

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: P158500

Luminaire Tested: **VST-E10-LED-E-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158500
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
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-SL3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (210) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30168.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

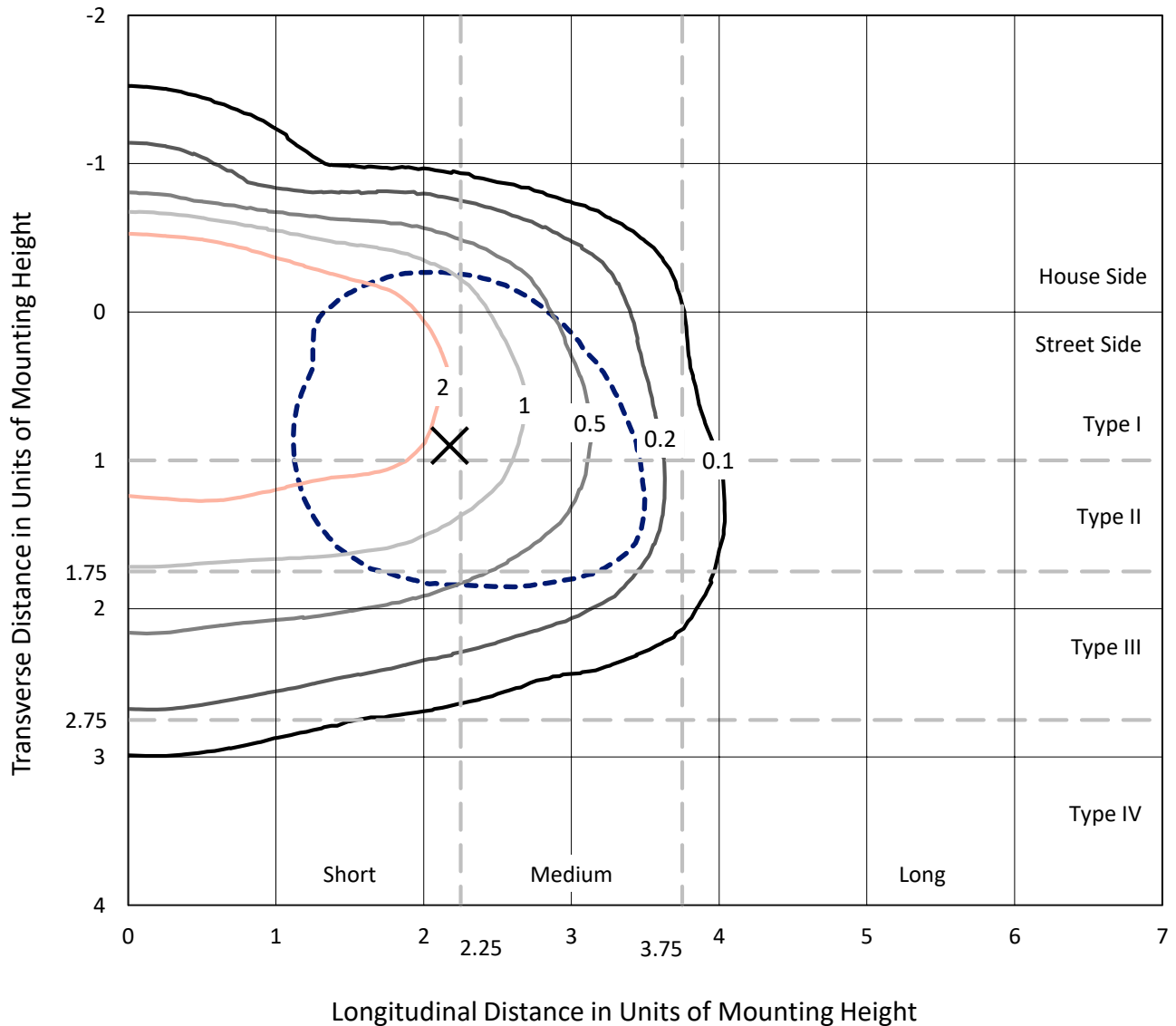
Input Watts (W): 247.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

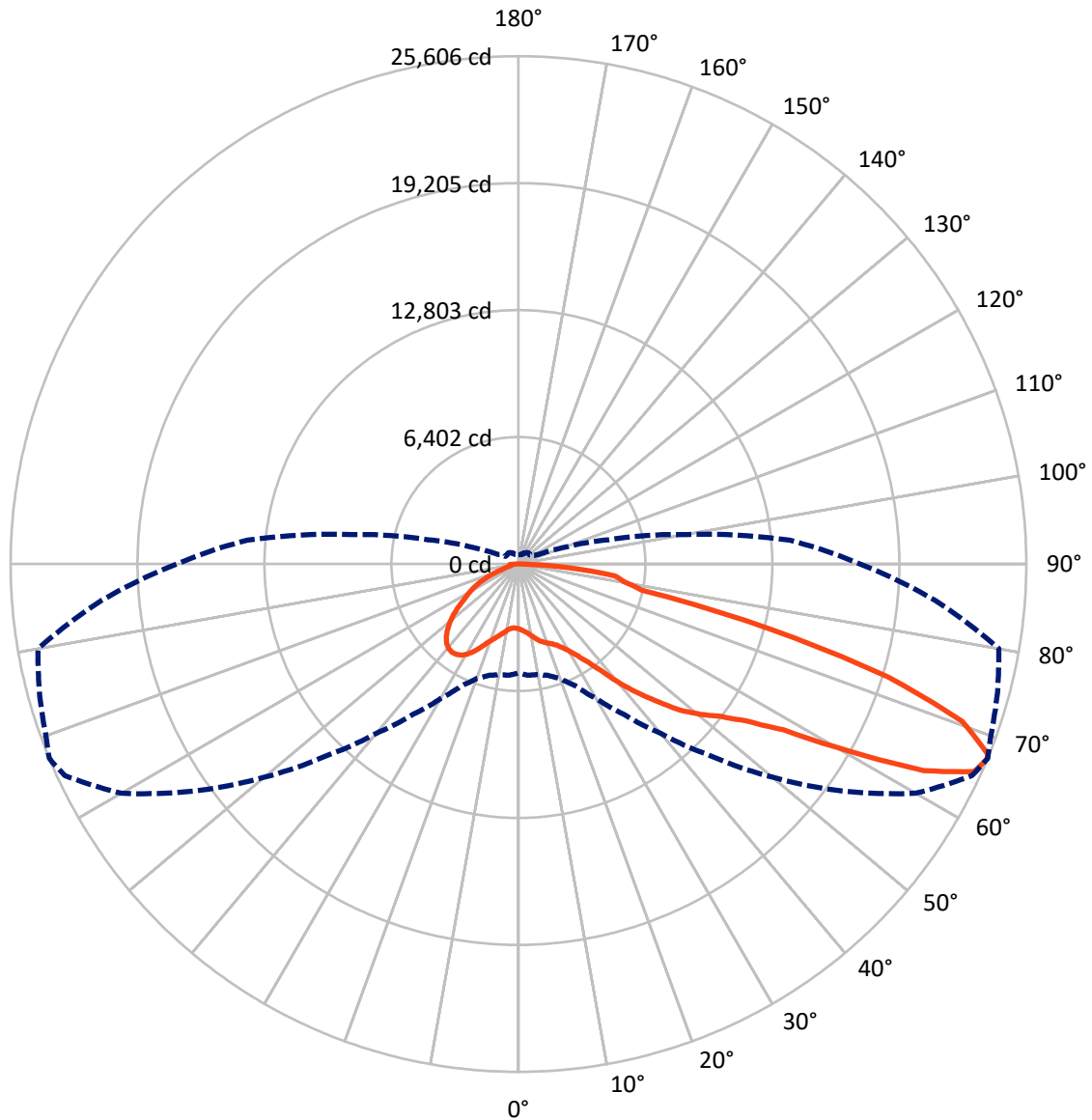


Based on 30 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical



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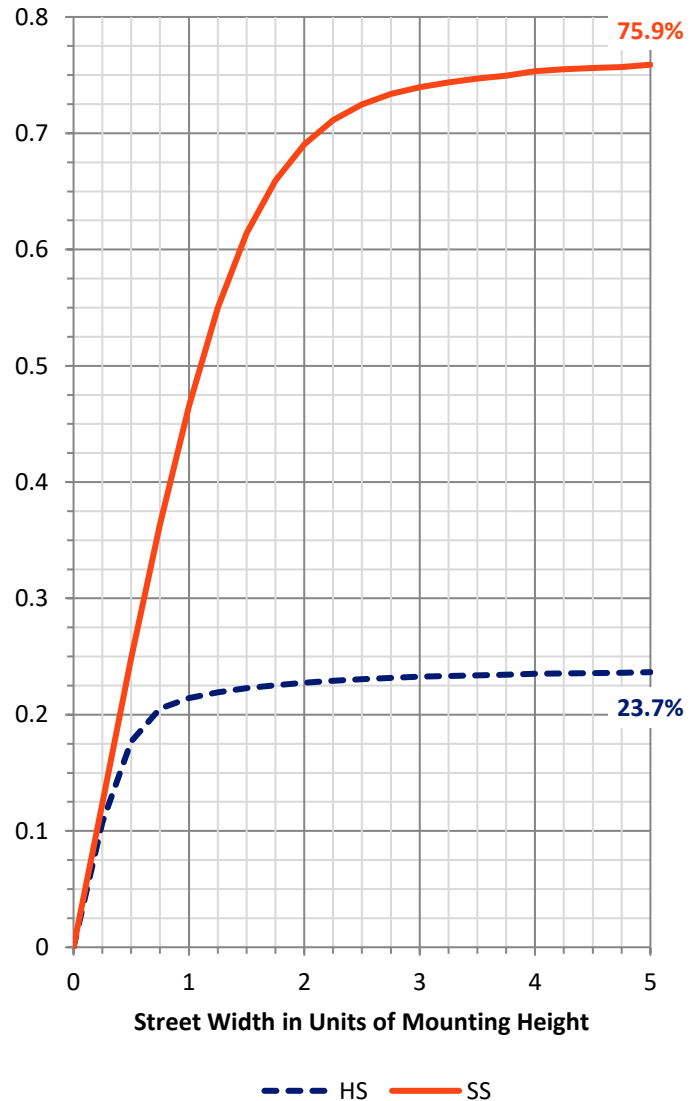
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7237.5	0.0	7237.5
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	22931.2	0.0	22931.2
	% Fixture	76.0	0.0	76.0
Total	Lumens	30168.7	0.0	30168.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.0	1.1
10°-20°	1107.3	3.7
20°-30°	1976.8	6.6
30°-40°	2897.2	9.6
40°-50°	4476.5	14.8
50°-60°	6518.6	21.6
60°-70°	8491.5	28.1
70°-80°	3801.1	12.6
80°-90°	574.7	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°	30168.7	100.0
0°-180°	30168.7	100.0



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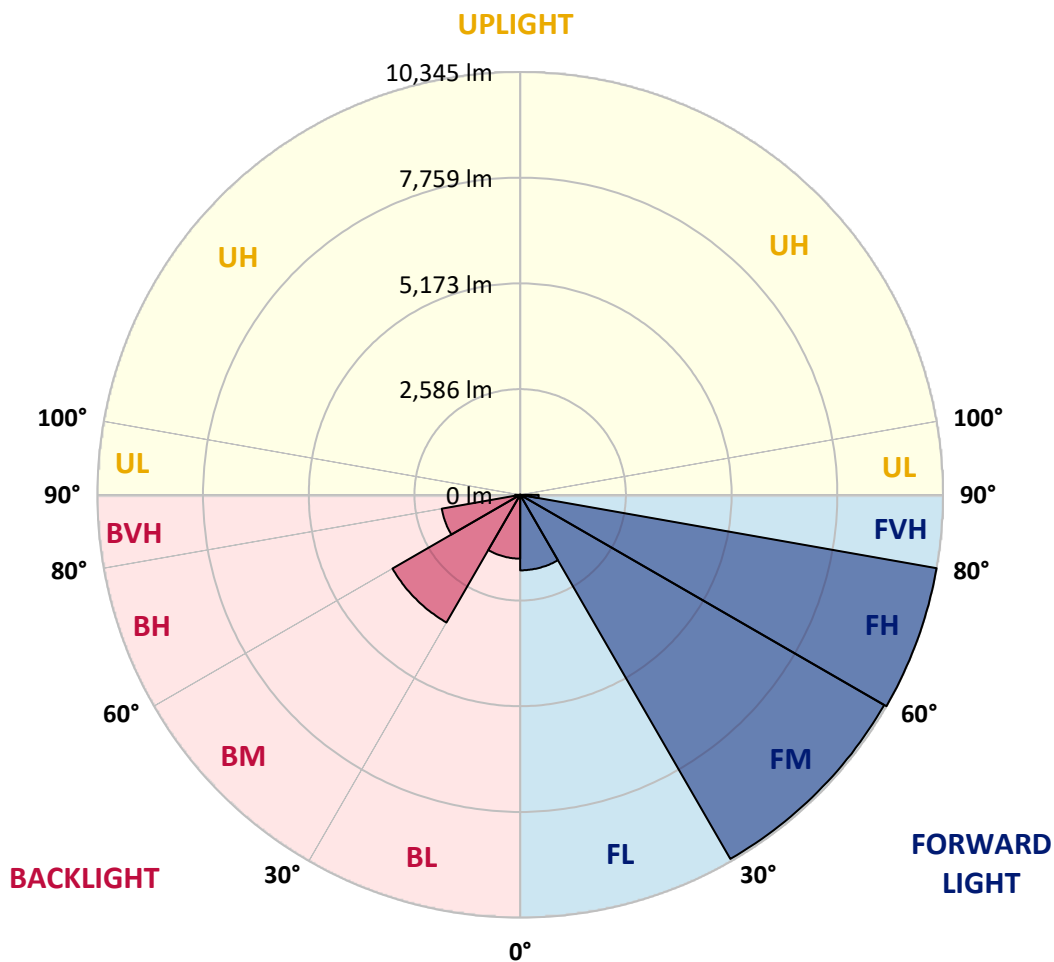
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1848.4	6.1			
FM	(30°-60°)	10285.9	34.1			
FH	(60°-80°)	10345.4	34.3			G4/12000
FVH	(80°-90°)	451.3	1.5			G3/500
BL	(0°-30°)	1560.6	5.2	B3/2500		
BM	(30°-60°)	3606.3	12.0	B3/5000		
BH	(60°-80°)	1947.2	6.5	B3/2500		G3/2500
BVH	(80°-90°)	123.4	0.4			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270
2.5°	3398	3406	3408	3406	3408	3400	3398	3386	3392	3376	3372
5°	3582	3588	3592	3576	3580	3572	3562	3550	3534	3512	3498
7.5°	3762	3772	3770	3764	3750	3742	3722	3704	3676	3650	3632
10°	4004	4002	4002	3968	3948	3930	3894	3866	3838	3800	3780
12.5°	4284	4270	4264	4240	4198	4166	4114	4060	4010	3970	3938
15°	4554	4554	4538	4500	4460	4418	4344	4266	4184	4120	4088
17.5°	4800	4778	4764	4714	4672	4604	4522	4438	4336	4246	4184
20°	4980	4962	4932	4870	4798	4718	4622	4524	4414	4316	4246
22.5°	5084	5062	5016	4934	4836	4724	4612	4520	4420	4346	4288
25°	5138	5116	5054	4946	4814	4666	4538	4448	4390	4372	4364
27.5°	5136	5118	5052	4928	4758	4588	4450	4374	4368	4438	4490
30°	5084	5072	5012	4888	4710	4532	4404	4364	4426	4574	4702
32.5°	5032	5026	4984	4872	4720	4570	4482	4486	4614	4842	5048
35°	5038	5046	5040	4980	4884	4806	4764	4852	5052	5328	5604
37.5°	5090	5120	5158	5164	5166	5154	5242	5428	5720	6080	6512
40°	5204	5238	5348	5444	5568	5716	5894	6152	6514	6958	7488
42.5°	5558	5606	5742	5920	6148	6380	6646	6998	7442	7910	8466
45°	6020	6120	6270	6468	6810	7136	7480	7874	8346	8932	9492
47.5°	6596	6696	6914	7126	7530	7936	8312	8724	9236	9836	10456
50°	7100	7214	7408	7694	8162	8660	9076	9522	9952	10584	11210
52.5°	7496	7578	7764	8026	8548	9094	9620	10116	10626	11258	11838
55°	7546	7622	7804	8104	8634	9240	9846	10434	11156	11846	12614
57.5°	7330	7392	7576	7844	8360	9050	9816	10570	11494	12426	13364
60°	7024	7086	7230	7444	7910	8654	9548	10580	11808	13154	14534
62.5°	6688	6742	6858	7010	7420	8106	9130	10514	12064	13878	16006
65°	6122	6252	6302	6458	6868	7516	8558	10068	11960	14200	16930
67°	5496	5628	5654	5812	6140	6762	7822	9242	11136	13644	16726
67.5°	5296	5408	5448	5606	5916	6502	7508	8944	10884	13340	16480
70°	3894	4018	4062	4128	4350	4838	5504	6750	8678	10886	13902
72.5°	2084	2184	2226	2324	2438	2704	3214	4108	5326	7284	9890
75°	1410	1450	1480	1548	1666	1878	2102	2416	3152	4110	5628
77.5°	804	822	826	838	932	1134	1502	2034	2608	2978	3600
80°	348	384	412	394	388	430	538	802	1572	2496	2962
82.5°	188	204	228	230	242	256	278	330	464	936	2042
85°	98	102	136	156	166	174	178	198	228	290	508
87.5°	14	20	24	32	36	38	44	56	66	80	136
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270
2.5°	3354	3350	3338	3330	3322	3314	3304	3296	3282	3272	3260
5°	3478	3454	3438	3416	3412	3386	3360	3348	3324	3304	3280
7.5°	3604	3576	3550	3532	3522	3486	3460	3430	3402	3376	3348
10°	3752	3724	3696	3684	3666	3632	3610	3572	3544	3512	3474
12.5°	3906	3886	3866	3850	3842	3826	3794	3762	3724	3692	3648
15°	4042	4028	4020	4016	4016	4006	3976	3946	3906	3870	3822
17.5°	4138	4132	4138	4144	4152	4144	4138	4104	4078	4034	3986
20°	4194	4206	4236	4256	4274	4288	4294	4266	4232	4200	4168
22.5°	4254	4288	4340	4370	4400	4450	4462	4442	4416	4396	4362
25°	4354	4404	4494	4542	4584	4658	4668	4672	4666	4650	4608
27.5°	4510	4608	4728	4790	4836	4932	4970	4970	4954	4972	4972
30°	4782	4912	5068	5104	5176	5260	5322	5330	5332	5370	5426
32.5°	5200	5324	5498	5538	5600	5680	5750	5742	5760	5842	5916
35°	5808	5934	6048	6102	6130	6202	6228	6272	6326	6428	6418
37.5°	6708	6820	6836	6870	6836	6850	6870	6922	7066	7158	7010
40°	7792	7978	7960	7920	7844	7742	7778	7858	8014	7934	7536
42.5°	8814	9006	8970	8924	8756	8718	8714	8780	8864	8636	7948
45°	9820	10016	9954	9928	9816	9734	9802	9806	9784	9296	8308
47.5°	10858	11038	10998	11020	10904	10850	10856	10828	10622	9856	8588
50°	11696	11938	11962	11912	11850	11768	11978	11902	11444	10400	8858
52.5°	12348	12674	12798	12766	12716	12726	13120	13206	12448	11086	9156
55°	13120	13634	13836	13956	13904	14104	15006	15050	13844	11982	9544
57.5°	14234	14970	15608	15778	15942	16592	18056	17610	15656	13338	10036
60°	15928	17540	18576	19120	19504	20412	21804	20674	17914	14952	10654
62.5°	18300	20656	22388	22934	23092	23614	24622	22460	19144	15676	10708
65°	20066	22892	24966	25246	25058	25068	25332	22366	18686	15044	9780
67°	19950	23114	25238	25606	25346	25004	24592	21092	17214	13720	8564
67.5°	19772	22900	25120	25508	25270	24880	24278	20598	16756	13308	8316
70°	17092	20198	23188	23734	23834	23478	21788	17368	13604	10826	6458
72.5°	13304	16070	19028	19502	19886	18860	15858	11996	9916	7802	4676
75°	8784	11598	13090	13160	12670	10770	7748	6008	5530	4586	2894
77.5°	4700	6820	6862	6354	6122	4564	1852	1022	1138	1292	1152
80°	3506	4344	5034	5412	5524	3914	958	542	474	432	426
82.5°	3162	4196	4704	4910	4858	3220	538	364	302	328	374
85°	1240	2240	2946	2852	2396	1200	294	196	196	284	368
87.5°	254	460	624	596	536	232	144	118	120	230	348
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270	3270
2.5°	3248	3236	3228	3220	3212	3208	3202	3202	3190	3186	3182
5°	3262	3242	3228	3210	3196	3184	3168	3164	3150	3140	3136
7.5°	3322	3292	3262	3240	3220	3194	3176	3160	3146	3136	3124
10°	3436	3404	3362	3322	3296	3256	3228	3200	3184	3172	3156
12.5°	3604	3558	3508	3460	3416	3364	3336	3302	3282	3272	3260
15°	3776	3726	3664	3618	3568	3528	3502	3472	3456	3444	3436
17.5°	3952	3894	3850	3804	3780	3750	3716	3678	3632	3604	3566
20°	4132	4088	4062	4036	4008	3966	3898	3820	3734	3652	3574
22.5°	4342	4316	4312	4288	4230	4130	4004	3858	3712	3576	3470
25°	4638	4638	4618	4520	4384	4204	3992	3782	3588	3402	3262
27.5°	5010	4996	4898	4696	4452	4172	3888	3622	3374	3170	2990
30°	5420	5322	5112	4794	4428	4068	3720	3412	3120	2870	2658
32.5°	5846	5608	5230	4794	4344	3912	3510	3132	2798	2518	2266
35°	6232	5798	5258	4716	4180	3682	3216	2788	2388	2086	1810
37.5°	6582	5924	5228	4564	3942	3358	2812	2340	1888	1596	1360
40°	6810	5950	5104	4326	3602	2920	2316	1788	1430	1164	1006
42.5°	6952	5900	4904	4000	3144	2370	1738	1282	1016	868	808
45°	7032	5770	4608	3554	2590	1802	1234	926	782	730	710
47.5°	7028	5560	4238	3038	1978	1256	874	722	682	666	662
50°	6986	5302	3804	2478	1428	876	692	648	638	628	624
52.5°	6928	4982	3324	1932	1014	700	628	616	608	598	594
55°	6820	4588	2804	1454	794	632	606	602	592	578	570
57.5°	6688	4188	2306	1136	702	616	602	596	582	566	550
60°	6640	3858	1916	958	680	622	612	604	584	560	542
62.5°	6340	3486	1636	888	692	648	644	632	602	574	546
65°	5564	2948	1386	840	716	692	696	678	648	610	560
67°	4706	2404	1154	794	734	738	752	738	700	646	578
67.5°	4478	2266	1096	780	738	750	766	756	718	656	586
70°	3328	1596	818	706	738	786	822	832	790	704	602
72.5°	2344	1030	628	612	670	734	802	836	788	694	580
75°	1408	644	510	520	564	630	684	698	638	578	502
77.5°	652	428	400	414	456	486	486	458	412	376	360
80°	384	350	348	374	402	380	346	308	284	272	266
82.5°	360	374	398	404	382	328	286	248	236	230	224
85°	424	454	414	382	338	276	224	192	186	180	172
87.5°	392	374	326	280	232	168	122	110	118	116	112
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3270	3270	3270	3270	3270
2.5°	3184	3184	3176	3172	3182
5°	3128	3130	3124	3122	3124
7.5°	3116	3114	3110	3106	3110
10°	3152	3150	3144	3148	3142
12.5°	3260	3272	3270	3274	3282
15°	3436	3434	3428	3432	3438
17.5°	3536	3520	3506	3500	3500
20°	3512	3466	3442	3428	3424
22.5°	3370	3304	3254	3242	3232
25°	3138	3056	2992	2978	2952
27.5°	2868	2758	2682	2666	2652
30°	2514	2388	2300	2244	2262
32.5°	2082	1962	1860	1770	1756
35°	1608	1476	1386	1346	1320
37.5°	1200	1090	1030	992	994
40°	918	860	828	802	804
42.5°	766	740	732	720	714
45°	694	686	688	676	672
47.5°	654	648	650	642	640
50°	622	618	620	614	612
52.5°	590	592	590	586	586
55°	562	560	564	558	558
57.5°	540	538	538	536	536
60°	528	520	518	518	520
62.5°	522	508	506	506	508
65°	524	502	494	492	490
67°	526	494	478	470	468
67.5°	528	490	472	464	460
70°	516	462	436	422	418
72.5°	486	428	396	378	374
75°	432	388	360	340	332
77.5°	334	314	304	292	288
80°	260	250	246	238	236
82.5°	216	206	200	190	184
85°	168	156	152	144	140
87.5°	110	104	102	92	88
90°	0	0	0	0	0

(END OF REPORT)