

## LF5HTi 581409.322

$n_d = 1.58144$	$v_d = 40.89$	$n_F - n_C = 0.014220$
$n_e = 1.58482$	$v_e = 40.61$	$n_{F'} - n_{C'} = 0.014400$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.54970
$n_{1970.1}$	1970.1	1.55448
$n_{1529.6}$	1529.6	1.55978
$n_{1060.0}$	1060.0	1.56596
$n_t$	1014.0	1.56674
$n_s$	852.1	1.57015
$n_r$	706.5	1.57490
$n_C$	656.3	1.57724
$n_{C'}$	643.8	1.57790
$n_{632.8}$	632.8	1.57852
$n_D$	589.3	1.58132
$n_d$	587.6	1.58144
$n_e$	546.1	1.58482
$n_F$	486.1	1.59145
$n_{F'}$	480.0	1.59230
$n_g$	435.8	1.59963
$n_h$	404.7	1.60665
$n_i$	365.0	1.61921
$n_{334.1}$	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	0.777	0.532
2325	0.830	0.628
1970	0.938	0.852
1530	0.996	0.991
1060	0.999	0.999
700	0.999	0.999
660	0.999	0.999
620	0.999	0.999
580	0.999	0.999
546	0.999	0.999
500	0.999	0.998
460	0.999	0.998
436	0.999	0.998
420	0.999	0.997
405	0.999	0.997
400	0.999	0.997
390	0.999	0.996
380	0.998	0.995
370	0.997	0.993
365	0.996	0.991
350	0.985	0.962
334	0.891	0.750
320	0.380	0.089
310	0.020	
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2401
$P_{C,s}$	0.4982
$P_{d,C}$	0.2959
$P_{e,d}$	0.2373
$P_{g,F}$	0.5746
$P_{i,h}$	0.8831
$P'_{s,t}$	0.2371
$P'_{C',s}$	0.5380
$P'_{d,C'}$	0.2462
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5090
$P'_{i,h}$	0.8721

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

$\Delta P_{C,t}$	-0.0006
$\Delta P_{C,s}$	0.0000
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	-0.0041

Constants of Dispersion Formula	
$B_1$	1.28552924
$B_2$	0.158357622
$B_3$	0.892175122
$C_1$	0.0093988626
$C_2$	0.0452566659
$C_3$	110.544829

Constants of Dispersion $dn/dT$	
$D_0$	$-2.26 \cdot 10^{-6}$
$D_1$	$1.17 \cdot 10^{-8}$
$D_2$	$-4.14 \cdot 10^{-11}$
$E_0$	$8.24 \cdot 10^{-7}$
$E_1$	$7.78 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.232

Color Code	
$\lambda_{80}/\lambda_5$	33/31
(*= $\lambda_{70}/\lambda_5$ )	

Remarks	
i-line glass	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	9.1
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	10.6
$T_g [^\circ C]$	419
$T_{10}^{13.0} [^\circ C]$	411
$T_{10}^{7.6} [^\circ C]$	585
$c_p [J/(g \cdot K)]$	0.657
$\lambda [W/(m \cdot K)]$	0.866
$\rho [g/cm^3]$	3.22
$E [10^3 N/mm^2]$	59
$\mu$	0.223
$K [10^{-6} mm^2/N]$	2.83
$HK_{0.1/20}$	450
<b>HG</b>	
<b>CR</b>	2
<b>FR</b>	0
<b>SR</b>	1
<b>AR</b>	2.3
<b>PR</b>	2

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	0.7	1.8	3.0	-1.4	-0.3	0.8
+20/ +40	0.8	2.0	3.4	-0.6	0.7	2.0
+60/ +80	0.8	2.2	3.6	-0.3	1.1	2.5