

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: P13099

Luminaire Tested: **TRU25S3F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: P13099
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: TRU25S3F
Description: TRIBUTE AREA/SITE HID FIXTURE WITH TYPE 3F SEMI SPECULAR
HYDROFORMED REFLECTOR
Light Source: (1) MOGUL BASE ED18 HIGH PRESSURE SODIUM LAMP
USING MANUFACTURERS PUBLISHED DATA AND A BARE LAMP SUM FOR
THE LAMP UNDER TEST IN GONIOPHOTOMETER WITH TEST DISTANCE OF
25.0 FEET
LU250/ED18 250 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 28000 (1 lamp)
Luminaire Lumens: 21112.8 lumens
Efficiency: 75.4%
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 1.1' x L: 1.1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

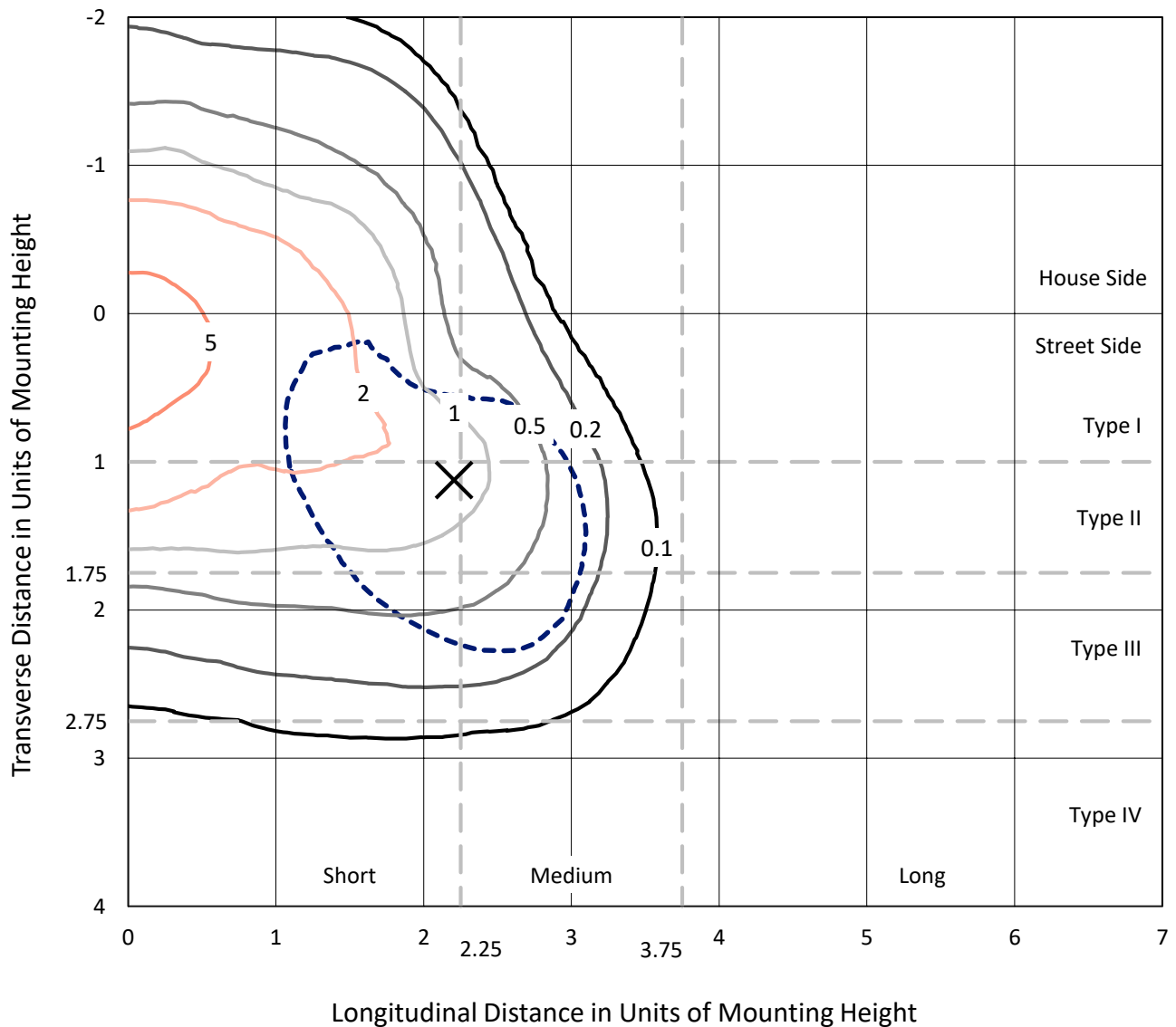
Input Watts (W): 250.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

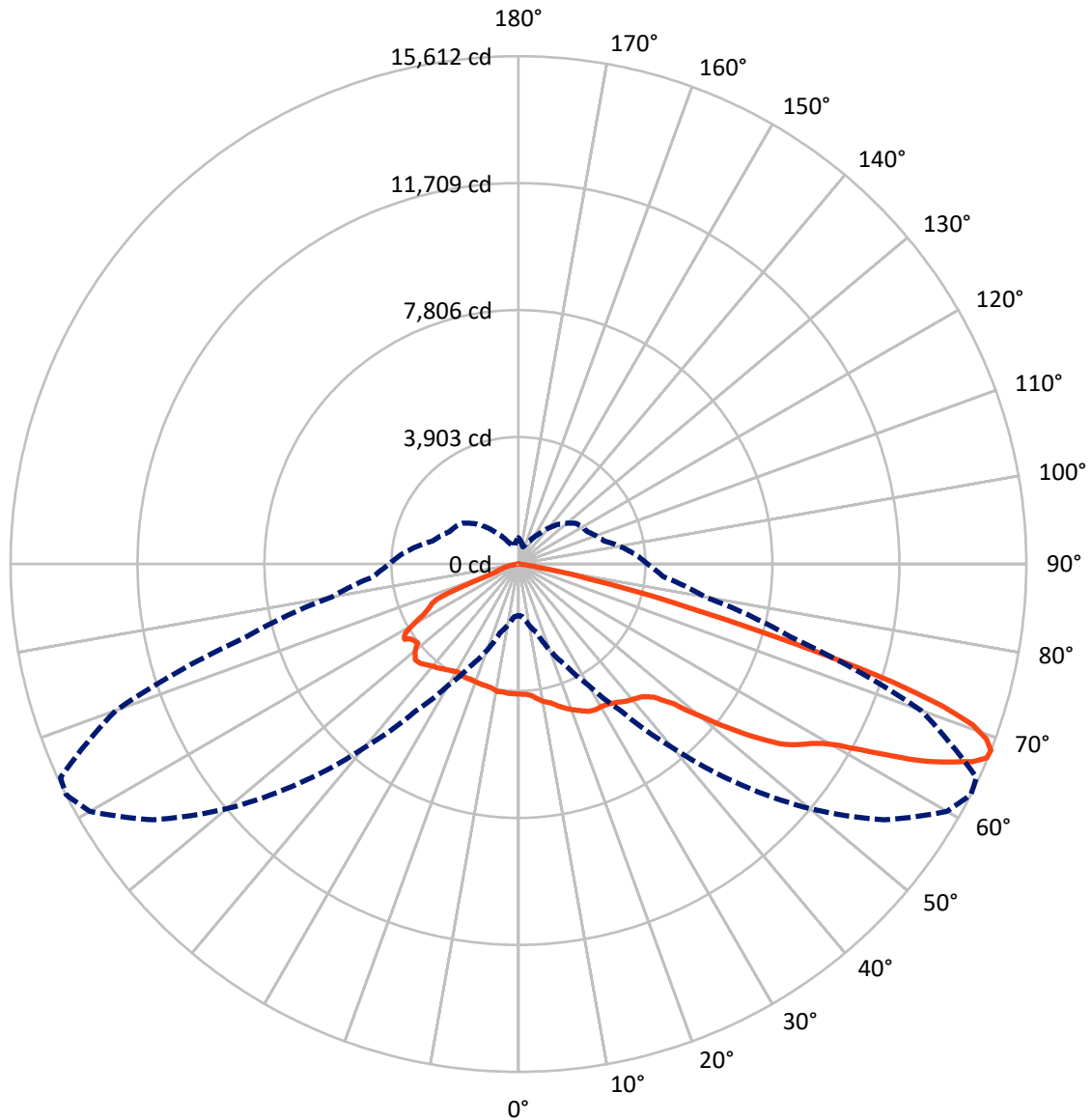
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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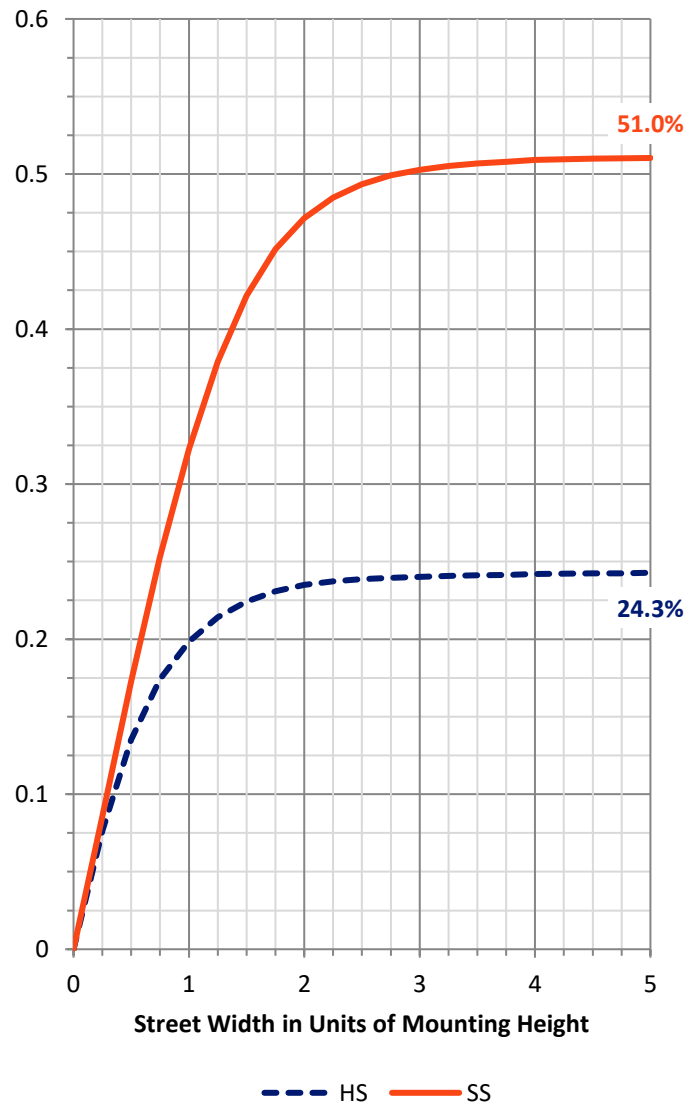
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6832.5	0.0	6832.5
	% Lamp	24.4	0.0	24.4
Street Side	Lumens	14280.3	0.0	14280.3
	% Lamp	51.0	0.0	51.0
Total	Lumens	21112.8	0.0	21112.8
	% Lamp	75.4	0.0	75.4

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	386.2	1.8	1.4
10°-20°	1192.3	5.6	4.3
20°-30°	2030.7	9.6	7.3
30°-40°	2796.2	13.2	10.0
40°-50°	3554.6	16.8	12.7
50°-60°	4544.9	21.5	16.2
60°-70°	4631.2	21.9	16.5
70°-80°	1912.0	9.1	6.8
80°-90°	64.8	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	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°	21112.8	100.0	75.4
0°-180°	21112.8	100.0	75.4

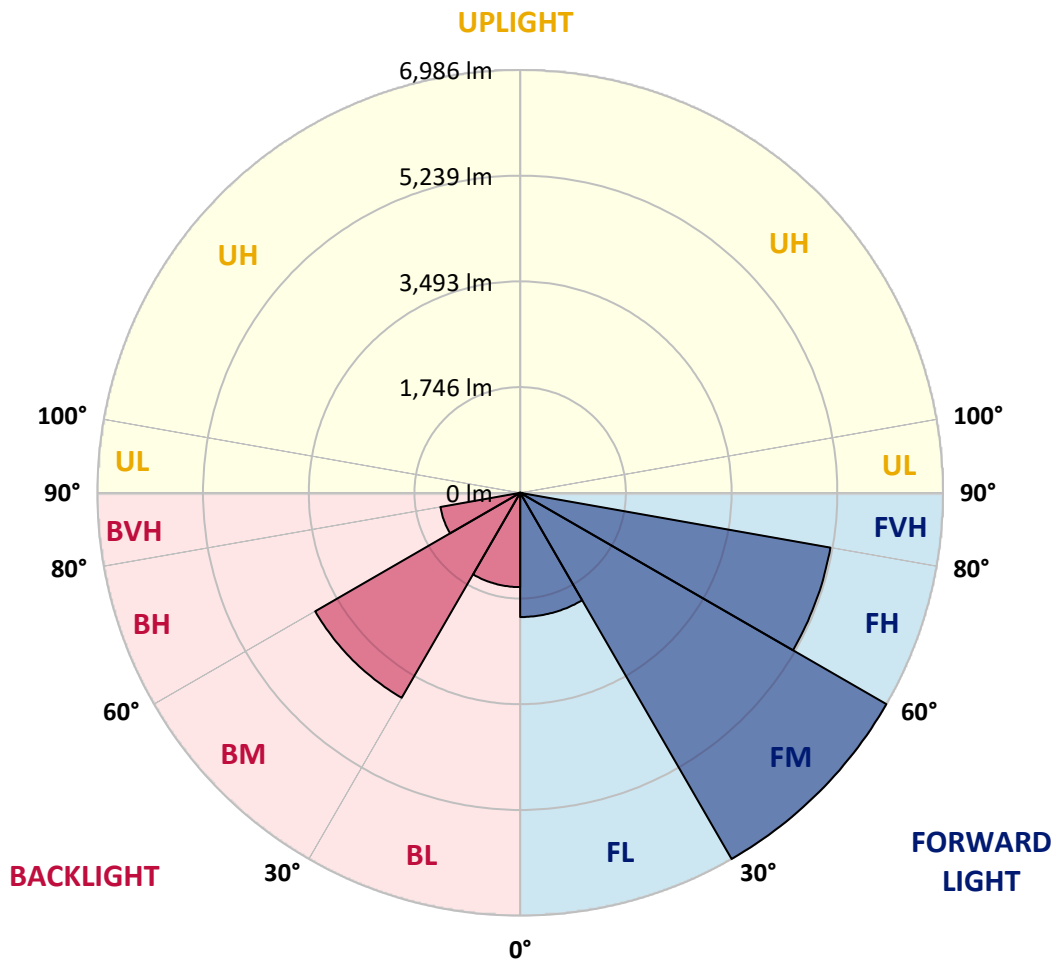


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2051.7	7.3			
FM (30°-60°)	6985.5	24.9			
FH (60°-80°)	5204.4	18.6			G3/7500
FVH (80°-90°)	38.6	0.1			G1/100
BL (0°-30°)	1557.5	5.6	B3/2500		
BM (30°-60°)	3910.2	14.0	B3/5000		
BH (60°-80°)	1338.7	4.8	B3/2500		G3/2500
BVH (80°-90°)	26.1	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	6887.2	24.6			

BUG Rating: B3-U0-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	30°	35°	40°	45°	50°	55°	60°
0°	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
2.5°	4001	3998	4017	4012	4010	3998	4008	4014	4015	4022	4002
5°	4086	4079	4096	4093	4092	4066	4077	4078	4083	4089	4071
7.5°	4237	4191	4221	4197	4206	4186	4206	4225	4200	4183	4205
10°	4378	4365	4385	4386	4392	4377	4388	4394	4376	4343	4306
12.5°	4534	4536	4581	4605	4560	4578	4547	4540	4500	4463	4408
15°	4702	4729	4765	4804	4809	4747	4727	4722	4692	4616	4596
17.5°	4882	4902	4978	5012	4992	4953	4937	4902	4848	4786	4692
20°	5105	5111	5176	5205	5195	5143	5122	5076	5000	4908	4823
22.5°	5258	5275	5424	5393	5347	5297	5276	5227	5143	5062	4945
25°	5356	5388	5557	5575	5513	5452	5405	5378	5289	5195	5108
27.5°	5496	5498	5637	5635	5604	5543	5498	5448	5415	5316	5169
30°	5667	5676	5693	5618	5566	5561	5539	5496	5421	5307	5164
32.5°	6001	5945	5756	5594	5509	5473	5511	5491	5437	5346	5180
35°	6259	6160	5764	5441	5387	5389	5398	5442	5411	5363	5279
37.5°	6387	6237	5751	5334	5239	5219	5255	5324	5398	5454	5403
40°	6435	6149	5637	5235	5130	5098	5162	5277	5396	5519	5489
42.5°	6244	6052	5524	5203	5076	5029	5071	5222	5428	5561	5609
45°	6262	6050	5521	5214	5068	5006	5078	5321	5505	5722	5828
47.5°	6342	6124	5564	5283	5107	4988	5158	5411	5740	6048	6335
50°	6295	6105	5550	5364	5146	5101	5323	5735	6212	6761	7299
52.5°	5923	5761	5284	5275	5247	5320	5603	6211	7001	7806	8446
55°	5199	5074	4999	5401	5434	5604	6078	6984	8032	8912	9568
56°	4773	4711	4786	5382	5513	5716	6278	7294	8318	9235	9894
57°	4440	4415	4681	5486	5661	5969	6575	7641	8639	9586	10219
58°	4050	4058	4526	5500	5769	6119	6734	7764	8778	9779	10380
59°	3664	3723	4309	5465	5869	6247	6911	7870	8951	9937	10695
60°	3309	3369	4107	5382	5897	6361	7065	8009	9136	10146	10991
61°	3049	3029	3842	5273	5852	6427	7172	8180	9335	10487	11515
62°	2692	2753	3579	5056	5756	6457	7269	8387	9666	11002	12199
63°	2445	2515	3329	4834	5585	6373	7320	8578	10112	11674	12950
64°	2219	2294	3064	4565	5377	6267	7343	8825	10575	12305	13656
65°	2009	2065	2810	4288	5128	6084	7353	9095	11071	12835	14227
66°	1884	1949	2615	4033	4883	5970	7435	9392	11435	13287	14754
67°	1720	1779	2383	3733	4622	5761	7393	9558	11611	13605	15137
68°	1583	1635	2191	3442	4296	5530	7371	9538	11703	13709	15209
69°	1457	1506	1974	3137	3974	5278	7145	9362	11612	13583	14968
70°	1329	1399	1799	2851	3641	4953	6846	9087	11327	13256	14499
71°	1231	1257	1619	2563	3299	4531	6374	8615	10886	12654	13649
72°	1148	1156	1477	2294	2963	4072	5809	8055	10278	11801	12271
73°	975	1017	1317	2059	2617	3533	5099	7314	9288	10390	10311
74°	776	812	1091	1743	2232	2978	4215	6252	7976	8567	8119
75°	586	650	860	1380	1860	2361	3224	5011	6392	6682	6080
77.5°	258	268	390	611	786	922	1261	2069	2746	2824	2502
80°	73	63	81	120	150	174	295	603	825	844	783



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	30°	35°	40°	45°	50°	55°	60°
82.5°	35	22	32	31	40	78	76	125	166	186	186
85°	19	1	1	25	5	1	8	15	35	27	30
87.5°	6	0	13	0	0	0	5	0	0	0	9
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	63°	65°	70°	75°	80°	85°	90°	95°	105°	115°	125°
0°	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
2.5°	4007	4012	4008	4012	4010	4009	4003	4018	3998	3991	3983
5°	4055	4062	4037	4053	4066	4048	4035	4084	4026	3992	3968
7.5°	4176	4170	4153	4143	4123	4117	4098	4091	4039	3965	3934
10°	4303	4285	4251	4224	4184	4159	4140	4092	4042	3976	3952
12.5°	4376	4356	4299	4266	4205	4189	4136	4075	3955	3909	3856
15°	4520	4497	4405	4347	4270	4218	4159	4092	4000	3889	3815
17.5°	4659	4642	4539	4477	4374	4324	4230	4143	4017	3887	3798
20°	4781	4750	4632	4528	4460	4364	4270	4175	4016	3880	3760
22.5°	4899	4850	4724	4620	4548	4430	4310	4217	4042	3862	3724
25°	5019	4977	4835	4698	4589	4476	4361	4274	4056	3879	3708
27.5°	5069	4994	4850	4789	4619	4521	4425	4339	4128	3868	3666
30°	5069	4999	4845	4726	4643	4575	4500	4393	4168	3854	3609
32.5°	5126	5061	4959	4865	4769	4705	4610	4505	4236	3916	3673
35°	5218	5190	5110	5007	4963	4908	4833	4733	4419	4001	3669
37.5°	5357	5324	5270	5204	5180	5154	5107	5012	4593	4105	3651
40°	5459	5435	5394	5385	5378	5381	5365	5274	4827	4214	3579
42.5°	5575	5557	5565	5602	5588	5579	5582	5519	5082	4343	3512
45°	5831	5821	5892	5941	5916	5861	5841	5755	5350	4495	3471
47.5°	6416	6414	6462	6584	6466	6280	6196	6097	5609	4564	3383
50°	7469	7486	7432	7381	7111	6796	6626	6370	5581	4421	3229
52.5°	8648	8663	8431	8160	7678	7122	6704	6263	5321	4156	3063
55°	9763	9763	9138	8381	7800	7335	7028	6545	5478	4234	3095
56°	10056	9988	9125	8258	7821	7456	7187	6667	5592	4320	3021
57°	10324	10232	9249	8347	7965	7664	7396	6838	5810	4479	3051
58°	10554	10471	9430	8386	7973	7693	7415	6957	5882	4445	3019
59°	10866	10854	9720	8428	7941	7618	7382	6936	5735	4331	2965
60°	11327	11385	10070	8503	7876	7452	7096	6563	5363	4116	2887
61°	11962	11996	10540	8577	7598	6936	6490	5977	4927	3828	2795
62°	12657	12737	11059	8466	7030	6284	5756	5375	4504	3559	2722
63°	13449	13464	11465	8171	6387	5596	5216	4840	4136	3356	2682
64°	14123	14101	11811	7941	5899	5018	4562	4251	3824	3193	2668
65°	14675	14613	12202	7888	5430	4415	4028	3865	3672	3075	2637
66°	15227	15182	12665	7988	5239	4169	3889	3839	3541	2993	2659
67°	15584	15479	12942	8237	5368	4270	3948	3816	3270	2801	2503
68°	15612	15532	13177	8660	5829	4467	3970	3579	2731	2343	2175
69°	15359	15287	13213	8944	6039	4392	3503	2763	1693	1462	1547
70°	14825	14699	12709	8605	5606	3692	2537	1668	994	853	1031
71°	13748	13502	11351	7384	4468	2659	1686	1143	772	680	811
72°	12063	11564	9370	5812	3341	2023	1367	1025	801	678	741
73°	9847	9345	7235	4441	2631	1723	1223	962	768	613	670
74°	7558	7090	5419	3373	2046	1394	1054	891	742	565	562
75°	5570	5174	3994	2463	1522	1128	884	822	717	523	472
77.5°	2229	2036	1489	979	698	606	588	613	611	438	358
80°	663	598	441	346	277	257	279	315	343	225	168



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CANDELA DISTRIBUTION (continued):

	63°	65°	70°	75°	80°	85°	90°	95°	105°	115°	125°
82.5°	170	150	122	101	84	87	89	115	127	96	72
85°	30	69	21	37	14	57	26	16	22	16	18
87.5°	0	0	0	0	0	0	0	0	0	5	1
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	4000	4000	4000	4000	4000	4000
2.5°	3980	3985	3987	4006	3976	3978
5°	3945	3940	3930	3935	3913	3911
7.5°	3890	3858	3824	3813	3787	3795
10°	3855	3806	3772	3720	3705	3701
12.5°	3793	3772	3680	3620	3595	3583
15°	3739	3683	3623	3559	3532	3513
17.5°	3694	3629	3549	3498	3446	3439
20°	3664	3572	3477	3396	3337	3335
22.5°	3591	3489	3374	3284	3224	3237
25°	3551	3425	3292	3208	3165	3150
27.5°	3507	3353	3204	3111	3036	3006
30°	3430	3271	3085	2964	2889	2902
32.5°	3389	3172	3024	2860	2768	2758
35°	3372	3092	2906	2733	2636	2625
37.5°	3231	2990	2774	2590	2499	2486
40°	3104	2867	2615	2445	2335	2366
42.5°	2967	2666	2478	2333	2214	2209
45°	2856	2522	2352	2309	2134	2117
47.5°	2702	2392	2206	2301	2057	2031
50°	2617	2304	2069	2240	1933	1938
52.5°	2543	2197	1974	2049	1789	1731
55°	2488	2091	1844	1830	1622	1600
56°	2427	2001	1732	1686	1537	1528
57°	2423	2010	1735	1653	1565	1583
58°	2373	1965	1691	1558	1541	1581
59°	2339	1917	1615	1473	1517	1573
60°	2306	1891	1563	1389	1472	1506
61°	2272	1832	1483	1296	1384	1455
62°	2253	1798	1416	1235	1320	1372
63°	2242	1768	1353	1106	1209	1227
64°	2228	1714	1251	991	1094	1113
65°	2178	1616	1104	837	971	998
66°	2157	1534	1028	765	904	966
67°	1984	1349	895	644	802	874
68°	1720	1153	747	540	711	805
69°	1347	920	598	436	615	726
70°	975	653	474	381	540	629
71°	759	446	333	362	448	550
72°	690	383	300	424	445	531
73°	618	352	284	509	436	495
74°	542	302	243	518	382	392
75°	457	264	200	524	356	343
77.5°	301	215	159	487	315	271
80°	146	103	119	284	169	134



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
82.5°	60	37	28	76	51	62
85°	12	17	4	33	1	6
87.5°	0	0	0	0	0	0
90°	0	0	0	0	0	0

(END OF REPORT)