

## LAFN7 750350.438

$n_d = 1.74950$	$v_d = 34.95$	$n_F - n_C = 0.021445$
$n_e = 1.75458$	$v_e = 34.72$	$n_{F'} - n_{C'} = 0.021735$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.70211
$n_{1970.1}$	1970.1	1.70934
$n_{1529.6}$	1529.6	1.71726
$n_{1060.0}$	1060.0	1.72642
$n_t$	1014.0	1.72758
$n_s$	852.1	1.73264
$n_r$	706.5	1.73970
$n_C$	656.3	1.74319
$n_{C'}$	643.8	1.74418
$n_{632.8}$	632.8	1.74511
$n_D$	589.3	1.74931
$n_d$	587.6	1.74950
$n_e$	546.1	1.75458
$n_F$	486.1	1.76464
$n_{F'}$	480.0	1.76592
$n_g$	435.8	1.77713
$n_h$	404.7	1.78798
$n_i$	365.0	1.80762
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.382	0.090
2325	0.700	0.410
1970	0.937	0.850
1530	0.984	0.960
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.994
500	0.998	0.994
460	0.993	0.982
436	0.986	0.965
420	0.976	0.940
405	0.950	0.880
400	0.937	0.850
390	0.905	0.780
380	0.842	0.650
370	0.693	0.400
365	0.546	0.220
350	0.125	0.010
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2360
$P_{C,s}$	0.4921
$P_{d,C}$	0.2941
$P_{e,d}$	0.2369
$P_{g,F}$	0.5825
$P_{i,h}$	0.9160
$P'_{s,t}$	0.2329
$P'_{C',s}$	0.5311
$P'_{d,C'}$	0.2446
$P'_{e,d}$	0.2338
$P'_{g,F'}$	0.5158
$P'_{i,h}$	0.9037

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	0.0174
$\Delta P_{C,s}$	0.0078
$\Delta P_{F,e}$	-0.0011
$\Delta P_{g,F}$	-0.0025
$\Delta P_{i,g}$	-0.0093

Constants of Dispersion Formula	
$B_1$	1.66842615
$B_2$	0.298512803
$B_3$	1.0774376
$C_1$	0.0103159999
$C_2$	0.0469216348
$C_3$	82.5078509

Constants of Dispersion $dn/dT$	
$D_0$	$7.27 \cdot 10^{-6}$
$D_1$	$1.31 \cdot 10^{-8}$
$D_2$	$-3.32 \cdot 10^{-11}$
$E_0$	$8.88 \cdot 10^{-7}$
$E_1$	$9.32 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.248

Color Code	
$\lambda_{80}/\lambda_{5}$	40/35
(* = $\lambda_{70}/\lambda_{5}$ )	

Remarks	
lead containing glass type	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	5.3
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	6.4
$T_g [^\circ C]$	500
$T_{10}^{13.0} [^\circ C]$	481
$T_{10}^{7.6} [^\circ C]$	573
$c_p [J/(g \cdot K)]$	
$\lambda [W/(m \cdot K)]$	0.770
$\rho [g/cm^3]$	4.38
$E [10^3 N/mm^2]$	80
$\mu$	0.280
$K [10^{-6} mm^2/N]$	1.77
$HK_{0.1/20}$	520
<b>HG</b>	3
<b>CR</b>	3
<b>FR</b>	1
<b>SR</b>	53.3
<b>AR</b>	2.2
<b>PR</b>	4.3

Temperature Coefficients of Refractive Index						
[ $^\circ C$ ]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	6.0	7.8	9.7	3.7	5.4	7.2
+20/ +40	6.3	8.3	10.4	4.8	6.7	8.9
+60/ +80	6.5	8.6	10.9	5.3	7.4	9.7