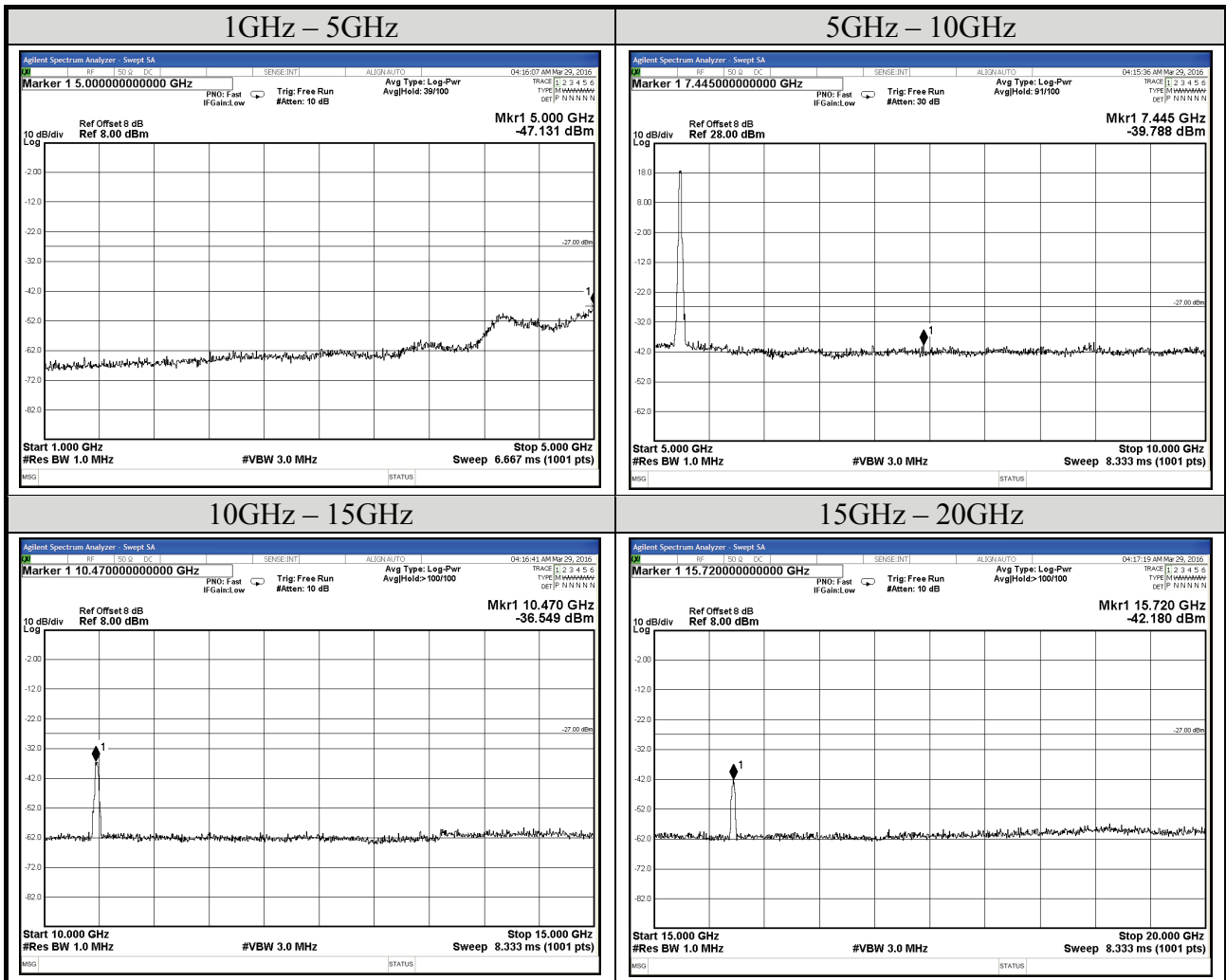
Test Date	2016/03/25	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	I
		Frequency	TX 5200MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	

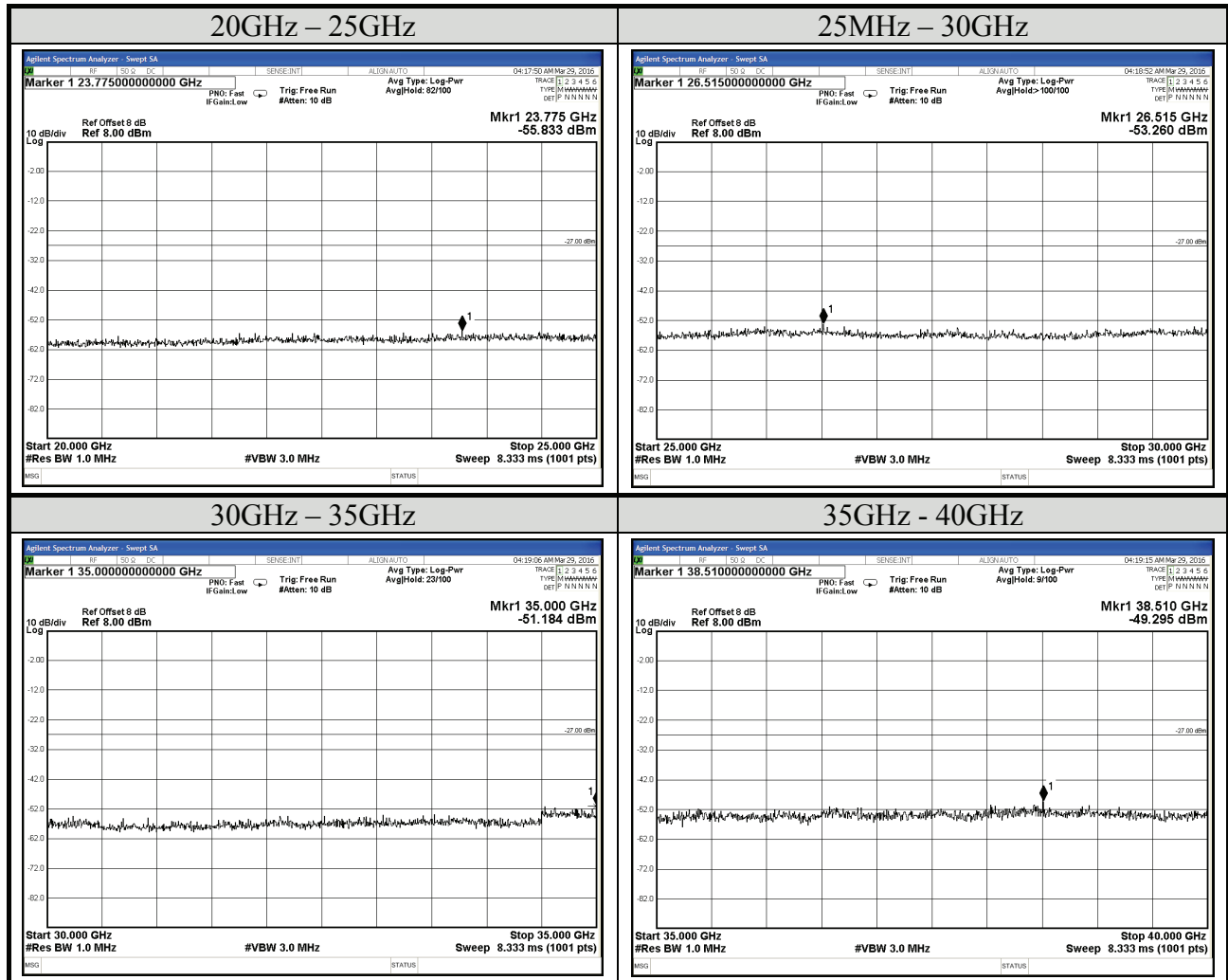




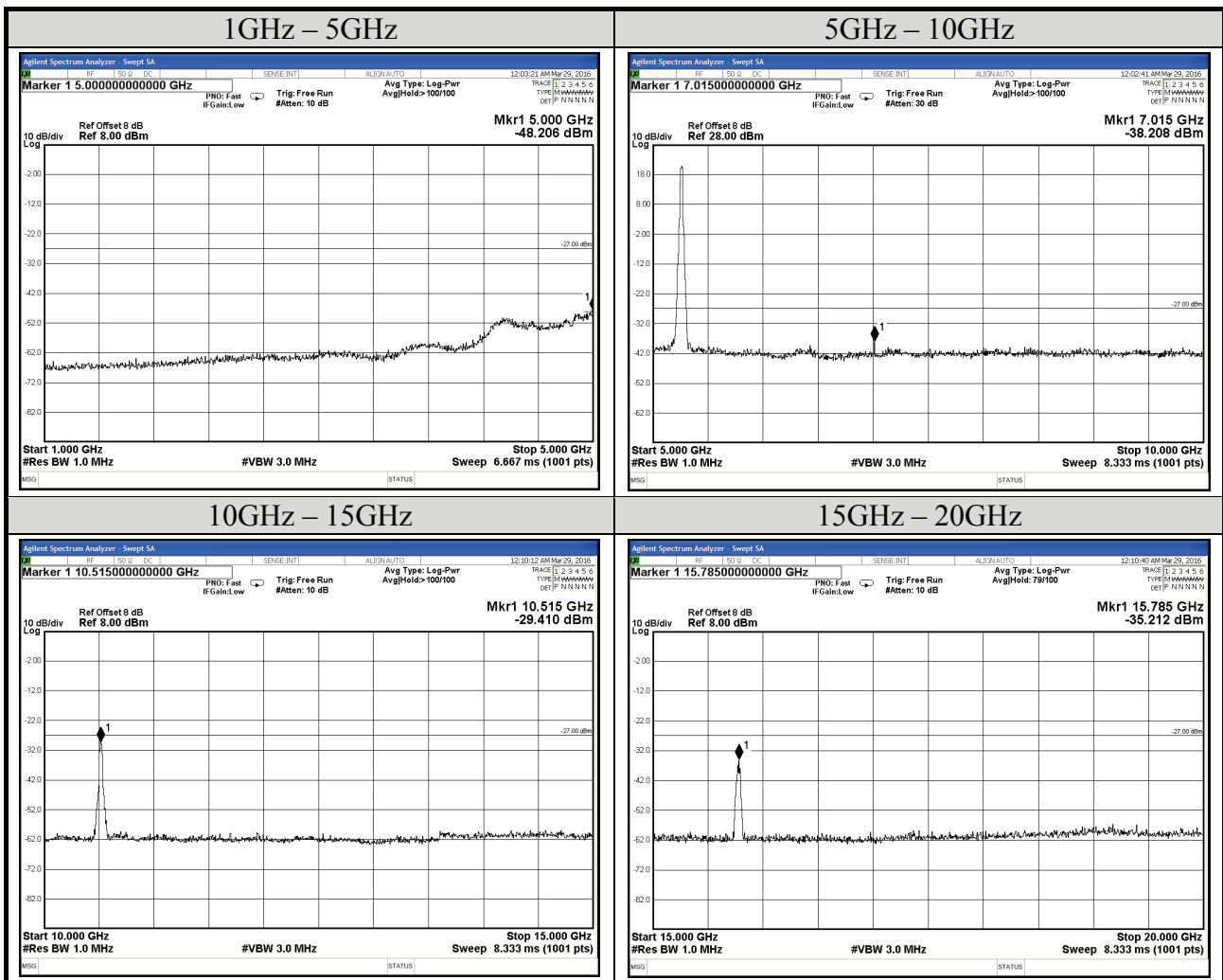


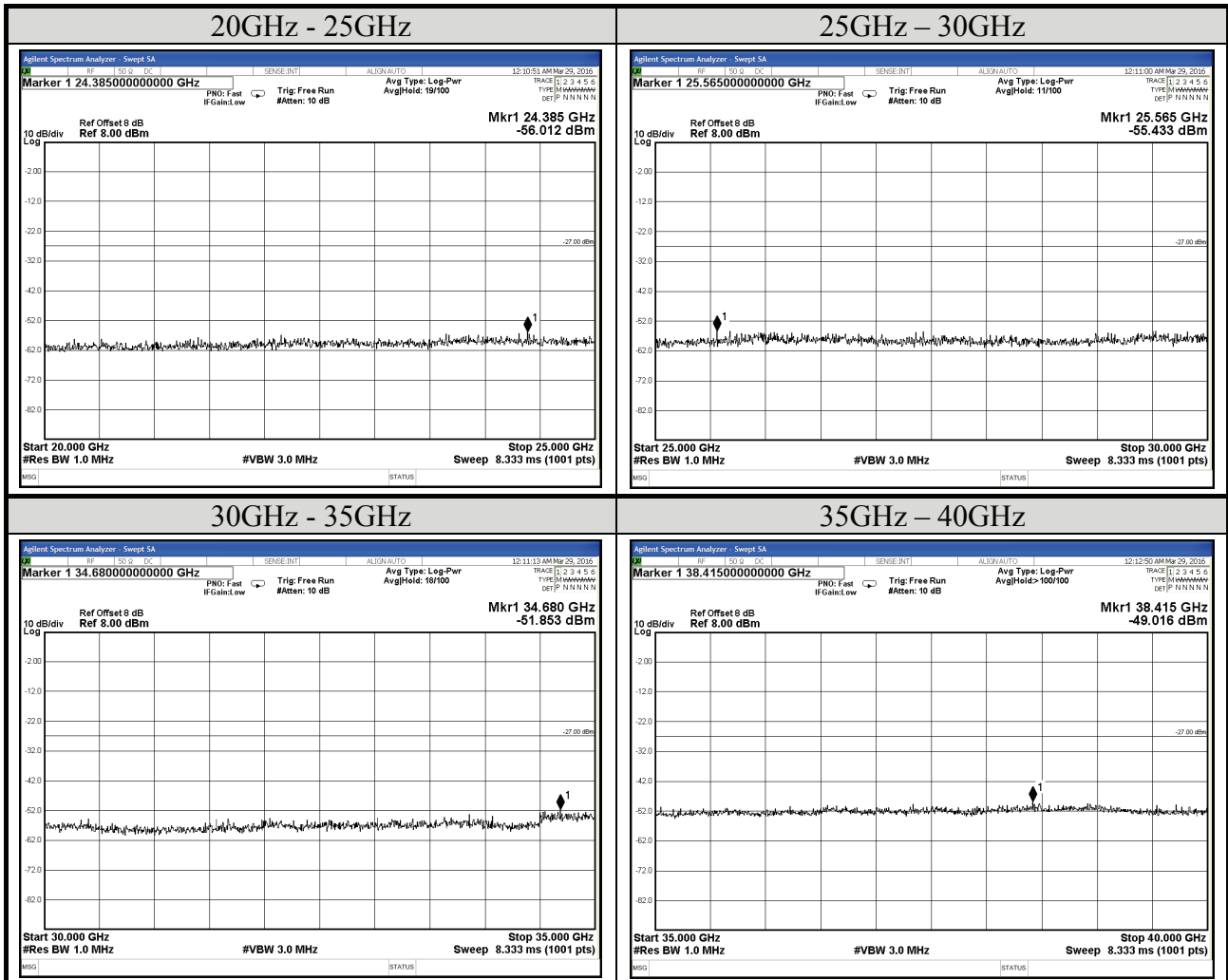
Test Date	2016/03/26	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	I
		Frequency	TX 5240MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	



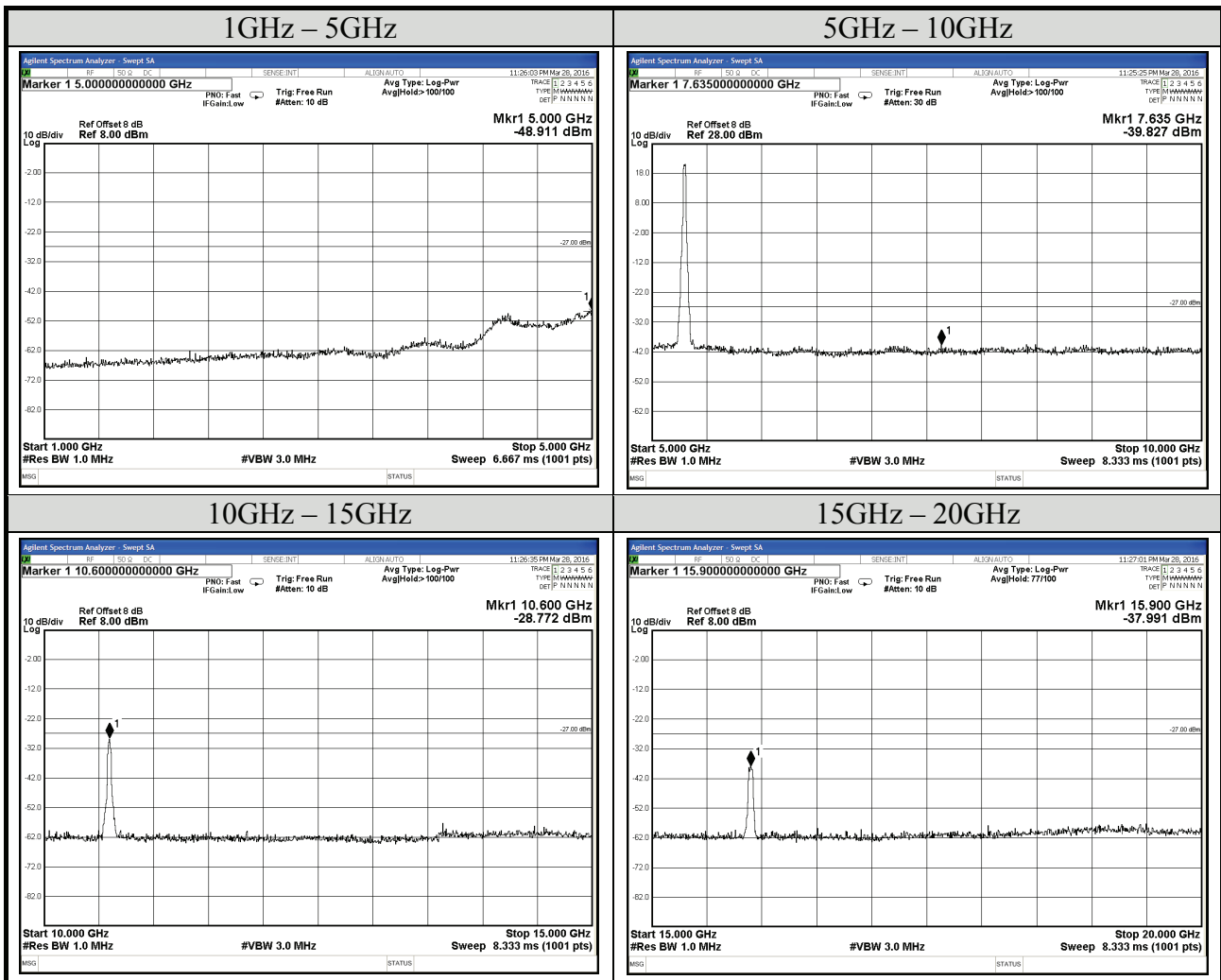


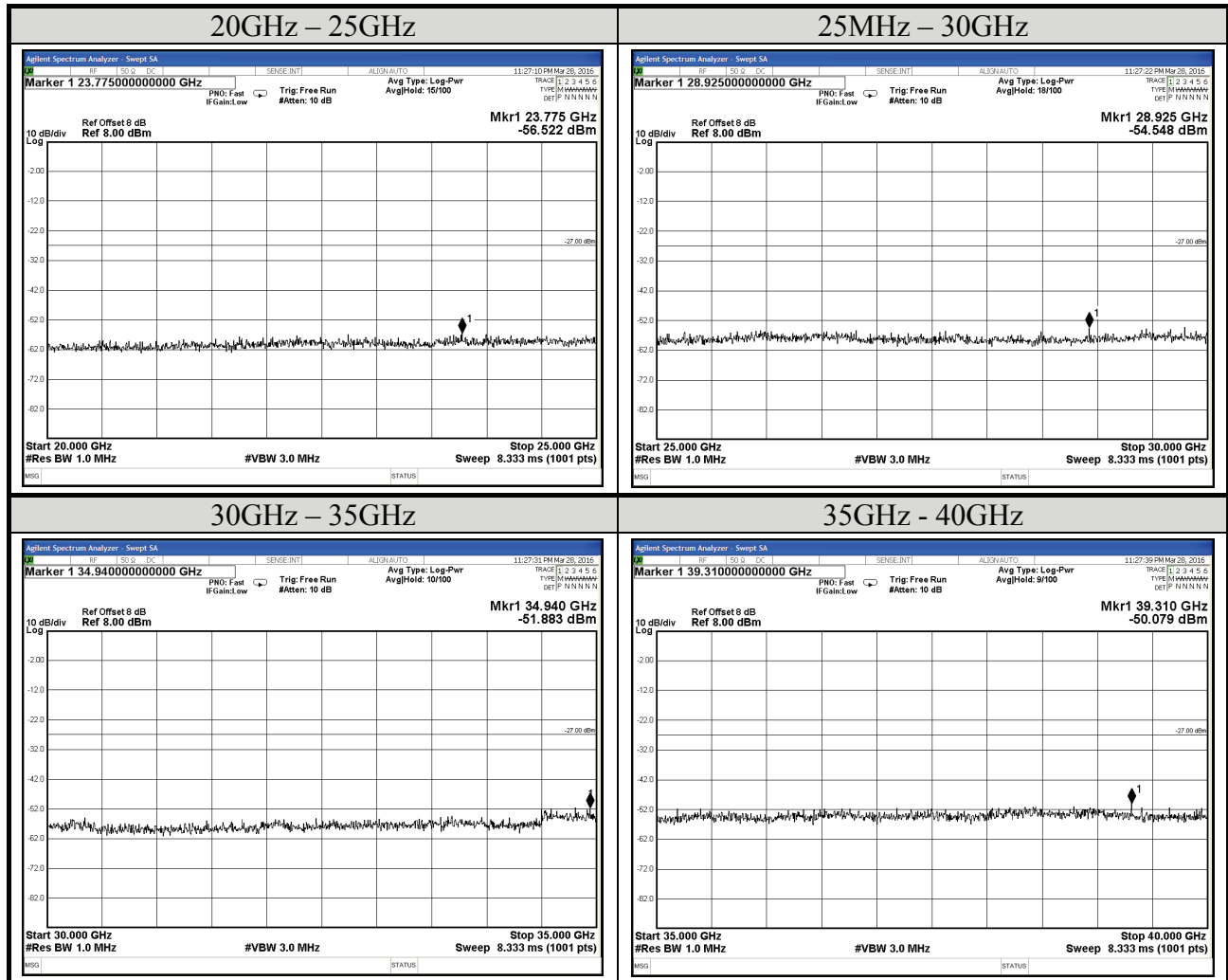
Test Date	2016/03/29	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	II-2A
		Frequency	TX 5260MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	



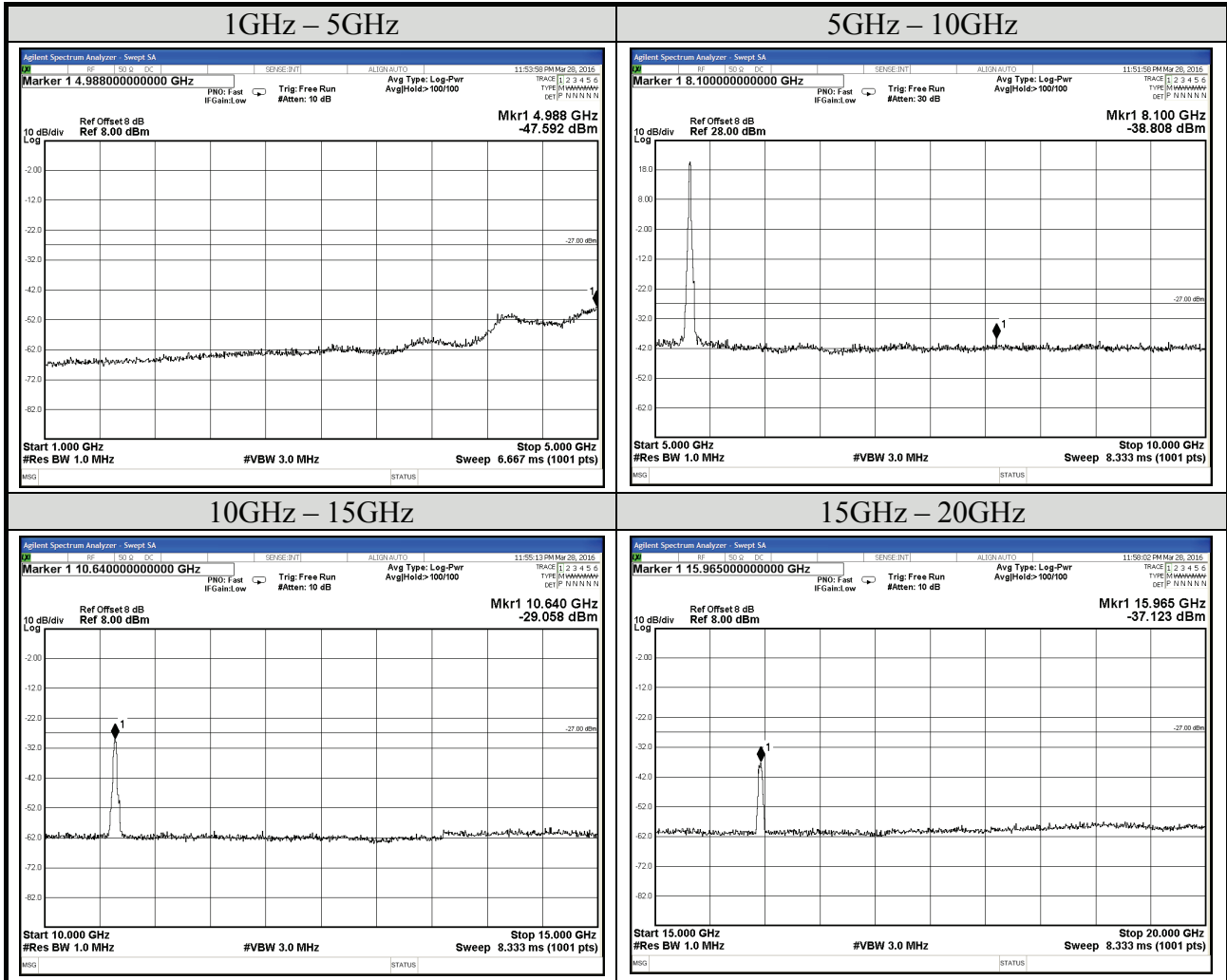


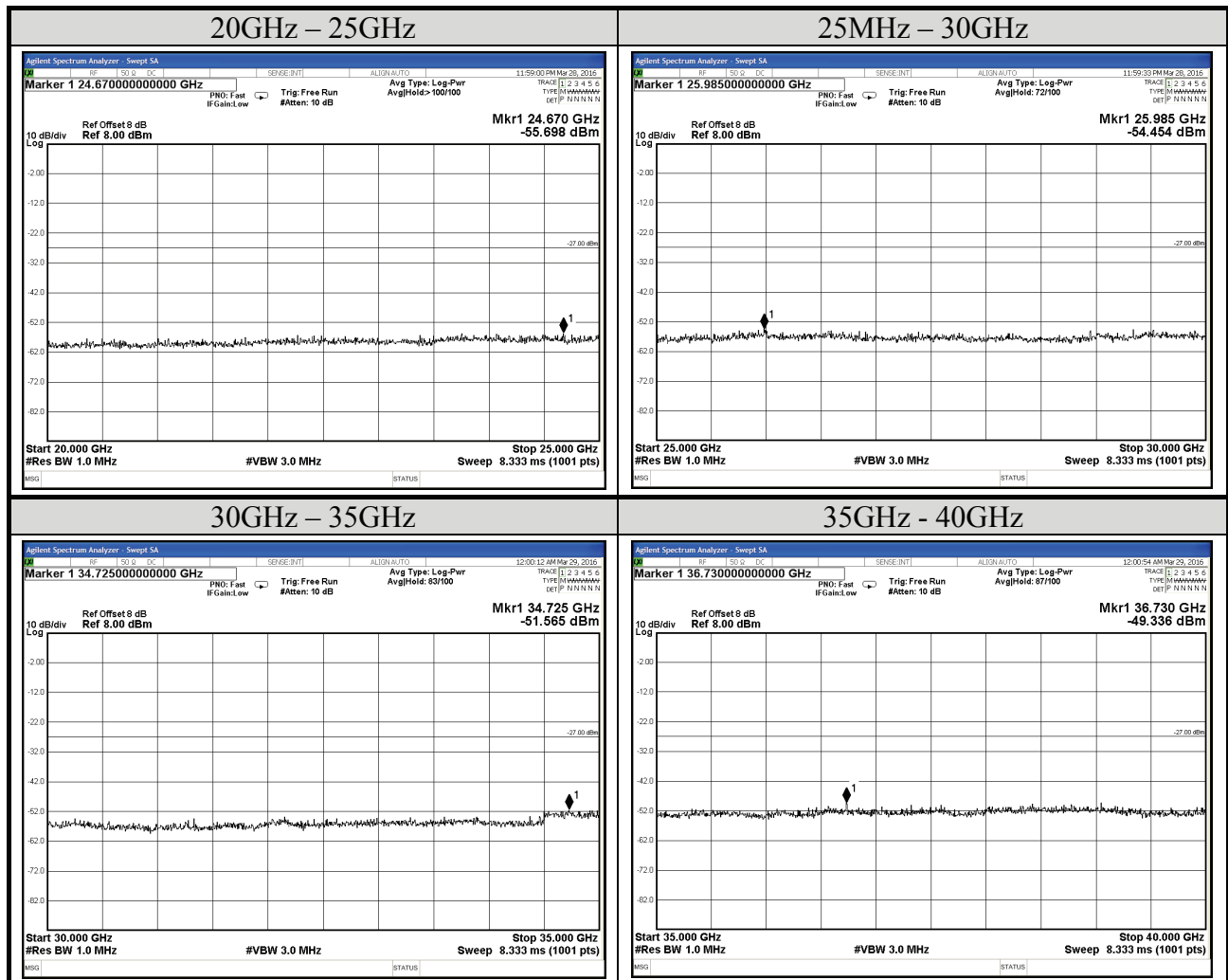
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Mode	802.11a	UNII Band	II-2A
		Frequency	TX 5300MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	





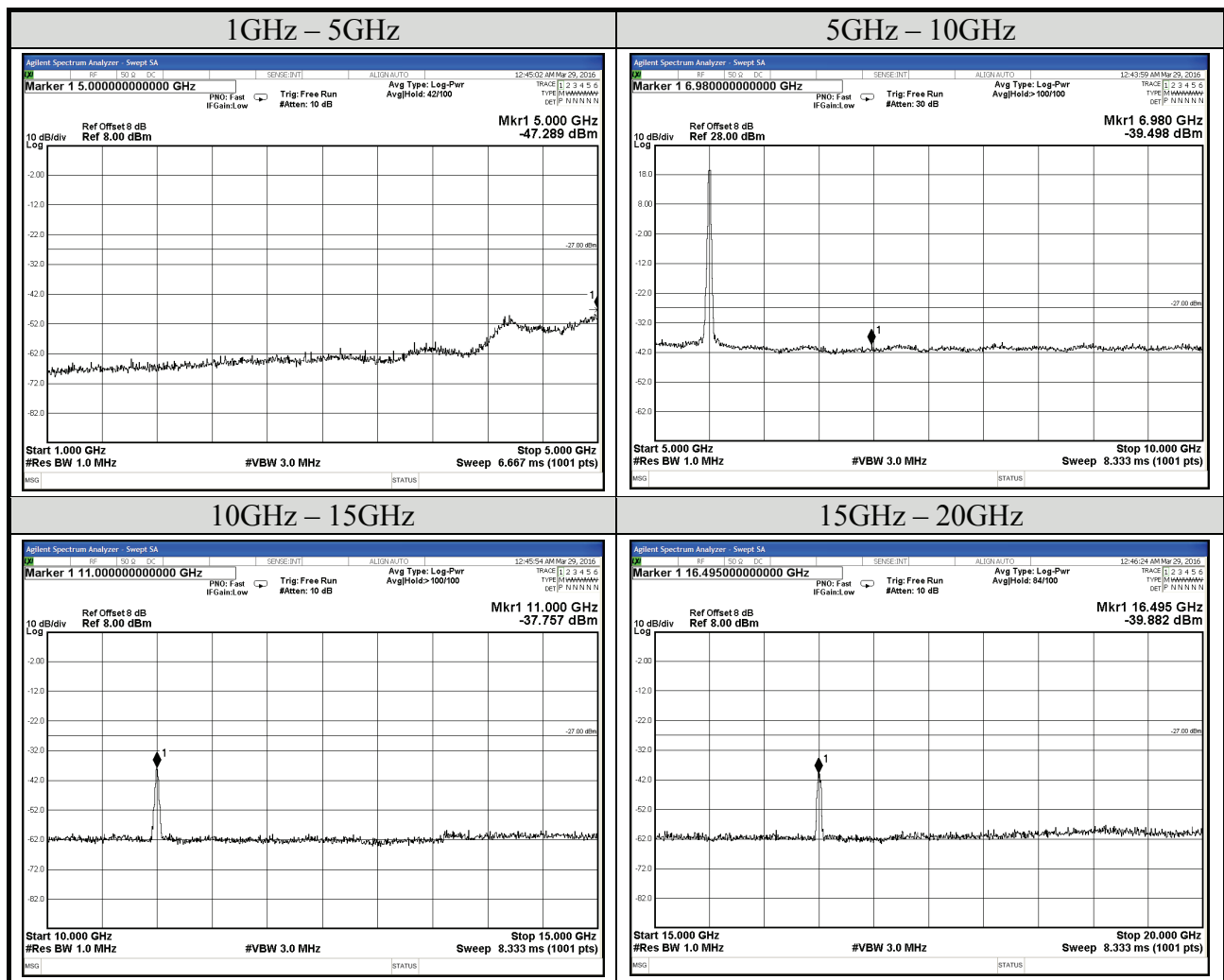
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Mode	802.11a	UNII Band	II-2A
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Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	

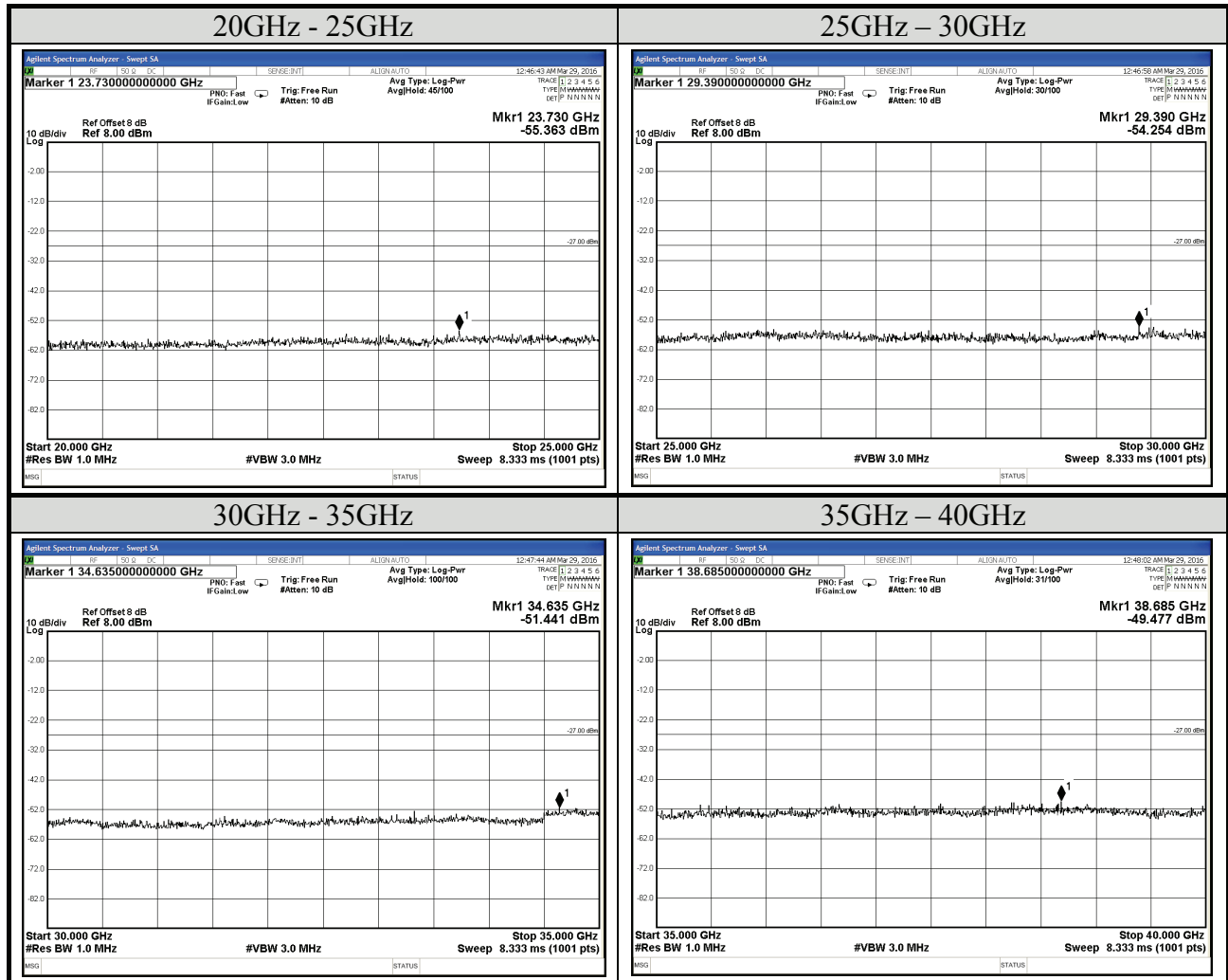




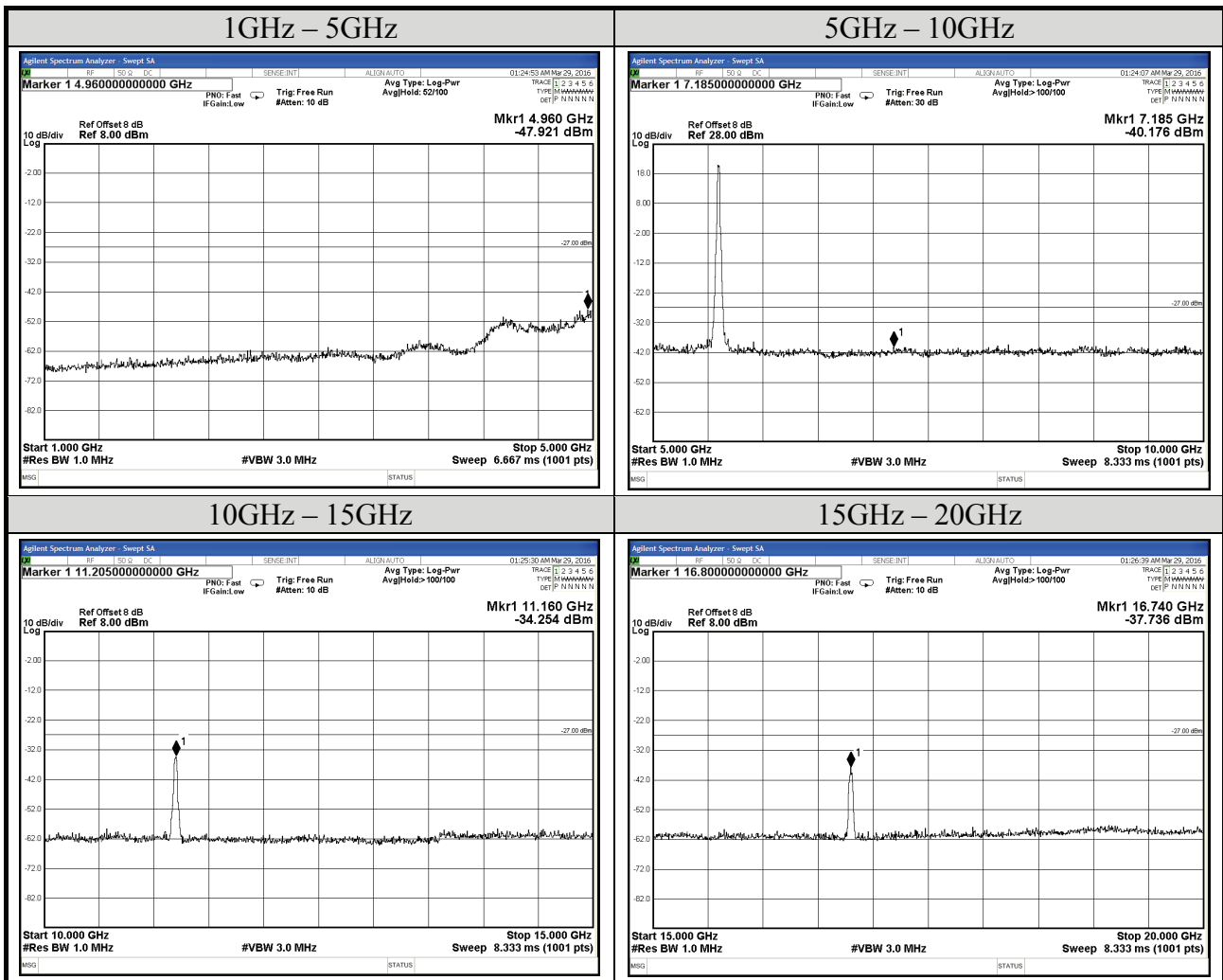


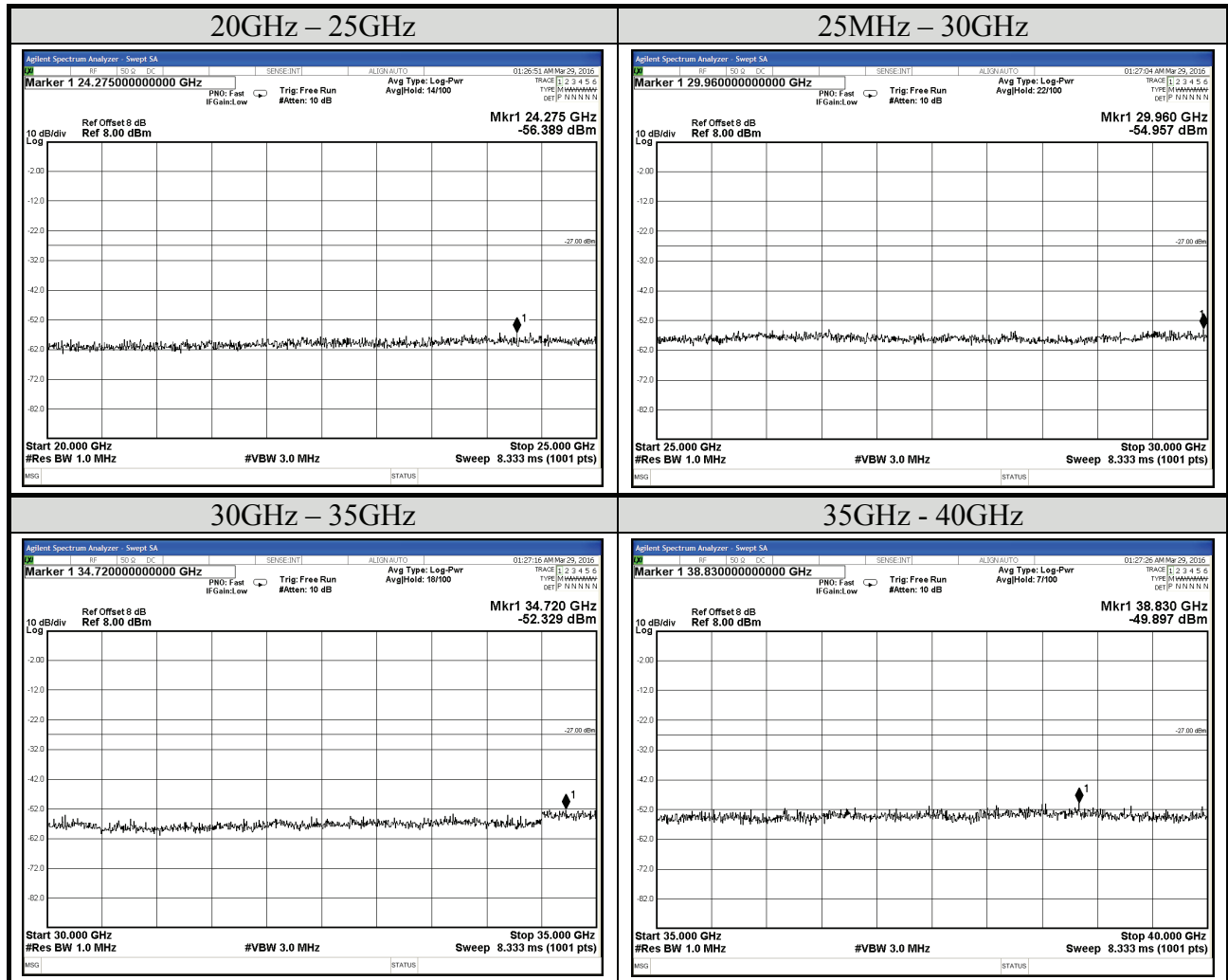
Test Date	2016/03/29	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	II-2C
		Frequency	TX 5500MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	





Test Date	2016/03/29	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	II-2C
		Frequency	TX 5580MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	





Test Date	2016/03/29	Temp./Hum.	25°C/54%
Mode	802.11a	UNII Band	II-2C
		Frequency	TX 5700MHz
Cable Loss	8dB	Test Voltage	DC 3.3V
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		0	

