sasa 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: sasa

User:

Manufacturer: UTP

Model: UTP-CG-001

Serial Number: UTP30032024A

Wavelength Range: 340 - 850 nm

Baseline Correction: Yes

Date: 06-04-2024 09:34:53

Laboratory: Indicasat AIP

Location: Panama City, Panama

Light Source: High Power LED

Detector: CMOS

Test condition

Temperature: 25°C

Humidity: 50%

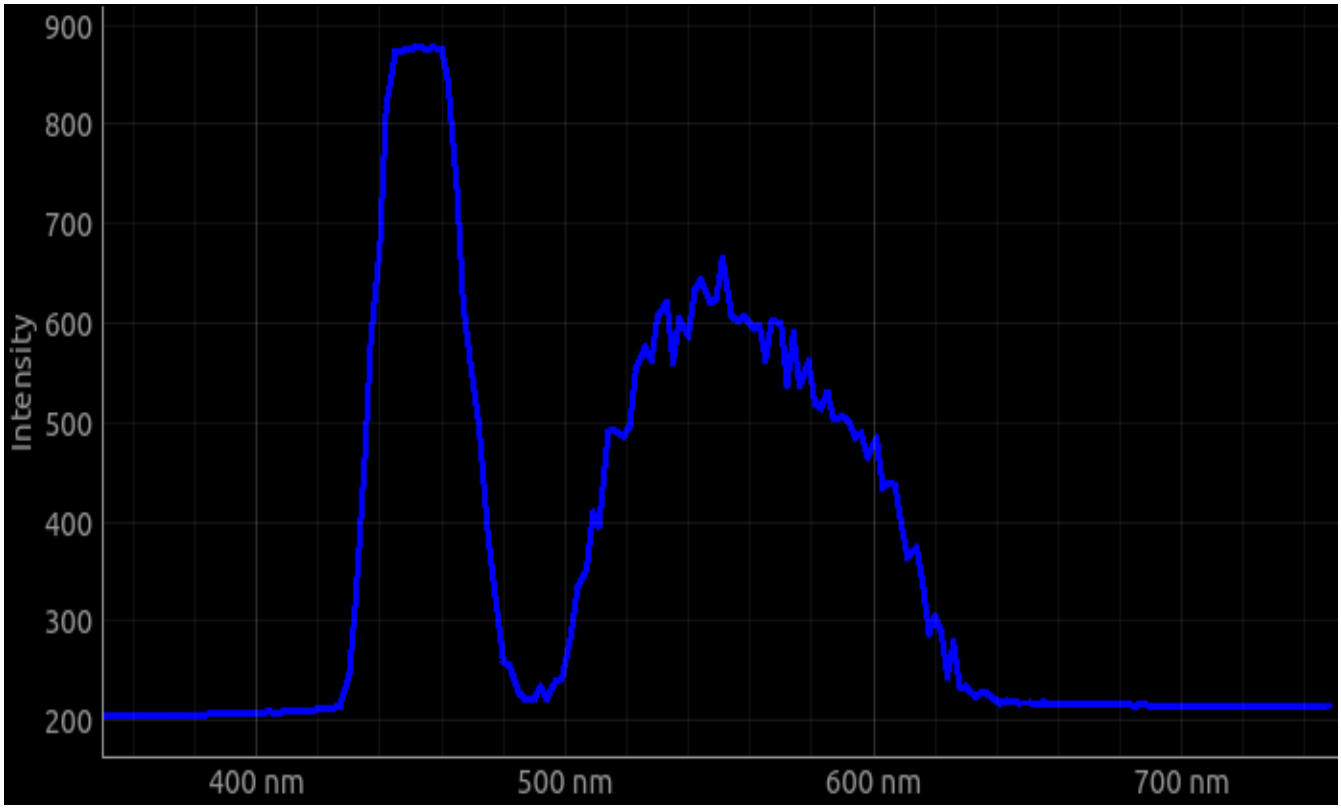
WL Range: 350 - 750 nm

Scan Speed: 39.55 nm/sec

Test mode: Single

Scan Mode: Absorbance

Measured Graph:



Parameters:

Key Parameters:

Max dB: 0.019925259609422954
Max nm: 734
Min dB: -0.08266957389344617
Min nm: 430
Violet's (428nm) dB: 0.011581872549815138
Blue's (474nm) dB: -0.049657531360430066
Green's (535nm) dB: -0.013583980044830845
Yellow's (587nm) dB: -0.01684455664772981
Orange's (609nm) dB: -0.037004871386089114
Red's (660nm) dB: 0.015794267183231882

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: -0.005297087223579454
Standard Deviation: 0.02609221959537991
Variance: 0.0006808039234135273
RMS: 0.026624482276050673
Weighted Average: 523.7242050223855
Minimum Value: -0.08266957389344617
Maximum Value: 0.019925259609422954
Number of Values: 198

Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053
Chromaticity Coordinate (Y-axis): 0.3205
CCT: 7015K
Prcp WL: - Ld: 430nm
Purity: 10.5%
Peak WL: - Lp: 734nm
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
308	0.00000	1.00000
311	0.01404	0.96818
314	0.01404	0.96818
316	0.01201	0.97273
319	0.01201	0.97273
322	0.01404	0.96818
324	0.01601	0.96380
327	0.01404	0.96818
330	0.01404	0.96818
332	0.01601	0.96380
335	0.01404	0.96818
338	0.01398	0.96833
341	0.01601	0.96380
343	0.01398	0.96833
346	0.01404	0.96818
349	0.01601	0.96380
351	0.01201	0.97273
354	0.01404	0.96818
357	0.01404	0.96818
359	0.01404	0.96818
362	0.01404	0.96818
365	0.01404	0.96818
367	0.01404	0.96818
370	0.01398	0.96833
372	0.01398	0.96833
375	0.01601	0.96380
378	0.01398	0.96833
380	0.01601	0.96380
383	0.01404	0.96818
386	0.01404	0.96818
388	0.01201	0.97273
391	0.01398	0.96833
393	0.01404	0.96818
396	0.01601	0.96380

WL (nm)	Abs (dB)	T (I/Io)
399	0.01398	0.96833
401	0.01404	0.96818
404	0.01398	0.96833
406	0.01404	0.96818
409	0.01404	0.96818
412	0.00998	0.97727
414	0.01195	0.97285
417	0.01391	0.96847
419	0.01587	0.96413
422	0.01185	0.97309
425	0.01765	0.96018
427	0.01158	0.97368
430	-0.08267	1.20968
432	-0.06754	1.16825
435	-0.03670	1.08817
437	-0.01541	1.03612
440	-0.00856	1.01991
442	-0.00671	1.01557
445	0.00100	0.99771
447	0.00100	0.99771
450	0.00149	0.99657
452	0.00099	0.99771
455	0.00099	0.99771
457	0.00100	0.99771
460	0.00050	0.99885
462	-0.00456	1.01055
465	-0.00803	1.01867
467	-0.01005	1.02340
470	-0.01362	1.03186
472	-0.02393	1.05664
475	-0.04966	1.12113
477	-0.06284	1.15569
480	-0.07280	1.18251
482	-0.07242	1.18147
485	-0.05707	1.14043

WL (nm)	Abs (dB)	T (I/Io)
487	-0.01674	1.03930
490	-0.02038	1.04803
492	-0.06489	1.16116
494	-0.02408	1.05702
497	-0.06744	1.16800
499	-0.06719	1.16732
502	-0.05163	1.12625
504	-0.05046	1.12321
507	-0.04635	1.11264
509	-0.04760	1.11584
511	-0.04252	1.10287
514	-0.01648	1.03868
516	-0.02402	1.05686
519	-0.02090	1.04931
521	-0.01866	1.04389
523	-0.01764	1.04145
526	-0.01417	1.03317
528	-0.01160	1.02707
530	-0.01475	1.03454
533	-0.01192	1.02782
535	-0.01358	1.03177
537	-0.01147	1.02677
540	-0.01390	1.03252
542	-0.01104	1.02576
544	-0.01607	1.03771
547	-0.01259	1.02941
549	-0.01249	1.02919
551	-0.00994	1.02315
554	-0.01076	1.02508
556	-0.01089	1.02540
558	-0.01545	1.03622
561	-0.00683	1.01585
563	-0.01096	1.02556
565	-0.01370	1.03204
567	-0.01020	1.02377

Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)
570	-0.01364	1.03190
572	-0.01350	1.03158
574	-0.01177	1.02746
576	-0.01665	1.03908
579	-0.01524	1.03571
581	-0.01320	1.03085
583	-0.01568	1.03676
585	-0.01303	1.03047
587	-0.01684	1.03955
590	-0.01675	1.03933
592	-0.01927	1.04537
594	-0.02348	1.05556
596	-0.02321	1.05490
598	-0.02612	1.06198
601	-0.01838	1.04322
603	-0.04051	1.09778
605	-0.03395	1.08132
607	-0.03484	1.08352
609	-0.03700	1.08894
611	-0.04679	1.11376
614	-0.04836	1.11780
616	-0.05019	1.12251
618	-0.05411	1.13269
620	-0.04845	1.11801
622	-0.05303	1.12987
624	-0.05799	1.14286
626	-0.05445	1.13356
628	-0.07200	1.18033
630	-0.07200	1.18033
633	-0.04928	1.12017
635	-0.05982	1.14768
637	-0.05054	1.12340
639	-0.02577	1.06114
641	0.00580	0.98673
643	-0.01128	1.02632

WL (nm)	Abs (dB)	T (I/Io)
645	0.00583	0.98667
647	0.00583	0.98667
649	0.01179	0.97321
651	0.01174	0.97333
653	0.01179	0.97321
655	0.01379	0.96875
657	0.01373	0.96889
659	0.01579	0.96429
661	0.01579	0.96429
663	0.01385	0.96861
665	0.01587	0.96413
667	0.01385	0.96861
669	0.01587	0.96413
671	0.01781	0.95982
673	0.01587	0.96413
675	0.01781	0.95982
677	0.01789	0.95964
679	0.01789	0.95964
681	0.01594	0.96396
683	0.01789	0.95964
685	0.01594	0.96396
686	0.01594	0.96396
688	0.01391	0.96847
690	0.01594	0.96396
692	0.01594	0.96396
694	0.01789	0.95964
696	0.01789	0.95964
698	0.01601	0.96380
700	0.01594	0.96396
702	0.01398	0.96833
703	0.01391	0.96847
705	0.01398	0.96833
707	0.01789	0.95964
709	0.01594	0.96396
711	0.01594	0.96396

WL (nm)	Abs (dB)	T (I/Io)
713	0.01594	0.96396
714	0.01789	0.95964
716	0.01789	0.95964
718	0.01601	0.96380
720	0.01398	0.96833
722	0.01601	0.96380
723	0.01601	0.96380
725	0.01398	0.96833
727	0.01601	0.96380
729	0.01601	0.96380
730	0.01797	0.95946
732	0.01797	0.95946
734	0.01993	0.95516
736	0.01797	0.95946
737	0.01601	0.96380
739	0.01601	0.96380
741	0.01797	0.95946
743	0.01601	0.96380
744	0.01398	0.96833
746	0.01993	0.95516
748	0.01601	0.96380
749	0.01797	0.95946