

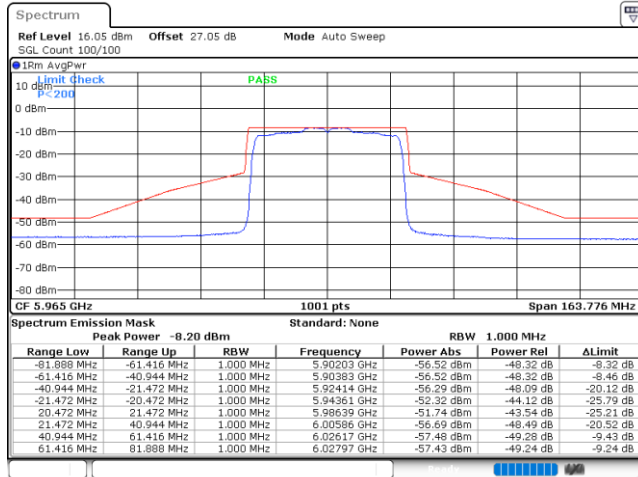


MIMO <Ant. 4+3(4)>

EUT Mode

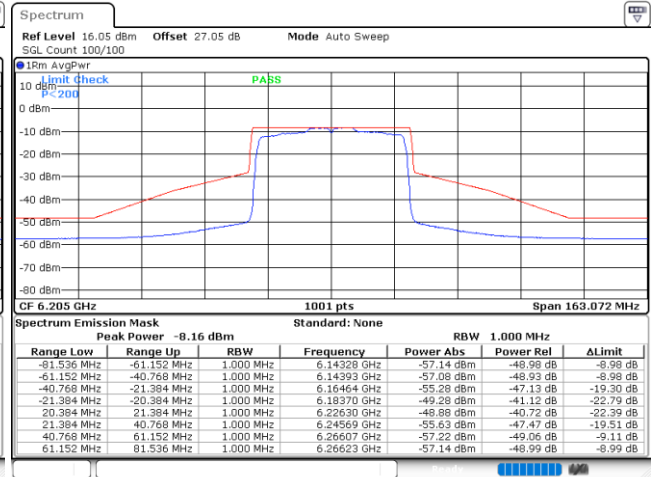
802.11ax HE40 Full RU

Plot on Channel 5965 MHz



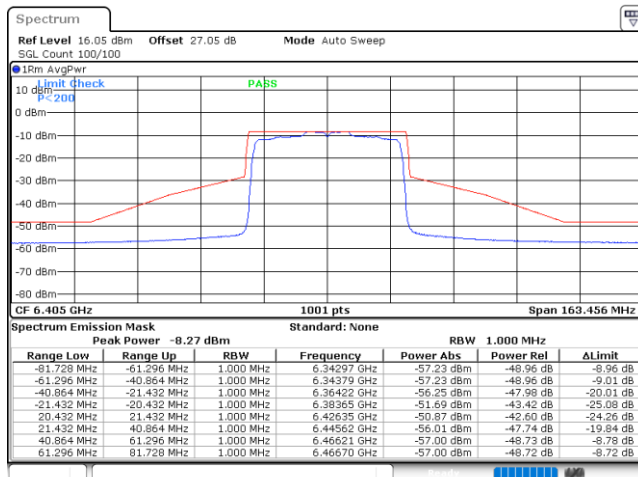
Date: 13.JUN.2024 05:57:10

Plot on Channel 6205 MHz



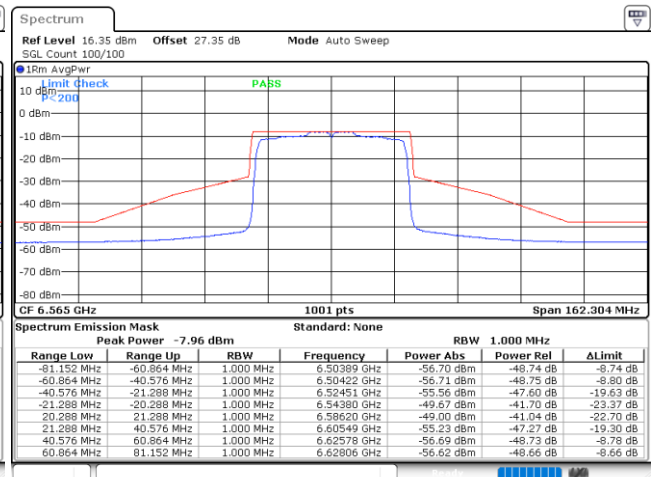
Date: 13.JUN.2024 06:10:42

Plot on Channel 6405 MHz



Date: 13.JUN.2024 06:18:38

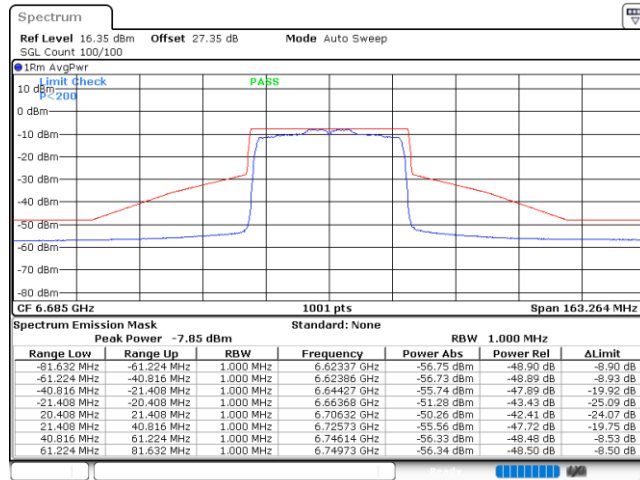
Plot on Channel 6565 MHz



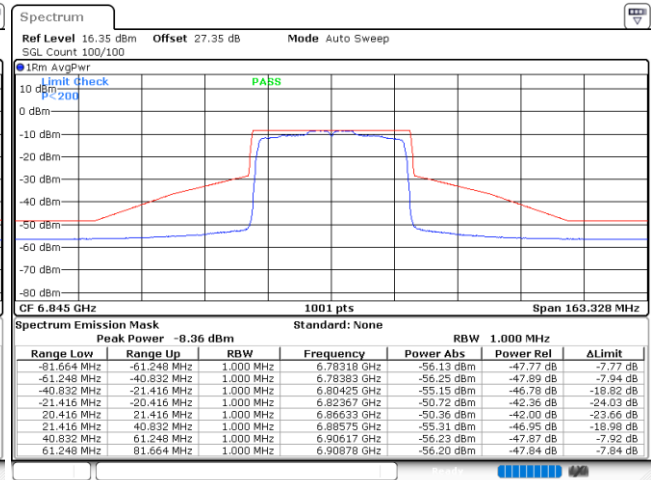
Date: 13.JUN.2024 06:52:35



Plot on Channel 6685 MHz



Plot on Channel 6845 MHz



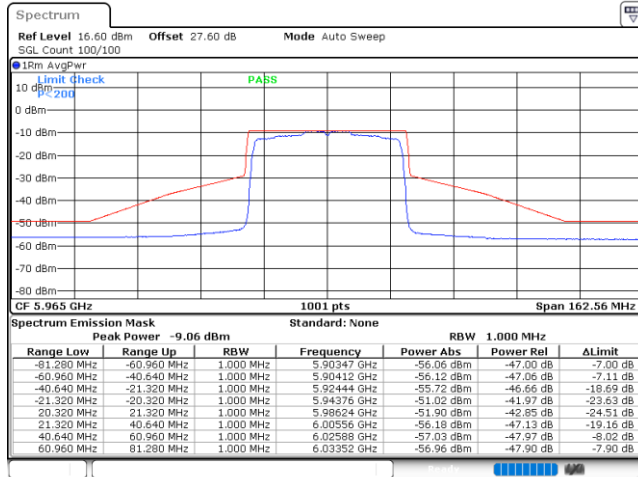


MIMO <Ant. 4+3(3)>

EUT Mode

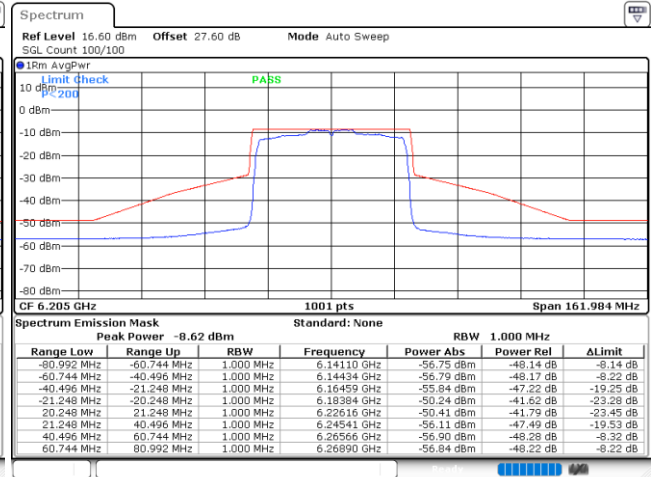
802.11ax HE40 Full RU

Plot on Channel 5965 MHz



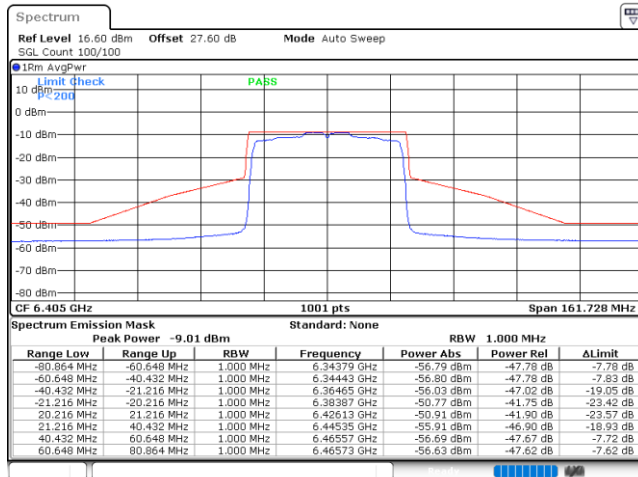
Date: 13.JUN.2024 05:58:54

Plot on Channel 6205 MHz



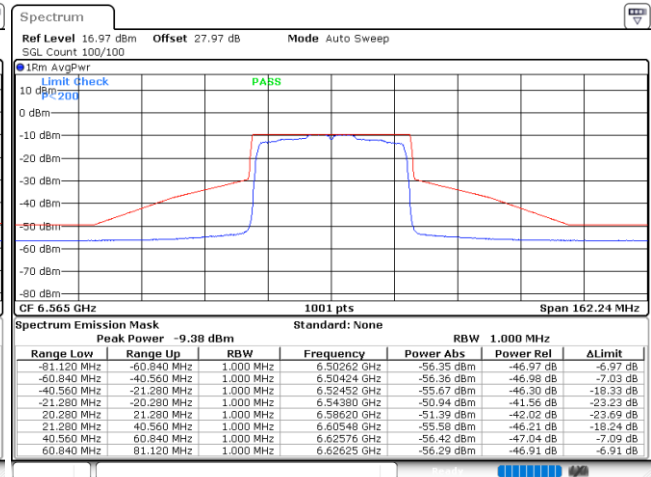
Date: 13.JUN.2024 06:11:41

Plot on Channel 6405 MHz



Date: 13.JUN.2024 06:20:01

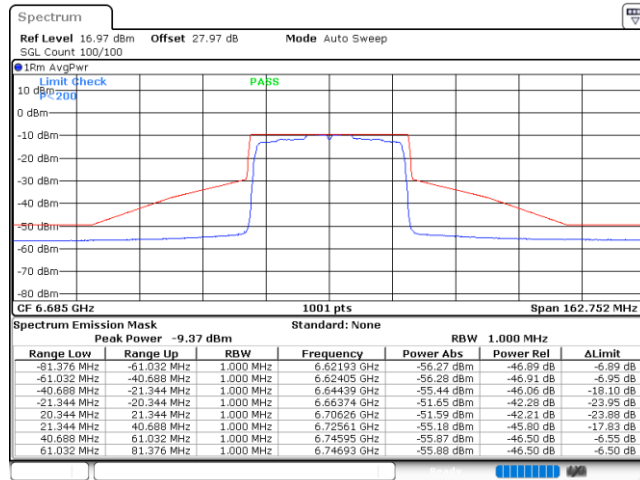
Plot on Channel 6565 MHz



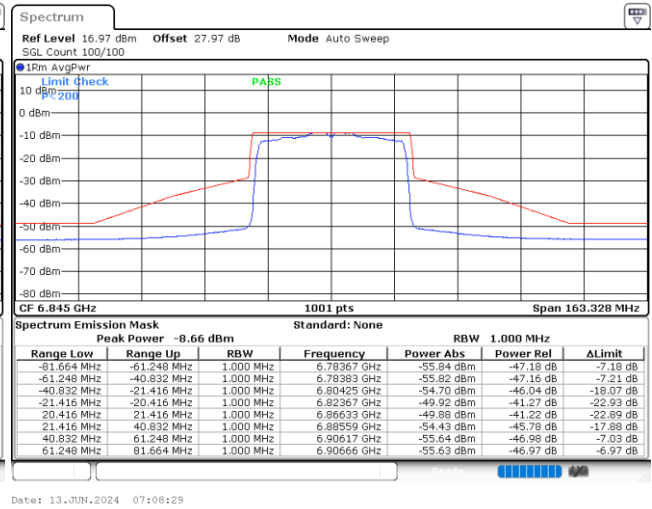
Date: 13.JUN.2024 06:53:38



Plot on Channel 6685 MHz



Plot on Channel 6845 MHz



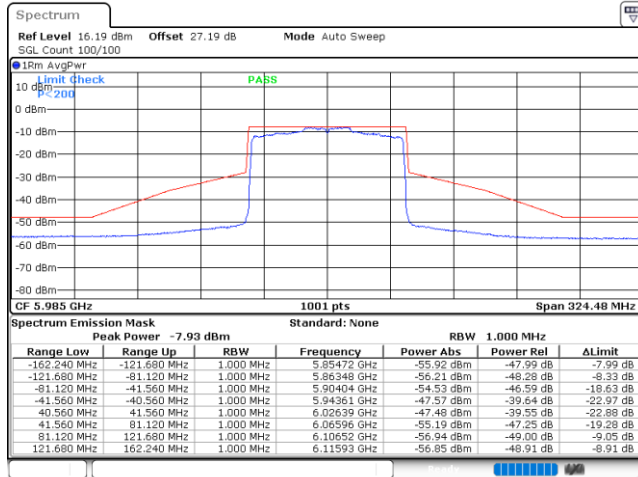


MIMO <Ant. 4+3(4)>

EUT Mode

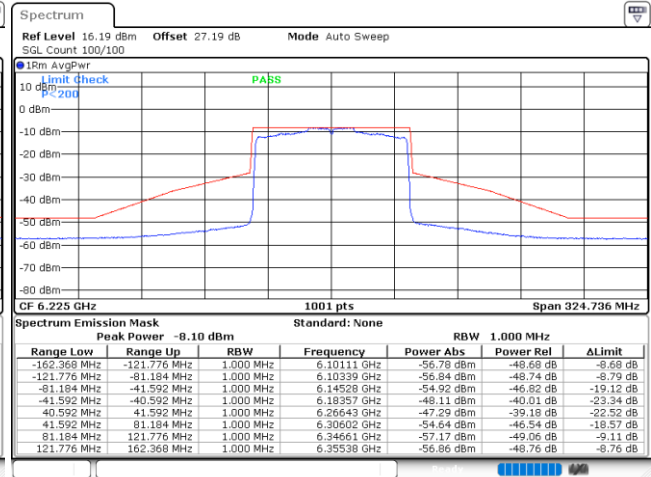
802.11ax HE80 Full RU

Plot on Channel 5985 MHz



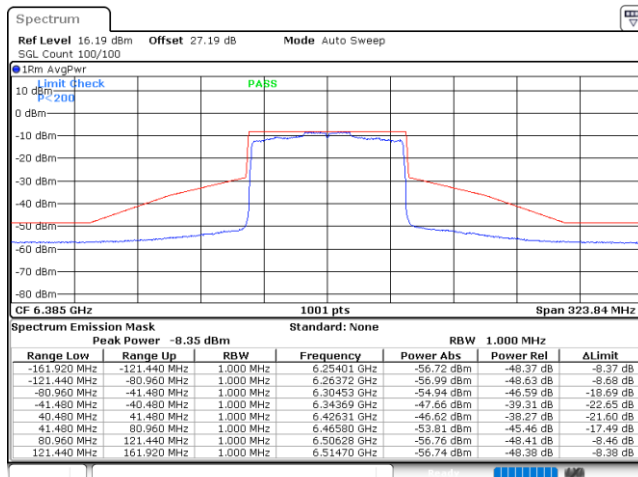
Date: 13.JUN.2024 07:49:21

Plot on Channel 6225 MHz



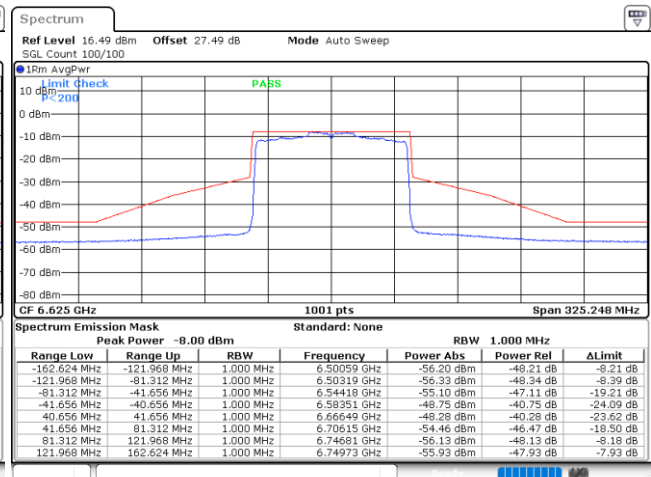
Date: 13.JUN.2024 07:57:46

Plot on Channel 6385 MHz



Date: 13.JUN.2024 08:05:48

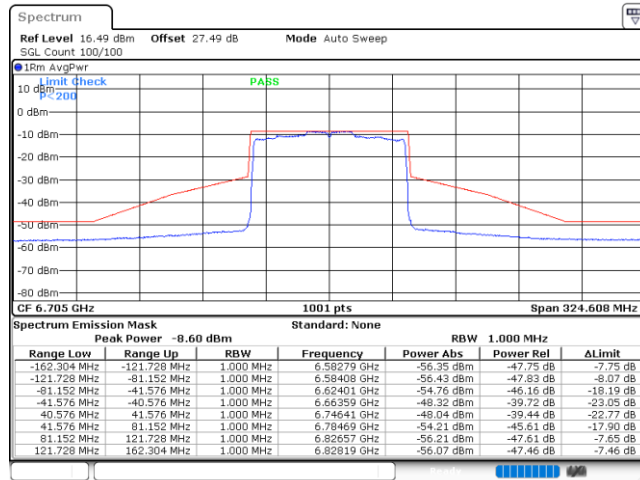
Plot on Channel 6625 MHz



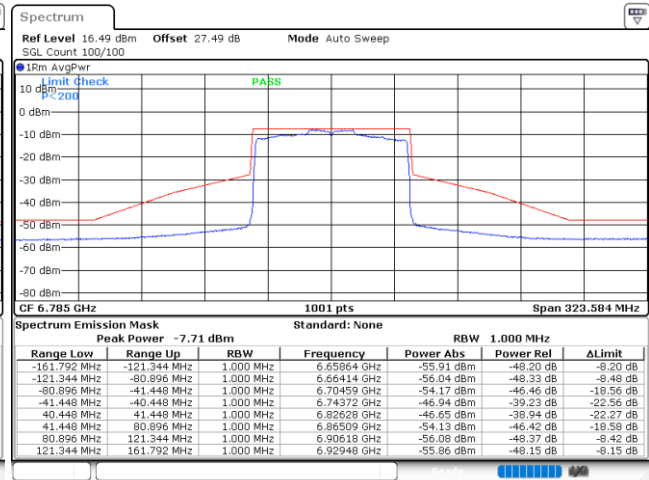
Date: 14.JUN.2024 05:44:20



Plot on Channel 6705 MHz



Plot on Channel 6785 MHz



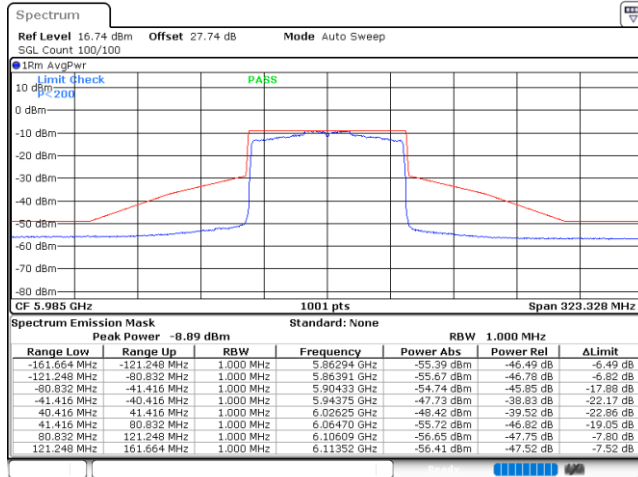


MIMO <Ant. 4+3(3)>

EUT Mode

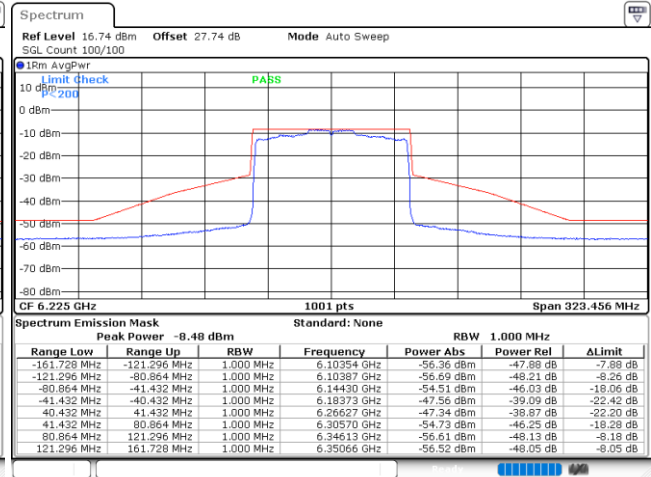
802.11ax HE80 Full RU

Plot on Channel 5985 MHz



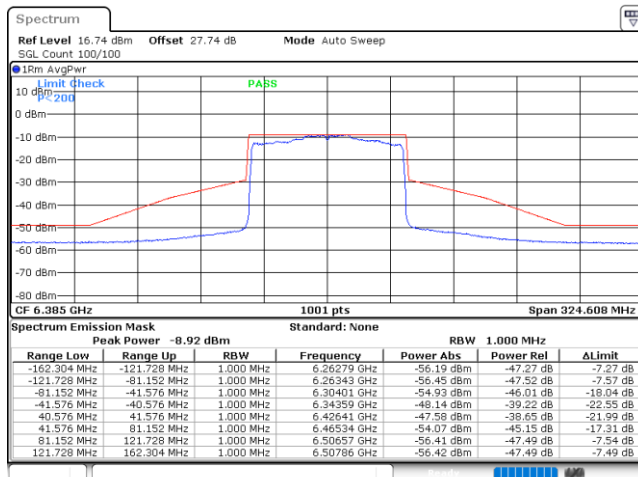
Date: 13.JUN.2024 07:50:58

Plot on Channel 6225 MHz



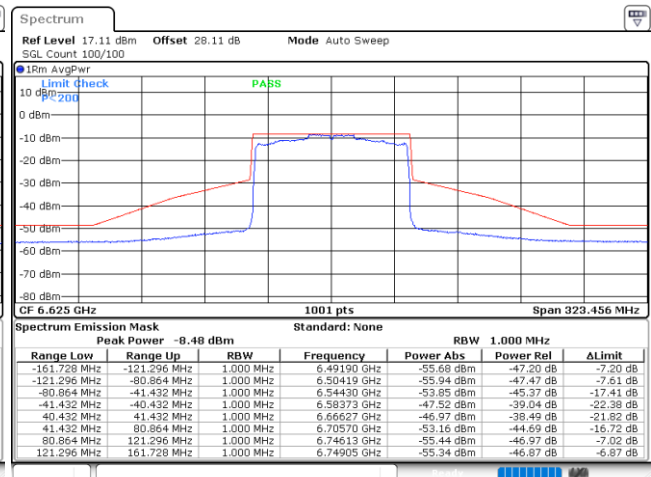
Date: 13.JUN.2024 07:59:26

Plot on Channel 6385 MHz



Date: 13.JUN.2024 08:09:03

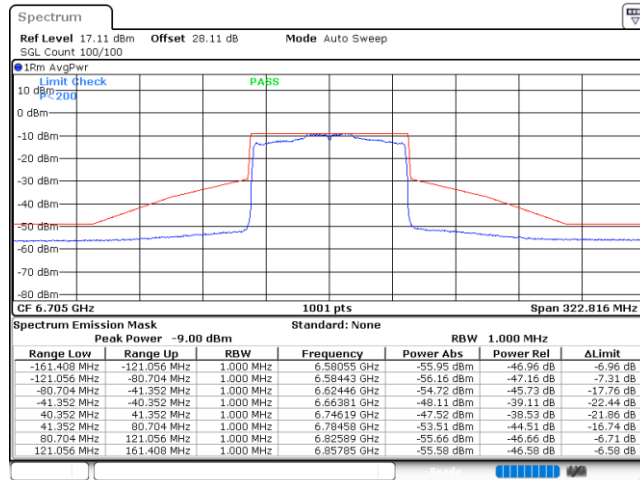
Plot on Channel 6625 MHz



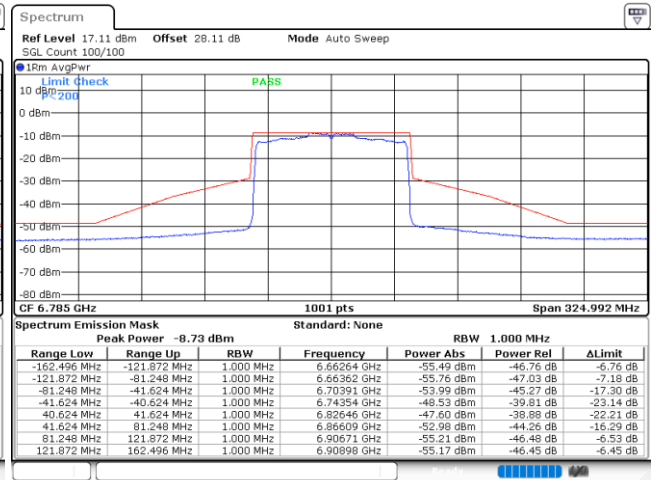
Date: 14.JUN.2024 06:10:22



Plot on Channel 6705 MHz



Plot on Channel 6785 MHz





Appendix B. Spot Check Evaluation on GTF7P, G3Y12

Conducted power test and radiated spurious emission test configurations were selected from the worst cases identified in the reference model and tested to demonstrate the test data from reference model remains representative for the variant model.

The deviation between the spot check and the referenced values is within 3dB, therefore data referencing is justified according to the guidance in the ECR inquiry

Test Item	Mode	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Conducted Power (dBm)	WWAN GPRS 850 Class 8 CH128	32.60	32.32	0.28
	WWAN GPRS 1900 Class 8 CH512	29.28	29.21	0.07
	WWAN WCDMA Band V RMC 12.2K CH4182	24.77	24.62	0.15
	WWAN LTE Band 5 10MHz 1RB0 QPSK Mid	24.72	24.71	0.01
	WWAN LTE Band 7 20MHz 1RB0 QPSK Mid	24.45	24.33	0.12
	WWAN LTE Band 12 10MHz 1RB0 QPSK Mid	24.66	24.66	0.00
	WWAN LTE Band 26 (90S) 5MHz 1RB0 QPSK High	24.70	24.65	0.05
	WWAN LTE Band 41 HPUE 15MHz 1RB37 QPSK Mid	26.43	26.36	0.07
	WWAN NR n5 10MHz 1RB1 QPSK Low	25.18	25.02	0.16
	WWAN NR n7 25MHz 1RB1 QPSK High	24.83	24.58	0.25
	WWAN NR n12 15MHz 36RB18 BPSK Low	24.88	24.84	0.04
	WWAN NR n26 5MHz 1RB23 QPSK Low	25.19	24.92	0.27
	WWAN NR n41 HPUE 100MHz 1RB1 QPSK Low	27.15	26.96	0.19
	WWAN NR n77 HPUE 50MHz 1RB1 QPSK Low	27.20	26.93	0.27

Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT (BR 1Mbps CH39)	4	20.69	20.59	0.10
	BLE / BT EDR (BLE 2Mbps CH19)	4	20.20	20.16	0.04
	BLE CS GFSK_DTS (2Mbps CH38)	4	20.50	20.30	0.20
	BLE CS ASK_FHSS (2Mbps CH38)	4	20.29	20.12	0.17
	WiFi 2.4GHz (HE20 CH06 Full RU)	4+3	23.98	23.85	0.13
	WiFi 5GHz (11a CH169)	4+3	22.55	22.29	0.26
	WiFi 6GHz (11a CH049)	4+3	21.69	21.60	0.09



Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Field Strength (dBuV/m)	NFC 13.56MHz	-	25.45	23.86	1.59
Radiated Spurious Emission (dBuV/m)	NFC 13.56MHz	-	-3.19	-3.27	0.08
Radiated Spurious Emission (dBm)	WWAN GSM 850 CH189	0	-18.90	-21.23	2.33
	WWAN GSM 1900 CH512	2	-20.77	-22.79	2.02
	WWAN WCDMA Band V CH4132	0	-41.92	-43.94	2.02
	WWAN LTE Band 26 10MHz 1RB0 QPSK High	0	-32.45	-32.71	0.26
	WWAN LTE Band 7 10MHz 1RB0 QPSK High	0	-21.91	-23.47	1.56
	WWAN LTE Band 12 10MHz 1RB0 QPSK Low	1	-32.20	-33.22	1.02
	WWAN LTE Band 26 (90S) 15MHz 1RB0 QPSK Mid	0	-20.42	-22.30	1.88
	WWAN LTE Band 41 HPUE 10MHz 1RB0 QPSK Low	0	-10.25	-11.23	0.98
	WWAN NR n26 20MHz 1RB1 BPSK High	1	-29.65	-31.05	1.40
	WWAN NR n7 20MHz 1RB1 BPSK Low	0	-21.64	-21.87	0.23
	WWAN NR n12 10MHz 1RB1 BPSK Low	1	-35.23	-36.03	0.80
	WWAN NR n26 (90S) 15MHz 1RB1 BPSK Mid	1	-31.65	-33.29	1.64
	WWAN NR n41 20MHz 1RB1 BPSK Mid	2	-12.22	-14.37	2.15
	WWAN NR n77 HPUE (27Q) 20MHz 1RB1 BPSK Low	6	-20.74	-22.69	1.95
		2	-37.09	-39.98	2.89

Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBuV/m)	BT (BR 1Mbps CH78)	4	-16.58	-19.44	2.86
	BLE / BT EDR (BLE 1Mbps CH39)	4	-4.11	-6.08	1.97
	BLE CS GFSK_DTS (2Mbps CH76)	3	-1.95	-2.16	0.21
	BLE CS ASK_FHSS (2Mbps CH76)	3	-10.53	-11.69	1.16
	WiFi 2.4GHz (HE20 CH12 Full RU)	4+3	-1.58	-2.78	1.20
	WiFi 5GHz (HE20 CH136 Full RU)	4+3	-1.52	-2.24	0.72
	WiFi 6GHz (11a CH001)	4+3	-1.89	-2.39	0.50

Note: BLE CS means BLE Channel Sounding.



Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Rule Part & Frequency Band	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Exhibit	Full report referenced	FCC ID Filling (Variant)
15E	6VL	WiFi	§15.407 6GHz	A4RGXQ96	Original Grant	GXQ96_FCC Part 15E_VLP	Y	A4RGTF7P



List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Sep. 11, 2024	Radiation (03CH21-HY)
Bilog Antenna	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	63303 & 001	30MHz~1GHz	Oct. 15, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Oct. 14, 2024	Radiation (03CH21-HY)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227880	1GHz~18GHz	Oct. 04, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Oct. 03, 2024	Radiation (03CH21-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C03A18EN	1GHz~18GHz	Jul. 11, 2024	Aug. 08, 2024 ~ Aug. 12, 2024	Jul. 10, 2025	Radiation (03CH21-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jun. 24, 2024	Aug. 08, 2024 ~ Aug. 12, 2024	Jun. 23, 2025	Radiation (03CH21-HY)
Amplifier	SONOMA	310N	421580	30MHz~1GHz	Jul. 14, 2024	Aug. 08, 2024 ~ Aug. 12, 2024	Jul. 13, 2025	Radiation (03CH21-HY)
Amplifier	EMEC	EM01G18GA	060876	1GHz~18GHz	Sep. 28, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Sep. 27, 2024	Radiation (03CH21-HY)
Preamplifier	EMEC	EM18G40G	060871	18GHz~40GHz	Aug. 30, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Aug. 29, 2024	Radiation (03CH21-HY)
Spectrum Analyzer	Keysight	N9010B	MY62170358	10Hz~44GHz	Aug. 28, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Aug. 27, 2024	Radiation (03CH21-HY)
Signal Generator	Rohde & Schwarz	SMW200A	111391	N/A	Jan. 23, 2024	Aug. 08, 2024 ~ Aug. 12, 2024	Jan. 22, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Aug. 08, 2024 ~ Aug. 12, 2024	Mar. 05, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804397/2,804612/2,804614/2	30MHz~40GHz	Oct. 24, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Oct. 23, 2024	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP211568	N/A	Oct. 30, 2023	Aug. 08, 2024 ~ Aug. 12, 2024	Oct. 29, 2024	Radiation (03CH21-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 08, 2024 ~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 08, 2024 ~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Aug. 08, 2024 ~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Software	Audix	E3 6.2009-8-24	RK-002349	N/A	N/A	Aug. 08, 2024 ~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
DC Power Supply	GW Instek	GPE2323	GET910884	0V~64V ;0A~6A	Nov. 16, 2023	Jul. 31, 2024~ Aug. 03, 2024	Nov. 15, 2024	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101049	10Hz~44GHz	Sep. 26, 2023	Jul. 31, 2024~ Aug. 03, 2024	Sep. 25, 2024	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-241	92003713	-30℃ ~95℃	May 14, 2024	Jul. 31, 2024~ Aug. 03, 2024	May 13, 2025	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP200886	NA	Mar. 14, 2024	Jul. 31, 2024~ Aug. 03, 2024	Mar. 13, 2025	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6262148275	FR1	Oct. 24, 2023	Jul. 31, 2024~ Aug. 03, 2024	Oct. 23, 2024	Conducted (TH03-HY)
Coupler	MVE	MVE-4816-10	A400024	N/A	Jun. 27, 2024	Jul. 31, 2024~ Aug. 03, 2024	Jun. 26, 2025	Conducted (TH03-HY)
Software 1	Sporton	FCC 5GNR_FSV3044_20231106	N/A	Conducted Test Item	N/A	Jul. 31, 2024~ Aug. 03, 2024	N/A	Conducted (TH03-HY)

—THE END—