

DeepBRDF:
A Deep Representation for Manipulating Measured BRDF
Supplemental Document

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**Reconstruction quality comparison
between DeepBRDF and IPCA on
all 100 materials in the MERL
dataset.**

- 1. alum-bronze



- 2. alumina-oxide



- 3. aluminium



- 4. aventurnine



- 5. beige-fabric



- 6. black-fabric



- 7. black-obsidian



- 8. black-oxidized-steel



- 9. black-phenolic



- 10. black-soft-plastic



- 11. blue-acrylic



- 12. blue-fabric



- 13. blue-metallic-paint



- 14. blue-metallic-paint2



- 15. blue-rubber



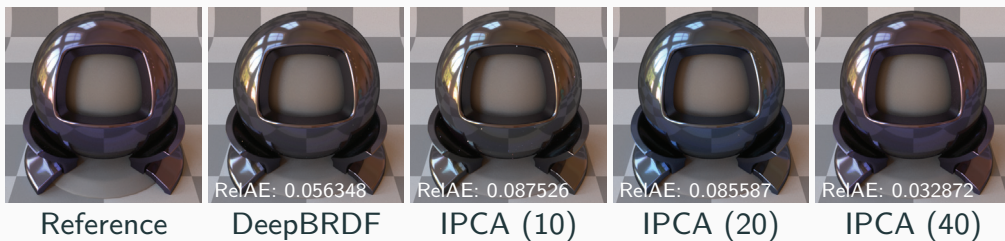
- 16. brass



- 17. cherry-235



- 18. chrome-steel



- 19. chrome



- 20. colonial-maple-223



- 21. color-changing-paint1



- 22. color-changing-paint2



- 23. color-changing-paint3



- 24. dark-blue-paint



- 25. dark-red-paint



- 26. dark-specular-fabric



- 27. delrin



- 28. fruitwood-241



- 29. gold-metallic-paint



- 30. gold-metallic-paint2



- 31. gold-metallic-paint3



- 32. gold-paint



- 33. gray-plastic



- 34. grease-covered-steel



- 35. green-acrylic



- 36. green-fabric



- 37. green-latex



- 38. green-metallic-paint



- 39. green-metallic-paint2



- 40. green-plastic



- 41. hematite



- 42. ipswich-pine-221



- 43. light-brown-fabric



- 44. light-red-paint



- 45. maroon-plastic



- 46. natural-209



- 47. neoprene-rubber



- 48. nickel



- 49. nylon



- 50. orange-paint



- 51. pearl-paint



- 52. pickled-oak-260



- 53. pink-fabric



- 54. pink-fabric2



- 55. pink-felt



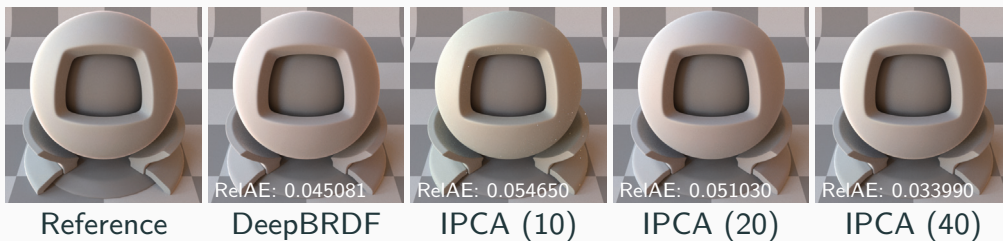
- 56. pink-jasper



- 57. pink-plastic



- 58. polyethylene



- 59. polyurethane-foam



- 60. pure-rubber



- 61. purple-paint



- 62. pvc



- 63. red-fabric



- 64. red-fabric2



- 65. red-metallic-paint



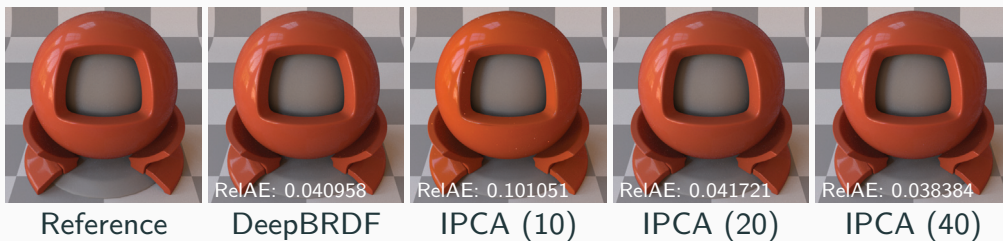
- 66. red-phenolic



- 67. red-plastic



- 68. red-specular-plastic



- 69. silicon-nitride



- 70. silver-metallic-paint



- 71. silver-metallic-paint2



- 72. silver-paint



- 73. special-walnut-224



- 74. specular-black-phenolic



- 75. specular-blue-phenolic



- 76. specular-green-phenolic



- 77. specular-maroon-phenolic



- 78. specular-orange-phenolic



- 79. specular-red-phenolic



- 80. specular-violet-phenolic



- 81. specular-white-phenolic



- 82. specular-yellow-phenolic



- 83. ss440



- 84. steel



- 85. teflon



- 86. tungsten-carbide



- 87. two-layer-gold



- 88. two-layer-silver



- 89. violet-acrylic



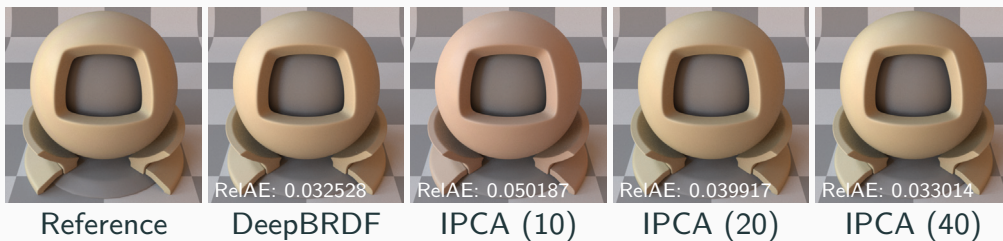
- 90. violet-rubber



- 91. white-acrylic



- 92. white-diffuse-bball



- 93. white-fabric



- 94. white-fabric2



- 95. white-marble



- 96. white-paint



- 97. yellow-matte-plastic



- 98. yellow-paint



- 99. yellow-phenolic



- 100. yellow-plastic



Reconstruction quality comparison using different numbers of slices.

- 1. alum-bronze



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- 3. aluminium



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- 6. black-fabric



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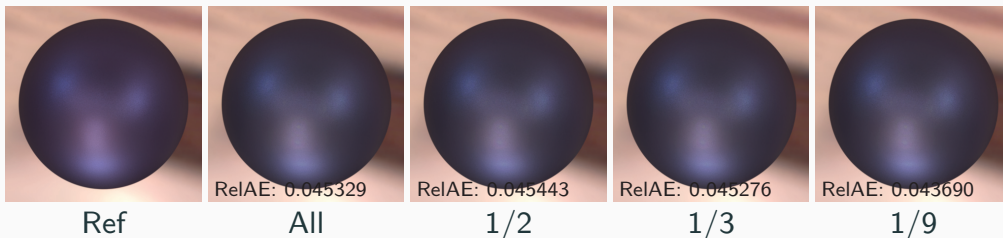
- 11. blue-acrylic



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- 15. blue-rubber



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- 17. cherry-235



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- 20. colonial-maple-223



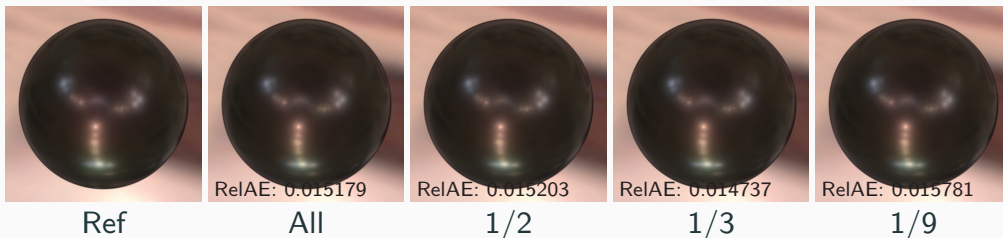
- 21. color-changing-paint1



- 22. color-changing-paint2



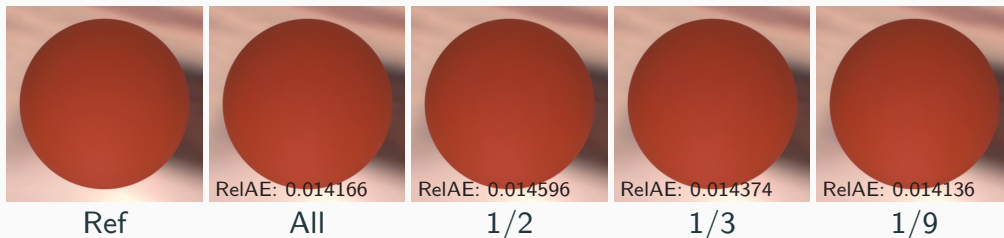
- 23. color-changing-paint3



- 24. dark-blue-paint



- 25. dark-red-paint



- 26. dark-specular-fabric



- 27. delrin



- 28. fruitwood-241



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- 33. gray-plastic



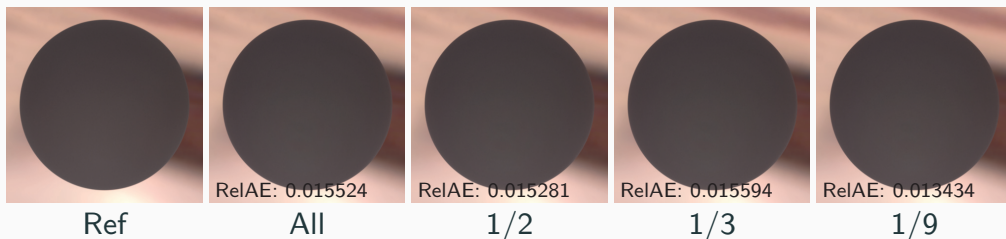
- 34. grease-covered-steel



- 35. green-acrylic



- 36. green-fabric



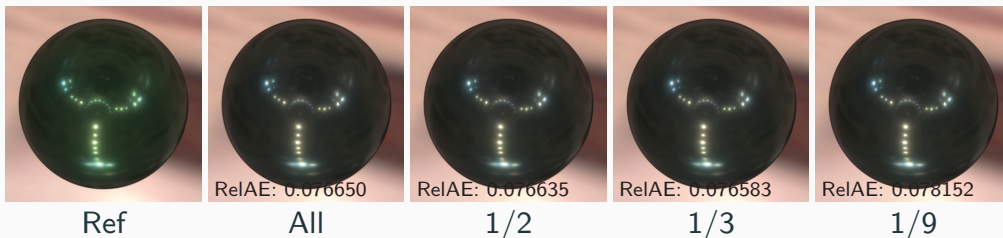
- 37. green-latex



- 38. green-metallic-paint



- 39. green-metallic-paint2



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- 41. hematite



- 42. ipswich-pine-221



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- 44. light-red-paint



- 45. maroon-plastic



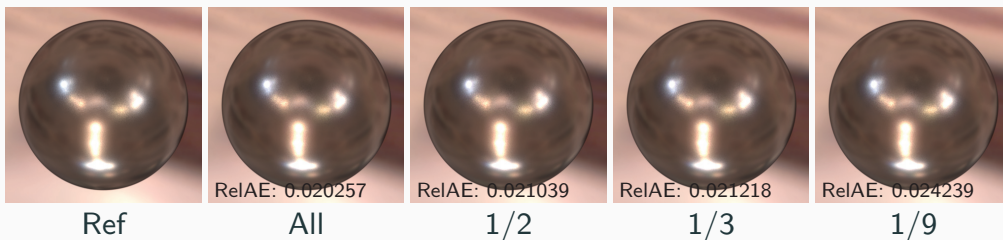
- 46. natural-209



- 47. neoprene-rubber



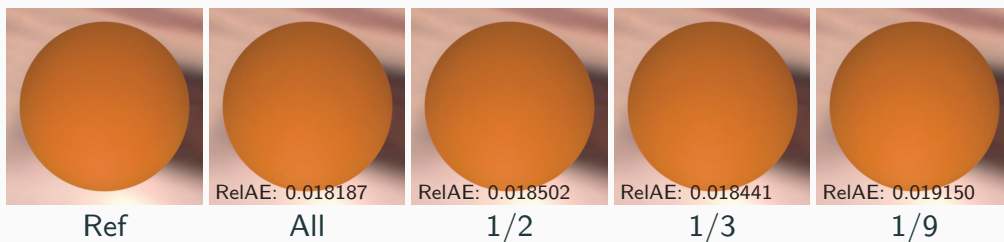
- 48. nickel



- 49. nylon



- 50. orange-paint



- 51. pearl-paint



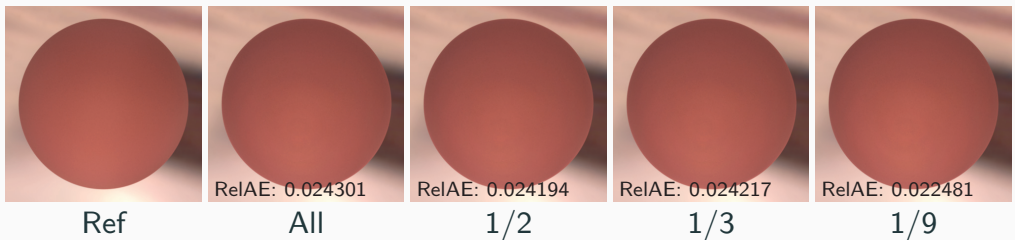
- 52. pickled-oak-260



- 53. pink-fabric



- 54. pink-fabric2



- 55. pink-felt



- 56. pink-jasper



- 57. pink-plastic



- 58. polyethylene



- 59. polyurethane-foam



- 60. pure-rubber



- 61. purple-paint



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- 63. red-fabric



- 64. red-fabric2



- 65. red-metallic-paint



- 66. red-phenolic



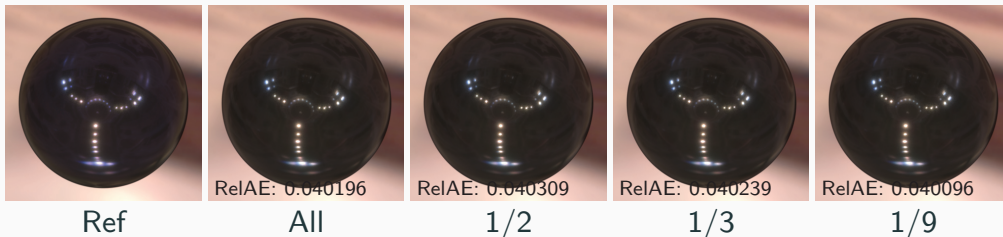
- 67. red-plastic



- 68. red-specular-plastic



- 69. silicon-nitride



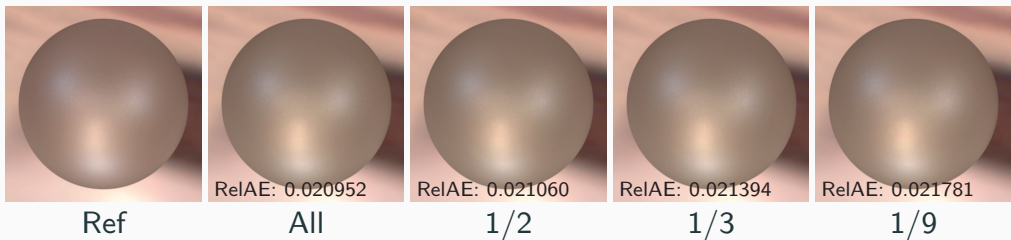
- 70. silver-metallic-paint



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- 72. silver-paint



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- 75. specular-blue-phenolic



- 76. specular-green-phenolic



- 77. specular-maroon-phenolic



- 78. specular-orange-phenolic



- 79. specular-red-phenolic



- 80. specular-violet-phenolic



- 81. specular-white-phenolic



- 82. specular-yellow-phenolic



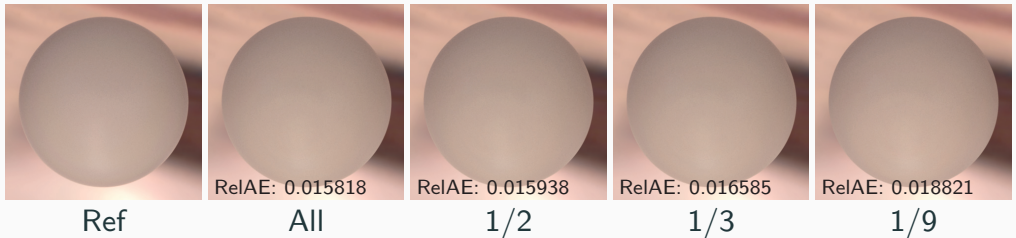
- 83. ss440



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- 85. teflon



- 86. tungsten-carbide



- 87. two-layer-gold



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- 90. violet-rubber



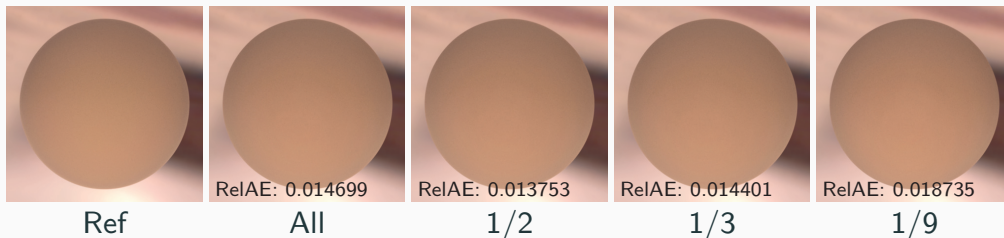
- 91. white-acrylic



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- 93. white-fabric



- 94. white-fabric2



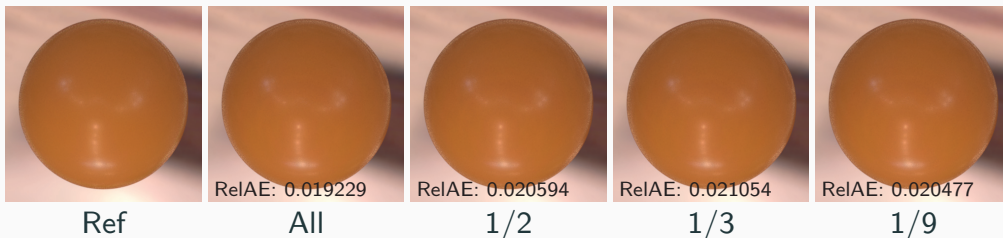
- 95. white-marble



- 96. white-paint



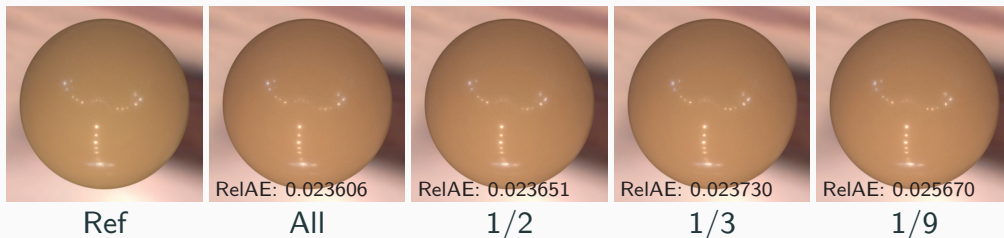
- 97. yellow-matte-plastic



- 98. yellow-paint



- 99. yellow-phenolic



- 100. yellow-plastic



Samples in the training dataset for single image BRDF recovery

