**Grammar**

**Abstract**

~~Line 8: There should not be a comma after since~~

~~Line 23: Should be “properties” instead of “proteries”~~

**Introduction**

~~Line 26: Missing comma after “(it’s color, shape, etc.)”~~

~~Line 47: “Show varying degree” is incorrect. “degree” should be “degrees”~~

~~Line 55: Missing comma after “(Linhares, Pinto, & Nascimento, 2008)”~~

~~Line 56: Missing comma after “displayed”~~

~~Line 58: Missing comma after “method” and “method” should be plural.~~

~~Line 60: “method” should be plural.~~

~~Line 61: “method” should be plural and “involves” should be “involve”~~

~~Line 66: “to be same or different” should be “to be the same or different”~~

~~Line 72: “variability in spectra” should be “variability in the spectra”~~

~~Line 93: Missing comma after “regime”~~

~~Line 94-95: “by model” should be “by a model”~~

~~Line 98: Missing comma after “simultaneous variation”~~

**Experimental Methods-Overview**

~~Line 110: “variability of reflectance spectra” should be “variability of the reflectance spectra”~~

~~Line 115: Switches from past tense to present. “rendering” should be “rendered”~~

**Experimental Methods-Preregistration**

~~Line 166: “experiments were same” should be “experiments were the same”~~

~~Line 169: “threshold” should be plural~~

**Experimental Methods-Reflectance and Illumination Spectra**

~~Line 178: “described in previous work” should be “described in the previous work”~~

~~Line 187: “weight” should be plural~~

**Experimental Methods-Stimulus Design**

Line 227: “reflectance spectra and spectral power” should be “reflectance spectras and the spectral power”

~~Line 238: “within monitor gamut” should be “within the monitor’s gamut”~~

~~Line 239: “images was presented” should be “images were presented”~~

~~Line 240: “1100 images, 100 images each at” should be “1100 images, with 100 images at each of the”~~

**Experimental Methods-Experimental Structure**

Line 261: “target LRF level” should be “target LRF levels”

Line 266: “standard and comparison in a trial” should be “standard and comparison images in a trial”

Line 266: There is an extra comma after “trial”

Line 266: Pseudorandomly is one word

Line 273: “experiment at time” should be “experiment at any time”

**Experimental Methods-Observer Recruitment and Exclusion**

Line 297: “and local” should be “and the local”

Line 304: “screen for observers’ ability” should be “screen for the observers’ ability”

**Experimental Methods-Apparatus**

Line 369: “observer’s” should be plural and possessive

Line 370: “observer’s” should be plural and possessive

Line 371: “observer’s” should be plural and possessive

**Experimental Methods-Monitor Calibration**

Line 374: Should be a comma after “once calibrated”

**Experimental Methods-Linear Receptive Field Model**

Line 395-396: “image with higher noise” should be “image with the higher noise”

Line 403: “(RTΣe0R)” shouldn’t be in parentheses

**Results-Background Reflectance Variation**

Line 443: “log squared threshold” should be “log threshold squared”

Line 444: “p-value” should be plural

Line 451-452: “external variance and intrinsic noise” should be “external variance to intrinsic noise”

Line 455: Should be a comma after “But”

Line 455: “the ratio not significantly large compared to 1, indicating” should be “since the ratio is not significantly large compared to 1, this indicates”

**Results-Simultaneous Variation**

Line 479-480: “light source” should be plural

**Discussion**

Line 525: “level” should be plural

Line 527: “effect of extrinsic started” should be “effect of extrinsic variance started”

**Table S3**

Line 569: “Experiment 9” should be “Experiment 8”

**Comments**

**Experimental Methods-Observer Information**

Observer fun, from experiment 8, is the same as observer content, from experiment 7 and 8. I forgot the pseudo-name during experiment 8 so I gave a new one. The names are different, but they are the same person.