Inference at $*$ 1
of proof for Lemma absval_eq:

1. $x : \mathbb{Z}$
2. $y : \mathbb{Z}$
$\vdash$ $(|x| = |y|) \Longleftrightarrow x = \pm\, y$
by Unfold ‘absval‘ 0

1:

$\vdash$ (if $0 \leq$z x then x else -x fi = if $0 \leq$z y then y else -y fi) $\Longleftrightarrow x = \pm\, y$
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http://www.nuprl.org/FDLcontent/p0_942988_/p121_73350_{absval_eq}1.html