

August 7, 2017

TUV SUD BABT Octagon House, Concorde Way Segensworth Rd N, Fareham PO15 5RL

Attention: Director of Certification

FCC ID: LTQB3TR IC: 3659A-B3TR

RE: Minimum separation distance calculation per guidance from KDB 447498 D01 Mobile Portable RF Exposure v06 and RSS-102 Issue 5 March 2015.

EUT	B3TR 76-77 GHz Vehicular Radar
EIRP	396.28 mW (measured worst-case Peak EIRP of the EUT)
Frequency	76.0925 GHz
FCC Limit (§1.1310 (d)(4))	1.0 mW/cm ² @ 76.0925 GHz
ISED Limit (RSS-102 (4) Table 4)	10 W/m² @ 76.0925 GHz

Equation for predicting RF field was used to determine the minimum distance that will comply with the requirements:

$$S = \frac{EIRP}{4\pi r^2}$$

Where: EIRP = equivalent isotropically radiated power

r = distance from the antenna to the point of investigation



From this formula, using 1.0 mW/cm^2 as S, the distance r is then calculated. This is the minimum distance of compliance with the power density requirements.

$$r = \sqrt{\frac{EIRP}{4\pi S}}$$

$$r = \sqrt{\frac{396.28 \, mW}{12.566 \, \frac{mW}{cm^2}}}$$

Therefore r = 5.6 centimeters from the EUT antenna surface.

Sincerely,

Nikolay Shtin

Name

Authorized Signatory

Title: EMC/Wireless Engineer