

## LF5G19 597399.330

$n_d = 1.59655$	$v_d = 39.89$	$n_F - n_C = 0.014954$
$n_e = 1.60010$	$v_e = 39.60$	$n_{F'} - n_{C'} = 0.015153$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.56416
$n_{1970.1}$	1970.1	1.56890
$n_{1529.6}$	1529.6	1.57419
$n_{1060.0}$	1060.0	1.58045
$n_t$	1014.0	1.58125
$n_s$	852.1	1.58477
$n_r$	706.5	1.58970
$n_C$	656.3	1.59214
$n_{C'}$	643.8	1.59284
$n_{632.8}$	632.8	1.59349
$n_D$	589.3	1.59642
$n_d$	587.6	1.59655
$n_e$	546.1	1.60010
$n_F$	486.1	1.60710
$n_{F'}$	480.0	1.60799
$n_g$	435.8	1.61578
$n_h$	404.7	1.62330
$n_i$	365.0	
$n_{334.1}$	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	0.525	0.200
2325	0.631	0.316
1970	0.870	0.707
1530	0.992	0.979
1060	0.999	0.998
700	0.997	0.993
660	0.995	0.987
620	0.993	0.983
580	0.991	0.977
546	0.986	0.966
500	0.973	0.934
460	0.929	0.832
436	0.822	0.612
420	0.657	0.350
405	0.382	0.090
400	0.276	0.040
390	0.090	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2355
$P_{C,s}$	0.4930
$P_{d,C}$	0.2946
$P_{e,d}$	0.2370
$P_{g,F}$	0.5803
$P_{i,h}$	
$P'_{s,t}$	0.2324
$P'_{C',s}$	0.5322
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2339
$P'_{g,F'}$	0.5139
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0056
$\Delta P_{C,s}$	-0.0028
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.34611327
$B_2$	0.142428018
$B_3$	0.900477176
$C_1$	0.0097174385
$C_2$	0.0501911619
$C_3$	111.959703

Constants of Dispersion $dn/dT$	
$D_0$	$-8.15 \cdot 10^{-6}$
$D_1$	$1.34 \cdot 10^{-8}$
$D_2$	$-9.22 \cdot 10^{-12}$
$E_0$	$8.57 \cdot 10^{-7}$
$E_1$	$8.26 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.243

Color Code	
$\lambda_{80}/\lambda_5$	45/39
(*= $\lambda_{70}/\lambda_5$ )	

Remarks	
radiation resistant glass	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	10.7
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	11.4
$T_g [^\circ C]$	474
$T_{10}^{13.0} [^\circ C]$	462
$T_{10}^{7.6} [^\circ C]$	606
$c_p [J/(g \cdot K)]$	0.580
$\lambda [W/(m \cdot K)]$	0.750
$\rho [g/cm^3]$	3.30
$E [10^3 N/mm^2]$	56
$\mu$	0.242
$K [10^{-6} mm^2/N]$	2.80
$HK_{0.1/20}$	410
$HG$	2
$CR$	3
$FR$	2
$SR$	3.4
$AR$	2.2
$PR$	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	-2.1	-0.9	0.4	-4.2	-3.1	-1.8
+20/ +40	-2.0	-0.7	0.8	-3.3	-2.1	-0.6
+60/ +80	-1.8	-0.3	1.3	-2.8	-1.4	0.1