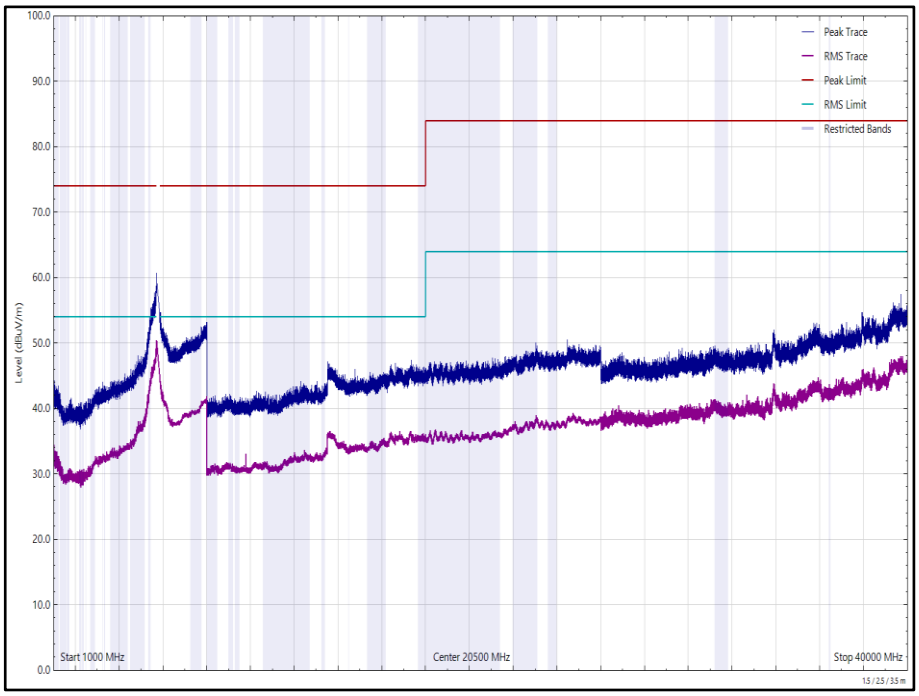

Figure 329 - U-NII-3 - 5745 MHz (CH149), VHT20, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.814	29.5	40.0	-10.5	Q-Peak	360	365	Horizontal
30.954	33.4	40.0	-6.6	Q-Peak	175	102	Vertical
36.707	29.7	40.0	-10.3	Q-Peak	0	100	Vertical
72.623	32.0	40.0	-8.0	Q-Peak	270	262	Vertical
72.731	34.0	40.0	-6.0	Q-Peak	307	249	Horizontal
100.221	30.9	43.5	-12.6	Q-Peak	132	181	Horizontal
102.869	40.5	43.5	-3.0	Q-Peak	96	101	Vertical
128.072	32.8	43.5	-10.7	Q-Peak	0	275	Horizontal
11649.734	38.4	54.0	-15.6	RMS	90	296	Horizontal
11652.240	36.9	54.0	-17.2	RMS	72	103	Vertical

Table 698 - U-NII-3 - 5825 MHz (CH165), VHT20, CDD, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 6 dB of the limit.

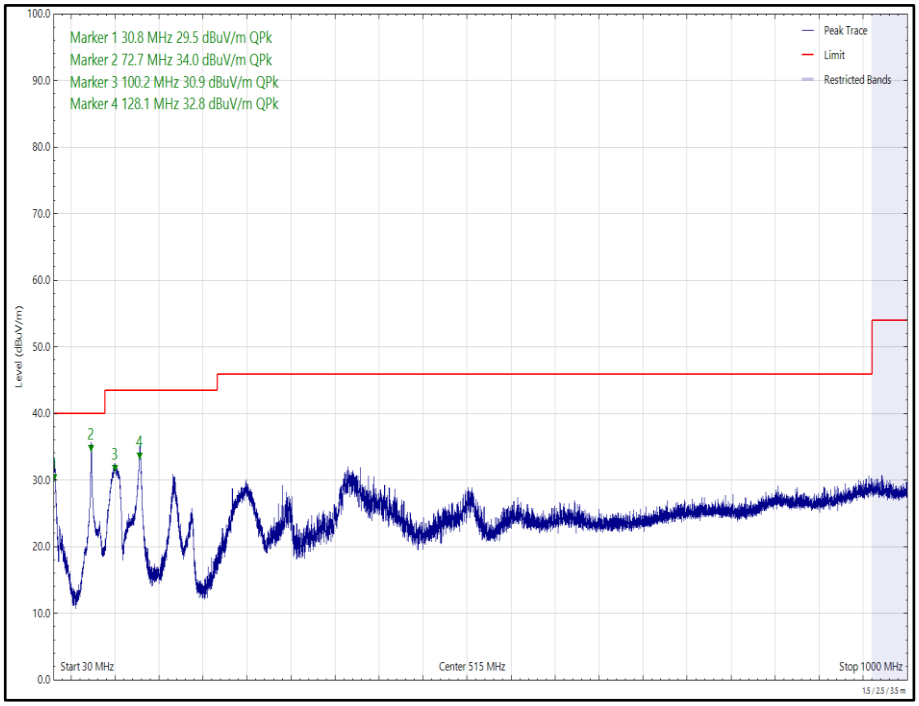

Figure 330 - U-NII-3 - 5825 MHz (CH165), VHT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

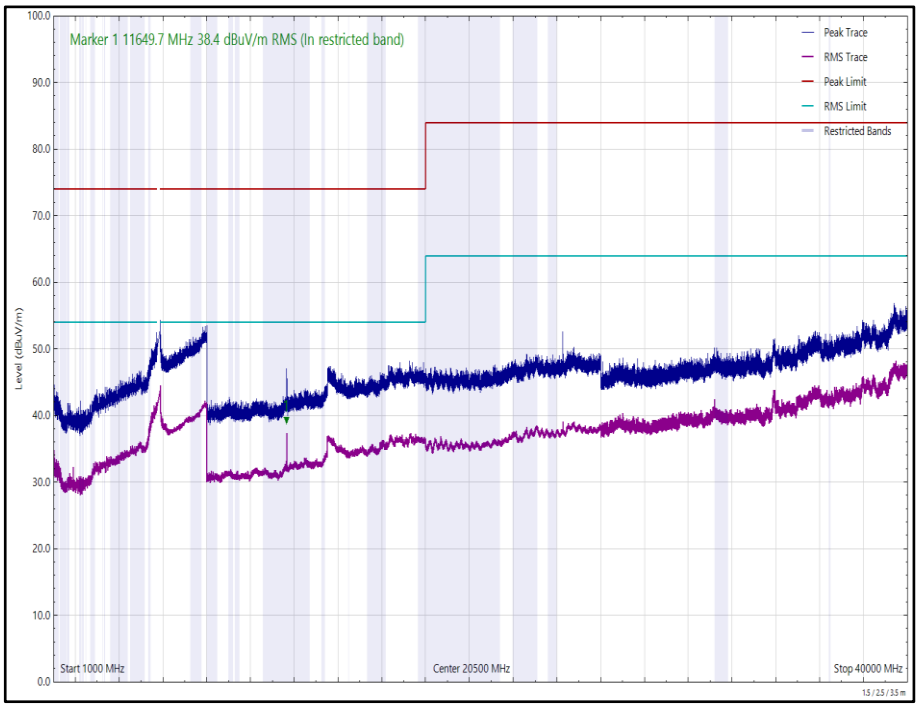

Figure 331 - U-NII-3 - 5825 MHz (CH165), VHT20, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

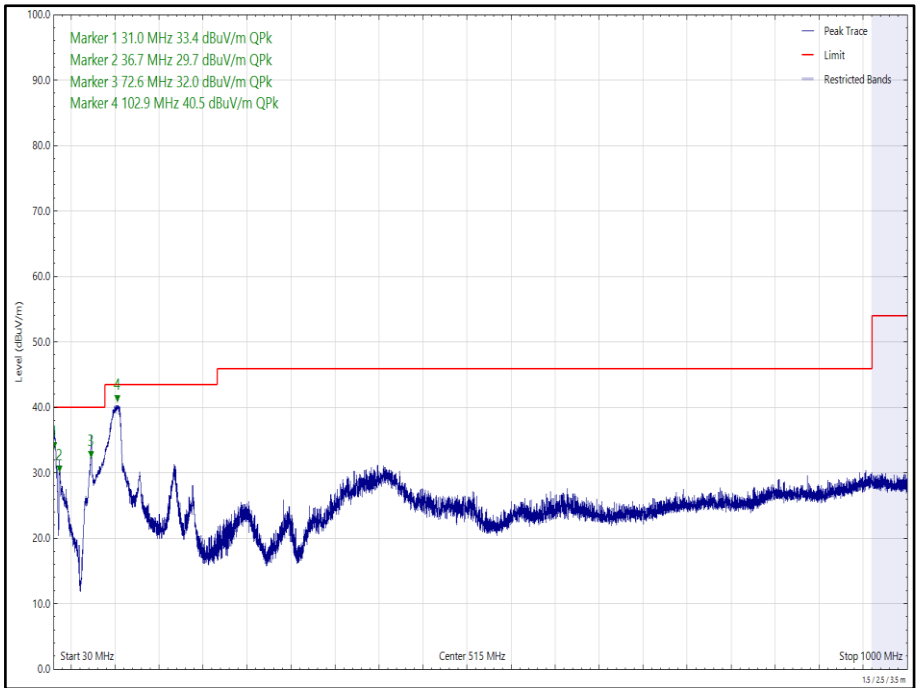

Figure 332 - U-NII-3 - 5825 MHz (CH165), VHT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

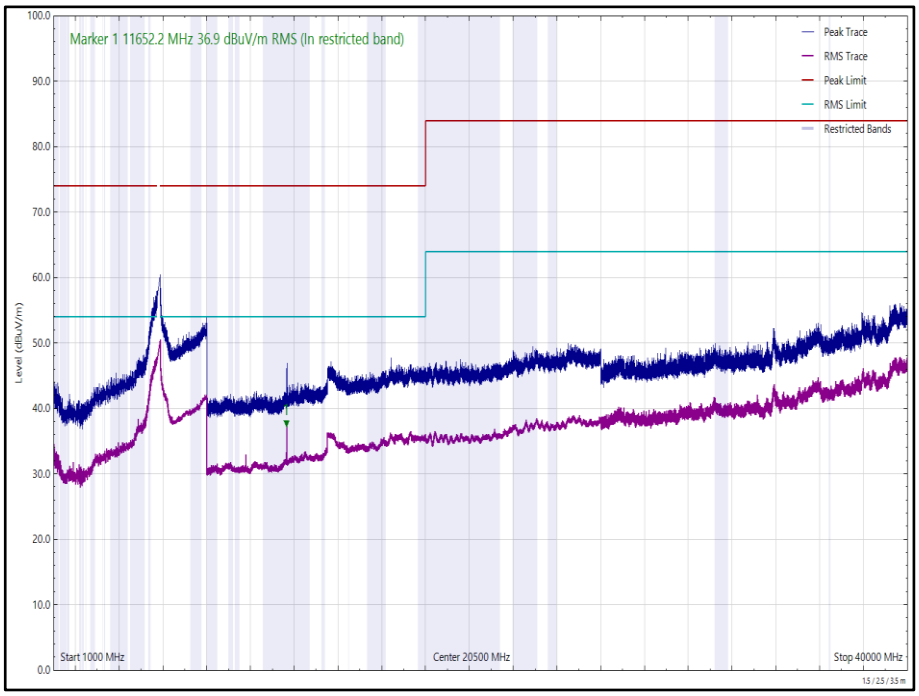

Figure 333 - U-NII-3 - 5825 MHz (CH165), VHT20, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.021	35.2	40.0	-4.8	Q-Peak	350	104	Vertical
30.333	29.2	40.0	-10.8	Q-Peak	350	391	Horizontal
36.666	31.5	40.0	-8.5	Q-Peak	62	101	Vertical
74.998	35.6	40.0	-4.4	Q-Peak	268	172	Vertical
75.077	33.3	40.0	-6.7	Q-Peak	130	371	Horizontal
92.450	37.0	43.5	-6.5	Q-Peak	193	107	Vertical
93.174	37.9	43.5	-5.7	Q-Peak	358	359	Horizontal
110.680	35.8	43.5	-7.7	Q-Peak	125	100	Vertical
111.688	33.4	43.5	-10.1	Q-Peak	32	246	Horizontal
121.673	33.7	43.5	-9.8	Q-Peak	155	256	Horizontal
123.005	33.0	43.5	-10.5	Q-Peak	129	107	Vertical
156.532	30.8	43.5	-12.7	Q-Peak	37	168	Horizontal
10342.099	53.8	74.0	-20.2	Peak	45	239	Vertical
10342.269	48.7	74.0	-25.3	Peak	286	363	Horizontal
15514.904	35.1	54.0	-18.9	RMS	174	107	Vertical
15515.016	34.5	54.0	-19.5	RMS	242	391	Horizontal

Table 699 - U-NII-1 - 5180 MHz (CH36), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 6 dB of the limit.

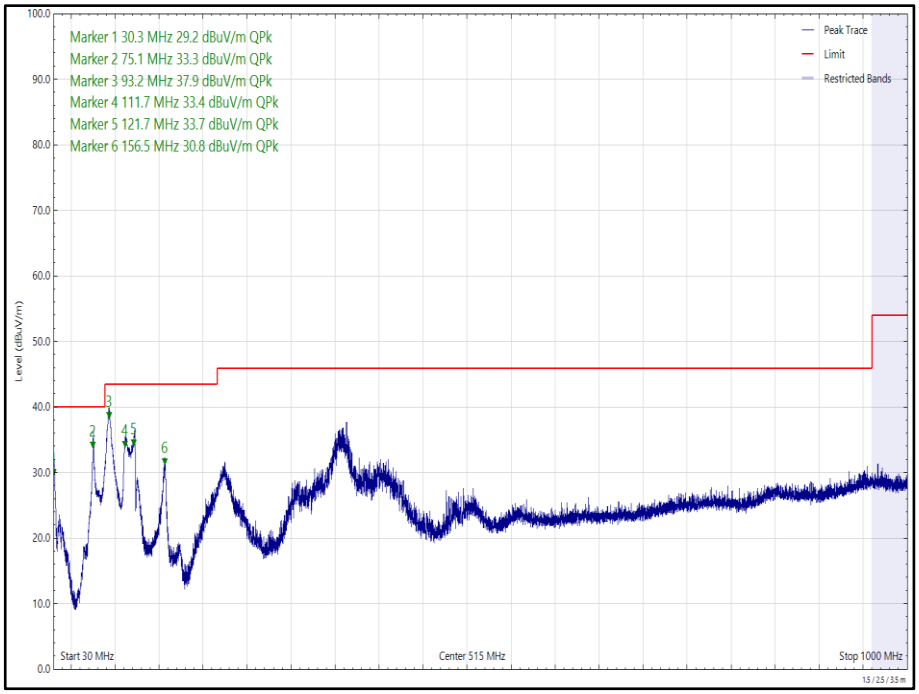

Figure 334 - U-NII-1 - 5180 MHz (CH36), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

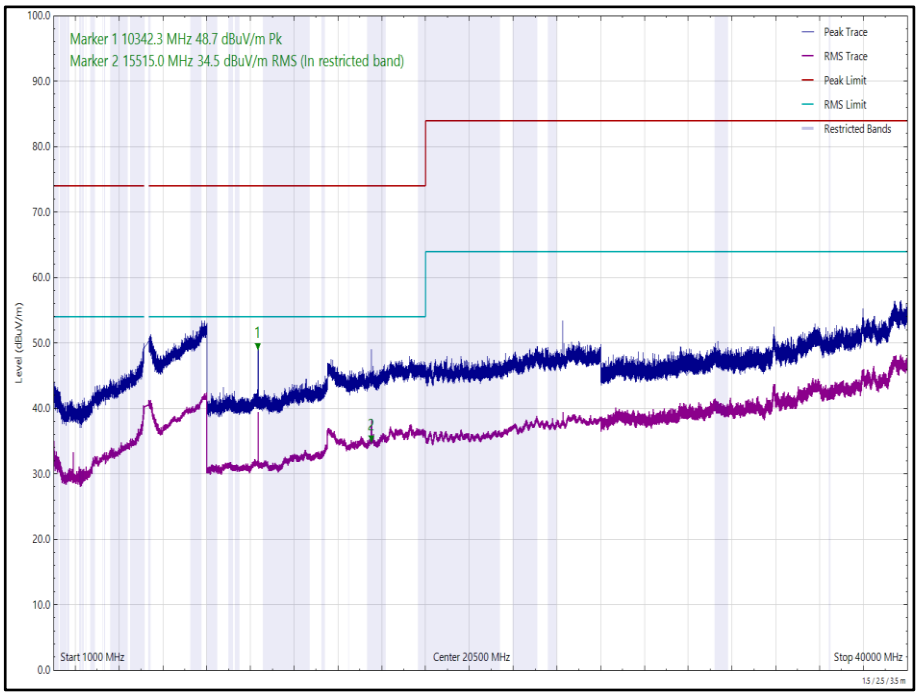

Figure 335 - U-NII-1 - 5180 MHz (CH36), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

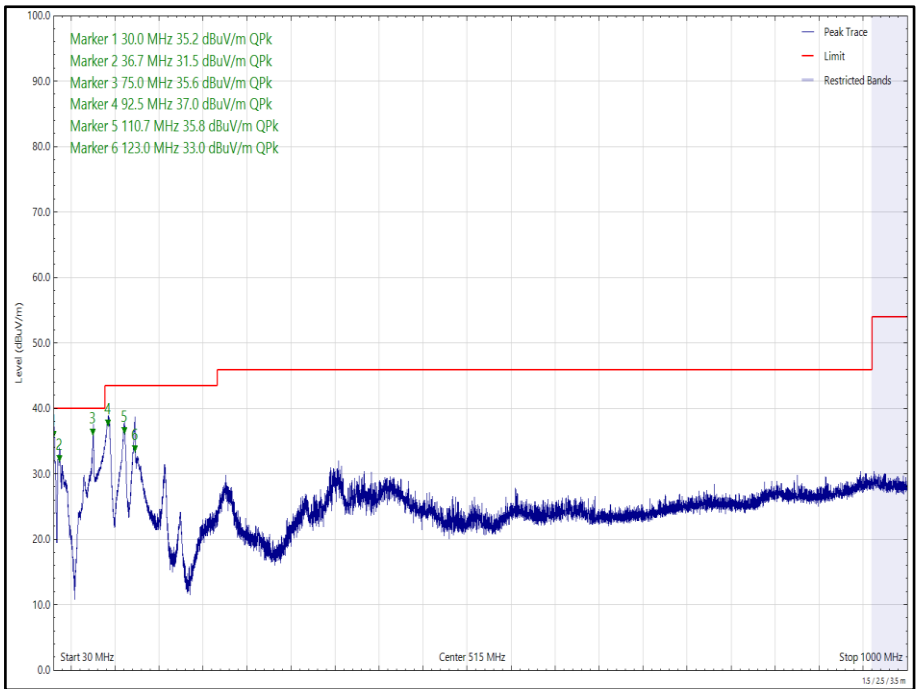

Figure 336 - U-NII-1 - 5180 MHz (CH36), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

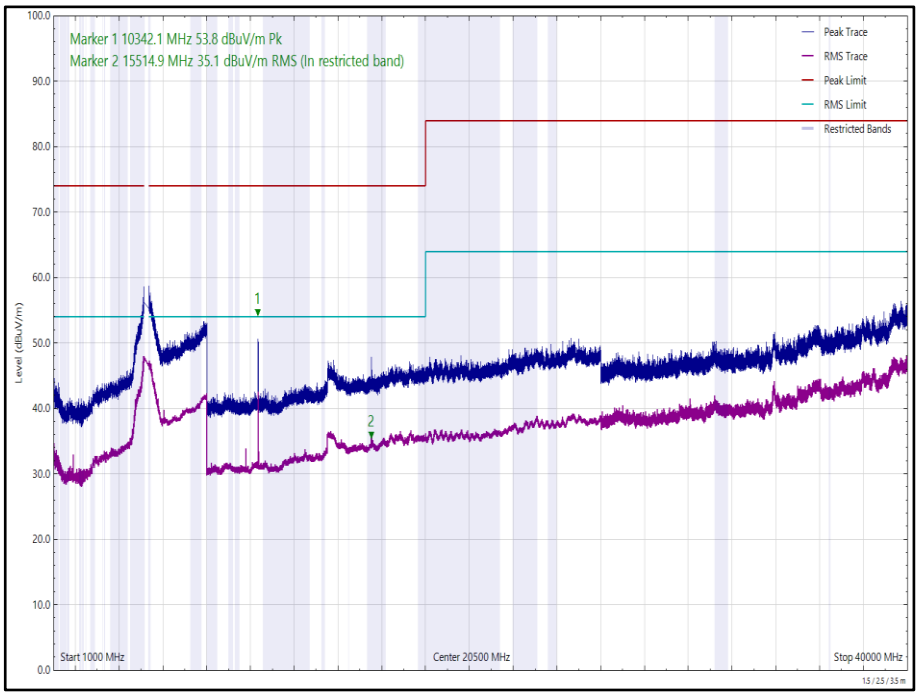

Figure 337 - U-NII-1 - 5180 MHz (CH36), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
10624.498	36.2	54.0	-17.8	RMS	42	239	Vertical
10624.756	33.9	54.0	-20.1	RMS	284	390	Horizontal

Table 700 - U-NII-2A - 5320 MHz (CH64), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz

No other emissions found within 6 dB of the limit.

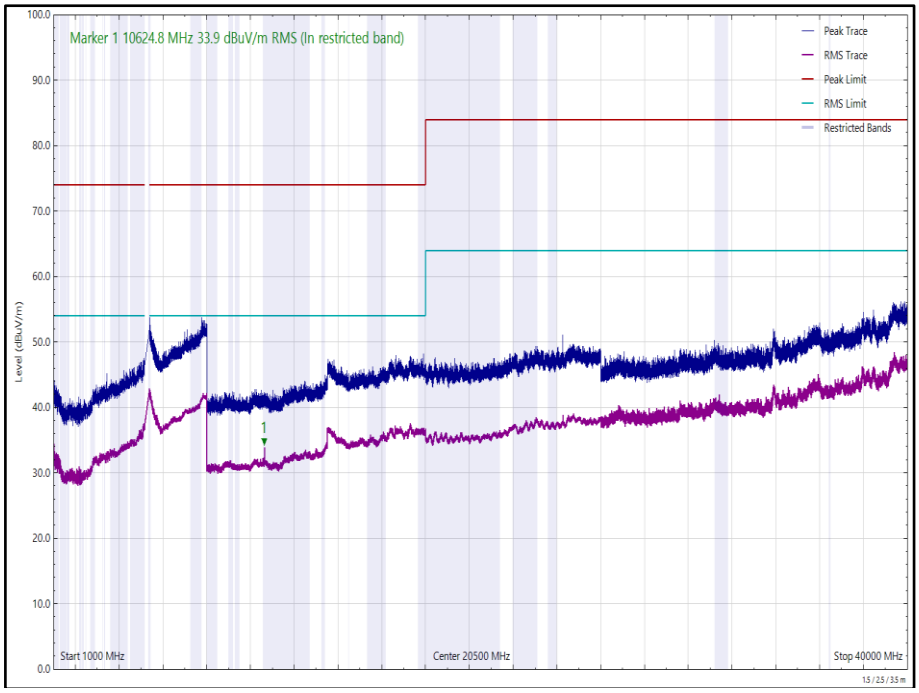

Figure 338 - U-NII-2A - 5320 MHz (CH64), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

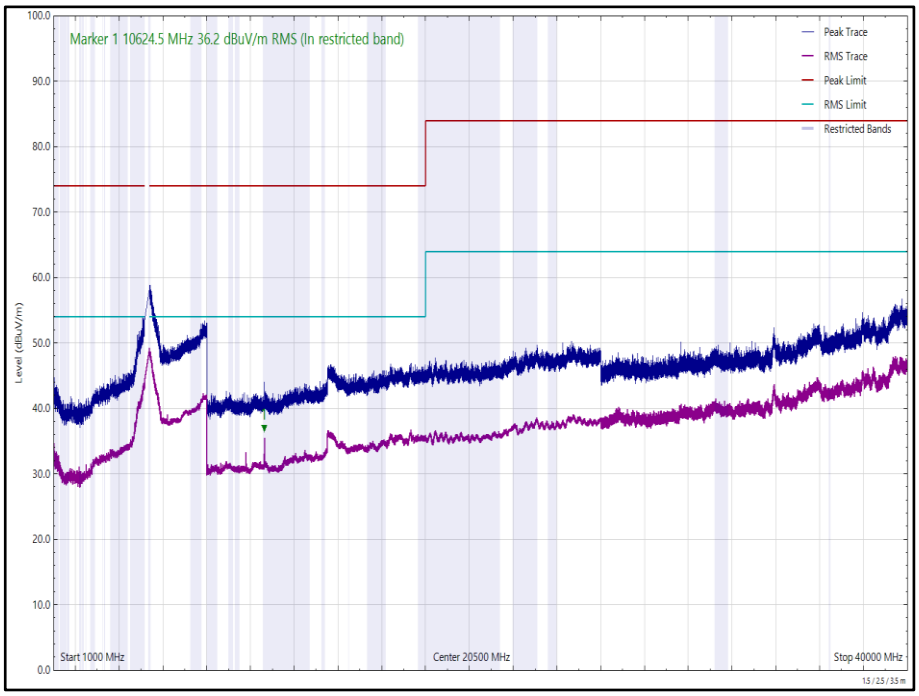

Figure 339 - U-NII-2A - 5320 MHz (CH64), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 701 - U-NII-2C - 5500 MHz (CH100), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz

*No emissions found within 6 dB of the limit.

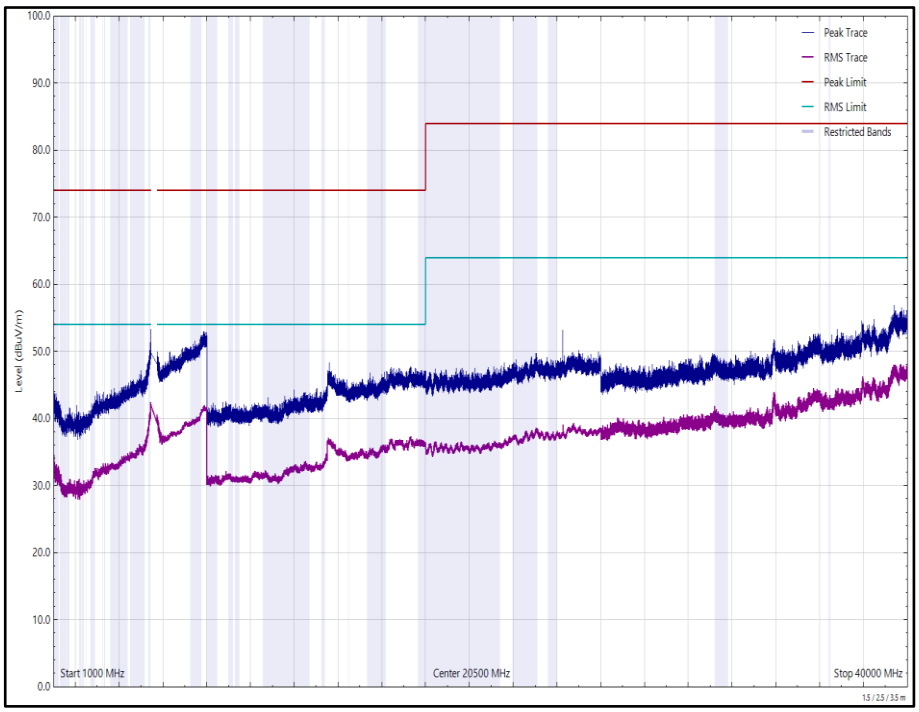

Figure 340 - U-NII-2C - 5500 MHz (CH100), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

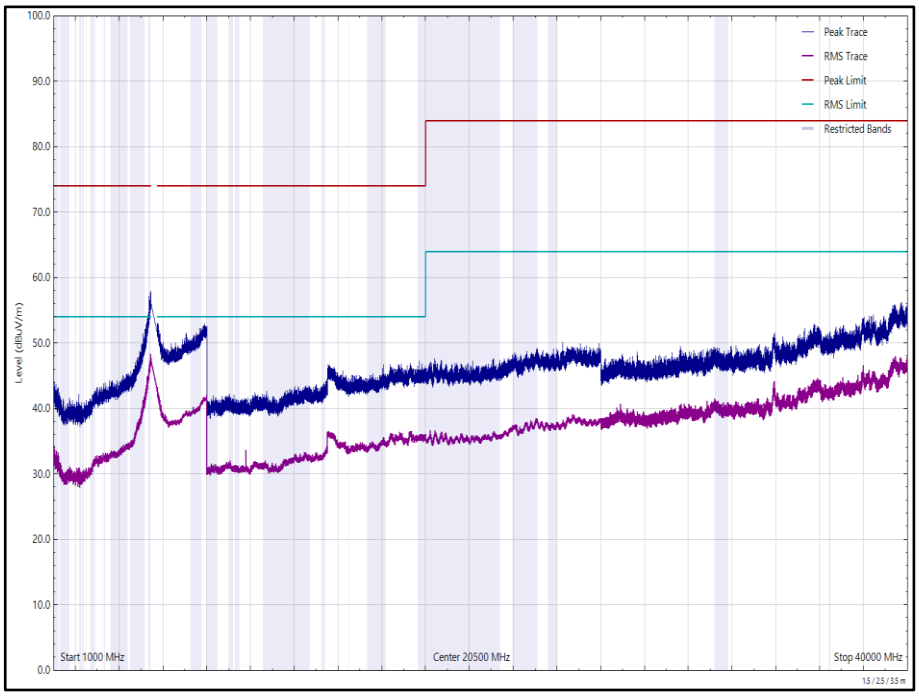

Figure 341 - U-NII-2C - 5500 MHz (CH100), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4750.015	38.6	54.0	-15.4	RMS	343	274	Vertical

Table 702 - U-NII-2C - 5700 MHz (CH140), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz

No other emissions found within 6 dB of the limit.

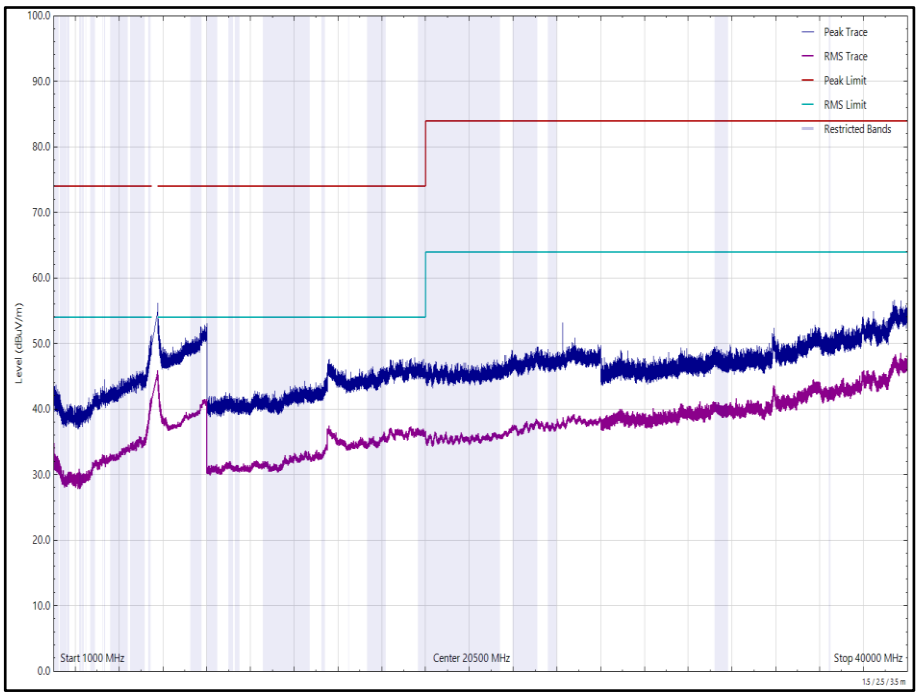

Figure 342 - U-NII-2C - 5700 MHz (CH140), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

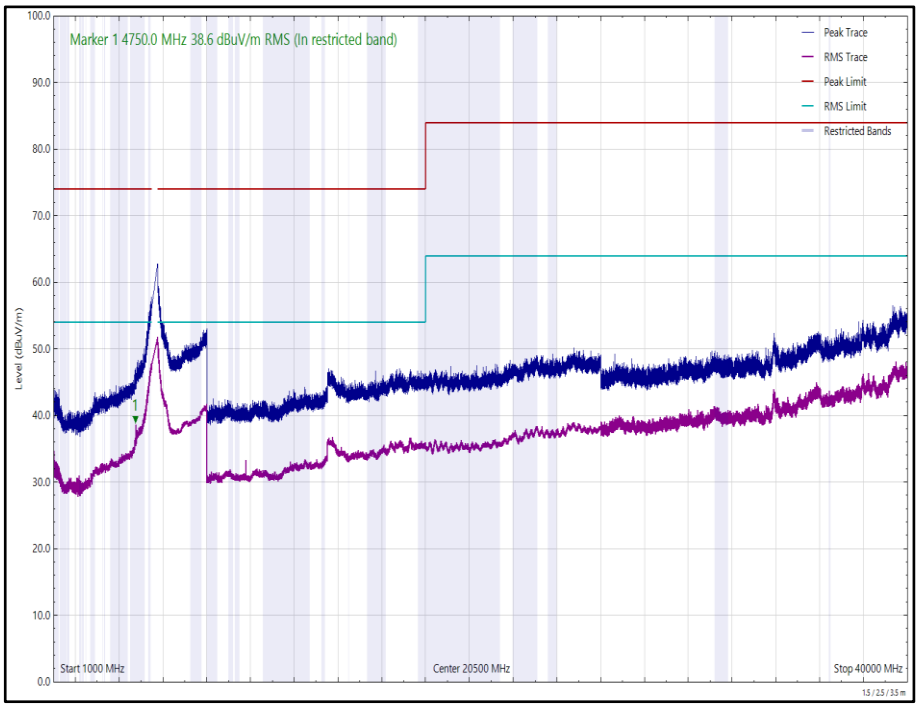

Figure 343 - U-NII-2C - 5700 MHz (CH140), HE20, RU52-37, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4852.985	38.3	54.0	-15.7	RMS	350	278	Vertical

Table 703 - U-NII-3 - 5745 MHz (CH149), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz

No other emissions found within 6 dB of the limit.

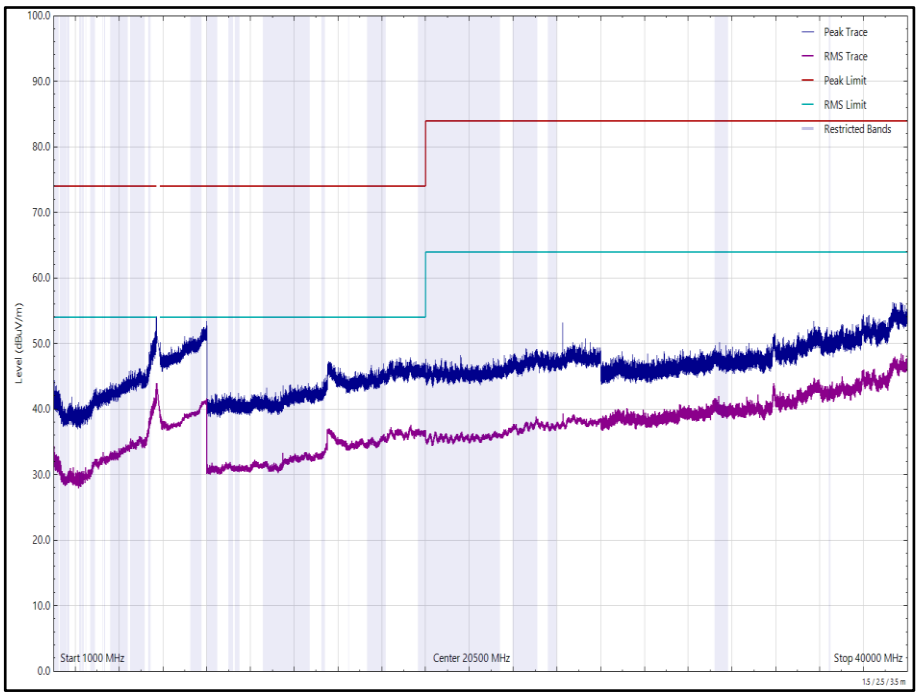

Figure 344 - U-NII-3 - 5745 MHz (CH149), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

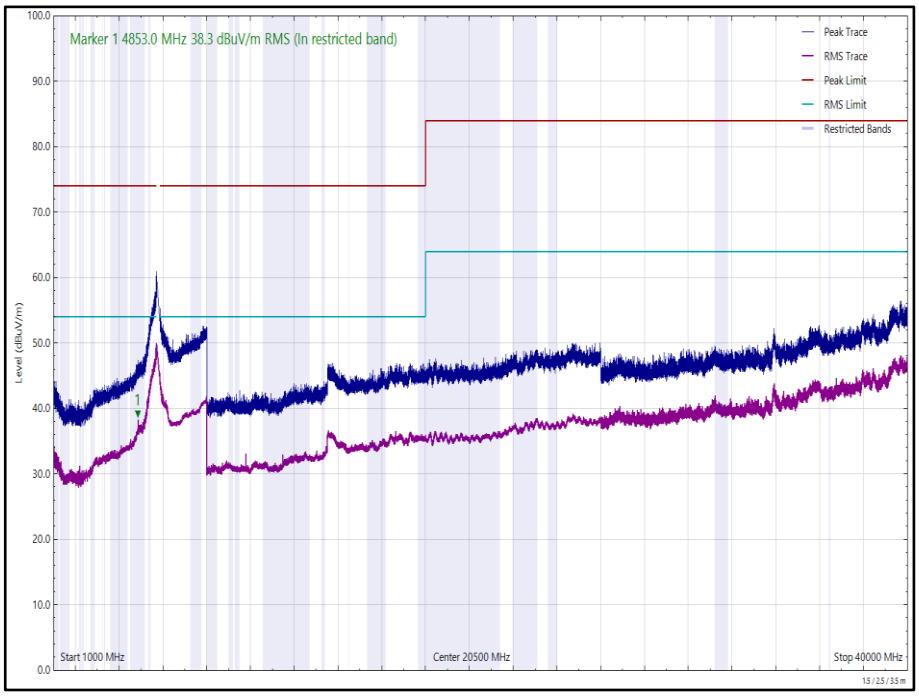

Figure 345 - U-NII-3 - 5745 MHz (CH149), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.015	30.6	40.0	-9.4	Q-Peak	358	390	Horizontal
30.359	34.5	40.0	-5.5	Q-Peak	92	102	Vertical
36.944	30.7	40.0	-9.3	Q-Peak	121	100	Vertical
75.079	35.4	40.0	-4.6	Q-Peak	266	173	Vertical
75.119	32.9	40.0	-7.1	Q-Peak	120	368	Horizontal
92.418	37.0	43.5	-6.5	Q-Peak	192	103	Vertical
93.081	38.3	43.5	-5.2	Q-Peak	0	179	Horizontal
110.422	35.8	43.5	-7.7	Q-Peak	134	108	Vertical
112.033	33.7	43.5	-9.8	Q-Peak	9	247	Horizontal
121.761	33.7	43.5	-9.9	Q-Peak	169	254	Horizontal
122.212	36.1	43.5	-7.5	Q-Peak	121	101	Vertical
156.487	28.3	43.5	-15.2	Q-Peak	8	100	Vertical
156.749	30.7	43.5	-12.8	Q-Peak	40	189	Horizontal
358.020	33.0	46.0	-13.0	Q-Peak	162	107	Horizontal
4846.062	38.3	54.0	-15.8	RMS	350	304	Vertical
11632.516	41.8	54.0	-12.2	RMS	73	256	Vertical
11632.516	38.2	54.0	-15.8	RMS	286	293	Horizontal

Table 704 - U-NII-3 - 5825 MHz (CH165), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 6 dB of the limit.

Figure 346 - U-NII-3 - 5825 MHz (CH165), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

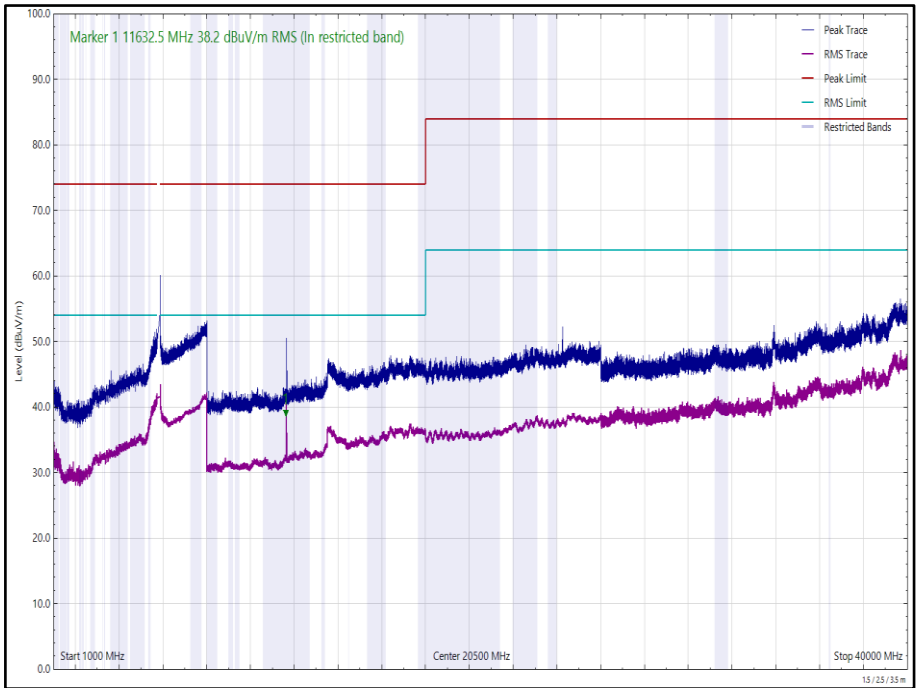

Figure 347 - U-NII-3 - 5825 MHz (CH165), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

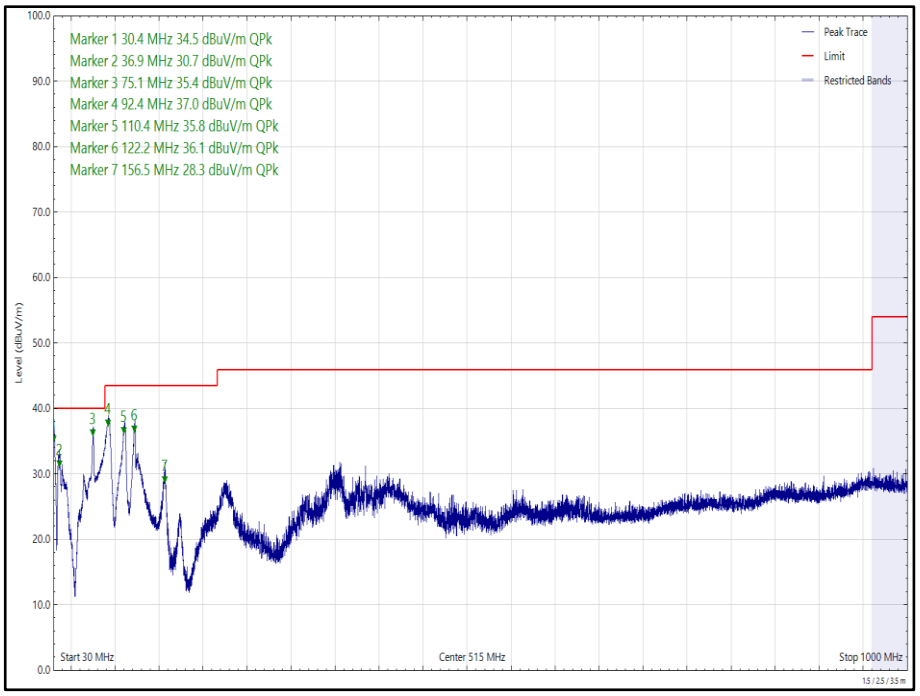

Figure 348 - U-NII-3 - 5825 MHz (CH165), HE20, RU26-0, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

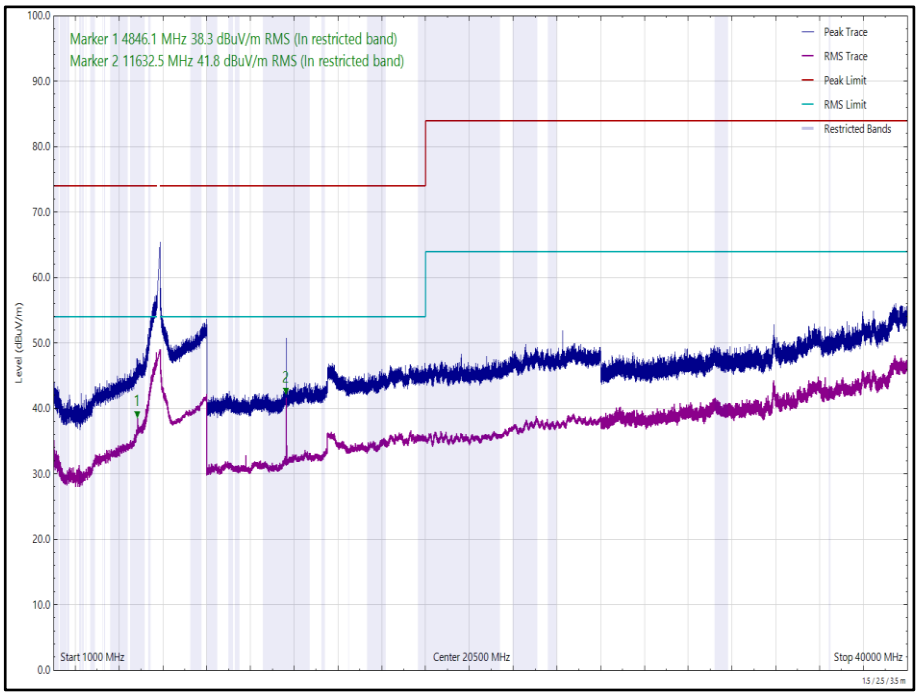

Figure 349 - U-NII-3 - 5825 MHz (CH165), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

FCC 47 CFR Part 15, Limit Clause 15.407(b)(1)(2)(3)(4)

Emissions not falling within the restricted bands listed in FCC 47 CFR Part 15.209:

For transmitters operating in the 5.15-5.25 GHz band: ≤-27 dBm/MHz outside 5150-5350 MHz.

For transmitters operating in the 5.25-5.35 GHz band: ≤-27 dBm/MHz outside 5150-5350 MHz.

For transmitters operating in the 5.47-5.725 GHz band: ≤-27 dBm/MHz outside 5470-5725 MHz

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Emissions within the restricted bands listed in FCC 47 CFR Part 15.209:

Frequency (MHz)	Field Strength (µV/m) at 3m	Field Strength Limit (dBµV/m) at 3m
30 to 88	100	40.00
88 to 216	150	43.52
216 to 960	200	46.02
Above 960	500	53.98

Table 705 - Radiated Emissions Limit Table (FCC)

ISED RSS-247, Limit Clause 6.2.1.2, 6.2.2.2, 6.2.3.2 and 6.2.4.2 and ISED RSS-GEN, Limit Clause 8.9

Emissions not falling within the restricted bands listed in ISED RSS-GEN, Clause 8.10:

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz 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.

For transmitters with operating frequencies in the bands 5250-5350 MHz and 5470-5725 MHz, all emissions outside the band 5250-5350 MHz and 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

Emissions falling within the restricted bands listed in ISED RSS-GEN, Clause 8.10:

Frequency (MHz)	Field Strength (µV/m) at 3m	Field Strength Limit (dBµV/m) at 3m
30 to 88	100	40.00
88 to 216	150	43.52
216 to 960	200	46.02
Above 960	500	53.98

Table 706 - Radiated Emissions Limit Table (ISED)

2.6.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
LISN	Rohde & Schwarz	ESH3-Z5	1390	12	31-Jan-2023
Screened Room (5)	Rainford	Rainford	1545	36	15-Apr-2024
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Programmable Power Supply	Iso-tech	IPS 2010	2437	-	O/P Mon
Multimeter	Fluke	79 Series II	3057	12	23-Aug-2022
Mast Controller	Maturo Gmbh	NCD	4810	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	4811	-	TU
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	01-Apr-2022
8 - 18 GHz pre-amp	Wright Technologies	PS06-0061/PS06-0060	4971	6	09-Nov-2022
Band Reject Filter - 2.425 GHz	Wainwright	WRCGV14-2390-2400-2450-2460-50SS	5067	12	29-Sep-2022
Band Reject Filter - 2.4585 GHz	Wainwright	WRCGV14-2423.5-2433.5-2483.5-2493.5-50SS	5069	12	11-Oct-2022
Band Reject Filter - 5.795 GHz	Wainwright	WRCJV10-5725-5755-5835-5865-50SS	5071	12	29-Sep-2022
Band Reject Filter - 5.22 GHz	Wainwright	WRCJV12-5120-5150-5290-5320-50SS	5073	12	29-Sep-2022
Band Reject Filter - 5.28 GHz	Wainwright	WRCJV12-5180-5210-5350-5380-50SS	5075	12	29-Sep-2022
Band Reject Filter - 5.775 GHz	Wainwright	WRCJV10-5700-5735-5815-5850-50SS	5077	12	15-Nov-2022
Band Reject Filter - 5.570 GHz	Wainwright	WRCJV10-5440-5490-5650-5700-50SS	5079	12	15-Nov-2022
Emissions Software	TUV SUD	EmX V2.1.12	5125	-	Software
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	5217	12	25-Jan-2023
Preamplifier (30dB 18-40GHz)	Schwarzbeck	BBV 9721	5218	12	25-Jan-2023
3 GHz High pass filter	Wainwright	WHKX12-2580-3000-18000-80SS	5220	12	23-Mar-2023
Preamplifier (30dB 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	08-Apr-2022
Antenna (DRG Horn 7.5-18GHz)	Schwarzbeck	HWRD750	5348	12	15-Oct-2022

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5513	12	09-Apr-2022
1m SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5514	12	09-Apr-2022
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5517	12	09-Apr-2022
8m N Type Cable	Junkosha	MWX221-08000NMSNMS/B	5519	12	07-Mar-2023
8m N-Type Cable	Junkosha	MWX221-08000NMSNMS/B	5520	12	24-Mar-2023
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241-02000KMSKMS/A	5524	12	24-Mar-2022
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	15-Apr-2022
7 GHz High pass Filter	Wainwright	WHKX12-5850-6800-18000-80SS	5549	12	20-May-2022
1200 MHz Low Pass Filter (01)	Mini-Circuits	VLF-1200+	5559	12	24-May-2022
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5605	12	23-Sep-2022
Antenna (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	16-Oct-2022

Table 707

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

2.7 Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

2.7.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (h)(2)(iii)(iv)
ISED RSS-247, Clause 6.3.2(c)(d)(e)

2.7.2 Equipment Under Test and Modification State

A2681, S/N: WDFNWR14Q4 - Modification State 0

2.7.3 Date of Test

16-February-2022 to 23-February-2022

2.7.4 Test Method

This test was performed in accordance with FCC KDB 905462 D02, clause 7.8.3.

A computer was connected via an Ethernet cable to the Master device and the FCC defined audio/video file was streamed from the Client device using Windows Media Player.

Radar Pulse Type 0 was then transmitted, and the Spectrum monitored. The transmissions from the UUT were observed for a period of 12 seconds after the final injected Radar Pulse.

It was checked that all transmissions stopped within the 10 second period defined from the point of the end of the final Radar pulse + 10 seconds. In addition, the aggregate on time during the first 200ms and the following 9.8 seconds of the Channel Move Time was computed by the Aeroflex DFS Software.

The markers on the trace data correspond to the following time periods:

Red - End Of Radar Burst, (T0)
Purple - End Of 200ms Period, (T0 + 200 ms)
Orange - End Of Channel Move Time, (T0 + 10 seconds)

To verify the non-occupancy period, the PXI digitiser was replaced with a Spectrum Analyser. The external trigger from the Aeroflex DFS test system was used to trigger a 30-minute sweep from the moment the radar burst sequence was injected. It was verified that no transmissions occurred on the test channel during this time period.

2.7.5 Environmental Conditions

Ambient Temperature	22.2 - 24.0 °C
Relative Humidity	27.3 - 43.5 %

2.7.6 Test Results

5 GHz WLAN - 802.11ac VHT80

The equipment was set up as shown in the diagram below. The EUT was configured to run iPerf, transmitting UDP to the client laptop. The channel loading was set to >17% by adjusting the bandwidth specified in the iPerf UDP transfer.

To calibrate the level of the radar at the input to the companion device, the companion device was replaced by the spectrum analyser and the output of the PXI RF generator adjusted to give -62 dBm.

Radar Type	Pulse Width (µs)	PRI (µs)	Number of Pulses
0	1	1428	18

Table 708 - Radar Pulse Type 0 Characteristics

Manufacturer	Model	Serial Number	FCC ID
ASUS	RT-AC68U	GAIU0H002628	MSQ-RTAC68U

Table 709 - Details of Master Device used to support testing

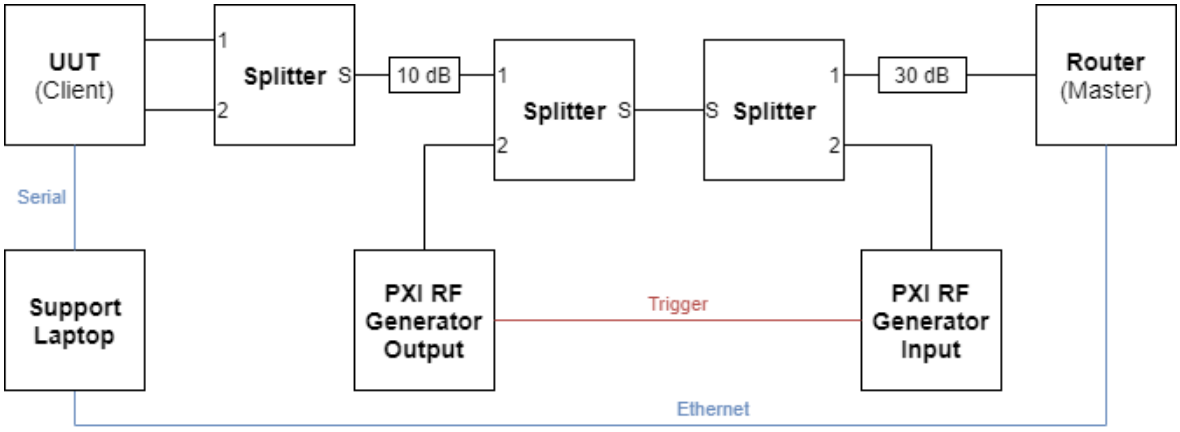

Figure 350 - Test Equipment Setup Diagram for Client without Radar Detection with Injection at the Master

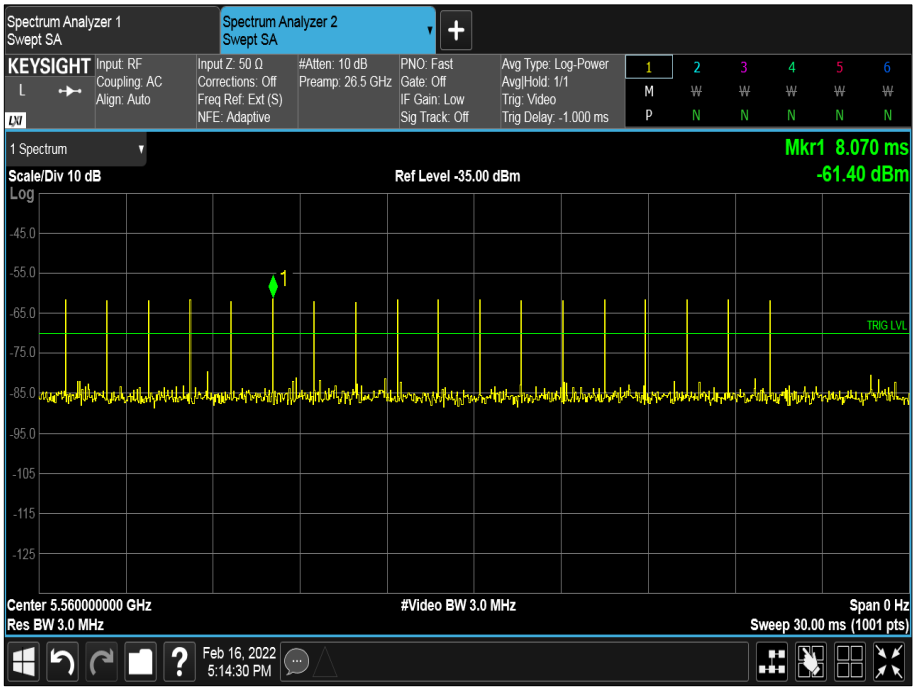

Figure 351 - Verification of Radar Type 0

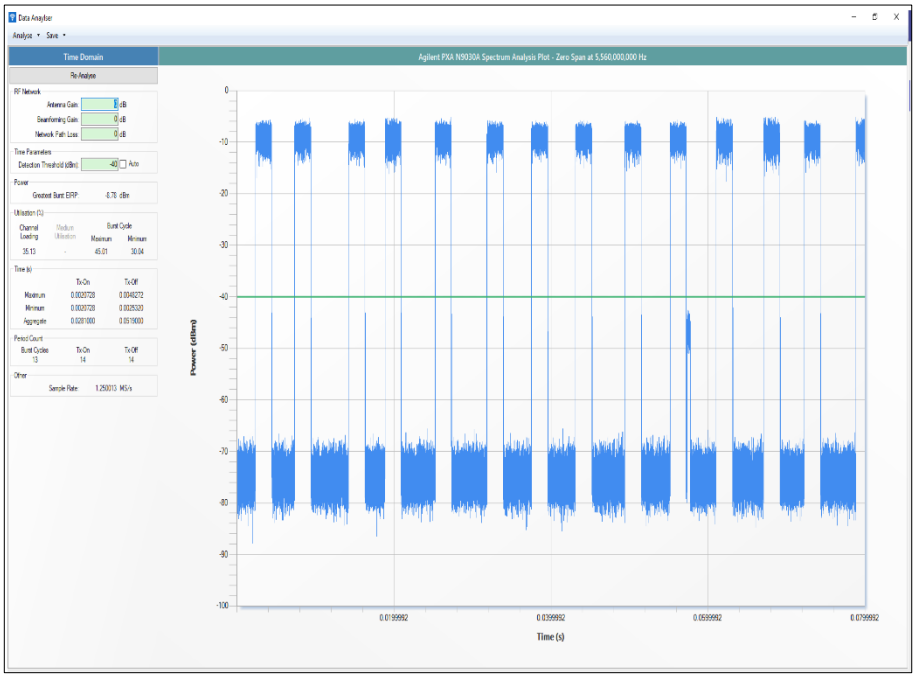

Figure 352 - Channel Loading

The channel loading was 35.13%

Maximum Transmit Power	Value (Notes 1 and 2)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	

Table 710 - DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Test Parameter	Result
Test Channel	5560 MHz
Channel Move Time	0.046 sec
Channel Closing Time (Aggregate Time During 200 ms)	8.29 ms
Channel Closing Time (Aggregate Time During 200 ms to 10 s)	0.00 ms
Channel Closing Time (Aggregate Time During 10 s)	8.29 ms
Transmission Observed During Non-Occupancy Period	None

Table 711 - In-Service Monitoring Test Results

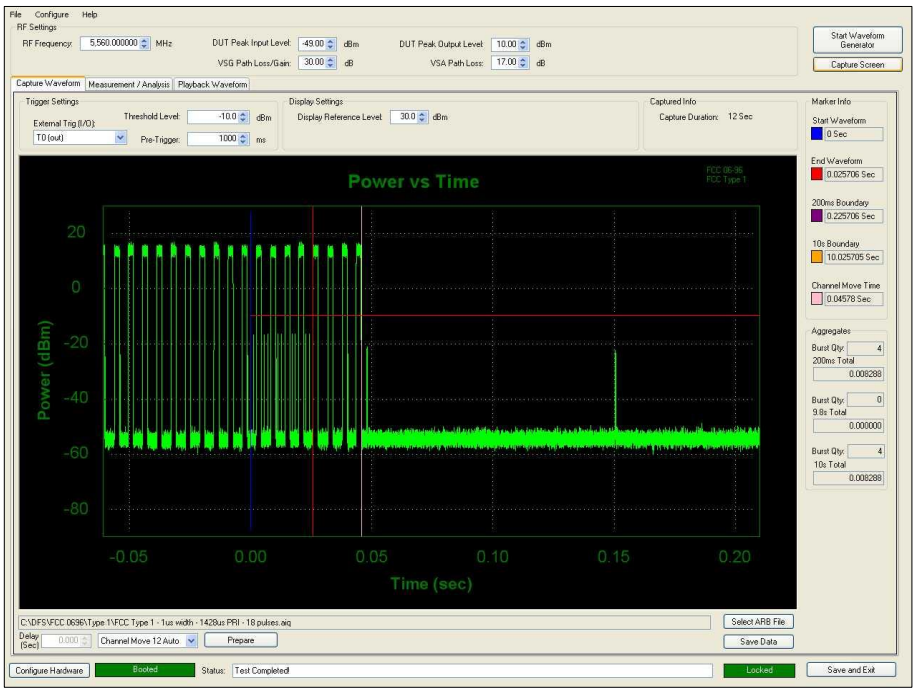

Figure 353 - First 200 ms of Channel Shutdown Period

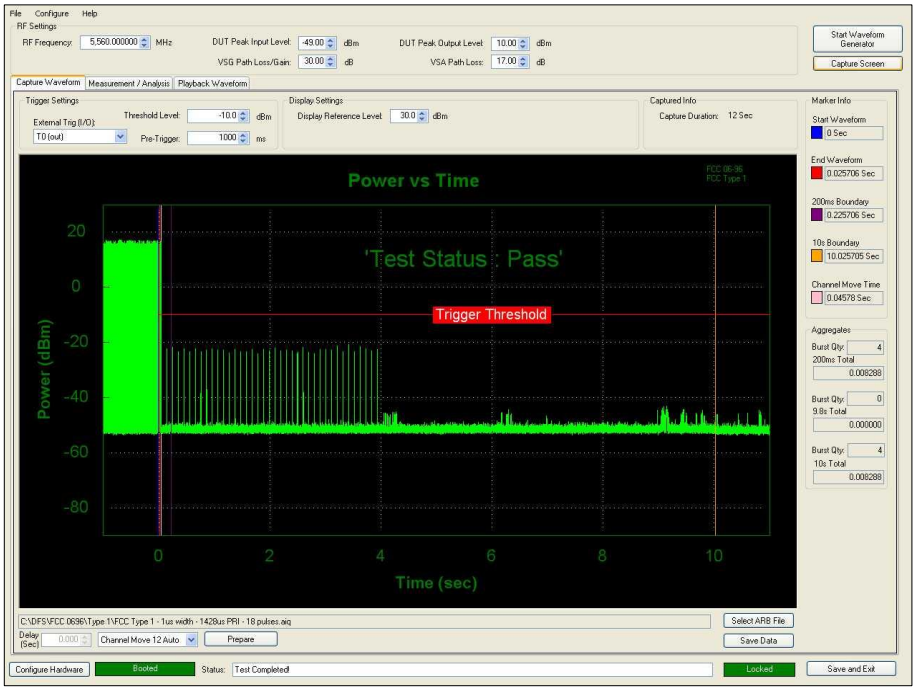

Figure 354 - First 12 s of Channel Shutdown Period

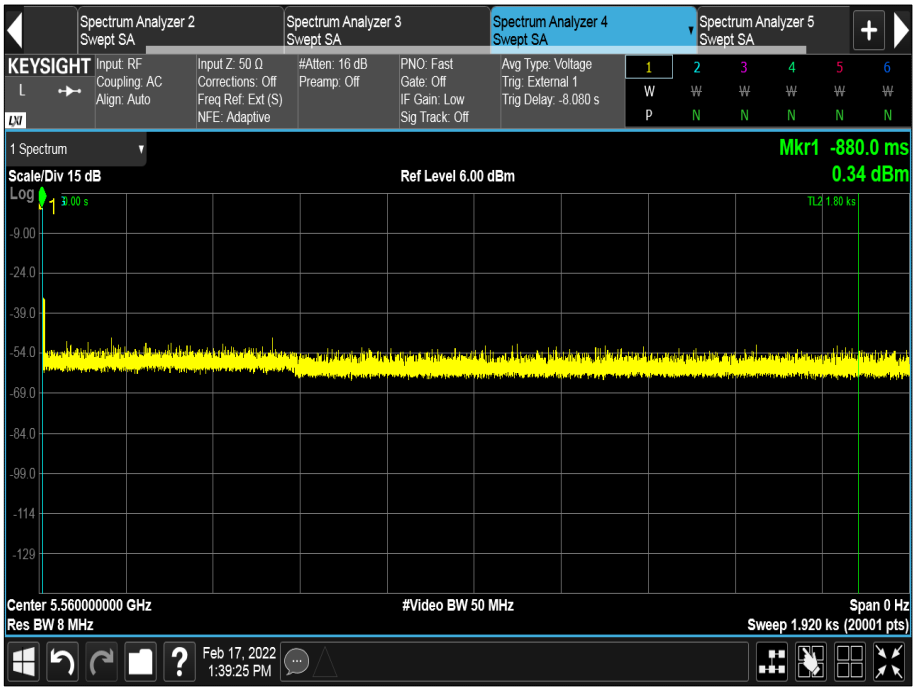

Figure 355 - 30 minute Non-Occupancy Period

5 GHz WLAN - Client to Client - 802.11ac VHT80

The equipment was set up as shown in the diagram below. The EUT was configured to play a HD video on the Client. The channel loading was set to >17% by adjusting the bandwidth specified in the iPerf UDP transfer.

To calibrate the level of the radar at the input to the companion device, the companion device was replaced by the spectrum analyser and the output of the PXI RF generator adjusted to give -62 dBm.

Radar Type	Pulse Width (µs)	PRI (µs)	Number of Pulses
0	1	1428	18

Table 712 - Radar Pulse Type 0 Characteristics

Manufacturer	Model	Serial Number	FCC ID
ASUS	RT-AC68U	SN: L8IUIB004830	MSQ-RTACIB00

Table 713 - Details of Master Device used to support testing

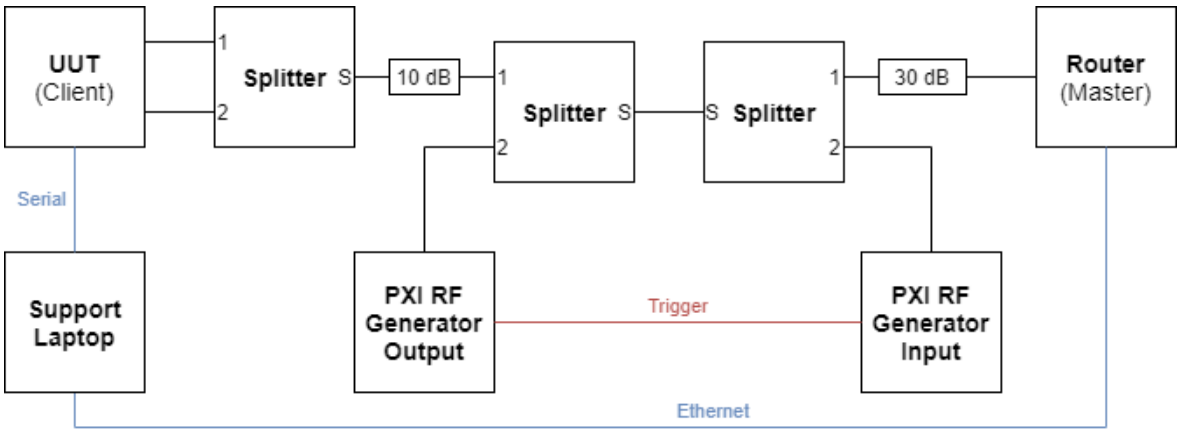

Figure 356 - Test Equipment Setup Diagram for Client without Radar Detection with Injection at the Master

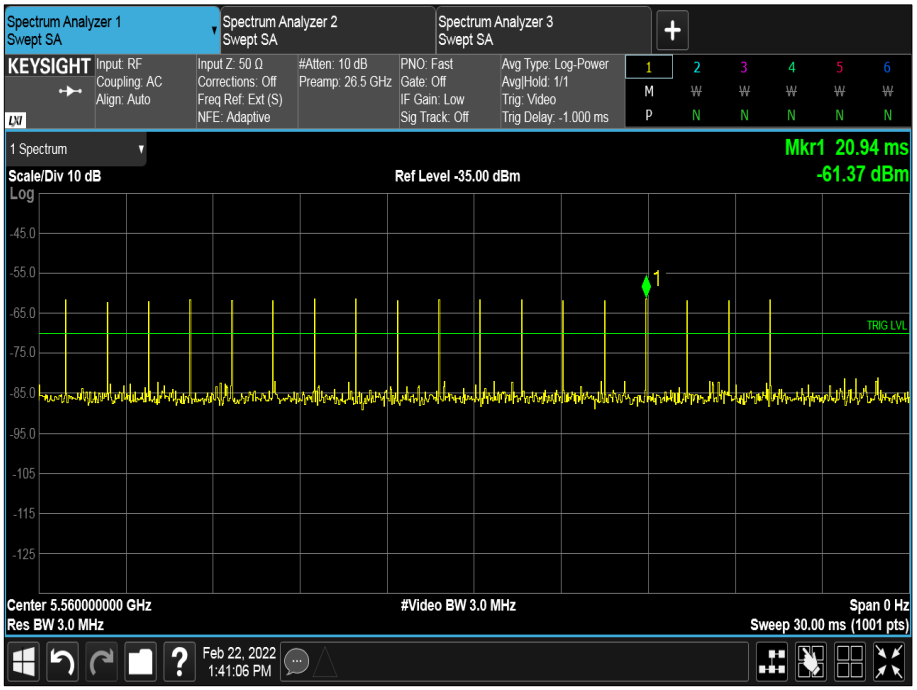

Figure 357 - Verification of Radar Type 0

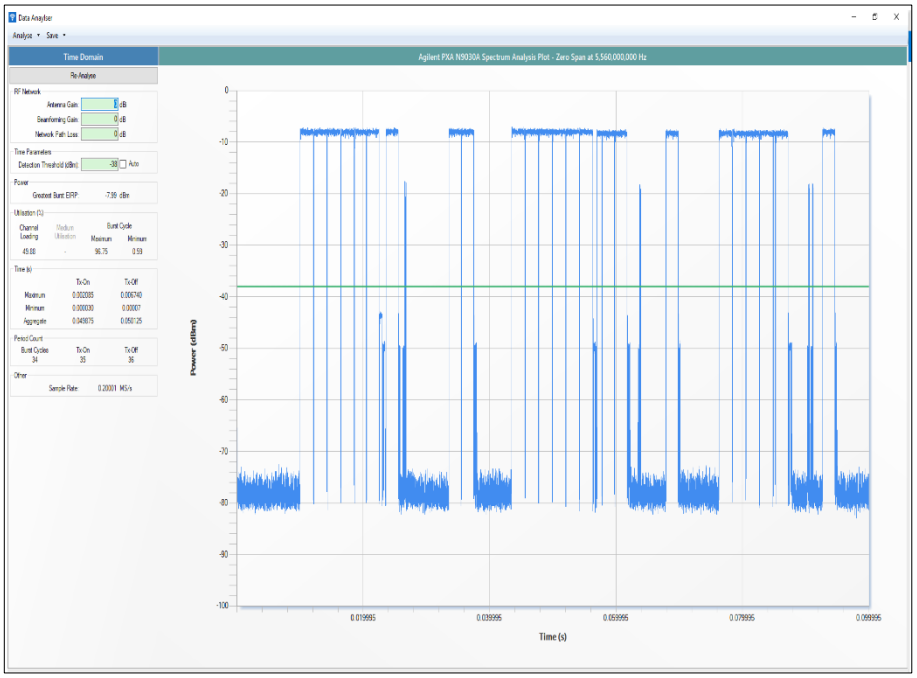

Figure 358 - Channel Loading

The channel loading was 49.88%

Maximum Transmit Power	Value (Notes 1 and 2)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	

Table 714 - DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Test Parameter	Result
Test Channel	CH112 5560 MHz
Channel Move Time	0.069 sec
Channel Closing Time (Aggregate Time During 200 ms)	21.495 ms
Channel Closing Time (Aggregate Time During 200 ms to 10 s)	0. 00 ms
Channel Closing Time (Aggregate Time During 10 s)	21.495 ms
Transmission Observed During Non-Occupancy Period	None

Table 715 - In-Service Monitoring Test Results

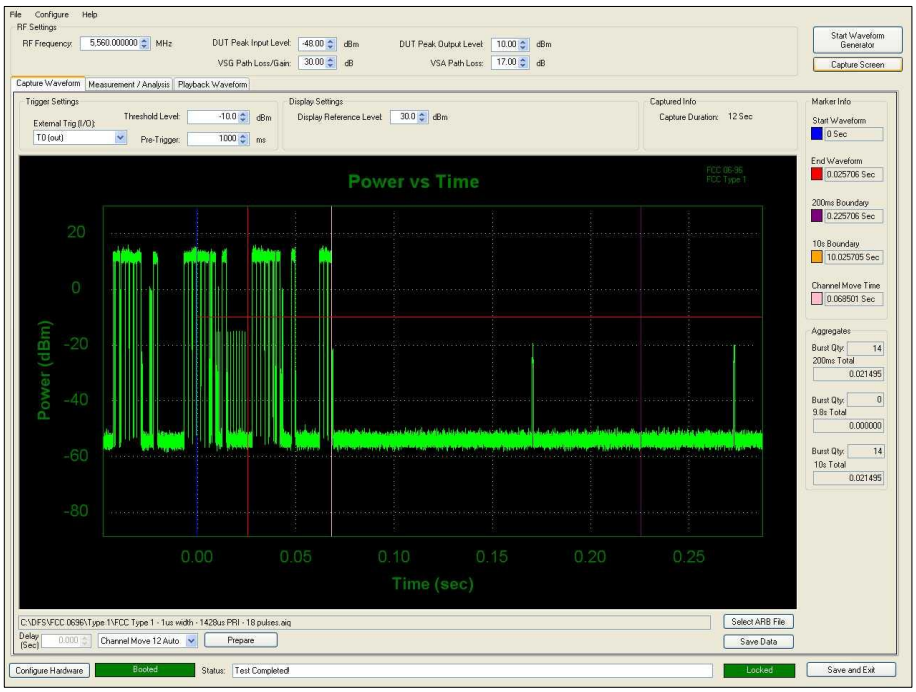

Figure 359 - First 200 ms of Channel Shutdown Period

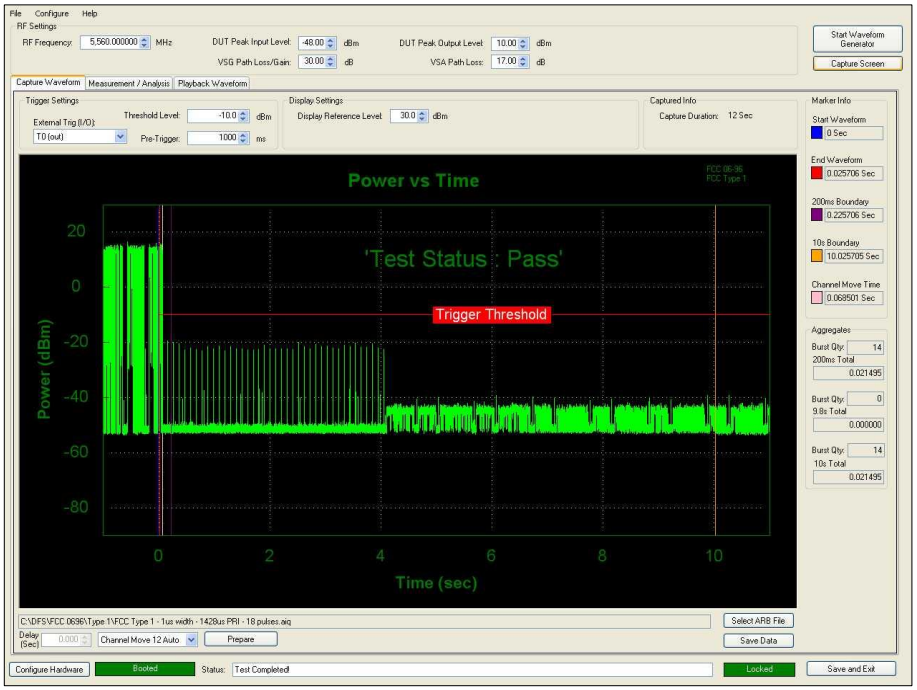

Figure 360 - First 12 s of Channel Shutdown Period

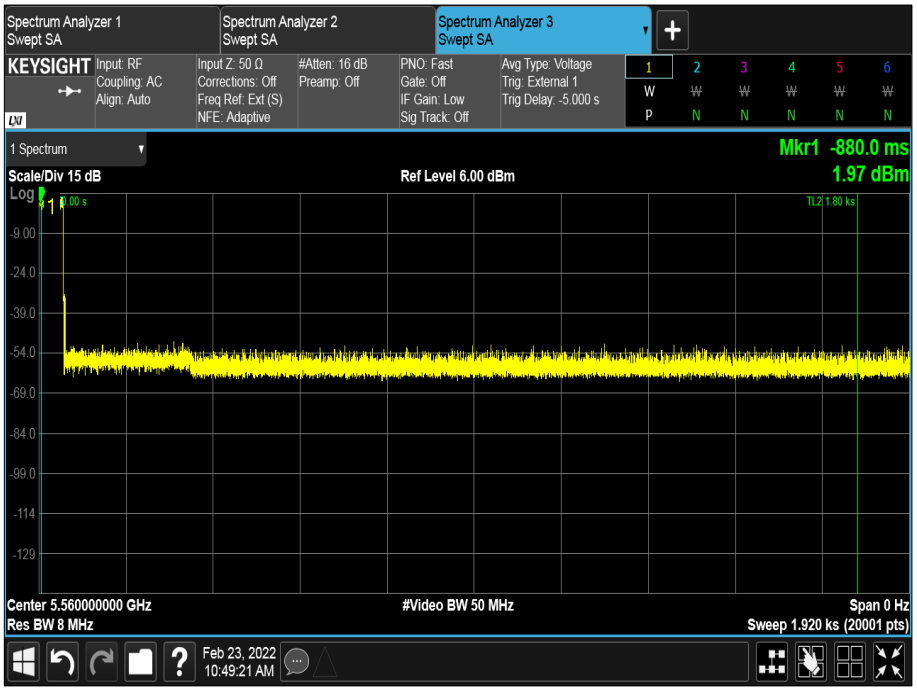

Figure 361 - 30 minute Non-Occupancy Period

FCC 47 CFR Part 15, Limit Clause 15.407 (h)(2)(iii)

Channel Move Time	<10 seconds
Channel Closing Time (Aggregate Time During 200ms)	<200 ms
Channel Closing Time (Aggregate Time During +200ms to 10s)	<60 ms

Table 716 - Channel Move Time and Channel Closing Transmission Time Limit

FCC 47 CFR Part 15, Limit Clause 15.407 (h)(2)(iv)

Non-occupancy Period	> 30 minutes

Table 717 - Non-Occupancy Limit

ISED RSS-247, Limit Clause 6.3.2

Devices shall comply with the following requirements, however, the requirement for in-service monitoring does not apply to slave devices without radar detection.

In-service monitoring: an LE-LAN device shall be able to monitor the operating channel to check that a co-channel radar has not moved or started operation within range of the LE-LAN device. During in-service monitoring, the LE-LAN radar detection function continuously searches for radar signals between normal LE-LAN transmissions.

Channel availability check time: the device shall check whether there is a radar system already operating on the channel before it initiates a transmission on a channel and when it moves to a channel. The device may start using the channel if no radar signal with a power level greater than the interference threshold value specified in Section 6.3.1 above is detected within 60 seconds. This requirement only applies in the master operational mode.

Channel move time: after a radar signal is detected, the device shall cease all transmissions on the operating channel within 10 seconds.

Channel closing transmission time: is comprised of 200 ms starting at the beginning of the channel move time plus any additional intermittent control signals required to facilitate a channel move (an aggregate of 60 ms) over the remaining 10-second period of the channel move time.

Non-occupancy period: a channel that has been flagged as containing a radar signal, either by a channel availability check or in-service monitoring, is subject to a 30-minute non-occupancy period where the channel cannot be used by the LE-LAN device. The non-occupancy period starts from the time that the radar signal is detected

2.7.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Antenna (DRG Horn)	ETS-Lindgren	3115	3125	12	15-Oct-2022
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
PXI RF Digitizer	Aeroflex	3035	4012	24	12-Nov-2022
PXI RF Synthesizer	Aeroflex	3010	4013	24	12-Nov-2022
PXI RF Synthesizer	Aeroflex	3011	4014	24	12-Nov-2022
PXI Digital RF Signal Generator	Aeroflex	3025	4015	24	12-Nov-2022
Power splitter - 2 port	Mini-Circuits	ZN2PD-63-S+	4743	12	24-Sep-2022
Power splitter - 4 port	Mini-Circuits	ZN4PD1-63-S+	4744	12	26-Oct-2022
Wireless Cable & Fibre Router - AC 1900, Dual-band	Asus	RT-AC68U	4881	-	TU
EXA	Keysight Technologies	N9010B	4968	24	19-Jan-2024
EXA	Keysight Technologies	N9010B	4969	24	07-Feb-2024
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5418	12	23-Jun-2022
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5419	12	09-Jul-2022
Cable (sma-sma, 2 m)	Junkosha	MWX221-02000DMS	5428	12	20-Oct-2022
Attenuator 5W 20dB DC-18GHz	Aaren	AT40A-4041-D18-20	5498	12	10-May-2022
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5504	12	14-Apr-2022
Attenuator 2W 10dB DC-10GHz	Telegartner	J01156A0031	5580	-	O/P Mon
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5687	12	20-Dec-2022
Wireless Cable & Fibre Router - AC 1900, Dual-band	Asus	RT-AC68U	5815		TU

Table 718

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Restricted Band Edges	± 6.3 dB
Maximum Conducted Output Power	± 3.2 dB
Maximum Conducted Power Spectral Density	± 3.2 dB
Emission Bandwidth	955.68 kHz
Authorised Band Edges	± 6.3 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period	Time: ± 0.47 % Power: ± 1.29 dB

Table 719

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2007, Clause 4.4.3 and 4.5.1. (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.