

Declaration of Similarity

Date: 18th June 2020

Element Materials Technology
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RE: Declaration of Similarity
FCC ID: S7Y-MV1

To Whom It May Concern:

Please be advised that Navtech Radar Ltd market a number of product models based on the HDR100 Series radar. These serve a range of different applications, notably Industrial uses such as vehicle automation and anti-collision systems as well as for short range ground surveillance applications within airfield perimeters.

All use cases are to be limited to those non-prohibited under Part 95M rules. As per 95.3331, Radar systems operating in the 76-81 GHz band may operate as:

- (a) vehicular radars; OR
- (b) as fixed or mobile radars in airport air operations areas, including but not limited to FOD detection radars and aircraft-mounted radars for ground use only

Models marketed to the ground surveillance applications are electronically identical, with all RF measurements applicable to all. The models are marketed based on the following format: **HDR1yz**.

This is defined as:

- y: This is an instrumented range designator. The transmitted power is identical, but the range data reported by the radar is altered in software based on the unit purchased.
- z: This represents rotation speed of the radar and can be 1, 2 or 4Hz

Models marketed to Industrial applications are electronically identical and are marketed based on the following format: **CIRyyz-X**

This is defined as:



- yy: This is a 2 digit instrumented range designator. For example, 05 represents 50m instrumented range, where as 50 would represent 500m
- z: This represents rotation speed of the radar and can be 1, 2 or 4Hz

The transceiver remains the same for all models, but two antenna options are available, both of which were tested.

- -X: This defines the antenna type fitted to the unit.
 - A unit with a -X is fitted with a 1.8° x 1.8°, with fill in below the horizontal.
 - A unit without a -X is fitted with a 1.8° x 1.8 without fill in.



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Thank you for your attention to this matter.

Yours faithfully
Navtech Radar Ltd

A handwritten signature in black ink, appearing to read "R. Poulton".

Mr Richard Poulton