

i483 ! " # \$ % & (' % () * +)

, - . /

¥ 0 1 2 3 4 5 6 7 8 ' 9 : 8 ; (<) = ' 9 : > ? & @ A B C B D B)

¥ 18:00 E F 24:00 G

HI 1

1.1

¥ RPR0521RSJ K L Mesp-idfNOP, -

¥ Q R S T U

¥ LED current 200mA

¥ Gain x64

79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.125000)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.125000)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.125000)
79.007812 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.132812)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)

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79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.125000)
79.015625 lx (infrated: 14.128906)
79.019531 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.132812)
79.015625 lx (infrated: 14.128906)
79.023438 lx (infrated: 14.128906)
79.023438 lx (infrated: 14.132812)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.132812)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.019531 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.125000)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.125000)
79.019531 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.132812)
79.023438 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.128906)
79.015625 lx (infrated: 14.132812)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.011719 lx (infrated: 14.128906)
79.023438 lx (infrated: 14.128906)
79.019531 lx (infrated: 14.132812)
79.023438 lx (infrated: 14.128906)

```

1.2

¥ MicroPythonNOPSCD41J K L M, -

¥ Q R S T U: ' V W X &

```

1971 ppm, 22.40444 jC, 67.85229 RH
2143 ppm, 22.42847 jC, 68.82735 RH
2274 ppm, 22.30831 jC, 69.52773 RH
2381 ppm, 22.1748 jC, 70.15335 RH
2435 ppm, 22.04662 jC, 70.8629 RH
2471 ppm, 21.93179 jC, 71.45342 RH
2485 ppm, 21.82765 jC, 72.04242 RH
2493 ppm, 21.71282 jC, 72.59632 RH
2496 ppm, 21.63805 jC, 73.05562 RH

```

```

2502 ppm, 21.56062 jC, 73.52102 RH
2502 ppm, 21.50187 jC, 73.96811 RH
2504 ppm, 21.44846 jC, 74.37705 RH
2508 ppm, 21.36568 jC, 74.70512 RH
2510 ppm, 21.31495 jC, 75.02403 RH
2512 ppm, 21.26688 jC, 75.31396 RH
2514 ppm, 21.23217 jC, 75.52911 RH
2516 ppm, 21.20013 jC, 75.81903 RH
2531 ppm, 21.16274 jC, 76.02502 RH
2531 ppm, 21.13069 jC, 76.2005 RH
2532 ppm, 21.12268 jC, 76.36073 RH
2532 ppm, 21.10666 jC, 76.49195 RH
2535 ppm, 21.06393 jC, 76.59418 RH
2535 ppm, 21.06927 jC, 76.71168 RH
2539 ppm, 21.05859 jC, 76.7773 RH
2540 ppm, 21.07462 jC, 76.84901 RH
2540 ppm, 21.04524 jC, 76.90852 RH
2541 ppm, 21.05325 jC, 76.98177 RH
2541 ppm, 21.0666 jC, 77.02144 RH
2541 ppm, 21.06126 jC, 77.02296 RH
2542 ppm, 21.07195 jC, 77.06416 RH
2541 ppm, 21.07195 jC, 77.09621 RH
2540 ppm, 21.06393 jC, 77.08705 RH
2541 ppm, 21.0666 jC, 77.11757 RH
2541 ppm, 21.07195 jC, 77.08553 RH
2541 ppm, 21.07996 jC, 77.07332 RH
2542 ppm, 21.09331 jC, 77.0489 RH
2542 ppm, 21.09865 jC, 77.07942 RH
2545 ppm, 21.10666 jC, 77.04585 RH
2546 ppm, 21.12802 jC, 77.00008 RH
2547 ppm, 21.13336 jC, 76.95583 RH
2547 ppm, 21.14939 jC, 76.94209 RH
2547 ppm, 21.16007 jC, 76.96193 RH
2552 ppm, 21.17609 jC, 76.89479 RH
2552 ppm, 21.18143 jC, 76.87343 RH

```

1.3

2* Y Z P

HI 2

[\

[\ J] B5 ^ _ N ` a P Q R S T U b , - J] L M c

¥ [\ : { repository_root } / esp32-sensing

¥ K d e f : Rust

¥ g d h Mcrate

! esp-idf-svc: esp-idf8 > i j %/HAL

" https://docs.esp-rs.org/esp-idf-svc/esp_idf_svc/index.html

! byteorder: k R' l mR8no

" <https://docs.rs/byteorder/latest/byteorder/>

! anyhow: k > %p q 5Result r 8s t u Dv B

" <https://docs.rs/anyhow/latest/anyhow/>

RPR0521RS8T U

¥ LED current: 200mA

¥ Gain x64

wx y @' %(z %&N{ | } ~ BDE L MM+ 5Rohm8Arduino>? • >€J • , NhM
<https://github.com/RohmSemiconductor/Arduino/blob/447c576a4ff34215adaf2ae0e5ea68fbc4d73b8f/RPR-0521RS/RPR-0521RS.cpp#L182>

BH17508T U

¥ One Time H-Resolution Mode2

¥ MTReg: 0xfe

! one count = 0.11 lx

DPS3108T U

¥ coefficient source: external temperature sensor

¥ oversampling 64 times

' VWX&b f ASIC„ ...8QRSJ d BPO† NDLCBM@5‡ @^ E h B(-N i % DŠ)8b< ...8E
• QRSJ d BPO† NTUhM

SCD418T U

¥ ' VWX&

, -

¥ , - Ž •

! print_csv() (esp32-sensing/main.rs „)

! z €mX• ' (b' " hM" • E F CSVJ – LM picocom -g output.txt É

¥ ' %(: {repository_root}/data/data.csv

¥ —~ : , - ™Š





