

Scaled data based on original data using  
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires  
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 769080

Luminaire Tested: **OVX25SXX7E**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-31-95  
Report Number: 769080  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: OVX25SXX7E  
Description: TYPE II 4-WAY ROADWAY LUMINAIRE  
Light Source: 250 watt HPS Clear HOR E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 23000 (1 lamp)  
Luminaire Lumens: 16205.3 lumens  
Efficiency: 70.5%  
Efficacy: 64.8 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Short - Cutoff  
BUG Rating: B3 - U3 - G3

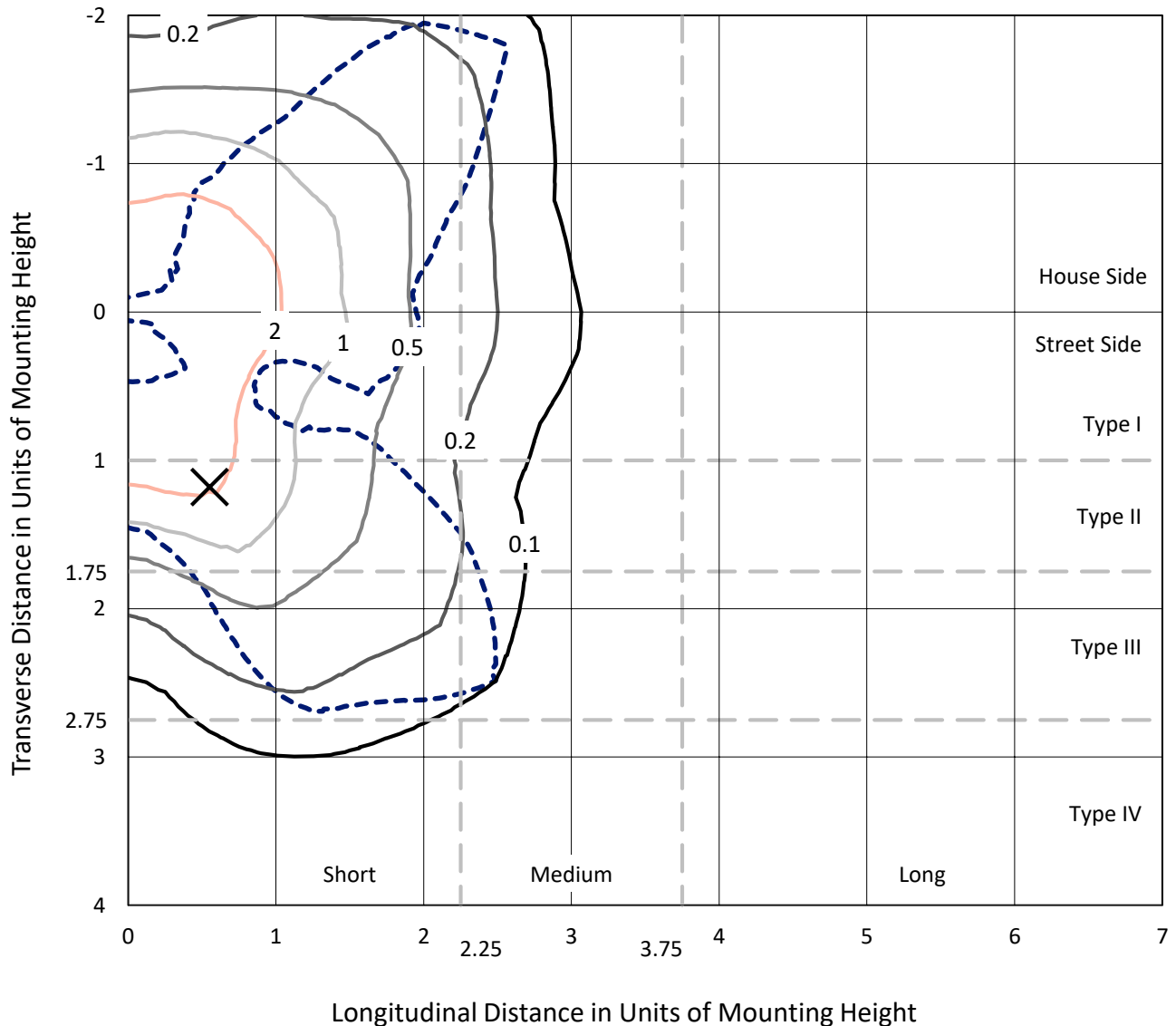
Input Watts (W): 250  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

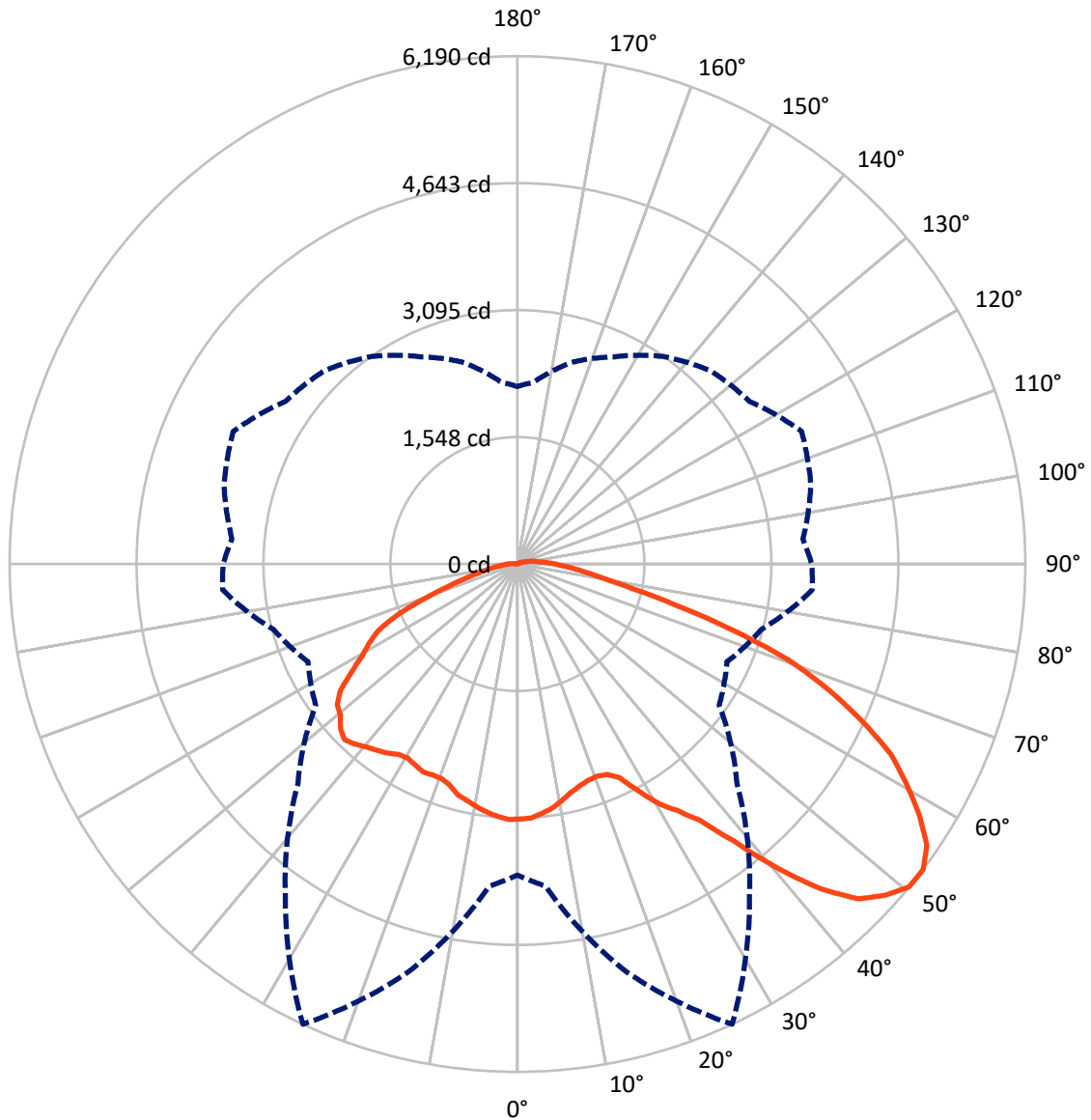
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type III - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral      - - - Horizontal Cone Through 52.5-Deg Vertical

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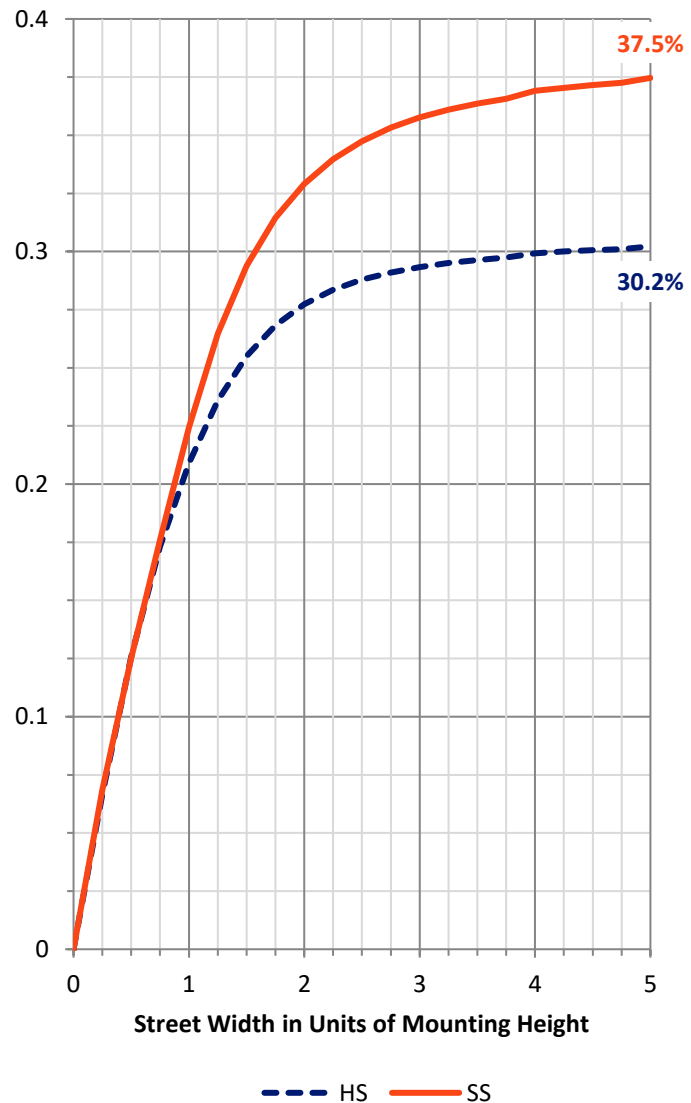
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7041.0	124.1	7165.1
	% Lamp	30.6	0.5	31.2
<b>Street Side</b>	Lumens	8785.8	254.4	9040.2
	% Lamp	38.2	1.1	39.3
<b>Total</b>	Lumens	15826.8	378.5	16205.3
	% Lamp	68.8	1.6	70.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	293.2	1.8	1.3
10°-20°	849.8	5.2	3.7
20°-30°	1430.9	8.8	6.2
30°-40°	2142.0	13.2	9.3
40°-50°	2885.9	17.8	12.5
50°-60°	3127.9	19.3	13.6
60°-70°	2846.8	17.6	12.4
70°-80°	1653.8	10.2	7.2
80°-90°	596.5	3.7	2.6
90°-100°	235.8	1.5	1.0
100°-110°	108.5	0.7	0.5
110°-120°	39.0	0.2	0.2
120°-130°	8.5	0.1	0.0
130°-140°	0.5	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	15826.8	97.7	68.8
0°-180°	16205.3	100.0	70.5

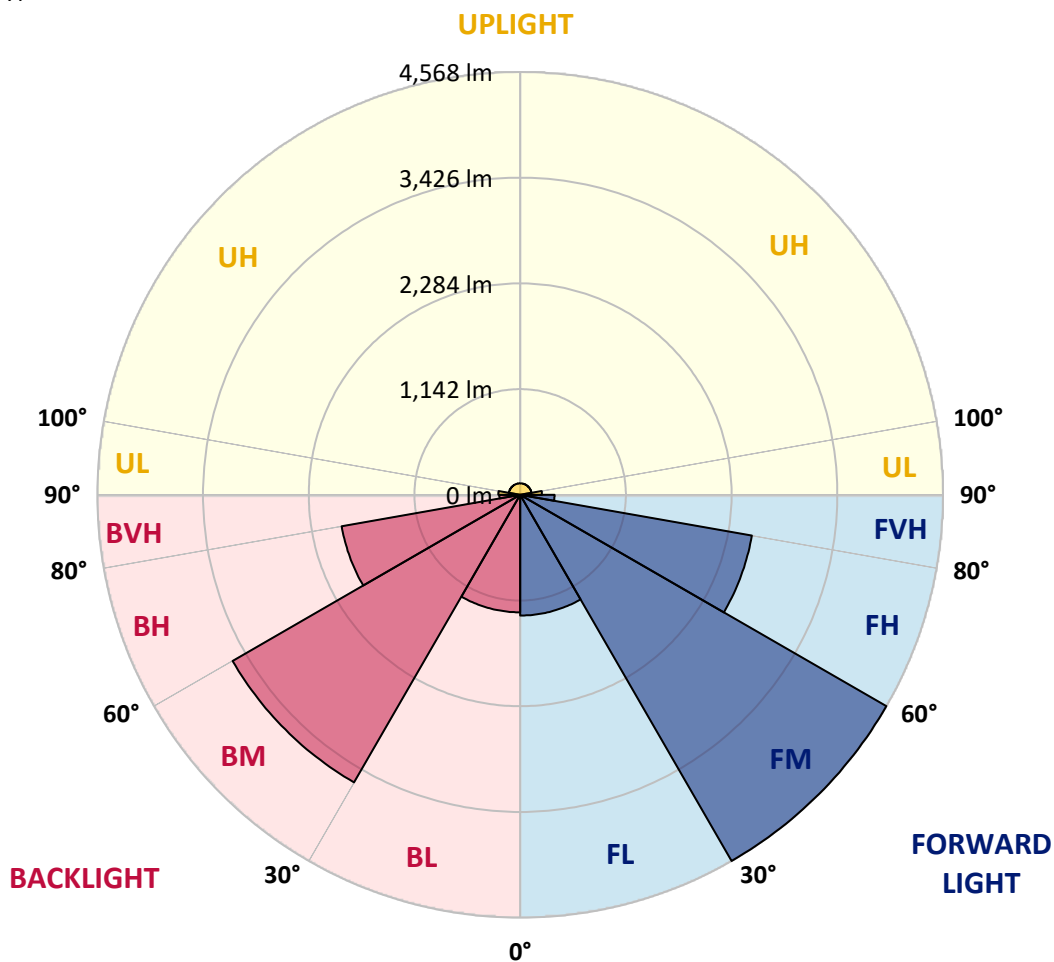


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1304.3	5.7			
FM	(30°-60°)	4568.2	19.9			
FH	(60°-80°)	2541.9	11.1			G2/5000
FVH	(80°-90°)	371.4	1.6			G3/500
BL	(0°-30°)	1269.6	5.5	B3/2500		
BM	(30°-60°)	3587.6	15.6	B3/5000		
BH	(60°-80°)	1958.7	8.5	B3/2500		G3/2500
BVH	(80°-90°)	225.0	1.0			G3/500
UL	(90°-100°)	235.8	1.0		U3/500	
UH	(100°-180°)	124.1	0.5		U3/500	
Trapped Light		6794.7	29.5			

**BUG Rating: B3-U3-G3**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3108	3108	3108	3108	3108	3108	3108	3108	3108	3108	3108
2.5°	3093	3104	3093	3101	3101	3104	3104	3108	3112	3112	3112
5°	3039	3039	3047	3055	3062	3066	3081	3097	3112	3112	3116
7.5°	2985	2993	2997	3008	3012	3039	3066	3093	3116	3120	3124
10°	2916	2924	2928	2939	2966	3005	3058	3093	3112	3124	3124
12.5°	2840	2847	2843	2863	2905	2966	3039	3104	3135	3127	3131
15°	2794	2805	2778	2813	2867	2962	3070	3147	3185	3185	3173
17.5°	2778	2782	2755	2774	2832	2947	3070	3200	3266	3231	3212
20°	2809	2801	2763	2763	2813	2939	3097	3262	3342	3304	3273
22.5°	2863	2847	2817	2786	2809	2924	3108	3327	3434	3350	3292
25°	2993	2966	2939	2882	2855	2913	3131	3400	3546	3419	3312
27.5°	3216	3181	3162	3127	2989	2989	3193	3496	3715	3569	3419
30°	3469	3411	3431	3388	3216	3189	3292	3596	3834	3634	3461
32.5°	3692	3680	3764	3584	3484	3350	3381	3603	3807	3626	3457
35°	3983	3999	4152	3837	3776	3477	3446	3565	3730	3676	3538
37.5°	4329	4386	4609	4282	4033	3584	3469	3450	3645	3722	3649
40°	4682	4793	5169	4873	4336	3703	3396	3285	3530	3738	3703
42.5°	4989	5084	5675	5407	4666	3730	3239	3112	3400	3695	3745
45°	5073	5131	5940	5821	4912	3680	3078	2962	3239	3630	3753
47.5°	4812	4893	5886	6032	5023	3649	2985	2828	3093	3573	3695
50°	4344	4490	5603	6186	5015	3657	2962	2797	3062	3580	3642
52.5°	3791	3941	5150	6190	4931	3784	3001	2817	3078	3607	3588
55°	3177	3319	4555	6055	4950	3972	3039	2874	3131	3649	3523
57.5°	2533	2675	3872	5775	4985	4129	3181	2909	3127	3642	3461
60°	1980	2130	3346	5449	4912	4225	3350	2951	3124	3530	3362
62.5°	1612	1765	2978	5111	4735	4259	3511	2867	2851	3166	3097
65°	1358	1493	2717	4616	4447	4313	3573	2575	2510	2797	2797
67.5°	1182	1305	2513	4091	3995	4359	3469	2253	2164	2483	2517
70°	1097	1178	2279	3507	3557	4210	3216	1892	1853	2222	2268
72.5°	998	1040	1980	2725	3085	3661	2606	1558	1639	2034	2041
75°	875	886	1554	1980	2464	2728	1903	1293	1477	1827	1788
77.5°	714	721	1121	1412	1807	1850	1393	1094	1320	1569	1489
80°	576	564	748	1067	1335	1286	1063	921	1132	1274	1186
82.5°	499	484	591	848	1013	959	837	779	929	1002	932
85°	430	422	487	675	767	737	668	641	729	764	714
87.5°	368	361	414	537	595	576	537	522	556	579	545
90°	307	307	345	437	464	464	441	426	434	437	418
95°	200	200	230	269	284	303	295	284	269	265	265
105°	77	81	88	100	123	142	146	138	134	146	146
115°	31	23	23	27	42	54	54	58	65	73	77
125°	0	0	0	0	0	0	0	4	12	15	15
135°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0





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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3108	3108	3108	3108	3108	3108	3108	3108	3108	3108
2.5°	3116	3116	3116	3112	3112	3112	3116	3116	3116	3116
5°	3116	3116	3116	3104	3097	3093	3085	3081	3089	3085
7.5°	3131	3120	3116	3097	3078	3066	3047	3039	3035	3032
10°	3131	3124	3104	3085	3055	3032	3001	2989	2985	2978
12.5°	3135	3112	3101	3085	3055	3005	2947	2920	2909	2909
15°	3173	3124	3093	3078	3074	2982	2905	2847	2840	2840
17.5°	3208	3143	3093	3055	3028	2943	2817	2767	2790	2786
20°	3239	3170	3120	3089	2993	2905	2774	2755	2809	2824
22.5°	3231	3147	3127	3124	3020	2909	2771	2790	2882	2901
25°	3216	3104	3116	3124	3097	2939	2782	2809	2909	2947
27.5°	3266	3066	3078	3135	3197	2959	2748	2767	2867	2893
30°	3292	3039	3043	3258	3269	2970	2717	2709	2748	2763
32.5°	3277	3008	3074	3365	3331	3005	2736	2644	2583	2571
35°	3365	3047	3120	3342	3396	3097	2797	2594	2433	2410
37.5°	3507	3258	3250	3338	3496	3197	2843	2598	2379	2348
40°	3592	3480	3423	3465	3507	3220	2890	2652	2379	2348
42.5°	3695	3657	3565	3580	3438	3166	2955	2732	2406	2348
45°	3780	3803	3745	3473	3377	3116	3005	2782	2418	2348
47.5°	3711	3849	3860	3415	3315	3097	2947	2767	2391	2318
50°	3599	3822	3883	3450	3281	3120	2836	2709	2345	2279
52.5°	3492	3703	3822	3454	3331	3089	2786	2544	2222	2164
55°	3381	3603	3814	3434	3373	3047	2648	2291	2015	1926
57.5°	3312	3565	3845	3461	3312	2974	2402	1992	1715	1619
60°	3258	3569	3929	3550	3346	2843	2191	1642	1381	1328
62.5°	3062	3461	3991	3707	3373	2763	2038	1366	1082	1105
65°	2778	3143	3841	3857	3442	2529	1876	1159	856	883
67.5°	2483	2705	3415	3845	3385	2206	1589	986	683	668
70°	2195	2214	2859	3561	3078	1842	1216	821	545	507
72.5°	1915	1738	2256	3016	2583	1470	894	656	434	407
75°	1612	1328	1685	2325	1988	1121	660	499	353	322
77.5°	1305	1017	1232	1681	1431	829	491	368	288	261
80°	1036	790	902	1167	990	602	368	265	223	215
82.5°	817	629	668	794	675	426	276	192	161	161
85°	637	503	503	545	457	303	207	142	107	107
87.5°	499	403	388	391	326	226	157	107	77	77
90°	395	330	303	295	242	173	127	81	61	61
95°	253	223	188	169	134	96	61	38	31	23
105°	146	123	92	69	46	19	8	0	0	0
115°	69	54	35	12	0	0	0	0	0	0
125°	12	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)