pruebaaa 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: pruebaaa

User:

Manufacturer: UTP

Model: UTP-CG-001

Serial Number: UTP30032024A

Wavelength Range: 340 - 850 nm

Baseline Correction: Yes

Date: 11-05-2024 16:25:51

Laboratory: Indicasat AIP

Location: Panama City, Panama

Light Source: High Power LED

Detector: CMOS

Test condition

Temperature: 25°C

Humidity: 50%

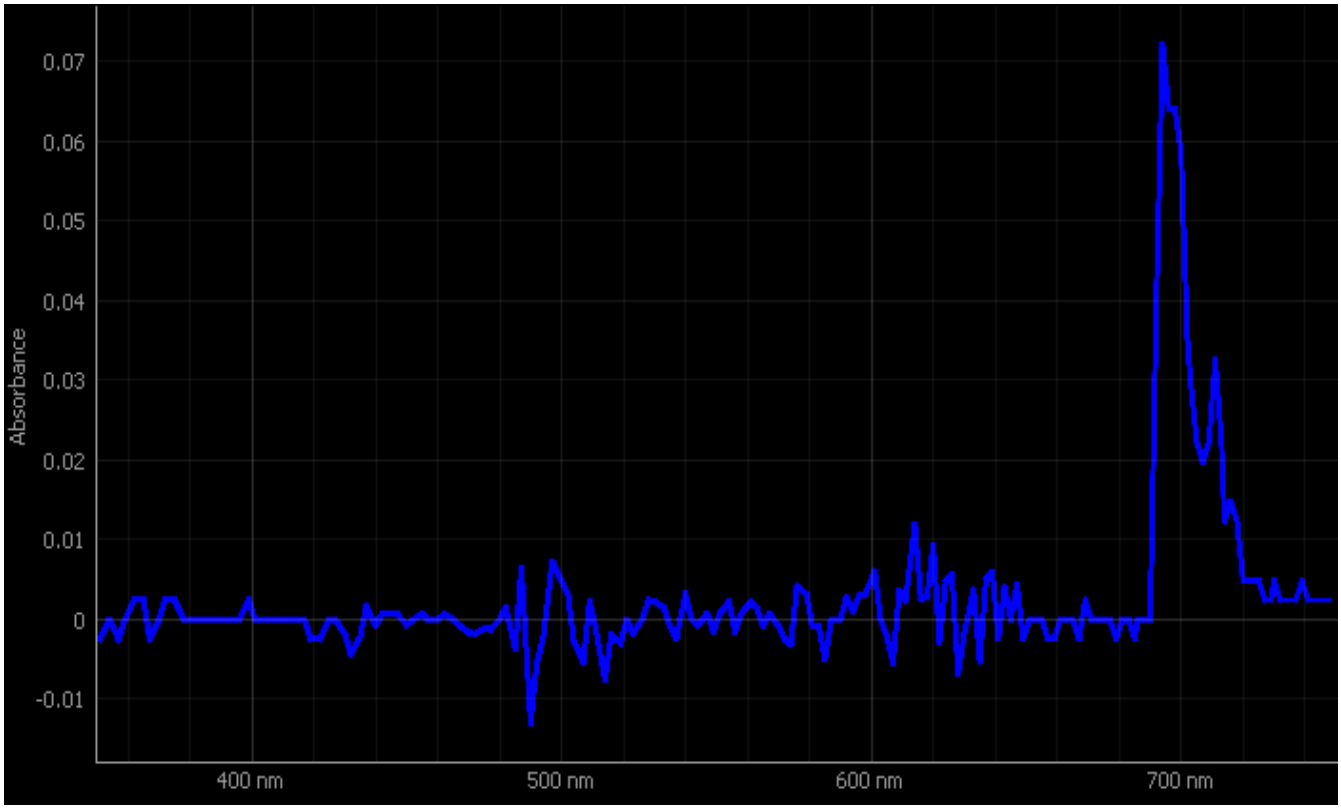
WL Range: 350 - 750 nm

Scan Speed: 39.55 nm/sec

Test mode: Single

Scan Mode: Absorbance

Measured Graph:



Parameters:

Key Parameters:

Max dB: 0.07212505665080761
Max nm: 694
Min dB: -0.012983282519421508
Min nm: 490
Violet's (428nm) dB: 0.0
Blue's (474nm) dB: -0.001088631788022027
Green's (535nm) dB: -0.0008203018232492788
Yellow's (587nm) dB: 0.0
Orange's (609nm) dB: 0.0035430487626078935
Red's (660nm) dB: -0.002406113977764118

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: 0.00295770082583953
Standard Deviation: 0.011021437270515435
Variance: 0.00012147207950790673
RMS: 0.011411401039446408
Weighted Average (nm): 717.1675264642286
Minimum Value: -0.012983282519421508
Maximum Value: 0.07212505665080761
Number of Values: 198

Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053
Chromaticity Coordinate (Y-axis): 0.3205
CCT: 7015K
Prcp WL: - Ld: 490nm
Purity: 10.5%
Peak WL: - Lp: 694nm
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	-0.00069	1.00158
306	-0.00046	1.00105
307	-0.00023	1.00053
308	0.00000	1.00000
309	-0.00082	1.00189
310	-0.00164	1.00377
311	-0.00245	1.00567
312	-0.00164	1.00377
313	-0.00082	1.00189
314	0.00000	1.00000
315	-0.00123	1.00283
316	-0.00245	1.00567
317	-0.00164	1.00377
318	-0.00082	1.00189
319	0.00000	1.00000
320	-0.00082	1.00189
321	-0.00164	1.00377
322	-0.00245	1.00567
323	-0.00123	1.00283
324	0.00000	1.00000
325	0.00000	1.00000
326	0.00000	1.00000
327	0.00000	1.00000
328	0.00000	1.00000
329	0.00000	1.00000
330	0.00000	1.00000
331	0.00000	1.00000
332	0.00000	1.00000
333	-0.00082	1.00189
334	-0.00164	1.00377
335	-0.00245	1.00567
336	-0.00245	1.00567
337	-0.00245	1.00567
338	-0.00245	1.00567
339	-0.00164	1.00377

WL (nm)	Abs (dB)	T (I/Io)
340	-0.00082	1.00189
341	0.00000	1.00000
342	-0.00123	1.00283
343	-0.00245	1.00567
344	-0.00082	1.00189
345	0.00082	0.99812
346	0.00245	0.99436
347	0.00082	0.99812
348	-0.00082	1.00189
349	-0.00245	1.00567
350	-0.00245	1.00567
351	-0.00245	1.00567
352	-0.00164	1.00377
353	-0.00082	1.00189
354	0.00000	1.00000
355	-0.00082	1.00189
356	-0.00164	1.00377
357	-0.00245	1.00567
358	-0.00123	1.00283
359	0.00000	1.00000
360	0.00082	0.99812
361	0.00164	0.99624
362	0.00245	0.99436
363	0.00245	0.99436
364	0.00245	0.99436
365	0.00245	0.99436
366	0.00000	1.00000
367	-0.00245	1.00567
368	-0.00164	1.00377
369	-0.00082	1.00189
370	0.00000	1.00000
371	0.00123	0.99718
372	0.00245	0.99436
373	0.00245	0.99436
374	0.00245	0.99436

WL (nm)	Abs (dB)	T (I/Io)
375	0.00245	0.99436
376	0.00164	0.99624
377	0.00082	0.99812
378	0.00000	1.00000
379	0.00000	1.00000
380	0.00000	1.00000
381	0.00000	1.00000
382	0.00000	1.00000
383	0.00000	1.00000
384	0.00000	1.00000
385	0.00000	1.00000
386	0.00000	1.00000
387	0.00000	1.00000
388	0.00000	1.00000
389	0.00000	1.00000
390	0.00000	1.00000
391	0.00000	1.00000
392	0.00000	1.00000
393	0.00000	1.00000
394	0.00000	1.00000
395	0.00000	1.00000
396	0.00000	1.00000
397	0.00082	0.99812
398	0.00164	0.99624
399	0.00245	0.99436
400	0.00123	0.99718
401	0.00000	1.00000
402	0.00000	1.00000
403	0.00000	1.00000
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	0.00000	1.00000
416	0.00000	1.00000
417	0.00000	1.00000
418	-0.00122	1.00281
419	-0.00243	1.00562
420	-0.00243	1.00561
421	-0.00243	1.00561
422	-0.00243	1.00560
423	-0.00162	1.00373
424	-0.00081	1.00186
425	0.00000	1.00000
426	0.00000	1.00000
427	0.00000	1.00000
428	-0.00061	1.00140
429	-0.00122	1.00281
430	-0.00183	1.00421
431	-0.00308	1.00711
432	-0.00433	1.01001
433	-0.00358	1.00827
434	-0.00283	1.00653
435	-0.00208	1.00479
436	-0.00022	1.00050
437	0.00164	0.99623
438	0.00085	0.99805
439	0.00005	0.99987
440	-0.00074	1.00170
441	-0.00003	1.00006
442	0.00068	0.99843
443	0.00068	0.99843
444	0.00068	0.99843

WL (nm)	Abs (dB)	T (I/Io)
445	0.00068	0.99843
446	0.00068	0.99843
447	0.00068	0.99843
448	0.00023	0.99948
449	-0.00023	1.00052
450	-0.00068	1.00157
451	-0.00034	1.00078
452	0.00000	1.00000
453	0.00023	0.99948
454	0.00045	0.99896
455	0.00068	0.99844
456	0.00034	0.99922
457	0.00000	1.00000
458	0.00000	1.00000
459	0.00000	1.00000
460	0.00000	1.00000
461	0.00034	0.99922
462	0.00068	0.99843
463	0.00045	0.99896
464	0.00023	0.99948
465	0.00000	1.00000
466	-0.00037	1.00085
467	-0.00074	1.00170
468	-0.00103	1.00239
469	-0.00133	1.00308
470	-0.00163	1.00377
471	-0.00169	1.00391
472	-0.00175	1.00405
473	-0.00153	1.00354
474	-0.00131	1.00302
475	-0.00109	1.00251
476	-0.00116	1.00267
477	-0.00123	1.00283
478	-0.00082	1.00188
479	-0.00041	1.00094

WL (nm)	Abs (dB)	T (I/Io)
480	0.00000	1.00000
481	0.00076	0.99824
482	0.00153	0.99649
483	-0.00022	1.00051
484	-0.00197	1.00455
485	-0.00372	1.00861
486	0.00141	0.99675
487	0.00655	0.98503
488	0.00004	0.99991
489	-0.00647	1.01501
490	-0.01298	1.03035
491	-0.00921	1.02144
492	-0.00544	1.01261
493	-0.00386	1.00893
494	-0.00228	1.00527
495	0.00091	0.99791
496	0.00410	0.99060
497	0.00729	0.98335
498	0.00644	0.98528
499	0.00559	0.98721
500	0.00480	0.98902
501	0.00400	0.99083
502	0.00321	0.99264
503	0.00022	0.99948
504	-0.00276	1.00637
505	-0.00361	1.00836
506	-0.00447	1.01034
507	-0.00532	1.01234
508	-0.00150	1.00346
509	0.00233	0.99465
510	0.00058	0.99867
511	-0.00118	1.00271
512	-0.00330	1.00762
513	-0.00542	1.01255
514	-0.00754	1.01751

WL (nm)	Abs (dB)	T (I/Io)
515	-0.00474	1.01097
516	-0.00194	1.00447
517	-0.00229	1.00528
518	-0.00263	1.00608
519	-0.00298	1.00688
520	-0.00149	1.00344
521	0.00000	1.00000
522	-0.00086	1.00198
523	-0.00172	1.00396
524	-0.00115	1.00264
525	-0.00057	1.00132
526	0.00000	1.00000
527	0.00124	0.99714
528	0.00248	0.99430
529	0.00240	0.99450
530	0.00231	0.99470
531	0.00204	0.99532
532	0.00177	0.99594
533	0.00150	0.99656
534	0.00034	0.99922
535	-0.00082	1.00189
536	-0.00158	1.00363
537	-0.00233	1.00538
538	-0.00049	1.00112
539	0.00136	0.99688
540	0.00320	0.99265
541	0.00160	0.99632
542	0.00000	1.00000
543	-0.00037	1.00085
544	-0.00073	1.00169
545	-0.00024	1.00055
546	0.00026	0.99940
547	0.00076	0.99826
548	-0.00037	1.00085
549	-0.00149	1.00344

WL (nm)	Abs (dB)	T (I/Io)
550	-0.00040	1.00092
551	0.00070	0.99840
552	0.00122	0.99720
553	0.00174	0.99600
554	0.00226	0.99481
555	0.00038	0.99913
556	-0.00151	1.00347
557	-0.00038	1.00088
558	0.00074	0.99830
559	0.00124	0.99716
560	0.00173	0.99602
561	0.00223	0.99488
562	0.00187	0.99570
563	0.00151	0.99653
564	0.00035	0.99919
565	-0.00081	1.00187
566	-0.00002	1.00006
567	0.00076	0.99825
568	0.00025	0.99942
569	-0.00026	1.00059
570	-0.00077	1.00177
571	-0.00165	1.00381
572	-0.00254	1.00586
573	-0.00283	1.00653
574	-0.00312	1.00720
575	0.00053	0.99877
576	0.00419	0.99041
577	0.00385	0.99118
578	0.00351	0.99196
579	0.00317	0.99273
580	0.00116	0.99734
581	-0.00085	1.00196
582	-0.00085	1.00197
583	-0.00086	1.00197
584	-0.00294	1.00679

WL (nm)	Abs (dB)	T (I/Io)
585	-0.00503	1.01164
586	-0.00251	1.00580
587	0.00000	1.00000
588	0.00000	1.00000
589	0.00000	1.00000
590	0.00000	1.00000
591	0.00139	0.99681
592	0.00277	0.99364
593	0.00188	0.99568
594	0.00099	0.99773
595	0.00198	0.99544
596	0.00298	0.99316
597	0.00308	0.99293
598	0.00319	0.99269
599	0.00413	0.99053
600	0.00508	0.98838
601	0.00602	0.98623
602	0.00301	0.99309
603	0.00000	1.00000
604	-0.00109	1.00251
605	-0.00218	1.00502
606	-0.00378	1.00873
607	-0.00538	1.01246
608	-0.00092	1.00211
609	0.00354	0.99188
610	0.00301	0.99309
611	0.00248	0.99431
612	0.00562	0.98715
613	0.00875	0.98005
614	0.01189	0.97299
615	0.00723	0.98349
616	0.00257	0.99409
617	0.00276	0.99366
618	0.00295	0.99323
619	0.00616	0.98592