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## Analysis on the Beautiful Appeal of Legs in a Newly-developed Pantyhose

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**Abstract:** To examine the aesthetic properties of pantyhose, an image analysis and wear experiment were carried out. We analyzed both the area ratio of light, medium, and dark lightness areas and the position of three areas in the distribution of lightness difference between legs with and without pantyhose fabric. The data was used to determine what effect these two variables have on the visual appeal of legs in pantyhose. Moreover, we examined the relationship between pantyhose size and women's leg size on the attractiveness of legs in pantyhose made from single covered yarn with colored polyurethane core yarn. The results showed that, for the enhanced visual appeal of legs in pantyhose, (1) the area ratio and position of three areas in the distribution of lightness difference were very important factors; (2) it was desirable to design and produce the appropriate size of pantyhose for various sized legs in order to enhance their attractiveness.

**Key Words:** [Beautiful appeal](#), [Image analysis](#), [Distribution of lightness difference](#), [Pantyhose size](#)

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