October 5, 2016

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

Attention: Director of Certification

FCC ID: LTQR3TR
IC: 3659A-R3TR

RE: ***Minimum separation distance calculation per guidance from KDB 447498 D01 Mobile Portable RF Exposure v05r02 and RSS-102 Issue 5 March 2015***.

EUT	R3TR 76-77 GHz Vehicular Radar
EIRP	382.82 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/m^2 @ 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.

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

$$r = \sqrt{\frac{382.82\ mW}{12.566\ \frac{mW}{cm^2}}}$$

Therefore *r* = 5.5 centimeters from the EUT antenna surface.

Sincerely,

Nikolay Shtin
Name
Authorized Signatory
Title: EMC/Wireless Engineer