

# pruebafinal 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.

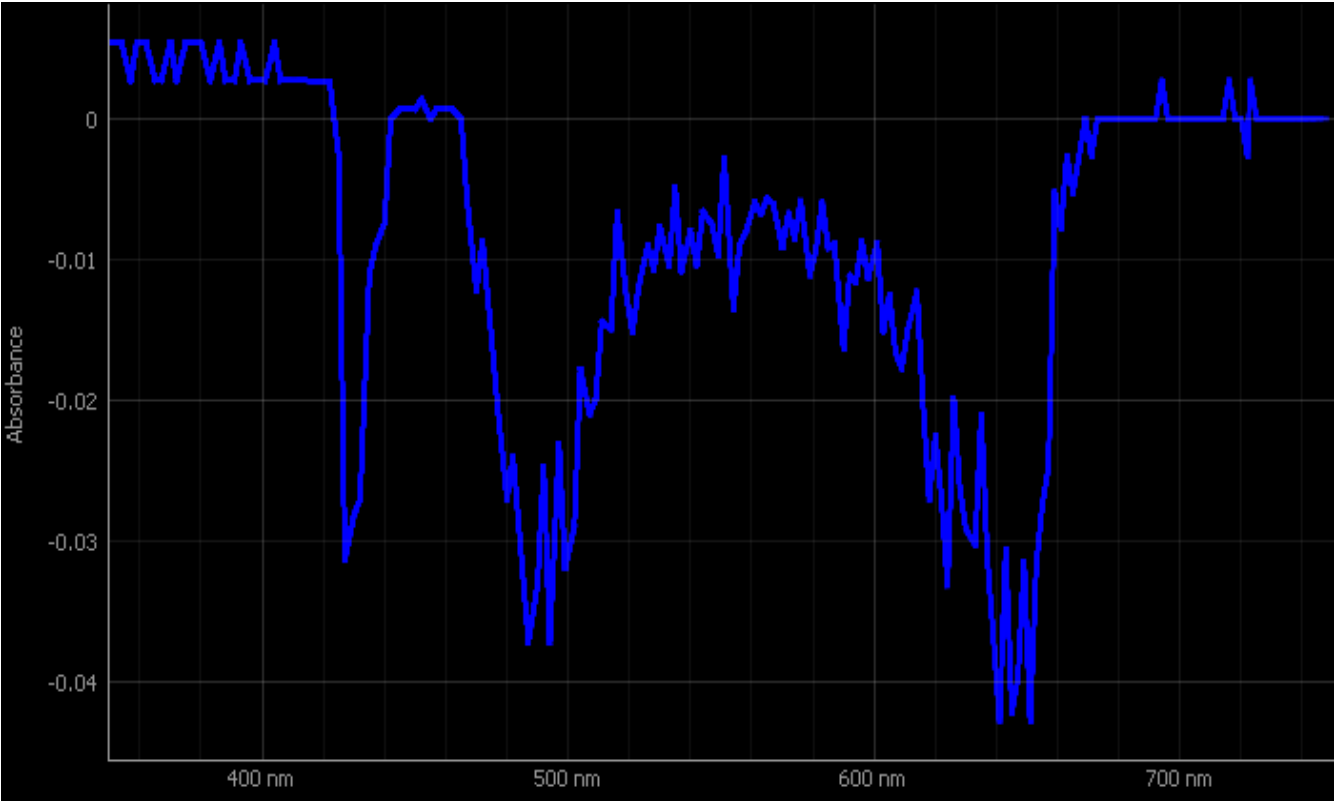
## General information:

Sample Name: pruebafinal	Baseline Correction: Yes
User:	Date: 11-05-2024 16:35:23
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: 0.005395235072804557  
Max nm: 316  
Min dB: -0.042713637359740576  
Min nm: 651  
Violet's (428nm) dB: -0.031286245382011205  
Blue's (474nm) dB: -0.015662112567797894  
Green's (535nm) dB: -0.00489886788327553  
Yellow's (587nm) dB: -0.008862024704372702  
Orange's (609nm) dB: -0.017718566161121767  
Red's (660nm) dB: -0.005211565239548861

## 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: -0.007496892453306164  
Standard Deviation: 0.01221139862734405  
Variance: 0.00014911825643590013  
RMS: 0.01432904926686831  
Weighted Average (nm): 590.1265728354622  
Minimum Value: -0.042713637359740576  
Maximum Value: 0.005395235072804557  
Number of Values: 198

## Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053  
Chromaticity Coordinate (Y-axis): 0.3205  
CCT: 7015K  
Prpc WL: - Ld: 651nm  
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	0.00000	1.00000
307	0.00000	1.00000
308	0.00000	1.00000
309	0.00089	0.99795
310	0.00179	0.99589
311	0.00268	0.99385
312	0.00179	0.99589
313	0.00089	0.99795
314	0.00000	1.00000
315	0.00270	0.99381
316	0.00540	0.98765
317	0.00540	0.98765
318	0.00540	0.98765
319	0.00540	0.98765
320	0.00540	0.98765
321	0.00540	0.98765
322	0.00540	0.98765
323	0.00404	0.99073
324	0.00269	0.99382
325	0.00359	0.99176
326	0.00449	0.98971
327	0.00540	0.98765
328	0.00540	0.98765
329	0.00540	0.98765
330	0.00540	0.98765
331	0.00540	0.98765
332	0.00540	0.98765
333	0.00449	0.98971
334	0.00359	0.99176
335	0.00269	0.99382
336	0.00359	0.99176
337	0.00449	0.98971
338	0.00540	0.98765
339	0.00540	0.98765

WL (nm)	Abs (dB)	T (I/Io)
340	0.00540	0.98765
341	0.00540	0.98765
342	0.00540	0.98765
343	0.00540	0.98765
344	0.00540	0.98765
345	0.00540	0.98765
346	0.00540	0.98765
347	0.00540	0.98765
348	0.00540	0.98765
349	0.00540	0.98765
350	0.00540	0.98765
351	0.00540	0.98765
352	0.00540	0.98765
353	0.00540	0.98765
354	0.00540	0.98765
355	0.00449	0.98971
356	0.00359	0.99176
357	0.00269	0.99382
358	0.00404	0.99073
359	0.00540	0.98765
360	0.00540	0.98765
361	0.00540	0.98765
362	0.00540	0.98765
363	0.00450	0.98970
364	0.00360	0.99174
365	0.00270	0.99379
366	0.00270	0.99379
367	0.00270	0.99379
368	0.00360	0.99174
369	0.00450	0.98970
370	0.00540	0.98765
371	0.00405	0.99072
372	0.00270	0.99379
373	0.00360	0.99174
374	0.00450	0.98970

WL (nm)	Abs (dB)	T (I/Io)
375	0.00540	0.98765
376	0.00540	0.98765
377	0.00540	0.98765
378	0.00540	0.98765
379	0.00540	0.98765
380	0.00540	0.98765
381	0.00450	0.98970
382	0.00360	0.99174
383	0.00270	0.99379
384	0.00360	0.99174
385	0.00450	0.98970
386	0.00540	0.98765
387	0.00404	0.99073
388	0.00269	0.99382
389	0.00269	0.99382
390	0.00269	0.99382
391	0.00269	0.99382
392	0.00404	0.99073
393	0.00540	0.98765
394	0.00449	0.98971
395	0.00359	0.99176
396	0.00269	0.99382
397	0.00269	0.99382
398	0.00269	0.99382
399	0.00269	0.99382
400	0.00269	0.99382
401	0.00269	0.99382
402	0.00359	0.99176
403	0.00449	0.98971
404	0.00540	0.98765
405	0.00405	0.99072
406	0.00270	0.99379
407	0.00270	0.99380
408	0.00270	0.99381
409	0.00269	0.99382

## Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)
410	0.00269	0.99382
411	0.00269	0.99382
412	0.00269	0.99382
413	0.00269	0.99382
414	0.00269	0.99382
415	0.00269	0.99383
416	0.00268	0.99384
417	0.00268	0.99385
418	0.00268	0.99385
419	0.00268	0.99385
420	0.00268	0.99386
421	0.00267	0.99387
422	0.00267	0.99388
423	0.00090	0.99792
424	-0.00086	1.00198
425	-0.00262	1.00606
426	-0.01695	1.03981
427	-0.03129	1.07470
428	-0.03022	1.07207
429	-0.02916	1.06946
430	-0.02810	1.06685
431	-0.02754	1.06547
432	-0.02698	1.06409
433	-0.02169	1.05121
434	-0.01640	1.03848
435	-0.01111	1.02590
436	-0.01008	1.02349
437	-0.00906	1.02108
438	-0.00850	1.01977
439	-0.00794	1.01846
440	-0.00739	1.01715
441	-0.00369	1.00854
442	0.00000	1.00000
443	0.00023	0.99948
444	0.00045	0.99895

WL (nm)	Abs (dB)	T (I/Io)
445	0.00068	0.99843
446	0.00068	0.99843
447	0.00068	0.99843
448	0.00068	0.99843
449	0.00068	0.99843
450	0.00068	0.99843
451	0.00102	0.99765
452	0.00136	0.99688
453	0.00091	0.99792
454	0.00045	0.99896
455	0.00000	1.00000
456	0.00034	0.99922
457	0.00068	0.99843
458	0.00068	0.99843
459	0.00068	0.99843
460	0.00068	0.99843
461	0.00068	0.99843
462	0.00068	0.99843
463	0.00045	0.99895
464	0.00023	0.99948
465	0.00000	1.00000
466	-0.00293	1.00676
467	-0.00585	1.01357
468	-0.00797	1.01851
469	-0.01008	1.02348
470	-0.01219	1.02847
471	-0.01044	1.02433
472	-0.00869	1.02020
473	-0.01101	1.02568
474	-0.01334	1.03119
475	-0.01566	1.03672
476	-0.01813	1.04264
477	-0.02060	1.04859
478	-0.02273	1.05372
479	-0.02485	1.05888

WL (nm)	Abs (dB)	T (I/Io)
480	-0.02697	1.06406
481	-0.02549	1.06046
482	-0.02402	1.05686
483	-0.02662	1.06322
484	-0.02923	1.06963
485	-0.03184	1.07607
486	-0.03448	1.08263
487	-0.03712	1.08924
488	-0.03575	1.08580
489	-0.03438	1.08237
490	-0.03300	1.07896
491	-0.02883	1.06864
492	-0.02466	1.05843
493	-0.03089	1.07372
494	-0.03712	1.08924
495	-0.03243	1.07754
496	-0.02774	1.06596
497	-0.02305	1.05450
498	-0.02744	1.06523
499	-0.03184	1.07607
500	-0.03088	1.07369
501	-0.02992	1.07132
502	-0.02896	1.06895
503	-0.02337	1.05529
504	-0.01779	1.04181
505	-0.01885	1.04435
506	-0.01991	1.04691
507	-0.02097	1.04947
508	-0.02042	1.04813
509	-0.01986	1.04680
510	-0.01712	1.04021
511	-0.01438	1.03367
512	-0.01456	1.03409
513	-0.01474	1.03451
514	-0.01491	1.03494

WL (nm)	Abs (dB)	T (I/Io)
515	-0.01079	1.02516
516	-0.00667	1.01548
517	-0.00864	1.02009
518	-0.01060	1.02471
519	-0.01257	1.02936
520	-0.01384	1.03239
521	-0.01512	1.03543
522	-0.01355	1.03169
523	-0.01197	1.02795
524	-0.01099	1.02562
525	-0.01000	1.02329
526	-0.00901	1.02097
527	-0.00985	1.02294
528	-0.01069	1.02493
529	-0.00918	1.02136
530	-0.00766	1.01780
531	-0.00859	1.01997
532	-0.00951	1.02213
533	-0.01043	1.02431
534	-0.00766	1.01780
535	-0.00490	1.01134
536	-0.00785	1.01825
537	-0.01081	1.02521
538	-0.00985	1.02294
539	-0.00889	1.02069
540	-0.00793	1.01843
541	-0.00916	1.02132
542	-0.01039	1.02422
543	-0.00849	1.01973
544	-0.00658	1.01527
545	-0.00689	1.01598
546	-0.00719	1.01669
547	-0.00750	1.01741
548	-0.00858	1.01996
549	-0.00967	1.02251

WL (nm)	Abs (dB)	T (I/Io)
550	-0.00622	1.01443
551	-0.00278	1.00642
552	-0.00635	1.01474
553	-0.00993	1.02313
554	-0.01351	1.03159
555	-0.01123	1.02621
556	-0.00896	1.02085
557	-0.00853	1.01983
558	-0.00809	1.01881
559	-0.00737	1.01711
560	-0.00665	1.01542
561	-0.00592	1.01373
562	-0.00634	1.01470
563	-0.00675	1.01566
564	-0.00620	1.01437
565	-0.00564	1.01308
566	-0.00585	1.01355
567	-0.00605	1.01402
568	-0.00708	1.01643
569	-0.00811	1.01885
570	-0.00914	1.02127
571	-0.00793	1.01843
572	-0.00672	1.01559
573	-0.00762	1.01769
574	-0.00851	1.01979
575	-0.00717	1.01665
576	-0.00584	1.01353
577	-0.00759	1.01762
578	-0.00934	1.02174
579	-0.01109	1.02587
580	-0.01019	1.02374
581	-0.00928	1.02161
582	-0.00762	1.01769
583	-0.00595	1.01379
584	-0.00756	1.01756

WL (nm)	Abs (dB)	T (I/Io)
585	-0.00917	1.02134
586	-0.00902	1.02098
587	-0.00886	1.02062
588	-0.01134	1.02646
589	-0.01382	1.03234
590	-0.01631	1.03826
591	-0.01371	1.03208
592	-0.01112	1.02593
593	-0.01135	1.02649
594	-0.01159	1.02705
595	-0.01017	1.02368
596	-0.00874	1.02033
597	-0.01002	1.02333
598	-0.01129	1.02634
599	-0.01047	1.02440
600	-0.00965	1.02246
601	-0.00883	1.02053
602	-0.01195	1.02789
603	-0.01507	1.03530
604	-0.01379	1.03227
605	-0.01252	1.02925
606	-0.01456	1.03410
607	-0.01661	1.03898
608	-0.01716	1.04031
609	-0.01772	1.04164
610	-0.01635	1.03836
611	-0.01498	1.03509
612	-0.01408	1.03295
613	-0.01318	1.03081
614	-0.01228	1.02868
615	-0.01628	1.03819
616	-0.02027	1.04779
617	-0.02363	1.05591
618	-0.02698	1.06409
619	-0.02472	1.05856

WL (nm)	Abs (dB)	T (I/Io)
620	-0.02245	1.05306
621	-0.02469	1.05851
622	-0.02694	1.06398
623	-0.03002	1.07157
624	-0.03311	1.07922
625	-0.02644	1.06278
626	-0.01978	1.04659
627	-0.02298	1.05435
628	-0.02619	1.06217
629	-0.02766	1.06576
630	-0.02913	1.06937
631	-0.02949	1.07026
632	-0.02985	1.07114
633	-0.03020	1.07202
634	-0.02559	1.06070
635	-0.02098	1.04949
636	-0.02607	1.06188
637	-0.03117	1.07441
638	-0.03404	1.08153
639	-0.03691	1.08871
640	-0.03980	1.09597
641	-0.04269	1.10329
642	-0.03659	1.08790
643	-0.03049	1.07273
644	-0.03630	1.08718
645	-0.04211	1.10182
646	-0.04088	1.09870
647	-0.03965	1.09559
648	-0.03553	1.08525
649	-0.03141	1.07500
650	-0.03706	1.08908
651	-0.04271	1.10335
652	-0.03718	1.08938
653	-0.03164	1.07558
654	-0.02949	1.07025

WL (nm)	Abs (dB)	T (I/Io)
655	-0.02733	1.06495
656	-0.02601	1.06173
657	-0.02470	1.05851
658	-0.01495	1.03503
659	-0.00521	1.01207
660	-0.00649	1.01506
661	-0.00777	1.01805
662	-0.00520	1.01203
663	-0.00262	1.00606
664	-0.00393	1.00909
665	-0.00523	1.01212
666	-0.00394	1.00911
667	-0.00265	1.00611
668	-0.00132	1.00305
669	0.00000	1.00000
670	-0.00133	1.00306
671	-0.00266	1.00614
672	-0.00133	1.00306
673	0.00000	1.00000
674	0.00000	1.00000
675	0.00000	1.00000
676	0.00000	1.00000
677	0.00000	1.00000
678	0.00000	1.00000
679	0.00000	1.00000
680	0.00000	1.00000
681	0.00000	1.00000
682	0.00000	1.00000
683	0.00000	1.00000
684	0.00000	1.00000
685	0.00000	1.00000
686	0.00000	1.00000
687	0.00000	1.00000
688	0.00000	1.00000
689	0.00000	1.00000

WL (nm)	Abs (dB)	T (I/Io)
690	0.00000	1.00000
691	0.00000	1.00000
692	0.00000	1.00000
693	0.00134	0.99692
694	0.00268	0.99385
695	0.00134	0.99692
696	0.00000	1.00000
697	0.00000	1.00000
698	0.00000	1.00000
699	0.00000	1.00000
700	0.00000	1.00000
701	0.00000	1.00000
702	0.00000	1.00000
703	0.00000	1.00000
704	0.00000	1.00000
705	0.00000	1.00000
706	0.00000	1.00000
707	0.00000	1.00000
708	0.00000	1.00000
709	0.00000	1.00000
710	0.00000	1.00000
711	0.00000	1.00000
712	0.00000	1.00000
713	0.00000	1.00000
714	0.00000	1.00000
715	0.00135	0.99691
716	0.00269	0.99382
717	0.00135	0.99691
718	0.00000	1.00000
719	0.00000	1.00000
720	0.00000	1.00000
721	-0.00135	1.00310
722	-0.00269	1.00622
723	0.00269	0.99382
724	0.00135	0.99691

WL (nm)	Abs (dB)	T (I/Io)
725	0.00000	1.00000
726	0.00000	1.00000
727	0.00000	1.00000
728	0.00000	1.00000
729	0.00000	1.00000
730	0.00000	1.00000
731	0.00000	1.00000
732	0.00000	1.00000
733	0.00000	1.00000
734	0.00000	1.00000
735	0.00000	1.00000
736	0.00000	1.00000
737	0.00000	1.00000
738	0.00000	1.00000
739	0.00000	1.00000
740	0.00000	1.00000
741	0.00000	1.00000
742	0.00000	1.00000
743	0.00000	1.00000
744	0.00000	1.00000
745	0.00000	1.00000
746	0.00000	1.00000
747	0.00000	1.00000
748	0.00000	1.00000
749	0.00000	1.00000