## 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: 30-03-2024 18:30:24

Laboratory: Indicasat AIP

Location: Panama City, Panama

Light Source: High Power LED

**Detector: CMOS** 

#### **Test condition**

Temperature: 25°C

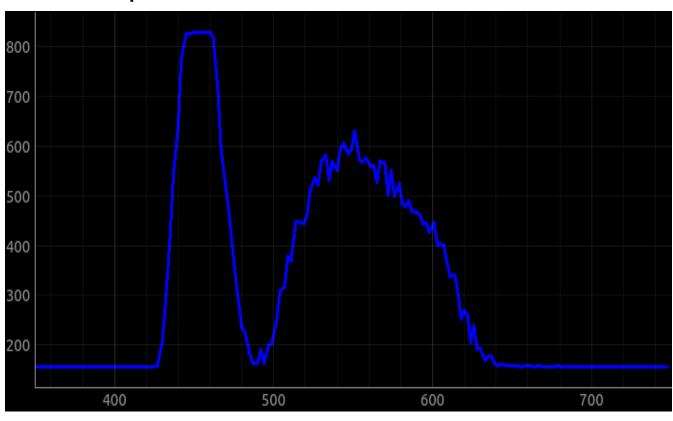
Humidity: 50%

WL Range: 350 - 750 nm Scan Speed: 39.55 nm/sec

Test mode: Single

Scan Mode: Absorbance

### **Measured Graph:**



## **Parameters:**

**Key Parameters:** 

Max dB: 0.00277505405477213

Max nm: 311

Min dB: -0.7237013713748772

Min nm: 455

Violet's (428nm) dB: -0.0081687890774271

Blue's (474nm) dB: -0.37230207165776125

Green's (535nm) dB: -0.5250860917445053

Yellow's (587nm) dB: -0.47061832814564714

Orange's (609nm) dB: -0.3640069726268788

Red's (660nm) dB: -0.002757434545188901

**Photometric Parameters:** 

Luminous Flux: 1000 lm

Luminous Density: 518 lm/mm2

Color Rendering: 70

Thermal resistance: 1.6 C°/W

Luminous Efficacy: 206 lm/W

**Electrical Parameters:** 

Voltage: 12 V

Current: 3 A

Power: 36 W

Power Factor: 1.0

Frequency: 60 Hz

**Colorimetric Parameters:** 

Chromaticity Coordinate (X-axis): 0.30053

Chromaticity Coordinate (Y-axis): 0.3205

CCT: 7015K

Prcp WL: - Ld: 455nm

Purity: 10.5%

Peak WL: - Lp: 311nm

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	-0.00053	1.00121
308	0.00000	1.00000
311	0.00278	0.99363
314	0.00278	0.99363
316	0.00278	0.99363
319	0.00000	1.00000
322	0.00000	1.00000
324	0.00000	1.00000
327	0.00000	1.00000
330	0.00276	0.99367
332	0.00000	1.00000
335	0.00000	1.00000
338	0.00276	0.99367
341	0.00276	0.99367
343	0.00000	1.00000
346	-0.00276	1.00637
349	0.00000	1.00000
351	0.00000	1.00000
354	0.00000	1.00000
357	0.00000	1.00000
359	-0.00278	1.00641
362	0.00000	1.00000
365	0.00000	1.00000
367	-0.00276	1.00637
370	0.00276	0.99367
372	0.00000	1.00000
375	0.00000	1.00000
378	0.00276	0.99367
380	0.00000	1.00000
383	0.00000	1.00000
386	-0.00276	1.00637
388	0.00000	1.00000
391	0.00000	1.00000
393	0.00276	0.99367
396	0.00278	0.99363

WL (nm)	Abs (dB)	T (I/Io)
399	0.00276	0.99367
401	0.00000	1.00000
404	0.00000	1.00000
406	0.00000	1.00000
409	-0.00276	1.00637
412	0.00000	1.00000
414	0.00000	1.00000
417	0.00000	1.00000
419	0.00000	1.00000
422	-0.00276	1.00637
425	-0.00550	1.01274
427	-0.00817	1.01899
430	-0.11651	1.30769
432	-0.25589	1.80255
435	-0.42735	2.67516
437	-0.53890	3.45860
440	-0.61238	4.09615
442	-0.69452	4.94904
445	-0.72213	5.27389
447	-0.72265	5.28025
450	-0.72318	5.28662
452	-0.72042	5.25316
455	-0.72370	5.29299
457	-0.72318	5.28662
460	-0.72318	5.28662
462	-0.71685	5.21019
465	-0.65475	4.51592
467	-0.57366	3.74684
470	-0.51675	3.28662
472	-0.46973	2.94937
475	-0.37230	2.35669
477	-0.29964	1.99363
480	-0.17794	1.50641
482	-0.15628	1.43312
485	-0.07826	1.19745

WL (nm)	Abs (dB)	T (I/Io)
487	-0.02682	1.06369
490	-0.02158	1.05096
492	-0.08966	1.22930
494	-0.02158	1.05096
497	-0.12007	1.31847
499	-0.12838	1.34395
502	-0.20550	1.60510
504	-0.28554	1.92994
507	-0.30789	2.03185
509	-0.37537	2.37342
511	-0.37113	2.35032
514	-0.45246	2.83439
516	-0.45441	2.84713
519	-0.45148	2.82803
521	-0.46031	2.88608
523	-0.51422	3.26752
526	-0.53164	3.40127
528	-0.52426	3.34395
530	-0.56150	3.64331
533	-0.56552	3.67722
535	-0.52509	3.35032
537	-0.55921	3.62420
540	-0.54525	3.50955
542	-0.57513	3.75949
544	-0.58370	3.83439
547	-0.56977	3.71338
549	-0.57200	3.73248
551	-0.60344	4.01274
554	-0.56150	3.64331
556	-0.55845	3.61783
558	-0.56074	3.63694
561	-0.55615	3.59873
563	-0.55461	3.58599
565	-0.52315	3.33544
567	-0.55615	3.59873

# Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)
570	-0.55538	3.59236
572	-0.50653	3.21019
574	-0.54249	3.48734
576	-0.50220	3.17834
579	-0.52343	3.33758
581	-0.48805	3.07643
583	-0.48079	3.02548
585	-0.49252	3.10828
587	-0.47062	2.95541
590	-0.47062	2.95541
592	-0.46686	2.92994
594	-0.44934	2.81410
596	-0.45148	2.82803
598	-0.42838	2.68153
601	-0.45148	2.82803
603	-0.40616	2.54777
605	-0.40833	2.56051
607	-0.40724	2.55414
609	-0.36401	2.31210
611	-0.33410	2.15823
614	-0.33939	2.18471
616	-0.28840	1.94268
618	-0.21572	1.64331
620	-0.24185	1.74522
622	-0.21907	1.65605
624	-0.11521	1.30380
626	-0.18155	1.51899
628	-0.09413	1.24204
630	-0.09190	1.23567
633	-0.03687	1.08861
635	-0.06178	1.15287
637	-0.05420	1.13291
639	-0.01894	1.04459
641	-0.00546	1.01266
643	-0.02172	1.05128

Abs (dB)	T (I/Io)
0.00000	. ,
	1.01911
	1.01911
	1.01274
	1.01274
	1.01274
	1.00637
-0.00550	1.01274
-0.00276	1.00637
-0.00276	1.00637
-0.00276	1.00637
0.00000	1.00000
-0.00278	1.00641
0.00000	1.00000
-0.00276	1.00637
-0.00276	1.00637
0.00276	0.99367
-0.00276	1.00637
0.00000	1.00000
0.00000	1.00000
-0.00276	1.00637
0.00000	1.00000
0.00000	1.00000
0.00000	1.00000
0.00000	1.00000
0.00276	0.99367
0.00000	1.00000
0.00000	1.00000
0.00000	1.00000
-0.00553	1.01282
0.00000	1.00000
-0.00553	1.01282
0.00000	1.00000
-0.00276	1.00637
-0.00276	1.00637
-0.00276	1.00637
	-0.00276

WL (nm)	Abs (dB)	T (I/Io)
713	-0.00276	1.00637
714	0.00000	1.00000
716	0.00276	0.99367
718	0.00276	0.99367
720	0.00000	1.00000
722	-0.00276	1.00637
723	0.00000	1.00000
725	0.00000	1.00000
727	0.00000	1.00000
729	0.00000	1.00000
730	0.00000	1.00000
732	0.00276	0.99367
734	0.00276	0.99367
736	0.00276	0.99367
737	-0.00276	1.00637
739	0.00000	1.00000
741	0.00000	1.00000
743	0.00000	1.00000
744	0.00276	0.99367
746	0.00000	1.00000
748	0.00000	1.00000
749	0.00000	1.00000