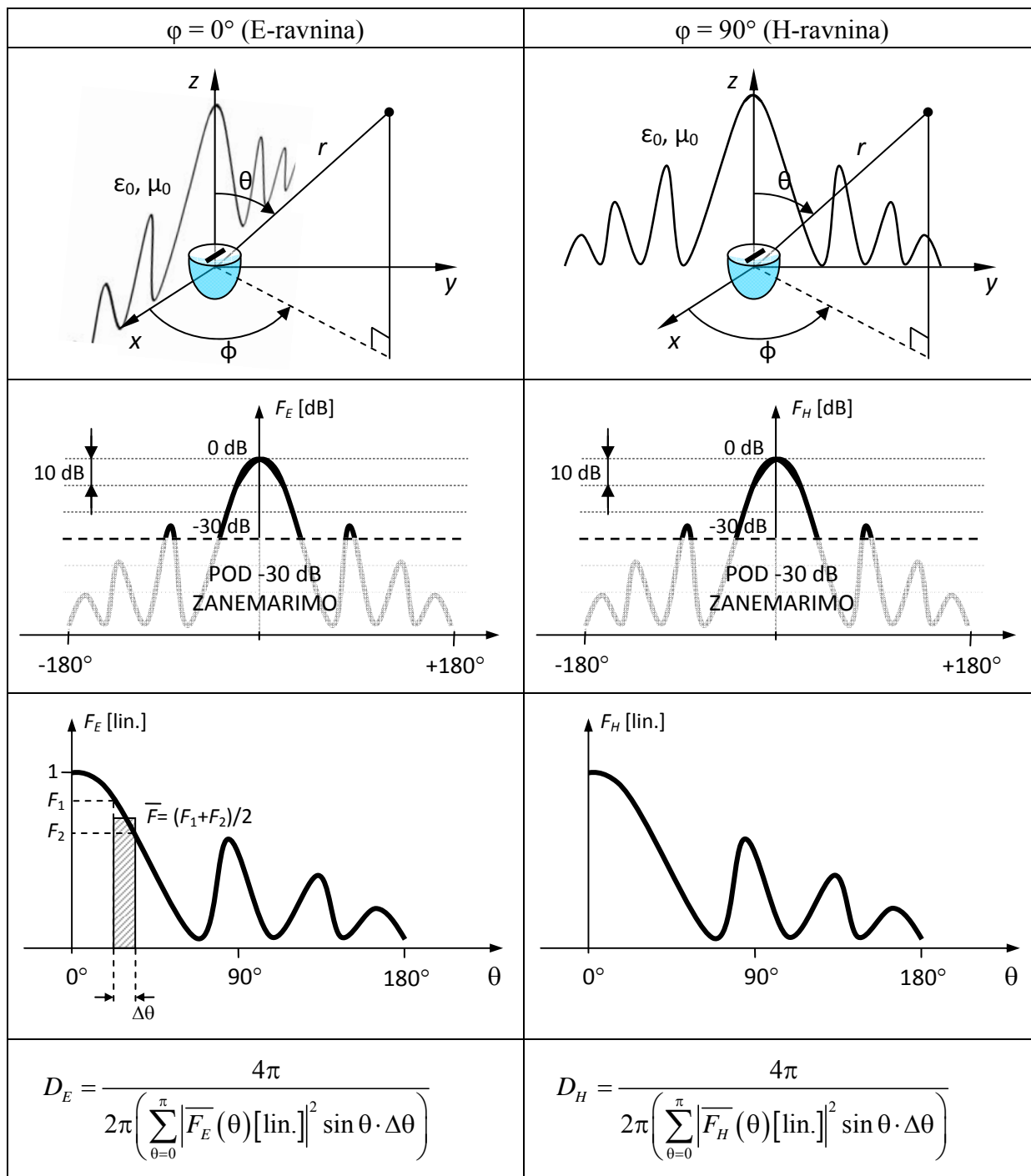


3. Vaja: Merjenje smernega diagrama in računanje smernosti

Iz izmerjenih prerezov smernega diagrama izračunamo smernost po naslednjem postopku:



$$D = \frac{2}{\frac{1}{D_E} + \frac{1}{D_H}}$$

Integracija smernega diagrama:

Θ [°]	Θ [rad]	F_E [dB]	F_E	\bar{F}_E	$ \bar{F}_E ^2 \sin\theta \cdot \Delta\theta$	F_H [dB]	F_H	\bar{F}_H	$ \bar{F}_H ^2 \sin\theta \cdot \Delta\theta$		
0	0										
5	$\pi/36$										
10	$2\pi/36$										
15	$3\pi/36$										
20	$4\pi/36$										
25	$5\pi/36$										
30	$\pi/6$										
35	$7\pi/36$										
40	$8\pi/36$										
45	$\pi/4$										
50	$10\pi/36$										
55	$11\pi/36$										
60	$\pi/3$										
65	$13\pi/36$										
70	$14\pi/36$										
75	$15\pi/36$										
80	$16\pi/36$										
85	$17\pi/36$										
90	$\pi/2$										
95	$19\pi/36$										
100	$20\pi/36$										
105	$21\pi/36$										
110	$22\pi/36$										
115	$23\pi/36$										
120	$2\pi/3$										
125	$25\pi/36$										
130	$26\pi/36$										
135	$3\pi/4$										
140	$28\pi/36$										
145	$29\pi/36$										
150	$5\pi/6$										
155	$31\pi/36$										
160	$32\pi/36$										
165	$33\pi/36$										
170	$34\pi/36$										
175	$35\pi/36$										
180	π										
$\sum_{\theta=0}^{\pi} \bar{F}_E ^2 \sin\theta \cdot \Delta\theta$						$\sum_{\theta=0}^{\pi} \bar{F}_H ^2 \sin\theta \cdot \Delta\theta$					

Dobljena smernost:

Smernost v E-ravnini:

$$D_E =$$

Smernost v H-ravnini:

$$D_H =$$

Celotna smernost antene:

$$D =$$