

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: STREETWORKS

Report Number: P158280

Luminaire Tested: **VST-E10-LED-E-U-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158280
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33712)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E10-LED-E-U-SL2
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (210) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30087.7 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 247.7
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



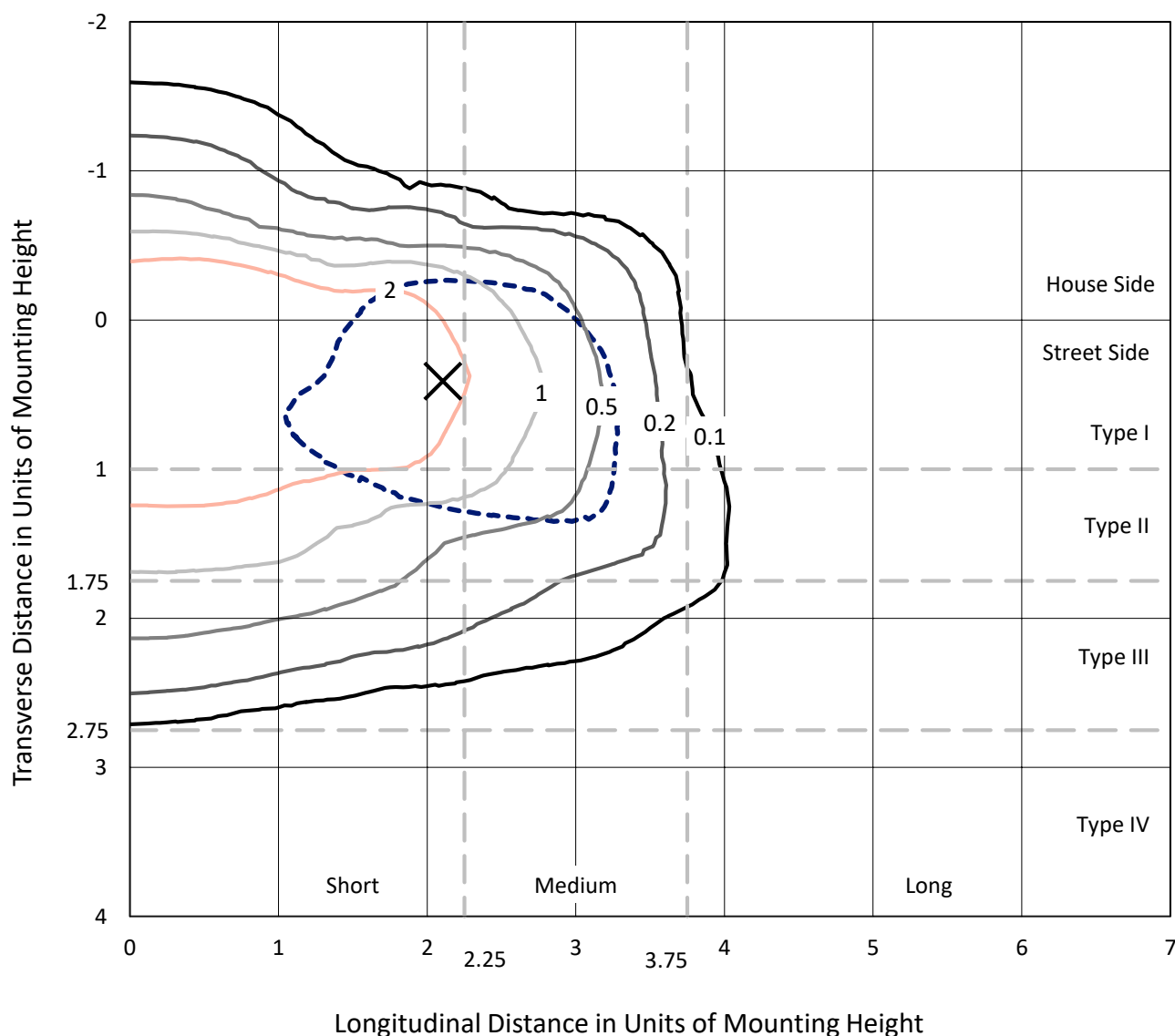
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

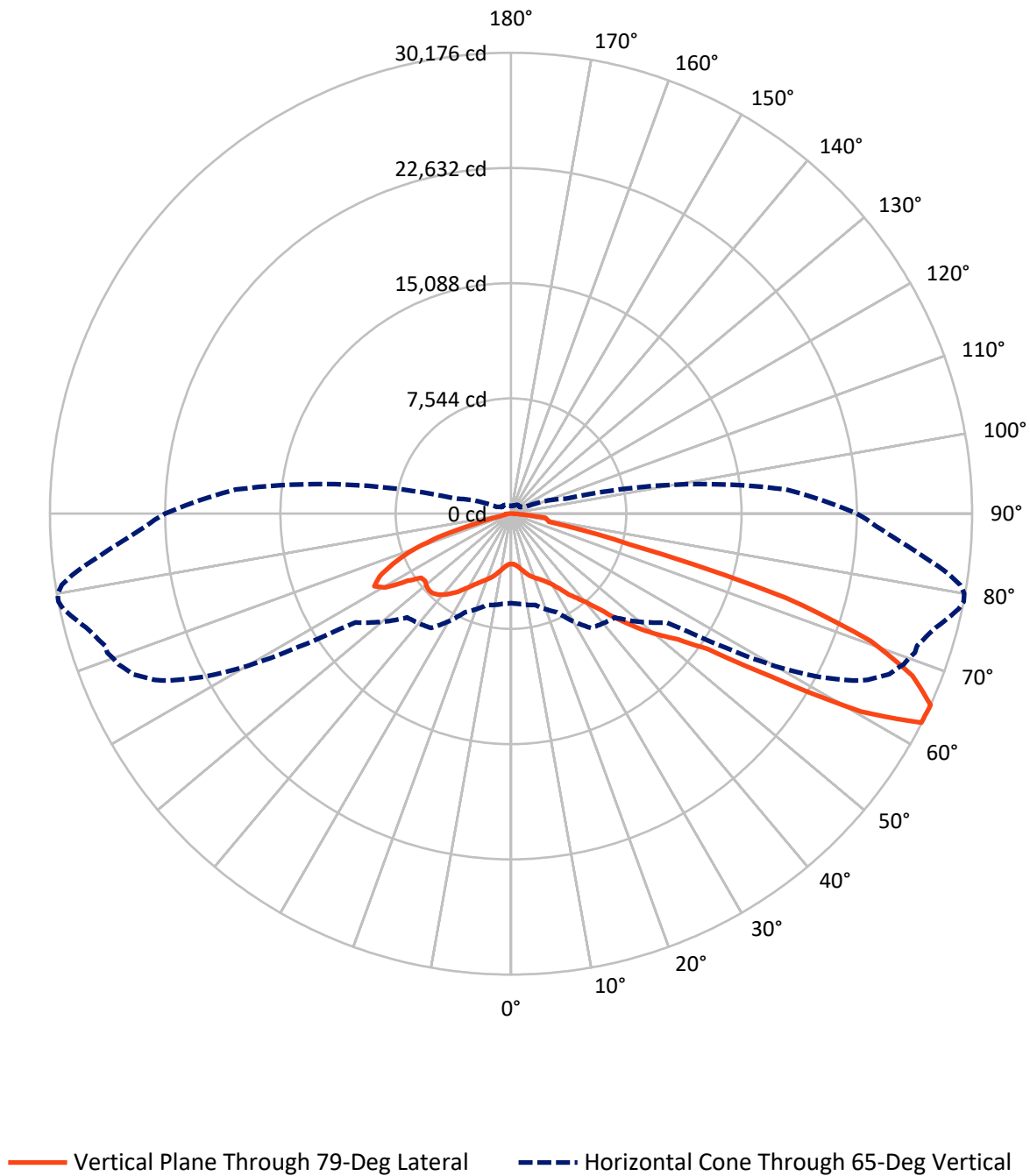


Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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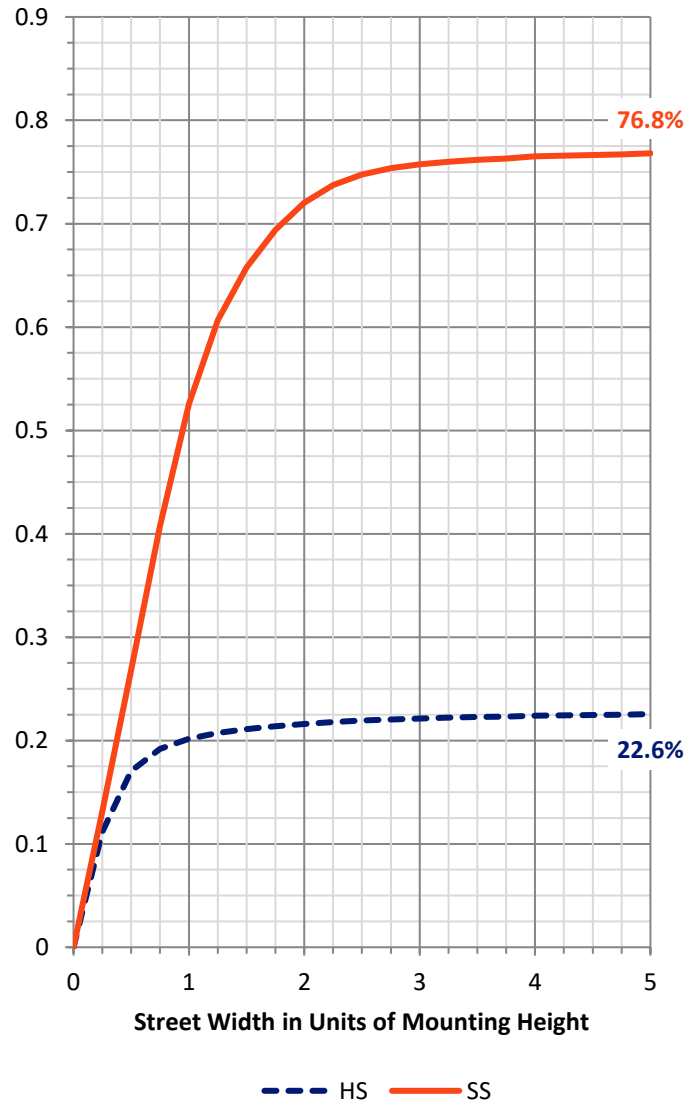
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6913.6	0.0	6913.6
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	23174.1	0.0	23174.1
	% Fixture	77.0	0.0	77.0
Total	Lumens	30087.7	0.0	30087.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.7	1.1
10°-20°	1057.8	3.5
20°-30°	1823.6	6.1
30°-40°	2987.0	9.9
40°-50°	5002.2	16.6
50°-60°	6766.2	22.5
60°-70°	8332.5	27.7
70°-80°	3225.4	10.7
80°-90°	567.2	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	30087.7	100.0
0°-180°	30087.7	100.0

Coefficient of Utilization



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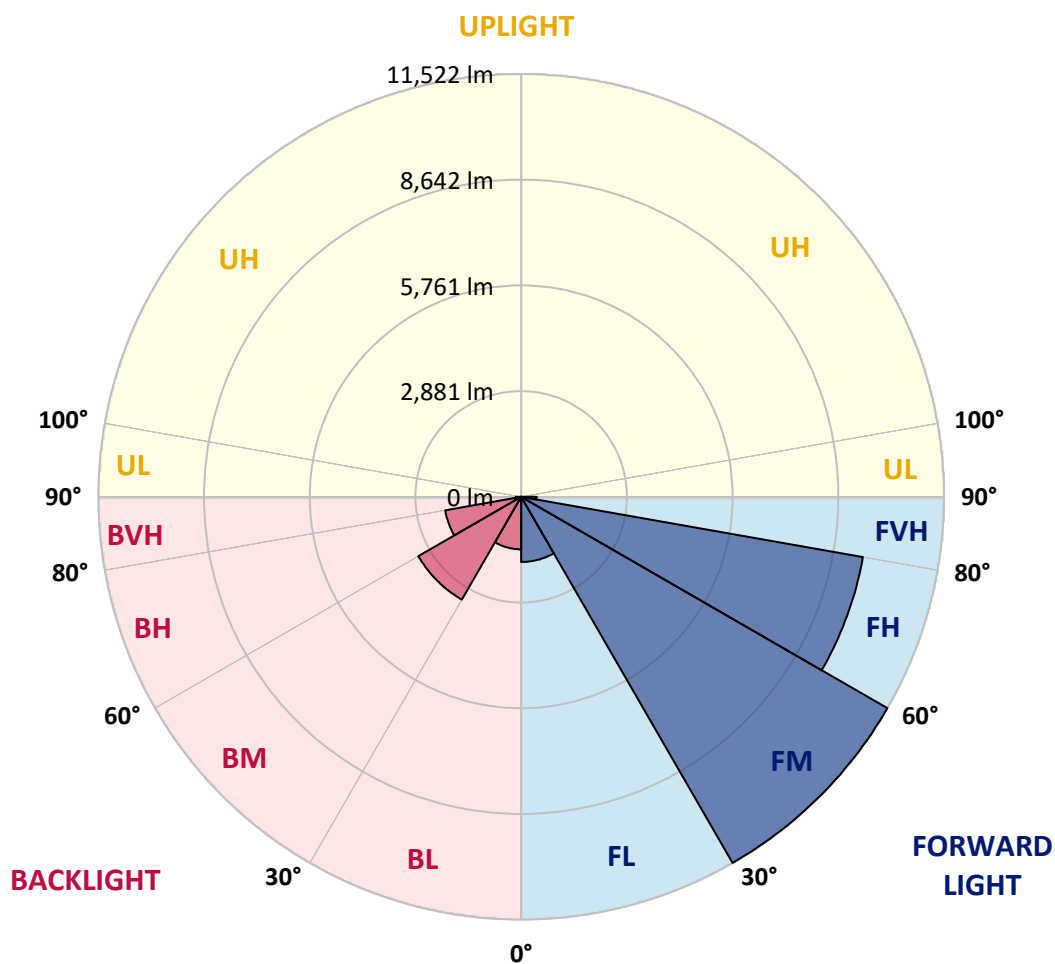
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1776.3	5.9			
FM	(30°-60°)	11522.3	38.3			
FH	(60°-80°)	9454.6	31.4			G4/12000
FVH	(80°-90°)	420.9	1.4			G3/500
BL	(0°-30°)	1430.8	4.8	B3/2500		
BM	(30°-60°)	3233.1	10.7	B3/5000		
BH	(60°-80°)	2103.4	7.0	B3/2500		G3/2500
BVH	(80°-90°)	146.3	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292
2.5°	3298	3288	3298	3306	3312	3320	3318	3316	3314	3316	3316
5°	3326	3324	3334	3342	3356	3366	3378	3378	3378	3376	3380
7.5°	3416	3414	3424	3432	3444	3464	3480	3488	3486	3486	3486
10°	3564	3556	3556	3556	3572	3586	3622	3626	3634	3630	3632
12.5°	3708	3710	3704	3698	3700	3728	3780	3790	3792	3798	3802
15°	3838	3836	3822	3808	3826	3874	3942	3960	3960	3972	3980
17.5°	3958	3954	3928	3904	3922	4004	4110	4122	4140	4146	4154
20°	4100	4092	4062	3998	3998	4110	4250	4262	4278	4282	4296
22.5°	4298	4278	4214	4098	4066	4196	4368	4374	4386	4402	4414
25°	4522	4526	4422	4220	4150	4286	4482	4492	4514	4526	4540
27.5°	4754	4760	4644	4392	4274	4410	4636	4648	4674	4688	4710
30°	5018	5026	4914	4660	4480	4592	4864	4896	4918	4936	4972
32.5°	5652	5604	5526	5256	4972	4964	5232	5268	5298	5336	5370
35°	6450	6480	6520	6338	6088	5906	5928	5908	5936	5992	6026
37.5°	7082	7148	7322	7440	7430	7394	7058	7058	7076	7046	7042
40°	7578	7620	7976	8434	8820	9010	8744	8706	8726	8572	8578
42.5°	7834	7896	8408	9212	9978	10588	10506	10480	10420	10382	10358
45°	7964	8038	8648	9752	10868	11810	12234	12230	12176	12132	12112
47.5°	7898	7962	8612	9916	11336	12598	13536	13594	13578	13642	13668
50°	7466	7548	8200	9562	11140	12908	14438	14546	14692	14784	14906
52.5°	7076	7144	7732	8988	10496	12656	14982	15204	15404	15592	15738
55°	6668	6736	7252	8392	9846	11912	15230	15554	15866	16184	16476
57.5°	6514	6586	6970	7930	9314	11174	15352	15884	16392	16932	17492
60°	6914	6978	7270	7942	8908	10436	15106	15942	16816	17706	18566
62.5°	6792	6826	7190	8232	9426	9708	14040	15144	16414	17718	19036
65°	5860	5926	6200	7116	9136	9610	12416	13526	15024	16566	18332
67.5°	4204	4112	4324	5126	7088	9594	10588	11410	12584	13766	15214
70°	1910	1866	2032	2666	4276	7582	8952	9230	9666	10462	11440
72.5°	754	752	860	1102	2022	4880	7528	7688	7842	8188	8610
75°	494	494	526	594	996	2356	6368	6514	6750	6848	7028
77.5°	372	374	388	404	550	1240	4494	5012	5412	5710	5928
80°	264	276	302	312	358	706	2540	2914	3366	3848	4454
82.5°	198	212	256	268	284	402	1146	1300	1518	1968	2830
85°	92	102	176	192	206	232	582	650	738	808	942
87.5°	14	10	30	42	66	68	200	238	258	310	322
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292
2.5°	3316	3318	3320	3316	3318	3318	3314	3312	3312	3312	3314
5°	3380	3384	3380	3382	3390	3388	3384	3382	3390	3392	3386
7.5°	3494	3496	3488	3498	3502	3504	3504	3508	3508	3514	3508
10°	3640	3640	3654	3652	3654	3658	3660	3668	3674	3674	3678
12.5°	3808	3810	3824	3826	3834	3836	3848	3840	3860	3860	3866
15°	3982	3996	3998	4018	4022	4024	4040	4040	4054	4056	4060
17.5°	4154	4166	4174	4190	4204	4210	4216	4228	4238	4242	4252
20°	4302	4314	4322	4338	4350	4360	4366	4380	4390	4394	4408
22.5°	4426	4434	4448	4470	4474	4486	4504	4514	4518	4530	4546
25°	4558	4570	4578	4598	4614	4634	4650	4666	4670	4686	4700
27.5°	4734	4746	4748	4788	4804	4832	4850	4874	4886	4900	4928
30°	4994	5022	5034	5080	5088	5120	5152	5160	5178	5180	5226
32.5°	5392	5432	5448	5496	5508	5538	5556	5598	5600	5620	5630
35°	6044	6034	6096	6108	6144	6170	6188	6188	6226	6228	6240
37.5°	6934	6914	6930	6858	6876	6844	6838	6846	6830	6834	6832
40°	8358	8268	8174	7952	7904	7812	7740	7682	7626	7566	7526
42.5°	10144	10014	9874	9518	9352	9174	9000	8900	8700	8578	8512
45°	12016	11864	11668	11372	11136	10946	10628	10478	10168	10014	9806
47.5°	13550	13552	13394	13094	12842	12716	12518	12228	11876	11678	11308
50°	14892	14890	14880	14700	14524	14386	14212	13950	13662	13438	13014
52.5°	15884	16016	16072	16070	16048	15984	15852	15626	15334	15208	14870
55°	16704	16992	17142	17470	17500	17606	17490	17492	17320	17332	17224
57.5°	17946	18472	18774	19500	19864	20304	20226	20594	20728	20898	21124
60°	19356	20338	21054	22498	23086	23798	24190	24608	24912	25224	25454
62.5°	20364	21654	22830	24888	25652	26402	26896	27402	27744	27968	28134
65°	19952	21378	22768	24926	25758	26302	26890	27182	27524	27710	27948
67.5°	16954	18384	19874	22420	23290	24042	24500	24878	25154	25390	25664
70°	12608	14172	15712	18504	19602	20688	21228	21696	21984	22222	22524
72.5°	9074	10054	11016	14142	15240	16644	17204	17724	18098	18086	18406
75°	7224	7622	8050	9664	10452	11636	11950	12242	12066	11728	11708
77.5°	6014	6178	6322	6828	6944	7226	7070	6908	6386	5946	5714
80°	4882	5206	5418	5778	5926	6010	6032	5976	5784	5518	5094
82.5°	3630	4246	4666	5374	5634	5688	5792	5728	5602	5386	5082
85°	1064	1204	1380	1872	2194	2468	2748	2886	2972	2852	2538
87.5°	374	422	472	650	692	836	820	968	974	1016	972
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292
2.5°	3312	3312	3312	3314	3314	3314	3310	3308	3310	3314	3314
5°	3390	3392	3396	3388	3390	3396	3392	3390	3392	3396	3392
7.5°	3516	3518	3514	3522	3522	3526	3532	3526	3528	3530	3532
10°	3680	3682	3686	3692	3694	3698	3702	3708	3708	3704	3714
12.5°	3876	3874	3878	3886	3890	3896	3908	3908	3916	3914	3924
15°	4068	4078	4080	4094	4100	4110	4124	4132	4132	4144	4148
17.5°	4260	4268	4276	4288	4296	4302	4318	4328	4326	4348	4348
20°	4408	4424	4434	4442	4456	4466	4478	4490	4498	4512	4516
22.5°	4552	4562	4576	4586	4602	4614	4628	4638	4652	4670	4676
25°	4712	4728	4744	4758	4770	4784	4808	4830	4850	4866	4872
27.5°	4934	4952	4976	4986	5004	5016	5052	5080	5090	5118	5126
30°	5234	5254	5278	5290	5322	5338	5376	5406	5416	5450	5456
32.5°	5668	5680	5728	5726	5770	5816	5838	5862	5906	5924	5930
35°	6270	6298	6332	6330	6386	6412	6456	6482	6514	6512	6546
37.5°	6852	6862	6874	6900	6940	6976	6992	7018	7042	7078	7122
40°	7486	7510	7512	7526	7546	7592	7622	7650	7732	7784	7810
42.5°	8436	8430	8390	8416	8428	8498	8520	8606	8698	8808	8838
45°	9658	9578	9554	9544	9608	9644	9734	9894	9990	10094	10144
47.5°	11162	10912	10794	10768	10834	10988	11018	11176	11302	11378	11428
50°	12668	12472	12224	12140	12122	12264	12298	12430	12558	12580	12554
52.5°	14560	14240	13830	13682	13564	13574	13602	13658	13740	13706	13636
55°	16980	16616	16414	16134	15956	15924	15802	15634	15628	15650	15440
57.5°	21010	20858	20944	20914	20738	20844	20294	20138	20014	19798	19604
60°	25658	25814	25992	26402	26384	26796	26414	26318	26202	25536	25210
62.5°	28424	28486	28748	29130	29506	29900	30078	30140	29898	29354	28674
65°	27942	28216	28470	28800	29186	29580	29956	30176	30120	29760	29012
67.5°	25752	26040	26412	26758	27174	27516	27928	28332	28344	28164	27644
70°	22556	22890	23274	23468	23918	24228	24570	24970	25100	25122	24516
72.5°	18338	18478	18666	18564	18654	18852	18760	18792	18298	18390	17642
75°	11168	11040	10472	9954	9322	8836	8952	8024	7110	7064	6404
77.5°	5664	5460	5108	4742	4206	3592	3080	2528	2062	1796	1542
80°	4824	4680	4486	4220	3830	3376	2842	2422	2032	1626	1302
82.5°	4616	4176	3894	3672	3250	2830	2538	2250	1974	1724	1366
85°	2290	2026	1714	1520	1170	916	858	706	658	508	428
87.5°	770	630	470	396	316	258	254	226	224	204	188
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292	3292
2.5°	3312	3316	3316	3312	3314	3310	3312	3314	3308	3306	3300
5°	3394	3392	3392	3394	3400	3402	3392	3396	3398	3388	3366
7.5°	3530	3530	3536	3534	3546	3542	3540	3540	3540	3520	3484
10°	3714	3714	3720	3728	3730	3726	3726	3728	3738	3698	3642
12.5°	3920	3930	3928	3928	3952	3946	3938	3946	3956	3900	3820
15°	4150	4156	4160	4174	4170	4184	4188	4184	4194	4122	3988
17.5°	4358	4370	4374	4390	4390	4392	4408	4402	4404	4322	4130
20°	4530	4542	4548	4566	4570	4578	4584	4588	4598	4500	4246
22.5°	4702	4712	4722	4734	4750	4760	4768	4772	4790	4676	4356
25°	4894	4916	4926	4946	4962	4978	4990	4992	5022	4880	4446
27.5°	5150	5180	5196	5228	5244	5260	5256	5280	5322	5114	4516
30°	5486	5524	5534	5566	5592	5608	5626	5646	5674	5374	4550
32.5°	5954	6012	6026	6044	6082	6110	6122	6154	6162	5620	4540
35°	6596	6570	6638	6654	6708	6730	6744	6786	6754	5888	4474
37.5°	7176	7168	7234	7270	7340	7324	7358	7386	7272	6078	4352
40°	7884	7874	7966	7978	8086	8062	8076	8098	7844	6210	4130
42.5°	8872	8876	8974	8986	9000	9044	8972	8976	8452	6246	3764
45°	10174	10244	10184	10186	10182	10098	10008	9902	9084	6122	3292
47.5°	11436	11388	11312	11242	11184	11052	10920	10740	9630	5828	2766
50°	12516	12408	12340	12146	12008	11836	11652	11446	10078	5404	2274
52.5°	13520	13408	13154	12952	12754	12526	12312	12070	10474	4920	1898
55°	15188	15090	14836	14466	14222	13908	13626	13298	11276	4528	1650
57.5°	19070	18986	18452	18218	17896	17108	16992	16480	13426	4482	1504
60°	24536	24176	23732	23092	22338	22078	21498	20816	16886	4608	1386
62.5°	27892	27072	26420	25682	24988	24392	23758	23084	18656	4442	1240
65°	28144	27180	26318	25452	24672	23930	23314	22640	18080	3818	1050
67.5°	26756	25740	24800	23818	23030	22360	21576	20928	16456	2972	874
70°	23894	23002	22192	21134	20480	19664	19166	18356	14344	2026	722
72.5°	17210	16538	16274	15536	14680	14200	13970	13184	10600	1258	590
75°	5814	5980	5600	5018	5302	4864	5042	4668	4484	722	496
77.5°	1290	1212	1120	1040	1034	972	1030	974	1042	460	438
80°	1018	804	684	624	592	574	560	544	496	392	404
82.5°	1100	830	608	486	416	390	384	368	364	380	408
85°	352	294	250	236	218	208	204	198	240	414	392
87.5°	184	162	144	138	120	112	110	112	168	414	284
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	125°	135°	145°	155°	165°	175°	180°
0°	3292	3292	3292	3292	3292	3292	3292
2.5°	3294	3292	3288	3286	3284	3274	3282
5°	3356	3336	3318	3296	3284	3274	3274
7.5°	3450	3394	3348	3298	3264	3238	3234
10°	3568	3460	3354	3264	3200	3152	3146
12.5°	3680	3516	3348	3200	3100	3032	3028
15°	3784	3546	3302	3084	2934	2844	2834
17.5°	3866	3528	3198	2922	2718	2612	2606
20°	3884	3456	3050	2722	2506	2394	2368
22.5°	3868	3326	2866	2502	2254	2142	2128
25°	3820	3168	2638	2246	2016	1902	1874
27.5°	3734	2982	2392	1998	1770	1660	1632
30°	3606	2758	2130	1766	1530	1442	1414
32.5°	3428	2486	1872	1528	1332	1262	1250
35°	3182	2174	1602	1332	1188	1146	1140
37.5°	2868	1862	1376	1192	1088	1062	1058
40°	2458	1542	1216	1092	1016	994	990
42.5°	2036	1302	1098	1012	950	930	924
45°	1666	1140	1010	946	888	866	864
47.5°	1390	1046	938	886	828	802	804
50°	1188	960	878	834	768	744	746
52.5°	1050	874	822	772	716	692	692
55°	942	804	768	714	670	648	646
57.5°	854	748	716	672	628	602	602
60°	800	708	682	642	590	562	560
62.5°	768	696	674	618	560	532	526
65°	744	724	696	604	536	506	500
67.5°	746	790	750	612	528	484	476
70°	758	842	788	630	562	474	456
72.5°	698	762	710	600	548	456	434
75°	582	556	510	488	492	414	406
77.5°	472	414	370	388	414	354	346
80°	410	336	314	344	376	302	282
82.5°	384	284	270	358	394	260	228
85°	338	232	212	422	394	196	182
87.5°	226	138	132	310	270	136	110
90°	0	0	0	0	0	0	0

(END OF REPORT)