ISO/IEC 24769-5:2012-12 (E)

Information technology - Automatic identification and data capture techniques - Real time locating systems (RTLS) device conformance test methods - Part 5: Test methods for chirp spread spectrum (CSS) at 2,4 GHz air interface

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Symbols and abbreviated terms 2

5.1 General 3
5.2 Overall Test conditions 3
5.2.1 Test environment 3
5.2.2 Default tolerance 3
5.3 Transmitter and Receiver setup 3
5.3.1 Transmitting setup 3
5.3.2 Receiving setup 4
5.4 RF transmission tests 5
5.4.1 Test setup 5
5.4.2 2-ary orthogonal CSS modulation at 1 Mbits/s transmission test 5
5.4.3 2-ary orthogonal CSS modulation at 250 Kbits/s transmission test 7
5.4.4 DQPSK CSS modulation at 1 Mbits/s transmission test 8
5.4.5 DQPSK CSS modulation at 250 Kbits/s transmission test 10
5.5 RF reception tests 11
5.5.1 Test setup 11
5.5.2 2-ary orthogonal CSS modulation at 1 Mbits/s reception test 12
5.5.3 2-ary orthogonal CSS modulation at 250 Kbits/s reception test 14
5.5.4 DQPSK CSS modulation at 1 Mbits/s reception test 16
5.5.5 DQPSK CSS modulation at 250 Kbits/s reception test 17
5.6 Application layer conformance tests 19
5.6.1 Test setup 19
5.6.2 Set and get configuration vector command 20
5.6.3 Set, add and get ranging peer 21
5.6.4 Switch state command test 22
5.6.5 Ranging packet exchange 24
5.6.6 Ranging report 27

Annex A (normative) Technical requirements of the testing equipment 29

Bibliography 30