

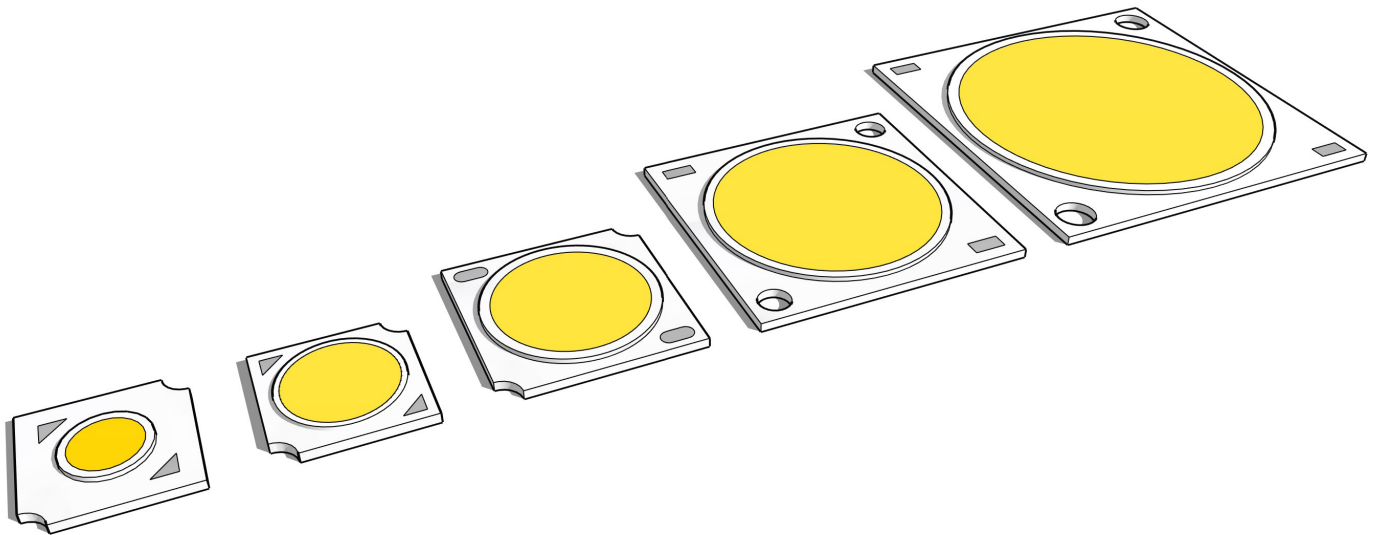
XOB

XOB delivers Xicato's award-winning color points, unmatched color rendering, and great performance in an industry standard form factor that allows for rapid fixture design resulting in accelerated time to revenue.

CCT range: Xicato 2700K - 4000K color points

Color matching: Xicato 1x2 SDCM

CRI: 80, 90, 95, Vibrant95



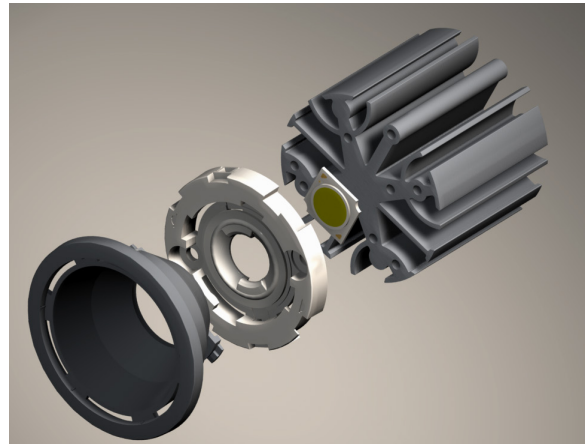
2700K-4000K ($T_c=70^{\circ}\text{C}$)	80 CRI	90 CRI	95 CRI
6 mm		850 - 950 lm	750 - 900 lm
9.8 mm		1,400 - 1,600 lm	1,250 - 1,450 lm
14.5 mm		4,000 - 4,800 lm	3,600 - 4,300 lm
23 mm	5,850 - 6,900 lm	4,950 - 5,850 lm	
32.8 mm	8,300 - 9,800 lm	7,050 - 8,300 lm	

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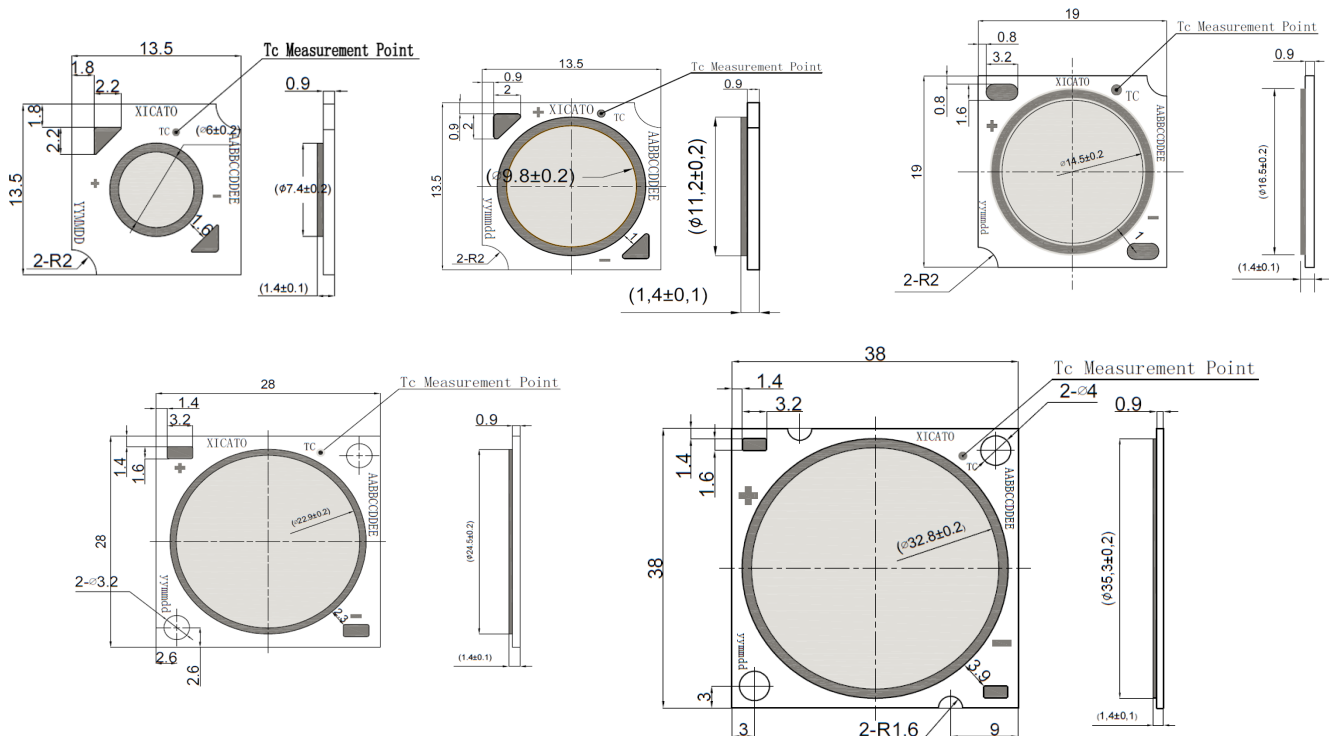
XOB: Packages and Operation

Package options:

- 13.5 mm x 13.5 mm - LES: 6 mm, 250 mA
- 13.5 mm x 13.5 mm - LES: 9.8 mm, 350 mA
- 19 mm x 19 mm - LES: 14.5 mm, 1050 mA
- 28 mm x 28 mm - LES: 23 mm, 1400 mA
- 38 mm x 38 mm - LES: 32.8 mm, 1400 mA



LES (mm)	If (mA)	Maximum If (mA)	Typical Vf (V)	Maximum Vf (V)	Maximum Power (W)	Maximum Tcase (°C)
6	250	300	31.4	33	9.9	90
9.8	350	500	34.2	36	18.0	90
14.5	1,050	1,100	34.2	36	39.6	90
23	1,400	2,100	34.2	36	75.6	90
32.8	1,400	2,100	48.5	51	107.1	90



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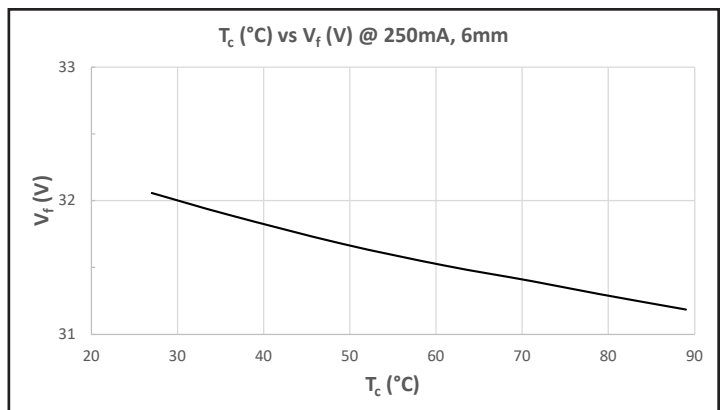
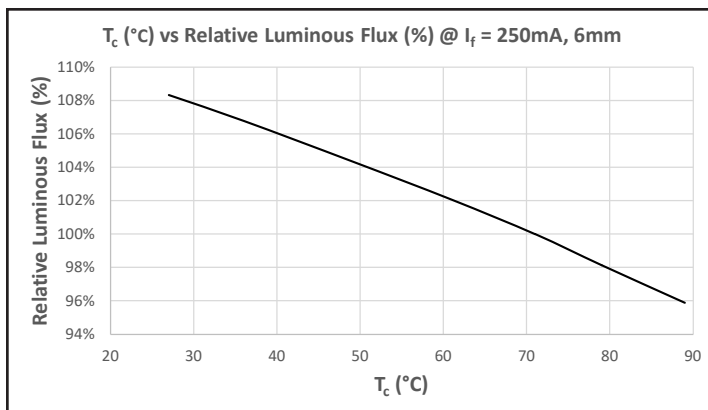
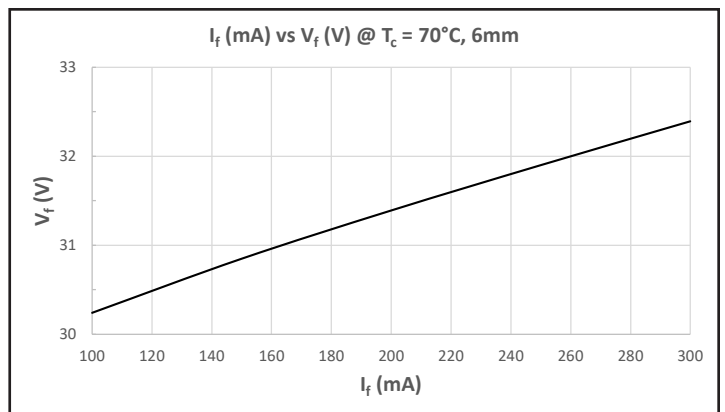
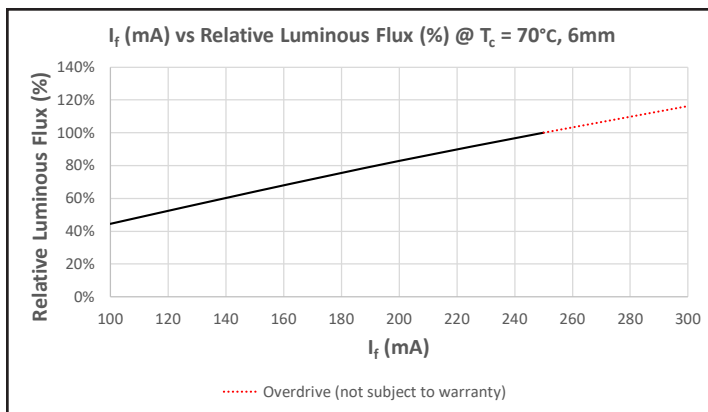
XOB: 6mm Product Selection Table ($T_c = 70^\circ\text{C}$)

LES (mm)	Minimum CRI	CCT (K)	If (mA)	Flux (lm)	Efficacy (lm/W)
6	90	2700	200	700	113
			250	850	108
		3000	200	725	117
			250	875	111
		3500	200	775	125
			250	950	121
		4000	200	800	129
			250	975	124
	95	2700	200	625	101
			250	750	96
		3000	200	650	105
			250	800	102
		3500	200	700	113
			250	850	108
		4000	200	750	121
			250	900	115
	Vibrant 95	3000 BBBL	200	650	105
			250	800	102

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XOB: 6mm Performance Characteristics

LES (mm)	Minimum CRI	CCT (K)	If (mA)	Flux (lm)	Efficacy (lm/W)
6	90	2700	250	850	108
		3000	250	875	111
		3500	250	950	121
		4000	250	975	124
	95	2700	250	750	96
		3000	250	800	102
		3500	250	850	108
		4000	250	900	115
	Vibrant 95	3000 BBBL	250	800	102



Values in the table above represent 100% relative flux at $I_f = 250\text{mA}$ and $T_c = 70^\circ\text{C}$. To calculate flux under different drive conditions, use the tables and charts above to determine relative flux at different I_f and T_c values. For example, in order to calculate the flux of a when driving a 6mm 95 CRI 3000K XOB at $I_f = 140\text{mA}$ and $T_c = 50^\circ\text{C}$, multiply 800 lumens by 0.6 and then multiply again by 1.04 to get 499 lumens. $P = I \cdot V$, so the efficacy for these drive conditions would be $(499 \text{ lm}) / (0.140 \text{ A} \cdot 30.7 \text{ V}) = 116 \text{ lm/W}$.

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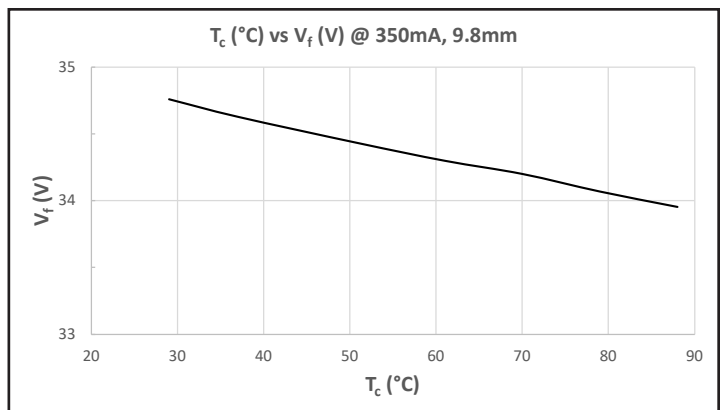
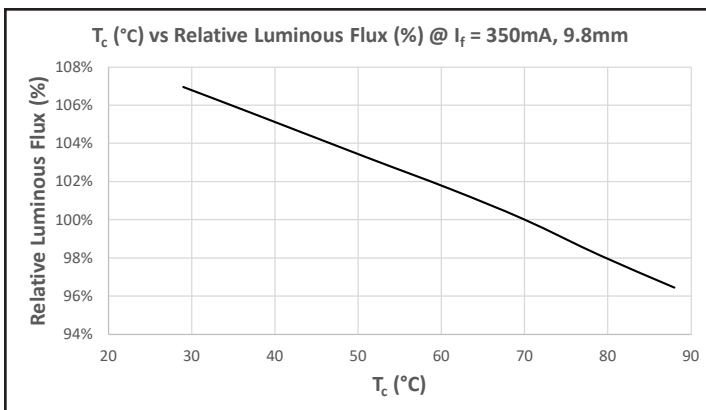
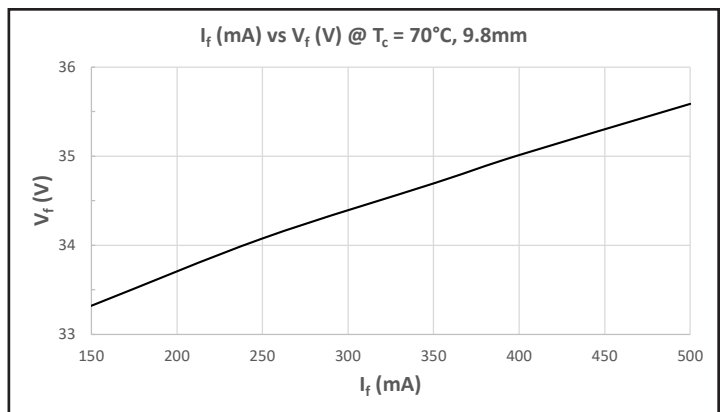
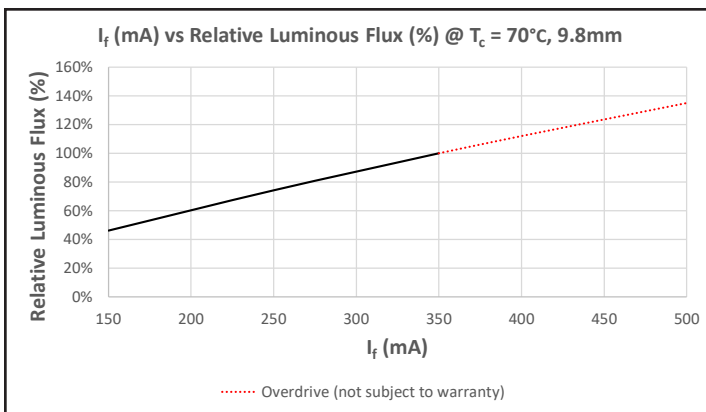
XOB: 9.8mm Product Selection Table ($T_c = 70^\circ\text{C}$)

LES (mm)	Minimum CRI	CCT (K)	If (mA)	Flux (lm)	Efficacy (lm/W)
9.8	90	2700	250	1100	131
			350	1425	119
		3000	250	1150	136
			350	1525	127
		3500	250	1200	142
			350	1575	132
		4000	250	1225	145
			350	1625	136
	95	2700	250	975	116
			350	1275	107
		3000	250	1025	122
			350	1350	113
		3500	250	1075	128
			350	1425	119
		4000	250	1125	134
			350	1475	123
	Vibrant 95	3000 BBBL	250	1025	122
			350	1350	113

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XOB: 9.8mm Performance Characteristics

LES (mm)	Minimum CRI	CCT (K)	If (mA)	Flux (lm)	Efficacy (lm/W)
9.8	90	2700	350	1425	119
		3000	350	1525	127
		3500	350	1575	132
		4000	350	1625	136
	95	2700	350	1275	107
		3000	350	1350	113
		3500	350	1425	119
		4000	350	1475	123
	Vibrant 95	3000 BBBL	350	1350	113



Values in the table above represent 100% relative flux at $I_f = 350\text{mA}$ and $T_c = 70^\circ\text{C}$. To calculate flux under different drive conditions, use the tables and charts above to determine relative flux at different I_f and T_c values. For example, in order to calculate the flux of a when driving a 9.8mm 95 CRI 3000K XOB at $I_f = 200\text{mA}$ and $T_c = 50^\circ\text{C}$, multiply 1,350 lumens by 0.6 and then multiply again by 1.03 to get 834 lumens. $P = I \cdot V$, so the efficacy for these drive conditions would be $(834 \text{ lm}) / (0.200 \text{ A} \cdot 33.7 \text{ V}) = 124 \text{ lm/W}$.

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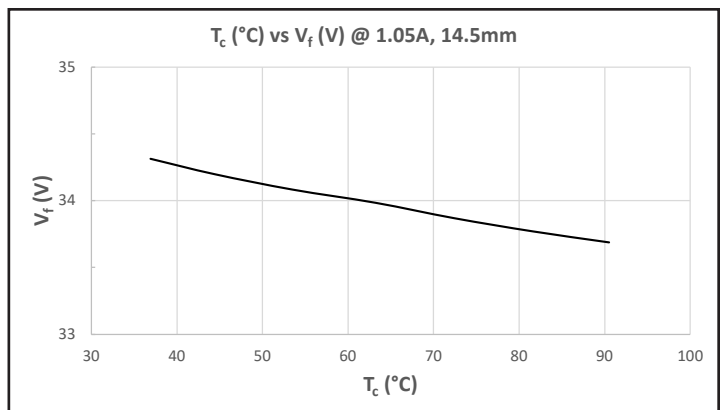
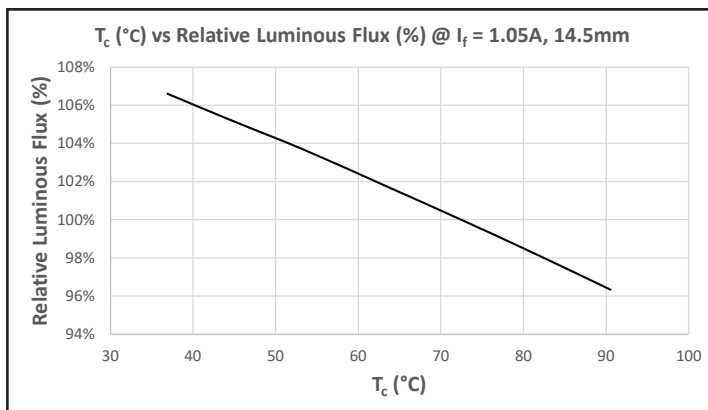
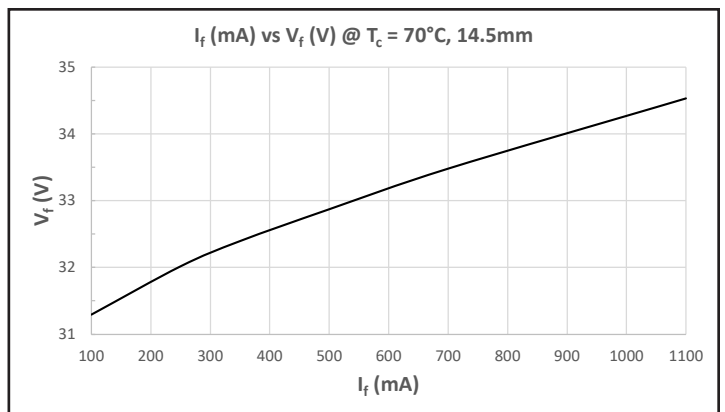
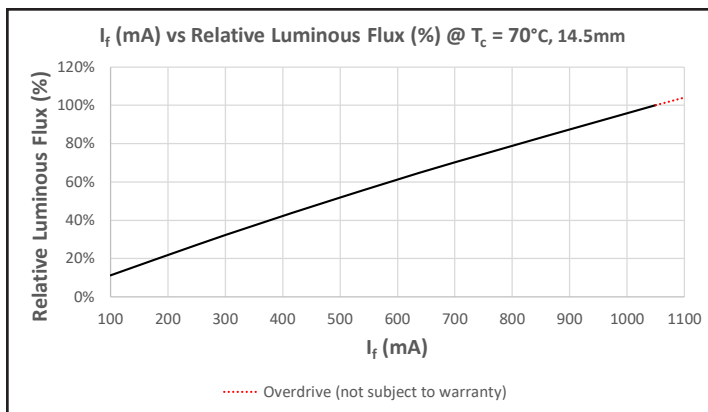
XOB: 14.5mm Product Selection Table ($T_c = 70^{\circ}\text{C}$)

LES (mm)	Minimum CRI	CCT (K)	If (mA)	Flux (lm)	Efficacy (lm/W)
14.5	90	2700	350	1,500	134
			500	2,100	130
			700	2,850	123
			1,050	4,050	114
		3000	350	1,600	143
			500	2,250	139
			700	3,000	130
			1,050	4,300	121
		3500	350	1,700	152
			500	2,400	148
			700	3,250	141
			1,050	4,600	129
		4000	350	1,750	157
			500	2,450	151
			700	3,350	145
			1,050	4,750	133
	95	2700	350	1,350	121
			500	1,900	117
			700	2,550	110
			1,050	3,650	103
		3000	350	1,450	130
			500	2,000	124
			700	2,700	117
			1,050	3,850	108
		3500	350	1,550	139
			500	2,150	133
			700	2,900	126
			1,050	4,150	117
		4000	350	1,600	143
			500	2,200	136
			700	3,000	130
			1,050	4,300	121

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XOB: 14.5mm Performance Characteristics

LES (mm)	Minimum CRI	CCT (K)	I _f (mA)	Flux (lm)	Efficacy (lm/W)
14.5	90	2700	1,050	4,050	114
		3000	1,050	4,300	121
		3500	1,050	4,600	129
		4000	1,050	4,750	133
	95	2700	1,050	3,650	103
		3000	1,050	3,850	108
		3500	1,050	4,150	117
		4000	1,050	4,300	121



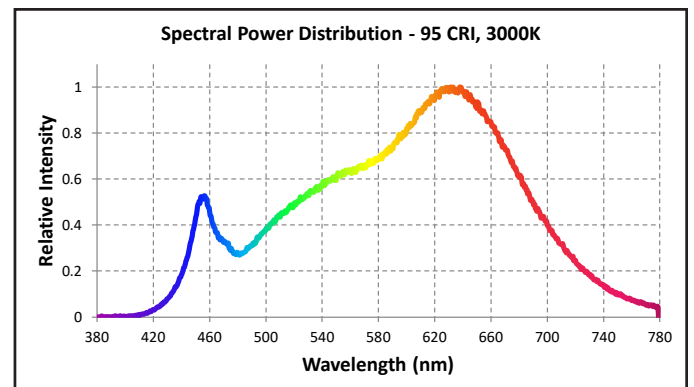
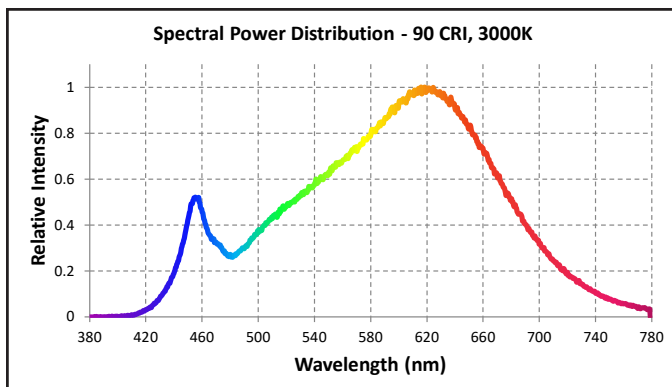
Values in the table above represent 100% relative flux at I_f = 1,050mA and T_c = 70°C. To calculate flux under different drive conditions, use the tables and charts above to determine relative flux at different I_f and T_c values. For example, in order to calculate the flux of a when driving a 14.5mm 95 CRI 3000K XOB at I_f = 200mA and T_c = 40°C, multiply 3,850 lumens by 0.21 and then multiply again by 1.06 to get 857 lumens. P = I*V, so the efficacy for these drive conditions would be (857 lm) / (0.200 A * 34.25 V) = 125 lm/W.

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XOB: Color Specification

Minimum CRI	Typical CRI	Minimum R9	Rf	Rg	GAI
90	93	50	88	101	104
95	98	90	93	103	109
Vibrant 95	98	90	93	106	123

Correlated Color Temperature			Initial Color Consistency	
Nominal	Actual	CCT	SDCM	Duv
2700K	2700K	± 40K	≤ 1x2	± 0.001
3000K	2950K	± 50K		
3500K	3420K	± 60K		
4000K	4000K	± 70K		



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XOB: Part Numbering and Nomenclature

XOB	06	95	27	10	X	33	2	1
	LES 06: 6 mm 09: 9.8 mm 14: 14.5 mm 23: 23 mm 32: 32.8 mm	Minimum CRI	CCT 27: 2700K 30: 3000K 35: 3500K 40: 4000K	Flux Range 10: 1,000 lm 15: 1,500 lm	Color Point X: Xicato V: Vibrant	Max Voltage	1x2 SDCM	Rev.

LES (mm)	Min. CRI	CCT	Part Number
6	90	2700K	XOB06902710X332I
		3000K	XOB06903010X332I
		3500K	XOB06903510X332I
		4000K	XOB06904010X332I
	95	2700K	XOB06952710X332I
		3000K	XOB06953010X332I
		3500K	XOB06953510X332I
		4000K	XOB06954010X332I
	Vibrant 95	3000K BBBL	XOB06953010V332I
9.8	90	2700K	XOB09902715X362I
		3000K	XOB09903015X362I
		3500K	XOB09903515X362I
		4000K	XOB09904015X362I
	95	2700K	XOB09952715X362I
		3000K	XOB09953015X362I
		3500K	XOB09953515X362I
		4000K	XOB09954015X362I
	Vibrant 95	3000K BBBL	XOB09953015V362I
14.5	90	2700K	XOB14902750X362I
		3000K	XOB14903050X362I
		3500K	XOB14903550X362I
		4000K	XOB14904050X362I
	95	2700K	XOB14952750X362I
		3000K	XOB14953050X362I
		3500K	XOB14953550X362I
		4000K	XOB14954050X362I

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