

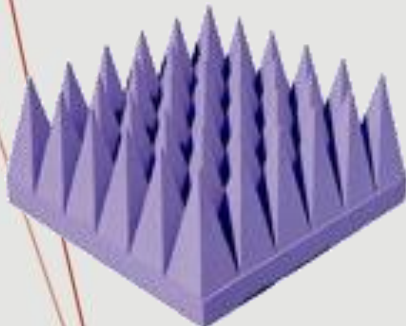
MICROWAVE PYRAMIDAL ABSORBER PERFORMANCES ACCORDING TO INCIDENCE ANGLE

APM absorbers keep their performances for incidence angles of 45° or lower. Table below provides performances of APM for these incident angles.

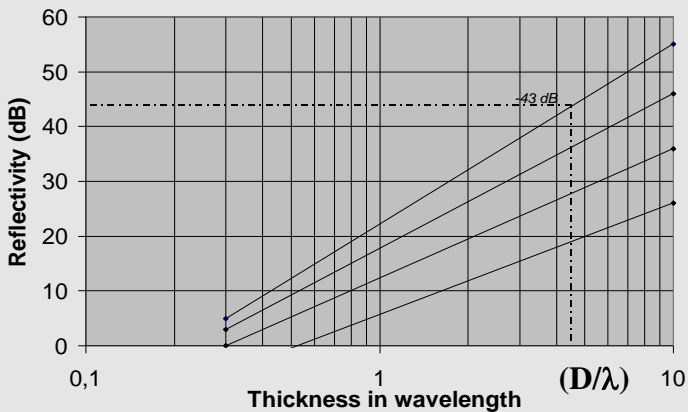
GUARANTEED PERFORMANCES

MINIMUM REFLECTIVITY OF APM in dB - For incidence angles close to the normal											
Type	Height (mm)	80 MHz	200 MHz	300 MHz	500 MHz	1 GHz	2 GHz	4 GHz	8 GHz	12 GHz	18 GHz
APM 3	28							-17	-17	-23	-23
APM 5	55						-20	-21	-25	-31	-35
APM 9	89					-16	-20	-29	-35	-40	-43
APM 12	115					-19	-22	-33	-40	-45	-50
APM 20	210				-13	-25	-36	-45	-46	-52	-51
APM 30	305				-25	-36	-40	-48	-52	-52	-51
APM 45	455				-27	-40	-42	-50	-52	-52	-51
APM 55	550			-26	-36	-44	-44	-50	-52	-52	-51
APM 66	660	-6	-21	-26	-37	-45	-47	-52	-52	-52	-51
APM 85	850	-10	-25	-28	-42	-49	-50	-52	-52	-52	-51
APM 100	1000	-11	-26	-36	-45	-50	-52	-52	-52	-52	-51
APM 115	1150	-16	-26	-36	-45	-50	-52	-52	-52	-52	-51

For incidence angles higher than 45°, the curver hereafter gives the performances reached by the absorbers.



Absorbers performances according to incidence angle



An example of APM 66 performance calculation at 50° incidence angle and 2 GHz.

Frequency $f = 2 \text{ GHz}$

Incidence angle: 50°

$$\text{Wavelength } \lambda = \frac{c}{f} = \frac{3 \cdot 10^8}{2 \cdot 10^9} = 0.150 \text{ m}$$

Absorber Height: $D = 0.66 \text{ m}$

$$\frac{D}{\lambda} = 4.4$$

4.4 is reported on the 50° line of the graph.

A reflectivity of -43dB can be read.