Supplementary document for “Effect of Geometric Sharpness on Translucent Material Perception”

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Supplementary Figures:

Figure 1S. Relationship between Michaelson Contrasts and geometric blur of target images. Geometric blur increases increased image contrasts for images with low relief but
geometric blur increases the image contrasts for images because rounder edges cast more shadows and can have more specular highlights.

Figure 2S. Relationship between RMS Contrasts and geometric blur of target images. The relationship between RMS contrasts and geometric blur is similar to those of Michaelson contrasts but more dramatic for images of high-relief objects.
High resolution images of example stimuli:

Experiment 1: Positively Relief

Side-lighting, relief height = 0.5mm, blur = 0.08mm, density = 1.11 (1/mm)

Side-lighting, relief height = 0.5mm, blur = 0.2mm, density = 1.11 (1/mm)
Side-lighting, relief height = 0.5mm, blur = 0.4mm, density = 1.11 (1/mm)

Side-lighting, relief height = 2.0mm, blur = 0.08mm, density = 1.84 (1/mm)
Side-lighting, relief height = 2.0mm, blur = 0.2mm, density = 1.84 (1/mm)

Side-lighting, relief height = 2.0mm, blur = 0.4mm, density = 1.84 (1/mm)
Top-lighting, relief height = 0.5mm, blur = 0.08mm, density = 1.11 (1/mm)

Top-lighting, relief height = 0.5mm, blur = 0.4mm, density = 1.11 (1/mm)
Top-lighting, relief height = 2.0mm, blur = 0.08mm, density = 1.84 (1/mm)

Top-lighting, relief height = 2.0mm, blur = 0.4mm, density = 1.84 (1/mm)
Experiment 2 Negative Relief

Side-lighting, relief height = 0.5mm, blur = 0.2mm, density = 0.74 (1/mm)

Side-lighting, relief height = 0.5mm, blur = 0.2 mm, density = 2.25 (1/mm)
Side-lighting, relief height = 0.5mm, blur = 0.2, density = 1.11 (1/mm)
Side-lighting, relief height = 0.5mm, blur = 0.56, density = 1.11 (1/mm)

Side-lighting, relief height = 0.5mm, blur = 0.08, density = 2.25 (1/mm)
Side-lighting, relief height = 0.5mm, blur = 0.56, density = 2.25(1/mm)

Top-lighting, relief height = 0.5mm, blur = 0.2mm, density = 0.74 (1/mm)
Top-lighting, relief height = 0.5mm, blur = 0.2mm, density = 2.25 (1/mm)

Top-lighting, relief height = 0.5mm, blur = 0.2, density = 1.11 (1/mm)
Top-lighting, relief height = 0.5 mm, blur = 0.56, density = 1.11 (1/mm)

Top-lighting, relief height = 2.0 mm, blur = 0.08 mm, density = 1.11 (1/mm)
Top-lighting, relief height = 0.5mm, blur = 0.08, density = 2.25 (1/mm)

Top-lighting, relief height = 0.5mm, blur = 0.56, density = 2.25 (1/mm)