# PERFORMANCE SPECIFICATION FOR SHORT-RANGE RADAR EQUIPMENT OPERATING IN THE 79 GHz BAND



#### **FOREWORD**

- 1. This specification is prescribed under section 32D of the Telecommunications Ordinance (Cap 106) ("the Ordinance") to set out the technical and evaluation requirements for short-range radar equipment operating in the frequency range 77 81 GHz ("the 79 GHz band"). Radiocommunications apparatus falling into the scope of this specification shall meet the stipulated requirements.
- 2. Under the Ordinance, the possession or use of any radiocommunications apparatus or any apparatus emitting radio frequency energy must be covered by an appropriate licence issued by the Communications Authority (CA) with the exception of those specifically exempted from licensing under the Ordinance, such as those covered by the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order.
- 3. At present, the Office of the Communications Authority (OFCA) operates a Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme. Details of the HKTEC Scheme can be found in the information note OFCA I 421. Under the Scheme, suppliers or manufacturers of the radiocommunications apparatus may apply for certification of their apparatus against this specification. The application procedures for certification of radiocommunications apparatus can be found in the information note OFCA I 401. A prescribed label may be affixed to the equipment which has been certified. Details of the labelling arrangement can be found in the Standardisation Guide HKCA 3211.
- 4. The CA may amend any part of this specification as and when it deems necessary.
- 5. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the equipment manufacturers or suppliers about the equipment, the decision of the CA shall be final.
- 6. The HKCA specifications and information notes issued by the CA can be downloaded from OFCA's website at <a href="http://www.ofca.gov.hk">http://www.ofca.gov.hk</a>. Enquiries about this specification may be directed to:

Senior Telecommunications Engineer, Standards Section Office of the Communications Authority, 29/F Wu Chung House, 213 Queen's Road East, Wanchai, Hong Kong.

Fax: +852 2838 5004

Email: standards@ofca.gov.hk

# AMENDMENT TABLE

Item	Issue No.	Paragraph	Description
1.	Issue 1 January 2017	All	First Release
2.	Issue 2 September 2018	2.2, 3 and 4	Adoption of the standards ARIB STD-T111 and 47 CFR Part 95 Subpart M.

# **CONTENT**

- 1. SCOPE OF SPECIFICATION
- 2. TECHNICAL REQUIREMENTS
- 3. EVALUATION REQUIRMENTS
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#### 1. SCOPE OF SPECIFICATION

This specification sets out the minimum performance requirements for short-range radar equipment operating in the 77 - 81 GHz band ("the 79 GHz band") (hereafter referred as "the equipment").

## 2. TECHNICAL REQUIREMENTS

- 2.1 The equipment shall meet the following technical requirements:
  - (i) Frequency band:

77 – 81 GHz

- (ii) Maximum radiated peak power (e.i.r.p.): 55 dBm
- 2.2 The equipment shall meet the technical requirements in accordance with one of the following standards -
  - (a) ETSI EN 302 264-2 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Short Range Radar equipment operating in the 77 GHz to 81 GHz band; Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive" published by the European Telecommunications Standards Institute;
  - (b) ARIB STD-T111 "79 GHz Band High Resolution Radar" published by the Association of Radio Industries and Businesses of Japan; and
  - (c) Code of Federal Regulations (USA); Title 47 Telecommunication; Chapter 1 Federal Communications Commission, Part 95 Personal Radio Services: Subpart M The 76 81 GHz Band Radar Service.

### 3. EVALUATION REQUIREMENTS

Compliance of the equipment with the technical requirements shall be evaluated in accordance with the procedures specified in the standards given in clause 2.2 above.

#### 4. **REFERENCE**

ETSI EN 302 264-2 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Short Range Radar equipment operating in the 77 GHz to 81 GHz band; Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive"

ARIB STD-T111 "79 GHz Band High Resolution Radar" published by the Association of Radio Industries and Businesses of Japan

Code of Federal Regulations (USA); Title 47 Telecommunication; Chapter 1 Federal Communications Commission, Part 95 Personal Radio Services: Subpart  $M-The\ 76-81\ GHz$  Band Radar Service.

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