



Appendix D

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: Mobile operating terminal

Test Model: H6

Environmental Conditions

Temperature:	21.6° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan



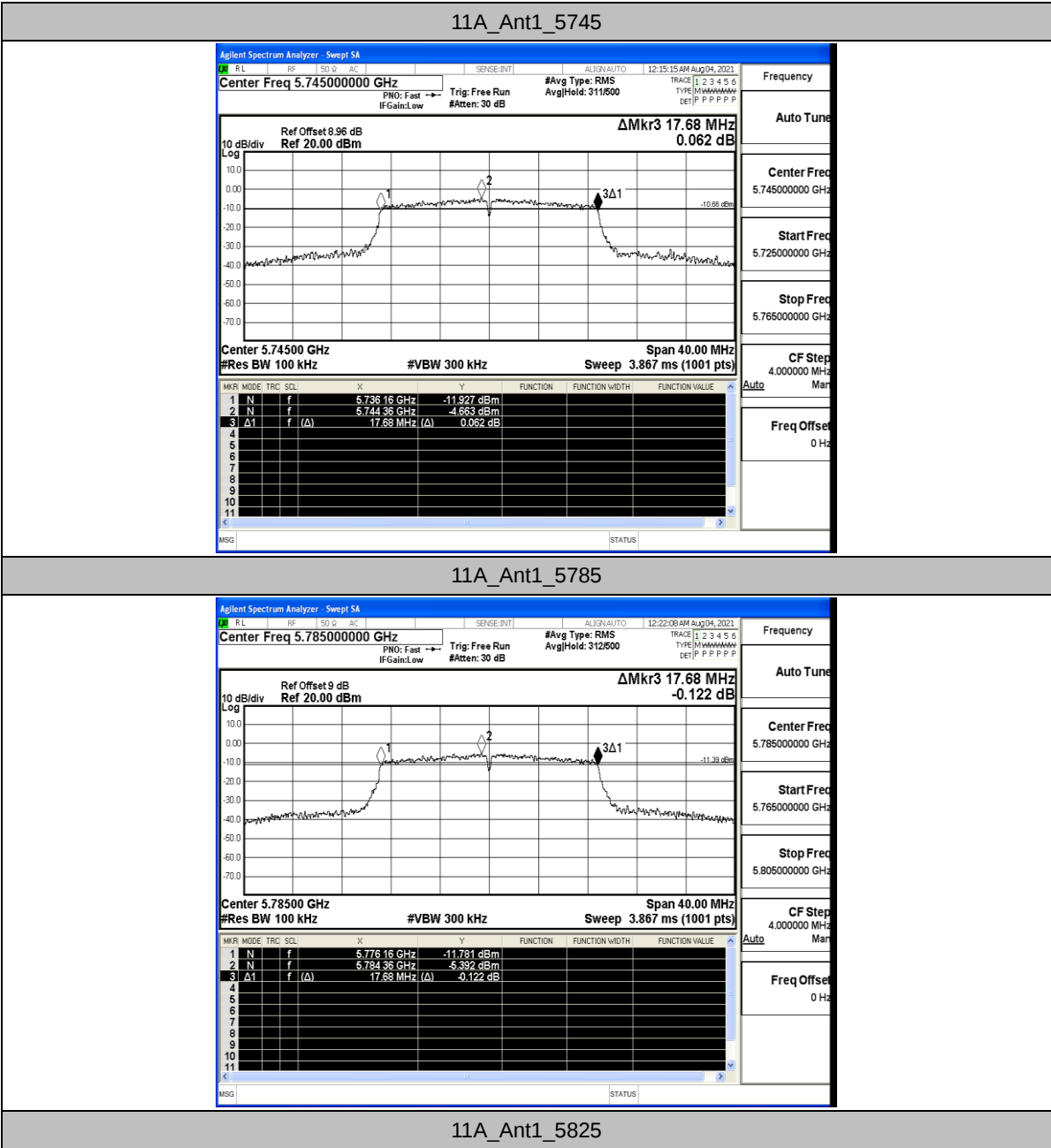
D.1 Min emission bandwidth

Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.680	5736.160	5753.840	0.5	PASS
		5785	17.680	5776.160	5793.840	0.5	PASS
		5825	17.680	5816.160	5833.840	0.5	PASS
11N20SISO	Ant1	5745	17.680	5736.160	5753.840	0.5	PASS
		5785	17.680	5776.160	5793.840	0.5	PASS
		5825	17.680	5816.160	5833.840	0.5	PASS
11N40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.480	5776.760	5813.240	0.5	PASS

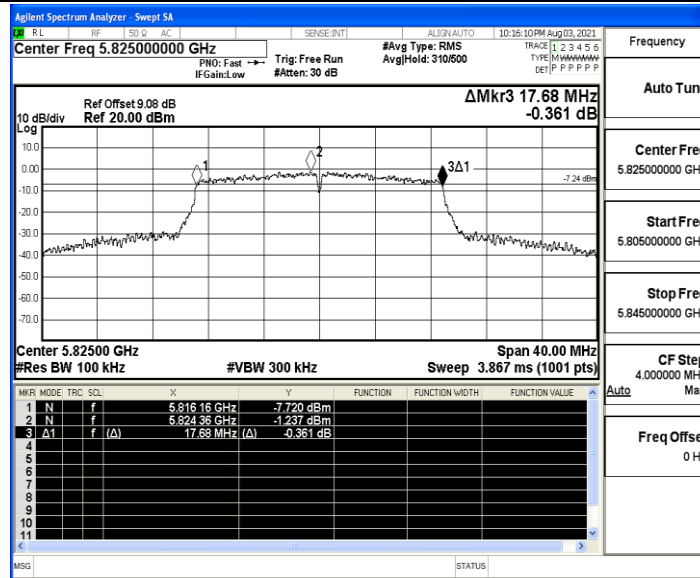


Test Graphs

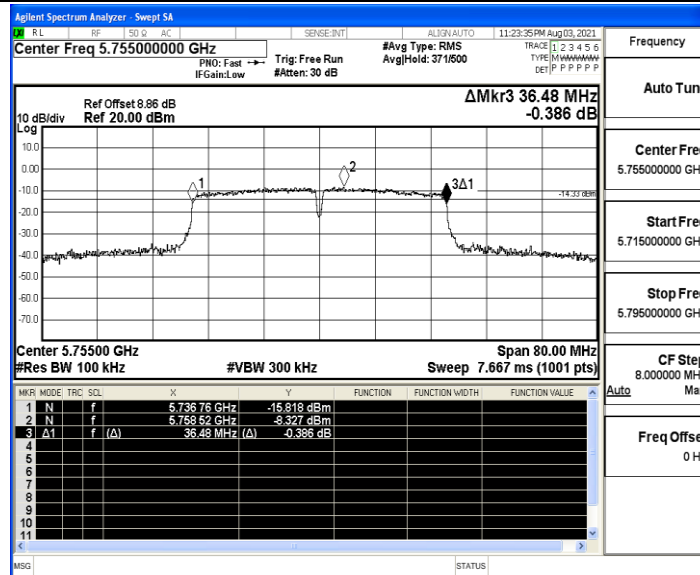




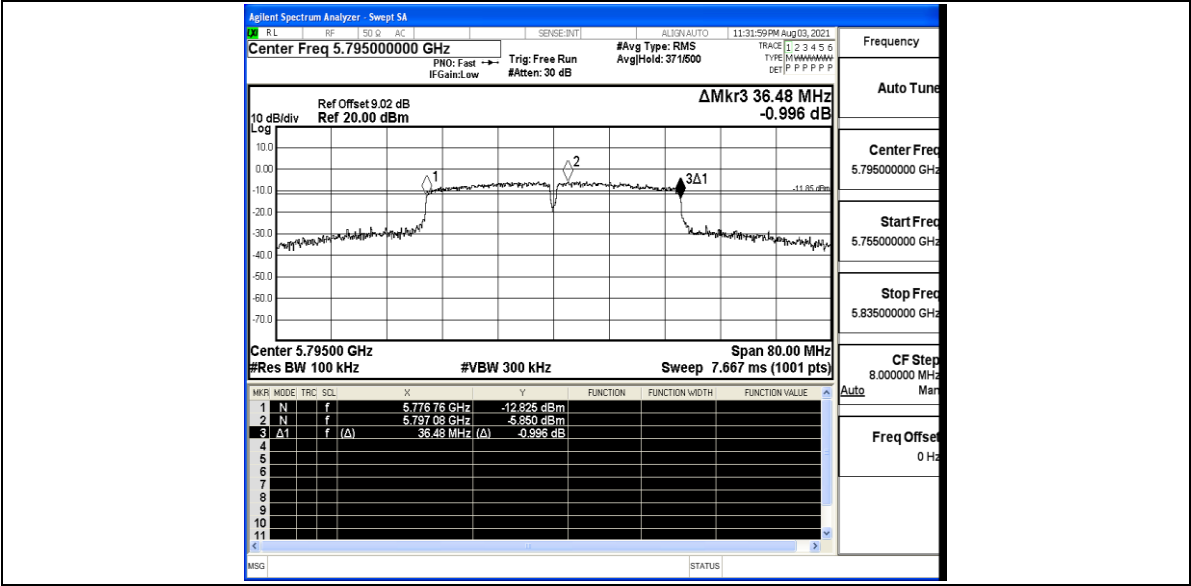
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795





D.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	11.69	≤30	PASS
		5785	11.75	≤30	PASS
		5825	11.90	≤30	PASS
11N20SISO	Ant1	5745	11.98	≤30	PASS
		5785	12.20	≤30	PASS
		5825	12.05	≤30	PASS
11N40SISO	Ant1	5755	10.75	≤30	PASS
		5795	11.00	≤30	PASS

Note: The Duty Cycle Factor is compensated in the graph.



D.3 Maximum power spectral density

Test Result

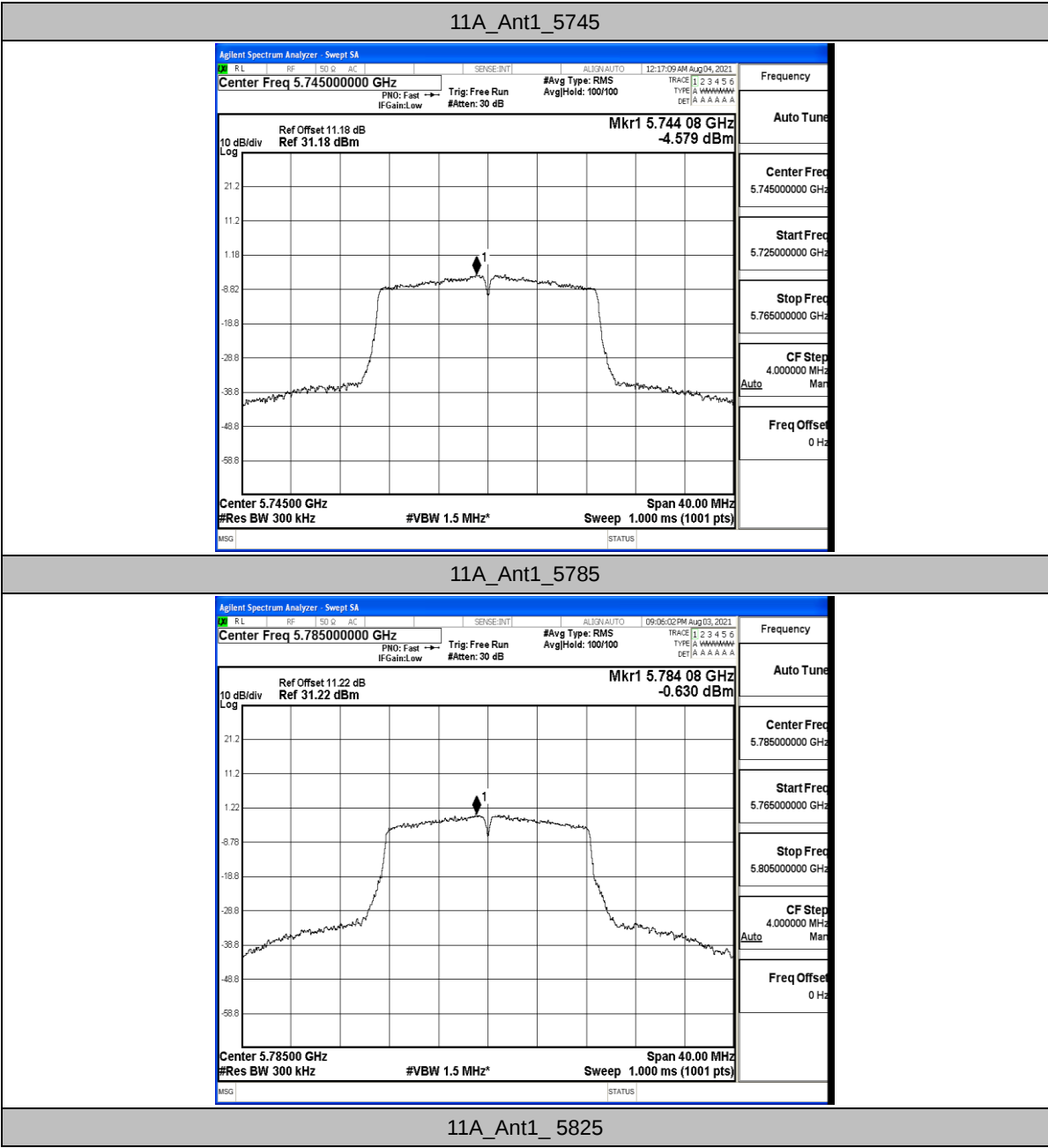
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-4.58	≤30	PASS
		5785	-0.63	≤30	PASS
		5825	-0.87	≤30	PASS
11N20SISO	Ant1	5745	-1.21	≤30	PASS
		5785	-0.97	≤30	PASS
		5825	-1.19	≤30	PASS
11N40SISO	Ant1	5755	-6.23	≤30	PASS
		5795	-5.9	≤30	PASS

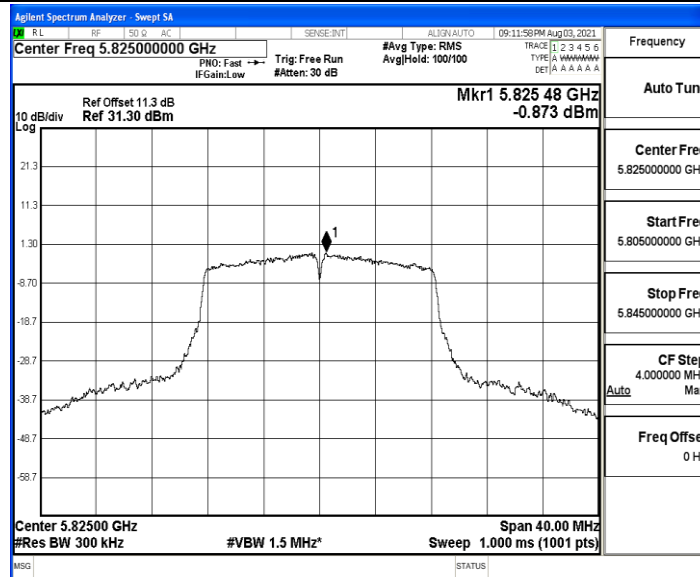
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

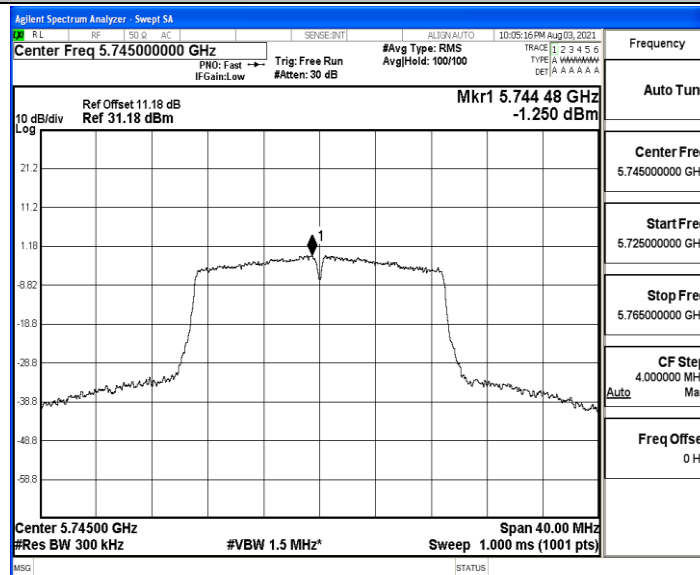


Test Graphs

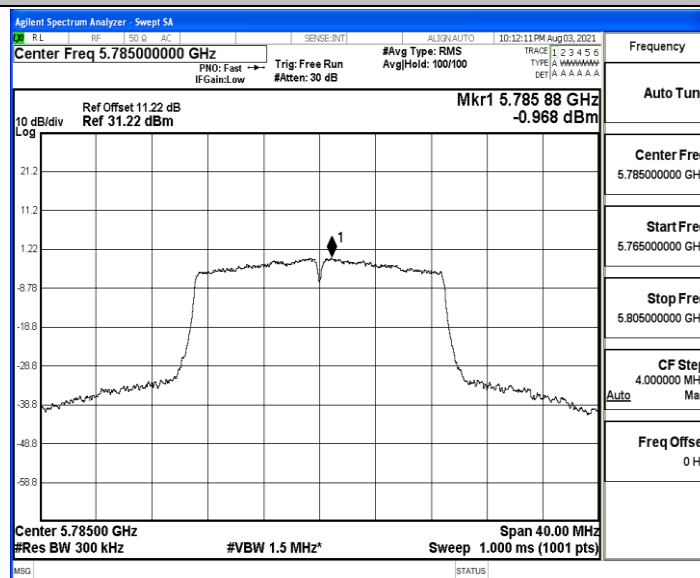




11N20SISO_Ant1_5745

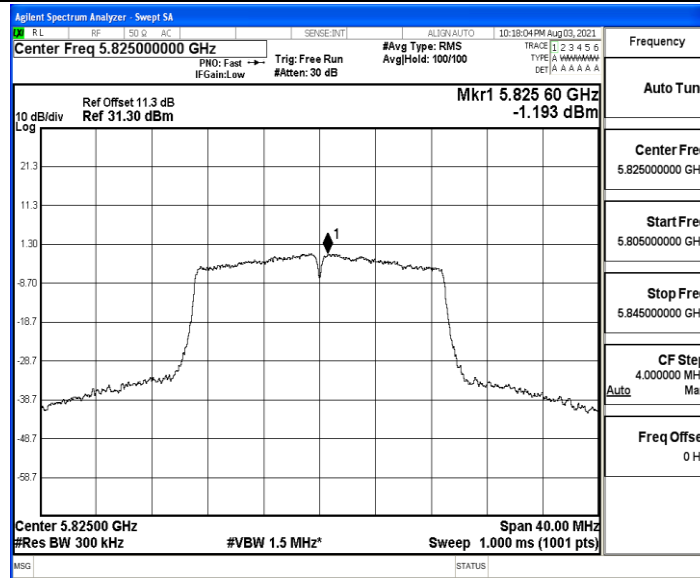


11N20SISO_Ant1_5785

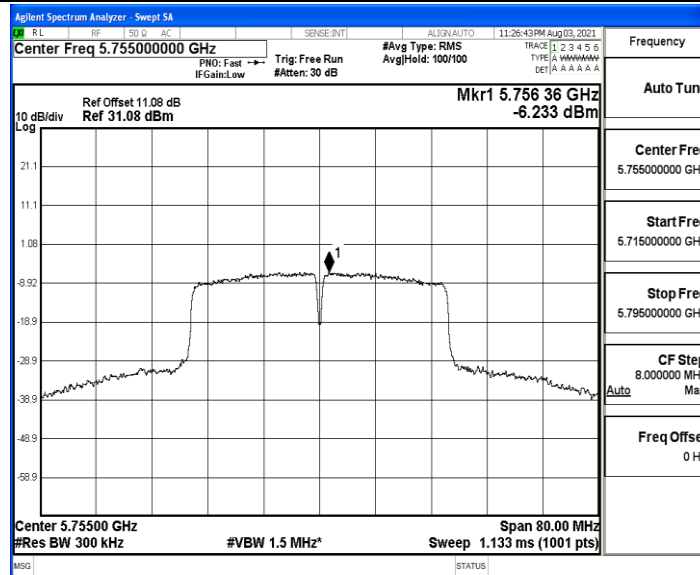




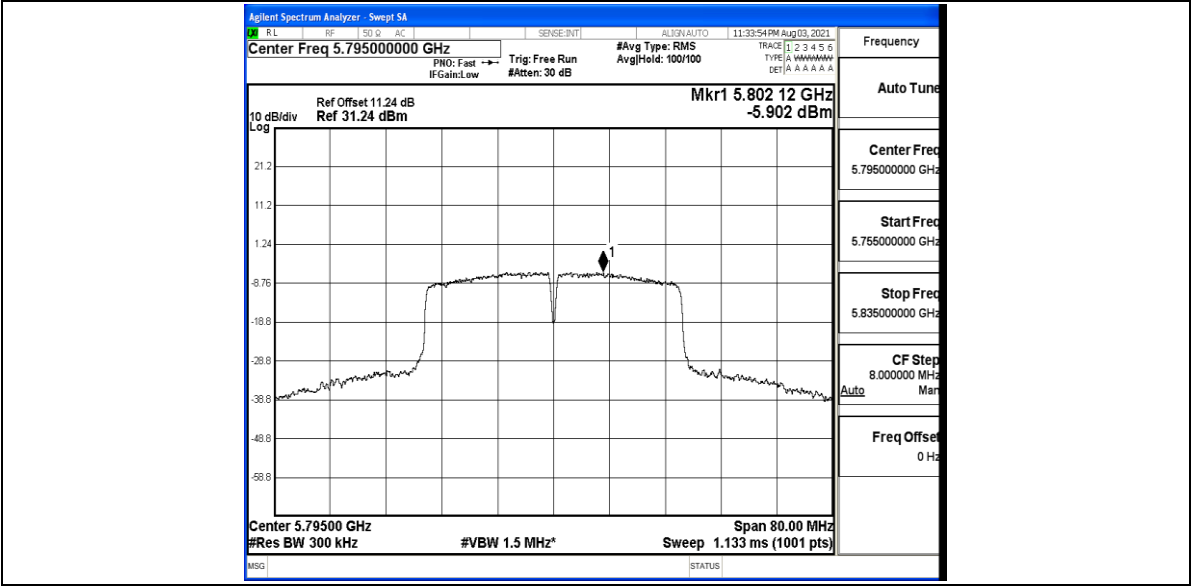
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795





D.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-41.368	≤-27.00	---	---	PASS
				Peak	5700.000	-40.31	≤10.00	---	---	PASS
				Peak	5720.000	-35.25	≤15.60	---	---	PASS
				Peak	5725.000	-29.78	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-36.845	≤15.60	---	---	PASS
				Peak	5855.000	-38.48	≤27.00	---	---	PASS
				Peak	5875.000	-41.87	≤15.60	---	---	PASS
				Peak	5925.000	-41.45	≤10.00	---	---	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-41.929	≤-27.00	---	---	PASS
				Peak	5700.000	-40.19	≤10.00	---	---	PASS
				Peak	5720.000	-34.98	≤15.60	---	---	PASS
				Peak	5725.000	-29.48	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-37.558	≤15.60	---	---	PASS
				Peak	5855.000	-41.71	≤27.00	---	---	PASS
				Peak	5875.000	-40.22	≤15.60	---	---	PASS
				Peak	5925.000	-41.81	≤10.00	---	---	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-43.483	≤-27.00	---	---	PASS
				Peak	5700.000	-33.6	≤10.00	---	---	PASS
				Peak	5720.000	-21.9	≤15.60	---	---	PASS
				Peak	5725.000	-20.65	≤27.00	---	---	PASS
		High	5795	Peak	5850.000	-35.898	≤15.60	---	---	PASS
				Peak	5855.000	-36.5	≤27.00	---	---	PASS
				Peak	5875.000	-38.65	≤15.60	---	---	PASS
				Peak	5925.000	-42.12	≤10.00	---	---	PASS

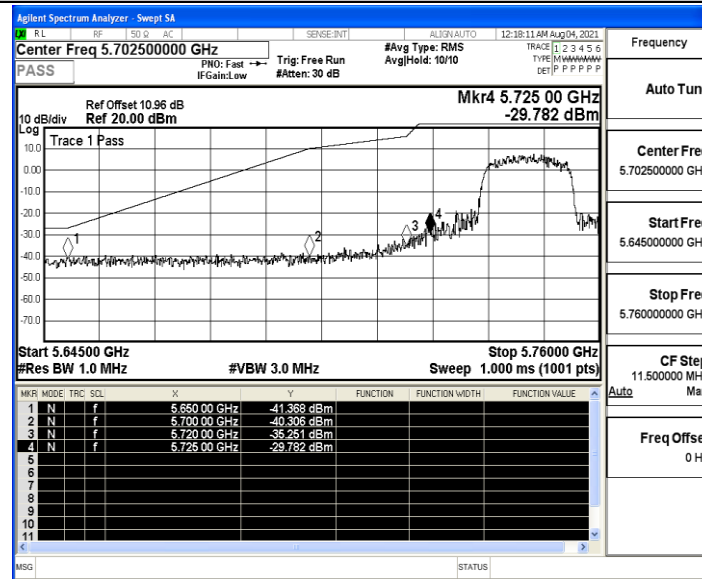
Note:

1. The Antenna Gain is compensated in the graph.
2. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

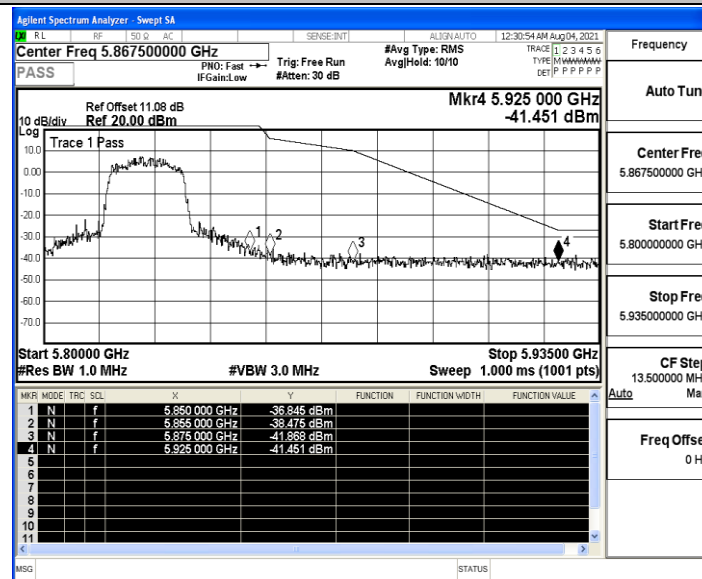


Test Graphs

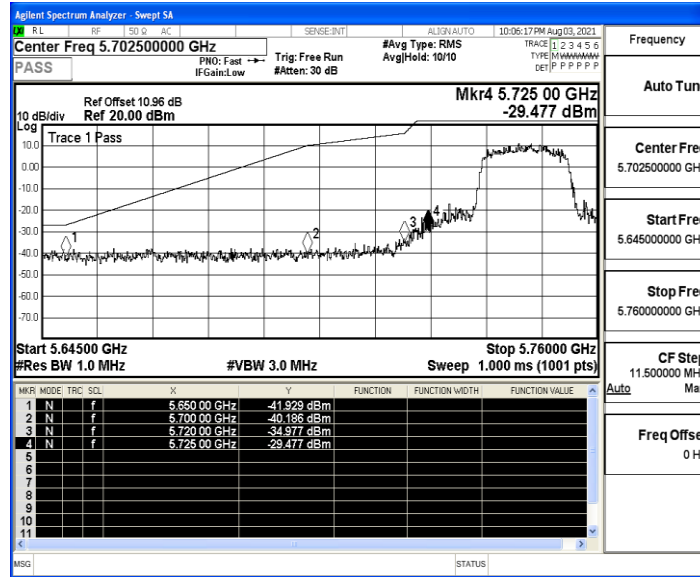
11A_Ant1_Low_5745_Peak



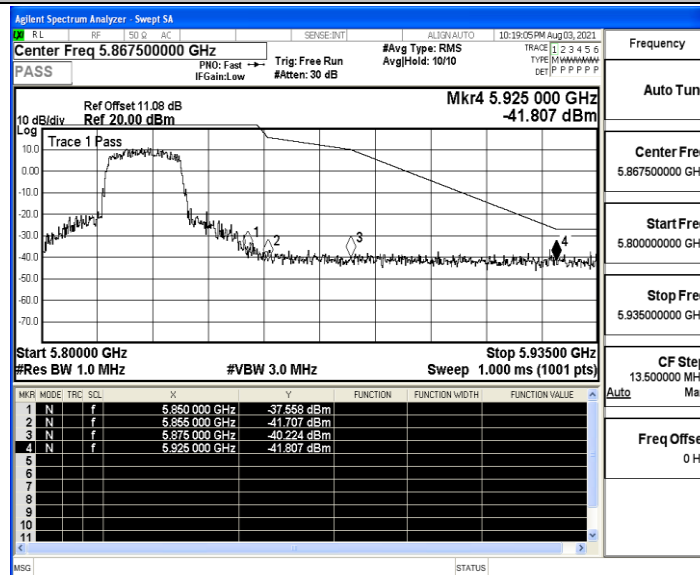
11A_Ant1_High_5825_Peak



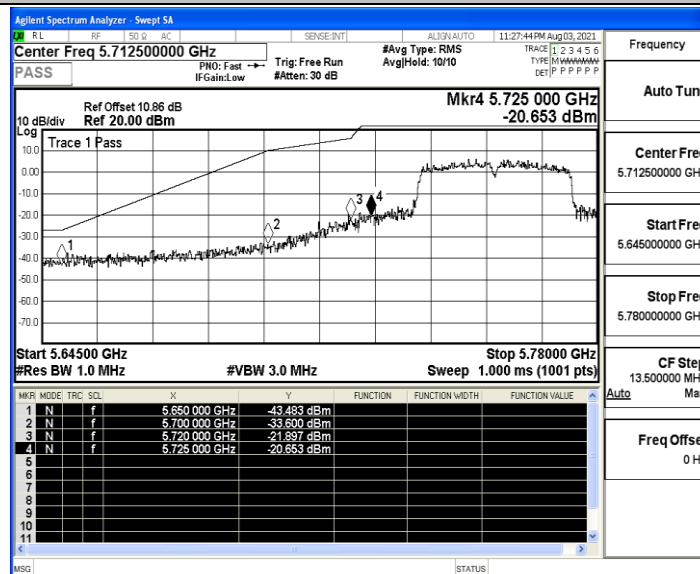
11N20SISO_Ant1_Low_5745_Peak

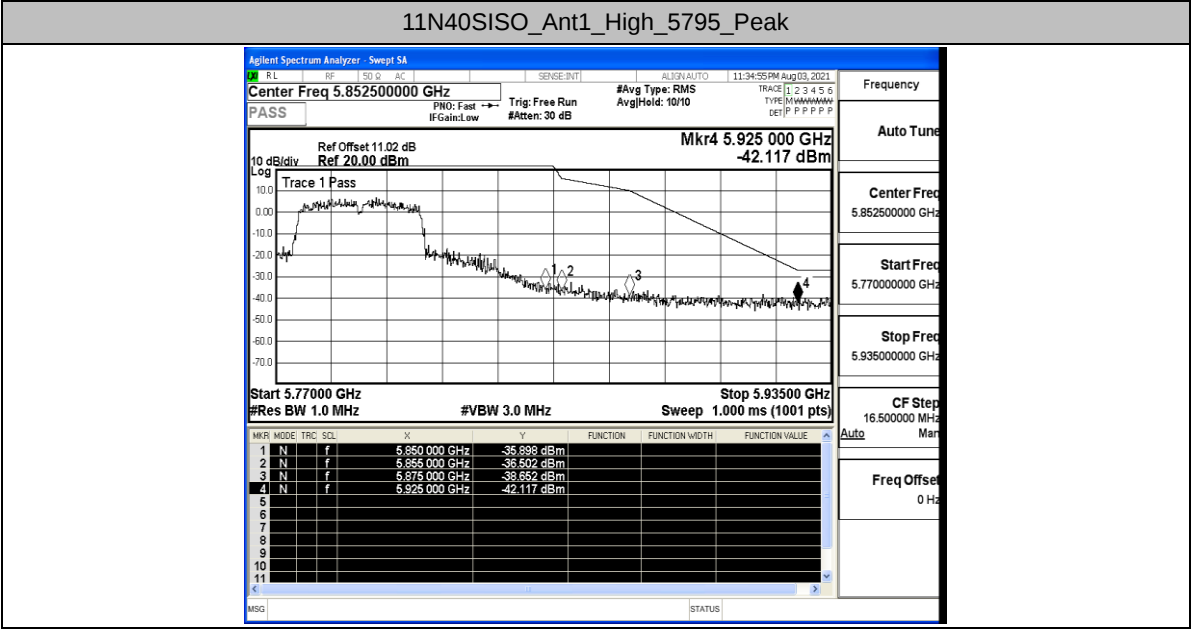


11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak







D.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	-8000	-1.392515	20	PASS
			LV	NT	-8000	-1.392515	20	PASS
			HV	NT	-7000	-1.218451	20	PASS
		5785	NV	NT	-8000	-1.382887	20	PASS
			LV	NT	-8000	-1.382887	20	PASS
			HV	NT	-8000	-1.382887	20	PASS
		5825	NV	NT	-9000	-1.545064	20	PASS
			LV	NT	-9000	-1.545064	20	PASS
			HV	NT	-9000	-1.545064	20	PASS
11N20SISO	Ant1	5745	NV	NT	-12000	-2.088773	20	PASS
			LV	NT	-12000	-2.088773	20	PASS
			HV	NT	-12000	-2.088773	20	PASS
		5785	NV	NT	-12000	-2.07433	20	PASS
			LV	NT	-12000	-2.07433	20	PASS
			HV	NT	-11000	-1.901469	20	PASS
		5825	NV	NT	-12000	-2.060086	20	PASS
			LV	NT	-12000	-2.060086	20	PASS
			HV	NT	-11000	-1.888412	20	PASS
11N40SISO	Ant1	5755	NV	NT	-7000	-1.216334	20	PASS
			LV	NT	-7000	-1.216334	20	PASS
			HV	NT	-6000	-1.042572	20	PASS
		5795	NV	NT	-8000	-1.3805	20	PASS
			LV	NT	-8000	-1.3805	20	PASS
			HV	NT	-7000	-1.207938	20	PASS



Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	-30	-7000	-1.218451	20	PASS
			NV	-20	-7000	-1.218451	20	PASS
			NV	-10	-7000	-1.218451	20	PASS
			NV	0	-7000	-1.218451	20	PASS
			NV	10	-7000	-1.218451	20	PASS
			NV	20	-7000	-1.218451	20	PASS
			NV	30	-7000	-1.218451	20	PASS
			NV	40	-7000	-1.218451	20	PASS
			NV	50	-7000	-1.218451	20	PASS
		5785	NV	-30	-8000	-1.382887	20	PASS
			NV	-20	-7000	-1.210026	20	PASS
			NV	-10	-7000	-1.210026	20	PASS
			NV	0	-7000	-1.210026	20	PASS
			NV	10	-7000	-1.210026	20	PASS
			NV	20	-7000	-1.210026	20	PASS
			NV	30	-7000	-1.210026	20	PASS
			NV	40	-7000	-1.210026	20	PASS
			NV	50	-7000	-1.210026	20	PASS
		5825	NV	-30	-9000	-1.545064	20	PASS
			NV	-20	-8000	-1.373391	20	PASS
			NV	-10	-9000	-1.545064	20	PASS
			NV	0	-9000	-1.545064	20	PASS
			NV	10	-9000	-1.545064	20	PASS
			NV	20	-8000	-1.373391	20	PASS
			NV	30	-9000	-1.545064	20	PASS
			NV	40	-8000	-1.373391	20	PASS
			NV	50	-8000	-1.373391	20	PASS
11N20SISO	Ant1	5745	NV	-30	-12000	-2.088773	20	PASS
			NV	-20	-12000	-2.088773	20	PASS
			NV	-10	-12000	-2.088773	20	PASS
			NV	0	-11000	-1.914708	20	PASS
			NV	10	-11000	-1.914708	20	PASS
			NV	20	-11000	-1.914708	20	PASS
			NV	30	-11000	-1.914708	20	PASS
			NV	40	-11000	-1.914708	20	PASS
			NV	50	-11000	-1.914708	20	PASS
		5785	NV	-30	-11000	-1.901469	20	PASS
			NV	-20	-11000	-1.901469	20	PASS
			NV	-10	-11000	-1.901469	20	PASS



			NV	0	-11000	-1.901469	20	PASS
			NV	10	-11000	-1.901469	20	PASS
			NV	20	-11000	-1.901469	20	PASS
			NV	30	-11000	-1.901469	20	PASS
			NV	40	-11000	-1.901469	20	PASS
			NV	50	-11000	-1.901469	20	PASS
		5825	NV	-30	-11000	-1.888412	20	PASS
			NV	-20	-11000	-1.888412	20	PASS
			NV	-10	-11000	-1.888412	20	PASS
			NV	0	-11000	-1.888412	20	PASS
			NV	10	-11000	-1.888412	20	PASS
			NV	20	-11000	-1.888412	20	PASS
			NV	30	-11000	-1.888412	20	PASS
			NV	40	-11000	-1.888412	20	PASS
			NV	50	-11000	-1.888412	20	PASS
11N40SIS O	Ant1	5755	NV	-30	-6000	-1.042572	20	PASS
			NV	-20	-6000	-1.042572	20	PASS
			NV	-10	-6000	-1.042572	20	PASS
			NV	0	-6000	-1.042572	20	PASS
			NV	10	-6000	-1.042572	20	PASS
			NV	20	-6000	-1.042572	20	PASS
			NV	30	-6000	-1.042572	20	PASS
			NV	40	-6000	-1.042572	20	PASS
			NV	50	-6000	-1.042572	20	PASS
		5795	NV	-30	-7000	-1.207938	20	PASS
			NV	-20	-7000	-1.207938	20	PASS
			NV	-10	-7000	-1.207938	20	PASS
			NV	0	-7000	-1.207938	20	PASS
			NV	10	-7000	-1.207938	20	PASS
			NV	20	-7000	-1.207938	20	PASS
			NV	30	-6000	-1.035375	20	PASS
			NV	40	-7000	-1.207938	20	PASS
			NV	50	-6000	-1.035375	20	PASS



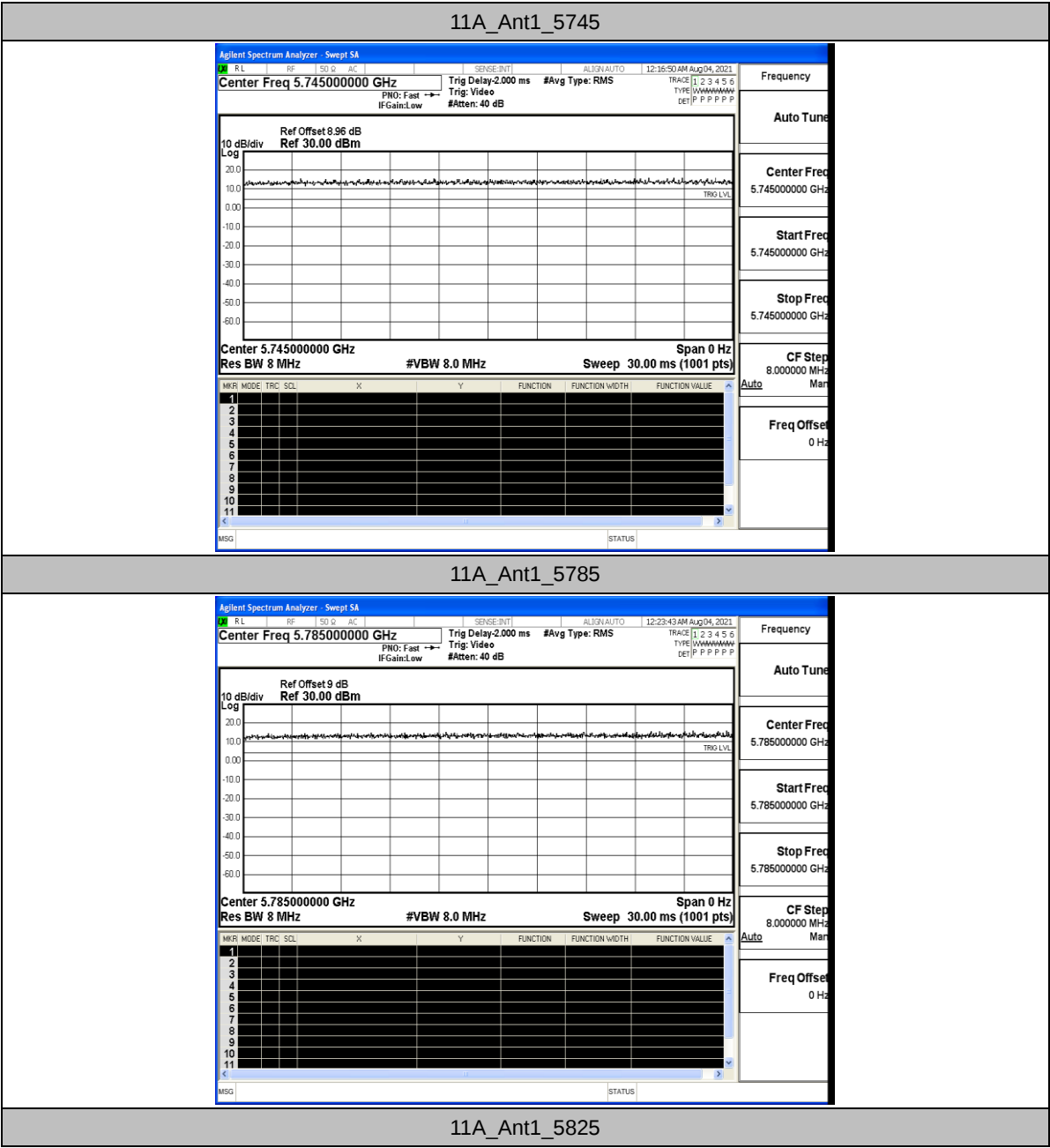
D.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5745	30.00	30.00	100.00	---	PASS
		5785	30.00	30.00	100.00	---	PASS
		5825	30.00	30.00	100.00	---	PASS
11N20SISO	Ant1	5745	30.00	30.00	100.00	---	PASS
		5785	30.00	30.00	100.00	---	PASS
		5825	30.00	30.00	100.00	---	PASS
11N40SISO	Ant1	5755	30.00	30.00	100.00	---	PASS
		5795	30.00	30.00	100.00	---	PASS



Test Graphs



Frequency

Auto Tune

Center Freq 5.745000000 GHz

Start Freq 5.745000000 GHz

Stop Freq 5.745000000 GHz

CF Step 8.0000000 MHz

Freq Offset 0 Hz

11A_Ant1_5785

Agilent Spectrum Analyzer - Swept SA

RL

RF

SO G

AC

SENSE INT1

ALIGN AUTO

12:23:43 AM Aug04, 2021

Center Freq 5.785000000 GHz

Trig Delay: 2.000 ms

#Avg Type: RMS

Trig: Video

IF Gain: Low

#Atten: 40 dB

TRAC 1 2 3 4 5 6

TYPE: WWWWMMW

DET: P P P P P P

Ref Offset 9 dB

Ref 30.00 dBm

10 dB/div

Log

20.0

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

TRIG LVL

Center 5.785000000 GHz

Res BW 8 MHz

#VBW 8.0 MHz

Span 0 Hz

Sweep 30.00 ms (1001 pts)

MNR

MODE

TRC

SCL

X

Y

FUNCTION

FUNCTION WIDTH

FUNCTION VALUE

1

2

3

4

5

6

7

8

9

10

11

MSG

STATUS

Frequency

Auto Tune

Center Freq 5.785000000 GHz

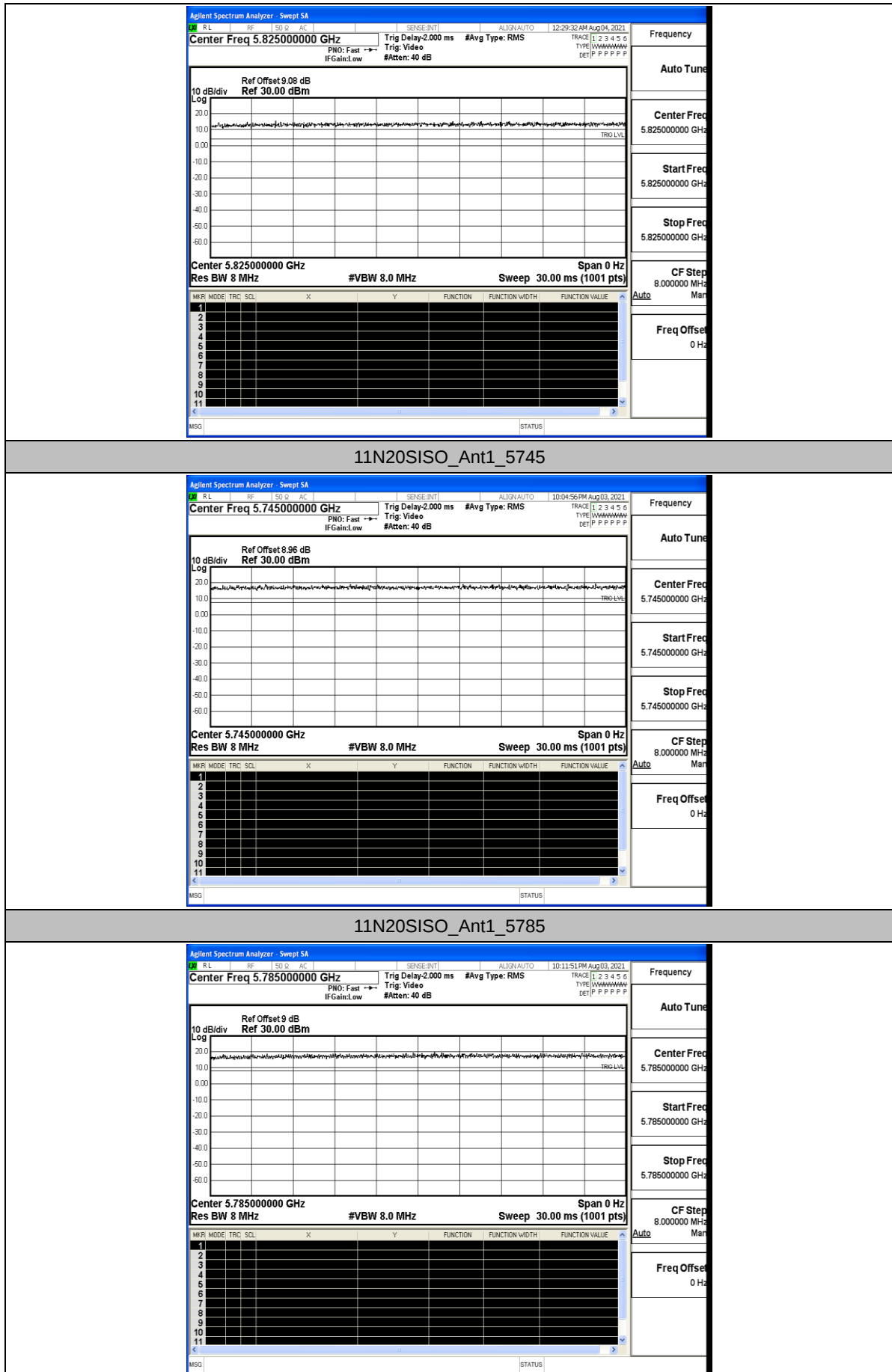
Start Freq 5.785000000 GHz

Stop Freq 5.785000000 GHz

CF Step 8.0000000 MHz

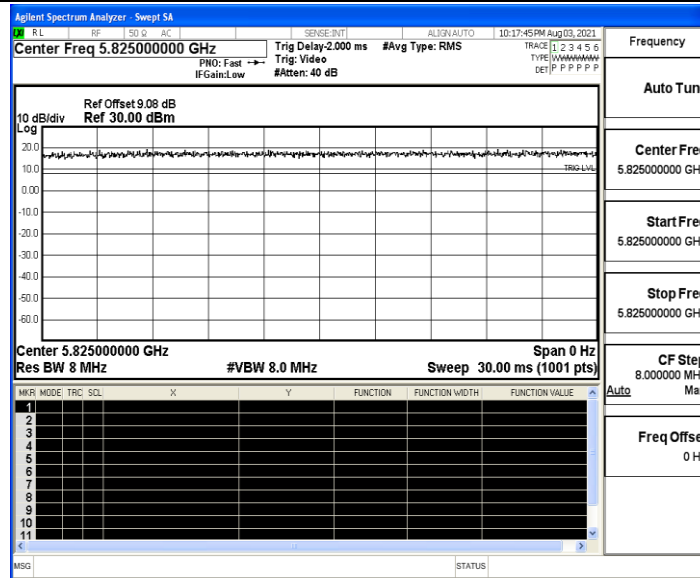
Freq Offset 0 Hz

11A_Ant1_5825

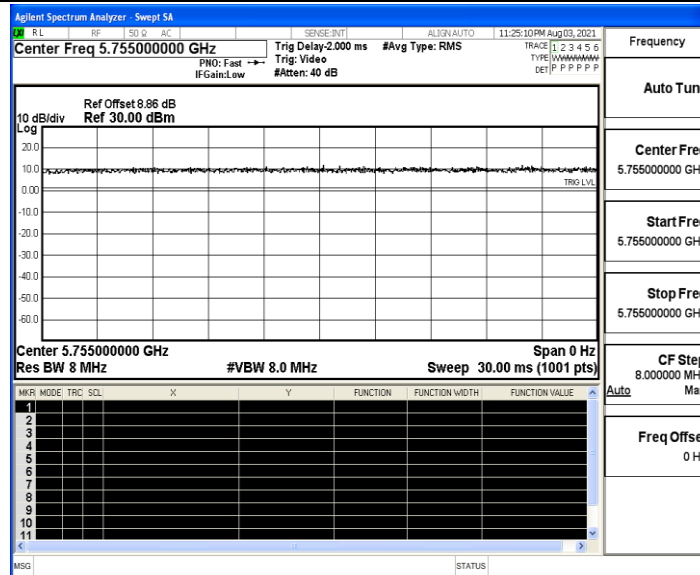




11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

