1644 blocker data pack

This data pack consists of hardcopy scans of various filter transmission curves supplied by the vendor.

Some scans refer to the actual full size filter; some refer to a small witness sample used to determine relative performance change between two conditions, such as different temperatures or incidence angles; one refers to theoretical performance calculated for wavelengths at which the vendor has no test capability.

The data are

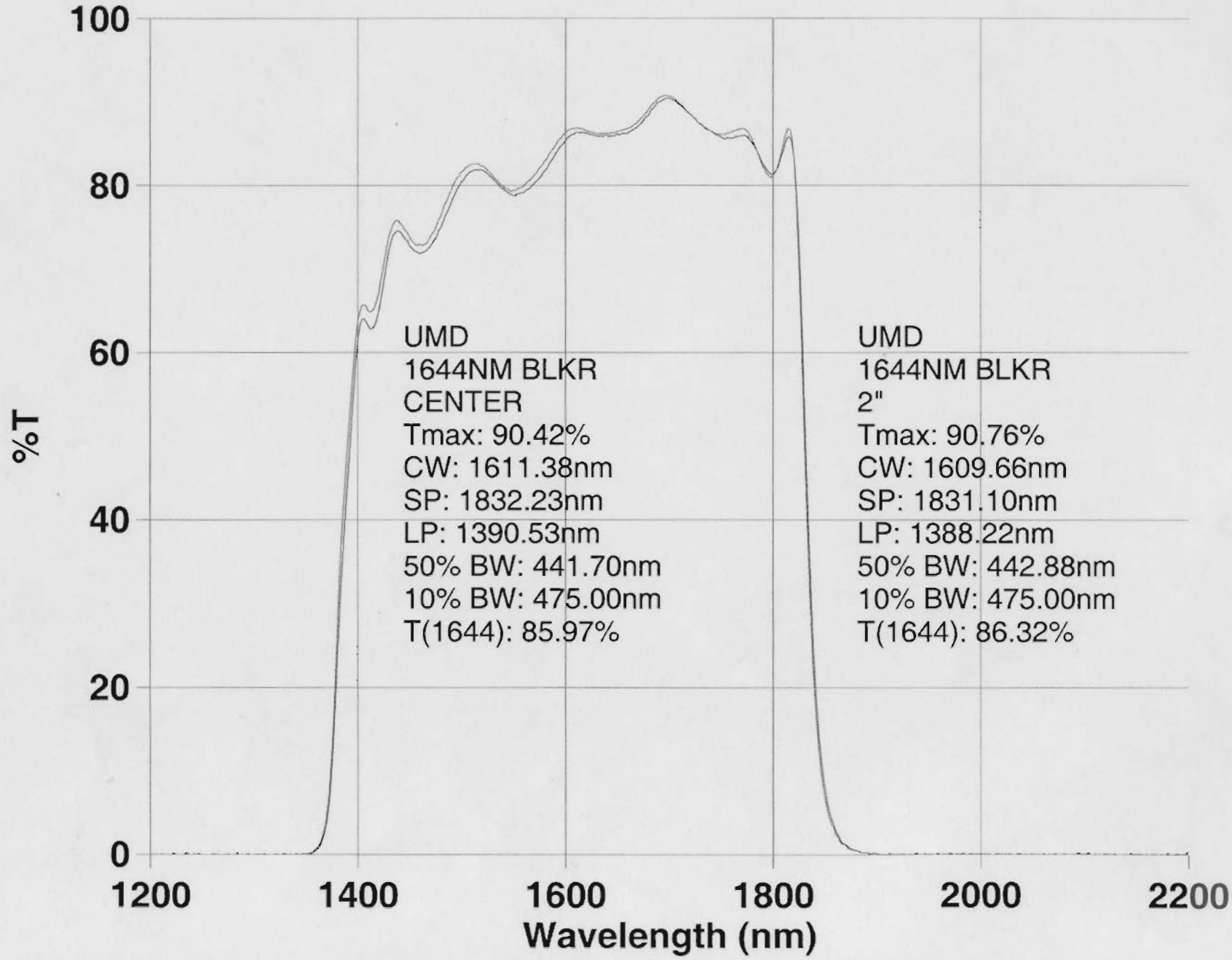
1. Transmission of the filter at 65 K, at two positions: filter center, and a position 2 inches radially from center. The source data are room temperature scans at normal incidence with an f/8 beam, subsequently corrected for the temperature shift to 65 K using the witness sample data.

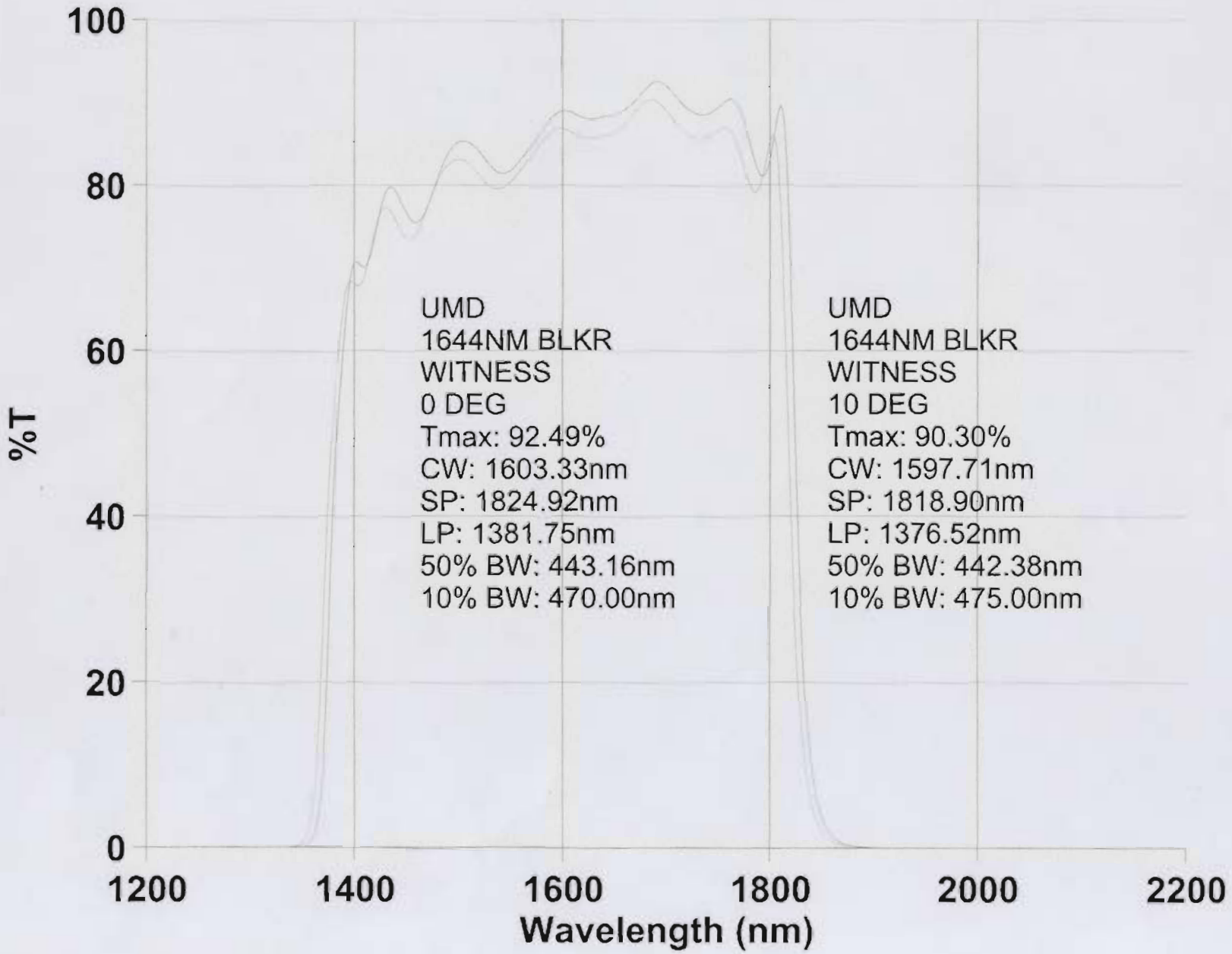
2. Angle of incidence dependence: room temperature scans of the witness sample at two different angles with an f/8 beam.

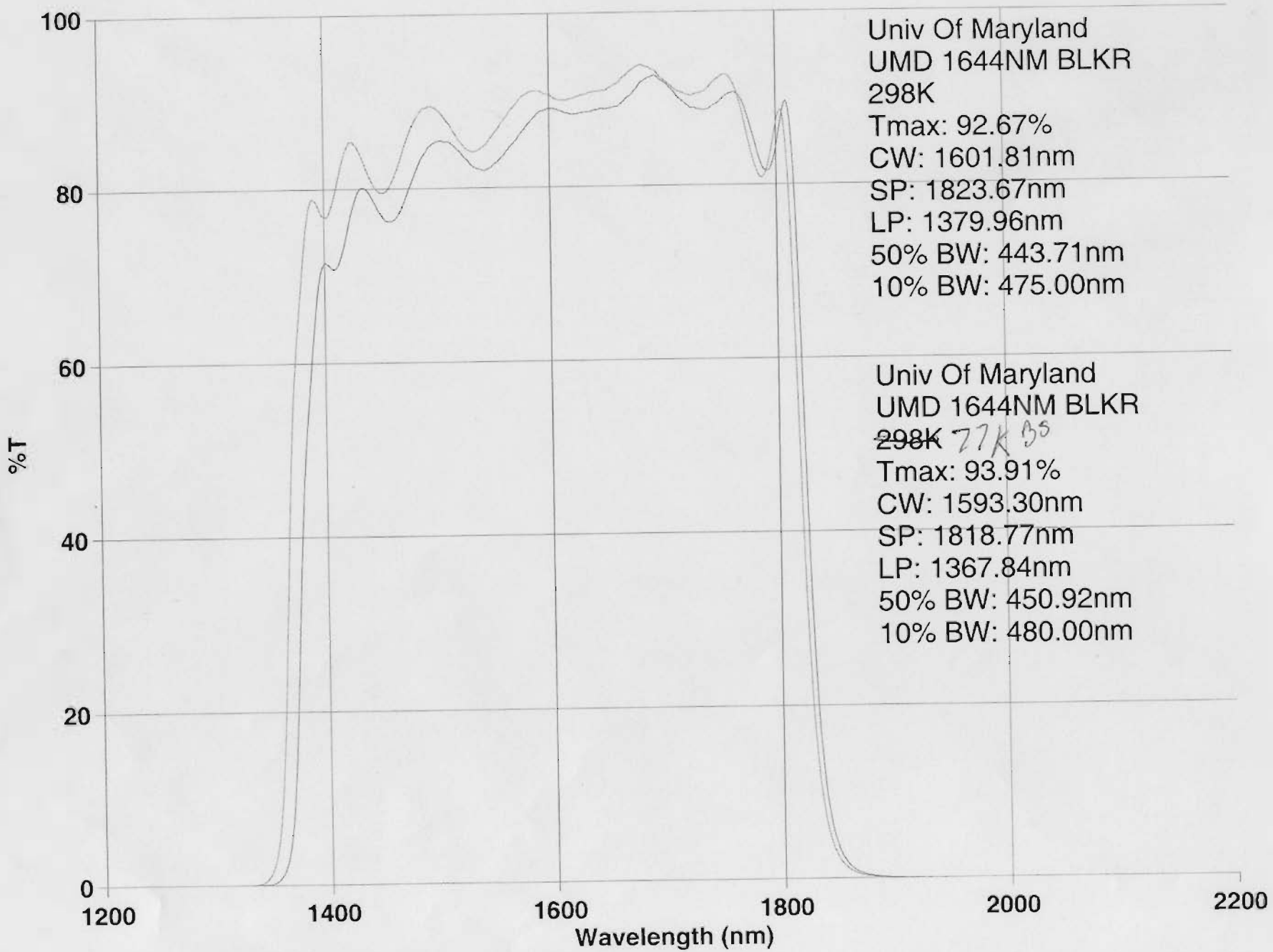
3. Temperature dependence: 298 K and 77 K scans of the witness sample at normal incidence, f/8 beam

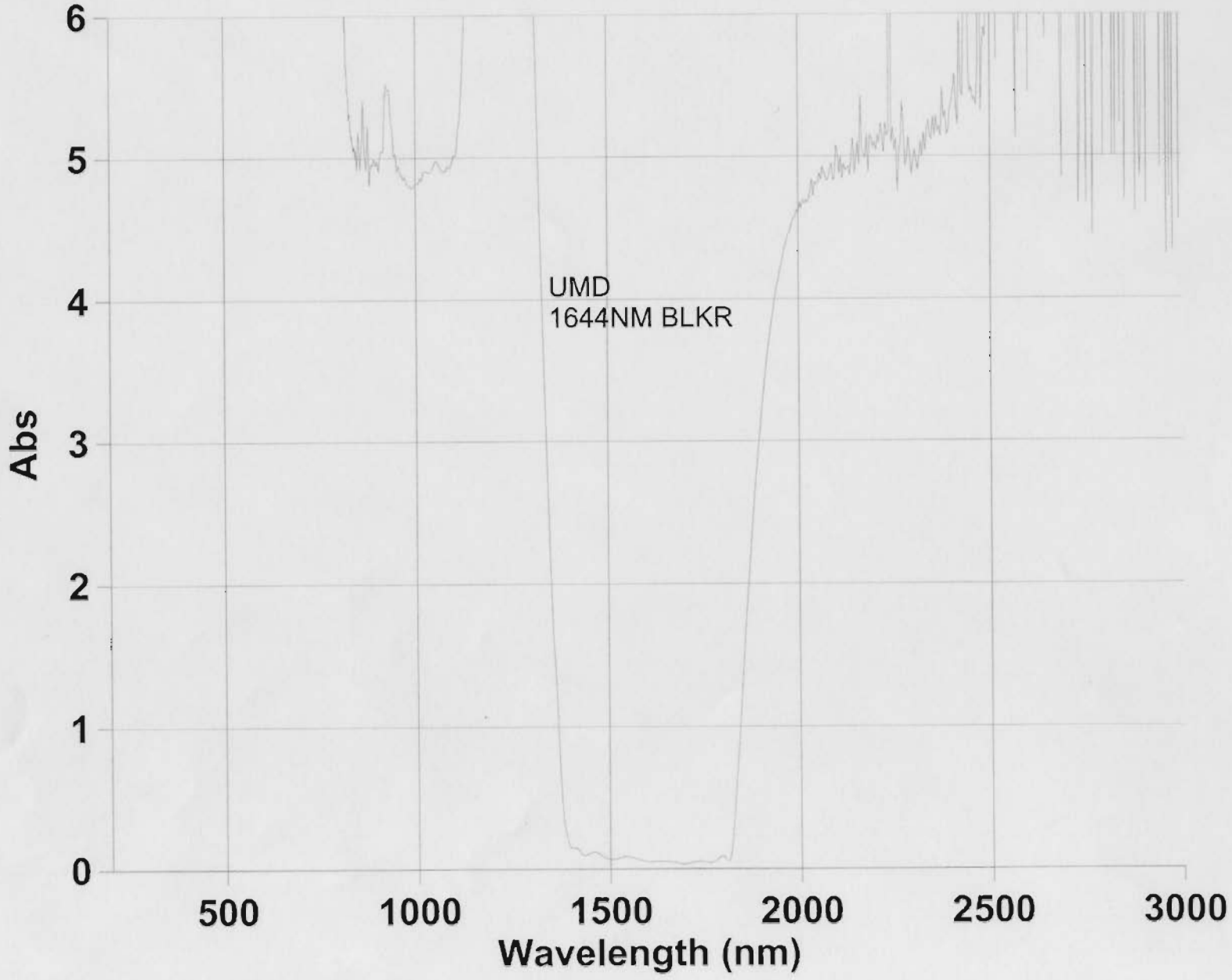
4. Transmission of the filter across 800 to 3000 nm to show out-of-band blocking.

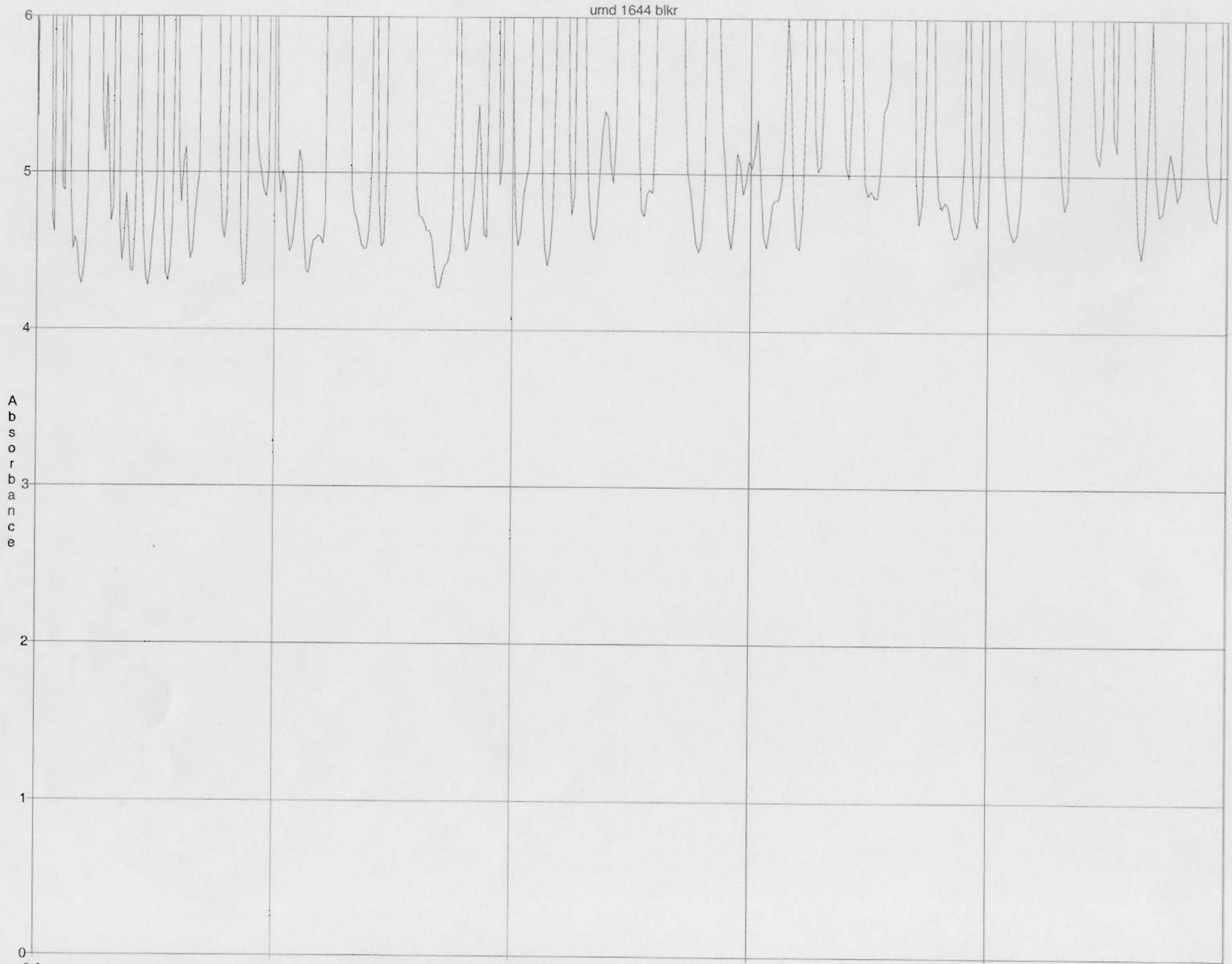
5. Theoretically calculated out of band blocking at 3000 to 4000 nm.


100
80
60
40
20
0
%T
1200
1400
1600
1800
2000
2200
Wavelength (nm)
UMD
1644NM BLKR
CENTER
Tmax: 90.42%
CW: 1611.38nm
SP: 1832.23nm
LP: 1390.53nm
50% BW: 441.70nm
10% BW: 475.00nm
T(1644): 85.97%
UMD
1644NM BLKR
2"
Tmax: 90.76%
CW: 1609.66nm
SP: 1831.10nm
LP: 1388.22nm
50% BW: 442.88nm
10% BW: 475.00nm
T(1644): 86.32%


100
80
60
40
20
0
%T
1200
1400
1600
1800
2000
2200
Wavelength (nm)
UMD
1644NM BLKR
WITNESS
0 DEG
Tmax: 92.49%
CW: 1603.33nm
SP: 1824.92nm
LP: 1381.75nm
50% BW: 443.16nm
10% BW: 470.00nm
UMD
1644NM BLKR
WITNESS
10 DEG
Tmax: 90.30%
CW: 1597.71nm
SP: 1818.90nm
LP: 1376.52nm
50% BW: 442.38nm
10% BW: 475.00nm


100
80
60
40
20
0
%T
1200
1400
1600
1800
2000
2200
Wavelength (nm)
Univ Of Maryland
UMD 1644NM BLKR
298K
Tmax: 92.67%
CW: 1601.81nm
SP: 1823.67nm
LP: 1379.96nm
50% BW: 443.71nm
10% BW: 475.00nm
Univ Of Maryland
UMD 1644NM BLKR
~~298K~~ 77K BS
Tmax: 93.91%
CW: 1593.30nm
SP: 1818.77nm
LP: 1367.84nm
50% BW: 450.92nm
10% BW: 480.00nm


6
5
4
3
2
1
0
Abs
UMD
1644NM BLKR
500
1000
1500
2000
2500
3000
Wavelength (nm)


umd 1644 blkr
Absorbance
6
5
4
3
2
1
0