

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: H39520

Luminaire Tested: **ARC15SXX3CX5XC**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: H39520  
Test Lab: PEACHTREE CITY  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARC15SXX3CX5XC  
Description: STREETWORKS AVENUE ARC TYPE 3 CUT OFF POST TOP  
WITH COPPER FINISH DECORATIVE CHIMNEY, ACRYLIC GLOBE  
AND TYPE THREE REFLECTOR INSERT  
Light Source: MOGUL BASE E23.5 CLEAR HIGH PRESSURE SODIUM LAMP  
LU150/U 150 WATTS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 16000 (1 lamp)  
Luminaire Lumens: 10447.2 lumens  
Efficiency: 65.3%  
Efficacy: 69.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
IES Classification: Type III - Short - Cutoff  
BUG Rating: B3 - U2 - G3

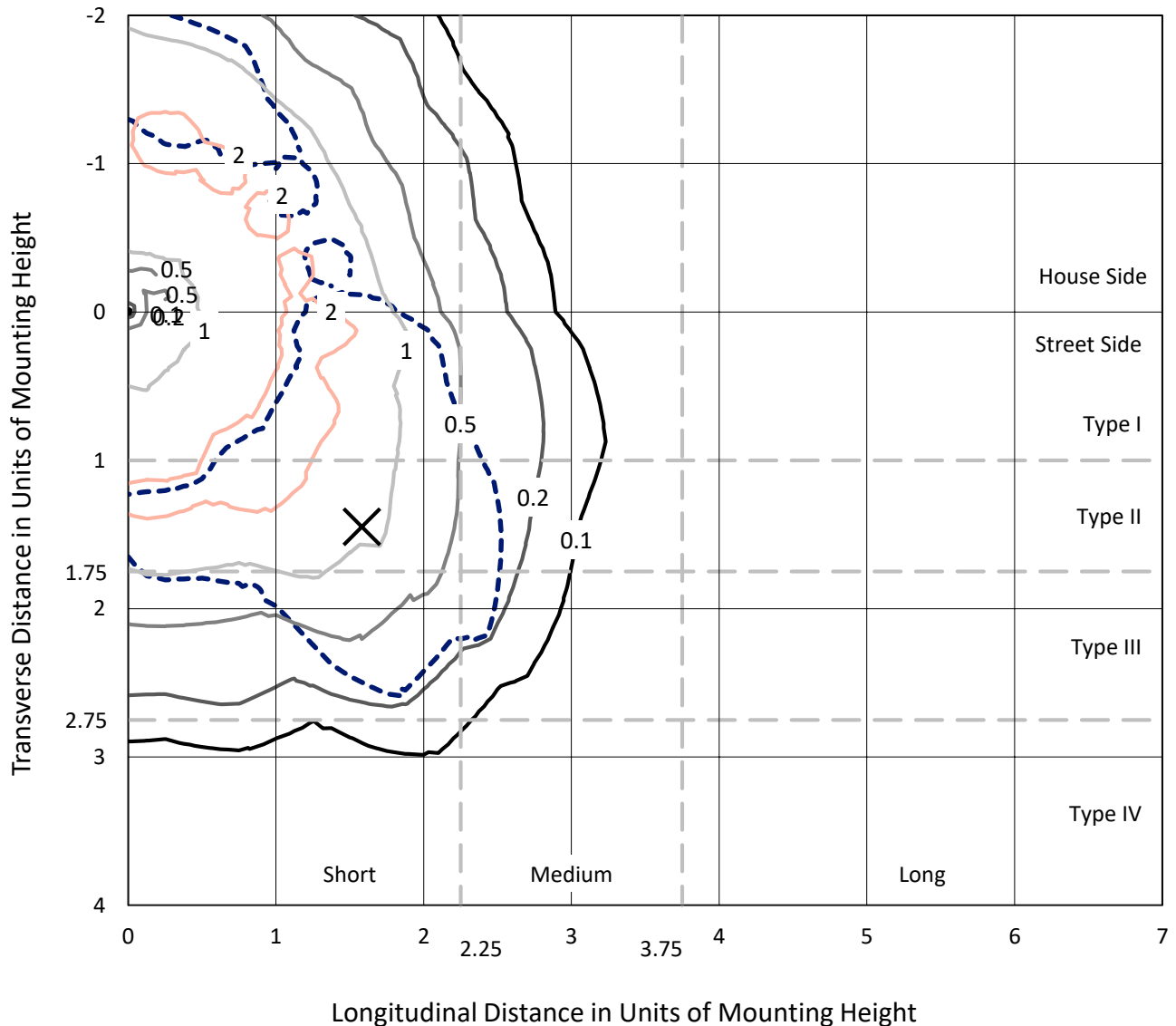
Input Watts (W): 150  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

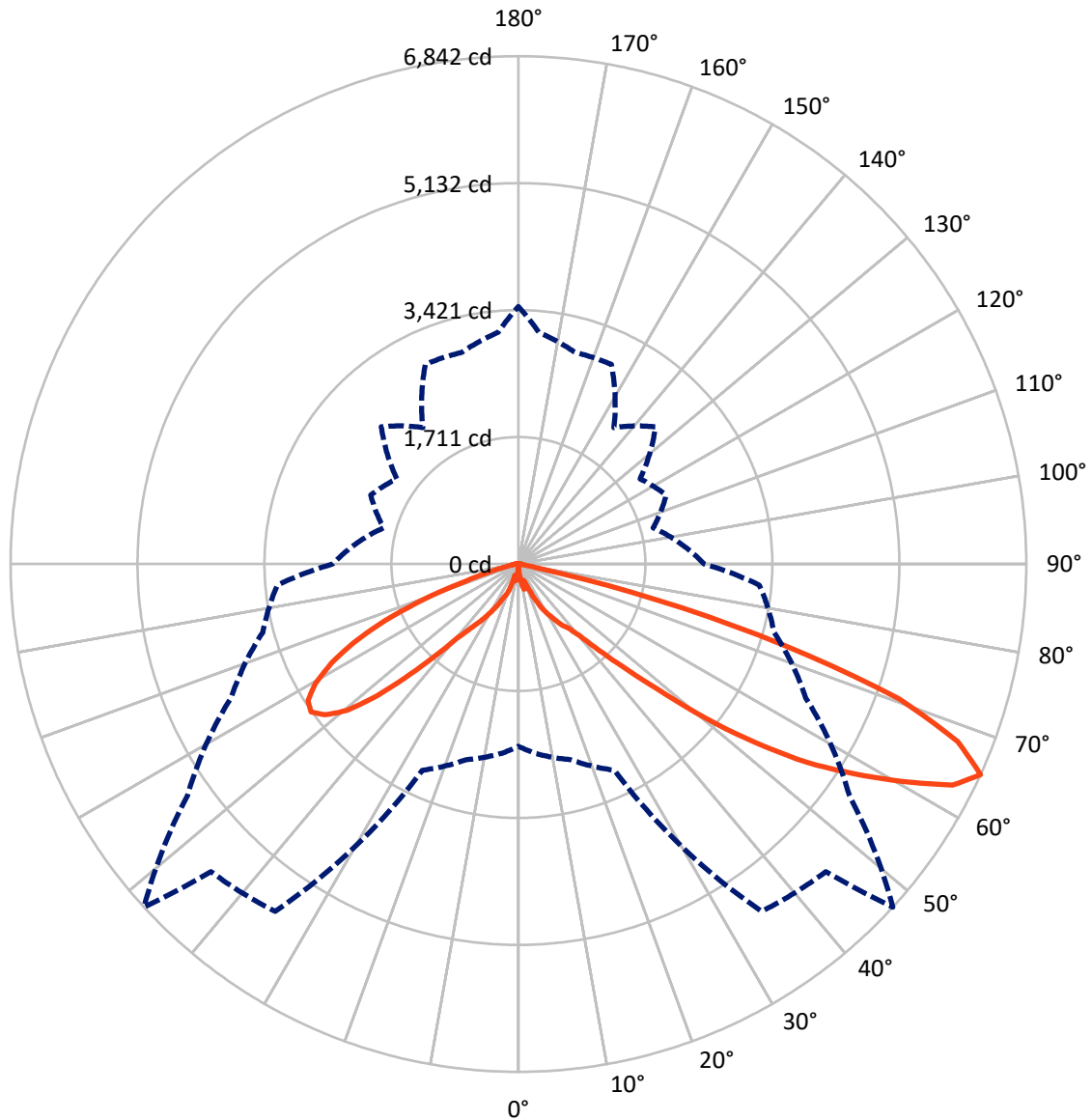
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical



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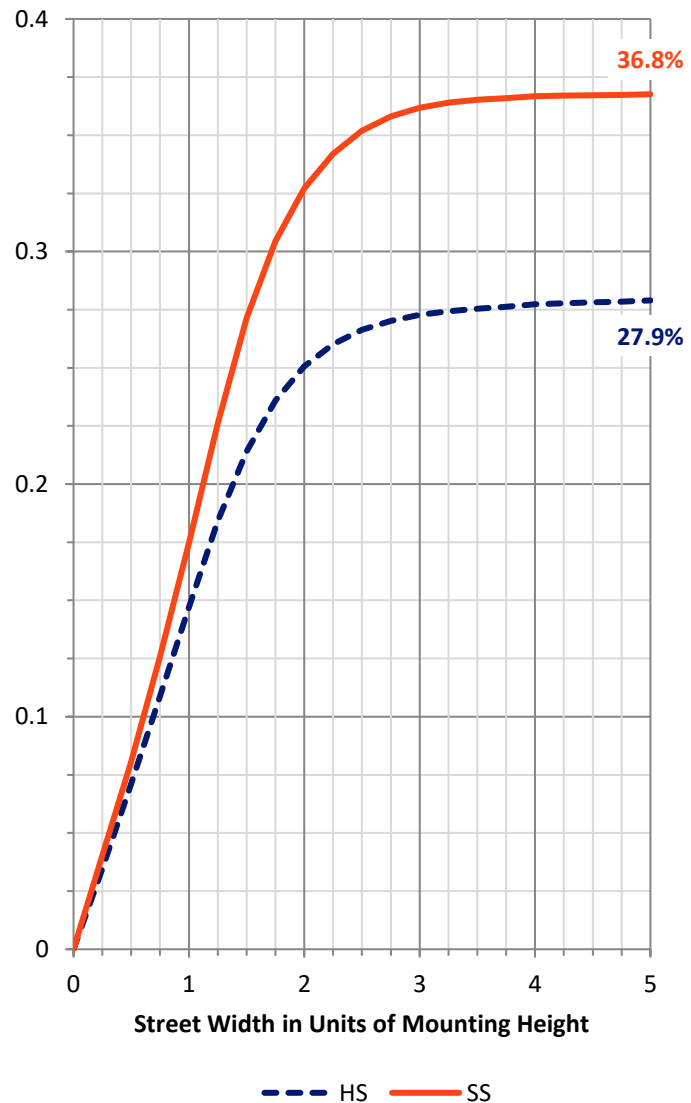
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4480.3	35.0	4515.3
	% Lamp	28.0	0.2	28.2
<b>Street Side</b>	Lumens	5902.1	29.7	5931.9
	% Lamp	36.9	0.2	37.1
<b>Total</b>	Lumens	10382.4	64.8	10447.2
	% Lamp	64.9	0.4	65.3

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	15.8	0.2	0.1
10°-20°	69.2	0.7	0.4
20°-30°	259.6	2.5	1.6
30°-40°	625.3	6.0	3.9
40°-50°	1701.8	16.3	10.6
50°-60°	3535.2	33.8	22.1
60°-70°	3185.0	30.5	19.9
70°-80°	919.6	8.8	5.7
80°-90°	70.9	0.7	0.4
90°-100°	36.7	0.4	0.2
100°-110°	20.9	0.2	0.1
110°-120°	3.8	0.0	0.0
120°-130°	1.5	0.0	0.0
130°-140°	0.7	0.0	0.0
140°-150°	0.5	0.0	0.0
150°-160°	0.4	0.0	0.0
160°-170°	0.3	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-90°	10382.4	99.4	64.9
0°-180°	10447.2	100.0	65.3



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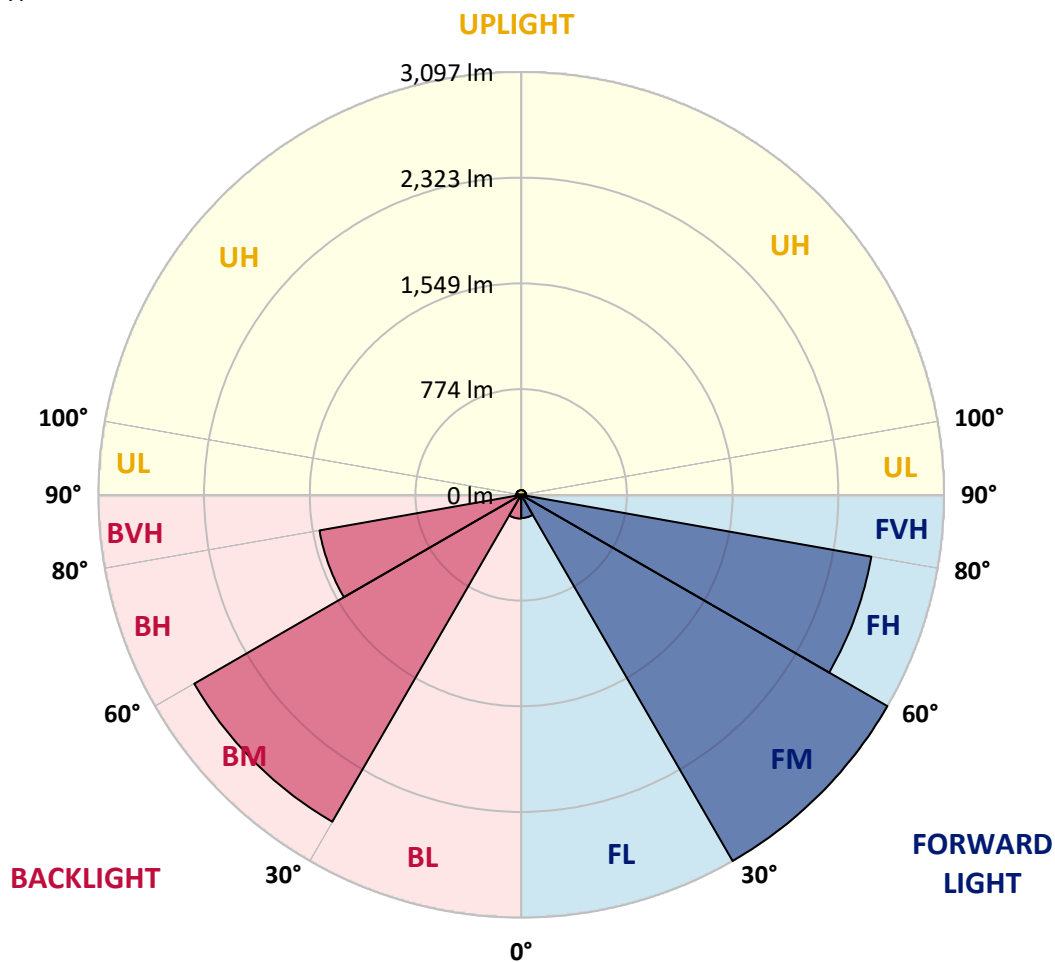
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	170.0	1.1			
FM	(30°-60°)	3097.3	19.4			
FH	(60°-80°)	2604.7	16.3			G2/5000
FVH	(80°-90°)	30.1	0.2			G1/100
BL	(0°-30°)	174.6	1.1	B1/500		
BM	(30°-60°)	2765.1	17.3	B3/5000		
BH	(60°-80°)	1499.9	9.4	B3/2500		G3/2500
BVH	(80°-90°)	40.7	0.3			G1/100
UL	(90°-100°)	36.7	0.2		U2/50	
UH	(100°-180°)	35.0	0.2		U2/50	
Trapped Light		5552.8	34.7			

**BUG Rating: B3-U2-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47.5°	55°	65°	75°	85°
0°	17	17	17	17	17	17	17	17	17	17	17
2.5°	28	28	27	24	21	17	17	16	15	15	15
5°	189	198	188	180	158	141	132	122	116	102	101
7.5°	233	233	229	228	222	222	216	211	222	224	224
10°	252	254	268	281	293	300	303	307	320	307	322
12.5°	311	307	305	328	337	350	351	357	339	329	300
15°	297	298	291	288	287	294	291	294	288	261	229
17.5°	243	248	240	235	235	231	229	229	216	183	174
20°	246	241	234	246	263	272	277	290	289	285	325
22.5°	355	347	336	384	396	431	394	425	449	374	417
25°	483	467	445	518	550	563	540	559	578	466	525
27.5°	605	581	560	676	707	689	667	685	686	549	650
30°	691	680	648	770	783	788	781	781	776	658	769
32.5°	755	755	738	859	878	855	880	832	890	771	899
35°	865	855	865	957	991	1015	1009	954	1010	923	1007
37.5°	1004	977	974	1046	1105	1105	1100	1111	1097	1101	1113
40°	1100	1115	1077	1185	1284	1277	1262	1298	1241	1278	1283
42.5°	1368	1387	1286	1494	1644	1605	1584	1587	1545	1599	1618
45°	1788	1840	1690	1865	2178	2044	1962	1985	1956	2027	2171
47.5°	2420	2444	2300	2415	3003	2732	2504	2601	2658	2598	3061
50°	3134	3211	3078	3140	3958	3631	3257	3527	3532	3255	4011
52.5°	3790	3905	3802	3740	4976	4438	3996	4355	4367	3565	4749
55°	3979	4163	4132	4144	5502	5183	4719	4860	5018	3498	5141
57.5°	3555	3995	3999	4183	5735	5673	5328	5174	5304	3604	5153
60°	3158	3554	3639	3983	5795	5874	5946	5396	5277	3660	4673
62.5°	2783	3090	3200	3599	5842	6029	6561	5539	4915	3712	3979
65°	2456	2559	2729	3065	5713	5859	6842	5444	4272	3566	3260
67.5°	1978	1971	2371	2424	5333	5328	6381	5251	3809	3113	2585
70°	1444	1429	2019	1849	4807	4703	5444	4474	3312	2589	1943
72.5°	653	647	1109	1047	3356	3138	3738	3031	2190	1950	1278
75°	147	162	456	554	1945	1610	1918	1614	931	1230	622
77.5°	103	112	168	191	405	249	279	216	192	223	163
80°	70	73	75	78	84	73	73	85	94	98	97
82.5°	58	59	58	62	64	57	55	62	70	76	78
85°	55	55	51	57	62	51	48	47	50	52	55
87.5°	49	49	44	46	50	42	39	38	38	39	39
90°	42	42	38	38	39	37	35	32	33	34	35
92.5°	40	39	36	34	37	34	32	29	32	32	34
95°	39	38	32	31	33	30	28	26	27	29	32
97.5°	36	35	29	29	30	27	25	24	25	26	30
100°	32	31	27	26	27	24	23	21	22	23	26
102.5°	27	28	24	24	23	21	20	19	18	20	23
105°	23	23	21	20	19	18	17	17	16	18	20
107.5°	17	17	16	14	13	13	12	11	11	13	16
110°	9	9	8	7	5	3	3	3	4	6	7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	47.5°	55°	65°	75°	85°
112.5°	7	7	7	5	3	2	1	1	2	3	5
115°	6	6	6	4	2	1	1	0	1	2	4
117.5°	6	6	5	4	2	0	0	0	0	1	3
120°	5	5	4	3	1	0	0	0	0	1	2
122.5°	5	5	4	3	1	0	0	0	0	1	2
125°	4	4	4	2	0	0	0	0	0	0	2
127.5°	4	4	3	2	0	0	0	0	0	0	1
130°	4	4	3	2	0	0	0	0	0	0	1
132.5°	3	3	3	1	0	0	0	0	0	0	1
135°	3	3	3	1	0	0	0	0	0	0	1
137.5°	3	3	3	1	0	0	0	0	0	0	1
140°	3	3	3	1	0	0	0	0	0	0	1
142.5°	3	3	3	1	0	0	0	0	0	0	1
145°	3	3	3	1	0	0	0	0	0	0	1
147.5°	4	3	3	1	0	0	0	0	0	0	1
150°	4	4	3	2	0	0	0	0	0	0	1
152.5°	4	4	3	2	0	0	0	0	0	0	1
155°	4	4	3	1	0	0	0	0	0	0	1
157.5°	4	4	3	1	0	0	0	0	0	0	1
160°	4	4	3	2	0	0	0	0	0	0	1
162.5°	4	4	3	2	0	0	0	0	0	0	1
165°	4	4	3	2	0	0	0	0	0	0	1
167.5°	4	4	3	2	0	0	0	0	0	0	1
170°	4	4	3	2	0	0	0	0	0	0	1
172.5°	4	4	3	2	0	0	0	0	0	0	1
175°	4	4	3	2	0	0	0	0	0	0	1
177.5°	4	4	3	2	0	0	0	0	0	0	1
180°	0	0	0	0	0	0	0	0	0	0	0





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	17	17	17	17	17	17	17	17	17	17	17
2.5°	15	16	16	15	14	13	13	12	11	11	11
5°	89	83	74	64	50	43	40	30	21	15	12
7.5°	225	225	228	208	206	211	207	194	182	169	168
10°	315	298	277	254	246	219	229	231	234	234	225
12.5°	299	291	272	280	252	225	195	183	179	192	204
15°	225	228	227	224	208	196	164	140	133	145	147
17.5°	179	174	168	167	154	155	132	107	107	104	110
20°	298	353	332	339	370	378	358	376	359	400	411
22.5°	366	469	446	437	471	443	494	517	538	478	522
25°	526	549	529	537	567	500	586	631	739	596	644
27.5°	638	652	632	653	680	611	707	724	818	700	738
30°	784	771	753	765	781	714	808	826	918	799	811
32.5°	896	882	859	857	890	832	904	919	1003	901	944
35°	1012	988	966	968	993	955	982	985	1045	974	983
37.5°	1119	1104	1093	1087	1117	1089	1101	1108	1177	1120	1114
40°	1288	1311	1325	1298	1328	1278	1304	1330	1390	1343	1312
42.5°	1576	1680	1667	1665	1749	1595	1738	1679	1818	1750	1657
45°	2042	2113	2106	2080	2334	1989	2289	2148	2408	2273	2037
47.5°	2650	2606	2739	2507	2981	2469	2935	2660	3070	2805	2496
50°	3421	3040	3281	2887	3527	2875	3427	3078	3608	3307	2965
52.5°	3835	3217	3637	3074	3729	3158	3588	3422	3836	3650	3341
55°	4060	3303	3622	3164	3655	3359	3717	3690	4113	3949	3840
57.5°	4020	3296	3324	3034	3322	3399	3617	3840	4229	4124	4258
60°	3606	3083	2878	2811	2873	3275	3274	3714	3993	3986	4262
62.5°	3060	2738	2382	2523	2461	2988	2799	3436	3542	3646	4026
65°	2501	2294	1879	2195	2000	2613	2243	2966	2951	3133	3469
67.5°	1929	1845	1469	1767	1541	2089	1697	2392	2340	2503	2773
70°	1360	1304	1019	1216	1067	1451	1148	1661	1672	1808	2022
72.5°	771	741	601	697	629	771	657	941	968	1074	1228
75°	359	374	358	387	362	402	365	481	517	591	666
77.5°	186	204	206	209	195	207	221	258	332	369	398
80°	103	118	125	113	106	119	132	136	199	217	218
82.5°	78	93	95	85	79	93	93	92	128	144	142
85°	59	67	72	66	64	72	63	64	69	69	68
87.5°	40	42	44	43	44	43	43	42	43	43	42
90°	37	38	41	39	39	39	38	38	38	37	37
92.5°	36	39	39	38	39	38	38	37	37	37	37
95°	35	38	39	38	38	37	37	36	37	37	36
97.5°	33	36	37	36	35	35	34	33	34	33	34
100°	29	32	33	33	31	31	31	29	30	29	29
102.5°	25	27	29	28	27	27	26	26	26	25	25
105°	22	24	26	24	23	22	21	21	21	21	22
107.5°	17	19	20	19	18	18	17	17	17	16	17
110°	8	9	9	8	8	8	8	7	7	6	6



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	5	6	7	6	6	5	5	4	2	2	2
115°	5	5	6	6	5	5	4	3	2	1	1
117.5°	4	4	5	5	5	4	3	2	1	0	0
120°	3	4	5	4	4	4	3	1	0	0	0
122.5°	2	3	4	4	4	4	3	1	0	0	0
125°	2	3	4	3	3	3	2	0	0	0	0
127.5°	2	2	3	3	2	2	1	0	0	0	0
130°	2	2	3	2	2	1	0	0	0	0	0
132.5°	2	2	2	2	1	1	0	0	0	0	0
135°	2	2	2	1	1	0	0	0	0	0	0
137.5°	2	2	2	1	0	0	0	0	0	0	0
140°	2	2	2	1	0	0	0	0	0	0	0
142.5°	2	2	2	1	0	0	0	0	0	0	0
145°	2	2	2	1	0	0	0	0	0	0	0
147.5°	2	2	2	1	0	0	0	0	0	0	0
150°	2	2	2	1	1	0	0	0	0	0	0
152.5°	2	2	2	1	0	0	0	0	0	0	0
155°	2	2	2	1	0	0	0	0	0	0	0
157.5°	2	2	2	1	0	0	0	0	0	0	0
160°	2	2	2	1	1	0	0	0	0	0	0
162.5°	2	2	2	2	1	0	0	0	0	0	0
165°	2	2	2	2	1	0	0	0	0	0	0
167.5°	2	2	2	2	1	0	0	0	0	0	0
170°	2	2	2	2	1	0	0	0	0	0	0
172.5°	2	2	2	2	1	0	0	0	0	0	0
175°	2	2	2	2	1	0	0	0	0	0	0
177.5°	2	2	2	2	1	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)