Test Case	Current State	Inputs						Internal					Expected o/p					Next State
		N	V	E	C	U	L	D1	D2	D3	D4	D1D2D3D4 = Code	B	R	Y	G	X	
1	Start	–	–	–	–	–	–	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
2	S_0	F	–	T	F	F	F	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
3	S_0	F	–	F	T	F	F	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
4	S_0	F	–	F	F	T	F	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
5	S_0	F	–	F	F	F	T	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
6	S_0	T	✓	F	F	F	F	✓	NULL	NULL	NULL	–	T	F	F	F	T	S_1
7	S_1	F	–	T	F	F	F	✓	NULL	NULL	NULL	–	T	F	F	F	T	S_1
8	S_1	F	–	F	F	T	F	✓	NULL	NULL	NULL	–	T	F	F	F	T	S_1
9	S_1	F	–	F	F	F	T	✓	NULL	NULL	NULL	–	T	F	F	F	T	S_1
10	S_1	F	–	F	T	F	F	NULL	NULL	NULL	NULL	–	F	F	F	F	T	S_0
11	S_1	T	✓	F	F	F	F	✓	✓	NULL	NULL	–	F	T	F	F	T	S_2
12	S_2	F	–	T	F	F	F	✓	✓	NULL	NULL	–	F	T	F	F	T	S_2
13	S_2	F	–	F	F	T	F	✓	✓	NULL	NULL	–	F	T	F	F	T	S_2
14	S_2	F	–	F	F	F	T	✓	✓	NULL	NULL	–	F	T	F	F	T	S_2
15	S_2	F	–	F	T	F	F	✓	NULL	NULL	NULL	–	T	F	F	F	T	S_1
16	S_2	T	✓	F	F	F	F	✓	✓	✓	NULL	–	F	F	T	F	T	S_3
17	S_3	F	–	T	F	F	F	✓	✓	✓	NULL	–	F	F	T	F	T	S_3
18	S_3	F	–	F	F	T	F	✓	✓	✓	NULL	–	F	F	T	F	T	S_3
19	S_3	F	–	F	F	F	T	✓	✓	✓	NULL	–	F	F	T	F	T	S_3
20	S_3	F	–	F	T	F	F	✓	✓	NULL	NULL	–	F	T	F	F	T	S_2
21	S_3	T	✓	F	F	F	F	✓	✓	✓	✓	–	F	F	F	T	T	S_4