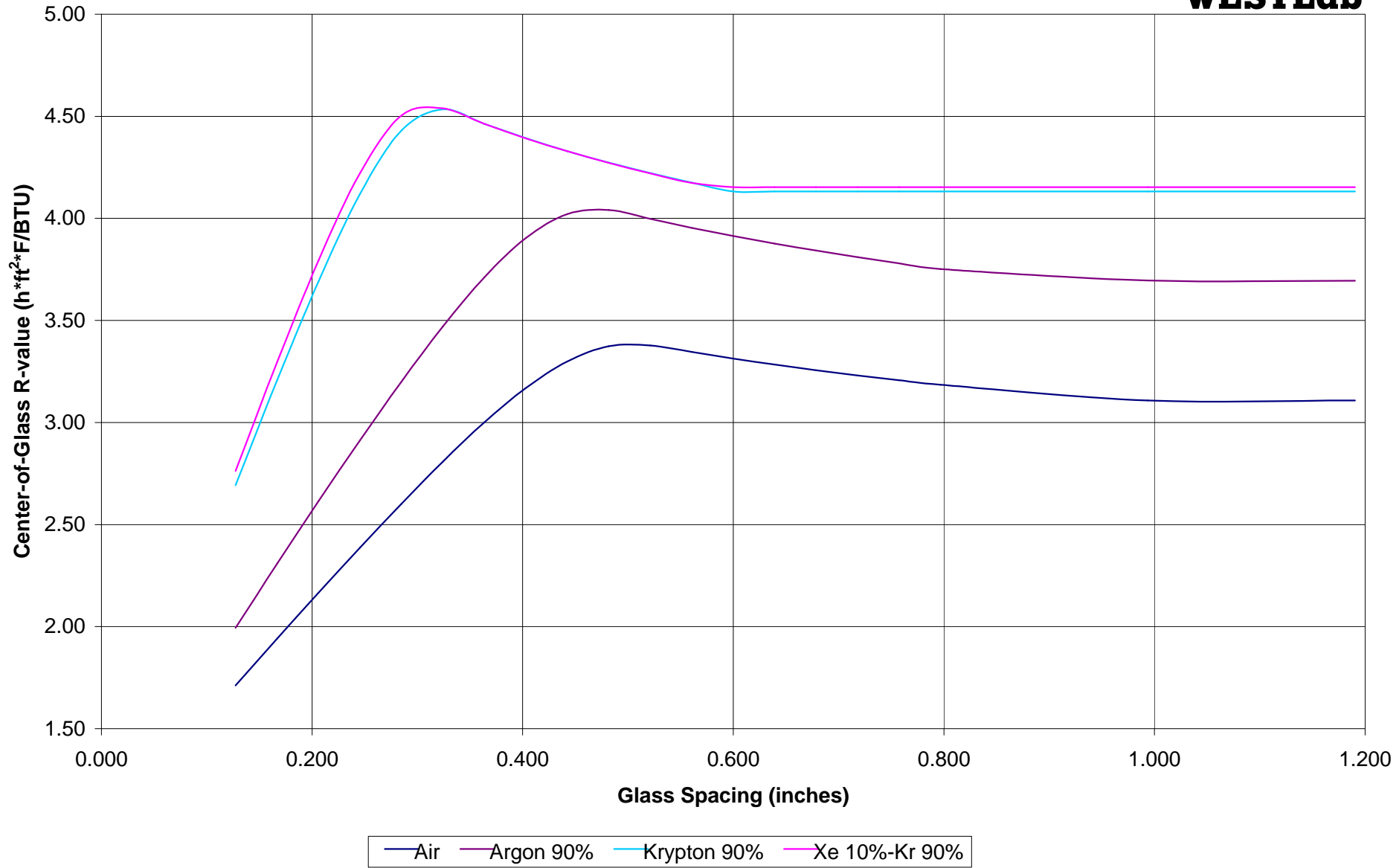
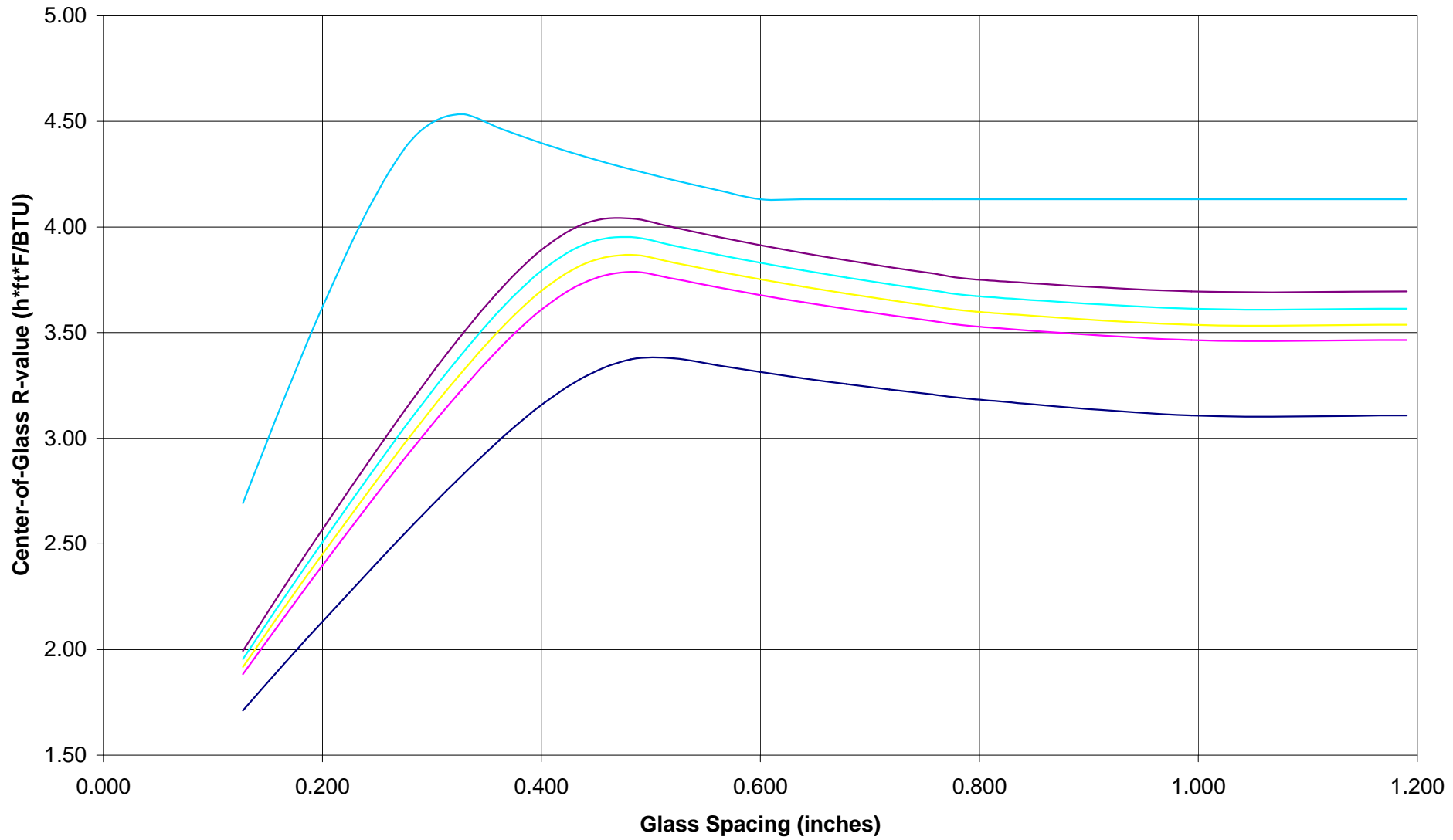


**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.04 Argon and Krypton Fills**  
Gas percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.

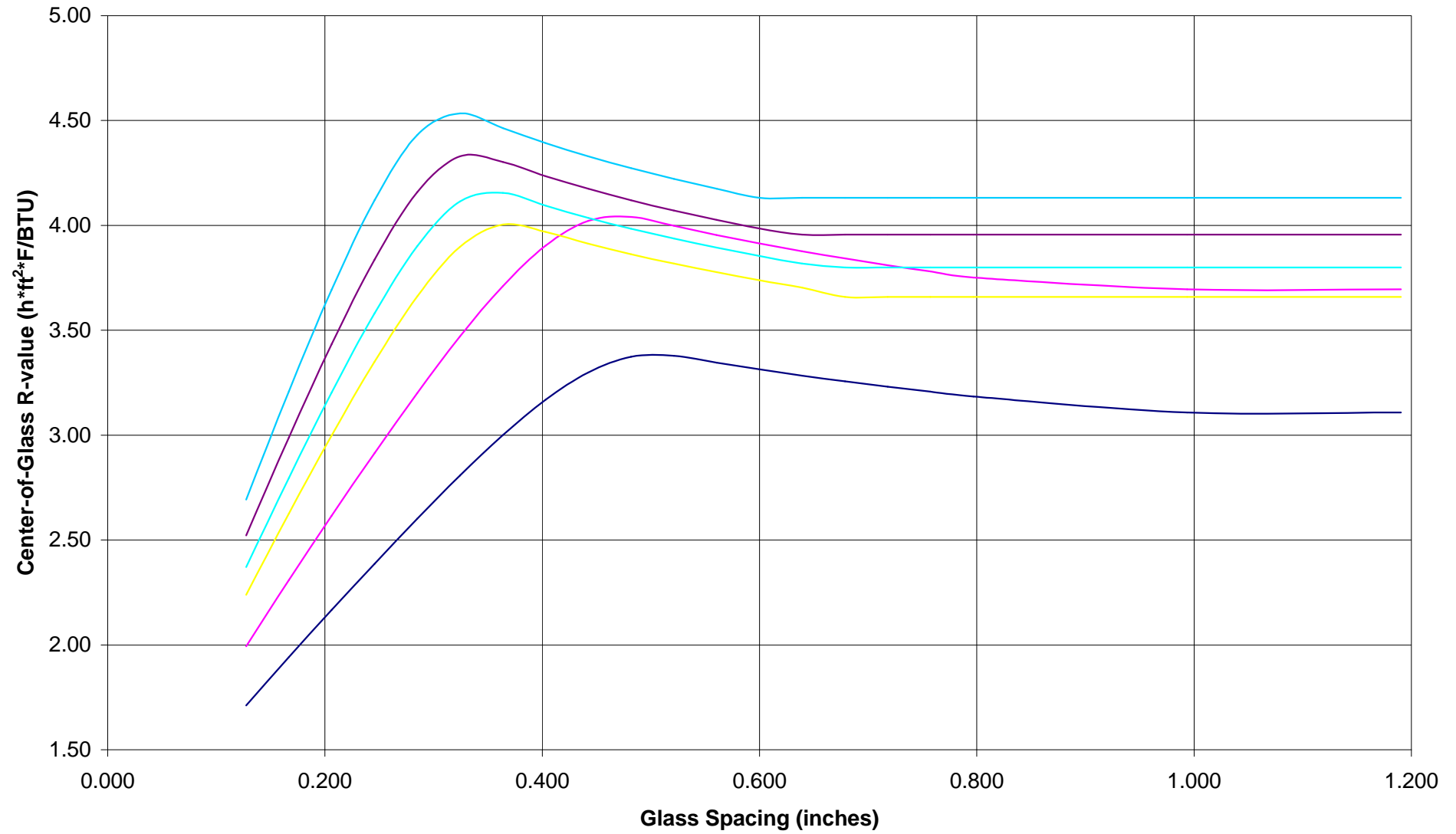


**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.04 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



— Air   
 — Argon 60%   
 — Argon 70%   
 — Argon 80%   
 — Argon 90%   
 — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.04 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

# Center-of-Glass R-value (IP) vs. Glass Spacing

## Double Glazed Low-e 0.04 Argon, Krypton and Xenon Fills

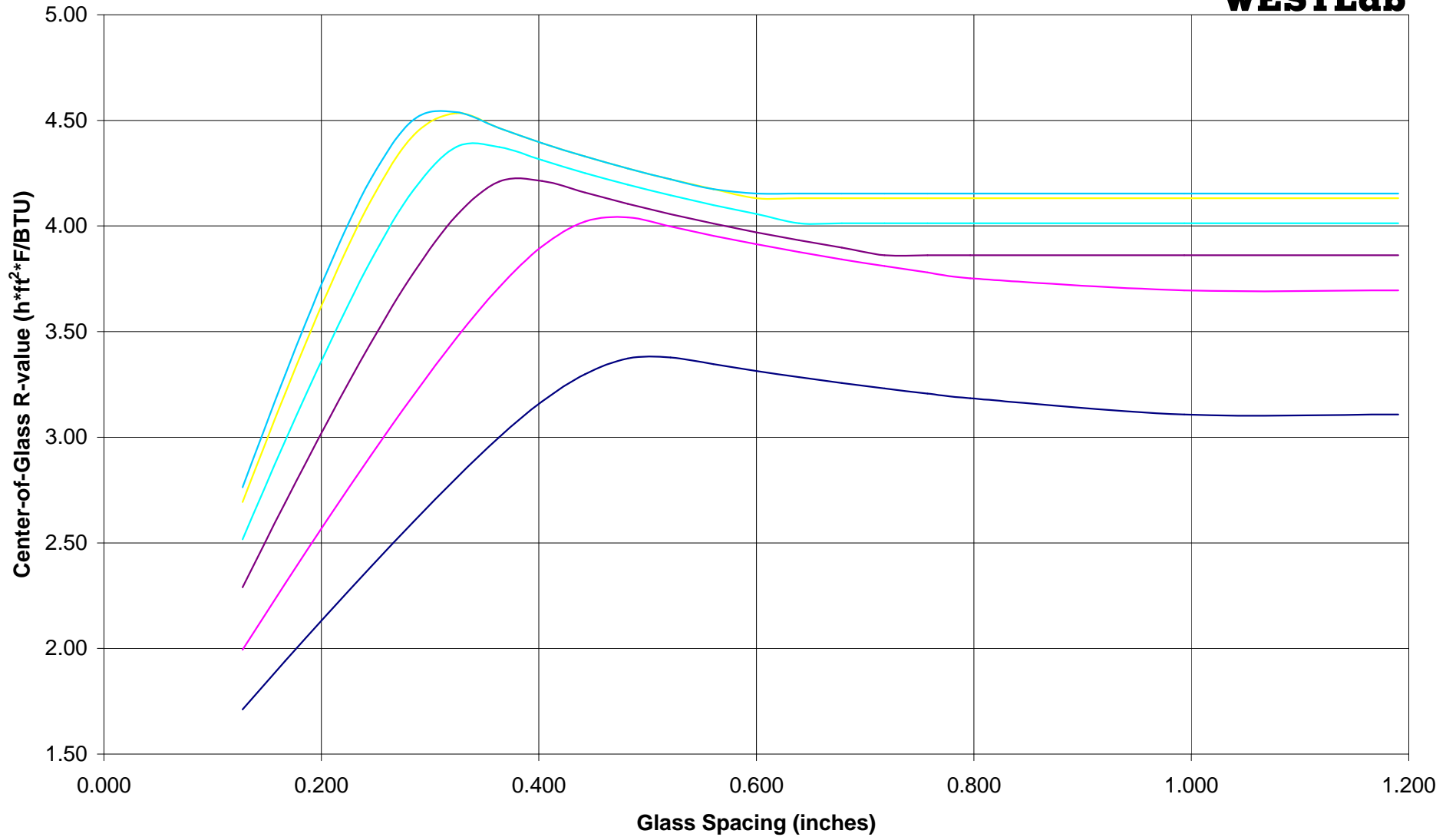
Gas percentages represent fill gas concentration, initial fill rate was 90%  
Calculations performed using Window 5.2 computer program by WESTLab

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**FDR Design, Inc.**

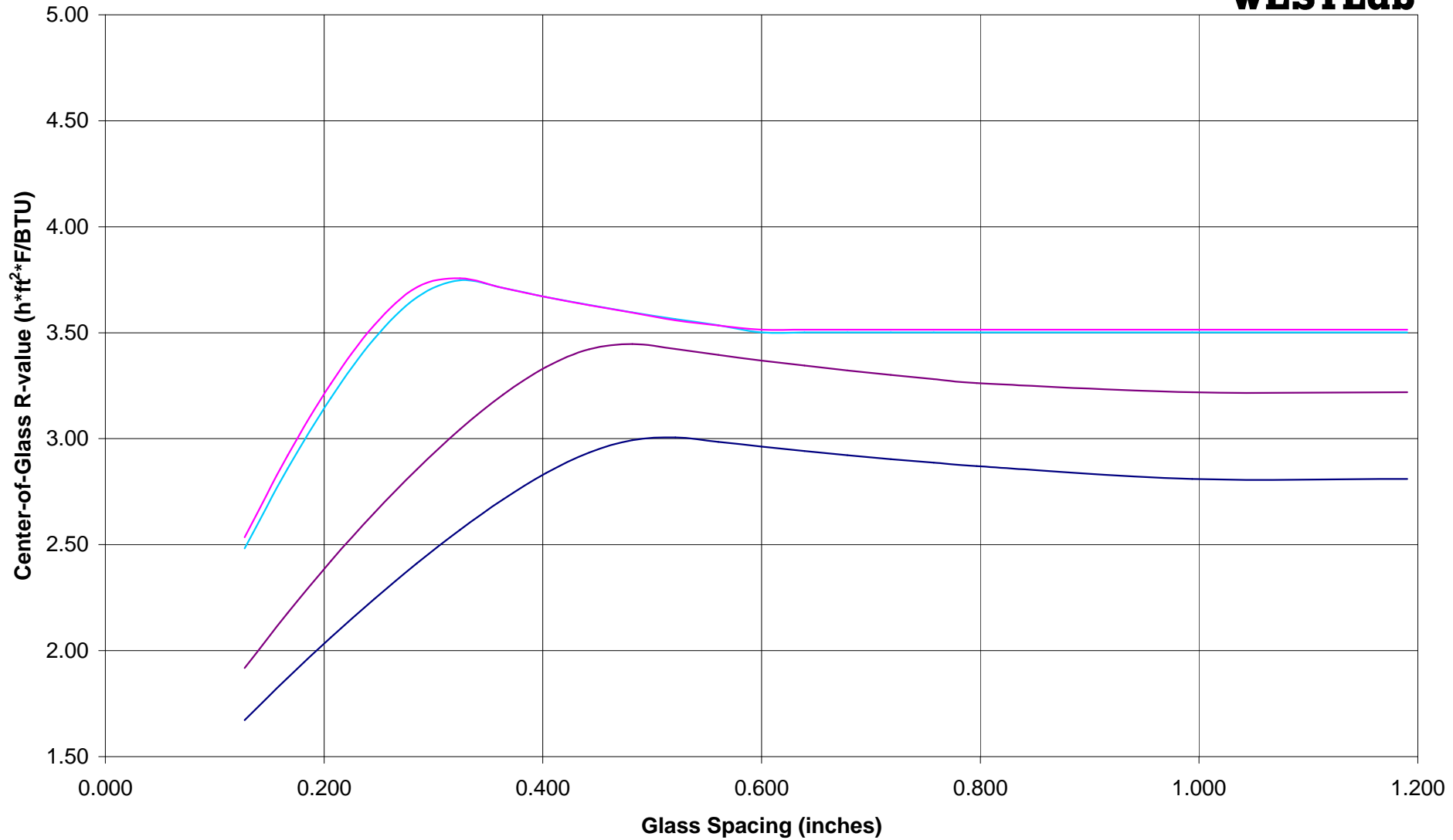
**SPECTRA GASES**

**WESTLab**



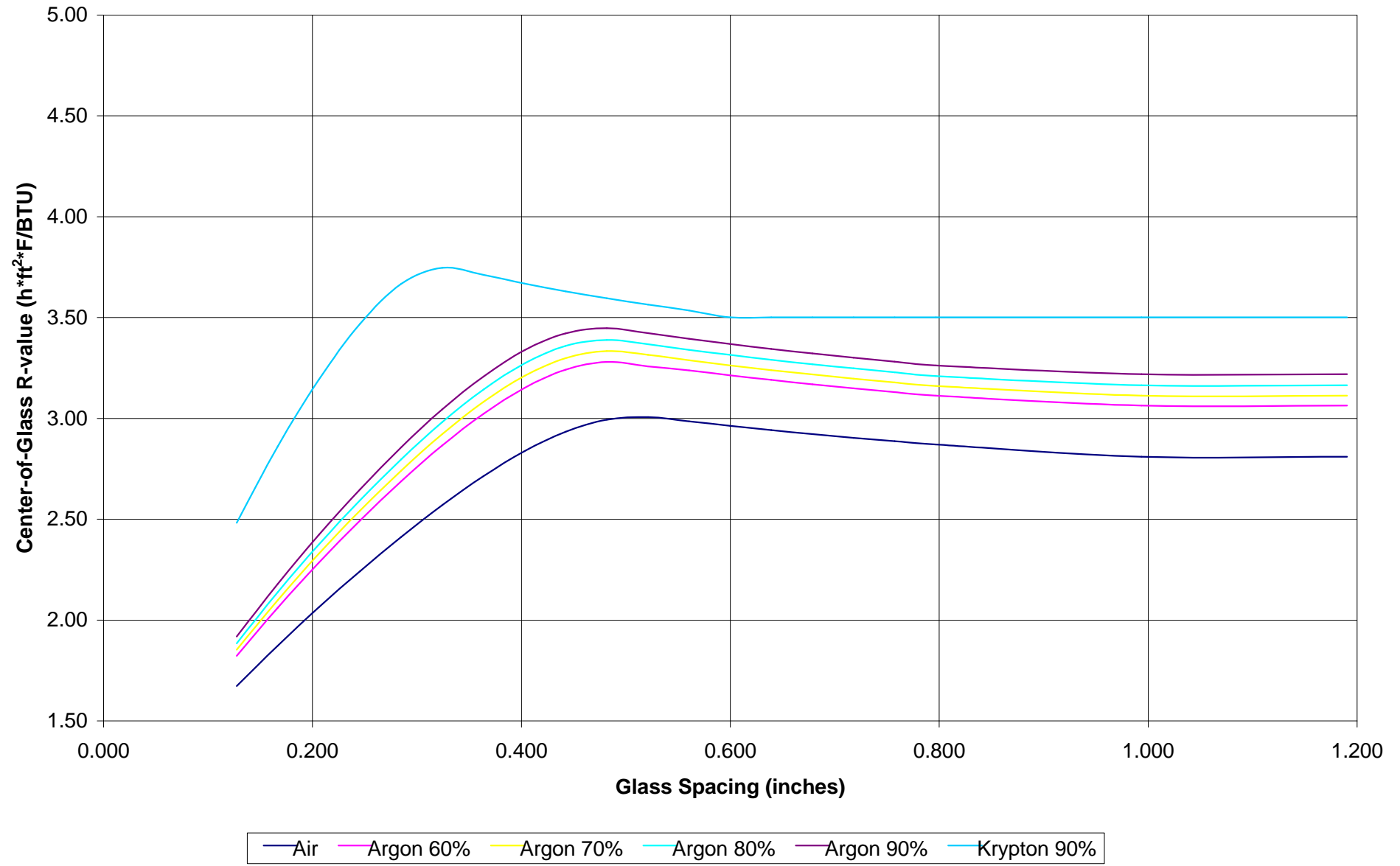
— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.15 Argon and Krypton Fills**  
Gas percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.

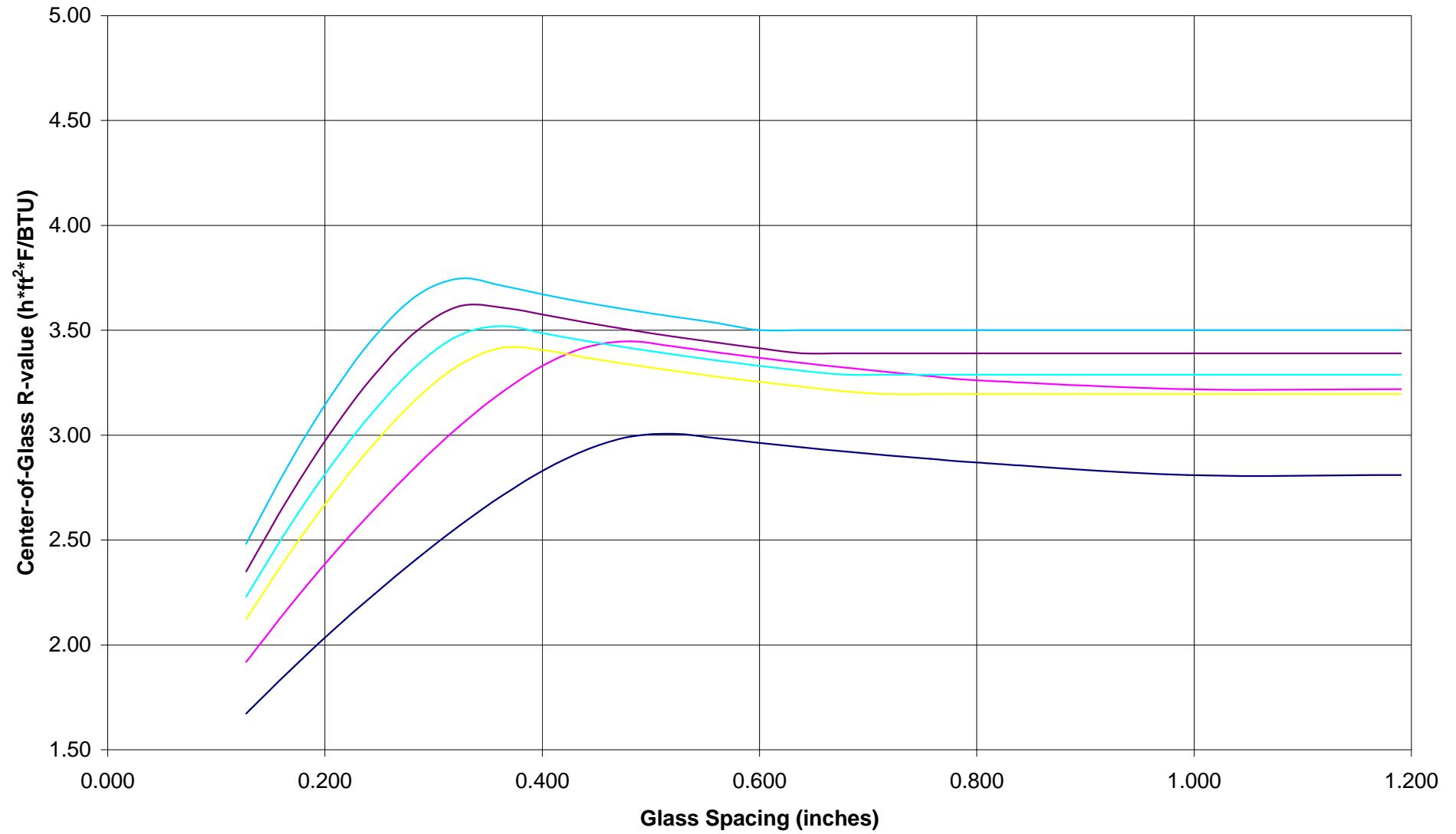


— Air — Argon 90% — Krypton 90% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.15 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Double Glazed Low-e 0.15 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.

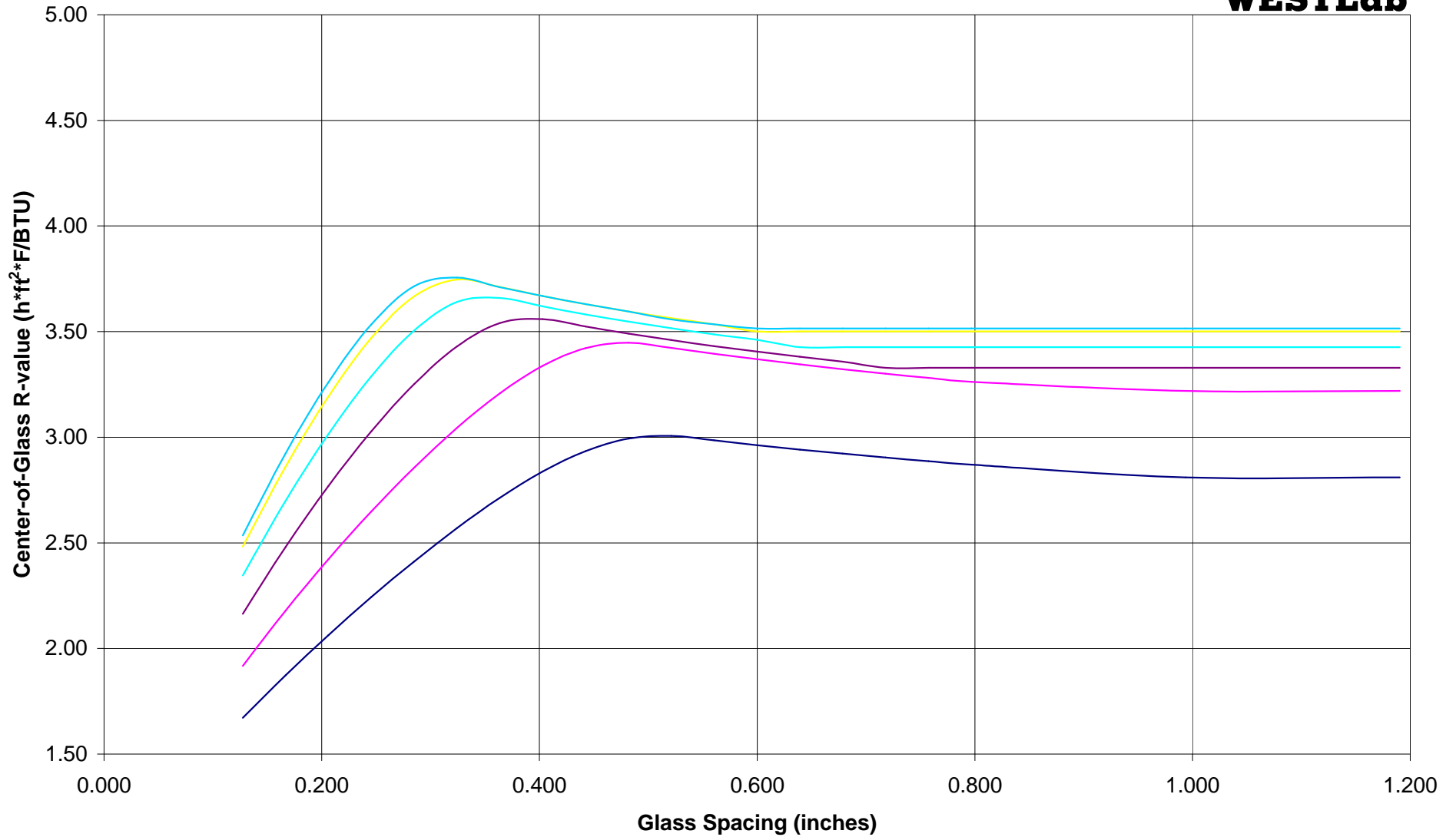


— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

# Center-of-Glass R-value (IP) vs. Glass Spacing

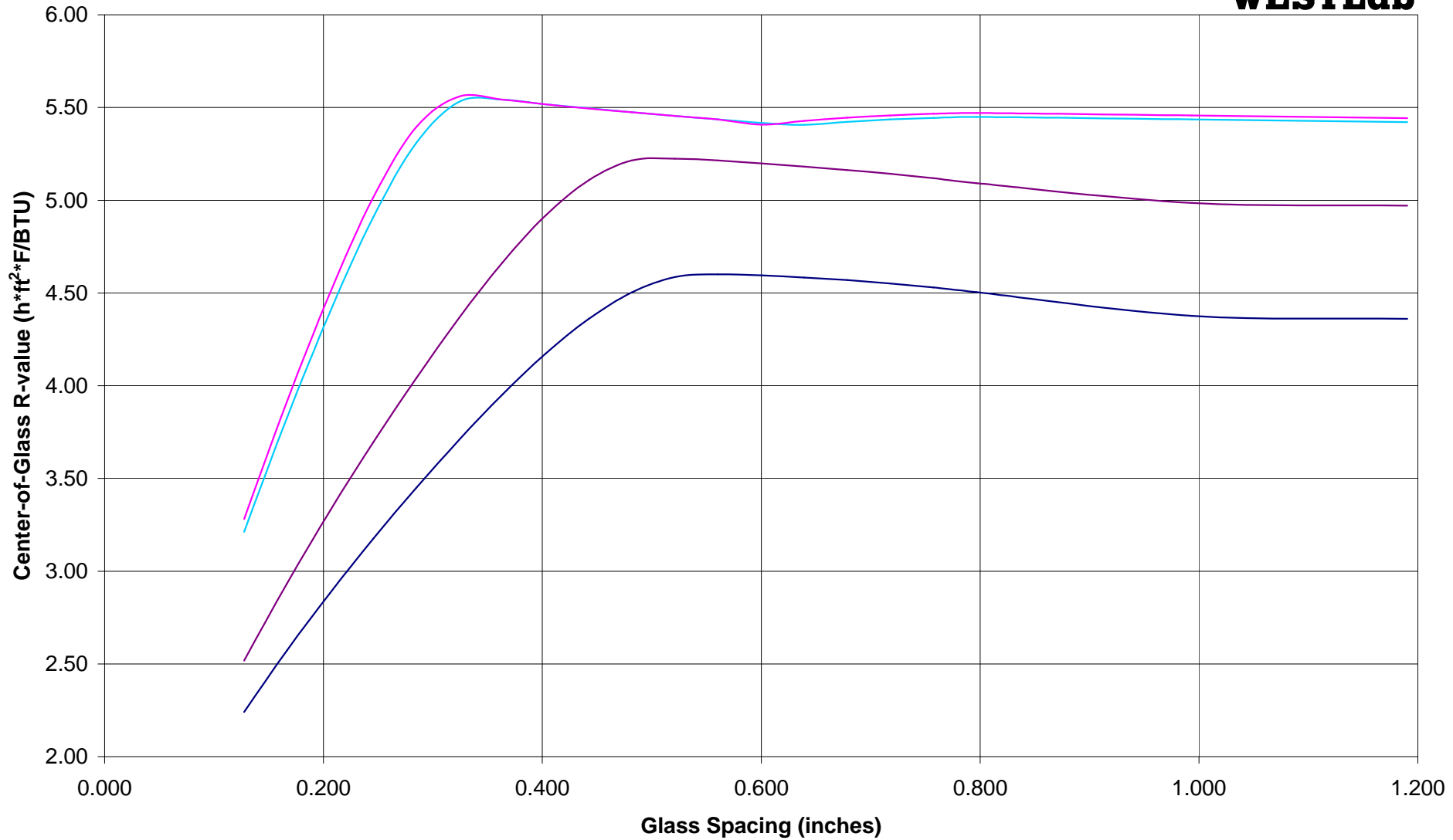
## Double Glazed Low-e 0.15 Argon, Krypton and Xenon Fills

Gas percentages represent fill gas concentration, initial fill rate was 90%  
Calculations performed using Window 5.2 computer program by WESTLab



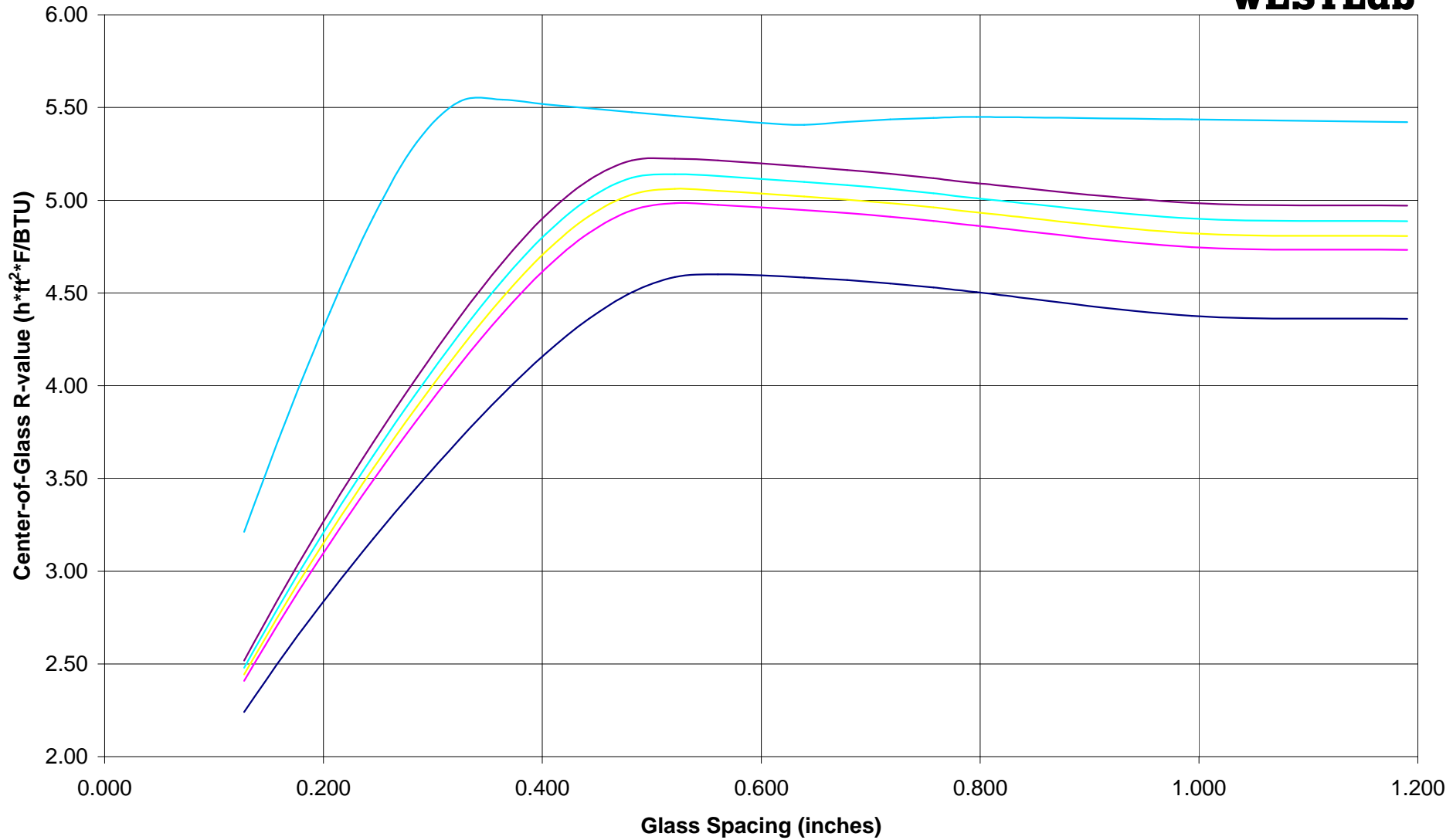
— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.04 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



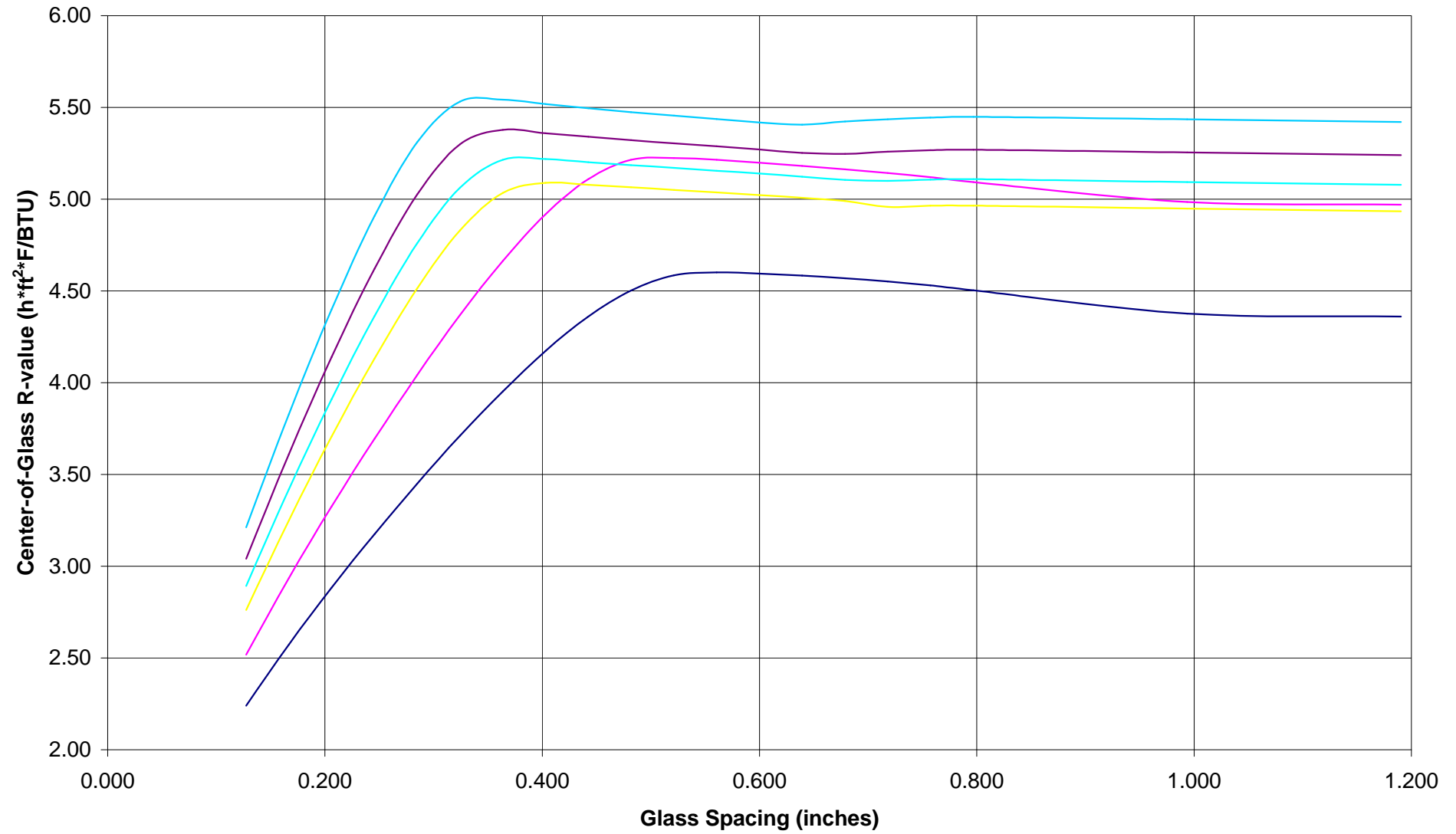
— Air — Argon 90% — Krypton 90% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.04 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



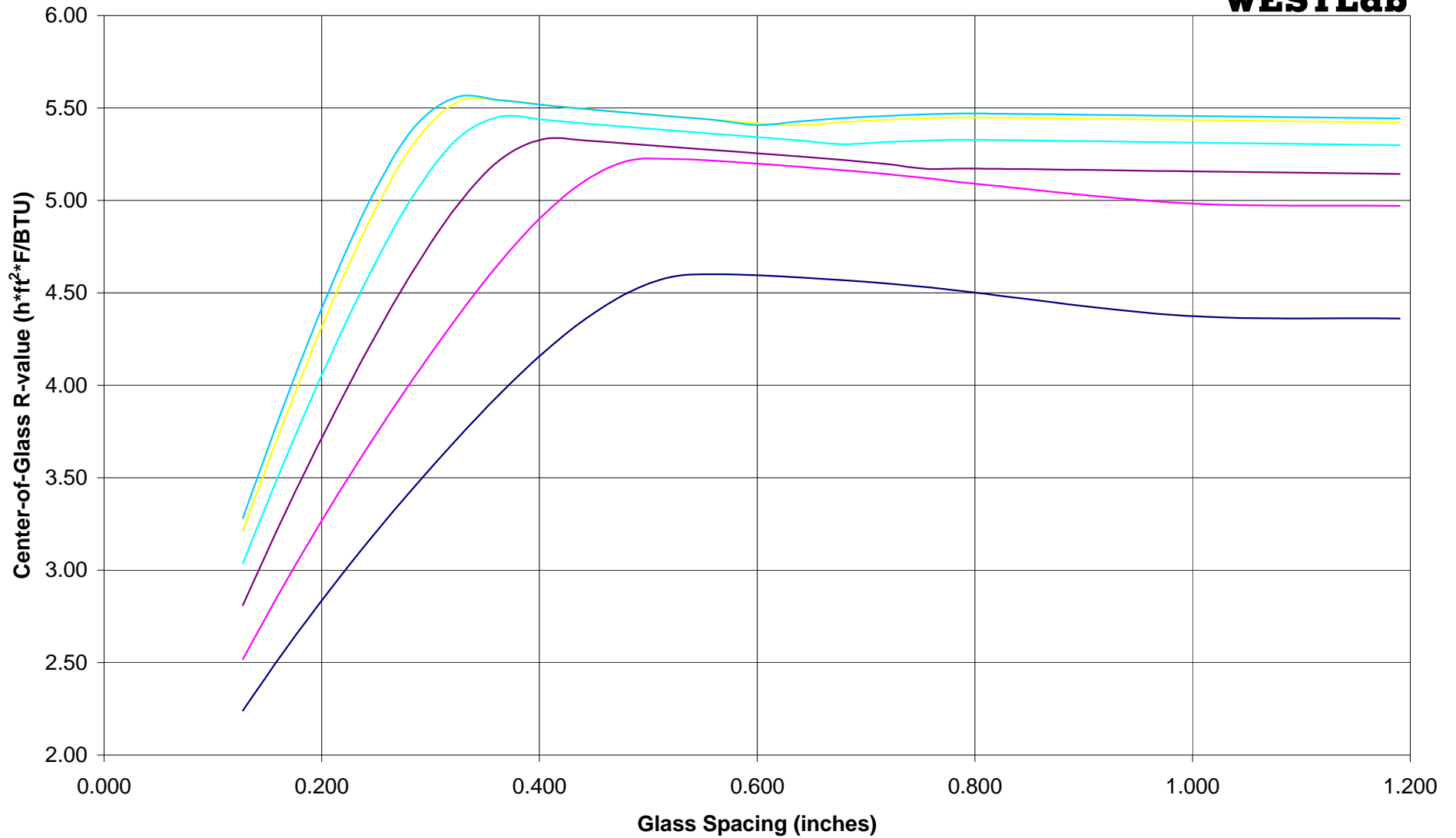
— Air   
 — Argon 60%   
 — Argon 70%   
 — Argon 80%   
 — Argon 90%   
 — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.04 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



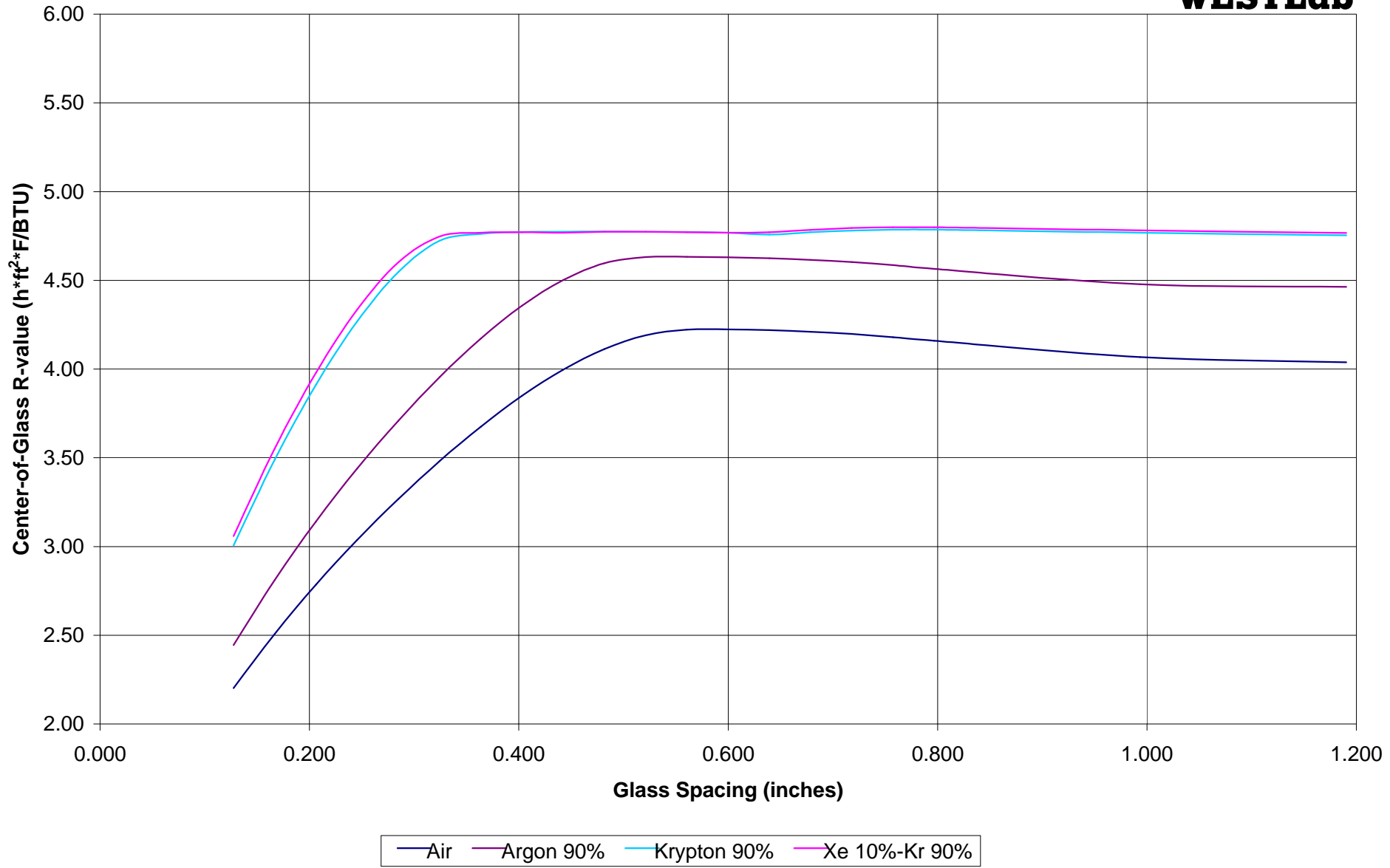
— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.04 Argon, Krypton and Xenon**  
 Gas percentages represent fill gas concentration, initial fill rate was 90%  
 Calculations performed using Window 5.2 computer program by WESTLab

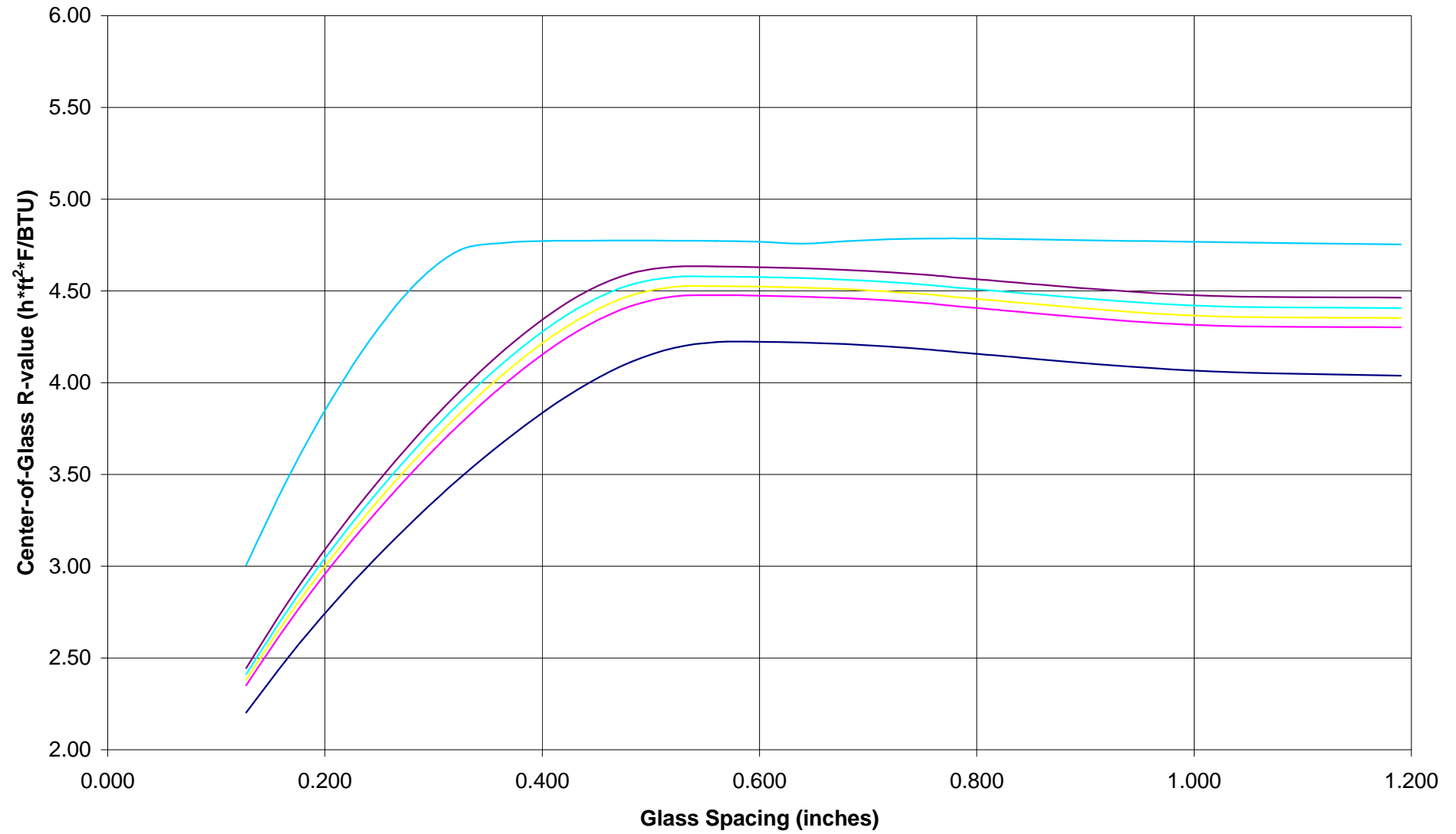


— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.15 Argon and Krypton Fills**  
Gas percentages represent initial fill rates achieved, balance assumed to be air.  
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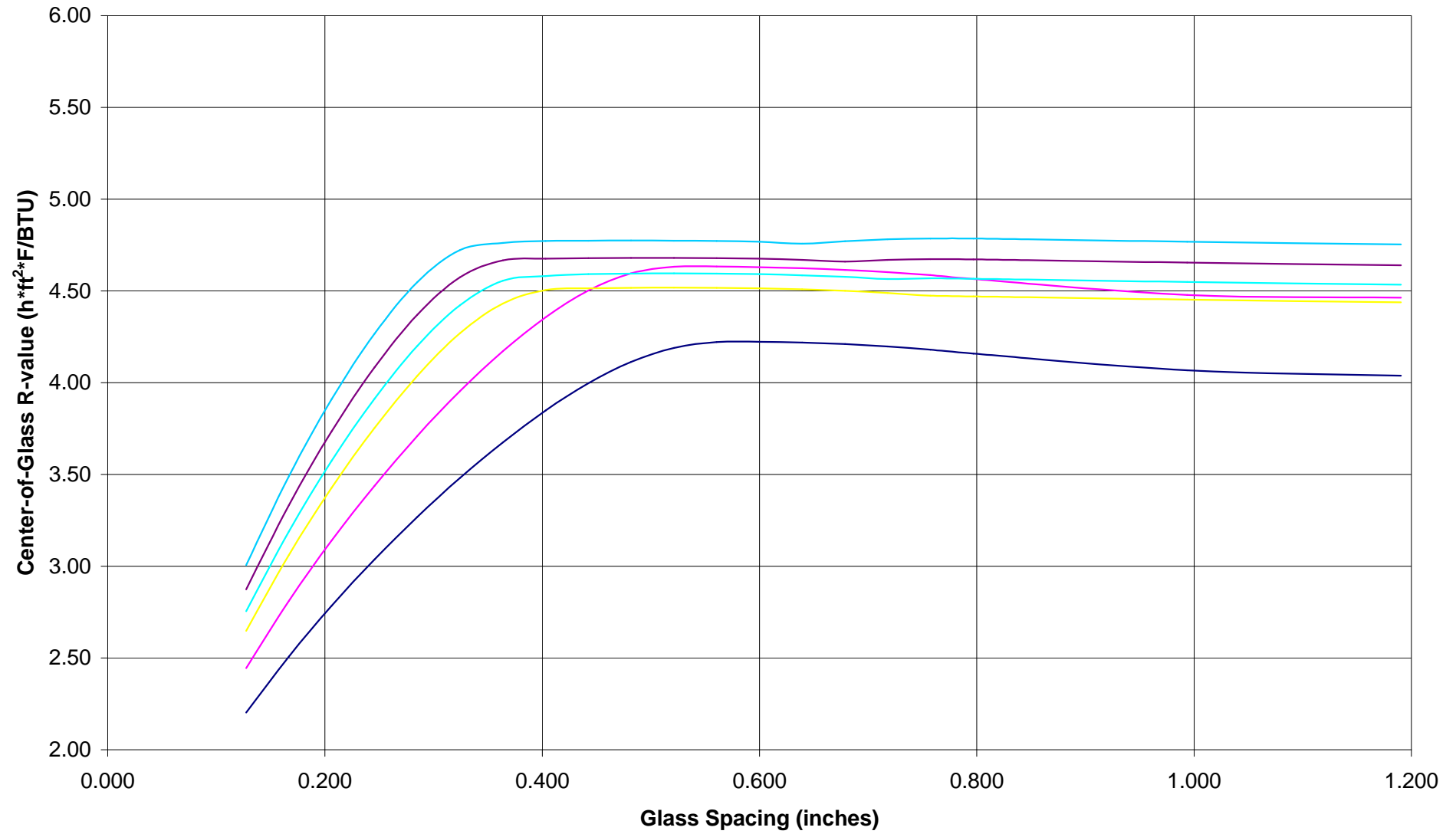


**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.15 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
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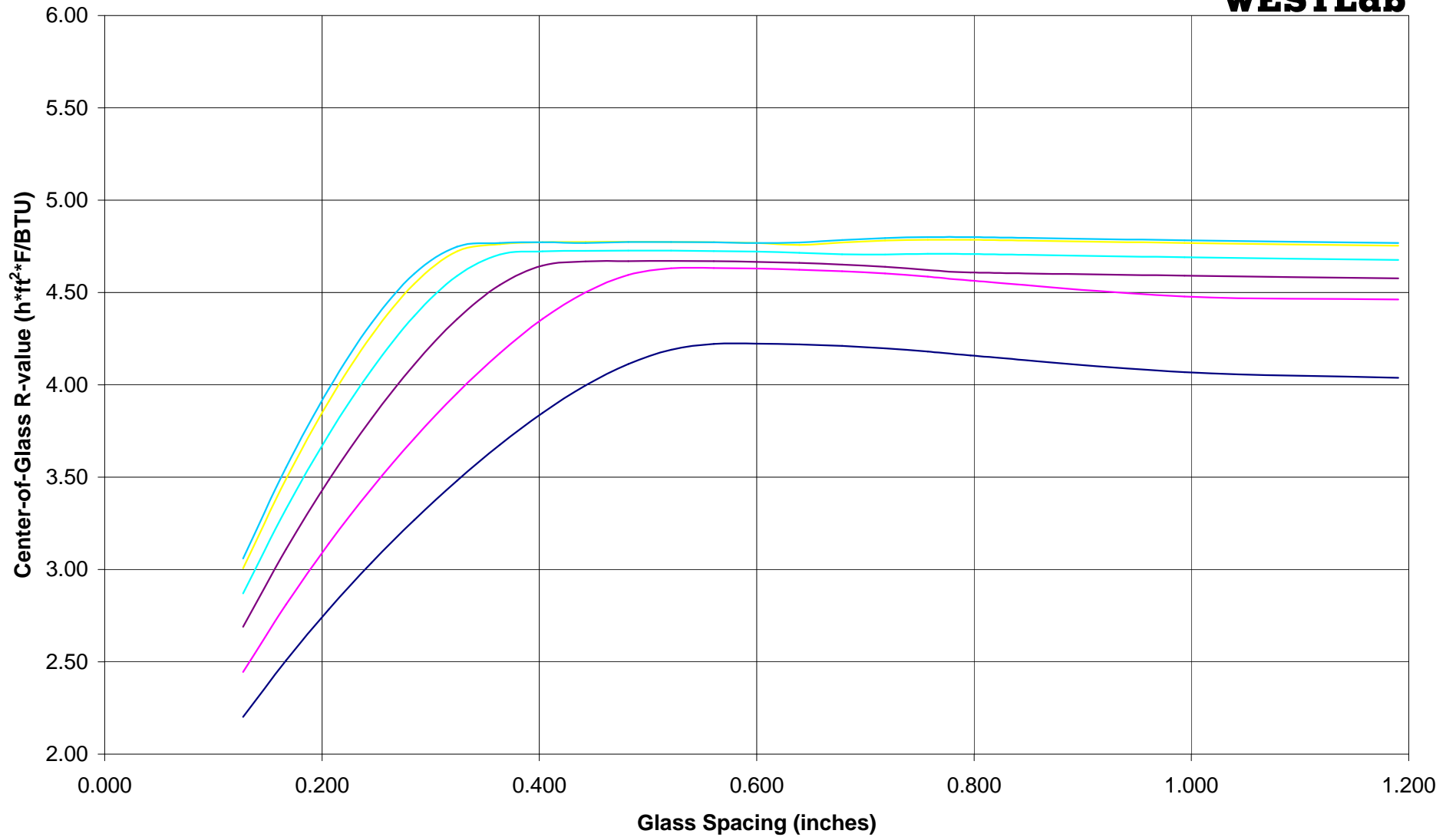
— Air — Argon 60% — Argon 70% — Argon 80% — Argon 90% — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.15 Argon and Krypton Fills**  
 Gas percentages represent initial fill rates achieved, balance assumed to be air.  
 Calculations performed using Window 5.2 computer program by WESTLab.



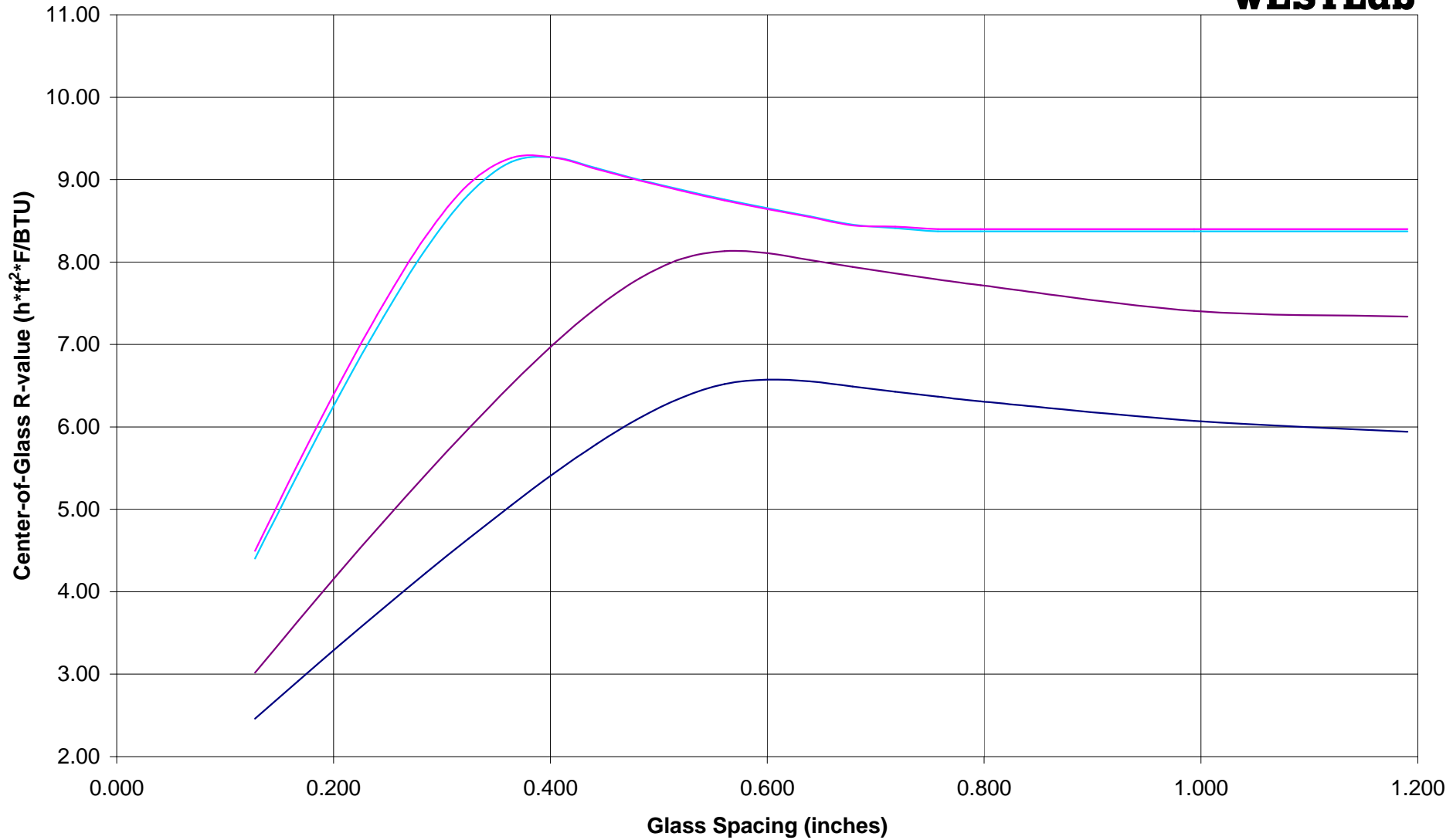
— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed One Low-e 0.15 Argon, Krypton and Xenon**  
 Gas percentages represent fill gas concentration, initial fill rate was 90%  
 Calculations performed using Window 5.2 computer program by WESTLab



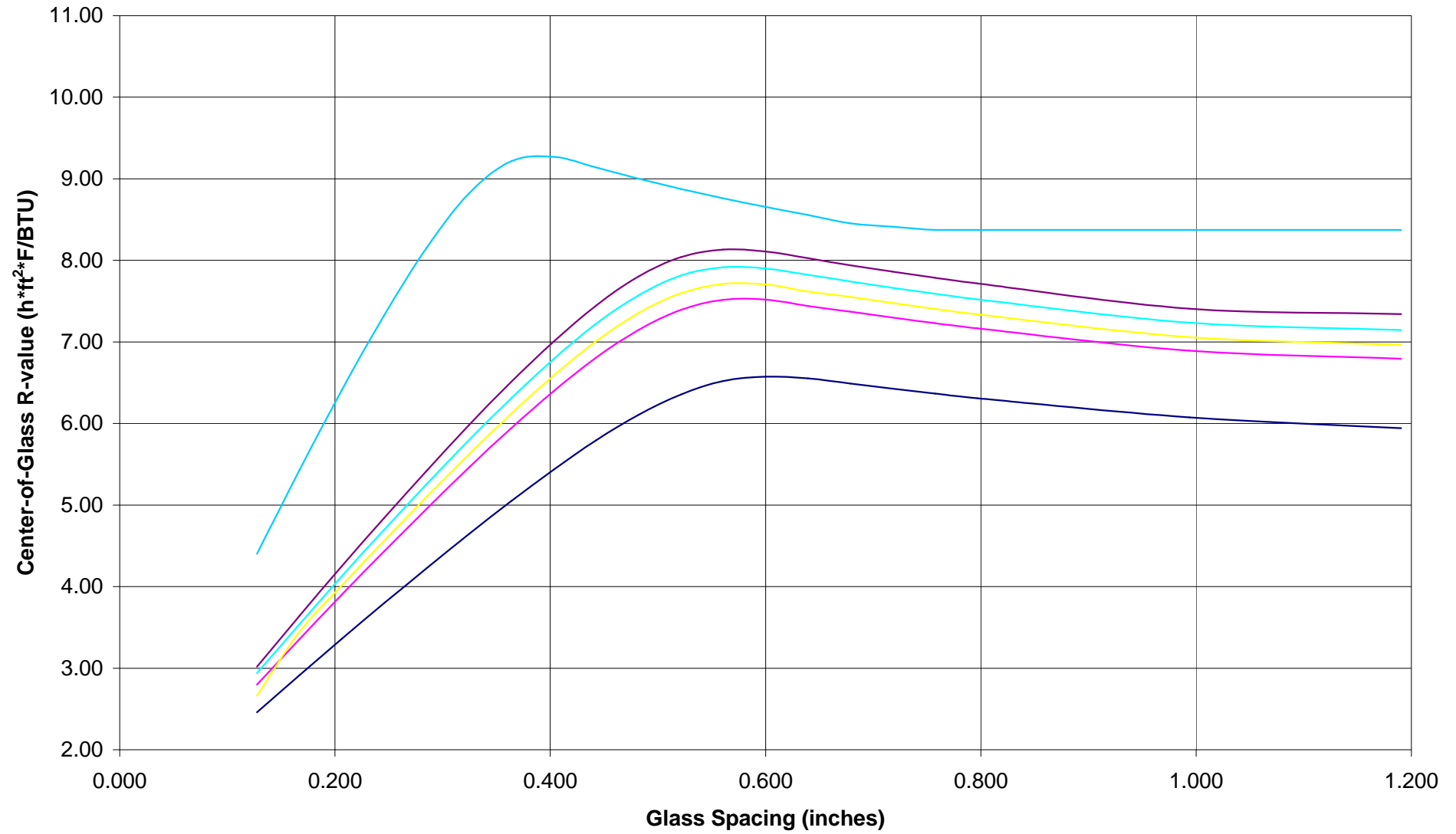
— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.04 Argon and Krypton Fills**  
Gas percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



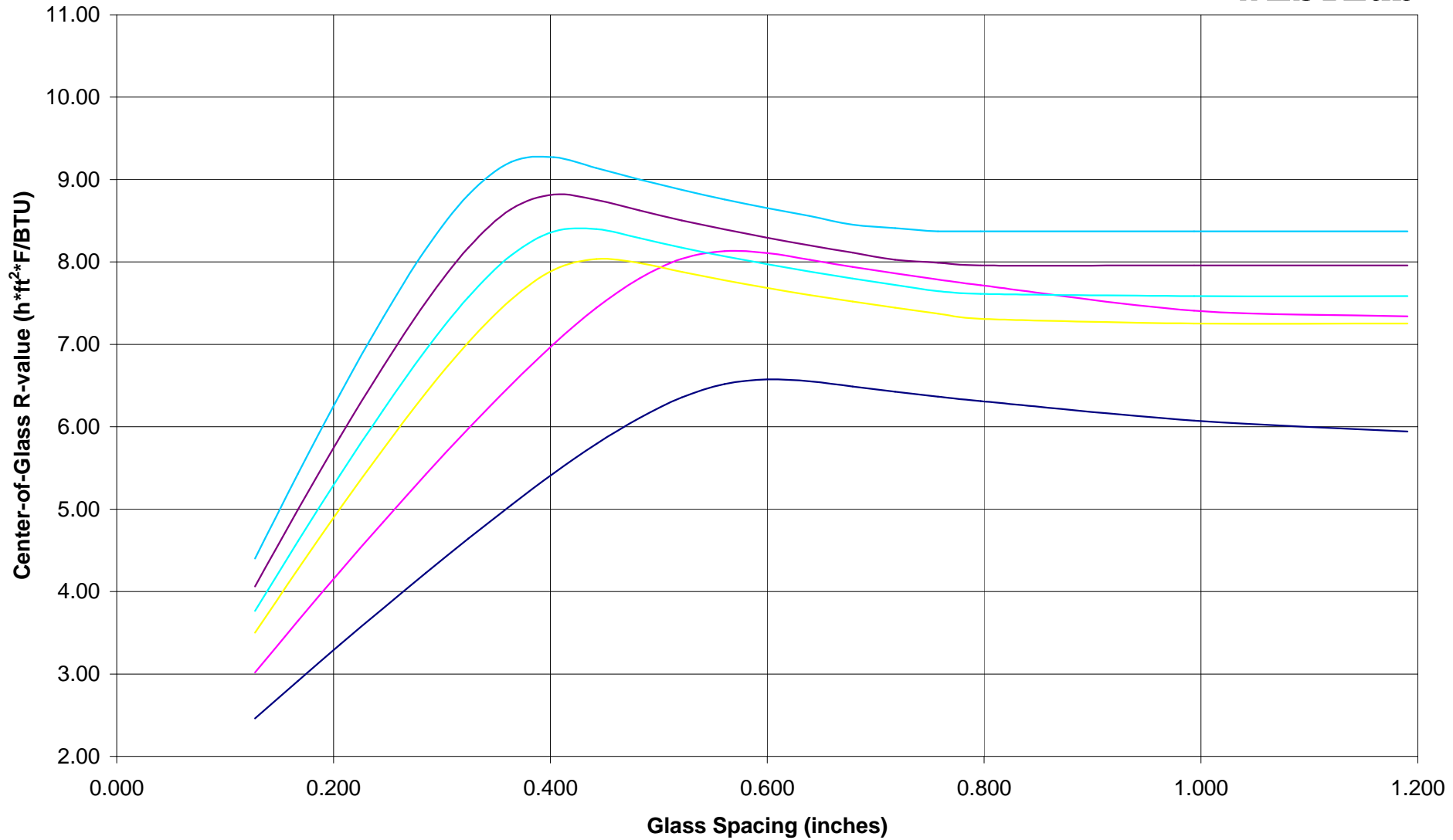
— Air — Argon 90% — Krypton 90% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.04 Argon and Krypton Fills**  
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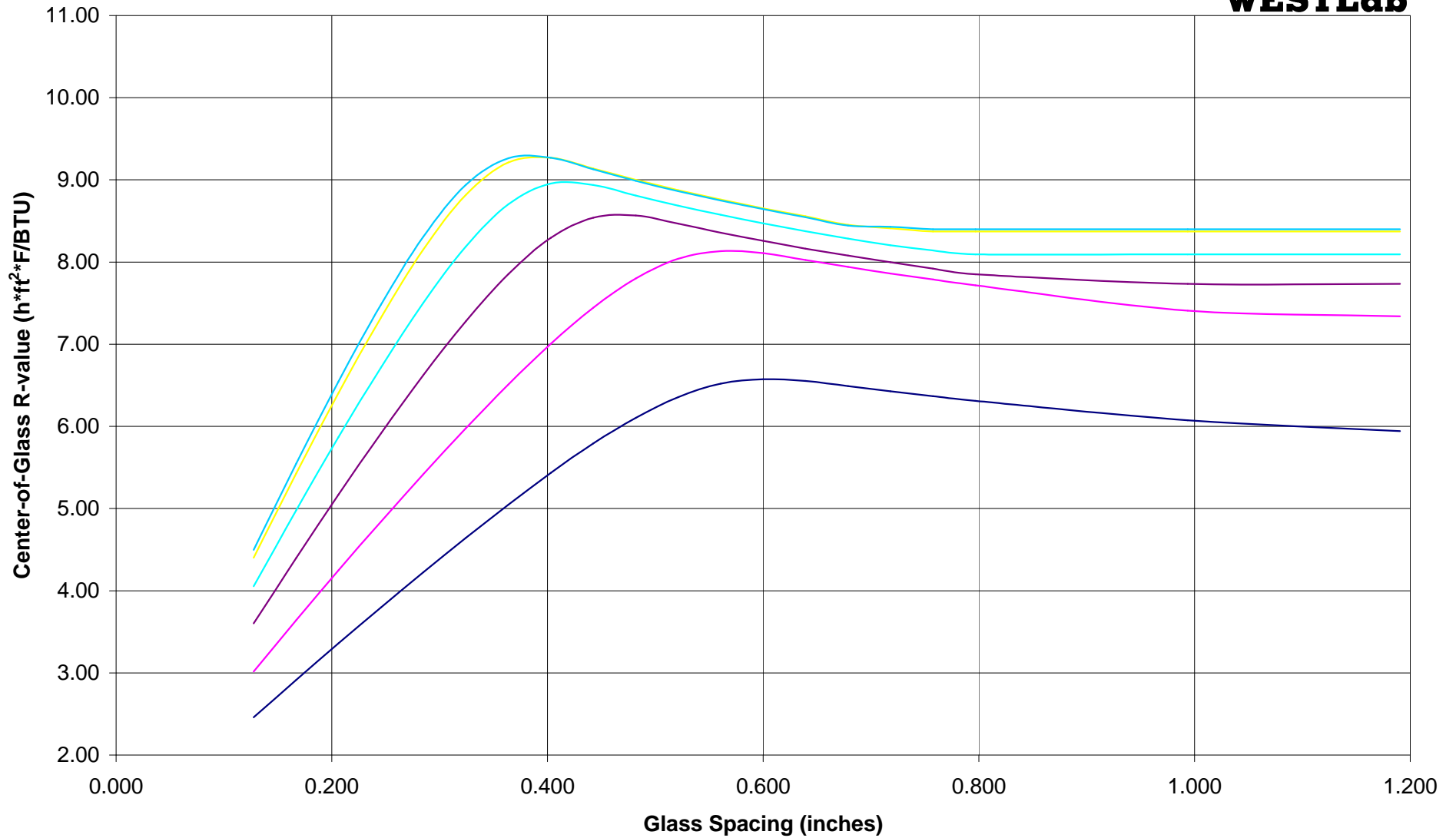
— Air   
 — Argon 60%   
 — Argon 70%   
 — Argon 80%   
 — Argon 90%   
 — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
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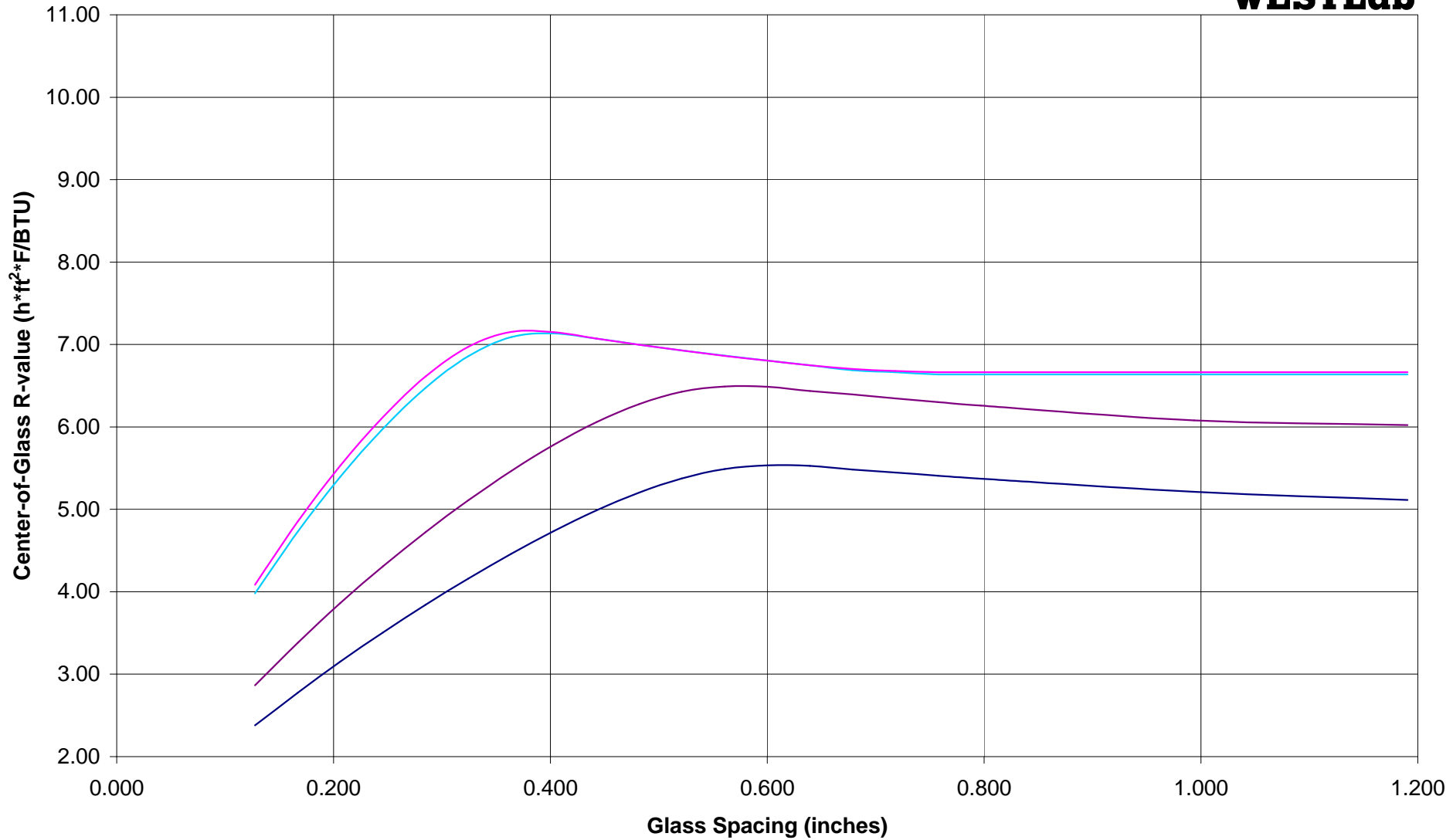
— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.04 Argon, Krypton and Xenon**  
 Gas percentages represent fill gas concentration, initial fill rate was 90%  
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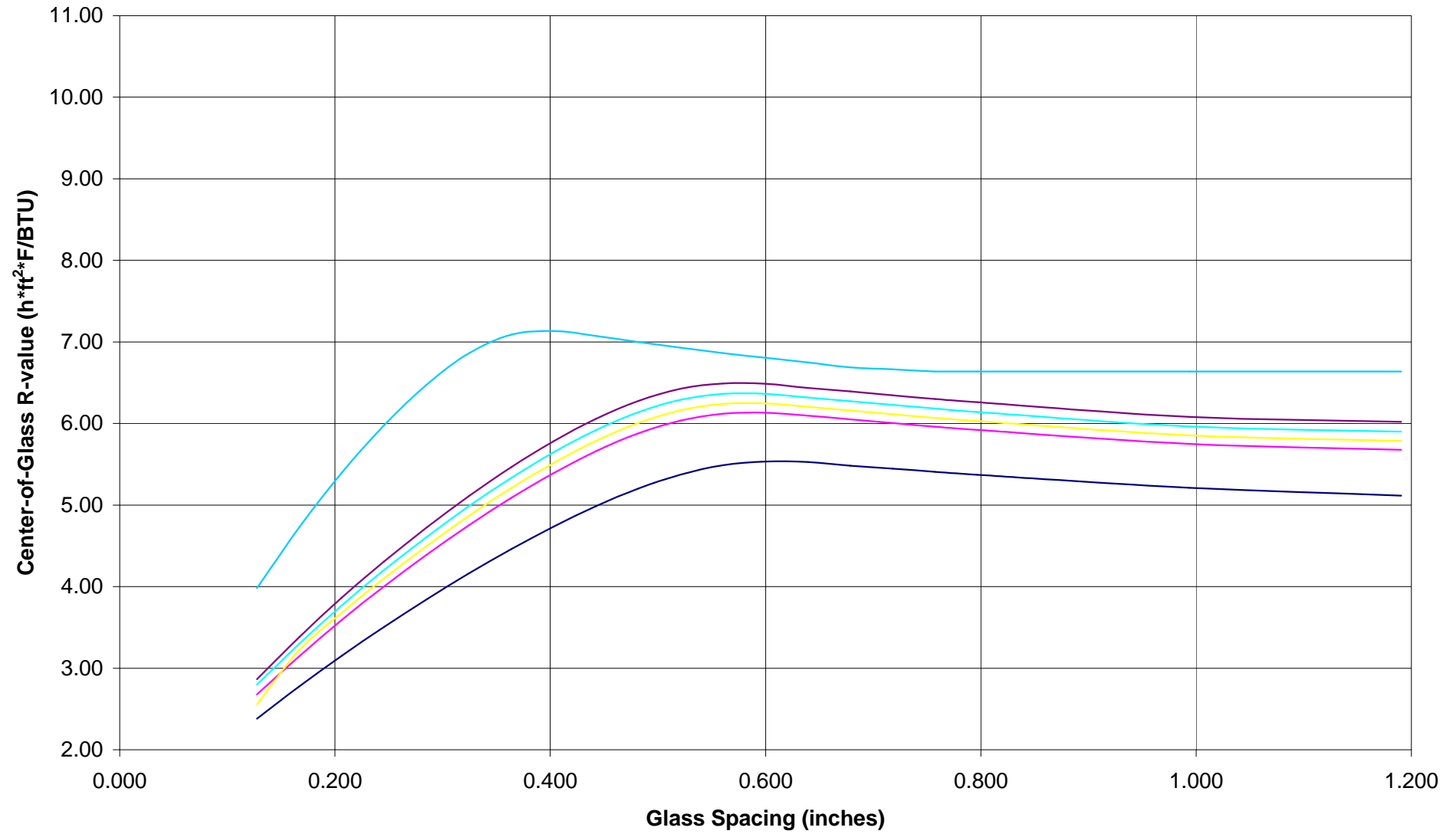
— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.15 Argon and Krypton Fills**  
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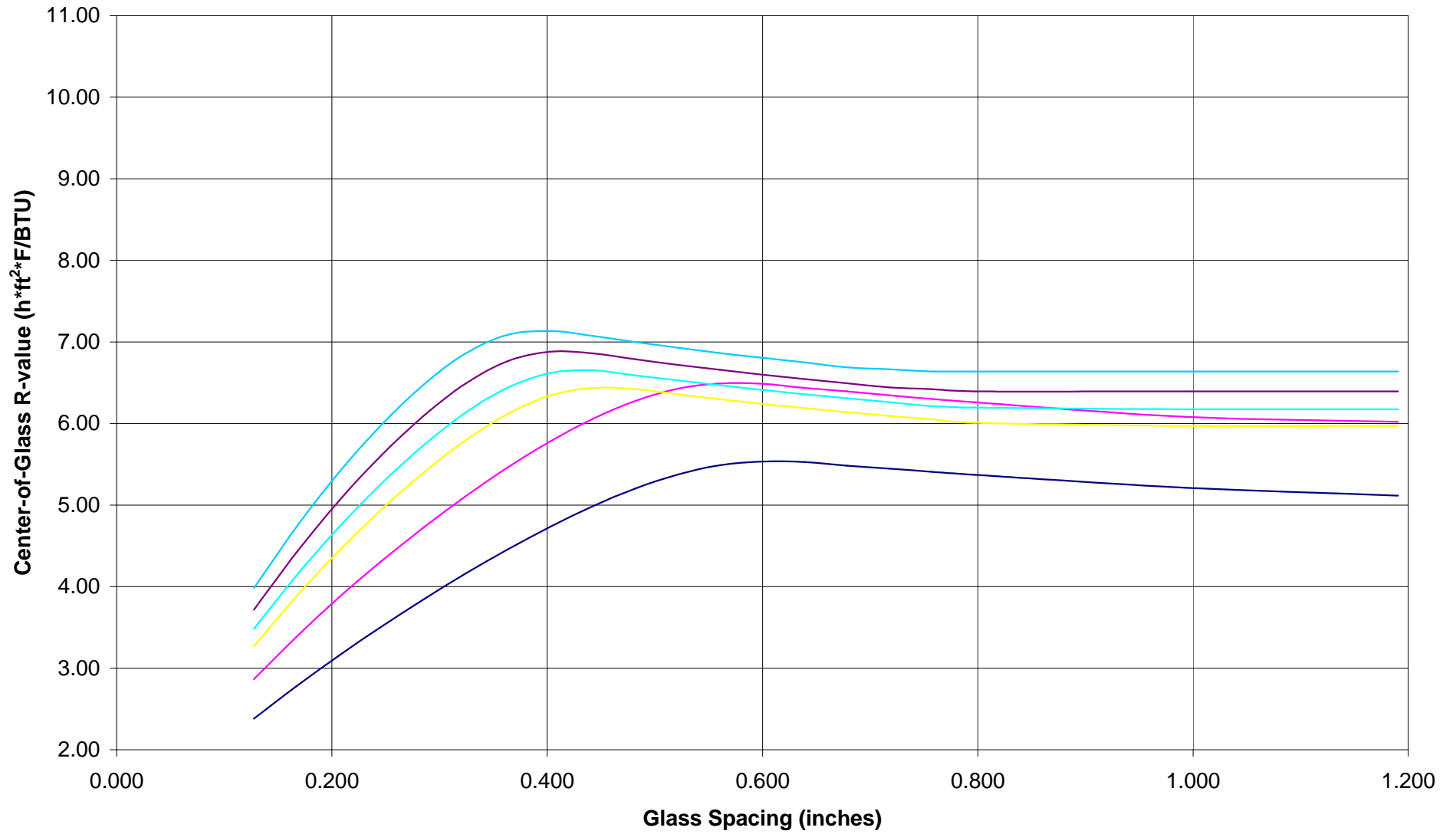
— Air — Argon 90% — Krypton 90% — Xe 10%-Kr 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
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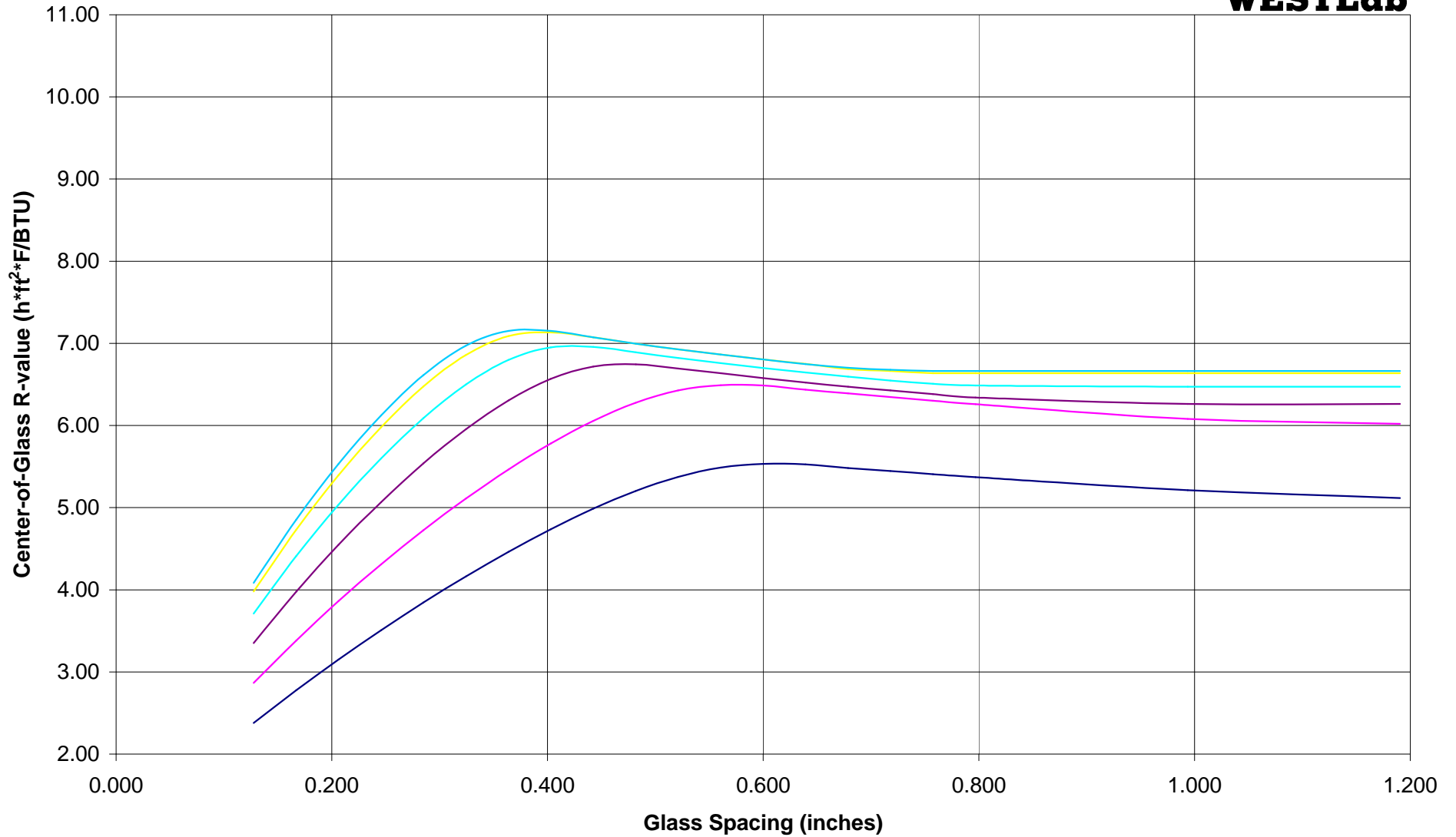
— Air — Argon 60% — Argon 70% — Argon 80% — Argon 90% — Krypton 90%

**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.15 Argon and Krypton Fills**  
Gas percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



— Air — Argon 90% — Krypton 60% — Krypton 70% — Krypton 80% — Krypton 90%

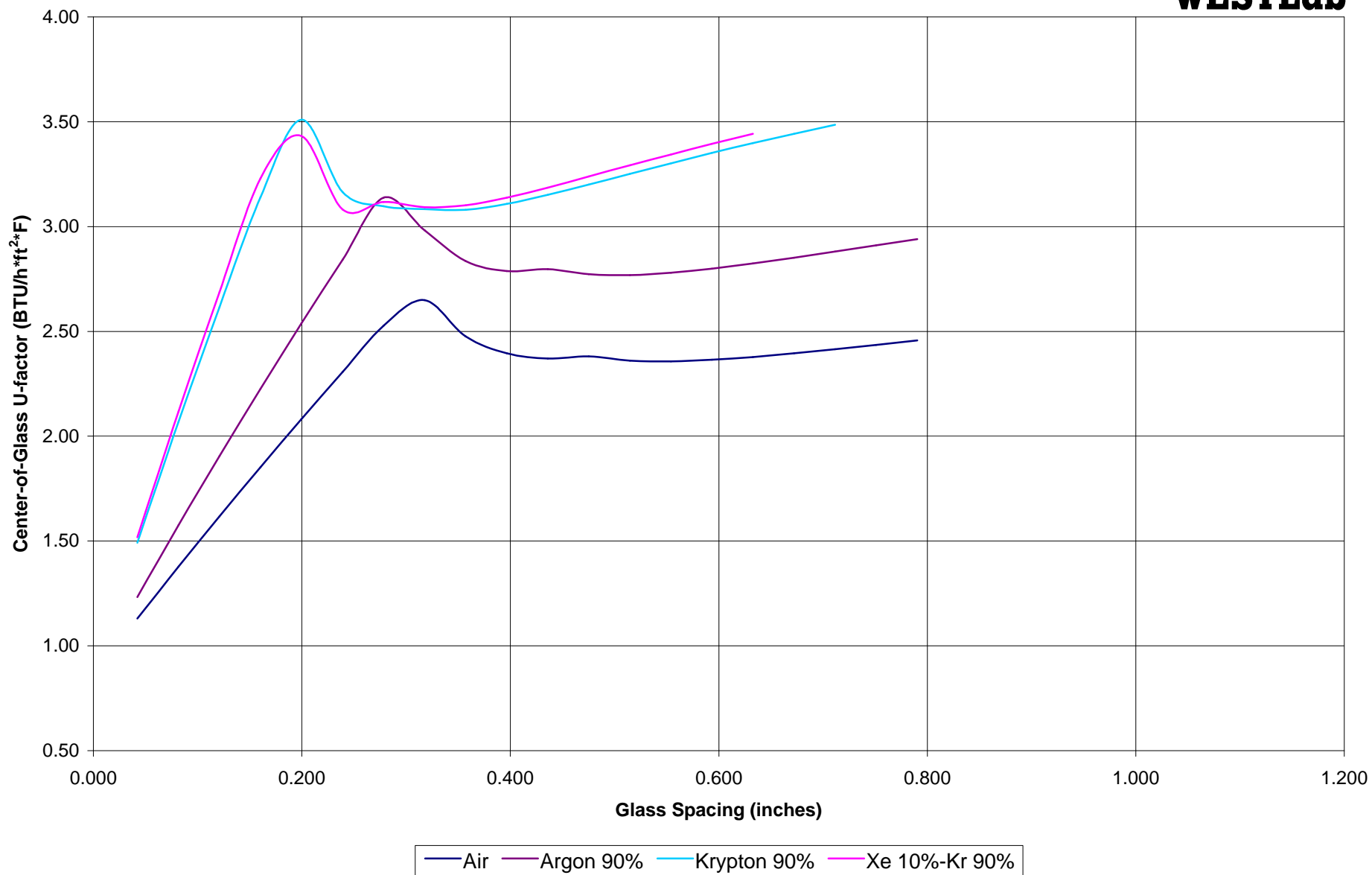
**Center-of-Glass R-value (IP) vs. Glass Spacing**  
**Triple Glazed Two Low-e 0.15 Argon, Krypton and Xenon**  
 Gas percentages represent fill gas concentration, initial fill rate was 90%  
 Calculations performed using Window 5.2 computer program by WESTLab



— Air — Argon — Krypton — Kr 80%-Ar 20% — Kr 50%-Ar 50% — Xe 10%-Kr 90%

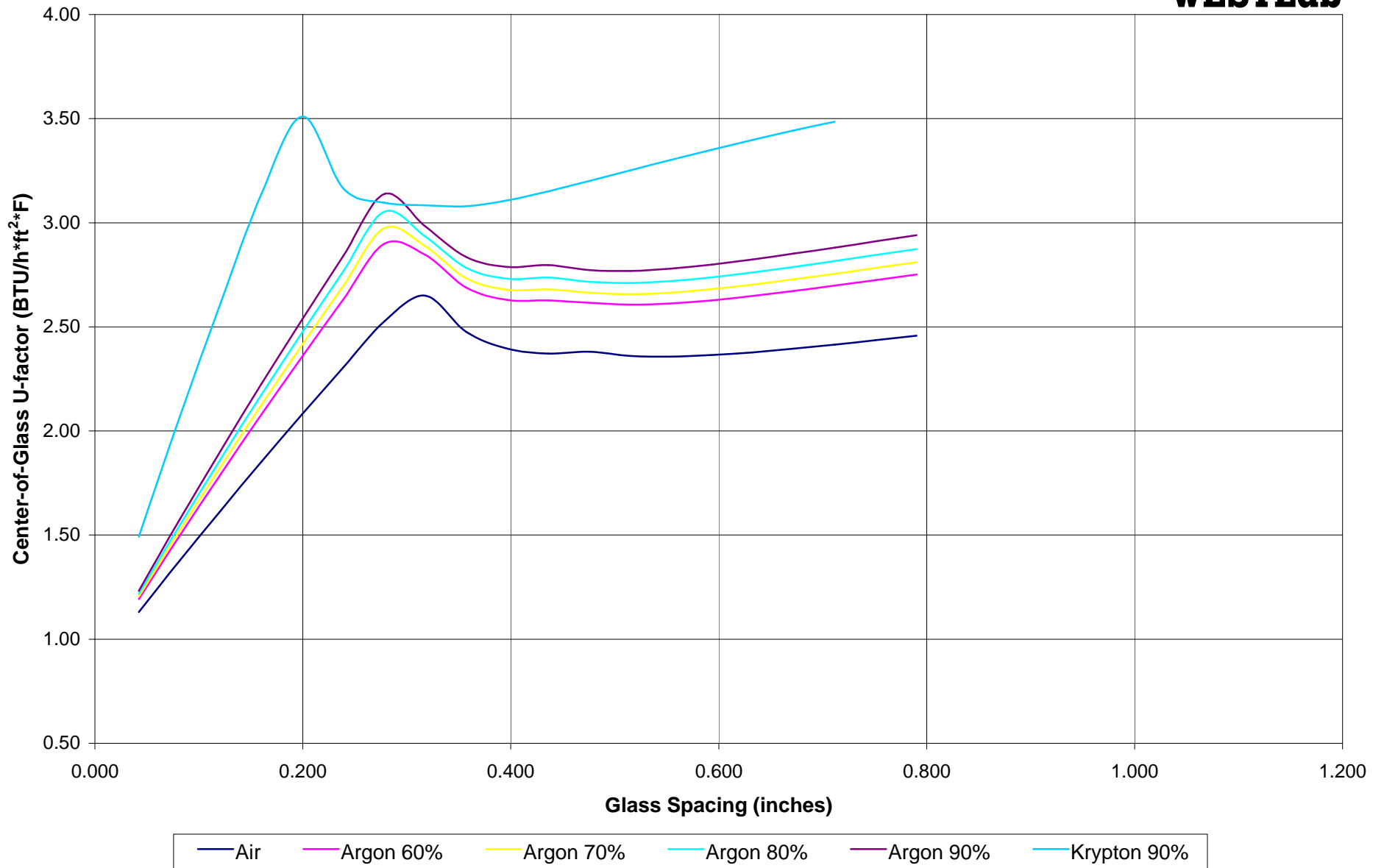
# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.04 Ar and Kr

Gas percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



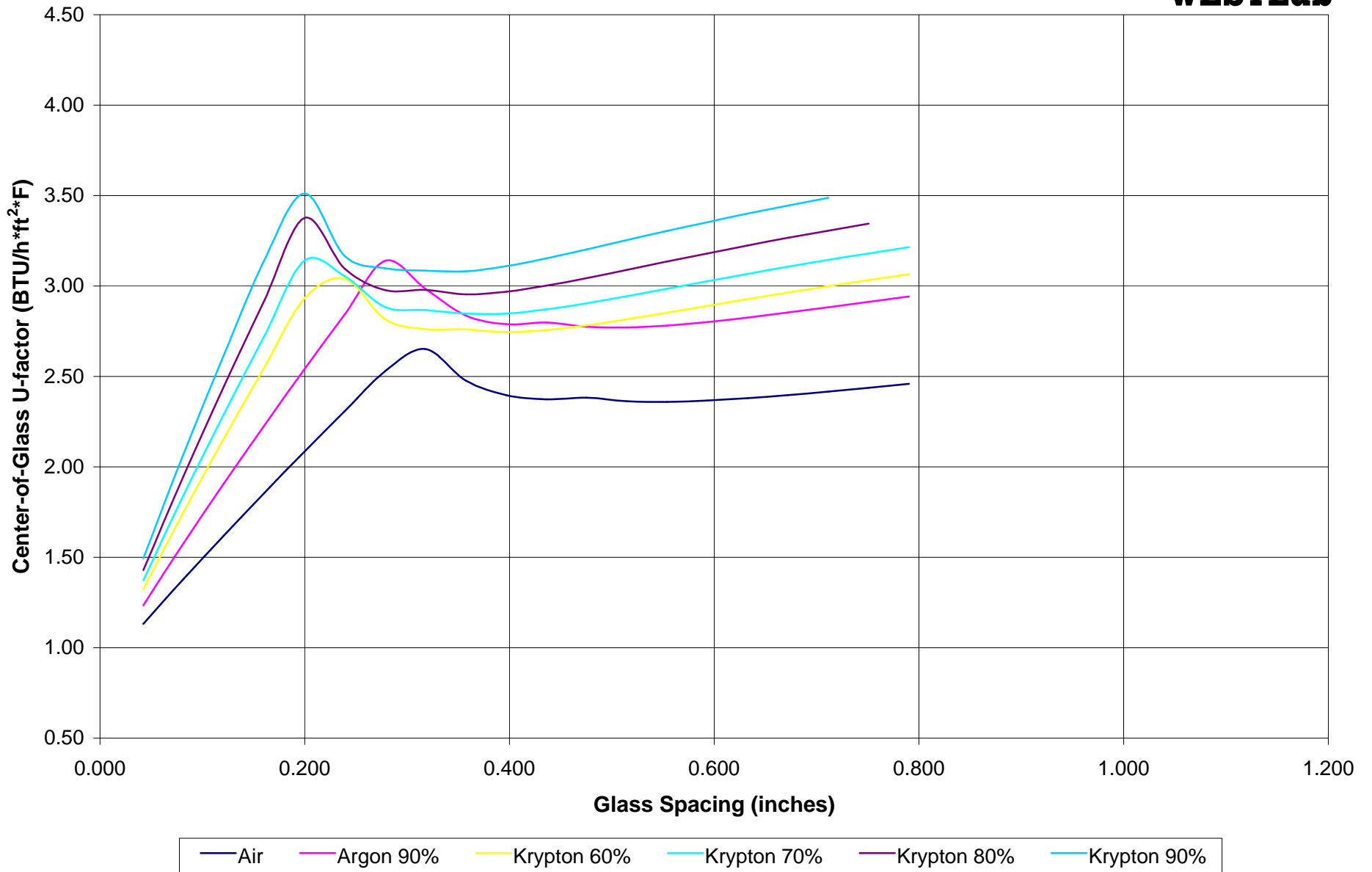
# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.04 Ar and Kr

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Windows 5.2 computer program by WESTLab.



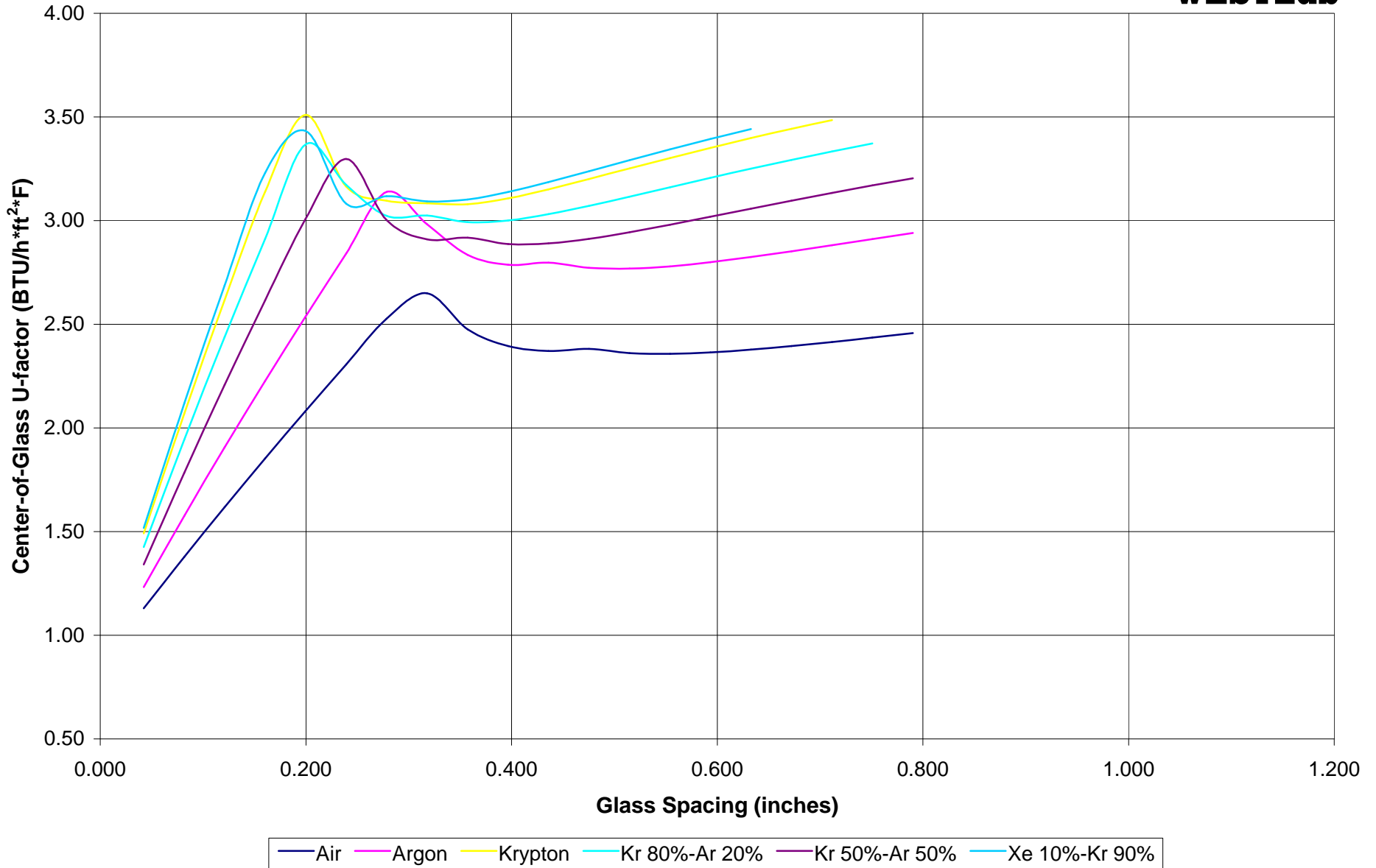
# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.04 Ar and Kr

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



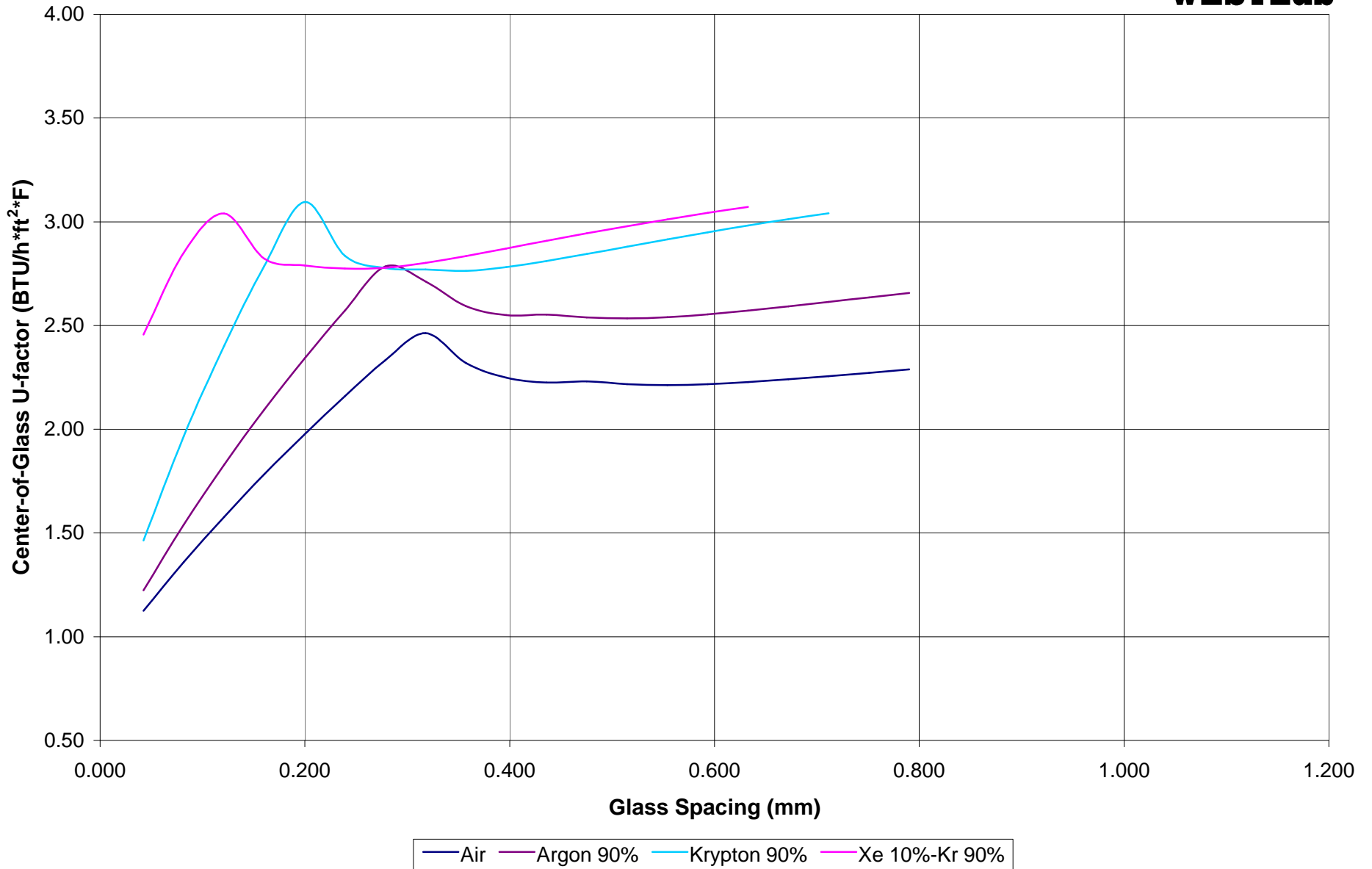
# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.04 Ar, Kr and Xe

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



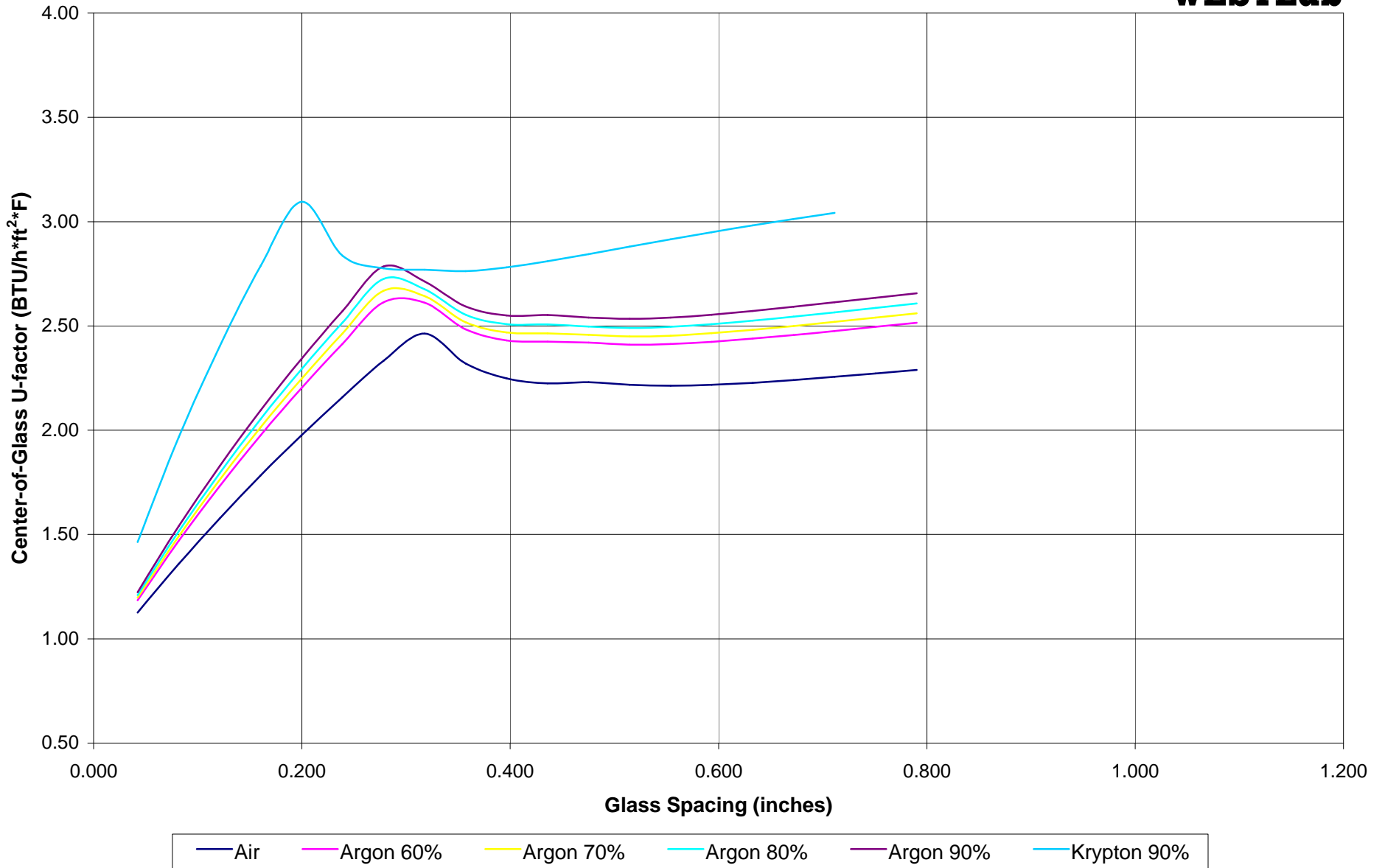
**Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree)**  
**Double Glazed Low-e 0.15 Ar and Kr**

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
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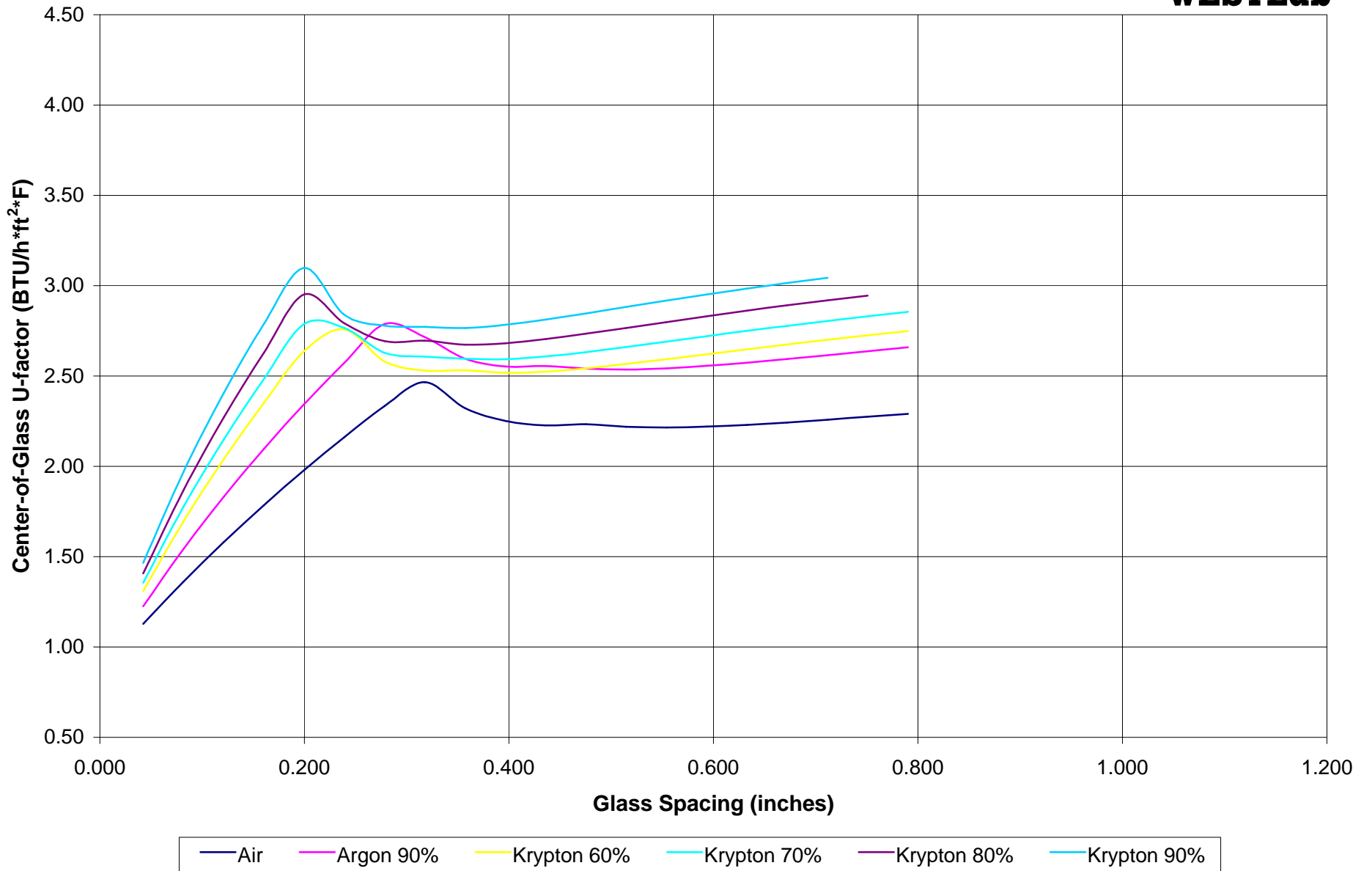
# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.15 Ar and Kr

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
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# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.15 Ar and Kr

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.



# Center-of-Glass R-value (IP) vs. Glass Spacing (20 degree) Double Glazed Low-e 0.15 Ar, Kr and Xe

Gas fill percentages represent initial fill rates achieved, balance assumed to be air.  
Calculations performed using Window 5.2 computer program by WESTLab.

