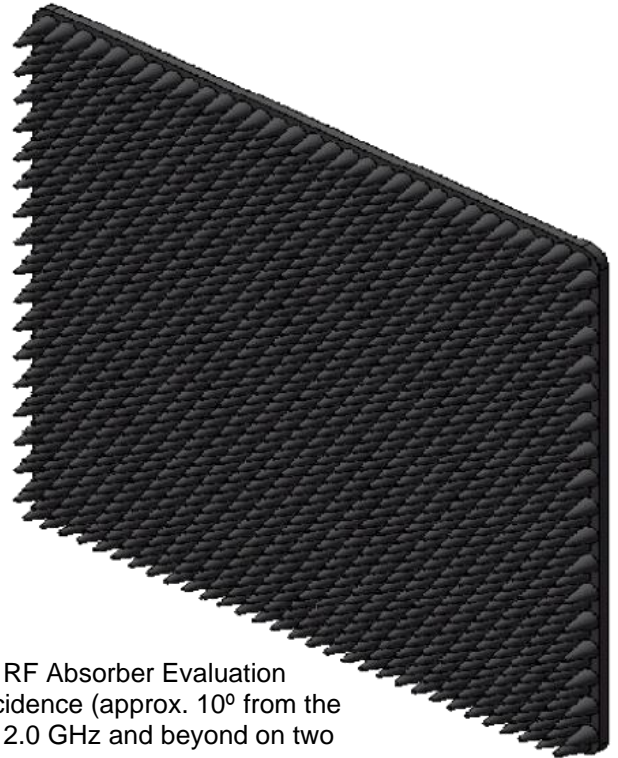


## RADAR ABSORBENT MATERIAL (RAM)

KV-CRA-18

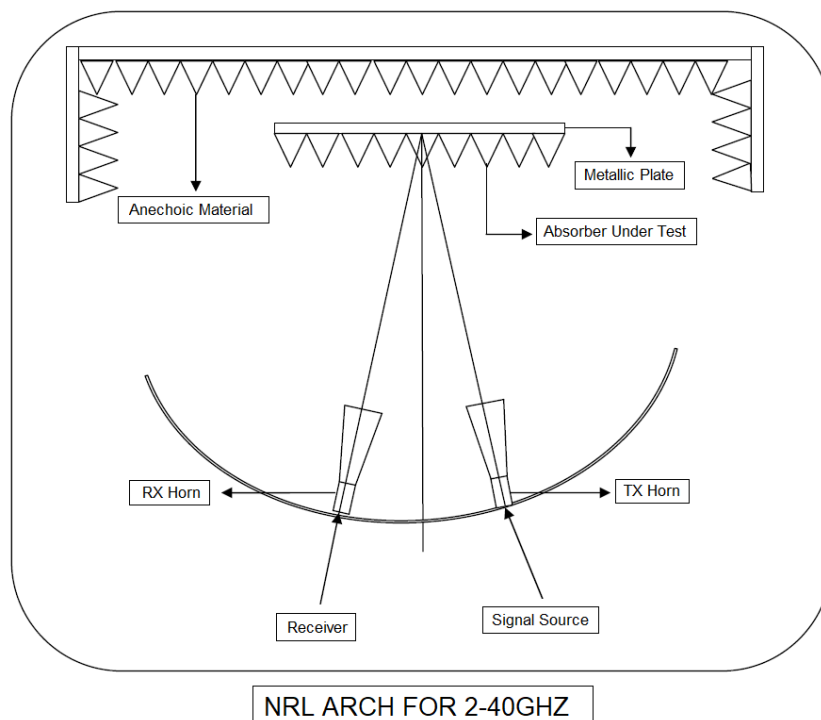
### Characteristics:

- Basic Composition: Loaded Rubber
- Working Temperature: -50 °C to + 80 °C.
- Thickness: 18 to 20mm.
- Base Size: 300mm X 300mm.
- Weight: Approx.1.3 kg of 300mm X 300mm size sheet.
- Colour: Black.
- Frequency: 5.2 GHz to 18.0 GHz and Beyond
- Feature: Broadband, Conical, Weatherproof, Suitable for sea applications.
- Application: On ship borne mast and on walk-on areas, etc.
- Performance: Minimum reflection loss w.r.t metal plate at near normal incidence shall be -15dB at 5.0 GHz, rising to min. -17 dB at 8.0 GHz and min. -20 dB at 10.0 GHz and higher frequencies.



### Test Procedure To Test Rubber Absorber:

Tested as Per IEEE Std.1128/1998: IEEE Recommended practice for RF Absorber Evaluation using NRL Arch Method. Measured Reflection Loss at near normal incidence (approx.  $10^\circ$  from the normal) with reference to metal sheet of 300mm X 300mm sized from 2.0 GHz and beyond on two orientation, which is 90 degree to each other. Test setup is as below:



## RADAR ABSORBENT MATERIAL (RAM)

KV-CRA-18

### Test Results:

Frequency	Reflection Loss (in dB) at near normal incidence (approx. 10 Deg. from normal) with reference to Metal Plate of same size (300 mm x 300 mm)	
	Orientation I	Orientation II
5.0	-15.7	-15.4
5.2	-18.2	-16.8
5.4	-20.2	-19.2
5.6	-19.8	-19.6
5.8	-19.0	-19.5
6.0	-17.9	-18.44
6.2	-16.0	-16.4
6.4	-16.1	-16.5
6.6	-16.3	-16.8
6.8	-16.0	-16.4
7.0	-16.7	-16.9
7.5	-17.5	-17.7
8.0	-23.44	-23.0
8.5	-26.6	-23.7
9.0	-25.7	-23.1
9.5	-27.1	-24.8
10.0	-28.6	-35.1
10.5	-36.6	-32.3
11.0	-37.6	-37.6
11.5	-34.8	-38.8
12.0	-29.9	-31.0
12.5	-26.6	-27.0
13.0	-29.9	-28.2
13.5	-29.9	-28.2
14.0	-30.0	-28.3
14.5	-29.6	-27.9
15.0	-29.5	-28.0
15.5	-29.4	-27.9
16.0	-29.5	-27.9
16.5	-29.4	-27.8
17.0	-29.5	-27.9
17.5	-29.6	-28.0
18.0	-29.7	-27.9