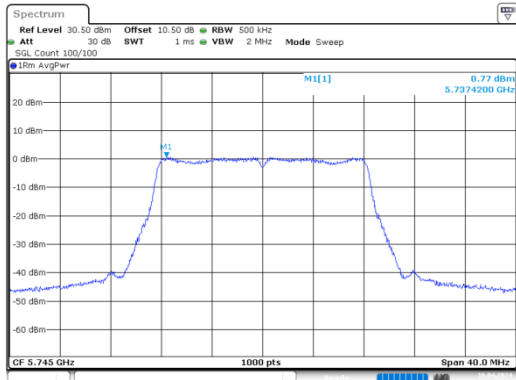


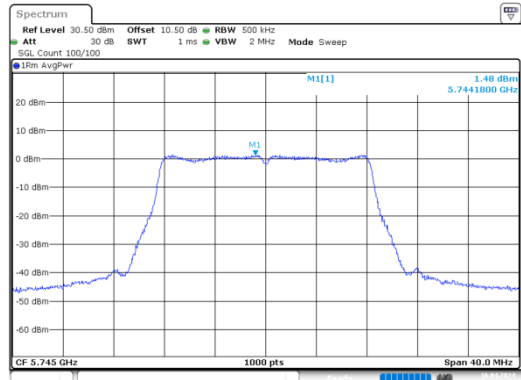
5725-5850 MHz:

a\_5745MHz\_Chain 0



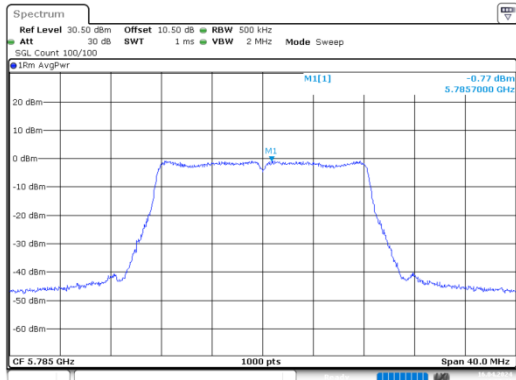
ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 11:56:59

a\_5745MHz\_Chain 1



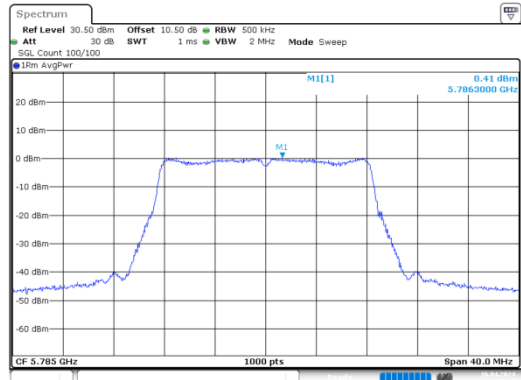
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Date: 16.APR.2024 13:48:14

a\_5785MHz\_Chain 0



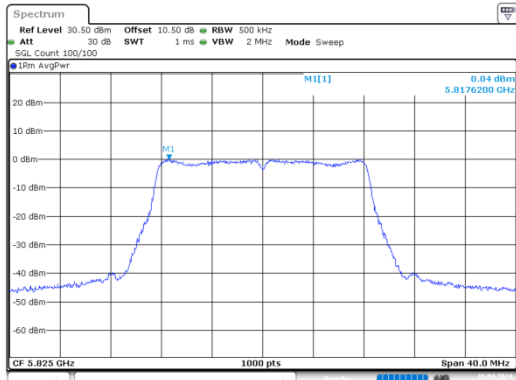
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Date: 16.APR.2024 13:07:42

a\_5785MHz\_Chain 1



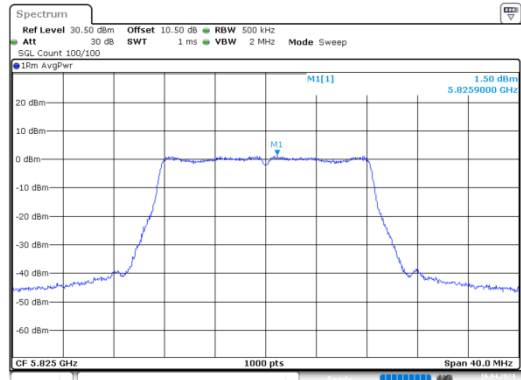
ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 13:49:27

a\_5825MHz\_Chain 0



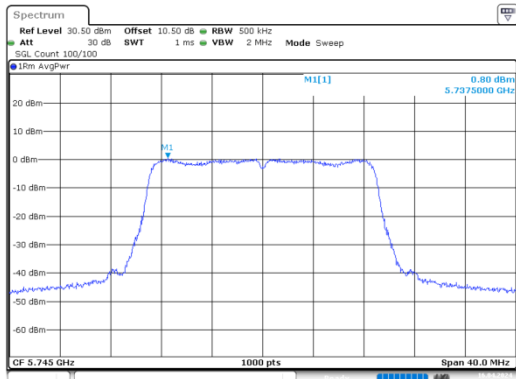
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Date: 16.APR.2024 13:09:16

a\_5825MHz\_Chain 1



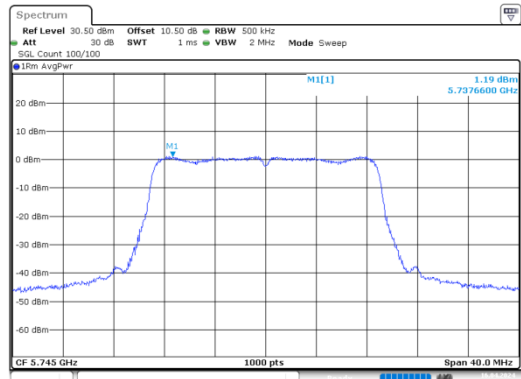
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Date: 16.APR.2024 13:50:32

n20\_5745MHz\_Chain 0



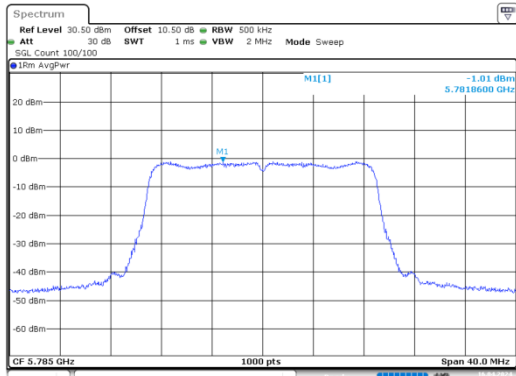
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:10:40

n20\_5745MHz\_Chain 1



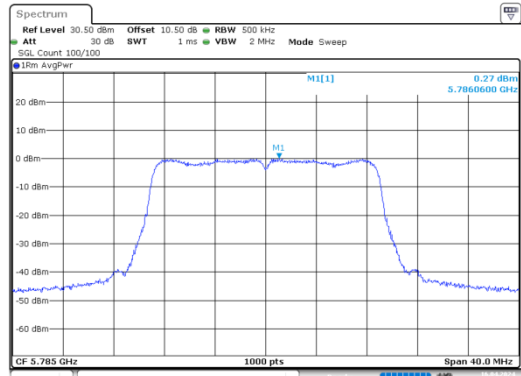
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:11:37

n20\_5785MHz\_Chain 0



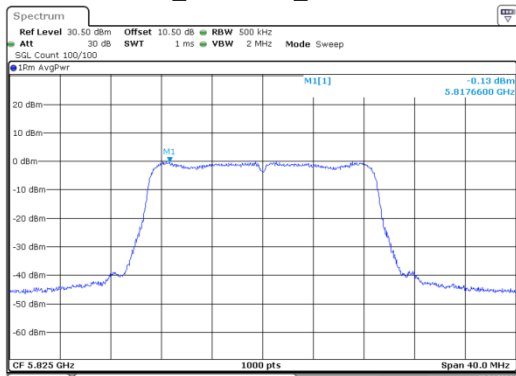
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:11:05

n20\_5785MHz\_Chain 1



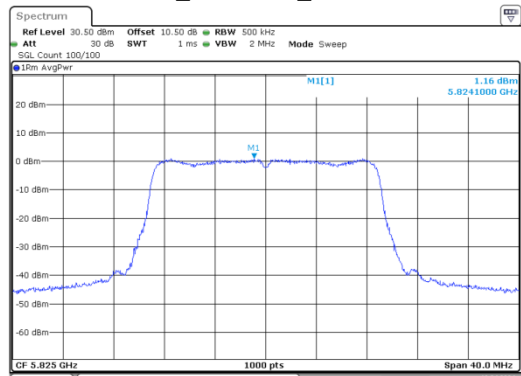
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:12:50

n20\_5825MHz\_Chain 0



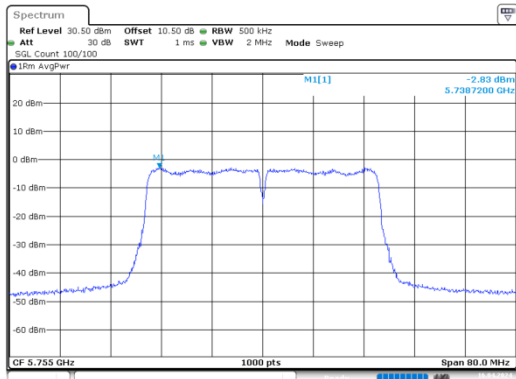
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Date: 16.APR.2024 13:11:26

n20\_5825MHz\_Chain 1



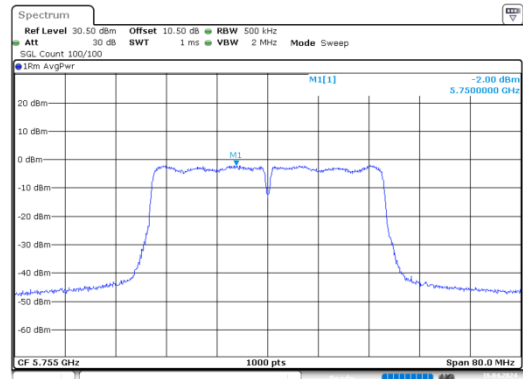
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:15:06

n40\_5755MHz\_Chain 0



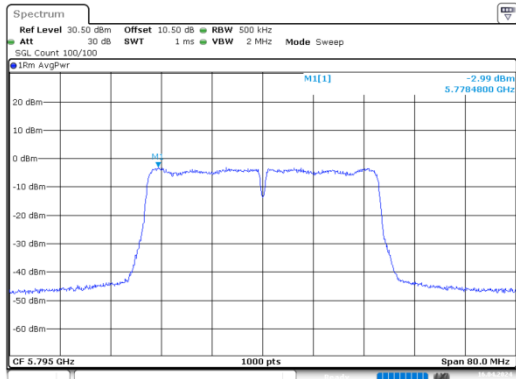
ProjectNo.:DG2240325-15384E-RF Testeri:ALice Tan  
Date: 16.APR.2024 13:14:38

n40\_5755MHz\_Chain 1



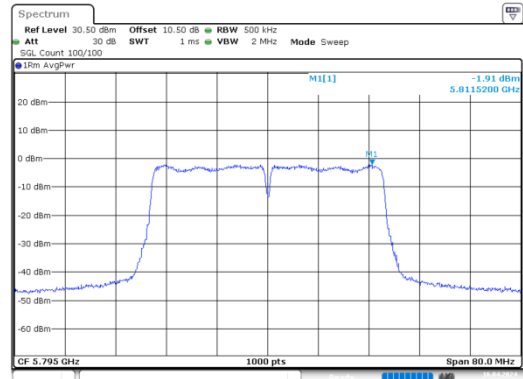
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n40\_5795MHz\_Chain 0



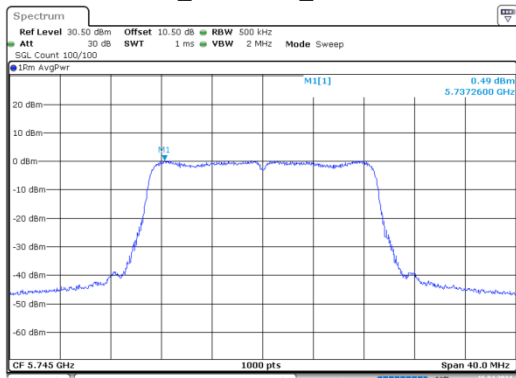
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Date: 16.APR.2024 13:15:49

n40\_5795MHz\_Chain 1



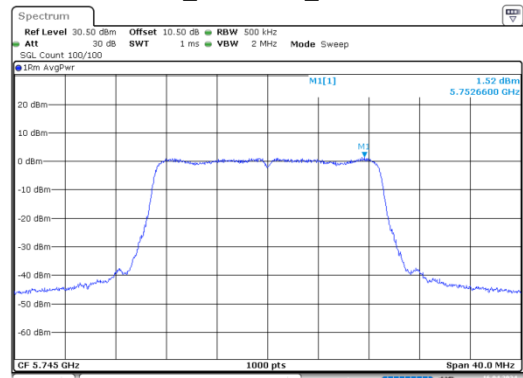
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Date: 16.APR.2024 13:15:10

ac20\_5745MHz\_Chain 0



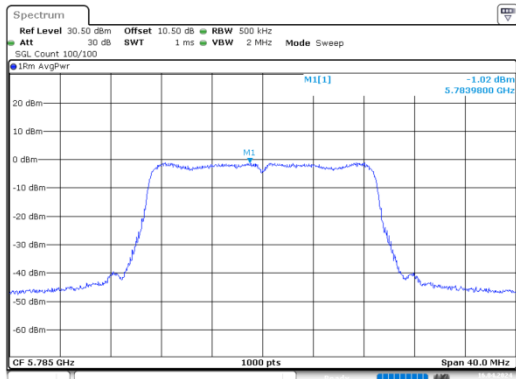
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Date: 16.APR.2024 13:17:08

ac20\_5745MHz\_Chain 1



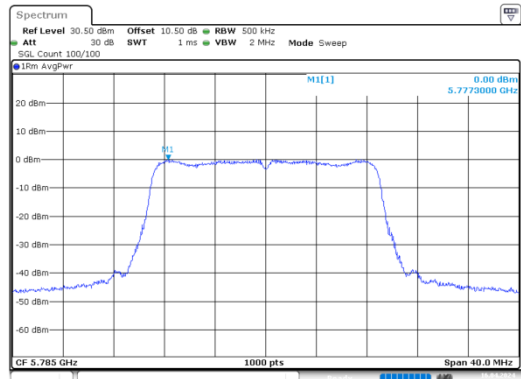
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Date: 16.APR.2024 13:17:11

ac20\_5785MHz\_Chain 0



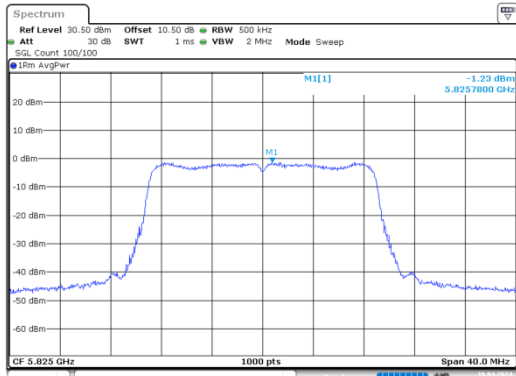
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Date: 16.APR.2024 13:18:34

ac20\_5785MHz\_Chain 1



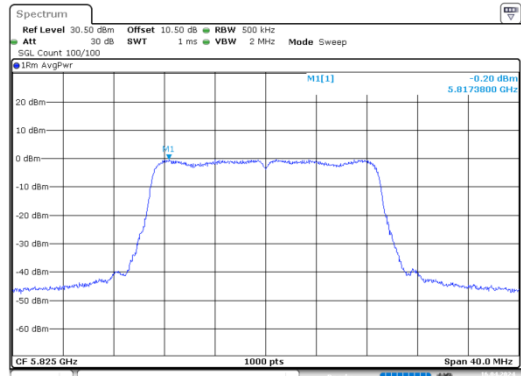
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Date: 16.APR.2024 13:19:43

ac20\_5825MHz\_Chain 0



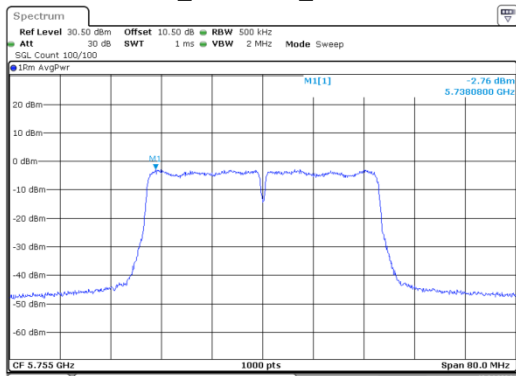
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ac20\_5825MHz\_Chain 1



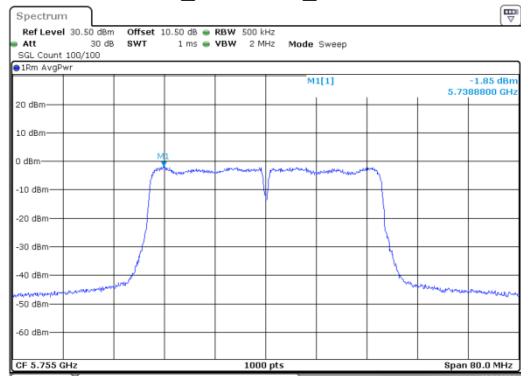
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Date: 16.APR.2024 13:19:45

ac40\_5755MHz\_Chain 0



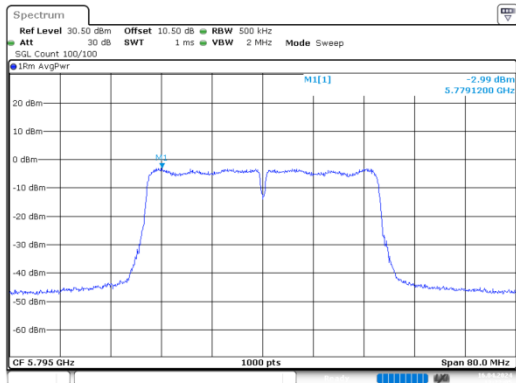
ProjectNo.:DG2240325-15384E-RF Testeri: Alice Tan  
Date: 16.APR.2024 13:21:01

ac40\_5755MHz\_Chain 1



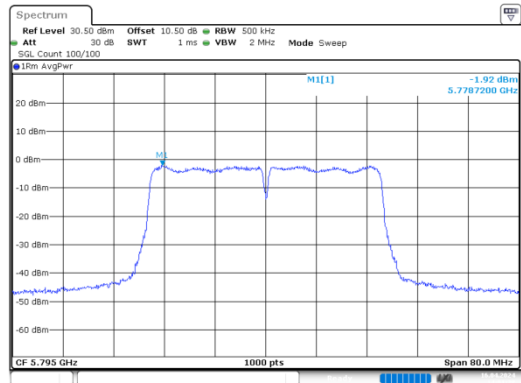
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Date: 16.APR.2024 14:09:43

ac40\_5795MHz\_Chain 0



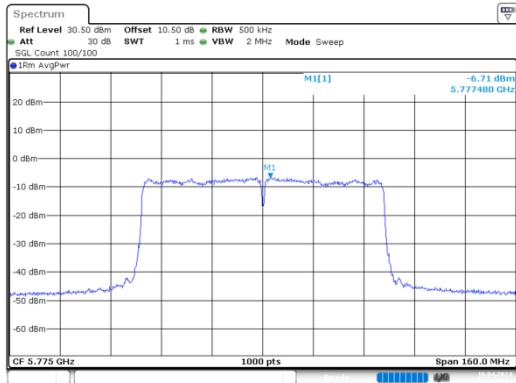
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Date: 16.APR.2024 13:22:05

ac40\_5795MHz\_Chain 1



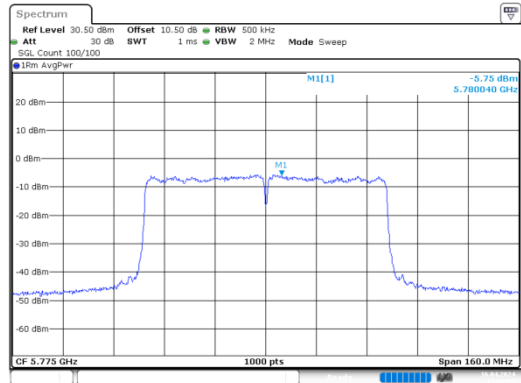
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Date: 16.APR.2024 14:01:38

ac80\_5775MHz\_Chain 0



ProjectNo.:DG2240325-15384E-RF Testeri:Alice Tan  
Date: 16.APR.2024 13:23:25

ac80\_5775MHz\_Chain 1



ProjectNo.:DG2240325-15384E-RF Testeri:Alice Tan  
Date: 16.APR.2024 13:26:59

**5.7 Duty Cycle**

<b>Serial No.:</b>	2J55-4	<b>Test Date:</b>	2024/04/16
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Alice Tan	<b>Test Result:</b>	N/A

**Environmental Conditions:**

<b>Temperature:</b> (°C)	26.7	<b>Relative Humidity:</b> (%)	49	<b>ATM Pressure:</b> (kPa)	100.5
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101589	2023/10/18	2024/10/17
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM488	2023/09/10	2024/09/09

\* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**5125-5250 MHz**

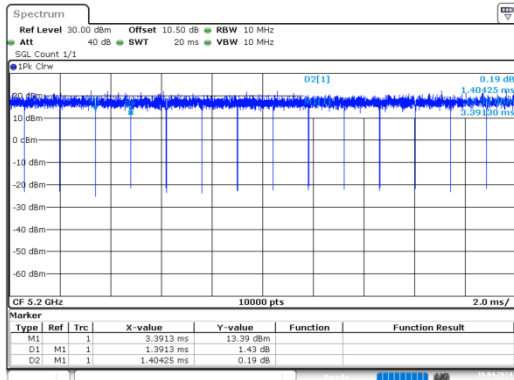
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty cycle Factor (dB)	VBW Setting (kHz)
802.11a	1.391	1.404	99.07	/	/	0.01
802.11n ht20	2.611	2.624	99.50	/	/	0.01
802.11n ht40	0.649	0.660	98.33	/	/	0.01
802.11ac vht20	1.306	1.316	99.24	/	/	0.01
802.11ac vht40	0.651	0.678	96.02	1536	0.18	2
802.11ac vht80	0.326	0.334	97.60	3067	0.11	5

**5725-5850 MHz**

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty cycle Factor (dB)	VBW Setting (kHz)
802.11a	1.392	1.404	99.15	/	/	0.01
802.11n ht20	2.604	2.624	99.24	/	/	0.01
802.11n ht40	0.649	0.660	98.33	/	/	0.01
802.11ac vht20	2.616	2.635	99.28	/	/	0.01
802.11ac vht40	0.650	0.664	97.89	1538	0.09	2
802.11ac vht80	0.325	0.334	97.31	3077	0.12	5

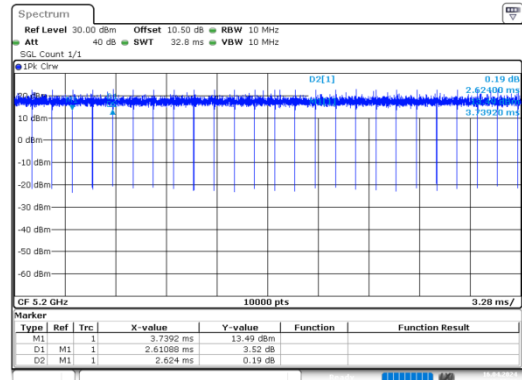
5125-5250 MHz

a\_5200MHz\_Chain 0



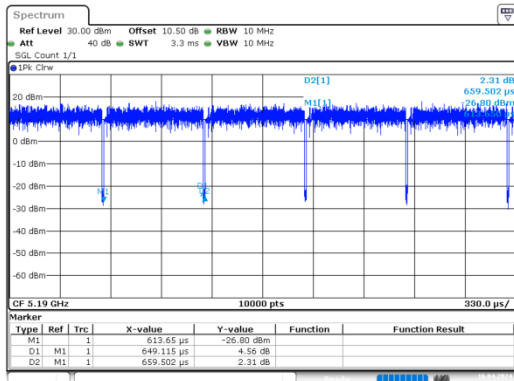
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Date: 16.APR.2024 10:37:21

n20\_5200MHz\_Chain 0



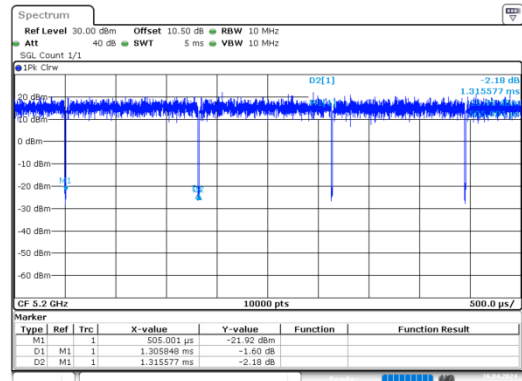
ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 10:38:40

n40\_5190MHz\_Chain 0



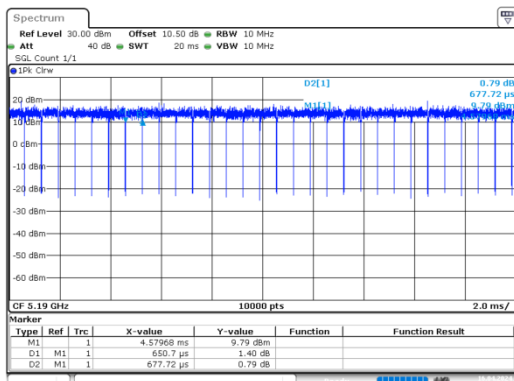
ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 10:40:56

ac20\_5200MHz\_Chain 0



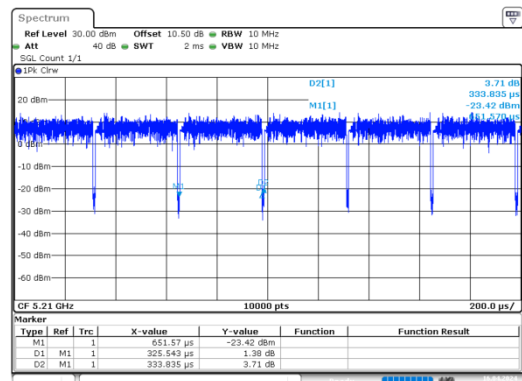
ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 10:43:59

ac40\_5190MHz\_Chain 0



ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 10:46:40

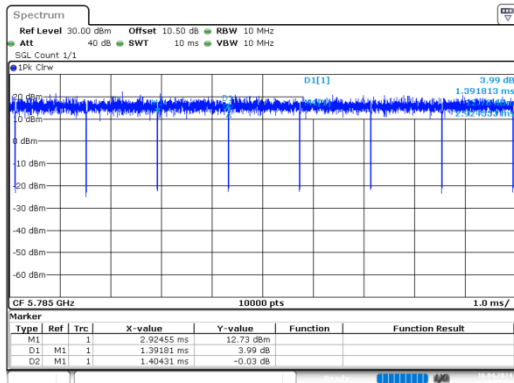
ac80\_5210MHz\_Chain 0



ProjectNo.:DG2240325-15384E-RF Tester: Alice Tan  
Date: 16.APR.2024 10:50:38

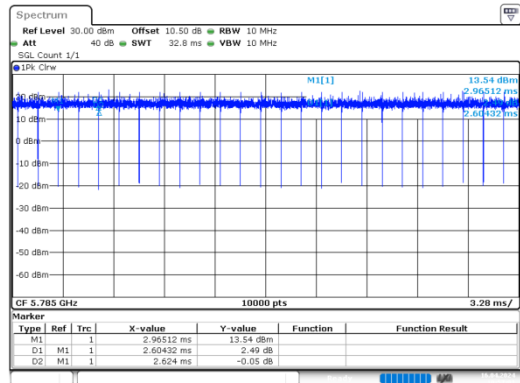
5725-5850 MHz

a\_5785MHz\_Chain 0



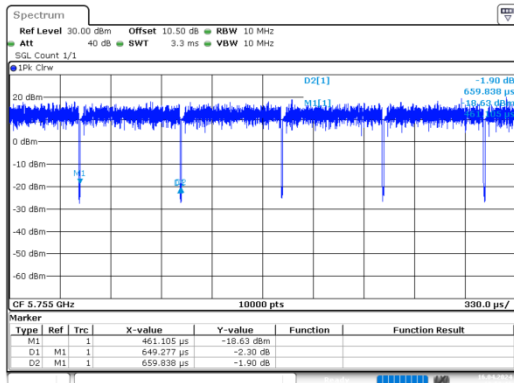
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Date: 16.APR.2024 10:55:36

n20\_5785MHz\_Chain 0



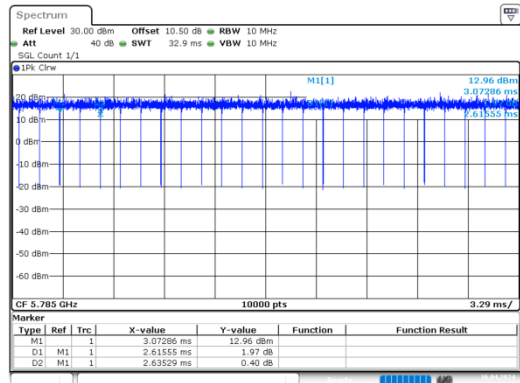
ProjectNo.:DG2240325-15384E-RF Testeri:Allice Tan  
Date: 16.APR.2024 10:57:01

n40\_5755MHz\_Chain 0



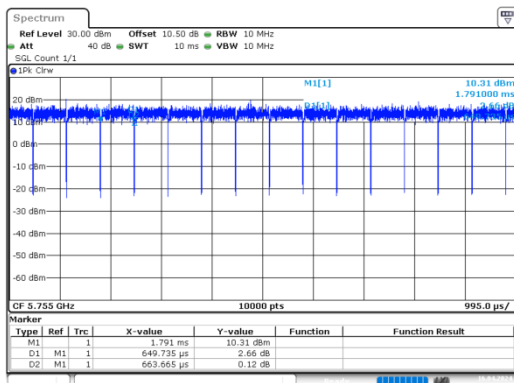
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Date: 16.APR.2024 10:59:17

ac20\_5785MHz\_Chain 0



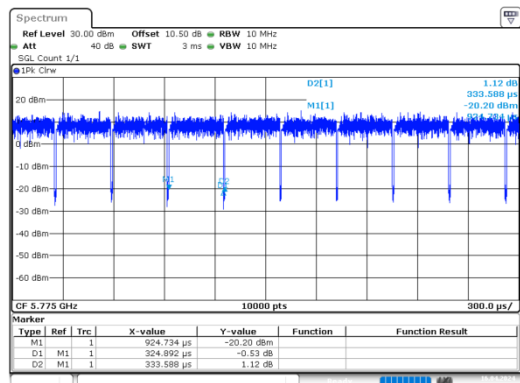
ProjectNo.:DG2240325-15384E-RF Testeri:Allice Tan  
Date: 16.APR.2024 11:00:49

ac40\_5755MHz\_Chain 0



ProjectNo.:DG2240325-15384E-RF Testeri:Allice Tan  
Date: 16.APR.2024 11:02:09

ac80\_5775MHz\_Chain 0



ProjectNo.:DG2240325-15384E-RF Testeri:Allice Tan  
Date: 16.APR.2024 11:04:02



## **APPENDIX A - EUT PHOTOGRAPHS**

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Please refer to the attachment DG2240325-15384E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and DG2240325-15384E-RF-INP EUT INTERNAL PHOTOGRAPHS.

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## **APPENDIX B - TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment DG2240325-15384E-RF-00B-TSP TEST SETUP PHOTOGRAPHS.

## APPENDIX C - RF EXPOSURE EVALUATION

### Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission’s guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
<b>Frequency Range (MHz)</b>	<b>Electric Field Strength (V/m)</b>	<b>Magnetic Field Strength (A/m)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>Averaging Time (minutes)</b>
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

### Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**Calculated Data:**

Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
	(dBi)	(numeric)	(dBm)	(mW)			
2412-2462	3.07	2.03	30.00	1000.00	20.00	0.40	1.0
5150-5250	4.10	2.57	17.00	50.12	20.00	0.03	1.0
5725-5850	4.69	2.94	18.00	63.10	20.00	0.04	1.0

The Conducted output power including Tune-up Tolerance provided by manufacturer

The WLAN 2.4G and 5G can transmit simultaneously:

$$\sum_i \frac{S_i}{S_{Limit,i}}$$

=S<sub>2.4</sub>/S<sub>limit-2.4</sub>+ S<sub>5</sub>/S<sub>limit-5</sub>

=0.40/1+0.04/1

=0.44

< 1.0

**Result:** The device meet FCC MPE at 20 cm distance

**===== END OF REPORT =====**