



forge europa

LED LIGHTING EXPERTS

Light Characterisation Report

Astro Kashima Bathroom Light 290mm

Project No: P4214
Customer: Astro
Report No: P4214-LCR-01
Issue: 02
Engineer: Michelle Mayes
Approved: Mark McIntosh
Date: 11/02/2015

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Summary

Date of Test	11/01/2014
Project Number	P4214
Client	Astro
Product Description	Kashima Bathroom Light 290mm
Product LED Type	Samsung LM561A (1 x FEM-1145)
Product LED Bin	Unknown
Measuring Distance (m)	4.50
Tamb	18°C 44%RH
Additional Comments	

Peak on axis intensity	72.70 candela	Chromaticity x	0.4412
Stabalised on axis intensity	69.46 candela	Chromaticity y	0.4061
Temperature Ratio	95.54%	CCT	2946K
		CRI	83 R _a

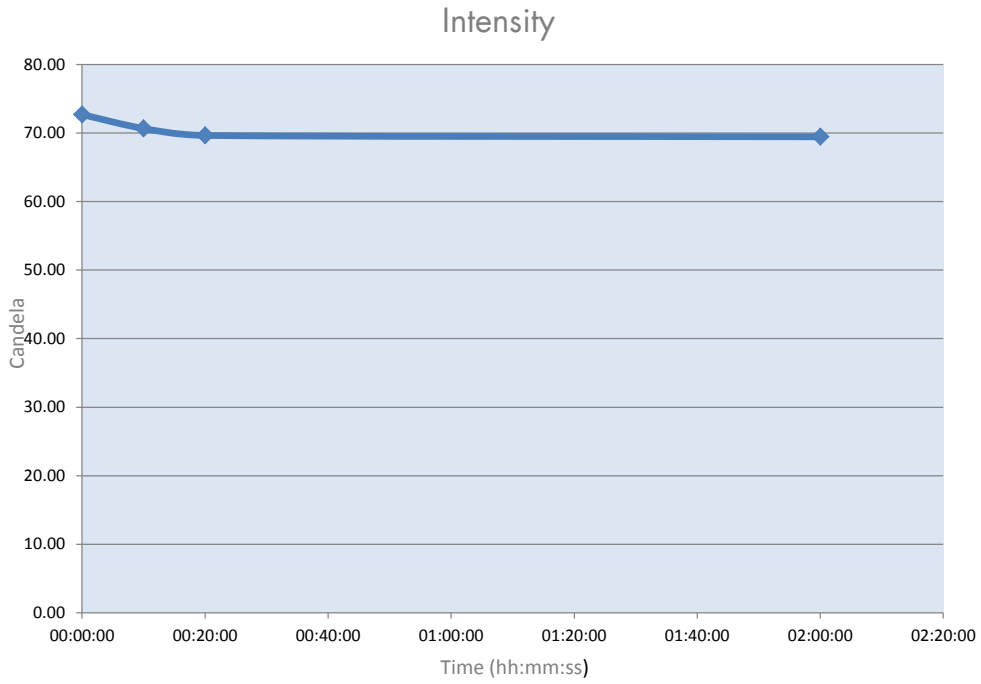
Luminous Intensity Distribution Scan 1

Total Downward Luminous Flux	165.30 lumens	Beam FWHM (50%)	0° Rotation 98.0	90° Rotation 90.5
Total Upward Luminous Flux	0.00 lumens	Beam FULL (10%)	159.0	155.0
Average Total Luminous Flux	165.30 lumens	Scan Comments		
Downward Flux Fraction	100.00%			

Supply Voltage	230 Volts		
Supply Current	0.041 Amps	Average Total Luminous Flux	Efficacy 36.52 lm/W
Supply Power	4.53 Watts	Perceived Downward Luminous Flux	36.52 lm/W
Power Factor	0.48		

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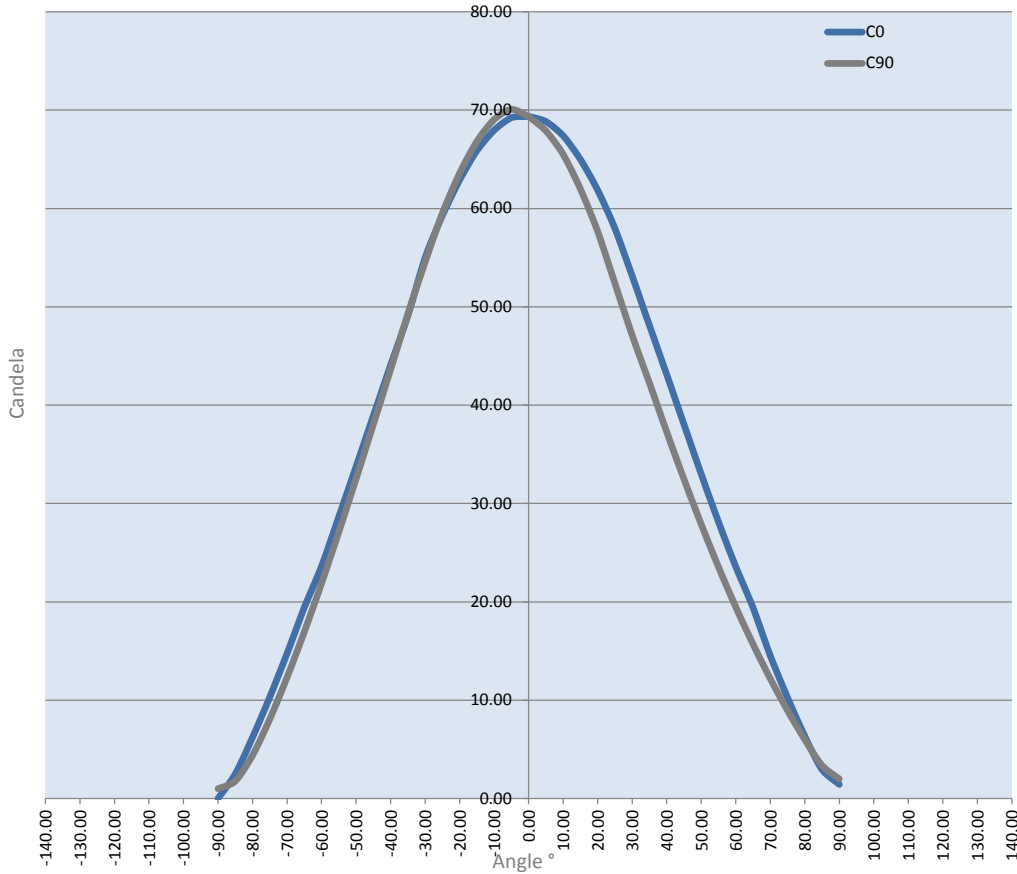
Intensity Data



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Average Luminous Flux Data

Luminous Intensity Distribution



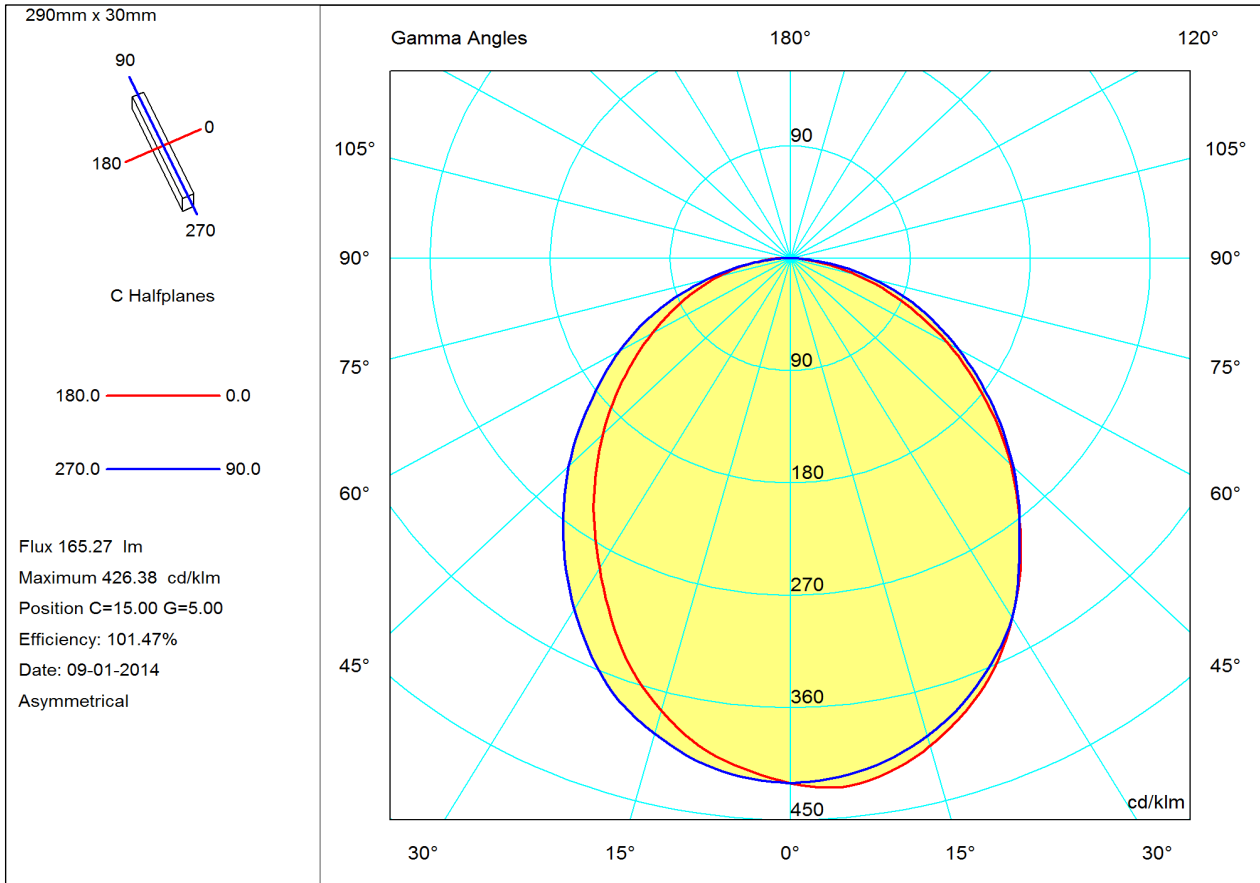
Perceived Downward Angle	90°
Total Downward Luminous Flux	165.30 lumens
Total Upward Luminous Flux	0.00 lumens
Average Total Luminous Flux	165.30 lumens
Downward Flux Fraction	100.00%

	0° Rotation	90° Rotation
Beam FWHM (50%)	98	90.5
Beam FULL (10%)	159	155

Scan Comments

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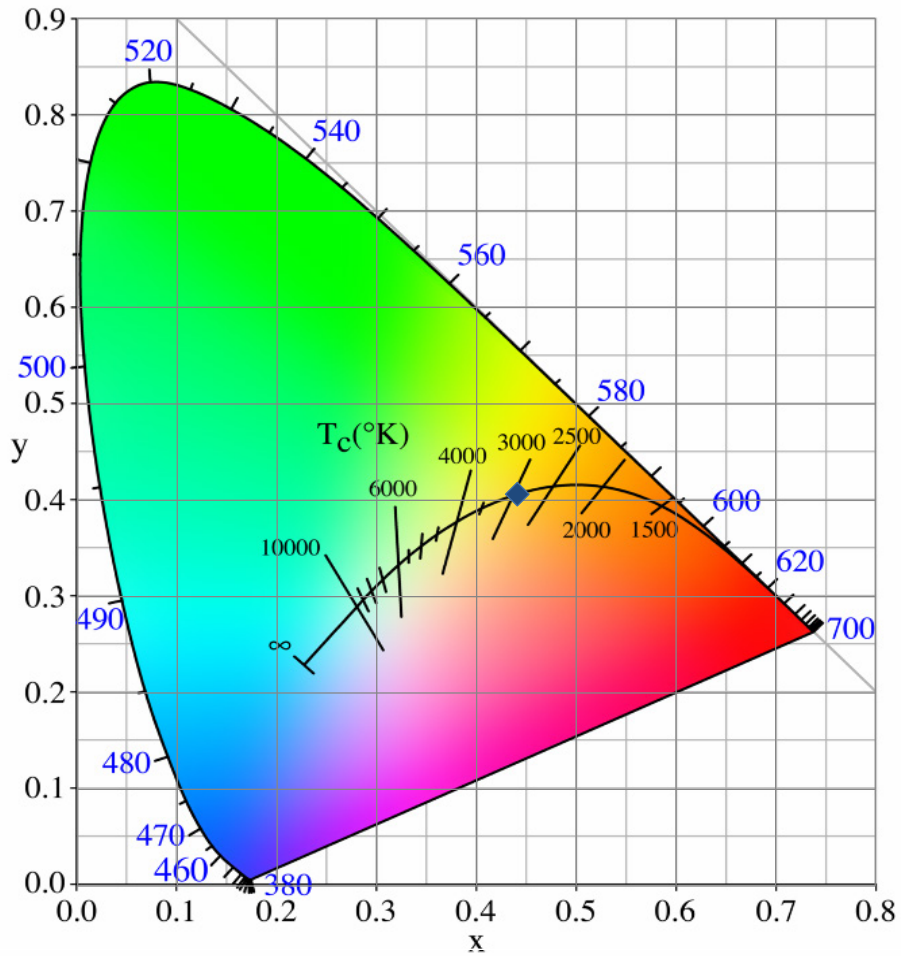
Polar Diagram



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Chromaticity

CIE 1931 Colour Space



x 0.4412

y 0.4061

u 0.2524

v 0.3486

u' 0.2524

v' 0.5228

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Efficacy

Input Voltage 230 V

Input Current 0.041 A

Total power 4.53 W

Power Factor 0.48

LED Vf Not measured

LED If Not measured

Driver efficiency N/A

Average Total Luminous Flux 165 lm

Efficacy 37 lm/W

Perceived Downward Luminous Flux 165 lm

Efficacy 36.52 lm/W

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Product Photographs



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