data5 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: data5

User:

Manufacturer: UTP

Model: UTP-CG-001

Serial Number: UTP30032024A

Wavelength Range: 340 - 850 nm

Baseline Correction: Yes

Date: 11-05-2024 16:14:26

Laboratory: Indicasat AIP

Location: Panama City, Panama

Light Source: High Power LED

Detector: CMOS

Test condition

Temperature: 25°C

Humidity: 50%

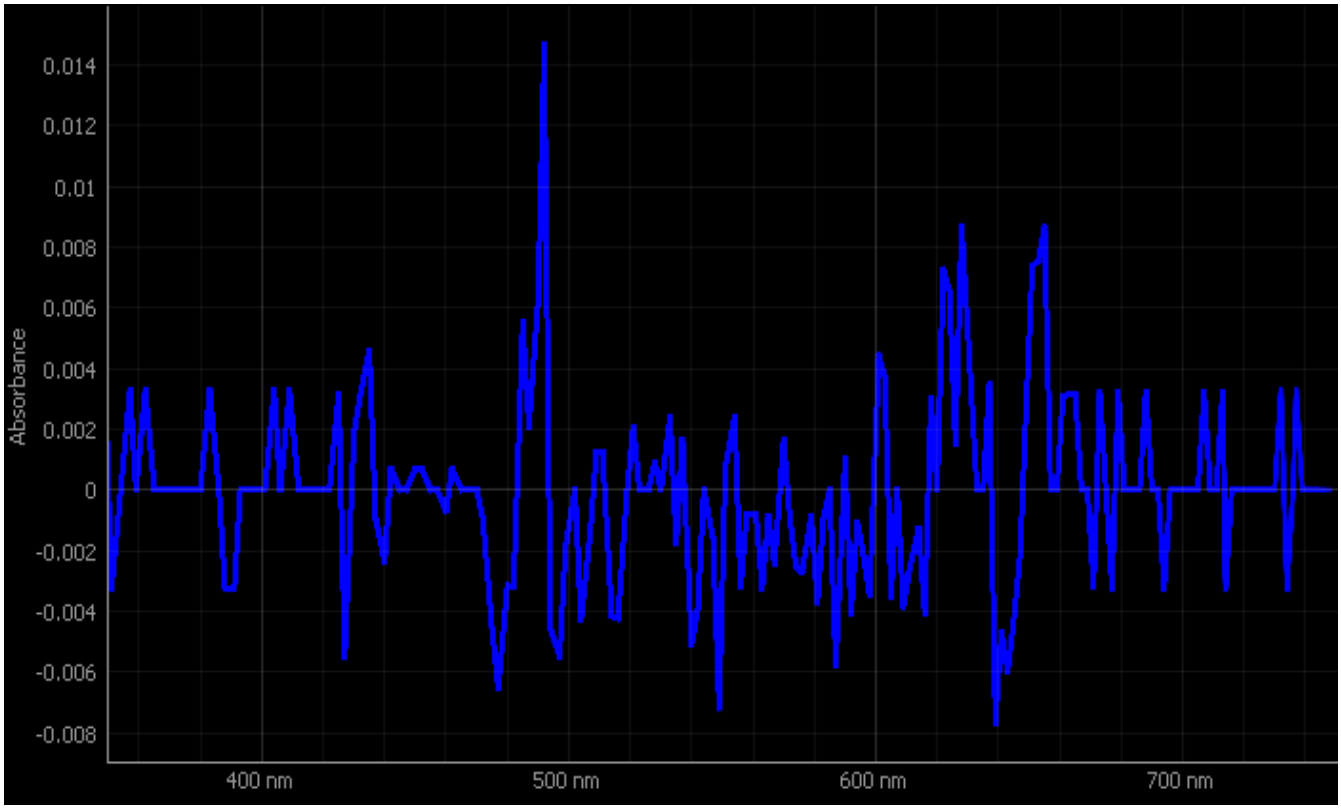
WL Range: 350 - 750 nm

Scan Speed: 39.55 nm/sec

Test mode: Single

Scan Mode: Absorbance

Measured Graph:



Parameters:

Key Parameters:

Max dB: 0.014667892163671791
Max nm: 492
Min dB: -0.007678535963840024
Min nm: 639
Violet's (428nm) dB: -0.00549201187576907
Blue's (474nm) dB: -0.004595557925060713
Green's (535nm) dB: -0.0017621745095471619
Yellow's (587nm) dB: -0.005767909704037832
Orange's (609nm) dB: -0.003839230253017336
Red's (660nm) dB: 0.0

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: 0.00010983189186907611
Standard Deviation: 0.0030157360797575905
Variance: 9.094664102751679e-06
RMS: 0.003017735433603023
Weighted Average (nm): 504.70886654877364
Minimum Value: -0.007678535963840024
Maximum Value: 0.014667892163671791
Number of Values: 198

Colorimetric Parameters:

Chromaticity Coordinate (X-axis): 0.30053
Chromaticity Coordinate (Y-axis): 0.3205
CCT: 7015K
Prcp WL: - Ld: 639nm
Purity: 10.5%
Peak WL: - Lp: 492nm
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	0.00000	1.00000
310	0.00000	1.00000
311	0.00000	1.00000
312	0.00000	1.00000
313	0.00000	1.00000
314	0.00000	1.00000
315	0.00163	0.99625
316	0.00327	0.99251
317	0.00327	0.99251
318	0.00327	0.99251
319	0.00327	0.99251
320	0.00327	0.99251
321	0.00327	0.99251
322	0.00327	0.99251
323	0.00163	0.99625
324	0.00000	1.00000
325	0.00000	1.00000
326	0.00000	1.00000
327	0.00000	1.00000
328	0.00109	0.99750
329	0.00218	0.99500
330	0.00327	0.99251
331	-0.00000	1.00000
332	-0.00327	1.00755
333	-0.00109	1.00251
334	0.00109	0.99750
335	0.00327	0.99251
336	0.00327	0.99251
337	0.00327	0.99251
338	0.00327	0.99251
339	0.00218	0.99500

WL (nm)	Abs (dB)	T (I/Io)
340	0.00109	0.99750
341	0.00000	1.00000
342	0.00000	1.00000
343	0.00000	1.00000
344	0.00000	1.00000
345	0.00000	1.00000
346	0.00000	1.00000
347	0.00109	0.99750
348	0.00218	0.99500
349	0.00327	0.99251
350	-0.00000	1.00000
351	-0.00327	1.00755
352	-0.00218	1.00503
353	-0.00109	1.00251
354	0.00000	1.00000
355	0.00109	0.99750
356	0.00218	0.99500
357	0.00327	0.99251
358	0.00163	0.99625
359	0.00000	1.00000
360	0.00109	0.99750
361	0.00218	0.99500
362	0.00327	0.99251
363	0.00218	0.99500
364	0.00109	0.99750
365	0.00000	1.00000
366	0.00000	1.00000
367	0.00000	1.00000
368	0.00000	1.00000
369	0.00000	1.00000
370	0.00000	1.00000
371	0.00000	1.00000
372	0.00000	1.00000
373	0.00000	1.00000
374	0.00000	1.00000

WL (nm)	Abs (dB)	T (I/Io)
375	0.00000	1.00000
376	0.00000	1.00000
377	0.00000	1.00000
378	0.00000	1.00000
379	0.00000	1.00000
380	0.00000	1.00000
381	0.00109	0.99750
382	0.00218	0.99500
383	0.00327	0.99251
384	0.00218	0.99500
385	0.00109	0.99750
386	0.00000	1.00000
387	-0.00163	1.00377
388	-0.00327	1.00755
389	-0.00327	1.00755
390	-0.00327	1.00755
391	-0.00327	1.00755
392	-0.00163	1.00377
393	0.00000	1.00000
394	0.00000	1.00000
395	0.00000	1.00000
396	0.00000	1.00000
397	0.00000	1.00000
398	0.00000	1.00000
399	0.00000	1.00000
400	0.00000	1.00000
401	0.00000	1.00000
402	0.00109	0.99750
403	0.00218	0.99500
404	0.00327	0.99251
405	0.00163	0.99625
406	0.00000	1.00000
407	0.00109	0.99750
408	0.00218	0.99500
409	0.00327	0.99251

Measured Data (cont):

WL (nm)	Abs (dB)	T (I/Io)

WL (nm)	Abs (dB)	T (I/Io)

WL (nm)	Abs (dB)	T (I/Io)