

peudauba Spectrophotometric Report

This spectrophotometer report provides a comprehensive analysis of the sample. It includes the sample's absorbance spectrum, a table of absorbance values at specific wavelengths, and a detailed interpretation of the results. The report is designed to provide clear, actionable insights for further research or industrial applications.

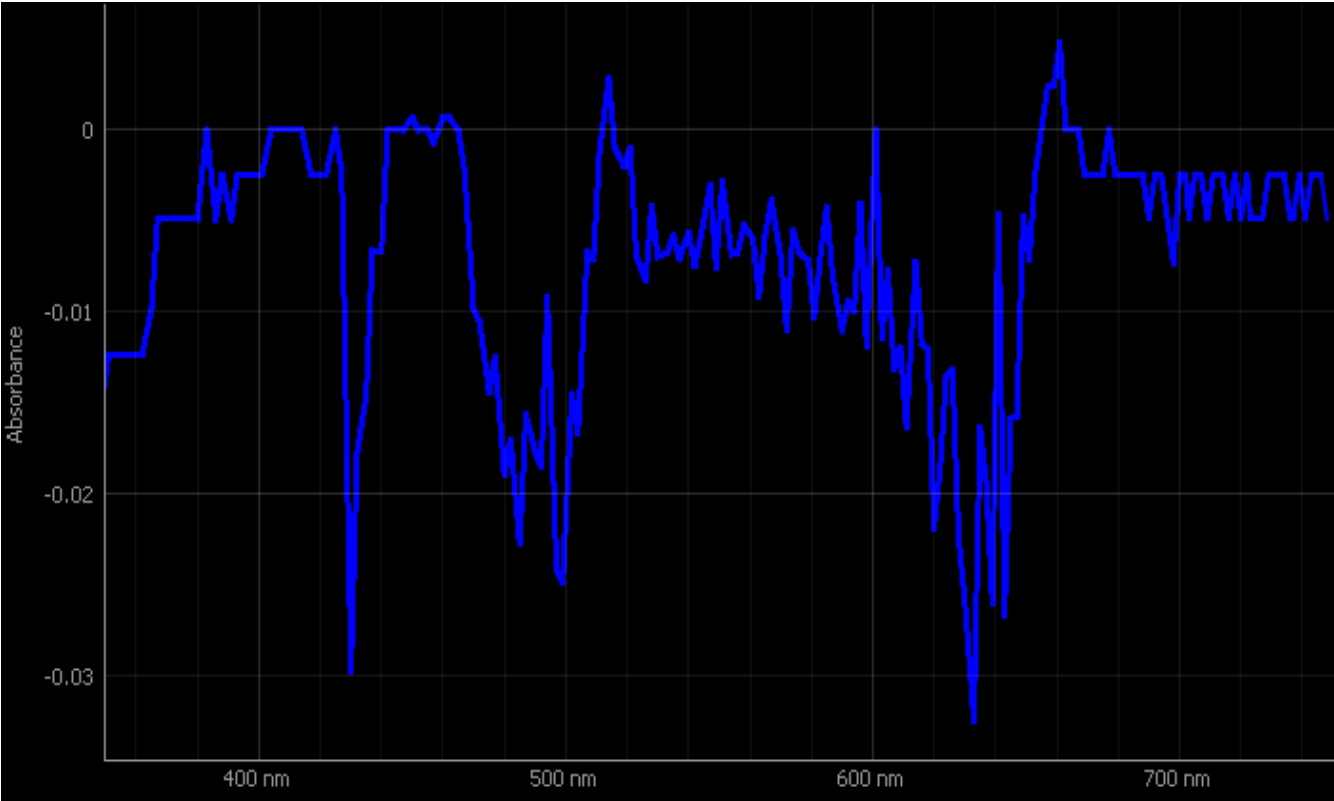
General information:

Sample Name: peudauba	Baseline Correction: Yes
User:	Date: 11-05-2024 16:32:35
Manufacturer: UTP	Laboratory: Indicasat AIP
Model: UTP-CG-001	Location: Panama City, Panama
Serial Number: UTP30032024A	Light Source: High Power LED
Wavelength Range: 340 - 850 nm	Detector: CMOS

Test condition

Temperature: 25°C
Humidity: 50%
WL Range: 350 - 750 nm
Scan Speed: 39.55 nm/sec
Test mode: Single
Scan Mode: Absorbance

Measured Graph:



Parameters:

Key Parameters:

Max dB: 0.004821719553973496
Max nm: 661
Min dB: -0.032488238543459405
Min nm: 633
Violet's (428nm) dB: -0.002378081511029231
Blue's (474nm) dB: -0.014409022906177375
Green's (535nm) dB: -0.005812228769193252
Yellow's (587nm) dB: -0.008075130901406796
Orange's (609nm) dB: -0.011960443102455198
Red's (660nm) dB: 0.002415605576209383

Radiometric Parameters:

Radiant Flux: 1000 rad
Radiant Density: 518 rad/mm2
Color Rendering: 70
Thermal resistance: 1.6 C°/W
Radiant Efficacy: 206 rad/W

Electrical Parameters:

Voltage: 12 V
Current: 3 A
Power: 36 W
Power Factor: 1.0
Frequency: 60 Hz

Statistical Parameters:

Mean: -0.007335501707242795
Standard Deviation: 0.006942463456578288
Variance: 4.819779884592494e-05
RMS: 0.01009987050129291
Weighted Average (nm): 520.2452728755616
Minimum Value: -0.032488238543459405
Maximum Value: 0.004821719553973496
Number of Values: 198

Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053
Chromaticity Coordinate (Y-axis): 0.3205
CCT: 7015K
Prpc WL: - Ld: 633nm
Purity: 10.5%
Peak WL: - Lp: 661nm
FWHM: 12.0nm
Ratio (Red): 13.9%
Ratio (Green): 86.1%
Ratio (Blue): 0.0%
Render Index (Ra): 0.0
EEI: 0.00015
R1: 88
R2: 0.0
R3: 0.0
R4: 0.0
R5: 0.0
R6: 0.0
R7: 0.0
R8: 0.0
R9: 0.0
R10: 0.0
R11: 0.0
R12: 0.0
R13: 0.0
R14: 0.0
R15: 0.0

Measured Data:

WL (nm)	Abs (dB)	T (I/Io)
305	0.00000	1.00000
306	0.00000	1.00000
307	0.00000	1.00000
308	0.00000	1.00000
309	-0.00664	1.01540
310	-0.01328	1.03104
311	-0.01992	1.04693
312	-0.01826	1.04293
313	-0.01660	1.03895
314	-0.01494	1.03499
315	-0.01494	1.03499
316	-0.01494	1.03499
317	-0.01575	1.03694
318	-0.01657	1.03890
319	-0.01739	1.04086
320	-0.01655	1.03885
321	-0.01571	1.03685
322	-0.01488	1.03485
323	-0.01488	1.03485
324	-0.01488	1.03485
325	-0.01488	1.03485
326	-0.01488	1.03485
327	-0.01488	1.03485
328	-0.01488	1.03485
329	-0.01488	1.03485
330	-0.01488	1.03485
331	-0.01488	1.03485
332	-0.01488	1.03485
333	-0.01404	1.03286
334	-0.01321	1.03088
335	-0.01237	1.02890
336	-0.01237	1.02890
337	-0.01237	1.02890
338	-0.01237	1.02890
339	-0.01402	1.03281

WL (nm)	Abs (dB)	T (I/Io)
340	-0.01567	1.03674
341	-0.01732	1.04069
342	-0.01485	1.03477
343	-0.01237	1.02890
344	-0.01321	1.03088
345	-0.01404	1.03286
346	-0.01488	1.03485
347	-0.01486	1.03480
348	-0.01484	1.03475
349	-0.01482	1.03470
350	-0.01359	1.03180
351	-0.01237	1.02890
352	-0.01237	1.02890
353	-0.01237	1.02890
354	-0.01237	1.02890
355	-0.01235	1.02886
356	-0.01234	1.02882
357	-0.01232	1.02878
358	-0.01232	1.02878
359	-0.01232	1.02878
360	-0.01232	1.02878
361	-0.01232	1.02878
362	-0.01232	1.02878
363	-0.01149	1.02682
364	-0.01067	1.02486
365	-0.00984	1.02291
366	-0.00737	1.01711
367	-0.00490	1.01134
368	-0.00490	1.01134
369	-0.00490	1.01134
370	-0.00490	1.01134
371	-0.00490	1.01134
372	-0.00490	1.01134
373	-0.00490	1.01134
374	-0.00490	1.01134

WL (nm)	Abs (dB)	T (I/Io)
375	-0.00490	1.01134
376	-0.00490	1.01134
377	-0.00490	1.01134
378	-0.00490	1.01134
379	-0.00490	1.01134
380	-0.00490	1.01134
381	-0.00327	1.00755
382	-0.00163	1.00377
383	0.00000	1.00000
384	-0.00163	1.00377
385	-0.00327	1.00755
386	-0.00490	1.01134
387	-0.00367	1.00849
388	-0.00244	1.00564
389	-0.00326	1.00754
390	-0.00408	1.00944
391	-0.00490	1.01134
392	-0.00367	1.00849
393	-0.00244	1.00564
394	-0.00244	1.00564
395	-0.00244	1.00564
396	-0.00244	1.00564
397	-0.00244	1.00564
398	-0.00244	1.00564
399	-0.00244	1.00564
400	-0.00244	1.00564
401	-0.00244	1.00564
402	-0.00163	1.00376
403	-0.00081	1.00188
404	0.00000	1.00000
405	0.00000	1.00000
406	0.00000	1.00000
407	0.00000	1.00000
408	0.00000	1.00000
409	0.00000	1.00000

Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)
410	0.00000	1.00000
411	0.00000	1.00000
412	0.00000	1.00000
413	0.00000	1.00000
414	0.00000	1.00000
415	-0.00081	1.00187
416	-0.00162	1.00374
417	-0.00243	1.00562
418	-0.00243	1.00561
419	-0.00243	1.00560
420	-0.00243	1.00560
421	-0.00243	1.00560
422	-0.00243	1.00560
423	-0.00162	1.00373
424	-0.00081	1.00186
425	0.00000	1.00000
426	-0.00119	1.00274
427	-0.00238	1.00549
428	-0.01151	1.02687
429	-0.02065	1.04870
430	-0.02979	1.07099
431	-0.02379	1.05631
432	-0.01779	1.04182
433	-0.01672	1.03926
434	-0.01565	1.03670
435	-0.01458	1.03414
436	-0.01060	1.02470
437	-0.00661	1.01534
438	-0.00664	1.01541
439	-0.00667	1.01548
440	-0.00670	1.01555
441	-0.00335	1.00774
442	0.00000	1.00000
443	0.00000	1.00000
444	0.00000	1.00000

WL (nm)	Abs (dB)	T (I/Io)
445	0.00000	1.00000
446	0.00000	1.00000
447	0.00000	1.00000
448	0.00023	0.99948
449	0.00045	0.99896
450	0.00068	0.99844
451	0.00034	0.99922
452	0.00000	1.00000
453	0.00000	1.00000
454	0.00000	1.00000
455	0.00000	1.00000
456	-0.00034	1.00078
457	-0.00068	1.00157
458	-0.00023	1.00052
459	0.00023	0.99948
460	0.00068	0.99844
461	0.00068	0.99843
462	0.00068	0.99843
463	0.00045	0.99896
464	0.00023	0.99948
465	0.00000	1.00000
466	-0.00111	1.00255
467	-0.00221	1.00511
468	-0.00477	1.01104
469	-0.00732	1.01700
470	-0.00988	1.02300
471	-0.01024	1.02386
472	-0.01060	1.02472
473	-0.01187	1.02771
474	-0.01314	1.03072
475	-0.01441	1.03373
476	-0.01345	1.03146
477	-0.01250	1.02919
478	-0.01466	1.03434
479	-0.01683	1.03950

WL (nm)	Abs (dB)	T (I/Io)
480	-0.01899	1.04469
481	-0.01799	1.04229
482	-0.01699	1.03990
483	-0.01891	1.04451
484	-0.02083	1.04914
485	-0.02275	1.05379
486	-0.01918	1.04516
487	-0.01562	1.03661
488	-0.01631	1.03826
489	-0.01700	1.03991
490	-0.01769	1.04157
491	-0.01809	1.04254
492	-0.01850	1.04352
493	-0.01386	1.03242
494	-0.00921	1.02143
495	-0.01419	1.03322
496	-0.01918	1.04515
497	-0.02416	1.05721
498	-0.02450	1.05804
499	-0.02484	1.05887
500	-0.02141	1.05055
501	-0.01799	1.04229
502	-0.01456	1.03410
503	-0.01561	1.03660
504	-0.01666	1.03912
505	-0.01334	1.03120
506	-0.01003	1.02335
507	-0.00671	1.01556
508	-0.00691	1.01605
509	-0.00712	1.01653
510	-0.00416	1.00961
511	-0.00119	1.00274
512	0.00016	0.99964
513	0.00150	0.99655
514	0.00285	0.99347

WL (nm)	Abs (dB)	T (I/Io)
515	0.00093	0.99785
516	-0.00098	1.00225
517	-0.00132	1.00304
518	-0.00166	1.00383
519	-0.00200	1.00462
520	-0.00149	1.00343
521	-0.00097	1.00224
522	-0.00395	1.00913
523	-0.00692	1.01606
524	-0.00737	1.01711
525	-0.00782	1.01816
526	-0.00826	1.01921
527	-0.00622	1.01442
528	-0.00417	1.00964
529	-0.00556	1.01288
530	-0.00695	1.01612
531	-0.00689	1.01599
532	-0.00683	1.01585
533	-0.00677	1.01572
534	-0.00629	1.01460
535	-0.00581	1.01347
536	-0.00643	1.01491
537	-0.00704	1.01635
538	-0.00657	1.01525
539	-0.00611	1.01416
540	-0.00564	1.01306
541	-0.00656	1.01521
542	-0.00748	1.01737
543	-0.00669	1.01551
544	-0.00590	1.01367
545	-0.00494	1.01144
546	-0.00399	1.00922
547	-0.00303	1.00700
548	-0.00528	1.01223
549	-0.00752	1.01747

WL (nm)	Abs (dB)	T (I/Io)
550	-0.00515	1.01194
551	-0.00279	1.00644
552	-0.00414	1.00957
553	-0.00548	1.01271
554	-0.00683	1.01586
555	-0.00682	1.01582
556	-0.00680	1.01578
557	-0.00601	1.01392
558	-0.00521	1.01207
559	-0.00547	1.01267
560	-0.00572	1.01327
561	-0.00598	1.01387
562	-0.00755	1.01755
563	-0.00913	1.02124
564	-0.00742	1.01724
565	-0.00572	1.01326
566	-0.00477	1.01105
567	-0.00382	1.00885
568	-0.00486	1.01125
569	-0.00589	1.01366
570	-0.00693	1.01608
571	-0.00897	1.02088
572	-0.01102	1.02570
573	-0.00826	1.01919
574	-0.00549	1.01273
575	-0.00611	1.01416
576	-0.00672	1.01559
577	-0.00687	1.01595
578	-0.00703	1.01631
579	-0.00718	1.01667
580	-0.00873	1.02030
581	-0.01028	1.02395
582	-0.00859	1.01997
583	-0.00690	1.01601
584	-0.00556	1.01289

WL (nm)	Abs (dB)	T (I/Io)
585	-0.00423	1.00978
586	-0.00615	1.01426
587	-0.00808	1.01877
588	-0.00906	1.02108
589	-0.01005	1.02340
590	-0.01103	1.02573
591	-0.01021	1.02378
592	-0.00938	1.02183
593	-0.00967	1.02251
594	-0.00996	1.02319
595	-0.00698	1.01619
596	-0.00400	1.00924
597	-0.00792	1.01841
598	-0.01185	1.02766
599	-0.00790	1.01836
600	-0.00395	1.00914
601	0.00000	1.00000
602	-0.00572	1.01327
603	-0.01145	1.02671
604	-0.00958	1.02231
605	-0.00772	1.01793
606	-0.01043	1.02431
607	-0.01315	1.03073
608	-0.01255	1.02933
609	-0.01196	1.02792
610	-0.01413	1.03307
611	-0.01630	1.03824
612	-0.01327	1.03102
613	-0.01024	1.02385
614	-0.00720	1.01673
615	-0.00947	1.02205
616	-0.01174	1.02740
617	-0.01190	1.02779
618	-0.01207	1.02817
619	-0.01697	1.03985

WL (nm)	Abs (dB)	T (I/Io)
620	-0.02187	1.05165
621	-0.02018	1.04757
622	-0.01849	1.04350
623	-0.01599	1.03752
624	-0.01350	1.03156
625	-0.01333	1.03118
626	-0.01317	1.03079
627	-0.01781	1.04187
628	-0.02246	1.05307
629	-0.02415	1.05718
630	-0.02584	1.06131
631	-0.02806	1.06674
632	-0.03027	1.07219
633	-0.03249	1.07768
634	-0.02441	1.05781
635	-0.01633	1.03832
636	-0.01783	1.04191
637	-0.01933	1.04551
638	-0.02265	1.05355
639	-0.02598	1.06164
640	-0.01532	1.03590
641	-0.00466	1.01078
642	-0.01566	1.03673
643	-0.02667	1.06334
644	-0.02126	1.05017
645	-0.01585	1.03716
646	-0.01579	1.03703
647	-0.01573	1.03689
648	-0.01025	1.02388
649	-0.00477	1.01103
650	-0.00592	1.01373
651	-0.00708	1.01643
652	-0.00472	1.01093
653	-0.00236	1.00545
654	-0.00118	1.00272

WL (nm)	Abs (dB)	T (I/Io)
655	0.00000	1.00000
656	0.00120	0.99724
657	0.00240	0.99450
658	0.00241	0.99447
659	0.00242	0.99445
660	0.00362	0.99170
661	0.00482	0.98896
662	0.00241	0.99446
663	0.00000	1.00000
664	0.00000	1.00000
665	0.00000	1.00000
666	0.00000	1.00000
667	0.00000	1.00000
668	-0.00121	1.00278
669	-0.00242	1.00558
670	-0.00242	1.00558
671	-0.00242	1.00558
672	-0.00242	1.00558
673	-0.00242	1.00558
674	-0.00242	1.00559
675	-0.00243	1.00560
676	-0.00121	1.00280
677	0.00000	1.00000
678	-0.00121	1.00278
679	-0.00242	1.00558
680	-0.00242	1.00559
681	-0.00243	1.00560
682	-0.00243	1.00560
683	-0.00243	1.00560
684	-0.00243	1.00560
685	-0.00243	1.00560
686	-0.00243	1.00560
687	-0.00243	1.00560
688	-0.00243	1.00560
689	-0.00364	1.00842

WL (nm)	Abs (dB)	T (I/Io)
690	-0.00486	1.01125
691	-0.00365	1.00843
692	-0.00243	1.00562
693	-0.00243	1.00561
694	-0.00243	1.00560
695	-0.00364	1.00842
696	-0.00486	1.01125
697	-0.00608	1.01410
698	-0.00730	1.01696
699	-0.00487	1.01128
700	-0.00243	1.00562
701	-0.00243	1.00562
702	-0.00243	1.00562
703	-0.00486	1.01125
704	-0.00365	1.00845
705	-0.00244	1.00564
706	-0.00244	1.00563
707	-0.00243	1.00562
708	-0.00366	1.00846
709	-0.00488	1.01130
710	-0.00366	1.00846
711	-0.00243	1.00562
712	-0.00243	1.00562
713	-0.00243	1.00562
714	-0.00243	1.00562
715	-0.00366	1.00846
716	-0.00488	1.01130
717	-0.00366	1.00847
718	-0.00244	1.00564
719	-0.00366	1.00847
720	-0.00488	1.01130
721	-0.00366	1.00846
722	-0.00243	1.00562
723	-0.00488	1.01130
724	-0.00488	1.01130

WL (nm)	Abs (dB)	T (I/I ₀)
725	-0.00488	1.01130
726	-0.00488	1.01130
727	-0.00488	1.01130
728	-0.00366	1.00847
729	-0.00244	1.00564
730	-0.00244	1.00564
731	-0.00244	1.00564
732	-0.00244	1.00564
733	-0.00244	1.00564
734	-0.00244	1.00564
735	-0.00366	1.00847
736	-0.00488	1.01130
737	-0.00488	1.01130
738	-0.00366	1.00846
739	-0.00243	1.00562
740	-0.00366	1.00846
741	-0.00488	1.01130
742	-0.00366	1.00847
743	-0.00244	1.00564
744	-0.00244	1.00564
745	-0.00244	1.00564
746	-0.00244	1.00564
747	-0.00366	1.00847
748	-0.00488	1.01130
749	-0.00243	1.00562