

# Photometric measurements, Catherina<sup>S</sup> June 2012

## Measurement conditions:

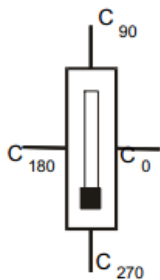
meas. date 1.7.2012  
ambient temperature = 25,0 °C  
Fixture Temperature = 50°C  
Voltage = 230,0 V  
Current = 0,1125 A  
Power consumption 10,94 VA

## Note:

Used: ac-dc power adapter: Sunny  
Model: SYS1381-1224-W2E

## DC:

Voltage = 24,0 VDC  
Current = 0,385 ADC  
DC Power = 9,24 W

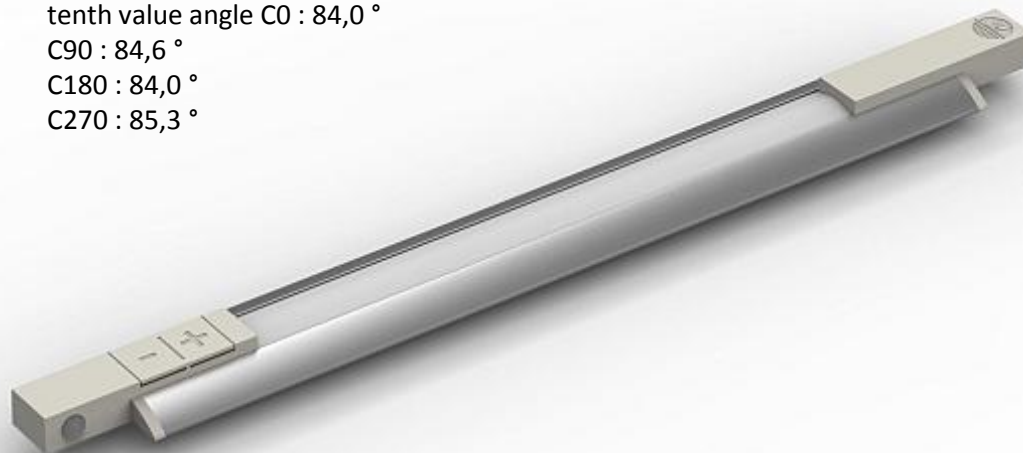


## Measurement results:

flux of luminaire 549,5 lm  
Efficiency: 50,22 lm/W  
Efficacy: 60,89 lm /W\*  
lower flux fraction 95,45 %  
upper flux fraction 4,55 %  
intensity maximum 312,6 cd/klm  
in C-plane 175,0 °  
at gamma 5,0 °  
half value angle C0 : 59,9 °  
C90 : 59,9 °  
C180 : 59,0 °  
C270 : 58,7 °  
tenth value angle C0 : 84,0 °  
C90 : 84,6 °  
C180 : 84,0 °  
C270 : 85,3 °

## Fixture Data:

Name: Catherina<sup>S</sup>  
Producer: FuturoLighting  
Light source: OSRAM Duris E5, module  
Length: 420 mm  
width: 50 mm  
Height: 16 mm



\* DC supply



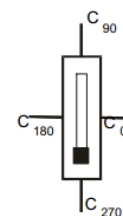
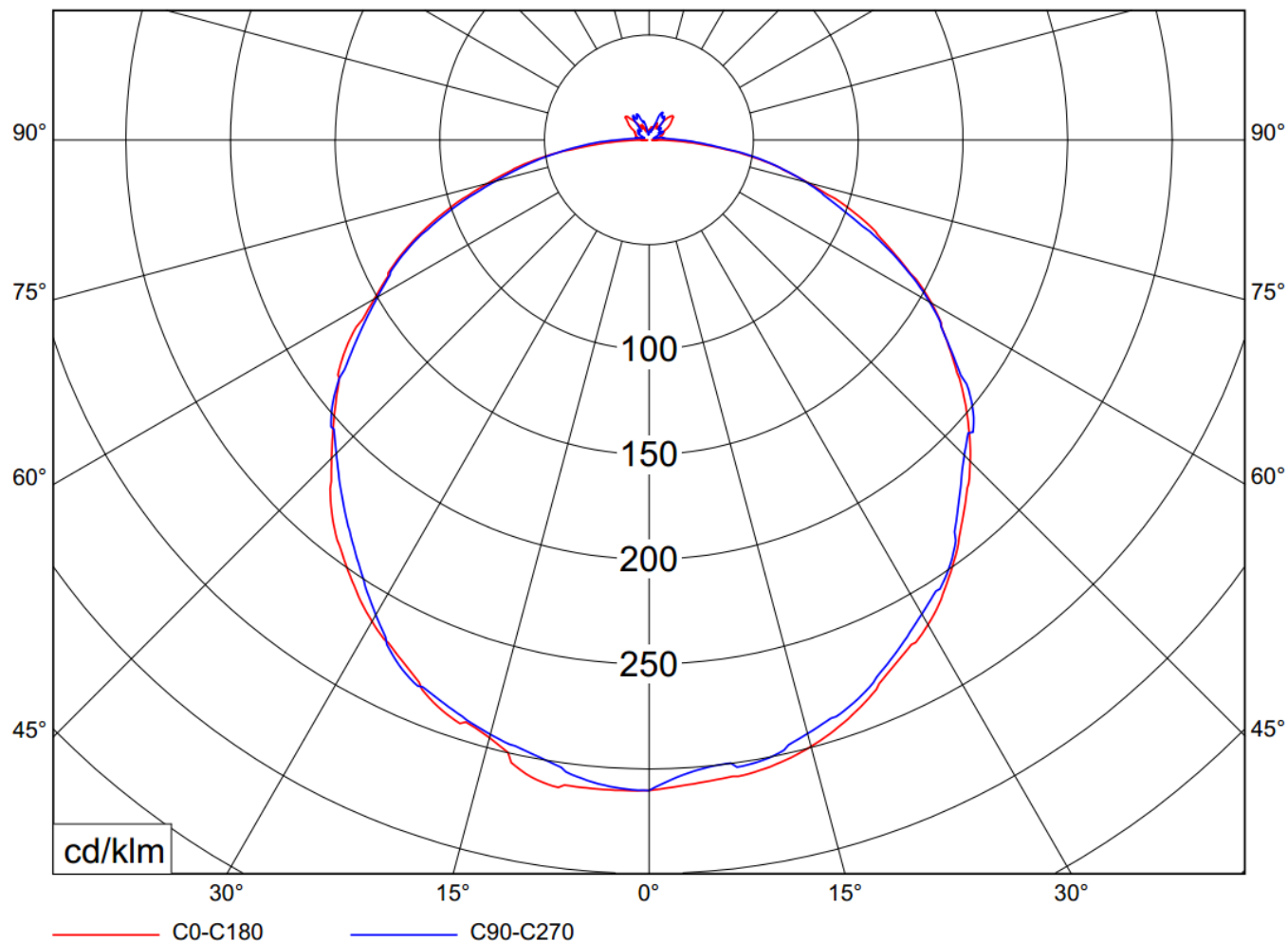
**Futuro  
Lighting**

**FuturoLighting Ltd.**  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

## Photometric measurements, Catherina<sup>S</sup> intensity distribution / polar



**Futuro  
Lighting**

**FuturoLighting Ltd.**  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

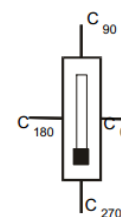
Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

# Photometric measurements, Catherina<sup>S</sup> cone diagram

distance [m]	cone diameter [m]	E [lx]	
1,0	3,45	E(0°) 171 E(C0) 59,9° 43	
2,0	6,90	E(0°) 43 E(C0) 59,9° 11	
3,0	10,35	E(0°) 19 E(C0) 59,9° 5	
4,0	13,80	E(0°) 11 E(C0) 59,9° 3	
5,0	17,25	E(0°) 7 E(C0) 59,9° 2	

half value angle 119,8°



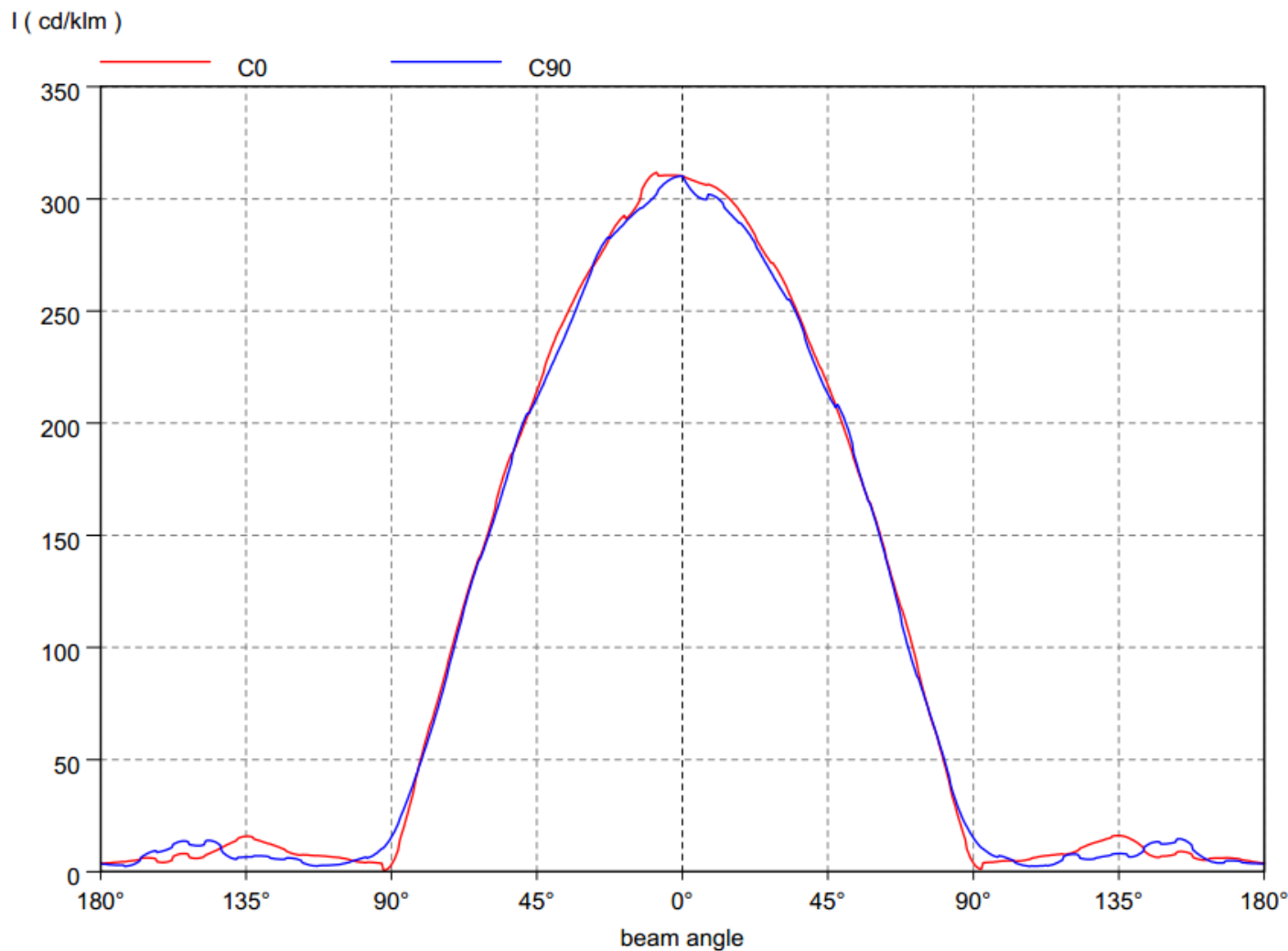
**Futuro  
Lighting**

FuturoLighting Ltd.  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

# Photometric measurements, Catherina<sup>S</sup> intensity distribution / cartesian



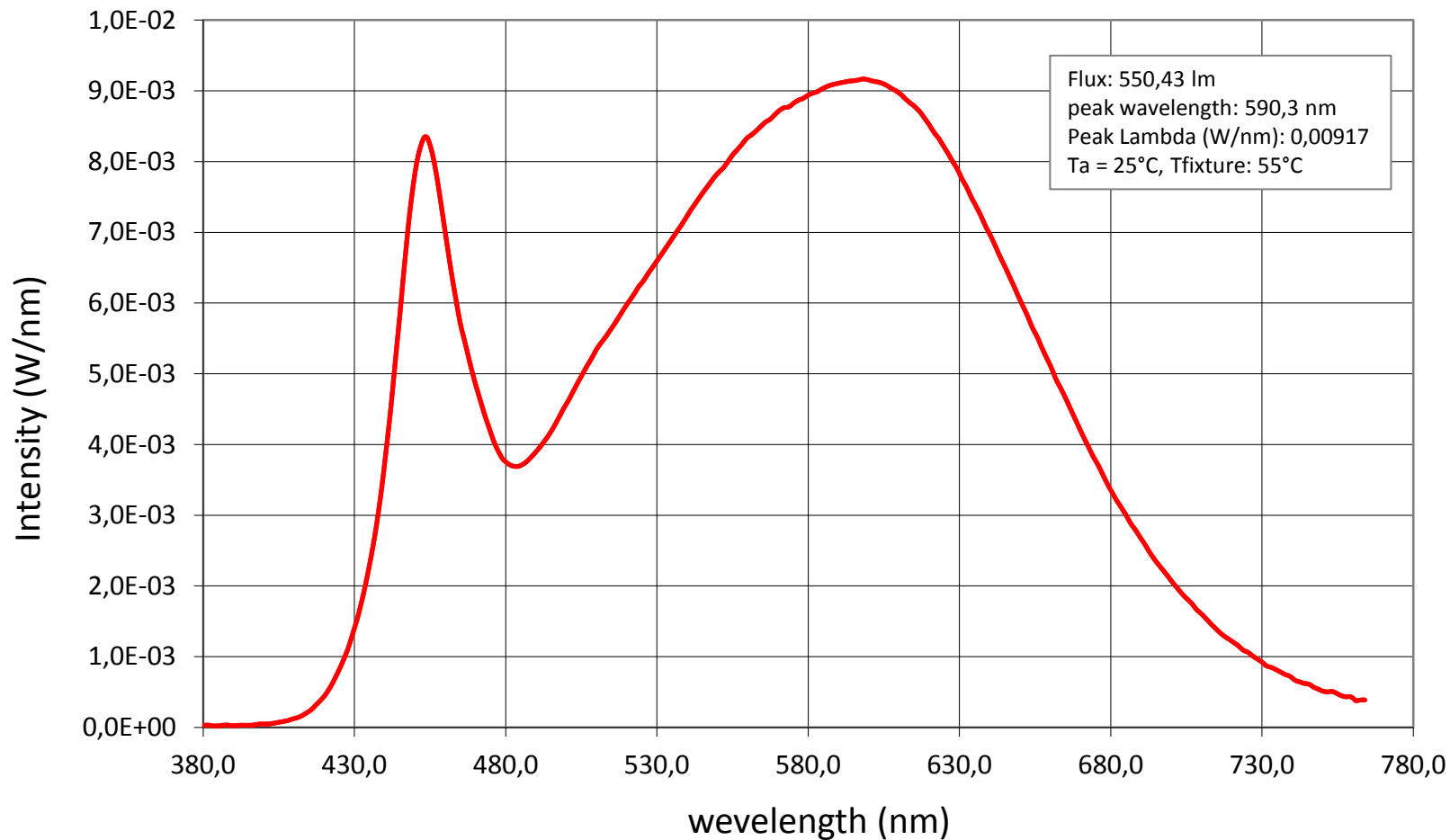
**Futuro  
Lighting**

FuturoLighting Ltd.  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

## Photometric measurements, Catherina<sup>S</sup> Spectral Power Distribution (SPD)



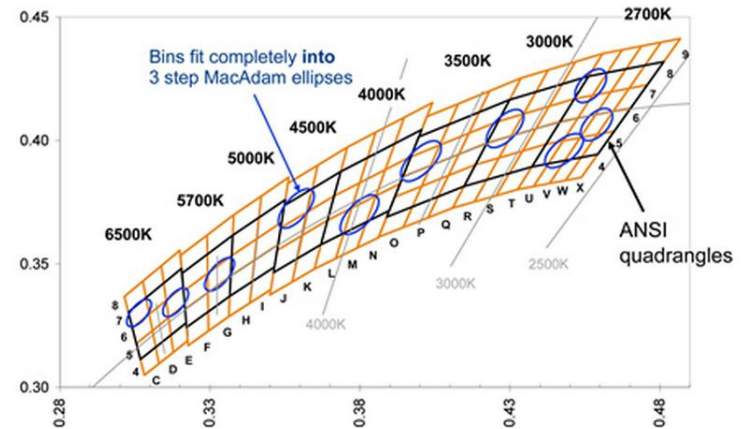
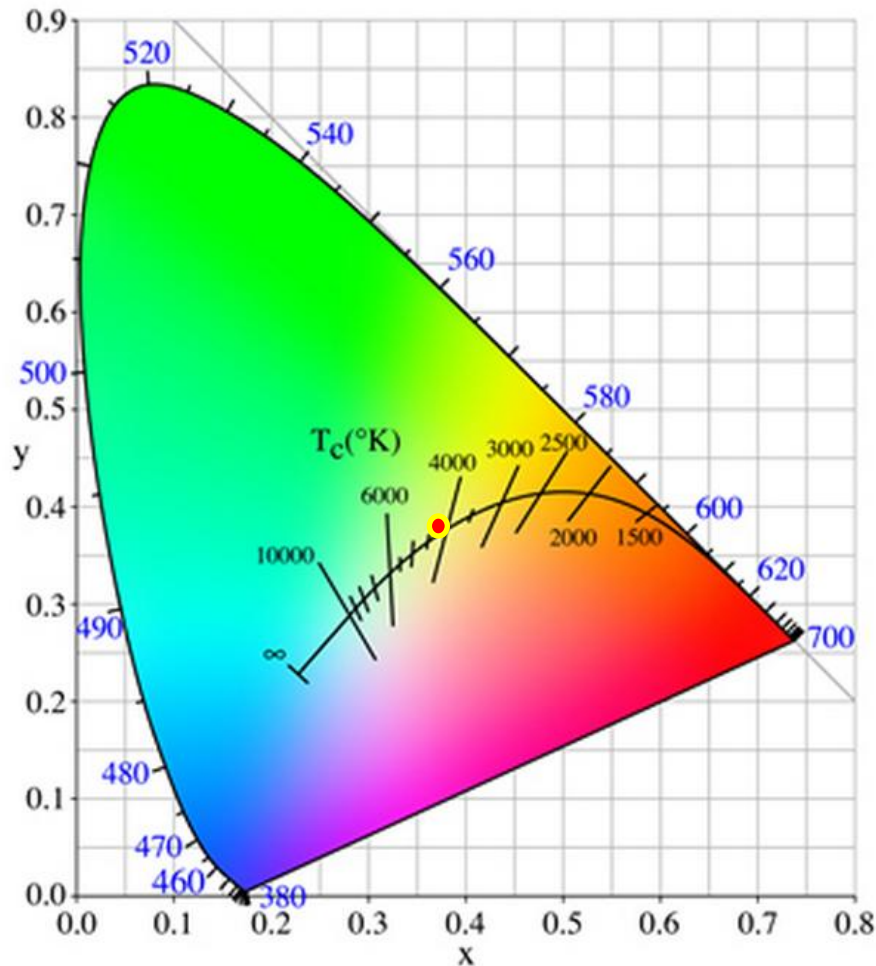
**Futuro  
Lighting**

**FuturoLighting Ltd.**  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

# Photometric measurements, Catherina<sup>5</sup> CIE 1931 x, y Chromaticity Diagram



T[K]	3890
x	0,3862
y	0,3827
u	0,2265
v	0,5051
X	0,8132
Y	0,8059
Z	0,4865

Ra	86,1
R1	84,7
R2	92,0
R3	96,3
R4	83,3
R5	84,0
R6	87,2
R7	89,0
R8	72,2
R9	30,9
R10	79,8
R11	81,1
R12	65,6
R13	86,6
R14	98,0

CRI = 86,1



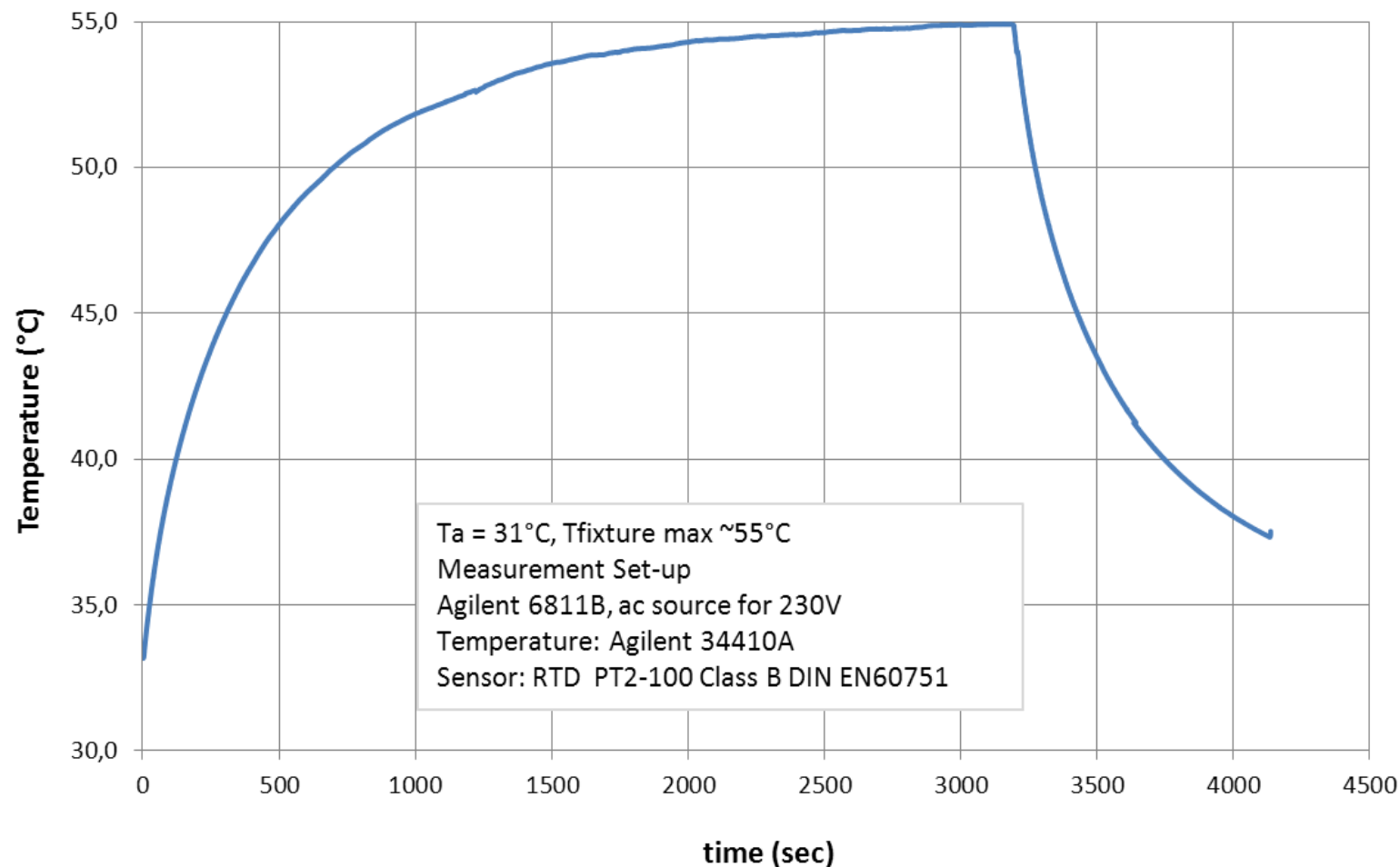
**Futuro  
Lighting**

FuturoLighting Ltd.  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>

## Photometric measurements, Catherina<sup>S</sup> Thermal behavior



Estimation:  
T fixture max  $\leq$  60°C @ Ta max = 35°C



**Futuro  
Lighting**

**FuturoLighting Ltd.**  
Headquarter Address: N. Teslu 5,  
92101 Piestany, Slovakia

Company Identification Number: 45 981 809  
VAT: SK2023166783  
Bank: IBAN: SK63 1100 0000 0029 2984 9547  
SWIFT: TATR SK BX

e-mail: [info@fulit.eu](mailto:info@fulit.eu)  
Phone: +421 948 388 317  
WEB: <http://www.fulit.eu>