

## Stella-HB (Vero29) Simulation for EnGen

### Simulation Setup

LED: BXRC-40E10K0-C-73 LED COB VERO 29 4000K ROUND

Optic: LEDiL Optic - Stella HB

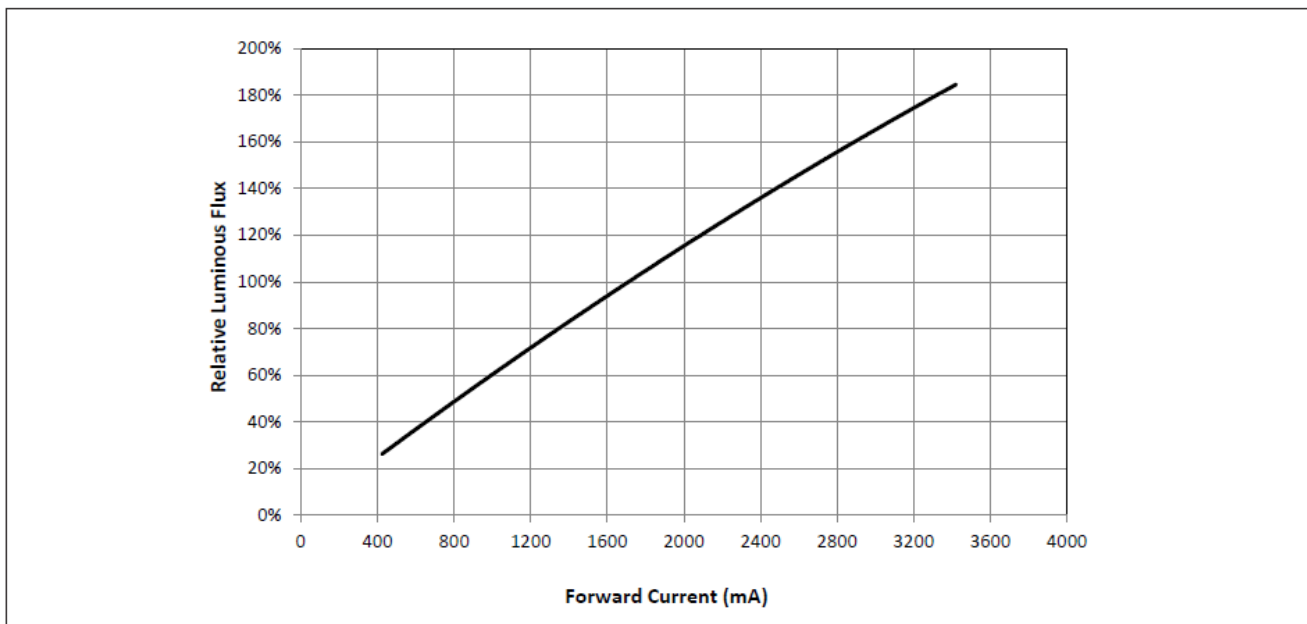
LED Current: 700mA

Mounting Height: 27 feet

Lumen output calculation:

Typical Flux: 19,120 lm @ 1710mA @ 25C

Figure 5: Vero 29C Typical Relative Flux vs. Current ( $T_j = T_c = 25^\circ\text{C}$ )



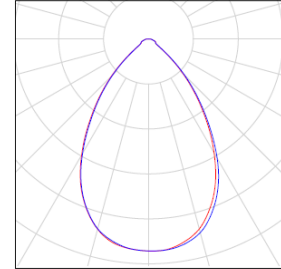
Flux @ 700mA = 6,692 lm (~35% of 19,120 lm)

Power:

700Ma x 49.5VDC = 34.65W

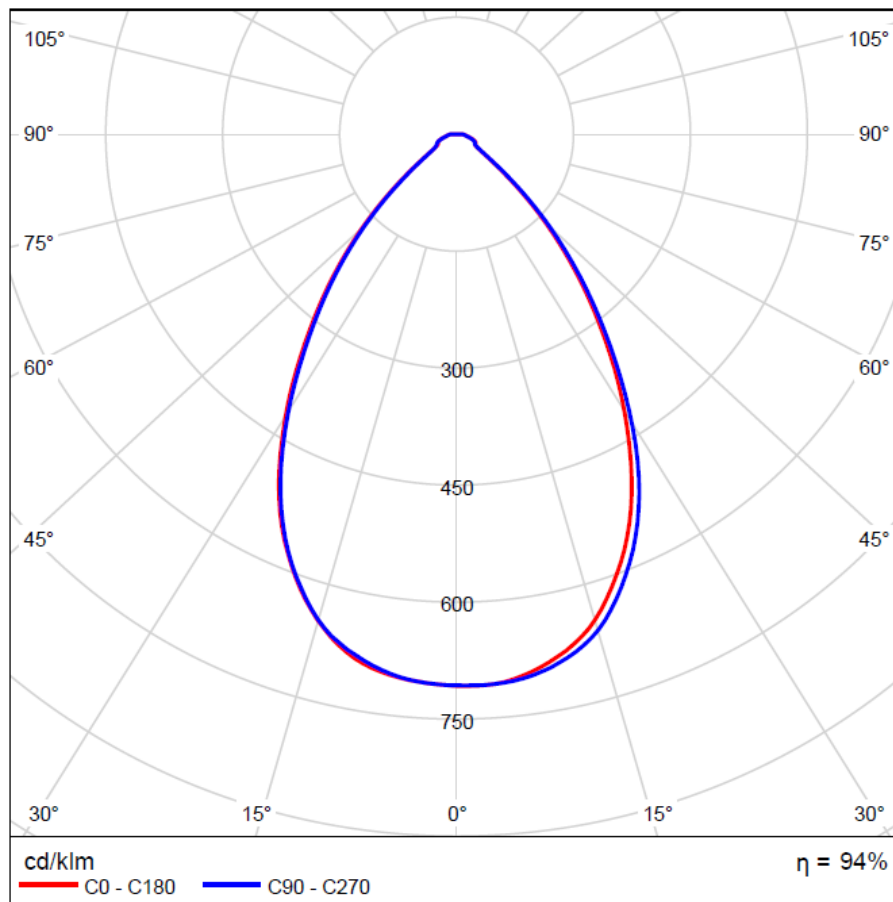
## Stella-HB Vero29 Simulation Rev 00

Quantity	Luminaire (Luminous emittance)
1	<p>LEDiL Oy - FN14074_STELLA-HB_(VERO29)                      Luminous emittance 1                      Fitting: 1xBridgelux_VERO29_(BXRC-50C10K0-L-04)_568.615lm@100mA_CCT=4910K_P=3.4015W_I=100.1mA                      Light output ratio: 94.00%                      Lamp luminous flux: 6692 lm                      Luminaire luminous flux: 6291 lm                      Power: 34.7 W                      Luminous efficacy: 181.6 lm/W</p> <p>Colorimetric data                      1xBridgelux_VERO29_(BXRC-50C10K0-L-04)_568.615lm@100mA_CCT=4910K_P=3.4015W_I=100.1mA: CCT 4000 K, CRI 100</p>



Total lamp luminous flux: 6692 lm, Total luminaire luminous flux: 6291 lm, Total Load: 34.7 W, Luminous efficacy: 181.3 lm/W

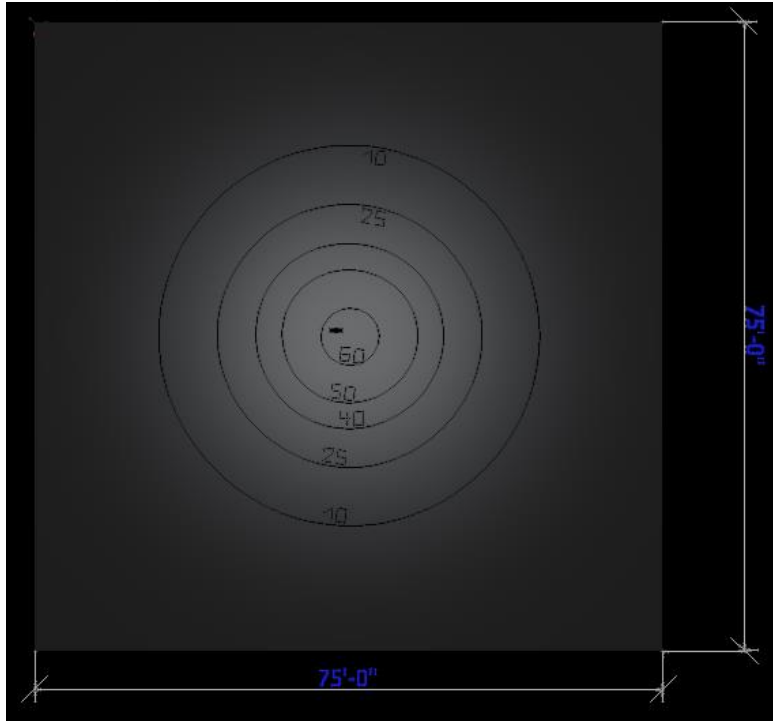
### Luminous emittance 1 / Polar LDC



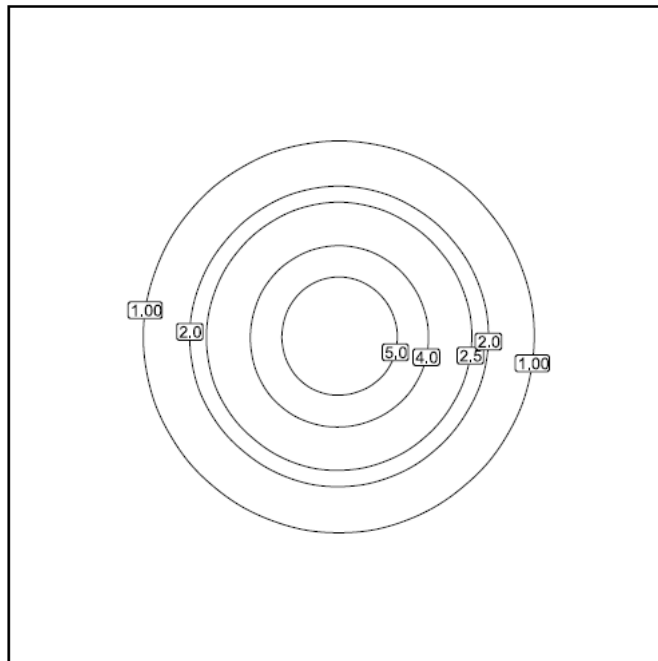
**Simulation Results**

Target surface dimensions: 75' x 75'

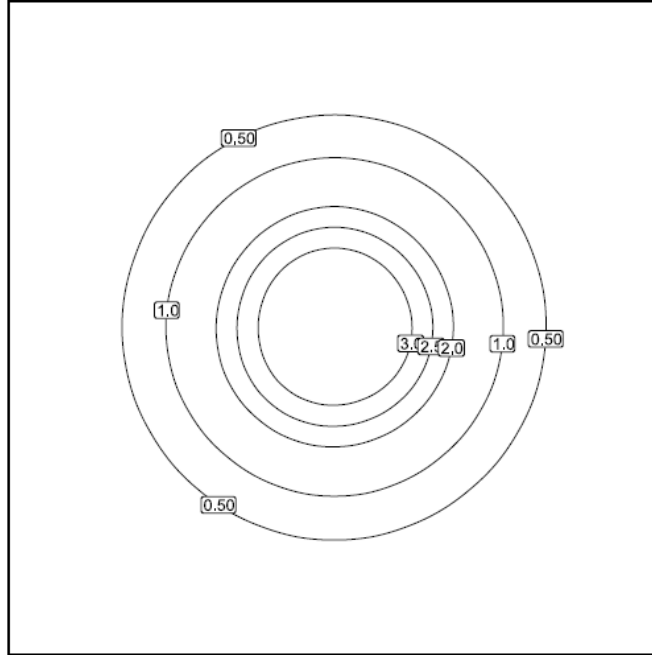
**Isolines (lux)**



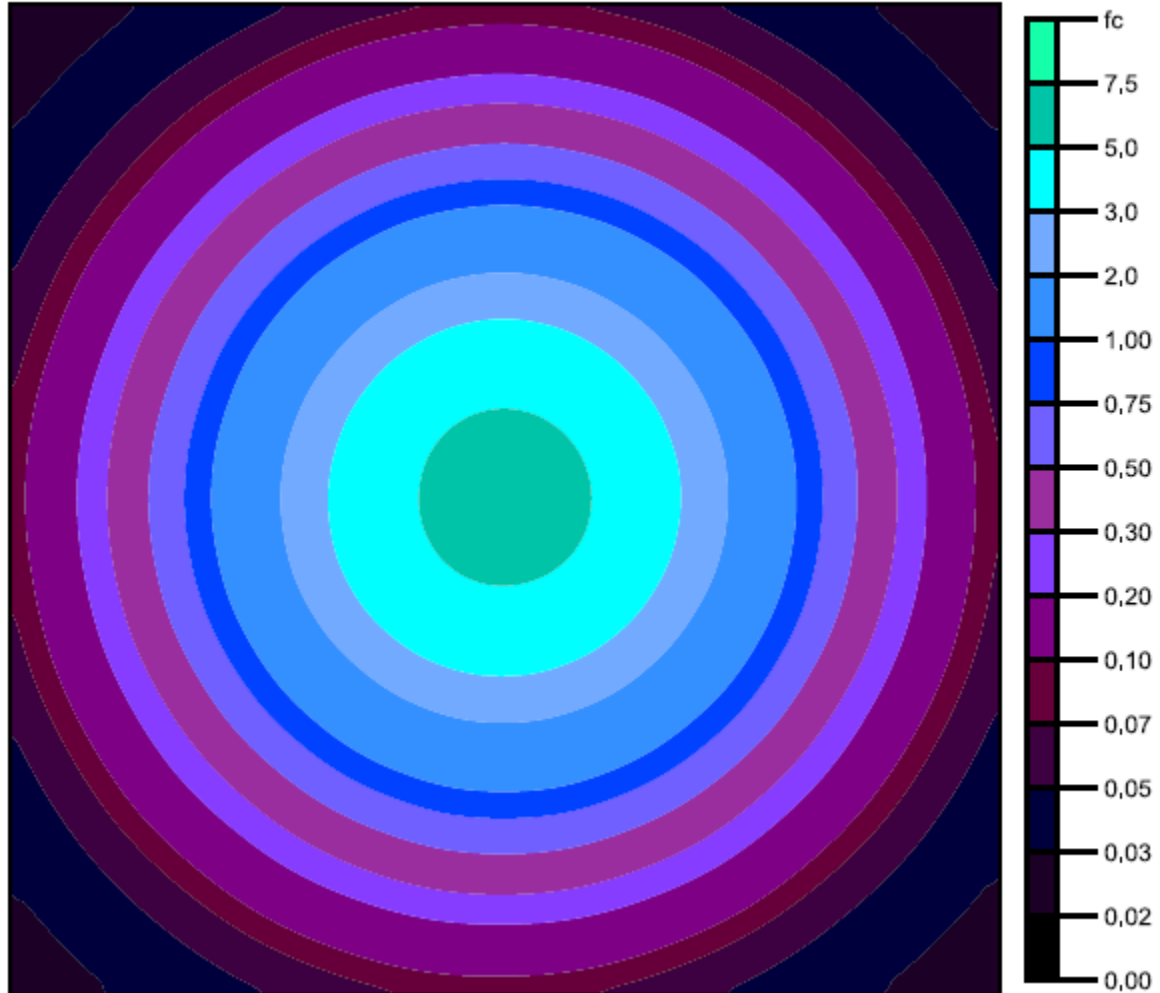
**Isolines [fc]**



Isolines [cd/m<sup>2</sup>]



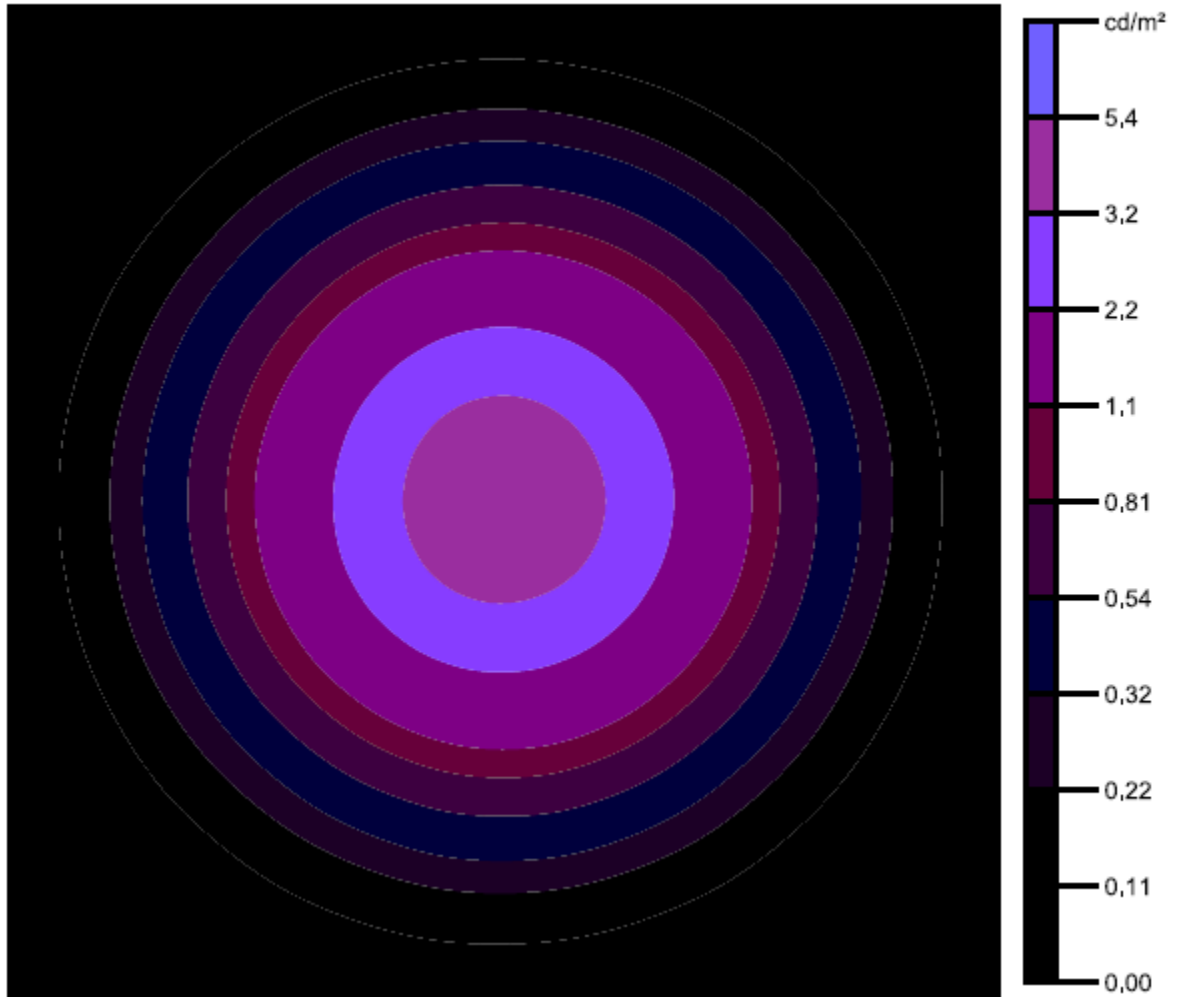
False colors [fc]



## Value grid [fc]

+0.03	+0.06	+0.15	+0.32	+0.41	+0.32	+0.15	+0.06
+0.05	+0.15	+0.54	+1.2	+1.6	+1.2	+0.52	+0.14
+0.07	+0.32	+1.2	+3.1	+4.4	+3.1	+1.2	+0.31
+0.09	+0.41	+1.6	+4.3	<b>(5.8)</b>	+4.2	+1.5	+0.40
+0.07	+0.32	+1.2	+3.1	+4.3	+3.0	+1.1	+0.30
+0.05	+0.16	+0.52	+1.2	+1.5	+1.2	+0.50	+0.14
+0.03	+0.06	+0.16	+0.32	+0.40	+0.31	+0.14	+0.06
<b>(0.02)</b>	+0.03	+0.05	+0.07	+0.08	+0.07	+0.05	+0.03

False colors [cd/m<sup>2</sup>]



Value grid [cd/m<sup>2</sup>]

0.02	0.02	0.03	0.04	0.06	0.08	0.09	0.08	0.06	0.04	0.03	0.02	0.02
0.02	0.04	0.06	0.11	0.17	0.23	0.25	0.23	0.17	0.10	0.06	0.03	0.02
0.03	0.06	0.13	0.25	0.41	0.55	0.62	0.54	0.40	0.24	0.12	0.06	0.03
0.05	0.11	0.25	0.50	0.85	1.2	1.3	1.2	0.84	0.49	0.24	0.10	0.04
0.07	0.18	0.41	0.84	1.5	2.2	2.5	2.2	1.5	0.83	0.40	0.16	0.06
0.09	0.23	0.55	1.2	2.2	3.2	3.6	3.1	2.1	1.2	0.53	0.22	0.08
0.09	0.26	0.62	1.3	2.4	3.6	4.0	3.5	2.4	1.3	0.60	0.24	0.08
0.09	0.23	0.54	1.2	2.2	3.1	3.5	3.1	2.1	1.1	0.52	0.21	0.08
0.07	0.18	0.41	0.83	1.5	2.2	2.4	2.1	1.5	0.81	0.39	0.16	0.06
0.05	0.11	0.25	0.49	0.83	1.1	1.3	1.1	0.81	0.48	0.23	0.10	0.04
0.03	0.06	0.13	0.25	0.40	0.53	0.60	0.53	0.39	0.24	0.12	0.06	0.03
0.02	0.04	0.06	0.11	0.17	0.23	0.25	0.22	0.17	0.10	0.06	0.03	0.02
0.02	0.02	0.03	0.05	0.07	0.08	0.09	0.08	0.06	0.04	0.03	0.02	0.02