STOANE LIGHTING

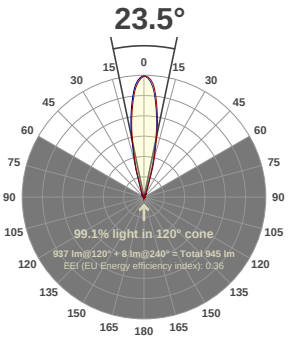
EQUIPMENT DESIGN + MANUFACTURE

Fitting name:
MSL_BBX.70_9mm Xicato
XIM_98CRI_3000K_XIM_1235lm_Medium

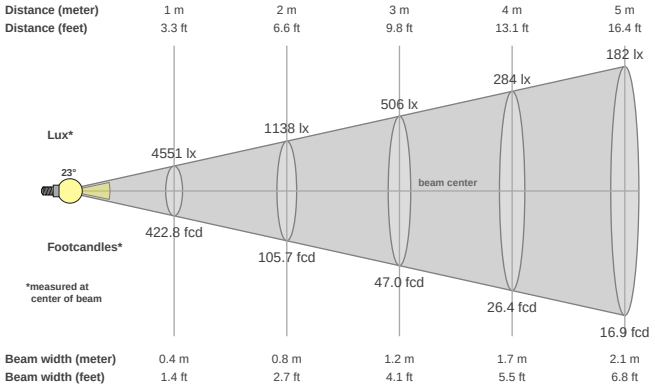
Date:
13/03/2018

Delivered Output: 937 Lumen

LOR: 76% *



Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
23.5°	39.6°	77°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
4566 cd	99.1%	95.7%

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
4551lx	1138lx	506lx	284lx	182lx	126lx	93lx	71lx	56lx	46lx	38lx	32lx	27lx	23lx	20lx	18lx	16lx	14lx	13lx	11lx
422.8fcd	105.7fcd	47fcd	26.4fcd	16.9fcd	11.7fcd	8.6fcd	6.6fcd	5.2fcd	4.2fcd	3.5fcd	2.9fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1.1fcd

Files are generated using the highest CRI and highest output 3000K light source available in the luminaire, other lower outputs and colour temperatures are of course available. Other outputs and colour temperatures are available on request, these may take some time as they must be tested.

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The power figures in the files have been generated based on the voltage and current to the light source only, not allowing for any driver losses. This is because our fittings are used with a number of different drivers (sometimes integral) and loaded differently, these variations effect the driver power factor and efficiency which in turn skews the power consumption figure.

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MSL advise that lighting designers apply a +/- 5% tolerance allowance on the files we provide as subtle variations in system components (eg slight variations in output of LED light sources through a bin) and ambient temperature variations can effect output and distribution slightly.

Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	14.2	14.9	14.4	15.0	15.2	20.8	21.5	21.0	21.7	21.8
	3H	14.0	14.7	14.3	14.9	15.1	20.6	21.3	20.9	21.5	21.7
	4H	14.0	14.5	14.3	14.8	15.1	20.6	21.1	20.9	21.4	21.7
	6H	13.9	14.4	14.2	14.7	15.0	20.5	21.0	20.8	21.3	21.6
	8H	13.8	14.4	14.2	14.7	14.9	20.4	21.0	20.8	21.3	21.6
	12H	13.8	14.3	14.2	14.6	14.9	20.4	20.9	20.8	21.2	21.5
4H	2H	14.5	15.1	14.8	15.3	15.6	20.7	21.3	21.0	21.5	21.8
	3H	14.3	14.8	14.7	15.1	15.4	20.5	21.0	20.9	21.3	21.6
	4H	14.3	14.7	14.6	15.0	15.4	20.4	20.9	20.8	21.2	21.5
	6H	14.2	14.5	14.6	14.9	15.3	20.4	20.7	20.8	21.1	21.5
	8H	14.1	14.5	14.6	14.8	15.2	20.3	20.6	20.7	21.0	21.4
	12H	14.1	14.4	14.5	14.8	15.2	20.3	20.6	20.7	21.0	21.4
8H	4H	14.1	14.5	14.6	14.8	15.2	20.3	20.6	20.7	21.0	21.4
	6H	14.1	14.3	14.5	14.7	15.2	20.2	20.5	20.7	20.9	21.3
	8H	14.0	14.2	14.5	14.6	15.1	20.2	20.4	20.7	20.8	21.3
	12H	14.0	14.1	14.4	14.6	15.1	20.1	20.3	20.6	20.8	21.3
12H	4H	14.1	14.4	14.5	14.8	15.2	20.3	20.6	20.7	21.0	21.4
	6H	14.0	14.2	14.5	14.6	15.1	20.2	20.4	20.7	20.8	21.3
	8H	14.0	14.1	14.4	14.6	15.1	20.1	20.3	20.6	20.8	21.3
Variation of the observer position for the luminaire distance S											
S = 1.0H		+2.7 / -3.5					+0.7 / -0.7				
S = 1.5H		+5.1 / -23.1					+2.2 / -7.1				
S = 2.0H		+7.7 / -94.2					+4.2 / -101.6				
Standard table		BK00					BK00				
Correction summand		-4.2					2.2				
Corrected glare indices referring to 937lm total luminous flux											

STOANE LIGHTING

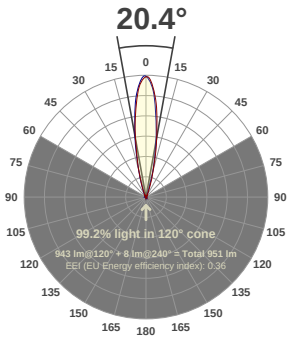
EQUIPMENT DESIGN + MANUFACTURE

Fitting name:
MSL_BBX.70_9mm Xicato XIM_98CRI_3000K_XIM_1235lm_Narrow

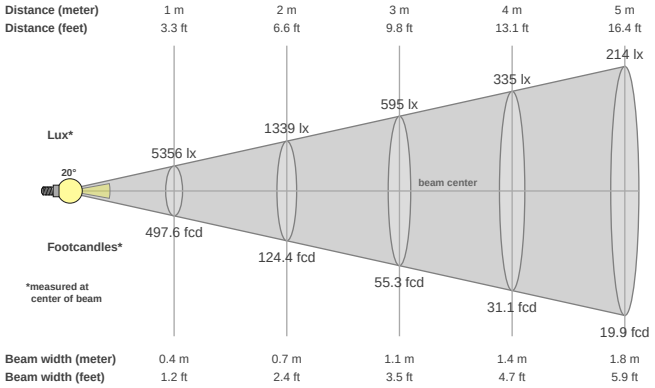
Date:
13/03/2018

Delivered Output: 943 Lumen

LOR: 76% *



Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
20.4°	39°	56.8°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
5512 cd	99.2%	96.4%

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
5356lx	1339lx	595lx	335lx	214lx	149lx	109lx	84lx	66lx	54lx	44lx	37lx	32lx	27lx	24lx	21lx	19lx	17lx	15lx	13lx
497.6fcd	124.4fcd	55.3fcd	31.1fcd	19.9fcd	13.8fcd	10.2fcd	7.8fcd	6.1fcd	5fcd	4.1fcd	3.5fcd	2.9fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd	1.2fcd

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Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	12.8	13.5	13.0	13.6	13.8	19.3	20.0	19.5	20.2	20.3
	3H	12.6	13.3	12.9	13.5	13.7	19.1	19.8	19.4	20.0	20.2
	4H	12.6	13.1	12.9	13.4	13.7	19.1	19.7	19.4	19.9	20.2
	6H	12.5	13.0	12.8	13.3	13.6	19.0	19.5	19.3	19.8	20.1
	8H	12.5	13.0	12.8	13.3	13.5	19.0	19.5	19.3	19.8	20.1
	12H	12.4	12.9	12.8	13.2	13.5	18.9	19.4	19.3	19.7	20.0
4H	2H	13.1	13.7	13.4	13.9	14.2	19.2	19.8	19.5	20.0	20.3
	3H	12.9	13.4	13.3	13.7	14.0	19.0	19.5	19.4	19.8	20.1
	4H	12.9	13.3	13.2	13.6	13.9	19.0	19.4	19.3	19.7	20.0
	6H	12.8	13.1	13.2	13.5	13.9	18.9	19.2	19.3	19.6	20.0
	8H	12.7	13.0	13.2	13.4	13.8	18.8	19.2	19.3	19.5	19.9
	12H	12.7	13.0	13.1	13.4	13.8	18.8	19.1	19.2	19.5	19.9
8H	4H	12.7	13.0	13.2	13.4	13.8	18.8	19.2	19.3	19.5	19.9
	6H	12.6	12.9	13.1	13.3	13.7	18.8	19.0	19.2	19.4	19.9
	8H	12.6	12.8	13.1	13.2	13.7	18.7	18.9	19.2	19.3	19.8
	12H	12.6	12.7	13.0	13.2	13.7	18.7	18.8	19.1	19.3	19.8
12H	4H	12.7	13.0	13.1	13.4	13.8	18.8	19.1	19.2	19.5	19.9
	6H	12.6	12.8	13.1	13.2	13.7	18.7	18.9	19.2	19.3	19.8
	8H	12.6	12.7	13.0	13.2	13.7	18.7	18.8	19.1	19.3	19.8
Variation of the observer position for the luminaire distance S											
S = 1.0H		+2.9 / -3.9					+0.8 / -0.7				
S = 1.5H		+5.3 / -27.8					+2.2 / -7.0				
S = 2.0H		+7.9 / -92.8					+4.1 / -100.1				
Standard table		BK00					BK00				
Correction summand		-5.6					0.7				
Corrected glare indices referring to 943lm total luminous flux											

STOANE LIGHTING

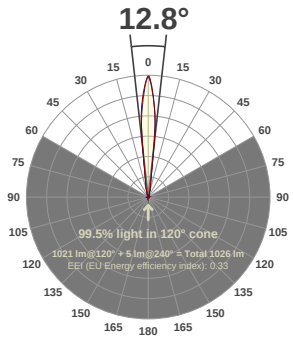
EQUIPMENT DESIGN + MANUFACTURE

Fitting name:
MSL_BBX.70_9mm Xicato XIM_98CRI_3000K_XIM_1235lm_Very Narrow

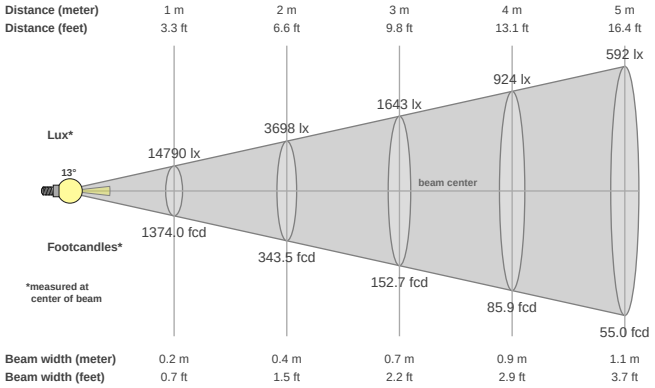
Date:
13/03/2018

Delivered Output: 1021 Lumen

LOR: 83% *



Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
12.8°	22.5°	41.5°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
15023 cd	99.5%	98.3%

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
14790lx	3698lx	1643lx	924lx	592lx	411lx	302lx	231lx	183lx	148lx	122lx	103lx	88lx	75lx	66lx	58lx	51lx	46lx	41lx	37lx
1374fcd	343.5fcd	152.7fcd	85.9fcd	55fcd	38.2fcd	28fcd	21.5fcd	17fcd	13.7fcd	11.4fcd	9.5fcd	8.1fcd	7fcd	6.1fcd	5.4fcd	4.8fcd	4.2fcd	3.8fcd	3.4fcd

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Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	10.3	11.0	10.6	11.2	11.4	14.2	14.9	14.5	15.1	15.3
	3H	10.2	10.8	10.5	11.0	11.3	14.1	14.7	14.4	14.9	15.1
	4H	10.1	10.7	10.4	10.9	11.2	14.0	14.6	14.3	14.8	15.1
	6H	10.1	10.6	10.4	10.9	11.1	14.0	14.5	14.3	14.7	15.0
	8H	10.0	10.5	10.4	10.8	11.1	13.9	14.4	14.2	14.7	15.0
	12H	10.0	10.5	10.3	10.8	11.1	13.9	14.3	14.2	14.6	15.0
4H	2H	10.3	10.9	10.6	11.1	11.4	14.1	14.6	14.4	14.9	15.2
	3H	10.1	10.6	10.5	10.9	11.2	13.9	14.4	14.3	14.7	15.0
	4H	10.1	10.5	10.4	10.8	11.1	13.9	14.3	14.2	14.6	14.9
	6H	10.0	10.3	10.4	10.7	11.1	13.8	14.1	14.2	14.5	14.9
	8H	10.0	10.2	10.4	10.6	11.0	13.8	14.0	14.2	14.4	14.8
	12H	9.9	10.2	10.3	10.6	11.0	13.7	14.0	14.1	14.4	14.8
8H	4H	10.0	10.2	10.4	10.6	11.0	13.8	14.0	14.2	14.4	14.8
	6H	9.9	10.1	10.3	10.5	11.0	13.7	13.9	14.1	14.3	14.7
	8H	9.8	10.0	10.3	10.4	10.9	13.6	13.8	14.1	14.2	14.7
	12H	9.8	9.9	10.3	10.4	10.9	13.6	13.7	14.1	14.2	14.7
12H	4H	9.9	10.2	10.3	10.6	11.0	13.7	14.0	14.1	14.4	14.8
	6H	9.8	10.0	10.3	10.4	10.9	13.6	13.8	14.1	14.2	14.7
	8H	9.8	9.9	10.3	10.4	10.9	13.6	13.7	14.1	14.2	14.7
Variation of the observer position for the luminaire distance S											
S = 1.0H		+5.0 / -7.4					+2.7 / -1.8				
S = 1.5H		+7.9 / -25.1					+4.6 / -8.6				
S = 2.0H		+10.2 / -90.1					+6.6 / -94.8				
Standard table		BK00					BK00				
Correction summand		-8.2					-4.3				
Corrected glare indices referring to 1021lm total luminous flux											

STOANE LIGHTING

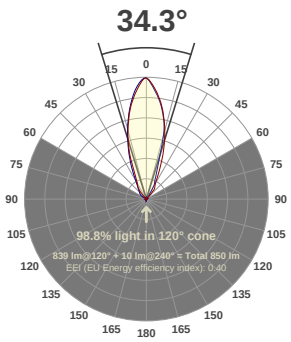
EQUIPMENT DESIGN + MANUFACTURE

Fitting name:
MSL_BBX.70_9mm Xicato XIM_98CRI_3000K_XIM_1235lm_Flood

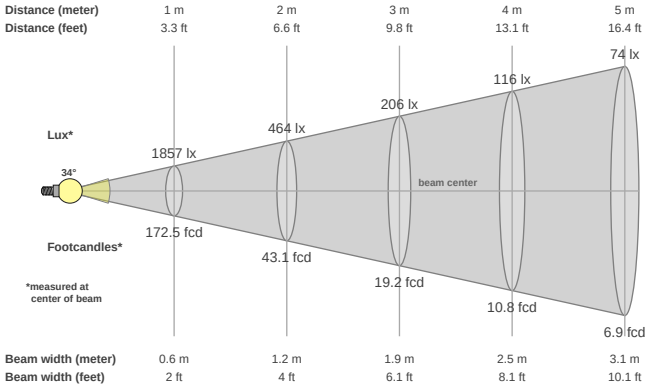
Date:
13/03/2018

Delivered Output: 839 Lumen

LOR: 68% *



Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
34.3°	73.1°	92.5°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
1869 cd	98.8%	93.7%

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1857lx	464lx	206lx	116lx	74lx	52lx	38lx	29lx	23lx	19lx	15lx	13lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	5lx
172.5fcd	43.1fcd	19.2fcd	10.8fcd	6.9fcd	4.8fcd	3.5fcd	2.7fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd

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p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	17.6	18.3	17.9	18.5	18.7	22.9	23.6	23.2	23.8	24.0
	3H	17.5	18.1	17.8	18.4	18.6	22.8	23.4	23.1	23.7	23.9
	4H	17.4	18.0	17.7	18.3	18.5	22.7	23.3	23.0	23.6	23.8
	6H	17.3	17.9	17.7	18.2	18.5	22.6	23.2	23.0	23.5	23.8
	8H	17.3	17.8	17.6	18.1	18.4	22.6	23.1	22.9	23.4	23.7
	12H	17.3	17.8	17.6	18.1	18.4	22.6	23.1	22.9	23.4	23.7
4H	2H	17.7	18.3	18.0	18.6	18.8	22.8	23.4	23.1	23.7	23.9
	3H	17.6	18.1	17.9	18.4	18.7	22.7	23.2	23.0	23.5	23.8
	4H	17.5	17.9	17.9	18.3	18.6	22.6	23.0	23.0	23.4	23.7
	6H	17.4	17.8	17.8	18.2	18.5	22.5	22.9	22.9	23.2	23.6
	8H	17.4	17.7	17.8	18.1	18.5	22.5	22.8	22.9	23.2	23.6
	12H	17.3	17.6	17.8	18.0	18.5	22.4	22.7	22.9	23.1	23.5
8H	4H	17.4	17.7	17.8	18.1	18.5	22.5	22.8	22.9	23.2	23.6
	6H	17.3	17.6	17.7	18.0	18.4	22.4	22.6	22.8	23.1	23.5
	8H	17.3	17.5	17.7	17.9	18.4	22.3	22.6	22.8	23.0	23.5
	12H	17.2	17.4	17.7	17.8	18.3	22.3	22.5	22.8	22.9	23.4
12H	4H	17.3	17.6	17.8	18.0	18.5	22.4	22.7	22.9	23.1	23.5
	6H	17.3	17.5	17.7	17.9	18.4	22.3	22.6	22.8	23.0	23.5
	8H	17.2	17.4	17.7	17.8	18.3	22.3	22.5	22.8	22.9	23.4
Variation of the observer position for the luminaire distance S											
S = 1.0H		+3.5 / -5.0					+0.9 / -0.7				
S = 1.5H		+6.3 / -24.8					+1.9 / -8.3				
S = 2.0H		+8.8 / -98.0					+3.9 / -104.1				
Standard table		BK00					BK00				
Correction summand		-0.9					4.3				
Corrected glare indices referring to 839lm total luminous flux											