

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P731769

Luminaire Tested: **NHRS50UBZ730**

Issue Date: 09/15/2023

Test Information

Test Method: LM-79-2019
Report Number: P731769
Test Lab: INNOVATION CENTER
Issue Date: 09/15/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NHRS50UBZ730
Description: LUMARK NIGHT HARRIER 2 PANEL FLOOD SELECTABLE CCT NEMA 6 AT 3000K
Light Source: (32) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

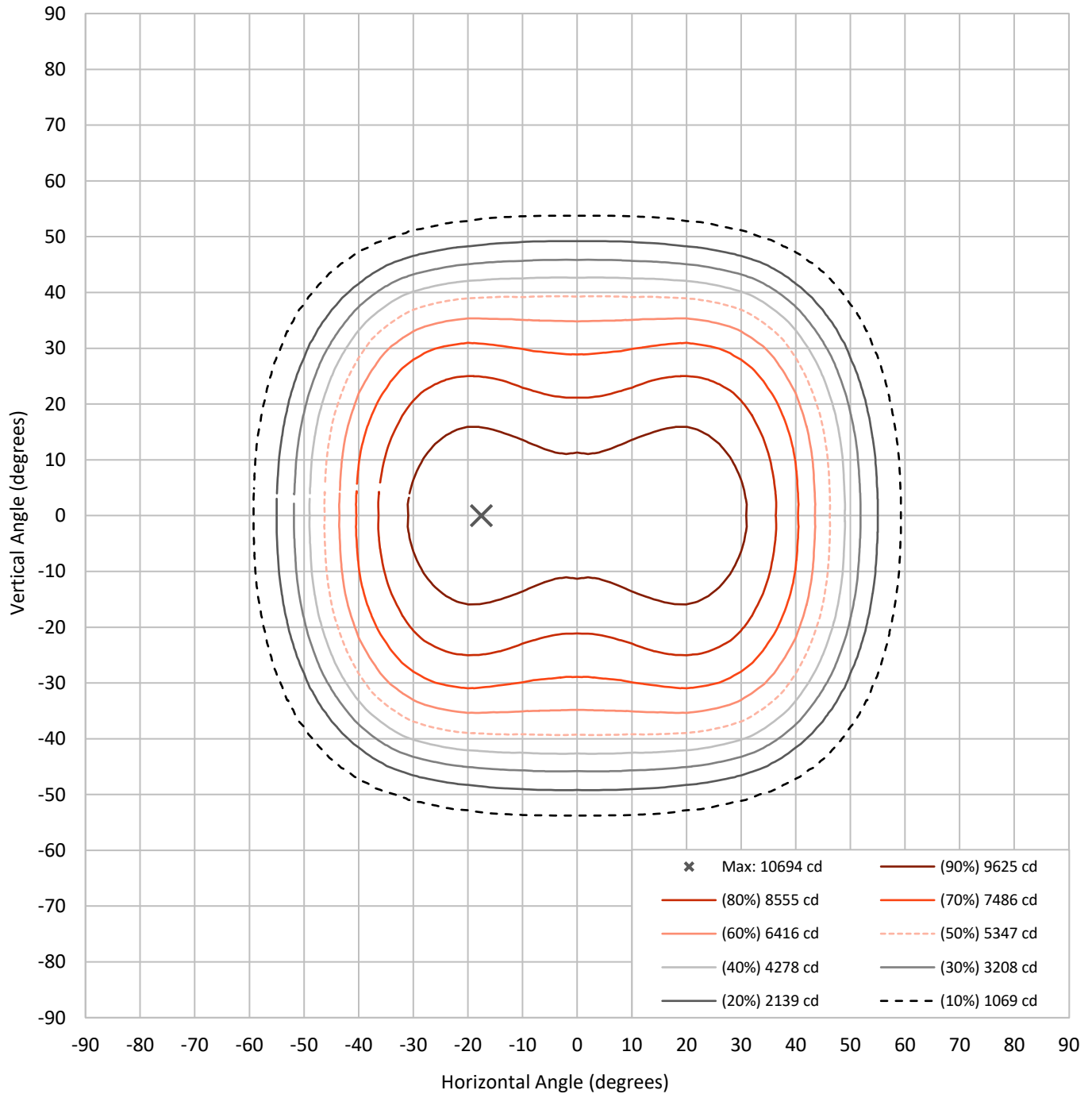
Summary

Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	19064.3 lumens	Max Intensity:	10694 candela
Efficiency:	N/A	Max Intensity Angle:	-17.5°H x 0°V
Efficacy:	124.1 lumens/watt		
Luminous Opening:	Rectangular (W 1.25' x L: 0.5' x H: 0')		
Beam Angle (50%):	92.5°H x 78.1°V	Field Angle (10%):	118.5°H x 106.2°V
Beam Lumens:	15180.3 lumens	Field Lumens:	18334 lumens
Beam Efficiency:	79.6%	Field Efficiency:	96.2%
Input Watts (W):	153.6		
Input Voltage (V):	120		
Input Current (A _{in}):	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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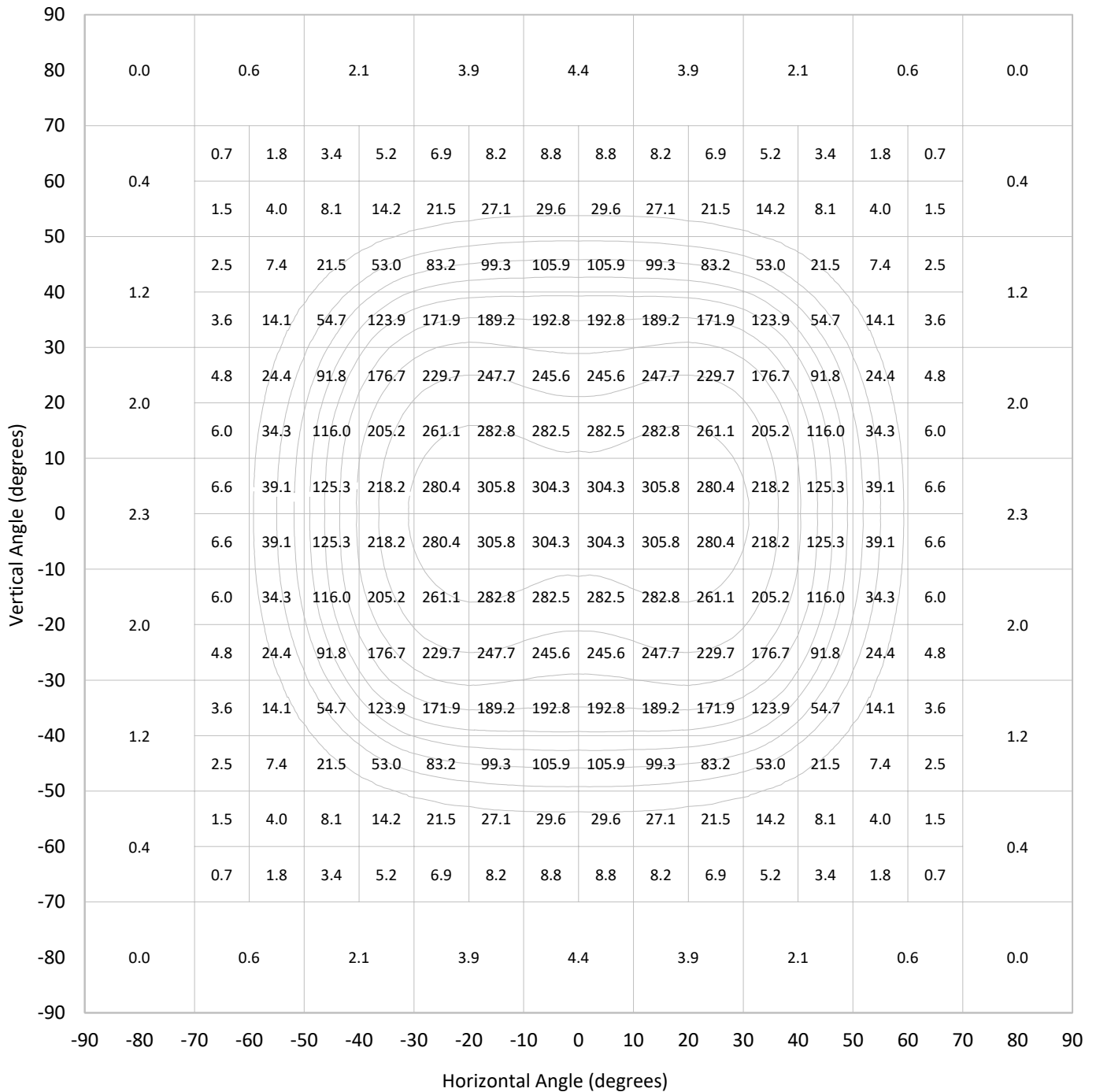
Iso-Candela Plot





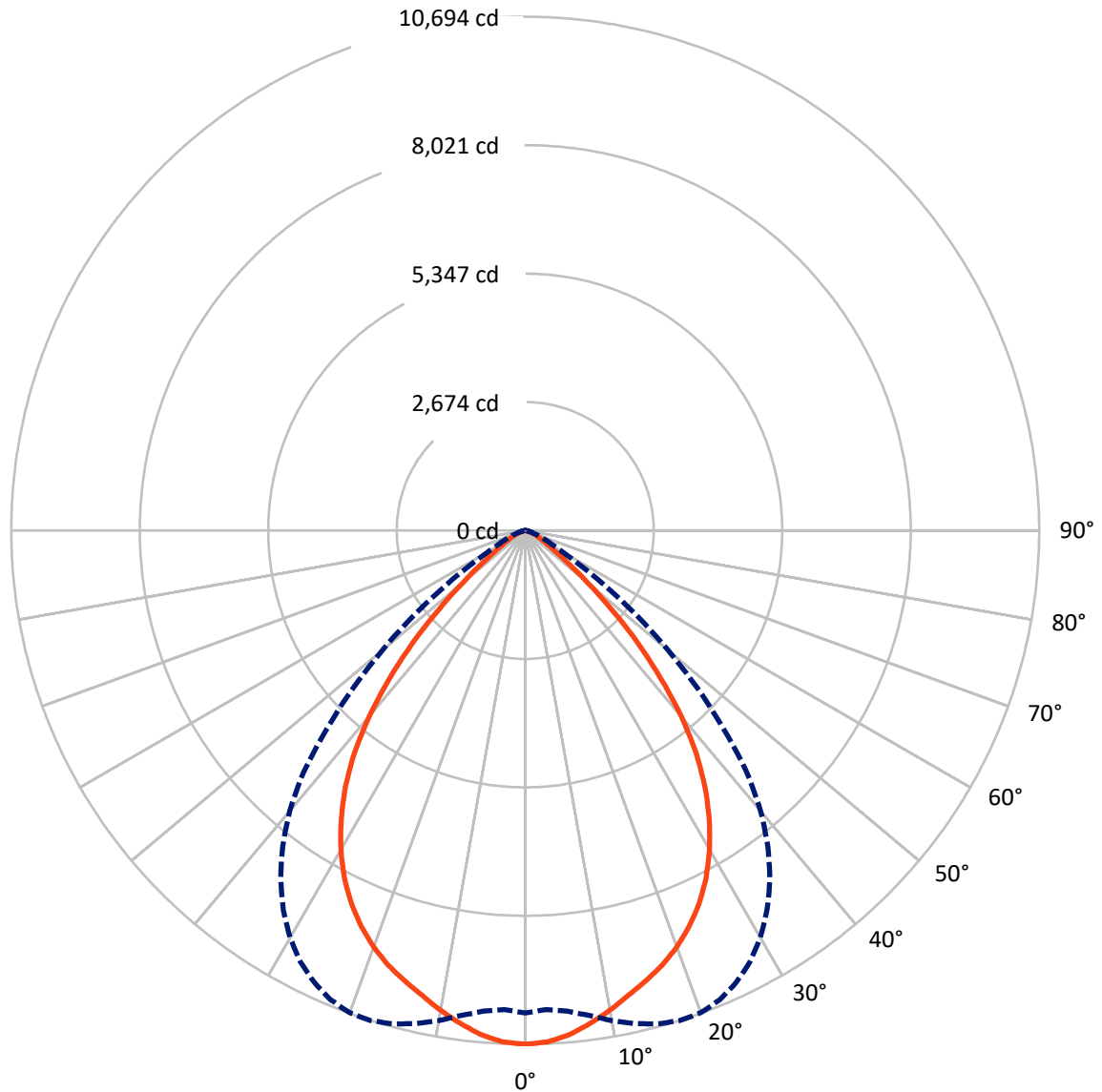
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Lumen Table



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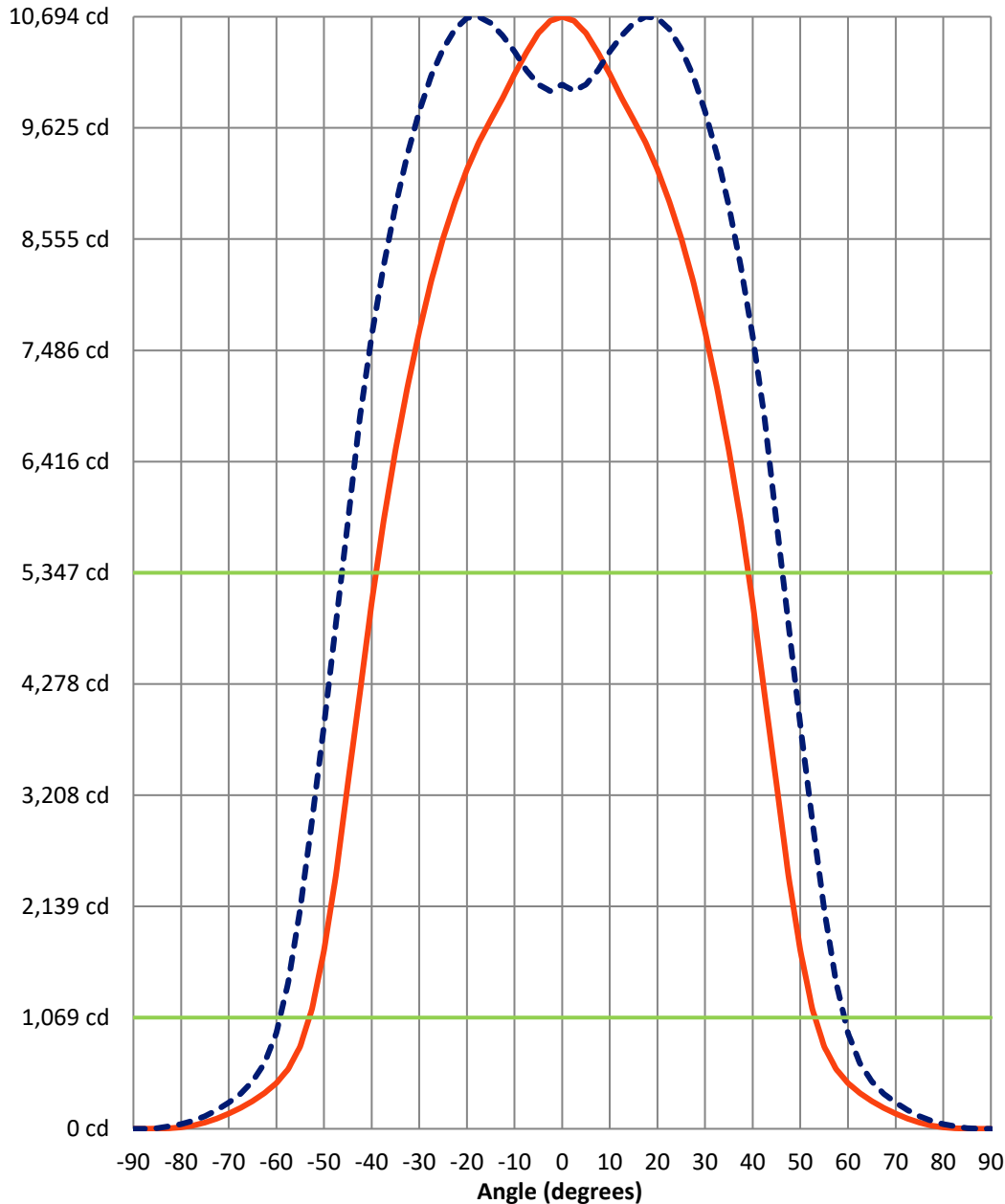
Luminous Intensity Polar Plot



— Vertical Distribution Through -17.5-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 92.5°
 V Angle: 78.1°
 Lumens: 15180.3
 Efficiency: 79.6%

Field:
 H Angle: 118.5°
 V Angle: 106.2°
 Lumens: 18334
 Efficiency: 96.2%

Spill:
 Lumens: 730.3
 Efficiency: 3.8%

— Vertical Distribution through -17.5-Deg

- - - Horizontal Distribution through 0-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	1	1
80°	0	0	0	0	0	0	0	1	1	2	2
77.5°	0	0	0	0	0	0	1	2	3	3	5
75°	0	0	0	0	0	2	3	4	5	8	11
72.5°	0	0	0	0	1	3	4	6	10	14	17
70°	0	0	0	0	2	4	6	11	15	20	26
67.5°	0	0	0	1	3	5	10	16	21	28	36
65°	0	0	0	2	4	7	14	20	28	37	47
62.5°	0	0	0	2	5	10	18	26	36	47	61
60°	0	0	0	3	6	14	22	33	44	59	75
57.5°	0	0	0	4	8	17	27	39	54	71	92
55°	0	0	1	4	11	20	32	46	64	84	109
52.5°	0	0	1	5	13	23	37	54	75	99	128
50°	0	0	2	5	15	27	42	62	86	114	145
47.5°	0	0	2	6	18	31	47	70	98	129	164
45°	0	0	2	8	20	34	53	78	110	144	182
42.5°	0	0	3	10	22	38	59	87	121	160	203
40°	0	0	3	11	24	41	65	96	132	175	223
37.5°	0	0	4	12	27	44	71	105	145	190	243
35°	0	0	4	14	29	48	76	113	156	206	263
32.5°	0	0	4	15	31	52	81	121	168	221	285
30°	0	0	4	16	33	56	87	128	178	236	306
27.5°	0	0	5	17	35	59	93	137	189	249	325
25°	0	0	5	18	37	62	98	145	200	264	343
22.5°	0	0	5	19	38	65	103	152	210	278	364
20°	0	0	5	20	40	68	107	158	219	291	384
17.5°	0	0	5	21	41	70	111	164	227	303	401
15°	0	0	6	22	42	72	114	169	233	313	416
12.5°	0	0	6	22	43	74	116	173	239	321	429
10°	0	0	6	23	44	75	118	176	244	328	440
7.5°	0	0	6	24	45	76	120	178	248	332	447
5°	0	0	6	24	45	77	122	181	252	339	453
2.5°	0	0	6	24	45	77	121	181	252	338	457
0°	0	0	6	24	45	77	121	181	252	338	457
-2.5°	0	0	6	24	45	77	121	181	252	338	457
-5°	0	0	6	24	45	77	122	181	252	339	453
-7.5°	0	0	6	24	45	76	120	178	248	332	447
-10°	0	0	6	23	44	75	118	176	244	328	440
-12.5°	0	0	6	22	43	74	116	173	239	321	429
-15°	0	0	6	22	42	72	114	169	233	313	416
-17.5°	0	0	5	21	41	70	111	164	227	303	401
-20°	0	0	5	20	40	68	107	158	219	291	384



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CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	0	0	5	19	38	65	103	152	210	278	364
-25°	0	0	5	18	37	62	98	145	200	264	343
-27.5°	0	0	5	17	35	59	93	137	189	249	325
-30°	0	0	4	16	33	56	87	128	178	236	306
-32.5°	0	0	4	15	31	52	81	121	168	221	285
-35°	0	0	4	14	29	48	76	113	156	206	263
-37.5°	0	0	4	12	27	44	71	105	145	190	243
-40°	0	0	3	11	24	41	65	96	132	175	223
-42.5°	0	0	3	10	22	38	59	87	121	160	203
-45°	0	0	2	8	20	34	53	78	110	144	182
-47.5°	0	0	2	6	18	31	47	70	98	129	164
-50°	0	0	2	5	15	27	42	62	86	114	145
-52.5°	0	0	1	5	13	23	37	54	75	99	128
-55°	0	0	1	4	11	20	32	46	64	84	109
-57.5°	0	0	0	4	8	17	27	39	54	71	92
-60°	0	0	0	3	6	14	22	33	44	59	75
-62.5°	0	0	0	2	5	10	18	26	36	47	61
-65°	0	0	0	2	4	7	14	20	28	37	47
-67.5°	0	0	0	1	3	5	10	16	21	28	36
-70°	0	0	0	0	2	4	6	11	15	20	26
-72.5°	0	0	0	0	1	3	4	6	10	14	17
-75°	0	0	0	0	0	2	3	4	5	8	11
-77.5°	0	0	0	0	0	0	1	2	3	3	5
-80°	0	0	0	0	0	0	0	1	1	2	2
-82.5°	0	0	0	0	0	0	0	0	0	1	1
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	1	1	1
82.5°	1	1	1	1	1	1	1	2	2	3	3
80°	2	3	4	5	5	6	6	6	6	7	8
77.5°	7	9	10	10	11	13	15	16	17	18	19
75°	13	15	18	20	23	25	27	31	35	38	41
72.5°	22	26	30	33	39	44	49	54	59	65	71
70°	32	37	45	52	59	67	75	83	90	98	106
67.5°	44	54	63	73	84	95	105	117	128	137	146
65°	60	71	85	99	113	127	141	154	170	183	195
62.5°	76	93	109	125	144	161	180	199	219	233	248
60°	95	115	135	156	177	201	223	245	266	285	308
57.5°	115	139	163	188	215	242	269	294	324	350	377
55°	136	165	193	224	255	287	319	357	389	436	474
52.5°	158	190	226	261	298	338	383	434	492	550	625
50°	179	219	259	302	348	400	467	539	633	728	853
47.5°	203	247	297	346	406	481	570	698	817	1012	1198
45°	228	278	333	401	478	578	726	884	1135	1383	1716
42.5°	254	310	378	455	567	716	899	1200	1519	1907	2337
40°	279	341	424	534	672	878	1181	1541	2018	2514	3062
37.5°	306	381	474	609	821	1102	1491	1977	2551	3193	3775
35°	332	420	539	709	968	1368	1855	2430	3114	3842	4503
32.5°	362	459	601	827	1168	1642	2227	2935	3681	4454	5202
30°	393	508	672	936	1372	1945	2644	3419	4218	5006	5734
27.5°	421	557	765	1090	1574	2227	3028	3878	4703	5506	6218
25°	447	602	851	1248	1815	2534	3377	4262	5140	5941	6631
22.5°	478	643	926	1390	2034	2823	3701	4608	5503	6346	7015
20°	511	705	1020	1520	2229	3075	3988	4917	5821	6642	7328
17.5°	540	759	1118	1672	2417	3294	4237	5227	6105	6924	7579
15°	565	805	1201	1799	2580	3478	4435	5409	6341	7169	7809
12.5°	586	843	1268	1901	2711	3623	4590	5570	6515	7341	7981
10°	603	873	1319	1979	2809	3728	4705	5691	6643	7455	8105
7.5°	616	896	1357	2034	2877	3796	4778	5770	6733	7543	8198
5°	625	912	1388	2080	2929	3842	4820	5808	6782	7601	8266
2.5°	631	924	1413	2118	2977	3894	4877	5862	6848	7650	8317
0°	630	921	1410	2112	2967	3878	4855	5830	6828	7620	8291
-2.5°	631	924	1413	2118	2977	3894	4877	5862	6848	7650	8317
-5°	625	912	1388	2080	2929	3842	4820	5808	6782	7601	8266
-7.5°	616	896	1357	2034	2877	3796	4778	5770	6733	7543	8198
-10°	603	873	1319	1979	2809	3728	4705	5691	6643	7455	8105
-12.5°	586	843	1268	1901	2711	3623	4590	5570	6515	7341	7981
-15°	565	805	1201	1799	2580	3478	4435	5409	6341	7169	7809
-17.5°	540	759	1118	1672	2417	3294	4237	5227	6105	6924	7579
-20°	511	705	1020	1520	2229	3075	3988	4917	5821	6642	7328



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CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	478	643	926	1390	2034	2823	3701	4608	5503	6346	7015
-25°	447	602	851	1248	1815	2534	3377	4262	5140	5941	6631
-27.5°	421	557	765	1090	1574	2227	3028	3878	4703	5506	6218
-30°	393	508	672	936	1372	1945	2644	3419	4218	5006	5734
-32.5°	362	459	601	827	1168	1642	2227	2935	3681	4454	5202
-35°	332	420	539	709	968	1368	1855	2430	3114	3842	4503
-37.5°	306	381	474	609	821	1102	1491	1977	2551	3193	3775
-40°	279	341	424	534	672	878	1181	1541	2018	2514	3062
-42.5°	254	310	378	455	567	716	899	1200	1519	1907	2337
-45°	228	278	333	401	478	578	726	884	1135	1383	1716
-47.5°	203	247	297	346	406	481	570	698	817	1012	1198
-50°	179	219	259	302	348	400	467	539	633	728	853
-52.5°	158	190	226	261	298	338	383	434	492	550	625
-55°	136	165	193	224	255	287	319	357	389	436	474
-57.5°	115	139	163	188	215	242	269	294	324	350	377
-60°	95	115	135	156	177	201	223	245	266	285	308
-62.5°	76	93	109	125	144	161	180	199	219	233	248
-65°	60	71	85	99	113	127	141	154	170	183	195
-67.5°	44	54	63	73	84	95	105	117	128	137	146
-70°	32	37	45	52	59	67	75	83	90	98	106
-72.5°	22	26	30	33	39	44	49	54	59	65	71
-75°	13	15	18	20	23	25	27	31	35	38	41
-77.5°	7	9	10	10	11	13	15	16	17	18	19
-80°	2	3	4	5	5	6	6	6	6	7	8
-82.5°	1	1	1	1	1	1	1	2	2	3	3
-85°	0	0	0	0	0	0	0	0	1	1	1
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	1	1	1	2	2	2	2	2	2	2	2
82.5°	4	4	4	5	5	5	5	5	6	6	6
80°	9	10	11	12	13	13	14	14	14	14	14
77.5°	21	23	26	27	29	30	30	31	31	31	31
75°	44	47	50	53	55	57	59	60	61	62	61
72.5°	75	79	83	87	91	94	96	98	99	100	101
70°	112	118	124	129	135	139	143	146	148	150	151
67.5°	155	163	171	178	185	191	196	201	204	207	210
65°	205	216	227	236	243	251	259	266	270	274	277
62.5°	262	276	290	303	313	323	334	343	349	353	358
60°	327	346	364	382	397	409	426	439	447	453	459
57.5°	409	432	455	488	513	530	553	575	588	593	604
55°	521	565	591	649	697	724	746	792	818	826	843
52.5°	690	778	842	908	1007	1062	1082	1155	1206	1227	1257
50°	985	1110	1259	1359	1492	1590	1636	1714	1785	1817	1854
47.5°	1442	1642	1851	2008	2158	2293	2365	2435	2522	2562	2598
45°	2051	2362	2600	2809	2978	3127	3219	3315	3368	3406	3426
42.5°	2793	3173	3459	3689	3881	4031	4127	4176	4254	4283	4283
40°	3563	4032	4334	4584	4774	4930	5009	5054	5104	5121	5107
37.5°	4331	4821	5172	5425	5602	5742	5815	5839	5856	5859	5833
35°	5074	5537	5948	6168	6343	6461	6529	6522	6481	6486	6450
32.5°	5734	6192	6558	6826	6986	7085	7169	7127	7076	7037	6989
30°	6340	6751	7092	7375	7539	7634	7685	7668	7601	7525	7468
27.5°	6794	7245	7577	7833	8029	8121	8151	8150	8072	7973	7895
25°	7198	7659	8000	8240	8426	8543	8567	8563	8495	8388	8277
22.5°	7546	7985	8348	8612	8768	8881	8934	8915	8870	8752	8616
20°	7862	8304	8621	8889	9072	9177	9233	9224	9171	9074	8943
17.5°	8105	8530	8862	9126	9321	9436	9480	9485	9429	9350	9245
15°	8320	8734	9075	9336	9527	9652	9710	9702	9658	9585	9498
12.5°	8493	8914	9267	9537	9733	9858	9916	9912	9870	9802	9722
10°	8633	9074	9432	9711	9921	10062	10135	10142	10090	10015	9930
7.5°	8739	9198	9574	9875	10104	10254	10333	10350	10312	10224	10126
5°	8825	9300	9692	10007	10246	10417	10515	10536	10481	10395	10291
2.5°	8891	9380	9795	10117	10367	10548	10644	10654	10595	10493	10369
0°	8871	9366	9783	10125	10383	10574	10682	10694	10633	10512	10359
-2.5°	8891	9380	9795	10117	10367	10548	10644	10654	10595	10493	10369
-5°	8825	9300	9692	10007	10246	10417	10515	10536	10481	10395	10291
-7.5°	8739	9198	9574	9875	10104	10254	10333	10350	10312	10224	10126
-10°	8633	9074	9432	9711	9921	10062	10135	10142	10090	10015	9930
-12.5°	8493	8914	9267	9537	9733	9858	9916	9912	9870	9802	9722
-15°	8320	8734	9075	9336	9527	9652	9710	9702	9658	9585	9498
-17.5°	8105	8530	8862	9126	9321	9436	9480	9485	9429	9350	9245
-20°	7862	8304	8621	8889	9072	9177	9233	9224	9171	9074	8943



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CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	7546	7985	8348	8612	8768	8881	8934	8915	8870	8752	8616
-25°	7198	7659	8000	8240	8426	8543	8567	8563	8495	8388	8277
-27.5°	6794	7245	7577	7833	8029	8121	8151	8150	8072	7973	7895
-30°	6340	6751	7092	7375	7539	7634	7685	7668	7601	7525	7468
-32.5°	5734	6192	6558	6826	6986	7085	7169	7127	7076	7037	6989
-35°	5074	5537	5948	6168	6343	6461	6529	6522	6481	6486	6450
-37.5°	4331	4821	5172	5425	5602	5742	5815	5839	5856	5859	5833
-40°	3563	4032	4334	4584	4774	4930	5009	5054	5104	5121	5107
-42.5°	2793	3173	3459	3689	3881	4031	4127	4176	4254	4283	4283
-45°	2051	2362	2600	2809	2978	3127	3219	3315	3368	3406	3426
-47.5°	1442	1642	1851	2008	2158	2293	2365	2435	2522	2562	2598
-50°	985	1110	1259	1359	1492	1590	1636	1714	1785	1817	1854
-52.5°	690	778	842	908	1007	1062	1082	1155	1206	1227	1257
-55°	521	565	591	649	697	724	746	792	818	826	843
-57.5°	409	432	455	488	513	530	553	575	588	593	604
-60°	327	346	364	382	397	409	426	439	447	453	459
-62.5°	262	276	290	303	313	323	334	343	349	353	358
-65°	205	216	227	236	243	251	259	266	270	274	277
-67.5°	155	163	171	178	185	191	196	201	204	207	210
-70°	112	118	124	129	135	139	143	146	148	150	151
-72.5°	75	79	83	87	91	94	96	98	99	100	101
-75°	44	47	50	53	55	57	59	60	61	62	61
-77.5°	21	23	26	27	29	30	30	31	31	31	31
-80°	9	10	11	12	13	13	14	14	14	14	14
-82.5°	4	4	4	5	5	5	5	5	6	6	6
-85°	1	1	1	2	2	2	2	2	2	2	2
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	3	3	3	2	3	3	3	2	2	2	2
82.5°	6	6	6	6	6	6	6	6	6	6	5
80°	14	14	14	14	14	14	14	14	14	14	14
77.5°	30	30	30	30	30	30	30	31	31	31	31
75°	61	60	60	59	60	60	61	61	62	61	60
72.5°	101	102	102	101	102	102	101	101	100	99	98
70°	152	153	153	152	153	153	152	151	150	148	146
67.5°	211	213	212	211	212	213	211	210	207	204	201
65°	279	279	280	279	280	279	279	277	274	270	266
62.5°	361	361	364	363	364	361	361	358	353	349	343
60°	463	463	466	465	466	463	463	459	453	447	439
57.5°	609	609	613	611	613	609	609	604	593	588	575
55°	850	848	853	849	853	848	850	843	826	818	792
52.5°	1276	1277	1286	1278	1286	1277	1276	1257	1227	1206	1155
50°	1886	1892	1905	1893	1905	1892	1886	1854	1817	1785	1714
47.5°	2641	2649	2666	2650	2666	2649	2641	2598	2562	2522	2435
45°	3476	3486	3500	3477	3500	3486	3476	3426	3406	3368	3315
42.5°	4333	4339	4349	4323	4349	4339	4333	4283	4283	4254	4176
40°	5147	5157	5167	5141	5167	5157	5147	5107	5121	5104	5054
37.5°	5845	5850	5853	5829	5853	5850	5845	5833	5859	5856	5839
35°	6427	6418	6403	6392	6403	6418	6427	6450	6486	6481	6522
32.5°	6936	6920	6894	6884	6894	6920	6936	6989	7037	7076	7127
30°	7386	7364	7327	7319	7327	7364	7386	7468	7525	7601	7668
27.5°	7801	7756	7697	7701	7697	7756	7801	7895	7973	8072	8150
25°	8177	8107	8046	8043	8046	8107	8177	8277	8388	8495	8563
22.5°	8519	8433	8381	8373	8381	8433	8519	8616	8752	8870	8915
20°	8835	8743	8710	8706	8710	8743	8835	8943	9074	9171	9224
17.5°	9123	9046	9023	9010	9023	9046	9123	9245	9350	9429	9485
15°	9389	9313	9289	9292	9289	9313	9389	9498	9585	9658	9702
12.5°	9630	9540	9507	9525	9507	9540	9630	9722	9802	9870	9912
10°	9848	9753	9699	9734	9699	9753	9848	9930	10015	10090	10142
7.5°	10024	9948	9887	9924	9887	9948	10024	10126	10224	10312	10350
5°	10161	10061	10004	10028	10004	10061	10161	10291	10395	10481	10536
2.5°	10223	10126	10056	10051	10056	10126	10223	10369	10493	10595	10654
0°	10179	10043	9980	10041	9980	10043	10179	10359	10512	10633	10694
-2.5°	10223	10126	10056	10051	10056	10126	10223	10369	10493	10595	10654
-5°	10161	10061	10004	10028	10004	10061	10161	10291	10395	10481	10536
-7.5°	10024	9948	9887	9924	9887	9948	10024	10126	10224	10312	10350
-10°	9848	9753	9699	9734	9699	9753	9848	9930	10015	10090	10142
-12.5°	9630	9540	9507	9525	9507	9540	9630	9722	9802	9870	9912
-15°	9389	9313	9289	9292	9289	9313	9389	9498	9585	9658	9702
-17.5°	9123	9046	9023	9010	9023	9046	9123	9245	9350	9429	9485
-20°	8835	8743	8710	8706	8710	8743	8835	8943	9074	9171	9224



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CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	8519	8433	8381	8373	8381	8433	8519	8616	8752	8870	8915
-25°	8177	8107	8046	8043	8046	8107	8177	8277	8388	8495	8563
-27.5°	7801	7756	7697	7701	7697	7756	7801	7895	7973	8072	8150
-30°	7386	7364	7327	7319	7327	7364	7386	7468	7525	7601	7668
-32.5°	6936	6920	6894	6884	6894	6920	6936	6989	7037	7076	7127
-35°	6427	6418	6403	6392	6403	6418	6427	6450	6486	6481	6522
-37.5°	5845	5850	5853	5829	5853	5850	5845	5833	5859	5856	5839
-40°	5147	5157	5167	5141	5167	5157	5147	5107	5121	5104	5054
-42.5°	4333	4339	4349	4323	4349	4339	4333	4283	4283	4254	4176
-45°	3476	3486	3500	3477	3500	3486	3476	3426	3406	3368	3315
-47.5°	2641	2649	2666	2650	2666	2649	2641	2598	2562	2522	2435
-50°	1886	1892	1905	1893	1905	1892	1886	1854	1817	1785	1714
-52.5°	1276	1277	1286	1278	1286	1277	1276	1257	1227	1206	1155
-55°	850	848	853	849	853	848	850	843	826	818	792
-57.5°	609	609	613	611	613	609	609	604	593	588	575
-60°	463	463	466	465	466	463	463	459	453	447	439
-62.5°	361	361	364	363	364	361	361	358	353	349	343
-65°	279	279	280	279	280	279	279	277	274	270	266
-67.5°	211	213	212	211	212	213	211	210	207	204	201
-70°	152	153	153	152	153	153	152	151	150	148	146
-72.5°	101	102	102	101	102	102	101	101	100	99	98
-75°	61	60	60	59	60	60	61	61	62	61	60
-77.5°	30	30	30	30	30	30	30	31	31	31	31
-80°	14	14	14	14	14	14	14	14	14	14	14
-82.5°	6	6	6	6	6	6	6	6	6	6	5
-85°	3	3	3	2	3	3	3	2	2	2	2
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	2	2	2	2	1	1	1	1	1	1	0
82.5°	5	5	5	5	4	4	4	3	3	2	2
80°	14	13	13	12	11	10	9	8	7	6	6
77.5°	30	30	29	27	26	23	21	19	18	17	16
75°	59	57	55	53	50	47	44	41	38	35	31
72.5°	96	94	91	87	83	79	75	71	65	59	54
70°	143	139	135	129	124	118	112	106	98	90	83
67.5°	196	191	185	178	171	163	155	146	137	128	117
65°	259	251	243	236	227	216	205	195	183	170	154
62.5°	334	323	313	303	290	276	262	248	233	219	199
60°	426	409	397	382	364	346	327	308	285	266	245
57.5°	553	530	513	488	455	432	409	377	350	324	294
55°	746	724	697	649	591	565	521	474	436	389	357
52.5°	1082	1062	1007	908	842	778	690	625	550	492	434
50°	1636	1590	1492	1359	1259	1110	985	853	728	633	539
47.5°	2365	2293	2158	2008	1851	1642	1442	1198	1012	817	698
45°	3219	3127	2978	2809	2600	2362	2051	1716	1383	1135	884
42.5°	4127	4031	3881	3689	3459	3173	2793	2337	1907	1519	1200
40°	5009	4930	4774	4584	4334	4032	3563	3062	2514	2018	1541
37.5°	5815	5742	5602	5425	5172	4821	4331	3775	3193	2551	1977
35°	6529	6461	6343	6168	5948	5537	5074	4503	3842	3114	2430
32.5°	7169	7085	6986	6826	6558	6192	5734	5202	4454	3681	2935
30°	7685	7634	7539	7375	7092	6751	6340	5734	5006	4218	3419
27.5°	8151	8121	8029	7833	7577	7245	6794	6218	5506	4703	3878
25°	8567	8543	8426	8240	8000	7659	7198	6631	5941	5140	4262
22.5°	8934	8881	8768	8612	8348	7985	7546	7015	6346	5503	4608
20°	9233	9177	9072	8889	8621	8304	7862	7328	6642	5821	4917
17.5°	9480	9436	9321	9126	8862	8530	8105	7579	6924	6105	5227
15°	9710	9652	9527	9336	9075	8734	8320	7809	7169	6341	5409
12.5°	9916	9858	9733	9537	9267	8914	8493	7981	7341	6515	5570
10°	10135	10062	9921	9711	9432	9074	8633	8105	7455	6643	5691
7.5°	10333	10254	10104	9875	9574	9198	8739	8198	7543	6733	5770
5°	10515	10417	10246	10007	9692	9300	8825	8266	7601	6782	5808
2.5°	10644	10548	10367	10117	9795	9380	8891	8317	7650	6848	5862
0°	10682	10574	10383	10125	9783	9366	8871	8291	7620	6828	5830
-2.5°	10644	10548	10367	10117	9795	9380	8891	8317	7650	6848	5862
-5°	10515	10417	10246	10007	9692	9300	8825	8266	7601	6782	5808
-7.5°	10333	10254	10104	9875	9574	9198	8739	8198	7543	6733	5770
-10°	10135	10062	9921	9711	9432	9074	8633	8105	7455	6643	5691
-12.5°	9916	9858	9733	9537	9267	8914	8493	7981	7341	6515	5570
-15°	9710	9652	9527	9336	9075	8734	8320	7809	7169	6341	5409
-17.5°	9480	9436	9321	9126	8862	8530	8105	7579	6924	6105	5227
-20°	9233	9177	9072	8889	8621	8304	7862	7328	6642	5821	4917



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CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	8934	8881	8768	8612	8348	7985	7546	7015	6346	5503	4608
-25°	8567	8543	8426	8240	8000	7659	7198	6631	5941	5140	4262
-27.5°	8151	8121	8029	7833	7577	7245	6794	6218	5506	4703	3878
-30°	7685	7634	7539	7375	7092	6751	6340	5734	5006	4218	3419
-32.5°	7169	7085	6986	6826	6558	6192	5734	5202	4454	3681	2935
-35°	6529	6461	6343	6168	5948	5537	5074	4503	3842	3114	2430
-37.5°	5815	5742	5602	5425	5172	4821	4331	3775	3193	2551	1977
-40°	5009	4930	4774	4584	4334	4032	3563	3062	2514	2018	1541
-42.5°	4127	4031	3881	3689	3459	3173	2793	2337	1907	1519	1200
-45°	3219	3127	2978	2809	2600	2362	2051	1716	1383	1135	884
-47.5°	2365	2293	2158	2008	1851	1642	1442	1198	1012	817	698
-50°	1636	1590	1492	1359	1259	1110	985	853	728	633	539
-52.5°	1082	1062	1007	908	842	778	690	625	550	492	434
-55°	746	724	697	649	591	565	521	474	436	389	357
-57.5°	553	530	513	488	455	432	409	377	350	324	294
-60°	426	409	397	382	364	346	327	308	285	266	245
-62.5°	334	323	313	303	290	276	262	248	233	219	199
-65°	259	251	243	236	227	216	205	195	183	170	154
-67.5°	196	191	185	178	171	163	155	146	137	128	117
-70°	143	139	135	129	124	118	112	106	98	90	83
-72.5°	96	94	91	87	83	79	75	71	65	59	54
-75°	59	57	55	53	50	47	44	41	38	35	31
-77.5°	30	30	29	27	26	23	21	19	18	17	16
-80°	14	13	13	12	11	10	9	8	7	6	6
-82.5°	5	5	5	5	4	4	4	3	3	2	2
-85°	2	2	2	2	1	1	1	1	1	1	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	1	1	1	1	1	1	1	1	1	0	0
80°	6	6	5	5	4	3	2	2	2	1	1
77.5°	15	13	11	10	10	9	7	5	3	3	2
75°	27	25	23	20	18	15	13	11	8	5	4
72.5°	49	44	39	33	30	26	22	17	14	10	6
70°	75	67	59	52	45	37	32	26	20	15	11
67.5°	105	95	84	73	63	54	44	36	28	21	16
65°	141	127	113	99	85	71	60	47	37	28	20
62.5°	180	161	144	125	109	93	76	61	47	36	26
60°	223	201	177	156	135	115	95	75	59	44	33
57.5°	269	242	215	188	163	139	115	92	71	54	39
55°	319	287	255	224	193	165	136	109	84	64	46
52.5°	383	338	298	261	226	190	158	128	99	75	54
50°	467	400	348	302	259	219	179	145	114	86	62
47.5°	570	481	406	346	297	247	203	164	129	98	70
45°	726	578	478	401	333	278	228	182	144	110	78
42.5°	899	716	567	455	378	310	254	203	160	121	87
40°	1181	878	672	534	424	341	279	223	175	132	96
37.5°	1491	1102	821	609	474	381	306	243	190	145	105
35°	1855	1368	968	709	539	420	332	263	206	156	113
32.5°	2227	1642	1168	827	601	459	362	285	221	168	121
30°	2644	1945	1372	936	672	508	393	306	236	178	128
27.5°	3028	2227	1574	1090	765	557	421	325	249	189	137
25°	3377	2534	1815	1248	851	602	447	343	264	200	145
22.5°	3701	2823	2034	1390	926	643	478	364	278	210	152
20°	3988	3075	2229	1520	1020	705	511	384	291	219	158
17.5°	4237	3294	2417	1672	1118	759	540	401	303	227	164
15°	4435	3478	2580	1799	1201	805	565	416	313	233	169
12.5°	4590	3623	2711	1901	1268	843	586	429	321	239	173
10°	4705	3728	2809	1979	1319	873	603	440	328	244	176
7.5°	4778	3796	2877	2034	1357	896	616	447	332	248	178
5°	4820	3842	2929	2080	1388	912	625	453	339	252	181
2.5°	4877	3894	2977	2118	1413	924	631	457	338	252	181
0°	4855	3878	2967	2112	1410	921	630	456	337	252	180
-2.5°	4877	3894	2977	2118	1413	924	631	457	338	252	181
-5°	4820	3842	2929	2080	1388	912	625	453	339	252	181
-7.5°	4778	3796	2877	2034	1357	896	616	447	332	248	178
-10°	4705	3728	2809	1979	1319	873	603	440	328	244	176
-12.5°	4590	3623	2711	1901	1268	843	586	429	321	239	173
-15°	4435	3478	2580	1799	1201	805	565	416	313	233	169
-17.5°	4237	3294	2417	1672	1118	759	540	401	303	227	164
-20°	3988	3075	2229	1520	1020	705	511	384	291	219	158



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CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	3701	2823	2034	1390	926	643	478	364	278	210	152
-25°	3377	2534	1815	1248	851	602	447	343	264	200	145
-27.5°	3028	2227	1574	1090	765	557	421	325	249	189	137
-30°	2644	1945	1372	936	672	508	393	306	236	178	128
-32.5°	2227	1642	1168	827	601	459	362	285	221	168	121
-35°	1855	1368	968	709	539	420	332	263	206	156	113
-37.5°	1491	1102	821	609	474	381	306	243	190	145	105
-40°	1181	878	672	534	424	341	279	223	175	132	96
-42.5°	899	716	567	455	378	310	254	203	160	121	87
-45°	726	578	478	401	333	278	228	182	144	110	78
-47.5°	570	481	406	346	297	247	203	164	129	98	70
-50°	467	400	348	302	259	219	179	145	114	86	62
-52.5°	383	338	298	261	226	190	158	128	99	75	54
-55°	319	287	255	224	193	165	136	109	84	64	46
-57.5°	269	242	215	188	163	139	115	92	71	54	39
-60°	223	201	177	156	135	115	95	75	59	44	33
-62.5°	180	161	144	125	109	93	76	61	47	36	26
-65°	141	127	113	99	85	71	60	47	37	28	20
-67.5°	105	95	84	73	63	54	44	36	28	21	16
-70°	75	67	59	52	45	37	32	26	20	15	11
-72.5°	49	44	39	33	30	26	22	17	14	10	6
-75°	27	25	23	20	18	15	13	11	8	5	4
-77.5°	15	13	11	10	10	9	7	5	3	3	2
-80°	6	6	5	5	4	3	2	2	2	1	1
-82.5°	1	1	1	1	1	1	1	1	1	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0
77.5°	1	0	0	0	0	0	0
75°	3	2	0	0	0	0	0
72.5°	4	3	1	0	0	0	0
70°	6	4	2	0	0	0	0
67.5°	10	5	3	1	0	0	0
65°	14	7	4	2	0	0	0
62.5°	18	10	5	2	0	0	0
60°	22	14	6	3	0	0	0
57.5°	27	17	8	4	0	0	0
55°	32	20	11	4	1	0	0
52.5°	37	23	13	5	1	0	0
50°	42	27	15	5	2	0	0
47.5°	47	31	18	6	2	0	0
45°	53	34	20	8	2	0	0
42.5°	59	38	22	10	3	0	0
40°	65	41	24	11	3	0	0
37.5°	71	44	27	12	4	0	0
35°	76	48	29	14	4	0	0
32.5°	81	52	31	15	4	0	0
30°	87	56	33	16	4	0	0
27.5°	93	59	35	17	5	0	0
25°	98	62	37	18	5	0	0
22.5°	103	65	38	19	5	0	0
20°	107	68	40	20	5	0	0
17.5°	111	70	41	21	5	0	0
15°	114	72	42	22	6	0	0
12.5°	116	74	43	22	6	0	0
10°	118	75	44	23	6	0	0
7.5°	120	76	45	24	6	0	0
5°	122	77	45	24	6	0	0
2.5°	121	77	45	24	6	0	0
0°	121	77	45	24	6	0	0
-2.5°	121	77	45	24	6	0	0
-5°	122	77	45	24	6	0	0
-7.5°	120	76	45	24	6	0	0
-10°	118	75	44	23	6	0	0
-12.5°	116	74	43	22	6	0	0
-15°	114	72	42	22	6	0	0
-17.5°	111	70	41	21	5	0	0
-20°	107	68	40	20	5	0	0



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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	103	65	38	19	5	0	0
-25°	98	62	37	18	5	0	0
-27.5°	93	59	35	17	5	0	0
-30°	87	56	33	16	4	0	0
-32.5°	81	52	31	15	4	0	0
-35°	76	48	29	14	4	0	0
-37.5°	71	44	27	12	4	0	0
-40°	65	41	24	11	3	0	0
-42.5°	59	38	22	10	3	0	0
-45°	53	34	20	8	2	0	0
-47.5°	47	31	18	6	2	0	0
-50°	42	27	15	5	2	0	0
-52.5°	37	23	13	5	1	0	0
-55°	32	20	11	4	1	0	0
-57.5°	27	17	8	4	0	0	0
-60°	22	14	6	3	0	0	0
-62.5°	18	10	5	2	0	0	0
-65°	14	7	4	2	0	0	0
-67.5°	10	5	3	1	0	0	0
-70°	6	4	2	0	0	0	0
-72.5°	4	3	1	0	0	0	0
-75°	3	2	0	0	0	0	0
-77.5°	1	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0

(END OF REPORT)