**Data to accompany Metamer Mismatching**

Logvinenko, A.D., Funt, B., and Godau, C., "[Metamer Mismatching](http://www.cs.sfu.ca/~funt/LogvinenkoFuntGodauMetamerMismatchingTIP2013.pdf)," *IEEE Trans. on Image Processing,* Vol. 23, No. 1, pp. 34-43, Jan. 2014

The XYZ of the 20 5-transition reflectances that are all metameric under G (green) but form a hue circle under N (‘white’) light

**XYZ of 5-transition points under G:**

|  |  |  |
| --- | --- | --- |
| 16.8158382724808 | 50.0002137932422 | 8.16469294406277 |
| 16.8158165170515 | 50.0001131539871 | 8.16467195748698 |
| 16.8157351754357 | 49.9999164668319 | 8.16467454536524 |
| 16.8157853099561 | 50.0000325869055 | 8.16467959600331 |
| 16.8158187902762 | 50.0001328062544 | 8.16466919294362 |
| 16.8157505882161 | 50.0000041431800 | 8.16468678008800 |
| 16.8157694837692 | 49.9999848108758 | 8.16467986189718 |
| 16.8157673794957 | 49.9999955340667 | 8.16466718002673 |
| 16.8157698472428 | 50.0000603249846 | 8.16467345927094 |
| 16.8157572260824 | 49.9999359950252 | 8.16468349457794 |
| 16.8157501700792 | 49.9999780011654 | 8.16469545649945 |
| 16.8158184893916 | 50.0000921849707 | 8.16468639081731 |
| 16.8157662611253 | 49.9999743223793 | 8.16468032855000 |
| 16.8157784908124 | 50.0000255593372 | 8.16468763402279 |
| 16.8157754606713 | 50.0000565654364 | 8.16468643644346 |
| 16.8157599205514 | 49.9999792849864 | 8.16469467375228 |
| 16.8157620223886 | 50.0000249869378 | 8.16469521158083 |
| 16.8158142304524 | 50.0001434966139 | 8.16469784656294 |
| 16.8157870132780 | 50.0001300757795 | 8.16469776047102 |
| 16.8157849007503 | 50.0001202324936 | 8.16468820381043 |

**Transition Wavelengths**

Transition wavelengths of the 20 reflectances, one per row, each defining a 5-transition reflectance. Note that transitions T1, ..., T5 are given in order. In some rows the wavelengths are increasing, some decreasing. For the increasing case, the reflectance is zero for all wavelengths less than T1, one from T1 to T2, zero from T2 to T3, and so on. For the decreasing case, the reflectance is zero for all wavelengths greater than T1, one from T1 down to T2, zero from T2 down to T3, and so forth. Note that to get this data into Matlab you can simply cut and paste the whole table at once.

 T1 T2 T3 T4 T5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 453.790457551566 | 492.980677006508 | 519.647233106938 | 542.727154651099 | 568.025927735177 |
| 381.256627241184 | 443.716635516417 | 494.300969363267 | 528.698098519618 | 555.844640791466 |
| 464.095485191955 | 499.013188953185 | 526.055654221712 | 550.068940205005 | 579.035661663966 |
| 479.784332829411 | 509.057030641599 | 530.286895373848 | 551.612992415056 | 577.001660978760 |
| 490.993257452949 | 528.083680903343 | 555.326630251955 | 640.722841479197 | 696.851418885941 |
| 490.020803546656 | 525.631498727936 | 551.232960101997 | 582.496345926847 | 603.803440965726 |
| 607.770661839753 | 554.656372085779 | 527.665621718504 | 490.835595315035 | 387.961858803395 |
| 487.546369294945 | 520.323689108676 | 544.239851794829 | 570.447085549959 | 631.601678720795 |
| 567.396824345753 | 541.849386140335 | 518.230975963949 | 487.622165940351 | 431.403529237741 |
| 583.239767707342 | 551.107358699464 | 525.955742962555 | 494.749626161192 | 450.341402189107 |
| 581.994834548587 | 550.814463625920 | 525.948014229008 | 495.925944014915 | 454.737314717813 |
| 574.825590467363 | 547.557142009800 | 523.853133809290 | 496.120530390290 | 458.279809920605 |
| 566.193707606034 | 542.194373717684 | 521.337940831528 | 502.159347886232 | 473.954845812307 |
| 579.435440156056 | 553.016311765700 | 531.210715115327 | 509.461279198327 | 479.975002821806 |
| 602.104070462554 | 591.580996262914 | 553.932424712014 | 527.283714627400 | 490.687411037122 |
| 431.581739729963 | 492.191765451906 | 528.153368687318 | 555.277134616886 | 623.196867283893 |
| 430.273178256134 | 492.024459871620 | 528.051707712928 | 555.132247215902 | 617.601322702254 |
| 628.385957145406 | 558.360914826961 | 532.271279322346 | 505.688649868458 | 473.940875904610 |
| 435.574693270355 | 476.424578004139 | 505.651133774590 | 532.288759348044 | 558.483868351133 |
| 452.437135573253 | 493.569504804141 | 521.734549806721 | 545.204518604183 | 571.402517756163 |