

Figure 8.2-337: Conducted band edge emission at 728 MHz, Port A, QPSK, Band 85A 5 MHz channel

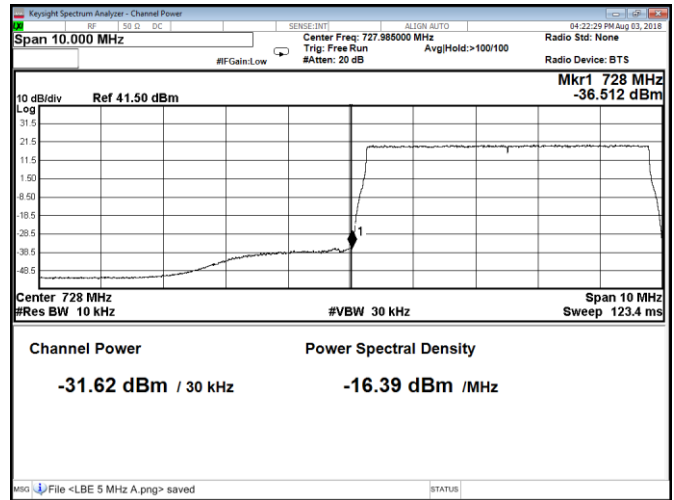


Figure 8.2-338: Conducted band edge emission at 728 MHz, Port B, QPSK, Band 85A 5 MHz channel

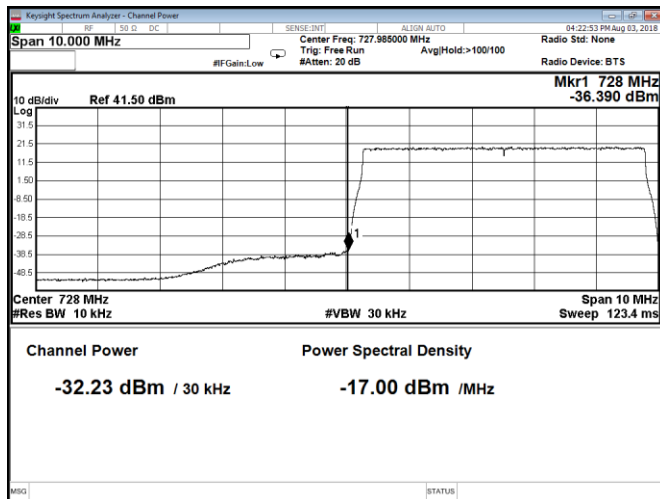


Figure 8.2-339: Conducted band edge emission at 728 MHz, Port C, QPSK, Band 85A 5 MHz channel

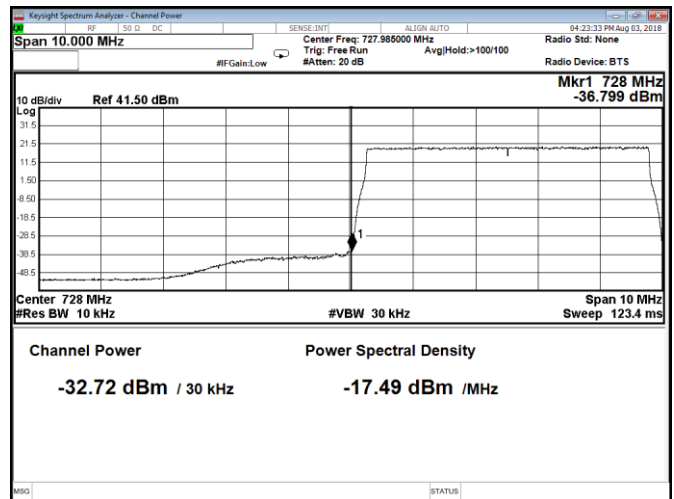


Figure 8.2-340: Conducted band edge emission at 728 MHz, Port D, QPSK, Band 85A 5 MHz channel

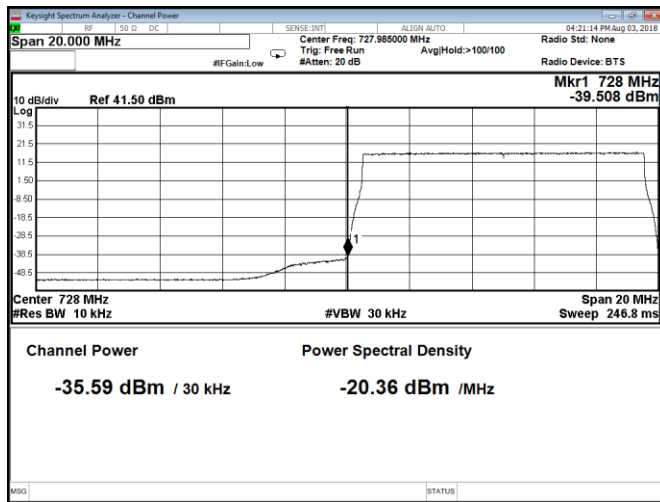


Figure 8.2-341: Conducted band edge emission at 728 MHz, Port A, QPSK, Band 85A 10 MHz channel

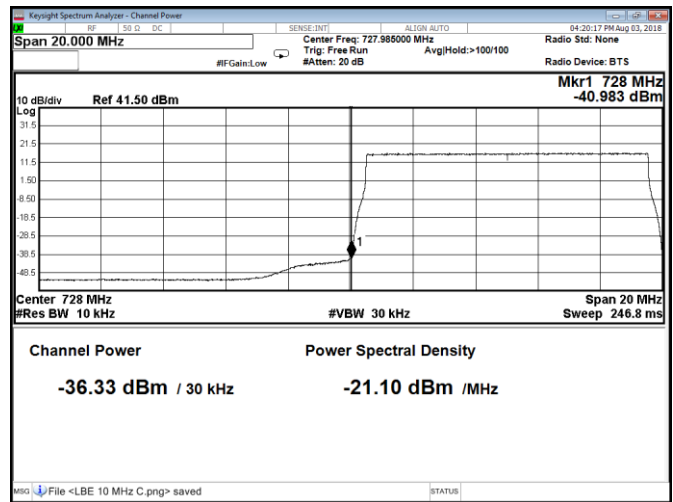


Figure 8.2-342: Conducted band edge emission at 728 MHz, Port B, QPSK, Band 85A 10 MHz channel

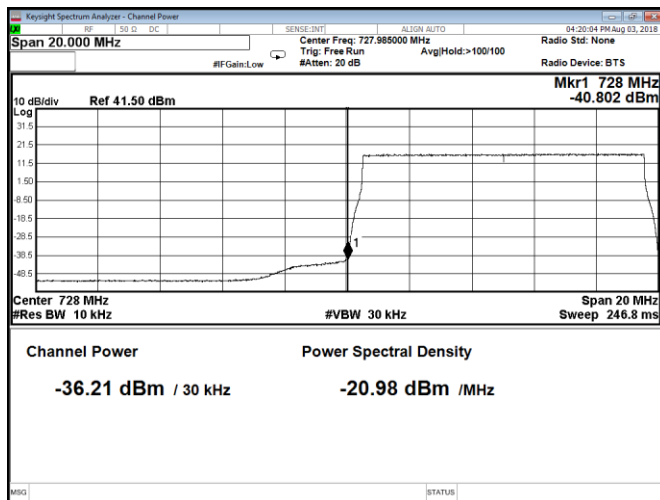


Figure 8.2-343: Conducted band edge emission at 728 MHz, Port C, QPSK, Band 85A 10 MHz channel

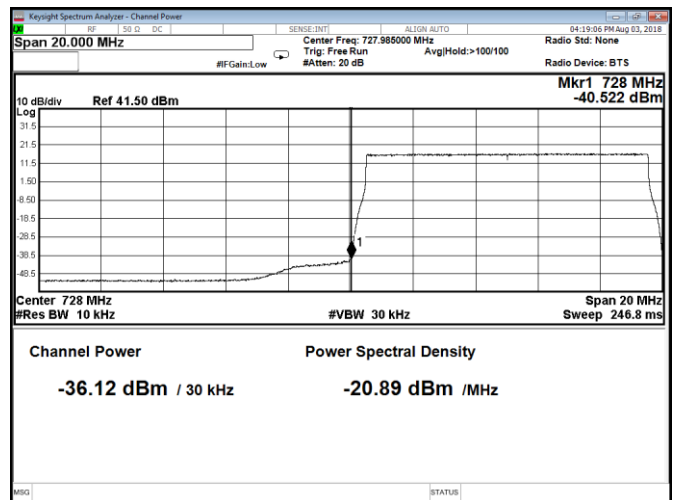


Figure 8.2-344: Conducted band edge emission at 728 MHz, Port D, QPSK, Band 85A 10 MHz channel

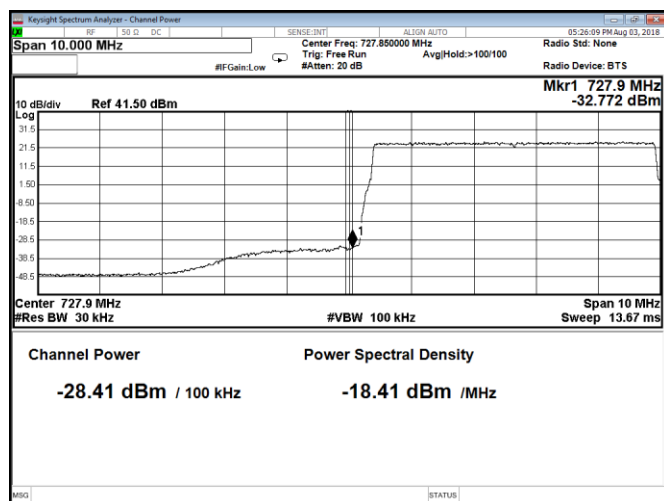


Figure 8.2-345: Conducted band edge emission at 727.9 MHz, Port A, QPSK, Band 85A 5 MHz channel

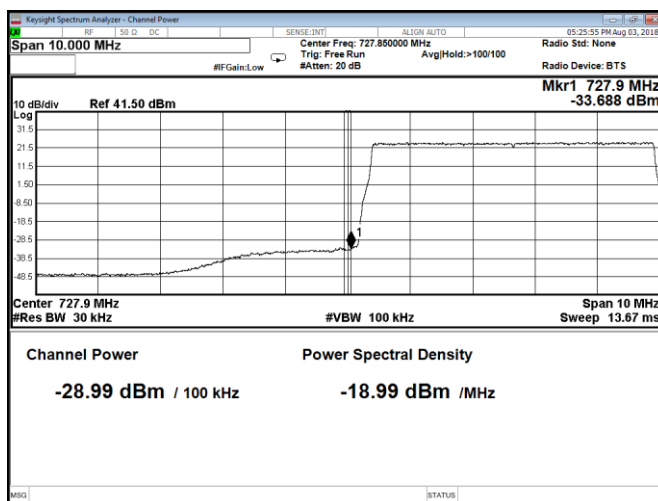


Figure 8.2-346: Conducted band edge emission at 727.9 MHz, Port B, QPSK, Band 85A 5 MHz channel

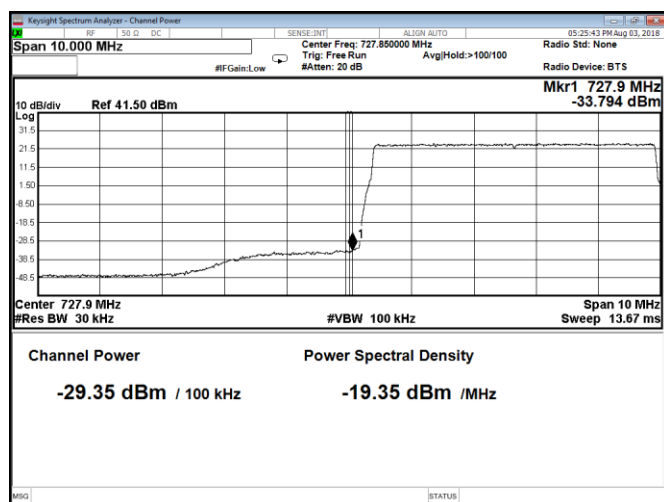


Figure 8.2-347: Conducted band edge emission at 727.9 MHz, Port C, QPSK, Band 85A 5 MHz channel

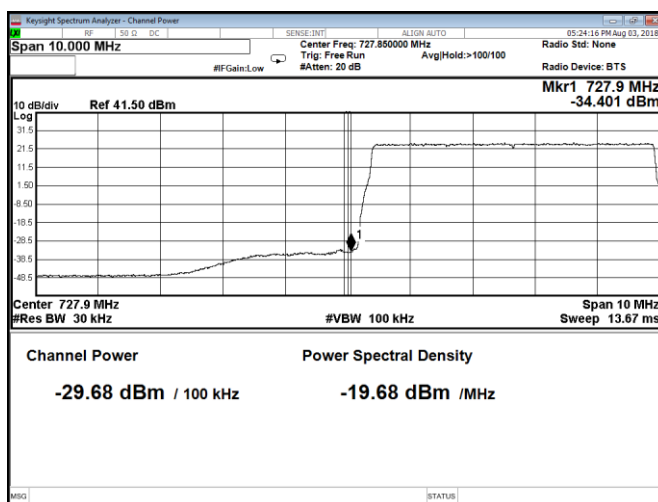


Figure 8.2-348: Conducted band edge emission at 727.9 MHz, Port D, QPSK, Band 85A 5 MHz channel

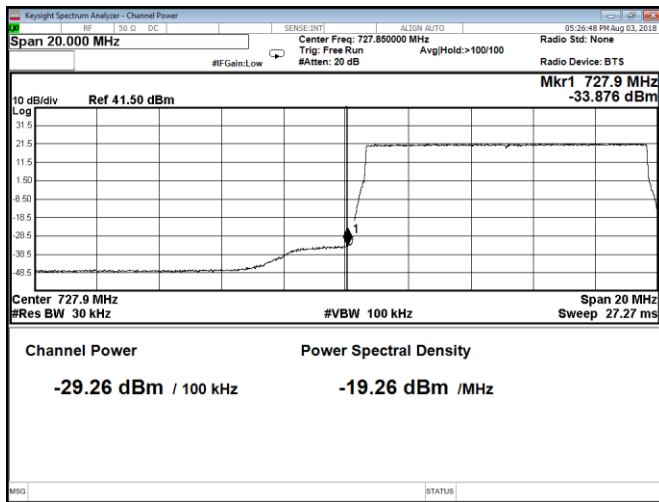


Figure 8.2-349: Conducted band edge emission at 727.9 MHz, Port A, QPSK, Band 85A 10 MHz channel

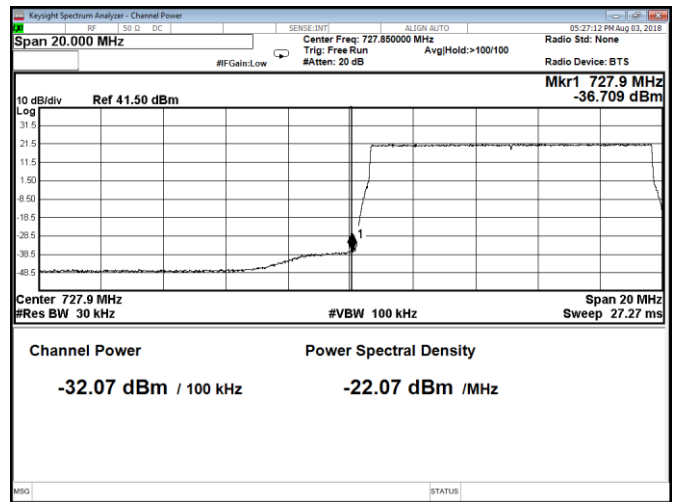


Figure 8.2-350: Conducted band edge emission at 727.9 MHz, Port B, QPSK, Band 85A 10 MHz channel

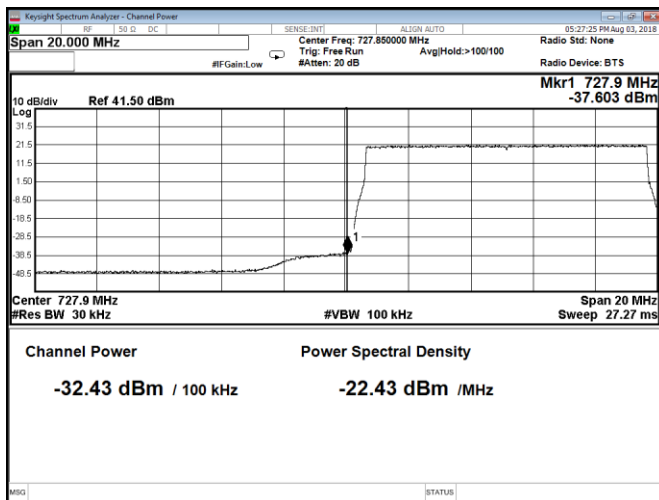


Figure 8.2-351: Conducted band edge emission at 727.9 MHz, Port C, QPSK, Band 85A 10 MHz channel

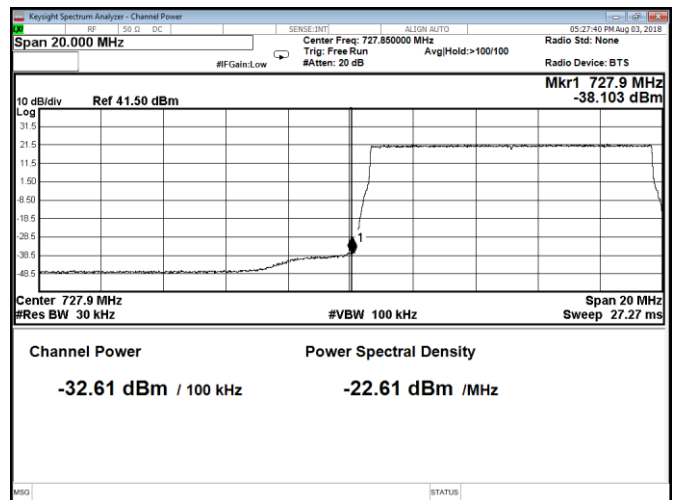


Figure 8.2-352: Conducted band edge emission at 727.9 MHz, Port D, QPSK, Band 85A 10 MHz channel

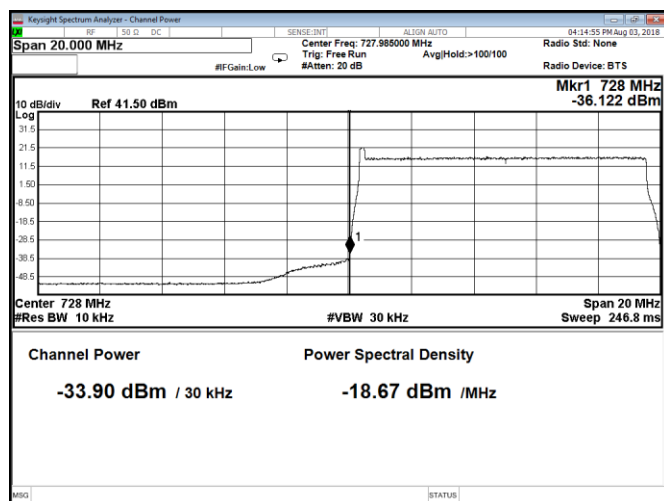


Figure 8.2-353: Conducted band edge emission at 728 MHz, Port A, QPSK, Band 85A IoT + LTE 10 MHz channel

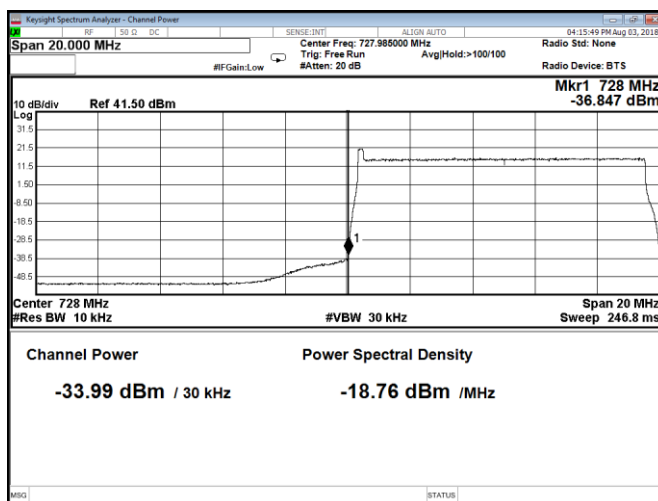


Figure 8.2-354: Conducted band edge emission at 728 MHz, Port B, QPSK, Band 85A IoT + LTE 10 MHz channel

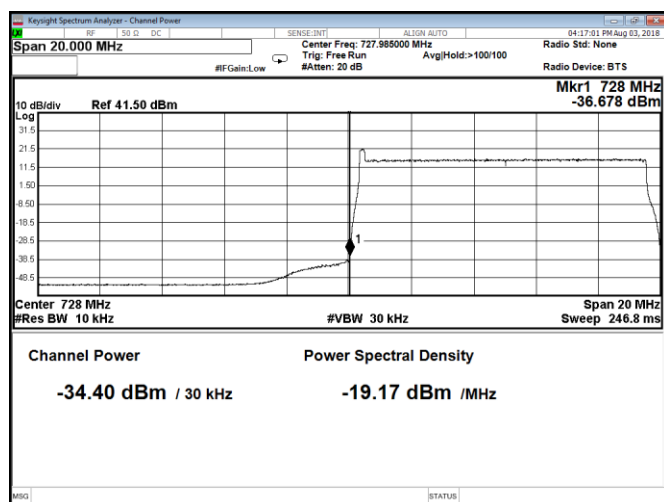


Figure 8.2-355: Conducted band edge emission at 728 MHz, Port C, QPSK, Band 85A IoT + LTE 10 MHz channel

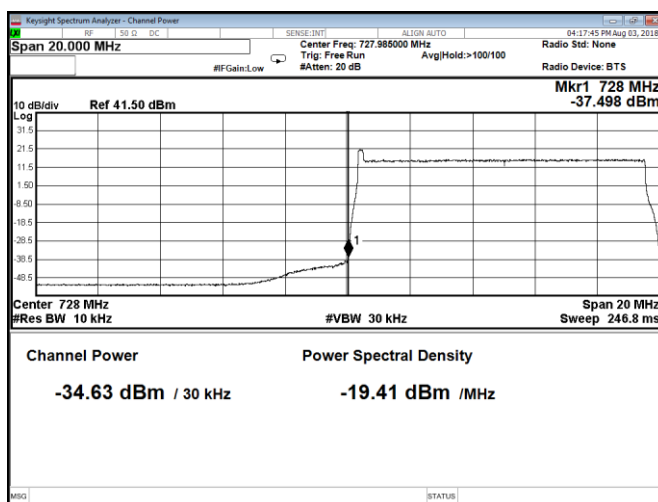


Figure 8.2-356: Conducted band edge emission at 728 MHz, Port D, QPSK, Band 85A IoT + LTE 10 MHz channel

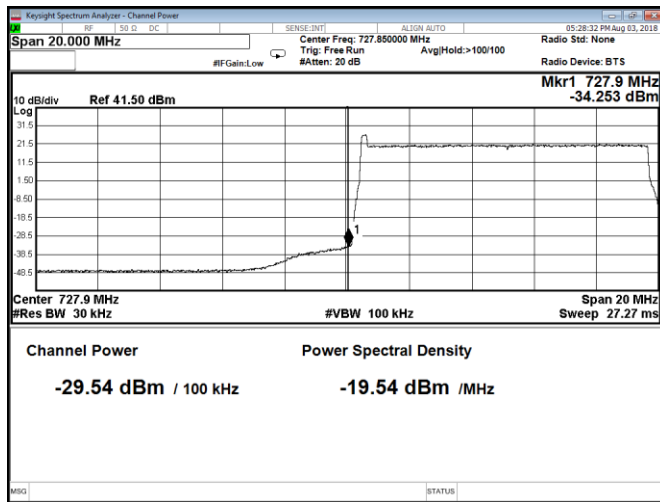


Figure 8.2-357: Conducted band edge emission at 727.9 MHz, Port A, QPSK, Band 85A IoT + LTE 10 MHz channel

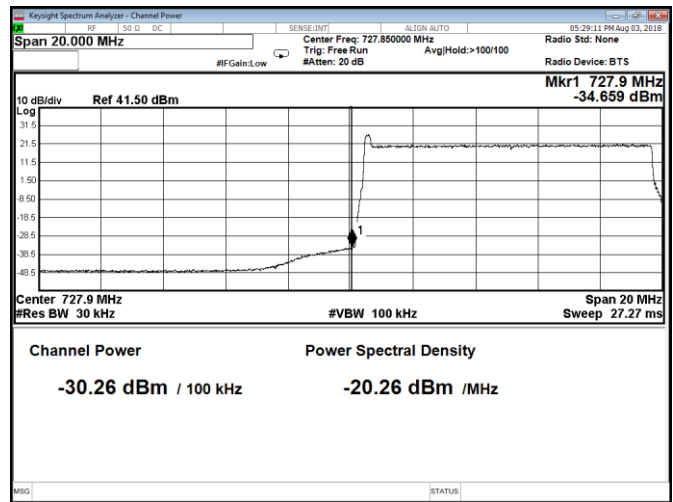


Figure 8.2-358: Conducted band edge emission at 727.9 MHz, Port B, QPSK, Band 85A IoT + LTE 10 MHz channel

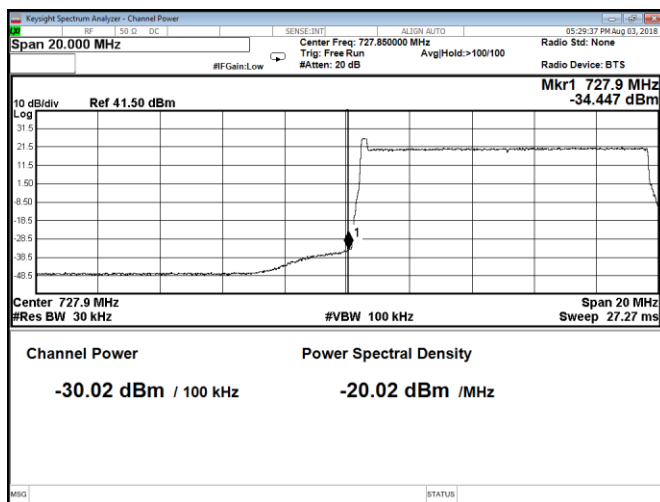


Figure 8.2-359: Conducted band edge emission at 727.9 MHz, Port C, QPSK, Band 85A IoT + LTE 10 MHz channel

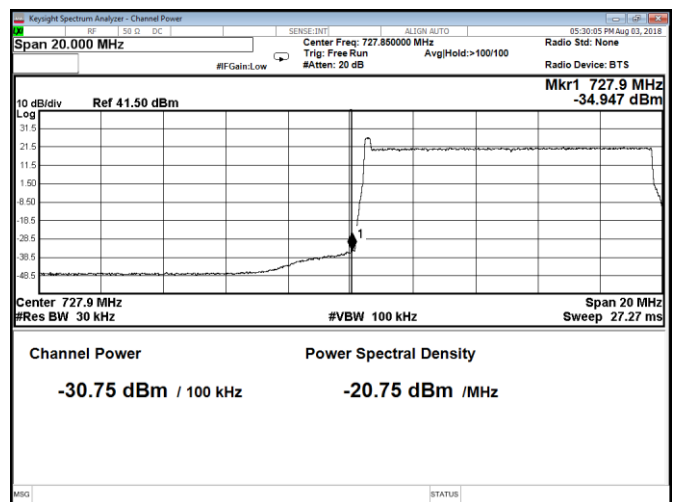


Figure 8.2-360: Conducted band edge emission at 727.9 MHz, Port D, QPSK, Band 85A IoT + LTE 10 MHz channel

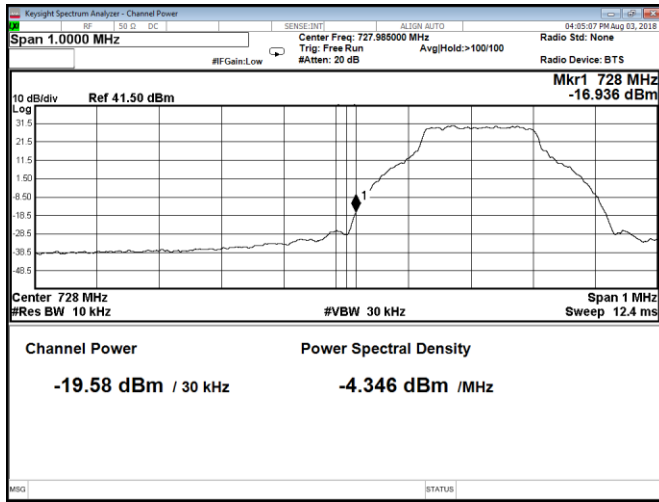


Figure 8.2-361: Conducted band edge emission at 728 MHz, Port A, Band 85A IoT stand-alone 200 kHz away from the band edge

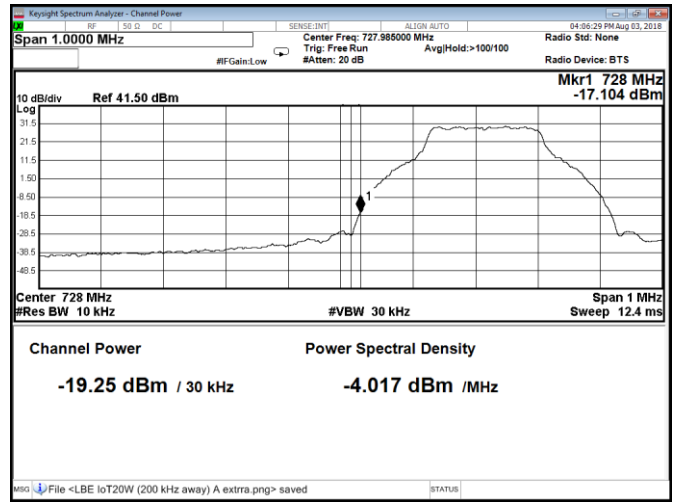


Figure 8.2-362: Conducted band edge emission at 728 MHz, Port B, Band 85A IoT stand-alone 200 kHz away from the band edge

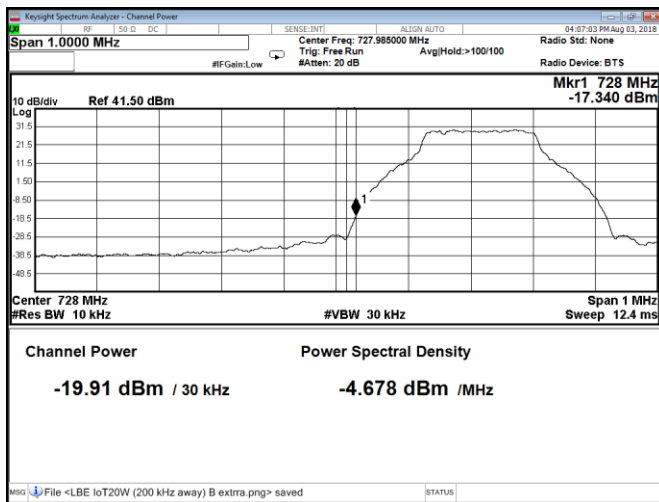


Figure 8.2-363: Conducted band edge emission at 728 MHz, Port C, Band 85A IoT stand-alone 200 kHz away from the band edge

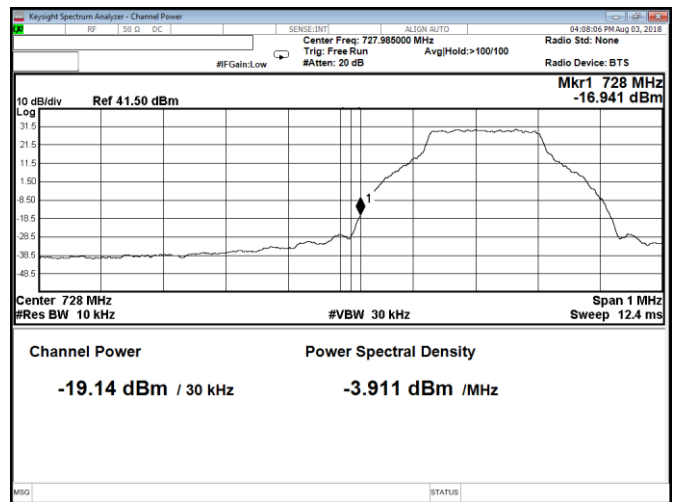


Figure 8.2-364: Conducted band edge emission at 728 MHz, Port D, Band 85A IoT stand-alone 200 kHz away from the band edge

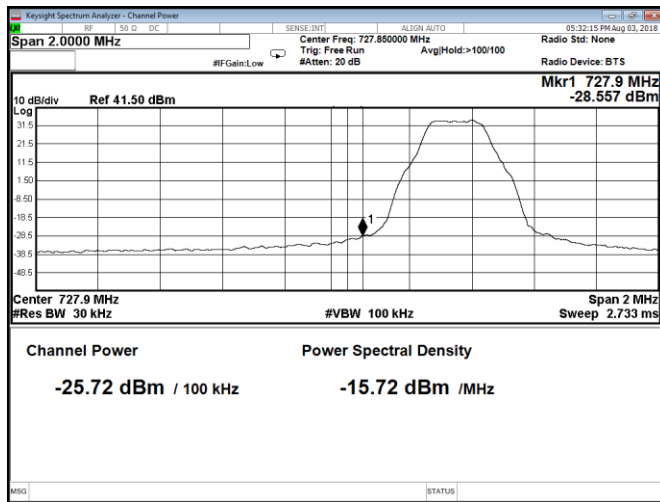


Figure 8.2-365: Conducted band edge emission at 727.9 MHz, Port A, Band 85A IoT stand-alone 200 kHz away from the band edge

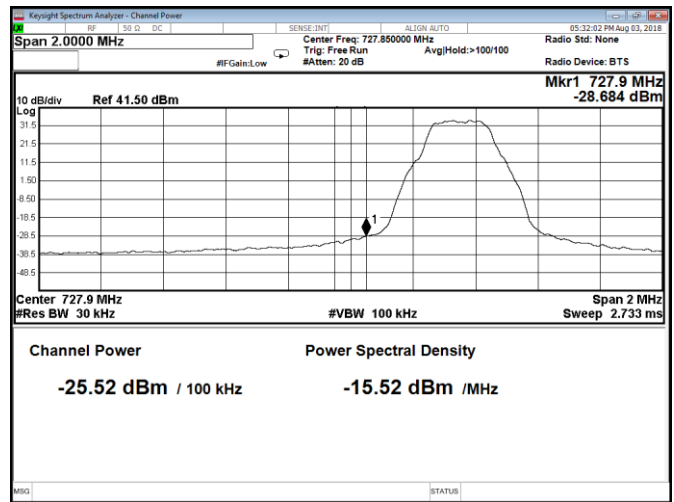


Figure 8.2-366: Conducted band edge emission at 727.9 MHz, Port B, Band 85A IoT stand-alone 200 kHz away from the band edge

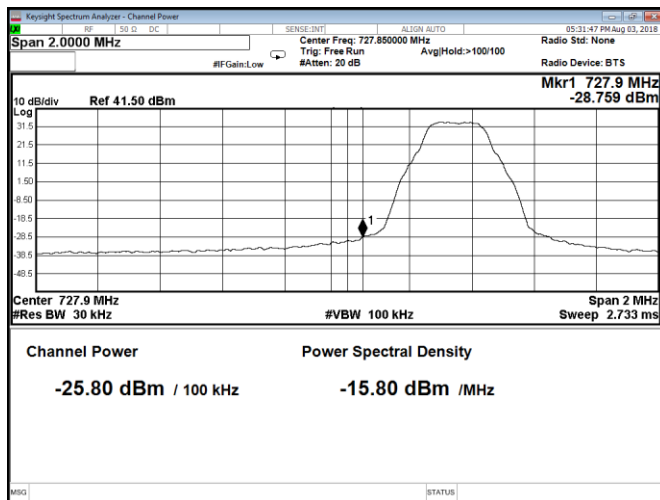


Figure 8.2-367: Conducted band edge emission at 727.9 MHz, Port C, Band 85A IoT stand-alone 200 kHz away from the band edge

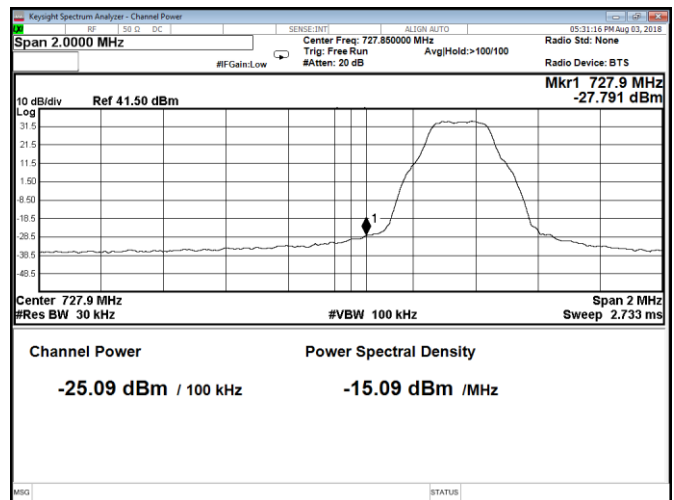


Figure 8.2-368: Conducted band edge emission at 727.9 MHz, Port D, Band 85A IoT stand-alone 200 kHz away from the band edge

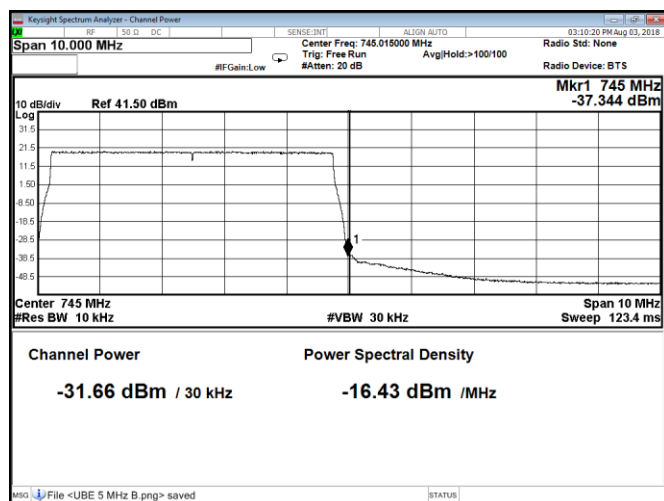


Figure 8.2-369: Conducted band edge emission at 745 MHz, Port A, QPSK, Band 85A 5 MHz channel

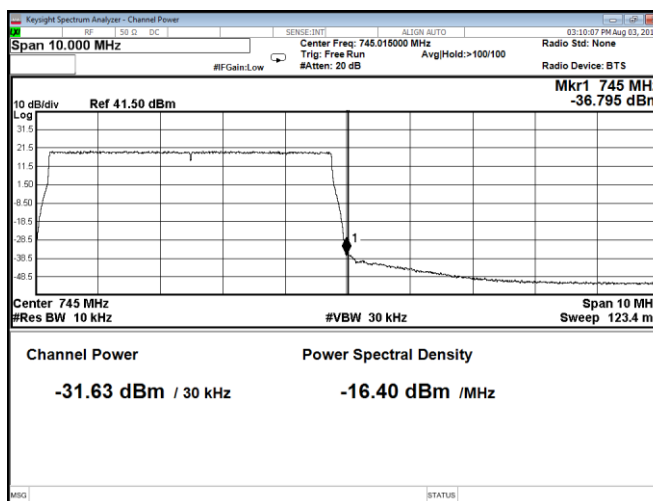


Figure 8.2-370: Conducted band edge emission at 745 MHz, Port B, QPSK, Band 85A 5 MHz channel

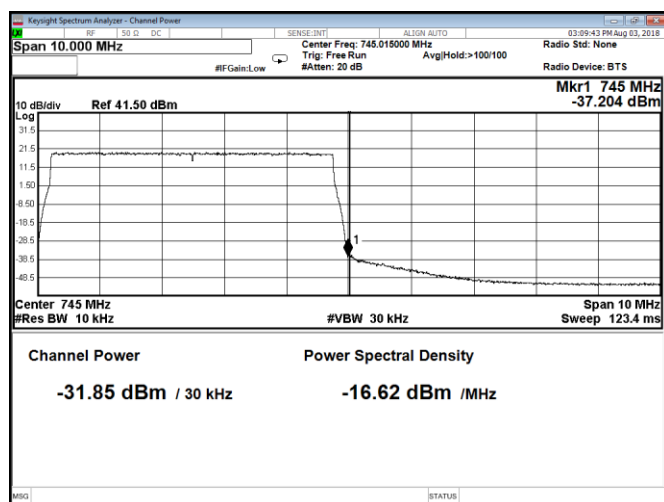


Figure 8.2-371: Conducted band edge emission at 745 MHz, Port C, QPSK, Band 85A 5 MHz channel

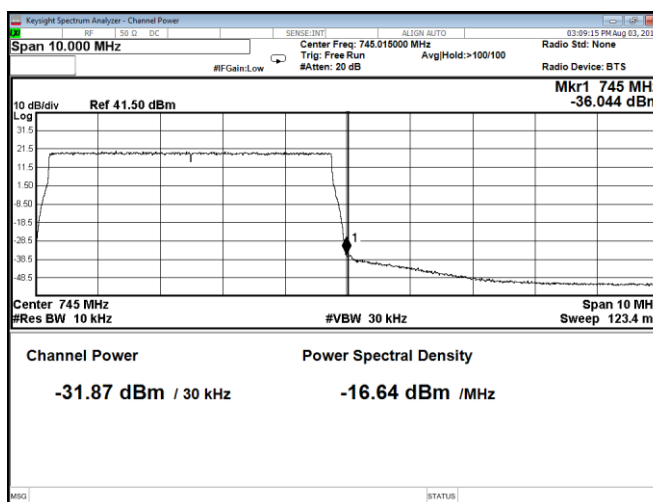


Figure 8.2-372: Conducted band edge emission at 745 MHz, Port D, QPSK, Band 85A 5 MHz channel

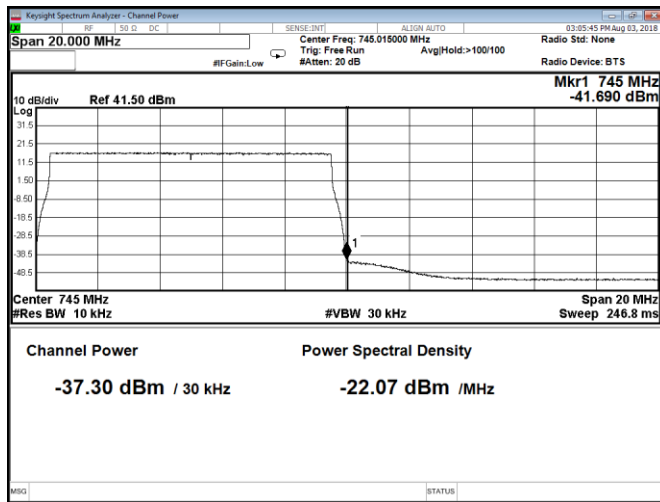


Figure 8.2-373: Conducted band edge emission at 745 MHz, Port A, QPSK, Band 85A 10 MHz channel

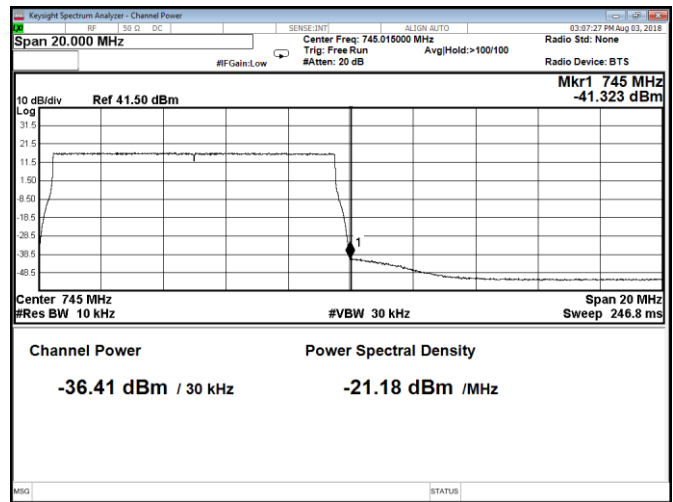


Figure 8.2-374: Conducted band edge emission at 745 MHz, Port B, QPSK, Band 85A 10 MHz channel

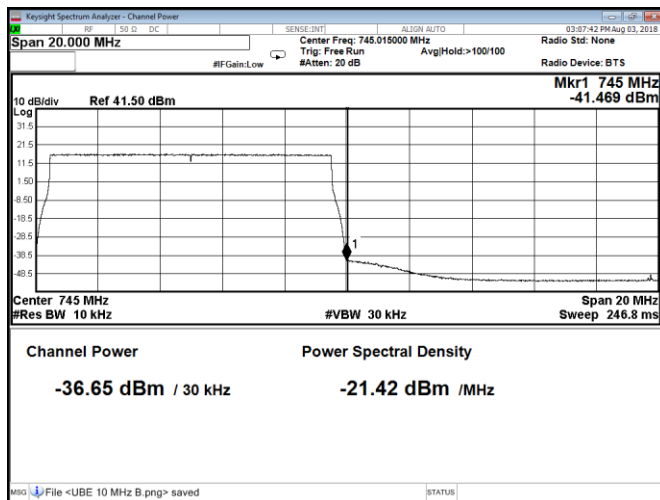


Figure 8.2-375: Conducted band edge emission at 745 MHz, Port C, QPSK, Band 85A 10 MHz channel

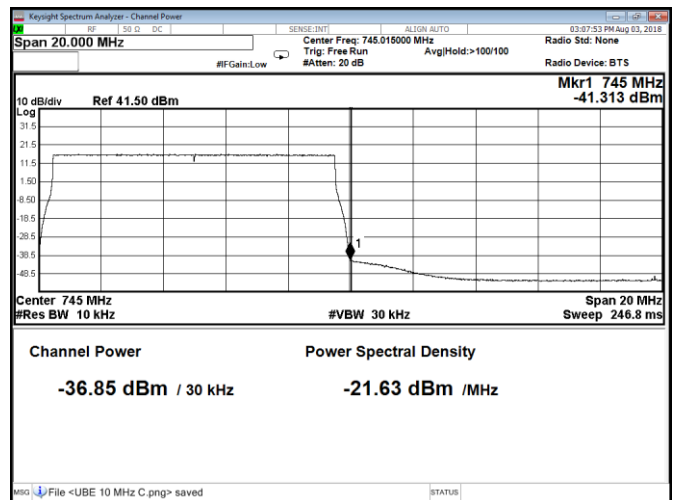


Figure 8.2-376: Conducted band edge emission at 745 MHz, Port D, QPSK, Band 85A 10 MHz channel

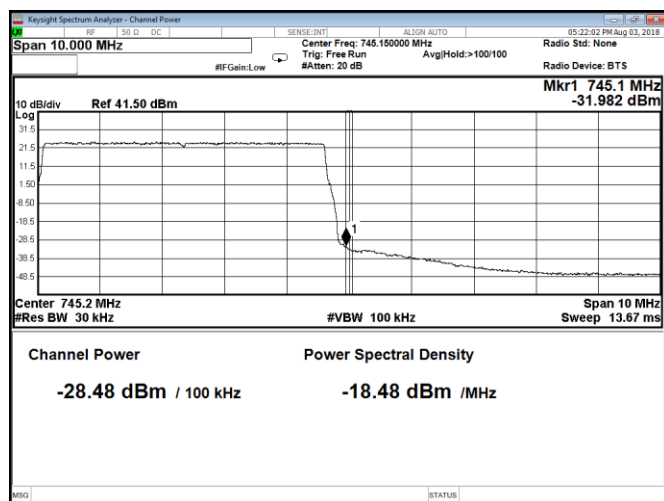


Figure 8.2-377: Conducted band edge emission at 745.1 MHz, Port A, QPSK, Band 85A 5 MHz channel

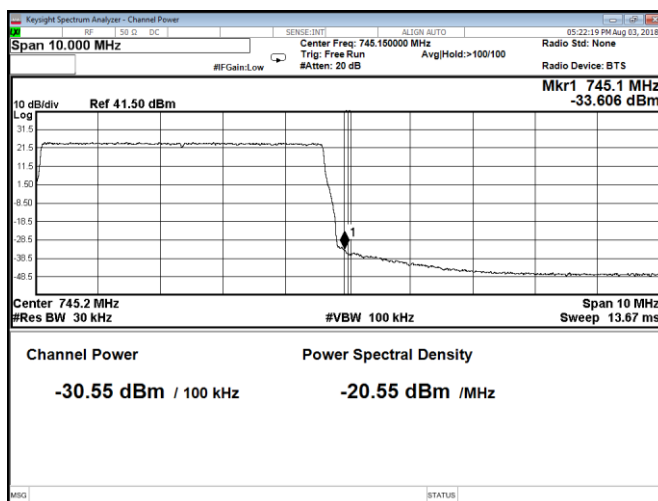


Figure 8.2-378: Conducted band edge emission at 745.1 MHz, Port B, QPSK, Band 85A 5 MHz channel

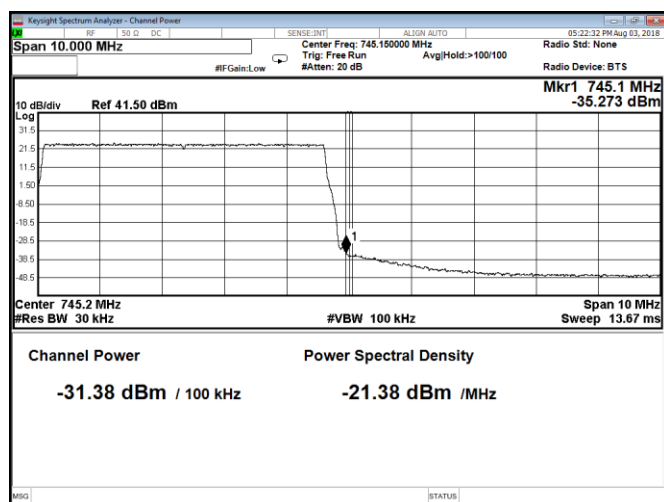


Figure 8.2-379: Conducted band edge emission at 745.1 MHz, Port C, QPSK, Band 85A 5 MHz channel

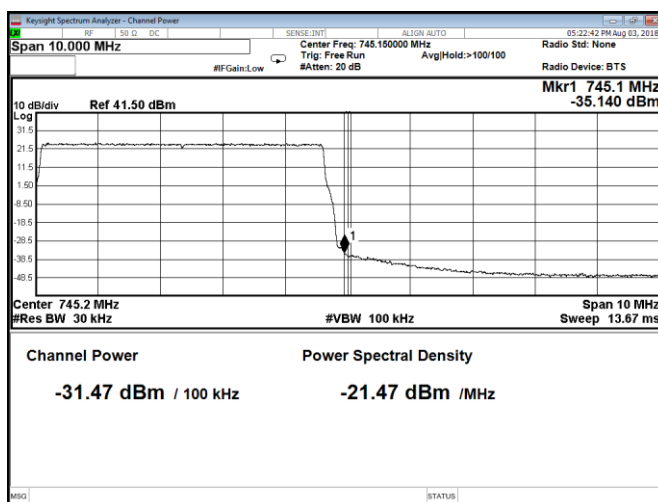


Figure 8.2-380: Conducted band edge emission at 745.1 MHz, Port D, QPSK, Band 85A 5 MHz channel

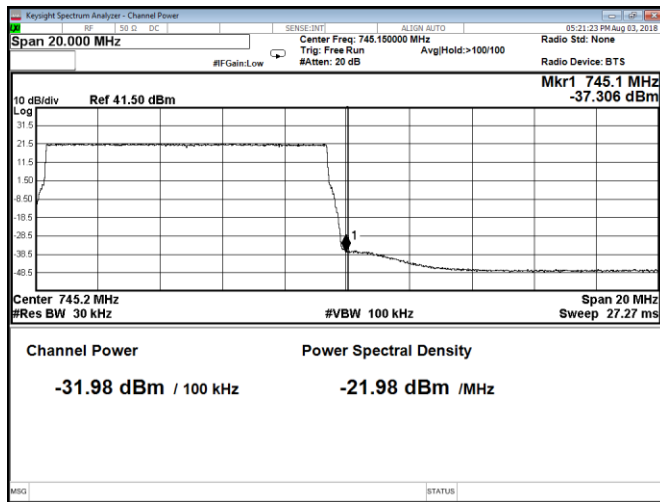


Figure 8.2-381: Conducted band edge emission at 745.1 MHz, Port A, QPSK, Band 85A 10 MHz channel

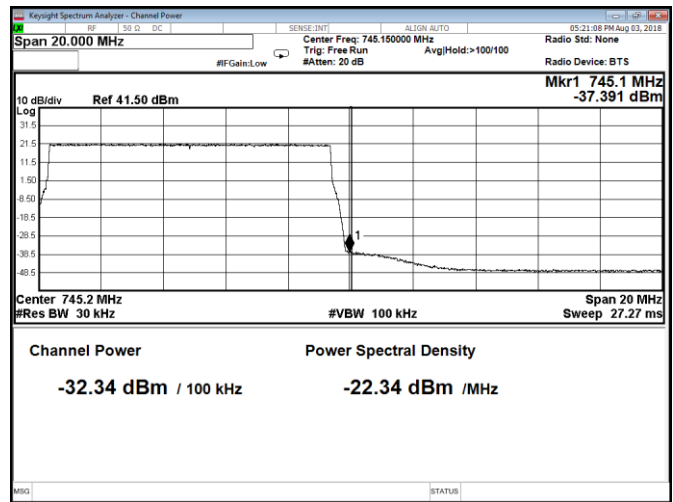


Figure 8.2-382: Conducted band edge emission at 745.1 MHz, Port B, QPSK, Band 85A 10 MHz channel

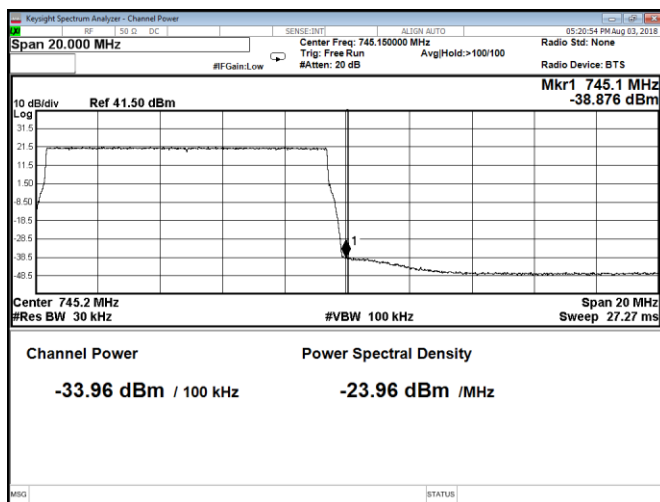


Figure 8.2-383: Conducted band edge emission at 745.1 MHz, Port C, QPSK, Band 85A 10 MHz channel

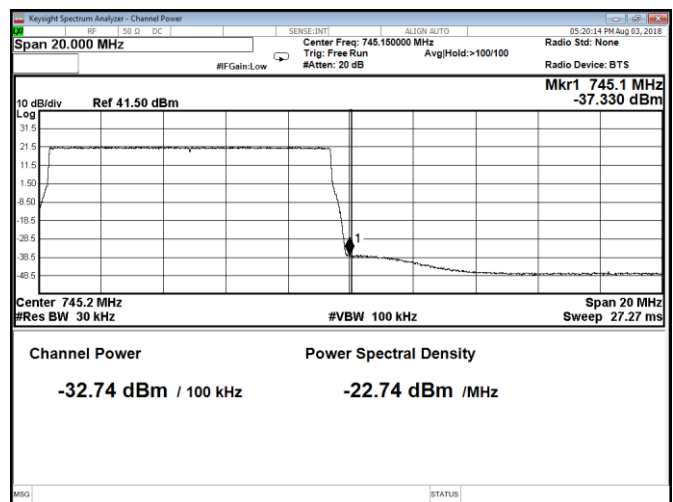


Figure 8.2-384: Conducted band edge emission at 745.1 MHz, Port D, QPSK, Band 85A 10 MHz channel

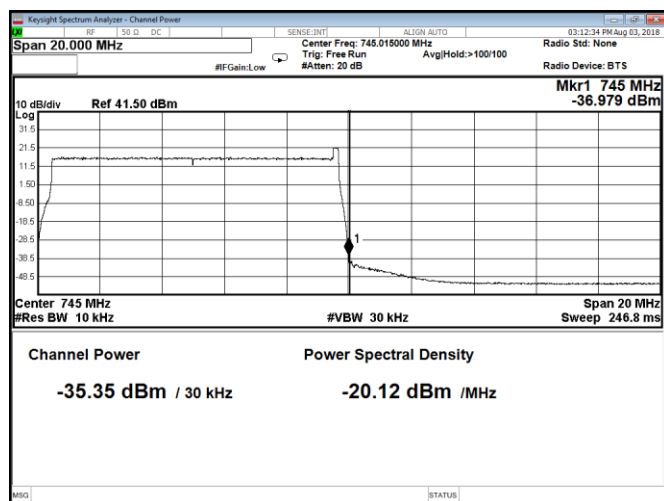


Figure 8.2-385: Conducted band edge emission at 745 MHz, Port A, QPSK, Band 85A IoT + LTE 10 MHz channel

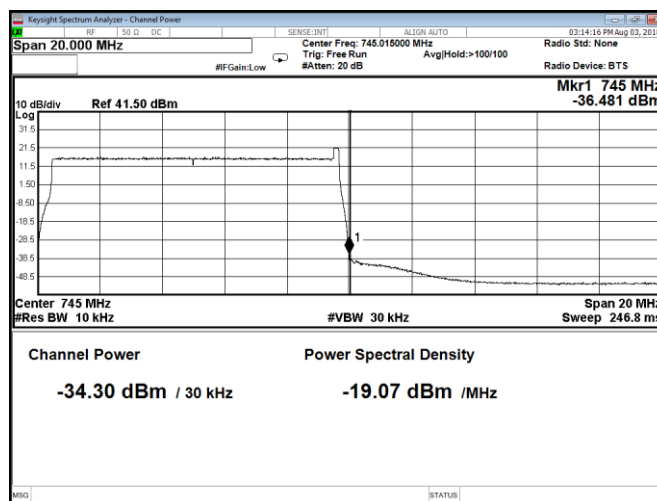


Figure 8.2-386: Conducted band edge emission at 745 MHz, Port B, QPSK, Band 85A IoT + LTE 10 MHz channel

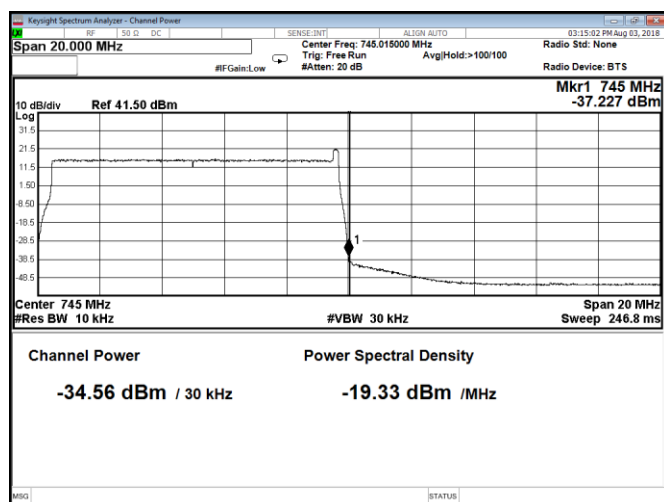


Figure 8.2-387: Conducted band edge emission at 745 MHz, Port C, QPSK, Band 85A IoT + LTE 10 MHz channel

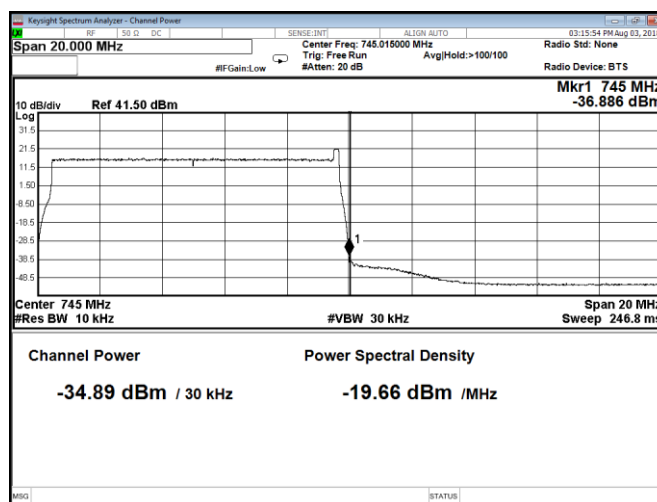


Figure 8.2-388: Conducted band edge emission at 745 MHz, Port D, QPSK, Band 85A IoT + LTE 10 MHz channel

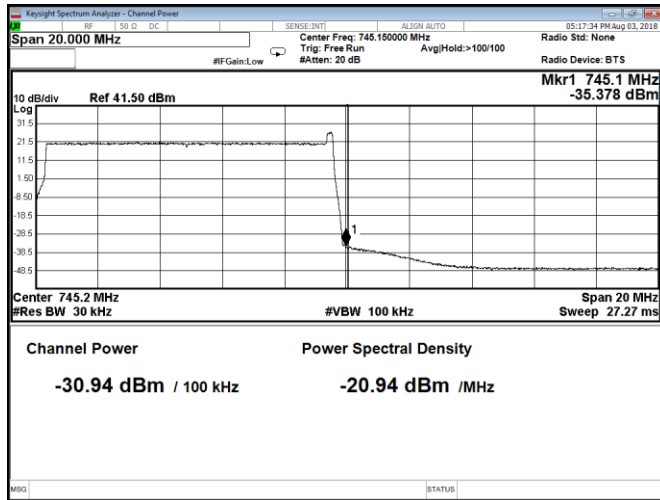


Figure 8.2-389: Conducted band edge emission at 745.1 MHz, Port A, QPSK, Band 85A IoT + LTE 10 MHz channel

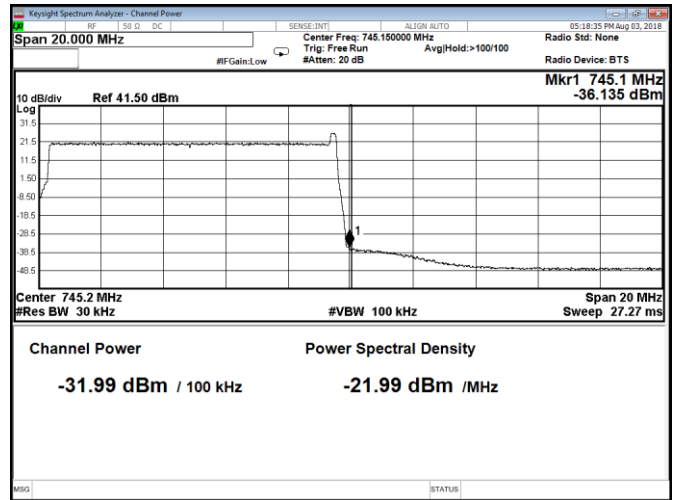


Figure 8.2-390: Conducted band edge emission at 745.1 MHz, Port B, QPSK, Band 85A IoT + LTE 10 MHz channel

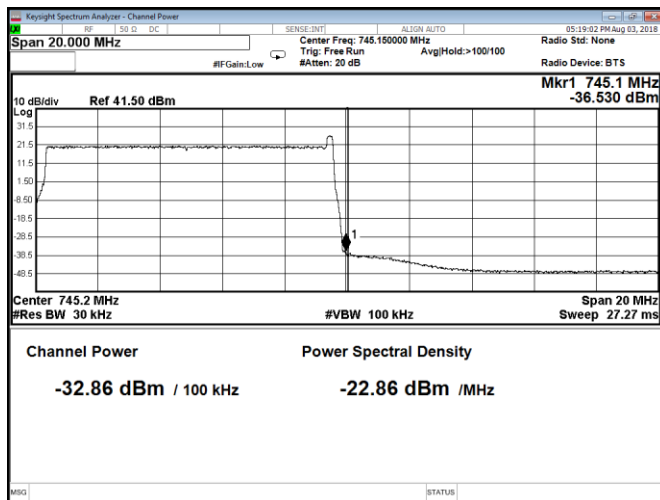


Figure 8.2-391: Conducted band edge emission at 745.1 MHz, Port C, QPSK, Band 85A IoT + LTE 10 MHz channel

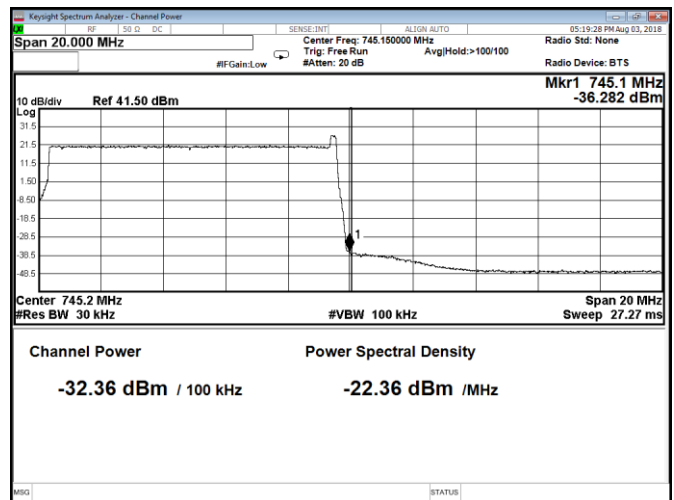


Figure 8.2-392: Conducted band edge emission at 745.1 MHz, Port D, QPSK, Band 85A IoT + LTE 10 MHz channel

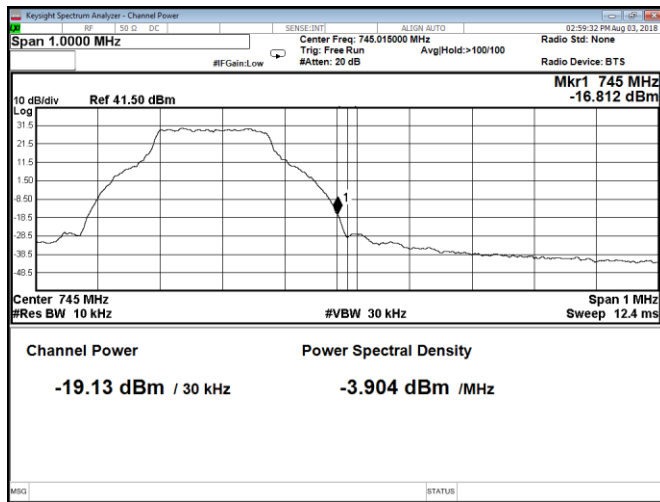


Figure 8.2-393: Conducted band edge emission at 745 MHz, Port A, Band 85A IoT stand-alone 200 kHz from the band edge

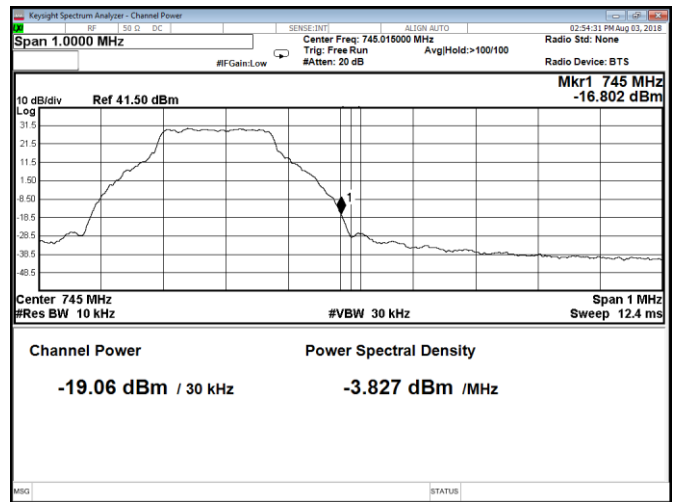


Figure 8.2-394: Conducted band edge emission at 745 MHz, Port B, Band 85A IoT stand-alone 200 kHz from the band edge

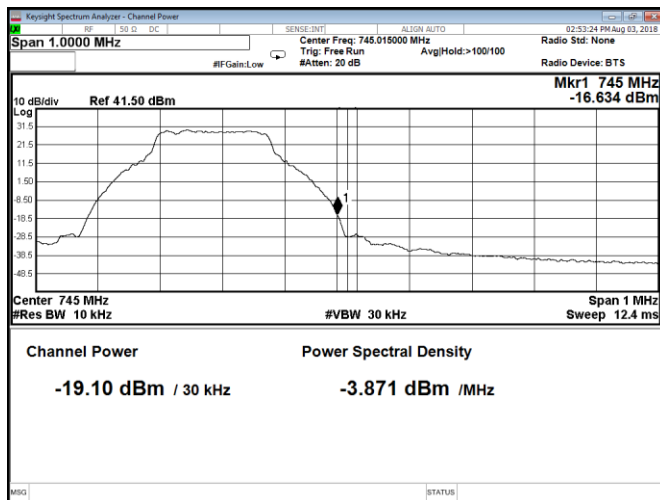


Figure 8.2-395: Conducted band edge emission at 745 MHz, Port C, Band 85A IoT stand-alone 200 kHz from the band edge

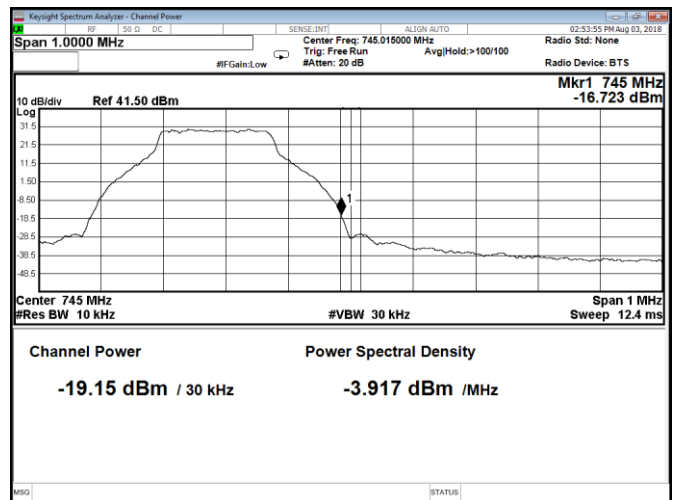


Figure 8.2-396: Conducted band edge emission at 745 MHz, Port D, Band 85A IoT stand-alone 200 kHz from the band edge

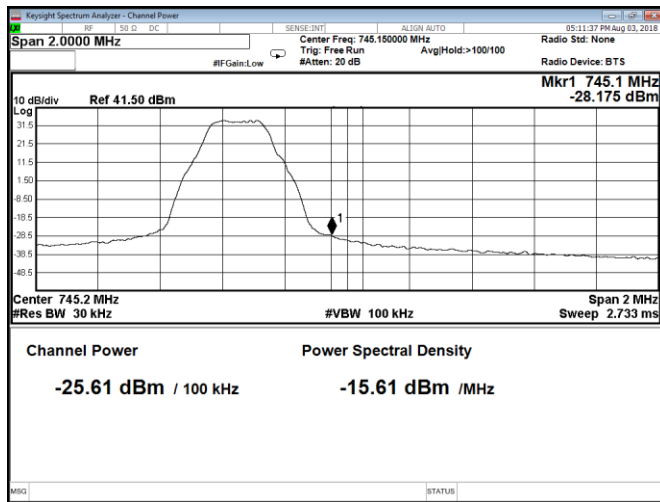


Figure 8.2-397: Conducted band edge emission at 745.1 MHz, Port A, Band 85A IoT stand-alone 200 kHz from the band edge

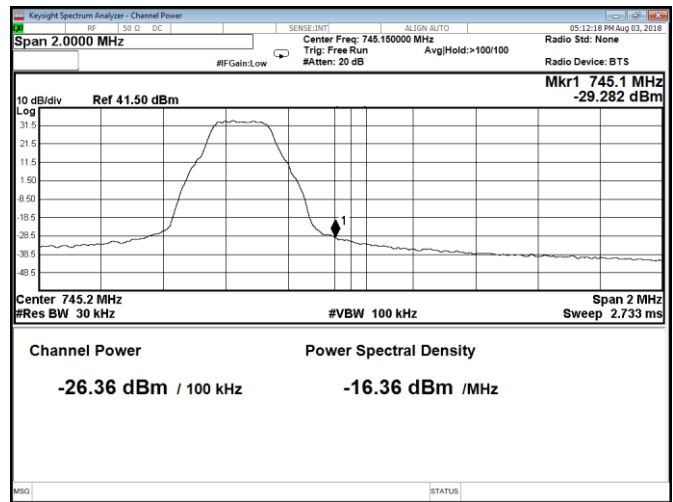


Figure 8.2-398: Conducted band edge emission at 745.1 MHz, Port B, Band 85A IoT stand-alone 200 kHz from the band edge

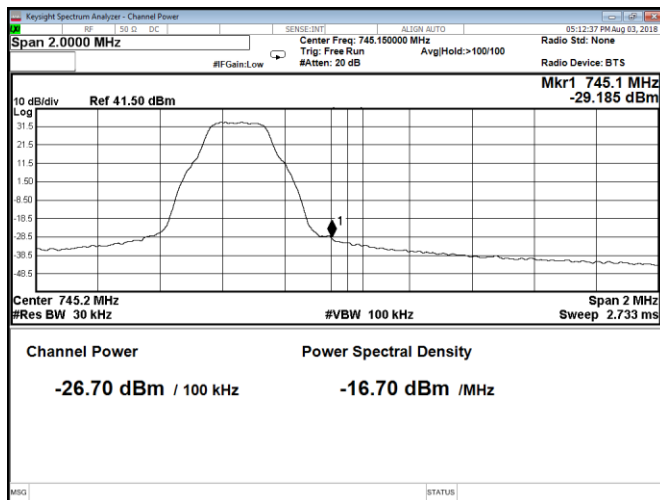


Figure 8.2-399: Conducted band edge emission at 745.1 MHz, Port C, Band 85A IoT stand-alone 200 kHz from the band edge

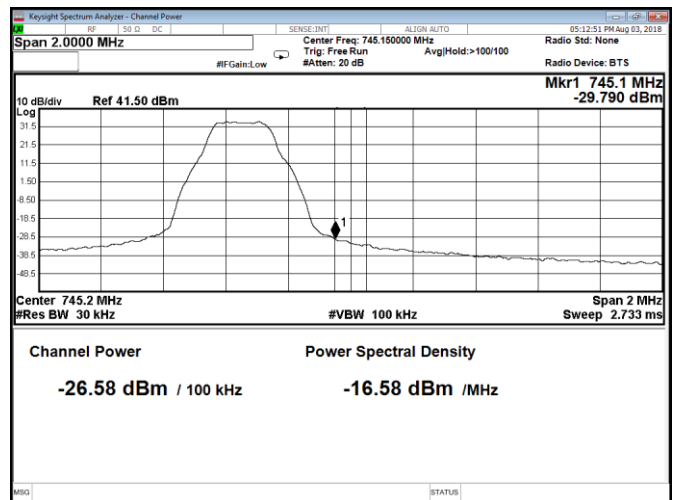


Figure 8.2-400: Conducted band edge emission at 745.1 MHz, Port D, Band 85A IoT stand-alone 200 kHz from the band edge

8.3 FCC 27.53 Radiated spurious emissions

8.3.1 Definitions and limits

FCC 27.53(g)

For operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

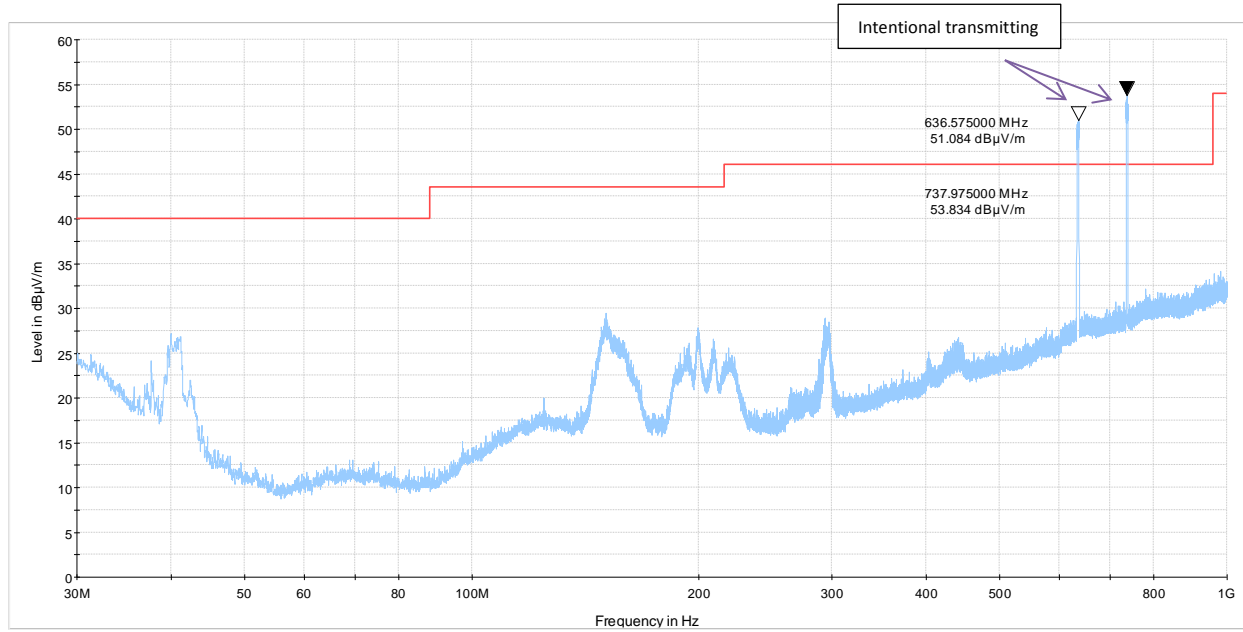
8.3.2 Test summary

Test date	July 26, 2018
Test engineer	Shawn He

8.3.3 Observations, settings and special notes

The spectrum was searched from 30 MHz to the 10th harmonic.
All measurements were performed using a peak detector.
RBW within 30–1000 MHz was 100 kHz and 1 MHz above 1 GHz. VBW was wider than RBW.
Testing was performed with RF ports terminated with 50 Ohm load.
Band 71 and Band 85A simultaneous transmission was tested as a worst-case emissions scenario.

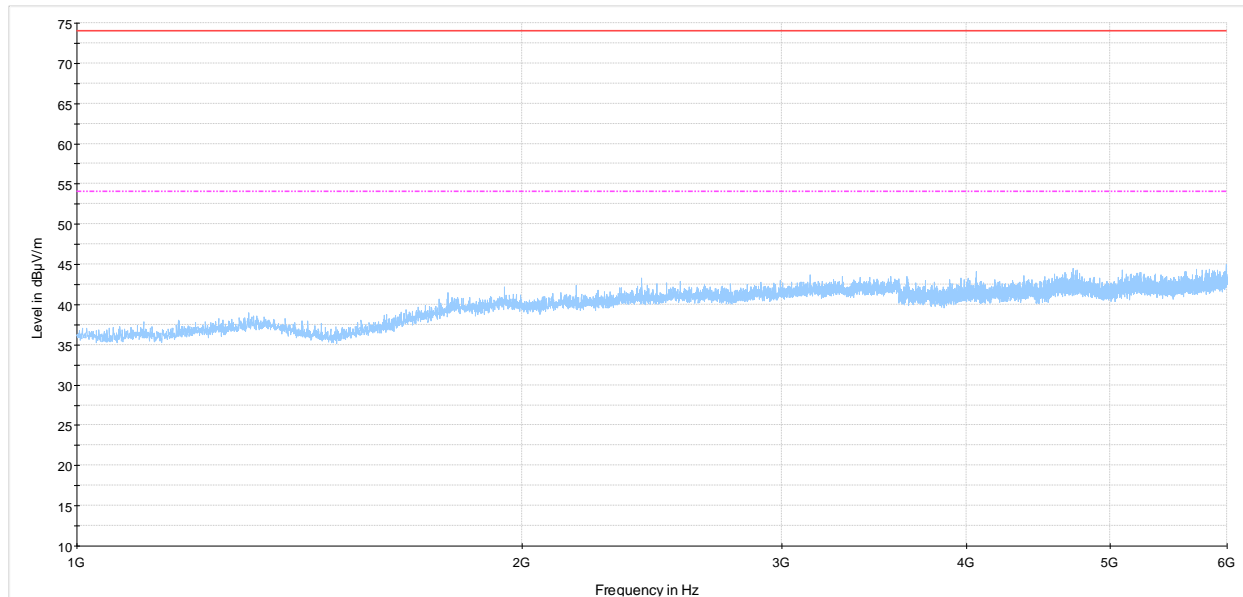
8.3.4 Test data



Radiated Emission 30MHz to 1000MHz - B71 5MHz Middle, B85a 5MHz Middle
 — FCC Part 15 and ICES - Class B 3m Q-Peak Limit
 — Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

Figure 8.3-1: Radiated emissions spectral plot (30 to 1000 MHz) - B71 5MHz Middle, B85a 5MHz Middle

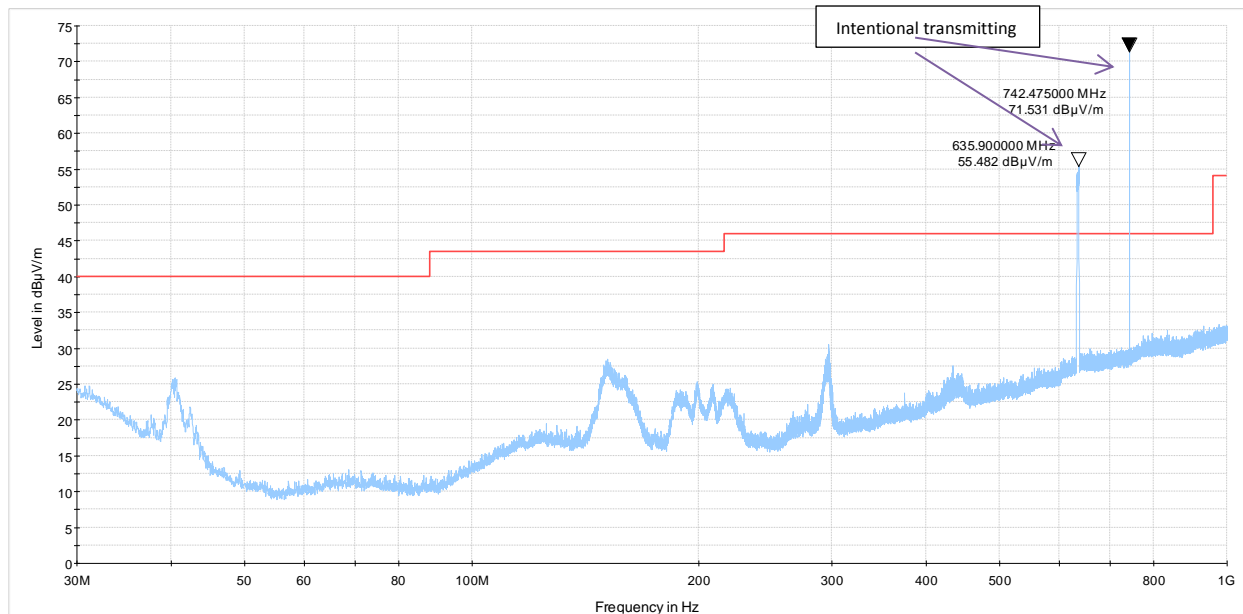


Radiated Emission 1GHz to 6GHz - B71 5MHz Bottom, B85a 5MHz Bottom

— FCC Part 15 and ICES- Class B 3m Peak Limit
— FCC Part 15 and ICES - Class B 3m Average Limit
— Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

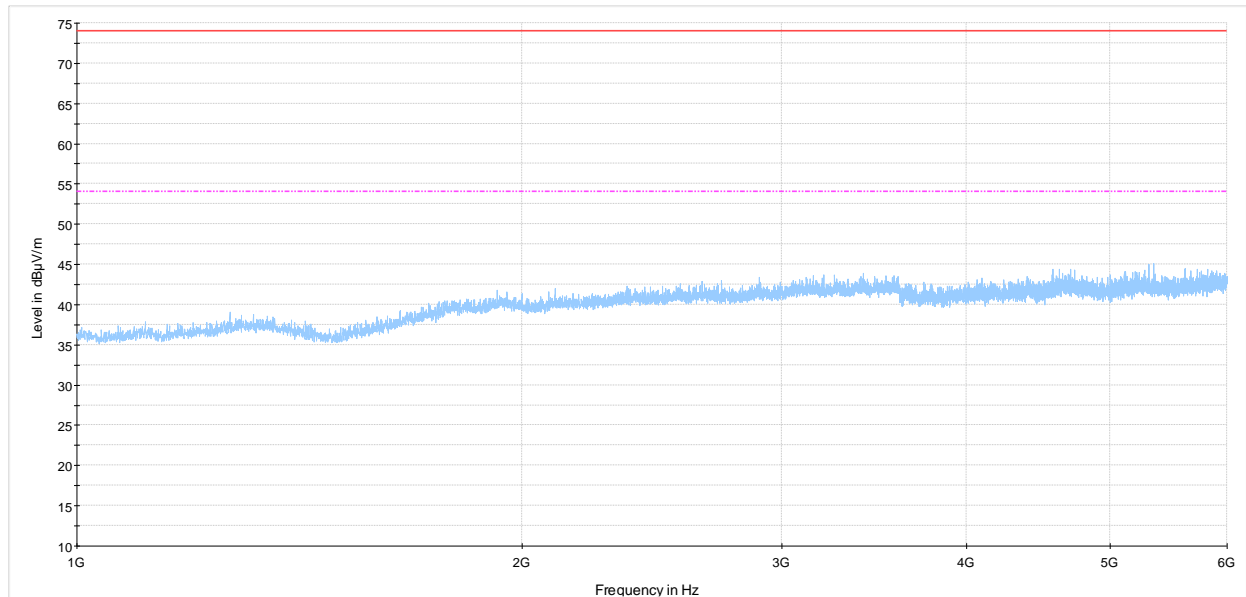
Figure 8.3-2: Radiated emissions spectral plot (1 to 6 GHz) - B71 5MHz Bottom, B85a 5MHz Bottom



Radiated Emission 30MHz to 1000MHz - B71 5MHz Middle, B85a Stand Alone Top
 — FCC Part 15 and ICES - Class B 3m Q-Peak Limit
 — Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

Figure 8.3-3: Radiated emissions spectral plot (30 to 1000 MHz) - B71 5MHz Middle, B85a Stand Alone Top

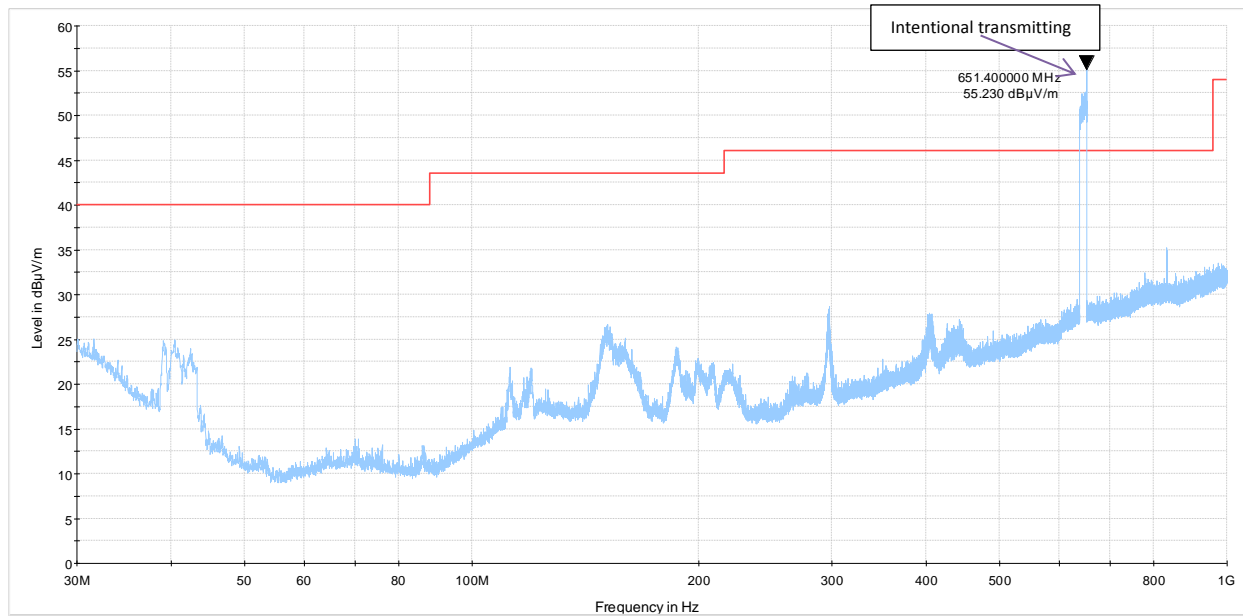


Radiated Emission 1GHz to 6GHz - B85a 5MHz Bottom, B85a Stand Alone Top

— FCC Part 15 and ICES- Class B 3m Peak Limit
— FCC Part 15 and ICES - Class B 3m Average Limit
— Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

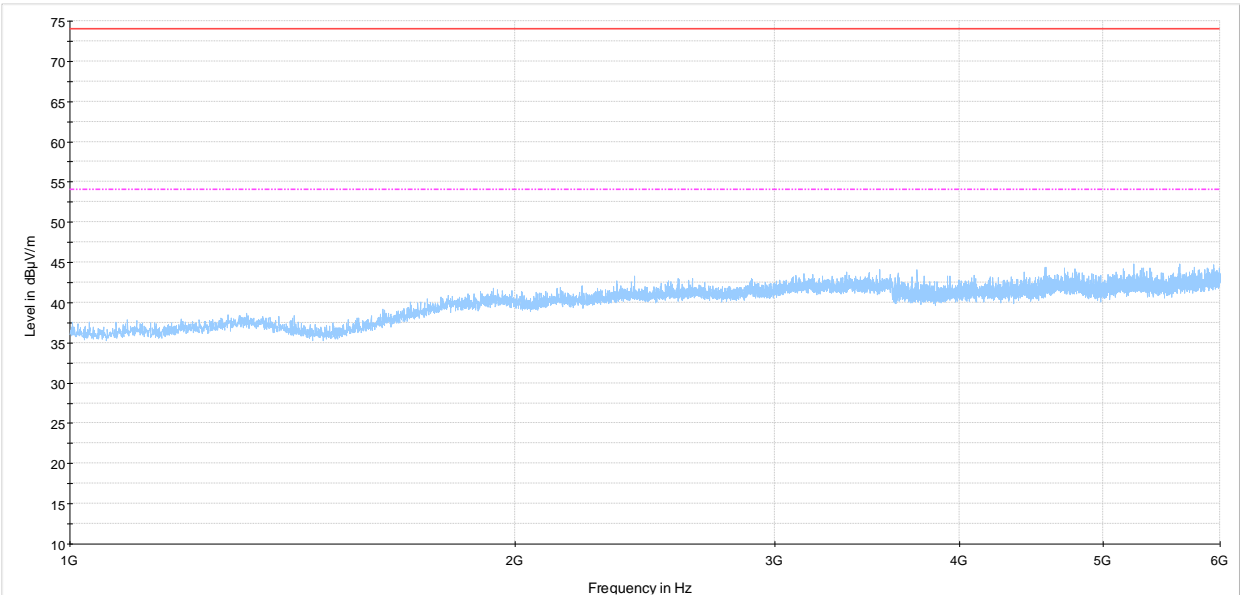
Figure 8.3-4: Radiated emissions spectral plot (1 to 6 GHz) - B85a 5MHz Bottom, B85a Stand Alone Top



Radiated Emission 30MHz to 1000MHz - B71 15MHz Guard Band Top
 — FCC Part 15 and ICES - Class B 3m Q-Peak Limit
 — Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

Figure 8.3-5: Radiated emissions spectral plot (30 to 1000 MHz) - B71 15MHz Guard Band Top



Radiated Emission 1GHz to 6GHz - B71 20MHz Guard Band Middle
— FCC Part 15 and ICES- Class B 3m Peak Limit
— FCC Part 15 and ICES - Class B 3m Average Limit
— Preview Result 1-PK+

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators).

Figure 8.3-6: Radiated emissions spectral plot (1 to 6 GHz) - B71 20MHz Guard Band Middle

8.4 FCC 27.54 Frequency stability

8.4.1 Definitions and limits

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

8.4.2 Test summary

Test date	August 1, 2018
Test engineer	Andrey Adelberg

8.4.3 Observations, settings and special notes

None

8.4.4 Test data

Table 8.4-1: Frequency error results

Temperature, °C	Voltage, V _{DC}	Frequency error, Hz
-40	48.0	0.566
-30	48.0	-0.526
-20	48.0	0.848
-10	55.2	-0.662
0	48.0	0.538
10	40.8	0.761
20	40.8	0.598
20	48.0	0.523
20	55.2	-0.557
30	48.0	-0.529
40	48.0	0.572
50	48.0	-0.538

Note: maximum frequency drift was less than 1 Hz.

8.5 FCC Part 2.1049 Occupied bandwidth

8.5.1 Definitions and limits

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

8.5.2 Test summary

Test date	August 1, 2018
Test engineer	Andrey Adelberg

8.5.3 Observations, settings and special notes

None

8.5.4 Test data

Table 8.5-1: Occupied bandwidth results in Band 71 for 5 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	4.4953	4.776
Antenna B, QPSK, low channel	4.4990	4.779
Antenna C, QPSK, low channel	4.4970	4.762
Antenna D, QPSK, low channel	4.4987	4.784
Antenna A, 16QAM, low channel	4.4766	4.766
Antenna B, 16QAM, low channel	4.4845	4.758
Antenna C, 16QAM, low channel	4.4801	4.759
Antenna D, 16QAM, low channel	4.4779	4.758
Antenna A, 64QAM, low channel	4.4973	4.786
Antenna B, 64QAM, low channel	4.4973	4.791
Antenna C, 64QAM, low channel	4.4956	4.782
Antenna D, 64QAM, low channel	4.4939	4.777
Antenna A, 256QAM, low channel	4.4956	4.792
Antenna B, 256QAM, low channel	4.4987	4.786
Antenna C, 256QAM, low channel	4.4975	4.782
Antenna D, 256QAM, low channel	4.4974	4.776
Antenna A, QPSK, mid channel	4.5005	4.783
Antenna B, QPSK, mid channel	4.4987	4.769
Antenna C, QPSK, mid channel	4.4977	4.781
Antenna D, QPSK, mid channel	4.4959	4.792
Antenna A, QPSK, high channel	4.4958	4.782
Antenna B, QPSK, high channel	4.5006	4.778
Antenna C, QPSK, high channel	4.4992	4.775
Antenna D, QPSK, high channel	4.4958	4.768

Table 8.5-2: Occupied bandwidth results in Band 71 for 10 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	8.9340	9.387
Antenna B, QPSK, low channel	8.9408	9.400
Antenna C, QPSK, low channel	8.9368	9.371
Antenna D, QPSK, low channel	8.9432	9.338
Antenna A, 16QAM, low channel	8.9320	9.324
Antenna B, 16QAM, low channel	8.9296	9.305
Antenna C, 16QAM, low channel	8.9340	9.349
Antenna D, 16QAM, low channel	8.9333	9.324
Antenna A, 64QAM, low channel	8.9310	9.339
Antenna B, 64QAM, low channel	8.9351	9.370
Antenna C, 64QAM, low channel	8.9400	9.332
Antenna D, 64QAM, low channel	8.9334	9.339
Antenna A, 256QAM, low channel	8.9383	9.343
Antenna B, 256QAM, low channel	8.9340	9.297
Antenna C, 256QAM, low channel	8.9427	9.388
Antenna D, 256QAM, low channel	8.9363	9.389
Antenna A, QPSK, mid channel	8.9376	9.386
Antenna B, QPSK, mid channel	8.9348	9.345
Antenna C, QPSK, mid channel	8.9415	9.361
Antenna D, QPSK, mid channel	8.9430	9.362
Antenna A, QPSK, high channel	8.9349	9.388
Antenna B, QPSK, high channel	8.9301	9.431
Antenna C, QPSK, high channel	8.9358	9.355
Antenna D, QPSK, high channel	8.9367	9.308

Table 8.5-3: Occupied bandwidth results in Band 71 for IoT + LTE 10 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	9.3978	9.646
Antenna B, QPSK, low channel	9.3960	9.633
Antenna C, QPSK, low channel	9.3962	9.642
Antenna D, QPSK, low channel	9.3977	9.648
Antenna A, QPSK, mid channel	9.3934	9.637
Antenna B, QPSK, mid channel	9.3952	9.641
Antenna C, QPSK, mid channel	9.3969	9.637
Antenna D, QPSK, mid channel	9.3967	9.648
Antenna A, QPSK, high channel	9.3971	9.641
Antenna B, QPSK, high channel	9.3930	9.635
Antenna C, QPSK, high channel	9.3941	9.638
Antenna D, QPSK, high channel	9.3944	9.643

Table 8.5-4: Occupied bandwidth results in Band 71 for 15 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	13.383	13.92
Antenna B, QPSK, low channel	13.390	13.89
Antenna C, QPSK, low channel	13.388	13.96
Antenna D, QPSK, low channel	13.384	13.88
Antenna A, 16QAM, low channel	13.384	13.85
Antenna B, 16QAM, low channel	13.395	13.82
Antenna C, 16QAM, low channel	13.388	13.81
Antenna D, 16QAM, low channel	13.394	13.87
Antenna A, 64QAM, low channel	13.378	13.92
Antenna B, 64QAM, low channel	13.387	13.94
Antenna C, 64QAM, low channel	13.389	13.95
Antenna D, 64QAM, low channel	13.386	13.95
Antenna A, 256QAM, low channel	13.376	13.96
Antenna B, 256QAM, low channel	13.391	13.94
Antenna C, 256QAM, low channel	13.378	13.89
Antenna D, 256QAM, low channel	13.386	13.93
Antenna A, QPSK, mid channel	13.379	13.88
Antenna B, QPSK, mid channel	13.388	13.84
Antenna C, QPSK, mid channel	13.395	13.90
Antenna D, QPSK, mid channel	13.382	13.86
Antenna A, QPSK, high channel	13.382	13.89
Antenna B, QPSK, high channel	13.384	13.83
Antenna C, QPSK, high channel	13.382	13.88
Antenna D, QPSK, high channel	13.378	13.89

Table 8.5-5: Occupied bandwidth results in Band 71 for IoT + LTE 15 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	13.960	14.27
Antenna B, QPSK, low channel	13.960	14.25
Antenna C, QPSK, low channel	13.970	14.25
Antenna D, QPSK, low channel	13.961	14.26
Antenna A, QPSK, mid channel	13.963	14.26
Antenna B, QPSK, mid channel	13.952	14.28
Antenna C, QPSK, mid channel	13.963	14.27
Antenna D, QPSK, mid channel	13.962	14.28
Antenna A, QPSK, high channel	13.961	14.26
Antenna B, QPSK, high channel	13.951	14.28
Antenna C, QPSK, high channel	13.961	14.28
Antenna D, QPSK, high channel	13.952	14.28

Table 8.5-6: Occupied bandwidth results in Band 71 for 20 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	17.834	18.41
Antenna B, QPSK, low channel	17.835	18.53
Antenna C, QPSK, low channel	17.838	18.45
Antenna D, QPSK, low channel	17.842	18.41
Antenna A, 16QAM, low channel	17.809	18.43
Antenna B, 16QAM, low channel	17.826	18.39
Antenna C, 16QAM, low channel	17.807	18.47
Antenna D, 16QAM, low channel	17.804	18.42
Antenna A, 64QAM, low channel	17.840	18.54
Antenna B, 64QAM, low channel	17.840	18.57
Antenna C, 64QAM, low channel	17.834	18.50
Antenna D, 64QAM, low channel	17.837	18.41
Antenna A, 256QAM, low channel	17.841	18.45
Antenna B, 256QAM, low channel	17.846	18.43
Antenna C, 256QAM, low channel	17.834	18.49
Antenna D, 256QAM, low channel	17.842	18.49
Antenna A, QPSK, mid channel	17.832	18.54
Antenna B, QPSK, mid channel	17.841	18.35
Antenna C, QPSK, mid channel	17.838	18.39
Antenna D, QPSK, mid channel	17.842	18.53
Antenna A, QPSK, high channel	17.822	18.45
Antenna B, QPSK, high channel	17.844	18.51
Antenna C, QPSK, high channel	17.828	18.46
Antenna D, QPSK, high channel	17.829	18.52

Table 8.5-7: Occupied bandwidth results in Band 71 for IoT + LTE 20 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	18.349	18.70
Antenna B, QPSK, low channel	18.348	18.73
Antenna C, QPSK, low channel	18.355	18.69
Antenna D, QPSK, low channel	18.348	18.73
Antenna A, QPSK, mid channel	18.357	18.77
Antenna B, QPSK, mid channel	18.354	18.74
Antenna C, QPSK, mid channel	18.355	18.73
Antenna D, QPSK, mid channel	18.354	18.72
Antenna A, QPSK, high channel	18.353	18.74
Antenna B, QPSK, high channel	18.349	18.77
Antenna C, QPSK, high channel	18.357	18.70
Antenna D, QPSK, high channel	18.347	18.72

Table 8.5-8: Occupied bandwidth results in Band 85A for 5 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	4.4972	4.772
Antenna B, QPSK, low channel	4.4902	4.788
Antenna C, QPSK, low channel	4.5005	4.776
Antenna D, QPSK, low channel	4.4966	4.773
Antenna A, 16QAM, low channel	4.4759	4.757
Antenna B, 16QAM, low channel	4.4763	4.763
Antenna C, 16QAM, low channel	4.4752	4.764
Antenna D, 16QAM, low channel	4.4688	4.753
Antenna A, 64QAM, low channel	4.4964	4.785
Antenna B, 64QAM, low channel	4.4959	4.780
Antenna C, 64QAM, low channel	4.4998	4.787
Antenna D, 64QAM, low channel	4.5007	4.793
Antenna A, 256QAM, low channel	4.4951	4.783
Antenna B, 256QAM, low channel	4.5008	4.786
Antenna C, 256QAM, low channel	4.4984	4.776
Antenna D, 256QAM, low channel	4.4965	4.777
Antenna A, QPSK, mid channel	4.5037	4.776
Antenna B, QPSK, mid channel	4.4981	4.781
Antenna C, QPSK, mid channel	4.4984	4.792
Antenna D, QPSK, mid channel	4.4947	4.796
Antenna A, QPSK, high channel	4.4999	4.784
Antenna B, QPSK, high channel	4.4962	4.783
Antenna C, QPSK, high channel	4.5008	4.783
Antenna D, QPSK, high channel	4.5004	4.784

Table 8.5-9: Occupied bandwidth results in Band 85A for 10 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	8.9320	9.371
Antenna B, QPSK, low channel	8.9339	9.391
Antenna C, QPSK, low channel	8.9378	9.310
Antenna D, QPSK, low channel	8.9318	9.318
Antenna A, 16QAM, low channel	8.9271	9.295
Antenna B, 16QAM, low channel	8.9265	9.336
Antenna C, 16QAM, low channel	8.9283	9.332
Antenna D, 16QAM, low channel	8.9266	9.329
Antenna A, 64QAM, low channel	8.9296	9.334
Antenna B, 64QAM, low channel	8.9290	9.371
Antenna C, 64QAM, low channel	8.9390	9.365
Antenna D, 64QAM, low channel	8.9418	9.356
Antenna A, 256QAM, low channel	8.9364	9.364
Antenna B, 256QAM, low channel	8.9353	9.357
Antenna C, 256QAM, low channel	8.9367	9.346
Antenna D, 256QAM, low channel	8.9290	9.392
Antenna A, QPSK, mid channel	8.9331	9.390
Antenna B, QPSK, mid channel	8.9372	9.385
Antenna C, QPSK, mid channel	8.9385	9.358
Antenna D, QPSK, mid channel	8.9351	9.311
Antenna A, QPSK, high channel	8.9370	9.392
Antenna B, QPSK, high channel	8.9374	9.352
Antenna C, QPSK, high channel	8.9362	9.381
Antenna D, QPSK, high channel	8.9312	9.313

Table 8.5-10: Occupied bandwidth results in Band 85A for IoT + LTE 10 MHz channel

Remarks	99% OBW, MHz	26 dB BW, MHz
Antenna A, QPSK, low channel	9.3958	9.633
Antenna B, QPSK, low channel	9.3899	9.641
Antenna C, QPSK, low channel	9.3938	9.652.1
Antenna D, QPSK, low channel	9.3884	9.644
Antenna A, QPSK, mid channel	9.3938	9.640
Antenna B, QPSK, mid channel	9.3962	9.640
Antenna C, QPSK, mid channel	9.3989	9.637
Antenna D, QPSK, mid channel	9.3922	9.642
Antenna A, QPSK, high channel	9.3959	9.636
Antenna B, QPSK, high channel	9.3868	9.643
Antenna C, QPSK, high channel	9.3938	9.637
Antenna D, QPSK, high channel	9.3945	9.631

Table 8.5-11: Occupied bandwidth results in Band 85A for IoT stand-alone

Remarks	99% OBW, kHz	26 dB BW, kHz
Antenna A, low channel	204.69	307.6
Antenna B, low channel	203.77	302.8
Antenna C, low channel	207.69	307.1
Antenna D, low channel	205.79	310.3
Antenna A, mid channel	203.93	307.9
Antenna B, mid channel	203.51	308.4
Antenna C, mid channel	205.48	306.6
Antenna D, mid channel	206.34	311.0
Antenna A, high channel	204.52	307.0
Antenna B, high channel	204.31	304.5
Antenna C, high channel	208.52	305.3
Antenna D, high channel	206.24	312.1

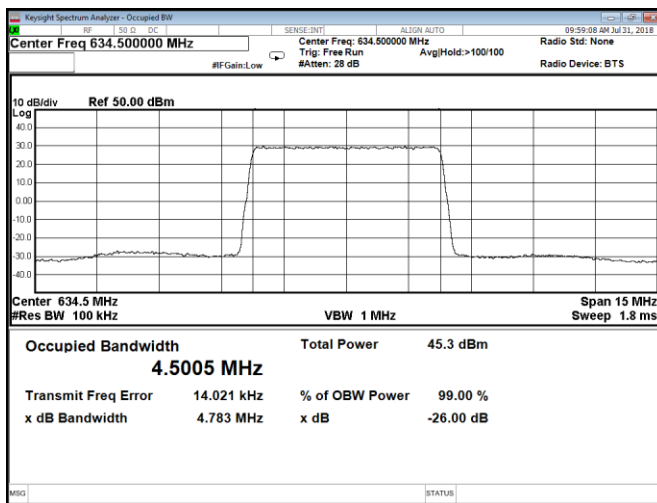


Figure 8.5-1: Occupied bandwidth, sample plot for LTE

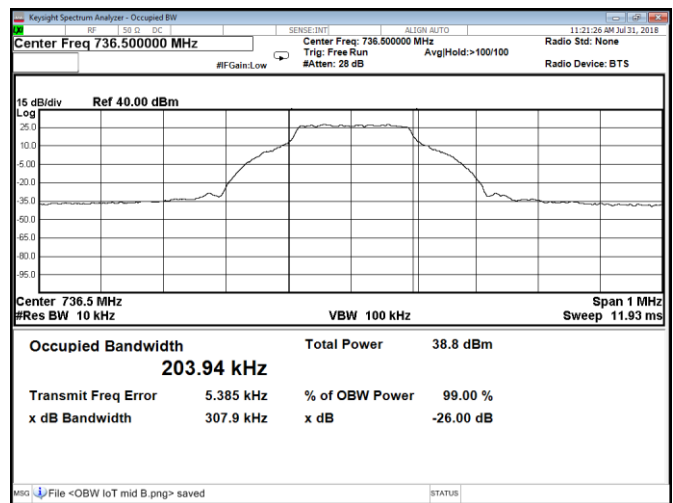
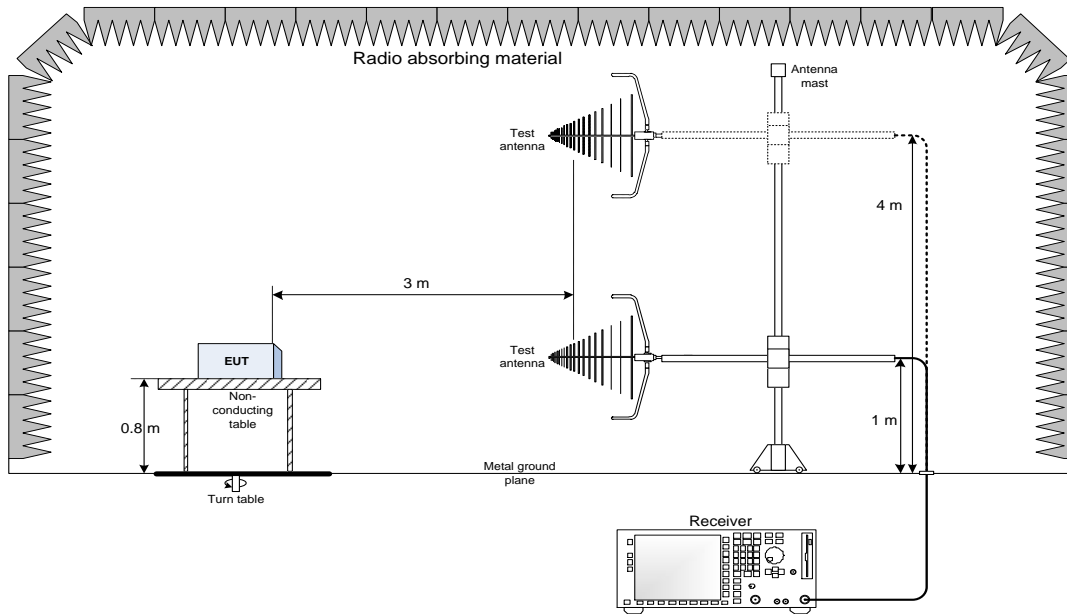


Figure 8.5-2: Occupied bandwidth, sample plot for IoT

Section 9. Block diagrams of test set-ups

9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz

