

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: P256744

Luminaire Tested: **CST-6-3-D-U-T5R-HSS-HM-EX180**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-6-3-D-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 4000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 180
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20757.9 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U2 - G4

Input Watts (W): 234
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

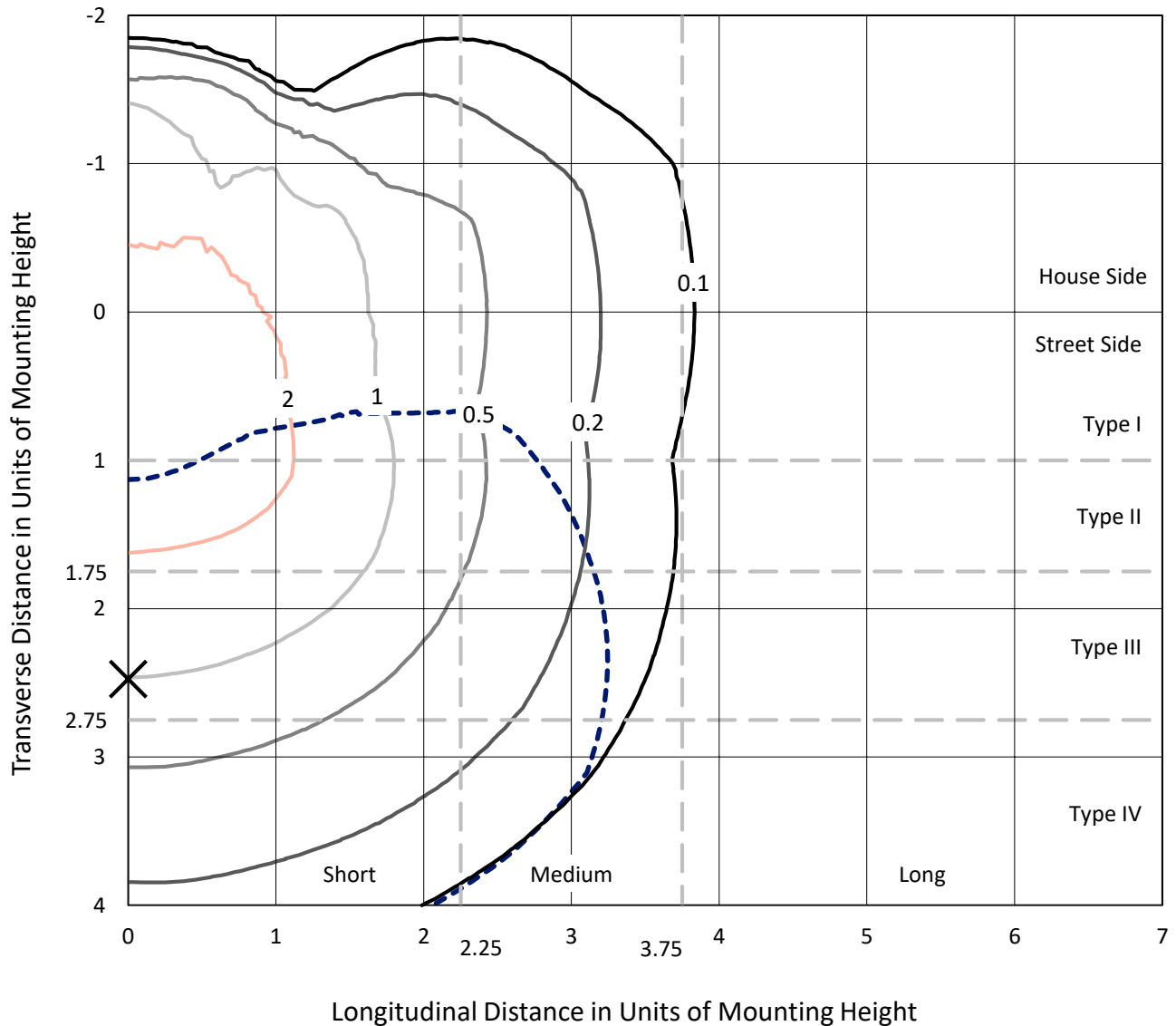


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

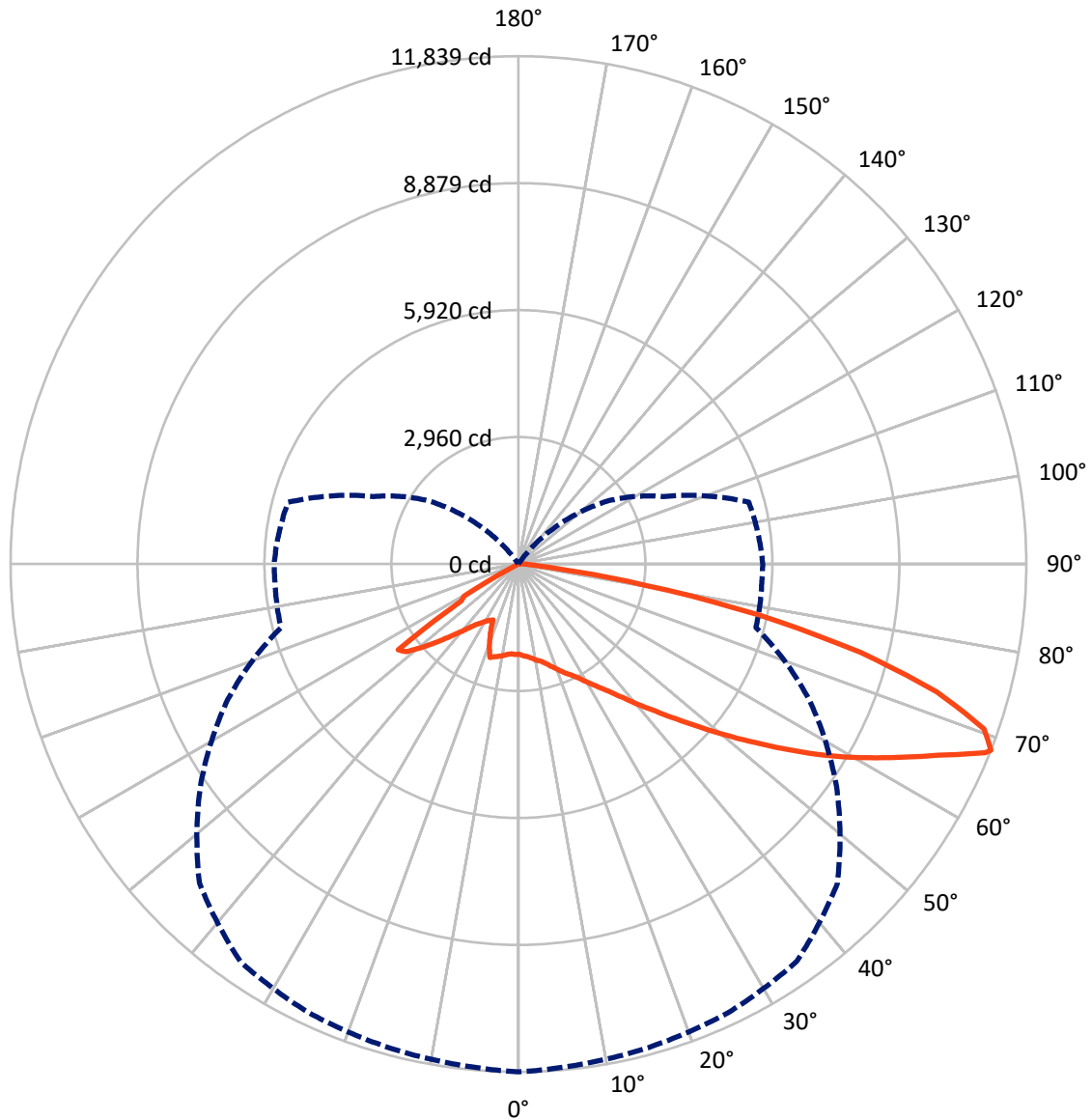


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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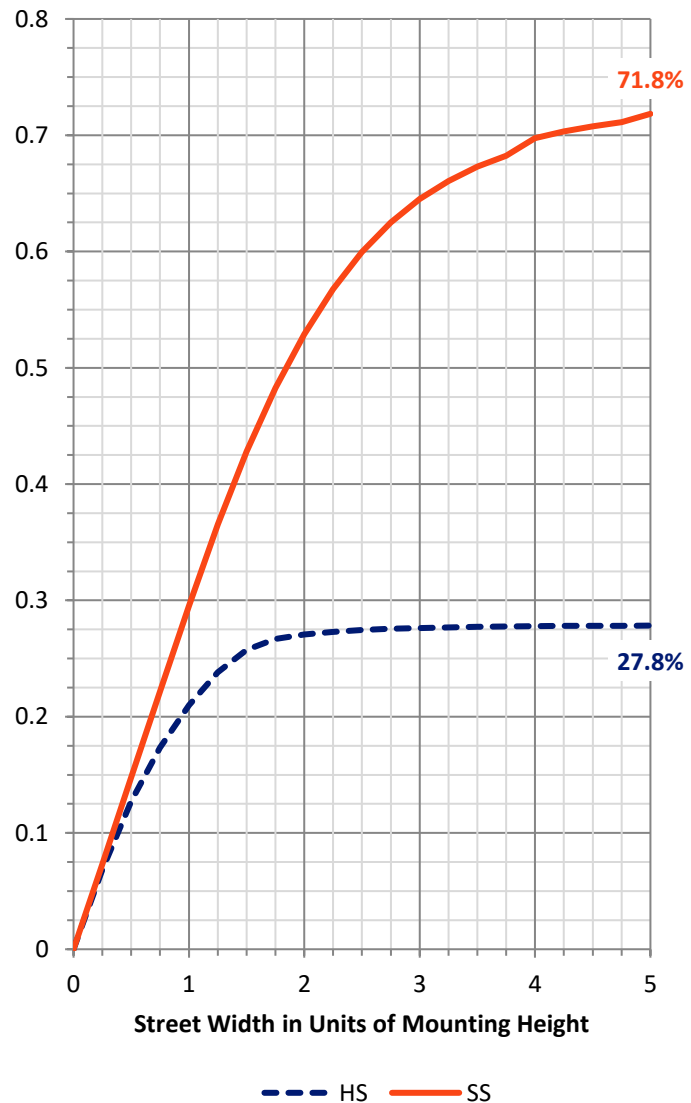
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5797.7	0.1	5797.8
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	14948.2	11.9	14960.1
	% Fixture	72.0	0.1	72.1
Total	Lumens	20745.9	12.0	20757.9
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.1	1.0
10°-20°	646.8	3.1
20°-30°	1095.0	5.3
30°-40°	1734.7	8.4
40°-50°	2836.1	13.7
50°-60°	4344.1	20.9
60°-70°	5341.5	25.7
70°-80°	4127.3	19.9
80°-90°	416.4	2.0
90°-100°	11.8	0.1
100°-110°	0.2	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°	20745.9	99.9
0°-180°	20757.9	100.0



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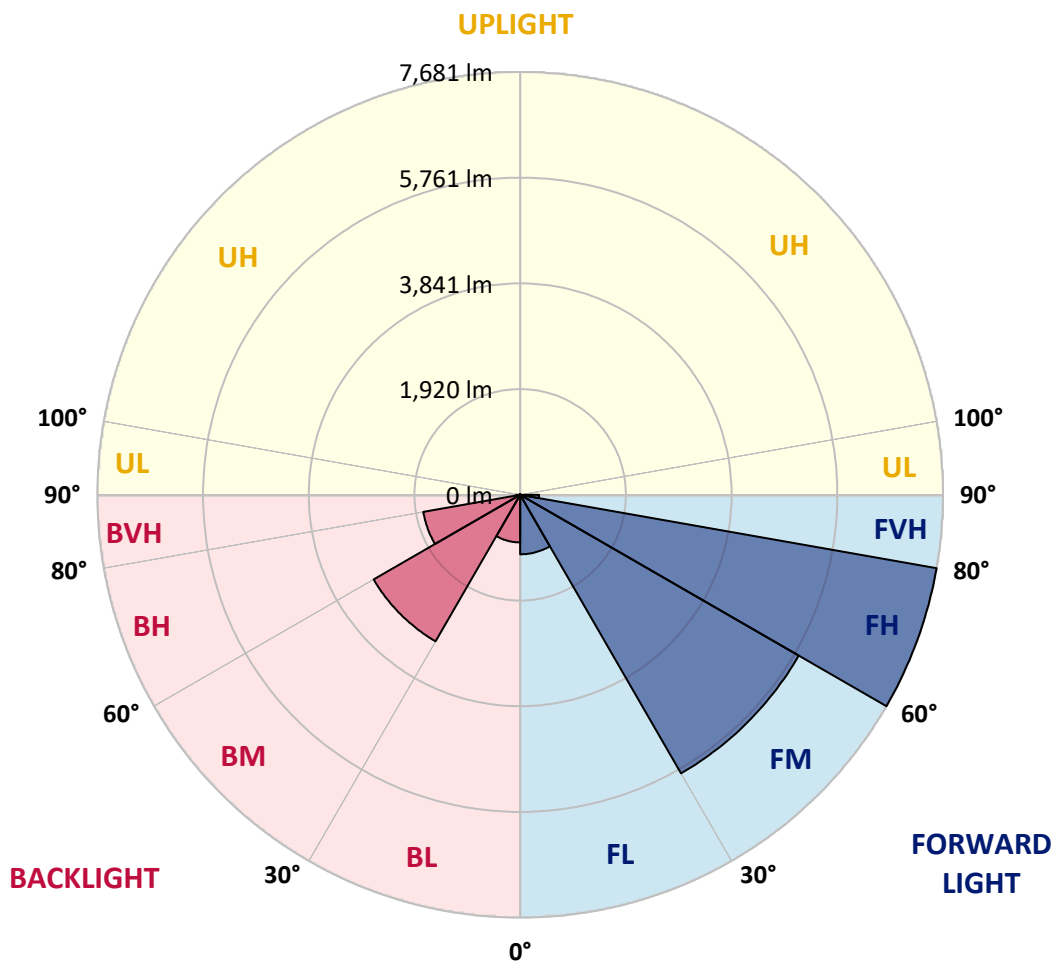
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1080.5	5.2			
FM	(30°-60°)	5843.0	28.1			
FH	(60°-80°)	7681.3	37.0			G4/12000
FVH	(80°-90°)	343.4	1.7			G3/500
BL	(0°-30°)	865.4	4.2	B2/1000		
BM	(30°-60°)	3071.9	14.8	B3/5000		
BH	(60°-80°)	1787.5	8.6	B3/2500		G3/2500
BVH	(80°-90°)	73.0	0.4			G1/100
UL	(90°-100°)	11.8	0.1		U2/50	
UH	(100°-180°)	0.1	0.0		U1/10	

BUG Rating: B3-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2103	2103	2103	2103	2103	2103	2103	2103	2103	2103	2103
2.5°	2141	2137	2133	2142	2107	2122	2110	2121	2113	2122	2119
5°	2169	2165	2153	2163	2140	2146	2131	2135	2108	2124	2123
7.5°	2215	2204	2196	2196	2176	2175	2151	2152	2131	2129	2133
10°	2277	2269	2247	2249	2221	2217	2187	2186	2169	2159	2168
12.5°	2323	2331	2311	2311	2283	2263	2242	2228	2215	2200	2193
15°	2407	2415	2388	2387	2376	2352	2329	2299	2276	2269	2258
17.5°	2516	2511	2488	2489	2491	2452	2429	2390	2357	2333	2327
20°	2627	2627	2602	2610	2600	2564	2549	2495	2449	2423	2402
22.5°	2751	2746	2729	2746	2726	2690	2665	2611	2552	2405	2345
25°	2869	2866	2873	2878	2853	2808	2791	2734	2570	2377	2256
27.5°	3018	3008	3024	3034	3009	2970	2934	2870	2523	2371	2358
30°	3209	3187	3210	3215	3189	3165	3111	2791	2539	2495	2491
32.5°	3413	3387	3417	3421	3387	3367	3231	2750	2696	2645	2650
35°	3655	3655	3670	3672	3647	3613	3095	2950	2902	2855	2854
37.5°	3950	3941	3981	4005	3978	3881	3293	3225	3151	3091	2967
40°	4306	4322	4333	4357	4331	4113	3582	3505	3447	3246	2933
42.5°	4690	4694	4718	4748	4748	4518	3920	3854	3779	3174	3033
45°	5149	5140	5186	5234	5221	4983	4313	4264	3913	3383	3384
47.5°	5670	5659	5725	5788	5723	5499	4745	4707	3777	3737	3729
50°	6272	6245	6321	6405	6352	6075	5270	4540	4156	4124	4119
52.5°	6915	6894	6940	7083	7013	6678	5767	4684	4595	4559	4550
55°	7641	7600	7699	7808	7727	7345	6257	5162	5070	5008	4918
57.5°	8404	8345	8396	8533	8455	8028	6889	5654	5545	4589	4224
60°	9164	9137	9157	9278	9182	8692	7481	6147	4693	4539	4557
62.5°	9928	9869	9887	10011	9888	9324	8042	6595	4939	4885	4904
65°	10747	10677	10693	10729	10577	9891	8538	7018	5309	5252	5273
67.5°	11734	11670	11583	11476	11266	10493	9031	7463	5725	5693	5700
68°	11839	11777	11672	11545	11309	10518	9052	7476	5731	5691	5693
70°	11512	11549	11430	11217	11020	10152	8709	7188	5476	5417	5402
72.5°	10195	10276	10112	10076	9834	9044	7621	6237	4763	4782	4728
75°	8231	8350	8151	8162	8024	7544	6387	5193	3911	3998	4014
77.5°	5724	5895	5808	5895	5827	5654	4943	3999	2984	3084	3123
80°	2985	3188	3303	3339	3361	3354	3010	2400	1725	1762	1760
82.5°	944	895	924	916	891	901	812	635	440	485	464
85°	285	287	279	277	256	225	184	106	52	61	57
87.5°	210	212	196	186	174	151	117	66	25	24	19
90°	116	112	104	96	91	78	59	25	9	7	6
92.5°	63	60	56	53	46	37	24	8	4	1	0
95°	29	27	26	23	20	14	8	5	3	1	0
97.5°	13	12	11	9	7	4	4	3	2	1	0
100°	3	3	2	2	2	2	2	2	2	1	0
102.5°	0	0	0	0	0	0	0	1	1	0	0
105°	0	0	0	0	0	0	0	0	1	0	0
107.5°	0	0	0	0	0	0	0	0	1	0	0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0	0	0	0	0	0	0	0	0	0	0
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	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°	2103	2103	2103	2103	2103	2103	2103	2103	2103	2103
2.5°	2116	2110	2107	2088	2094	2077	2110	2102	2097	2111
5°	2118	2097	2110	2099	2103	2079	2105	2094	2093	2099
7.5°	2123	2109	2122	2100	2110	2100	2119	2108	2117	2123
10°	2150	2142	2136	2131	2138	2118	2142	2143	2146	2164
12.5°	2188	2180	2170	2157	2164	2156	2174	2179	2190	2199
15°	2241	2226	2222	2210	2217	2213	2217	2214	2235	2232
17.5°	2314	2297	2240	2182	2145	2156	2202	2262	2277	2279
20°	2341	2221	2215	2149	2119	2117	2022	1880	1923	2024
22.5°	2309	2145	2128	2115	1987	1777	1757	1736	1731	1746
25°	2237	2218	2203	2033	1831	1832	1803	1665	1450	1432
27.5°	2347	2321	2176	1914	1910	1908	1865	1511	1465	1476
30°	2472	2429	2050	2016	2015	1997	1672	1524	1524	1526
32.5°	2616	2349	2122	2138	2137	2052	1615	1605	1601	1611
35°	2726	2285	2277	2306	2286	1741	1716	1707	1703	1698
37.5°	2692	2469	2469	2487	2326	1854	1842	1842	1834	1830
40°	2744	2698	2675	2682	1690	1991	2000	1998	1997	2004
42.5°	3018	2977	2956	2708	1892	1979	2199	2198	2201	2198
45°	3367	3329	3274	2534	2148	1735	2424	2435	2436	2435
47.5°	3733	3709	3146	2805	2426	1862	2317	2706	2701	2707
50°	4120	4012	3130	3126	2722	2072	2073	2943	2994	3010
52.5°	4551	3637	3469	3165	3022	2288	2266	2608	3304	3320
55°	4227	3842	3839	2817	3144	2496	2499	2475	3030	3444
57.5°	4206	4215	4208	3143	2294	2340	2723	2702	1962	1590
60°	4569	4582	4088	3394	2480	1439	1677	1425	1444	1459
62.5°	4916	4920	3325	2225	1229	58	28	23	22	22
65°	5300	5300	3564	2427	1187	22	4	3	11	11
67.5°	5671	5589	3739	2577	1208	3	0	0	0	0
68°	5650	5560	3723	2573	1205	2	0	0	0	0
70°	5336	5249	3532	2456	1160	2	0	0	0	0
72.5°	4710	4630	3128	2165	1046	1	0	0	0	0
75°	3987	3976	2702	1827	897	1	0	0	0	0
77.5°	3208	3158	2112	1432	723	0	0	0	0	0
80°	1787	1861	1236	842	455	0	0	0	0	0
82.5°	483	452	270	183	87	0	0	0	0	0
85°	62	68	31	25	6	0	0	0	0	0
87.5°	32	38	10	8	2	0	0	0	0	0
90°	6	7	3	1	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0
107.5°	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°
110°	0	0	0	0	0	0	0	0	0	0
112.5°	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)