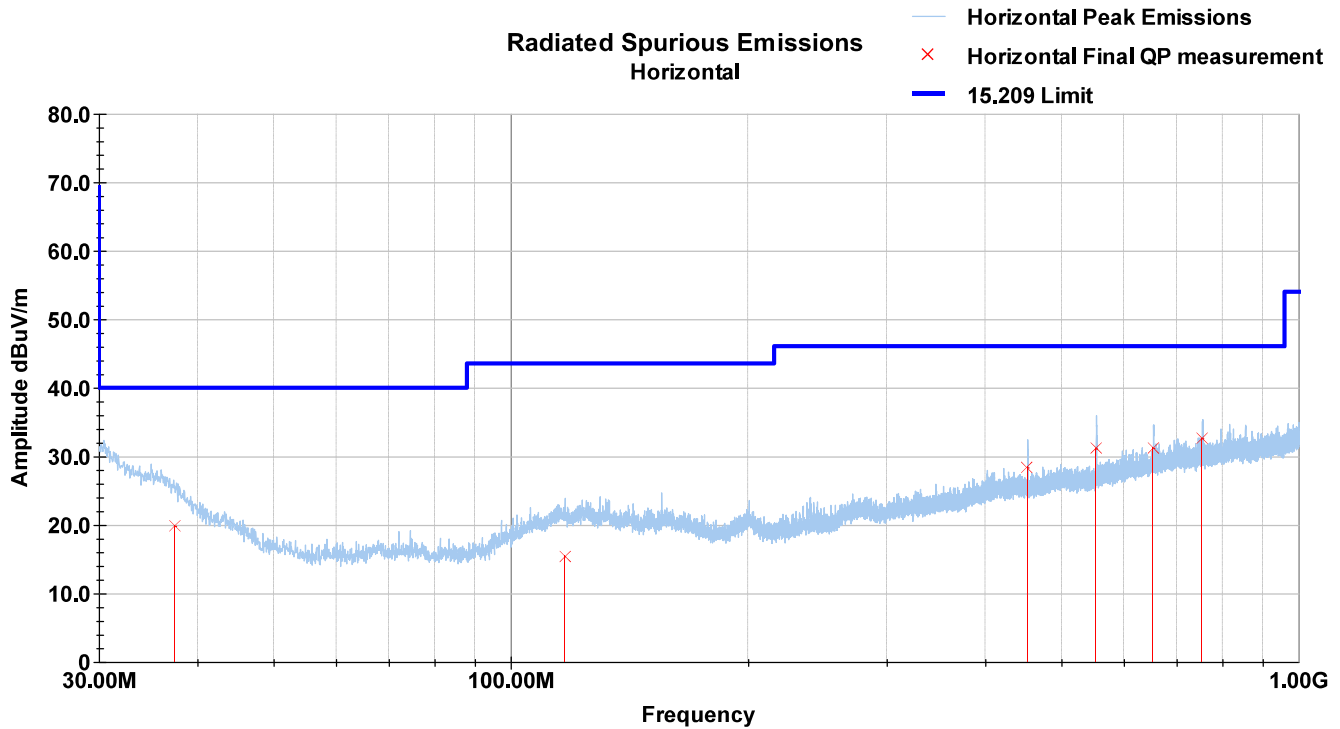


30-1000MHz – Horizontal – Ch165 Z-axis



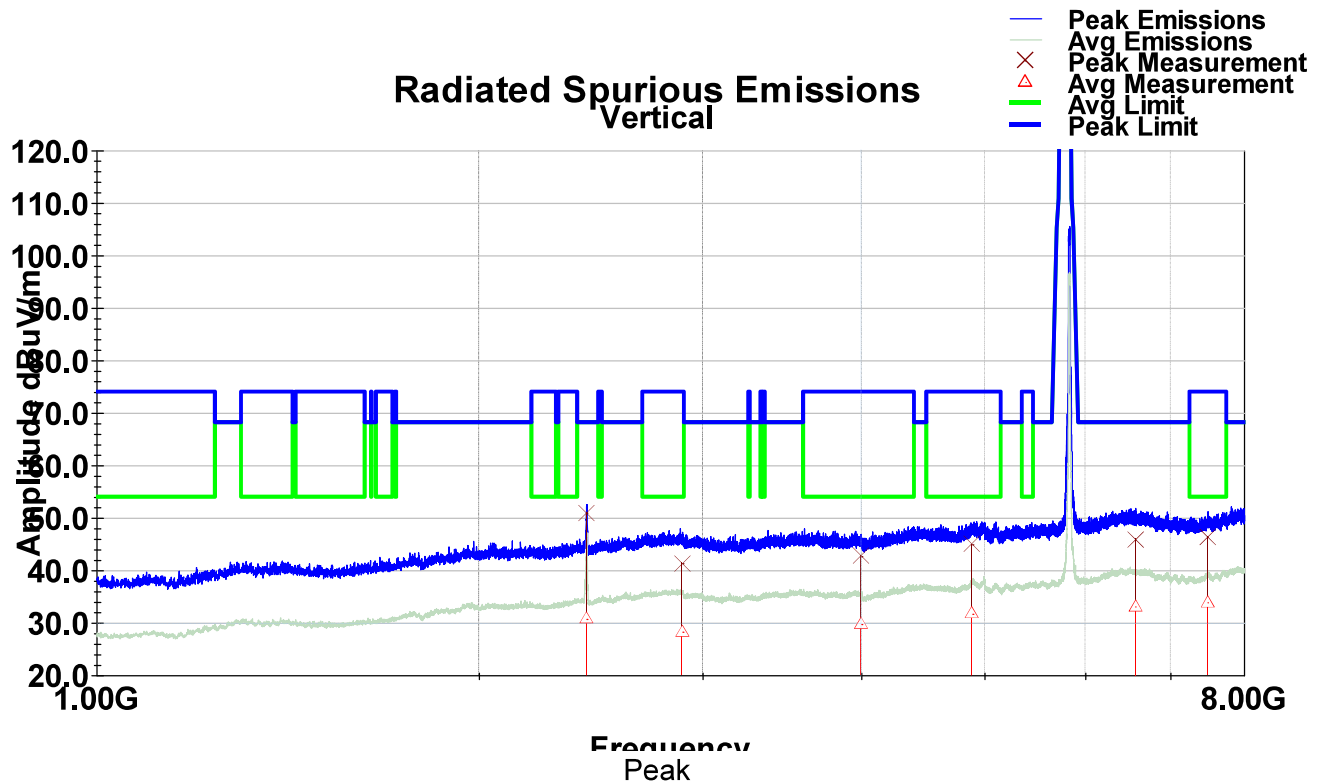
Quasi Peak

Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	QP Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)
37.46	29.8	H	220.0	228.0	20.3	0.3	0.0	30.6	19.8	40.0	-20.2
117.11	27.6	H	9.0	184.0	17.6	0.7	0.0	30.6	15.4	43.5	-28.1
452.55	35.2	H	90.0	214.0	21.3	1.8	0.0	30.1	28.4	46.0	-17.6
553.01	36.2	H	70.0	382.0	22.8	1.9	0.0	29.9	31.2	46.0	-14.9
653.54	34.1	H	294.0	170.0	24.5	2.0	0.0	29.5	31.2	46.0	-14.8
754.23	34.2	H	267.0	113.0	25.5	2.1	0.0	29.3	32.6	46.0	-13.4
QP Value = Raw QP + AF + Loss + DCF - Amp											
Margin = QP Value - Limit											

1-8 GHz

- This frequency range does not show any significant difference between different chains, channels and/or orientation. Worst case plots shown. Only fundamental frequency is present.

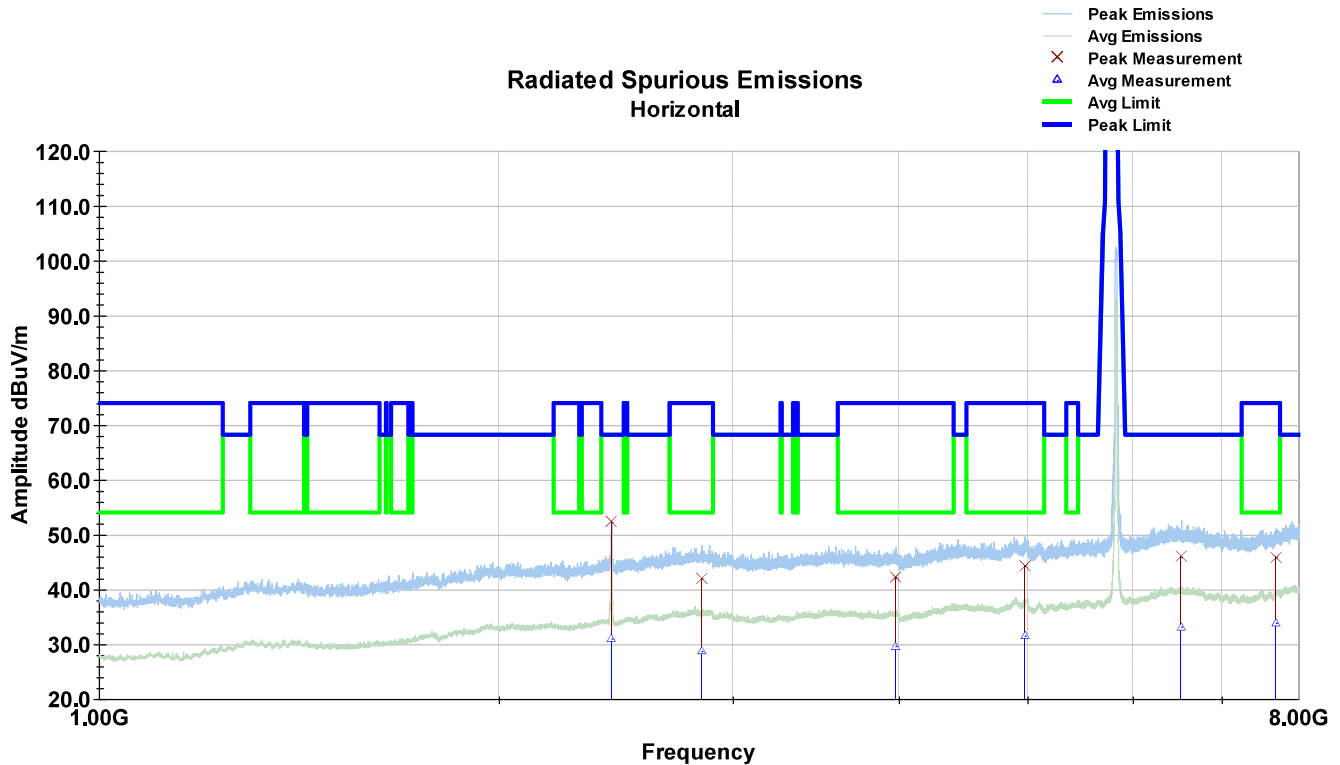
1-8GHz – Vertical – CH165 Z-axis



Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2429.78	51.7	V	110.0	191.0	31.9	1.9	0.0	34.5	51.0	68.2	-17.2
2891.01	41.2	V	237.0	204.0	32.4	2.2	0.0	34.4	41.3	74.0	-32.7
3998.11	41.3	V	33.0	116.0	33.3	2.6	0.0	34.4	42.7	74.0	-31.3
4888.99	41.7	V	69.0	182.0	34.1	3.1	0.0	34.0	44.9	74.0	-29.1
6571.46	41.3	V	190.0	126.0	35.6	3.1	0.0	34.2	45.9	68.2	-22.3
7491.84	41.9	V	122.0	222.0	35.8	3.2	0.0	34.5	46.4	74.0	-27.6
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Frequency MHz	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2429.78	31.4	V	110.0	191.0	31.9	1.9	0.0	34.5	30.7	68.2	-37.5
2891.01	28.1	V	237.0	204.0	32.4	2.2	0.0	34.4	28.3	54.0	-25.7
3998.11	28.4	V	33.0	116.0	33.3	2.6	0.0	34.4	29.8	54.0	-24.2
4888.99	28.5	V	69.0	182.0	34.1	3.1	0.0	34.0	31.7	54.0	-22.3
6571.46	28.6	V	190.0	126.0	35.6	3.1	0.0	34.2	33.1	68.2	-35.1
7491.84	29.4	V	122.0	222.0	35.8	3.2	0.0	34.5	33.9	54.0	-20.1
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

1-8GHz – Horizontal – CH165 Z-axis



Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
2430.80	53.0	H	9.0	193.0	31.9	1.9	0.0	34.6	52.3	68.2	-15.9
2841.70	41.8	H	100.0	148.0	32.5	2.1	0.0	34.3	42.0	74.0	-32.0
3976.75	40.9	H	16.0	187.0	33.3	2.5	0.0	34.4	42.2	74.0	-31.8
4975.65	41.5	H	319.0	130.0	34.1	2.9	0.0	34.1	44.3	74.0	-29.7
6525.10	41.3	H	159.0	175.0	35.6	3.1	0.0	34.1	45.9	68.2	-22.3
7688.15	41.1	H	69.0	246.0	35.9	3.3	0.0	34.4	45.9	74.0	-28.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

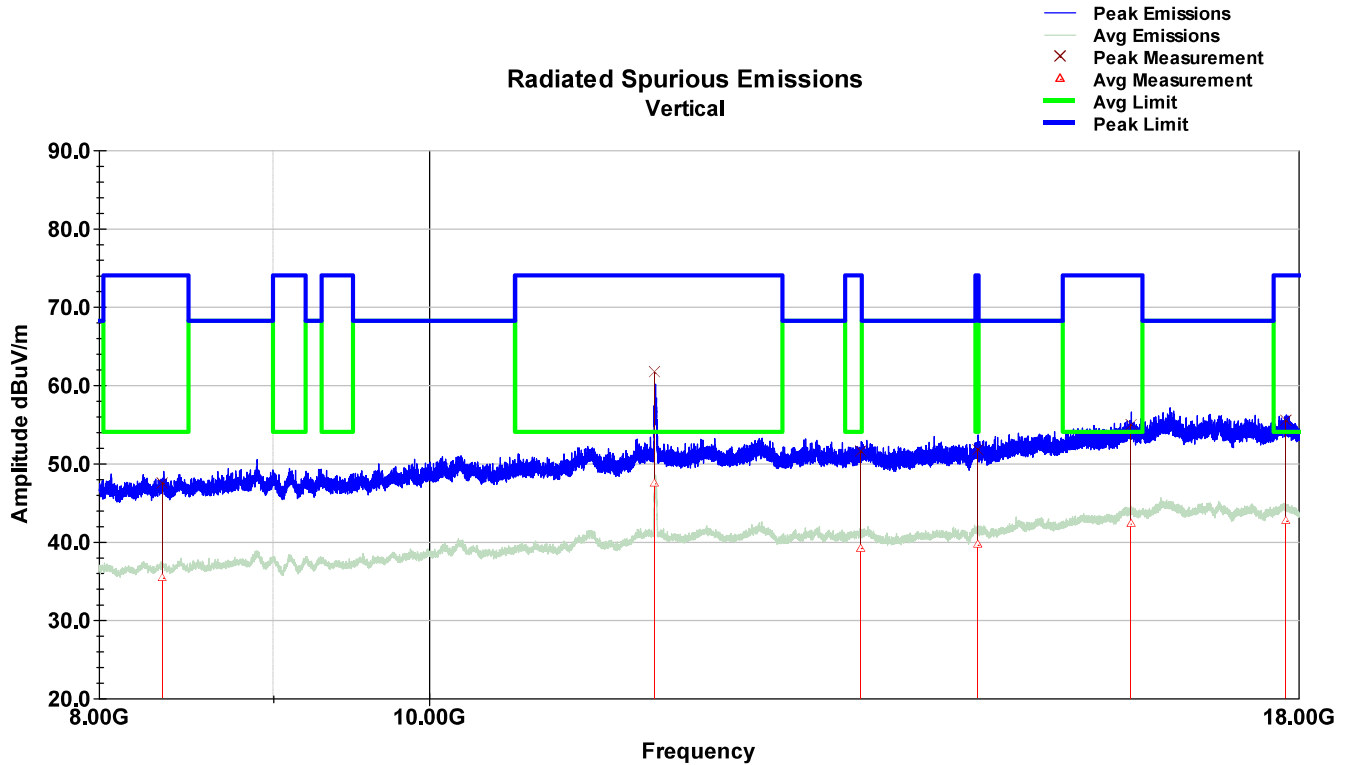
Average

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
2430.80	31.7	H	9.0	193.0	31.9	1.9	0.0	34.6	31.0	68.2	-37.2
2841.70	28.5	H	100.0	148.0	32.5	2.1	0.0	34.3	28.8	54.0	-25.2
3976.75	28.4	H	16.0	187.0	33.3	2.5	0.0	34.4	29.7	54.0	-24.3
4975.65	28.7	H	319.0	130.0	34.1	2.9	0.0	34.1	31.6	54.0	-22.4
6525.10	28.6	H	159.0	175.0	35.6	3.1	0.0	34.1	33.2	68.2	-35.0
7688.15	29.1	H	69.0	246.0	35.9	3.3	0.0	34.4	33.9	54.0	-20.1
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

8-18GHz

- This frequency range does not show any significant difference between different chains, channels and/or orientation.

8-18GHz – Vertical – CH165 Z-axis



Peak

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
8353.14	42.2	V	-1.0	225.0	35.9	3.7	0.0	34.3	47.5	74.0	-26.5
11650.86	54.1	V	179.0	178.0	38.9	4.4	0.0	35.9	61.6	74.0	-12.4
13388.04	43.8	V	90.0	216.0	39.2	4.5	0.0	36.1	51.5	74.0	-22.5
14487.40	43.9	V	216.0	144.0	39.7	4.7	0.0	36.5	51.8	74.0	-22.2
16068.58	44.9	V	344.0	182.0	40.9	5.0	0.0	35.9	54.9	74.0	-19.1
17845.88	45.7	V	62.0	229.0	41.0	5.5	0.0	36.7	55.5	74.0	-18.5

Final Pk = Raw Pk + AF + Loss + DCF - Amp

Margin = Final Pk - Limit

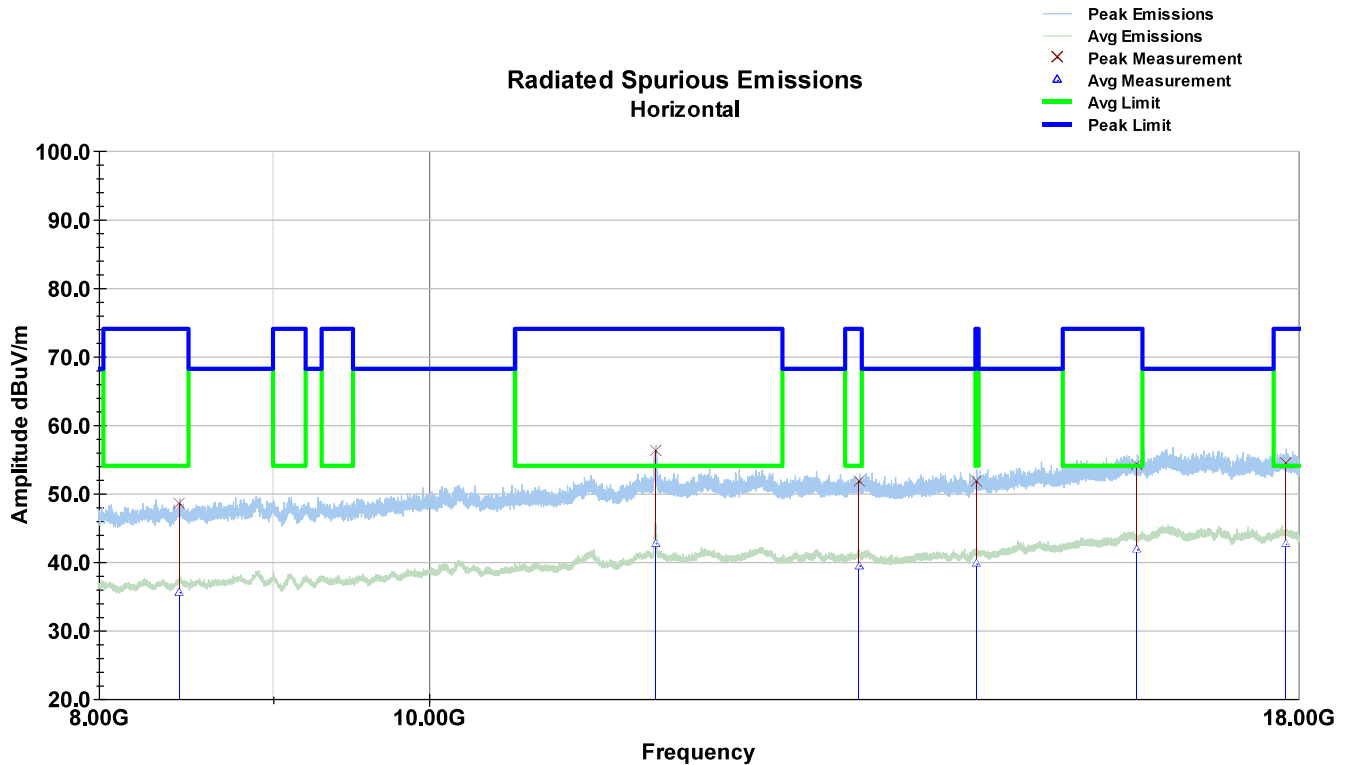
Average

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
8353.14	30.1	V	-1.0	225.0	35.9	3.7	0.0	34.3	35.4	54.0	-18.6
11650.86	39.9	V	179.0	178.0	38.9	4.4	0.0	35.9	47.5	54.0	-6.5
13388.04	31.6	V	90.0	216.0	39.2	4.5	0.0	36.1	39.2	54.0	-14.8
14487.40	31.6	V	216.0	144.0	39.7	4.7	0.0	36.5	39.6	54.0	-14.4
16068.58	32.3	V	344.0	182.0	40.9	5.0	0.0	35.9	42.3	54.0	-11.7
17845.88	32.9	V	62.0	229.0	41.0	5.5	0.0	36.7	42.7	54.0	-11.3

Final Avg = Raw Avg + AF + Loss + DCF - Amp

Margin = Final Avg - Limit

8-18GHz – Horizontal – CH165 Z-axis



Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
8448.00	43.1	H	281.0	161.0	35.9	3.8	0.0	34.2	48.5	74.0	-25.5
11655.50	48.6	H	34.0	100.0	39.0	4.5	0.0	35.8	56.2	74.0	-17.8
13374.00	44.0	H	62.0	206.0	39.3	4.5	0.0	36.0	51.7	74.0	-22.3
14476.50	43.7	H	30.0	172.0	39.7	4.6	0.0	36.4	51.8	74.0	-22.2
16135.50	44.5	H	11.0	200.0	40.8	5.0	0.0	36.0	54.3	74.0	-19.7
17844.50	44.7	H	153.0	101.0	41.0	5.5	0.0	36.7	54.5	74.0	-19.5
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

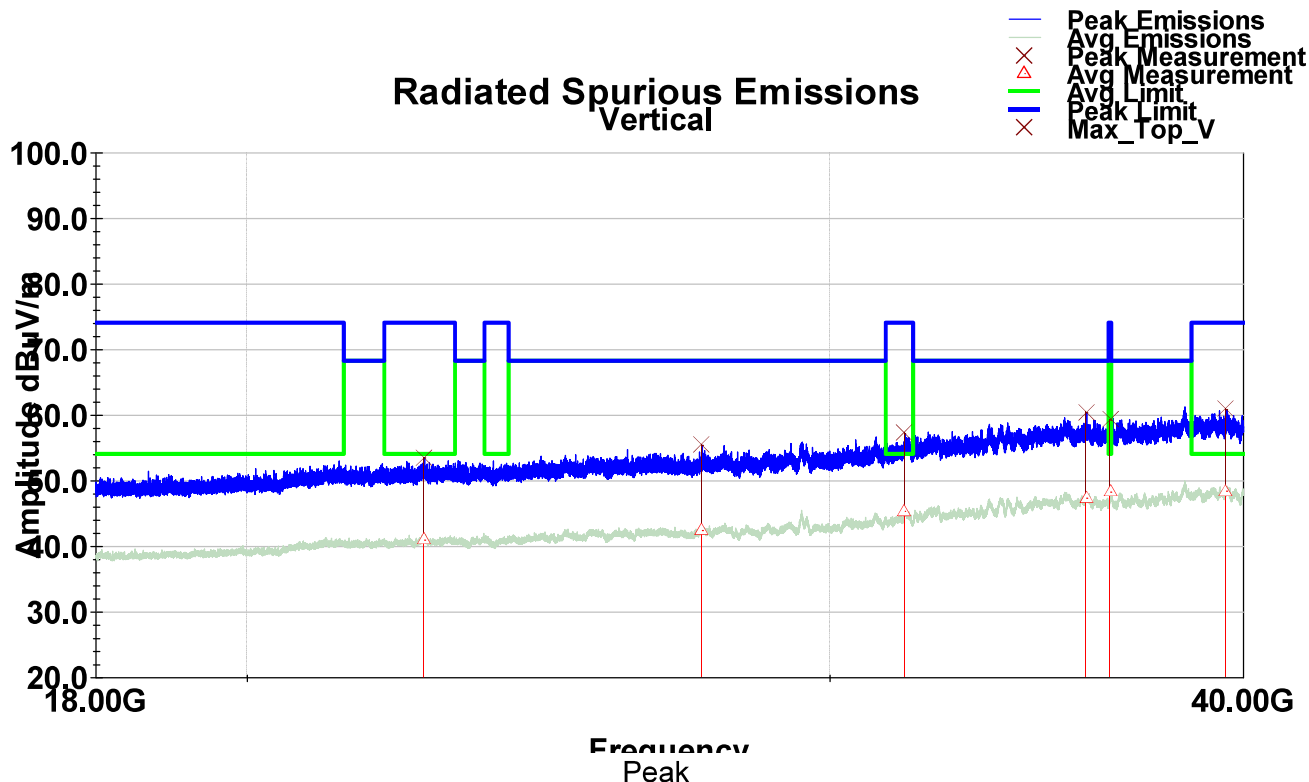
Average

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
8448.00	30.2	H	281.0	161.0	35.9	3.8	0.0	34.2	35.6	54.0	-18.4
11655.50	35.1	H	34.0	100.0	39.0	4.5	0.0	35.8	42.7	54.0	-11.3
13374.00	31.7	H	62.0	206.0	39.3	4.5	0.0	36.0	39.5	54.0	-14.5
14476.50	31.8	H	30.0	172.0	39.7	4.6	0.0	36.4	39.8	54.0	-14.2
16135.50	32.1	H	11.0	200.0	40.8	5.0	0.0	36.0	41.9	54.0	-12.1
17844.50	32.9	H	153.0	101.0	41.0	5.5	0.0	36.7	42.7	54.0	-11.3
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

18-40 GHz

- This frequency range does not show any significant difference between different chains, channels and/or orientation.

18-40GHz – Vertical – CH165 Z-axis



Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
22623.96	57.1	V	12.0	150.0	45.7	10.1	-9.5	49.9	53.5	74.0	-20.5
27449.00	57.4	V	184.0	248.0	46.5	11.2	-9.5	50.2	55.4	68.2	-12.8
31614.92	54.3	V	221.0	248.0	47.4	12.0	-9.5	47.0	57.2	74.0	-16.8
35867.96	58.1	V	246.0	248.0	48.7	13.2	-9.5	50.1	60.4	68.2	-7.8
36472.52	56.6	V	257.0	248.0	48.8	13.2	-9.5	49.9	59.2	74.0	-14.8
39533.60	56.9	V	128.0	150.0	49.2	14.0	-9.5	49.7	60.9	74.0	-13.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

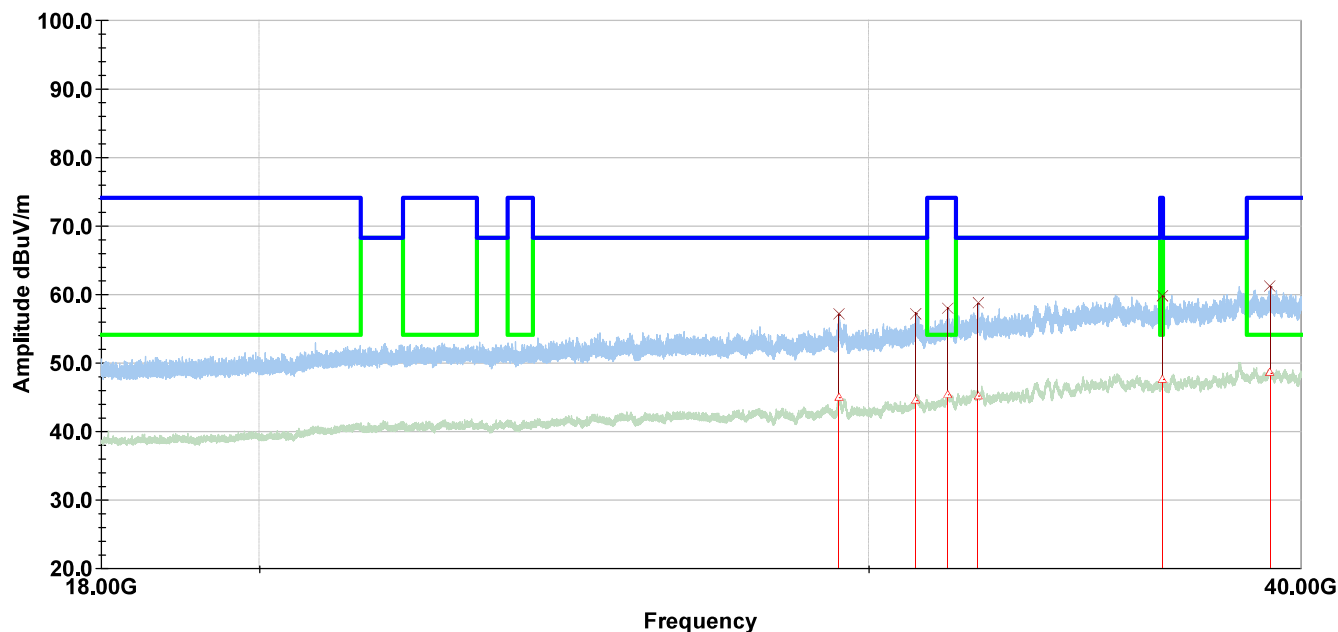
Average

Frequency MHz	Raw Ave dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
22623.96	44.6	V	12.0	150.0	45.7	10.1	-9.5	49.9	41.0	54.0	-13.0
27449.00	44.4	V	184.0	248.0	46.5	11.2	-9.5	50.2	42.4	68.2	-25.8
31614.92	42.4	V	221.0	248.0	47.4	12.0	-9.5	47.0	45.4	54.0	-8.6
35867.96	45.1	V	246.0	248.0	48.7	13.2	-9.5	50.1	47.4	68.2	-20.8
36472.52	45.6	V	257.0	248.0	48.8	13.2	-9.5	49.9	48.3	54.0	-5.7
39533.60	44.5	V	128.0	150.0	49.2	14.0	-9.5	49.7	48.4	54.0	-5.6
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

18-40GHz – Horizontal – CH165 Z-axis

Radiated Spurious Emissions
Horizontal

— Peak Emissions
 — Avg Emissions
 × Peak Measurement
 △ Avg Measurement
 — Avg Limit
 — Peak Limit



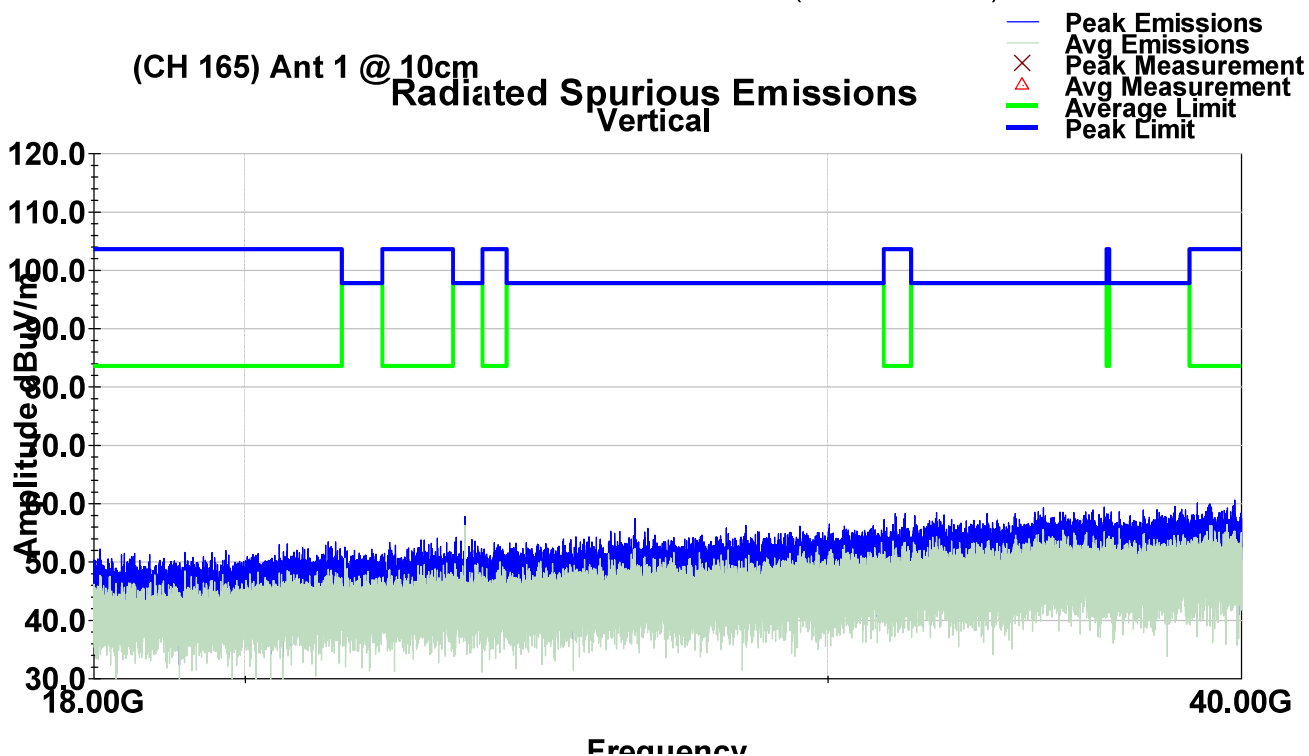
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
29413.16	56.2	H	24.0	150.0	46.9	11.7	-9.5	48.3	57.0	68.2	-11.2
30963.28	54.9	H	174.0	150.0	47.2	12.1	-9.5	47.5	57.2	68.2	-11.0
31632.08	55.0	H	300.0	150.0	47.4	12.0	-9.5	46.9	58.0	74.0	-16.0
32270.96	55.7	H	172.0	248.0	47.8	12.3	-9.5	47.6	58.6	68.2	-9.6
36496.28	57.4	H	314.0	200.0	48.8	13.3	-9.5	50.2	59.8	74.0	-14.2
39203.60	57.5	H	74.0	248.0	48.8	14.4	-9.5	50.1	61.1	74.0	-12.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Average

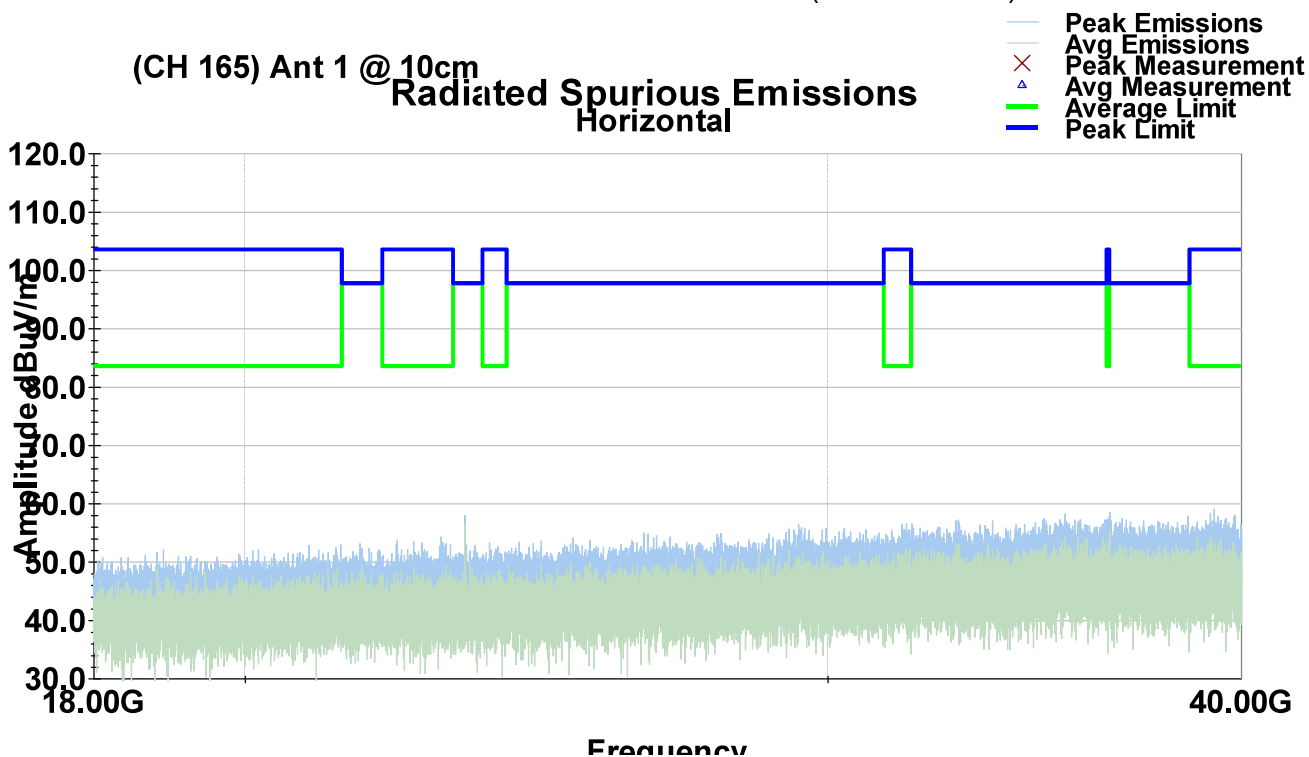
Frequency MHz	Raw Ave dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
29413.16	44.2	H	24.0	150.0	46.9	11.7	-9.5	48.3	45.0	68.2	-23.2
30963.28	42.3	H	174.0	150.0	47.2	12.1	-9.5	47.5	44.5	68.2	-23.7
31632.08	42.4	H	300.0	150.0	47.4	12.0	-9.5	46.9	45.4	54.0	-8.6
32270.96	42.2	H	172.0	248.0	47.8	12.3	-9.5	47.6	45.2	68.2	-23.0
36496.28	45.3	H	314.0	200.0	48.8	13.3	-9.5	50.2	47.6	54.0	-6.4
39203.60	44.8	H	74.0	248.0	48.8	14.4	-9.5	50.1	48.5	54.0	-5.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

18-40GHz – Vertical – CH165 Z-axis (10cm distance)



Note: To verify compliance, measurements were performed at a 10cm distance.

18-40GHz – Horizontal – CH165 Z-axis (10cm distance)



7 Emissions in Restricted Frequency Bands and Unwanted Emissions

7.1 Test Result

Test Description	Test Specification		Test Result
Restricted Band Emissions	15.407 (b) / 15.205 / 15.209	RSS-GEN S8.9 / 8.10 / RSS-247 S6.2	Compliant

7.2 Test Method

Field strength measurements were performed at the restricted band edges of 5150MHz & 5350MHz through 5460MHz, and UNI Band 3 Mask for each modulation. Measurements were made using the conducted methods defined in ANSI C63.10, Section 11.12.2.

Unwanted Emissions pursuant to RSS-247: For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS)and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

7.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 23.02 °C

Relative Humidity: 52.5 %

Atmospheric Pressure: 98.13 kPa

7.4 Test Equipment

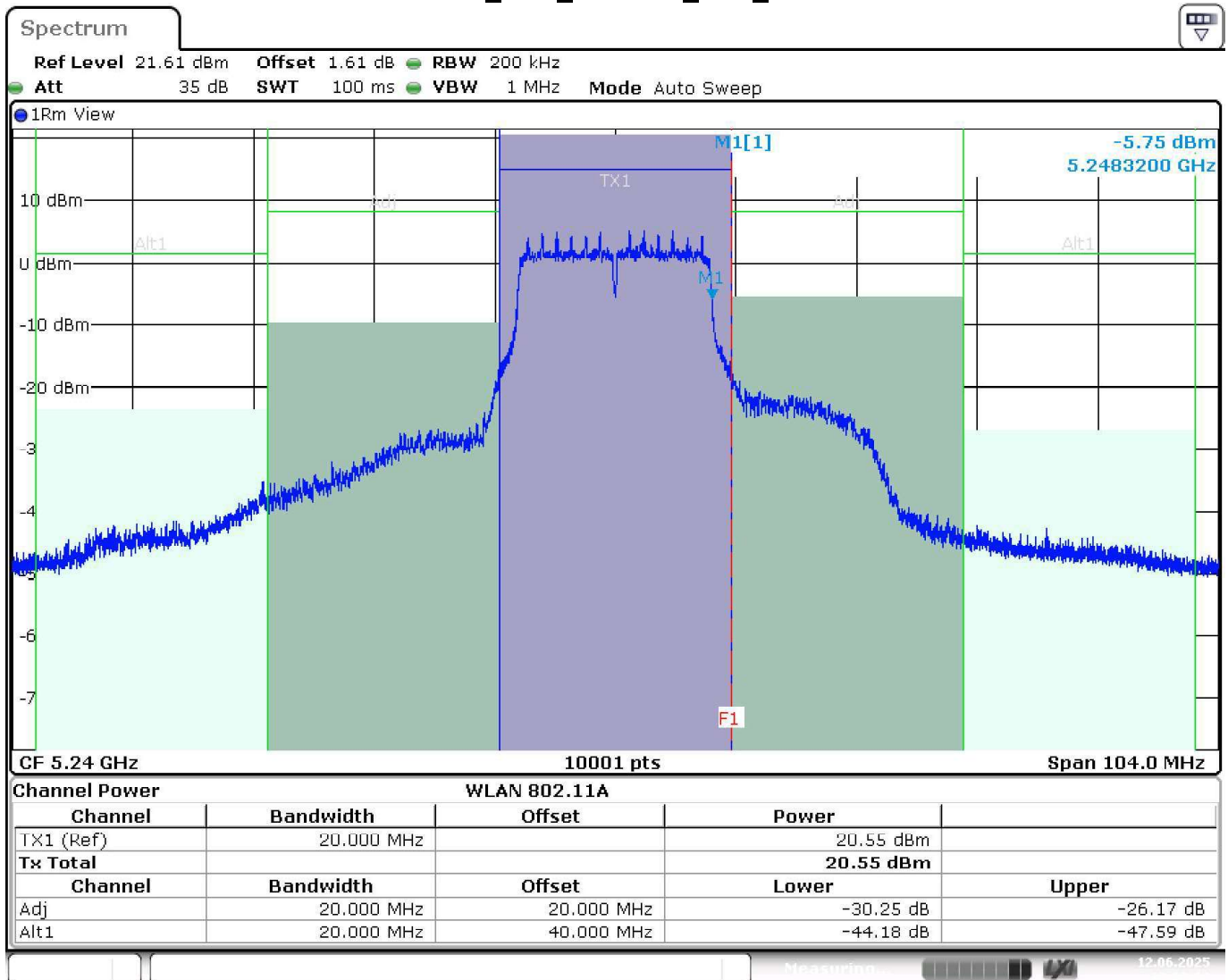
Test End Date: 12-June-2025

Tester: SGM

Equipment	Manufacturer	Model	Asset Number	Cal Date	Cal Due Date
RF CABLE SMA TO SMA, 0.01-40GHZ	TELEDYNE STORM MICROWAVE	084-0505-059	20108	3-Apr-2025	3-Apr-2026
TSTPASS SWITCHBOX	TSTPASS	SB2	23009	4-Apr-2025	4-Apr-2026
SIGNAL ANALYZER (TS8997)	ROHDE & SCHWARZ	FSV30	B085749	4-Mar-2025	4-Mar-2026

7.5 Test Data – Band Edge

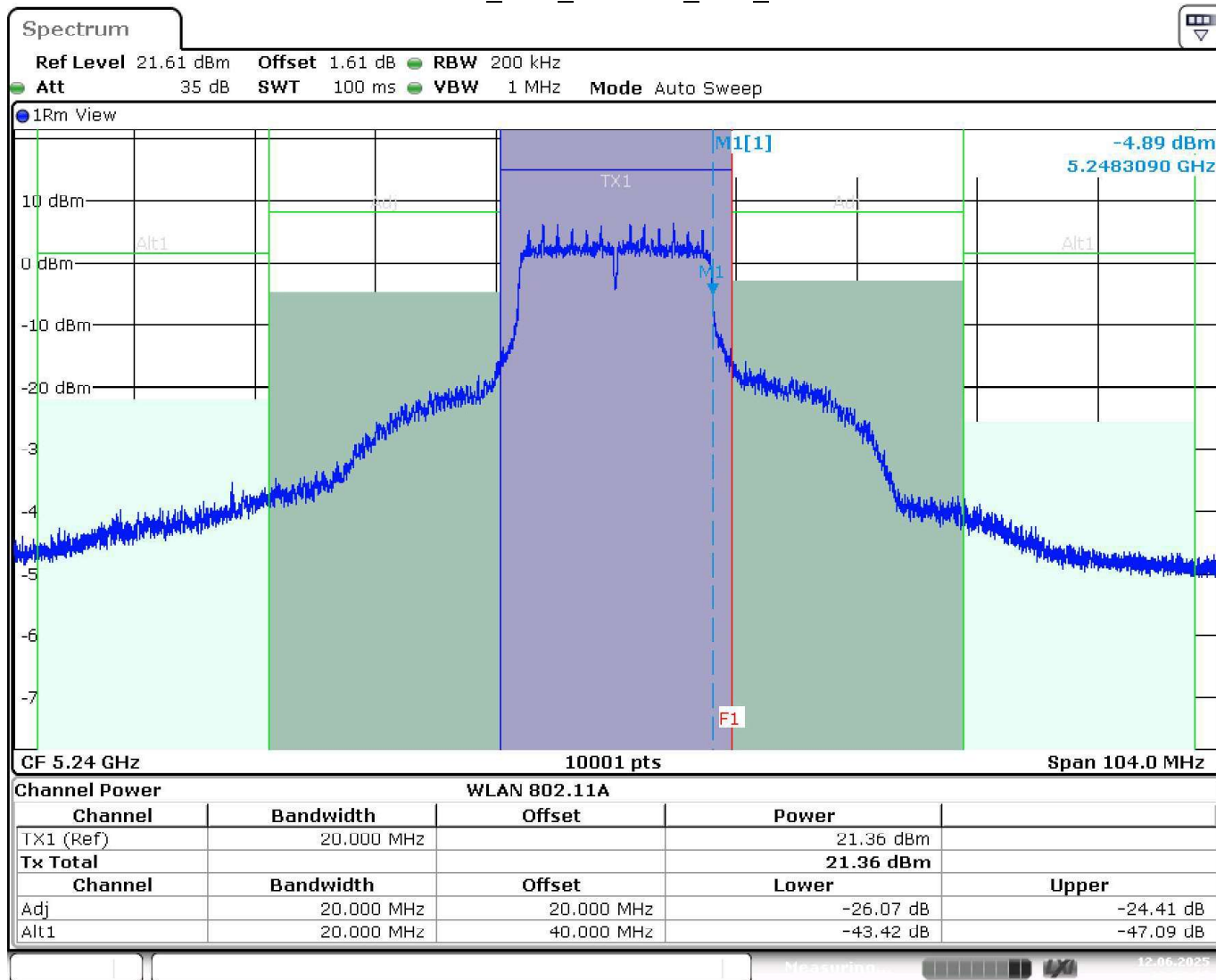
802.11a_HCH_5240MHz_Ant1_NTNV



Date: 12.JUN.2025 10:00:37

Complies with the 26 dB requirements of RSS-247 section 6.2.1.2.

802.11a_HCH_5240MHz_Ant2_NTNV



Date: 12.JUN.2025 10:04:26

Complies with the 26 dB requirements of RSS-247 section 6.2.1.2.