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| <b>TAC Number</b>                                                                               | 304                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>TAC Date</b>          | 23-JUL-2018           | <b>TAC Rev. date</b>                       | 21-JAN-2019 |
| <b>Beacon Model Name</b>                                                                        | FAST FIND RANGER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                       |                                            |             |
| <b>Additional Names</b>                                                                         | Z424                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                       |                                            |             |
| <b>Manufacturer</b>                                                                             | Orolia Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                       |                                            |             |
| <b>Tx Frequencies</b>                                                                           | 406.031 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                       |                                            |             |
| <b>In Production</b>                                                                            | in production                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       | <b>Class</b>                               | 2           |
| <b>Type</b>                                                                                     | PLB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                       | <b>Tested Life (hours)</b>                 | 24          |
| <b>Battery</b>                                                                                  | Lithium Manganese Dioxide, GP GPCR123A (2/3A size, 4 cells)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                       |                                            |             |
| Battery Legend: Battery cell manufacturer, Cell chemistry, Cell model, No. of cells, Cell size. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                       |                                            |             |
| <b>Protocols tested</b>                                                                         | UL - User-Location, SL - Standard Location, NL - National Location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                       |                                            |             |
| <b>Self Test</b>                                                                                | yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Self Test RF</b>      | yes                   | <b>Self Test RF (Short/Long)</b>           | long        |
| <b>Self Test Format Flag</b>                                                                    | long                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                       | <b>Self Test Consistent with 15 Hex ID</b> | yes         |
| <b>Homer Freq</b>                                                                               | 121.5 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                       | <b>Homer Duty Cycle</b>                    | 99%         |
| <b>Homer Power</b>                                                                              | 19 dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                       |                                            |             |
| <b>Strobe Light</b>                                                                             | no                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Strobe Brightness</b> | N/A                   | <b>Strobe Duty Cycle</b>                   | N/A         |
| <b>Nav Device</b>                                                                               | Int                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Nav Device Model</b>  | uBlox model "NEO-M8N" |                                            |             |
| <b>Separable Antenna</b>                                                                        | no                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Antenna Model</b>     | Integrated antenna    |                                            |             |
| <b>Additional functions</b>                                                                     | GNSS Self-test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                       |                                            |             |
| <b>General comments</b>                                                                         | (1) Model 'Z424' is a variant of the base model Fastfind PLB 220 which has slightly different case dimensions, (2) tested in PLB configurations only, corresponding to beacon operation while "on ground" and "above ground". (3) Demonstrated full compliance with C/S Standards: C/S T.001 Issue 4 - Rev.3 (June 2018), C/S T.007 Issue 5 - Rev.2 (June 2018). (4) Approved for message encoding with variants of Standard Location Protocol for EPIRB with MMSI, EPIRB with Serial Number, PLB with Serial Number, variants of User Location Protocol for Maritime with MMSI, Maritime with Radio Call Sign, EPIRB Non Float Free with Serial Number, Radio Call Sign, and PLB with Serial Number, and variants of National Location Protocols for EPIRB and PLB.                                                                                                  |                          |                       |                                            |             |
| <b>TAC rev history</b>                                                                          | (1) 6-Feb-09: original TAC 194 issued for Signature Industries Ltd.; (2) 5-Aug-09: first extension TAC 200 issued; (3) 18-Nov-09: TAC 200 re-issued in the name of McMurdo Ltd.; (4) 29-Mar-10: second extension TAC 203 issue; (5) 15-Apr-11: third extension TAC 217 issue; (6) 20-MAR-12: Additional names Z421 (Fastfind 220) and Z422 (Fastfind Ranger) added; (7) 1-Apr-12: TAC 217 re-issued in the name of Orolia Limited, UK; (8) 24-May-12: Fourth extension TAC 229 issued; (9) 6-Aug-13: Fifth extension TAC 243 assigned; (10) 10-Apr-15: Sixth extension TAC 263 assigned; (11) 14-Nov-16: Seventh extension TAC 281 assigned; (12) 4-Oct-17: Eighth extension TAC 292 assigned; (13) 13-Oct-17: Replacement of GNSS Chip to UBLOX "LEA 6A" approved; (14) 21-Jan-2019: Change to TAC 292 approved for related models to Fastfind 220 PLB as previously |                          |                       |                                            |             |

approved on TAC 304.