PMC Testing Journal

# 1.0 5 Watt Tests – Insulated Cork Configuration

## 1.1 “TC275-1 Baseline” – Test #1 – 02/13/2020

I started the test at 8:37 am and finished at 10:17 am, when the temperatures were reasonably close to steady state (no significant increase in the first decimal place for at least five minutes). I kept the door closed to prevent drafts of air. Over the duration of the experiment the door was opened a couple of times by other employees, but there was no noticeable affect at the second decimal place. There were also periodic drafts of cold air coming from the vent above me. The first two had no noticeable effect, but at 10:12 AM the vent release a significant amount of colder air and I noticed a slow decrease in temperatures at the second decimal place. Therefore, because I felt that the PMC coupons had reached “reasonably close” to steady state, I decided to end the test at 10:14:55 AM.

Unfortunately, there was a small error in my Labview software that caused the exported file to only print 2 significant figures of every string. Therefore, I lost the decimal point accuracy that was previously available. I was able to reconstruct the time vector, however, because I know the exact start time and the sampling increment. The problem with the program has been resolved, but this test will need to be redone. I am also strongly considering building a shroud for the coupon such that it is less impacted by the ambient environment.

# 2.0 5 Watt Tests – Insulated Cork Configuration (with Shroud)

# 2.1 “TC275-1 Baseline” – Test #2 – 02/13/2020