

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: McGRAW-EDISON

Report Number: 769027

Luminaire Tested: **GSM-XX-100-HPS-XX-3V-FG-XX-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 769027  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GSM-XX-100-HPS-XX-3V-FG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE 3 DISTRIBUTION  
Light Source: 100 WATT HPS CLEAR ED-23.5  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 9500 (1 lamp)  
Luminaire Lumens: 6762.9 lumens  
Efficiency: 71.2%  
Efficacy: 67.6 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Short - Cutoff  
BUG Rating: B2 - U1 - G2

Input Watts (W): 100  
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: 25 FT

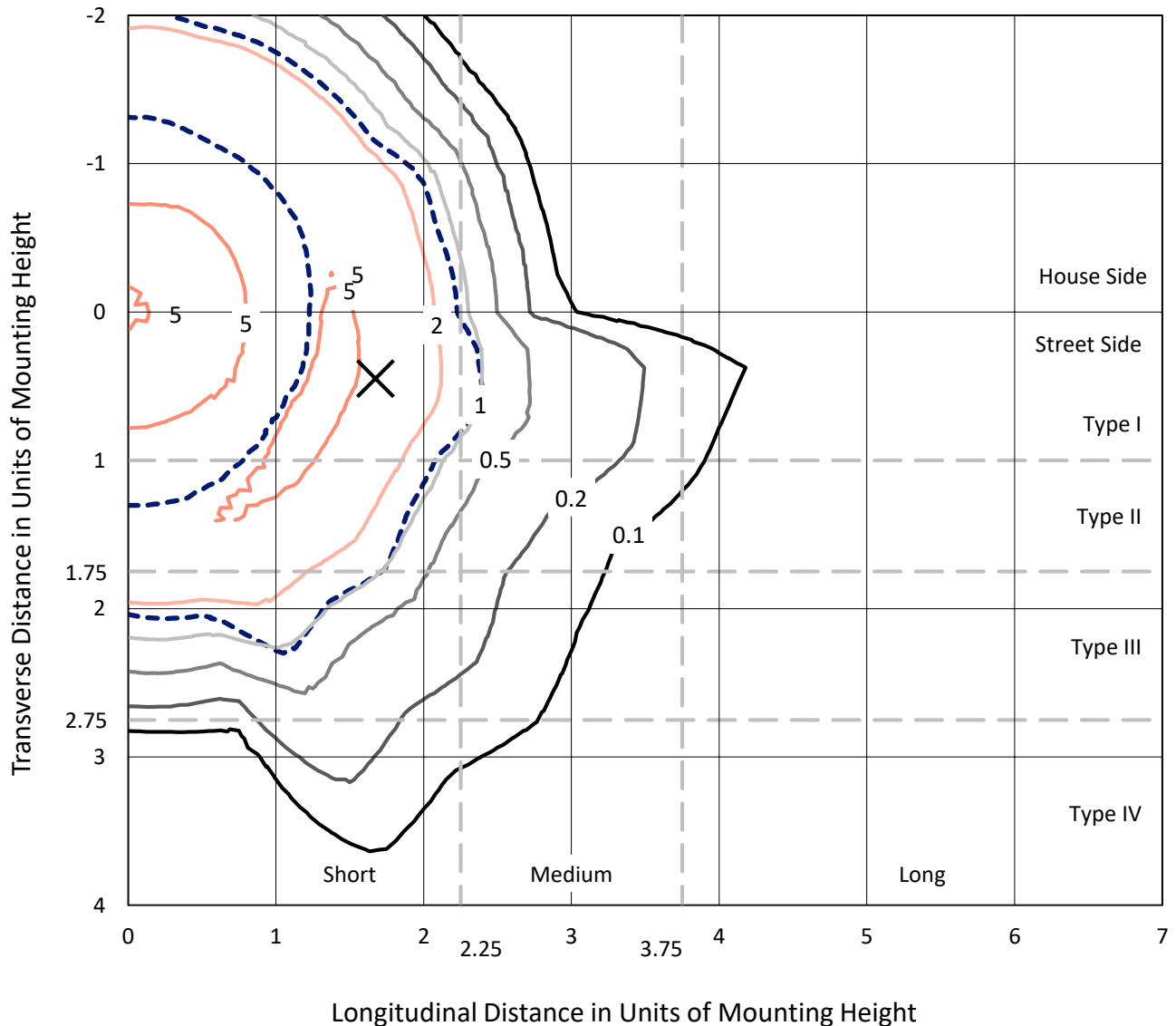


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

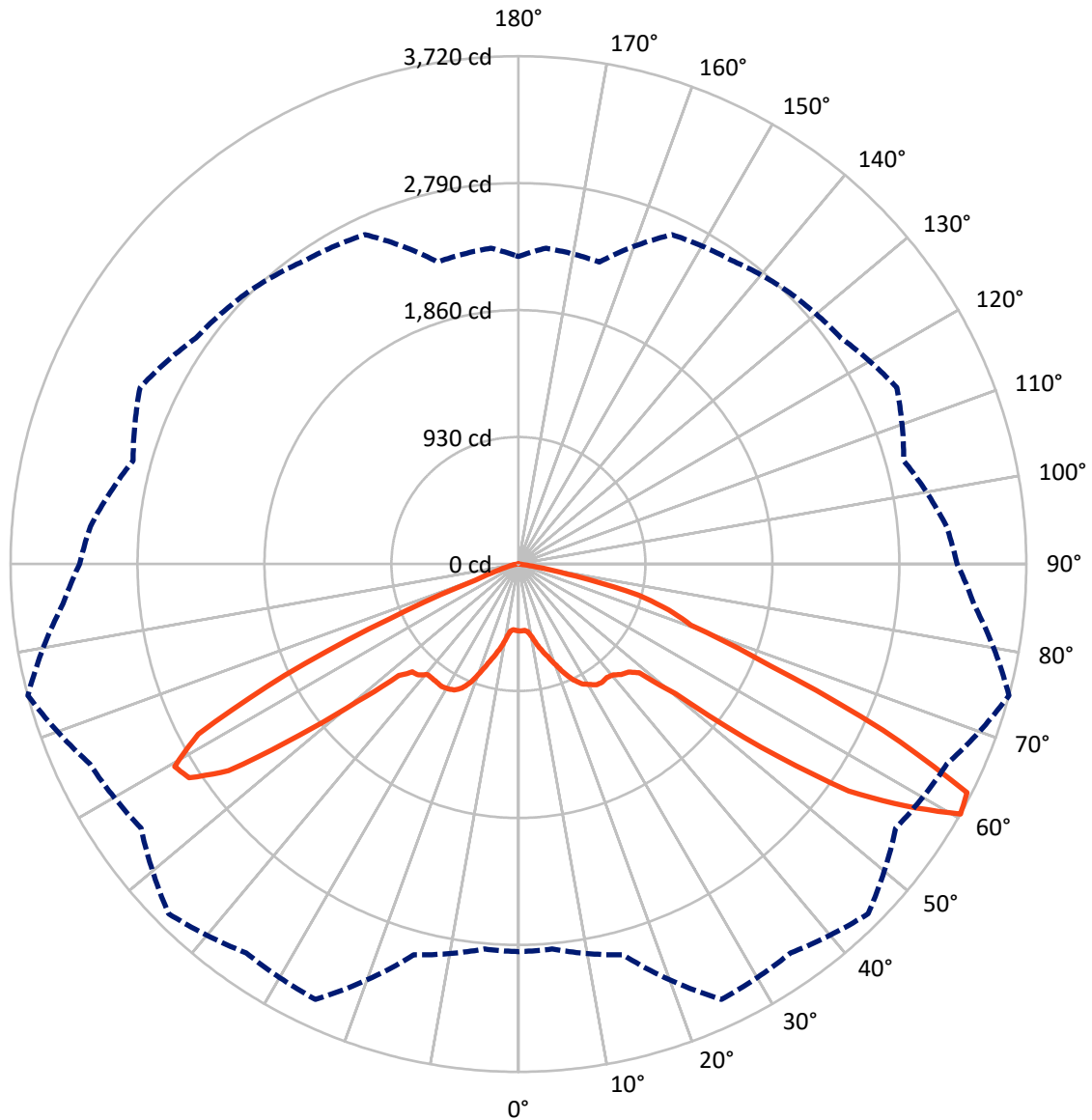


Based on 10 foot mounting height. Maximum calculated value = 7.4 fc  
 Type III - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 60-Deg Vertical

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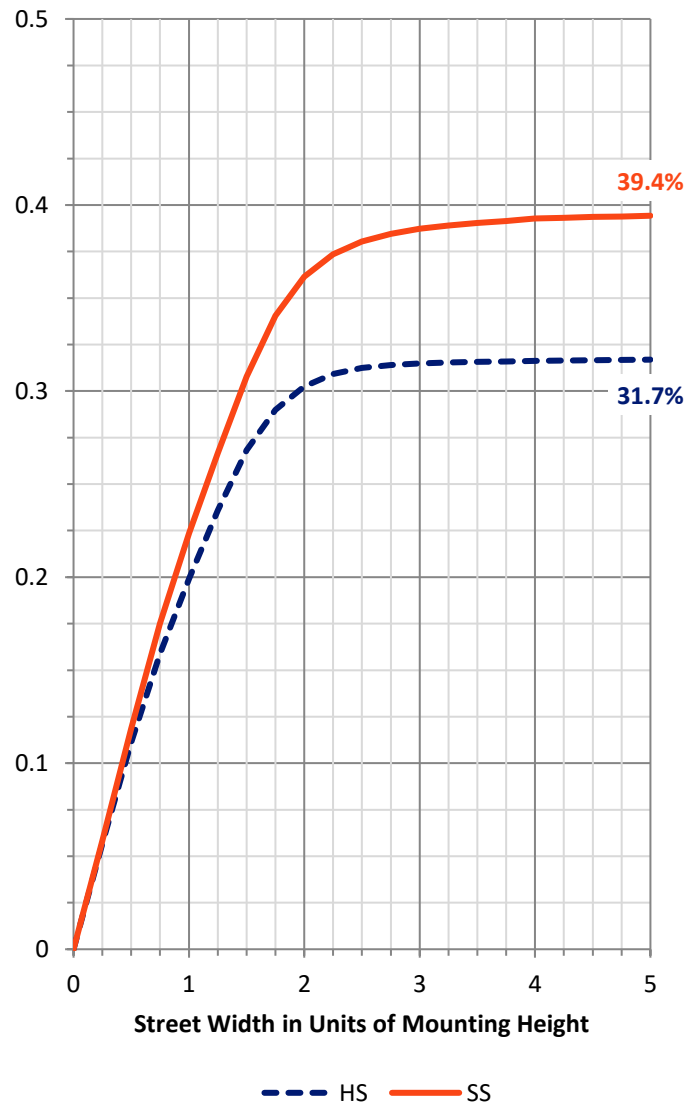
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3017.9	0.6	3018.4
	% Lamp	31.8	0.0	31.8
<b>Street Side</b>	Lumens	3744.2	0.3	3744.5
	% Lamp	39.4	0.0	39.4
<b>Total</b>	Lumens	6762.0	0.8	6762.9
	% Lamp	71.2	0.0	71.2

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	48.0	0.7	0.5
10°-20°	192.4	2.8	2.0
20°-30°	428.3	6.3	4.5
30°-40°	647.0	9.6	6.8
40°-50°	884.4	13.1	9.3
50°-60°	2254.5	33.3	23.7
60°-70°	1930.6	28.5	20.3
70°-80°	354.8	5.2	3.7
80°-90°	22.0	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.2	0.0	0.0
110°-120°	0.3	0.0	0.0
120°-130°	0.2	0.0	0.0
130°-140°	0.1	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°	6762.0	100.0	71.2
0°-180°	6762.9	100.0	71.2



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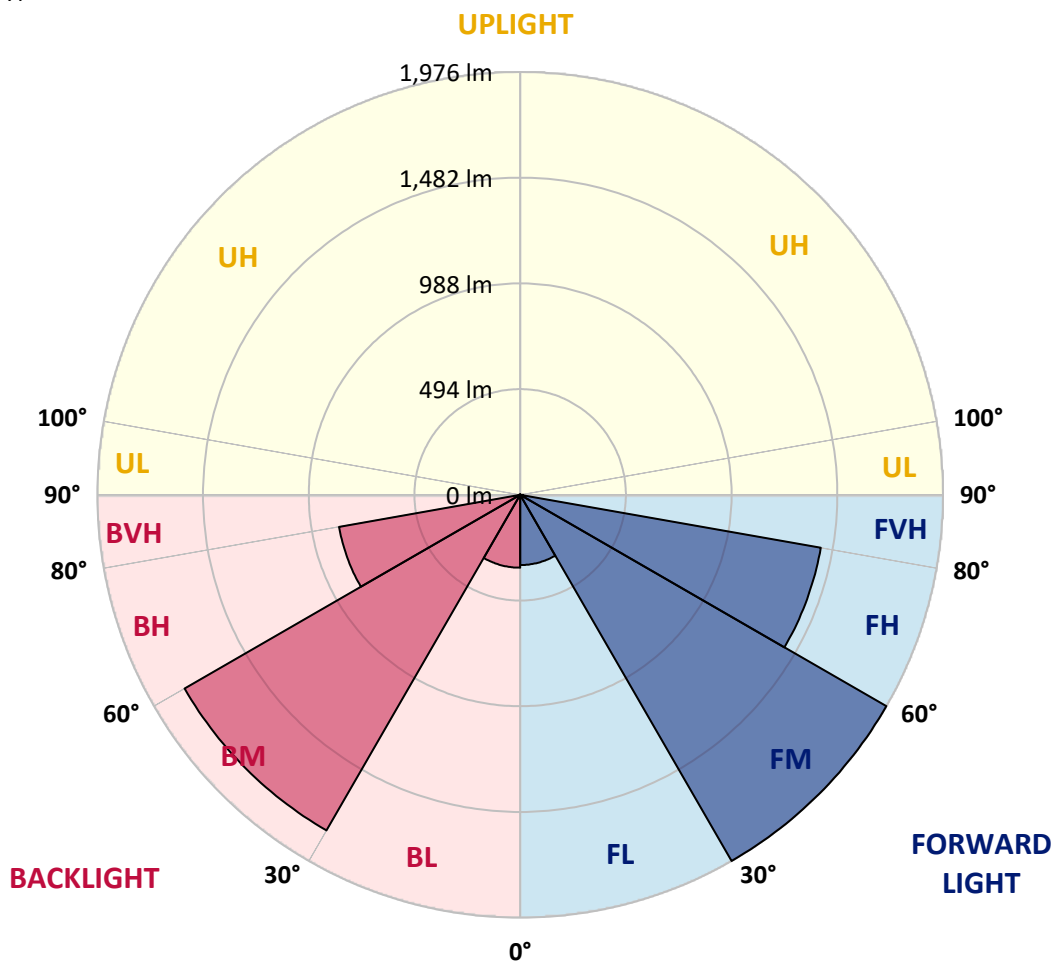
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	328.1	3.5			
FM	(30°-60°)	1975.5	20.8			
FH	(60°-80°)	1426.0	15.0			G1/1800
FVH	(80°-90°)	14.5	0.2			G1/100
BL	(0°-30°)	340.6	3.6	B1/500		
BM	(30°-60°)	1810.4	19.1	B2/2500		
BH	(60°-80°)	859.4	9.0	B2/1000		G2/1000
BVH	(80°-90°)	7.5	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U1/10	
UH	(100°-180°)	0.6	0.0		U1/10	
Trapped Light		2737.1	28.8			

**BUG Rating: B2-U1-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	490	490	490	490	490	490	490	490	490	490	490
2.5°	496	497	497	498	496	494	493	492	490	489	490
5°	502	501	502	501	499	497	495	492	488	487	485
7.5°	515	518	516	514	511	510	506	504	501	500	500
10°	544	546	546	543	538	537	542	543	543	548	549
12.5°	598	598	601	603	600	598	603	604	606	615	618
15°	639	640	642	649	652	652	654	660	662	672	676
17.5°	690	694	695	702	708	707	711	719	722	734	742
20°	736	737	742	755	762	763	770	785	793	808	819
22.5°	797	799	805	822	830	832	840	858	872	889	904
25°	861	864	871	887	892	897	910	927	942	961	973
27.5°	913	919	929	949	946	952	966	983	994	1004	1016
30°	954	959	972	993	988	992	1004	1018	1024	1026	1033
32.5°	998	1001	1010	1028	1028	1031	1039	1050	1054	1048	1044
35°	1009	1014	1029	1029	1039	1040	1065	1060	1061	1056	1042
37.5°	1015	1016	1024	1011	1026	1029	1070	1053	1054	1052	1037
40°	1035	1037	1036	1013	1024	1064	1095	1075	1068	1056	1040
42.5°	1071	1064	1062	1034	1063	1140	1178	1203	1106	1081	1068
45°	1124	1102	1099	1082	1123	1167	1279	1236	1129	1126	1135
47.5°	1211	1202	1195	1134	1200	1245	1354	1251	1189	1254	1299
50°	1288	1266	1271	1301	1441	1471	1596	1527	1492	1596	1618
52.5°	1733	1709	1728	1797	1946	2087	2340	2352	2231	2216	2216
55°	2614	2559	2570	2674	2771	2925	3147	3070	2936	2942	2877
57.5°	3053	3023	3036	3270	3270	3386	3381	3322	3344	3232	3093
60°	2839	2831	2964	3519	3477	3623	3374	3464	3720	3348	3214
62.5°	2255	2363	2538	3393	3258	3525	3109	3190	3688	3098	2974
65°	1486	1616	1706	2822	2514	2824	2394	2377	2935	2453	2159
67.5°	916	985	997	2170	1712	1940	1539	1493	1991	1696	1168
70°	297	309	353	1465	1027	1143	840	894	1339	1133	415
72.5°	145	153	189	1167	847	896	663	718	1152	1033	288
75°	93	94	118	882	635	731	575	514	910	937	221
77.5°	55	56	70	509	320	447	280	235	427	729	160
80°	31	31	36	181	111	211	151	70	124	407	92
82.5°	13	17	18	24	26	32	53	31	27	38	29
85°	3	5	6	7	8	9	12	12	7	7	8
87.5°	0	0	0	0	0	1	1	1	1	1	0
90°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
115°	0	1	0	1	0	0	0	0	0	0	1
125°	0	0	0	1	0	0	0	0	0	0	0
135°	0	0	0	1	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
165°	0	1	1	1	0	1	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	1	1	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°	490	490	490	490	490	490	490	490	490	490
2.5°	488	487	485	482	480	477	476	474	473	473
5°	484	483	483	480	477	474	472	470	468	467
7.5°	499	497	496	492	488	484	480	479	476	476
10°	550	554	550	542	540	545	539	535	530	528
12.5°	622	628	632	626	623	622	608	595	588	585
15°	683	691	703	698	688	682	666	644	635	632
17.5°	751	760	773	768	746	735	720	695	689	684
20°	828	845	853	847	830	811	791	765	759	757
22.5°	914	934	937	924	906	888	871	832	829	826
25°	982	999	1001	988	970	957	941	890	877	872
27.5°	1023	1036	1044	1031	1017	999	989	934	911	908
30°	1036	1049	1055	1045	1042	1025	1018	964	932	926
32.5°	1043	1058	1064	1058	1055	1043	1037	975	942	938
35°	1036	1053	1053	1053	1048	1042	1029	977	947	944
37.5°	1037	1048	1053	1051	1044	1037	1019	972	943	943
40°	1043	1049	1053	1050	1050	1037	1026	967	935	932
42.5°	1078	1094	1058	1057	1049	1047	1018	966	922	927
45°	1187	1108	1083	1061	1053	1047	1026	965	921	920
47.5°	1310	1198	1129	1098	1095	1099	1075	1000	954	964
50°	1551	1551	1320	1302	1328	1362	1411	1251	1137	1131
52.5°	2123	2034	1865	1857	1912	1940	2041	1864	1737	1769
55°	2778	2607	2566	2600	2588	2581	2602	2425	2409	2502
57.5°	3116	2876	2995	3019	2933	2861	2787	2522	2538	2585
60°	3148	2922	3058	2885	2811	2717	2662	2290	2322	2253
62.5°	2868	2657	2777	2242	2230	2179	2176	2006	2095	2018
65°	2114	1898	1976	1367	1380	1398	1420	1494	1583	1554
67.5°	1147	1021	1081	728	745	802	819	872	928	918
70°	363	339	359	296	305	328	338	331	341	346
72.5°	193	177	174	150	150	154	156	149	150	149
75°	129	108	102	94	93	95	94	90	89	90
77.5°	83	75	62	66	67	66	65	61	59	60
80°	47	46	46	44	47	46	43	39	39	39
82.5°	27	23	21	23	24	24	26	23	23	22
85°	9	9	7	7	8	8	9	8	8	9
87.5°	1	1	1	1	1	1	1	1	0	0
90°	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	1	1	0	1	0	0	0
115°	0	0	1	1	1	0	1	0	0	0
125°	0	0	0	0	0	1	1	0	0	0
135°	0	0	0	1	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	1	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0	0	0	0	1	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)