macquantumprofile, Standard Lens , Zoom at Minimum (12°) Photometric Report

Martin R&D Optics Laboratory, 15-Oct-2014

Data sheet conforms to American National Standard E1.9 - 2001

Product	MAC Quantum Profile
Catalog number	90240000
Lens Option	Standard
Spread	Minimum
IES file	MAC Quantum Profile_Standard_Minimum.ies

Procedure

The goniometer consists of a computerized robot IRB 6000 and a LMT Digital Illuminance Meter B 520 that provides luminous intensity measurements for computerized data collection. The computerized robot IRB 6000 is initialized so that the center of the luminaire's front lens is positioned 7 m from the luxmeter. The luminaire is rotated around both the horizontal and vertical axis per IESNA's type B photometry in 1° increments in the horizontal plane (rotational) and 1° increments in the vertical plane (radial).

Test lamp

Model	5W White LED
Rated life	50000 hours

Test conditions

Ambient temperature	25 ± 5 ºC
Consumed power	596 W
AC supply	230 V/50Hz
Lamp age	100 hours

Ballast

Type	Electronic
Ballast factor	1.000

Output

Total	12700 lumens
One-tenth peak	12700 lumens
Half-peak	12100 lumens
Efficacy	21.3 lumens per watt

Illuminance

Cutoff angle	12°
One-tenth-peak angle	11.5°
Half-peak angle	10.5°
Cutoff diameter	0.210 x distance
One-tenth-peak diam.	0.201 x distance
Half-peak diam.	0.184 x distance

Intended throw	-
Luminous intensity	532000 candela
Luminaire type	Far field

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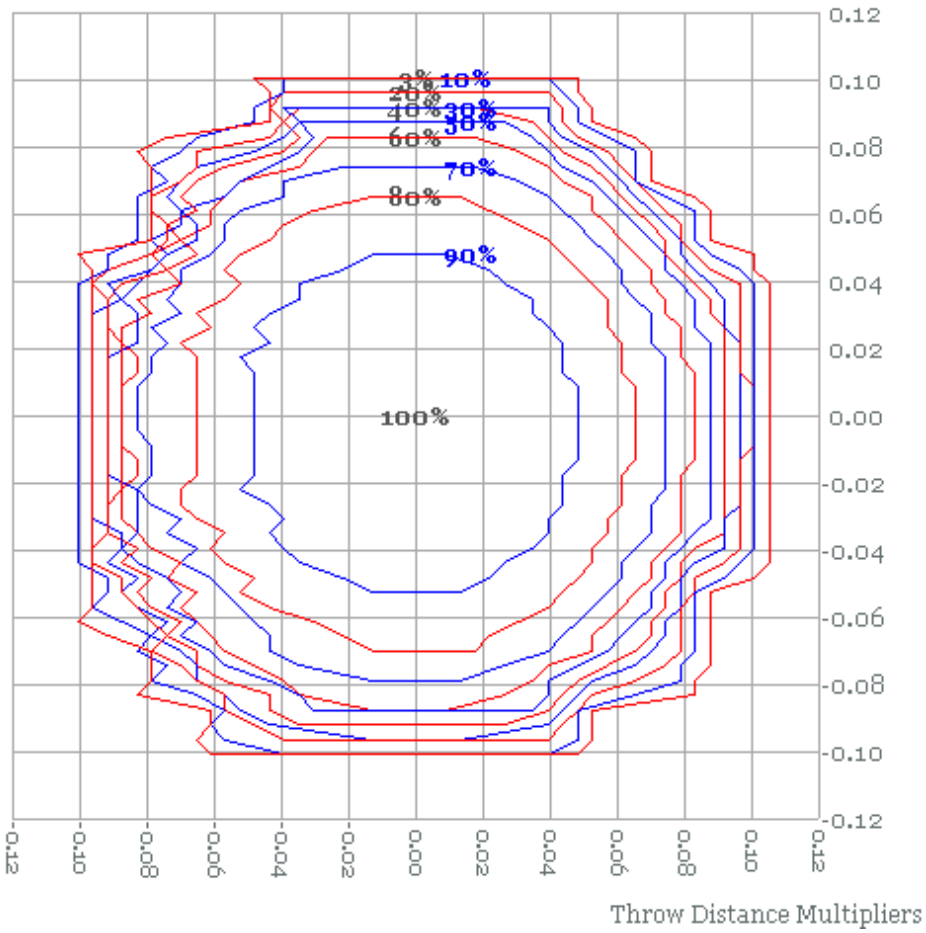
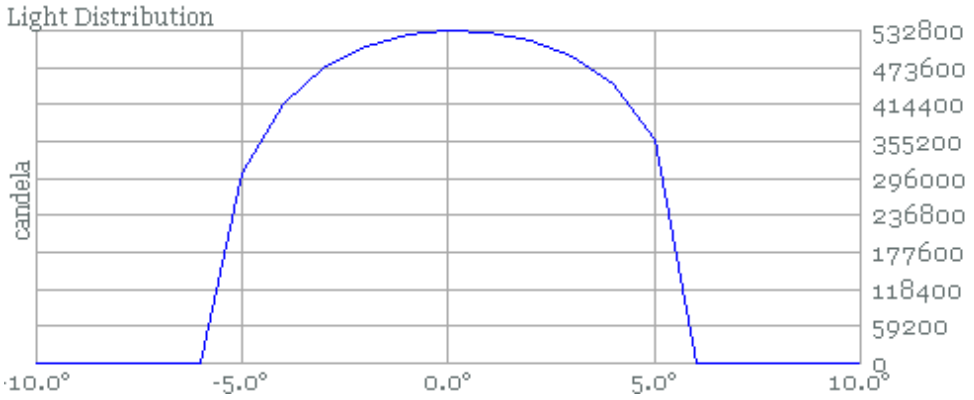
Iso-Illuminance



100%=489fc at 33ft
(distance from origin)=(throw distance) X (throw distance multiplier)

Light Distribution



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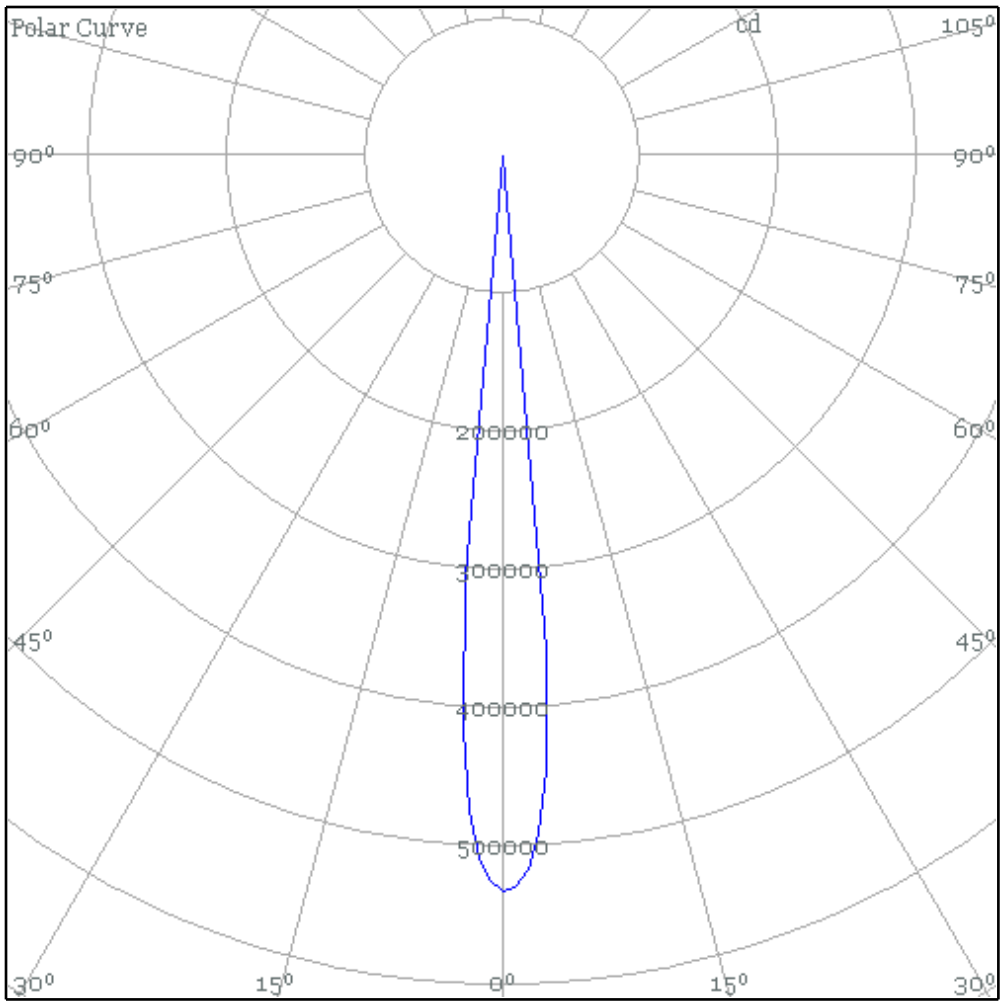

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macquantumprofile, Standard Lens , Zoom at Median (24°) Photometric Report

Martin R&D Optics Laboratory, 15-Oct-2014

Data sheet conforms to American National Standard E1.9 - 2001

Product	MAC Quantum Profile
Catalog number	90240000
Lens Option	Standard
Spread	Median
IES file	MAC Quantum Profile_Standard_Median.ies

Procedure

The goniometer consists of a computerized robot IRB 6000 and a LMT Digital Illuminance Meter B 520 that provides luminous intensity measurements for computerized data collection. The computerized robot IRB 6000 is initialized so that the center of the luminaire's front lens is positioned 7 m from the luxmeter. The luminaire is rotated around both the horizontal and vertical axis per IESNA's type B photometry in 1° increments in the horizontal plane (rotational) and 1° increments in the vertical plane (radial).

Test lamp

Model	5W White LED
Rated life	50000 hours

Test conditions

Ambient temperature	25 ± 5 ºC
Consumed power	596 W
AC supply	230 V/50Hz
Lamp age	101 hours

Ballast

Type	Electronic
Ballast factor	1.000

Output

Total	12700 lumens
One-tenth peak	12600 lumens
Half-peak	11200 lumens
Efficacy	21.3 lumens per watt

Illuminance

Cutoff angle	24°
One-tenth-peak angle	23°
Half-peak angle	20°
Cutoff diameter	0.425 x distance
One-tenth-peak diam.	0.407 x distance
Half-peak diam.	0.353 x distance

Intended throw	-
Luminous intensity	152000 candela
Luminaire type	Far field

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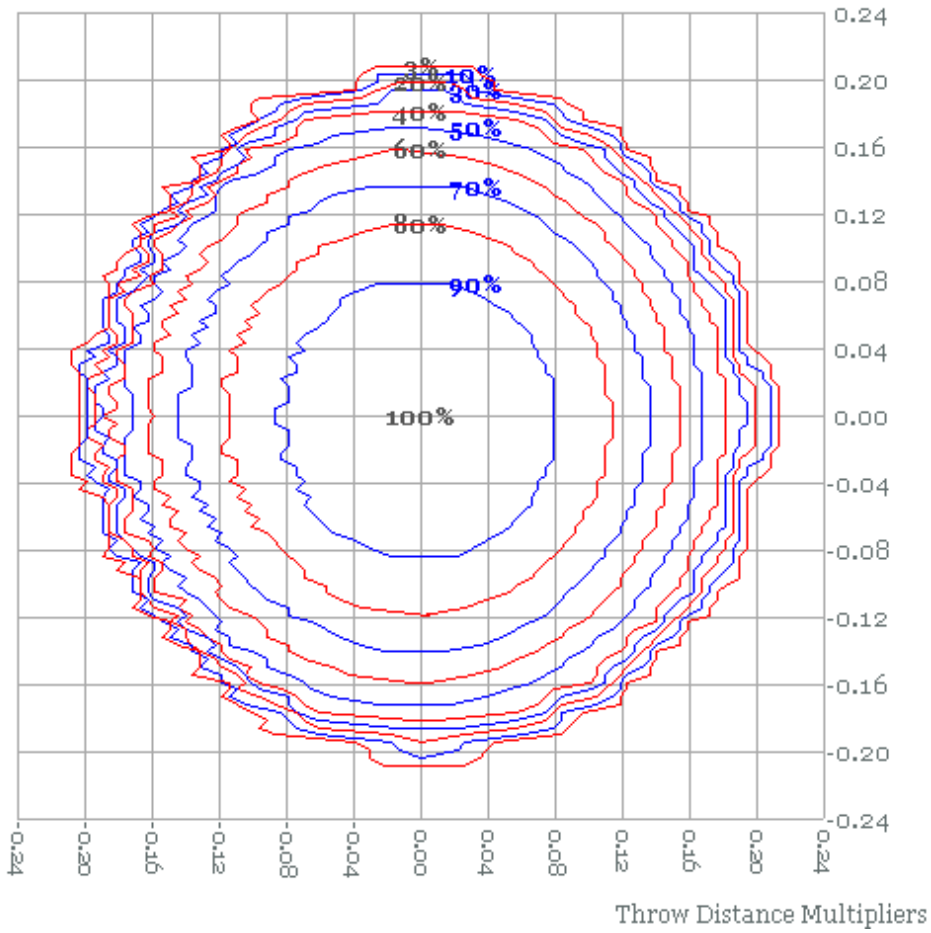
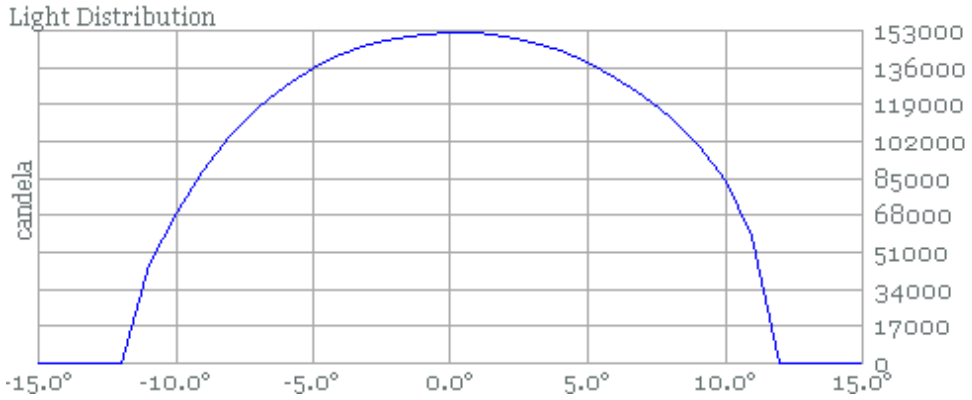
Iso-Illuminance



100%=140fc at 33ft
(distance from origin)=(throw distance) X (throw distance multiplier)

Light Distribution



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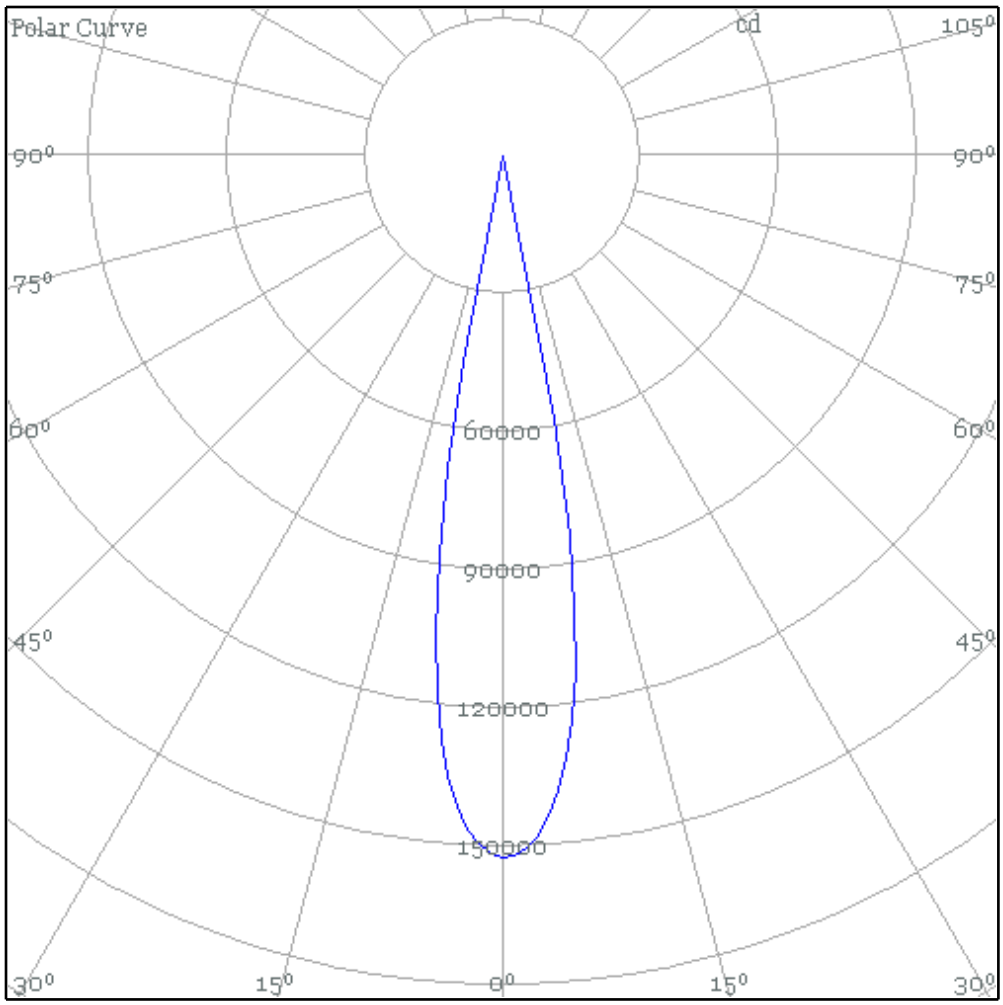

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macquantumprofile, Standard Lens , Zoom at Maximum (36°) Photometric Report

Martin R&D Optics Laboratory, 15-Oct-2014

Data sheet conforms to American National Standard E1.9 - 2001

Product	MAC Quantum Profile
Catalog number	90240000
Lens Option	Standard
Spread	Wide
IES file	MAC Quantum Profile_Standard_Maximum.ies

Procedure

The goniometer consists of a computerized robot IRB 6000 and a LMT Digital Illuminance Meter B 520 that provides luminous intensity measurements for computerized data collection. The computerized robot IRB 6000 is initialized so that the center of the luminaire's front lens is positioned 7 m from the luxmeter. The luminaire is rotated around both the horizontal and vertical axis per IESNA's type B photometry in 2° increments in the horizontal plane (rotational) and 2° increments in the vertical plane (radial).

Test lamp

Model	5W White LED
Rated life	50000 hours

Test conditions

Ambient temperature	25 ± 5 ºC
Consumed power	596 W
AC supply	230 V/50Hz
Lamp age	100 hours

Ballast

Type	Electronic
Ballast factor	1.000

Output

Total	12800 lumens
One-tenth peak	12800 lumens
Half-peak	10400 lumens
Efficacy	21.5 lumens per watt

Illuminance

Cutoff angle	36°
One-tenth-peak angle	35°
Half-peak angle	29°
Cutoff diameter	0.650 x distance
One-tenth-peak diam.	0.631 x distance
Half-peak diam.	0.517 x distance

Intended throw	-
Luminous intensity	69000 candela
Luminaire type	Far field

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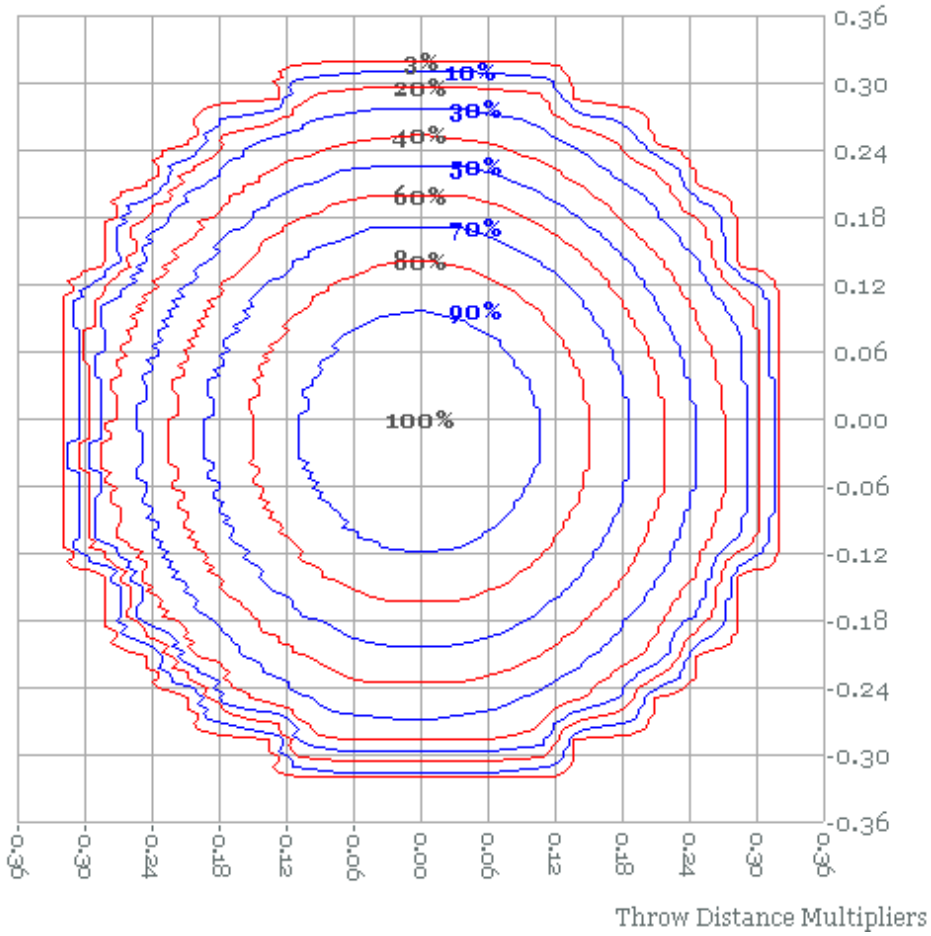
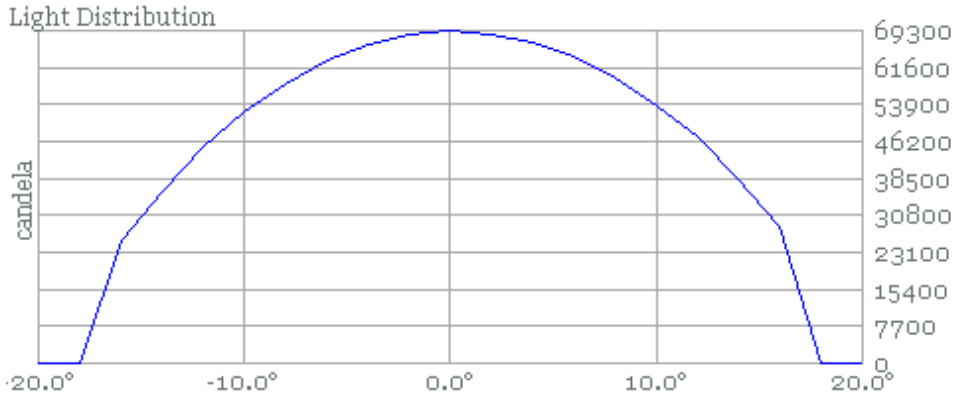
Iso-Illuminance



100%=63fc at 33ft
(distance from origin)=(throw distance) X (throw distance multiplier)

Light Distribution



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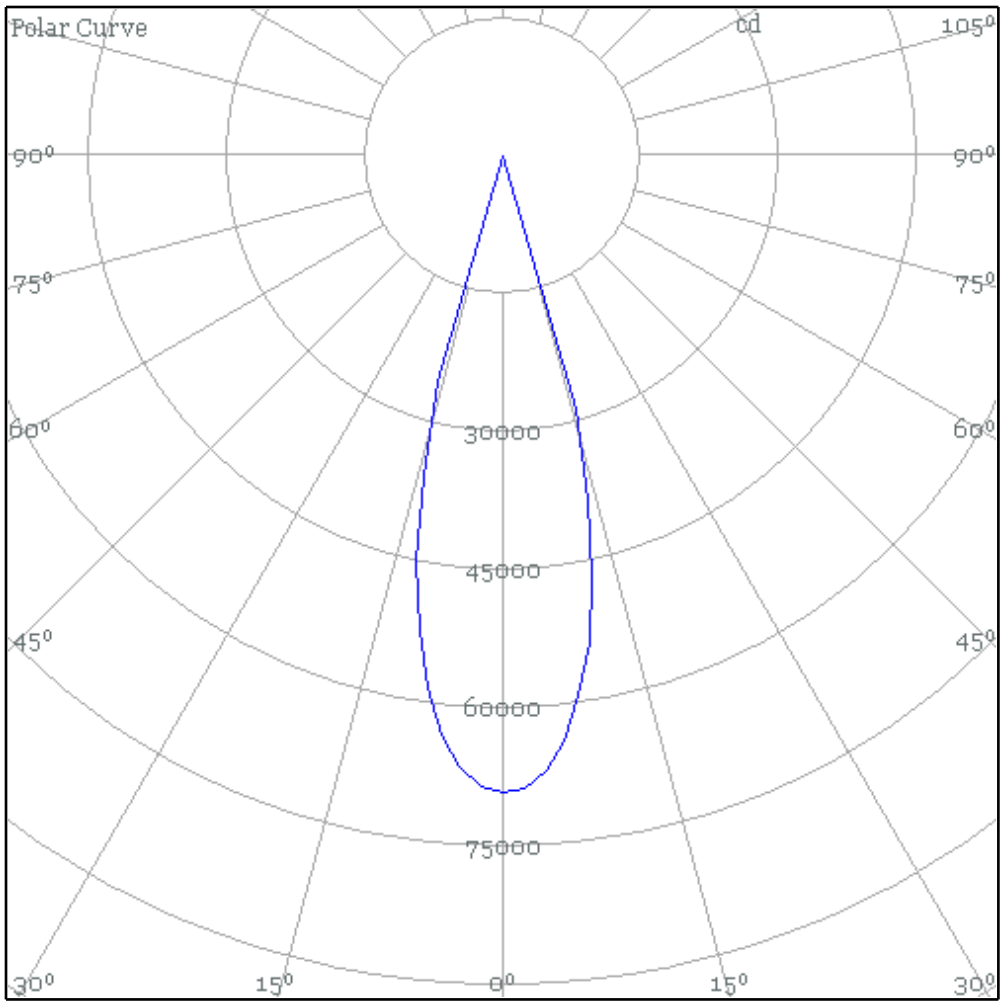

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