Radar Absorbent Material (RAM):KV-CRA-100

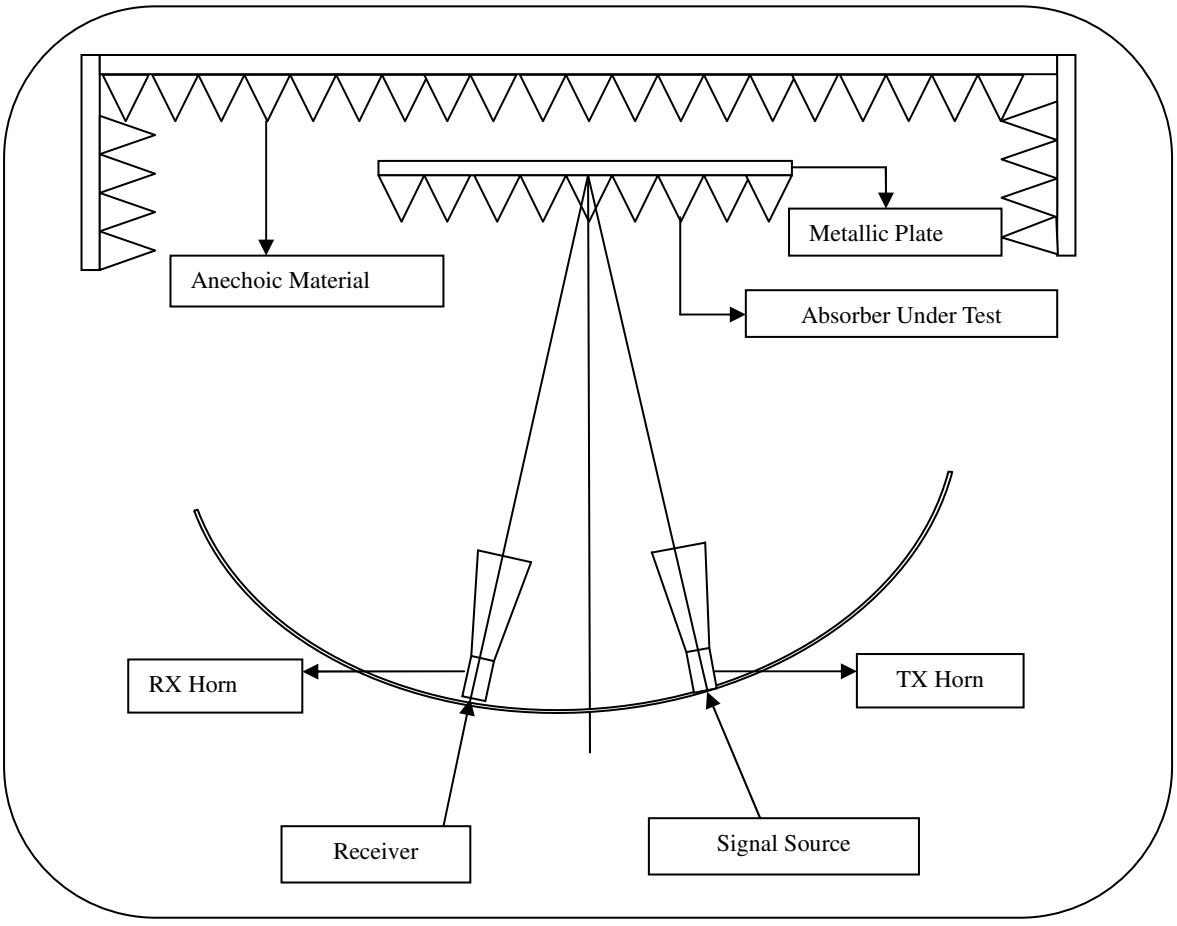
Characteristics Features:

- Basic Composition: Loaded Rubber.
- Working Temperature: -50 ºC to + 80 ºC.
- Thickness:100 mm.
- Base Size: 300mm X 300mm.
- Weight: Approx. 3.5 kg of 300mm X 300mm size sheet.
- Color: Black
- Feature: Broadband, Conical, Weather proof, suitable for sea applications.
- Application: On ship borne mast and other out door applications, etc.
- Frequency region:800 MHz to 12.0 GHz and beyond.
- Reflectivity Performance:

  Minimum reflection loss with respect to metal plate at near normal incidence shall be -10dB at 0.8 GHz, rising to min. -15 dB at 2.0 GHz, further rising to -20 dB at 5.0 GHz to 18.0 GHz and higher frequencies.

Test Procedure to Test RADAR ABSORBENT MATERIAL:

Tested as Per IEEE Std.1128/1998: IEEE Recommended practice for RF Absorber Evaluation using NRL Arch Method. Measurement of Reflection Loss at near normal incidence (approx. 10º from the normal) with reference to metal sheet of 300mm X 300mm size, at two polarizations – VV & HH. Test setup is as below for testing:

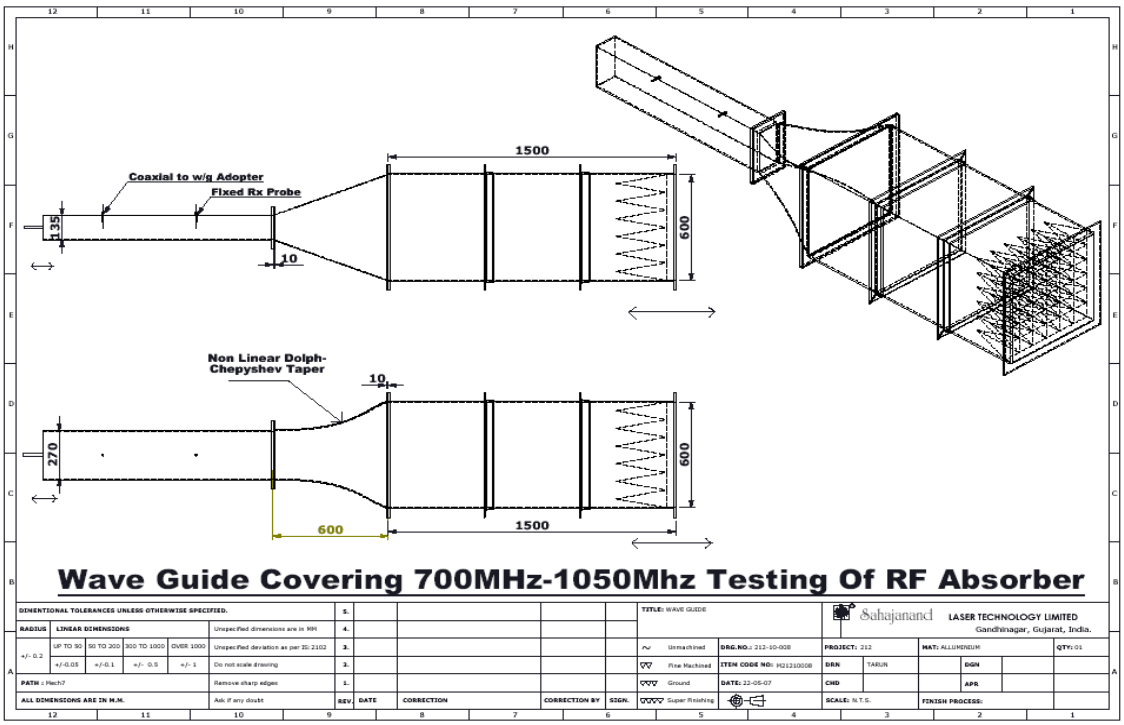


Standard Followed: IEEE-Std.1128-1998 **(Described on pp 28-32 in the Std.)**

i) Test Frequencies: 2GHz and higher Frequency.
ii) Absorber size: 300 mm X 300 mm
iii) Test Schedule: Each of absorbers is tested on 100% basis.

B) Wave Guide Test Setup (700 MHz- 1000 MHz):

- Wave Guide Test Set-up with Non linear Dolph-Chebyshev taper for Frequency 700MHz-1050MHz.



Standard Followed: IEEE-Std.1128-1998 **(Described on pp 42-45 in the Std.)**

i) Test Frequencies: 0.8 GHz to 1 GHz

ii) Absorber size: 300 mm X 300 mm

iii) Test Schedule: 4 Pieces are tested at a time.

iv) Equipment Used: Agilent VNA and Flared wave guide.

v) Method Followed: Time Domain filtering used to filter unwanted signals.