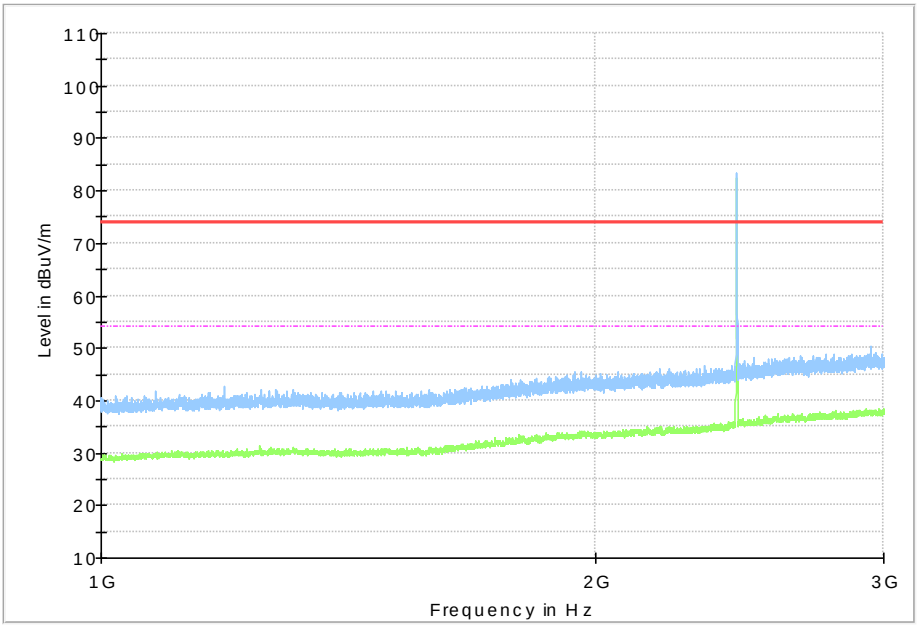

Fig.60 Radiated Spurious Emission, LE 1M (GFSK, Ch19, 1 GHz ~3 GHz)

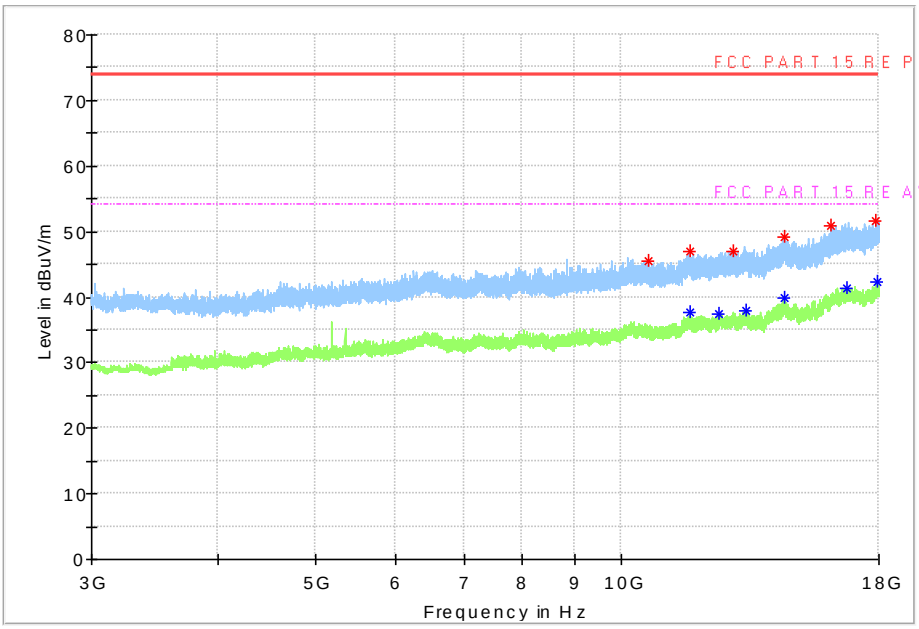

Fig.61 Radiated Spurious Emission, LE 1M (GFSK, Ch19, 3 GHz ~18 GHz)

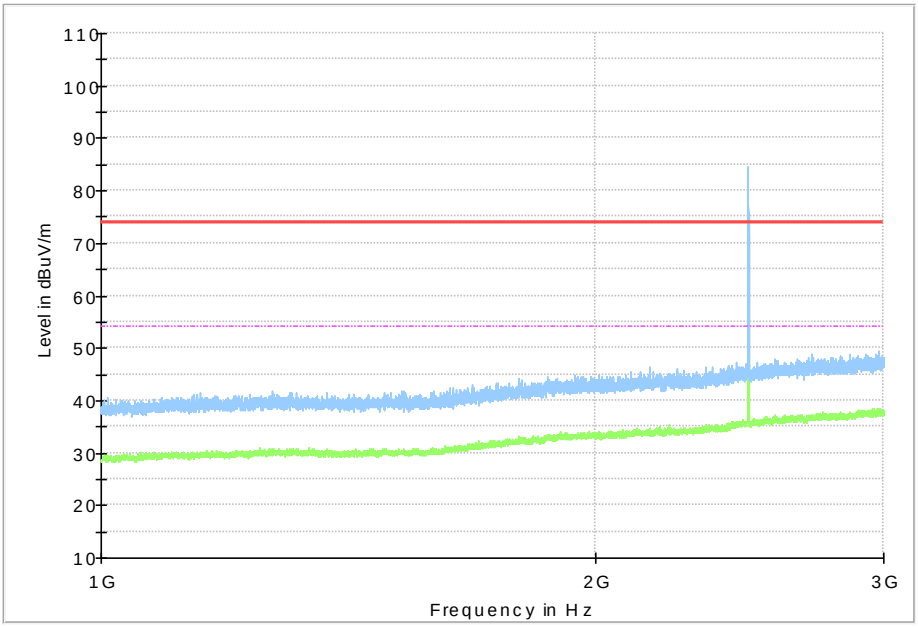

Fig.62 Radiated Spurious Emission, LE 1M (GFSK, Ch39, 1 GHz ~3 GHz)

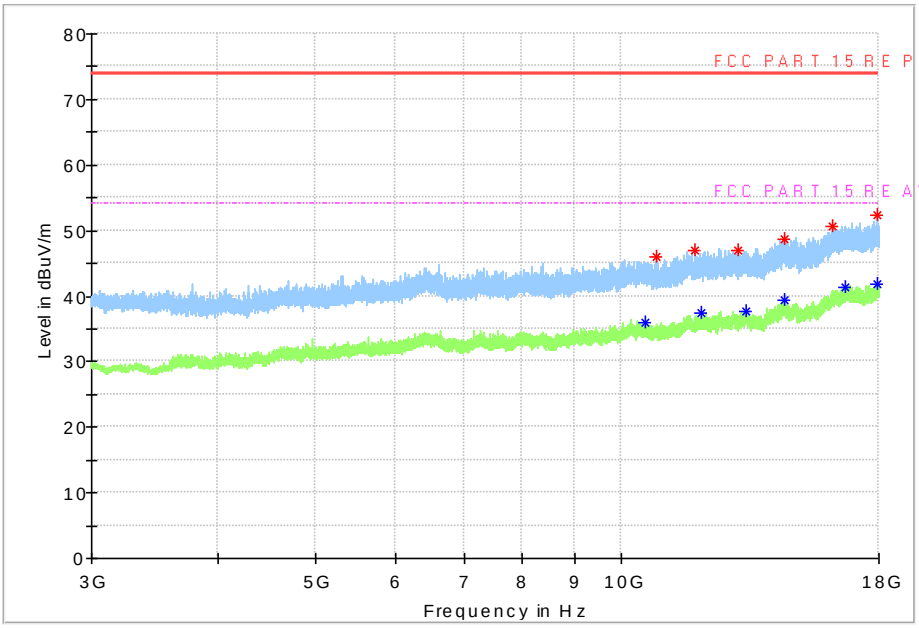

Fig.63 Radiated Spurious Emission, LE 1M (GFSK, Ch39, 3 GHz ~18 GHz)

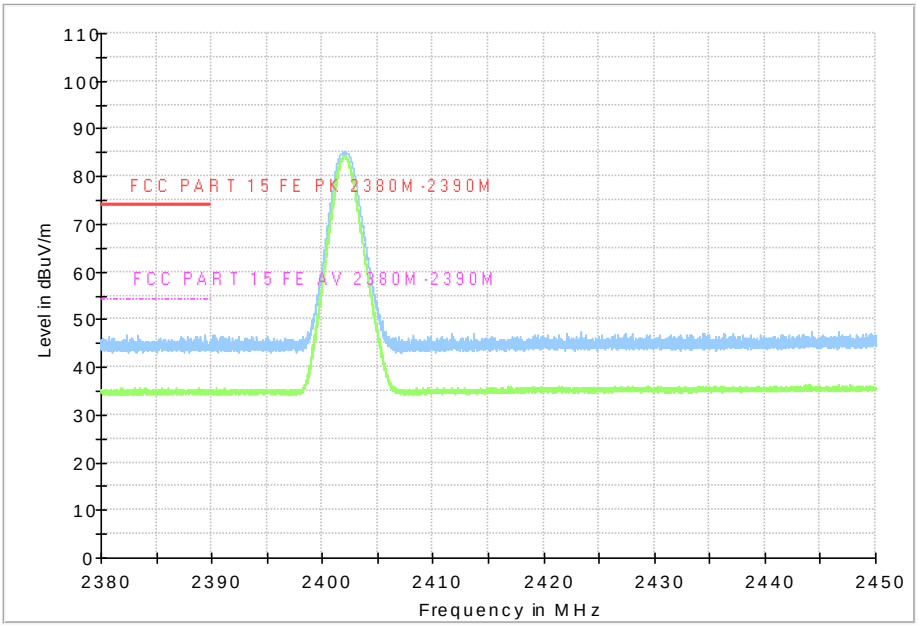

Fig.64 Radiated Band Edges, LE 1M (GFSK, Ch0, 2380GHz~2450GHz)

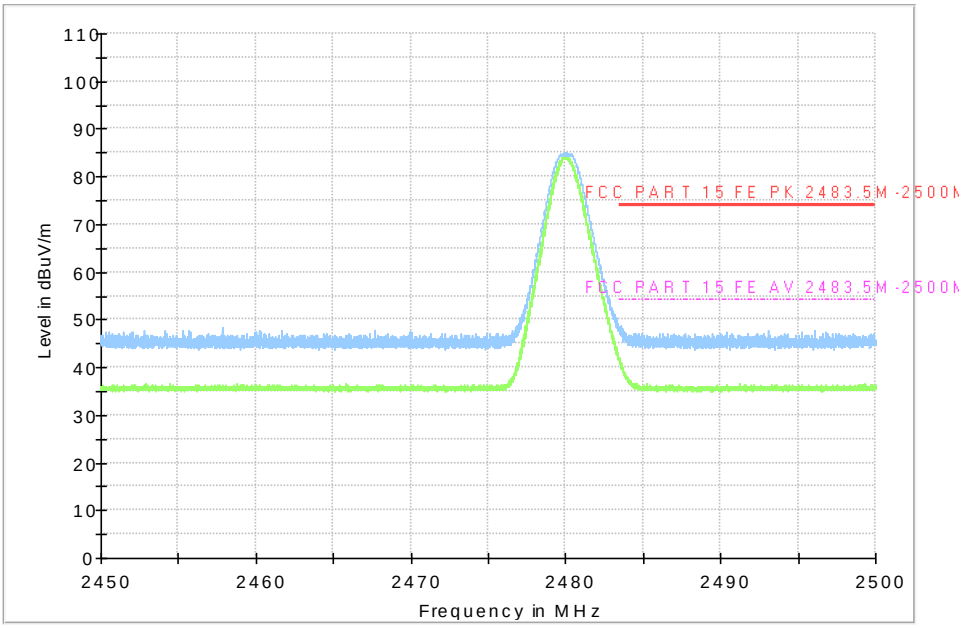

Fig.65 Radiated Band Edges, LE 1M (GFSK, Ch39, 2450GHz~2500GHz)

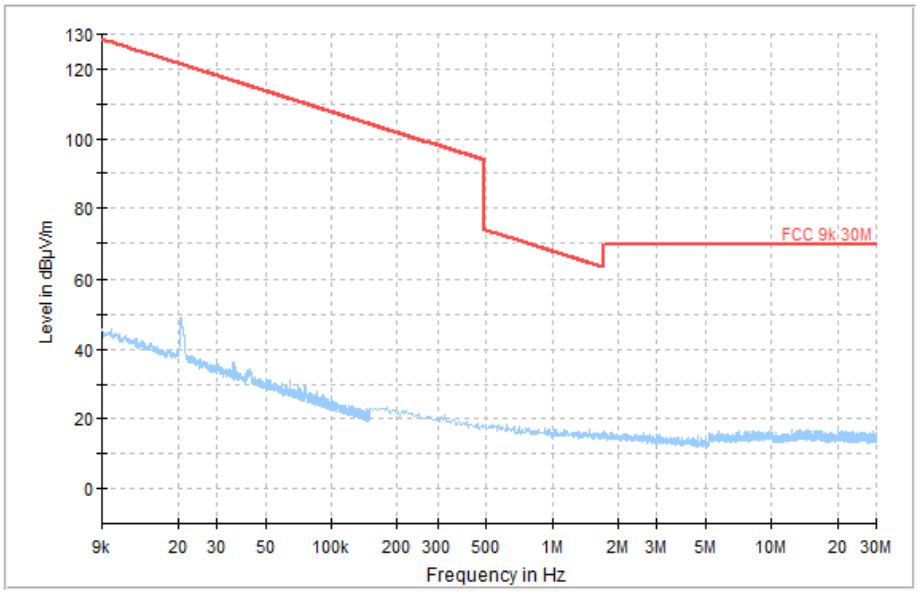

Fig.66 Radiated Spurious Emission, LE 1M (All Channels, 9 kHz-30 MHz)

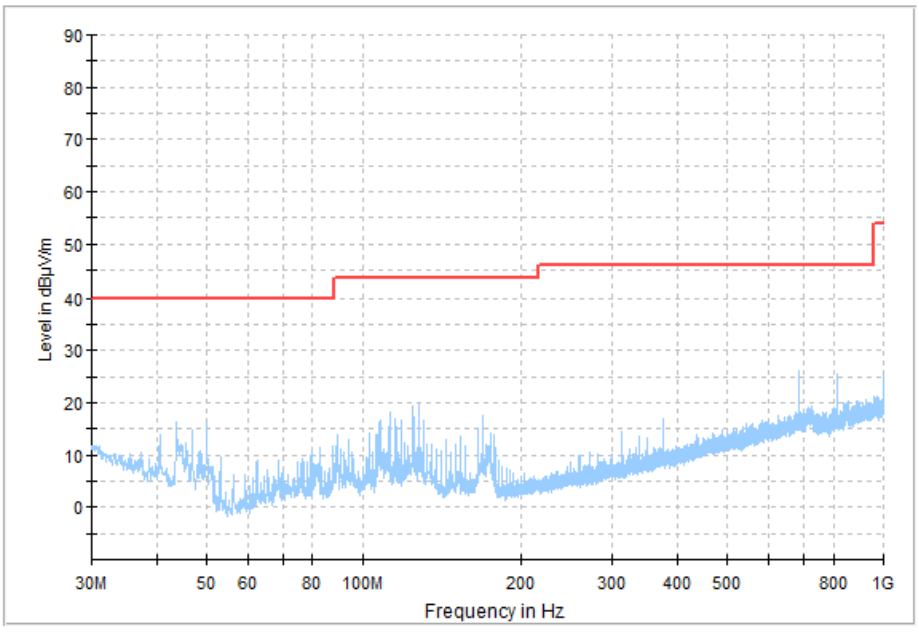

Fig.67 Radiated Spurious Emission, LE 1M (All Channels, 30 MHz-1 GHz)

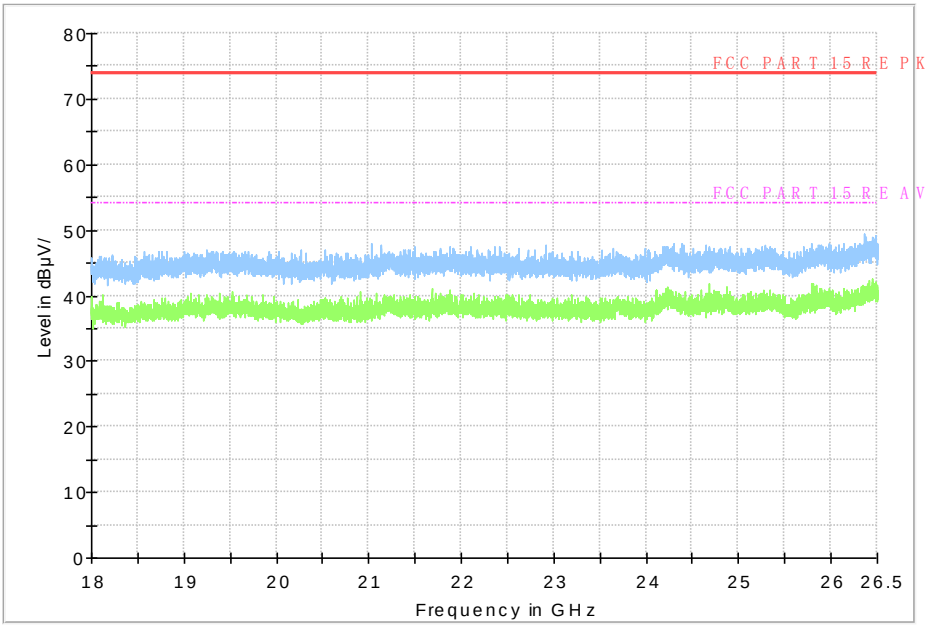

Fig.68 Radiated Spurious Emission, LE 1M (All Channels, 18 GHz-26.5 GHz)

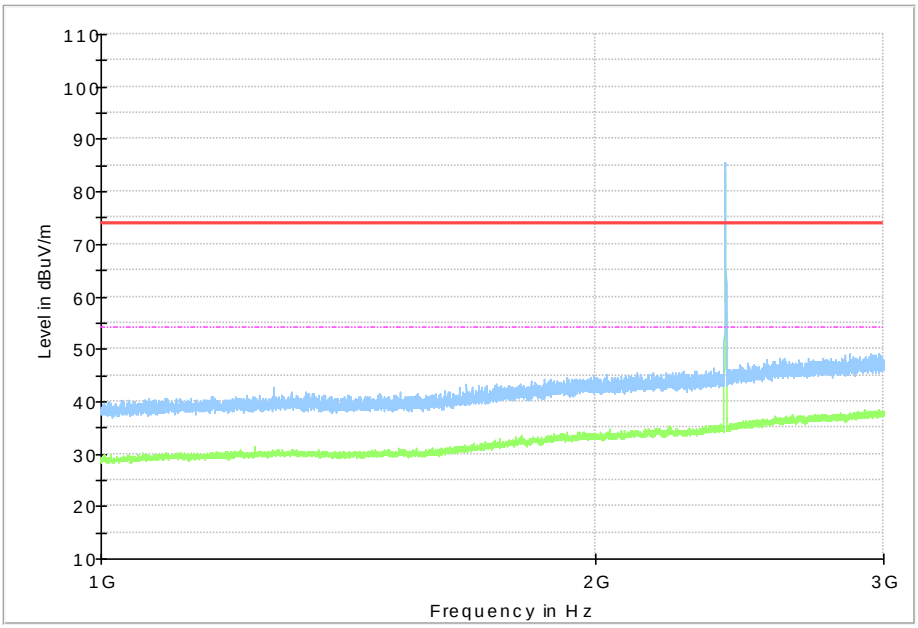

Fig.69 Radiated Spurious Emission, LE 2M (GFSK, Ch0, 1 GHz ~3 GHz)

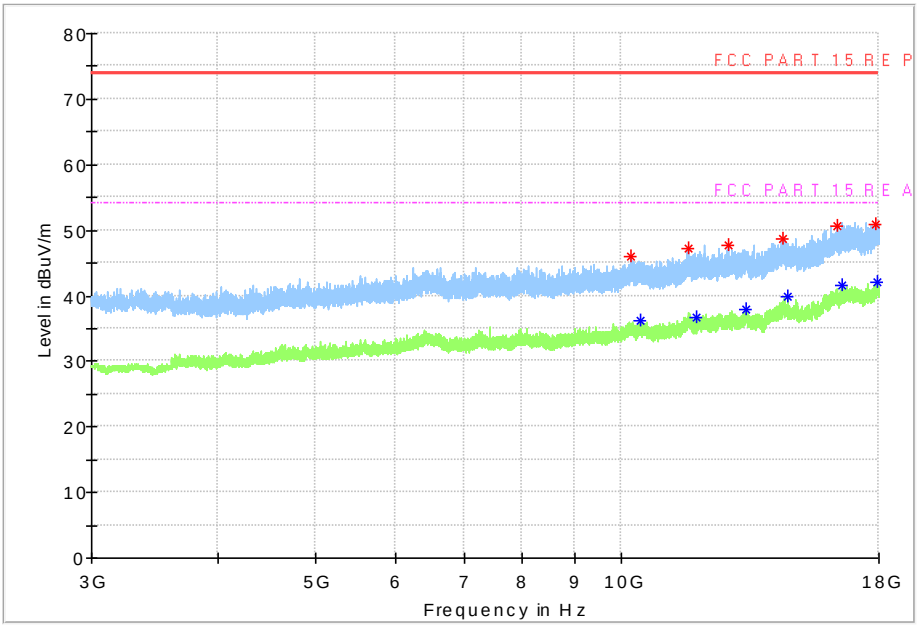

Fig.70 Radiated Spurious Emission , LE 2M (GFSK, Ch0, 3 GHz ~18 GHz)

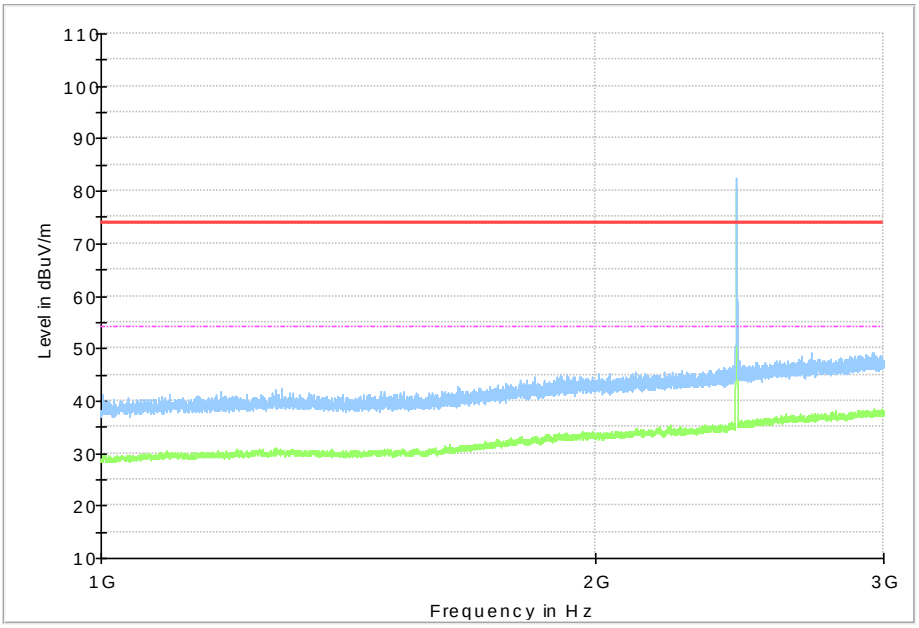

Fig.71 Radiated Spurious Emission, LE 2M (GFSK, Ch19, 1 GHz ~3 GHz)

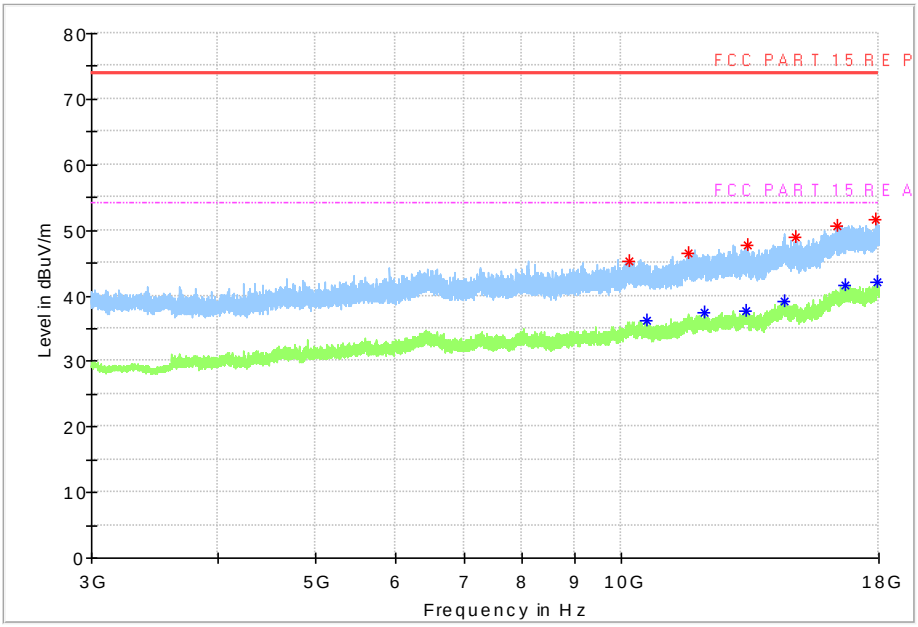

Fig.72 Radiated Spurious Emission, LE 2M (GFSK, Ch19, 3 GHz ~18 GHz)

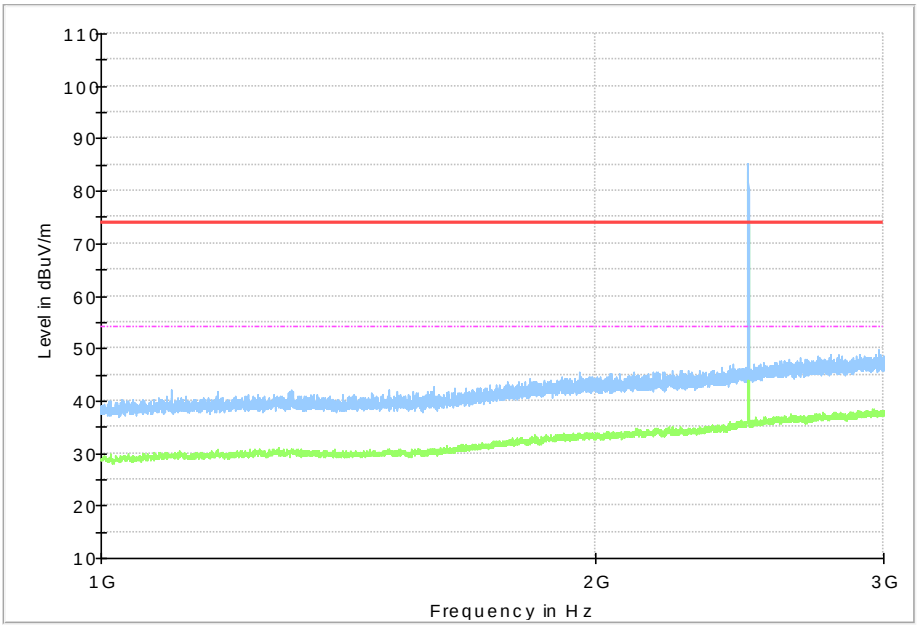

Fig.73 Radiated Spurious Emission, LE 2M (GFSK, Ch39, 1 GHz ~3 GHz)

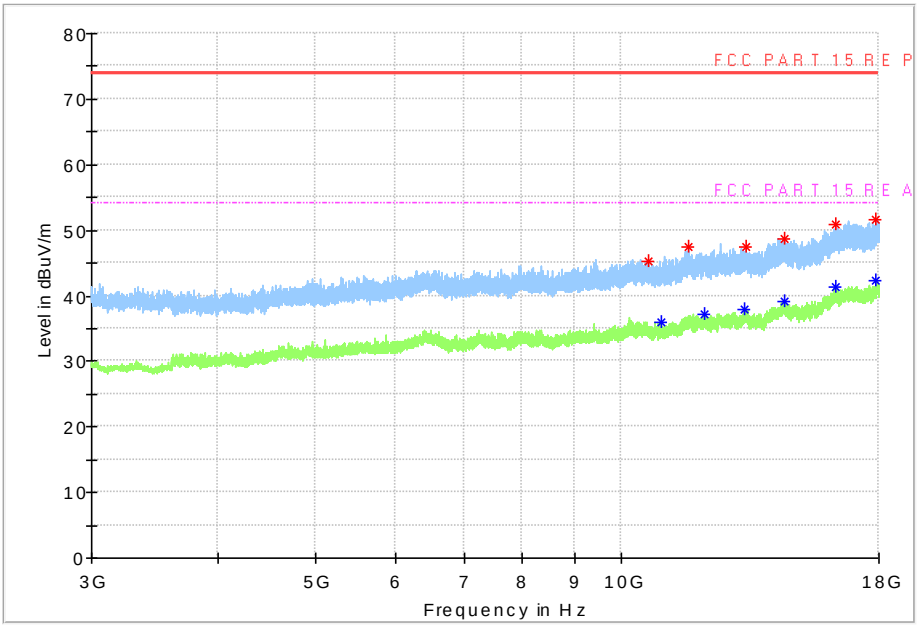

Fig.74 Radiated Spurious Emission, LE 2M (GFSK, Ch39, 3 GHz ~18 GHz)

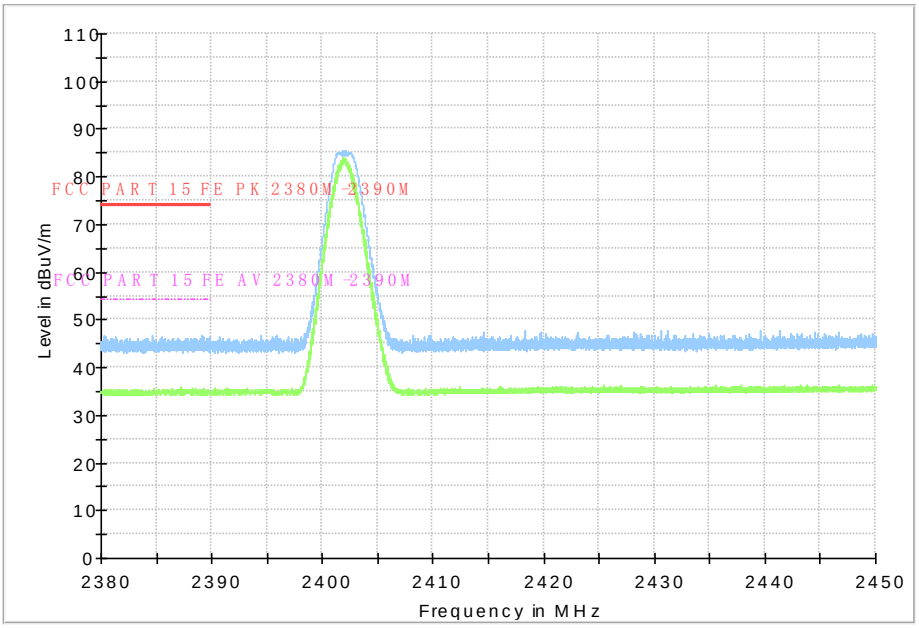

Fig.75 Radiated Band Edges, LE 2M (GFSK, Ch0, 2380GHz~2450GHz)

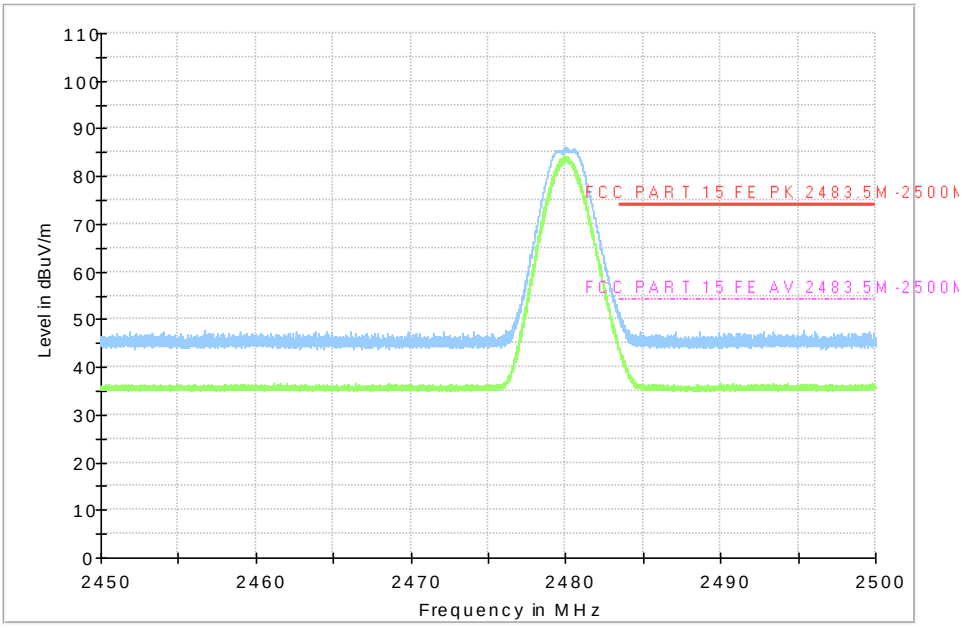

Fig.76 Radiated Band Edges, LE 2M (GFSK, Ch39, 2450GHz~2500GHz)

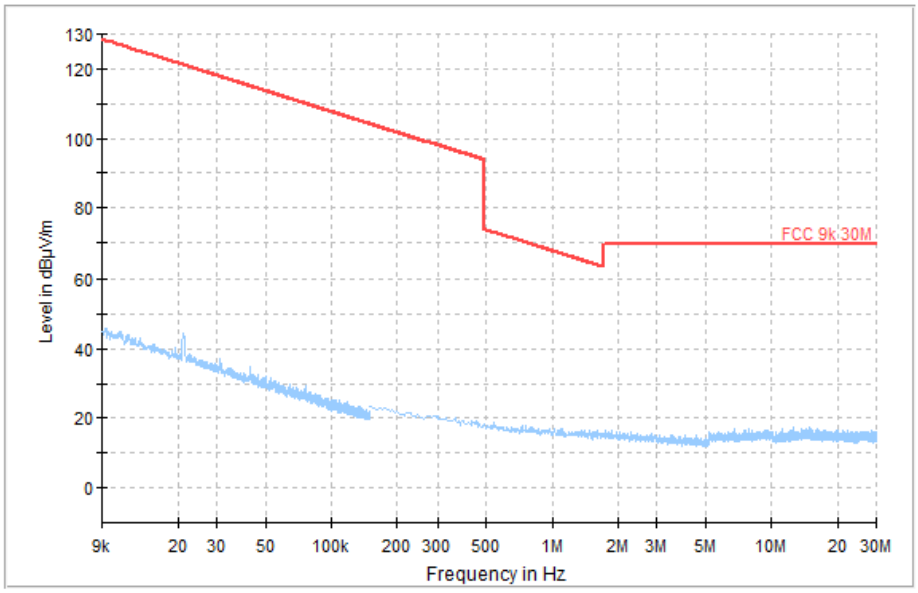

Fig.77 Radiated Spurious Emission, LE 2M (All Channels, 9 kHz-30 MHz)

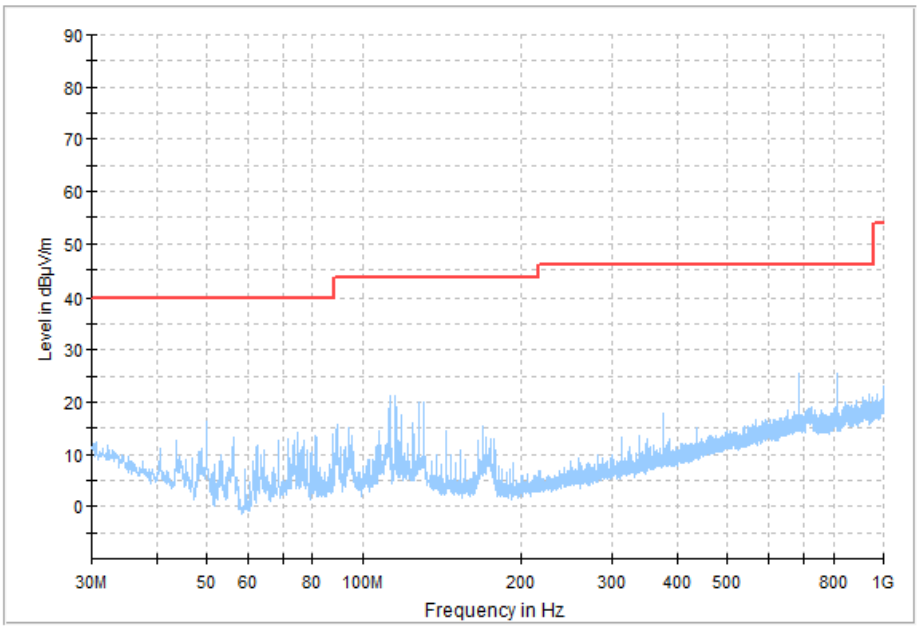

Fig.78 Radiated Spurious Emission, LE 2M (All Channels, 30 MHz-1 GHz)

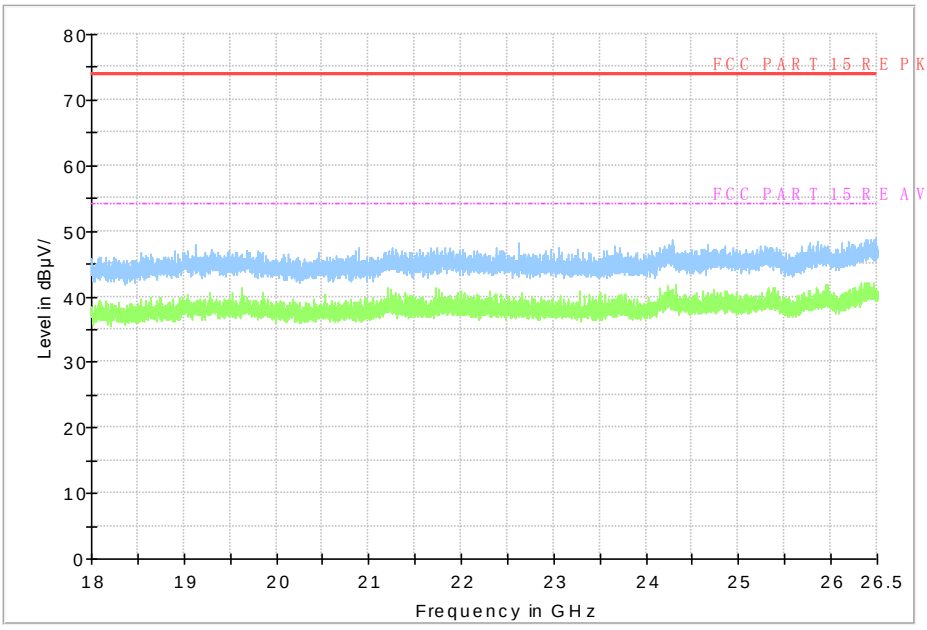

Fig.79 Radiated Spurious Emission, LE 2M (All Channels, 18 GHz-26.5 GHz)

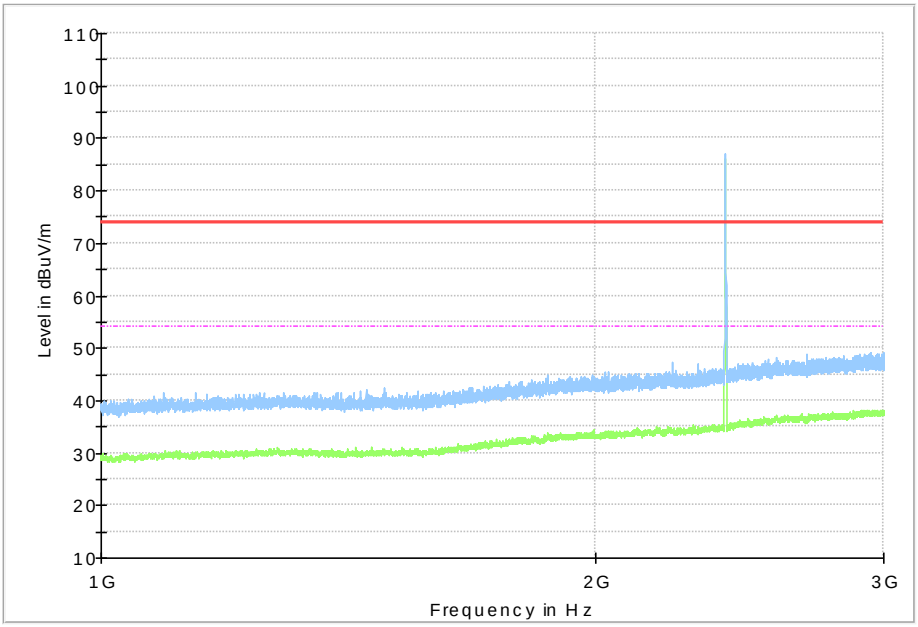

Fig.80 Radiated Spurious Emission, LE Coded (GFSK, Ch0, 1 GHz ~3 GHz)

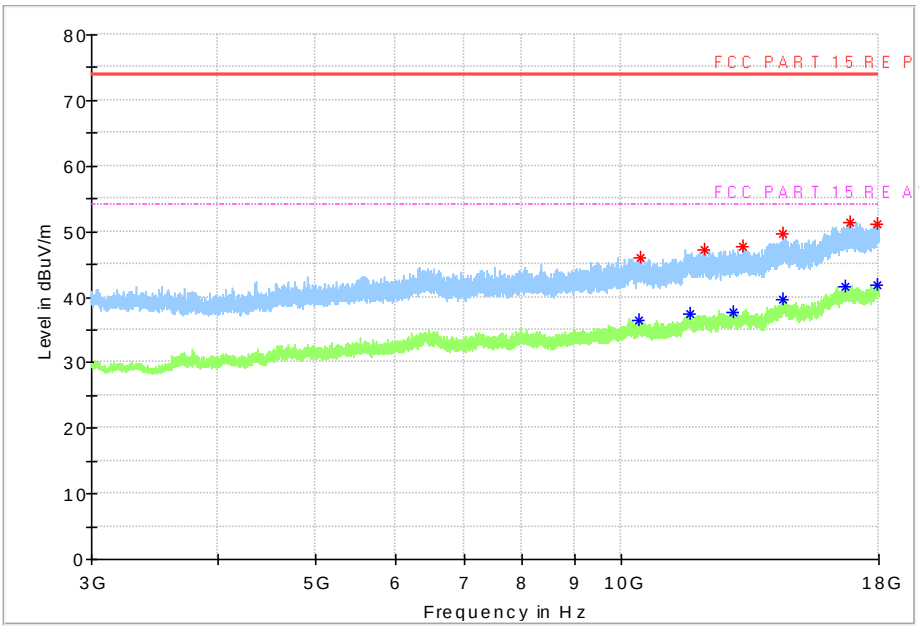

Fig.81 Radiated Spurious Emission , LE Coded (GFSK, Ch0, 3 GHz ~18 GHz)

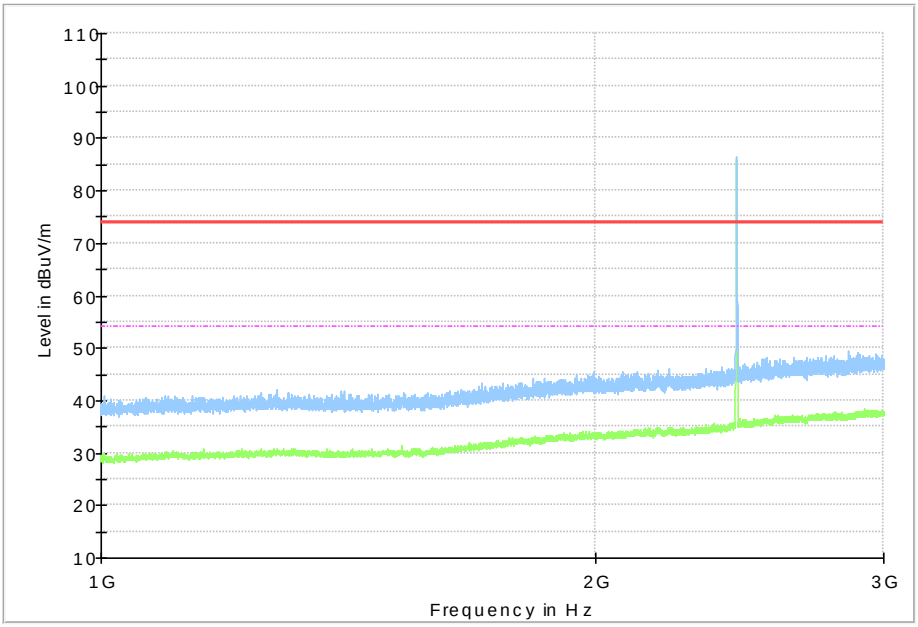

Fig.82 Radiated Spurious Emission, LE Coded (GFSK, Ch19, 1 GHz ~3 GHz)

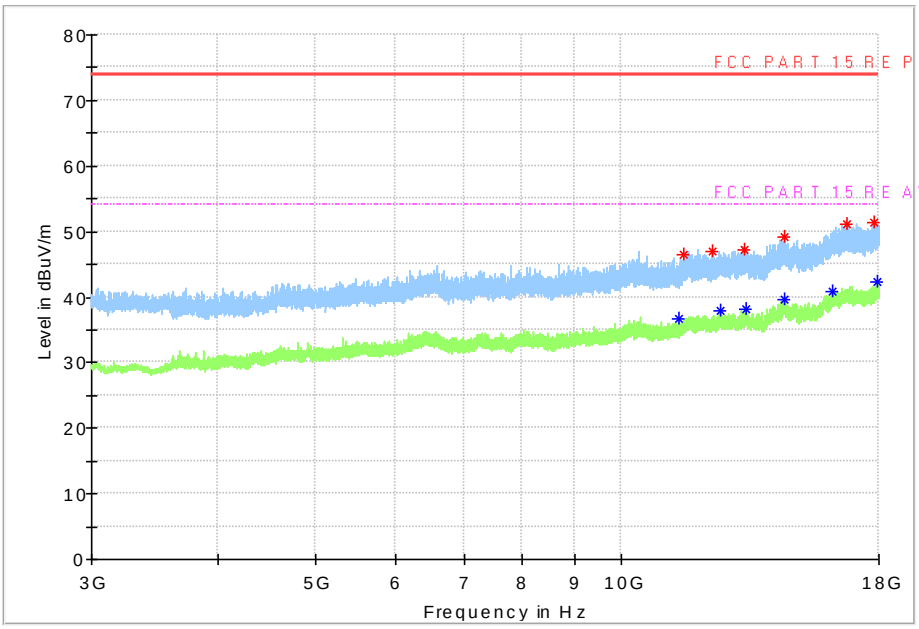

Fig.83 Radiated Spurious Emission, LE Coded (GFSK, Ch19, 3 GHz ~18 GHz)

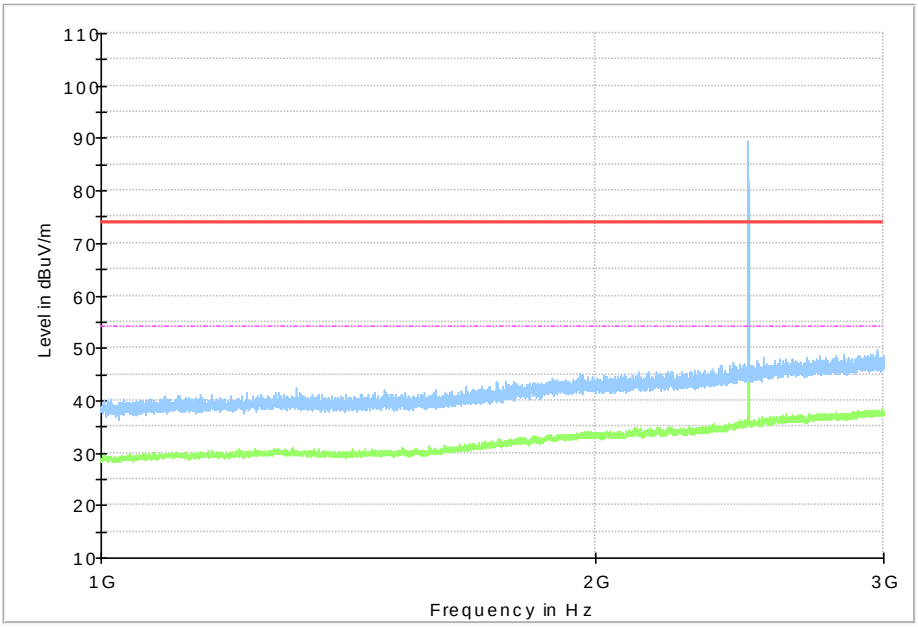

Fig.84 Radiated Spurious Emission, LE Coded (GFSK, Ch39, 1 GHz ~3 GHz)

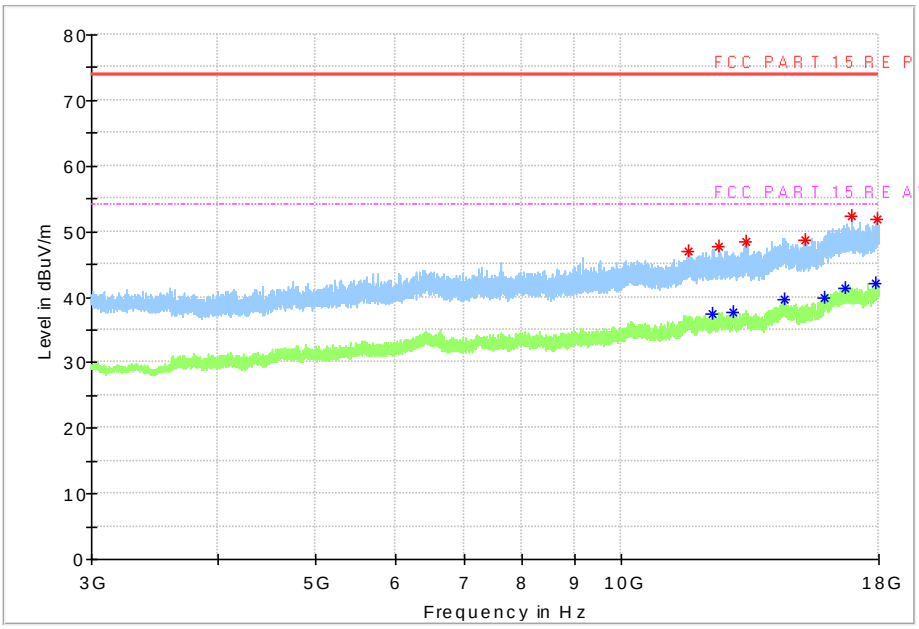

Fig.85 Radiated Spurious Emission, LE Coded (GFSK, Ch39, 3 GHz ~18 GHz)

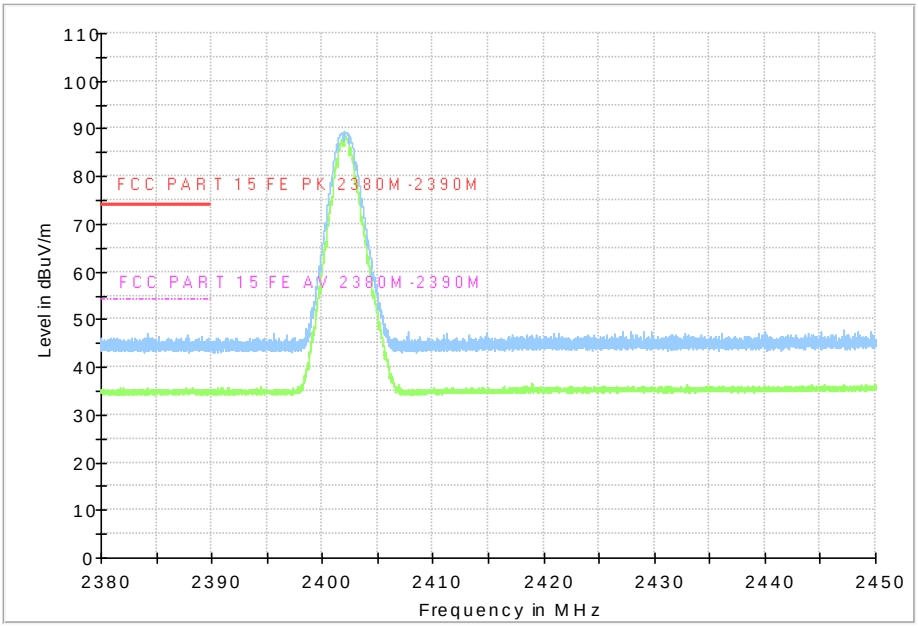

Fig.86 Radiated Band Edges, LE Coded (GFSK, Ch0, 2380GHz~2450GHz)

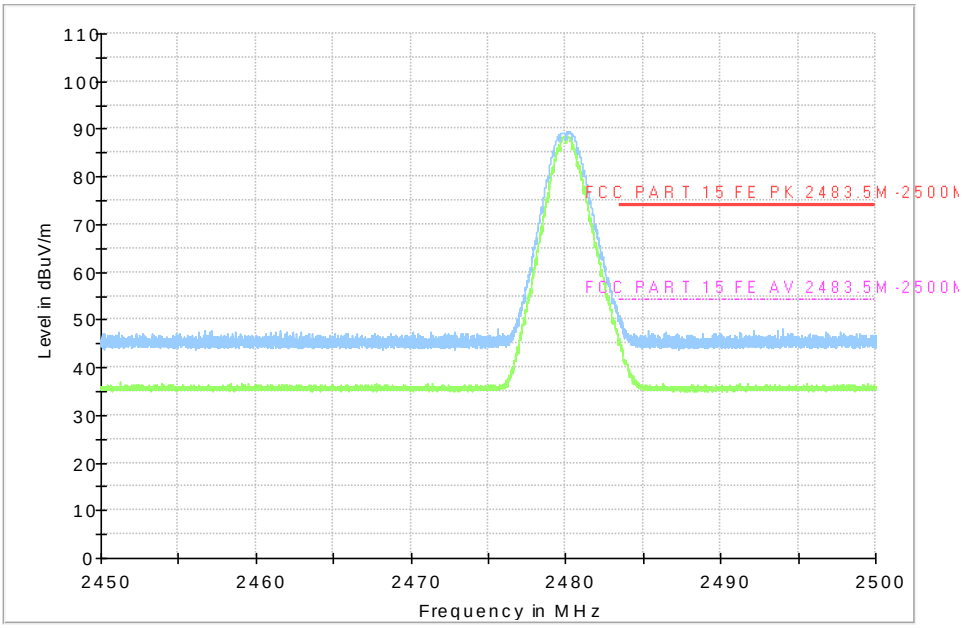

Fig.87 Radiated Band Edges, LE Coded (GFSK, Ch39, 2450GHz~2500GHz)

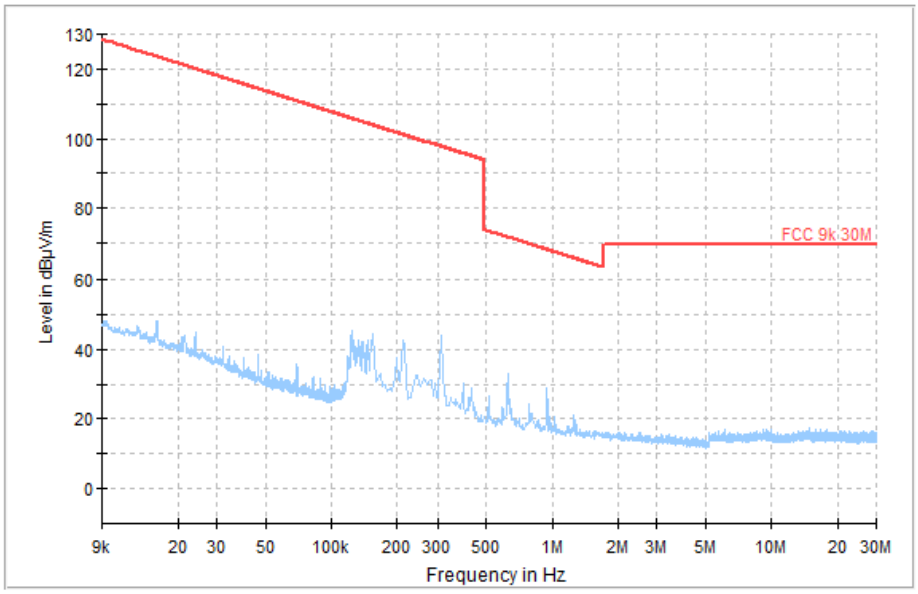

Fig.88 Radiated Spurious Emission, LE Coded (All Channels, 9 kHz-30 MHz)

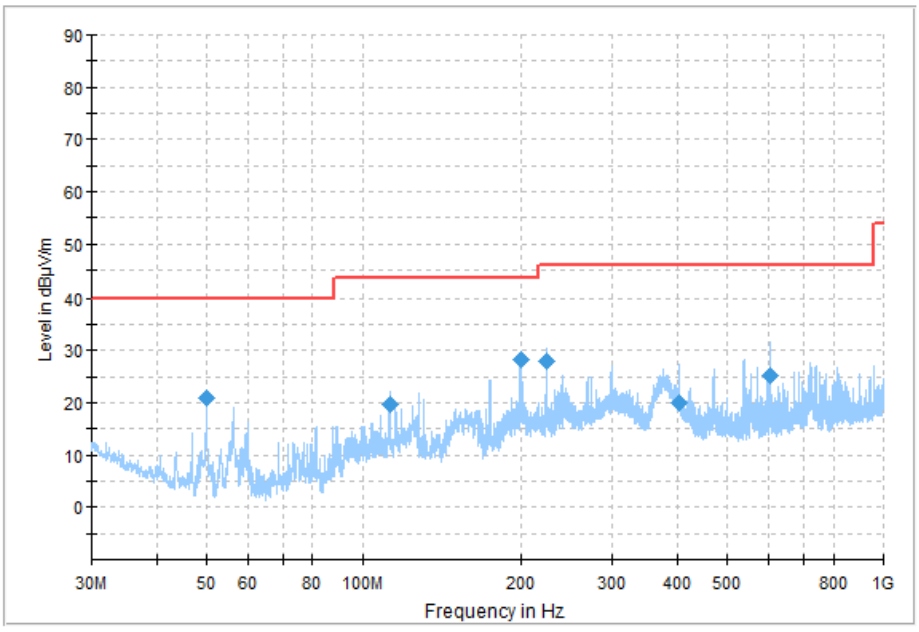

Fig.89 Radiated Spurious Emission, LE Coded (All Channels, 30 MHz-1 GHz)

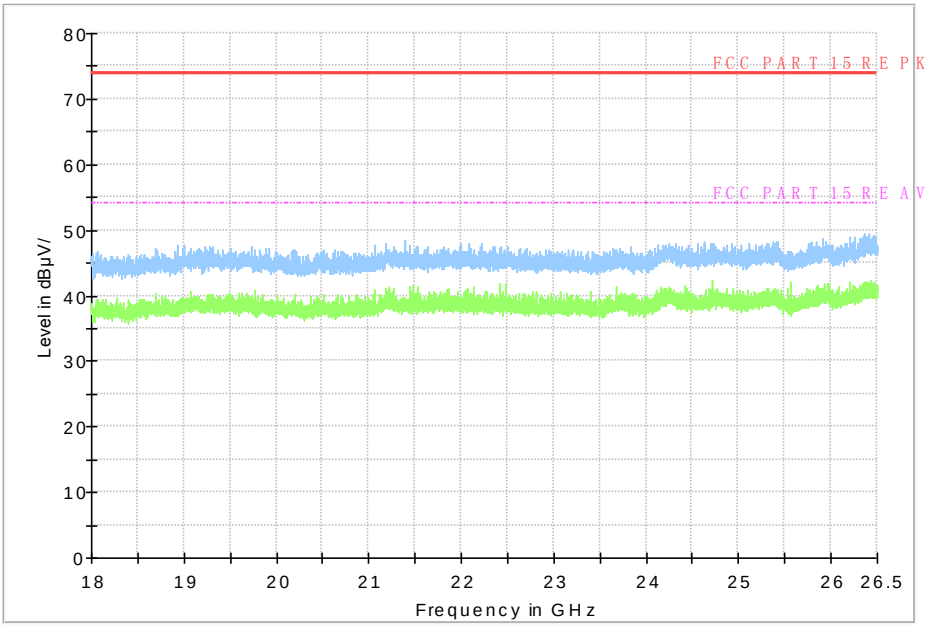

Fig.90 Radiated Spurious Emission, LE Coded (All Channels, 18 GHz-26.5 GHz)

A.7 AC Power line Conducted Emission

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

LE 1M:

BLE (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.91	Fig.92	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

BLE (Average Limit)

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig 91	Fig 92	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

LE 2M:

BLE (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.16 to 0.5	66 to 56	Fig.93	Fig.94	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

BLE (Average Limit)

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig 93	Fig 94	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

LE Coded:

BLE (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.17 to 0.5	66 to 56	Fig.95	Fig.96	**P**
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

BLE (Average Limit)

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig 95	Fig 96	**P**
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note: The measurement results include the L1 and N measurements.

See below for test graphs.

Conclusion: Pass

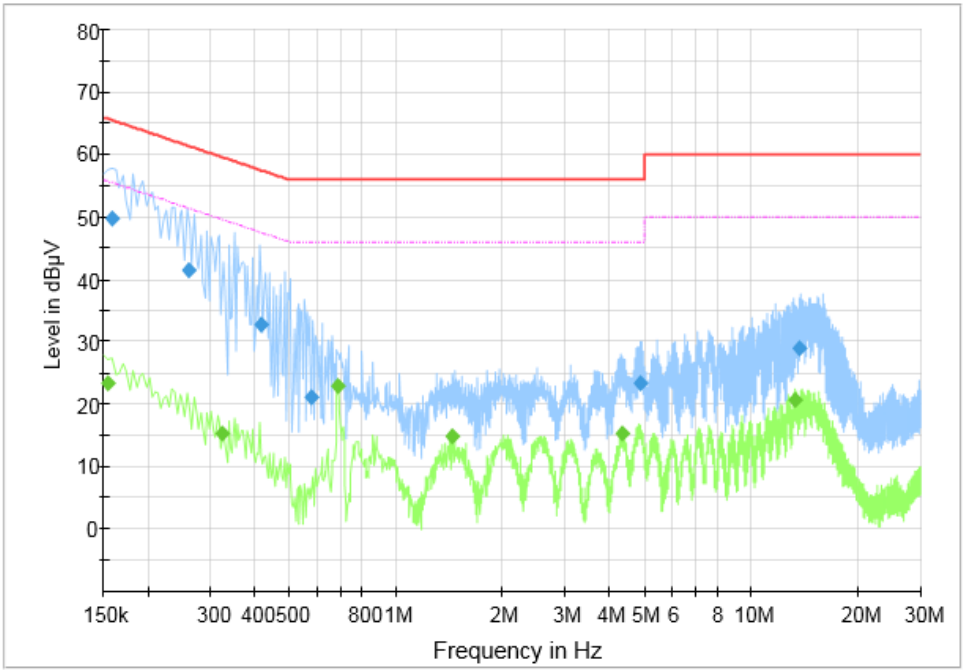

Fig.91 AC Power line Conducted Emission (Traffic), LE 1M

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.158	49.73	65.57	15.84	N	ON	9.6
0.260	41.57	61.43	19.86	L1	ON	9.6
0.416	32.75	57.53	24.78	L1	ON	9.7
0.576	21.05	56.00	34.95	N	ON	9.6
4.876	23.32	56.00	32.68	L1	ON	9.7
13.700	28.85	60.00	31.15	N	ON	9.8

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154	23.45	55.78	32.33	L1	ON	9.6
0.324	15.40	49.60	34.20	N	ON	9.6
0.688	23.01	46.00	22.99	N	ON	9.6
1.444	14.96	46.00	31.04	N	ON	9.7
4.348	15.27	46.00	30.73	N	ON	9.7
13.240	20.63	50.00	29.37	L1	ON	9.8

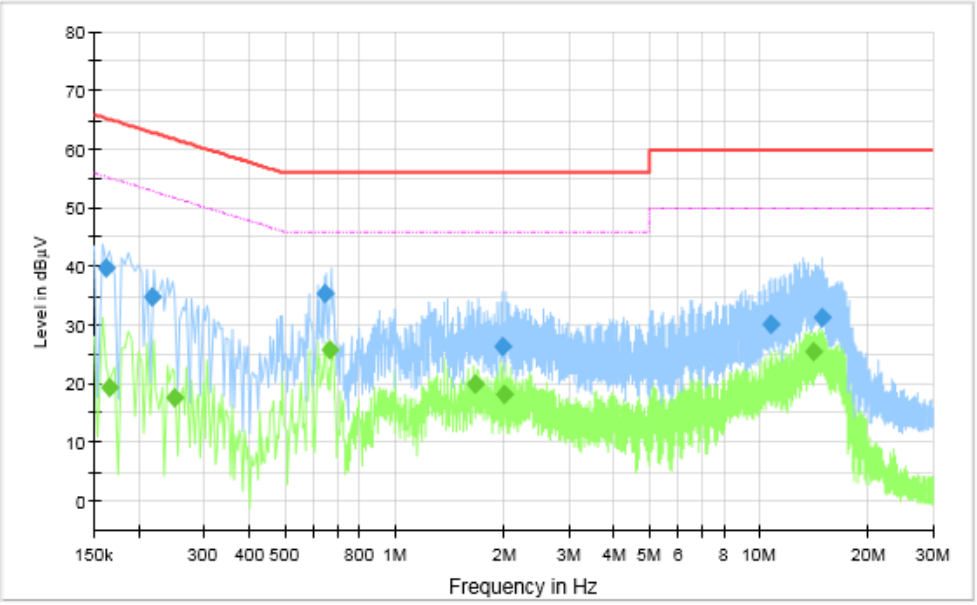

Fig.92 AC Power line Conducted Emission (Idle), LE 1M

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
1.968	26.53	56.00	29.47	N	ON	9.7
10.732	30.18	60.00	29.82	N	ON	9.8
14.860	31.39	60.00	28.61	N	ON	9.8
0.216	34.74	62.97	28.23	N	ON	9.6
0.644	35.43	56.00	20.57	N	ON	9.6
0.162	39.94	65.36	25.42	N	ON	9.6

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.166	19.47	55.16	35.69	N	ON	9.6
0.248	17.65	51.82	34.18	N	ON	9.6
0.664	25.82	46.00	20.18	N	ON	9.6
1.672	20.11	46.00	25.89	N	ON	9.7
1.996	18.31	46.00	27.69	N	ON	9.7
14.156	25.46	50.00	24.54	N	ON	9.8

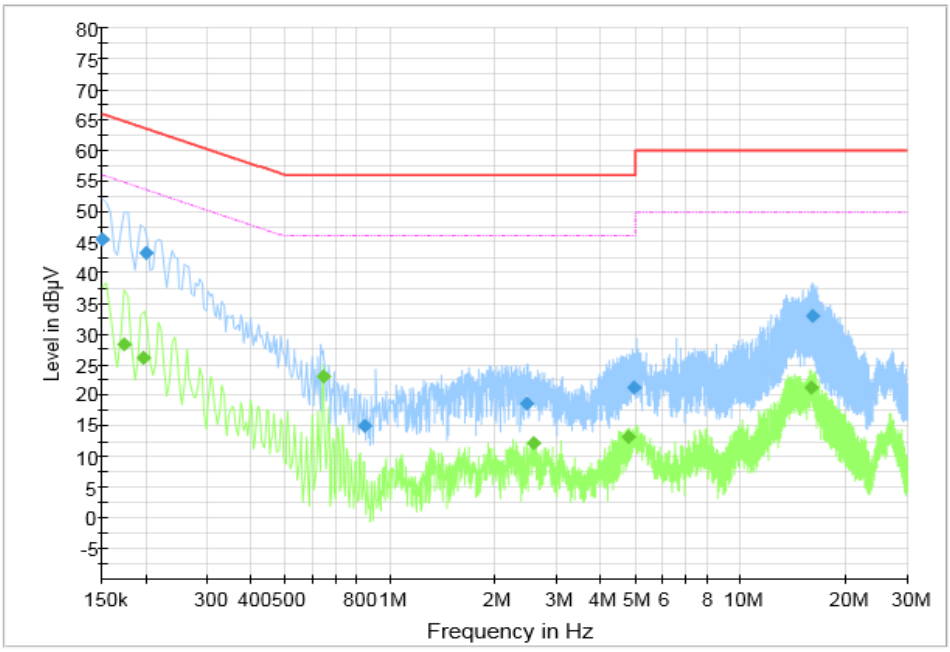

Fig.93 AC Power line Conducted Emission (Traffic), LE 2M

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	45.42	66.00	20.58	N	ON	9.6
0.200000	43.22	63.61	20.39	N	ON	9.6
0.840000	14.99	56.00	41.01	N	ON	9.6
2.456000	18.56	56.00	37.44	N	ON	9.7
4.980000	21.37	56.00	34.63	L1	ON	9.7
16.112000	32.96	60.00	27.04	N	ON	9.8

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174000	28.28	54.77	26.49	N	ON	9.6
0.196000	26.07	53.78	27.71	N	ON	9.6
0.644000	23.17	46.00	22.83	N	ON	9.6
2.576000	12.17	46.00	33.83	N	ON	9.7
4.804000	13.18	46.00	32.82	N	ON	9.7
15.956000	21.37	50.00	28.63	N	ON	9.8

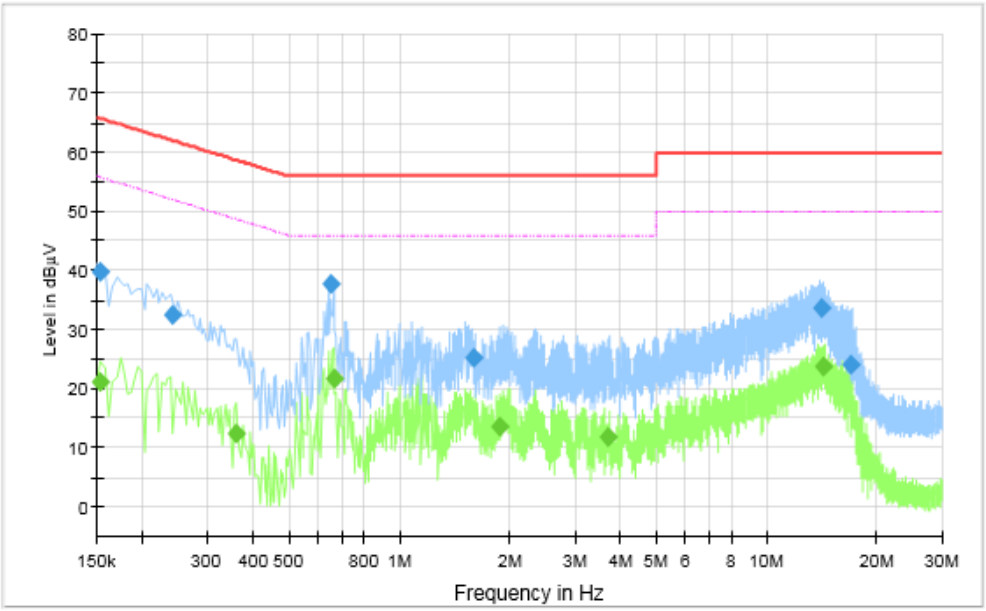

Fig.94 AC Power line Conducted Emission (Idle), LE 2M

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
16.952	24.06	60.00	35.94	N	ON	9.8
1.592	25.37	56.00	30.63	N	ON	9.7
0.240	32.51	62.10	29.58	N	ON	9.6
14.128	33.63	60.00	26.37	N	ON	9.8
0.652	37.67	56.00	18.33	N	ON	9.6
0.154	39.68	65.78	26.10	N	ON	9.6

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154	21.15	55.78	34.63	L1	ON	9.6
0.360	12.33	48.73	36.40	L1	ON	9.6
0.668	21.90	46.00	24.10	N	ON	9.6
1.876	13.60	46.00	32.40	N	ON	9.7
3.696	11.94	46.00	34.06	N	ON	9.7
14.264	23.96	50.00	26.04	N	ON	9.8

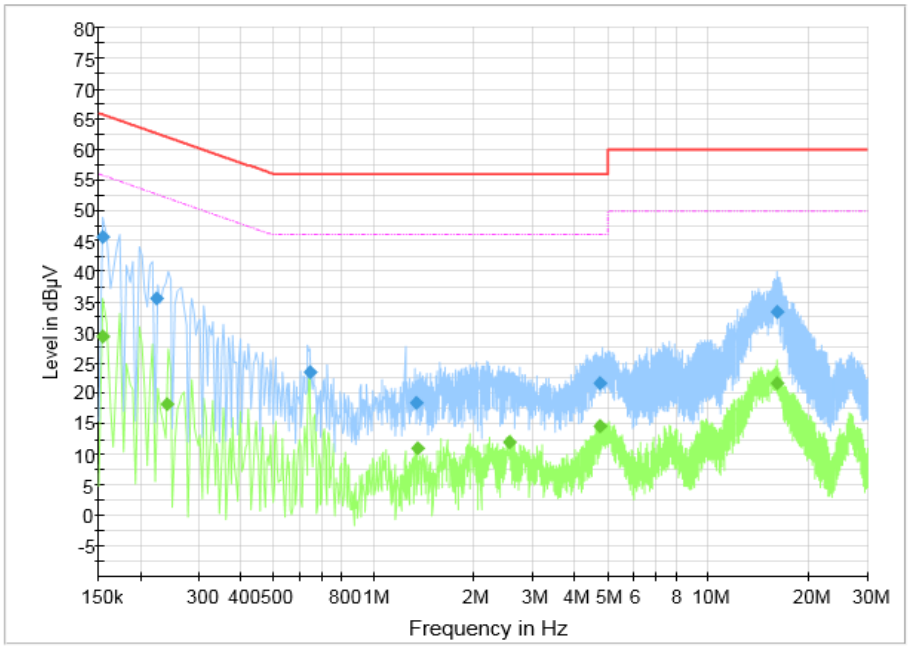

Fig.95 AC Power line Conducted Emission (Traffic), LE Coded

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	45.72	65.78	20.06	N	ON	9.6
0.224000	35.57	62.67	27.10	N	ON	9.6
0.644000	23.58	56.00	32.42	L1	ON	9.6
1.332000	18.46	56.00	37.54	N	ON	9.7
4.756000	21.67	56.00	34.33	L1	ON	9.7
16.044000	33.30	60.00	26.70	N	ON	9.8

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	29.39	55.78	26.39	L1	ON	9.6
0.240000	18.35	52.10	33.75	N	ON	9.6
1.352000	10.91	46.00	35.09	N	ON	9.7
2.532000	12.04	46.00	33.96	N	ON	9.7
4.744000	14.69	46.00	31.31	N	ON	9.7
16.036000	21.73	50.00	28.27	N	ON	9.8

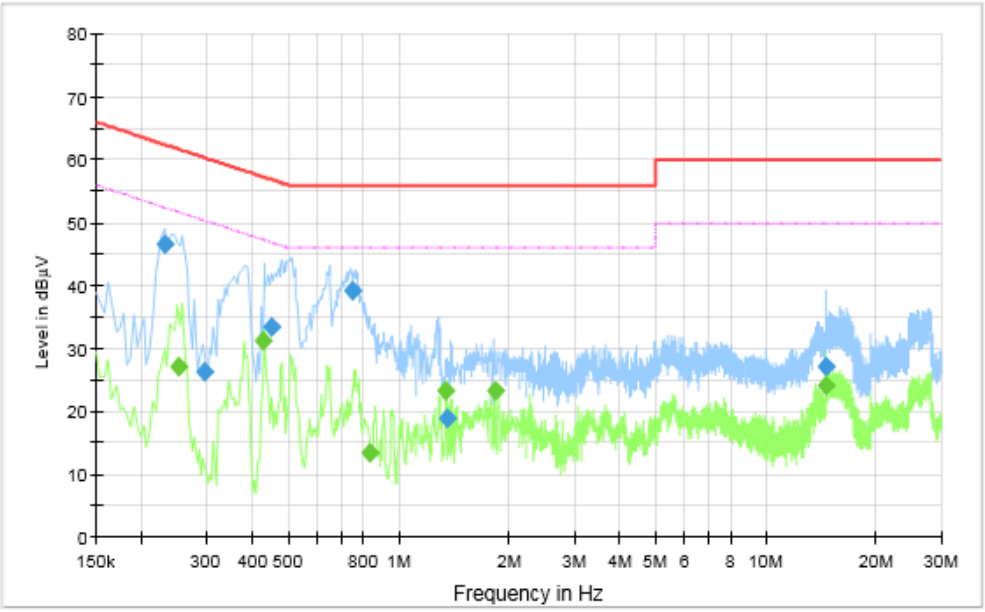

Fig.96 AC Power line Conducted Emission (Idle), LE Coded

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
1.360	18.85	56.00	37.15	L1	ON	9.7
0.296	26.19	60.35	34.17	N	ON	9.6
14.536	27.26	60.00	32.74	L1	ON	9.8
0.452	33.53	56.84	23.30	N	ON	9.6
0.748	39.15	56.00	16.85	N	ON	9.6
0.230	46.55	62.45	15.90	N	ON	9.6

Measurement Results : Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.252	27.18	51.69	24.51	N	ON	9.6
0.428	31.18	47.29	16.11	N	ON	9.6
0.832	13.36	46.00	32.64	L1	ON	9.6
1.344	23.29	46.00	22.71	L1	ON	9.7
1.824	23.19	46.00	22.81	L1	ON	9.7
14.516	24.11	50.00	25.89	L1	ON	9.8

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