

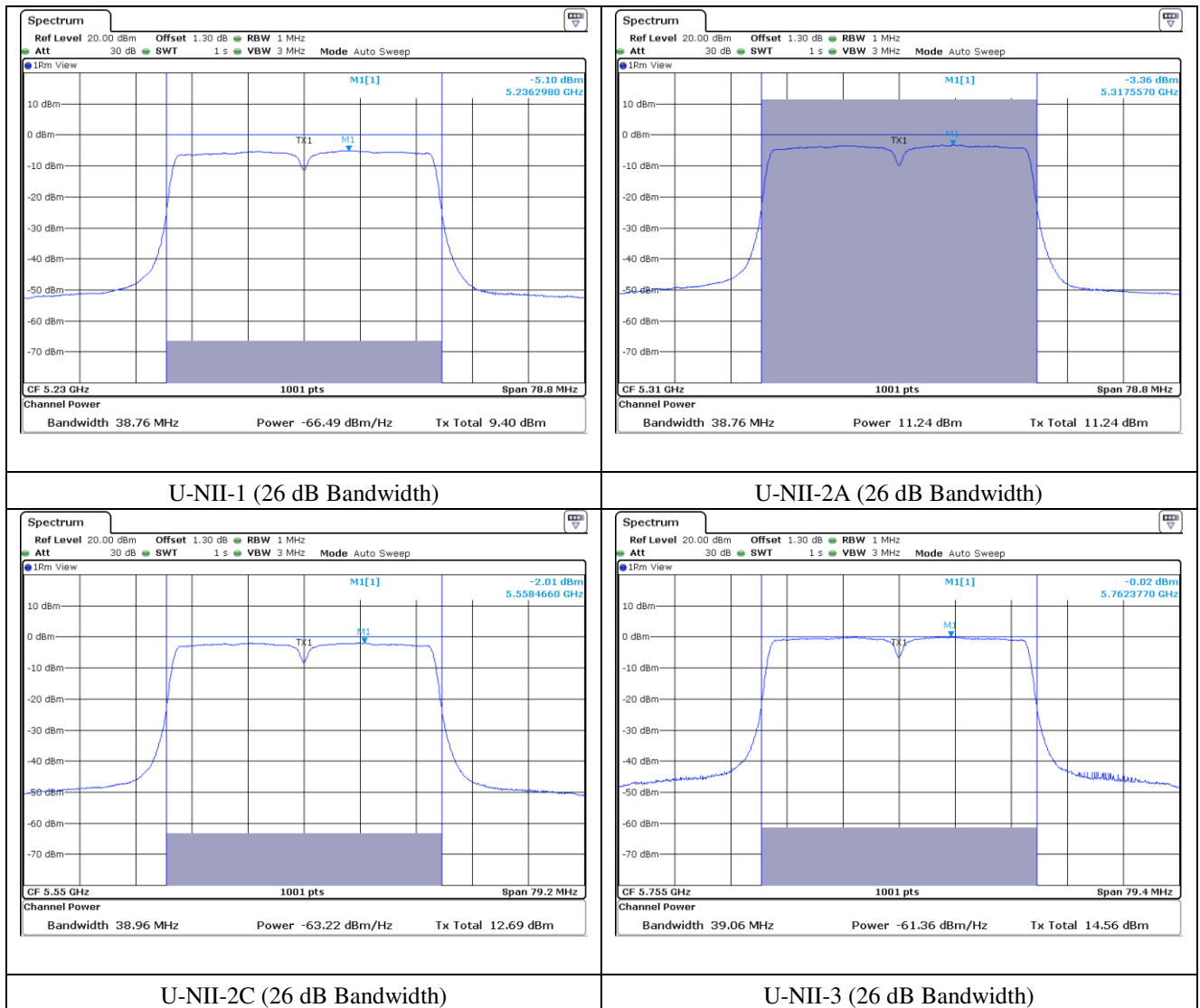
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	5.61	17.54	11.93
	High	5 230	36.16	5.54	17.54	12.00
5 250 ~ 5 350	Low	5 270	36.16	10.09	24	13.91
	High	5 310	36.16	10.82	24	13.18
5 470 ~ 5 725	Low	5 510	36.16	8.24	24	15.76
	Middle	5 550	36.16	8.81	24	15.19
	High	5 710	36.26	8.56	24	15.44
5 725 ~ 5 825	Low	5 755	36.26	12.97	30.00	17.03
	High	5 795	36.16	8.75	30.00	21.25

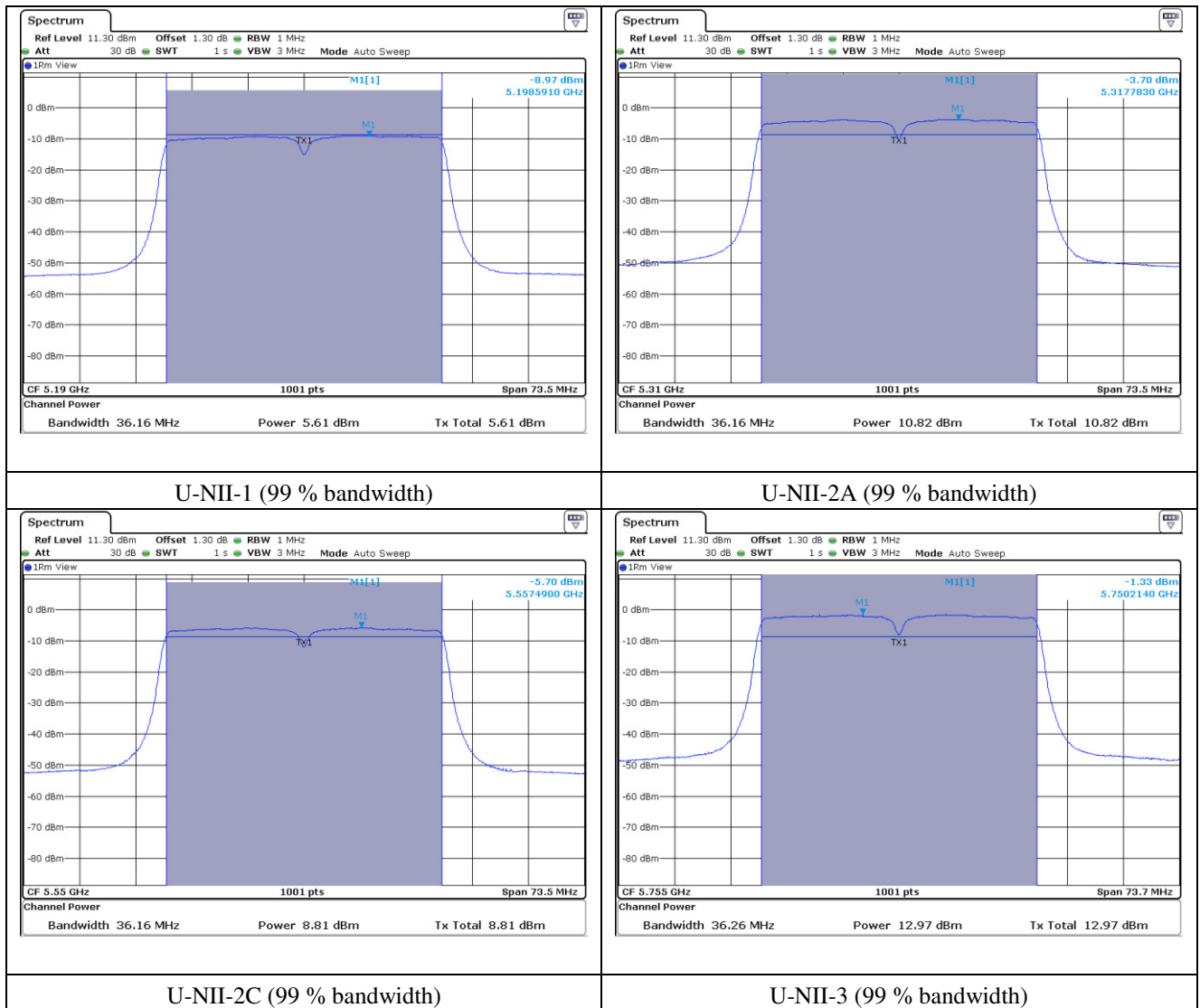
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.3.4 Test data for Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	38.76	6.76	30.00	23.24
	High	5 230	38.76	8.67	30.00	21.33
5 250 ~ 5 350	Low	5 270	38.76	10.01	24.00	13.99
	High	5 310	38.86	9.97	24.00	14.03
5 470 ~ 5 725	Low	5 510	38.96	7.91	24.00	16.09
	Middle	5 550	38.76	11.29	24.00	12.71
	High	5 710	38.86	10.41	24.00	13.59
5 725 ~ 5 850	Low	5 755	38.86	13.80	30.00	16.20
	High	5 795	38.86	9.60	30.00	20.40

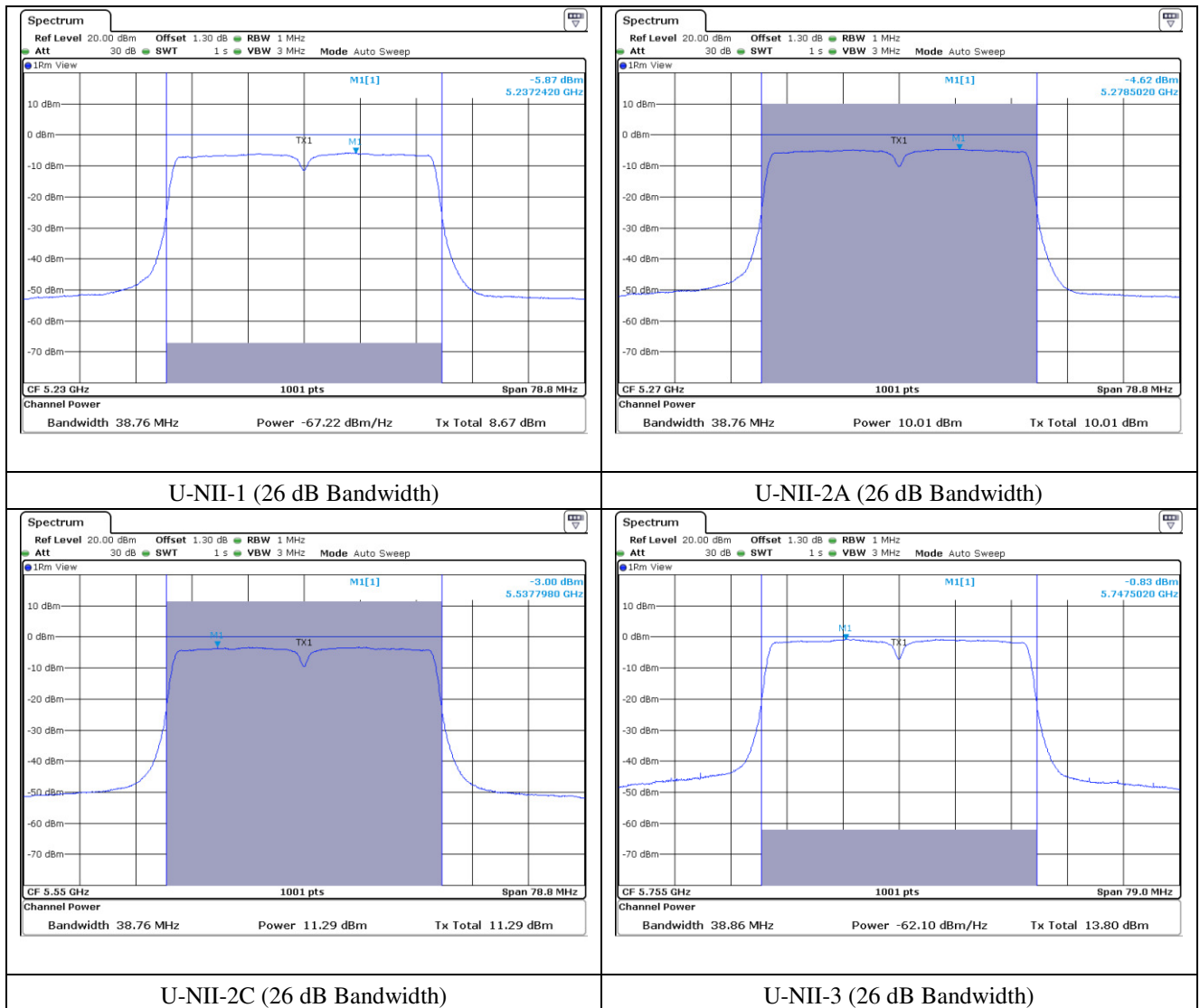
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	4.36	18.94	14.58
	High	5 230	36.16	4.94	18.94	14.00
5 250 ~ 5 350	Low	5 270	36.16	8.99	24	15.01
	High	5 310	36.16	9.53	24	14.47
5 470 ~ 5 725	Low	5 510	36.16	8.07	24	15.93
	Middle	5 550	36.16	7.31	24	16.69
	High	5 710	36.26	7.75	24	16.25
5 725 ~ 5 825	Low	5 755	36.26	12.20	30	17.80
	High	5 795	36.16	8.06	30	21.94

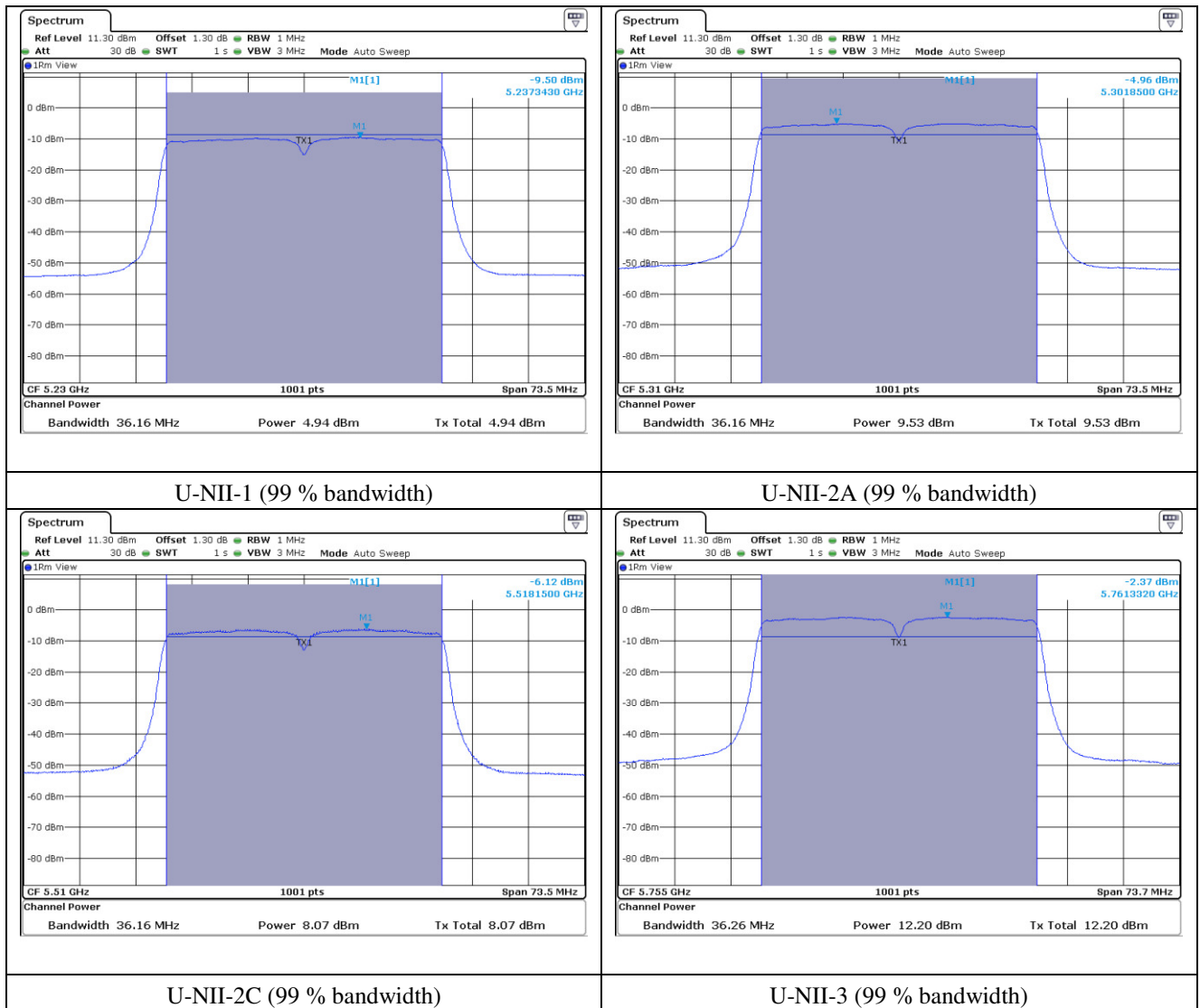
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.3.5 Test data for Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	13.81	25.11	11.30
	High	5 230	15.28	25.11	9.83
5 250 ~ 5 350	Low	5 270	16.69	18.89	2.20
	High	5 310	16.81	18.89	2.08
5 470 ~ 5 725	Low	5 510	15.16	18.80	3.64
	Middle	5 550	17.15	18.80	1.65
	High	5 710	17.17	18.80	1.63
5 725 ~ 5 850	Low	5 755	20.62	25.06	4.44
	High	5 795	16.28	25.06	8.78

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	11.55	12.11	0.56
	High	5 230	11.72	12.11	0.39
5 250 ~ 5 350	Low	5 270	16.17	18.89	2.72
	High	5 310	16.41	18.89	2.48
5 470 ~ 5 725	Low	5 510	14.22	18.80	4.58
	Middle	5 550	14.46	18.80	4.34
	High	5 710	14.59	18.80	4.21
5 725 ~ 5 825	Low	5 755	19.12	25.06	5.94
	High	5 795	14.88	25.06	10.18

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

9.5.3.6 Test data for Staddle Channel_Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.67	8.40	30.00	21.60
5 725 ~ 5 825	5 710	4.49	-3.41	24.00	27.41

9.5.3.7 Test data for Staddle Channel_Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	8.08	30.00	21.92
5 725 ~ 5 825	5 710	4.59	-3.39	24.00	27.39

9.5.3.8 Test data for Staddle Channel_Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.57	8.20	30.00	21.80
5 725 ~ 5 825	5 710	4.49	-3.40	24.00	27.40

9.5.3.9 Test data for Staddle Channel_Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	7.06	30.00	22.94
5 725 ~ 5 825	5 710	4.39	-4.67	24.00	28.67

9.5.3.10 Test data for Staddle Channel_Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

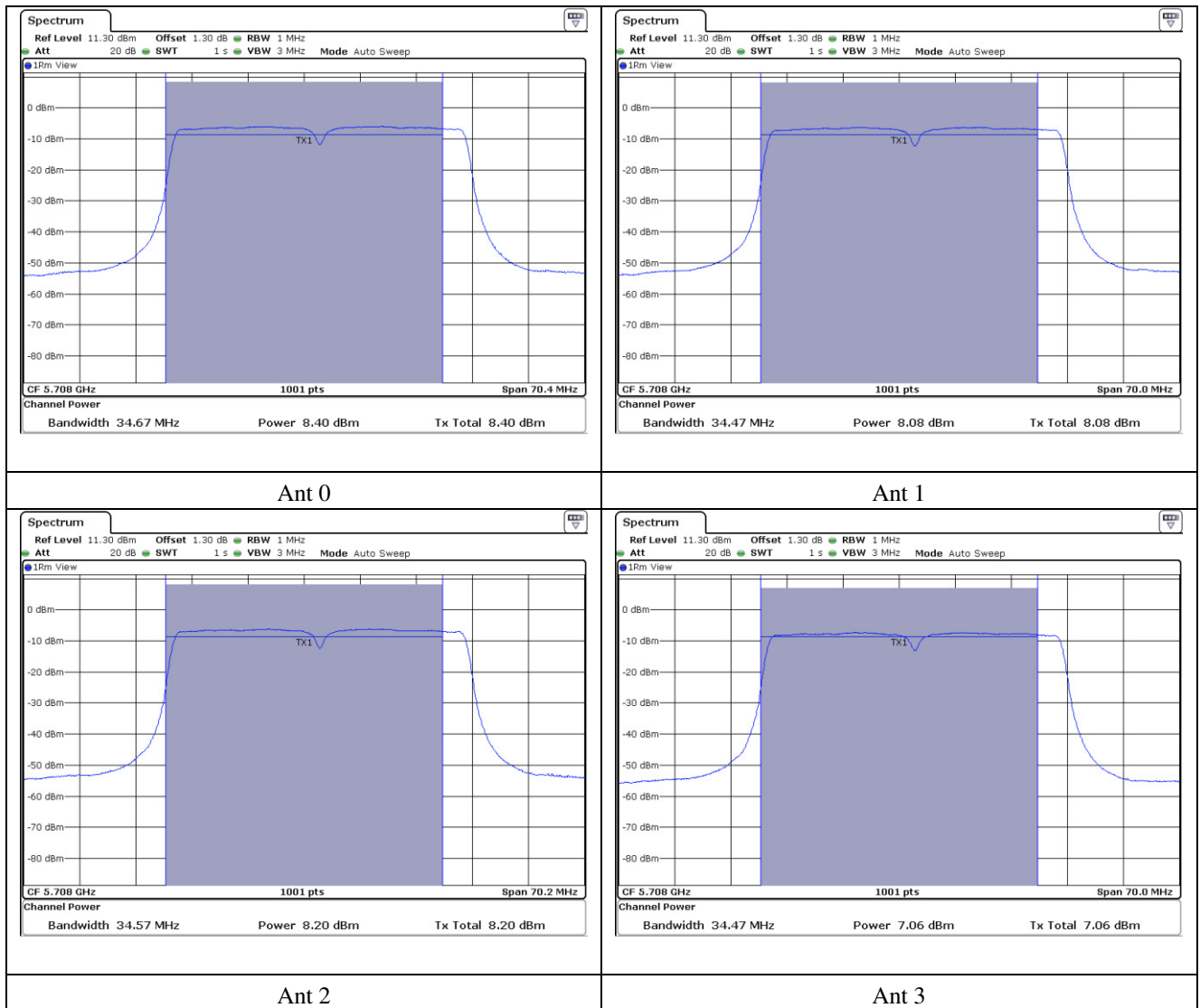
FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	13.99	18.8	4.81
5 725 ~ 5 850	5 710	2.34	25.06	22.72

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.4 Test data for 802.11ac_VHT20 RLAN Mode

9.5.4.1 Test data for Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	21.23	8.51	30.00	21.49
	Middle	5 220	20.93	8.52	30.00	21.48
	High	5 240	21.03	8.76	30.00	21.24
5 250 ~ 5 350	Low	5 260	21.08	11.69	24.00	12.31
	Middle	5 300	20.88	10.68	24.00	13.32
	High	5 320	20.98	10.89	24.00	13.11
5 470 ~ 5 725	Low	5 500	21.08	8.35	24.00	15.65
	Middle	5 560	21.18	10.66	24.00	13.34
	High	5 720	21.18	10.74	24.00	13.26
5 725 ~ 5 850	Low	5 745	21.13	14.36	30.00	15.64
	Middle	5 785	20.98	13.66	30.00	16.34
	High	5 825	21.23	9.99	30.00	20.01

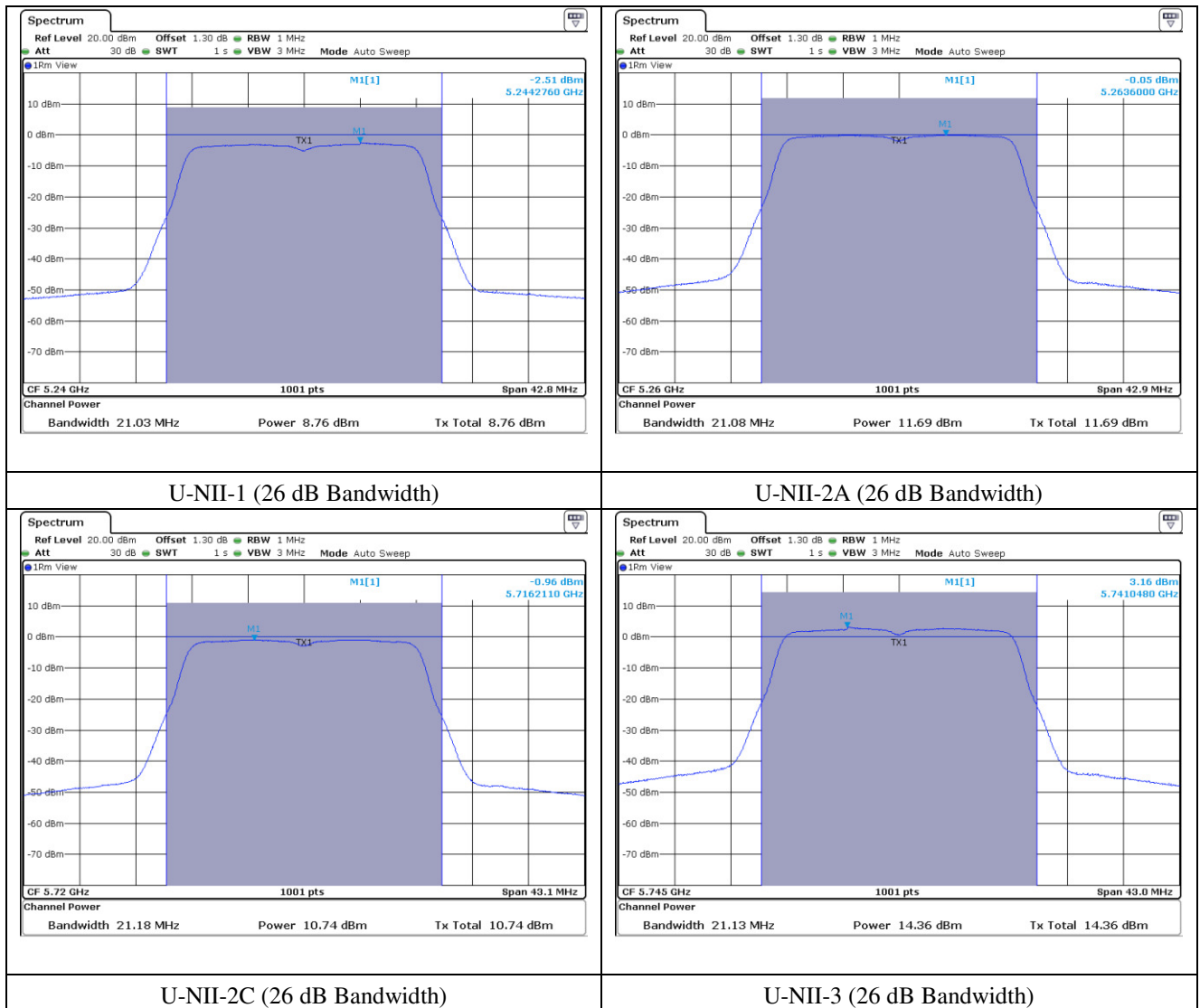
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	17.73	3.42	17.86	14.44
	Middle	5 220	17.78	3.58	17.86	14.28
	High	5 240	17.73	4.50	17.86	13.36
5 250 ~ 5 350	Low	5 260	17.78	9.06	23.17	14.11
	Middle	5 300	17.73	8.89	23.17	14.28
	High	5 320	17.78	8.67	23.17	14.50
5 470 ~ 5 725	Low	5 500	17.68	6.75	23.2	16.45
	Middle	5 560	17.73	9.44	23.2	13.76
	High	5 720	17.68	9.98	23.2	13.22
5 725 ~ 5 825	Low	5 745	17.73	10.51	30	19.49
	Middle	5 785	17.73	9.29	30	20.71
	High	5 825	17.68	9.10	30	20.90

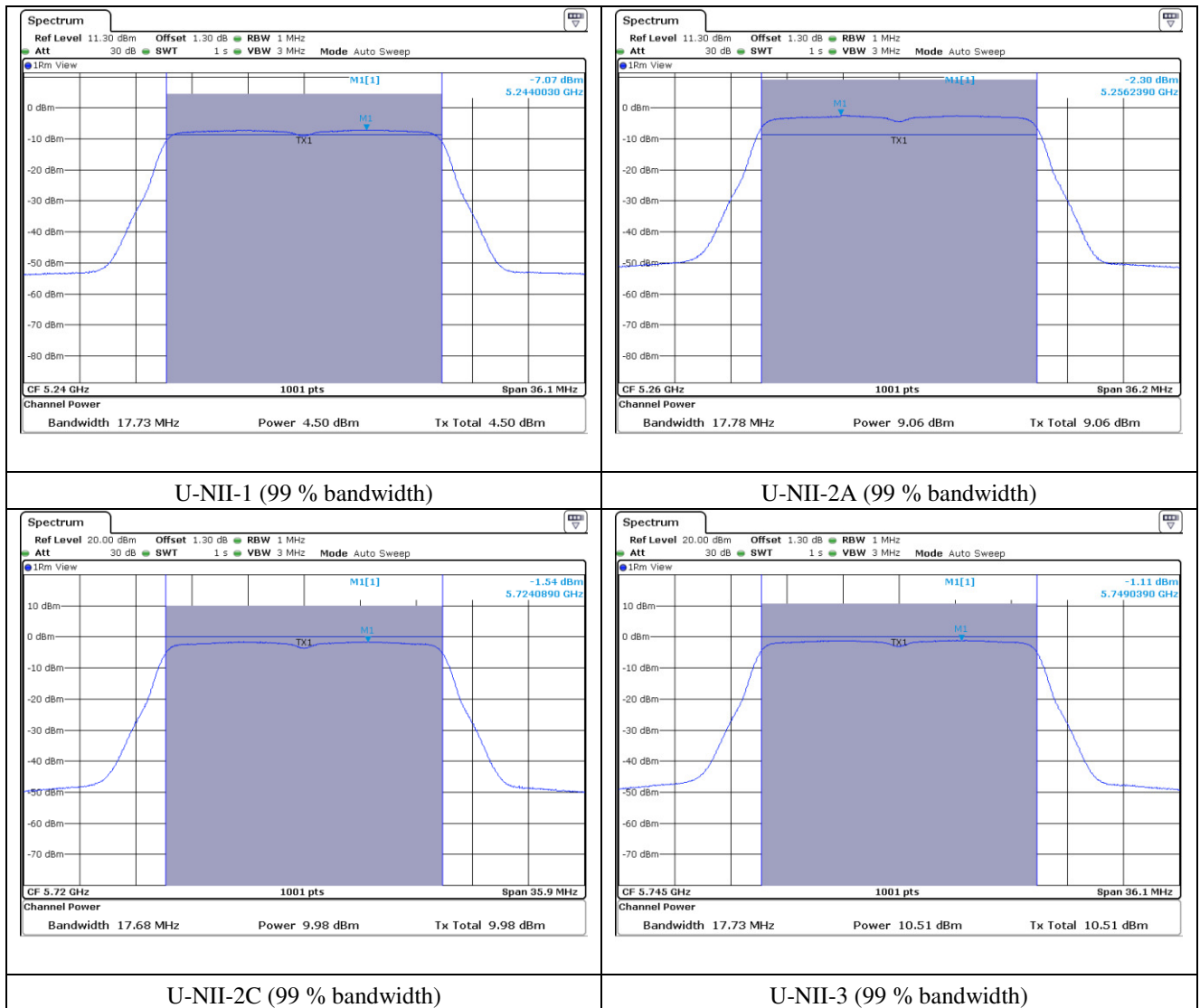
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.4.2 Test data for Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	21.23	6.81	30.00	23.19
	Middle	5 220	21.23	7.89	30.00	22.11
	High	5 240	20.98	7.55	30.00	22.45
5 250 ~ 5 350	Low	5 260	21.23	11.19	23.87	12.68
	Middle	5 300	21.13	10.07	23.87	13.80
	High	5 320	21.13	9.72	23.87	14.15
5 470 ~ 5 725	Low	5 500	21.08	8.33	24.00	15.67
	Middle	5 560	21.28	10.51	24.00	13.49
	High	5 720	21.18	10.48	24.00	13.52
5 725 ~ 5 850	Low	5 745	21.03	13.32	30.00	16.68
	Middle	5 785	21.28	12.81	30.00	17.19
	High	5 825	20.73	9.17	30.00	20.83

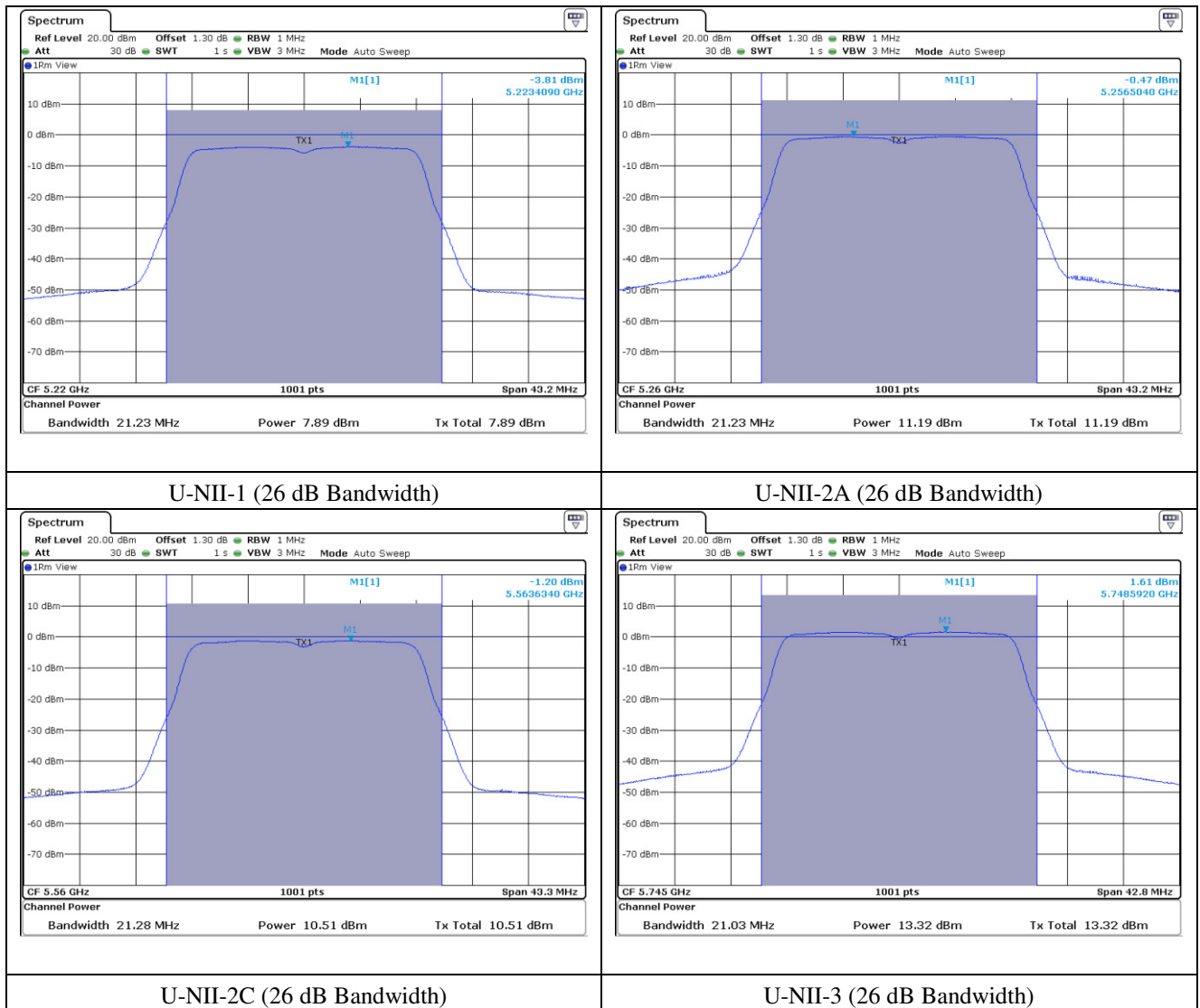
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	17.73	3.36	16.72	13.36
	Middle	5 220	17.73	3.51	16.72	13.21
	High	5 240	17.73	3.73	16.72	12.99
5 250 ~ 5 350	Low	5 260	17.73	7.83	23.04	15.21
	Middle	5 300	17.68	7.74	23.04	15.30
	High	5 320	17.73	7.81	23.04	15.23
5 470 ~ 5 725	Low	5 500	17.73	6.98	23.2	16.22
	Middle	5 560	17.73	9.01	23.2	14.19
	High	5 720	17.73	9.32	23.2	13.88
5 725 ~ 5 825	Low	5 745	17.73	10.25	30	19.75
	Middle	5 785	17.73	9.65	30	20.35
	High	5 825	17.68	8.49	30	21.51

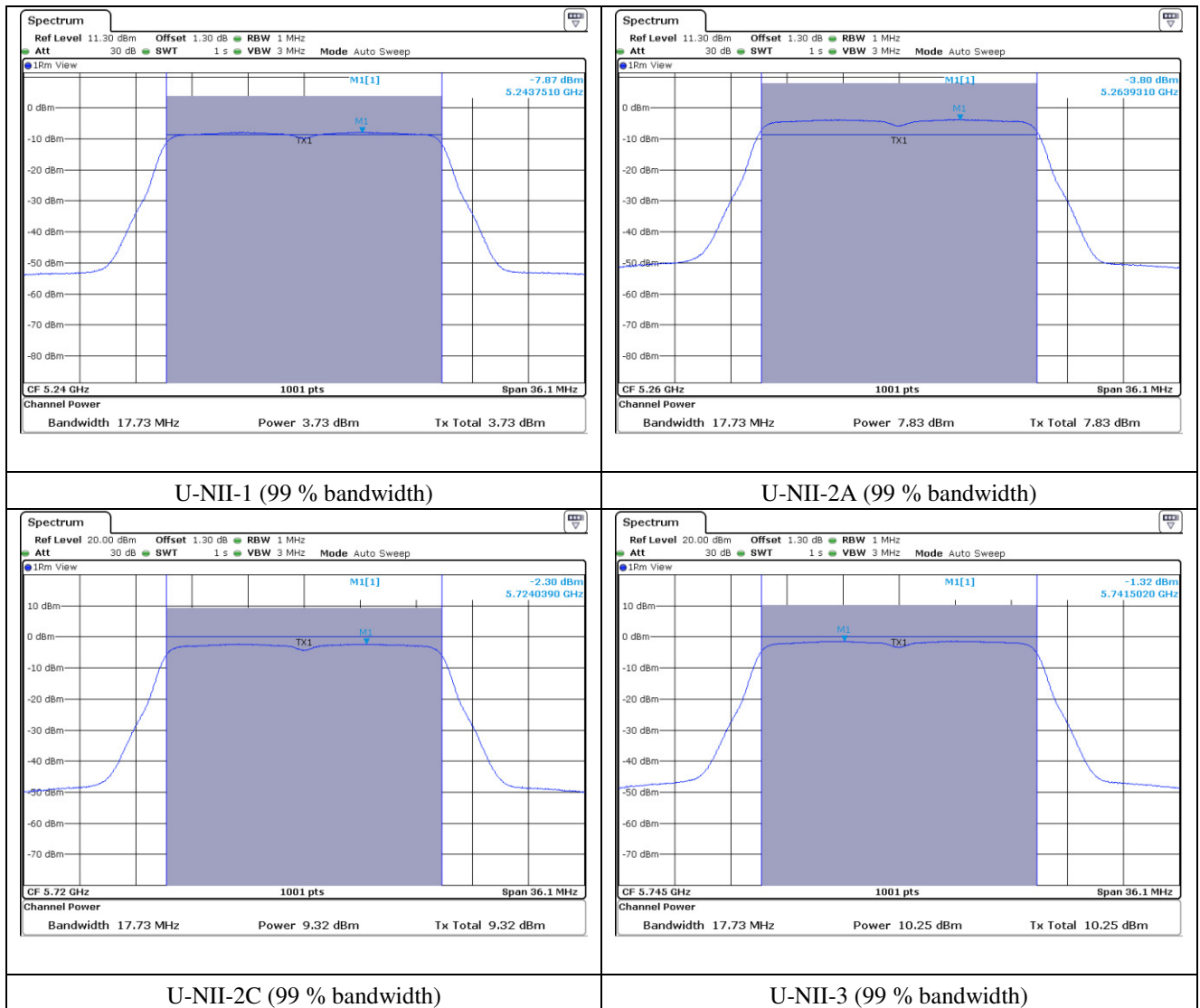
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.4.3 Test data for Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	21.13	6.43	30.00	23.57
	Middle	5 220	20.93	7.50	30.00	22.50
	High	5 240	21.13	7.47	30.00	22.53
5 250 ~ 5 350	Low	5 260	21.13	11.50	24.00	12.50
	Middle	5 300	21.13	10.18	24.00	13.82
	High	5 320	20.93	10.58	24.00	13.42
5 470 ~ 5 725	Low	5 500	21.03	8.50	24.00	15.50
	Middle	5 560	20.98	10.58	24.00	13.42
	High	5 720	21.03	10.24	24.00	13.76
5 725 ~ 5 850	Low	5 745	20.88	13.35	30.00	16.65
	Middle	5 785	20.93	12.83	30.00	17.17
	High	5 825	21.03	9.63	30.00	20.37

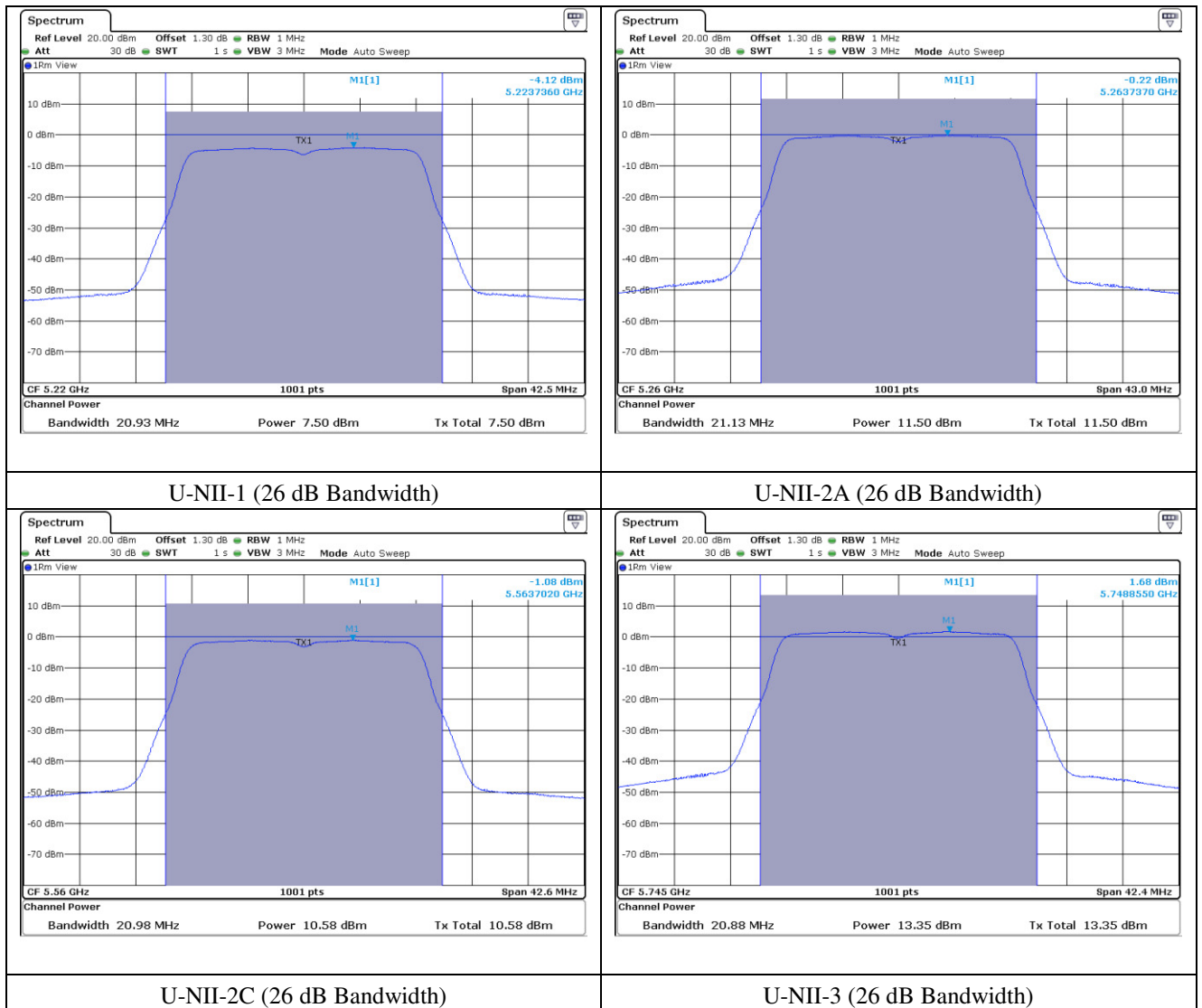
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	17.68	3.01	16.71	13.70
	Middle	5 220	17.68	3.26	16.71	13.45
	High	5 240	17.68	3.40	16.71	13.31
5 250 ~ 5 350	Low	5 260	17.68	7.88	23.17	15.29
	Middle	5 300	17.68	8.13	23.17	15.04
	High	5 320	17.68	8.41	23.17	14.76
5 470 ~ 5 725	Low	5 500	17.68	7.27	23.2	15.93
	Middle	5 560	17.68	8.95	23.2	14.25
	High	5 720	17.68	8.84	23.2	14.36
5 725 ~ 5 825	Low	5 745	17.73	10.20	30	19.80
	Middle	5 785	17.68	9.43	30	20.57
	High	5 825	17.68	8.96	30	21.04

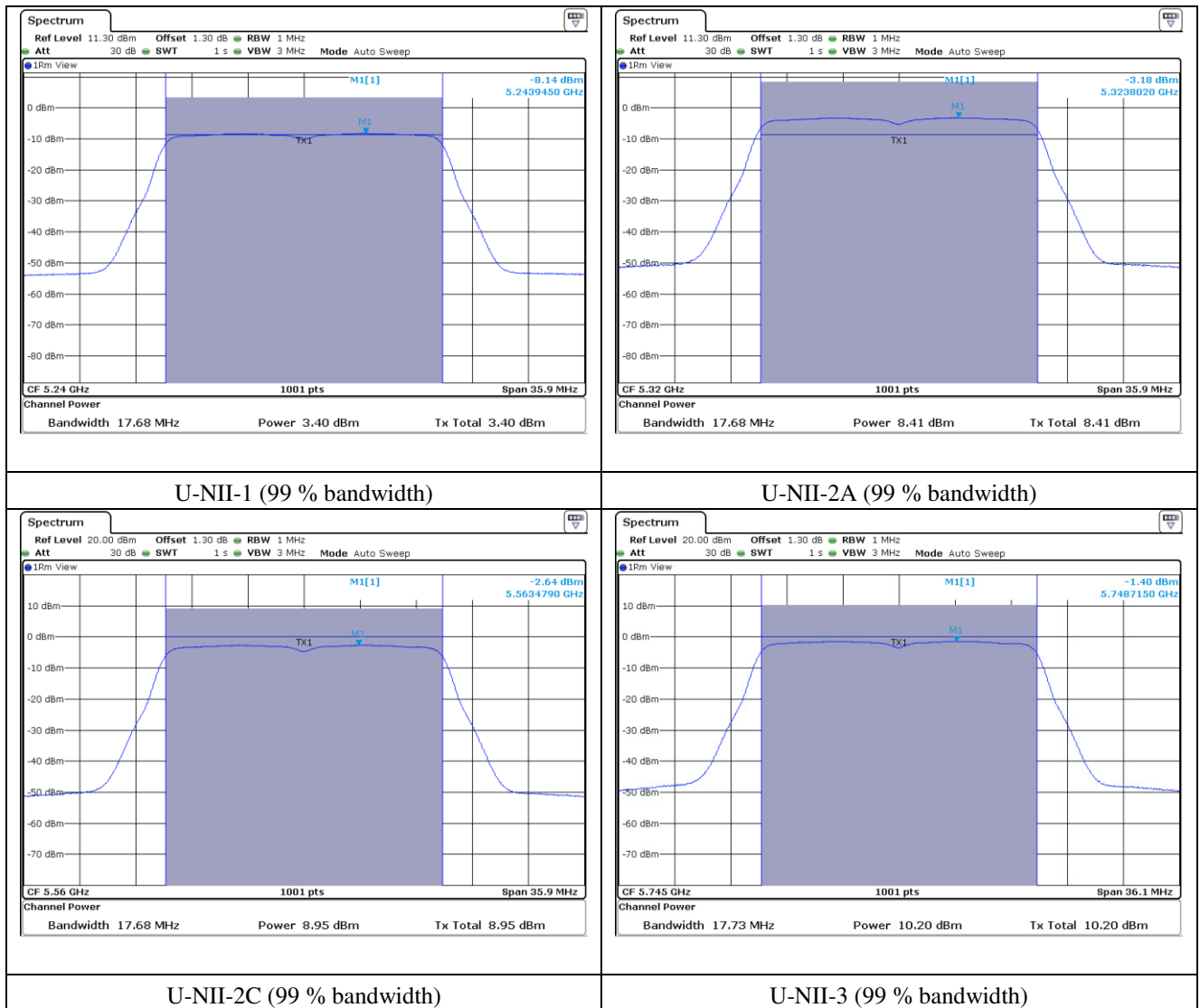
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.4.4 Test data for Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	21.18	5.80	30.00	24.20
	Middle	5 220	21.18	6.61	30.00	23.39
	High	5 240	21.08	6.67	30.00	23.33
5 250 ~ 5 350	Low	5 260	21.18	10.68	24.00	13.32
	Middle	5 300	21.13	9.07	24.00	14.93
	High	5 320	21.08	9.21	24.00	14.79
5 470 ~ 5 725	Low	5 500	20.98	6.68	24.00	17.32
	Middle	5 560	20.98	9.28	24.00	14.72
	High	5 720	21.03	9.56	24.00	14.44
5 725 ~ 5 850	Low	5 745	20.98	12.43	30.00	17.57
	Middle	5 785	21.03	11.90	30.00	18.10
	High	5 825	21.08	8.19	30.00	21.81

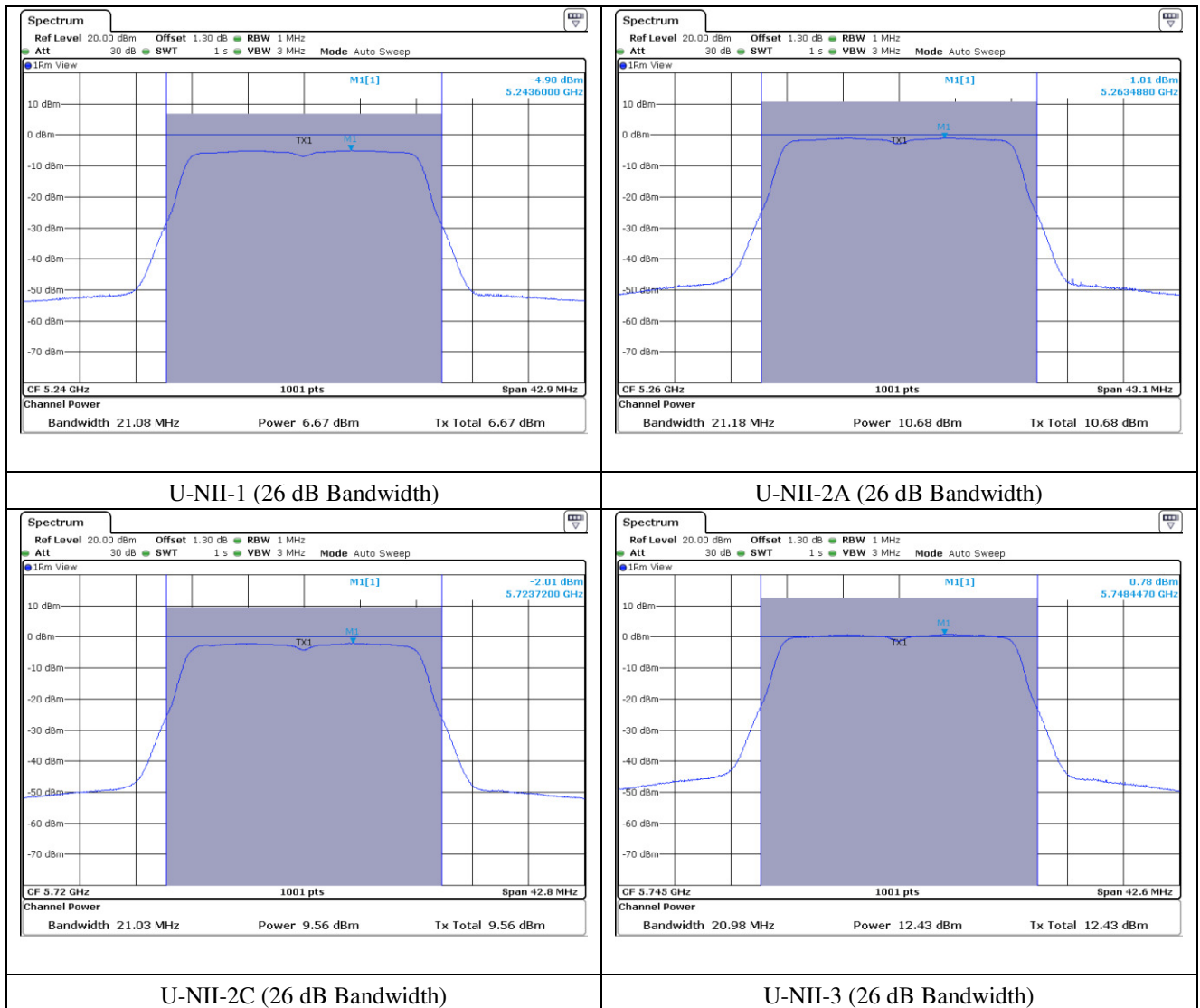
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	17.73	2.29	18.11	15.82
	Middle	5 220	17.73	2.54	18.11	15.57
	High	5 240	17.68	2.87	18.11	15.24
5 250 ~ 5 350	Low	5 260	17.73	6.60	23.17	16.57
	Middle	5 300	17.68	7.02	23.17	16.15
	High	5 320	17.73	6.91	23.17	16.26
5 470 ~ 5 725	Low	5 500	17.68	5.52	23.2	17.68
	Middle	5 560	17.68	7.44	23.2	15.76
	High	5 720	17.68	8.07	23.2	15.13
5 725 ~ 5 825	Low	5 745	17.68	9.29	30	20.71
	Middle	5 785	17.68	8.63	30	21.37
	High	5 825	17.73	7.59	30	22.41

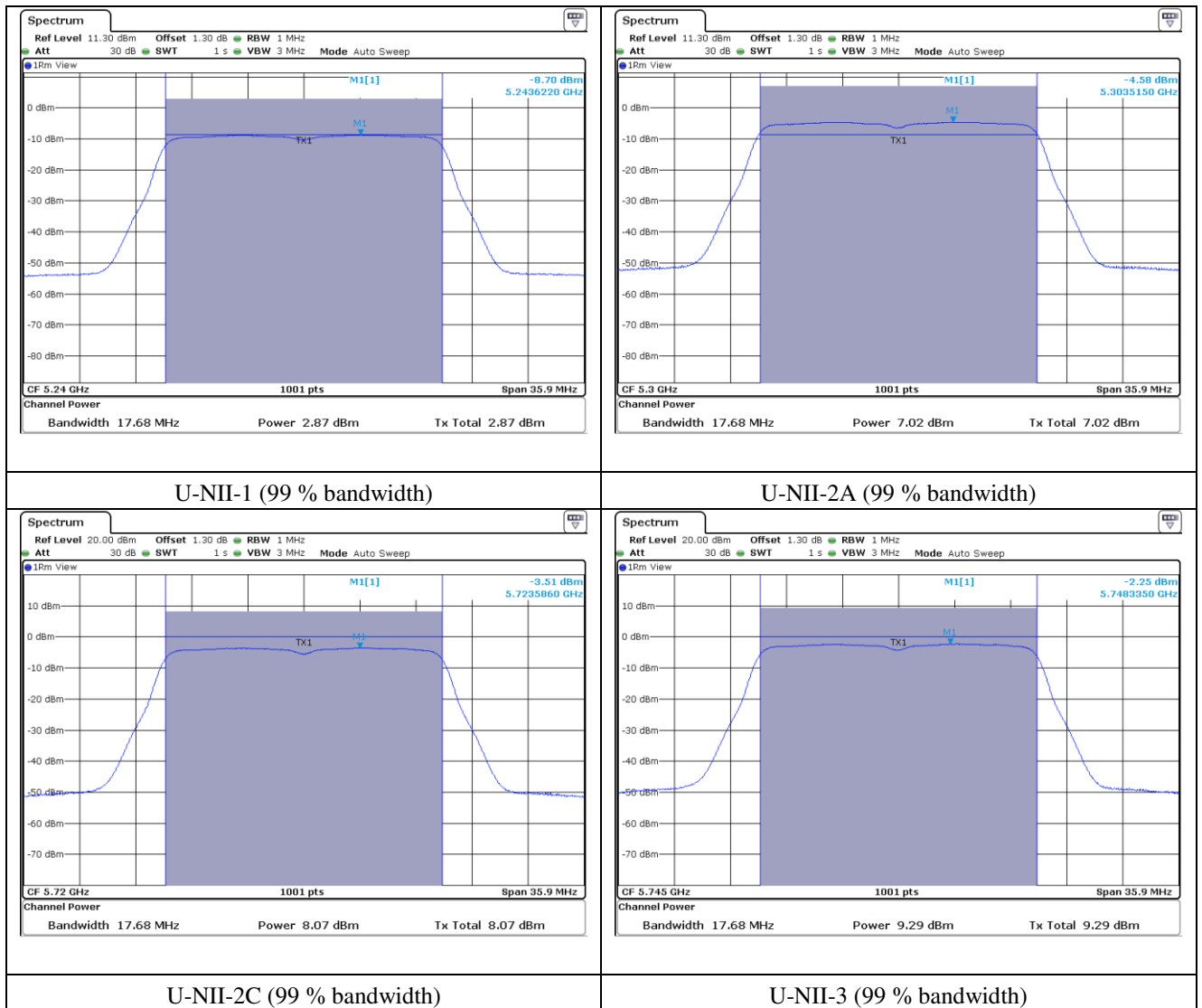
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.4.5 Test data for Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	13.03	25.11	12.08
	Middle	5 200	13.70	25.11	11.41
	High	5 240	13.70	25.11	11.41
5 250 ~ 5 350	Low	5 260	17.30	18.89	1.59
	Middle	5 300	16.06	18.89	2.83
	High	5 320	16.17	18.89	2.72
5 470 ~ 5 725	Low	5 500	14.05	18.80	4.75
	Middle	5 580	16.31	18.80	2.49
	High	5 720	16.30	18.80	2.50
5 725 ~ 5 850	Low	5 745	19.44	25.06	5.62
	Middle	5 785	18.86	25.06	6.20
	High	5 825	15.32	25.06	9.74

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)}+10^{(\text{Antenna2 Output Power}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	9.06	11.28	2.22
	Middle	5 220	9.26	11.28	2.02
	High	5 240	9.69	11.28	1.59
5 250 ~ 5 350	Low	5 260	13.95	18.06	4.11
	Middle	5 300	14.02	18.06	4.04
	High	5 320	14.02	18.06	4.04
5 470 ~ 5 725	Low	5 500	12.70	18.09	5.39
	Middle	5 560	14.79	18.09	3.30
	High	5 720	15.13	18.09	2.96
5 725 ~ 5 825	Low	5 745	16.11	25.06	8.95
	Middle	5 785	15.29	25.06	9.77
	High	5 825	14.59	25.06	10.47

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

9.5.4.6 Test data for Staddle Channel_Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	15.54	10.94	30.00	19.06
5 725 ~ 5 825	5 720	5.39	5.97	24.00	18.03

9.5.4.7 Test data for Staddle Channel_Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	15.59	10.75	30.00	19.25
5 725 ~ 5 825	5 720	5.49	5.76	24.00	18.24

9.5.4.8 Test data for Staddle Channel_Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	15.53	10.78	30.00	19.22
5 725 ~ 5 825	5 720	5.54	4.70	24.00	19.30

9.5.4.9 Test data for Staddle Channel_Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	15.44	9.83	30.00	20.17
5 725 ~ 5 825	5 720	5.54	3.87	24.00	20.13

9.5.4.10 Test data for Staddle Channel_Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

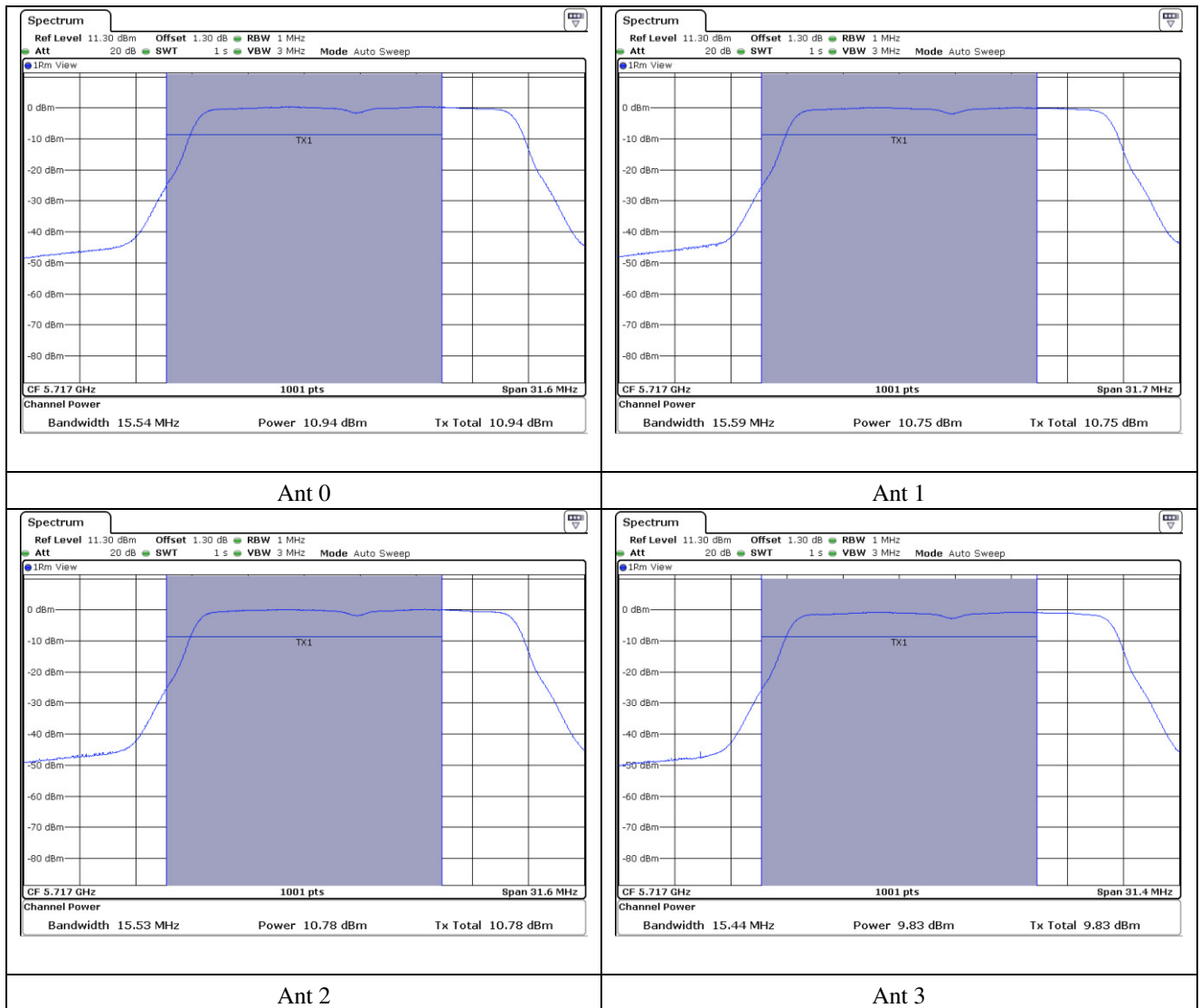
FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	16.62	18.8	2.18
5 725 ~ 5 850	5 720	11.18	25.06	13.88

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.5 Test data for 802.11ac_VHT40 RLAN Mode

9.5.5.1 Test data for Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	39.06	9.74	30.00	20.26
	High	5 230	38.96	10.22	30.00	19.78
5 250 ~ 5 350	Low	5 270	39.16	10.93	24.00	13.07
	High	5 310	38.86	11.66	24.00	12.34
5 470 ~ 5 725	Low	5 510	39.16	7.44	24.00	16.56
	Middle	5 550	39.16	11.90	24.00	12.10
	High	5 710	39.06	11.66	24.00	12.34
5 725 ~ 5 850	Low	5 755	39.26	17.72	30.00	12.28
	High	5 795	39.06	10.82	30.00	19.18

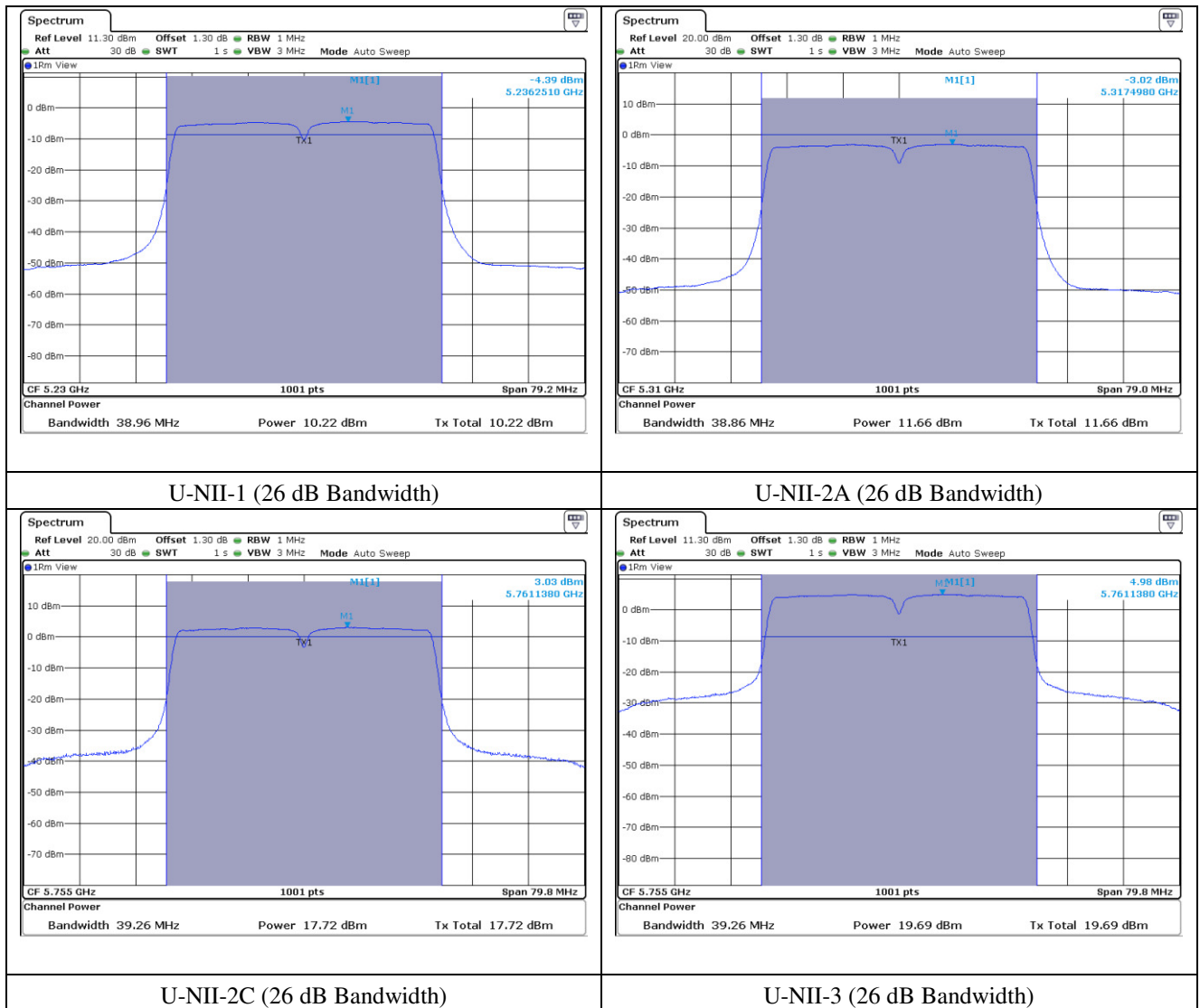
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	5.25	18.69	13.44
	High	5 230	36.16	5.66	18.69	13.03
5 250 ~ 5 350	Low	5 270	36.16	10.29	24	13.71
	High	5 310	36.16	10.93	24	13.07
5 470 ~ 5 725	Low	5 510	36.16	5.74	24	18.26
	Middle	5 550	36.16	9.11	24	14.89
	High	5 710	36.16	9.06	24	14.94
5 725 ~ 5 825	Low	5 755	36.26	17.41	30	12.59
	High	5 795	36.16	8.88	30	21.12

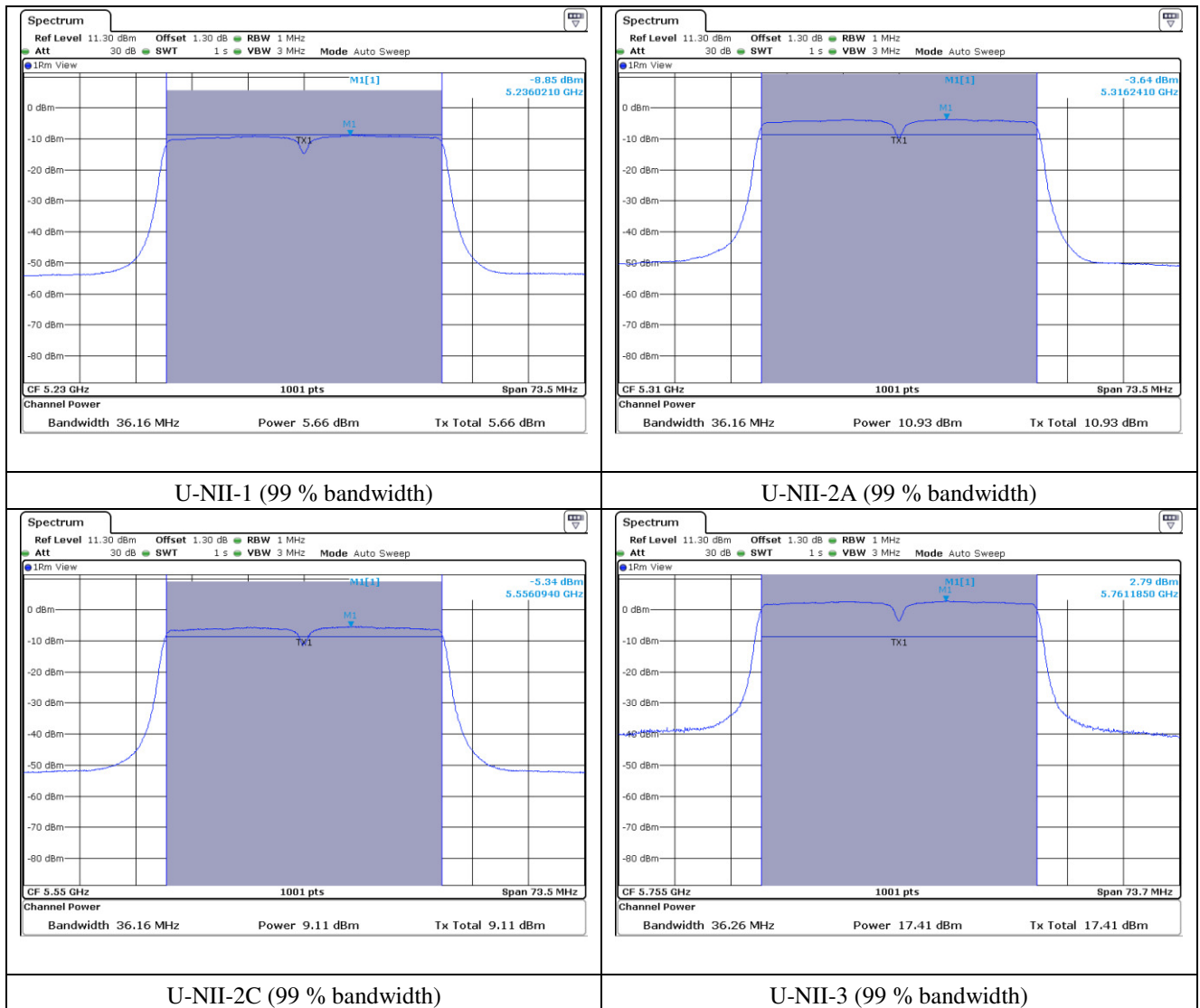
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.5.2 Test data for Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	38.96	8.80	30.00	21.20
	High	5 230	38.86	9.77	30.00	20.23
5 250 ~ 5 350	Low	5 270	38.96	10.66	23.87	13.21
	High	5 310	39.06	11.01	23.87	12.86
5 470 ~ 5 725	Low	5 510	39.06	7.32	24.00	16.68
	Middle	5 550	38.96	11.39	24.00	12.61
	High	5 710	38.96	11.20	24.00	12.80
5 725 ~ 5 850	Low	5 755	39.66	18.33	30.00	11.67
	High	5 795	38.96	10.57	30.00	19.43

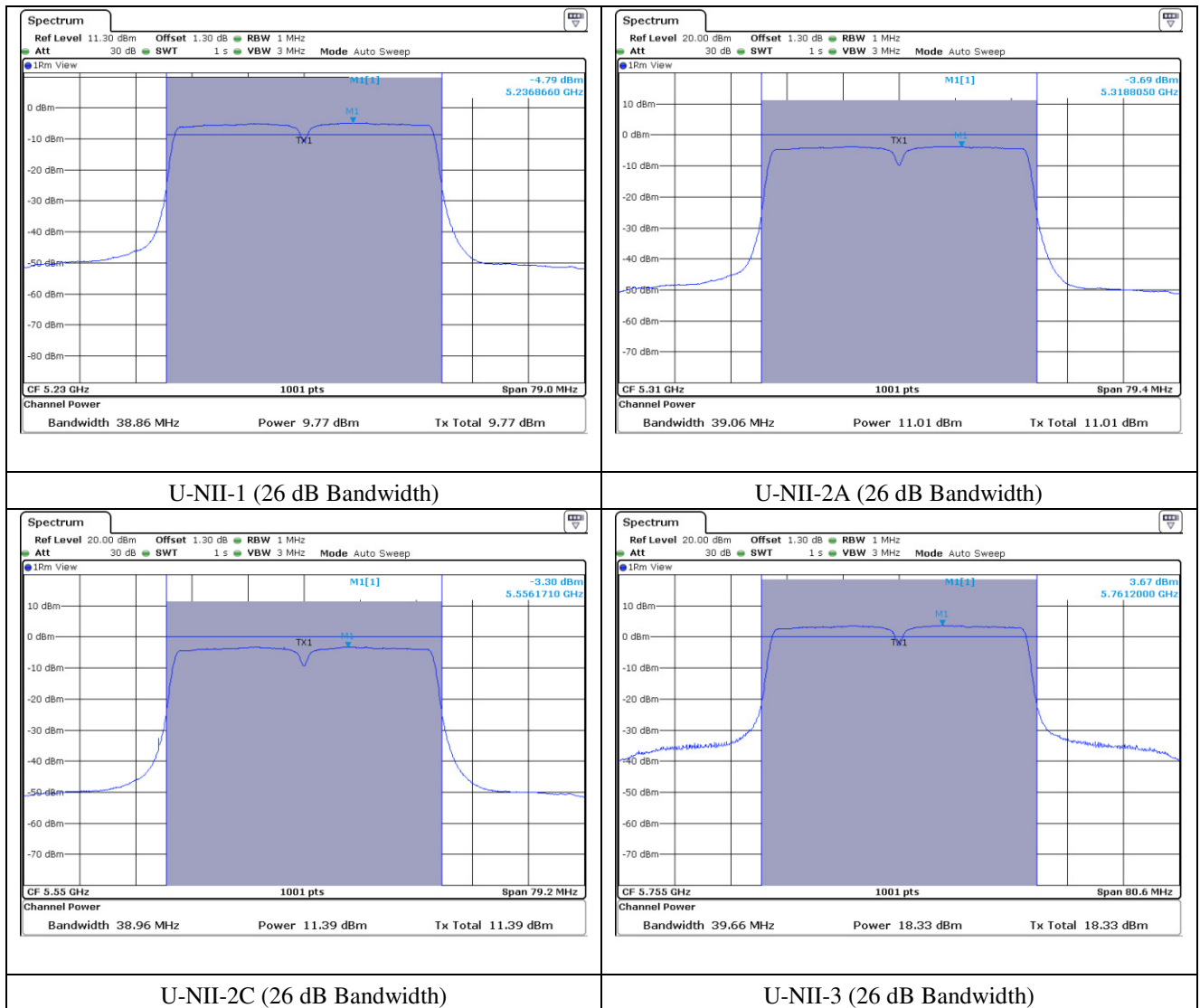
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	4.48	17.55	13.07
	High	5 230	36.16	5.51	17.55	12.04
5 250 ~ 5 350	Low	5 270	36.16	10.18	23.87	13.69
	High	5 310	36.16	10.42	23.87	13.45
5 470 ~ 5 725	Low	5 510	36.16	5.89	24	18.11
	Middle	5 550	36.16	8.68	24	15.32
	High	5 710	36.26	8.65	24	15.35
5 725 ~ 5 825	Low	5 755	36.36	17.99	30	12.01
	High	5 795	36.16	8.81	30	21.19

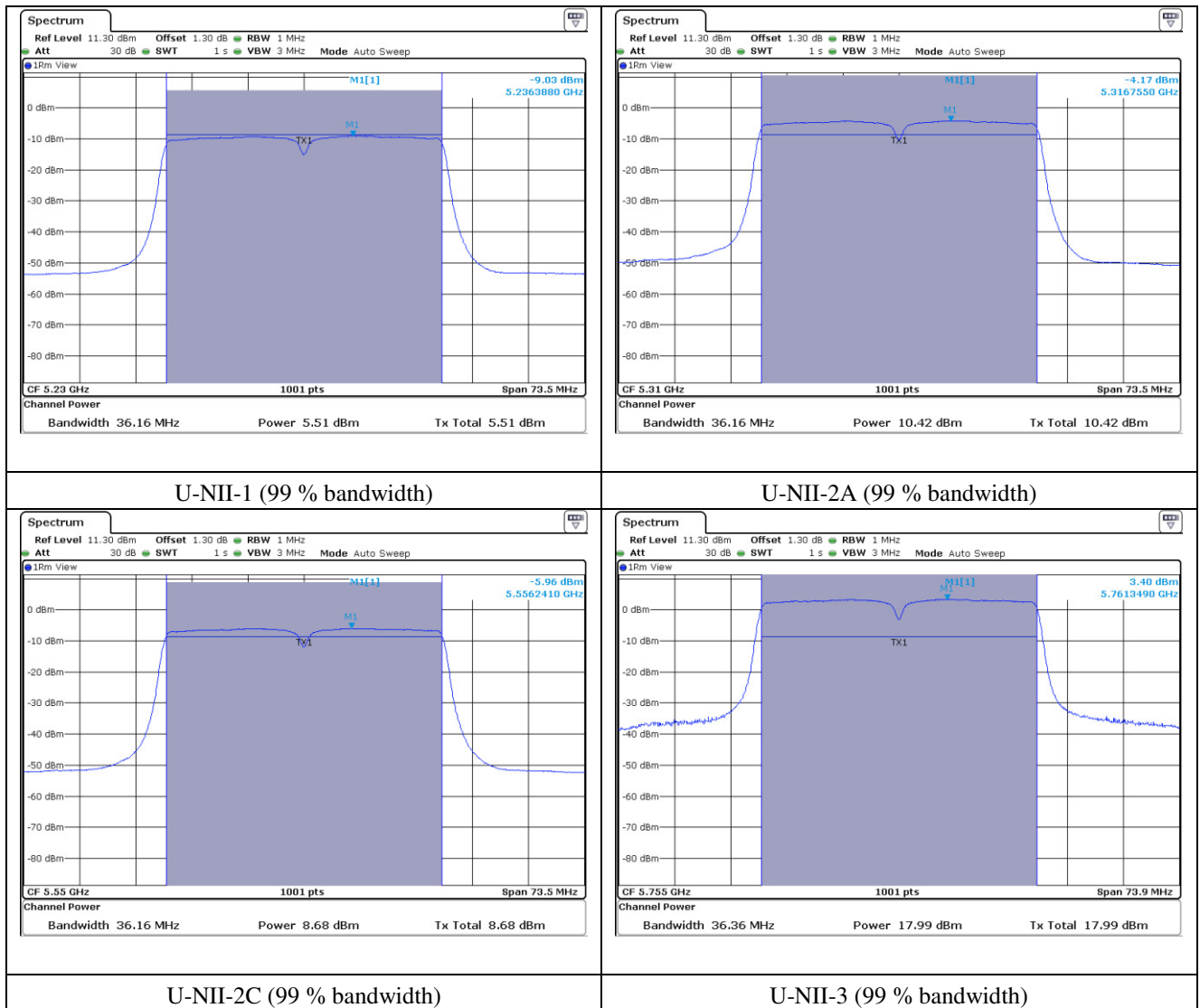
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.5.3 Test data for Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	38.86	8.09	30.00	21.91
	High	5 230	38.96	9.65	30.00	20.35
5 250 ~ 5 350	Low	5 270	38.96	10.97	24.00	13.03
	High	5 310	38.76	11.40	24.00	12.60
5 470 ~ 5 725	Low	5 510	38.96	7.62	24.00	16.38
	Middle	5 550	38.96	11.63	24.00	12.37
	High	5 710	39.06	11.32	24.00	12.68
5 725 ~ 5 850	Low	5 755	38.86	18.24	30.00	11.76
	High	5 795	38.96	10.40	30.00	19.60

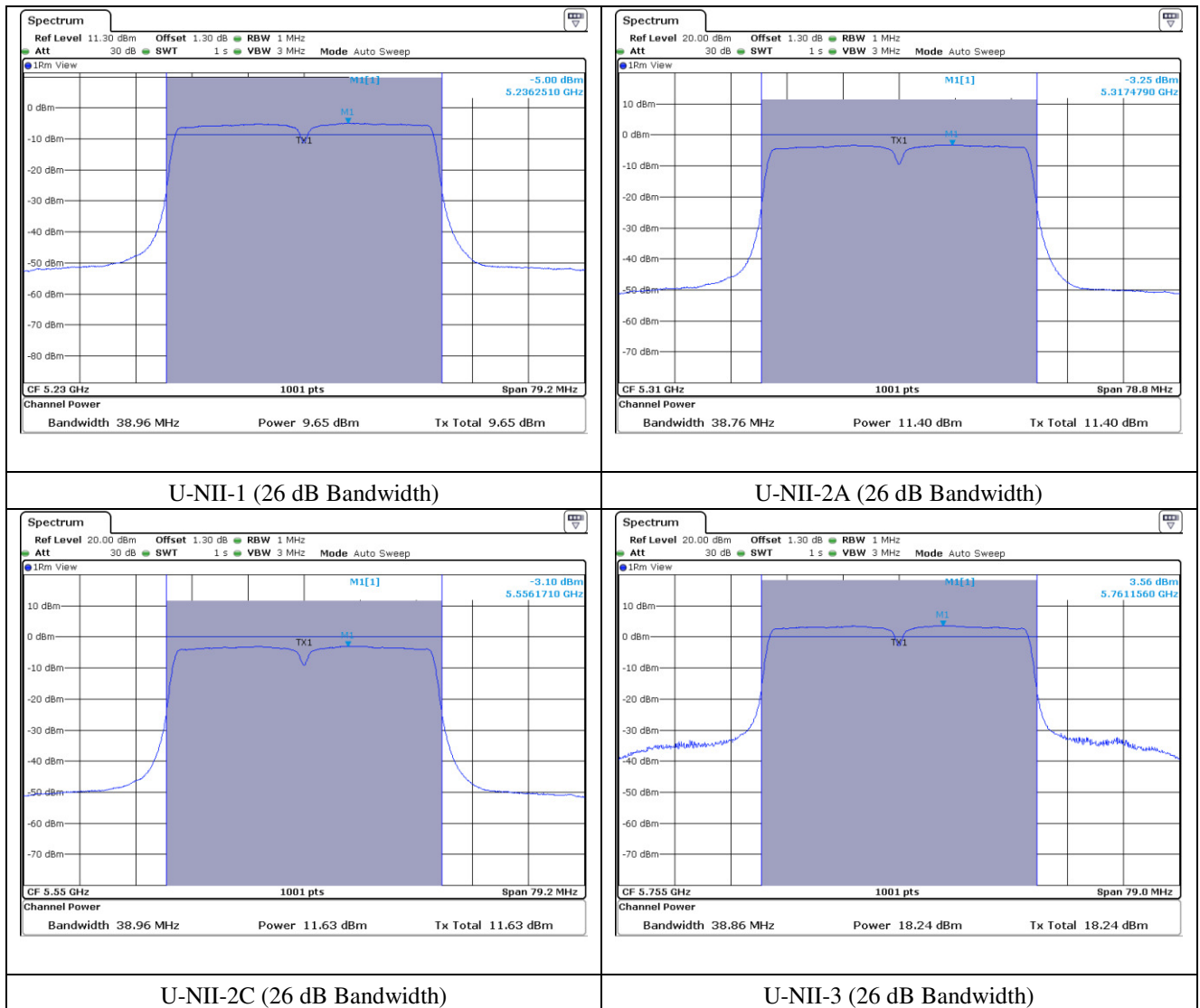
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	4.17	17.54	13.37
	High	5 230	36.16	5.24	17.54	12.30
5 250 ~ 5 350	Low	5 270	36.16	10.32	24	13.68
	High	5 310	36.16	10.67	24	13.33
5 470 ~ 5 725	Low	5 510	36.16	6.24	24	17.76
	Middle	5 550	36.16	9.04	24	14.96
	High	5 710	36.26	8.38	24	15.62
5 725 ~ 5 825	Low	5 755	36.26	17.21	30.00	12.79
	High	5 795	36.16	8.47	30.00	21.53

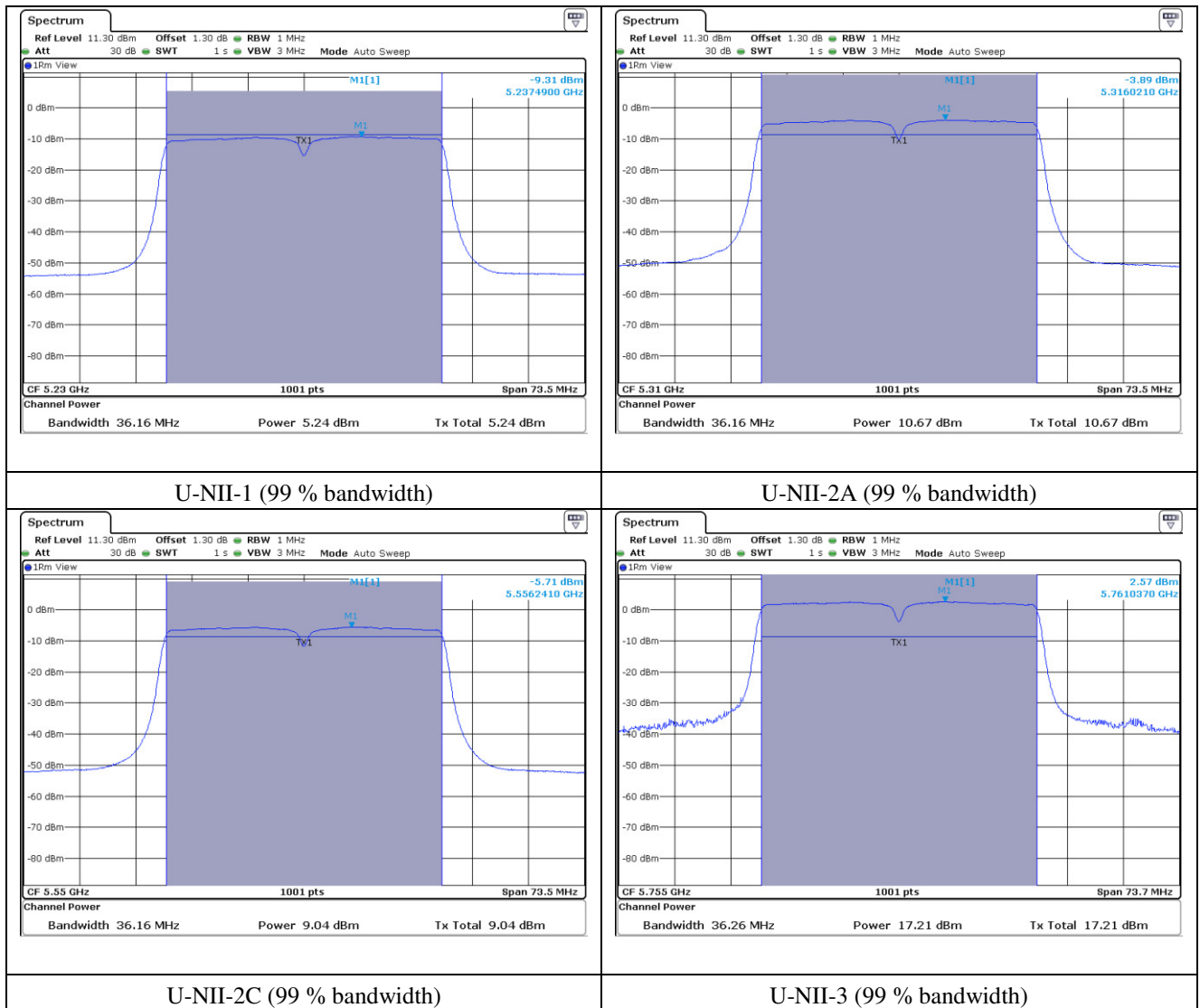
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.5.4 Test data for Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	38.86	7.80	30.00	22.20
	High	5 230	38.96	8.70	30.00	21.30
5 250 ~ 5 350	Low	5 270	38.86	9.88	24.00	14.12
	High	5 310	38.86	10.17	24.00	13.83
5 470 ~ 5 725	Low	5 510	38.86	6.20	24.00	17.80
	Middle	5 550	38.96	10.06	24.00	13.94
	High	5 710	38.96	10.49	24.00	13.51
5 725 ~ 5 850	Low	5 755	39.46	17.97	30.00	12.03
	High	5 795	38.86	9.87	30.00	20.13

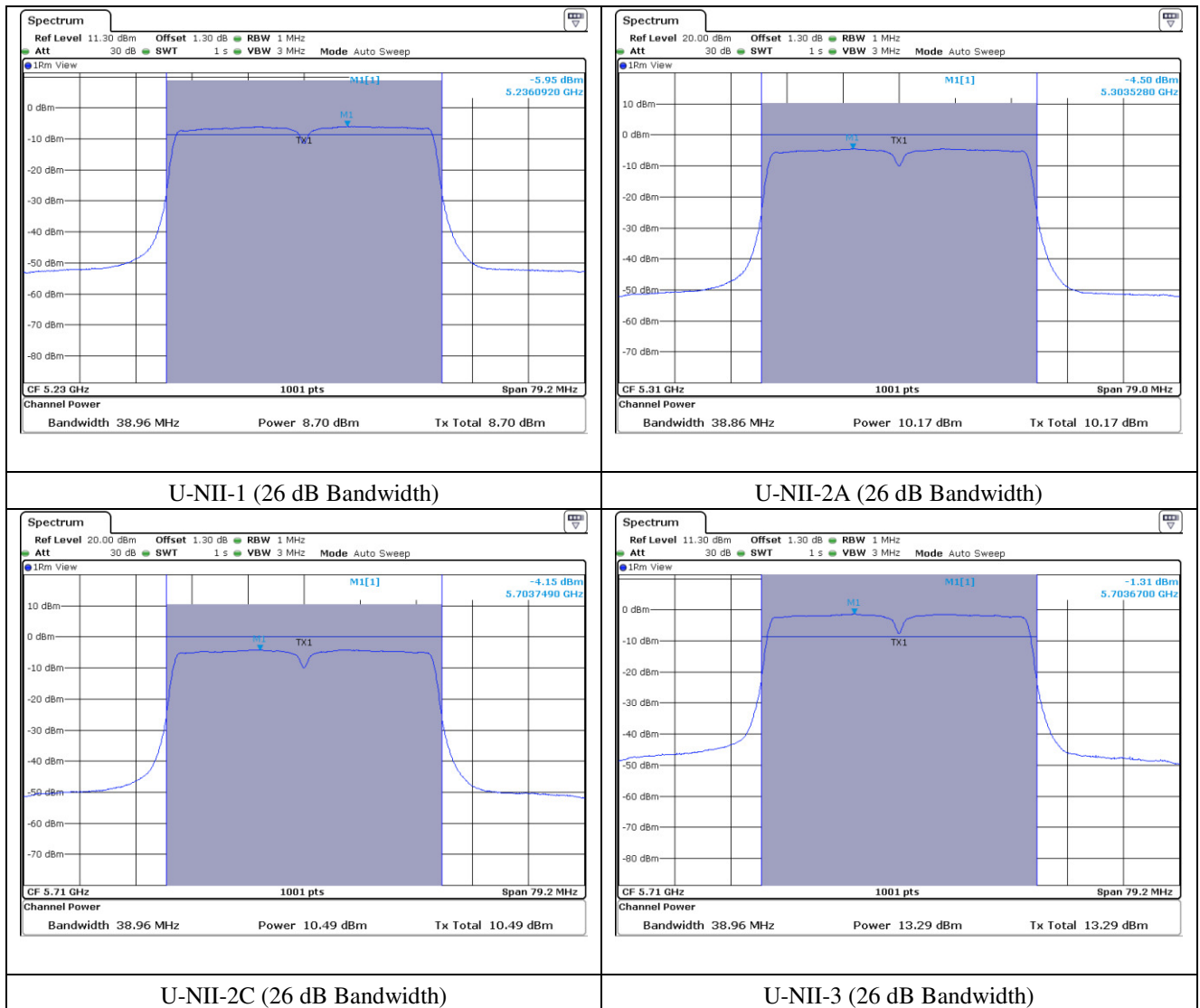
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	36.16	3.26	18.94	15.68
	High	5 230	36.16	4.42	18.94	14.52
5 250 ~ 5 350	Low	5 270	36.16	9.16	24	14.84
	High	5 310	36.16	9.46	24	14.54
5 470 ~ 5 725	Low	5 510	36.16	4.46	24	19.54
	Middle	5 550	36.16	7.36	24	16.64
	High	5 710	36.16	7.57	24	16.43
5 725 ~ 5 825	Low	5 755	36.26	17.17	30	12.83
	High	5 795	36.16	7.88	30	22.12

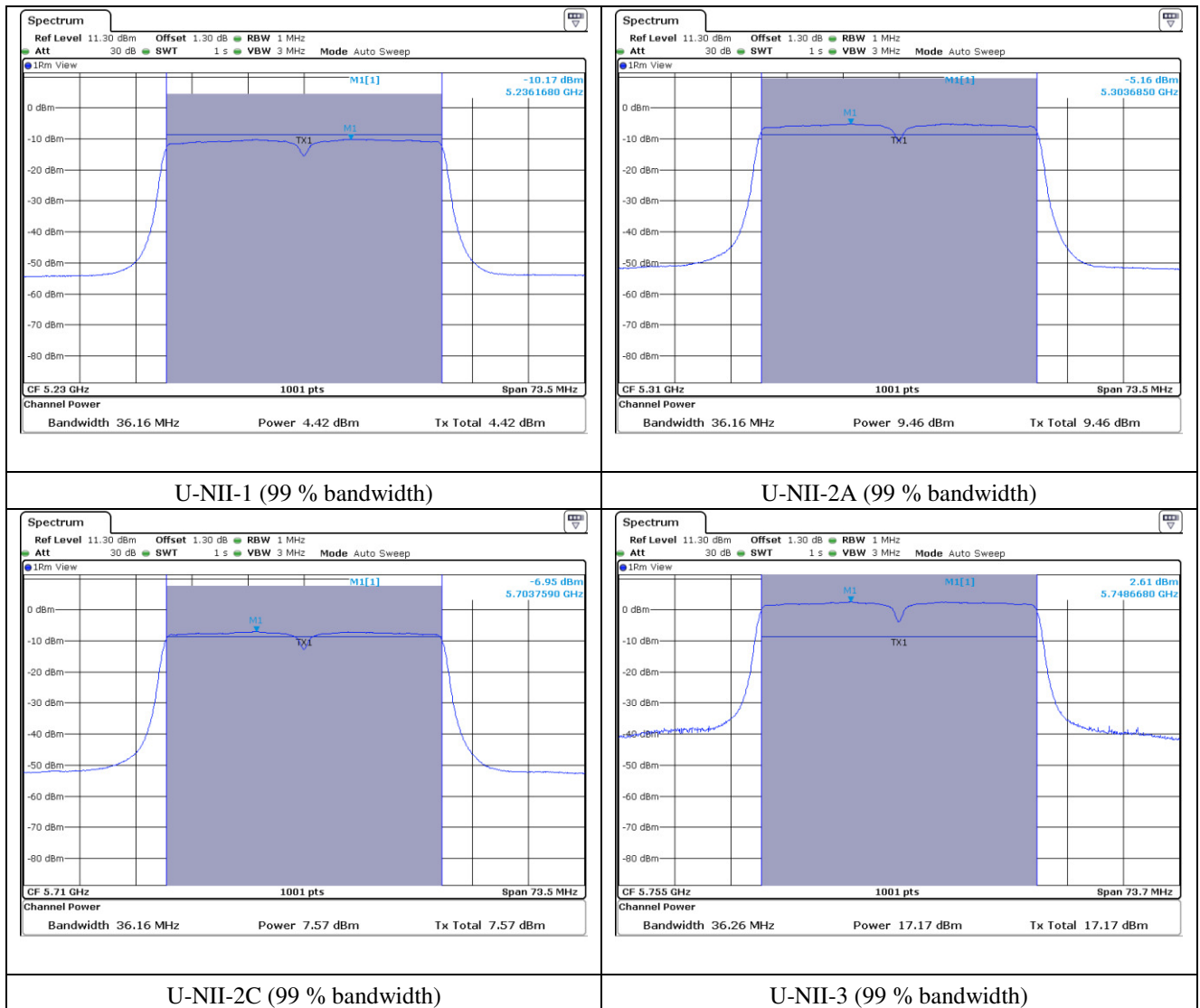
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.5.5 Test data for Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	14.69	25.11	10.42
	High	5 230	15.64	25.11	9.47
5 250 ~ 5 350	Low	5 270	16.03	18.89	2.24
	High	5 310	17.12	18.89	1.77
5 470 ~ 5 725	Low	5 510	13.20	18.80	5.60
	Middle	5 550	17.32	18.80	1.48
	High	5 710	17.21	18.80	1.59
5 725 ~ 5 850	Low	5 755	24.09	25.06	0.97
	High	5 795	16.45	25.06	8.61

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)}+10^{(\text{Antenna2 Output Power}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	10.37	12.11	1.74
	High	5 230	11.25	12.11	0.86
5 250 ~ 5 350	Low	5 270	16.24	18.89	2.86
	High	5 310	16.42	18.89	2.47
5 470 ~ 5 725	Low	5 510	11.65	18.80	7.15
	Middle	5 550	14.62	18.80	4.18
	High	5 710	14.47	18.80	4.33
5 725 ~ 5 825	Low	5 755	23.48	25.06	1.58
	High	5 795	14.55	25.06	10.51

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

9.5.5.6 Test data for Staddle Channel_Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	8.69	30.00	21.31
5 725 ~ 5 825	5 710	4.49	-3.20	24.00	27.20

9.5.5.7 Test data for Staddle Channel_Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	8.06	30.00	21.94
5 725 ~ 5 825	5 710	4.49	-3.44	24.00	27.44

9.5.5.8 Test data for Staddle Channel_Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	8.17	30.00	21.83
5 725 ~ 5 825	5 710	4.59	-3.32	24.00	27.32

9.5.5.9 Test data for Staddle Channel_Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	34.47	7.22	30.00	22.78
5 725 ~ 5 825	5 710	4.49	-4.27	24.00	28.27

9.5.5.10 Test data for Staddle Channel_Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

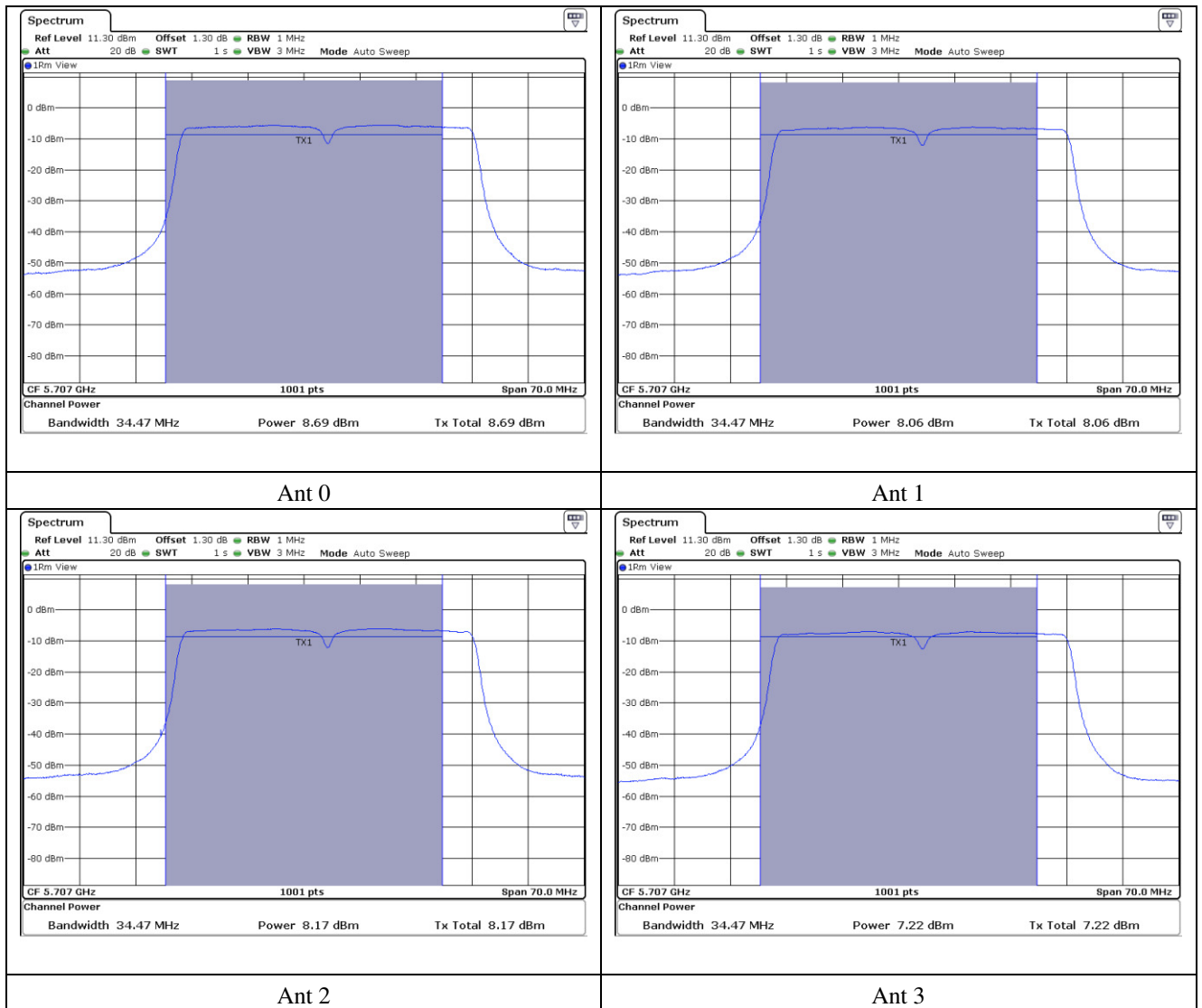
FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710	14.09	18.8	4.71
5 725 ~ 5 850	5 710	2.48	25.06	22.58

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.6 Test data for 802.11ac_VHT80 RLAN Mode

9.5.6.1 Test data for Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	78.32	9.61	30.00	20.39
5 250 ~ 5 350	Low	5 290	79.32	13.18	24.00	14.41
5 470 ~ 5 725	Low	5 530	79.52	6.50	24.00	17.50
5 725 ~ 5 850	Low	5 775	79.52	15.10	30.00	14.90

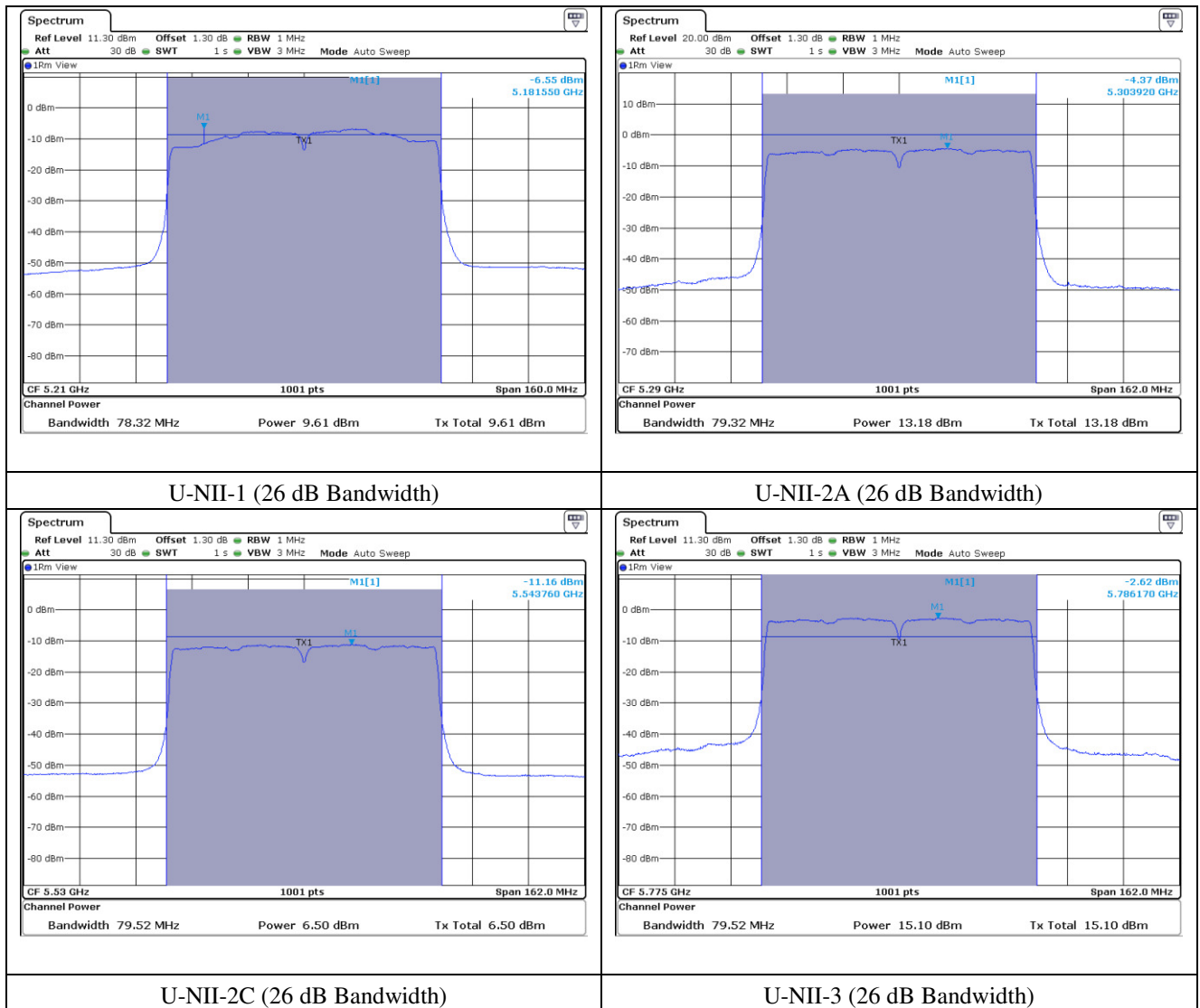
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	74.93	5.37	18.69	13.32
5 250 ~ 5 350	Low	5 290	75.52	9.59	24	14.41
5 470 ~ 5 725	Low	5 530	75.52	5.50	24	18.50
5 725 ~ 5 825	Low	5 775	75.52	4.44	30.00	25.56

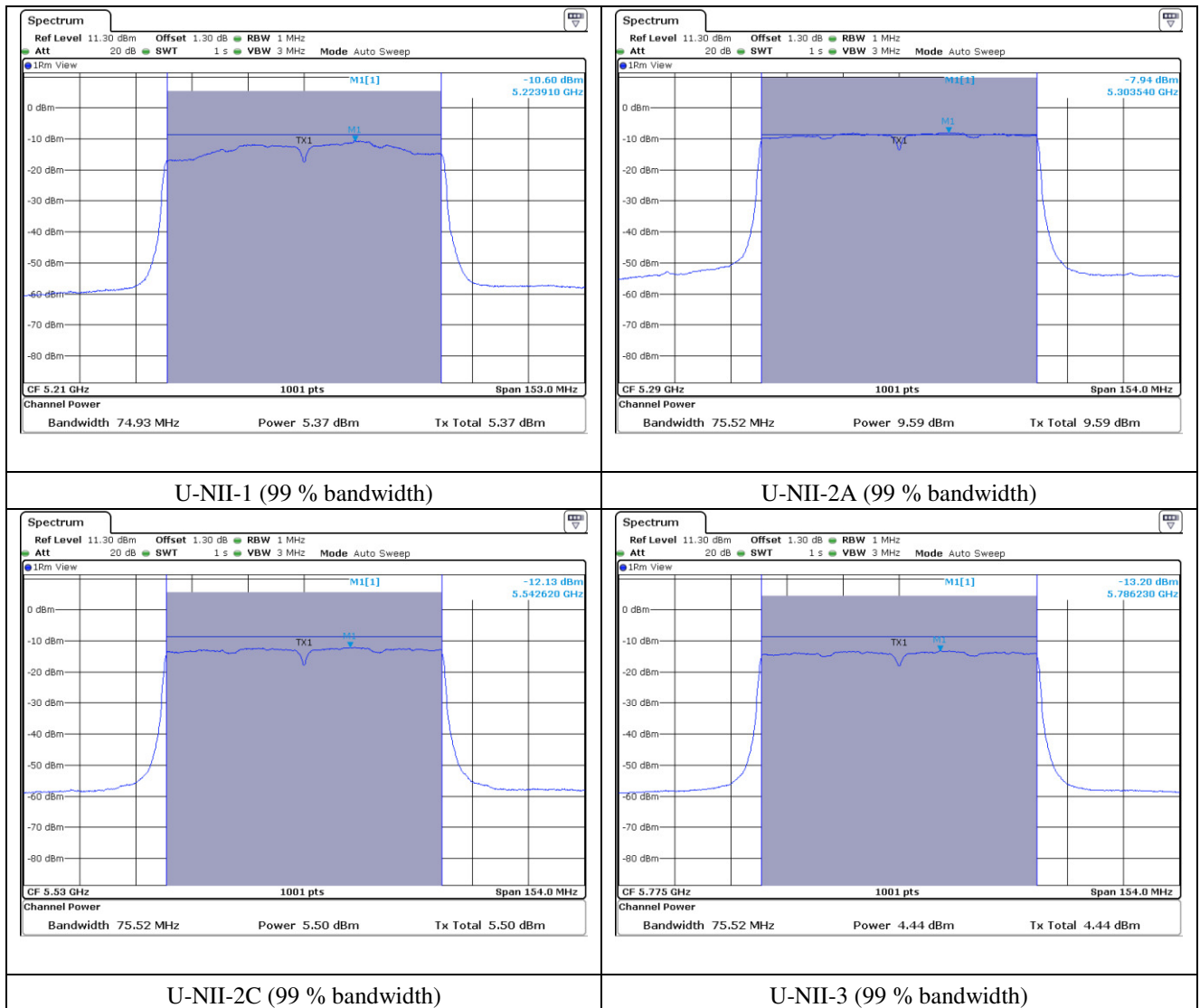
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.6.2 Test data for Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	77.92	9.18	30.00	20.82
5 250 ~ 5 350	Low	5 290	79.52	11.65	23.87	12.22
5 470 ~ 5 725	Low	5 530	79.12	7.10	24.00	16.90
5 725 ~ 5 850	Low	5 775	79.32	14.61	30.00	15.39

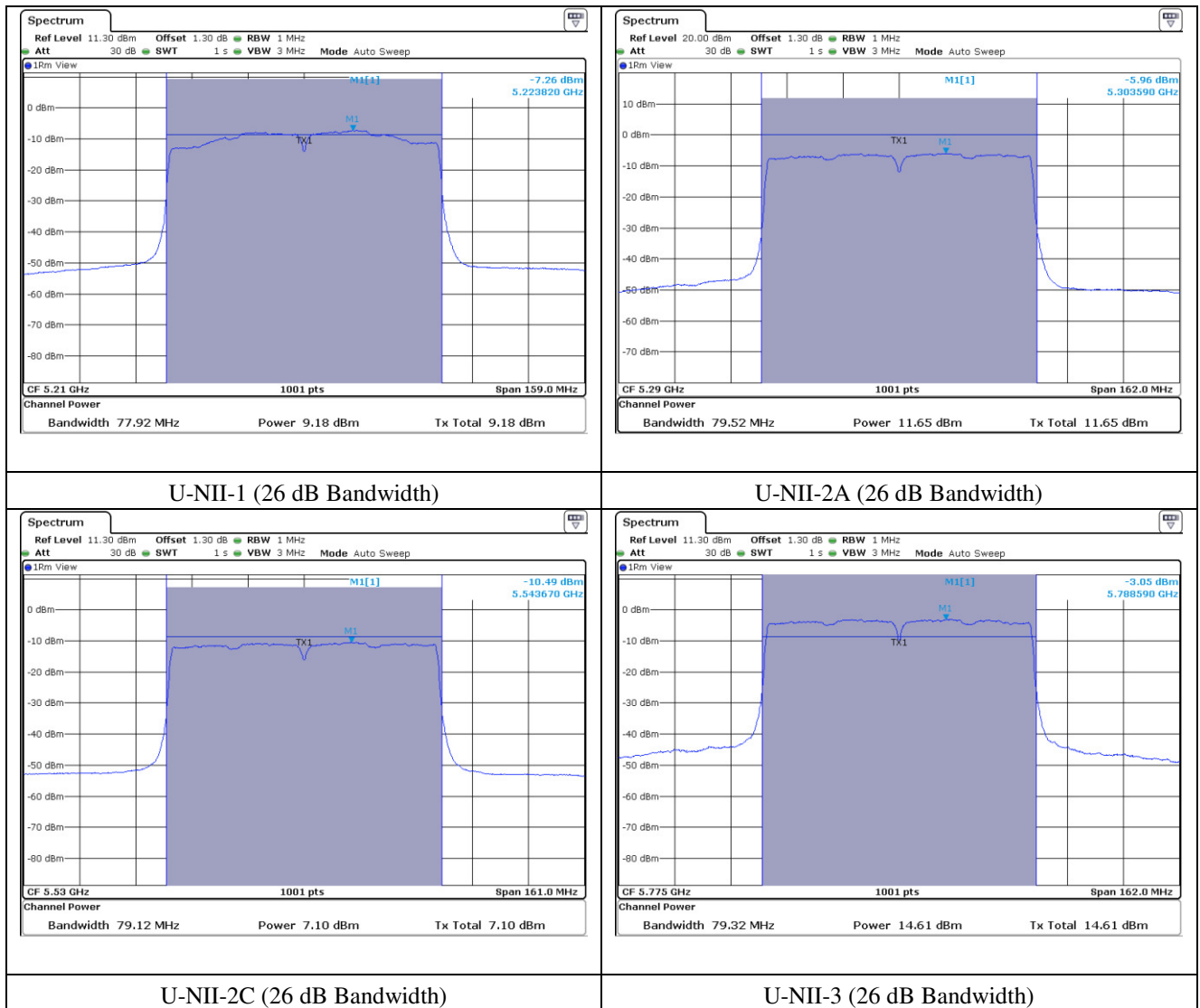
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	74.93	4.40	17.55	13.15
5 250 ~ 5 350	Low	5 290	75..52	9.05	23.87	14.82
5 470 ~ 5 725	Low	5 530	75.72	5.62	24	18.38
5 725 ~ 5 825	Low	5 775	75.52	3.67	30	26.33

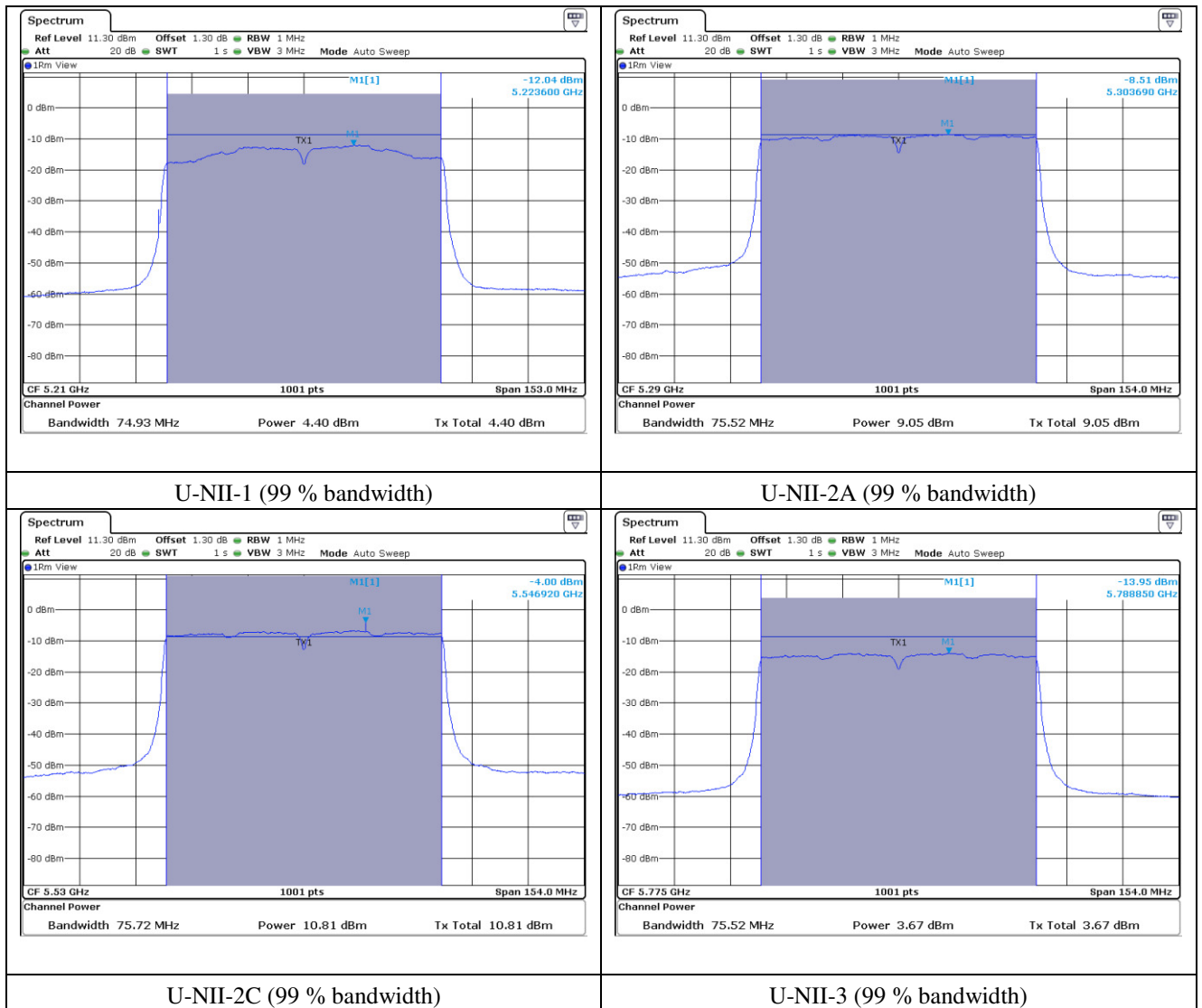
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.6.3 Test data for Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	77.92	8.76	30.00	21.24
5 250 ~ 5 350	Low	5 290	78.92	11.73	24.00	12.27
5 470 ~ 5 725	Low	5 530	79.32	7.50	24.00	16.50
5 725 ~ 5 850	Low	5 775	79.12	14.55	30.00	15.45

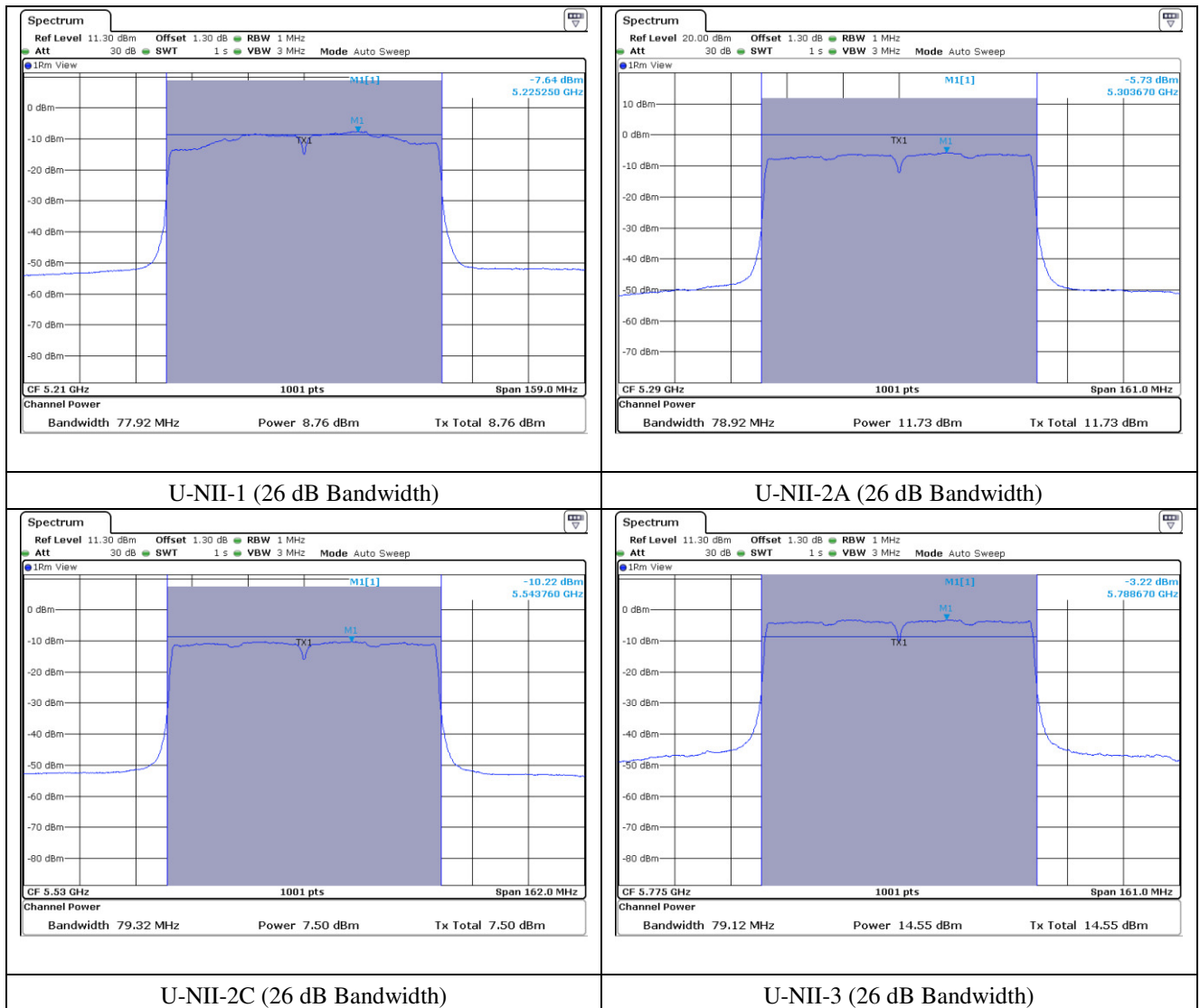
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	74.93	4.61	17.54	12.93
5 250 ~ 5 350	Low	5 290	75.52	9.27	24	14.73
5 470 ~ 5 725	Low	5 530	75.52	5.48	24	18.52
5 725 ~ 5 825	Low	5 775	75.52	3.76	30	26.24

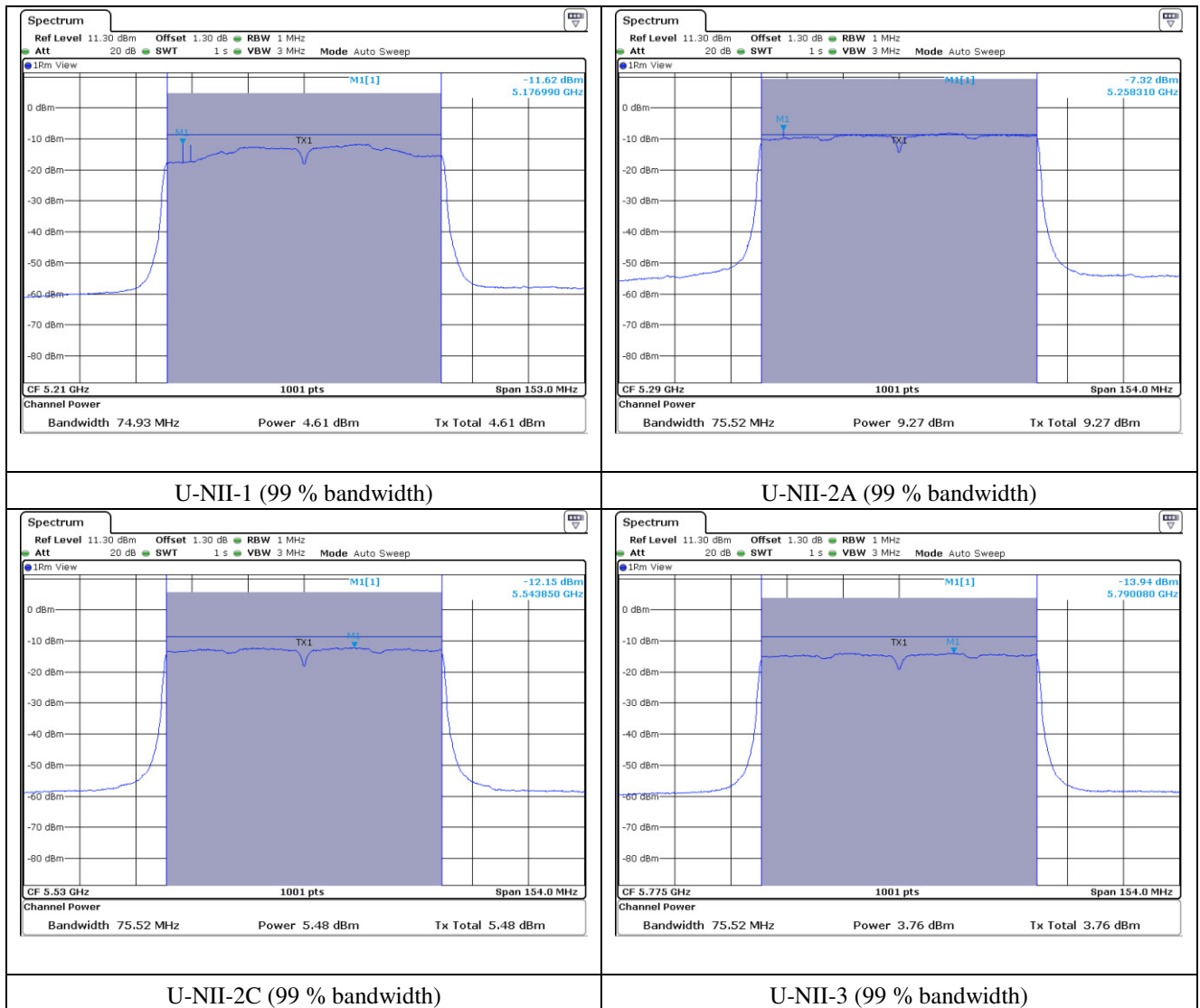
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.6.4 Test data for Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	78.12	7.79	30.00	22.21
5 250 ~ 5 350	Low	5 290	79.32	10.65	24.00	13.35
5 470 ~ 5 725	Low	5 530	79.12	5.88	24.00	18.12
5 725 ~ 5 850	Low	5 775	79.12	13.80	30.00	16.20

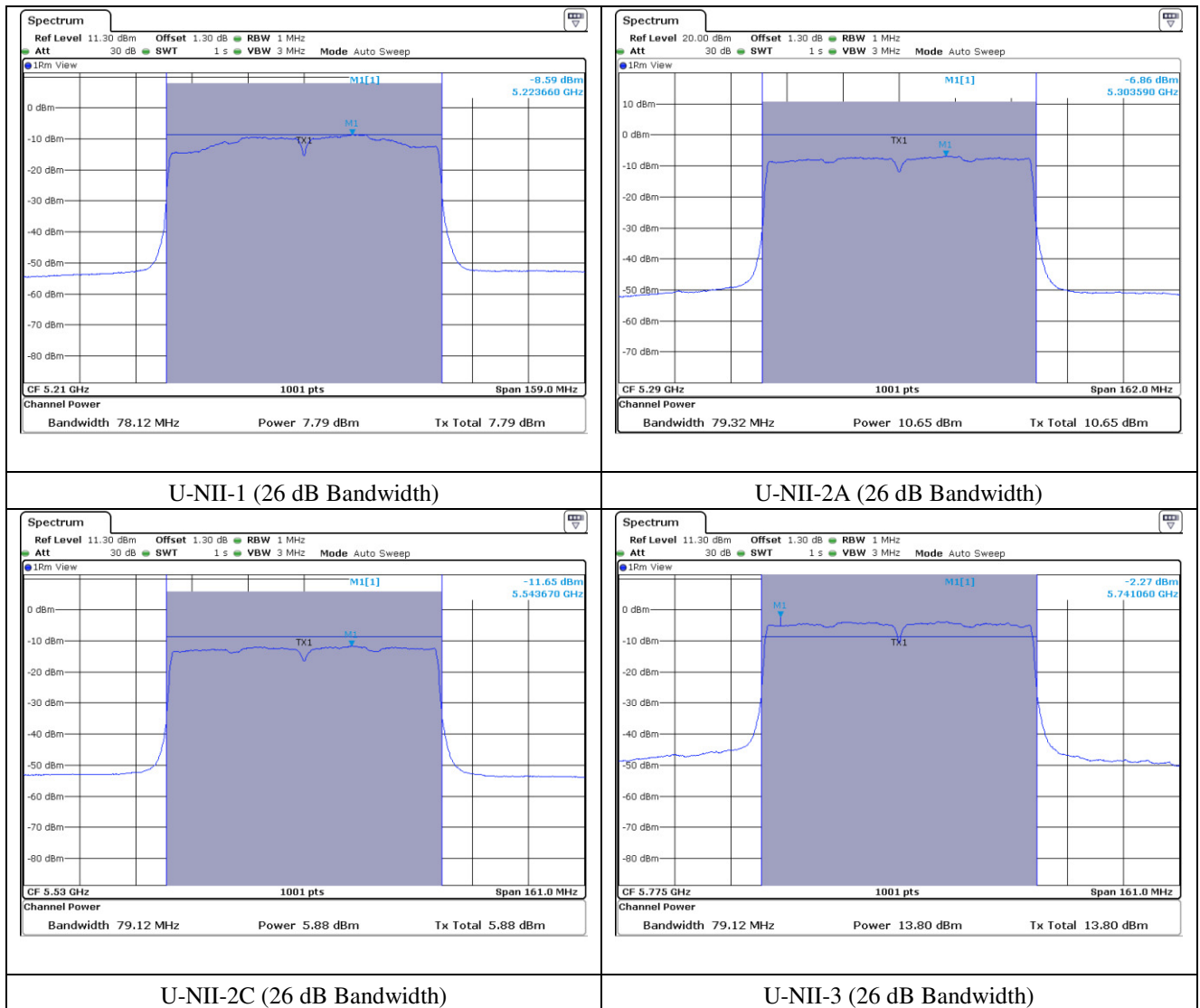
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	99 % bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	74.93	3.12	18.94	15.82
5 250 ~ 5 350	Low	5 290	75.52	8.19	24	15.81
5 470 ~ 5 725	Low	5 530	75.52	4.24	24	19.76
5 725 ~ 5 825	Low	5 775	75.52	2.78	30	27.22

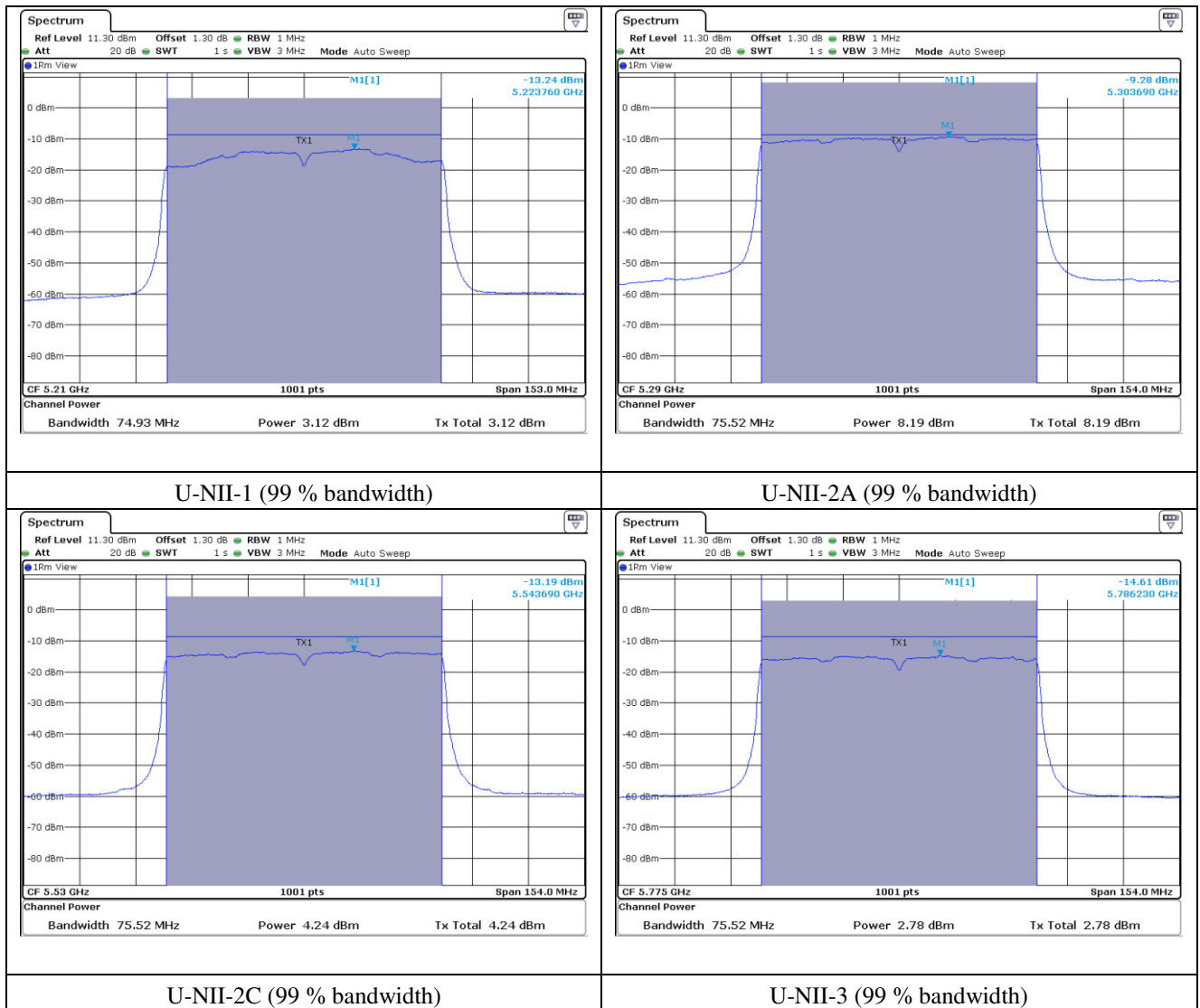
Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.



Note: In order to simplify the report, attached plots were only the most wide channel.

9.5.6.5 Test data for Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	14.91	25.11	10.20
5 250 ~ 5 350	Low	5 290	17.93	18.89	1.88
5 470 ~ 5 725	Low	5 530	12.81	18.80	5.99
5 725 ~ 5 850	Low	5 775	20.56	25.06	4.50

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)}+10^{(\text{Antenna2 Output Power}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	10.47	12.11	1.64
5 250 ~ 5 350	Low	5 290	15.08	18.89	3.81
5 470 ~ 5 725	Low	5 530	11.25	18.80	7.53
5 725 ~ 5 825	Low	5 775	9.72	25.06	15.34

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log (10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

9.5.6.6 Test data for Staddle Channel_Antenna 0

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690	74.76	11.31	30.00	18.69
5 725 ~ 5 825	5 690	4.76	-3.84	24.00	27.84

9.5.6.7 Test data for Staddle Channel_Antenna 1

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690	74.76	10.89	30.00	19.11
5 725 ~ 5 825	5 690	4.56	-3.77	24.00	27.77

9.5.6.8 Test data for Staddle Channel_Antenna 2

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690	74.76	10.97	30.00	19.03
5 725 ~ 5 825	5 690	4.56	-3.85	24.00	27.85

9.5.6.9 Test data for Staddle Channel_Antenna 3

-. Test Date : June 24, 2016

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	26 dB Bandwidth (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690	74.76	10.44	30.00	19.56
5 725 ~ 5 825	5 690	4.56	-4.68	24.00	28.68

9.5.6.10 Test data for Staddle Channel_Multiple Transmit

-. Test Date : June 24, 2016

-. Test Result : Pass

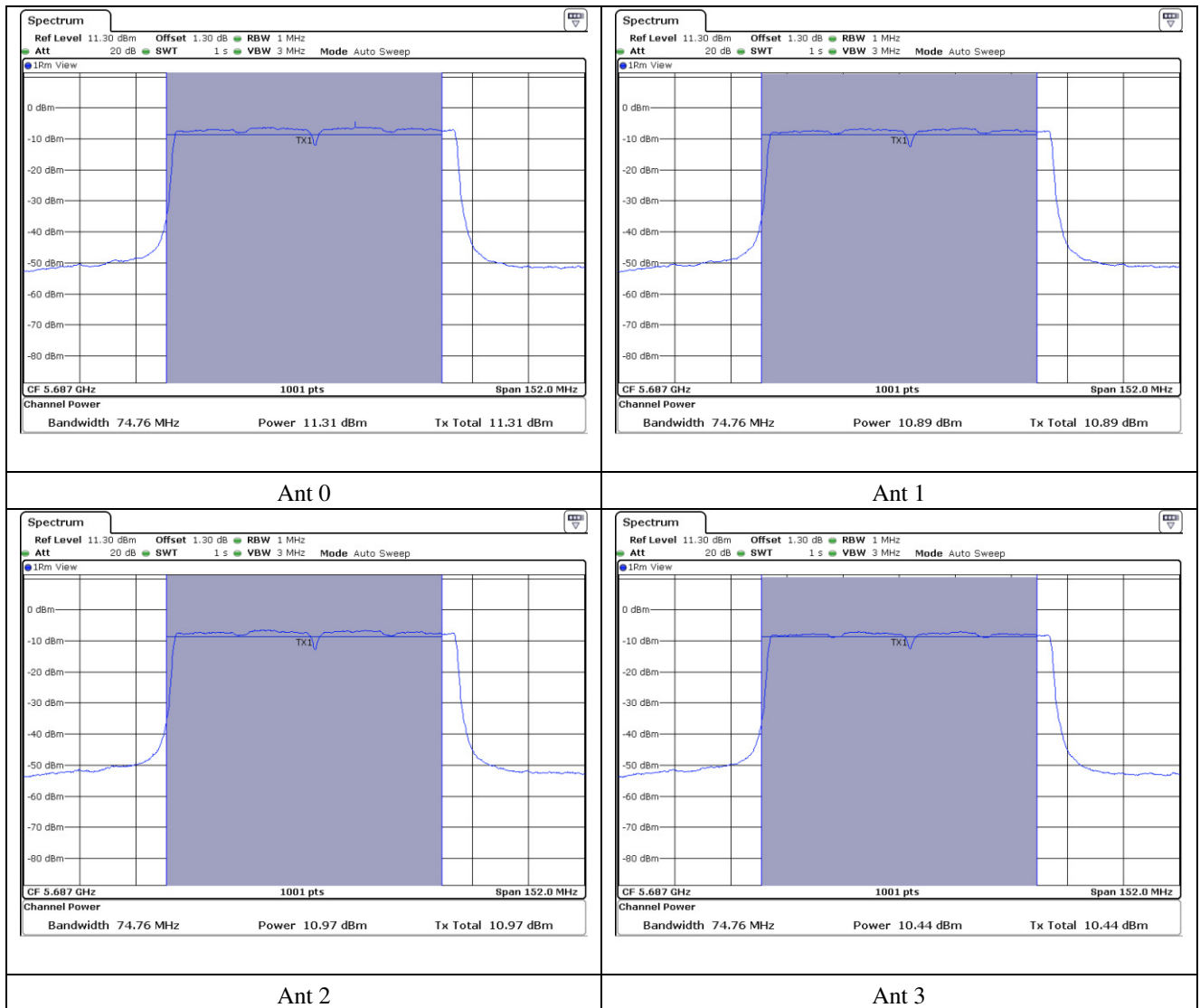
FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690	16.93	18.8	1.87
5 725 ~ 5 850	5 690	2.00	25.06	23.06

Remark 1 : Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Remark 2 : Calculated Output Power= $10\log(10^{(\text{Antenna1 Output Power}/10)} + 10^{(\text{Antenna2 Output Power}/10)})$



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10. PEAK POWER SPECTRUL DENSITY

10.1 Operating environment

Temperature : 25 °C
Relative humidity : 47 % R.H.

10.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 1 MHz, the video bandwidth is set to 3 times the resolution bandwidth. The maximum level form the EUT in 1 MHz bandwidth was measured with above condition.



10.3 Test equipment used

Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ - FSV30	Rohde & Schwarz	Signal Analyzer	101199	May.04, 2016 (1Y)

All test equipment used is calibrated on a regular basis.

10.4 Test data for Monitoring Port

10.4.1 Test data for 802.11a RLAN Mode

10.4.1.1 Test data for Antenna 0

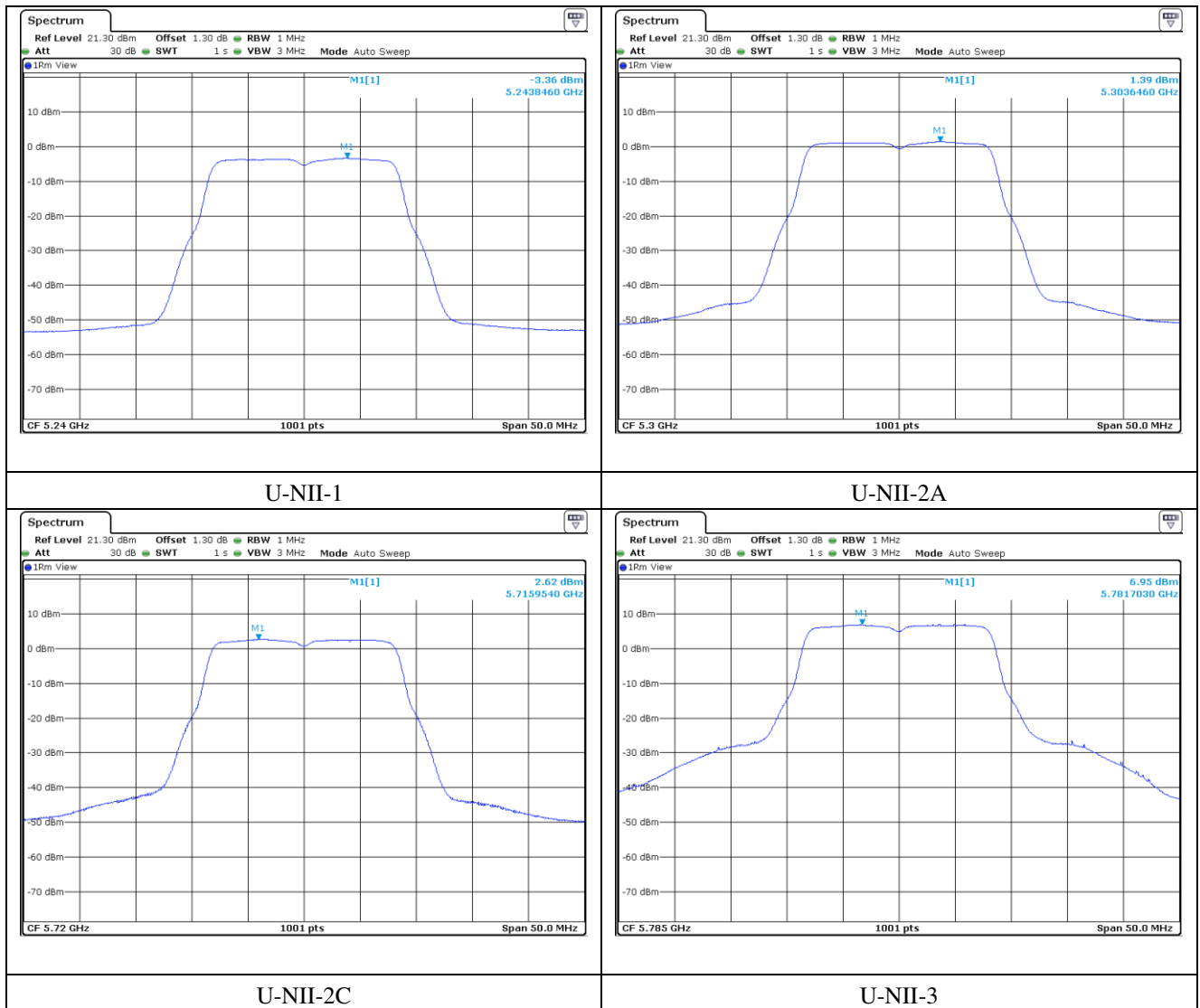
-. Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-3.51	5.69	9.20
	Middle	5 220	-3.63	5.69	9.32
	High	5 240	-3.36	5.69	9.05
5 250 ~ 5 350	Low	5 260	1.38	11	9.62
	Middle	5 300	1.39	11	9.61
	High	5 320	1.29	11	9.71
5 470 ~ 5 725	Low	5 500	1.76	11.00	9.24
	Middle	5 560	1.90	11.00	9.10
	High	5 720	2.62	11.00	8.38
5 725 ~ 5 850	Low	5 745	6.82	30.00	23.18
	Middle	5 785	6.95	30.00	23.05
	High	5 825	1.09	30.00	28.91

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.4.1.2 Test data for Antenna 1

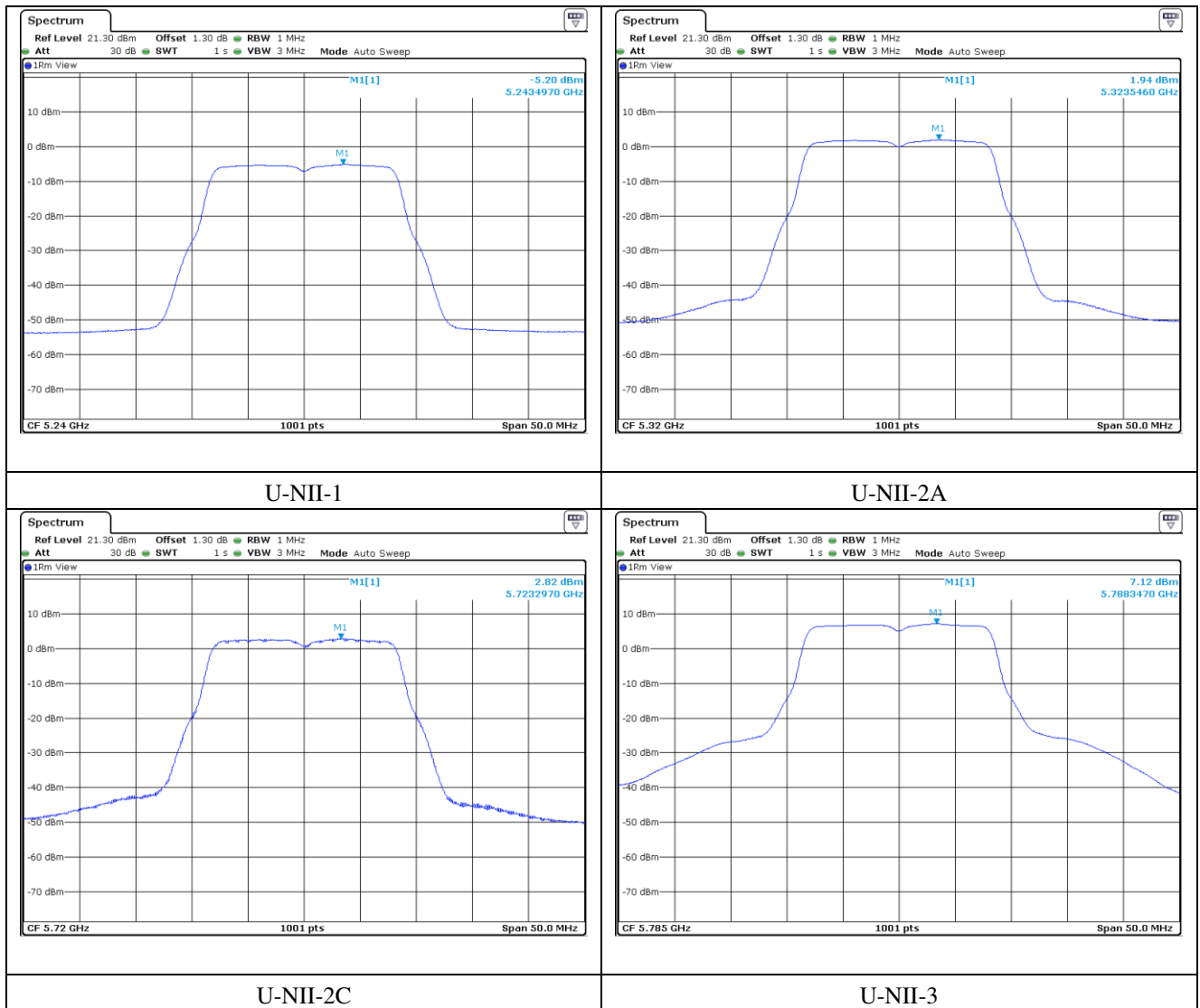
- . Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-5.27	4.55	9.82
	Middle	5 220	-5.49	4.55	10.04
	High	5 240	-5.2	4.55	9.75
5 250 ~ 5 350	Low	5 260	1.91	10.87	8.96
	Middle	5 300	1.93	10.87	8.94
	High	5 320	1.94	10.87	8.93
5 470 ~ 5 725	Low	5 500	1.76	11.00	9.24
	Middle	5 560	1.94	11.00	9.06
	High	5 720	2.82	11.00	8.18
5 725 ~ 5 850	Low	5 745	6.98	30.00	23.02
	Middle	5 785	7.12	30.00	22.88
	High	5 825	1.27	30.00	28.73

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.4.1.3 Test data for Multiple Transmit

- . Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-1.29	-0.89	0.40
	Middle	5 220	-1.45	-0.89	0.56
	High	5 240	-1.17	-0.89	0.28
5 250 ~ 5 350	Low	5 260	4.66	5.89	1.23
	Middle	5 300	4.68	5.89	1.21
	High	5 320	4.64	5.89	1.25
5 470 ~ 5 725	Low	5 500	4.77	5.80	1.03
	Middle	5 560	4.93	5.80	0.87
	High	5 720	5.73	5.80	0.07
5 725 ~ 5 850	Low	5 745	9.91	25.06	15.15
	Middle	5 785	10.05	25.06	15.01
	High	5 825	4.19	25.06	20.87

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

10.4.1.4 Test data for Staddle Channel_Antenna 0

- . Test Date : June 30, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	2.47	11.00	8.53
5 725 ~ 5 850	5 720	-0.47	30.00	30.47

Remark: See next page for measurement data.

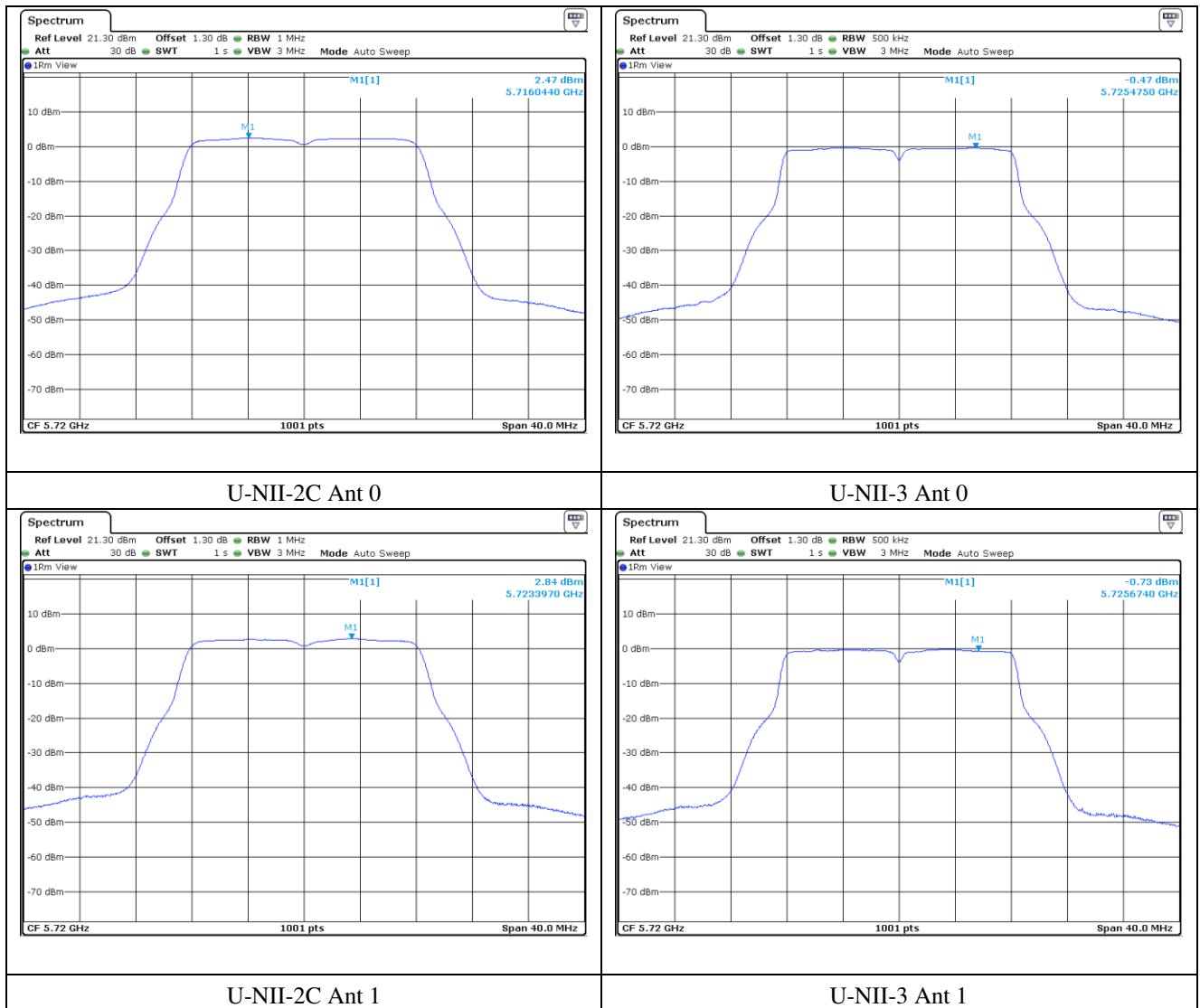
10.4.1.5 Test data for Staddle Channel_Antenna 1

- . Test Date : June 30, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	2.84	11.00	8.16
5 725 ~ 5 850	5 720	-0.73	30.00	30.73

Remark: See next page for measurement data.


 Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.5 Test data for Service Port

10.5.1 Test data for 802.11a RLAN Mode

10.5.1.1 Test data for Antenna 0

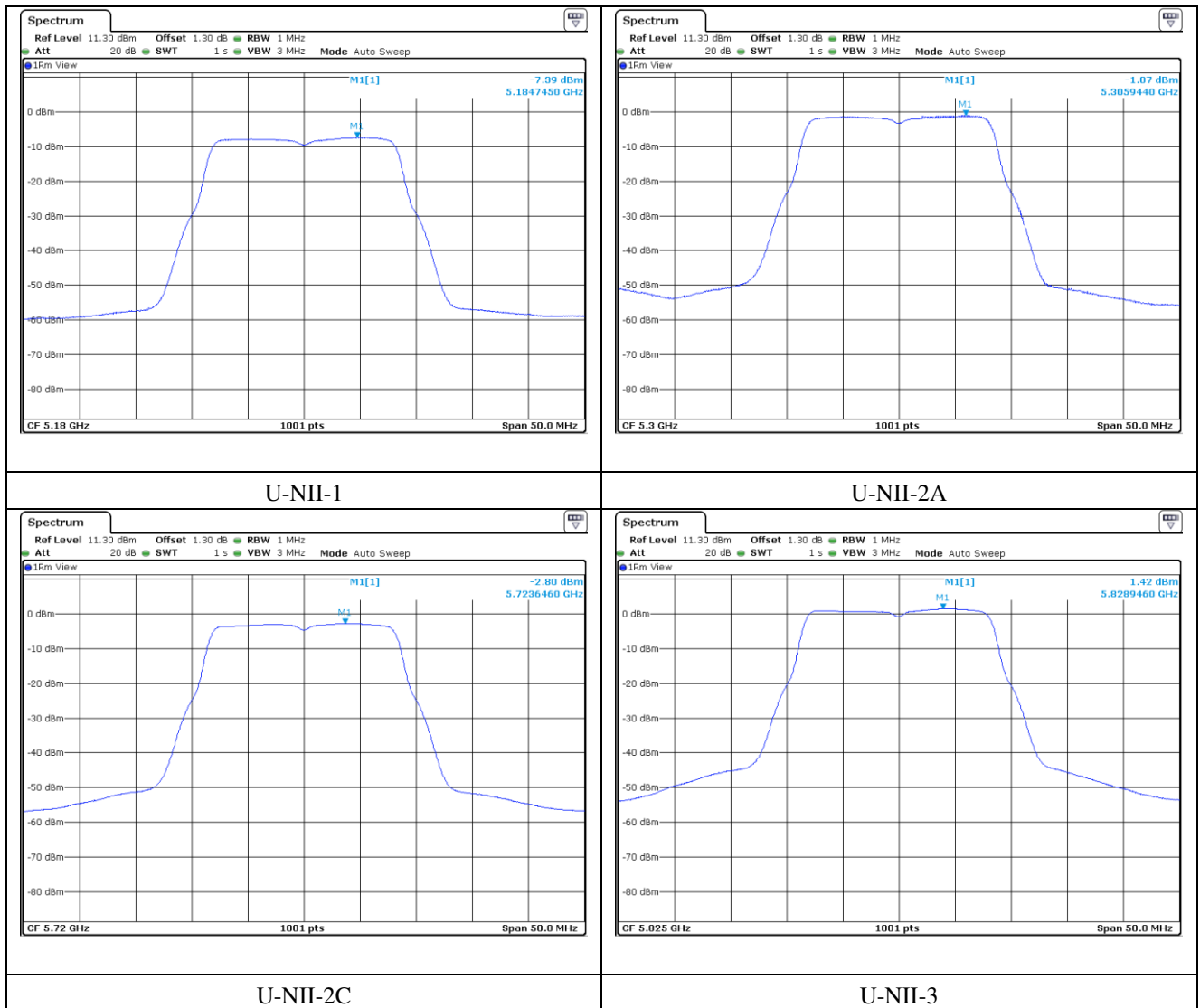
-. Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-7.39	5.69	13.08
	Middle	5 220	-7.47	5.69	13.16
	High	5 240	-8.39	5.69	14.08
5 250 ~ 5 350	Low	5 260	-3.67	11	14.67
	Middle	5 300	-1.07	11	12.07
	High	5 320	-2.14	11	13.14
5 470 ~ 5 725	Low	5 500	-4.96	11.00	15.96
	Middle	5 560	-2.93	11.00	13.93
	High	5 720	-2.80	11.00	13.80
5 725 ~ 5 850	Low	5 745	0.70	30.00	29.30
	Middle	5 785	0.93	30.00	29.07
	High	5 825	1.42	30.00	28.58

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.5.1.2 Test data for Antenna 1

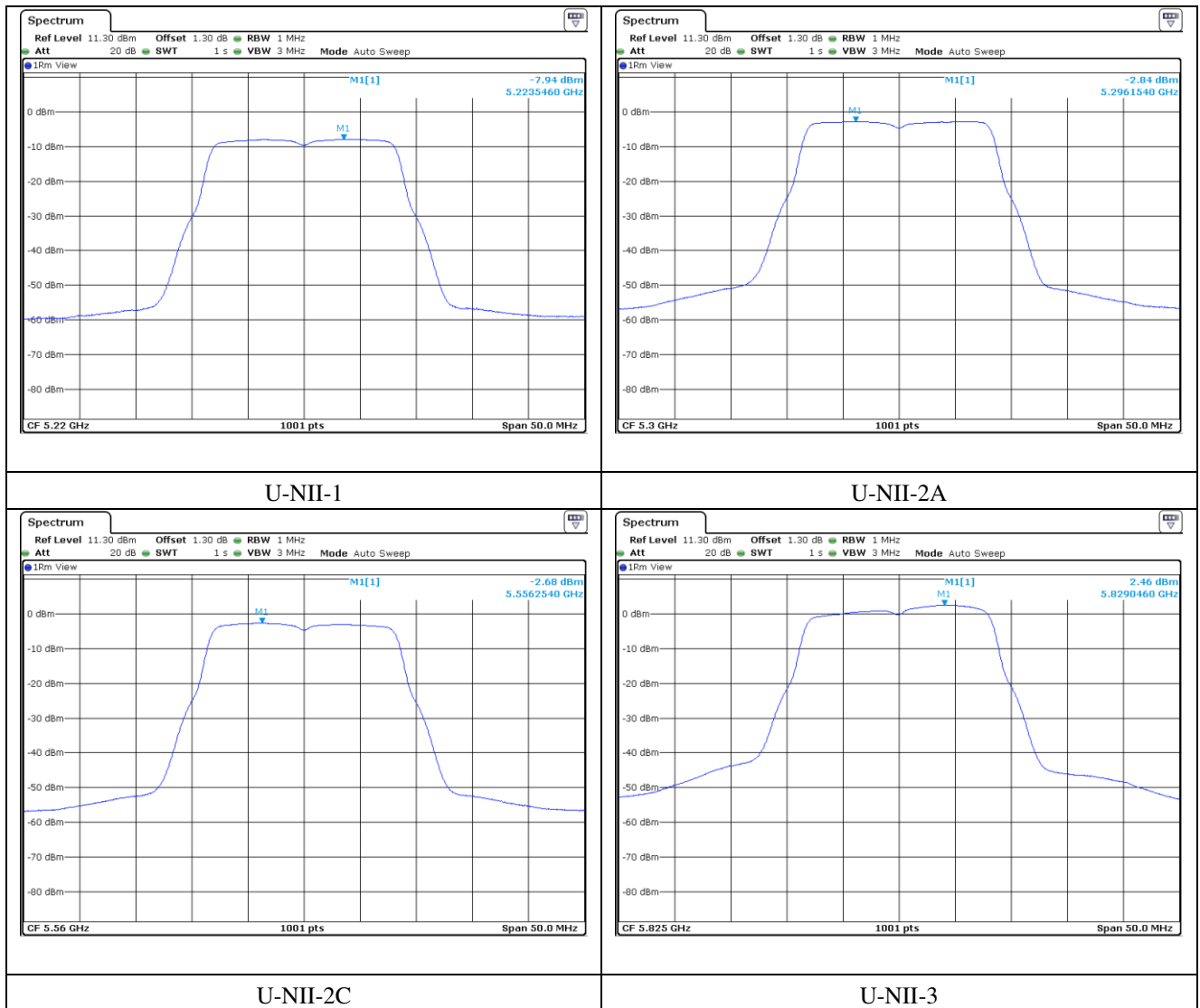
-. Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-8.33	4.55	12.88
	Middle	5 220	-7.94	4.55	12.49
	High	5 240	-8.71	4.55	13.26
5 250 ~ 5 350	Low	5 260	-4.34	10.87	15.21
	Middle	5 300	-2.84	10.87	13.71
	High	5 320	-3.01	10.87	13.88
5 470 ~ 5 725	Low	5 500	-4.64	11.00	15.64
	Middle	5 560	-2.68	11.00	13.68
	High	5 720	-2.87	11.00	13.87
5 725 ~ 5 850	Low	5 745	0.65	30.00	29.35
	Middle	5 785	0.11	30.00	29.89
	High	5 825	2.46	30.00	27.54

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.5.1.3 Test data for Antenna 2

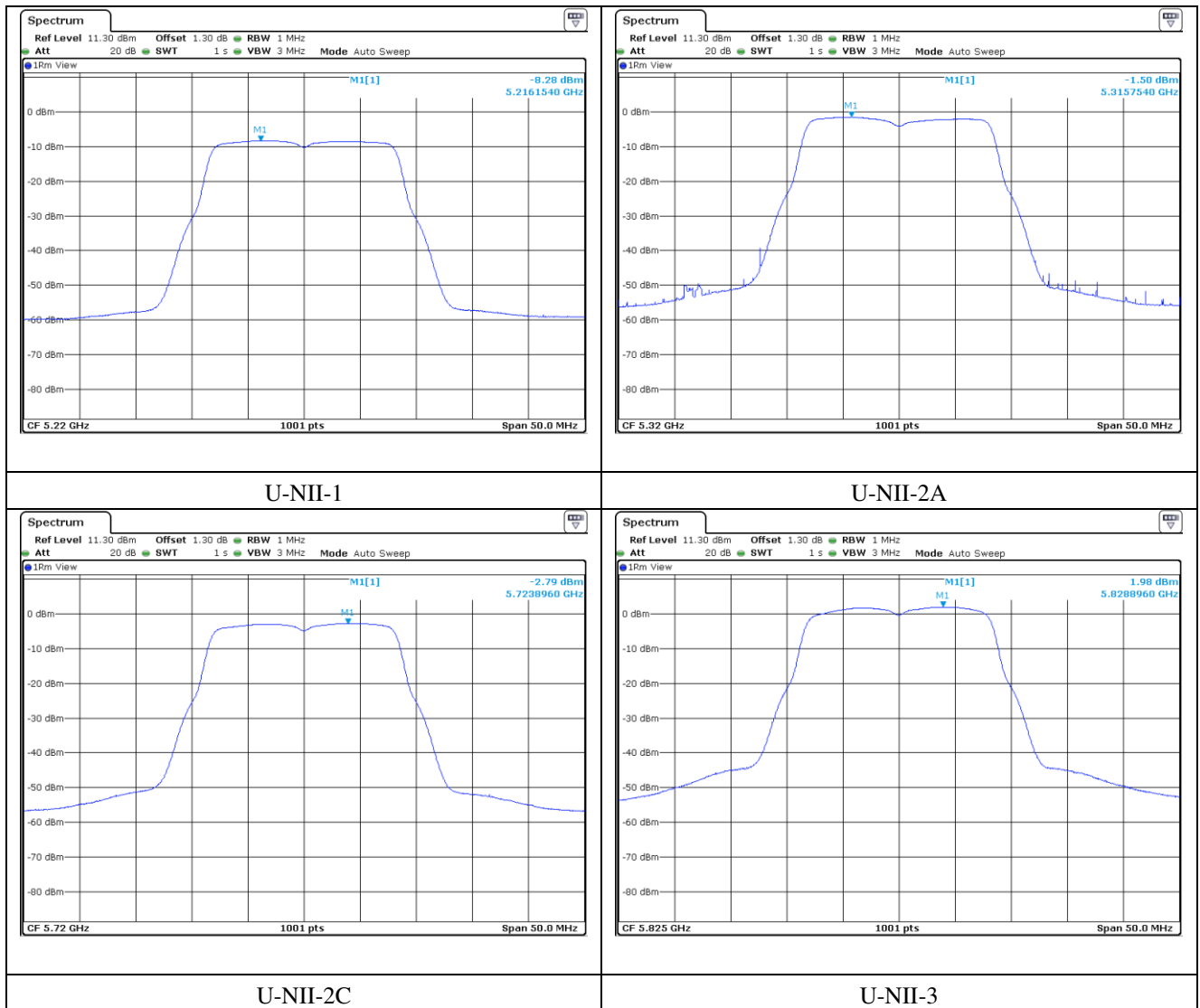
- . Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-8.56	4.54	13.10
	Middle	5 220	-8.28	4.54	12.82
	High	5 240	-8.97	4.54	13.51
5 250 ~ 5 350	Low	5 260	-4.24	11	15.24
	Middle	5 300	-2.44	11	13.44
	High	5 320	-1.5	11	12.50
5 470 ~ 5 725	Low	5 500	-4.64	11.00	15.64
	Middle	5 560	-2.88	11.00	13.88
	High	5 720	-2.79	11.00	13.79
5 725 ~ 5 850	Low	5 745	0.60	30.00	29.40
	Middle	5 785	-0.18	30.00	30.18
	High	5 825	1.98	30.00	28.02

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.5.1.4 Test data for Antenna 3

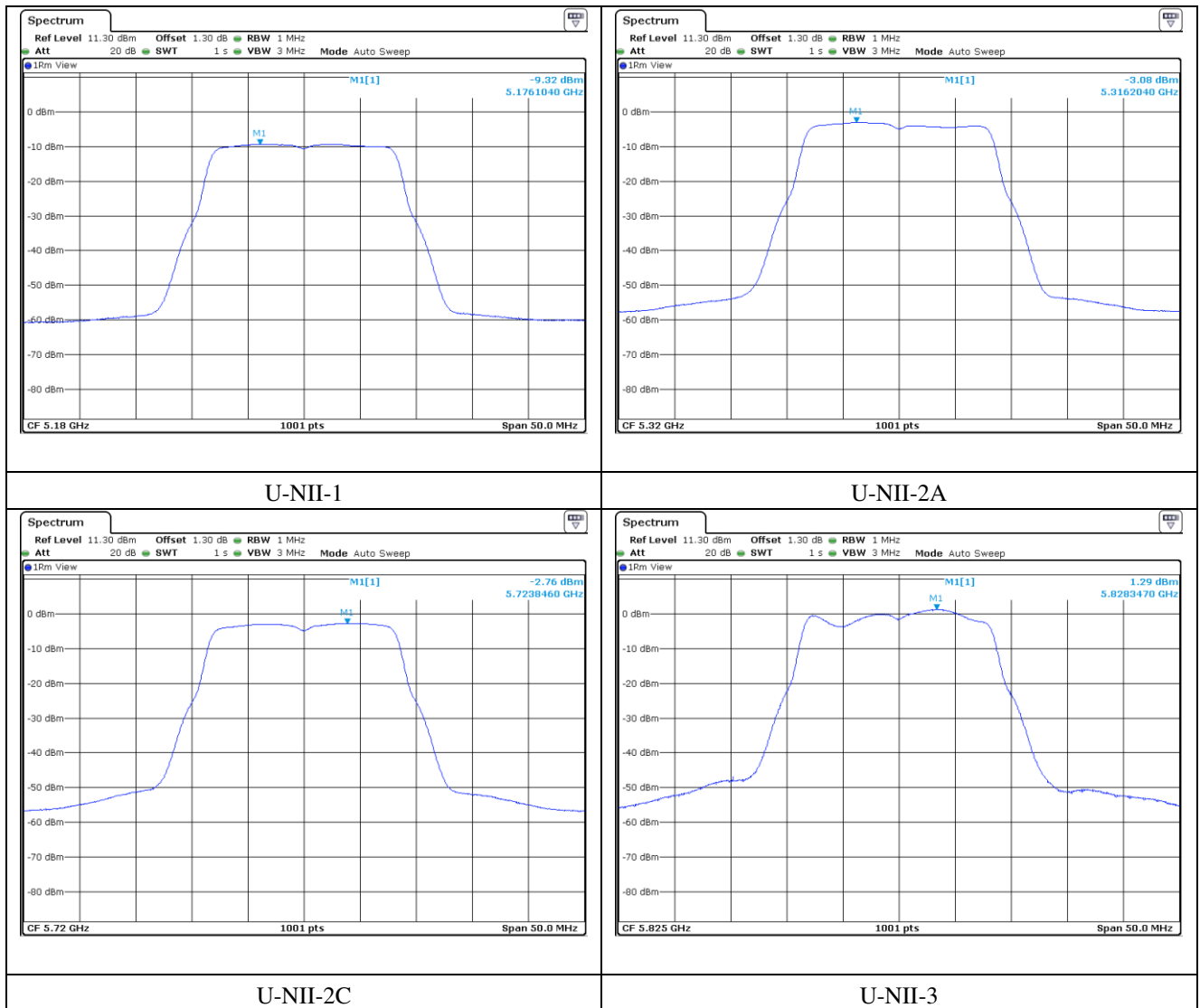
- . Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-9.32	5.97	15.29
	Middle	5 220	-9.64	5.94	15.58
	High	5 240	-9.45	5.94	15.39
5 250 ~ 5 350	Low	5 260	-3.54	11	14.54
	Middle	5 300	-3.16	11	14.16
	High	5 320	-3.08	11	14.08
5 470 ~ 5 725	Low	5 500	-6.06	11.00	17.06
	Middle	5 560	-3.72	11.00	14.72
	High	5 720	-2.76	11.00	13.76
5 725 ~ 5 850	Low	5 745	0.19	30.00	29.81
	Middle	5 785	-0.30	30.00	30.30
	High	5 825	1.29	30.00	28.71

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer



Note: In order to simplify the report, attached plots were only the most wide channel.

10.5.1.5 Test data for Multiple Transmit

- . Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-2.32	-0.89	1.43
	Middle	5 220	-2.24	-0.89	1.35
	High	5 240	-2.84	-0.89	1.95
5 250 ~ 5 350	Low	5 260	2.09	5.89	3.80
	Middle	5 300	3.72	5.89	2.17
	High	5 320	3.64	5.89	2.25
5 470 ~ 5 725	Low	5 500	0.98	5.80	4.82
	Middle	5 560	2.99	5.80	2.81
	High	5 720	3.22	5.80	2.58
5 725 ~ 5 850	Low	5 745	6.56	25.06	18.50
	Middle	5 785	6.19	25.06	18.87
	High	5 825	7.83	25.06	17.23

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$



Tested by: Min-Gu, Ji / Project Engineer

10.5.1.6 Test data for Staddle Channel_Antenna 0

-. Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	-3.80	11.00	14.80
5 725 ~ 5 850	5 720	-5.75	30.00	35.75

Remark: See next page for measurement data.

10.5.1.7 Test data for Staddle Channel_Antenna 1

-. Test Date : June 30, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 720	-3.66	11.00	14.66
5 725 ~ 5 850	5 720	-6.48	30.00	36.48

Remark: See next page for measurement data.



Tested by: Min-Gu, Ji / Project Engineer