



**5FT LED TUBE**

**SECTION 1: GENERAL DESCRIPTION**

Item ID	LED 1297
Voltage:	85-277V
Power:	24W
Diffuser Type:	Polymethyl Methacrylate
Base Material:	Cast Aluminum
Light Output:	2730 Lumens
Beam Angle:	120 Degrees
Correlated Colour Temperate (CCT):	6000-6700K White
Fixture Lifespan:	50,000 Hours (10+ years at 12 hours per day).
IP Rating:	IP30

**SECTION 2: CERTIFICATIONS MET**

UL Listing : Underwriters Laboratory testing for dependable reliability and lifespan of fixture.  
 RoHS: Restriction of Hazardous Substances- Ensuring no toxic chemicals or materials are used in the manufacture.  
 CE Certification: European Conformity- Passed standards to be sold within the European Union.

**SECTION 3: LIGHT SOURCE DESCRIPTION (LED CHIP)**

LED Shape	2835 SMD
Number of LEDS	180
LED TYPE	EPISTAR

**SECTION 4: COMPARABLE OLDER LIGHT SOURCE**

<b>5FT LED TUBE</b>	<b>5FT FLUORESCENT TUBE</b>
24 Watts Power	55 Watts Power
50,000 Hour Lifespan	200 Hour Lifespan
Carries 1 year Warranty	Carries no warranty
Withstands voltage surges	Destroyed with small voltage surges
Available in Cool White	Only Available in Warm

This guide explains the steps necessary to install our LED Tubes properly into your existing fixture to replace a fluorescent T8 tube. Only certified electricians should attempt the installation.

### Warning/Disclaimer

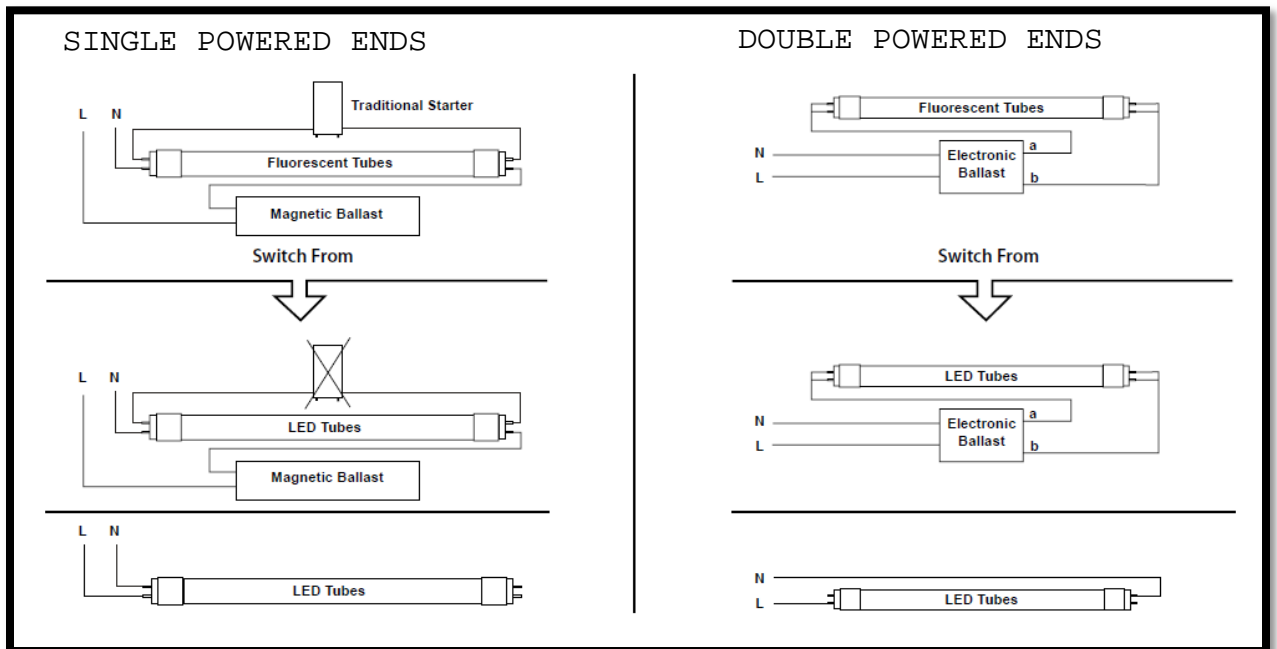
Target Solutions Ltd is not responsible for any damage or harm caused by improper handling and installation or our tube lights. Installation by a certified electrician is highly recommended.

### Cautions

- Do not touch this product with wet hands
- Do not disassemble, repair or alter the light
- Designed for indoor application
- Be careful and do not touch the light pins to the metal housing when installing
- This device is not intended for use with emergency exists
- Do not use with dimmers

### Installation

1. Disconnect the power of the fixture (Do not only turn off the switch)
2. Open the housing fixture
3. Remove the existing fluorescent lamps, and cut the wires according to the diagram and remove the ballast.
4. Connect the wires as seen in the diagram below according to either single powered or double powered tubes.



5. Install the LED Tube by placing the pins into the fixture and turn clockwise.
6. Double-check all the wiring is done correctly and then close the housing fixture.
7. Re-connect the power to the fixture and then switch on the light.

Report No.: 007

Test Time: 2013-11-25 18:20

Lamp Catalog: LED  
 Number of Lamps: 132  
 Luminous Length (mm): 1455  
 Voltage: 220.5 V  
 Power: 24.60 W

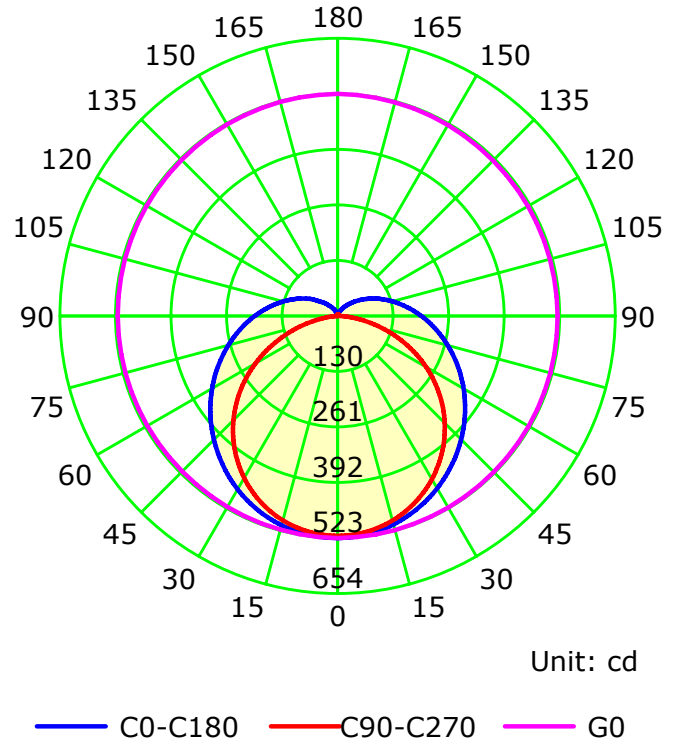
Lamp Description: 2835-132  
 Lumens per Lamp: 2200  
 Luminous Width (mm): 26  
 Current: 0.115 A  
 Power Factor: 0.956

## Photometric Results

CIE Class: Semi-Direct  
 Measurement Flux: 2173.2 lm  
 Downward Ratio: 0.65%  
 Field Angle: H260.6 V160.2  
 Luminaire Efficacy Rating (LER): 88  
 Max. Intensity: 523.52 cd

Total Rated Lamp Lumens: 290400.0 lm  
 Efficiency: 0.75%  
 Upward Ratio: 0.10%  
 Beam Angle: H152.4 V113.9  
 Central Intensity: 523.51 cd  
 Pos of Max. Intensity: H0 V0

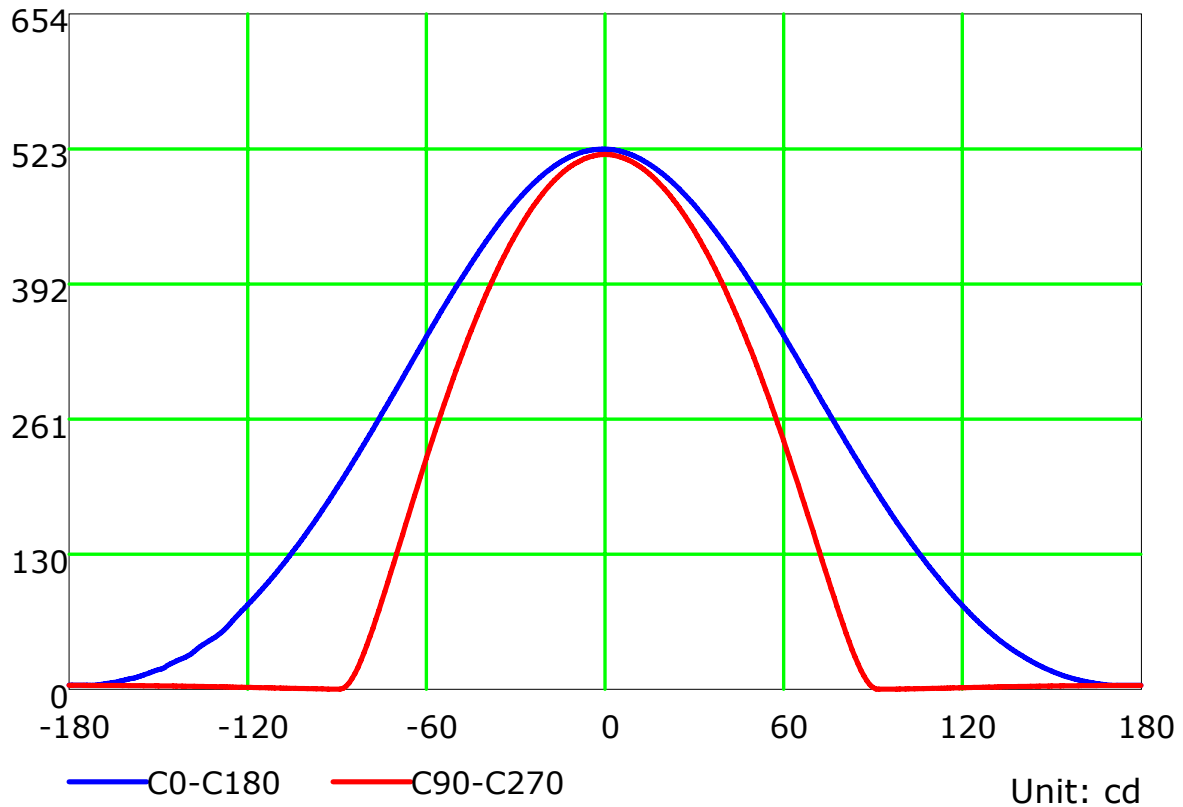
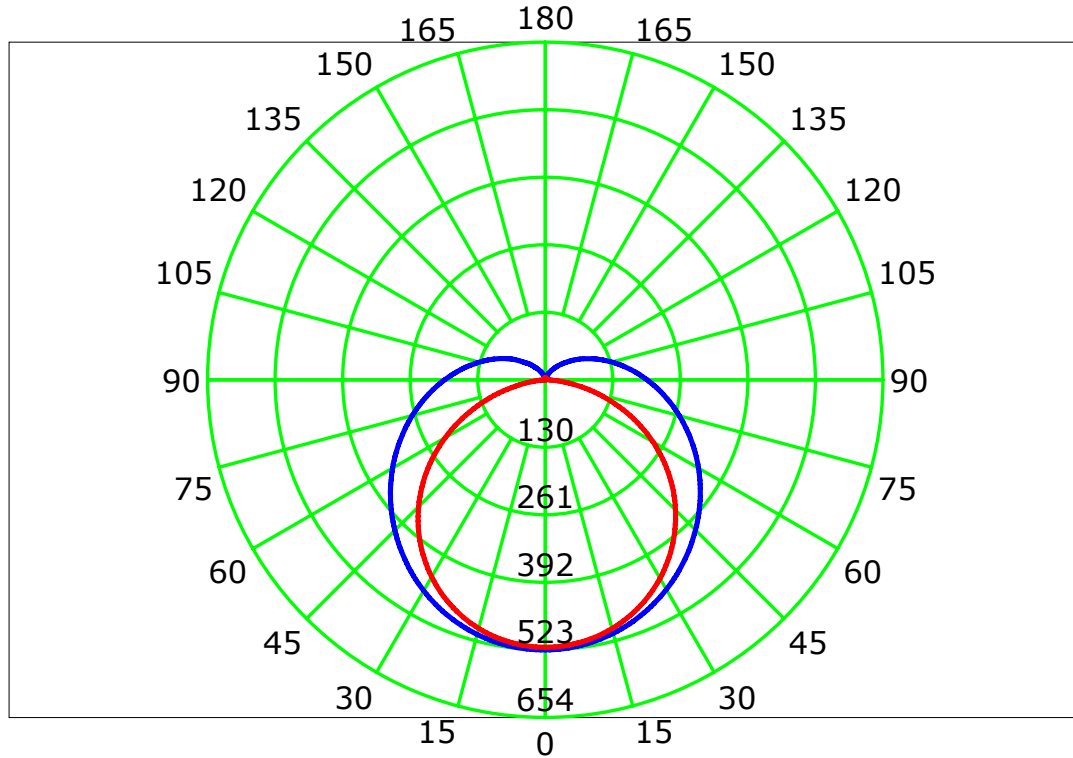
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 6.498 m  
 Humidity:  
 Inspector:

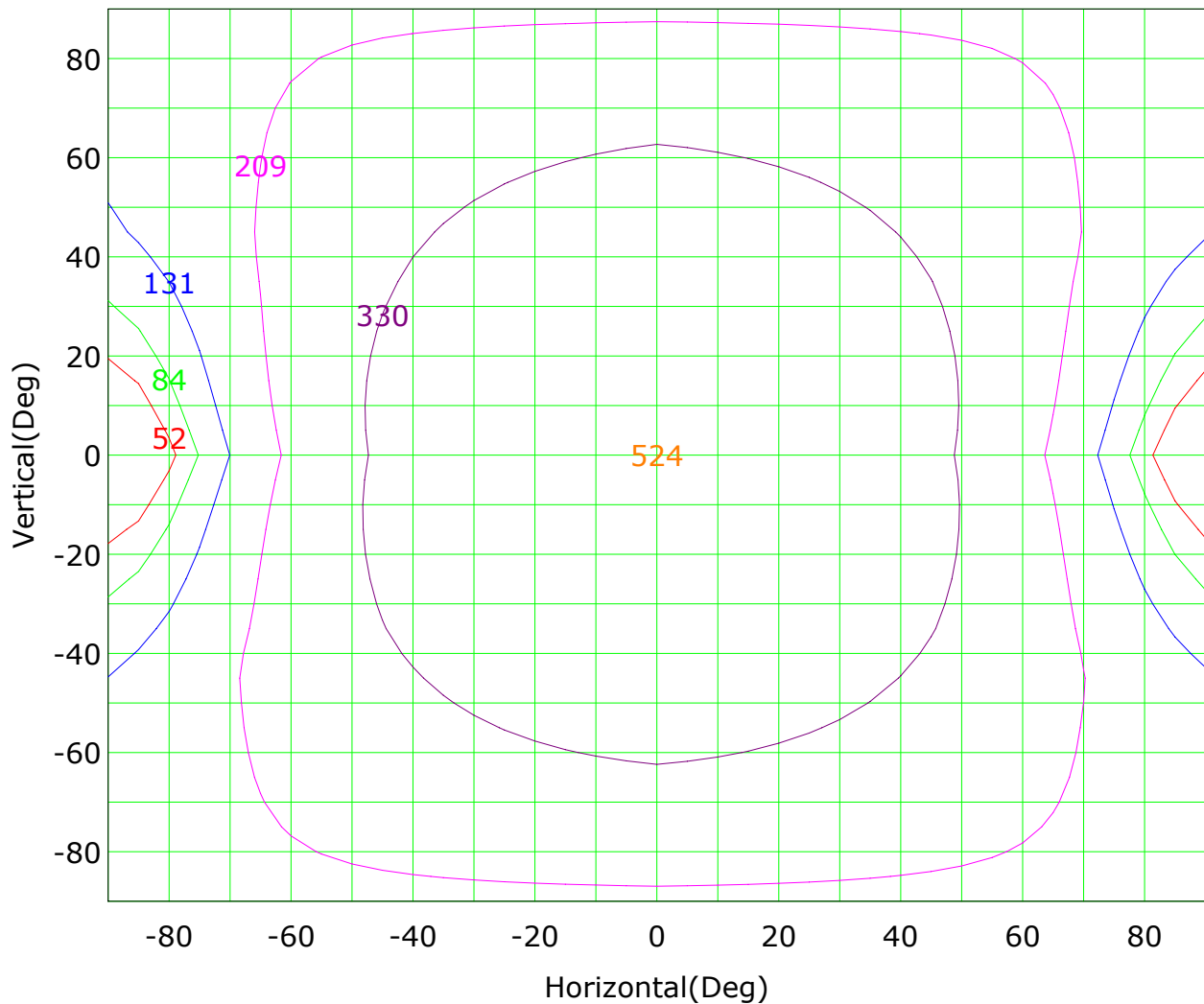
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator: Peter

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 6.498 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



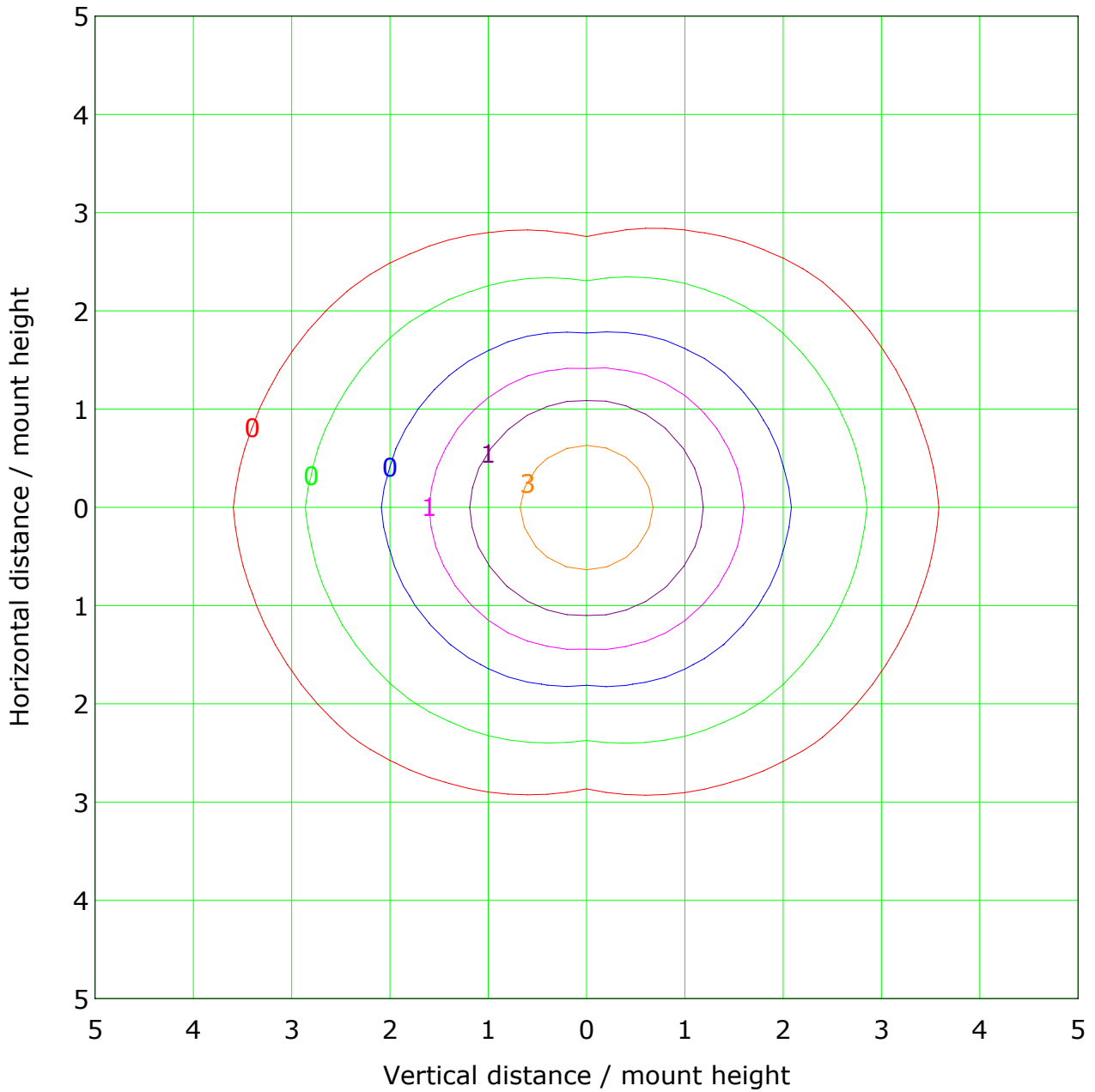
Imax (100%): 524 cd

— ( 10%):	52 cd	— ( 16%):	84 cd
— ( 25%):	131 cd	— ( 40%):	209 cd
— ( 63%):	330 cd	— (100%):	524 cd

C Plane (°):0.0-360.0: 45.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator: Peter

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600  
Distance: 6.498 m  
Humidity:  
Inspector:

## IsoLux Plot

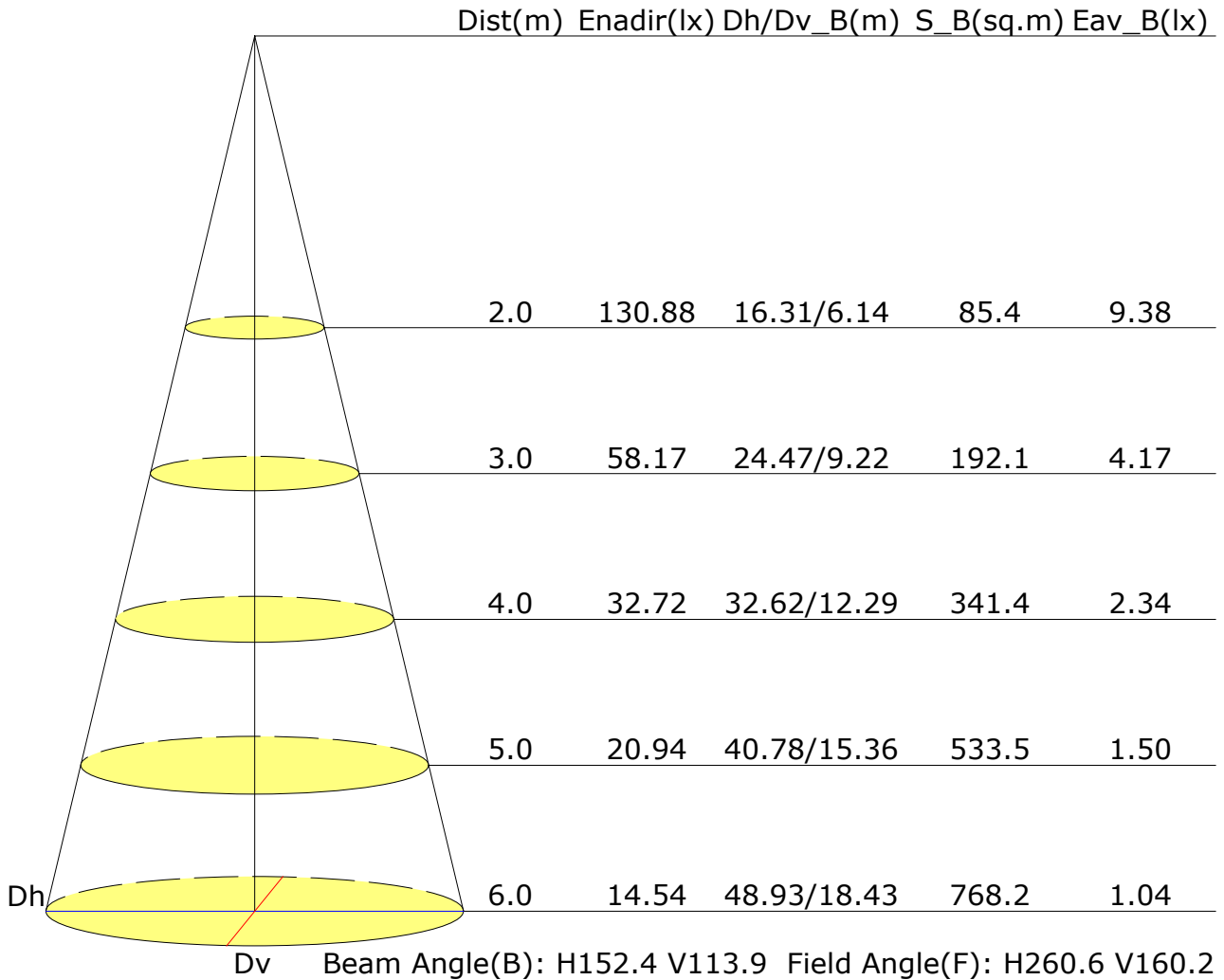


Mounting Height: 10.0m		Max Lux(100%): 5.2 lx	
— ( 1%):	0.1 lx	— ( 2%):	0.1 lx
— ( 5%):	0.3 lx	— (10%):	0.5 lx
— (20%):	1.0 lx	— (50%):	2.6 lx
— (100%):	5.2 lx		

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 6.498 m  
 Humidity:  
 Inspector:

## Illuminance at a Distance



C Plane (°):0.0-360.0: 45.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

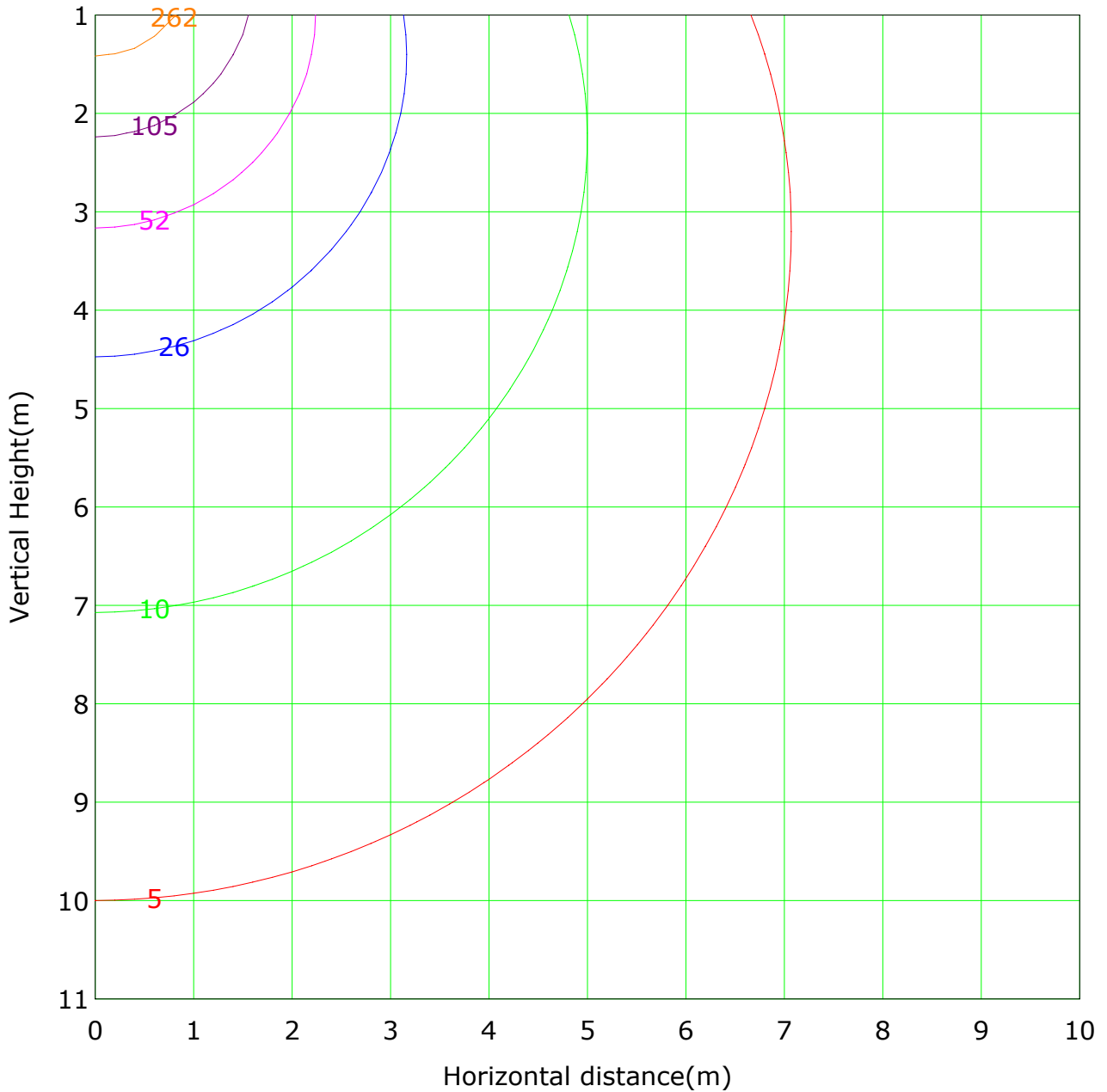
Test Device: GPM-1600

Distance: 6.498 m

Humidity:

Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 523.5 lx

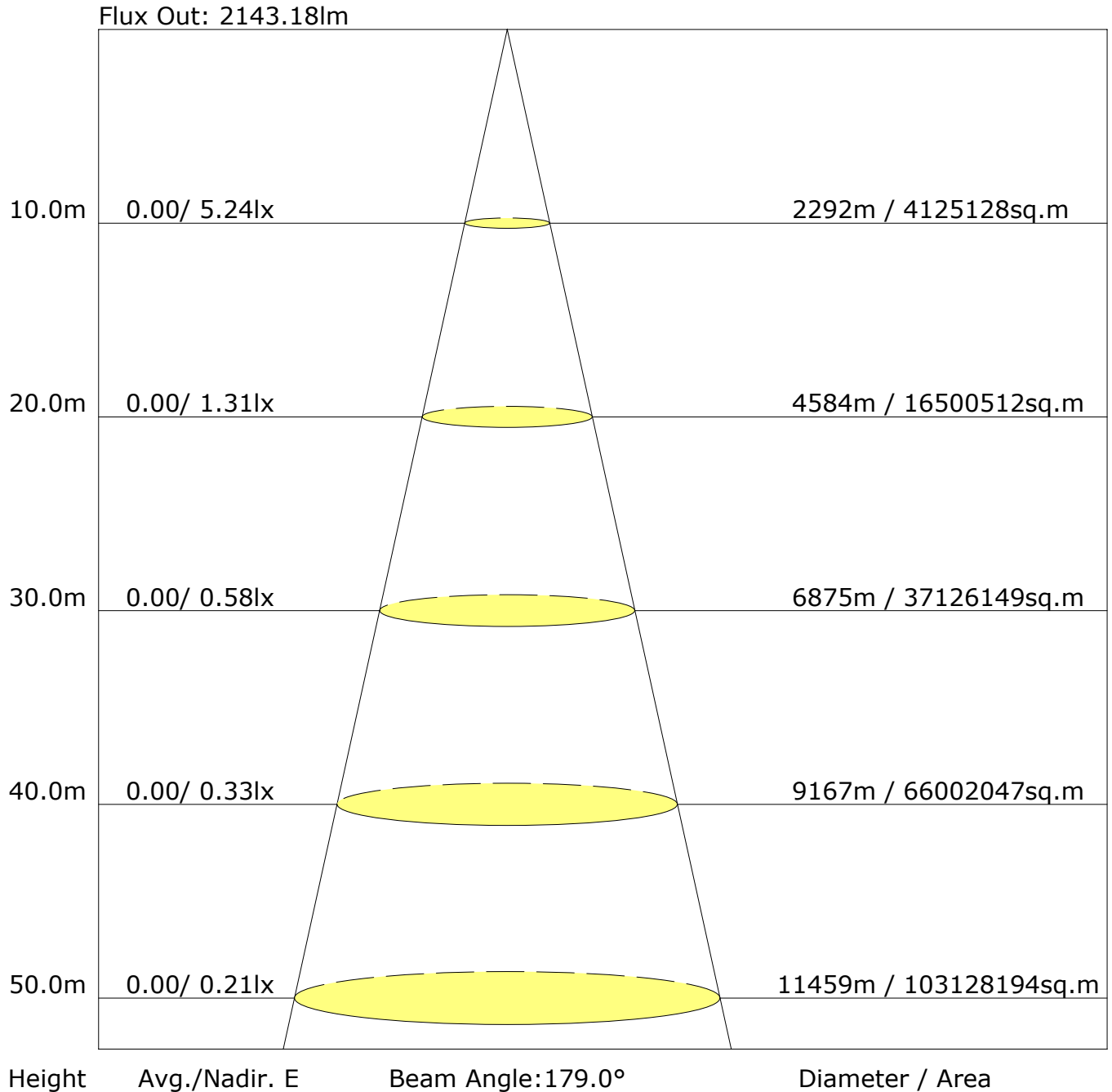
— ( 1%): 5.2 lx	— ( 2%): 10.5 lx
— ( 5%): 26.2 lx	— ( 10%): 52.4 lx
— ( 20%): 104.7 lx	— ( 50%): 261.8 lx
— (100%): 523.5 lx	

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 6.498 m  
 Humidity:  
 Inspector:



## The Average Illuminance Effective Figure



C Plane (°): 0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1600  
 Distance: 6.498 m  
 Humidity:  
 Inspector: