pruebaencsv 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: pruebaencsv

User:

Manufacturer: UTP

Model: UTP-CG-001

Serial Number: UTP30032024A

Wavelength Range: 340 - 850 nm

Baseline Correction: Yes

Date: 12-05-2024 09:35:58

Laboratory: Indicasat AIP

Location: Panama City, Panama

Light Source: High Power LED

Detector: CMOS

Test condition

Temperature: 25°C

Humidity: 50%

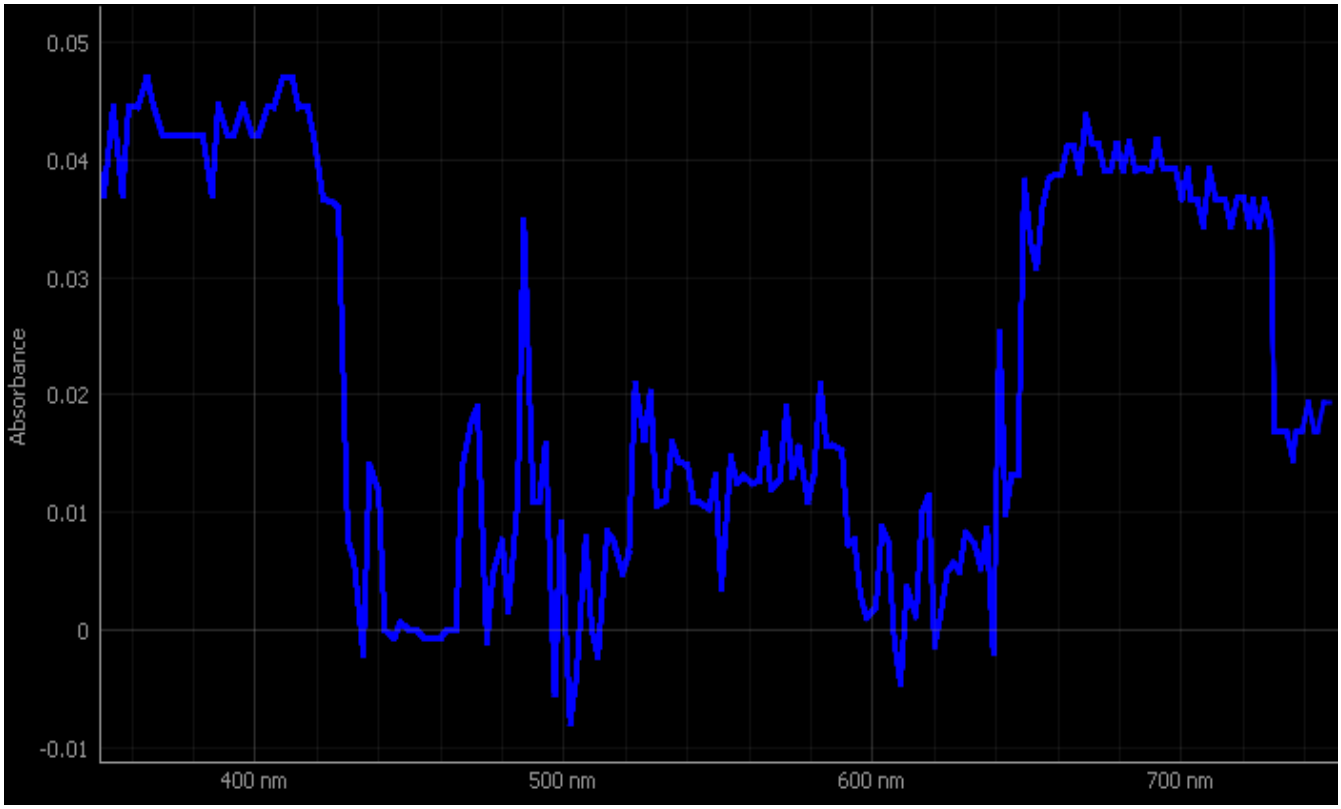
WL Range: 350 - 750 nm

Scan Speed: 39.55 nm/sec

Test mode: Single

Scan Mode: Absorbance

Measured Graph:



Parameters:

Key Parameters:

Max dB: 0.049812426901857595
Max nm: 316
Min dB: -0.0079014673003779
Min nm: 502
Violet's (428nm) dB: 0.03596073540559369
Blue's (474nm) dB: -0.001065892731236305
Green's (535nm) dB: 0.015968446414186547
Yellow's (587nm) dB: 0.01572467850986759
Orange's (609nm) dB: -0.004612867157854967
Red's (660nm) dB: 0.03873893639298531

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: 0.02325216414704291
Standard Deviation: 0.016873230368919023
Variance: 0.00028470590308261125
RMS: 0.028729236686755893
Weighted Average (nm): 531.5553119615573
Minimum Value: -0.0079014673003779
Maximum Value: 0.049812426901857595
Number of Values: 198

Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053
Chromaticity Coordinate (Y-axis): 0.3205
CCT: 7015K
Prcp WL: - Ld: 502nm
Purity: 10.5%
Peak WL: - Lp: 316nm
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	0.00023	0.99947
307	0.00046	0.99895
308	0.00069	0.99842
309	0.01620	0.96339
310	0.03171	0.92958
311	0.04722	0.89697
312	0.04722	0.89697
313	0.04722	0.89697
314	0.04722	0.89697
315	0.04852	0.89430
316	0.04981	0.89164
317	0.04895	0.89341
318	0.04809	0.89519
319	0.04722	0.89697
320	0.04722	0.89697
321	0.04722	0.89697
322	0.04722	0.89697
323	0.04722	0.89697
324	0.04722	0.89697
325	0.04636	0.89874
326	0.04550	0.90052
327	0.04464	0.90231
328	0.04550	0.90052
329	0.04636	0.89874
330	0.04722	0.89697
331	0.04593	0.89963
332	0.04464	0.90231
333	0.04379	0.90409
334	0.04293	0.90587
335	0.04208	0.90766
336	0.04373	0.90421
337	0.04538	0.90078
338	0.04703	0.89736
339	0.04624	0.89901

WL (nm)	Abs (dB)	T (I/Io)
340	0.04544	0.90066
341	0.04464	0.90231
342	0.04208	0.90765
343	0.03952	0.91302
344	0.03952	0.91302
345	0.03952	0.91302
346	0.03952	0.91302
347	0.03952	0.91302
348	0.03952	0.91302
349	0.03952	0.91302
350	0.03825	0.91570
351	0.03697	0.91839
352	0.03947	0.91312
353	0.04197	0.90789
354	0.04446	0.90268
355	0.04197	0.90789
356	0.03947	0.91312
357	0.03697	0.91839
358	0.04072	0.91050
359	0.04446	0.90268
360	0.04446	0.90268
361	0.04446	0.90268
362	0.04446	0.90268
363	0.04532	0.90091
364	0.04618	0.89913
365	0.04703	0.89736
366	0.04584	0.89983
367	0.04464	0.90231
368	0.04379	0.90409
369	0.04293	0.90587
370	0.04208	0.90766
371	0.04208	0.90766
372	0.04208	0.90766
373	0.04208	0.90766
374	0.04208	0.90766

WL (nm)	Abs (dB)	T (I/Io)
375	0.04208	0.90766
376	0.04208	0.90766
377	0.04208	0.90766
378	0.04208	0.90766
379	0.04208	0.90766
380	0.04208	0.90766
381	0.04208	0.90766
382	0.04208	0.90766
383	0.04208	0.90766
384	0.04038	0.91122
385	0.03868	0.91480
386	0.03697	0.91839
387	0.04081	0.91031
388	0.04464	0.90231
389	0.04379	0.90409
390	0.04293	0.90587
391	0.04208	0.90766
392	0.04208	0.90766
393	0.04208	0.90766
394	0.04293	0.90587
395	0.04379	0.90409
396	0.04464	0.90231
397	0.04379	0.90409
398	0.04293	0.90587
399	0.04208	0.90766
400	0.04208	0.90766
401	0.04208	0.90766
402	0.04287	0.90600
403	0.04367	0.90434
404	0.04446	0.90268
405	0.04446	0.90268
406	0.04446	0.90268
407	0.04532	0.90091
408	0.04618	0.89913
409	0.04703	0.89736

Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)
410	0.04703	0.89736
411	0.04703	0.89736
412	0.04703	0.89736
413	0.04575	0.90002
414	0.04446	0.90268
415	0.04446	0.90268
416	0.04446	0.90268
417	0.04446	0.90268
418	0.04319	0.90534
419	0.04191	0.90801
420	0.04016	0.91166
421	0.03842	0.91533
422	0.03668	0.91901
423	0.03658	0.91922
424	0.03649	0.91942
425	0.03639	0.91963
426	0.03617	0.92008
427	0.03596	0.92053
428	0.02653	0.94075
429	0.01709	0.96141
430	0.00765	0.98253
431	0.00678	0.98451
432	0.00590	0.98650
433	0.00324	0.99258
434	0.00057	0.99869
435	-0.00210	1.00484
436	0.00600	0.98628
437	0.01410	0.96806
438	0.01332	0.96979
439	0.01255	0.97152
440	0.01178	0.97325
441	0.00589	0.98653
442	0.00000	1.00000
443	-0.00023	1.00052
444	-0.00045	1.00105

WL (nm)	Abs (dB)	T (I/Io)
445	-0.00068	1.00157
446	0.00000	1.00000
447	0.00068	0.99843
448	0.00046	0.99895
449	0.00023	0.99948
450	0.00000	1.00000
451	0.00000	1.00000
452	0.00000	1.00000
453	-0.00023	1.00052
454	-0.00045	1.00105
455	-0.00068	1.00157
456	-0.00068	1.00157
457	-0.00068	1.00157
458	-0.00068	1.00157
459	-0.00068	1.00157
460	-0.00068	1.00157
461	-0.00034	1.00078
462	0.00000	1.00000
463	0.00000	1.00000
464	0.00000	1.00000
465	0.00000	1.00000
466	0.00692	0.98419
467	0.01384	0.96863
468	0.01515	0.96573
469	0.01645	0.96283
470	0.01775	0.95995
471	0.01839	0.95854
472	0.01903	0.95713
473	0.01233	0.97201
474	0.00563	0.98711
475	-0.00107	1.00246
476	0.00186	0.99572
477	0.00479	0.98902
478	0.00574	0.98686
479	0.00669	0.98470

WL (nm)	Abs (dB)	T (I/Io)
480	0.00764	0.98255
481	0.00459	0.98949
482	0.00153	0.99648
483	0.00474	0.98913
484	0.00796	0.98185
485	0.01117	0.97461
486	0.02302	0.94837
487	0.03488	0.92283
488	0.02688	0.93999
489	0.01888	0.95747
490	0.01088	0.97527
491	0.01092	0.97516
492	0.01097	0.97506
493	0.01341	0.96960
494	0.01585	0.96417
495	0.00875	0.98005
496	0.00165	0.99620
497	-0.00544	1.01261
498	0.00186	0.99574
499	0.00915	0.97914
500	0.00347	0.99205
501	-0.00222	1.00512
502	-0.00790	1.01836
503	-0.00598	1.01387
504	-0.00406	1.00939
505	-0.00009	1.00021
506	0.00388	0.99110
507	0.00785	0.98209
508	0.00393	0.99100
509	0.00000	1.00000
510	-0.00115	1.00265
511	-0.00230	1.00530
512	0.00128	0.99707
513	0.00485	0.98890
514	0.00842	0.98080

WL (nm)	Abs (dB)	T (I/Io)
515	0.00802	0.98170
516	0.00762	0.98261
517	0.00669	0.98471
518	0.00577	0.98681
519	0.00484	0.98892
520	0.00569	0.98698
521	0.00654	0.98506
522	0.01375	0.96884
523	0.02096	0.95289
524	0.01937	0.95637
525	0.01779	0.95987
526	0.01620	0.96338
527	0.01826	0.95883
528	0.02032	0.95429
529	0.01546	0.96502
530	0.01061	0.97586
531	0.01076	0.97554
532	0.01090	0.97521
533	0.01105	0.97488
534	0.01351	0.96938
535	0.01597	0.96390
536	0.01517	0.96567
537	0.01437	0.96745
538	0.01426	0.96771
539	0.01414	0.96796
540	0.01402	0.96822
541	0.01248	0.97168
542	0.01093	0.97515
543	0.01088	0.97525
544	0.01084	0.97535
545	0.01066	0.97574
546	0.01049	0.97613
547	0.01032	0.97652
548	0.01173	0.97336
549	0.01314	0.97020

WL (nm)	Abs (dB)	T (I/Io)
550	0.00830	0.98107
551	0.00346	0.99207
552	0.00722	0.98350
553	0.01099	0.97501
554	0.01476	0.96659
555	0.01364	0.96908
556	0.01252	0.97158
557	0.01281	0.97093
558	0.01311	0.97027
559	0.01290	0.97074
560	0.01269	0.97121
561	0.01248	0.97168
562	0.01257	0.97146
563	0.01267	0.97124
564	0.01467	0.96678
565	0.01667	0.96235
566	0.01432	0.96757
567	0.01196	0.97283
568	0.01225	0.97218
569	0.01254	0.97154
570	0.01283	0.97089
571	0.01590	0.96405
572	0.01897	0.95726
573	0.01599	0.96386
574	0.01300	0.97050
575	0.01429	0.96764
576	0.01557	0.96479
577	0.01402	0.96824
578	0.01247	0.97170
579	0.01092	0.97517
580	0.01211	0.97251
581	0.01329	0.96985
582	0.01714	0.96130
583	0.02099	0.95282
584	0.01834	0.95865

WL (nm)	Abs (dB)	T (I/Io)
585	0.01569	0.96451
586	0.01571	0.96448
587	0.01572	0.96444
588	0.01558	0.96477
589	0.01543	0.96510
590	0.01528	0.96544
591	0.01129	0.97433
592	0.00731	0.98330
593	0.00752	0.98284
594	0.00773	0.98237
595	0.00532	0.98782
596	0.00291	0.99331
597	0.00198	0.99546
598	0.00104	0.99761
599	0.00135	0.99689
600	0.00167	0.99617
601	0.00198	0.99545
602	0.00539	0.98767
603	0.00880	0.97995
604	0.00814	0.98143
605	0.00749	0.98291
606	0.00321	0.99263
607	-0.00106	1.00244
608	-0.00284	1.00655
609	-0.00461	1.01068
610	-0.00050	1.00114
611	0.00362	0.99170
612	0.00280	0.99356
613	0.00199	0.99543
614	0.00117	0.99730
615	0.00562	0.98715
616	0.01006	0.97710
617	0.01075	0.97554
618	0.01145	0.97399
619	0.00507	0.98840

WL (nm)	Abs (dB)	T (I/Io)
620	-0.00132	1.00303
621	0.00003	0.99994
622	0.00137	0.99685
623	0.00313	0.99281
624	0.00489	0.98880
625	0.00529	0.98790
626	0.00568	0.98700
627	0.00534	0.98778
628	0.00500	0.98856
629	0.00665	0.98480
630	0.00831	0.98105
631	0.00797	0.98182
632	0.00763	0.98259
633	0.00729	0.98335
634	0.00626	0.98569
635	0.00523	0.98804
636	0.00692	0.98419
637	0.00861	0.98036
638	0.00334	0.99235
639	-0.00194	1.00448
640	0.01167	0.97349
641	0.02528	0.94345
642	0.01759	0.96032
643	0.00989	0.97748
644	0.01158	0.97369
645	0.01326	0.96992
646	0.01322	0.97003
647	0.01317	0.97013
648	0.02573	0.94248
649	0.03828	0.91562
650	0.03570	0.92109
651	0.03311	0.92660
652	0.03196	0.92906
653	0.03080	0.93153
654	0.03345	0.92587

WL (nm)	Abs (dB)	T (I/Io)
655	0.03610	0.92023
656	0.03727	0.91776
657	0.03843	0.91530
658	0.03859	0.91498
659	0.03874	0.91466
660	0.03874	0.91466
661	0.03874	0.91466
662	0.03999	0.91203
663	0.04124	0.90940
664	0.04124	0.90940
665	0.04124	0.90940
666	0.04007	0.91187
667	0.03889	0.91434
668	0.04133	0.90923
669	0.04376	0.90415
670	0.04258	0.90660
671	0.04141	0.90906
672	0.04141	0.90906
673	0.04141	0.90906
674	0.04023	0.91153
675	0.03905	0.91401
676	0.03905	0.91401
677	0.03905	0.91401
678	0.04023	0.91153
679	0.04141	0.90906
680	0.04023	0.91153
681	0.03905	0.91401
682	0.04031	0.91136
683	0.04157	0.90871
684	0.04031	0.91136
685	0.03905	0.91401
686	0.03920	0.91368
687	0.03920	0.91368
688	0.03920	0.91368
689	0.03913	0.91385

WL (nm)	Abs (dB)	T (I/Io)
690	0.03905	0.91401
691	0.04039	0.91118
692	0.04174	0.90836
693	0.04047	0.91102
694	0.03920	0.91368
695	0.03920	0.91368
696	0.03920	0.91368
697	0.03920	0.91368
698	0.03920	0.91368
699	0.03794	0.91634
700	0.03668	0.91901
701	0.03794	0.91634
702	0.03920	0.91368
703	0.03668	0.91901
704	0.03668	0.91901
705	0.03668	0.91901
706	0.03549	0.92153
707	0.03430	0.92406
708	0.03675	0.91886
709	0.03920	0.91368
710	0.03794	0.91634
711	0.03668	0.91901
712	0.03668	0.91901
713	0.03668	0.91901
714	0.03668	0.91901
715	0.03549	0.92153
716	0.03430	0.92406
717	0.03556	0.92138
718	0.03683	0.91870
719	0.03683	0.91870
720	0.03683	0.91870
721	0.03556	0.92138
722	0.03430	0.92406
723	0.03668	0.91901
724	0.03549	0.92153

WL (nm)	Abs (dB)	T (I/Io)
725	0.03430	0.92406
726	0.03549	0.92153
727	0.03668	0.91901
728	0.03549	0.92153
729	0.03430	0.92406
730	0.01691	0.96181
731	0.01691	0.96181
732	0.01691	0.96181
733	0.01691	0.96181
734	0.01691	0.96181
735	0.01569	0.96452
736	0.01447	0.96724
737	0.01691	0.96181
738	0.01691	0.96181
739	0.01691	0.96181
740	0.01814	0.95910
741	0.01936	0.95639
742	0.01814	0.95910
743	0.01691	0.96181
744	0.01691	0.96181
745	0.01814	0.95910
746	0.01936	0.95639
747	0.01936	0.95639
748	0.01936	0.95639
749	0.02174	0.95117