

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: 767826

Luminaire Tested: **GMX91SXXARHS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 767826
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX91SXXARHS
Description: 1000W HPS AREA ROUND WITH HOUSE SIDE SHIELD
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 135000 (1 lamp)
Luminaire Lumens: 75070.9 lumens
Efficiency: 55.6%
Efficacy: 75.1 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - Medium - Cutoff
BUG Rating: B5 - U3 - G5

Input Watts (W): 1000
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



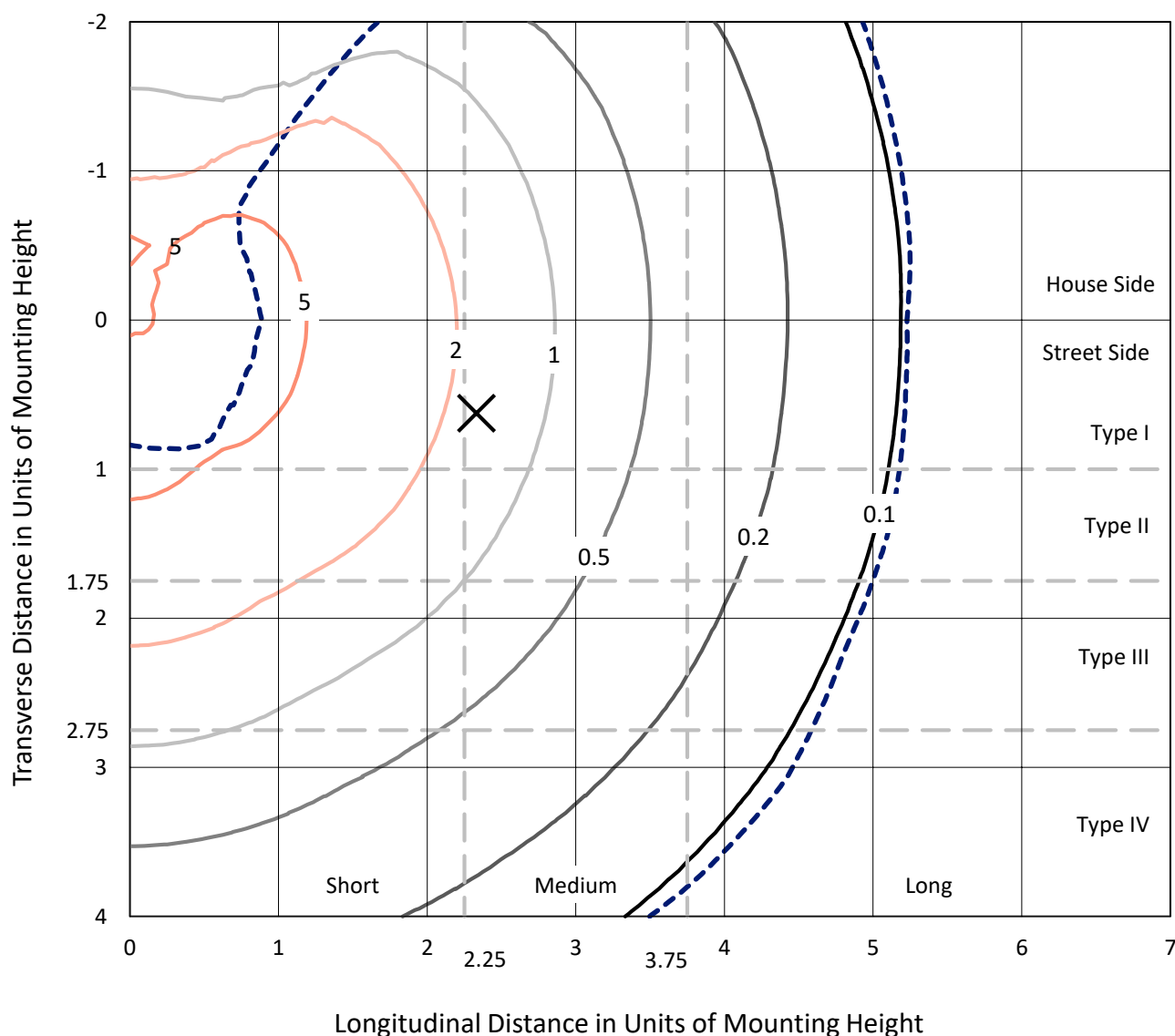
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

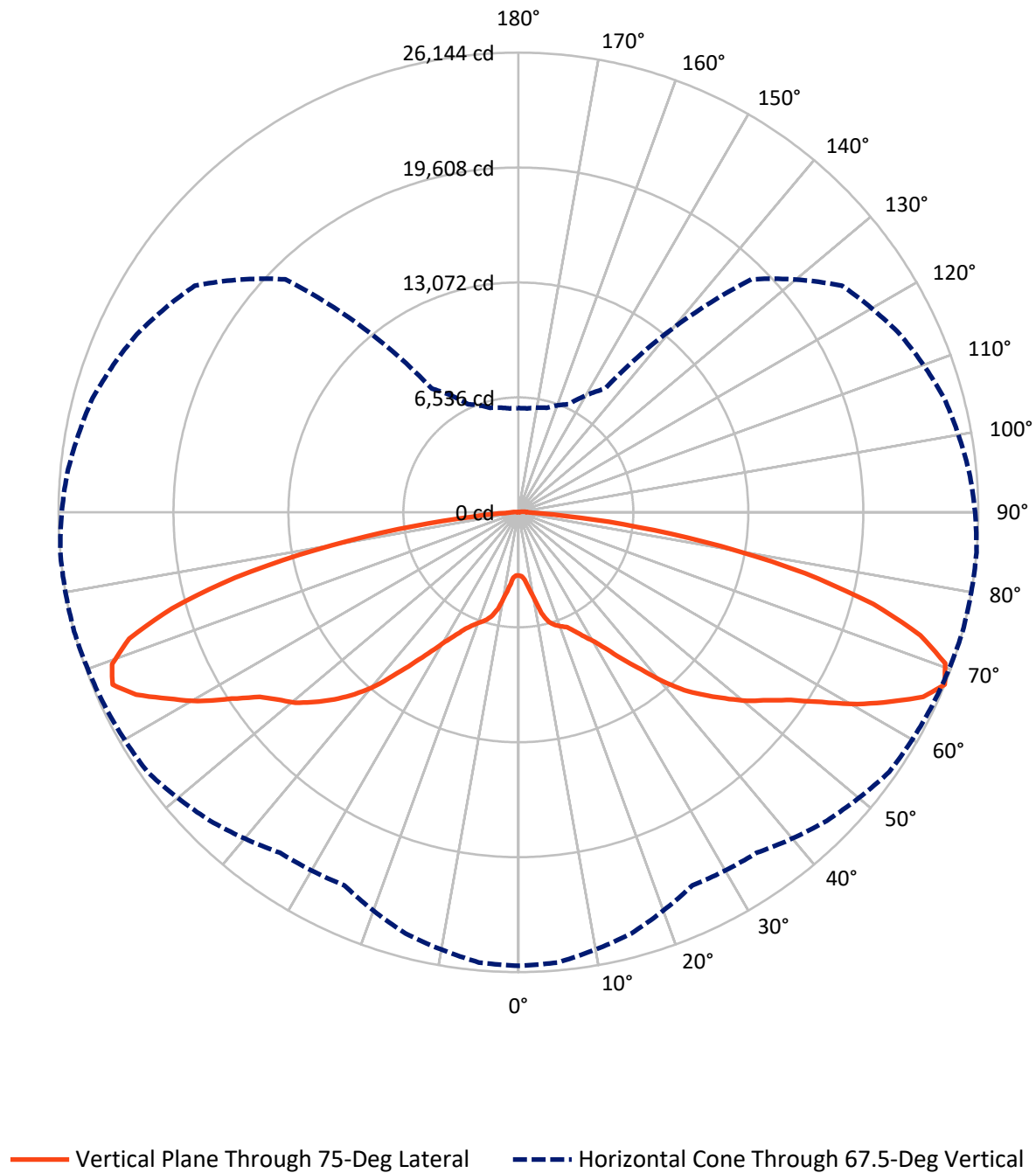


Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Medium - Cutoff

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Luminous Intensity Polar Plot



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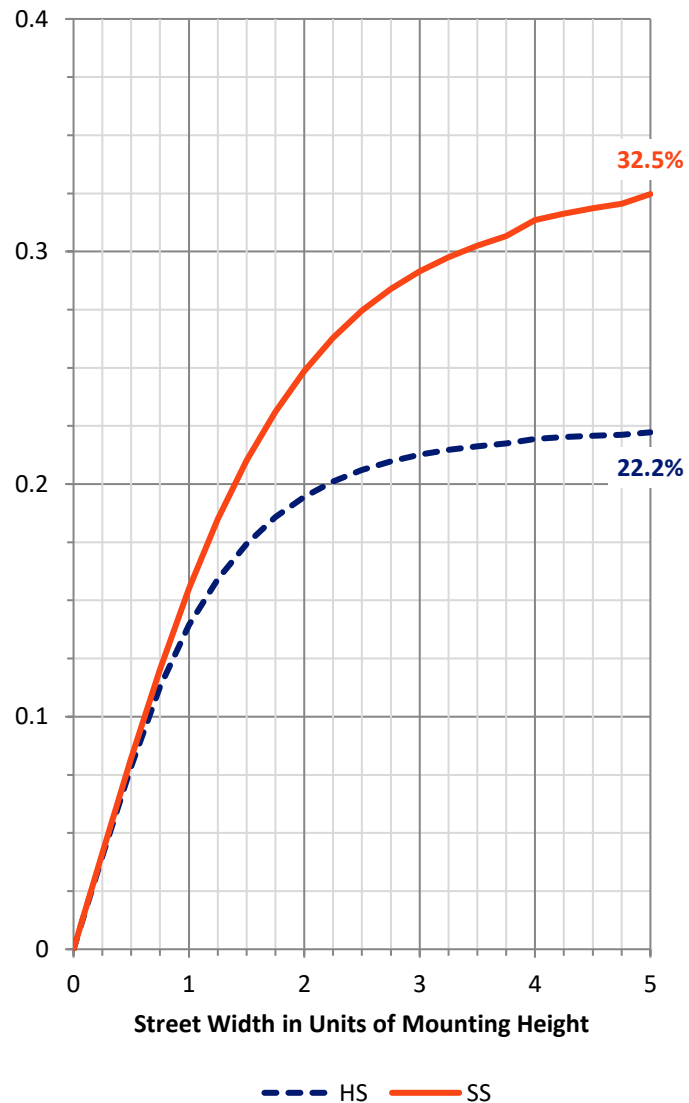
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	30112.7	88.9	30201.6
	% Lamp	22.3	0.1	22.4
Street Side	Lumens	44648.5	220.9	44869.4
	% Lamp	33.1	0.2	33.2
Total	Lumens	74761.1	309.8	75070.9
	% Lamp	55.4	0.2	55.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	397.1	0.5	0.3
10°-20°	1659.4	2.2	1.2
20°-30°	3345.4	4.5	2.5
30°-40°	5967.0	7.9	4.4
40°-50°	9802.6	13.1	7.3
50°-60°	14016.6	18.7	10.4
60°-70°	19419.1	25.9	14.4
70°-80°	16462.1	21.9	12.2
80°-90°	3691.8	4.9	2.7
90°-100°	266.4	0.4	0.2
100°-110°	67.3	0.1	0.0
110°-120°	3.7	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°	74761.1	99.6	55.4
0°-180°	75070.9	100.0	55.6

Coefficient of Utilization



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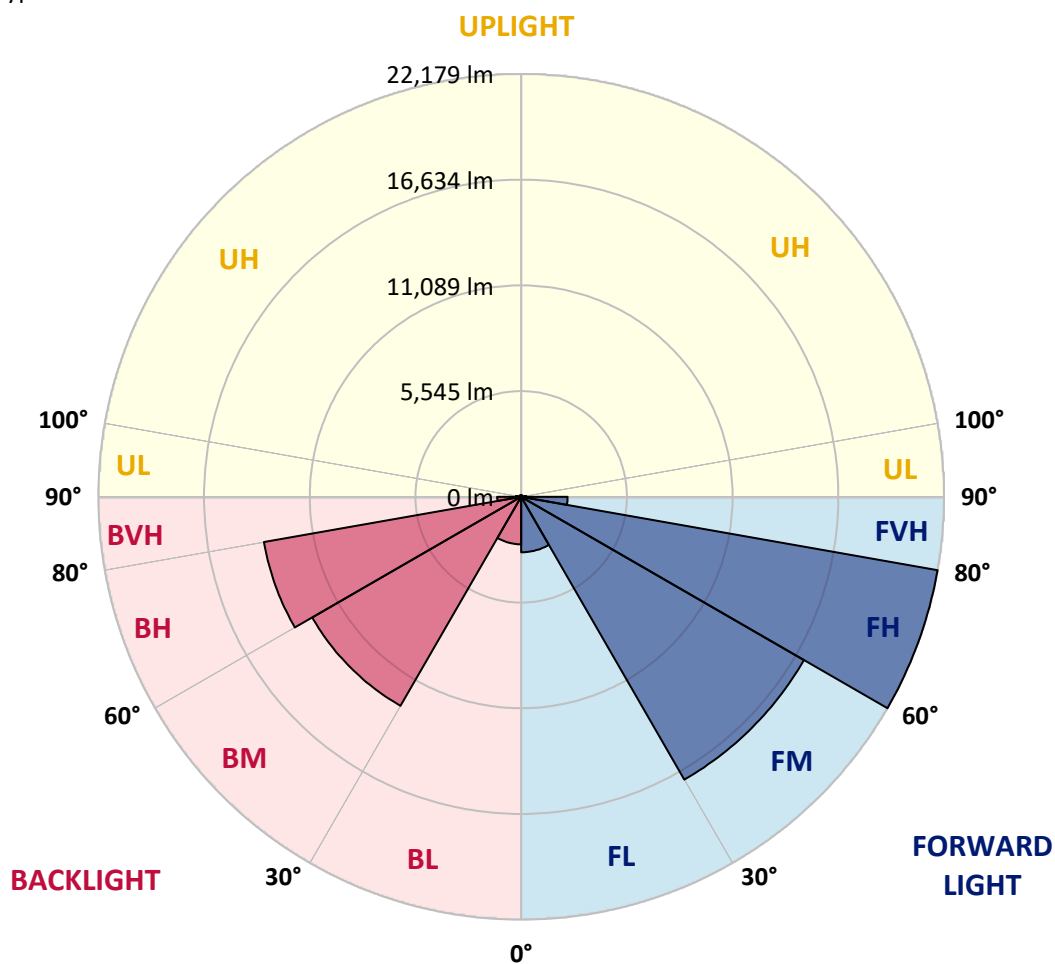
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2909.8	2.2			
FM	(30°-60°)	17125.5	12.7			
FH	(60°-80°)	22178.5	16.4			G5
FVH	(80°-90°)	2434.7	1.8			G5
BL	(0°-30°)	2492.1	1.8	B3/2500		
BM	(30°-60°)	12660.7	9.4	B5		
BH	(60°-80°)	13702.8	10.2	B5		G5
BVH	(80°-90°)	1257.1	0.9			G5
UL	(90°-100°)	266.4	0.2		U3/500	
UH	(100°-180°)	88.9	0.1		U3/500	
Trapped Light		59929.1	44.4			

BUG Rating: B5-U3-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3594	3594	3594	3594	3594	3594	3594	3594	3594	3594	3594
2.5°	3773	3773	3773	3773	3818	3773	3728	3728	3639	3639	3639
5°	4223	4223	4178	4178	4133	4088	4088	3953	3863	3818	3773
7.5°	4851	4851	4806	4717	4582	4582	4492	4447	4357	4312	4312
10°	5660	5615	5480	5346	5166	5076	5076	4986	5031	5031	5031
12.5°	6199	6199	6064	6019	5795	5750	5750	5795	5885	5795	5795
15°	6558	6603	6738	6648	6334	6379	6424	6424	6469	6379	6334
17.5°	7097	7142	7367	7008	6603	6693	6828	6873	6738	6693	6648
20°	7636	7726	7681	7097	6603	6873	7052	7052	6918	6918	6828
22.5°	8086	8176	7861	7008	6738	7008	7232	7232	7097	7052	7052
25°	8625	8535	8041	7142	7008	7322	7636	7592	7502	7457	7457
27.5°	9074	8984	8310	7502	7322	7816	8086	8131	7996	8041	7951
30°	9523	9343	8625	7816	7726	8310	8580	8670	8535	8625	8535
32.5°	10242	9927	9209	8490	8355	9074	9343	9523	9299	9388	9299
35°	11050	10736	10062	9433	9209	10017	10197	10556	10287	10466	10197
37.5°	11949	11679	11050	10466	10197	11095	11140	11679	11320	11679	11140
40°	13027	12802	12263	11679	11455	12173	12398	12802	12623	12847	12263
42.5°	14285	14015	13386	12712	12533	13296	13521	13925	13835	14015	13611
45°	15273	14958	14330	13521	13386	14195	14554	14958	14824	15003	14958
47.5°	16081	15947	15273	14419	14285	15183	15542	15902	15812	15992	15992
50°	17160	17025	16351	15408	15318	16126	16576	16980	16845	16980	16890
52.5°	18238	18103	17429	16351	16126	17025	17429	17878	17744	17788	17788
55°	18867	18732	17923	16845	16800	17699	18462	18732	18822	18732	18732
57.5°	20484	20304	19451	18193	18193	19091	19945	20214	20349	20304	20169
60°	22101	21921	21023	19765	19765	20798	21652	21966	22146	22101	22056
62.5°	23448	23359	22415	21157	21247	22280	23179	23448	23718	23763	23583
65°	24796	24661	23763	22460	22595	23853	24796	25066	25290	25290	25155
67.5°	25784	25694	24796	23403	23628	24796	25739	25964	26144	26144	25964
70°	25425	25335	24527	23179	23314	24527	25335	25560	25739	25694	25515
72.5°	23808	23763	22954	21741	21876	22864	23628	23673	23898	23718	23673
75°	21382	21292	20574	19585	19585	20259	20663	20618	20843	20618	20574
77.5°	17609	17564	16935	16081	16037	16441	16755	16531	16665	16351	16396
80°	13117	13027	12533	11949	11769	11994	12084	11724	11679	11500	11410
82.5°	8176	8265	7996	7502	7322	7367	7322	7008	6828	6558	6558
85°	3953	3998	3908	3639	3369	3144	3010	2830	2740	2650	2516
87.5°	1078	1123	1078	1078	1078	1033	1033	988	898	809	809
90°	719	719	629	629	629	539	539	539	494	449	449
95°	359	359	314	314	314	314	314	359	359	270	270
105°	90	90	0	0	0	0	0	0	45	45	45
115°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	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	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°	3594	3594	3594	3594	3594	3594	3594	3594	3594	3594
2.5°	3594	3594	3594	3594	3549	3549	3549	3594	3639	3594
5°	3773	3728	3639	3639	3549	3504	3459	3459	3414	3414
7.5°	4267	4267	4178	4043	3998	3818	3728	3594	3549	3504
10°	5031	4896	4762	4582	4447	4178	3818	3594	3549	3594
12.5°	5795	5615	5346	5211	5076	4537	3998	3863	3908	3953
15°	6289	6109	5885	5705	5525	4851	4178	4223	4357	4402
17.5°	6469	6424	6289	6154	5840	5031	4447	4627	4806	4851
20°	6693	6648	6469	6424	6019	5301	4806	5031	5301	5390
22.5°	6963	6918	6738	6693	6244	5615	5256	5525	5840	5929
25°	7412	7277	7142	7097	6693	6154	5750	6064	6379	6469
27.5°	7906	7816	7726	7636	7322	6693	6244	6424	6693	6828
30°	8490	8445	8310	8265	7906	7232	6603	6603	6783	6918
32.5°	9299	9299	9074	9074	8580	7861	6963	6469	6693	6918
35°	10107	10287	9972	9972	9299	8400	7008	6199	6379	6648
37.5°	11185	11455	11140	11095	10152	8984	6918	6019	5705	5750
40°	12488	12802	12488	12263	11050	9613	6738	5840	5076	4941
42.5°	13746	13925	13791	13296	11994	10242	6603	5346	4672	4672
45°	14779	14914	14824	14195	12802	10736	6199	4806	4492	4492
47.5°	15857	15812	15812	15003	13521	10826	5750	4537	4447	4402
50°	16845	16665	16665	15812	14150	10646	5390	4627	4627	4582
52.5°	17699	17294	17204	16531	14779	10197	5346	4896	4896	4941
55°	18507	18058	17564	17070	15542	9523	5570	5301	5301	5301
57.5°	20124	19451	18956	18193	16531	9388	6064	5660	5750	5750
60°	21876	21157	20394	19451	17519	9299	6379	5974	6019	6019
62.5°	23403	22550	21697	20618	18238	9074	6558	6154	6199	6199
65°	24841	24077	22999	21741	18777	8849	6693	6199	6244	6199
67.5°	25739	25066	23943	22460	18732	8580	6783	6154	5929	5929
70°	25290	24661	23898	22101	17699	8131	6334	5166	4672	4582
72.5°	23493	23269	22685	20798	15992	7457	5256	3549	2920	2965
75°	20618	20439	20214	18462	13611	6424	3728	2066	1258	1168
77.5°	16441	16531	16531	15093	10916	5121	2560	1168	539	449
80°	11634	11724	11904	11005	7636	3504	1527	539	270	180
82.5°	6513	6873	7052	6558	4582	1976	853	270	180	180
85°	2560	2605	2785	2650	1842	764	225	90	180	180
87.5°	764	719	674	629	494	225	90	90	90	90
90°	404	404	404	404	270	90	90	45	45	0
95°	270	225	225	180	90	90	45	0	0	0
105°	45	45	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	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	0	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	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)