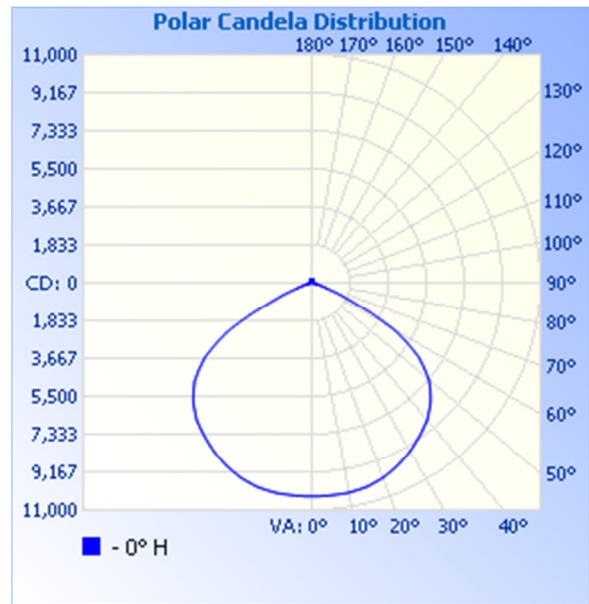


Manufacturer: Second Sun Inc
 Luminaire: Aluminum housing, no lens
 Luminaire Cat: HB2200R
 Lamp: 144 white LEDs
 Ballast Desc: None
 Lamp Output: Total luminaire Lumens: 29120
 Max Candela: 10,336.4 at Horizontal: 0°
 Input Wattage: 239.4
 Luminous Opening: Circular (L: 15.6", W: 15.6")
 Test Lab: Internal Lab
 Photometry : Type C
 CIE Class: Direct

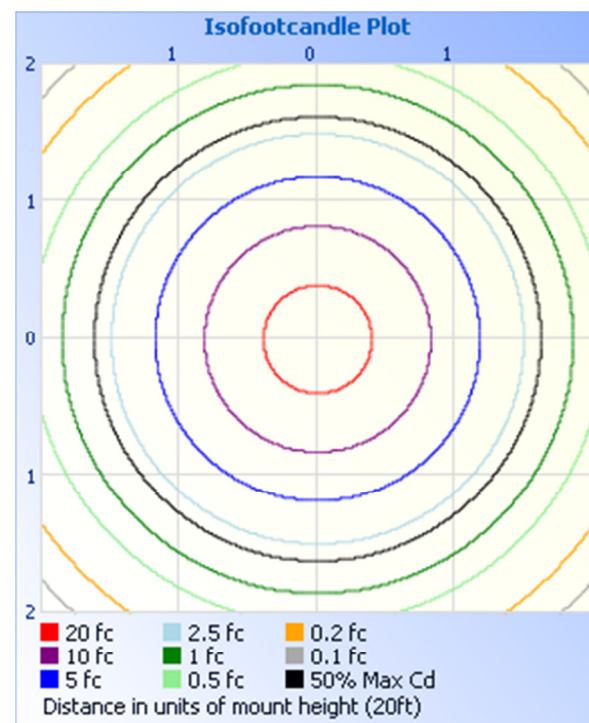
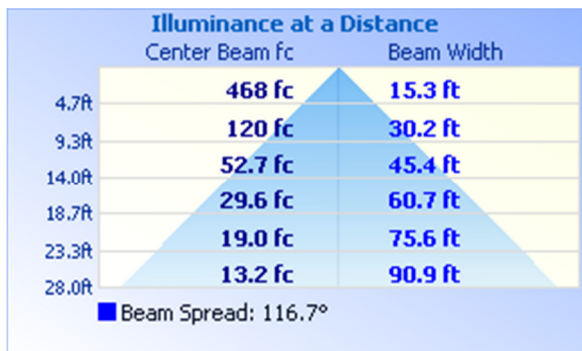


Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-5	247.0	0.8%	90-95	7.0	0%
5-10	738.3	2.5%	95-100	8.2	0%
10-15	1,217.6	4.2%	100-105	11.5	0%
15-20	1,668.4	5.7%	105-110	15.4	0.1%
20-25	2,074.7	7.1%	110-115	20.6	0.1%
25-30	2,426.3	8.3%	115-120	27.1	0.1%
30-35	2,717.3	9.3%	120-125	33.0	0.1%
35-40	2,947.8	10.1%	125-130	37.6	0.1%
40-45	3,095.4	10.6%	130-135	39.8	0.1%
45-50	3,121.3	10.7%	135-140	42.0	0.1%
50-55	2,966.3	10.2%	140-145	42.2	0.1%
55-60	2,518.1	8.6%	145-150	42.2	0.1%
60-65	1,629.1	5.6%	150-155	40.8	0.1%
65-70	728.2	2.5%	155-160	34.9	0.1%
70-75	298.3	1.0%	160-165	27.8	0.1%
75-80	151.8	0.5%	165-170	19.4	0.1%
80-85	81.8	0.3%	170-175	11.3	0%
85-90	27.9	0.1%	175-180	3.6	0%

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	8,372.4	28.8%
0-40	14,037.5	48.2%
0-60	25,738.5	88.4%
60-90	2,917.1	10%
70-100	575.0	2%
90-120	89.8	0.3%
0-90	28,655.6	98.4%
90-180	464.4	1.6%
0-180	29,120.0	100%



IES files available