

## RADAR ABSORBENT MATERIAL (RAM): KV-CRA-100

### Characteristics Features

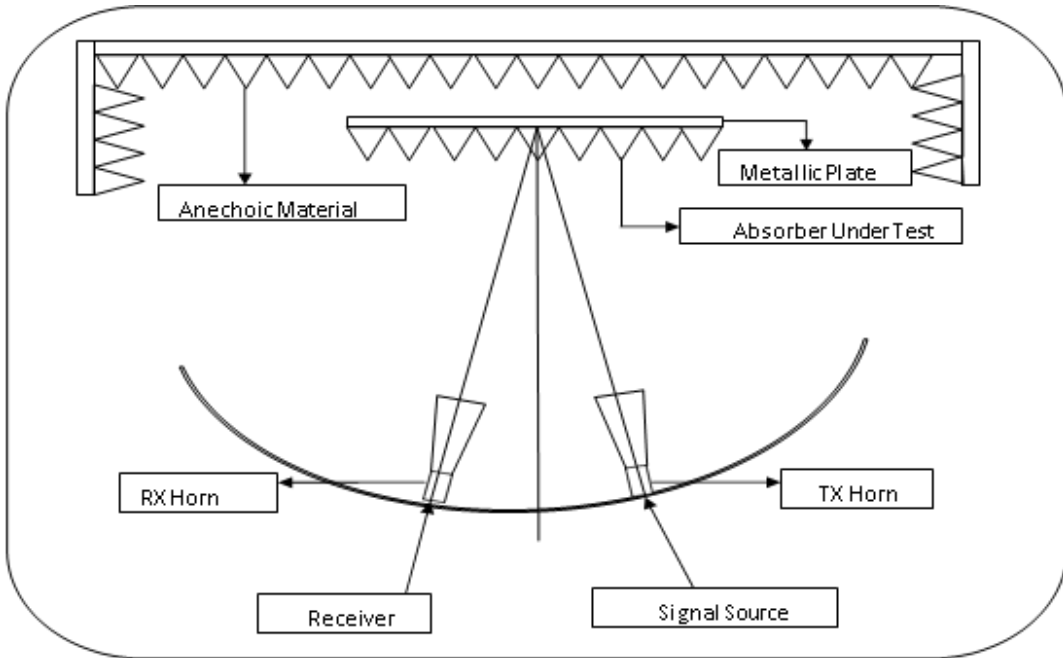


- ❖ Basic Composition: Loaded Rubber.
- ❖ Working Temperature: -50 °C to + 80 °C.
- ❖ Thickness: 100 mm.
- ❖ Base Size: 300mm X 300mm.
- ❖ Weight: Approx. 3.5 kg of 300mm X 300mm size sheet.
- ❖ Color: Black
- ❖ Feature: Broadband, Conical, Weather proof, suitable for sea applications
- ❖ Application: On ship borne mast and other outdoor applications, etc.
- ❖ Frequency region: 800 MHz to 18 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.  $10^\circ$  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:

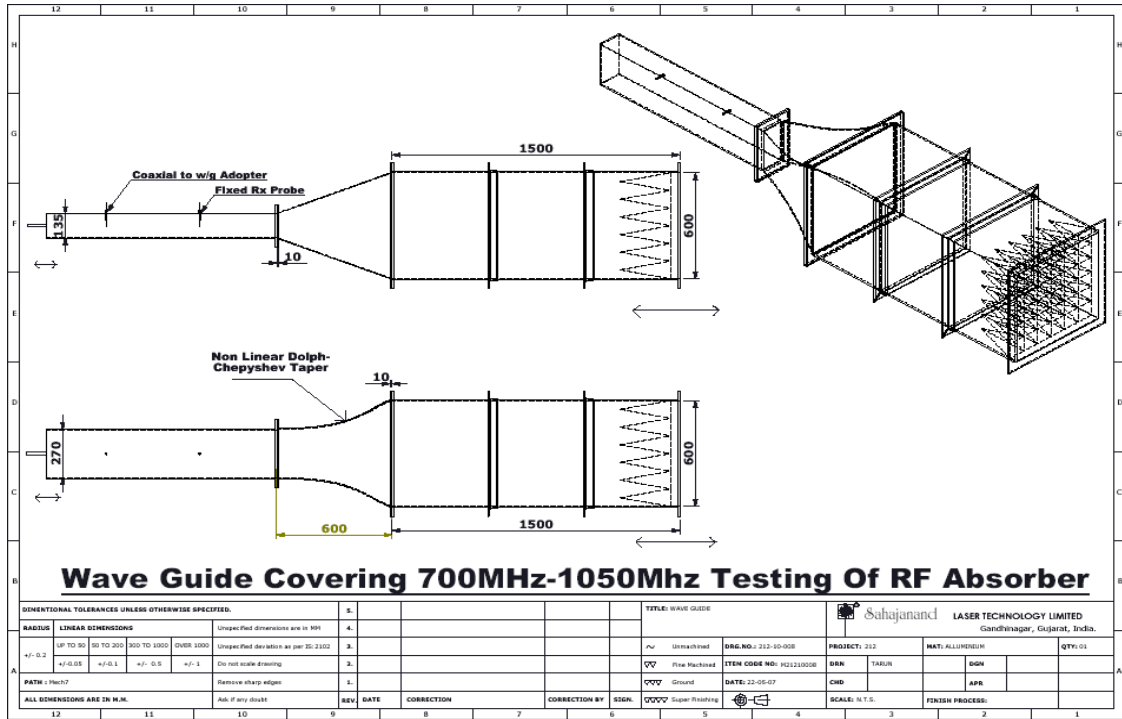


**Standard Followed: IEEE-Std.1128-1998 (Described on page 28-32 in the Std.)**

- 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 page 42-45 in the Std.)

i) Test Frequencies: 0.8 GHz to 1 GHz

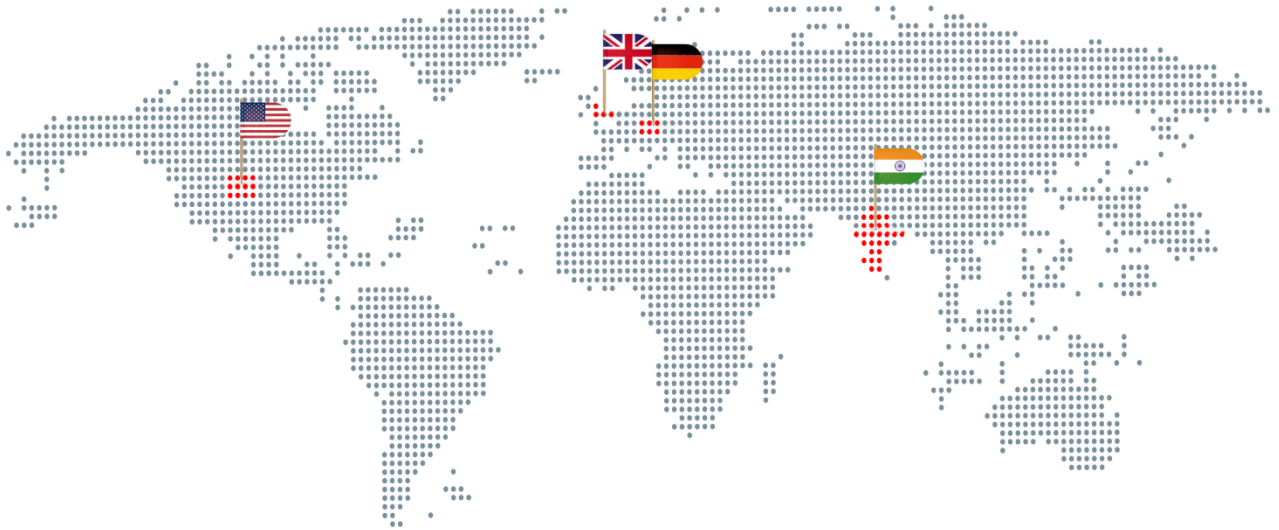
ii) Absorber size: 300 mm X 300 mm

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.

# GLOBAL PRESENCE



**LASER CUTTING** RF & Microwave  
**MARKING** Medical Devices  
**WELDING** Hi-Tech Software  
 Diamond Processing  
 Renewable Energy  
 Cleaning  
 Scribing / Dicing  
 Automations

**DEFENCE & AEROSPACE**  
**MICRO MACHINING**

## SLTL'S STRENGTH

<p>Experience</p> <p><b>34+</b> Years</p>	<p>Mfg. Plants</p> <p><b>6</b> Laying Over</p> <p><b>54000</b> Sq. mtr.</p>	<p><b>10%</b></p> <p>Yearly R&amp;D</p>	<p>Exports</p> <p><b>40+</b></p> <p>Countries</p>
<p><b>15000+</b></p> <p>Systems</p>	<p><b>ISO</b></p> <p>9001-2015</p>	<p><b>26+</b></p> <p>Patents</p>	<p><b>29+</b></p> <p>Awards</p>



**Sahajanand Laser Technology Ltd. (SLTL Group)**

E-30, Electronic Estate, G.I.D.C., Sector - 26,  
 Gandhinagar - 382 028, Gujarat, India.  
 Tel : +91-79-6170-1616 | Fax : +91-79-2328-7470

+91-90-9907-1094 | microwave@SLTL.in



Scan to Visit  
[www.SLTLmicrowave.com](http://www.SLTLmicrowave.com)