

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: 768944

Luminaire Tested: **ARC25SXX3C16X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 768944  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARC25SXX3C16X  
Description: CUTOFF GENERATIONS POST TOP TYPE 3 W/CAGE  
Light Source: 250 WATT HPS CLEAR E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 27500 (1 lamp)  
Luminaire Lumens: 14152.3 lumens  
Efficiency: 51.5%  
Efficacy: 56.6 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Short - Cutoff  
BUG Rating: B3 - U3 - G3

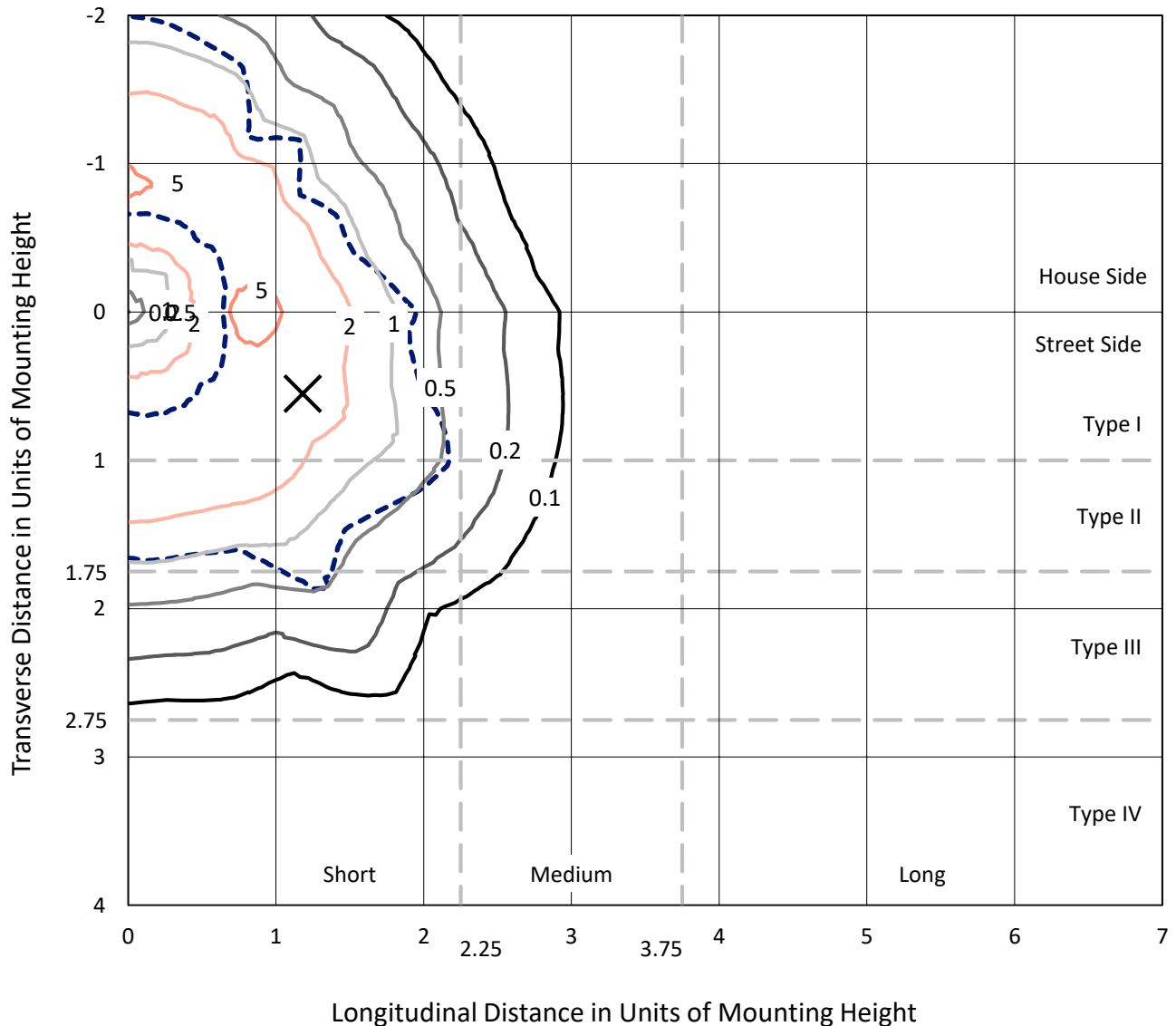
Input Watts (W): 250  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

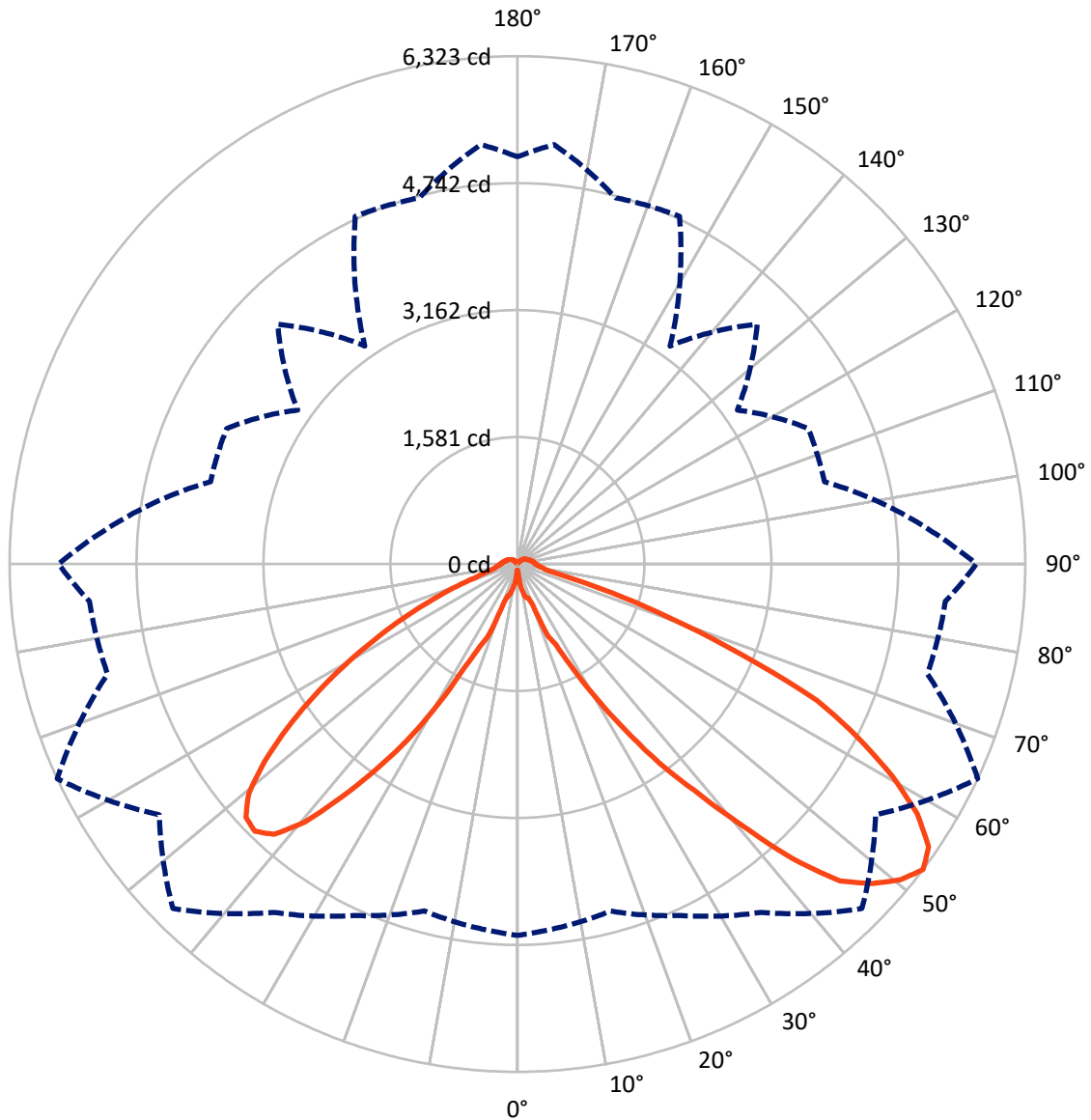
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 52.5-Deg Vertical

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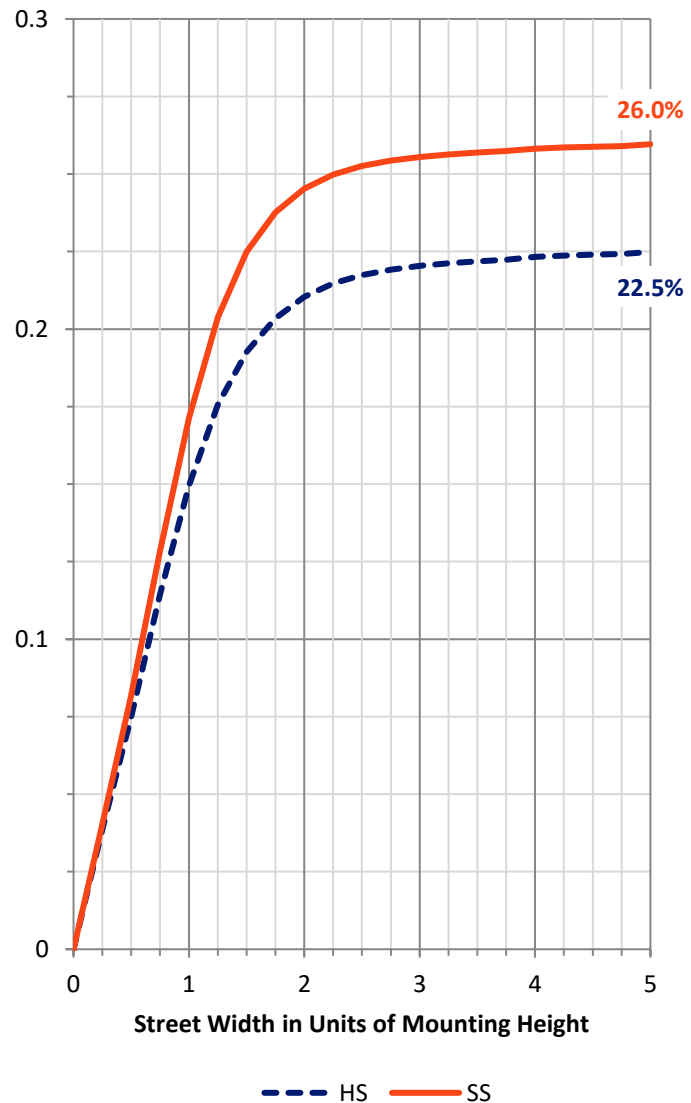
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6267.2	319.1	6586.3
	% Lamp	22.8	1.2	24.0
<b>Street Side</b>	Lumens	7221.7	344.2	7565.9
	% Lamp	26.3	1.3	27.5
<b>Total</b>	Lumens	13488.9	663.3	14152.3
	% Lamp	49.1	2.4	51.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	19.9	0.1	0.1
10°-20°	120.5	0.9	0.4
20°-30°	552.4	3.9	2.0
30°-40°	2003.3	14.2	7.3
40°-50°	3725.7	26.3	13.5
50°-60°	3893.6	27.5	14.2
60°-70°	2267.7	16.0	8.2
70°-80°	631.7	4.5	2.3
80°-90°	274.1	1.9	1.0
90°-100°	208.6	1.5	0.8
100°-110°	166.5	1.2	0.6
110°-120°	126.8	0.9	0.5
120°-130°	88.6	0.6	0.3
130°-140°	50.5	0.4	0.2
140°-150°	19.8	0.1	0.1
150°-160°	4.2	0.0	0.0
160°-170°	0.3	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	13488.9	95.3	49.1
0°-180°	14152.3	100.0	51.5



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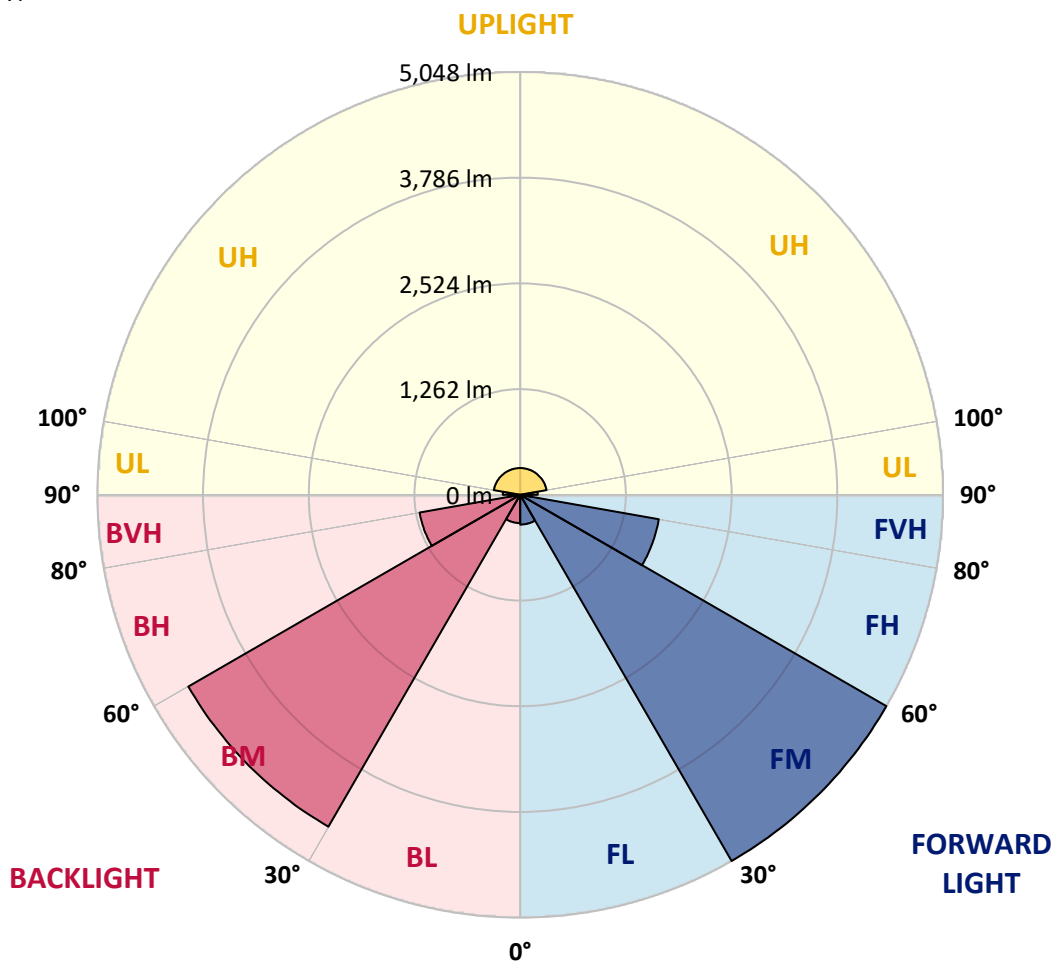
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	355.0	1.3			
FM	(30°-60°)	5047.6	18.4			
FH	(60°-80°)	1680.6	6.1			G1/1800
FVH	(80°-90°)	138.5	0.5			G2/225
BL	(0°-30°)	337.7	1.2	B1/500		
BM	(30°-60°)	4575.0	16.6	B3/5000		
BH	(60°-80°)	1218.9	4.4	B3/2500		G3/2500
BVH	(80°-90°)	135.6	0.5			G2/225
UL	(90°-100°)	208.6	0.8		U3/500	
UH	(100°-180°)	319.1	1.2		U3/500	
Trapped Light		13347.7	48.5			

**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°	75	75	75	75	75	75	75	75	75	75	75
2.5°	75	84	84	79	84	84	84	89	79	75	79
5°	177	182	186	182	172	168	163	144	135	130	126
7.5°	289	284	298	298	284	275	275	266	247	242	242
10°	336	340	349	368	363	359	354	336	317	312	303
12.5°	410	415	419	438	438	429	419	410	391	368	373
15°	475	466	471	485	489	480	457	438	405	415	415
17.5°	513	513	503	517	513	527	485	447	433	443	443
20°	615	582	606	606	587	536	545	536	513	503	508
22.5°	1072	913	1034	1020	927	638	792	974	927	788	969
25°	1165	1128	1100	1118	983	746	899	1109	1128	1142	1244
27.5°	1603	1547	1421	1477	1305	1463	1314	1477	1449	1580	1696
30°	2171	2134	1845	1864	1705	2162	1799	1952	2041	2260	2353
32.5°	2777	2735	2325	2446	2139	2605	2255	2446	2614	2936	3047
35°	3290	3215	2866	2954	2684	3155	2703	3047	3075	3719	3779
37.5°	3746	3719	3308	3513	3215	3719	3141	3574	3840	4399	4543
40°	4082	4203	3714	4054	3728	4208	3691	4236	4445	5019	5247
42.5°	4529	4483	4133	4380	4194	4660	4245	5005	4883	5582	5680
45°	4678	4660	4301	4664	4571	5196	4664	5629	5266	5811	5988
47.5°	4837	4711	4473	4818	4907	5578	5130	5946	5568	5806	6034
50°	4837	4706	4543	4907	5154	5904	5443	6179	5573	5648	6006
52.5°	4623	4571	4473	4828	5294	6067	5443	6323	5284	5349	5713
55°	4110	4147	4087	4445	5210	5871	5158	6211	4930	4981	5228
57.5°	3402	3523	3523	3826	4855	5233	4744	5867	4483	4352	4604
60°	2815	2880	2917	3183	4376	4492	4259	5359	3938	3625	3872
62.5°	2293	2297	2363	2568	3928	3644	3784	4753	3416	2973	3159
65°	1724	1659	1771	1920	3481	2828	3285	4101	2866	2386	2493
67.5°	1165	1104	1253	1253	2982	2069	2628	3015	2288	1836	1883
70°	783	769	904	820	2176	1323	1897	2022	1696	1328	1342
72.5°	578	615	666	610	1375	736	1212	1226	1142	974	946
75°	410	424	457	405	513	461	713	615	699	508	466
77.5°	298	303	322	317	359	363	447	373	447	363	354
80°	270	270	294	289	289	317	322	326	326	312	294
82.5°	242	252	261	270	266	284	280	289	289	270	266
85°	233	233	247	252	252	256	256	256	261	247	247
87.5°	214	219	228	233	228	233	233	242	238	224	219
90°	205	210	219	219	219	219	219	224	224	205	205
95°	186	191	200	200	200	191	196	205	200	182	186
105°	149	158	163	163	163	168	163	168	163	154	154
115°	130	130	126	140	130	135	130	130	130	121	121
125°	112	112	112	112	112	107	112	107	103	98	103
135°	75	70	70	70	70	65	65	65	65	65	70
145°	37	37	37	28	28	23	28	28	28	33	37
155°	0	9	9	5	0	0	0	9	0	5	5
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°	75	75	75	75	75	75	75	75	75	75
2.5°	75	79	75	75	75	75	75	75	75	75
5°	126	130	126	126	126	116	112	103	98	103
7.5°	242	228	238	233	224	210	205	205	205	205
10°	298	289	275	289	270	275	280	266	256	270
12.5°	354	345	340	331	345	349	345	340	331	326
15°	419	410	396	382	401	382	373	363	377	391
17.5°	429	424	419	410	415	410	396	363	377	373
20°	485	517	513	513	475	461	508	471	410	419
22.5°	774	923	955	792	555	722	927	904	685	801
25°	1179	1109	1132	923	685	904	1095	1104	1044	1100
27.5°	1659	1482	1426	1244	1417	1417	1426	1449	1514	1491
30°	2330	2041	1999	1827	2237	2018	1985	2022	2162	2199
32.5°	2987	2656	2591	2409	2884	2572	2689	2679	2847	2908
35°	3649	3234	3094	2922	3388	3075	3313	3294	3416	3486
37.5°	4408	3723	3625	3336	3882	3481	3830	3816	3970	3998
40°	5051	4194	4166	3737	4338	3798	4324	4338	4613	4613
42.5°	5582	4501	4529	3984	4674	3989	4711	4790	5112	5266
45°	5923	4571	4664	3989	4879	3956	5107	5065	5433	5638
47.5°	5927	4501	4623	3854	4795	3877	5130	5238	5550	5797
50°	5652	4254	4399	3686	4506	3672	5000	5084	5503	5601
52.5°	5116	3956	3993	3341	4222	3313	4776	4720	5242	5070
55°	4525	3513	3523	2959	3793	2996	4394	4357	4818	4567
57.5°	3924	3038	3020	2535	3299	2628	3905	3970	4357	4175
60°	3318	2530	2521	2120	2791	2227	3378	3523	3840	3774
62.5°	2693	2008	2027	1752	2274	1850	2815	3015	3271	3290
65°	2083	1542	1580	1403	1612	1445	2218	2418	2609	2665
67.5°	1519	1137	1170	1109	1230	1095	1589	1785	1892	1957
70°	1053	829	848	801	857	769	969	1114	1216	1286
72.5°	685	587	564	573	578	541	643	708	797	839
75°	447	443	419	433	424	410	466	503	564	578
77.5°	354	354	336	354	336	331	377	391	419	419
80°	294	303	289	308	294	294	322	331	331	336
82.5°	266	275	270	275	256	266	280	275	275	270
85°	238	256	247	247	233	233	256	256	242	242
87.5°	214	233	228	219	214	219	224	224	214	214
90°	205	219	210	214	196	205	214	210	196	196
95°	186	191	191	182	177	177	186	186	168	168
105°	149	163	154	163	149	158	149	144	140	140
115°	121	126	126	126	121	126	121	112	112	103
125°	103	98	98	93	98	98	98	89	93	93
135°	65	65	65	65	56	61	56	61	61	65
145°	37	33	23	28	19	23	28	28	28	28
155°	5	5	0	9	5	0	0	5	0	0
165°	5	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°	5	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)