



Lumitec Lighting
1405 Poinsettia Drive, Suite 10
Delray Beach, FL 33444

Report No: 780122-B

Date: June 26, 2018

Model: Lumitec SeaBlaze X2 2 color

Model Numbers: 101516

Serial:

Test: Electrical and Photometric tests

Standards Used: Appropriate part or all test guidelines were used for test performed:
IESNA LM79: 2008 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI NEMA ANSLG C78.377: 2008 Specification of the Chromaticity of Solid State Lighting Products

Description of Sample:
SeaBlaze X2 2 color (Blue/White) Underwater Light

Testing Condition:
Testing environment was adjusted to allow light to perform at full power through all sample orientations

Date of Tests: 06/26/2018

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment Used	Model Number
1m Integrating Sphere, Labsphere	AS-80000-100
Calibration Lamp Power Supply	LPS-150-0268
Auxiliary Lamp Power Supply	LPS-100-0625
Labsphere Spectrometer	CDS-610
Calibration Lamp	ICS-1400
Auxiliary Lamp	IHLS-100-75
Fluke Meter	1587
UDT Instruments Photometer	3211
Gamma Scientific Goniometer	940LED-1200

Test Summary	
Manufacture	Lumitec, LLC
Model Numbers	101516
Total Lumens White*	6366
Input Voltage (VDC)	24
Input Current (Amp)	2.499
Input Power (W)	59.98
Input Power Factor	N/A
Current ATHD @ 120VAC (%)	N/A
Current ATHD @ 277VAC (%)	N/A
Efficacy (lumens/watt)	106
Color Rendering Index (CRI)	72.5
Correlated Color Temperature (K)	6491
Chromaticity Coordinate x, y	0.3135, 0.3247
Ambient Temperature (°C)	25
Total Lumens Blue*	1032
Total Scotopic Lumens Blue*	15010
Dominate Blue Wavelength (nm)	469.4

* Maximum Integrating sphere measured lumens and power measured within 2 minute of initial startup



Figure 1: Luminaire

Photometric Test Data

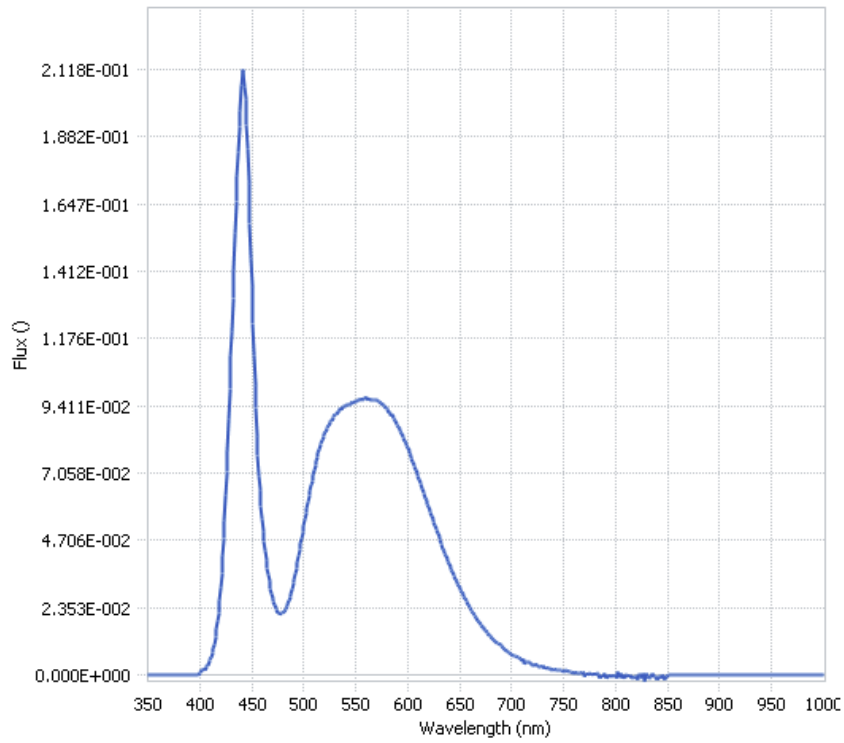


Figure 2: Spectral Power (White Light Only)

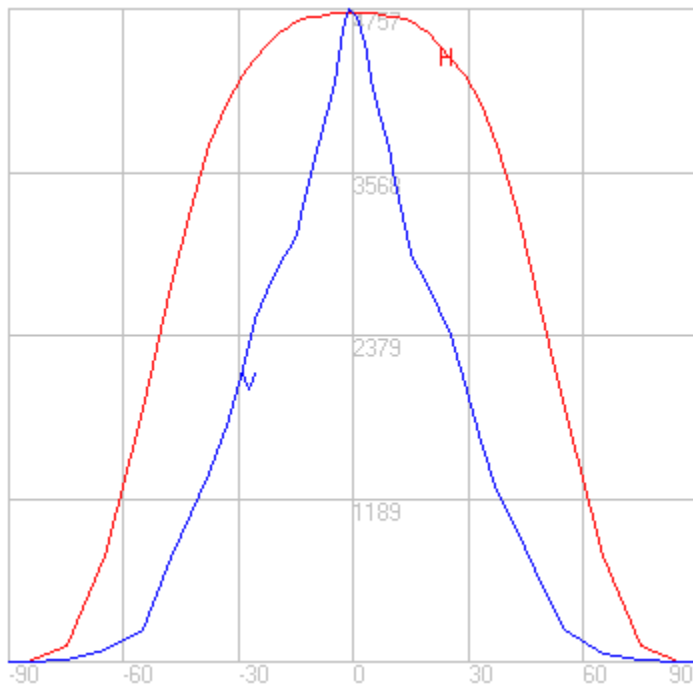


Figure 3: Axial candela plot (White Light Only)

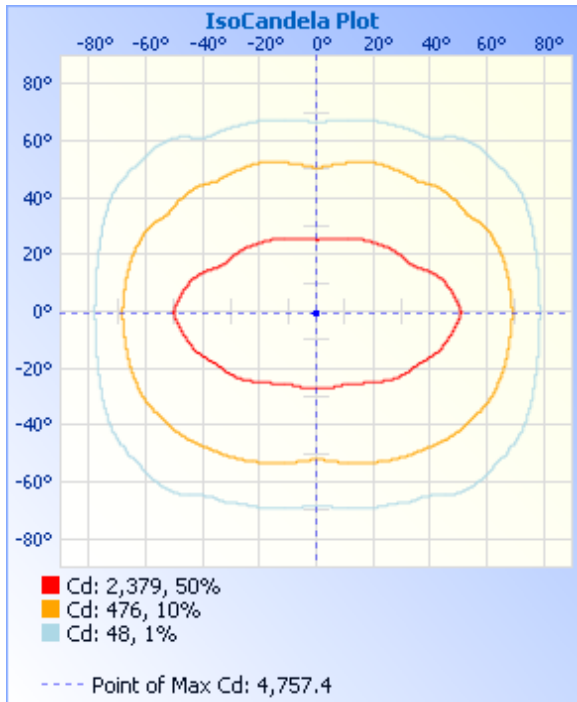


Figure 4: IsoCandela plot (White Light Only)

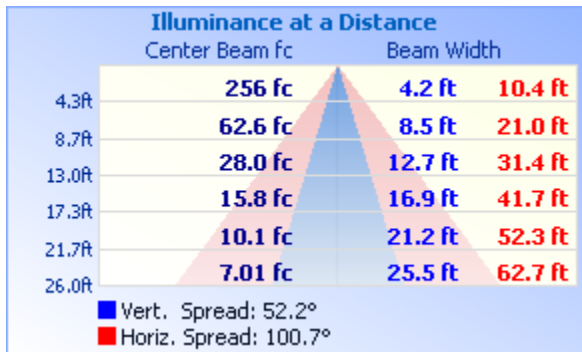


Figure 5: Illuminance at distance for center of beam (50% of max candela White Light Only)

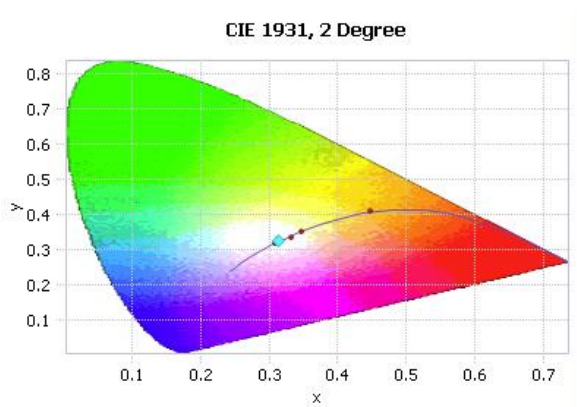


Figure 6: Chromaticity Diagram (White Light Only)

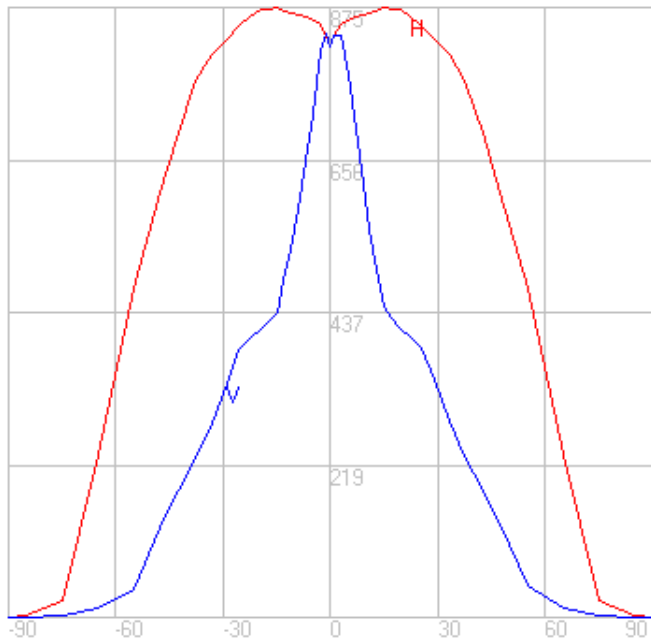


Figure 7: Axial candela plot (Blue Light Only)

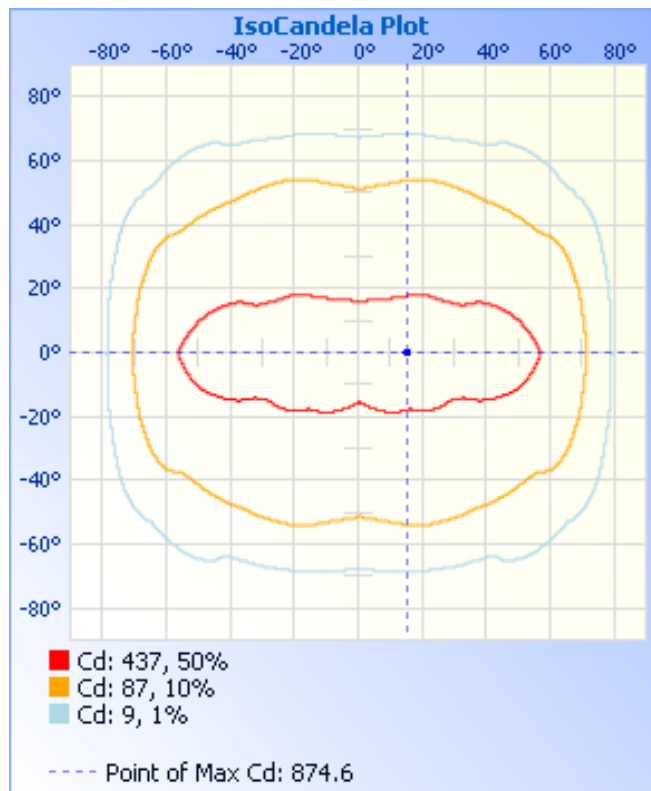


Figure 8: IsoCandela plot (Blue Light Only)

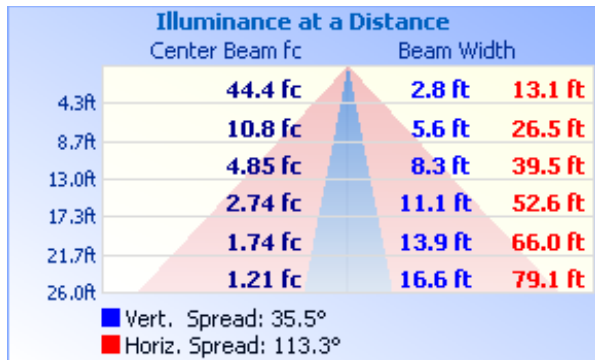


Figure 9: Illuminance at distance for center of beam (50% of max candela Blue Light Only)

Test Methods

Photometric Measurements – Goniophotometer

A Type C Goniophotometer with horizontal optical axis was used to measure candelas (intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C. Secondary device used to increase airflow allowing for light to stabilize at maximum rated light output throughout testing

Electrical measurements are measured using the listed equipment.

Spectral Measurements - Integrating Sphere

A spectrometer, in conjunction with a LabSphere 1 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature (CCT and the color rendering index (CRI) for each sample.

Measurements were taken within 2 minute of initial startup

Electrical measurements are taken using the listed equipment.

Report Prepared by: Stephan Williamson

Test Report Released by:

Test Report Reviewed by: