DesignLights Consortium

Model Number	Alpha III (52840)
Product Name	Dragon Alpha III
Product ID	H-VV878F
QPL	Horticultural
Manufacturer	Scynce LED
Brand Name	Scynce LED
DLC Family Code	IIIOVN
Listing Status	Listed
Date Qualified	2024-09-30

PRODUCT INFORMATION VIEW DETAILS

Qualified Product List	Horticultural
Product ID	H-VV878F
Manufacturer	Scynce LED
Brand	Scynce LED
Product Name	Dragon Alpha III
Model Number	Alpha III (52840)
Technical Requirements Version	3.0
DLC Family Code	IIIOVN
Parent	Yes
Input Power Type	AC
Fixture Maximum Ambient Temp	30 °C
Width	7 in
Height	4 in
Length	43.2 in
Actively Cooling Presence	No

PRODUCT CATEGORIZATION VIEW DETAILS

Controlled Environment	Indoor (Non-stacked), Greenhouse
Lighting Scheme (Position)	Top light
Lighting Scheme (Use Case)	Sole-Source, Supplemental
Category	Horticultural Lighting Fixture

CONTROL FEATURES VIEW DETAILS

Spectrally Tunable	Yes
Dimmable	Yes
Dimming and Control Method to the Product	YES, Proprietary RS485
Integral Control Capability	Dim to Off

Connector or Transmission Hardware	Proprietary Data and Power Plugs
Fan Presence	No

REPORTED PHOTOMETRIC PERFORMANCE VIEW DETAILS

Reported Photosynthetic Photon Efficacy (400-700nm)	2.46 µmol/J
Reported Photosynthetic Photon Flux (400-700nm)	1621 µmol/s
Reported Minimum Photosynthetic Photon Flux	0 µmol/s
Reported Default Photosynthetic Photon Flux	1620.8 µmol/s
Reported Photon Flux Blue (400-500nm)	249 µmol/s
Reported Photon Flux Green (500-600nm)	585 µmol/s
Reported Photon Flux Red (600-700nm)	788 µmol/s
Reported Photon Flux Far Red (700-800nm)	72 µmol/s
Reported Photon Flux (280-800nm)	1695 µmol/s
Reported Photon Efficacy (280-800nm)	2.57 µmol/J

REPORTED ELECTRICAL PERFORMANCE VIEW DETAILS

Reported Input Wattage	658.9 W
Reported Default Input Wattage	658.9 W
Reported Minimum Input Wattage	1 W
Reported Power Factor	0.995
Voltage Range	120-480 V
Reported Total Harmonic Distortion	8.1 %

TESTED PHOTOMETRIC PERFORMANCE VIEW DETAILS

Tested Photosynthetic Photon Efficacy (400-700nm)	2.46 µmol/J
Tested Photosynthetic Photon Flux (400-700nm)	1621 µmol/s
Tested Photon Flux Blue (400-500nm)	249 µmol/s
Tested Photon Flux Green (500-600nm)	585 µmol/s
Tested Photon Flux Red (600-700nm)	788 µmol/s
Tested Photon Flux Far Red (700-800nm)	72 µmol/s
Tested Photon Flux (280-800nm)	1695 µmol/s
Tested Photon Efficacy (280-800nm)	2.57 µmol/J
Tested Voltage for Minimum Efficacy	120

TESTED ELECTRICAL PERFORMANCE VIEW DETAILS

Tested Input Wattage	658.9 W
Tested Power Factor	0.942
Tested Total Harmonic Distortion	10.8 %

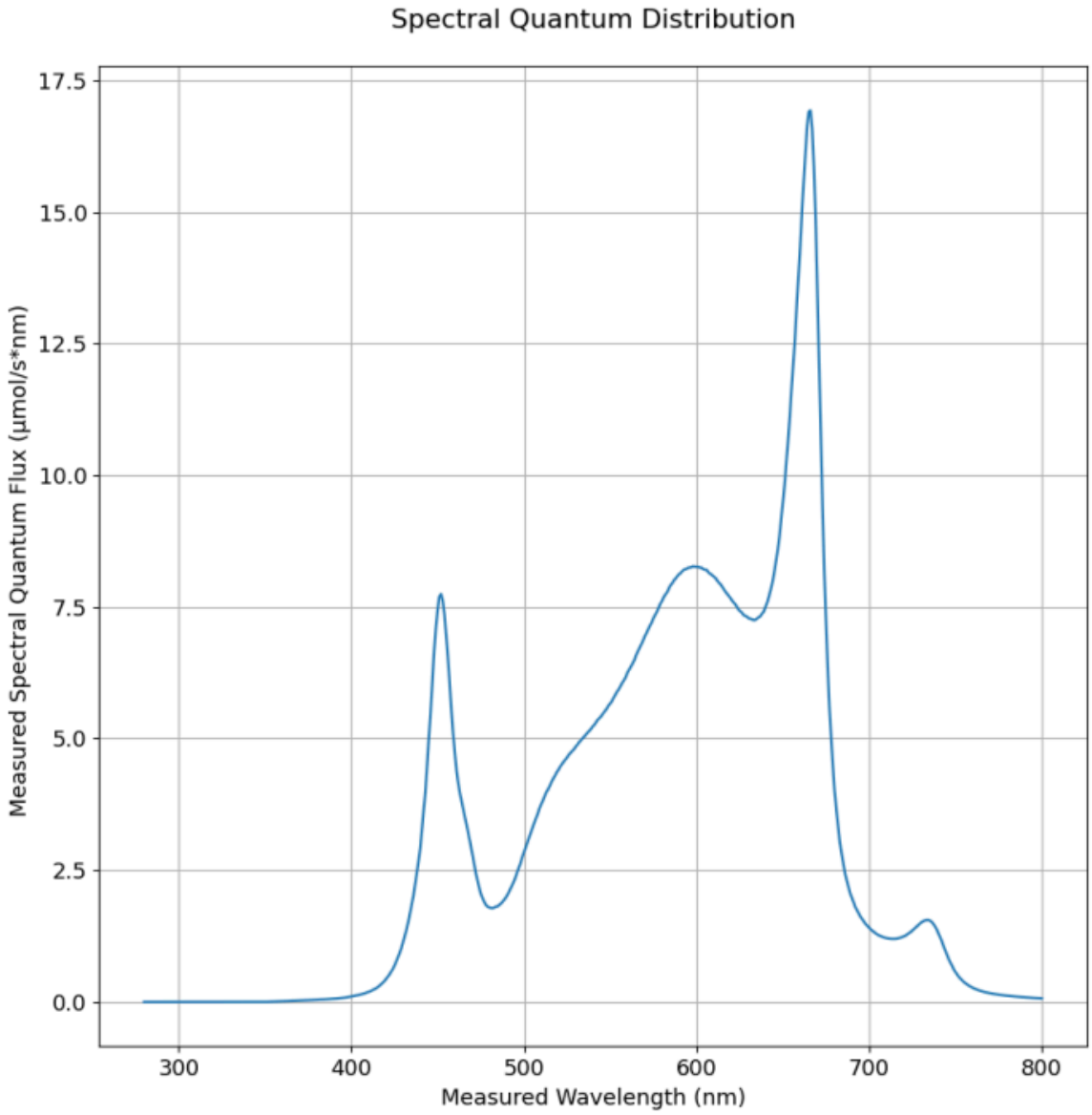
SPECTRAL TUNING PERFORMANCE VIEW DETAILS

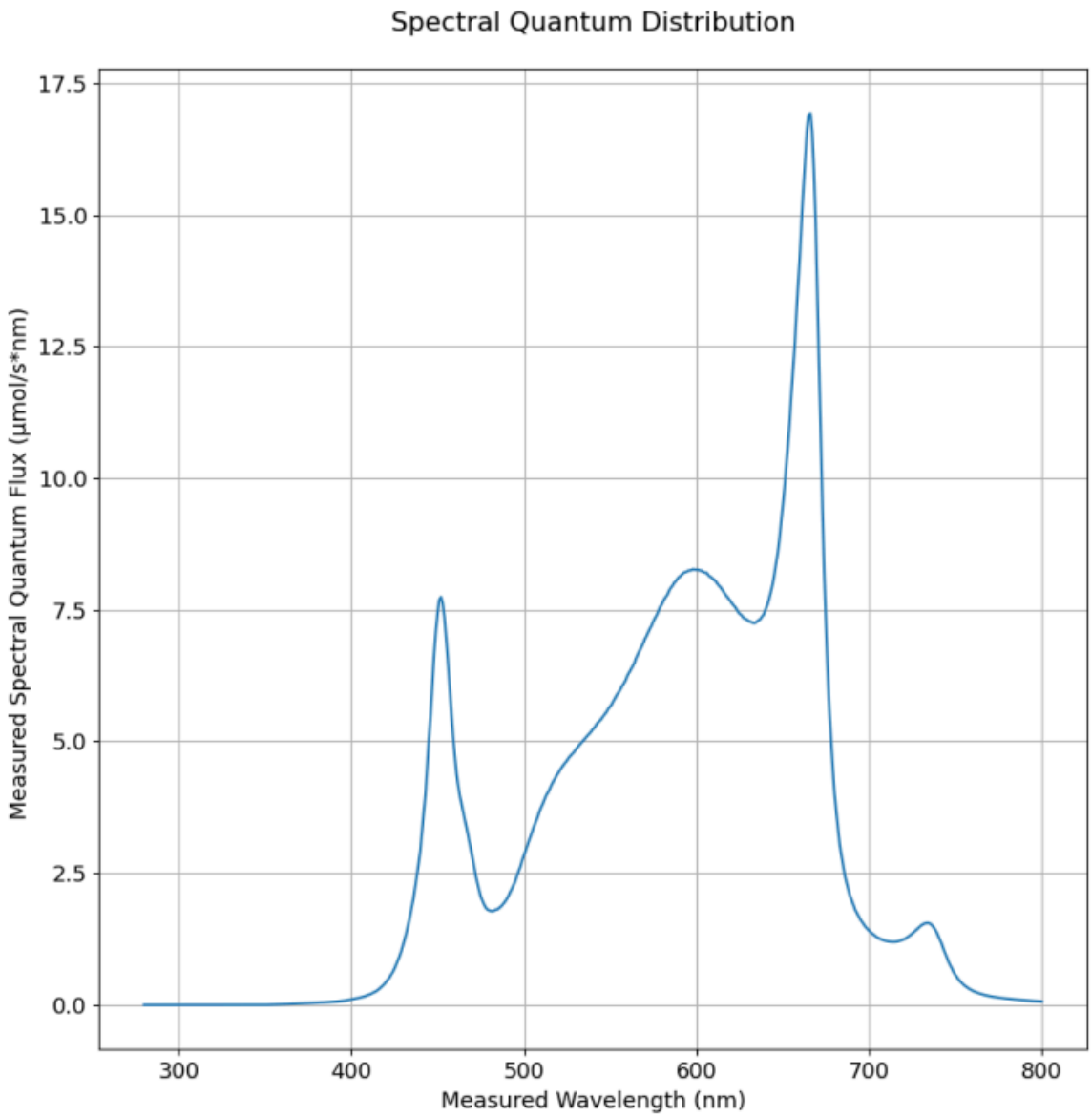
Spectral Channel Name 1	Cool White
Reported Photosynthetic Photon Flux (400-700nm) Channel 1	1243 µmol/s
Reported Photon Flux Blue (400-500nm) Channel 1	363 µmol/s
Reported Photon Flux Green (500-600nm) Channel 1	586 µmol/s
Reported Photon Flux Red (600-700nm) Channel 1	294 µmol/s
Reported Photon Flux Far Red (700-800nm) Channel 1	23 µmol/s
Reported Photon Flux (280-800nm) Channel 1	1268 µmol/s
Tested Photosynthetic Photon Flux (400-700nm) Channel 1	1243 µmol/s
Tested Photon Flux Blue (400-500nm) Channel 1	363 µmol/s
Tested Photon Flux Green (500-600nm) Channel 1	586 µmol/s
Tested Photon Flux Red (600-700nm) Channel 1	294 µmol/s
Tested Photon Flux Far Red (700-800nm) Channel 1	23 µmol/s
Tested Photon Flux (280-800nm) Channel 1	1268 µmol/s
Spectral Channel Name 2	Warm White
Reported Photosynthetic Photon Flux (400-700nm) Channel 2	1167 µmol/s
Reported Photon Flux Blue (400-500nm) Channel 2	115 µmol/s
Reported Photon Flux Green (500-600nm) Channel 2	510 µmol/s
Reported Photon Flux Red (600-700nm) Channel 2	541 µmol/s
Reported Photon Flux Far Red (700-800nm) Channel 2	44 µmol/s
Reported Photon Flux (280-800nm) Channel 2	1212 µmol/s
Tested Photosynthetic Photon Flux (400-700nm) Channel 2	1167 µmol/s
Tested Photon Flux Blue (400-500nm) Channel 2	115 µmol/s
Tested Photon Flux Green (500-600nm) Channel 2	510 µmol/s
Tested Photon Flux Red (600-700nm) Channel 2	541 µmol/s
Tested Photon Flux Far Red (700-800nm) Channel 2	44 µmol/s
Tested Photon Flux (280-800nm) Channel 2	1212 µmol/s
Spectral Channel Name 3	Red
Reported Photosynthetic Photon Flux (400-700nm) Channel 3	448 µmol/s
Reported Photon Flux Blue (400-500nm) Channel 3	0 µmol/s

Reported Photon Flux Green (500-600nm) Channel 3	1 µmol/s
Reported Photon Flux Red (600-700nm) Channel 3	447 µmol/s
Reported Photon Flux Far Red (700-800nm) Channel 3	2 µmol/s
Reported Photon Flux (280-800nm) Channel 3	449 µmol/s
Tested Photon Flux Blue (400-500nm) Channel 3	0 µmol/s
Tested Photosynthetic Photon Flux (400-700nm) Channel 3	448 µmol/s
Tested Photon Flux Green (500-600nm) Channel 3	1 µmol/s
Tested Photon Flux Red (600-700nm) Channel 3	447 µmol/s
Tested Photon Flux Far Red (700-800nm) Channel 3	2 µmol/s
Tested Photon Flux (280-800nm) Channel 3	449 µmol/s
Spectral Channel Name 4	Far Red
Reported Photosynthetic Photon Flux (400-700nm) Channel 4	12 µmol/s
Reported Photon Flux Blue (400-500nm) Channel 4	0 µmol/s
Reported Photon Flux Green (500-600nm) Channel 4	0 µmol/s
Reported Photon Flux Red (600-700nm) Channel 4	12 µmol/s
Reported Photon Flux Far Red (700-800nm) Channel 4	144 µmol/s
Reported Photon Flux (280-800nm) Channel 4	157 µmol/s
Tested Photosynthetic Photon Flux (400-700nm) Channel 4	12 µmol/s
Tested Photon Flux Blue (400-500nm) Channel 4	0 µmol/s
Tested Photon Flux Green (500-600nm) Channel 4	0 µmol/s
Tested Photon Flux Red (600-700nm) Channel 4	12 µmol/s
Tested Photon Flux Far Red (700-800nm) Channel 4	144 µmol/s
Tested Photon Flux (280-800nm) Channel 4	157 µmol/s

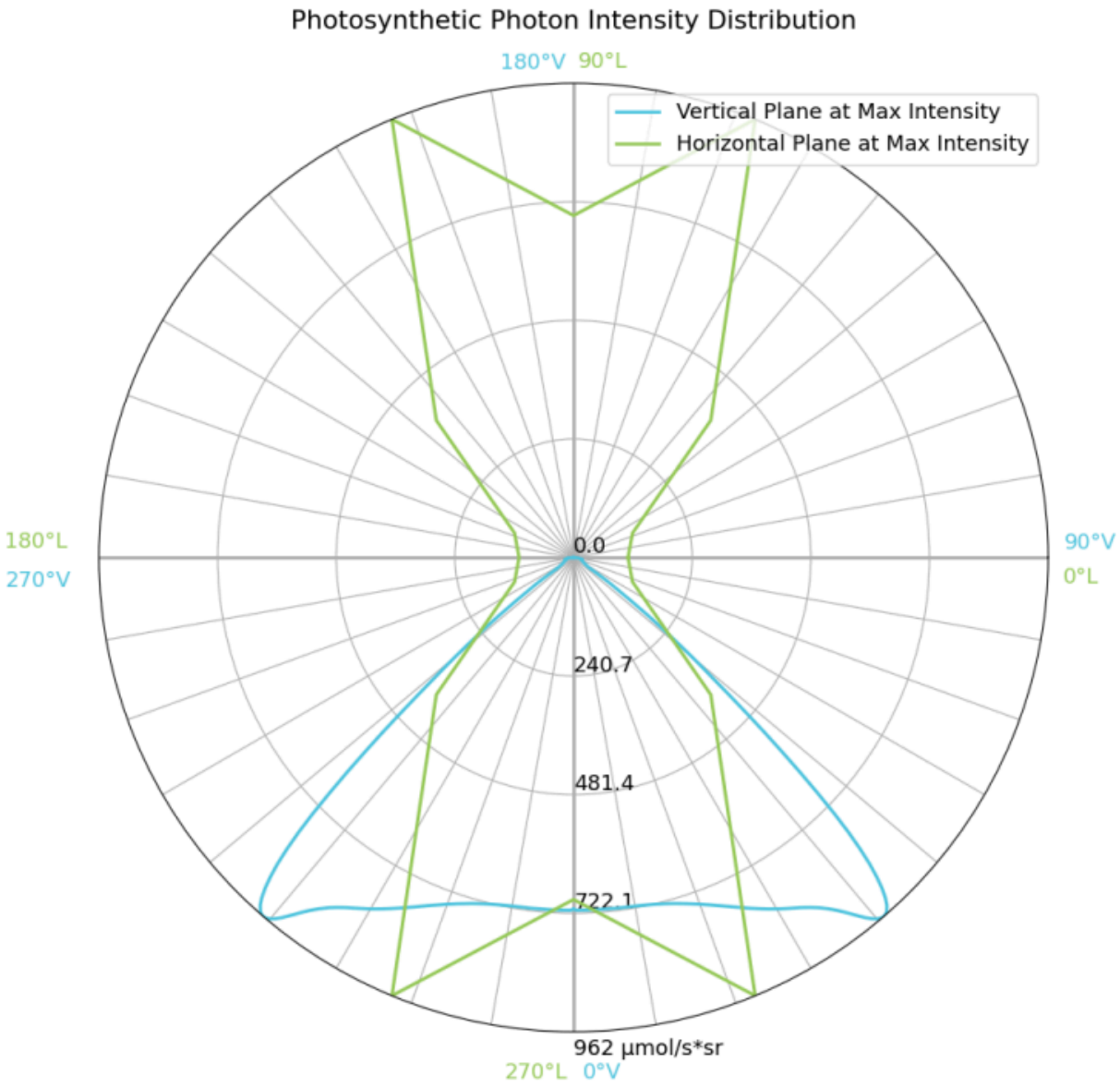
SQD/PPID VIEW DETAILS

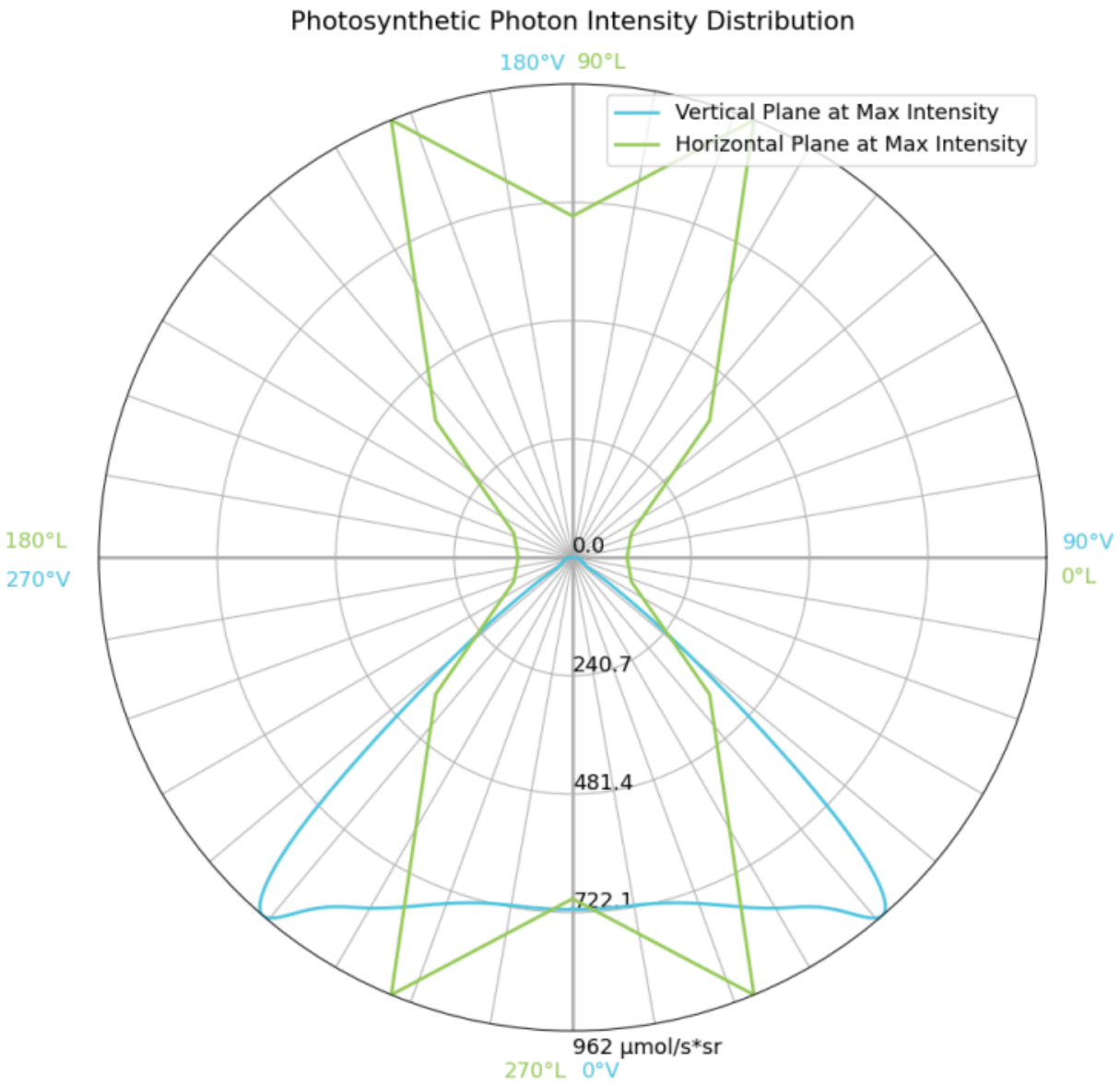
SQD
Click the image to zoom in.
Download Image



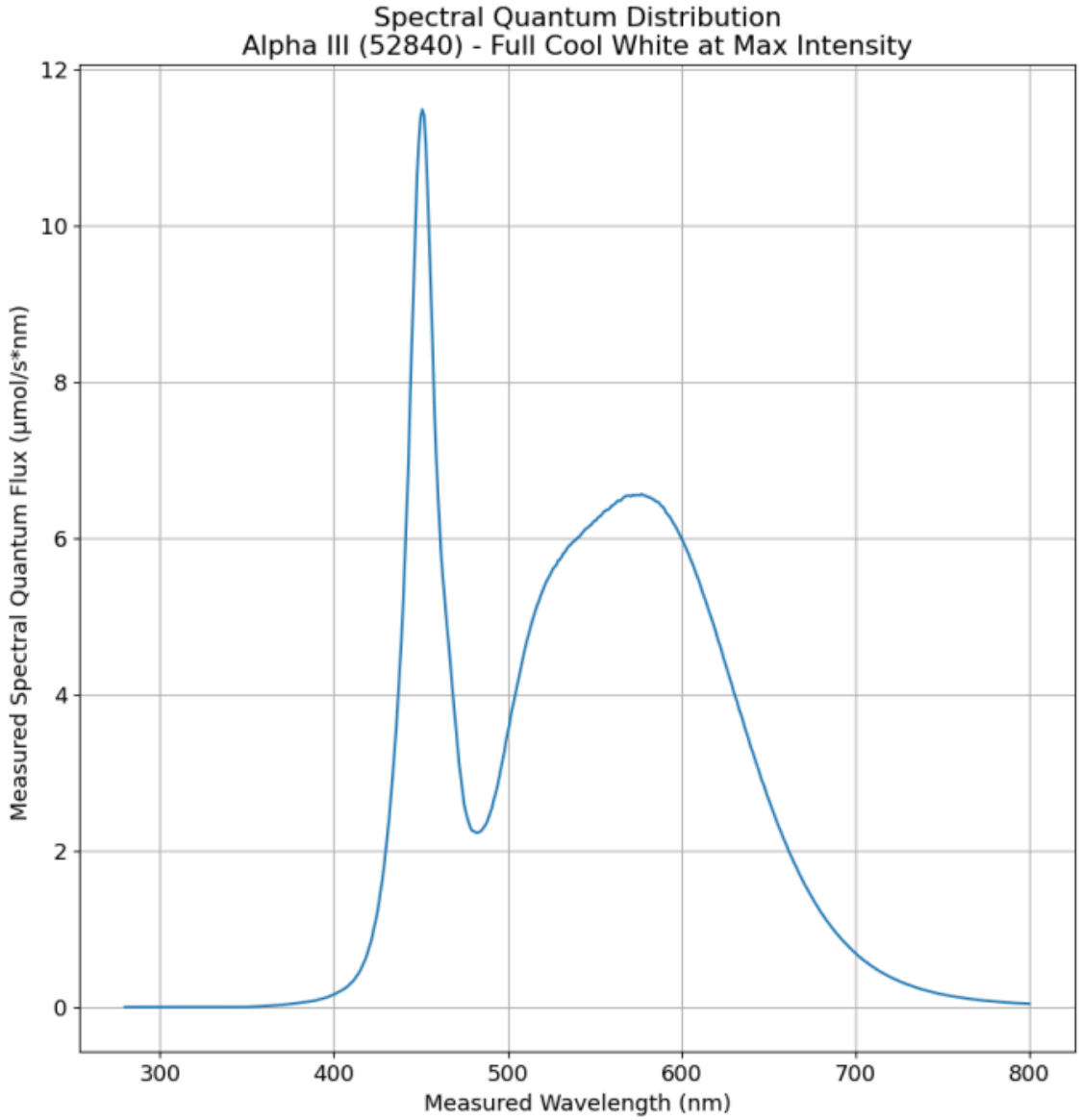

Spectral Quantum Distribution
Measured Spectral Quantum Flux (µmol/s*nm)
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
300
400
500
600
700
800
Measured Wavelength (nm)

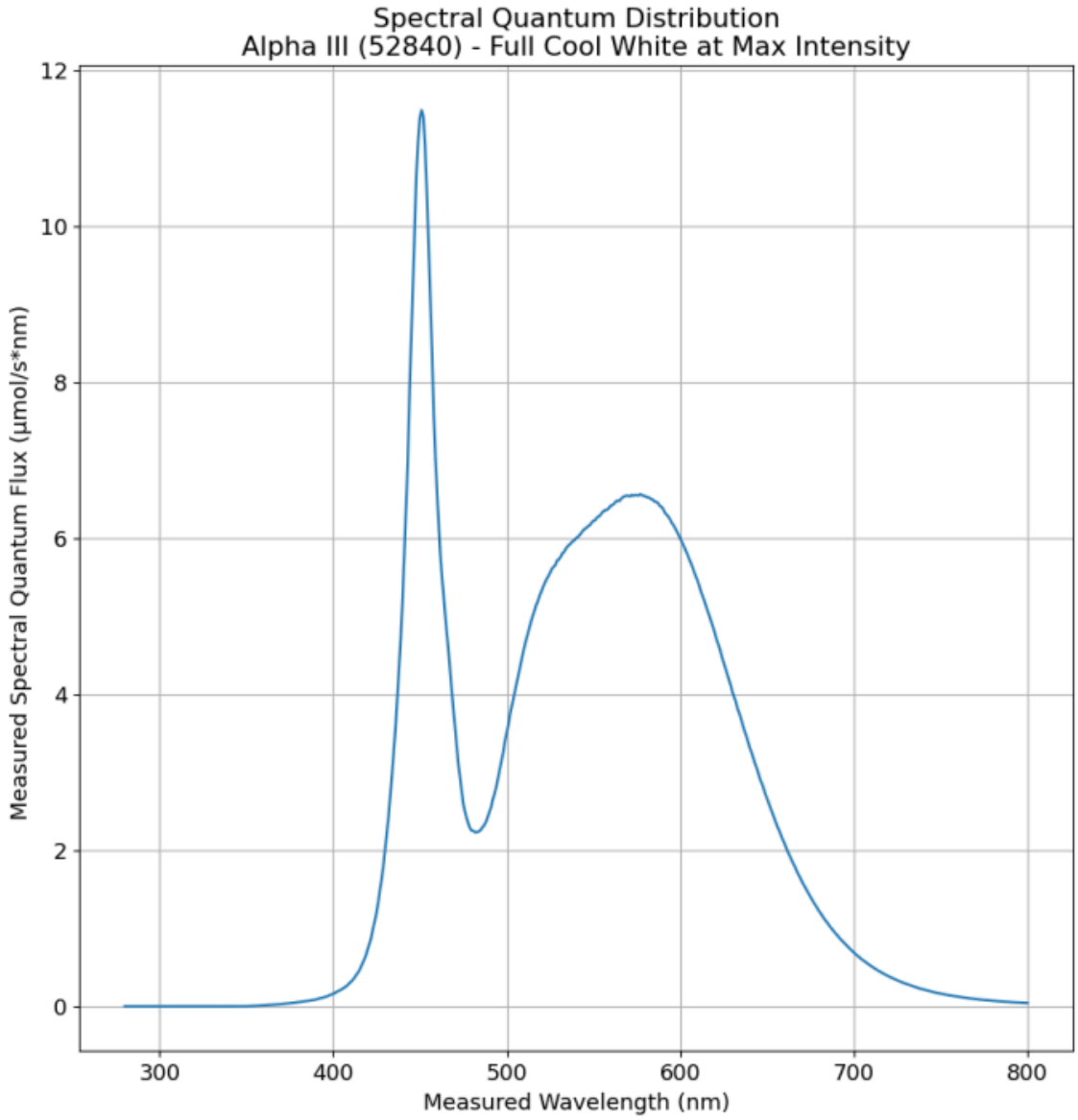
PPID
Click the image to zoom in.
Download Image



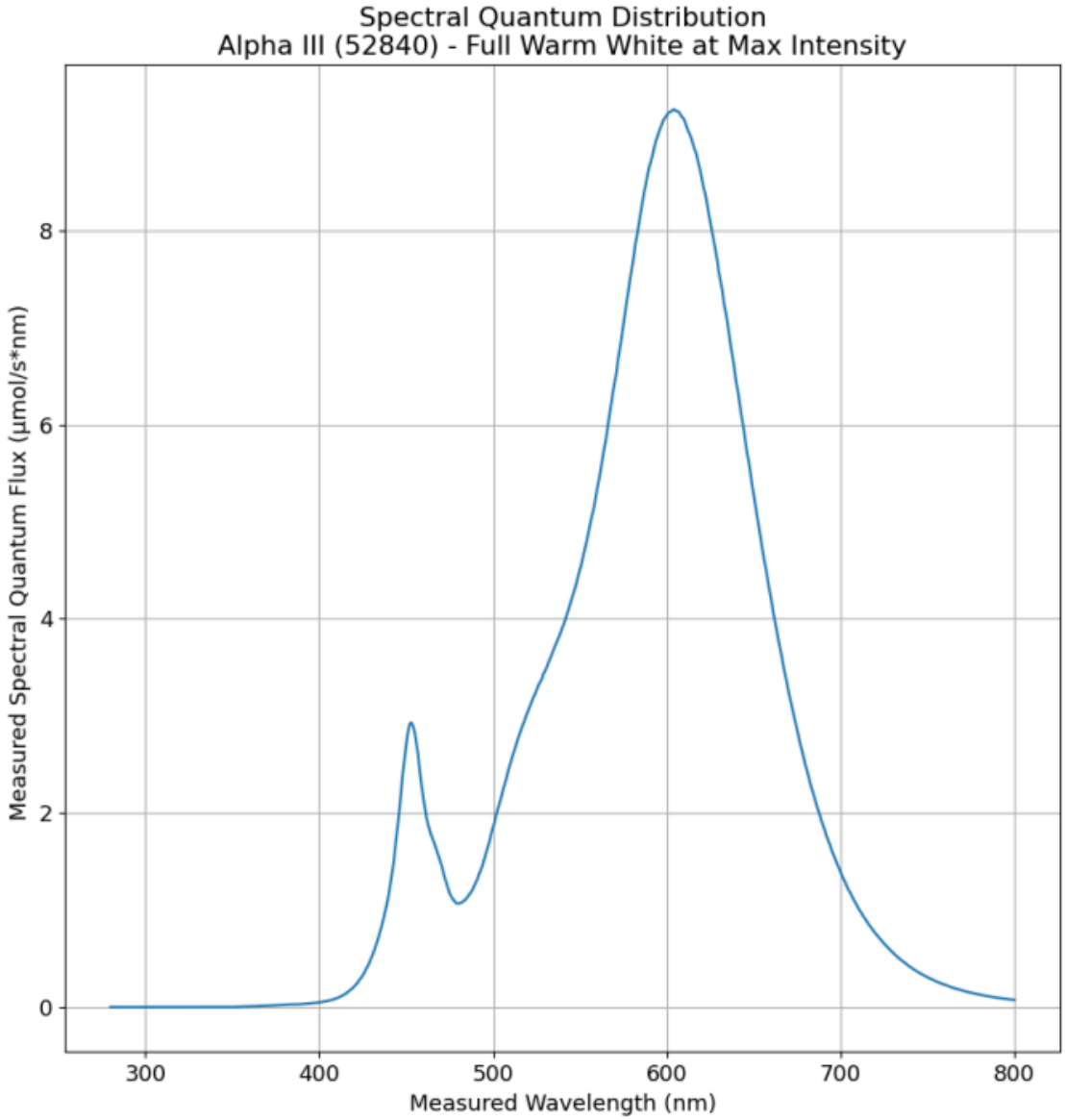

Photosynthetic Photon Intensity Distribution
180°V 90°L
Vertical Plane at Max Intensity
Horizontal Plane at Max Intensity
180°L
270°V
0.0
90°V
0°L
240.7
481.4
722.1
962 µmol/s*sr
270°L 0°V

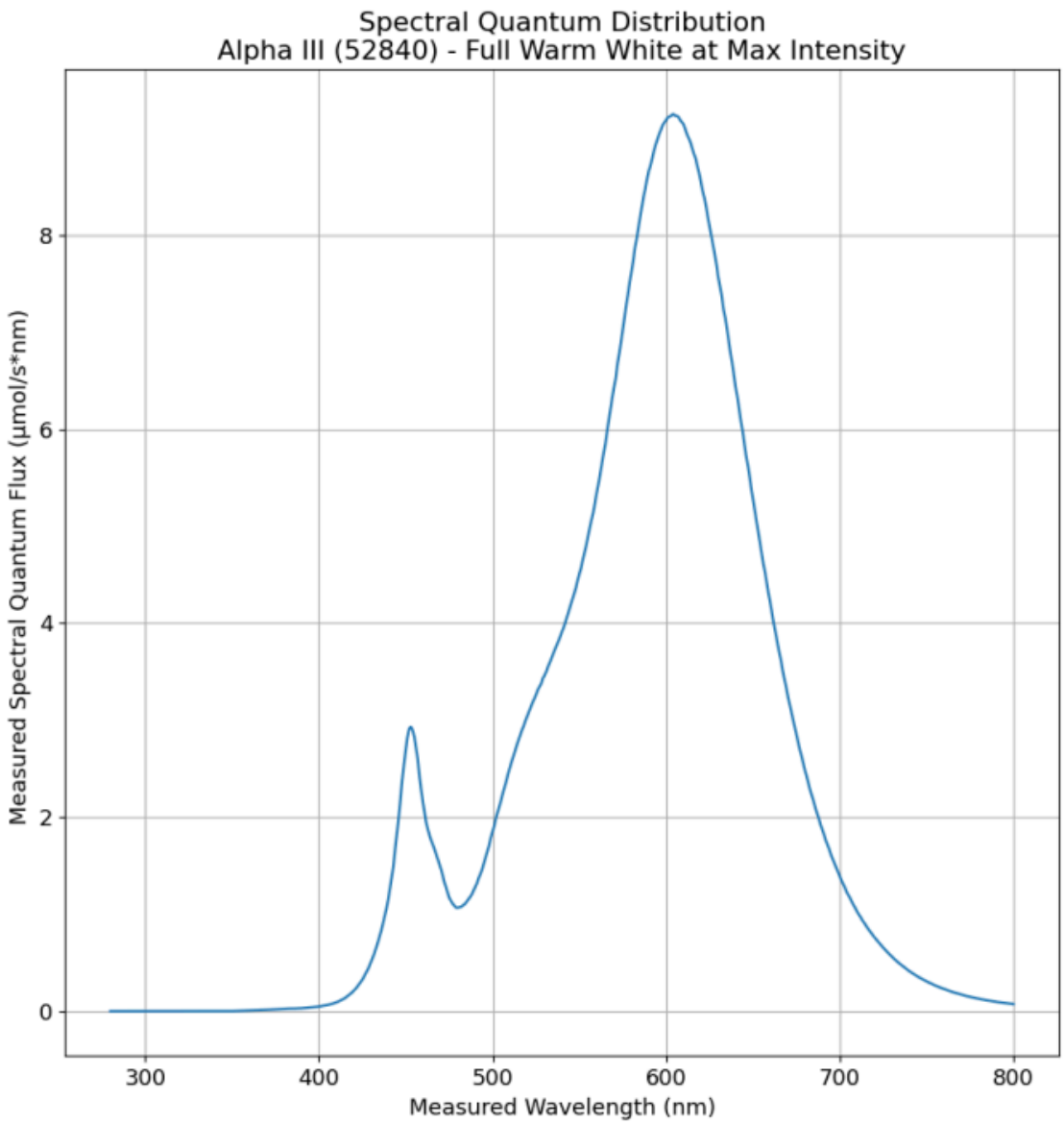
SQD Channel 1
Click the image to zoom in.
Download Image



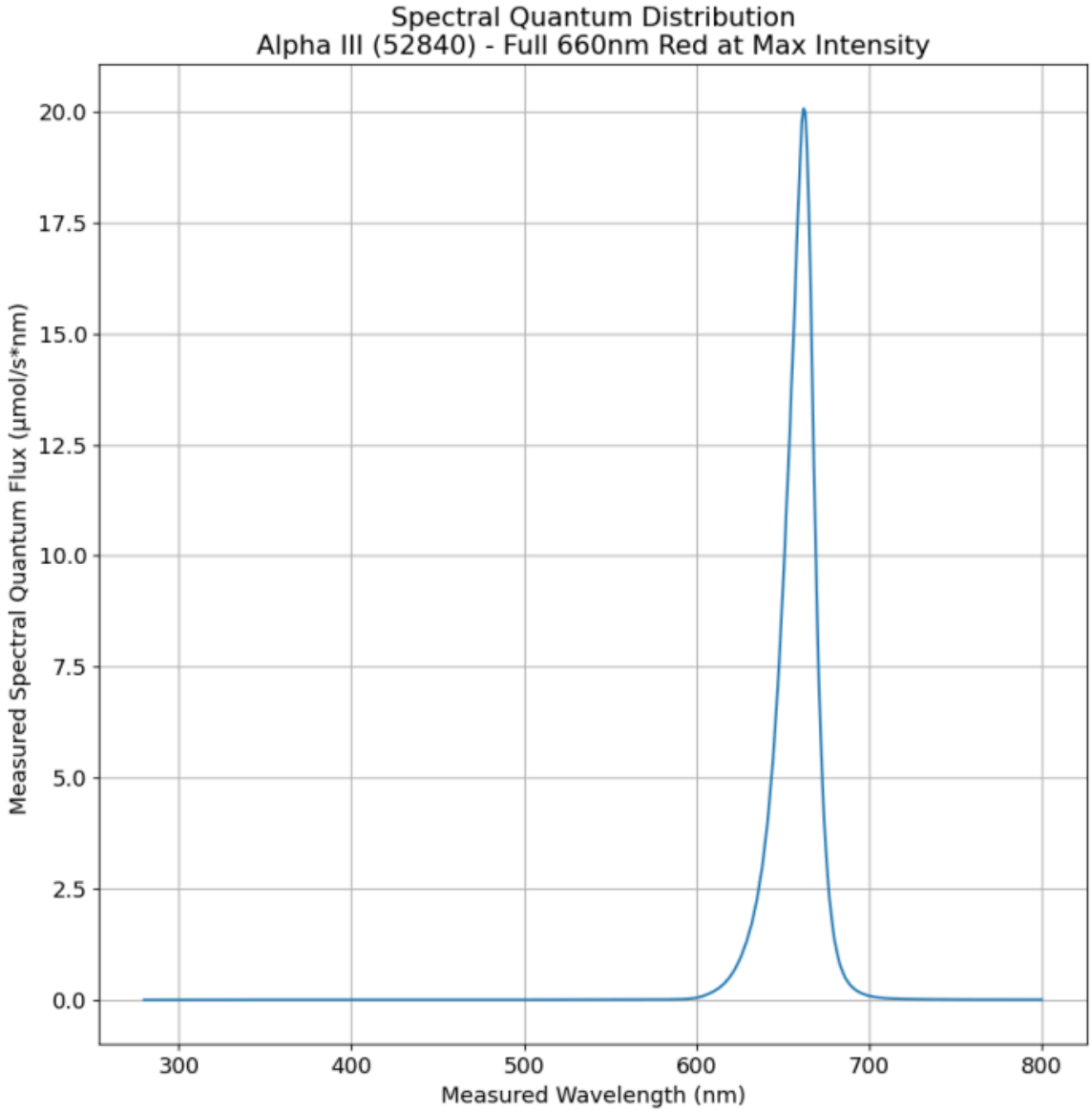

Spectral Quantum Distribution
Alpha III (52840) - Full Cool White at Max Intensity
Measured Spectral Quantum Flux (µmol/s*nm)
Measured Wavelength (nm)
0
2
4
6
8
10
12
300
400
500
600
700
800

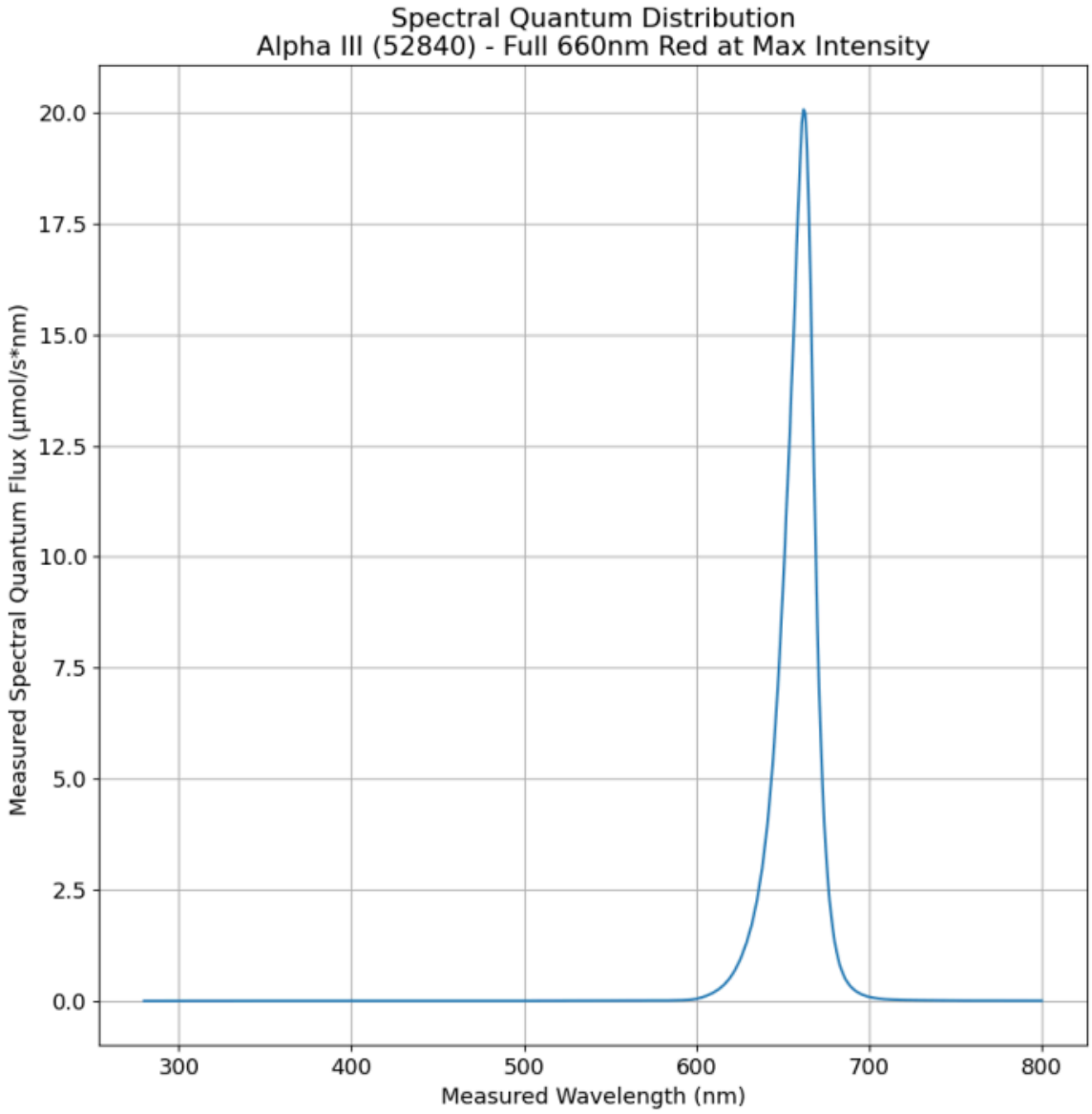
SQD Channel 2
Click the image to zoom in.
Download Image



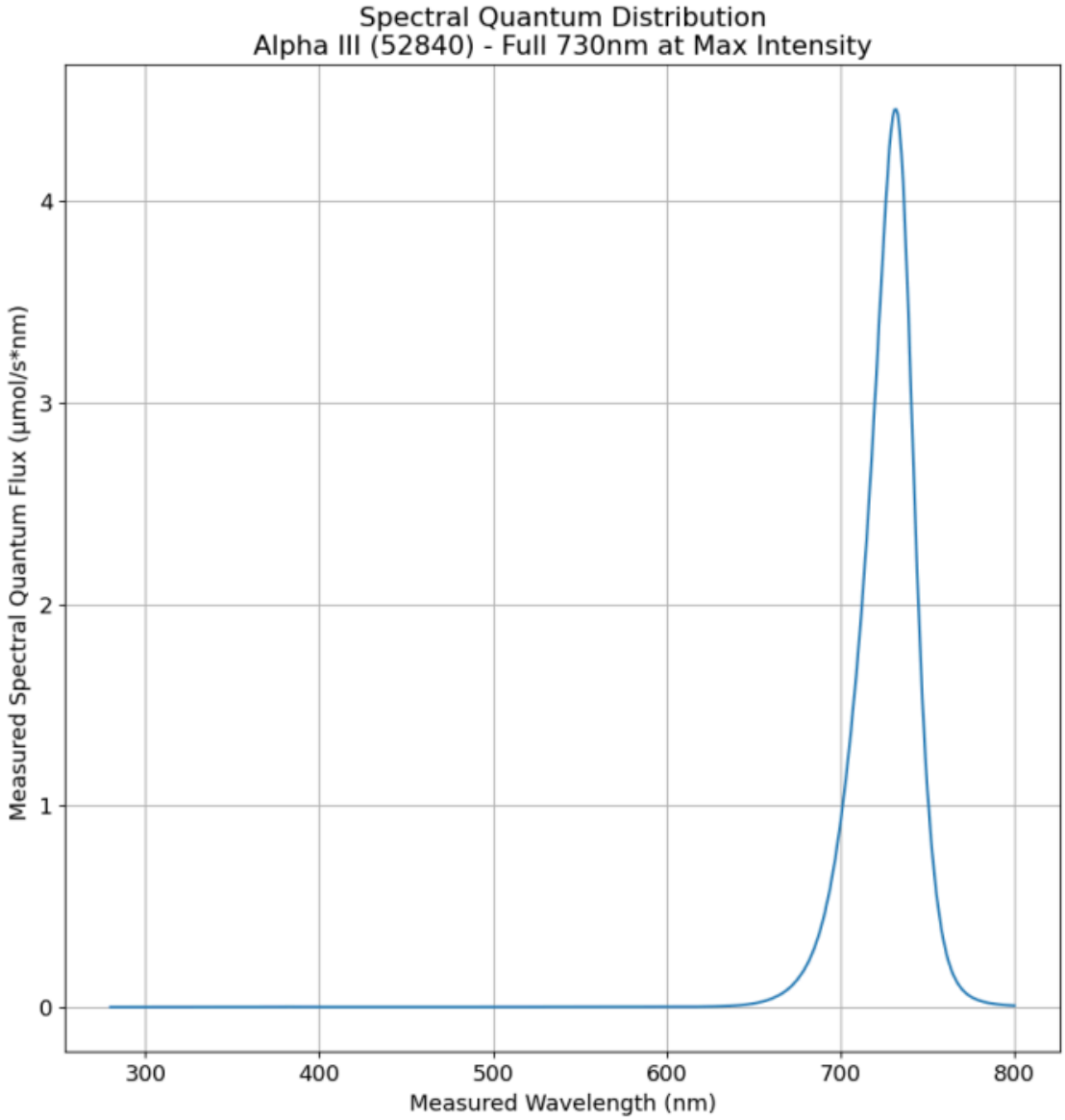

Spectral Quantum Distribution
Alpha III (52840) - Full Warm White at Max Intensity
Measured Spectral Quantum Flux (µmol/s*nm)
0
2
4
6
8
300
400
500
600
700
800
Measured Wavelength (nm)

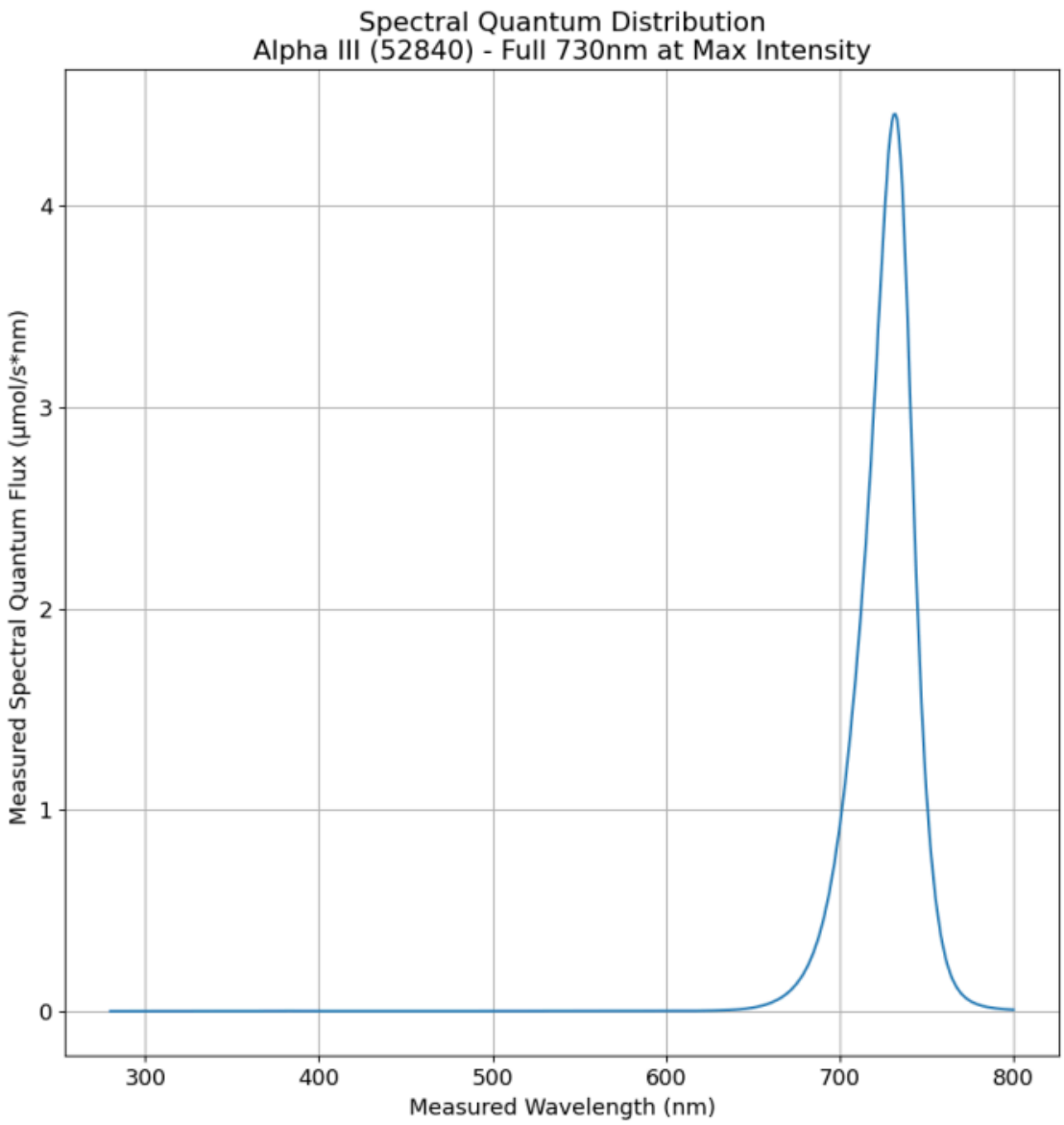
SQD Channel 3
Click the image to zoom in.
Download Image




Spectral Quantum Distribution
Alpha III (52840) - Full 660nm Red at Max Intensity
Measured Spectral Quantum Flux (µmol/s*nm)
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
300
400
500
600
700
800
Measured Wavelength (nm)

SQD Channel 4
Click the image to zoom in.
Download Image





VERSION HISTORY VIEW DETAILS

2024-09-30	Listed	3