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TEC IT Goniophotometer Test Report

Product Info

Luminaire Category : **DownLight**
Luminaire : **DL300Q 700mA**
Lamp Category : **NW403HE-KM35L2**
Manufacturer : **Tec It**
Submitter : **Manuel Fernandes**
Nuber of Lamps : **1** Lumens per Lamp : **4654 lm**
Luminous Length : **246 mm** Luminous Width : **246 mm** Luminous Height : **0 mm**

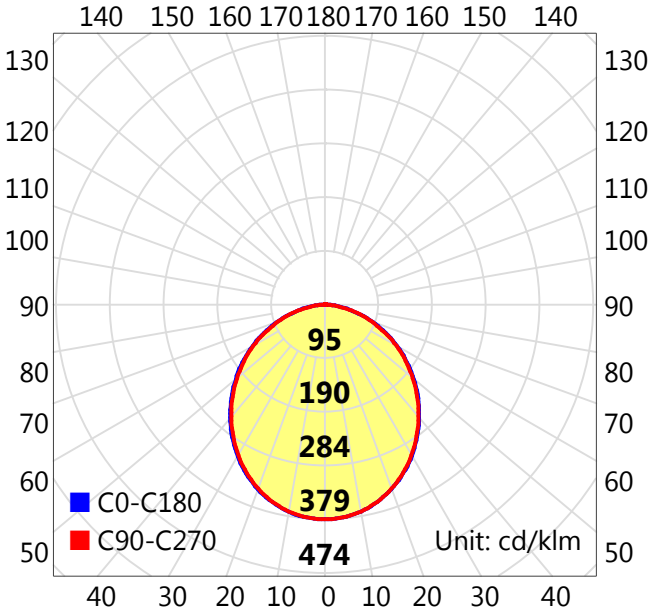
Electric Parameters

Voltage : **230.00 V** Current : **0.1500 A** Power : **34.50 W** Power Factor : **0.960** Frequency : **50.00 Hz**

Photometric Parameters

CIE Class : **Direct**
Measurement Flux : **4653.7 lm**
Upward Ratio : **0.60 %**
Maximum Intensity : **379.10 cd/klm**
Central Intensity : **378.96 cd/klm**
Luminaire Efficacy Rating (LER) : **135**
Beam Angle (C0-C180,C90-C270) : **105.8 °, 104.8 °**
Field Angle (C0-C180,C90-C270) : **159.1 °, 158.5 °**

Total Rated Lamp Lumens : **4653.7 lm**
Efficiency : **100.00 %**
Downward Ratio : **99.40 %**
Position Of Maximum Intensity : **C45° γ1°**
S/MH(C0-C180,C90-C270) : **1.21, 1.21**
Energy Efficiency Class : **E (EU 2019/2015 ηTM:135lm/W)**
Beam Angle (C45-C225,C135-C315) : **104.6 °, 104.6 °**
Field Angle (C45-C225,C135-C315) : **158.0 °, 158.0 °**



Average Beam Angle (50%): 104.8°

Test Type : Type C Test Distance : 12.444 m C Plane (°): 0.0-180.0:15.0 γ (°) : 0.0-180.0:1.0
Test Device : Lisun LSG-1800B Temperature : 25.0°C Humidity : 65.0%
Test Lab : Tec It
Test By : Manuel Fernandes Review By :

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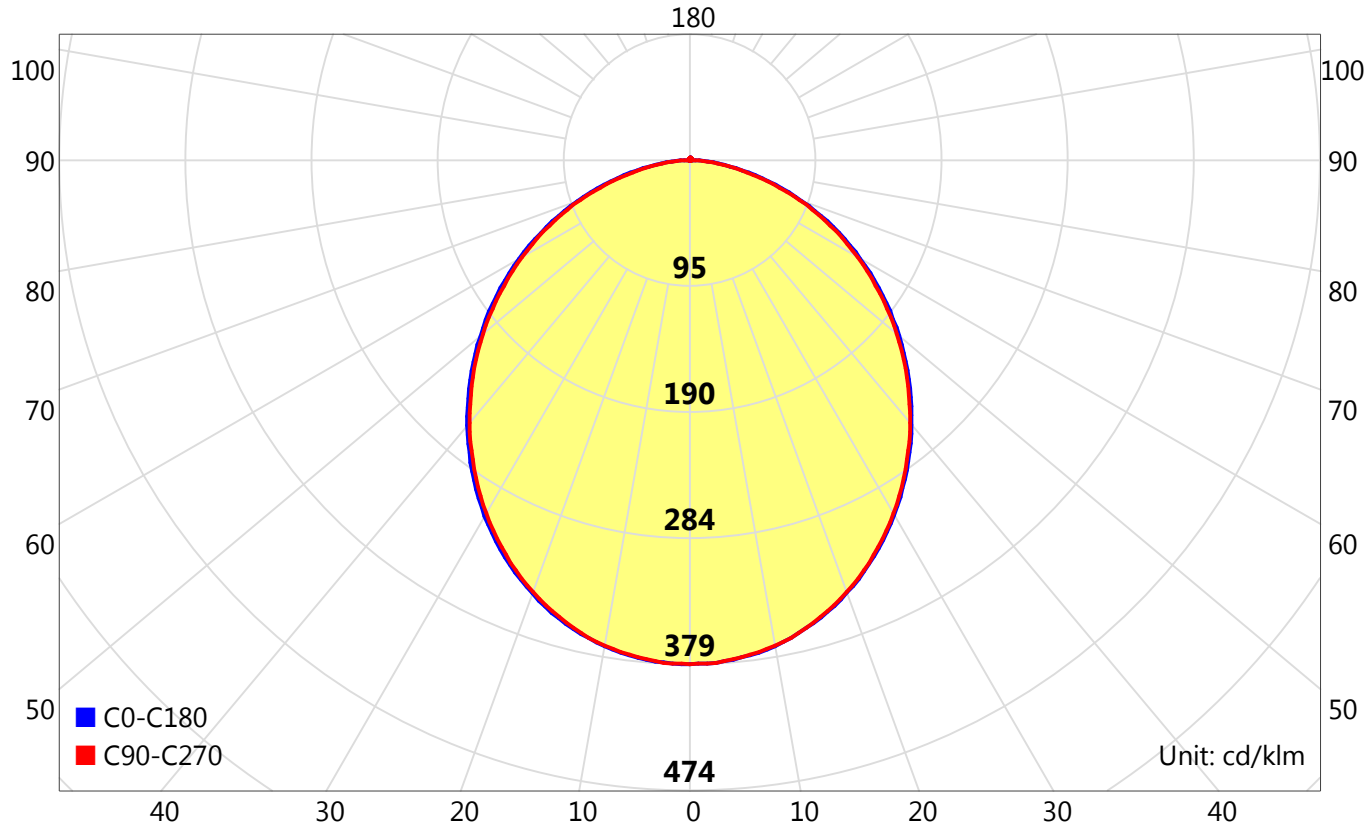
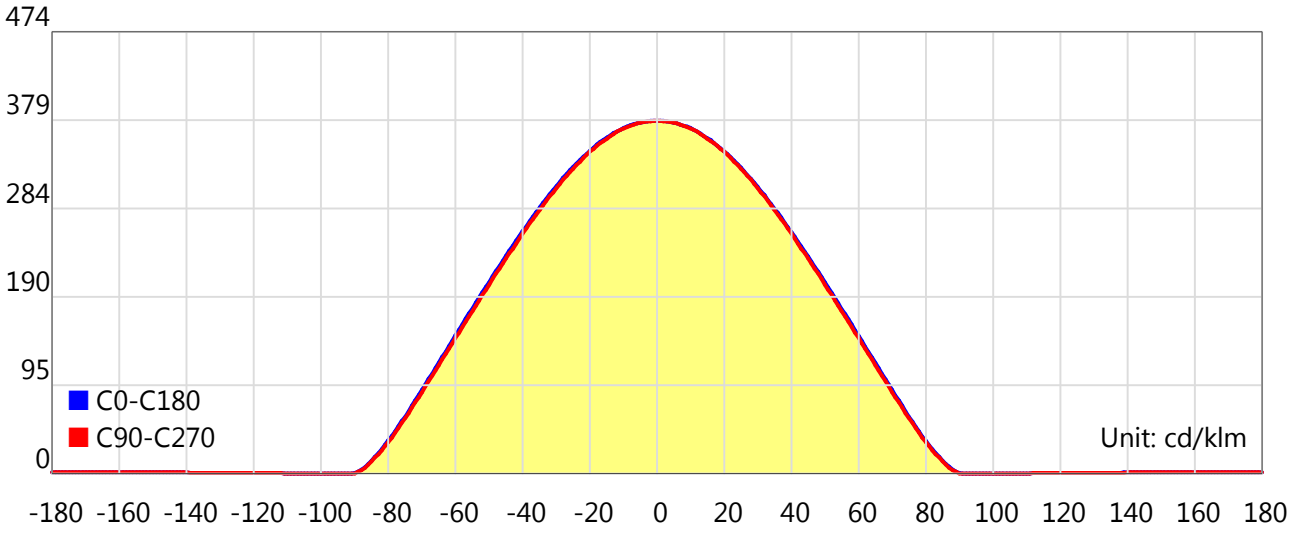
Light Distribution Curve





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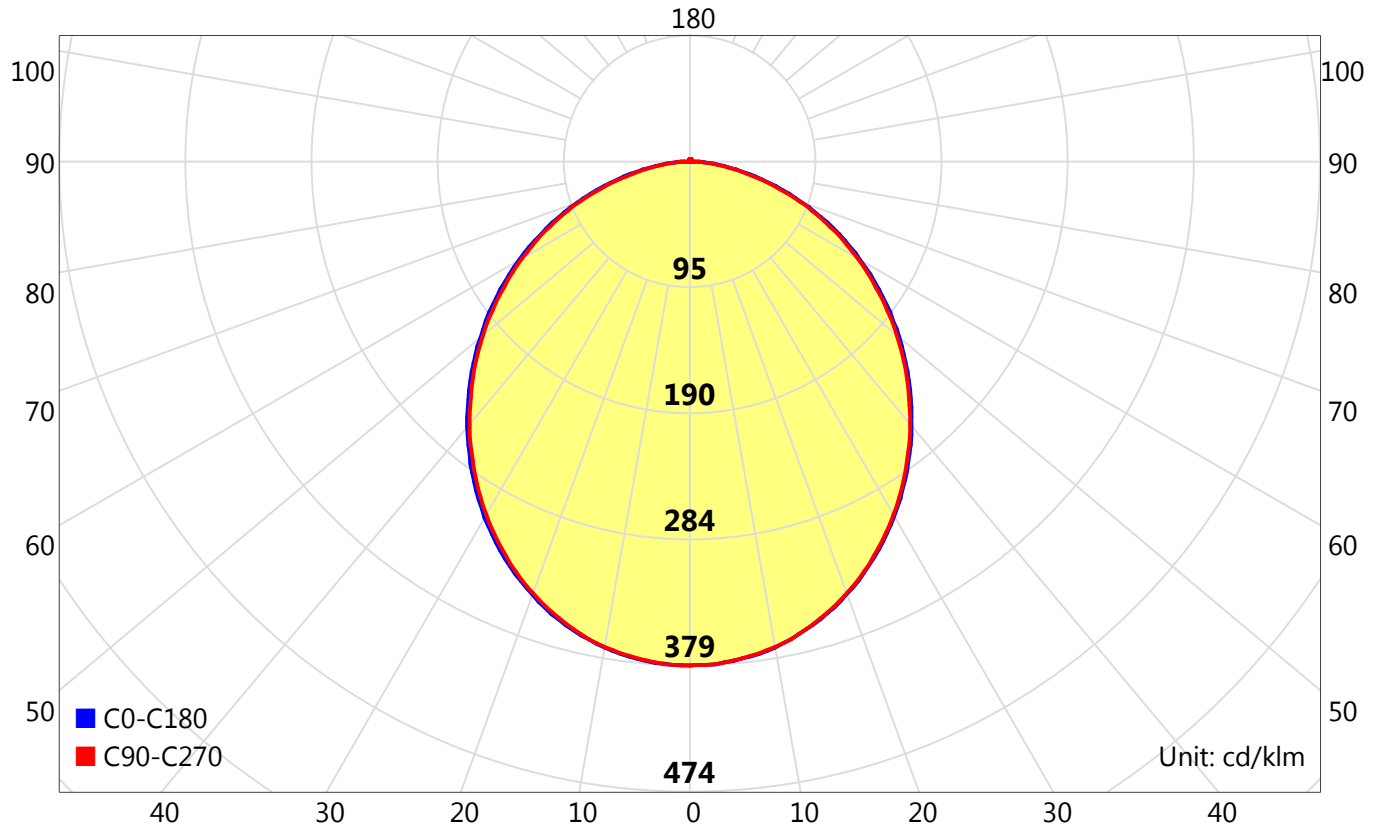
Light Distribution Curve (cd/klm)



NW403HE-KM35L2 η=100.00%

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Test Device : Lisun LSG-1800B Temperature : 25.0°C Humidity : 65.0%
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UGR

Reflectance											
Ceiling (cavity)		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	22.9	24.5	23.3	24.9	25.2	22.9	24.5	23.3	24.8	25.2
	3H	24.7	26.1	25.1	26.5	26.8	24.6	26.0	25.0	26.4	26.8
	4H	25.3	26.7	25.7	27.0	27.4	25.2	26.6	25.6	26.9	27.3
	6H	25.7	27.0	26.1	27.4	27.8	25.6	26.9	26.0	27.3	27.7
	8H	25.9	27.1	26.3	27.5	27.9	25.7	26.9	26.2	27.3	27.8
	12H	25.9	27.1	26.4	27.5	27.9	25.8	27.0	26.3	27.4	27.8
X=4H	Y=2H	23.5	24.9	23.9	25.3	25.6	23.5	24.9	23.9	25.2	25.6
	3H	25.5	26.6	25.9	27.0	27.5	25.4	26.6	25.9	27.0	27.4
	4H	26.2	27.3	26.7	27.7	28.1	26.2	27.2	26.6	27.6	28.1
	6H	26.8	27.7	27.2	28.1	28.6	26.7	27.6	27.2	28.0	28.5
	8H	26.9	27.8	27.4	28.2	28.7	26.8	27.7	27.3	28.1	28.6
	12H	27.1	27.8	27.5	28.3	28.8	26.9	27.7	27.4	28.2	28.7
X=8H	Y=4H	26.5	27.3	27.0	27.8	28.3	26.4	27.3	26.9	27.7	28.2
	6H	27.1	27.9	27.7	28.4	28.8	27.1	27.8	27.6	28.3	28.8
	8H	27.4	28.0	27.9	28.5	29.0	27.3	27.9	27.8	28.4	28.9
	12H	27.6	28.1	28.1	28.6	29.2	27.4	28.0	28.0	28.5	29.1
X=12H	Y=4H	26.5	27.3	27.0	27.8	28.3	26.5	27.2	27.0	27.7	28.2
	6H	27.2	27.8	27.7	28.3	28.9	27.1	27.8	27.7	28.2	28.8
	8H	27.5	28.0	28.0	28.5	29.1	27.4	27.9	27.9	28.4	29.0

Calculate in accordance with CIE 190:2010. The table is corrected with 4654lm (8log(F/F0) = 5.3).

Reflectance											
Ceiling (cavity)		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	23.5	24.8	23.8	25.1	25.3	23.4	24.8	23.7	25.0	25.3
	3H	24.9	26.2	25.3	26.4	26.7	24.9	26.1	25.2	26.4	26.7
	4H	25.5	26.7	25.9	27.0	27.3	25.4	26.6	25.8	26.9	27.2
	6H	25.9	27.0	26.3	27.3	27.6	25.8	26.9	26.2	27.2	27.5
	8H	26.0	27.1	26.4	27.4	27.7	25.9	27.0	26.3	27.3	27.6
	12H	26.1	27.1	26.5	27.4	27.8	26.0	27.0	26.4	27.3	27.7
X=4H	Y=2H	24.1	25.3	24.5	25.6	25.9	24.1	25.2	24.4	25.5	25.9
	3H	25.8	26.8	26.2	27.1	27.5	25.7	26.7	26.1	27.1	27.4
	4H	26.4	27.3	26.9	27.7	28.1	26.4	27.3	26.8	27.6	28.0
	6H	26.9	27.7	27.4	28.1	28.5	26.9	27.6	27.3	28.0	28.5
	8H	27.1	27.8	27.6	28.2	28.7	27.0	27.7	27.5	28.1	28.6
	12H	27.2	27.9	27.7	28.3	28.7	27.1	27.8	27.6	28.2	28.6
X=8H	Y=4H	26.7	27.4	27.2	27.8	28.3	26.6	27.4	27.1	27.8	28.2
	6H	27.3	27.9	27.8	28.4	28.8	27.3	27.8	27.7	28.3	28.8
	8H	27.6	28.1	28.1	28.5	29.0	27.5	28.0	28.0	28.5	29.0
	12H	27.7	28.2	28.2	28.7	29.2	27.6	28.1	28.1	28.5	29.1
X=12H	Y=4H	26.7	27.4	27.2	27.8	28.3	26.7	27.3	27.1	27.7	28.2
	6H	27.4	27.9	27.9	28.4	28.9	27.3	27.8	27.8	28.3	28.8
	8H	27.6	28.1	28.1	28.6	29.1	27.6	28.0	28.1	28.5	29.0
Variations with the observer position at spacings											
S=1.0H		+0.2/-0.2					+0.2/-0.2				
S=1.5H		+0.3/-0.5					+0.3/-0.5				
S=2.0H		+0.5/-0.9					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is corrected with 4654lm (8log(F/F0) = 5.3).

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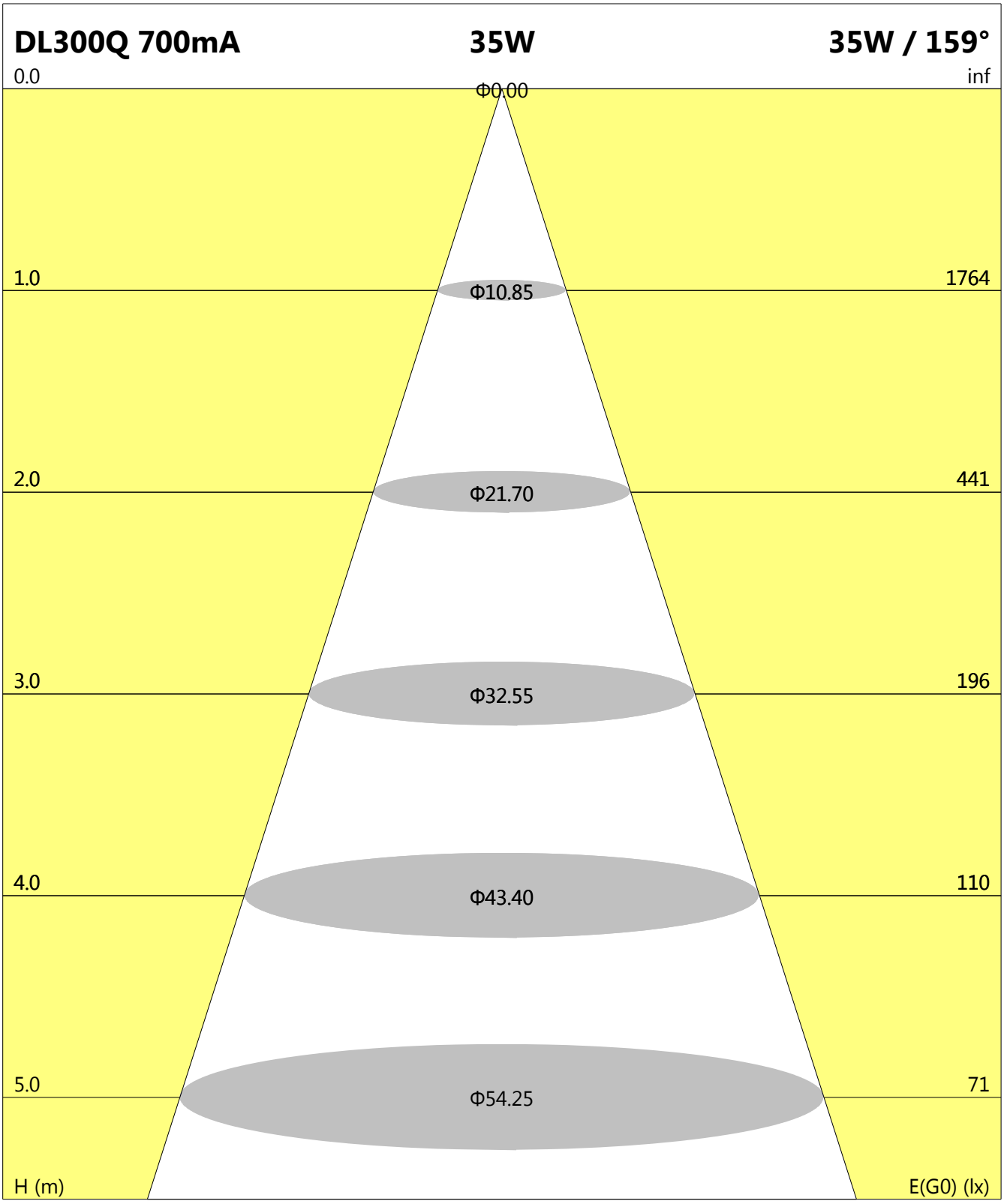
Lux-Distance



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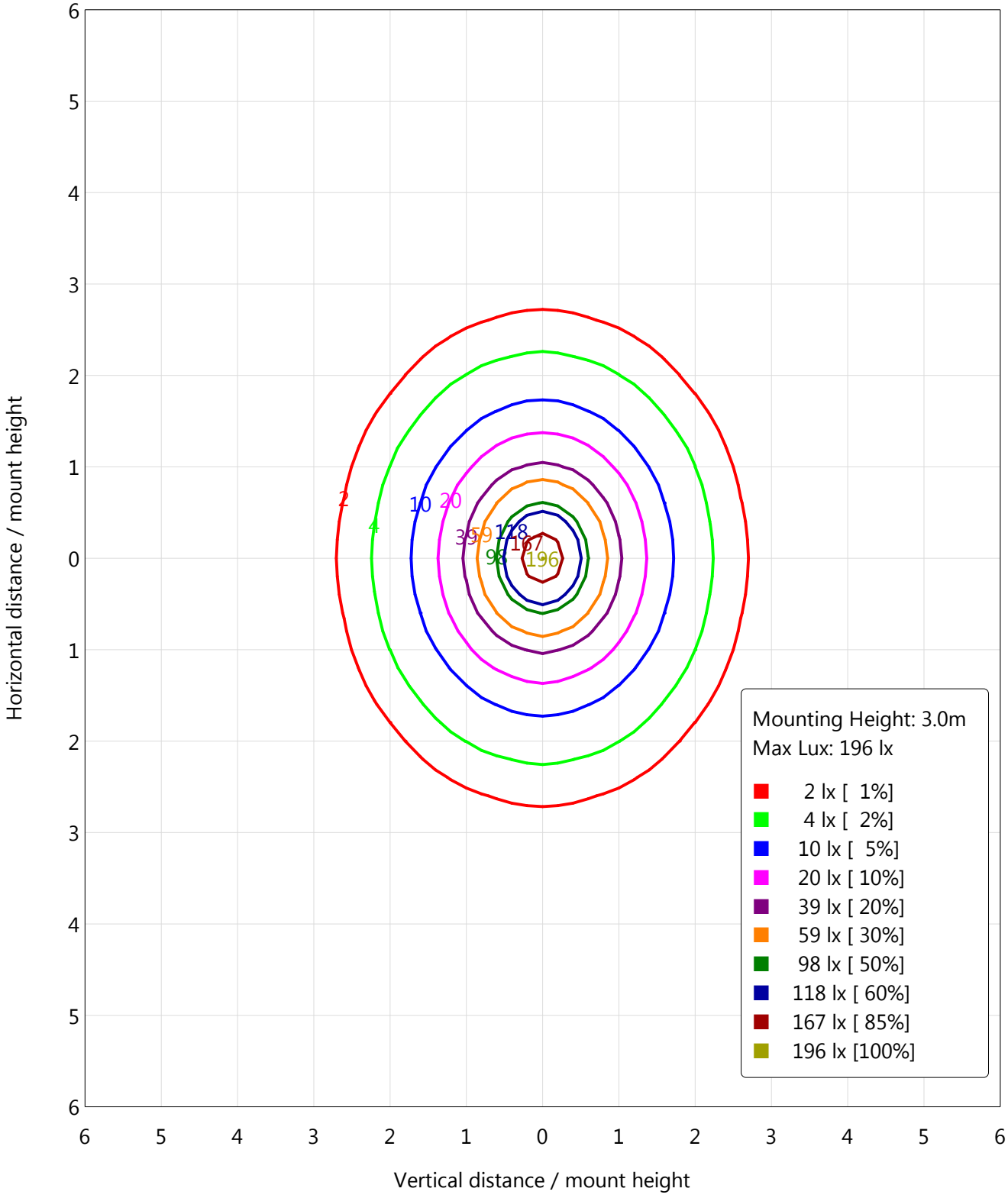
IsoLux



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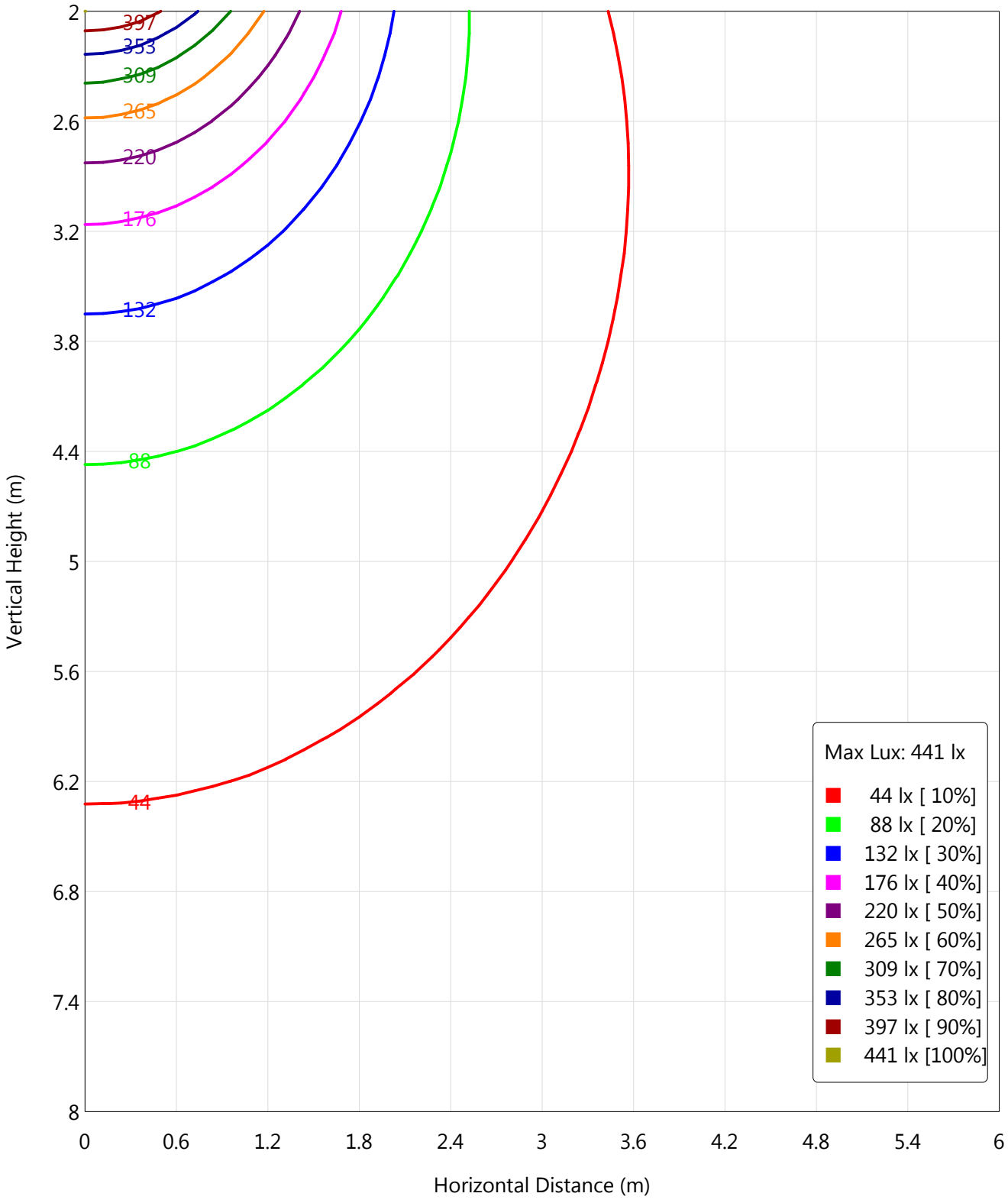
Vertical IsoLux Plot



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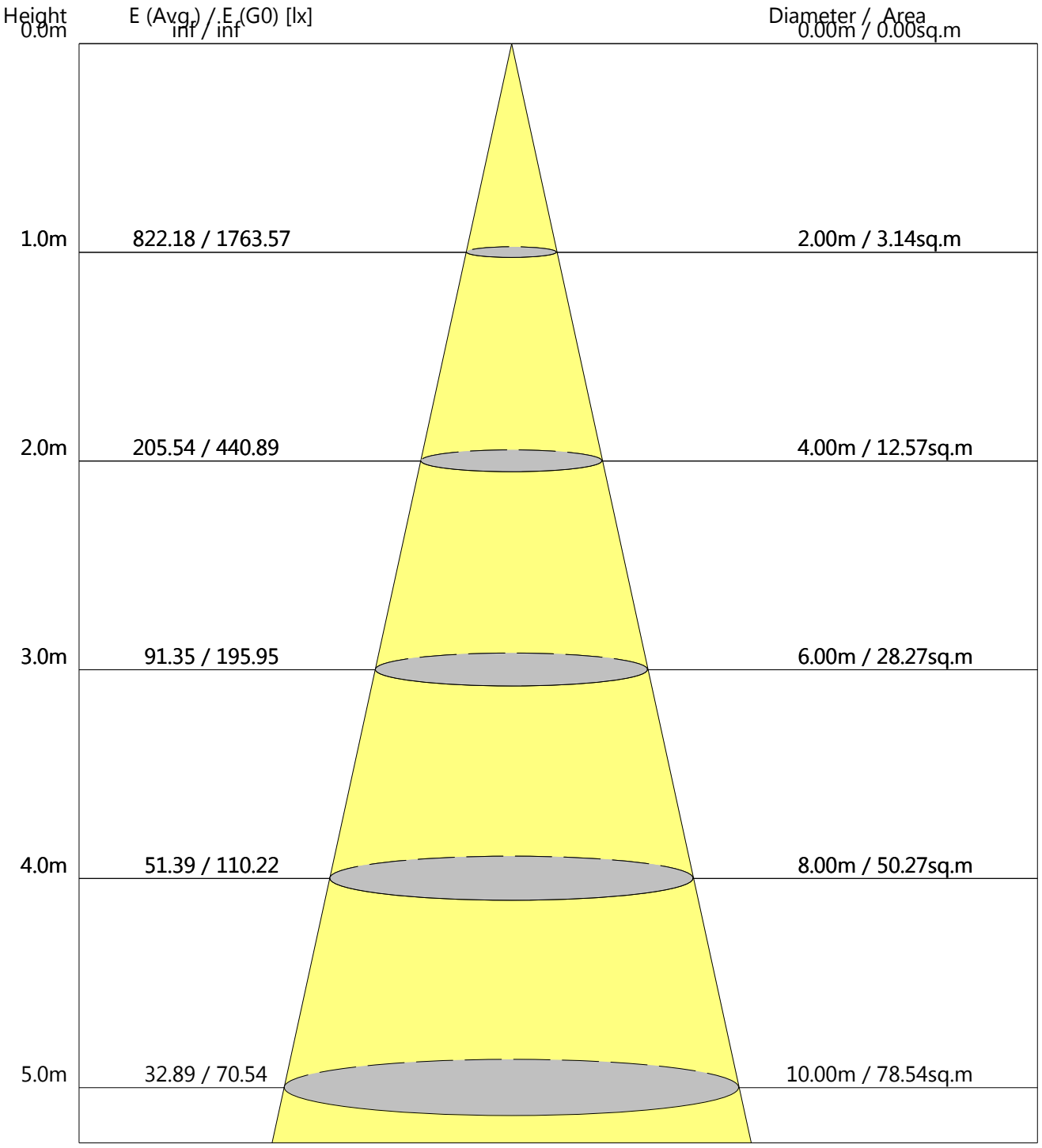
Average Illuminance Effective Figure



Beam Angle: 90° Flux Out: 2582.95lm

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