

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: 767491

Luminaire Tested: **VAN25SXX22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 767491
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VAN25SXX22
Description: 250W HPS DUSK-TO-DAWN
Light Source: 250W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 27500 (1 lamp)
Luminaire Lumens: 22258.6 lumens
Efficiency: 80.9%
Efficacy: 89.0 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B4 - U5 - G5

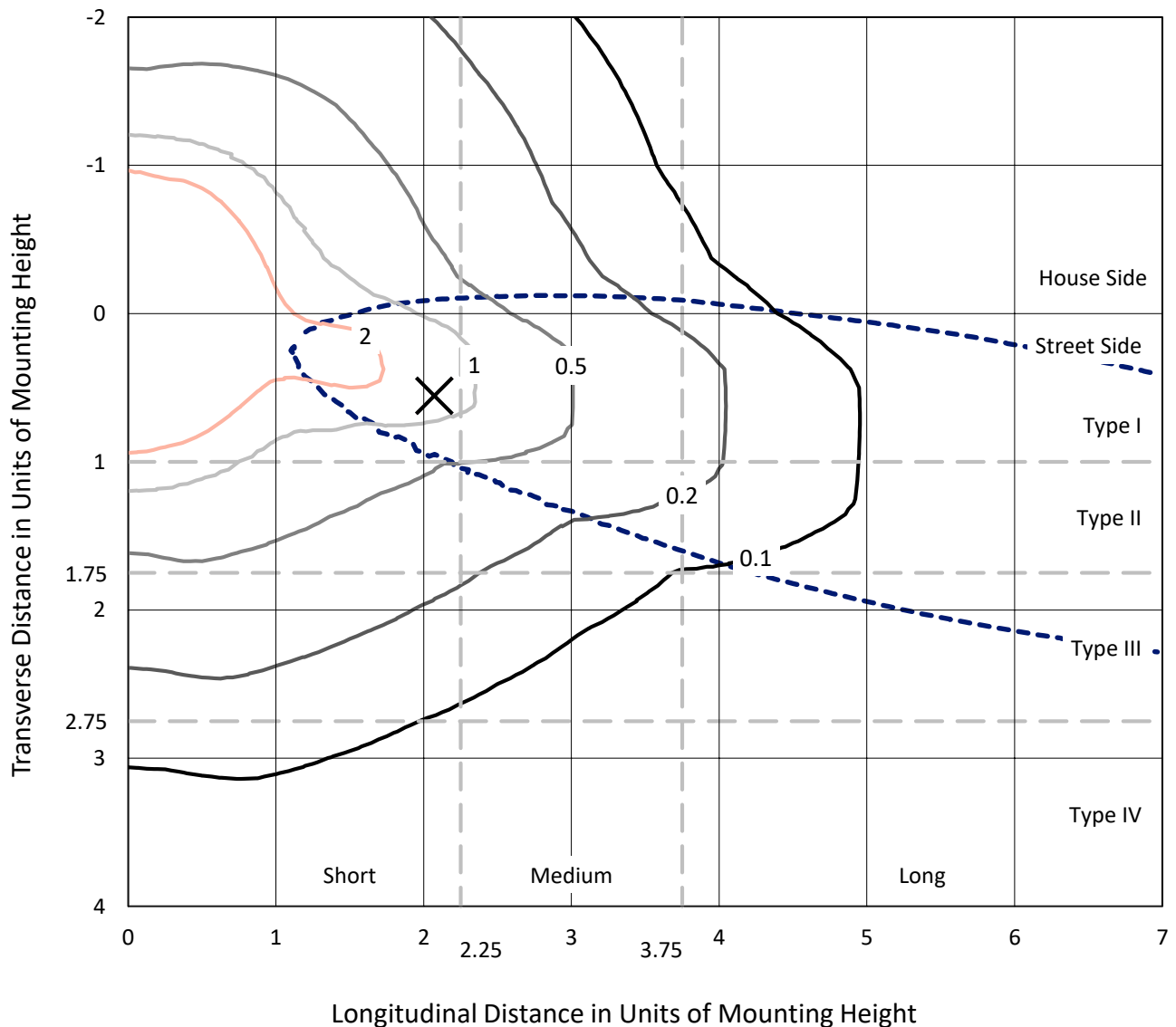
Input Watts (W): 250
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

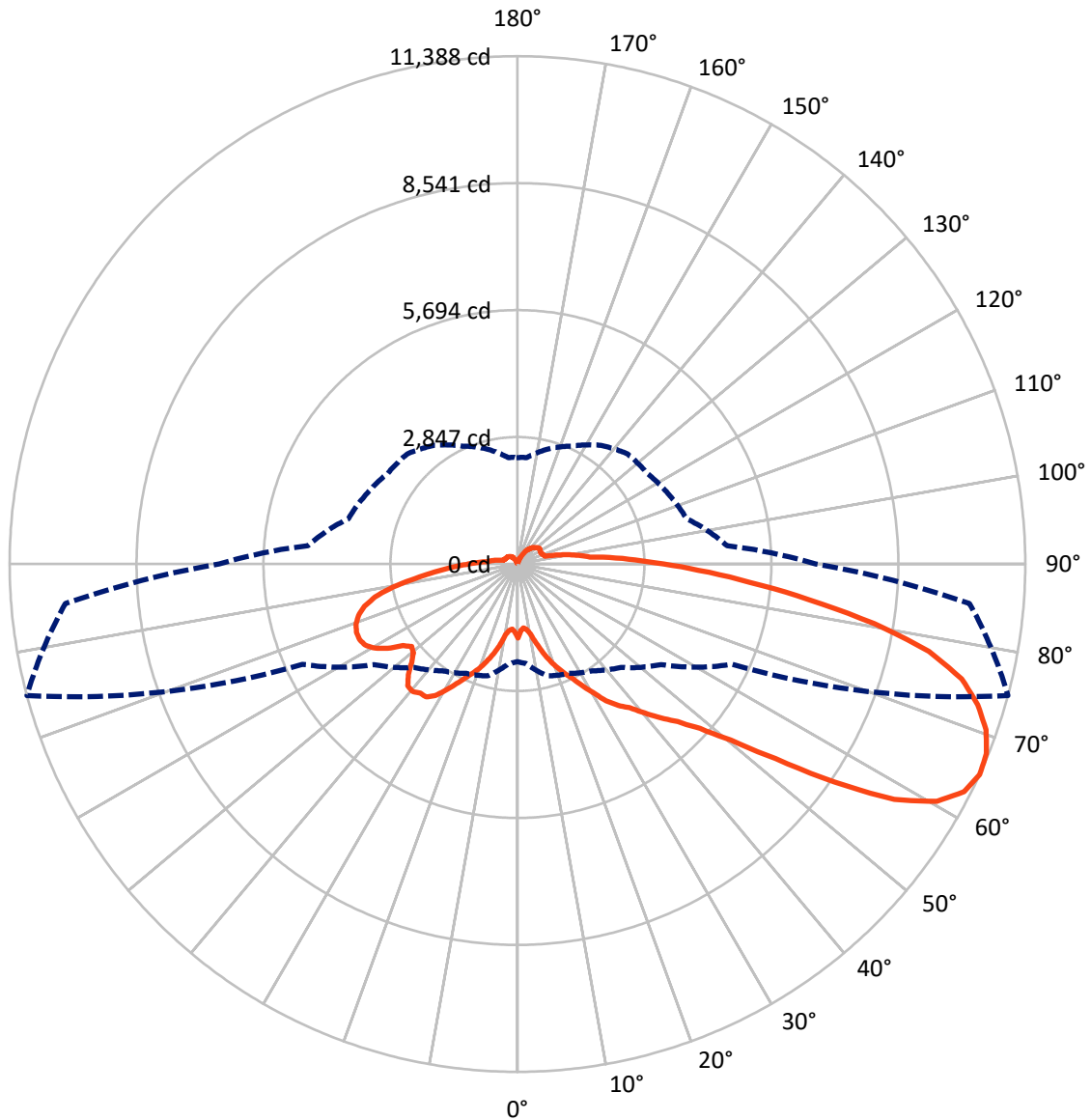
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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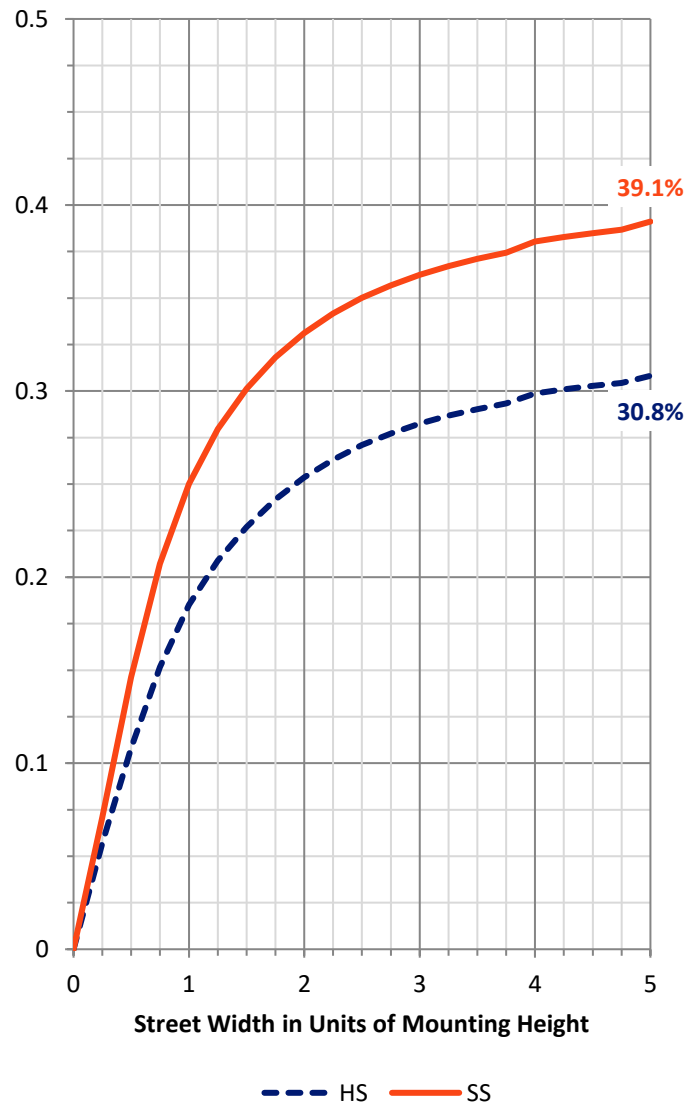
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8845.5	885.0	9730.4
	% Lamp	32.2	3.2	35.4
Street Side	Lumens	11238.0	1290.2	12528.2
	% Lamp	40.9	4.7	45.6
Total	Lumens	20083.4	2175.2	22258.6
	% Lamp	73.0	7.9	80.9

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	143.1	0.6	0.5
10°-20°	572.6	2.6	2.1
20°-30°	1271.4	5.7	4.6
30°-40°	2177.1	9.8	7.9
40°-50°	2683.2	12.1	9.8
50°-60°	3059.8	13.7	11.1
60°-70°	4074.3	18.3	14.8
70°-80°	3894.2	17.5	14.2
80°-90°	2207.7	9.9	8.0
90°-100°	888.3	4.0	3.2
100°-110°	457.7	2.1	1.7
110°-120°	302.0	1.4	1.1
120°-130°	244.0	1.1	0.9
130°-140°	178.7	0.8	0.6
140°-150°	104.6	0.5	0.4
150°-160°	39.6	0.2	0.1
160°-170°	6.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	20083.4	90.2	73.0
0°-180°	22258.6	100.0	80.9



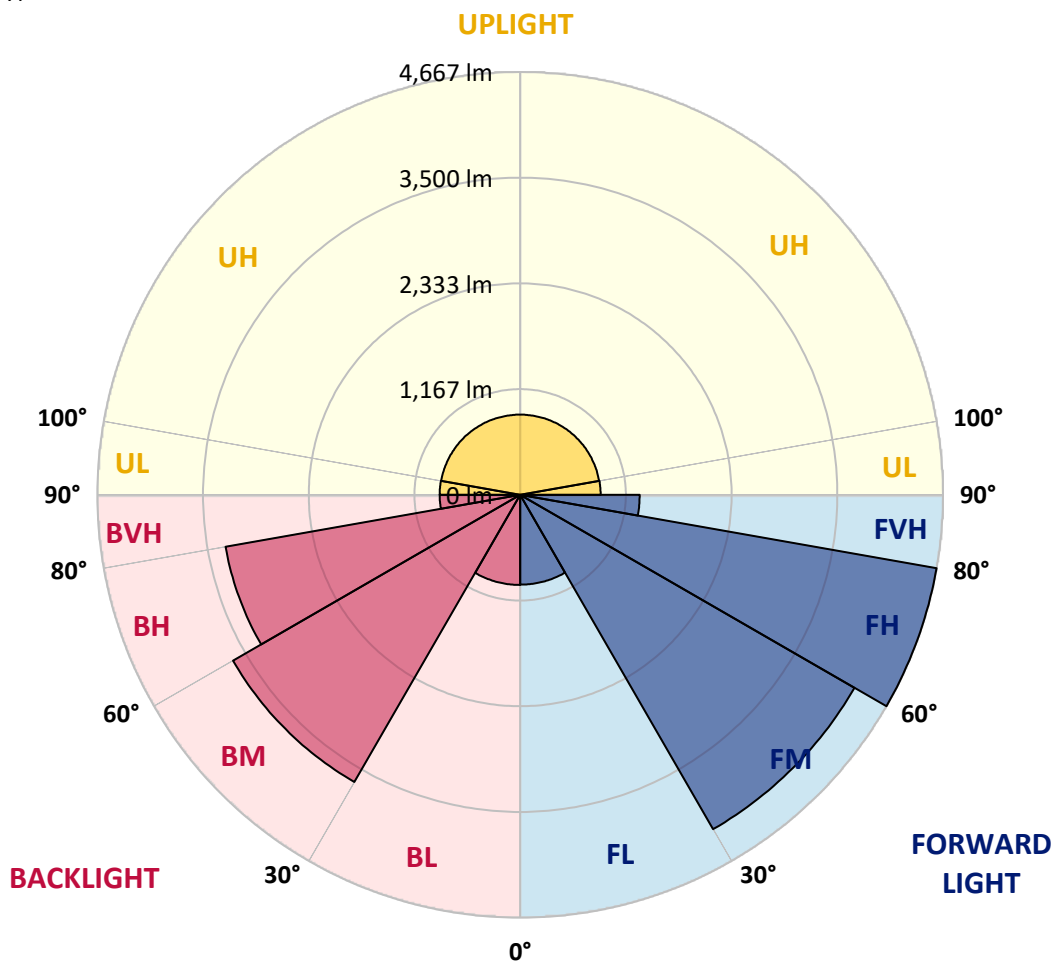
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	991.9	3.6			
FM	(30°-60°)	4260.5	15.5			
FH	(60°-80°)	4666.8	17.0			G2/5000
FVH	(80°-90°)	1318.9	4.8			G5
BL	(0°-30°)	995.2	3.6	B2/1000		
BM	(30°-60°)	3659.7	13.3	B3/5000		
BH	(60°-80°)	3301.8	12.0	B4/5000		G4/5000
BVH	(80°-90°)	888.8	3.2			G5
UL	(90°-100°)	888.3	3.2		U4/1000	
UH	(100°-180°)	885.0	3.2		U4/1000	
Trapped Light		5241.4	19.1			

BUG Rating: B4-U5-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1660	1660	1660	1660	1660	1660	1660	1660	1660	1660	1660
2.5°	1464	1468	1464	1464	1468	1478	1478	1482	1492	1501	1506
5°	1408	1408	1403	1408	1417	1422	1431	1431	1436	1445	1450
7.5°	1426	1426	1426	1440	1450	1454	1459	1468	1482	1487	1487
10°	1473	1482	1492	1529	1543	1543	1552	1557	1590	1594	1604
12.5°	1734	1739	1743	1767	1790	1785	1767	1767	1790	1799	1813
15°	1911	1921	1925	1953	1977	1981	1977	2000	2014	2018	2018
17.5°	2060	2060	2070	2116	2154	2177	2191	2214	2238	2233	2224
20°	2256	2261	2261	2322	2359	2377	2401	2433	2447	2438	2429
22.5°	2405	2415	2405	2485	2517	2531	2573	2620	2643	2629	2615
25°	2545	2559	2541	2648	2676	2704	2755	2820	2834	2816	2806
27.5°	2741	2750	2732	2844	2876	2904	2974	3058	3081	3063	3039
30°	2955	2965	2937	3063	3105	3142	3212	3310	3347	3328	3291
32.5°	3170	3170	3133	3282	3319	3361	3445	3580	3655	3613	3562
35°	3282	3291	3258	3398	3440	3492	3594	3762	3897	3823	3748
37.5°	3300	3310	3300	3408	3450	3515	3645	3855	4088	3981	3855
40°	3394	3394	3324	3450	3501	3580	3743	3990	4391	4247	4056
42.5°	3310	3319	3235	3384	3422	3520	3697	4028	4713	4485	4163
45°	3077	3077	3025	3156	3198	3310	3520	3948	5039	4671	4177
47.5°	2685	2680	2694	2816	2890	3021	3254	3823	5510	4946	4191
50°	2322	2326	2405	2513	2611	2764	3044	3785	6205	5403	4307
52.5°	2070	2084	2214	2326	2452	2634	2965	3883	7254	6163	4606
55°	2032	2056	2238	2359	2513	2718	3105	4214	8633	7272	5137
57.5°	2126	2158	2396	2513	2690	2942	3408	4690	9962	8475	5804
60°	2191	2228	2517	2634	2830	3114	3659	5030	10806	9351	6279
62.5°	2210	2252	2573	2690	2900	3226	3832	5226	11239	9897	6564
65°	2191	2238	2597	2708	2923	3277	3930	5319	11388	10176	6685
67.5°	2172	2219	2587	2690	2909	3282	3962	5333	11342	10237	6689
70°	2126	2177	2545	2648	2858	3258	3920	5263	11146	10120	6606
72.5°	2070	2121	2480	2578	2769	3193	3832	5114	10792	9855	6428
75°	1967	2014	2368	2461	2634	3053	3645	4867	10288	9407	6130
77.5°	1827	1865	2177	2261	2424	2811	3356	4461	9431	8661	5650
80°	1632	1660	1911	1981	2107	2452	2900	3841	8111	7403	4876
82.5°	1398	1422	1627	1683	1781	2060	2405	3170	6587	5990	3944
85°	1184	1207	1371	1417	1492	1725	1986	2569	5235	4713	3151
87.5°	998	1012	1147	1179	1235	1412	1604	2037	4070	3650	2452
90°	839	848	946	974	1016	1147	1287	1594	3077	2704	1865
95°	587	592	643	662	676	732	792	942	1632	1417	1021
105°	326	326	345	350	350	345	354	392	643	573	443
115°	270	270	284	289	289	284	298	340	578	499	387
125°	242	242	252	252	252	256	280	350	606	503	392
135°	196	196	200	205	210	219	238	317	522	434	345
145°	140	135	140	140	145	154	177	266	378	317	270
155°	65	65	65	65	65	70	103	145	168	145	131
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°	1660	1660	1660	1660	1660	1660	1660	1660	1660	1660
2.5°	1510	1529	1538	1548	1557	1562	1566	1557	1562	1566
5°	1454	1464	1478	1478	1501	1496	1492	1487	1487	1482
7.5°	1492	1496	1506	1492	1520	1524	1510	1506	1482	1492
10°	1604	1599	1599	1571	1590	1576	1548	1515	1524	1529
12.5°	1818	1832	1827	1818	1841	1841	1781	1729	1762	1781
15°	2032	2051	2051	2037	2056	2060	2000	1907	1935	1967
17.5°	2238	2247	2242	2224	2224	2228	2163	2051	2056	2079
20°	2438	2447	2429	2405	2401	2405	2345	2205	2219	2247
22.5°	2625	2625	2611	2573	2569	2578	2517	2363	2382	2405
25°	2802	2797	2778	2741	2732	2732	2676	2499	2494	2555
27.5°	3035	3011	2993	2946	2937	2928	2876	2671	2666	2750
30°	3291	3249	3226	3165	3156	3142	3091	2862	2876	2965
32.5°	3543	3478	3440	3389	3370	3366	3291	3049	3081	3170
35°	3706	3617	3575	3529	3506	3510	3454	3184	3217	3291
37.5°	3757	3622	3562	3520	3492	3501	3464	3165	3207	3310
40°	3897	3701	3631	3575	3580	3617	3575	3263	3384	3562
42.5°	3934	3673	3571	3538	3557	3617	3571	3300	3412	3543
45°	3809	3487	3356	3356	3375	3436	3375	3137	3203	3263
47.5°	3650	3245	3095	3072	3095	3109	3030	2816	2760	2816
50°	3543	3067	2872	2816	2820	2783	2685	2485	2349	2368
52.5°	3562	3007	2778	2685	2666	2578	2452	2252	2102	2107
55°	3785	3147	2900	2750	2718	2592	2429	2242	2074	2079
57.5°	4168	3473	3221	3053	3011	2825	2606	2391	2196	2191
60°	4461	3715	3482	3300	3249	3039	2769	2536	2308	2312
62.5°	4638	3869	3650	3468	3408	3179	2876	2620	2373	2368
65°	4718	3925	3729	3548	3492	3249	2918	2671	2396	2387
67.5°	4736	3920	3748	3566	3524	3277	2928	2676	2340	2312
70°	4704	3865	3711	3534	3506	3254	2904	2652	2144	2070
72.5°	4610	3748	3622	3445	3440	3193	2848	2573	1827	1697
75°	4405	3557	3445	3277	3291	3053	2722	2401	1389	1193
77.5°	4088	3277	3175	3021	3053	2839	2531	2158	1012	839
80°	3538	2839	2741	2625	2643	2461	2196	1776	788	699
82.5°	2876	2308	2228	2126	2163	2000	1790	1398	601	569
85°	2294	1865	1799	1720	1748	1608	1450	1100	480	485
87.5°	1799	1478	1422	1371	1380	1282	1147	858	420	420
90°	1385	1147	1114	1072	1082	1002	895	653	340	354
95°	792	681	676	653	662	620	541	387	233	261
105°	359	331	336	336	340	317	266	191	121	158
115°	312	289	284	284	284	261	210	149	107	131
125°	312	275	266	266	256	233	182	135	98	121
135°	284	242	219	219	210	191	149	112	79	103
145°	233	186	163	158	149	131	103	79	51	75
155°	121	93	84	79	75	70	51	42	14	37
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)