

# Light Balancing Filter (Blue)

**LB-20**

Catalog Thickness t = 2.5 mm

Reflection Factor  $P_r = 0.912$

Diagram-4

Transmittance (T) & Internal Transmittance ( $\tau$ ) units: (%)

$\lambda_{nm}$	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440
T										$4 \cdot 10^{-3}$	.12	6.4	27.9	51.2	67.4	76.9	82.3	86.0	87.4	89.0	89.7	89.8	88.2	87.8	86.9
$\tau$										$4 \cdot 10^{-3}$	.13	7.0	30.6	56.1	73.9	84.3	90.2	94.3	95.8	97.6	98.4	98.5	96.7	96.3	95.3
$\lambda_{nm}$	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690
T	86.2	85.4	84.5	83.9	82.9	82.1	81.4	80.3	78.9	78.4	78.1	78.5	78.2	76.4	74.2	73.3	72.9	72.2	71.1	69.9	69.3	69.2	69.7	70.3	70.8
$\tau$	94.5	93.6	92.7	92.0	90.9	90.0	89.3	88.0	86.5	86.0	85.6	86.1	85.7	83.8	81.4	80.4	79.9	79.2	78.0	76.6	76.0	75.9	76.4	77.1	77.6
$\lambda_{nm}$	700	710	720	730	740	750	800	850	900	950	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
T	71.0	70.9	70.8	70.6	70.2	70.1	70.3	71.2	72.9	75.0	76.9	79.9	82.8	84.4	86.0	87.0	88.1	88.4	88.8	88.8	88.9	88.5	88.2	87.7	87.3
$\tau$	77.9	77.7	77.6	77.4	77.0	76.9	77.1	78.1	79.9	82.2	84.3	87.6	90.8	92.5	94.3	95.4	96.6	96.9	97.4	97.4	97.5	97.0	96.7	96.2	95.7

Refractive Indices

Symbol	i	h	g	F'	F	e	d	D	C''	C	r	A'	t
$\lambda_{nm}$	365.0	404.7	435.8	480.0	486.1	546.1	587.6	589.3	643.8	656.3	706.5	768.2	1,014.0
n	1.575	1.566	1.561	1.555	1.554	1.549	1.547	1.546	1.544	1.544	1.541	1.539	1.535

Abbe-Number

$$V_d = \frac{n_d - 1}{n_F - n_C} = 49$$

Color Specifications

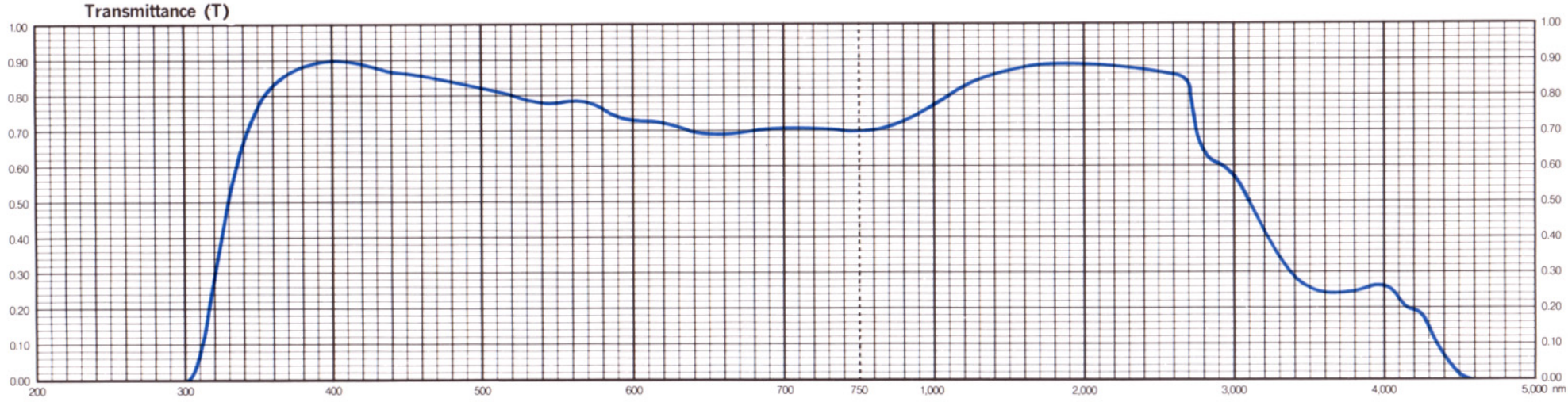
	x	y	Y	$\lambda_d$	$P_e$
A	.434	.405	76.3	492	3
C	.296	.305	77.5	481	6
$D_{65}$	.299	.318	77.6	481	6

Properties

Chemical		Thermal				Mechanical		Other
$D_w$	$D_A$	$T_g$	$T_s$	$\alpha_{-30/70}$	$\alpha_{100/300}$	$H_K$	$F_A$	S
3	1	470	515	95	117	490	110	2.81

Tolerances of Transmittance (T)

B-R Conversion Value	Filter Factor
V (mired)	P
-20 ± 5	0.5



All data are mean values of various melts.

HOYA 8304E