

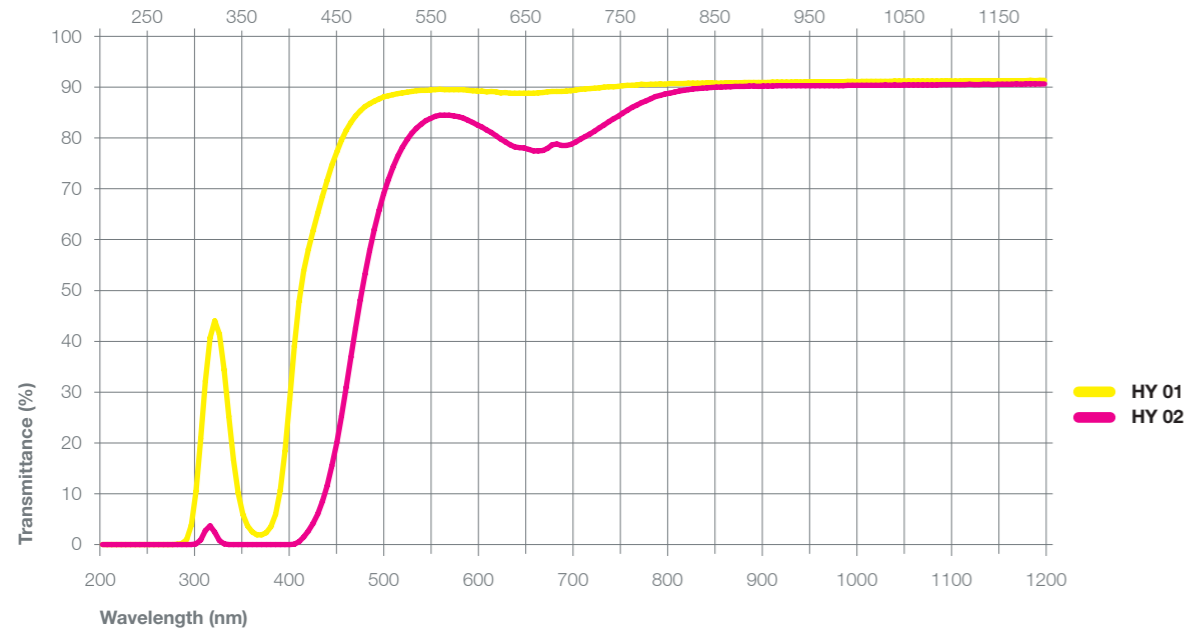
Glass Types

YELLOW	HEBO	Schott	Hoya
	HY 01	≈ GG 19	
	HY 02	≈ GG 10	

Yellow Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N _D	α × 10 ⁻⁷ (°C)	T _g (°C)	T _s (°C)	ρ (g/cm ³)
		x	y	Y	x	y	Y	D _A	D _w					
HY 01	1	0.459	0.423	89.0	0.331	0.366	89.0	4	3	1.536	107	549	619	2.78
HY 02	1	0.473	0.453	82.0	0.366	0.438	81.0	4	3	1.526	111	594	667	2.76

Type	Bubbles	Striae	Stress
HY 01	D	3C	3
HY 02	C-B	3C	3



	HY 01	HY 02
Thickness (mm)	1	1
Wavelength (nm)	%T	%T
200	0,001	0,001
210	4·10 ⁻⁵	3·10 ⁻⁵
220	0,001	5·10 ⁻⁴
230	0,001	0,001
240	2·10 ⁻⁴	5·10 ⁻⁴
250	0,001	6·10 ⁻⁵
260	2·10 ⁻⁴	4·10 ⁻⁴
270	0,007	9·10 ⁻⁵
280	0,202	5·10 ⁻⁴
290	3,800	0,003
300	20,822	0,935
310	40,687	3,665
320	41,410	0,804
330	25,256	0,010
340	10,165	7·10 ⁻⁵
350	3,657	4·10 ⁻⁴
360	1,935	0,001
370	2,344	2·10 ⁻⁴
380	5,986	2·10 ⁻⁴
390	18,331	6·10 ⁻⁴
400	39,020	0,105
410	53,850	1,508
420	61,752	4,186
430	68,513	8,473
440	74,612	15,464
450	79,571	25,317
460	83,091	36,828
470	85,343	48,114
480	86,731	57,824
490	87,679	65,716
500	88,309	71,823
510	88,731	76,382
520	89,048	79,686
530	89,280	81,950
540	89,395	83,404
550	89,523	84,271
560	89,529	84,509
570	89,508	84,368
580	89,530	83,934
590	89,300	83,068
600	89,247	82,161
610	89,138	81,069
620	88,889	79,774
630	88,785	78,646
640	88,811	78,132
650	88,814	77,761
660	88,908	77,443
670	89,113	77,979
680	89,167	78,816
690	89,219	78,504

	HY 01	HY 02
Thickness (mm)	1	1
Wavelength (nm)	%T	%T
700	89,443	79,233
710	89,652	80,278
720	89,788	81,358
730	89,972	82,591
740	90,105	83,776
750	90,270	84,922
760	90,386	86,004
770	90,547	86,944
780	90,592	87,739
790	90,637	88,396
800	90,719	88,814
810	90,730	89,214
820	90,754	89,517
830	90,784	89,731
840	90,823	89,862
850	90,817	89,980
900	90,953	90,242
950	91,078	90,321
1000	91,105	90,350
1050	91,179	90,421
1065	91,189	90,397
1100	91,224	90,484
1200	91,356	90,663
1300	91,387	90,762
1400	91,443	90,750
1500	91,470	90,911
1600	91,482	91,009
1700	91,395	91,016
1800	91,280	90,998
1900	91,148	90,977
2000	91,015	90,877
2100	90,779	90,694
2200	90,287	90,212
2300	90,054	90,012
2400	89,775	89,771
2500	89,285	89,252
2600	88,677	88,876
2700	87,121	87,016
2800	60,767	58,274
2900	54,491	53,385
3000	50,370	49,959

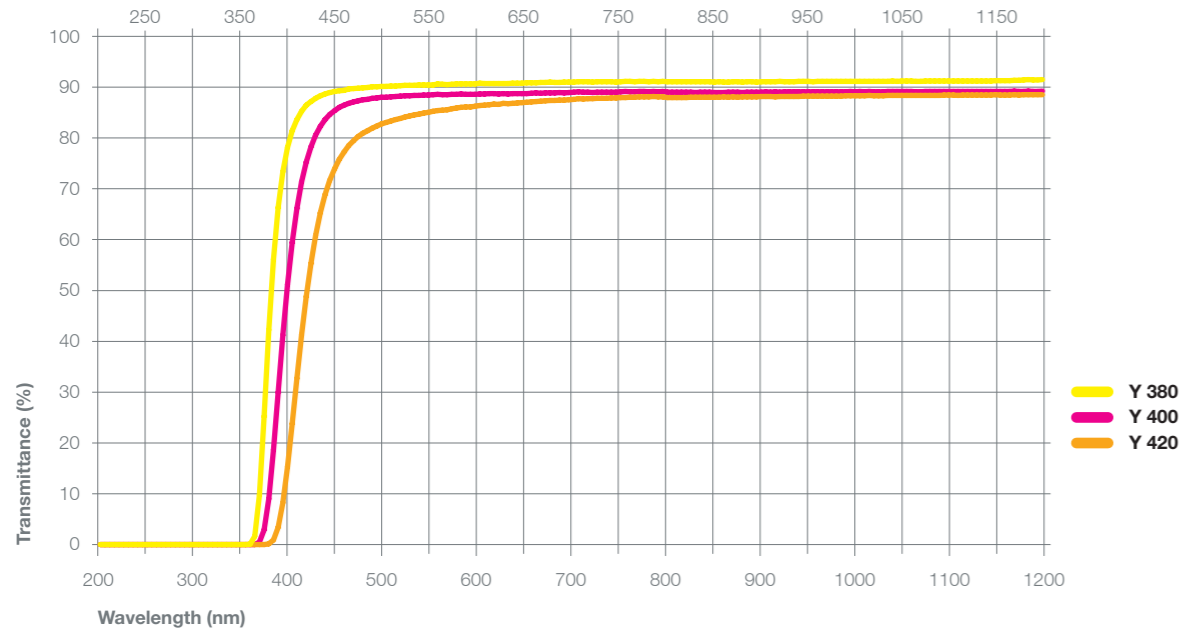
Glass Types

YELLOW	HEBO	Schott	Hoya
	Y 380	≈ GG 375	≈ L-38
	Y 400	≈ GG 400	≈ L-40
	Y 420	≈ GG 420	≈ L-42

Yellow Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N _D	α × 10 ⁻⁷ (°C)	T _g (°C)	T _s (°C)	ρ (g/cm ³)
		x	y	Y	x	y	Y	D _A	D _W					
Y 380	2							1	2	1.547	98	487	546	2.85
Y 400	2	0.450	0.410	96.3	0.316	0.336	94.2	1	1	1.632	95	497	555	3.65
Y 420	2	0.455	0.414	93.1	0.323	0.346	90.8	2	3	1.632	95	497	555	3.69

Type	Thickness (mm)	λ _{ti} (nm)	λ _p (nm)	Tλ _p (%)	T _k (nm/°C)	Bubbles	Striae	Stress
Y 380	2	380± 10	500	≥86.0	≥0.8	B	3C	3
Y 400	2	400± 10	560	≥86.0	≥0.6	C-B	3C	3
Y 420	2	420± 10	560	≥86.0	≥0.6	C-B	3C	3



	Y 380	Y 400	Y 420
Thickness (mm)	2	2	2
Wavelength (nm)	%T	%T	%T
200	8·10 ⁻⁴	0,001	8·10 ⁻⁴
210	8·10 ⁻⁴	4·10 ⁻⁴	6·10 ⁻⁴
220	0,002	0,001	8·10 ⁻⁴
230	0,002	0,002	9·10 ⁻⁴
240	0,001	0,001	8·10 ⁻⁴
250	0,001	0,001	0,001
260	8·10 ⁻⁴	4·10 ⁻⁵	4·10 ⁻⁴
270	0,001	2·10 ⁻⁴	0,001
280	5·10 ⁻⁴	1·10 ⁻⁴	4·10 ⁻⁴
290	2·10 ⁻⁴	5·10 ⁻⁴	5·10 ⁻⁴
300	5·10 ⁻⁴	9·10 ⁻⁴	5·10 ⁻⁴
310	9·10 ⁻⁴	7·10 ⁻⁵	0,001
320	7·10 ⁻⁴	6·10 ⁻⁵	3·10 ⁻⁴
330	2·10 ⁻⁴	6·10 ⁻⁵	4·10 ⁻⁴
340	4·10 ⁻⁴	5·10 ⁻⁴	2·10 ⁻⁴
350	8·10 ⁻⁴	0,001	9·10 ⁻⁴
360	1,647	0,025	8·10 ⁻⁴
370	25,262	2,896	0,008
380	56,164	18,648	0,932
390	73,324	41,157	8,200
400	81,414	59,492	23,786
410	85,293	71,334	41,226
420	87,136	78,266	55,315
430	88,310	82,317	65,241
440	88,945	84,620	71,678
450	89,332	86,006	75,806
460	89,629	86,844	78,505
470	89,799	87,348	80,286
480	89,929	87,630	81,462
490	90,057	87,862	82,367
500	90,175	88,040	83,075
510	90,230	88,168	83,635
520	90,334	88,297	84,121
530	90,395	88,357	84,518
540	90,460	88,419	84,880
550	90,463	88,549	85,247
560	90,554	88,538	85,488
570	90,608	88,556	85,739
580	90,629	88,638	86,017
590	90,631	88,561	86,124
600	90,757	88,675	86,387
610	90,709	88,717	86,562
620	90,719	88,628	86,603
630	90,736	88,668	86,737
640	90,801	88,708	86,896
650	90,846	88,746	87,020
660	90,871	88,839	87,202
670	90,955	88,886	87,302
680	90,933	88,864	87,387
690	90,989	88,897	87,490

	Y 380	Y 400	Y 420
Thickness (mm)	2	2	2
Wavelength (nm)	%T	%T	%T
700	91,018	88,979	87,628
710	91,041	89,000	87,698
720	91,015	88,976	87,732
730	91,080	88,984	87,821
740	91,059	89,020	87,862
750	91,101	89,059	87,923
760	91,107	89,099	88,004
770	91,147	89,133	88,067
780	91,042	89,085	88,074
790	91,079	89,101	88,091
800	91,076	89,034	87,919
810	91,066	89,019	87,947
820	91,068	89,018	87,966
830	91,037	88,974	87,995
840	91,036	88,985	88,030
850	91,027	88,978	88,026
900	91,088	89,031	88,152
950	91,147	89,094	88,253
1000	91,137	89,115	88,297
1050	91,208	89,123	88,359
1065	91,163	89,101	88,375
1100	91,198	89,147	88,413
1200	91,482	89,195	88,522
1300	91,512	89,228	88,603
1400	91,392	89,179	88,614
1500	91,514	89,200	88,662
1600	91,456	89,186	88,669
1700	91,238	88,991	88,475
1800	90,874	88,656	88,150
1900	90,513	88,290	87,852
2000	89,970	87,815	87,370
2100	89,127	87,310	86,790
2200	87,799	86,087	85,426
2300	87,316	85,247	84,548
2400	86,113	84,624	83,816
2500	84,346	83,182	81,906
2600	81,768	81,309	78,874
2700	74,549	76,248	71,279
2800	36,690	44,229	35,297
2900	34,079	37,809	28,686
3000	31,213	34,116	25,421

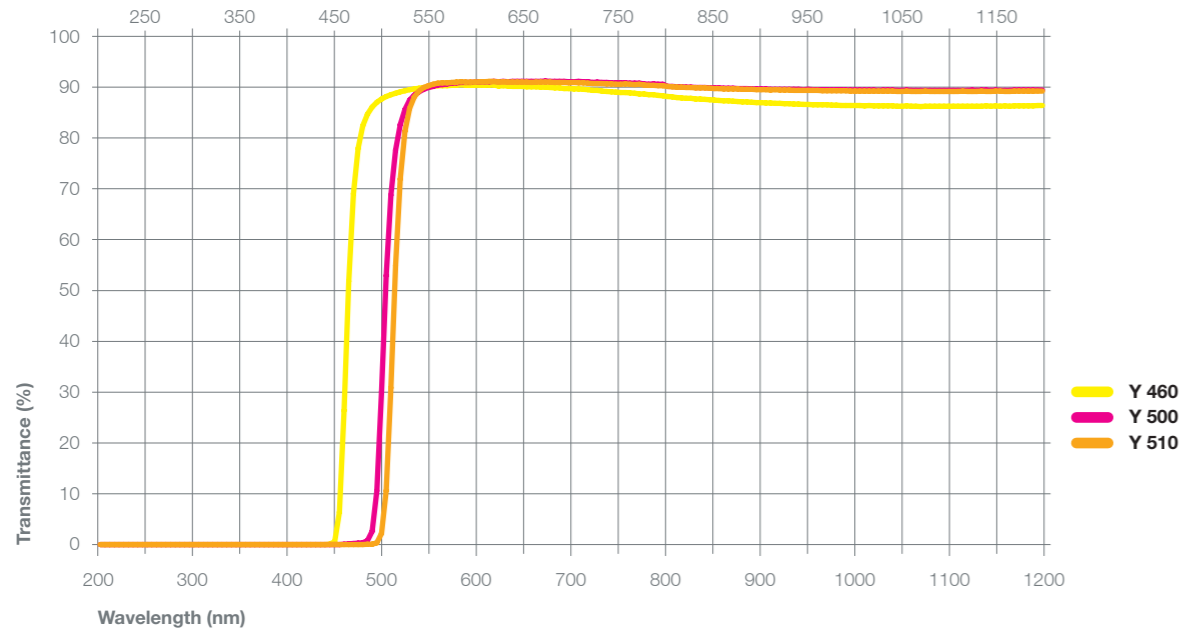
Glass Types

YELLOW	HEBO	Schott	Hoya
	Y 460	≈ GG 455	≈ Y-46
	Y 500	≈ GG 495	≈ Y-50
	Y 510	≈ OG 515	

Yellow Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N _D	α × 10 ⁻⁷ (°C)	T _g (°C)	T _s (°C)	ρ (g/cm ³)
		x	y	Y	x	y	Y	D _A	D _w					
Y 460	2	0.492	0.462	96.0	0.401	0.490	92.0	1	3	1.523	103	527	605	2.64
Y 500	2	0.502	0.468	94.5	0.422	0.514	89.6	1	3	1.523	103	527	605	2.64
Y 510	2	0.519	0.471	91.5	0.456	0.526	84.0	1	2	1.523	103	527	605	2.64

Type	Thickness (mm)	λ _{ti} (nm)	λ _p (nm)	Tλ _p (%)	T _k (nm/°C)	Bubbles	Striae	Stress
Y 460	2	460± 10	560	≥89.5	≥0.8	C-B	3C	3
Y 500	2	500± 10	580	≥89.5	≥1.2	C-B	3C	3
Y 510	2	510± 10	600	≥89.5	≥1.2	C-B	3C	3



	Y 460	Y 500	Y 510
Thickness (mm)	2	2	2
Wavelength (nm)	%T	%T	%T
200	0,009	0,004	0,004
210	0,007	0,004	0,004
220	0,009	0,005	0,005
230	0,010	0,005	0,006
240	0,010	0,005	0,005
250	0,011	0,004	0,005
260	0,011	0,004	0,005
270	0,012	0,004	0,005
280	0,012	0,004	0,006
290	0,012	0,005	0,005
300	0,014	0,006	0,007
310	0,014	0,006	0,005
320	0,014	0,006	0,007
330	0,016	0,005	0,007
340	0,016	0,005	0,006
350	0,014	0,005	0,007
360	0,014	0,005	0,007
370	0,014	0,006	0,007
380	0,013	0,004	0,006
390	0,013	0,005	0,006
400	0,013	0,004	0,006
410	0,013	0,004	0,006
420	0,014	0,005	0,006
430	0,014	0,006	0,006
440	0,037	0,006	0,006
450	6,413	0,023	0,007
460	51,834	0,119	0,017
470	77,961	0,259	0,027
480	84,698	0,761	0,038
490	87,025	10,585	0,357
500	88,144	52,921	10,661
510	88,835	77,591	54,845
520	89,314	85,635	81,261
530	89,686	88,459	88,099
540	89,908	89,555	89,921
550	90,175	90,124	90,606
560	90,258	90,529	90,825
570	90,363	90,763	90,928
580	90,471	90,899	91,061
590	90,362	90,952	90,982
600	90,441	91,105	91,087
610	90,443	91,076	91,112
620	90,234	91,085	90,982
630	90,208	91,096	90,967
640	90,164	91,116	90,981
650	90,106	91,123	90,978
660	90,087	91,130	91,018
670	89,988	91,180	90,996
680	89,843	91,121	90,922
690	89,747	91,117	90,917

	Y 460	Y 500	Y 510
Thickness (mm)	2	2	2
Wavelength (nm)	%T	%T	%T
700	89,656	91,083	90,907
710	89,587	91,047	90,878
720	89,358	90,962	90,721
730	89,261	90,941	90,724
740	89,092	90,868	90,648
750	88,966	90,825	90,596
760	88,872	90,809	90,556
770	88,689	90,770	90,539
780	88,549	90,597	90,394
790	88,407	90,600	90,322
800	88,132	90,149	90,136
810	87,956	90,079	90,037
820	87,835	90,037	89,968
830	87,682	89,950	89,879
840	87,571	89,927	89,838
850	87,433	89,838	89,715
900	86,969	89,679	89,532
950	86,629	89,550	89,397
1000	86,397	89,438	89,254
1050	86,273	89,372	89,178
1065	86,251	89,381	89,177
1100	86,237	89,377	89,172
1200	86,383	89,471	89,251
1300	86,726	89,635	89,408
1400	87,044	89,632	89,447
1500	87,860	90,106	89,914
1600	88,518	90,352	90,204
1700	88,783	90,358	90,232
1800	88,663	90,113	90,031
1900	88,343	89,775	89,696
2000	87,831	89,254	89,182
2100	87,201	88,583	88,545
2200	86,031	87,259	87,261
2300	85,742	86,871	86,869
2400	85,242	86,234	86,319
2500	84,027	84,910	85,059
2600	83,165	83,901	84,174
2700	78,842	79,295	79,721
2800	35,098	34,869	35,733
2900	33,240	33,253	34,092
3000	31,061	31,050	32,009