

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: 08513

Luminaire Tested: **HPSF-X-150**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 08513
Test Lab: LUMINAIRE TESTING LABORATORY, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: HPSF-X-150
Description: FALCON FLOODLIGHT
Light Source: 150 WATT HPS CLEAR ED-17 HOR
Ballast/Driver: -

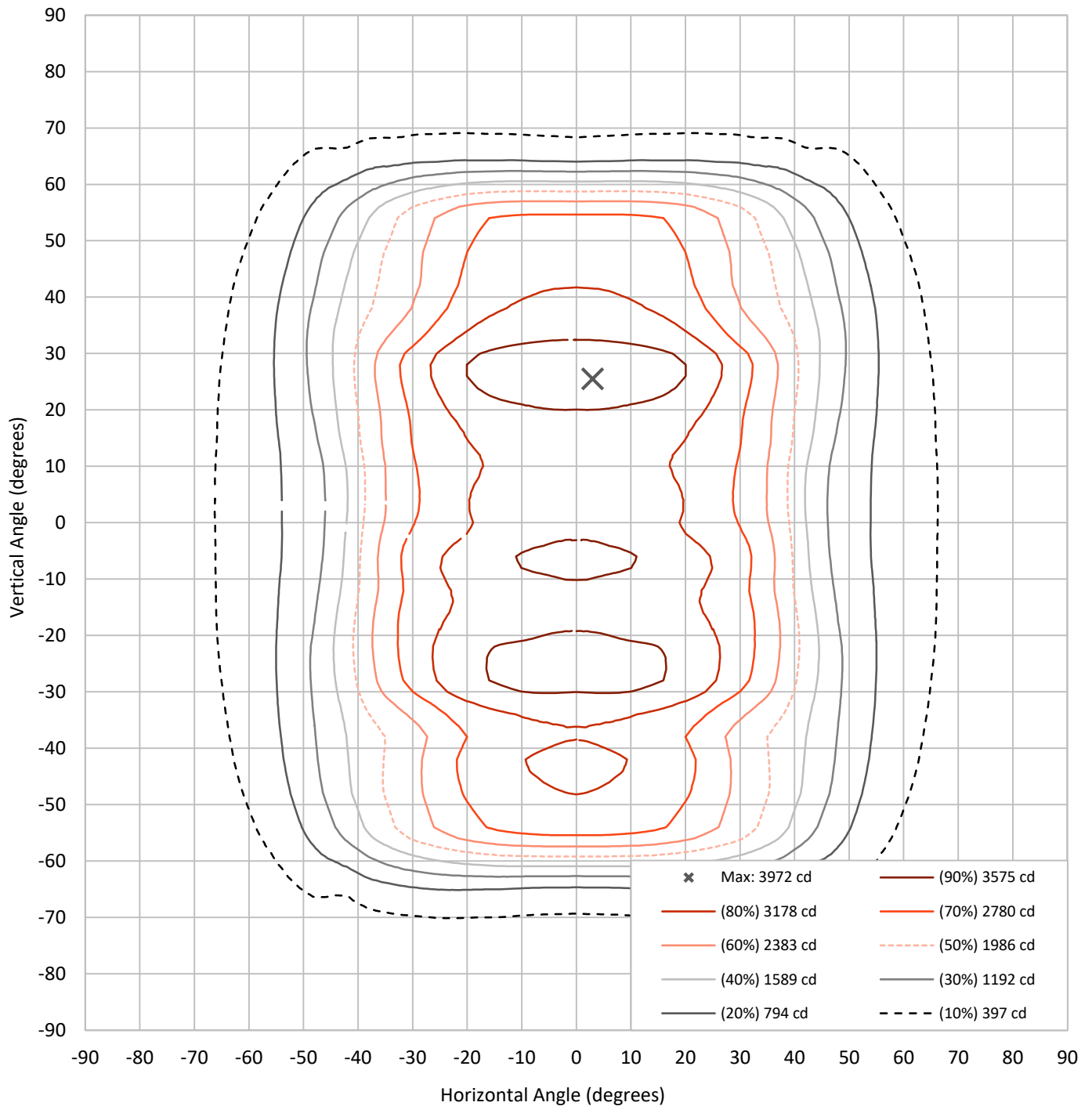
Summary

Lumens per Lamp:	16000 (1 lamp)	NEMA Type:	7H x 7V
Luminaire Lumens:	9479.4 lumens	Max Intensity:	3972 candela
Efficiency:	59.2%	Max Intensity Angle:	3°H x 25.5°V
Efficacy:	63.2 lumens/watt		
Luminous Opening:	Rectangular (W 0.79' x L: 0.54' x H: 0')		
Beam Angle (50%):	81.4°H x 117.9°V	Field Angle (10%):	130.7°H x 137.9°V
Beam Lumens:	7168.8 lumens	Field Lumens:	9195.3 lumens
Beam Efficiency:	75.6%	Field Efficiency:	97.0%
Input Watts (W):	150		
Input Voltage (V):	NR		
Input Current (Ain):	NR		
Voltage Rise (V):	NR		
Power Factor:	NR		
Total Harmonic Distortion (THDi):	NR		
Frequency (hertz):	60		
Stabilization Time:	NR		
Operation Time:	NR		
Ambient Temperature (°C):	NR		
Test Distance:	25 FT		



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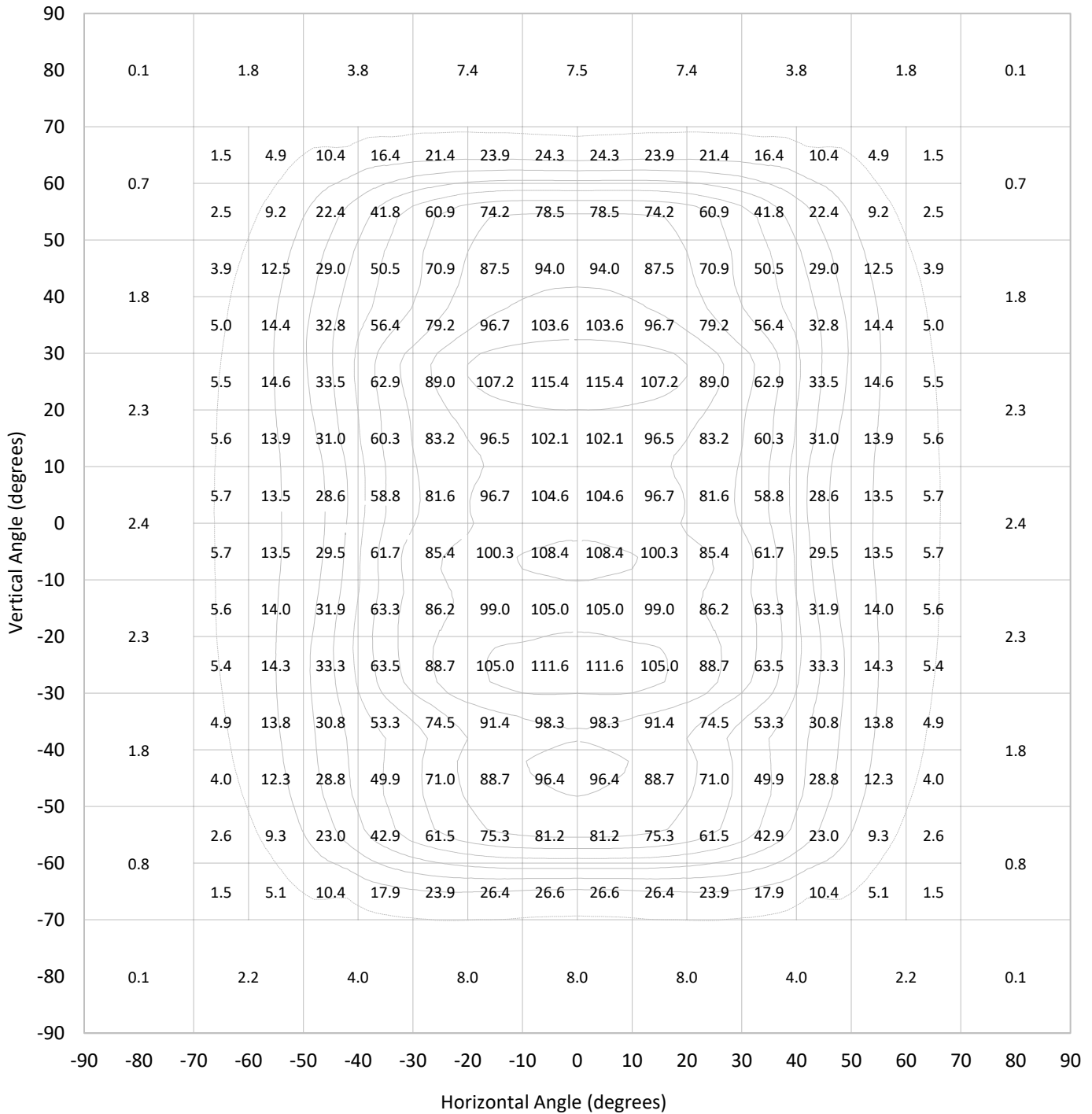
Iso-Candela Plot





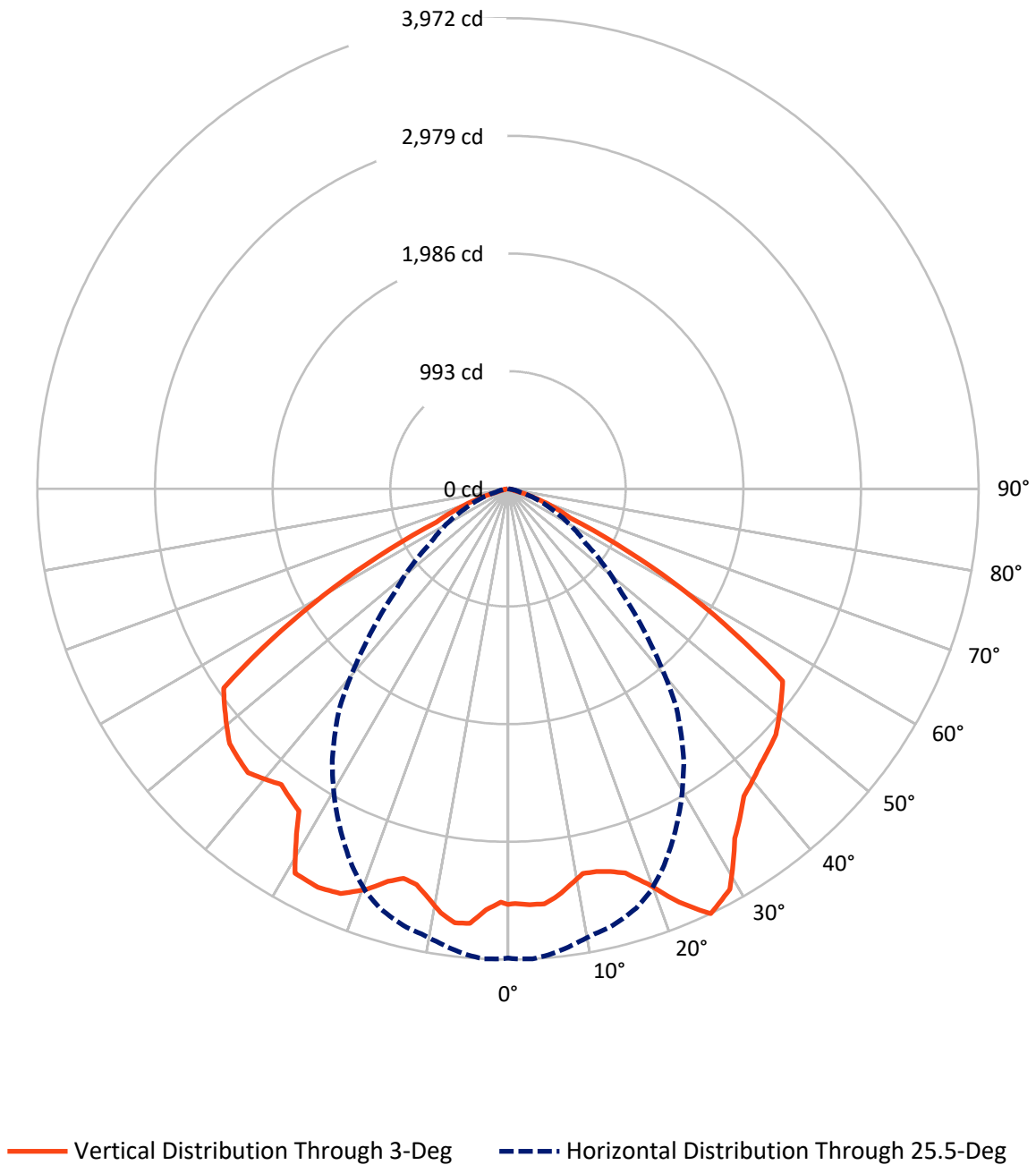
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Lumen Table



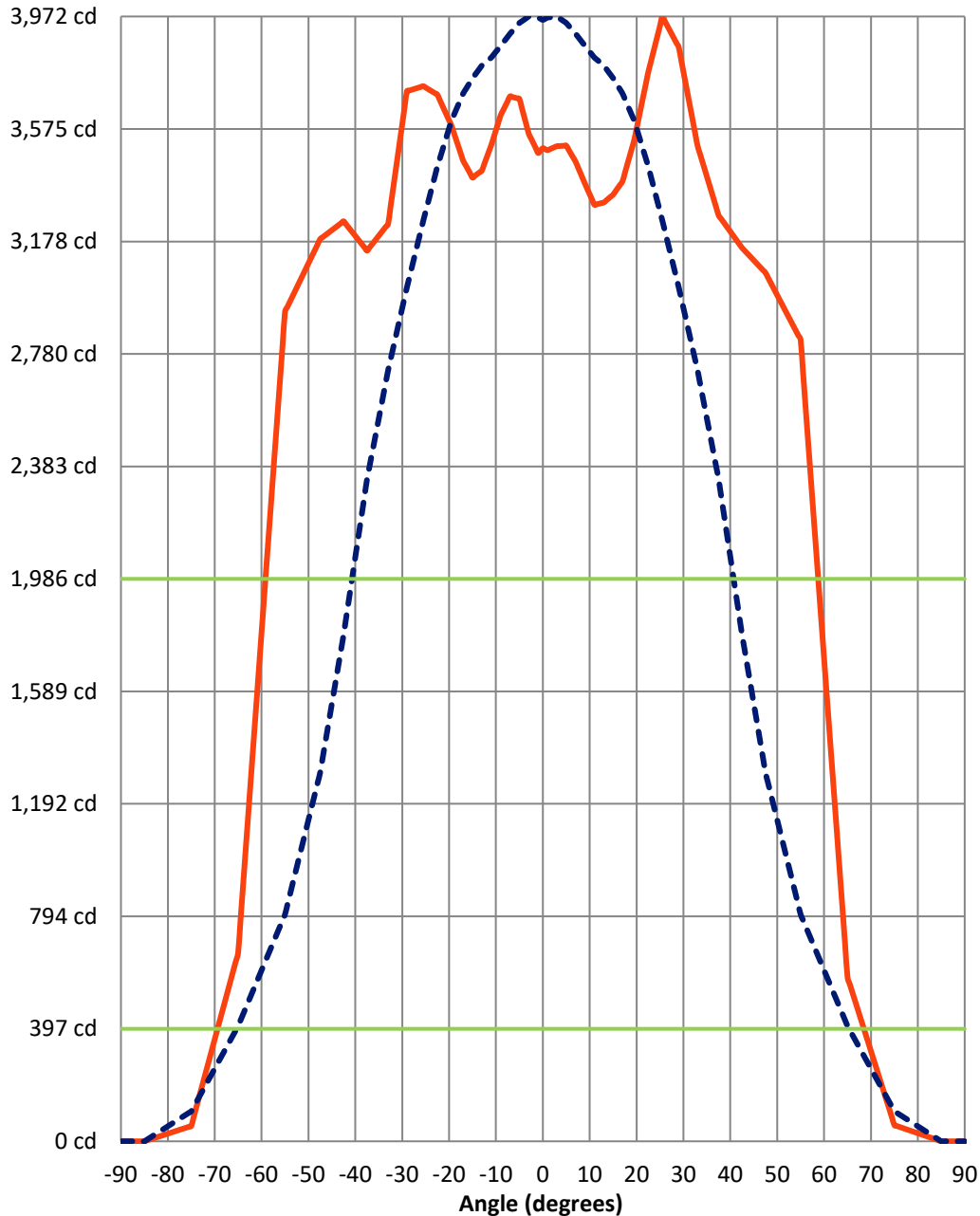
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 81.4°
 V Angle: 117.9°
 Lumens: 7168.8
 Efficiency: 75.6%

Field:
 H Angle: 130.7°
 V Angle: 137.9°
 Lumens: 9195.3
 Efficiency: 97.0%

Spill:
 Lumens: 284.1
 Efficiency: 3.0%

— Vertical Distribution through 3-Deg
 - - - Horizontal Distribution through 25.5-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
75°	52	52	57	62	62	58	62	67	70	66	63
65°	569	572	580	587	587	602	607	618	607	615	626
55°	2830	2830	2830	2835	2832	2832	2819	2802	2779	2735	2662
47.5°	3061	3068	3067	3073	3063	3055	3040	3006	2956	2898	2812
42.5°	3161	3160	3155	3152	3134	3119	3096	3065	3023	2974	2880
37.5°	3271	3269	3270	3273	3257	3235	3220	3189	3147	3100	3011
33°	3516	3518	3516	3508	3492	3474	3451	3424	3385	3339	3254
29°	3878	3879	3863	3856	3847	3829	3800	3769	3726	3682	3601
25.5°	3960	3968	3972	3949	3911	3868	3827	3799	3754	3700	3604
22.5°	3760	3769	3776	3755	3724	3690	3657	3631	3597	3546	3458
19.5°	3533	3536	3536	3526	3511	3487	3471	3451	3422	3382	3319
17°	3385	3386	3390	3388	3381	3363	3359	3350	3324	3286	3225
15°	3343	3352	3343	3347	3339	3321	3308	3307	3291	3261	3200
13°	3323	3336	3315	3307	3306	3295	3282	3261	3236	3203	3153
11°	3319	3331	3307	3287	3283	3264	3264	3241	3216	3184	3123
9°	3399	3402	3381	3364	3343	3314	3294	3261	3228	3182	3112
7°	3478	3481	3459	3437	3411	3380	3365	3326	3277	3227	3149
5°	3533	3529	3516	3495	3463	3447	3427	3386	3326	3264	3170
3°	3547	3536	3514	3505	3495	3467	3427	3400	3349	3291	3189
1°	3505	3502	3500	3471	3469	3454	3412	3364	3319	3257	3169
0°	3519	3511	3507	3452	3452	3443	3402	3347	3311	3252	3154
-1°	3512	3512	3490	3457	3438	3431	3400	3347	3304	3250	3163
-3°	3554	3562	3558	3515	3499	3482	3442	3401	3365	3315	3236
-5°	3664	3666	3681	3652	3617	3613	3554	3500	3474	3440	3363
-7°	3674	3692	3690	3676	3664	3638	3602	3542	3508	3473	3400
-9°	3636	3643	3623	3593	3574	3551	3518	3474	3456	3420	3356
-11°	3530	3535	3518	3495	3480	3453	3416	3392	3385	3358	3297
-13°	3419	3430	3428	3412	3404	3389	3359	3354	3339	3300	3246
-15°	3388	3409	3403	3397	3398	3381	3357	3347	3323	3292	3248
-17°	3467	3481	3463	3456	3444	3416	3405	3399	3379	3344	3288
-19.5°	3595	3595	3587	3567	3544	3523	3512	3504	3494	3456	3387
-22.5°	3698	3695	3696	3680	3662	3639	3629	3616	3597	3560	3487
-25.5°	3723	3726	3726	3726	3720	3709	3688	3654	3615	3568	3490
-29°	3695	3699	3708	3721	3716	3700	3673	3632	3586	3546	3470
-33°	3223	3234	3240	3249	3245	3236	3216	3193	3161	3122	3062
-37.5°	3157	3156	3145	3127	3106	3089	3055	3003	2953	2889	2792
-42.5°	3268	3262	3249	3236	3218	3195	3163	3131	3083	3024	2922
-47.5°	3202	3198	3186	3170	3146	3123	3109	3070	3020	2951	2857
-55°	2930	2931	2929	2930	2916	2898	2875	2844	2801	2735	2648
-65°	662	669	666	668	676	683	700	718	728	730	744
-75°	48	48	54	57	56	57	62	64	63	59	56
-85°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
75°	58	58	42	35	24	7	1	58	32	0	0
65°	633	616	625	568	582	453	471	260	100	21	0
55°	2535	2389	2201	1958	1588	1233	903	505	158	52	0
47.5°	2677	2528	2345	2131	1867	1469	1117	636	247	71	0
42.5°	2727	2551	2352	2158	1930	1579	1191	726	301	84	0
37.5°	2863	2687	2463	2237	1995	1681	1275	775	345	90	0
33°	3117	2940	2710	2473	2187	1777	1327	798	370	98	0
29°	3456	3266	3023	2742	2339	1791	1325	805	391	100	0
25.5°	3442	3251	3015	2723	2338	1789	1302	801	407	106	0
22.5°	3319	3154	2945	2677	2292	1758	1278	791	412	106	0
19.5°	3213	3072	2887	2636	2243	1723	1246	784	421	109	0
17°	3126	3015	2866	2615	2233	1696	1209	775	422	109	0
15°	3113	3008	2860	2613	2230	1665	1176	766	424	111	0
13°	3087	2996	2839	2603	2210	1617	1128	758	428	113	0
11°	3065	2965	2814	2585	2155	1566	1088	757	432	111	0
9°	3049	2943	2790	2568	2133	1539	1075	756	436	112	0
7°	3068	2945	2774	2574	2134	1521	1065	754	437	113	0
5°	3079	2951	2760	2566	2141	1517	1060	753	437	113	0
3°	3088	2966	2760	2558	2137	1511	1048	753	438	115	0
1°	3061	2948	2799	2558	2161	1528	1057	754	440	116	0
0°	3044	2954	2821	2580	2180	1537	1055	753	436	115	0
-1°	3051	2956	2842	2618	2197	1550	1057	751	436	115	0
-3°	3125	3033	2898	2682	2232	1568	1058	750	436	114	0
-5°	3242	3104	2967	2723	2265	1582	1072	752	432	116	0
-7°	3297	3159	3002	2723	2286	1595	1091	750	435	114	0
-9°	3262	3146	3006	2702	2275	1616	1114	758	433	113	0
-11°	3211	3100	2960	2683	2260	1639	1135	763	430	117	0
-13°	3179	3090	2956	2705	2290	1674	1162	767	429	118	0
-15°	3187	3102	2973	2748	2332	1713	1190	768	430	114	0
-17°	3212	3131	2998	2776	2363	1753	1215	772	426	114	0
-19.5°	3289	3171	3011	2773	2384	1789	1241	778	424	111	0
-22.5°	3371	3229	3031	2769	2380	1807	1272	781	415	110	0
-25.5°	3376	3226	3009	2743	2345	1782	1277	781	405	112	0
-29°	3355	3174	2932	2675	2289	1734	1266	776	389	105	0
-33°	2926	2740	2557	2339	2068	1630	1242	765	371	101	0
-37.5°	2646	2481	2278	2077	1864	1570	1210	743	343	94	0
-42.5°	2759	2572	2341	2114	1868	1537	1178	705	305	86	0
-47.5°	2715	2545	2342	2135	1869	1503	1121	635	256	74	0
-55°	2527	2391	2221	1983	1673	1279	930	510	166	54	0
-65°	758	755	729	691	612	430	475	267	106	22	0
-75°	54	54	32	29	24	11	0	84	33	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	90°
90°	0
85°	0
75°	0
65°	0
55°	0
47.5°	0
42.5°	0
37.5°	0
33°	0
29°	0
25.5°	0
22.5°	0
19.5°	0
17°	0
15°	0
13°	0
11°	0
9°	0
7°	0
5°	0
3°	0
1°	0
0°	0
-1°	0
-3°	0
-5°	0
-7°	0
-9°	0
-11°	0
-13°	0
-15°	0
-17°	0
-19.5°	0
-22.5°	0
-25.5°	0
-29°	0
-33°	0
-37.5°	0
-42.5°	0
-47.5°	0
-55°	0
-65°	0
-75°	0
-85°	0
-90°	0

(END OF REPORT)