|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | **Time from the beginning of the UV-A irradiation** |
| **Sample n°** | **Before soaking (t0)** | **After soaking** | **5 min** | **10 min** | **15 min** | **20 min** | **25 min** | **30 min** |
| **1** | 1.32 | 0.32 | 0.84 | 1.05 | 1.07 | 1.10 | 1.09 | 1.18 |
| **2** | 1.09 | 0.22 | 0.91 | 1.10 | 1.00 | 1.00 | 0.99 | 1.06 |
| **3** | 1.10 | 0.27 | 0.83 | 1.05 | 1.02 | 1.10 | 1.00 | 0.97 |
| **4** | 1.10 | 0.25 | 0.79 | 0.99 | 1.10 | 1.00 | 1.10 | 1.09 |
| **5** | 1.20 | 0.24 | 0.86 | 1.20 | 1.20 | 1.04 | 1.09 | 1.10 |
| **6** | 1.04 | 0.32 | 0.89 | 1.20 | 1.20 | 1.30 | 1.30 | 1.05 |
| **7** | 1.08 | 0.27 | 0.83 | 1.10 | 1.03 | 1.00 | 0.98 | 1.07 |
| **8** | 1.06 | 0.25 | 0.79 | 0.98 | 1.03 | 1.10 | 1.05 | 1.11 |
| **9** | 1.11 | 0.23 | 0.86 | 1.10 | 1.05 | 1.15 | 1.10 | 1.12 |
| **10** | 1.24 | 0.30 | 0.88 | 1.20 | 1.22 | 1.25 | 1.15 | 1.19 |
| **11** | 1.09 | 0.24 | 0.84 | 1.14 | 1.10 | 1.10 | 1.15 | 1.15 |
| **12** | 1.10 | 0.27 | 0.87 | 1.15 | 1.10 | 1.12 | 1.06 | 1.15 |
| **Average** | **1.13** | **0.27** | **0.85** | **1.10** | **1.09** | **1.11** | **1.09** | **1.10** |
| **SD** | 0.08 | 0.03 | 0.03 | 0.07 | 0.08 | 0.09 | 0.09 | 0.06 |
| **p** |  | <0.01 | <0.01 | 0.50 | 0.30 | 0.54 | 0.27 | 0.42 |

**Supplemental digital content 1**: Measured UV-A output intensities (I, expressed in mW/cm2) through twelwe cornea samples using an input power , I0 of 3mW/cm2. SD is the standard deviation, while p is the significance respect to t0 values (two tails, heteroscedastic)