CLAIMS

1. A method of wireless communication for a user equipment (UE), comprising: generating a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences that each have a peak-to-average-power ratio (PAPR) below a threshold, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first sequence set PAPR metric of the plurality of base sequences is lower than a second sequence set PAPR metric associated with a second plurality of base sequences associated with a second RAT different from the first RAT; and transmitting the reference signal to a base station.

2. The method of claim 1, wherein the different RAT comprises Long Term Evolution (LTE).

3. The method of claim 2, wherein the first RAT comprises new radio (NR).

4. The method of claim 1, wherein each base sequence has a sequence length of 18.

5. The method of claim 1, wherein the table comprises at least one pair of sequences comprising a first base sequence and at least one of a symbol-wise reverse of the first base sequence, a symbol-wise conjugate of the first base sequence, or a symbol-wise conjugate and reverse of the first base sequence.

6. The method of claim 1, wherein the plurality of base sequences represents a set of base sequences including time-cyclic-shifted versions and constant-phase-shifted versions of at least one base sequence comprised in the table.

7. The method of claim 1, further comprising: multiplexing the reference signal with an uplink transmission, wherein the reference signal is transmitted with the uplink transmission.

8. The method of claim 1, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first cross-correlation value for a first pairing of each of the plurality of base sequences in the table and each base sequence of a set of base sequences associated with a different RAT is no more than a first cross-correlation threshold.

9. The method of claim 8, wherein a second cross-correlation value for each pairing of base sequences in the plurality of base sequences in the table is below a second cross-correlation threshold.

10. The method of claim 1, wherein the plurality of base sequences comprised in the table include at least a subset of:

--3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;

-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

11. An apparatus for wireless communication of a user equipment (UE), comprising: means for generating a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences that each have a peak-to-average-power ratio (PAPR) below a threshold, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first sequence set PAPR metric of the plurality of base sequences is lower than a second sequence set PAPR metric associated with a second plurality of base sequences associated with a second RAT different from the first RAT; and means for transmitting the reference signal to a base station.

12. The apparatus of claim 11, wherein the different RAT comprises Long Term Evolution (LTE).

13. The apparatus of claim 12, wherein the first RAT comprises new radio (NR).

14. The apparatus of claim 11, wherein each base sequence has a sequence length of 18.

15. The apparatus of claim 11, wherein the table comprises at least one pair of sequences comprising a first base sequence and at least one of a symbol-wise reverse of the first base sequence, a symbol-wise conjugate of the first base sequence, or a symbol-wise conjugate and reverse of the first base sequence.

16. The apparatus of claim 11, wherein the plurality of base sequences represents a set of base sequences including time-cyclic-shifted versions and constant-phase-shifted versions of at least one base sequence comprised in the table.

17. The apparatus of claim 11, further comprising: means for multiplexing the reference signal

with an uplink transmission, wherein the reference signal is transmitted with the uplink transmission.

18. The apparatus of claim 11, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first cross-correlation value for a first pairing of each of the plurality of base sequences in the table and each base sequence of a set of base sequences associated with a different RAT is no more than a first cross-correlation threshold.

19. The apparatus of claim 18, wherein a second cross-correlation value for each pairing of base sequences in the plurality of base sequences in the table is below a second cross-correlation threshold.

20. The apparatus of claim 11, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

21. An apparatus for wireless communication of a user equipment (UE), comprising: a memory; at least one processor coupled to the memory and configured to: generate a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences that each have a peak-to-average-power ratio (PAPR) below a threshold, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first sequence set PAPR metric of the plurality of base sequences is lower than a second sequence set PAPR metric associated with a second plurality of base sequences associated with a second RAT different from the first RAT; and transmit the reference signal to a base station.

22. The apparatus of claim 21, wherein the different RAT comprises Long Term Evolution (LTE).

23. The apparatus of claim 21, wherein the first RAT comprises new radio (NR).

24. The apparatus of claim 21, wherein each base sequence has a sequence length of 18.

25. The apparatus of claim 21, wherein the table comprises at least one pair of sequences comprising a first base sequence and at least one of a symbol-wise reverse of the first base sequence, a symbol-wise conjugate of the first base sequence, or a symbol-wise conjugate and reverse of the first base sequence.

26. The apparatus of claim 21, wherein the plurality of base sequences represents a set of base sequences including time-cyclic-shifted versions and constant-phase-shifted versions of at least one base sequence comprised in the table.

27. The apparatus of claim 21, wherein the at least one processor is further configured to: multiplex the reference signal with an uplink transmission, wherein the reference signal is transmitted with the uplink transmission.

28. The apparatus of claim 21, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first cross-correlation value for a first pairing of each of the plurality of base sequences in the table and each base sequence of a set of base sequences associated with a different RAT is no more than a first cross-correlation threshold.

29. The apparatus of claim 28, wherein a second cross-correlation value for each pairing of base sequences in the plurality of base sequences in the table is below a second cross-correlation threshold.

30. The apparatus of claim 21, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;

-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

31. A non-transitory computer-readable medium storing computer executable code of a user equipment (UE), comprising code instructing one or more processors to: generate a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences that each have a peak-to-average-power ratio (PAPR) below a threshold, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first sequence set PAPR metric of the plurality of base sequences is lower than a second sequence set PAPR metric associated with a second plurality of base sequences associated with a second RAT different from the first RAT; and transmit the reference signal to a base station.

32. The computer-readable medium of claim 31, wherein the different RAT comprises Long Term Evolution (LTE).

33. The computer-readable medium of claim 32, wherein the first RAT comprises new radio (NR).

34. The computer-readable medium of claim 31, wherein each base sequence has a sequence length of 18.

35. The computer-readable medium of claim 31, wherein the table comprises at least one pair of sequences comprising a first base sequence and at least one of a symbol-wise reverse of the first base sequence, a symbol-wise conjugate of the first base sequence, or a symbol-wise conjugate and reverse of the first base sequence.

36. The computer-readable medium of claim 31, wherein the plurality of base sequences represents a set of base sequences including time-cyclic-shifted versions and constant-phase-shifted versions of at least one base sequence comprised in the table.

37. The computer-readable medium of claim 31, further comprising code instructing the one or more processors to: multiplex the reference signal with an uplink transmission, wherein the reference signal is transmitted with the uplink transmission.

38. The computer-readable medium of claim 31, wherein each of the plurality of base sequences comprised in the table are associated with a first radio access technology (RAT), and wherein a first cross-correlation value for a first pairing of each of the plurality of base sequences in the

table and each base sequence of a set of base sequences associated with a different RAT is no more than a first cross-correlation threshold.

39. The computer-readable medium of claim 38, wherein a second cross-correlation value for each pairing of base sequences in the plurality of base sequences in the table is below a second cross-correlation threshold.

40. The computer-readable medium of claim 31, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

41. A method of wireless communication for a user equipment (UE), comprising: generating a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences that each have a peak-to-average-power ratio (PAPR) below a threshold; and transmitting the reference signal to a base station, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;

-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

42. An apparatus for wireless communication of a user equipment (UE), comprising: means for generating a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences; and means for transmitting the reference signal to a base station, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

43. An apparatus for wireless communication of a user equipment (UE), comprising: a memory; at least one processor coupled to the memory and configured to: generate a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences; and transmit the reference signal to a base station, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

44. A non-transitory computer-readable medium storing computer executable code of a user equipment (UE), comprising code instructing one or more processors to: generate a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences; and transmit the reference signal to a base station, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

45. A method of wireless communication for a user equipment (UE), comprising: generating a reference signal using a base sequence obtained from a table, the table including a plurality of base sequences; and transmitting the reference signal to a base station, wherein the plurality of base sequences comprised in the table include at least a subset of:

-3, 3,-1,-3,-1,-3, 1, 1,-3,-3,-1,-1, 3,-3, 1, 3, 1, 1;
-3,-3, 1,-3, 3, 3, 3,-1, 3, 1, 1,-3,-3,-3, 3,-3,-1,-1;
-3, 1,-3,-3, 1,-3,-3, 3, 1,-3,-1,-3,-3,-3,-1, 1, 1, 3;
-3, 3, 1,-1,-1,-1,-1, 1,-1, 3, 3,-3,-1, 1, 3,-1, 3,-1;
-3,-3, 1,-1,-1, 1, 1,-3,-1, 3, 3, 3, 3,-1, 3, 1, 3, 1;
-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.

-3,-3, 3, 3,-3, 1, 3,-1,-3, 1,-1,-3, 3,-3,-1,-1,-1, 3;
-3,-3, 3, 3, 3, 1,-3, 1, 3, 3, 1,-3,-3, 3,-1,-3,-1, 1;
-3, 3,-1, 1, 3, 1,-3,-1, 1, 1,-3, 1, 3, 3,-1,-3,-3,-3;
-3, 1,-3,-1,-1, 3, 1,-3,-3,-3,-1,-3,-3, 1, 1, 1,-1,-1;
-3,-3, 3, 3, 3,-1,-1,-3,-1,-1,-1, 3, 1,-3,-3,-1, 3,-1;
-3,-1, 3, 3,-1, 3,-1,-3,-1, 1,-1,-3,-1,-1,-1, 3, 3, 1;
-3,-1,-3,-1,-3, 1, 3,-3,-1, 3, 3, 3, 1,-1,-3, 3,-1,-3;
-3, 3, 1,-1,-1, 3,-3,-1, 1, 1, 1, 1, 1,-1, 3,-1,-3,-1;
-3,-1,-1,-3, 1,-3, 3,-1,-1,-3, 3, 3,-3,-1, 3,-1,-1,-1; and
-3,-3,-3, 1,-3, 3, 1, 1, 3,-3,-3, 1, 3,-1, 3,-3,-3, 3.