

Fig.114. Number of hopping frequencies: 8DPSK, Channel 0 - 39

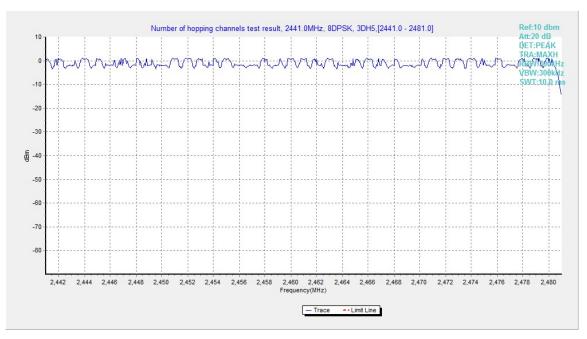


Fig.115. Number of hopping frequencies: 8DPSK, Channel 40 - 78



A.10. AC Powerline Conducted Emission

Test Condition

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	
0.5 to 5	56	Р
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.

Bluetooth (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	56 to 46	
0.5 to 5	46	Р
5 to 30	50	

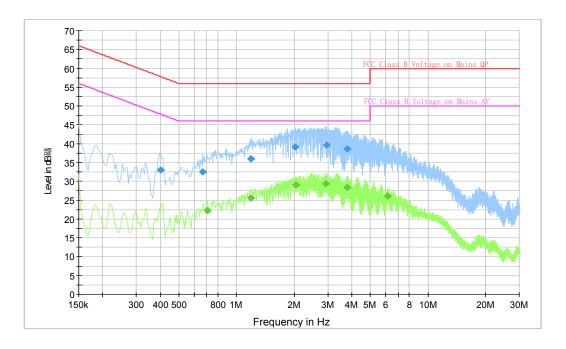
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

The measurement is made according to ANSI C63.10

Conclusion: PASS
Test graphs as below:



Traffic(Set.1):



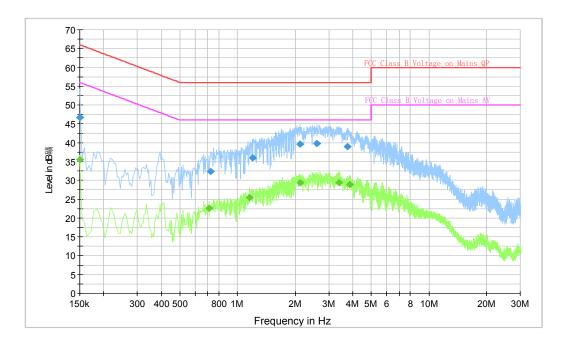
Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.402000	33.1	2000.0	9.000	On	N	19.9	24.8	57.8
0.667500	32.5	2000.0	9.000	On	N	19.8	23.5	56.0
1.189500	36.1	2000.0	9.000	On	N	19.7	19.9	56.0
2.022000	39.1	2000.0	9.000	On	L1	19.7	16.9	56.0
2.949000	39.7	2000.0	9.000	On	N	19.0	16.3	56.0
3.777000	38.6	2000.0	9.000	On	N	19.5	17.4	56.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.703500	22.2	2000.0	9.000	On	L1	19.8	23.8	46.0
1.189500	25.5	2000.0	9.000	On	N	19.7	20.5	46.0
2.053500	29.0	2000.0	9.000	On	N	19.7	17.0	46.0
2.917500	29.3	2000.0	9.000	On	L1	19.0	16.7	46.0
3.777000	28.5	2000.0	9.000	On	L1	19.5	17.5	46.0
6.166500	26.1	2000.0	9.000	On	N	19.6	23.9	50.0



Idle(Set.1):



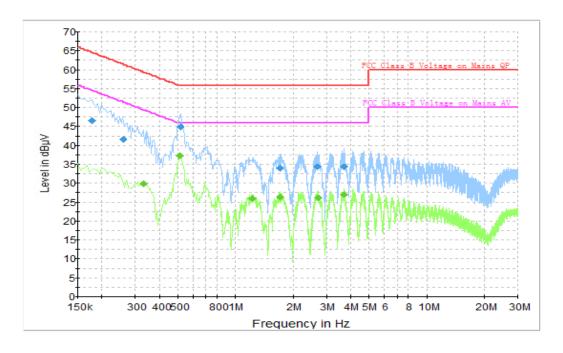
Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.150000	46.7	2000.0	9.000	On	N	20.2	19.3	66.0
0.726000	32.3	2000.0	9.000	On	L1	19.8	23.7	56.0
1.198500	36.1	2000.0	9.000	On	L1	19.7	19.9	56.0
2.121000	39.6	2000.0	9.000	On	L1	19.6	16.4	56.0
2.602500	39.7	2000.0	9.000	On	N	19.1	16.3	56.0
3.768000	38.9	2000.0	9.000	On	N	19.5	17.1	56.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.150000	35.5	2000.0	9.000	On	N	20.2	20.5	56.0
0.708000	22.7	2000.0	9.000	On	N	19.8	23.3	46.0
1.158000	25.4	2000.0	9.000	On	L1	19.7	20.6	46.0
2.116500	29.4	2000.0	9.000	On	L1	19.6	16.6	46.0
3.403500	29.4	2000.0	9.000	On	L1	19.4	16.6	46.0
3.844500	28.9	2000.0	9.000	On	L1	19.5	17.1	46.0



Traffic(Set.2):



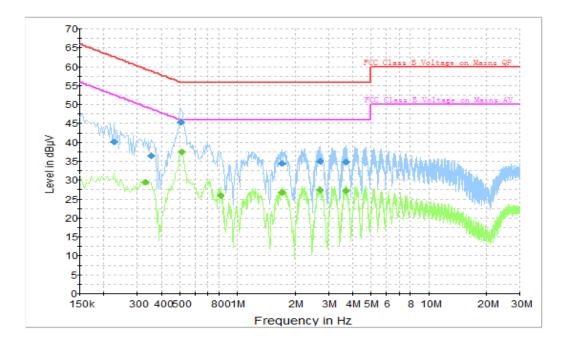
Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.177000	46.6	2000.0	9.000	On	L1	19.8	18.0	64.6
0.258000	41.6	2000.0	9.000	On	L1	19.8	19.9	61.5
0.514500	45.0	2000.0	9.000	On	N	19.9	11.0	56.0
1.702500	33.9	2000.0	9.000	On	N	19.7	22.1	56.0
2.674500	34.4	2000.0	9.000	On	N	19.4	21.6	56.0
3.673500	34.4	2000.0	9.000	On	N	19.5	21.6	56.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.330000	30.0	2000.0	9.000	On	N	19.8	19.5	49.5
0.510000	37.3	2000.0	9.000	On	L1	19.9	8.7	46.0
1.221000	25.9	2000.0	9.000	On	L1	19.7	20.1	46.0
1.716000	26.4	2000.0	9.000	On	N	19.7	19.6	46.0
2.724000	26.1	2000.0	9.000	On	N	19.2	19.9	46.0
3.673500	27.0	2000.0	9.000	On	L1	19.5	19.0	46.0



Idle(Set.2):



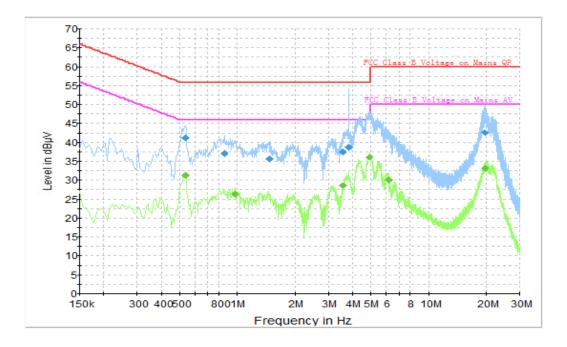
Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.226500	40.2	2000.0	9.000	On	L1	19.8	22.4	62.6
0.352500	36.5	2000.0	9.000	On	L1	19.8	22.4	58.9
0.505500	45.4	2000.0	9.000	On	L1	19.9	10.6	56.0
1.711500	34.4	2000.0	9.000	On	N	19.7	21.6	56.0
2.692500	35.0	2000.0	9.000	On	N	19.3	21.0	56.0
3.687000	34.9	2000.0	9.000	On	N	19.5	21.1	56.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.330000	29.6	2000.0	9.000	On	N	19.8	19.8	49.5
0.510000	37.5	2000.0	9.000	On	N	19.9	8.5	46.0
0.811500	25.9	2000.0	9.000	On	L1	19.8	20.1	46.0
1.720500	26.8	2000.0	9.000	On	N	19.7	19.2	46.0
2.692500	27.5	2000.0	9.000	On	N	19.3	18.5	46.0
3.687000	27.2	2000.0	9.000	On	N	19.5	18.8	46.0



Traffic(Set.3):



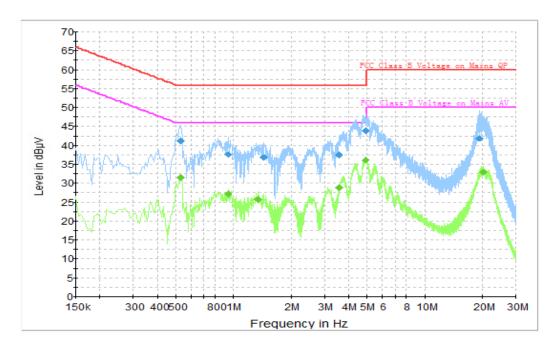
Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.532500	41.2	2000.0	9.000	On	L1	19.9	14.8	56.0
0.852000	37.1	2000.0	9.000	On	L1	19.8	18.9	56.0
1.473000	35.7	2000.0	9.000	On	L1	19.7	20.3	56.0
3.565500	37.5	2000.0	9.000	On	L1	19.5	18.5	56.0
3.813000	38.8	2000.0	9.000	On	N	19.5	17.2	56.0
19.576500	42.7	2000.0	9.000	On	N	19.9	17.3	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.532500	31.4	2000.0	9.000	On	L1	19.9	14.6	46.0
0.973500	26.4	2000.0	9.000	On	N	19.7	19.6	46.0
3.592500	28.5	2000.0	9.000	On	N	19.5	17.5	46.0
4.911000	36.2	2000.0	9.000	On	N	19.6	9.8	46.0
6.153000	30.1	2000.0	9.000	On	L1	19.6	19.9	50.0
19.671000	33.2	2000.0	9.000	On	N	19.9	16.8	50.0



Idle(Set.3):



Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.528000	41.3	2000.0	9.000	On	N	19.9	14.7	56.0
0.937500	37.7	2000.0	9.000	On	L1	19.8	18.3	56.0
1.441500	36.8	2000.0	9.000	On	N	19.7	19.2	56.0
3.552000	37.5	2000.0	9.000	On	L1	19.5	18.5	56.0
4.893000	43.9	2000.0	9.000	On	L1	19.6	12.1	56.0
19.347000	41.9	2000.0	9.000	On	L1	19.9	18.1	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµV)
0.528000	31.5	2000.0	9.000	On	N	19.9	14.5	46.0
0.937500	27.2	2000.0	9.000	On	L1	19.8	18.8	46.0
1.342500	25.8	2000.0	9.000	On	L1	19.7	20.2	46.0
3.592500	28.9	2000.0	9.000	On	N	19.5	17.1	46.0
4.902000	36.2	2000.0	9.000	On	N	19.6	9.8	46.0
20.121000	33.0	2000.0	9.000	On	L1	19.9	17.0	50.0

END OF REPORT