

Cod.	i	[X, Y, Z, x, y] ₁₀₀	[L*, a*, b*, C*, h _{AB} , a', b', c'] ₁₀₀	[Y, A, B, C _{AB} , h _{AB} , a, b, c] ₁₀₀	[l _d , i', c', λ _d , λ _c] ₁₀₀	[X, Y, Z] ₈₉	[L*, a*, b*, C*, h _{AB} , a', b', c'] ₈₉	[Y, A, B, C _{AB} , h _{AB}] ₈₉		
0005-ROOB	00	90.8 93.9 98.6 0.321 0.331	97.6 3.0 2.3 3.8 37.5 0.217	-0.212 0.01	93.9 1.7 2.2 40.8 0.967	-0.419 0.025	37 16 587 483	80.4 83.2 87.3	93.1 2.9 2.2 3.6 37.5	83.2 1.5 1.3 1.9 40.8
0010-ROOB	01	87.2 88.1 90.0 0.329 0.332	95.2 6.7 4.0 7.8 30.7 0.218	-0.211 0.011	88.1 3.5 2.3 4.2 33.3 0.99	-0.408 0.049	38 16 592 484	77.3 78.1 79.8	90.8 6.4 3.8 7.4 30.7	78.1 3.1 2.1 3.8 33.3
0015-ROOB	02	83.2 82.6 82.3 0.332 0.332	90.5 10.7 5.3 12.0 26.5 0.22	-0.208 0.013	82.6 5.5 3.0 6.2 28.5 1.066	-0.398 0.076	39 17 597 485	74.3 73.1 72.9	98.5 10.5 5.1 11.5 26.5	73.1 4.9 2.6 5.5 28.5
0020-ROOB	03	80.7 77.2 75.3 0.346 0.331	90.4 14.9 6.6 13.3 22.8 0.222	-0.207 0.014	77.2 7.4 3.5 8.2 25.2 1.045	-0.389 0.106	40 17 600 486	71.6 68.4 66.7	98.2 14.3 6.3 12.9 22.8	68.4 6.5 3.1 7.2 22.8
0025-ROOB	04	77.4 72.0 68.5 0.355 0.33	88.0 18.8 7.8 20.4 22.5 0.225	-0.205 0.016	72.0 9.0 3.9 9.8 23.5 1.074	-0.38 0.137	40 17 603 486	68.5 63.8 60.7	83.9 18.1 7.5 19.6 22.5	63.8 8.0 3.5 8.7 23.5
0030-ROOB	05	74.2 67.0 62.3 0.365 0.329	85.5 23.0 8.9 24.7 21.2 0.227	-0.203 0.019	67.0 10.6 4.2 11.4 21.8 1.107	-0.371 0.17	41 17 606 486	65.7 59.4 55.2	81.5 22.1 8.6 23.7 21.2	59.4 9.4 3.7 10.1 21.2
0035-ROOB	06	70.8 62.2 56.3 0.374 0.328	83.0 26.7 10.1 28.6 20.7 0.229	-0.202 0.021	62.2 11.8 4.5 12.6 21.0 1.139	-0.361 0.203	41 17 608 486	62.7 55.1 49.9	79.1 25.7 9.7 27.4 20.7	55.1 10.4 4.0 11.2 21.0
0040-ROOB	07	67.5 57.5 50.7 0.384 0.327	80.5 30.6 11.3 32.6 20.3 0.231	-0.2 0.024	57.5 12.9 4.8 13.8 20.2 1.174	-0.351 0.24	42 17 610 486	59.8 50.9 44.9	76.6 29.3 10.8 31.3 20.3	50.9 11.5 4.2 12.2 20.2
0045-ROOB	08	64.1 53.0 45.3 0.395 0.326	77.9 34.1 12.5 36.3 20.2 0.234	-0.198 0.027	53.0 13.8 4.9 14.7 19.7 1.21	-0.341 0.277	42 17 611 486	56.8 46.9 40.1	74.1 32.7 12.0 34.8 20.2	46.9 12.2 4.4 13.0 19.7
0050-ROOB	09	60.8 48.6 40.1 0.407 0.325	75.2 37.8 13.9 40.3 20.2 0.236	-0.195 0.03	48.6 14.6 5.1 15.5 19.3 1.25	-0.329 0.319	42 17 612 487	53.8 43.1 35.5	71.6 36.3 13.4 38.7 20.2	43.1 13.0 4.5 13.7 19.3
0055-ROOB	10	57.5 44.4 35.1 0.42 0.324	72.5 41.7 15.4 44.4 20.3 0.239	-0.193 0.034	44.4 15.4 5.3 16.3 18.9 1.296	-0.315 0.366	42 17 613 487	50.9 39.3 31.1	69.0 40.0 14.8 42.7 20.3	39.3 13.6 4.7 14.4 18.9
0060-ROOB	11	54.3 40.3 30.4 0.435 0.322	69.7 45.8 17.0 48.8 20.4 0.242	-0.19 0.038	40.3 16.0 5.4 16.9 18.5 1.348	-0.3 0.42	43 17 615 487	48.1 35.7 26.9	66.3 43.9 16.3 46.9 20.4	35.7 14.2 4.8 15.0 18.5
0065-ROOB	12	51.1 36.3 25.9 0.451 0.32	66.7 50.0 18.7 53.3 20.5 0.246	-0.186 0.043	36.3 16.6 5.4 17.5 18.1 1.407	-0.284 0.481	43 17 616 487	45.2 32.2 22.9	63.5 48.0 18.0 51.2 20.5	32.2 14.7 4.8 15.5 18.1
0070-ROOB	13	47.9 32.5 21.7 0.469 0.318	63.7 54.4 20.6 58.2 20.7 0.25	-0.182 0.048	32.5 17.1 5.4 17.9 17.7 1.475	-0.266 0.552	43 17 618 487	42.4 28.7 19.2	60.6 52.2 19.8 55.9 20.7	28.7 15.1 4.8 15.9 17.7
0075-ROOB	14	44.5 28.7 17.8 0.489 0.316	60.5 58.4 22.6 62.6 21.1 0.254	-0.178 0.054	28.7 17.2 5.4 18.0 17.4 1.548	-0.247 0.627	43 17 619 487	39.4 25.4 15.8	57.5 56.1 21.7 60.1 21.1	25.4 15.2 4.8 16.0 17.4
0080-ROOB	15	40.9 25.1 14.2 0.51 0.313	57.2 62.2 24.6 66.9 21.6 0.258	-0.172 0.061	25.1 17.1 5.2 17.9 17.0 1.63	-0.226 0.712	44 17 621 487	36.2 22.2 12.6	54.3 59.8 23.7 64.3 21.6	22.2 15.1 4.6 15.8 17.0
0085-ROOB	16	37.3 21.5 10.8 0.535 0.309	53.5 66.5 27.2 71.8 22.2 0.263	-0.166 0.069	21.5 16.9 5.0 17.6 16.6 1.732	-0.2 0.817	44 17 623 487	33.1 19.1 9.6	50.8 63.9 26.1 69.0 22.2	19.1 14.9 4.5 15.6 16.6
0090-ROOB	17	33.8 18.1 7.6 0.568 0.305	49.7 71.4 30.8 77.8 23.3 0.27	-0.156 0.081	18.1 16.6 4.8 17.3 16.3 1.865	-0.167 0.954	45 17 625 487	30.0 16.1 6.7	47.1 68.6 29.6 74.7 23.3	16.1 14.7 4.3 15.3 16.3
0095-ROOB	18	30.3 14.8 4.5 0.611 0.298	45.4 77.4 36.7 85.6 25.4 0.278	-0.14 0.098	14.8 16.3 4.6 16.9 15.9 2.05	-0.12 1.144	45 17 628 487	26.9 13.1 4.0	42.9 74.3 35.2 82.2 25.4	13.1 14.4 4.1 15.0 15.9
0099-ROOB	19	27.2 11.6 1.4 0.677 0.288	40.6 85.6 50.8 99.6 30.7 0.291	-0.102 0.136	11.6 16.2 4.5 16.8 15.5 2.342	-0.047 1.446	46 17 631 487	24.1 10.3 1.2	38.3 82.3 48.8 95.6 30.7	10.3 14.3 4.0 14.9 15.5
0005-BOOG	20	88.5 94.5 106.8 0.305 0.326	97.8 -2.2 -2.4 3.4 228.1 0.214	-0.217 0.01	94.5 -1.1 -1.5 2.0 232.4 0.936	-0.451 0.024	16 36 481 582	78.4 83.7 94.6	93.3 -2.1 -2.3 3.3 228.1	83.7 -1.0 -1.3 1.8 232.4
0010-BOOG	21	82.5 89.3 104.8 0.298 0.323	95.7 -4.2 -4.9 6.6 229.2 0.214	-0.22 0.012	89.3 -2.2 -3.0 3.8 234.0 0.924	-0.469 0.044	16 36 480 582	73.1 79.1 92.9	91.3 -4.0 -4.7 6.3 229.2	79.1 -1.9 -2.6 3.4 234.0
0015-BOOG	22	76.9 84.2 103.1 0.291 0.319	93.5 -6.0 -7.5 9.8 231.1 0.213	-0.223 0.014	84.2 -3.0 -4.5 5.5 236.3 0.913	-0.489 0.067	16 36 480 581	68.1 74.6 91.3	89.2 -5.8 -7.2 9.4 231.1	74.6 -2.6 -4.0 4.9 236.3
0020-BOOG	23	80.7 77.2 75.3 0.346 0.331	90.4 -10.7 -5.3 12.0 26.5 0.22	-0.208 0.013	77.2 -7.4 -3.5 8.2 25.2 1.045	-0.389 0.106	40 17 600 485	71.6 68.4 66.7	98.2 14.3 6.3 12.9 22.8	68.4 6.5 3.1 7.2 22.8
0025-BOOG	24	77.4 72.0 68.5 0.355 0.33	88.0 -18.8 -7.8 20.4 22.5 0.225	-0.205 0.016	72.0 -9.0 -3.9 9.8 23.5 1.074	-0.38 0.137	40 17 603 486	68.5 63.8 60.7	83.9 18.1 7.5 19.6 22.5	63.8 8.0 3.5 8.7 23.5
0030-BOOG	25	74.2 67.0 62.3 0.365 0.329	85.5 -23.0 -8.9 24.7 21.2 0.227	-0.203 0.019	67.0 -10.6 -4.2 11.4 21.8 1.107	-0.371 0.17	41 17 606 486	65.7 59.4 55.2	81.5 22.1 8.6 23.7 21.2	59.4 9.4 3.7 10.1 21.2
0035-BOOG	26	70.8 62.2 56.3 0.374 0.328	83.0 -26.7 -10.1 28.6 20.7 0.229	-0.202 0.021	62.2 -11.8 -4.5 12.6 21.0 1.139	-0.361 0.203	41 17 608 486	62.7 55.1 49.9	79.1 25.7 9.7 27.4 20.7	55.1 10.4 4.0 11.2 21.0
0040-BOOG	27	67.5 57.5 50.7 0.384 0.327	80.5 -30.6 -11.3 32.6 20.3 0.231	-0.2 0.024	57.5 -12.9 -4.8 13.8 20.2 1.174	-0.351 0.24	42 17 610 486	59.8 50.9 44.9	76.6 29.3 10.8 31.3 20.3	50.9 11.5 4.2 12.2 20.2
0045-BOOG	28	64.1 53.0 45.3 0.395 0.326	77.9 -34.1 -12.5 36.3 20.2 0.234	-0.198 0.027	53.0 -13.8 -4.9 14.7 19.7 1.21	-0.341 0.277	42 17 611 486	56.8 46.9 40.1	74.1 32.7 12.0 34.8 20.2	46.9 12.2 4.4 13.0 19.7
0050-BOOG	29	60.8 48.6 40.1 0.407 0.325	75.2 -37.8 13.9 40.3 20.2 0.236	-0.195 0.03	48.6 -14.6 5.1 15.5 19.3 1.25	-0.329 0.319	42 17 612 487	53.8 43.1 35.5	71.6 36.3 13.4 38.7 20.2	43.1 13.0 4.5 13.7 19.3
0055-BOOG	30	57.5 44.4 35.1 0.42 0.324	72.5 -41.7 15.4 44.4 20.3 0.239	-0.193 0.034	44.4 -15.4 5.3 16.3 18.9 1.296	-0.315 0.366	42 17 613 487	50.9 39.3 31.1	69.0 40.0 14.8 42.7 20.3	39.3 13.6 4.7 14.4 18.9
0060-ROOB	11	54.3 40.3 30.4 0.435 0.322	69.7 45.8 17.0 48.8 20.4 0.242	-0.19 0.038	40.3 16.0 5.4 16.9 18.5 1.348	-0.3 0.42	43 17 615 487	48.1 35.7 26.9	66.3 43.9 16.3 46.9 20.4	35.7 14.2 4.8 15.0 18.5
0065-ROOB	12	51.1 36.3 25.9 0.451 0.32	66.7 50.0 18.7 53.3 20.5 0.246	-0.186 0.043	36.3 16.6 5.4 17.5 18.1 1.407	-0.284 0.481	43 17 616 487	45.2 32.2 22.9	63.5 48.0 18.0 51.2 20.5	32.2 14.7 4.8 15.5 18.1
0070-ROOB	13	47.9 32.5 21.7 0.469 0.318	63.7 54.4 20.6 58.2 20.7 0.25	-0.182 0.048	32.5 17.1 5.4 17.9 17.7 1.475	-0.266 0.552	43 17 618 487	42.4 28.7 19.2	60.6 52.2 19.8 55.9 20.7	28.7 15.1 4.8 15.9 17.7
0075-ROOB	14	44.5 28.7 17.8 0.489 0.316	60.5 58.4 22.6 62.6 21.1 0.254	-0.178 0.054	28.7 17.2 5.4 18.0 17.4 1.548	-0.247 0.627	43 17 619 487	39.4 25.4 15.8	57.5 56.1 21.7 60.1 21.1	25.4 15.2 4.8 16.0 17.4
0080-ROOB	15	40.9 25.1 14.2 0.51 0.313	57.2 62.2 24.6 66.9 21.6 0.258	-0.172 0.061	25.1 17.1 5.2 17.9 17.0 1.63	-0.226 0.712	44 17 621 487	36.2 22.2 12.6	54.3 59.8 23.7 64.3 21.6	22.2 15.1 4.6 15.8 17.0
0085-ROOB	16	37.3 21.5 10.8 0.535 0.309	53.5 66.5 27.2 71.8 22.2 0.263	-0.166 0.069	21.5 16.9 5.0 17.6 16.6 1.732	-0.2 0.817	44 17 623 487	33.1 19.1 9.6	50.8 63.9 26.1 69.0 22.2	19.1 14.9 4.5 15.6 16.6
0090-ROOB	17	33.8 18.1 7.6 0.568 0.305	49.7 71.4 30.8 77.8 23.3 0.27	-0.156 0.081	18.1 16.6 4.8 17.3 16.3 1.865	-0.167 0.954	45 17 625 487	30.0 16.1 6.7	47.1 68.6 29.6 74.7 23.3	16.1 14.7 4.3 15.3 16.3
0095-ROOB	18	30.3 14.8 4.5 0.611 0.298	45.4 77.4 36.7 85.6 25.4 0.278	-0.14 0.098	14.8 16.3 4.6 16.9 15.9 2.05	-0.12 1.144	45 17 628 487	26.9 13.1 4.0	42.9 74.3 35.2 82.2 25.4	13.1 14.4 4.1 15.0 15.9
0099-ROOB	19	27.2 11.6 1.4 0.677 0.288	40.6 85.6 50.8 99.6 30.7 0.291	-0.102 0.136	11.6 16.2 4.5 16.8 15.5 2.342	-0.047 1.446	46 17 631 487	24.1 10.3 1.2	38.3 82.3 48.8 95.6 30.7	10.3 14.3 4.0 14.9 15.5
0005-BOOG	20	88.5 94.5 106.8 0.305 0.326	97.8 -2.2 -2.4 3.4 228.1 0.214	-0.217 0.01	94.5 -1.1 -1.5 2.0 232.4 0.936	-0.451 0.024	16 36 481 582	78.4 83.7 94.6	93.3 -2.1 -2.3 3.3 228.1	83.7 -1.0 -1.3 1.8 232.4
0010-BOOG	21	82.5 89.3 104.8 0.298 0.323	95.7 -4.2 -4.9 6.6 229.2 0.214							

Cod.	i	[X, Y, Z, x, y] ₁₀₀					[L*, a*, b*, C _{ab} , h _{ab} , a', b', c', c' _{ab}] ₁₀₀					[Y, A, B, C _{AB} , h _{AB} , a, b, c, c _{AB}] ₁₀₀					[i _d , i _c , λ _d , λ _c] ₁₀₀					[X, Y, Z] ₈₉					[L*, a*, b*, C _{ab} , h _{ab}] ₈₉					[Y, A, B, C _{AB} , h _{AB}] ₈₉							
9900-W99N	80	0.7	0.8	0.9	0.312	0.329	7.0	0.0	0.0	0.0	227.8	0.215	-0.215	0.01	0.8	0.0	0.0	0.0	229.9	0.949	-0.435	0.01	16	36	481	583	0.7	0.7	0.8	6.2	0.0	0.0	0.0	227.8	0.7	0.0	0.0	0.0	229.7
9500-W95N	81	2.4	2.5	2.8	0.312	0.329	18.1	0.0	0.0	0.0	164.0	0.215	-0.214	0.01	2.5	0.0	0.0	0.0	160.6	0.949	-0.434	0.01	20	-1	504	504c	2.1	2.2	2.4	16.7	0.0	0.0	0.0	164.0	2.2	0.0	0.0	0.0	160.5
9000-W90N	82	4.2	4.4	4.8	0.313	0.329	25.0	0.0	0.0	0.0	329.0	0.215	-0.215	0.01	4.4	0.0	0.0	0.0	326.1	0.95	-0.434	0.01	-1	27	537c	537	3.7	3.9	4.2	23.3	0.0	0.0	0.0	329.0	3.9	0.0	0.0	0.0	326.2
8500-W85N	83	6.1	6.4	7.0	0.313	0.329	30.4	0.0	0.0	0.1	325.8	0.215	-0.215	0.01	6.4	0.0	0.0	0.0	322.4	0.95	-0.435	0.01	-1	28	542c	542	5.4	5.7	6.2	28.6	0.0	0.0	0.1	325.8	5.7	0.0	0.0	0.0	322.5
8000-W80N	84	8.1	8.6	9.3	0.313	0.329	35.1	0.0	0.0	0.0	318.5	0.215	-0.215	0.01	8.6	0.0	0.0	0.0	314.9	0.95	-0.434	0.01	-1	30	550c	550	7.2	7.6	8.3	33.1	0.0	0.0	0.0	318.5	7.6	0.0	0.0	0.0	315.0
7500-W75N	85	10.4	10.9	11.9	0.313	0.329	39.4	0.1	0.0	0.1	351.1	0.216	-0.214	0.01	10.9	0.0	0.0	0.0	350.1	0.95	-0.434	0.01	-1	19	497c	497	9.2	9.7	10.5	37.2	0.1	0.0	0.1	351.1	9.7	0.0	0.0	0.0	350.1
7000-W70N	86	12.8	13.4	14.6	0.313	0.329	43.4	0.1	0.0	0.1	331.0	0.215	-0.215	0.01	13.4	0.0	0.0	0.0	327.7	0.95	-0.434	0.01	-1	26	533c	533	11.3	11.9	12.9	41.0	0.1	0.0	0.1	331.0	11.9	0.0	0.0	0.0	327.8
6500-W65N	87	15.4	16.1	17.6	0.313	0.329	47.2	0.1	0.0	0.1	342.8	0.216	-0.215	0.01	16.1	0.0	0.0	0.0	340.6	0.95	-0.434	0.01	-1	21	506c	506	13.6	14.3	15.6	44.7	0.1	0.0	0.1	342.8	14.3	0.0	0.0	0.0	340.6
6000-W60N	88	18.2	19.1	20.8	0.313	0.329	50.8	0.1	0.0	0.1	334.8	0.216	-0.215	0.01	19.1	0.0	0.0	0.0	331.8	0.95	-0.435	0.01	-1	24	523c	523	16.1	16.9	18.5	48.2	0.1	0.0	0.1	334.8	16.9	0.0	0.0	0.0	331.8
5500-W55N	89	21.3	22.4	24.4	0.313	0.329	54.4	0.1	0.0	0.1	344.2	0.216	-0.214	0.01	22.4	0.0	0.0	0.0	342.1	0.95	-0.434	0.01	-1	20	504c	504	18.9	19.8	21.6	51.7	0.1	0.0	0.1	344.2	19.8	0.0	0.0	0.0	342.1
5000-W50N	90	24.7	26.0	28.3	0.313	0.329	58.0	0.1	0.0	0.2	339.5	0.216	-0.215	0.01	26.0	0.0	0.0	0.0	336.9	0.951	-0.435	0.01	-1	22	512c	512	21.9	23.0	25.0	55.1	0.1	0.0	0.1	339.5	23.0	0.0	0.0	0.0	336.9
4500-W45N	91	28.4	29.9	32.6	0.313	0.329	61.6	0.1	0.0	0.1	337.4	0.216	-0.215	0.01	29.9	0.0	0.0	0.0	334.6	0.951	-0.435	0.01	-1	23	517c	517	25.2	26.5	28.9	58.5	0.1	0.0	0.1	337.4	26.5	0.0	0.0	0.0	334.6
4000-W40N	92	32.6	34.3	37.3	0.313	0.329	65.2	0.1	0.0	0.1	340.2	0.216	-0.215	0.01	34.3	0.0	0.0	0.0	337.6	0.95	-0.434	0.01	-1	22	511c	511	28.9	30.4	33.1	62.0	0.1	0.0	0.1	340.2	30.4	0.0	0.0	0.0	337.6
3500-W35N	93	37.2	39.2	42.7	0.313	0.329	68.9	0.1	0.0	0.1	338.0	0.216	-0.215	0.01	39.2	0.0	0.0	0.0	335.2	0.95	-0.435	0.01	-1	23	515c	515	33.0	34.7	37.8	65.5	0.1	0.0	0.1	338.0	34.7	0.0	0.0	0.0	335.2
3000-W30N	94	42.4	44.7	48.6	0.313	0.329	72.7	0.1	0.0	0.2	341.0	0.216	-0.215	0.01	44.7	0.0	0.0	0.1	338.5	0.951	-0.434	0.01	-1	21	509c	509	37.6	39.6	43.1	69.2	0.1	0.0	0.2	341.0	39.6	0.0	0.0	0.0	338.5
2500-W25N	95	48.3	50.8	55.4	0.313	0.329	76.6	0.1	0.0	0.2	336.2	0.216	-0.215	0.01	50.8	0.1	0.0	0.1	333.2	0.95	-0.435	0.01	-1	24	520c	520	42.8	45.0	49.0	72.9	0.1	0.0	0.2	336.2	45.0	0.0	0.0	0.1	333.2
2000-W20N	96	55.0	57.9	63.1	0.313	0.329	80.7	0.2	0.0	0.2	338.8	0.216	-0.215	0.01	57.9	0.1	0.0	0.1	336.0	0.95	-0.435	0.01	-1	22	514c	514	48.8	51.3	55.9	76.9	0.1	0.0	0.2	338.8	51.3	0.1	0.0	0.1	336.0
1500-W15N	97	62.8	66.0	71.9	0.313	0.329	85.0	0.2	0.0	0.2	339.6	0.216	-0.215	0.01	66.0	0.1	0.0	0.1	336.9	0.95	-0.434	0.01	-1	22	512c	512	55.6	58.5	63.7	81.0	0.2	0.0	0.2	339.6	58.5	0.1	0.0	0.1	337.0
1000-W10N	98	71.7	75.5	82.2	0.313	0.329	89.6	0.2	0.0	0.2	338.8	0.216	-0.215	0.01	75.5	0.1	0.0	0.1	336.1	0.95	-0.435	0.01	-1	22	513c	513	63.6	66.9	72.8	85.4	0.2	0.0	0.2	338.8	66.9	0.1	0.0	0.1	336.1
0500-W05N	99	82.3	86.6	94.3	0.313	0.329	94.6	0.2	0.0	0.2	338.5	0.216	-0.215	0.01	86.6	0.1	0.0	0.1	335.7	0.95	-0.435	0.01	-1	22	514c	514	72.9	76.7	83.5	90.2	0.2	0.0	0.2	338.5	76.7	0.1	0.0	0.1	335.7
0000-W00N	100	94.9	99.9	108.8	0.313	0.329	100.0	0.2	0.0	0.2	338.2	0.216	-0.215	0.01	99.9	0.1	0.0	0.1	335.4	0.95	-0.435	0.01	-1	23	515c	515	84.1	88.5	96.4	95.4	0.2	0.0	0.2	338.2	88.5	0.1	0.0	0.1	335.4