# STOANE LIGHTING

## EQUIPMENT DESIGN + MANUFACTURE

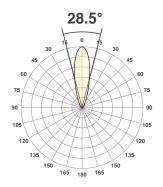
Fitting name: MSL\_BPX\_19mm Xicato

XTM\_98CRI\_3000K\_1055lm\_Diffuse Globe

Date: 27/10/2017

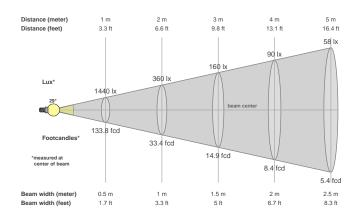
**Delivered Output: 783 Lumen** 

LOR: 74% \*





#### Beam details



#### Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%				
28.5°	61.8°	133.5°				

## Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone			
1440 cd	73.6%	65.3%			

# 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
1440lx	360lx	160lx	90lx	58lx	40lx	29lx	22lx	18lx	14lx	12lx	10lx	9lx	7lx	6lx	6lx	5lx	4lx	4lx	4lx
133.8fc	33.4fcd	14.9fcd	8.4fcd	5.4fcd	3.7fcd	2.7fcd	2.1fcd	1.7fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd
a																			

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.

\* These files are absolute measurements, not relative, as such the LOR is not generated when testing a fitting. To get an idea of LOR we use the measured delivered output in the files and documentation and calculate a ratio using the light source output mentioned in the file and product names. Note that the source output files will be nominal figures provided to us by the light source manufacturers and assuming a max 35°C ambient temperature so this LOR is as stated an indication only.

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.

Files are not always available for the specific combination of beam, accessory, driver selected, so these can be specifically requested. As with requests for specific colour temperatures this can take some time to generate as these combinations must be made then scheduled in to testing. MSL will advise on how long requests for specific data are likely to take.

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   F C	0 " 70 70 50 50 50 50 50 50 50												
P Floor   20   20   20   20   20   20   20   2													
Room size	p Walls		50	30	50	30	30	50	30	50	30	30	
Name	p Floor		20	20	20	20	20	20	20	20	20	20	
2H	Room size		View	•		-	es to	Viewir	ng directi	on parall	lel to lam	np axis	
Standard table   Stan	X	Υ		I	amp axis	8							
Heat	2H	2H	17.9 18.8 18.3 19.2 19.6						18.8	18.3	19.2	19.6	
6H       23.0       23.8       23.6       24.3       24.8       23.0       23.8       23.6       24.3       24.8         8H       24.0       24.7       24.5       25.2       25.8       24.0       24.7       24.5       25.2       25.8         12H       25.1       25.8       25.6       26.3       26.9       25.1       25.8       25.6       26.3       26.9         4H       2H       18.6       19.4       19.1       19.9       20.4       18.6       19.4       19.1       19.9       20.4         3H       21.1       21.8       21.6       22.3       22.9       21.1       21.8       21.6       22.3       22.9         4H       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.8       24.0       24.2		3H	20.0	20.9	20.5	21.3	21.8	20.0	20.9	20.5	21.3	21.8	
8H       24.0       24.7       24.5       25.2       25.8       24.0       24.7       24.5       25.2       25.8         12H       25.1       25.8       25.6       26.3       26.9       25.1       25.8       25.6       26.3       26.9         4H       2H       18.6       19.4       19.1       19.9       20.4       18.6       19.4       19.1       19.9       20.4         3H       21.1       21.8       21.6       22.3       22.9       21.1       21.8       21.6       22.3       22.9         4H       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.8       24.4         6H       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3         8H       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6		4H	21.4	22.2	21.9	22.7	23.2	21.4	22.2	21.9	22.7	23.2	
12H       25.1       25.8       25.6       26.3       26.9       25.1       25.8       25.6       26.3       26.9         4H       2H       18.6       19.4       19.1       19.9       20.4       18.6       19.4       19.1       19.9       20.4         3H       21.1       21.8       21.6       22.3       22.9       21.1       21.8       21.6       22.3       22.9         4H       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.8       24.4         6H       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3         8H       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3         12H       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.4       27.9       28.6         8H       4H       23.3       23.8       24.0       24.4       25.1       23.3       23.8       24.0       24.4       25.1         6H       25.5       25.9       26.1       26.5		6H	23.0	23.8	23.6	24.3	24.8	23.0	23.8	23.6	24.3	24.8	
4H       2H       18.6       19.4       19.1       19.9       20.4       18.6       19.4       19.1       19.9       20.4         3H       21.1       21.8       21.6       22.3       22.9       21.1       21.8       21.6       22.3       22.9         4H       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4         6H       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       28.6       26.8       27.2       27.4       27.9       28.6       26.8       27.2       25.5       25.9       26.1       26.5       27.2 <td></td> <td>8H</td> <td>24.0</td> <td>24.7</td> <td>24.5</td> <td>25.2</td> <td>25.8</td> <td>24.0</td> <td>24.7</td> <td>24.5</td> <td>25.2</td> <td>25.8</td>		8H	24.0	24.7	24.5	25.2	25.8	24.0	24.7	24.5	25.2	25.8	
3H		12H	25.1	25.8	25.6	26.3	26.9	25.1	25.8	25.6	26.3	26.9	
4H       22.7       23.3       23.3       23.8       24.4       22.7       23.3       23.3       23.8       24.4         6H       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3         8H       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3         12H       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.4       27.9       28.6         8H       4H       23.3       23.8       24.0       24.4       25.1       23.3       23.8       24.0       24.4       25.1         6H       25.5       25.9       26.1       26.5       27.2       25.5       25.9       26.1       26.5       27.2         8H       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.	4H	2H	18.6	19.4	19.1	19.9	20.4	18.6	19.4	19.1	19.9	20.4	
6H       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       24.5       25.0       25.1       25.6       26.3       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3       28.6       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4       26.7       25.3       <		3H	21.1	21.8	21.6	22.3	22.9	21.1	21.8	21.6	22.3	22.9	
8H       25.6       26.0       26.2       26.6       27.3       25.6       26.0       26.2       26.6       27.3         12H       26.8       27.2       27.4       27.9       28.6       26.8       27.2       27.4       27.9       28.6         8H       4H       23.3       23.8       24.0       24.4       25.1       23.3       23.8       24.0       24.4       25.1         6H       25.5       25.9       26.1       26.5       27.2       25.5       25.9       26.1       26.5       27.2         8H       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4         12H       28.2       28.5       28.9       29.2       29.9       28.2       28.5       28.9       29.2       29.9         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1         Variation of the observer position for the luminaire distance S		4H	22.7	23.3	23.3	23.8	24.4	22.7	23.3	23.3	23.8	24.4	
12H		6H	24.5	25.0	25.1	25.6	26.3	24.5	25.0	25.1	25.6	26.3	
8H       4H       23.3       23.8       24.0       24.4       25.1       23.3       23.8       24.0       24.4       25.1         6H       25.5       25.9       26.1       26.5       27.2       25.5       25.9       26.1       26.5       27.2         8H       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4         12H       28.2       28.5       28.9       29.2       29.9       28.2       28.5       28.9       29.2       29.9         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         S = 1.5H       +0.2       / -0.2       +0.3       / -0.3       +0.4       / -0.6       BK12 <td colspan<="" td=""><td></td><td>8H</td><td>25.6</td><td>26.0</td><td>26.2</td><td>26.6</td><td>27.3</td><td>25.6</td><td>26.0</td><td>26.2</td><td>26.6</td><td>27.3</td></td>	<td></td> <td>8H</td> <td>25.6</td> <td>26.0</td> <td>26.2</td> <td>26.6</td> <td>27.3</td> <td>25.6</td> <td>26.0</td> <td>26.2</td> <td>26.6</td> <td>27.3</td>		8H	25.6	26.0	26.2	26.6	27.3	25.6	26.0	26.2	26.6	27.3
6H       25.5       25.9       26.1       26.5       27.2       25.5       25.9       26.1       26.5       27.2         8H       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4         12H       28.2       28.5       28.9       29.2       29.9       28.2       28.5       28.9       29.2       29.9         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         S = 1.0H       +0.2 / -0.2       +0.3 / -0.3       +0.3 / -0.3       +0.4 / -0.6       +0.3 / -0.3       +0.4 / -0.6       BK12       BK12         Correction summand       11.3       11.3       11.3       11.3       11.3       11.3		12H	26.8	27.2	27.4	27.9	28.6	26.8	27.2	27.4	27.9	28.6	
8H       26.7       27.1       27.4       27.7       28.4       26.7       27.1       27.4       27.7       28.4         12H       28.2       28.5       28.9       29.2       29.9       28.2       28.5       28.9       29.2       29.9         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         S = 1.0H       +0.2 / -0.2       +0.3 / -0.3       +0.3 / -0.3       +0.4 / -0.6       +0.4 / -0.6       +0.4 / -0.6       Standard table       BK12       BK12       BK12	8H	4H	23.3	23.8	24.0	24.4	25.1	23.3	23.8	24.0	24.4	25.1	
12H       28.2       28.5       28.9       29.2       29.9       28.2       28.5       28.9       29.2       29.9         12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         S = 1.0H       +0.2 / -0.2       +0.2 / -0.2       +0.2 / -0.2       +0.3 / -0.3       +0.3 / -0.3       +0.4 / -0.6       Standard table       BK12       BK12       BK12       BK12       BK12		6H	25.5	25.9	26.1	26.5	27.2	25.5	25.9	26.1	26.5	27.2	
12H       4H       23.5       24.0       24.2       24.6       25.3       23.5       24.0       24.2       24.6       25.3         6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         S = 1.0H       +0.2 / -0.2       +0.2 / -0.2       +0.3 / -0.3       +0.3 / -0.3       +0.3 / -0.3       +0.4 / -0.6       Standard table       BK12       BK12       BK12       BK12		8H	26.7	27.1	27.4	27.7	28.4	26.7	27.1	27.4	27.7	28.4	
6H       25.8       26.1       26.4       26.8       27.5       25.8       26.1       26.4       26.8       27.5         8H       27.1       27.4       27.8       28.1       28.9       27.1       27.4       27.8       28.1       28.9         Variation of the observer position for the luminaire distance S         9 = 1.0H       +0.2 / -0.2       +0.2 / -0.2         S = 1.5H       +0.3 / -0.3       +0.3 / -0.3         S = 2.0H       +0.4 / -0.6       BK12         Standard table       BK12       BK12         Correction summand       11.3       11.3		12H	28.2	28.5	28.9	29.2	29.9	28.2	28.5	28.9	29.2	29.9	
8H     27.1     27.4     27.8     28.1     28.9     27.1     27.4     27.8     28.1     28.9       Variation of the observer position for the luminaire distance S       S = 1.0H     +0.2 / -0.2     +0.2 / -0.2       S = 1.5H     +0.3 / -0.3     +0.3 / -0.3       S = 2.0H     +0.4 / -0.6     BK12       Standard table     BK12     BK12       Correction summand     11.3     11.3	12H	4H	23.5	24.0	24.2	24.6	25.3	23.5	24.0	24.2	24.6	25.3	
Variation of the observer position for the luminaire distance S         S = 1.0H       +0.2 / -0.2       +0.2 / -0.2         S = 1.5H       +0.3 / -0.3       +0.3 / -0.3         S = 2.0H       +0.4 / -0.6       +0.4 / -0.6         Standard table       BK12       BK12         Correction summand       11.3       11.3		6H	25.8	26.1	26.4	26.8	27.5	25.8	26.1	26.4	26.8	27.5	
S = 1.0H       +0.2 / -0.2       +0.2 / -0.2         S = 1.5H       +0.3 / -0.3       +0.3 / -0.3         S = 2.0H       +0.4 / -0.6       +0.4 / -0.6         Standard table       BK12       BK12         Correction summand       11.3       11.3		8H	27.1	27.4	27.8	28.1	28.9	27.1	27.4	27.8	28.1	28.9	
S = 1.5H       +0.3 / -0.3       +0.3 / -0.3         S = 2.0H       +0.4 / -0.6       +0.4 / -0.6         Standard table       BK12       BK12         Correction summand       11.3       11.3	Variation of	of the obse	rver pos	ition for	the lumir	naire dis	tance S						
S = 2.0H       +0.4 / -0.6       +0.4 / -0.6         Standard table       BK12       BK12         Correction summand       11.3       11.3	S = 1	.0H		+(	).2 / -0	).2		+0.2 / -0.2					
Standard table BK12 BK12  Correction summand 11.3 11.3	S = 1	.5H		+(	).3 / -0	).3		+0.3 / -0.3					
Correction summand 11.3 11.3	S = 2	2.0H		+(	0.4 / -0	0.6		+0.4 / -0.6					
summand 11.3	Standar	d table			BK12			BK12					
Corrected glare indices referring to 783lm total luminous flux					11.3			11.3					
	Corrected												