



inches

centimeters

D55 Illuminant, 2 degree observer

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
38.12	44.78	50.50	55.58	60.02	63.80	67.08	69.92	72.34	74.38	76.04	77.42	78.52	79.34	80.00	80.52	80.91	81.18	81.43	81.66	81.87	82.06	82.23	82.38	82.51	82.62	82.71	82.79	82.86	82.91
14.32	13.28	12.28	11.31	10.39	9.53	8.73	8.00	7.34	6.75	6.23	5.78	5.39	5.06	4.78	4.55	4.37	4.23	4.13	4.06	4.01	3.98	3.96	3.95	3.95	3.95	3.95	3.95	3.95	3.95
0.0406	0.0456	0.0506	0.0556	0.0606	0.0656	0.0706	0.0756	0.0806	0.0856	0.0906	0.0956	0.1006	0.1056	0.1106	0.1156	0.1206	0.1256	0.1306	0.1356	0.1406	0.1456	0.1506	0.1556	0.1606	0.1656	0.1706	0.1756	0.1806	

Density → 0.04 0.09 0.15 0.22 0.30 0.38 0.46 0.54 0.62 0.70 0.78 0.86 0.94 1.02 1.10 1.18 1.26 1.34 1.42 1.50 1.58 1.66 1.74 1.82 1.90 1.98 2.06 2.14 2.22 2.30 2.38 2.46 2.54 2.62 2.70 2.78 2.86 2.94 3.02 3.10 3.18 3.26 3.34 3.42 3.50 3.58 3.66 3.74 3.82 3.90 3.98 4.06 4.14 4.22 4.30 4.38 4.46 4.54 4.62 4.70 4.78 4.86 4.94 5.02 5.10 5.18 5.26 5.34 5.42 5.50 5.58 5.66 5.74 5.82 5.90 5.98 6.06 6.14 6.22 6.30 6.38 6.46 6.54 6.62 6.70 6.78 6.86 6.94 7.02 7.10 7.18 7.26 7.34 7.42 7.50 7.58 7.66 7.74 7.82 7.90 7.98 8.06 8.14 8.22 8.30 8.38 8.46 8.54 8.62 8.70 8.78 8.86 8.94 9.02 9.10 9.18 9.26 9.34 9.42 9.50 9.58 9.66 9.74 9.82 9.90 9.98 10.06 10.14 10.22 10.30 10.38 10.46 10.54 10.62 10.70 10.78 10.86 10.94 11.02 11.10 11.18 11.26 11.34 11.42 11.50 11.58 11.66 11.74 11.82 11.90 11.98 12.06 12.14 12.22 12.30 12.38 12.46 12.54 12.62 12.70 12.78 12.86 12.94 13.02 13.10 13.18 13.26 13.34 13.42 13.50 13.58 13.66 13.74 13.82 13.90 13.98 14.06 14.14 14.22 14.30 14.38 14.46 14.54 14.62 14.70 14.78 14.86 14.94 15.02 15.10 15.18 15.26 15.34 15.42 15.50 15.58 15.66 15.74 15.82 15.90 15.98 16.06 16.14 16.22 16.30 16.38 16.46 16.54 16.62 16.70 16.78 16.86 16.94 17.02 17.10 17.18 17.26 17.34 17.42 17.50 17.58 17.66 17.74 17.82 17.90 17.98 18.06 18.14 18.22 18.30 18.38 18.46 18.54 18.62 18.70 18.78 18.86 18.94 19.02 19.10 19.18 19.26 19.34 19.42 19.50 19.58 19.66 19.74 19.82 19.90 19.98 20.06 20.14 20.22 20.30 20.38 20.46 20.54 20.62 20.70 20.78 20.86 20.94 21.02 21.10 21.18 21.26 21.34 21.42 21.50 21.58 21.66 21.74 21.82 21.90 21.98 22.06 22.14 22.22 22.30 22.38 22.46 22.54 22.62 22.70 22.78 22.86 22.94 23.02 23.10 23.18 23.26 23.34 23.42 23.50 23.58 23.66 23.74 23.82 23.90 23.98 24.06 24.14 24.22 24.30 24.38 24.46 24.54 24.62 24.70 24.78 24.86 24.94 25.02 25.10 25.18 25.26 25.34 25.42 25.50 25.58 25.66 25.74 25.82 25.90 25.98 26.06 26.14 26.22 26.30 26.38 26.46 26.54 26.62 26.70 26.78 26.86 26.94 27.02 27.10 27.18 27.26 27.34 27.42 27.50 27.58 27.66 27.74 27.82 27.90 27.98 28.06 28.14 28.22 28.30 28.38 28.46 28.54 28.62 28.70 28.78 28.86 28.94 29.02 29.10 29.18 29.26 29.34 29.42 29.50 29.58 29.66 29.74 29.82 29.90 29.98 30.06 30.14 30.22 30.30 30.38 30.46 30.54 30.62 30.70 30.78 30.86 30.94 31.02 31.10 31.18 31.26 31.34 31.42 31.50 31.58 31.66 31.74 31.82 31.90 31.98 32.06 32.14 32.22 32.30 32.38 32.46 32.54 32.62 32.70 32.78 32.86 32.94 33.02 33.10 33.18 33.26 33.34 33.42 33.50 33.58 33.66 33.74 33.82 33.90 33.98 34.06 34.14 34.22 34.30 34.38 34.46 34.54 34.62 34.70 34.78 34.86 34.94 35.02 35.10 35.18 35.26 35.34 35.42 35.50 35.58 35.66 35.74 35.82 35.90 35.98 36.06 36.14 36.22 36.30 36.38 36.46 36.54 36.62 36.70 36.78 36.86 36.94 37.02 37.10 37.18 37.26 37.34 37.42 37.50 37.58 37.66 37.74 37.82 37.90 37.98 38.06 38.14 38.22 38.30 38.38 38.46 38.54 38.62 38.70 38.78 38.86 38.94 39.02 39.10 39.18 39.26 39.34 39.42 39.50 39.58 39.66 39.74 39.82 39.90 39.98 40.06 40.14 40.22 40.30 40.38 40.46 40.54 40.62 40.70 40.78 40.86 40.94 41.02 41.10 41.18 41.26 41.34 41.42 41.50 41.58 41.66 41.74 41.82 41.90 41.98 42.06 42.14 42.22 42.30 42.38 42.46 42.54 42.62 42.70 42.78 42.86 42.94 43.02 43.10 43.18 43.26 43.34 43.42 43.50 43.58 43.66 43.74 43.82 43.90 43.98 44.06 44.14 44.22 44.30 44.38 44.46 44.54 44.62 44.70 44.78 44.86 44.94 45.02 45.10 45.18 45.26 45.34 45.42 45.50 45.58 45.66 45.74 45.82 45.90 45.98 46.06 46.14 46.22 46.30 46.38 46.46 46.54 46.62 46.70 46.78 46.86 46.94 47.02 47.10 47.18 47.26 47.34 47.42 47.50 47.58 47.66 47.74 47.82 47.90 47.98 48.06 48.14 48.22 48.30 48.38 48.46 48.54 48.62 48.70 48.78 48.86 48.94 49.02 49.10 49.18 49.26 49.34 49.42 49.50 49.58 49.66 49.74 49.82 49.90 49.98 50.06 50.14 50.22 50.30 50.38 50.46 50.54 50.62 50.70 50.78 50.86 50.94 51.02 51.10 51.18 51.26 51.34 51.42 51.50 51.58 51.66 51.74 51.82 51.90 51.98 52.06 52.14 52.22 52.30 52.38 52.46 52.54 52.62 52.70 52.78 52.86 52.94 53.02 53.10 53.18 53.26 53.34 53.42 53.50 53.58 53.66 53.74 53.82 53.90 53.98 54.06 54.14 54.22 54.30 54.38 54.46 54.54 54.62 54.70 54.78 54.86 54.94 55.02 55.10 55.18 55.26 55.34 55.42 55.50 55.58 55.66 55.74 55.82 55.90 55.98 56.06 56.14 56.22 56.30 56.38 56.46 56.54 56.62 56.70 56.78 56.86 56.94 57.02 57.10 57.18 57.26 57.34 57.42 57.50 57.58 57.66 57.74 57.82 57.90 57.98 58.06 58.14 58.22 58.30 58.38 58.46 58.54 58.62 58.70 58.78 58.86 58.94 59.02 59.10 59.18 59.26 59.34 59.42 59.50 59.58 59.66 59.74 59.82 59.90 59.98 60.06 60.14 60.22 60.30 60.38 60.46 60.54 60.62 60.70 60.78 60.86 60.94 61.02 61.10 61.18 61.26 61.34 61.42 61.50 61.58 61.66 61.74 61.82 61.90 61.98 62.06 62.14 62.22 62.30 62.38 62.46 62.54 62.62 62.70 62.78 62.86 62.94 63.02 63.10 63.18 63.26 63.34 63.42 63.50 63.58 63.66 63.74 63.82 63.90 63.98 64.06 64.14 64.22 64.30 64.38 64.46 64.54 64.62 64.70 64.78 64.86 64.94 65.02 65.10 65.18 65.26 65.34 65.42 65.50 65.58 65.66 65.74 65.82 65.90 65.98 66.06 66.14 66.22 66.30 66.38 66.46 66.54 66.62 66.70 66.78 66.86 66.94 67.02 67.10 67.18 67.26 67.34 67.42 67.50 67.58 67.66 67.74 67.82 67.90 67.98 68.06 68.14 68.22 68.30 68.38 68.46 68.54 68.62 68.70 68.78 68.86 68.94 69.02 69.10 69.18 69.26 69.34 69.42 69.50 69.58 69.66 69.74 69.82 69.90 69.98 70.06 70.14 70.22 70.30 70.38 70.46 70.54 70.62 70.70 70.78 70.86 70.94 71.02 71.10 71.18 71.26 71.34 71.42 71.50 71.58 71.66 71.74 71.82 71.90 71.98 72.06 72.14 72.22 72.30 72.38 72.46 72.54 72.62 72.70 72.78 72.86 72.94 73.02 73.10 73.18 73.26 73.34 73.42 73.50 73.58 73.66 73.74 73.82 73.90 73.98 74.06 74.14 74.22 74.30 74.38 74.46 74.54 74.62 74.70 74.78 74.86 74.94 75.02 75.10 75.18 75.26 75.34 75.42 75.50 75.58 75.66 75.74 75.82 75.90 75.98 76.06 76.14 76.22 76.30 76.38 76.46 76.54 76.62 76.70 76.78 76.86 76.94 77.02 77.10 77.18 77.26 77.34 77.42 77.50 77.58 77.66 77.74 77.82 77.90 77.98 78.06 78.14 78.22 78.30 78.38 78.46 78.54 78.62 78.70 78.78 78.86 78.94 79.02 79.10 79.18 79.26 79.34 79.42 79.50 79.58 79.66 79.74 79.82 79.90 79.98 80.06 80.14 80.22 80.30 80.38 80.46 80.54 80.62 80.70 80.78 80.86 80.94 81.02 81.10 81.18 81.26 81.34 81.42 81.50 81.58 81.66 81.74 81.82 81.90 81.98 82.06 82.14 82.22 82.30 82.38 82.46 82.54 82.62 82.70 82.78 82.86 82.94 83.02 83.10 83.18 83.26 83.34 83.42 83.50 83.58 83.66 83.74 83.82 83.90 83.98 84.06 84.14 84.22 84.30 84.38 84.46 84.54 84.62 84.70 84.78 84.86 84.94 85.02 85.10 85.18 85.26 85.34 85.42 85.50 85.58 85.66 85.74 85.82 85.90 85.98 86.06 86.14 86.22 86.30 86.38 86.46 86.54 86.62 86.70 86.78 86.86 86.94 87.02 87.10 87.18 87.26 87.34 87.42 87.50 87.58 87.66 87.74 87.82 87.90 87.98 88.06 88.14 88.22 88.30 88.38 88.46 88.54 88.62 88.70 88.78 88.86 88.94 89.02 89.10 89.18 89.26 89.34 89.42 89.50 89.58 89.66 89.74 89.82 89.90 89.98 90.06 90.14 90.22 90.30 90.38 90.46 90.54 90.62 90.70 90.78 90.86 90.94 91.02 91.10 91.18 91.26 91.34 91.42 91.50 91.58 91.66 91.74 91.82 91.90 91.98 92.06 92.14 92.22 92.30 92.38 92.46 92.54 92.62 92.70 92.78 92.86 92.94 93.02 93.10 93.18 93.26 93.34 93.42 93.50 93.58 93.66 93.74 93.82 93.90 93.98 94.06 94.14 94.22 94.30 94.38 94.46 94.54 94.62 94.70 94.78 94.86 94.94 95.02 95.10 95.18 95.26 95.34 95.42 95.50 95.58 95.66 95.74 95.82 95.90 95.98 96.06 96.14 96.22 96.30 96.38 96.46 96.54 96.62 96.70 96.78 96.86 96.94 97.02 97.10 97.18 97.26 97.34 97.42 97.50 97.58 97.66 97.74 97.82 97.90 97.98 98.06 98.14 98.22 98.30 98.38 98.46 98.54 98.62 98.70 98.78 98.86 98.94 99.02 99.10 99.18 99.26 99.34 99.42 99.50 99.58 99.66 99.74 99.82 99.90 99.98 100.06 100.14 100.22 100.30 100.38 100.46 100.54 100.62 100.70 100.78 100.86 100.94 101.02 101.10 101.18 101.26 101.34 101.42 101.50 101.58 101.66 101.74 101.82 101.90 101.98 102.06 102.14 102.22 102.30 102.38 102.46 102.54 102.62 102.70 102.78 102.86 102.94 103.02 103.10 103.18 103.26 103.34 103.42 103.50 103.58 103.66 103.74 103.82 103.90 103.98 104.06 104.14 104.22 104.30 104.38 104.46 104.54 104.62 104.70 104.78 104.86 104.94 105.02 105.10 105.18 105.26 105.34 105.42 105.50 105.58 105.66 105.74 105.82 105.90 105.98 106.06 106.14 106.22 106.30 106.38 106.46 106.54 106.62 106.70 106.78 106.86 106.94 107.02 107.10 107.18 107.26 107.34 107.42 107.50 107.58 107.66 107.74 107.82 107.90 107.98 108.06 108.14 108.22 108.30 108.38 108.46 108.54 108.62 108.70 108.78 108.86 108.94 109.02 109.10 109.18 109.26 109.34 109.42 109.50 109.58 109.66 109.74 109.82 109.90 109.98 110.06 110.14 110.22 110.30 110.38 110.46 110.54 110.62 110.70 110.78 110.86 110.94 111.02 111.10 111.18 111.26 111.34 111.42 111.50 111.58 111.66 111.74 111.82 111.90 111.98 112.06 112.14 112.22 112.30 112.38 112.46 112.54 112.62 112.70 112.78 112.86 112.94 113.02 113.10 113.18 113.26 113.34 113.42 113.50 113.58 113.66 113.74 113.82 113.90 113.98 114.06 114.14 114.22 114.30 114.38 114.46 114.54 114.62 114.70 114.78 114.86 114.94 115.02 115.10 115.18 115.26 115.34 115.42 115.50 115.58 115.66 115.74 115.82 115.90 115.98 116.06 116.14 116.22 116.30 116.38 116.46 116.54 116.62 116.70 116.78 116.86 116.94 117.02 117.10 117.18 117.26 117.34 117.42 117.50 117.58 117.66 117.74 117.82 117.90 117.98 118.06 118.14 118.22 118.30 118.38 118.46 118.54 118.62 118.70 118.78 118.86 118.94 119.02 119.10 119.18 119.26 119.34 119.42 119.50 119.58 119.66 119.74 119.82 119.90 119.98 120.06 120.14 120.22 120.30 120.38 120.46 120.54 120.62 120.70 120.78 120.86 120.94 121.02 121.10 121.18 121.26 121.34 121.42 121.50 121.58 121.66 121.74 121.82 121.90 121.98 122.06 122.14 122.22 122.30 122.38 122.46 122.54 122.62 122.70 122.78 122.86 122.94 123.02 123.10 123.18 123.26 123.34 123.42 123.50 123.58 123.66 123.74 123.82 123.90 123.98 124.06 124.14 124.22 124.30 124.38 124.46 124.54 124.62 124.70 124.78 124.86 124.94 125.02 125.10 125.18 125.26 125.34 125.42 125.50 125.58 125.66 125.74 125.82 125.90 125.98 126.06 126.14 126.22 126.30 126.38 126.46 126.54 126.62 126.70 126.78 126.86 126.94 127.02 127.10 127.18 127.26 127.34 127.42 127.50 127.58 127.66 127.74 127.82 127.90 127.98 128.06 128.14 128.22 128.30 128.38 128.46 128.54 128.62 128.70 128.78 128.86 128.94 129.02 129.10 129.18 129.26 129.34 129.42 129.50 129.58 129.66 129.74 129.82 129.90 129.98 130.06 130.14 130.22 130.30 130.38 130.46 130.54 130.62 130.70 130.78 130.86 130.94 131.02 131.10 131.18 131.26 131.34 131.42 131.50 131.58 131.66 131.74 131.82 131.90 131.98 132.06 132.14 132.22 132.30 132.38 132.46 132.54 132.62 132.70 132.78 132.86 132.94 133.02 133.10 133.18 133.26 133.34 133.42 133.50 133.58 133.66 133.74 133.82 133.90 133.98 134.06 134.14 134.22 134.30 134.38 134.46 134.54 134.62 134.70 134.78 134.86 134.94 135.02 135.10 135.18 135.26 135.34 135.42 135.50 135.58 135.66 135.74 135.82 135.90 135.98 136.06 136.14 136.22 136.30 136.38 136.46 136.54 136.62 136.70 136.78 136.86 136.94 137.02 137.10 137.18 137.26 137.34 137.42 137.50 137.58 137.66 137.74 137.82 137.90 137.98 138.06 138.14 138.22 138.30 138.38 138.46 138.54 138.62 138.70 138.78 138.86 138.94 139.02 139.10 139.18 139.26 139.34 139.42 139.50 139.58 139.66 139.74 139.82 139.90 139.98 140.06 140.14 140.22 140.30 140.38 140.46 140.54 140.62 140.70 140.78 140.86 140.94 141.02 141.10 141.18 141.26 141.34 141.42 141.50 141.58 141.66 141.74 141.82 141.90 141.98 142.06 142.14 142.22 142.30 142.38 142.46 142.54 142.62 142.70 142.78 142.86 142