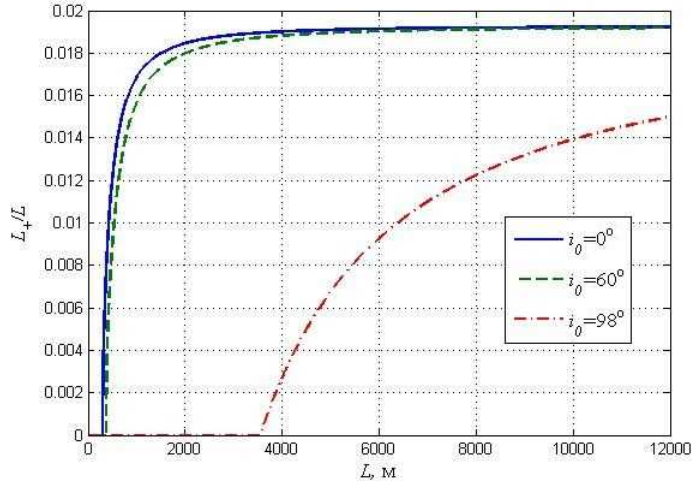


2 %

(. 1).



$H = 650$;

$i_0 -$

$R_0 = 10$ $r_t = 3$;

. 1 -

$\frac{L}{i_0}$

L_+

$$L \quad 2\pi r_t L, \quad - 2r_t L. \quad \sqrt{\pi m_i / m_e} \quad (m_e, m_i -$$

(),

[1] – [3],

[3], [4].

r_t

(

λ_D) $r_t \leq \lambda_D$ [5],

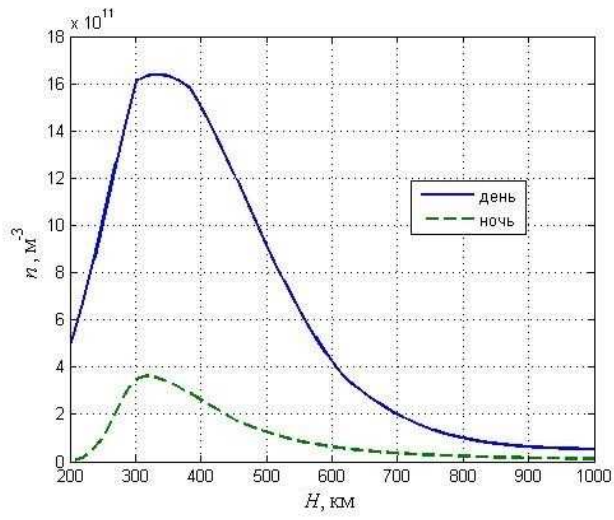
$h_t \ll \lambda_D$

$d_t \leq 4\lambda_D$.

()

(3–10)

IRI-2012 [6] (.2).

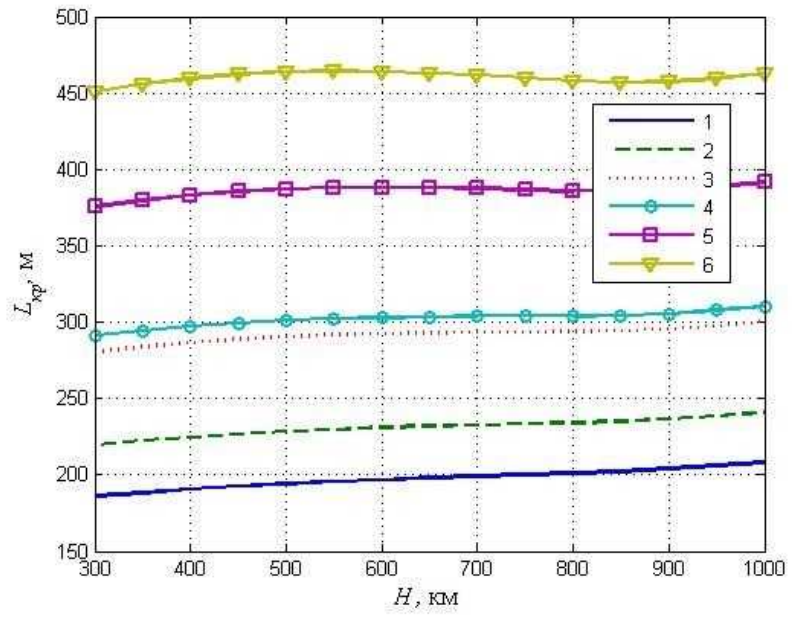


.2 –

(n)

(H)

(.3).



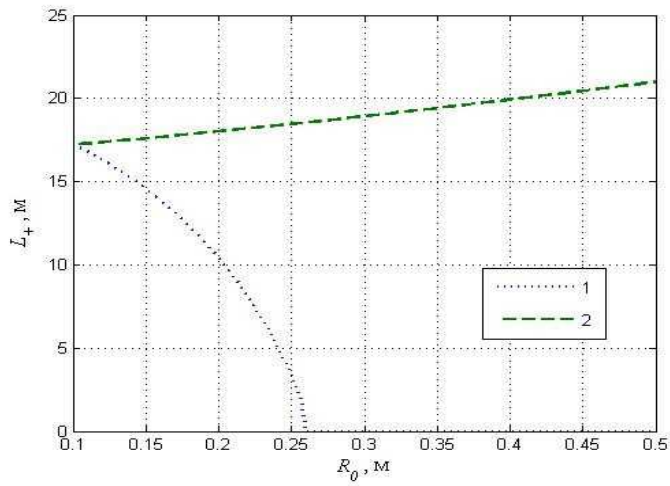
1 – $d_t = 2,0$; 2 – $d_t = 1,5$;
 3 – $d_t = 1,0$; 4 – $r_t = 3,0$;
 5 – $r_t = 2,0$;
 6 – $r_t = 1,5$
 . 3 – L H

. 3 , (p) -
 (H). , -

0,53 ÷ 0,64 .

, (. 4). -
 ($r_t = 3,0$; $L=1000$) 0,25 -

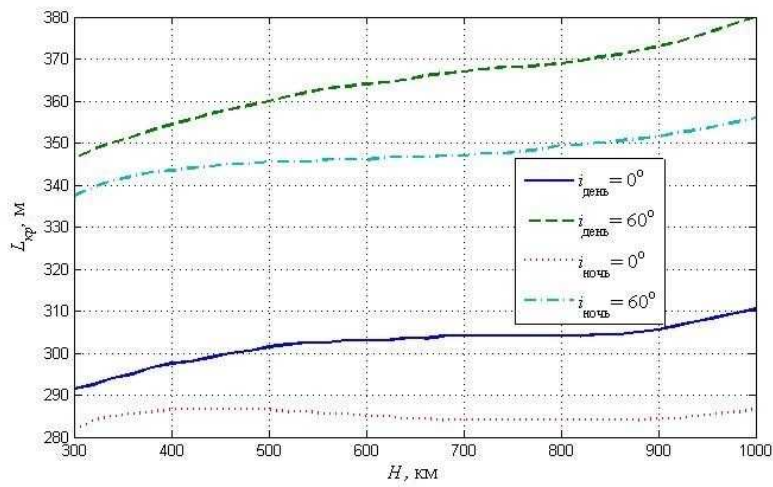
($d_t = 2,0$; $L=1000$) 0,35 . -



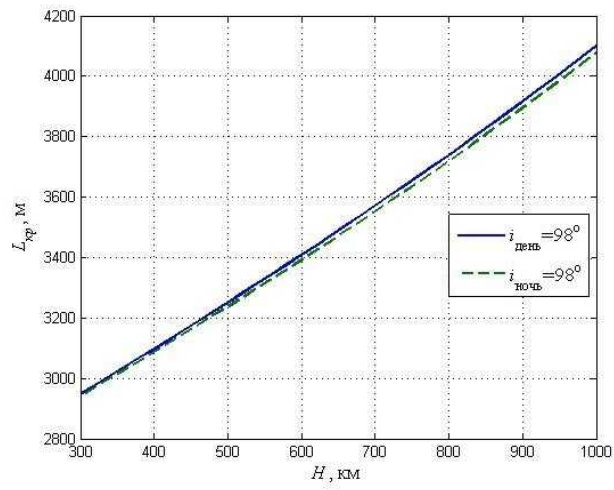
: $H = 650$; $i_0 = 0^\circ$
 : $r_t = 3,0$; $L = 1000$

1 – ;
 2 – ;
 .4 – ;
 , ;
 , ;
 (.4, 2).

.5 – 6.



.5 –



. 6 –

. 5 – 6,

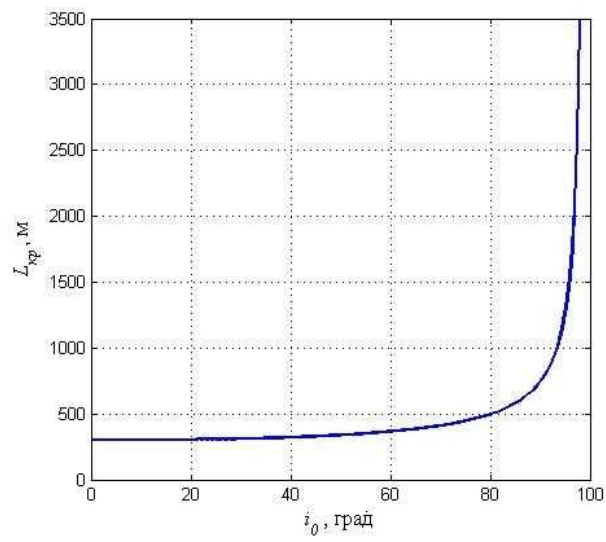
(7 – 15) %

4 .

(. 5 – 7).

400 .

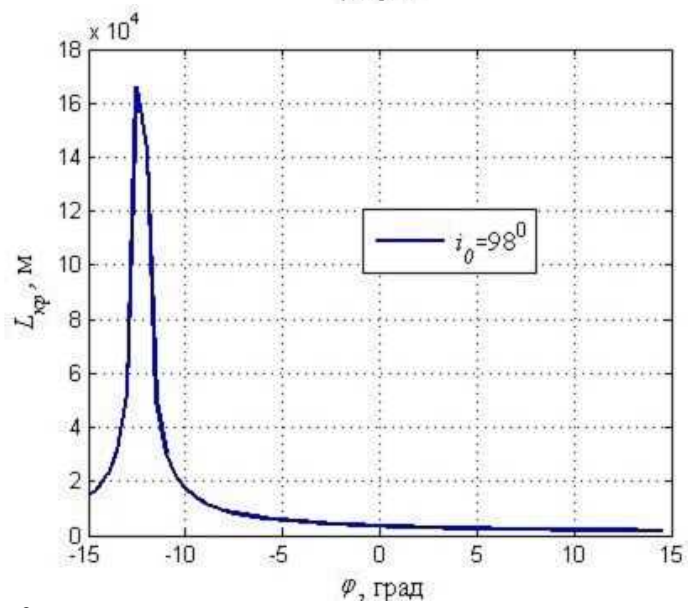
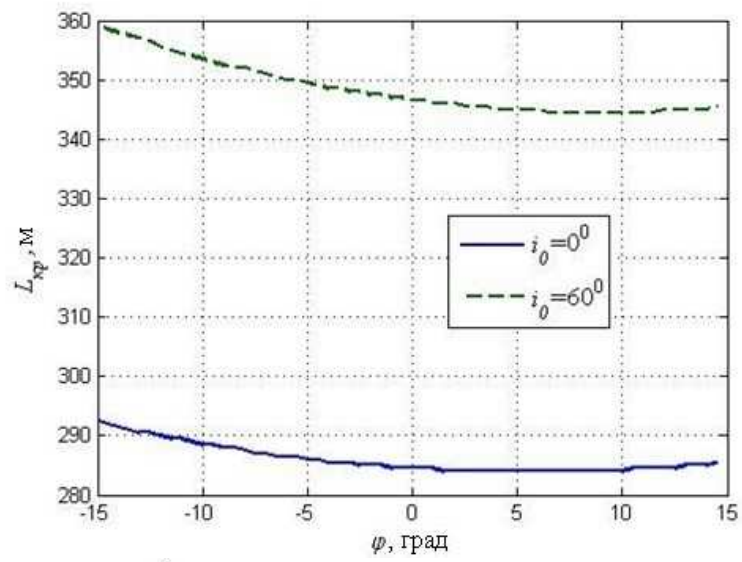
(. 7),



: $H = 650$;

: $r_t = 3$

. 7 –



.9 -

.9,

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04.12.2017,