

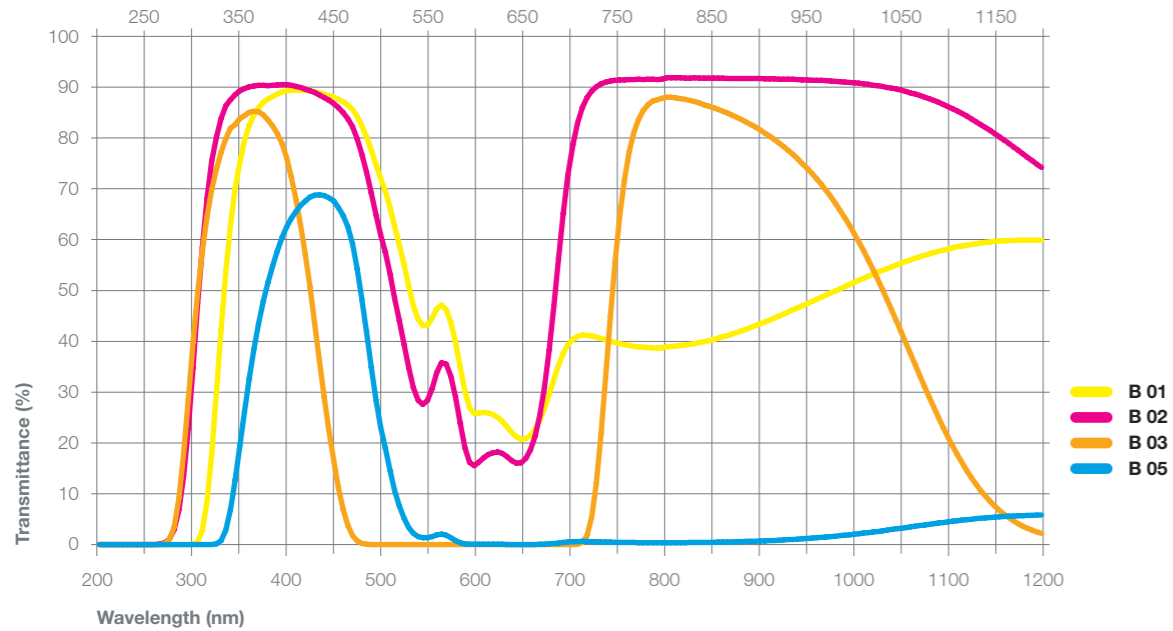
# Glass Types

<b>BLUE</b>	<b>HEBO</b>	Schott	Hoya
	<b>B 01</b>		
	<b>B 02</b>		≈ B-410
	<b>B 03</b>		
	<b>B 05</b>		≈ B-440

## Blue Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
<b>B 01</b>	2	0.354	0.379	44.8	0.235	0.258	49.0	1	3	1.520	93	477	550	2.51
<b>B 02</b>	2	0.322	0.334	28.8	0.210	0.206	32.6	1	3	1.520	93	477	550	2.51
<b>B 03</b>	2	0.159	0.042	0.8	0.156	0.028	1.8	1	3	1.520	91	525	577	2.51
<b>B 05</b>	2	0.143	0.106	2.8	0.146	0.146	5.2	1	2	1.520	93	477	550	2.52

Type	Bubbles	Striae	Stress
<b>B 01</b>	C-B	3C	3
<b>B 02</b>	C-B	3C	3
<b>B 03</b>	C-B	4	3
<b>B 05</b>	C-B	4	3



	B 01	B 02	B 03	B 05
Thickness (mm)	2	2	2	2
Wavelength (nm)	%T	%T	%T	%T
200	0,012	3·10 <sup>-4</sup>	8·10 <sup>-4</sup>	5·10 <sup>-4</sup>
210	0,012	6·10 <sup>-4</sup>	3·10 <sup>-4</sup>	3·10 <sup>-4</sup>
220	0,010	3·10 <sup>-4</sup>	5·10 <sup>-4</sup>	6·10 <sup>-4</sup>
230	0,009	0,001	7·10 <sup>-4</sup>	1·10 <sup>-4</sup>
240	0,008	0,001	4·10 <sup>-4</sup>	1·10 <sup>-4</sup>
250	0,006	0,009	4·10 <sup>-4</sup>	7·10 <sup>-4</sup>
260	0,005	0,112	0,034	4·10 <sup>-4</sup>
270	0,004	1,127	1,084	1·10 <sup>-5</sup>
280	0,004	6,787	9,111	7·10 <sup>-4</sup>
290	0,004	22,953	28,648	6·10 <sup>-4</sup>
300	0,559	47,459	49,675	6·10 <sup>-4</sup>
310	8,487	68,164	64,545	7·10 <sup>-4</sup>
320	29,854	80,190	73,874	0,120
330	53,562	86,339	79,905	2,828
340	70,100	88,503	82,616	12,673
350	79,527	89,734	84,375	26,139
360	84,538	90,225	85,279	38,444
370	87,024	90,337	84,561	47,820
380	88,176	90,332	82,371	54,779
390	89,051	90,506	78,964	60,356
400	89,430	90,345	72,259	64,237
410	89,430	89,911	62,740	66,777
420	89,284	89,322	50,587	68,356
430	88,874	88,481	36,171	68,804
440	88,353	87,423	22,617	68,265
450	87,629	85,951	11,029	66,264
460	86,487	83,800	3,779	62,540
470	84,162	79,774	0,694	54,204
480	80,189	73,231	0,069	41,753
490	74,794	64,937	0,004	28,458
500	69,560	57,519	6·10 <sup>-4</sup>	18,984
510	62,580	48,402	5·10 <sup>-4</sup>	10,576
520	55,038	39,417	4·10 <sup>-4</sup>	5,182
530	47,018	30,848	4·10 <sup>-4</sup>	2,164
540	43,099	27,598	3·10 <sup>-4</sup>	1,320
550	44,547	30,713	4·10 <sup>-4</sup>	1,556
560	47,124	35,755	5·10 <sup>-4</sup>	2,082
570	43,680	33,131	4·10 <sup>-4</sup>	1,348
580	34,942	23,864	3·10 <sup>-4</sup>	0,387
590	26,914	16,154	2·10 <sup>-4</sup>	0,088
600	25,861	16,221	6·10 <sup>-4</sup>	0,068
610	25,863	17,693	1·10 <sup>-4</sup>	0,067
620	25,038	18,183	3·10 <sup>-4</sup>	0,053
630	23,185	17,306	<1·10 <sup>-5</sup>	0,032
640	21,157	16,020	5·10 <sup>-4</sup>	0,019
650	20,815	16,929	9·10 <sup>-4</sup>	0,017
660	22,692	21,367	2·10 <sup>-4</sup>	0,027
670	26,812	31,003	0,001	0,064
680	32,509	46,912	1·10 <sup>-4</sup>	0,179
690	37,615	65,151	5·10 <sup>-4</sup>	0,390

	B 01	B 02	B 03	B 05
Thickness (mm)	2	2	2	2
Wavelength (nm)	%T	%T	%T	%T
700	40,410	78,666	0,005	0,561
710	41,214	85,946	0,410	0,612
720	41,053	89,234	5,411	0,584
730	40,568	90,671	21,770	0,531
740	40,016	91,210	44,908	0,481
750	39,519	91,398	64,725	0,441
760	39,179	91,483	77,219	0,412
770	38,914	91,536	83,635	0,389
780	38,784	91,548	86,532	0,377
790	38,707	91,493	87,554	0,369
800	38,912	91,822	88,036	0,387
810	39,034	91,817	87,897	0,372
820	39,253	91,811	87,588	0,377
830	39,572	91,839	87,157	0,410
840	39,914	91,759	86,544	0,436
850	40,356	91,761	85,963	0,458
900	43,429	91,686	81,560	0,705
950	47,421	91,442	74,003	1,191
1000	51,572	90,836	61,182	2,043
1050	55,351	89,405	41,887	3,199
1065	56,321	88,657	35,406	3,594
1100	58,142	86,189	21,193	4,461
1200	59,895	74,213	2,197	5,809
1300	61,394	67,089	0,438	7,237
1400	66,283	69,095	0,414	11,760
1500	66,602	64,670	0,266	12,751
1600	70,239	67,512	0,419	17,909
1700	72,019	67,879	0,523	21,323
1800	73,415	68,482	0,506	24,773
1900	77,675	74,327	1,233	35,190
2000	81,108	79,029	3,447	46,397
2100	83,059	81,926	6,725	54,604
2200	83,627	82,983	11,000	60,772
2300	84,340	83,995	17,593	66,091
2400	84,506	84,323	25,118	69,503
2500	83,914	83,561	30,676	70,702
2600	83,183	82,526	33,800	70,841
2700	80,659	79,860	30,521	69,263
2800	56,353	55,113	4,256	48,288
2900	52,991	50,265	5,407	45,327
3000	49,620	46,481	8,001	42,663

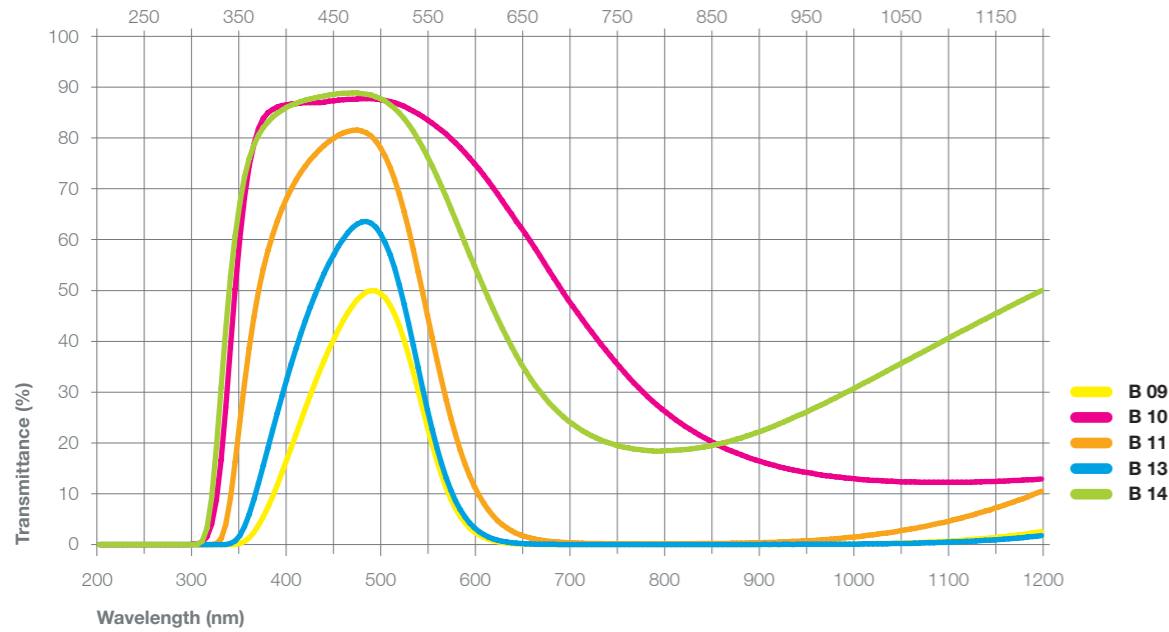
# Glass Types

<b>BLUE</b>	<b>HEBO</b>	Schott	Hoya
	<b>B 09</b>		
	<b>B 10</b>		
	<b>B 11</b>	≈ B-460	
	<b>B 13</b>		
	<b>B 14</b>	≈ BG 14	

## Blue Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
<b>B 09</b>	2	0.187	0.391	14.8	0.156	0.256	20.3	1	2	1.524	89	460	532	2.56
<b>B 10</b>	1	0.409	0.417	74.4	0.283	0.324	76.6	1	2	1.529	84	540	606	2.63
<b>B 11</b>	1	0.269	0.406	36.2	0.194	0.271	44.2	1	2	1.517	91	506	572	2.59
<b>B 13</b>	2	0.189	0.377	17.3	0.157	0.242	23.7	1	2	1.522	90	490	555	2.61
<b>B 14</b>	1	0.328	0.412	52.0	0.226	0.290	59.1	1	2	1.514	93	477	550	2.57

Type	Bubbles	Striae	Stress
<b>B 09</b>	C-B	4	3
<b>B 10</b>	D	3C	3
<b>B 11</b>	C-B	3C	3
<b>B 13</b>	C-B	3C	3
<b>B 14</b>	C-B	3C	3



	B 09	B 10	B 11	B 13	B 14
Thickness (mm)	2	1	2	2	1
Wavelength (nm)	%T	%T	%T	%T	%T
200	2 · 10 <sup>-4</sup>	3 · 10 <sup>-4</sup>	0,001	1 · 10 <sup>-4</sup>	0,007
210	3 · 10 <sup>-4</sup>	0,002	0,001	6 · 10 <sup>-4</sup>	0,008
220	3 · 10 <sup>-4</sup>	0,002	6 · 10 <sup>-4</sup>	2 · 10 <sup>-4</sup>	0,004
230	6 · 10 <sup>-4</sup>	0,002	6 · 10 <sup>-4</sup>	8 · 10 <sup>-4</sup>	0,003
240	4 · 10 <sup>-4</sup>	0,002	8 · 10 <sup>-4</sup>	3 · 10 <sup>-4</sup>	0,002
250	<1 · 10 <sup>-5</sup>	4 · 10 <sup>-4</sup>	4 · 10 <sup>-4</sup>	6 · 10 <sup>-4</sup>	0,001
260	<1 · 10 <sup>-5</sup>	4 · 10 <sup>-4</sup>	5 · 10 <sup>-4</sup>	4 · 10 <sup>-4</sup>	0,002
270	3 · 10 <sup>-4</sup>	8 · 10 <sup>-4</sup>	4 · 10 <sup>-4</sup>	7 · 10 <sup>-4</sup>	0,001
280	6 · 10 <sup>-4</sup>	0,001	3 · 10 <sup>-4</sup>	1 · 10 <sup>-4</sup>	4 · 10 <sup>-4</sup>
290	1 · 10 <sup>-5</sup>	0,010	1 · 10 <sup>-4</sup>	7 · 10 <sup>-4</sup>	9 · 10 <sup>-4</sup>
300	4 · 10 <sup>-4</sup>	0,154	1 · 10 <sup>-4</sup>	<1 · 10 <sup>-5</sup>	0,071
310	4 · 10 <sup>-4</sup>	1,557	0,001	4 · 10 <sup>-4</sup>	3,280
320	<1 · 10 <sup>-5</sup>	8,873	0,189	6 · 10 <sup>-4</sup>	19,188
330	0,001	26,951	3,987	0,027	42,438
340	0,065	50,244	16,200	0,693	60,705
350	0,642	68,269	31,690	3,538	72,344
360	2,419	78,765	44,754	8,890	78,576
370	5,490	83,822	54,184	15,545	82,070
380	9,449	85,623	60,905	22,452	84,116
390	14,146	86,360	66,058	29,227	85,441
400	19,164	86,699	70,051	35,570	86,449
410	24,268	86,871	73,199	41,377	87,159
420	29,271	86,971	75,681	46,626	87,691
430	34,008	86,975	77,661	51,265	88,090
440	38,355	87,210	79,282	55,299	88,432
450	42,315	87,486	80,578	58,723	88,697
460	45,621	87,604	81,294	61,352	88,824
470	48,173	87,672	81,560	63,079	88,854
480	49,741	87,770	81,007	63,549	88,621
490	49,900	87,691	79,346	62,423	88,121
500	48,523	87,381	76,357	59,296	87,213
510	45,306	86,954	71,800	54,340	85,806
520	40,253	86,248	65,579	47,358	83,837
530	33,785	85,226	57,968	39,141	81,282
540	26,640	84,186	49,444	30,628	78,121
550	19,719	82,931	40,724	22,671	74,496
560	13,694	81,510	32,371	15,925	70,481
570	8,952	79,894	24,894	10,678	66,129
580	5,552	78,099	18,597	6,863	61,680
590	3,288	76,074	13,527	4,253	57,082
600	1,882	73,886	9,678	2,568	52,761
610	1,045	71,495	6,795	1,509	48,508
620	0,566	68,925	4,704	0,869	44,452
630	0,303	66,262	3,235	0,495	40,649
640	0,162	63,600	2,226	0,283	37,174
650	0,088	61,017	1,545	0,163	34,102
660	0,050	58,272	1,085	0,096	31,359
670	0,027	55,355	0,777	0,058	28,953
680	0,017	52,441	0,570	0,036	26,896
690	0,011	49,582	0,430	0,023	25,124

	B 09	B 10	B 11	B 13	B 14
Thickness (mm)	2	1	2	2	1
Wavelength (nm)	%T	%T	%T	%T	%T
700	0,007	46,869	0,334	0,016	23,658
710	0,005	44,283	0,269	0,012	22,415
720	0,004	41,795	0,222	0,008	21,390
730	0,003	39,414	0,190	0,006	20,565
740	0,001	37,115	0,166	0,004	19,891
750	0,001	34,911	0,150	0,003	19,365
760	0,001	32,829	0,140	0,004	18,965
770	0,001	30,877	0,133	0,004	18,675
780	0,001	29,071	0,130	0,003	18,510
790	0,001	27,404	0,129	0,002	18,386
800	0,013	25,926	0,151	0,013	18,488
810	0,012	24,542	0,140	0,011	18,534
820	0,002	23,277	0,153	0,007	18,681
830	0,015	22,110	0,167	0,020	18,917
840	0,020	21,031	0,197	0,021	19,200
850	0,031	20,051	0,200	0,027	19,562
900	0,022	16,363	0,378	0,030	22,279
950	0,041	14,158	0,752	0,039	26,182
1000	0,122	12,940	1,505	0,101	30,758
1050	0,292	12,362	2,732	0,213	35,635
1065	0,379	12,298	3,214	0,279	37,113
1100	0,668	12,228	4,560	0,461	40,511
1200	2,580	12,912	10,458	1,758	49,995
1300	6,747	14,845	19,156	4,797	58,484
1400	13,337	18,590	29,449	10,047	65,575
1500	21,758	24,482	39,956	17,251	71,260
1600	30,890	30,992	49,534	25,577	75,725
1700	39,789	35,347	57,666	34,137	79,142
1800	47,826	36,577	64,198	42,211	81,696
1900	54,796	36,340	69,322	49,397	83,653
2000	60,560	36,499	73,164	55,442	85,080
2100	65,349	37,745	76,163	60,559	86,184
2200	68,065	39,738	77,579	64,102	86,669
2300	71,113	42,239	79,215	67,274	87,223
2400	73,735	44,156	80,240	69,777	87,605
2500	74,521	45,266	80,349	71,294	87,620
2600	75,372	46,020	80,340	72,366	87,554
2700	72,639	45,327	78,159	71,537	86,648
2800	28,995	25,360	48,361	47,775	72,154
2900	26,136	26,154	44,717	42,539	69,730
3000	27,887	27,350	43,901	38,891	67,742

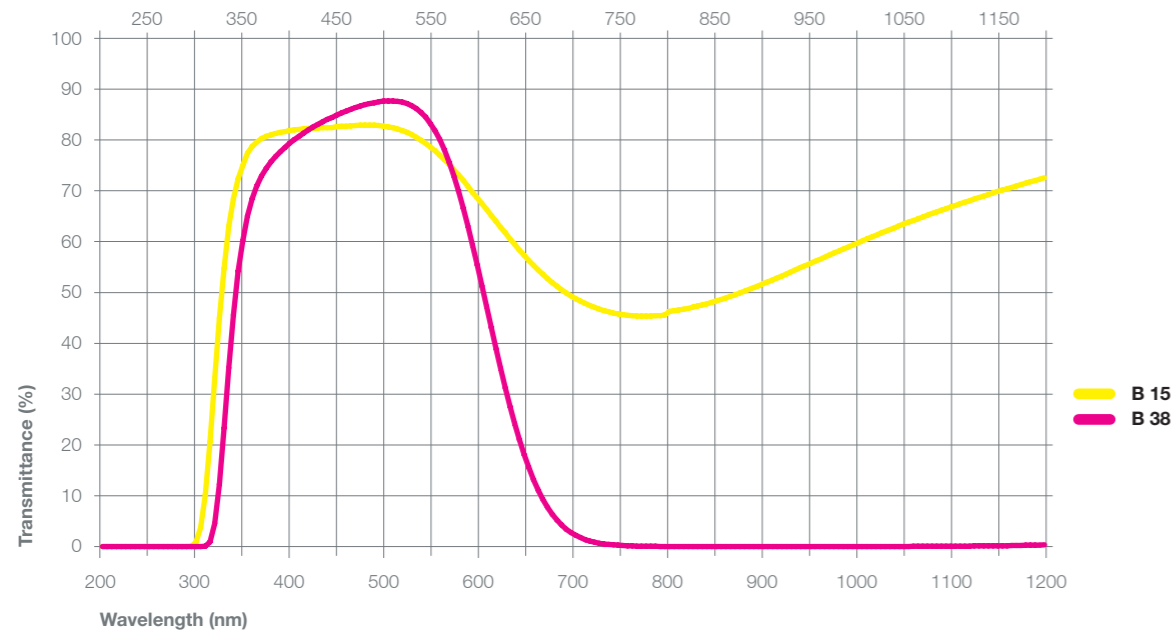
# Glass Types

BLUE	HEBO	Schott	Hoya
	B 15		
	B 38	≈ BG 38	

## Blue Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
B 15	1	0.400	0.413	75.20	0.274	0.315	78.3	1	3	1.518	90	490	555	2.50
B 38	2	0.345	0.439	62.1	0.244	0.326	68.8	1	3	1.535	100	421	463	2.86

Type	Bubbles	Striae	Stress
B 15	D	3C	3
B 38	C	3C	4



	B 15	B 38
Thickness (mm)	1	2
Wavelength (nm)	%T	%T
200	0,019	5·10 <sup>-4</sup>
210	0,020	2·10 <sup>-4</sup>
220	0,014	5·10 <sup>-4</sup>
230	0,012	<1·10 <sup>-5</sup>
240	0,010	7·10 <sup>-4</sup>
250	0,008	<1·10 <sup>-5</sup>
260	0,006	8·10 <sup>-4</sup>
270	0,006	4·10 <sup>-4</sup>
280	0,004	3·10 <sup>-4</sup>
290	0,106	7·10 <sup>-4</sup>
300	3,736	0,002
310	20,613	0,955
320	44,954	12,256
330	62,973	35,120
340	72,384	54,234
350	77,403	65,033
360	79,588	71,004
370	80,710	74,410
380	81,281	76,751
390	81,671	78,538
400	82,020	80,067
410	82,227	81,391
420	82,317	82,564
430	82,399	83,585
440	82,426	84,425
450	82,684	85,357
460	82,797	86,038
470	82,916	86,684
480	82,945	87,188
490	82,853	87,515
500	82,589	87,686
510	82,171	87,621
520	81,496	87,139
530	80,507	86,158
540	79,307	84,449
550	77,867	81,806
560	76,116	78,012
570	74,147	72,925
580	72,051	66,645
590	69,682	59,255
600	67,478	51,335
610	65,163	43,086
620	62,790	34,982
630	60,543	27,570
640	58,306	21,022
650	56,279	15,562
660	54,456	11,137
670	52,717	7,731
680	51,212	5,211
690	49,908	3,420

	B 15	B 38
Thickness (mm)	1	2
Wavelength (nm)	%T	%T
700	48,765	2,191
710	47,804	1,379
720	47,049	0,854
730	46,435	0,527
740	45,942	0,323
750	45,637	0,198
760	45,434	0,123
770	45,328	0,078
780	45,349	0,051
790	45,452	0,032
800	46,280	0,031
810	46,536	0,019
820	46,881	0,016
830	47,324	0,013
840	47,779	0,009
850	48,310	0,007
900	51,707	0,018
950	55,705	0,011
1000	59,708	0,022
1050	63,467	0,024
1065	64,520	0,043
1100	66,818	0,057
1200	72,558	0,346
1300	77,027	1,452
1400	80,304	4,787
1500	82,711	11,590
1600	84,439	21,718
1700	85,622	32,668
1800	86,415	42,032
1900	86,919	49,080
2000	87,282	53,492
2100	87,555	55,840
2200	87,246	53,221
2300	87,322	51,275
2400	87,286	50,996
2500	86,910	46,501
2600	86,562	36,350
2700	85,039	28,289
2800	65,127	1,078
2900	62,415	0,012
3000	61,215	0,013

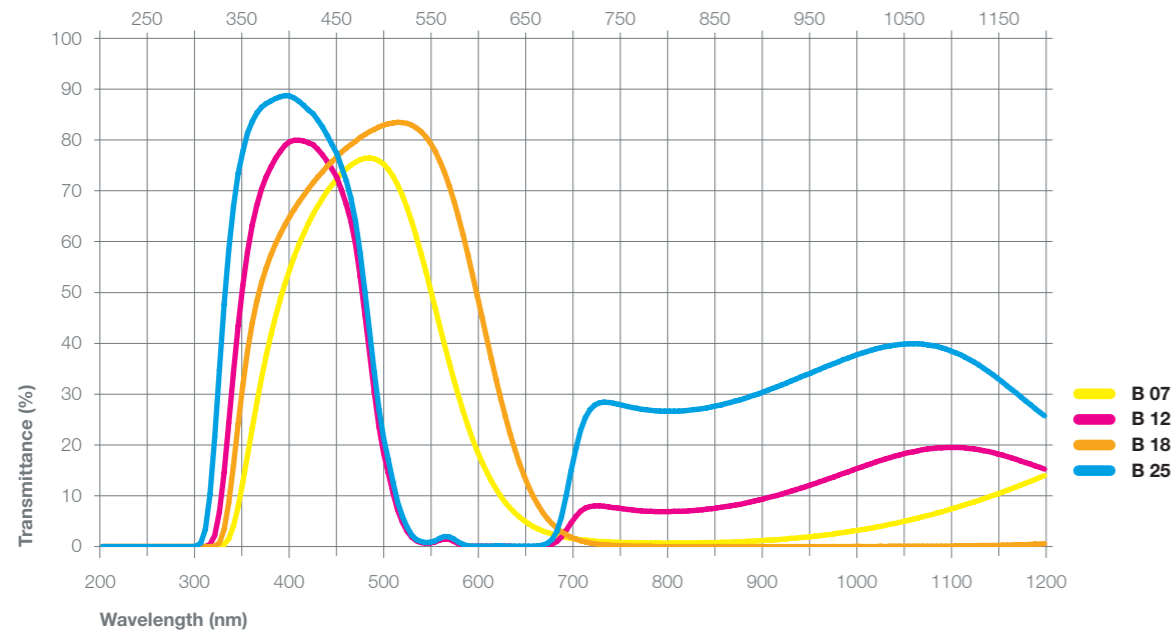
# Glass Types

<b>BLUE</b>	<b>HEBO</b>	Schott	Hoya
	<b>B 07</b>	≈ BG7	≈ B-480
	<b>B 12</b>	≈ BG12	
	<b>B 18</b>	≈ BG18	
	<b>B 25</b>	≈ BG25	≈ B-380

## Blue Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
<b>B 07</b>	1	0.306	0.440	10.0	0.207	0.229	51.2	1	2	1.517	93	477	550	2.56
<b>B 12</b>	1	0.148	0.084	1.4	0.148	0.053	4.75	4	3	1.513	93	477	550	2.56
<b>B 18</b>	1	0.375	0.452	57.2	0.266	0.356	61.8	6	5	1.536	74	549	624	2.82
<b>B 25</b>	1	0.158	0.093	2.1	0.151	0.070	4.5	1	2	1.517	93	477	550	2.56

Type	Bubbles	Striae	Stress
<b>B 07</b>	C-B	3C	3
<b>B 12</b>	C-B	3C	3
<b>B 18</b>	D-C	3C	4
<b>B 25</b>	C-B	3C	3



	<b>B 07</b>	<b>B 12</b>	<b>B 18</b>	<b>B 25</b>
Thickness (mm)	1	1	1	1
Wavelength (nm)	%T	%T	%T	%T
200	6·10 <sup>-4</sup>	1·10 <sup>-4</sup>	4·10 <sup>-4</sup>	4·10 <sup>-5</sup>
210	0,001	2·10 <sup>-5</sup>	4·10 <sup>-4</sup>	3·10 <sup>-4</sup>
220	2·10 <sup>-4</sup>	5·10 <sup>-4</sup>	2·10 <sup>-4</sup>	2·10 <sup>-4</sup>
230	3·10 <sup>-4</sup>	4·10 <sup>-4</sup>	4·10 <sup>-4</sup>	3·10 <sup>-4</sup>
240	4·10 <sup>-4</sup>	1·10 <sup>-4</sup>	3·10 <sup>-4</sup>	4·10 <sup>-4</sup>
250	3·10 <sup>-4</sup>	<1·10 <sup>-5</sup>	<1·10 <sup>-5</sup>	4·10 <sup>-4</sup>
260	1·10 <sup>-5</sup>	7·10 <sup>-4</sup>	7·10 <sup>-4</sup>	5·10 <sup>-4</sup>
270	1·10 <sup>-5</sup>	<1·10 <sup>-5</sup>	1·10 <sup>-4</sup>	4·10 <sup>-4</sup>
280	4·10 <sup>-4</sup>	0,001	4·10 <sup>-4</sup>	8·10 <sup>-4</sup>
290	0,001	<1·10 <sup>-5</sup>	4·10 <sup>-4</sup>	0,001
300	<1·10 <sup>-5</sup>	0,001	0,001	0,650
310	2·10 <sup>-4</sup>	0,404	6·10 <sup>-4</sup>	10,346
320	0,057	6,793	0,703	34,794
330	1,577	24,336	8,621	58,396
340	7,834	43,444	24,150	73,403
350	17,917	57,966	38,448	81,348
360	28,376	67,197	48,352	85,312
370	37,615	72,766	54,879	87,139
380	45,301	76,413	59,590	88,156
390	51,730	78,919	63,304	88,716
400	57,103	79,960	66,400	88,225
410	61,595	79,808	69,134	86,847
420	65,382	79,067	71,600	85,182
430	68,486	77,076	73,728	82,534
440	71,113	74,332	75,707	79,164
450	73,404	70,130	77,578	74,702
460	75,048	64,060	79,110	68,625
470	76,135	53,083	80,492	57,658
480	76,497	38,056	81,628	42,301
490	75,925	23,617	82,537	27,062
500	74,202	14,443	83,174	17,084
510	71,176	7,153	83,471	8,707
520	66,687	3,067	83,251	3,819
530	60,904	1,098	82,381	1,379
540	54,186	0,647	80,647	0,810
550	46,972	0,895	77,796	1,132
560	39,684	1,497	73,608	1,990
570	32,809	1,019	68,055	1,471
580	26,564	0,255	61,247	0,400
590	21,128	0,048	53,375	0,081
600	16,620	0,042	45,185	0,078
610	12,895	0,053	36,930	0,102
620	9,906	0,050	29,098	0,106
630	7,589	0,035	22,213	0,081
640	5,804	0,022	16,399	0,055
650	4,466	0,024	11,722	0,064
660	3,471	0,054	8,131	0,151
670	2,730	0,214	5,474	0,628
680	2,186	0,980	3,593	3,005
690	1,783	3,180	2,305	10,048

	<b>B 07</b>	<b>B 12</b>	<b>B 18</b>	<b>B 25</b>
Thickness (mm)	1	1	1	1
Wavelength (nm)	%T	%T	%T	%T
700	1,484	5,937	1,453	19,308
710	1,261	7,556	0,906	25,380
720	1,093	8,026	0,560	27,853
730	0,968	7,941	0,346	28,397
740	0,873	7,685	0,216	28,184
750	0,803	7,421	0,134	27,767
760	0,750	7,194	0,087	27,357
770	0,712	7,025	0,057	27,026
780	0,686	6,910	0,037	26,787
790	0,673	6,853	0,026	26,661
800	0,690	6,897	0,034	26,632
810	0,683	6,928	0,010	26,674
820	0,695	7,023	0,010	26,807
830	0,729	7,176	0,018	27,036
840	0,764	7,348	0,022	27,318
850	0,805	7,579	0,015	27,689
900	1,195	9,368	0,022	30,404
950	1,930	12,098	0,013	34,106
1000	3,174	15,347	0,040	37,748
1050	4,964	18,258	0,057	39,849
1065	5,617	18,867	0,067	39,899
1100	7,352	19,497	0,102	38,517
1200	13,978	15,259	0,534	25,712
1300	22,613	13,148	2,062	19,330
1400	32,050	17,714	6,099	23,860
1500	41,561	15,633	13,585	19,611
1600	50,129	20,519	23,960	24,219
1700	57,516	22,409	35,137	25,617
1800	63,597	24,836	45,310	27,447
1900	68,528	36,355	53,692	39,250
2000	72,389	48,887	59,956	52,117
2100	75,476	57,704	64,434	60,730
2200	77,538	64,479	65,424	67,080
2300	79,308	70,055	66,816	72,176
2400	80,727	73,317	68,667	75,036
2500	81,558	74,203	67,532	75,604
2600	82,044	73,876	62,123	74,919
2700	81,507	72,595	57,069	73,405
2800	66,110	59,427	12,350	62,086
2900	62,497	57,008	1,592	60,727
3000	59,774	55,418	1,072	59,288

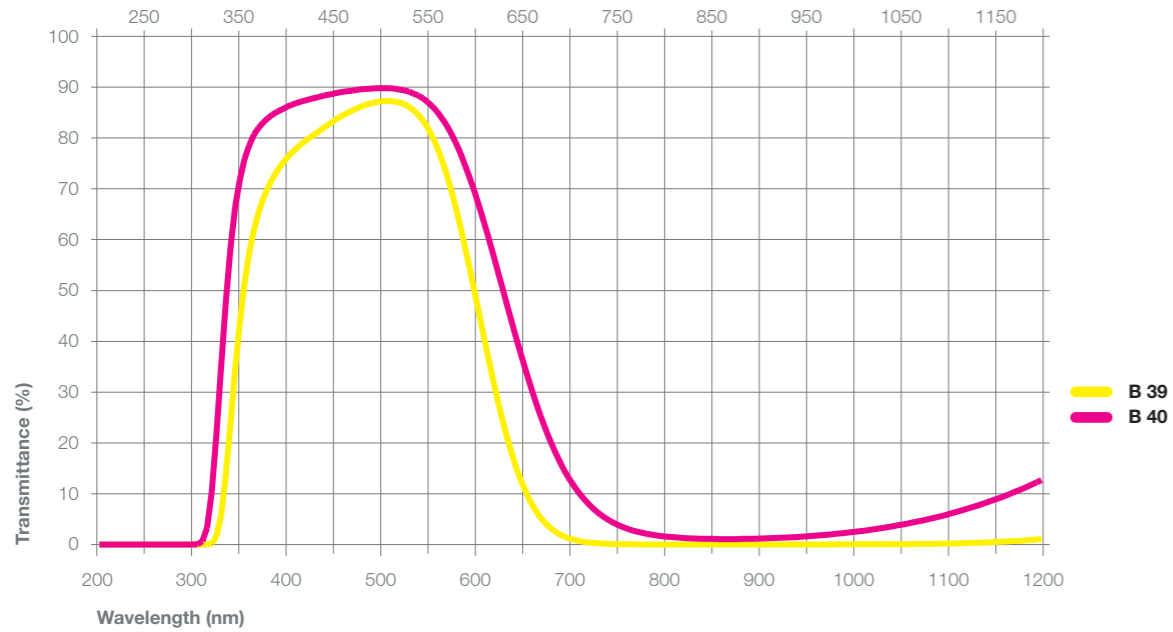
# Glass Types

BLUE	HEBO	Schott	Hoya
	B 39	≈ BG 39	
	B 40	≈ BG 40	

## Blue Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
B 39	1	0.364	0.431	66	0.255	0.321	73	1	3	1.55	94	417	489	2.75
B 40	1	0.404	0.422	77	0.282	0.327	82	1	3	1.54	95	419	492	2.75

Type	Bubbles	Striae	Stress
B 39	C	3C	4
B 40	C	3C	4



	B 39	B 40
Thickness (mm)	1	1
Wavelength (nm)	%T	%T
200	4·10 <sup>-5</sup>	1·10 <sup>-4</sup>
210	2·10 <sup>-4</sup>	2·10 <sup>-4</sup>
220	6·10 <sup>-4</sup>	2·10 <sup>-4</sup>
230	3·10 <sup>-4</sup>	4·10 <sup>-4</sup>
240	0,001	<1·10 <sup>-5</sup>
250	0,001	6·10 <sup>-4</sup>
260	5·10 <sup>-4</sup>	3·10 <sup>-4</sup>
270	1·10 <sup>-4</sup>	4·10 <sup>-4</sup>
280	4·10 <sup>-4</sup>	6·10 <sup>-4</sup>
290	6·10 <sup>-4</sup>	3·10 <sup>-4</sup>
300	7·10 <sup>-4</sup>	0,048
310	0,011	3,359
320	1,567	21,707
330	13,615	47,615
340	34,411	66,407
350	51,487	75,823
360	61,846	80,616
370	68,086	83,083
380	72,068	84,633
390	74,881	85,637
400	77,056	86,500
410	78,705	87,159
420	80,144	87,696
430	81,393	88,071
440	82,649	88,496
450	83,959	88,949
460	84,996	89,242
470	85,887	89,484
480	86,597	89,670
490	87,046	89,778
500	87,276	89,792
510	87,193	89,703
520	86,664	89,399
530	85,474	88,760
540	83,499	87,798
550	80,350	86,266
560	75,882	84,012
570	69,964	81,021
580	62,701	77,077
590	54,333	72,191
600	45,556	66,693
610	36,706	60,510
620	28,361	53,860
630	21,078	47,157
640	15,041	40,494
650	10,323	34,210
660	6,831	28,433
670	4,360	23,243
680	2,703	18,770
690	1,634	14,977

	B 39	B 40
Thickness (mm)	1	1
Wavelength (nm)	%T	%T
700	0,968	11,842
710	0,569	9,334
720	0,334	7,335
730	0,196	5,784
740	0,116	4,584
750	0,071	3,676
760	0,045	2,983
770	0,029	2,465
780	0,019	2,066
790	0,014	1,772
800	0,023	1,562
810	0,016	1,395
820	0,014	1,269
830	0,017	1,194
840	0,018	1,138
850	0,015	1,109
900	0,021	1,184
950	0,020	1,620
1000	0,053	2,497
1050	0,094	3,894
1065	0,114	4,436
1100	0,206	5,951
1200	1,080	12,675
1300	4,182	23,368
1400	11,518	36,784
1500	23,205	50,079
1600	37,098	61,570
1700	49,935	69,765
1800	60,055	74,986
1900	67,461	78,287
2000	72,300	79,961
2100	75,349	80,750
2200	74,497	77,816
2300	74,561	76,666
2400	75,703	77,134
2500	73,418	74,035
2600	66,990	66,606
2700	61,308	60,210
2800	14,468	11,627
2900	1,308	0,900
3000	0,603	0,404