CSEC LRP Wind Drift Estimator 2.0 for 6.5mm (.264) Caliber

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This sheet demonstrates the use of the **CSEC LRP Wind Drift Estimator 2.0** for all 6.5mm (.264) calibers.

WD = (CW/K) x R

Base K_{LR} = 15
Base Alt = 0, sea level
Base MV = 2700fps for all calibers.
Base BW = 140gr

- **Altitude correction: .00006 times altitude feet, or .06 for every 1000'**
- **Bullet Weight correction: ±.01 per 1 grain above/below Base BW**
- **Muzzle Velocity correction: ±.001 per 1 fps above/below 2700 fps MV**

Scenario 1: Hunting at 10,000' with 143gr 6.5mm bullet @ 3000fps muzzle velocity, temperature is 30ºF, shot presents at 450 yards, 12 mph crosswind from left to right. You had previously calculated the corrected **K_{LR}** value:
Calculate Corrections:

- Altitude Correction: .6, BW Correction: .03, MV Correction: .3
- **Total Correction: 0.93**

Calculate corrected K_{LR} = 15 x 1.93 = 28.95 ~ **29**
Calculate K_{HR}:
K_{HR} = 29 x 1.4 = 40.6 ~ 40

Calculate WD(450)= (12mph/K_{HR}40mph) x 4.5 = .3 x 4.5 = 1.35 MOA_L

Compare with Hornady 4DOF ballistic Calculator Total Wind Drift = 1.68 MOA_L

Scenario 2: You make a terrible shot, the wounded Mule Deer buck runs and stops at 900 yards. You could recalculate:
WD(900) = (12/29) x 9 = .413 x 9 = 3.72 MOA_L plus .25 MOA_L for spin drift = ~ 4.0 MOA_L,

...but this is too complicated and takes too long, so you round off numbers:

WD(900) = (12mph/K_{LR}30mph) x 9 = .4 x 9 = 3.6 MOA_L and add a "click" for Spin Drift to **3.85 MOA_L**, and still put the buck down.

Compare to Hornady 4DOF ballistic calculator Total Wind Drift 900 yds = 4.09 MOA_L

Scenario 3: You were so impressed with your 900 yd shot during Deer season, you wanted to see how far your hunting load could shoot accurately. You are now at CSEC LRP (5300', Station 25 inHg) setting up for the 1300 yd target. Crosswind is left to right at 10 mph.
First you calculate the corrected K_{LR} value:

- Altitude Correction: .32, BW Correction: .03, MV Correction: .3
- **Total Correction: 0.65**

K_{LR} =15 x 1.65 = ~ 25

Next calculate K_{ELR}:
K_{ELR} = K_{LR} x .75 = 25 x .75 = 18.75 ~ 19

Then calculate:
WD(1300) = (10mph/K_{ELR}19mph) x 13 = 6.84 MOA_L, then add .6 MOA_L for spin drift, set Total Windage at 7.44 MOA_L

… but you dont have a calculator handy so you round off:
WD(1300) = (10/20) x 13 = .5 x 13 = 6.5 MOA_L and add .6 MOA_L for spin drift, set the Windage to 7.1 MOA_L … and get IMPACT!

Compare to Hornady 4DOF ballistic calculator Total Wind Drift = 7.16 MOA_L.