

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: P731781

Luminaire Tested: **NHRS50UBZ750-VS**

Issue Date: 09/15/2023

Test Information

Test Method: LM-79-2019
Report Number: P731781
Test Lab: INNOVATION CENTER
Issue Date: 09/15/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NHRS50UBZ750-VS
Description: LUMARK NIGHT HARRIER 2 PANEL FLOOD SELECTABLE CCT NEMA 6 AT 5000K WITH VISOR
Light Source: (32) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

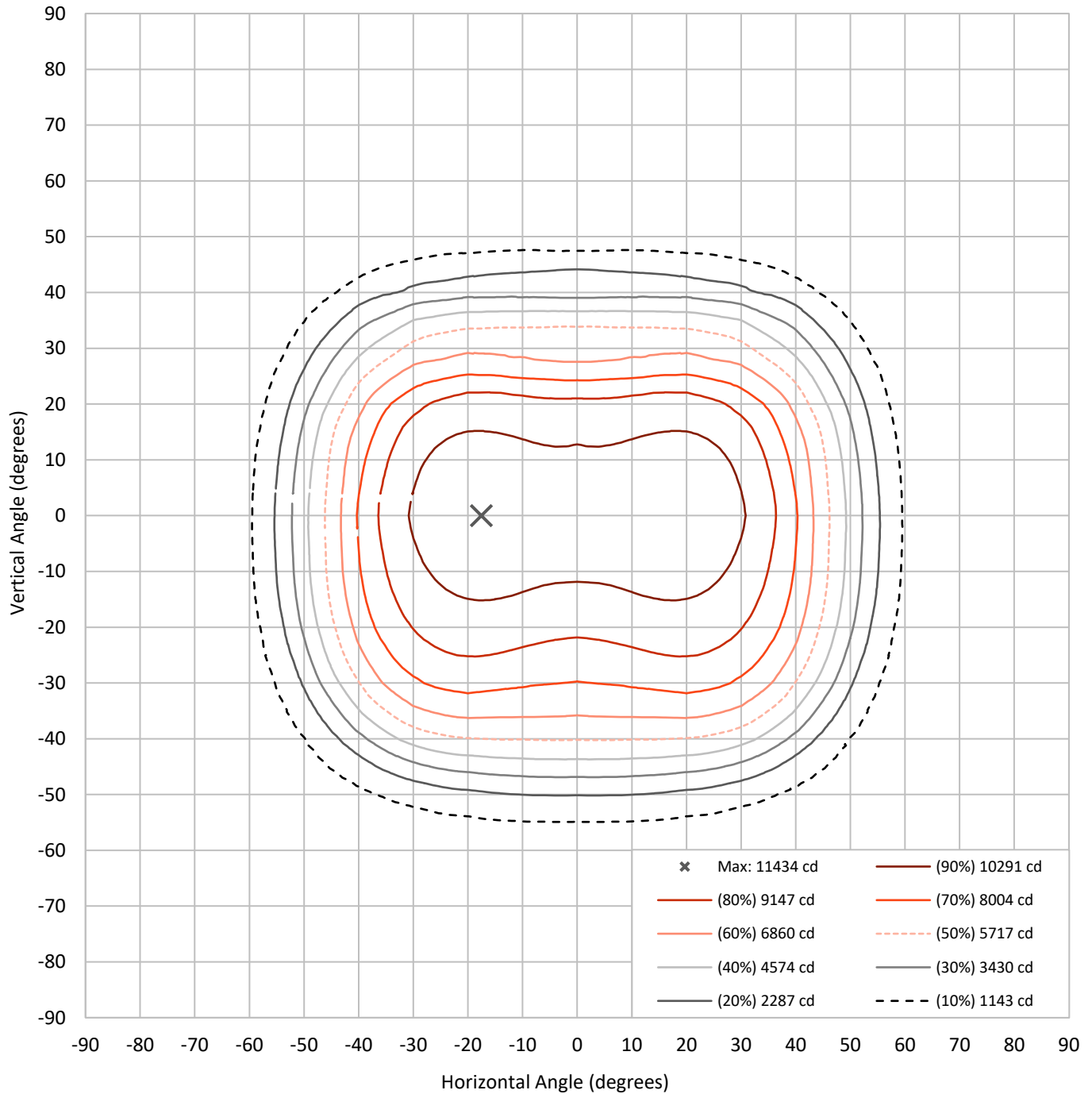
Summary

Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	19282 lumens	Max Intensity:	11434 candela
Efficiency:	N/A	Max Intensity Angle:	-17.5°H x 0°V
Efficacy:	124.7 lumens/watt		
Luminous Opening:	Rectangular (W 1.25' x L: 0.46' x H: 0')		
Beam Angle (50%):	92.3°H x 73.6°V	Field Angle (10%):	119°H x 101.4°V
Beam Lumens:	15161.3 lumens	Field Lumens:	18651.7 lumens
Beam Efficiency:	78.6%	Field Efficiency:	96.7%
Input Watts (W):	154.6		
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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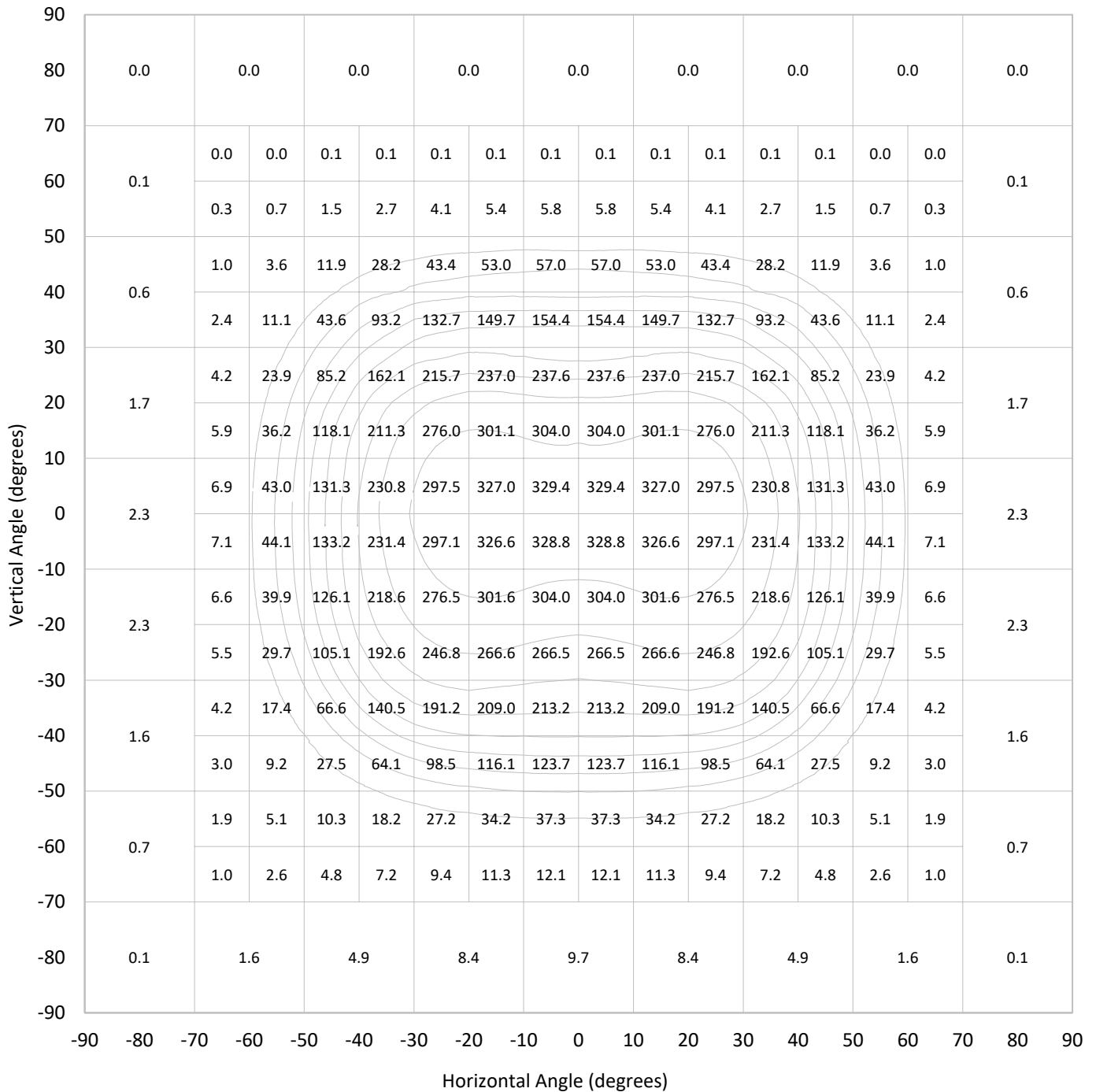
Iso-Candela Plot





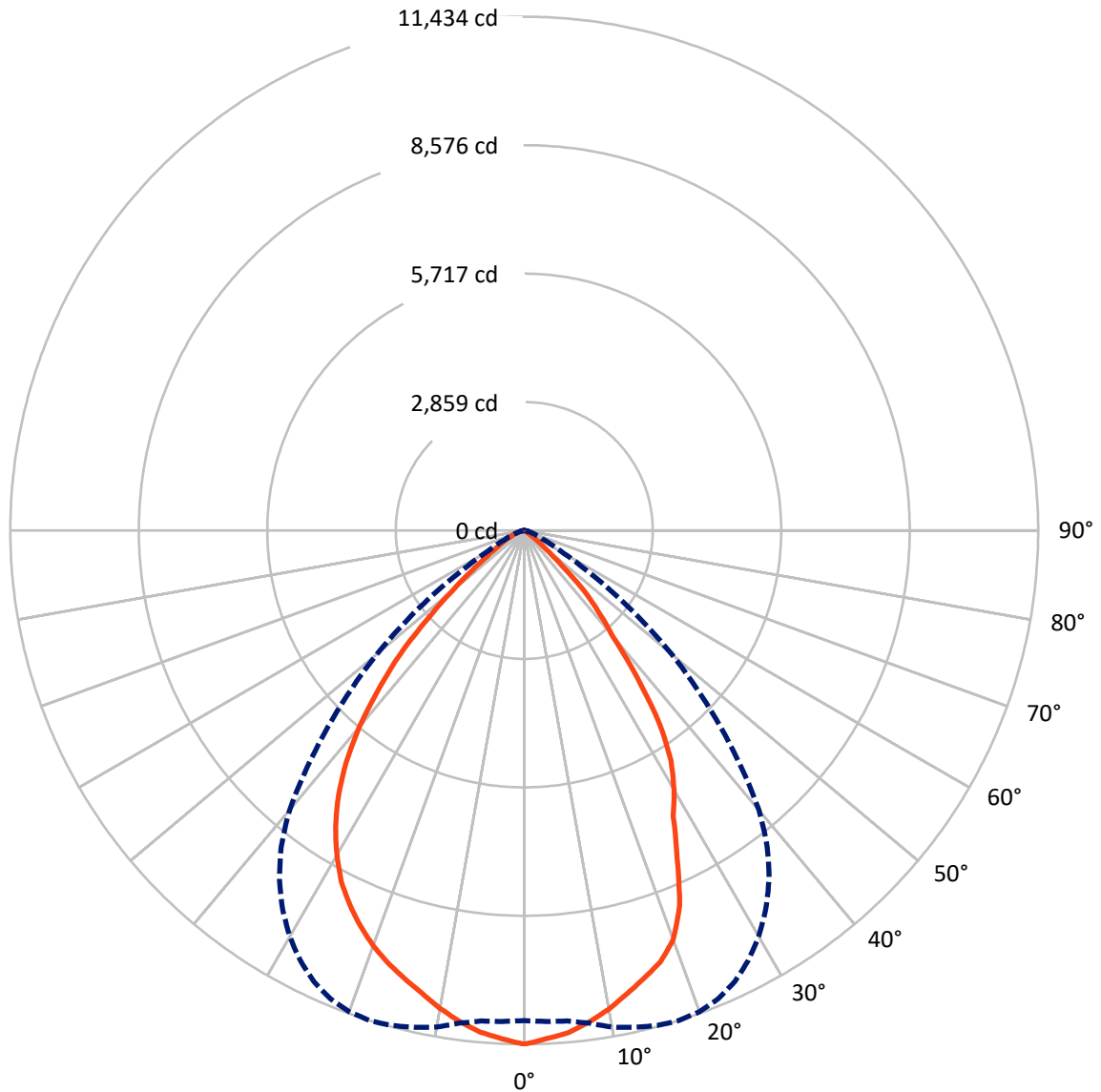
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Lumen Table



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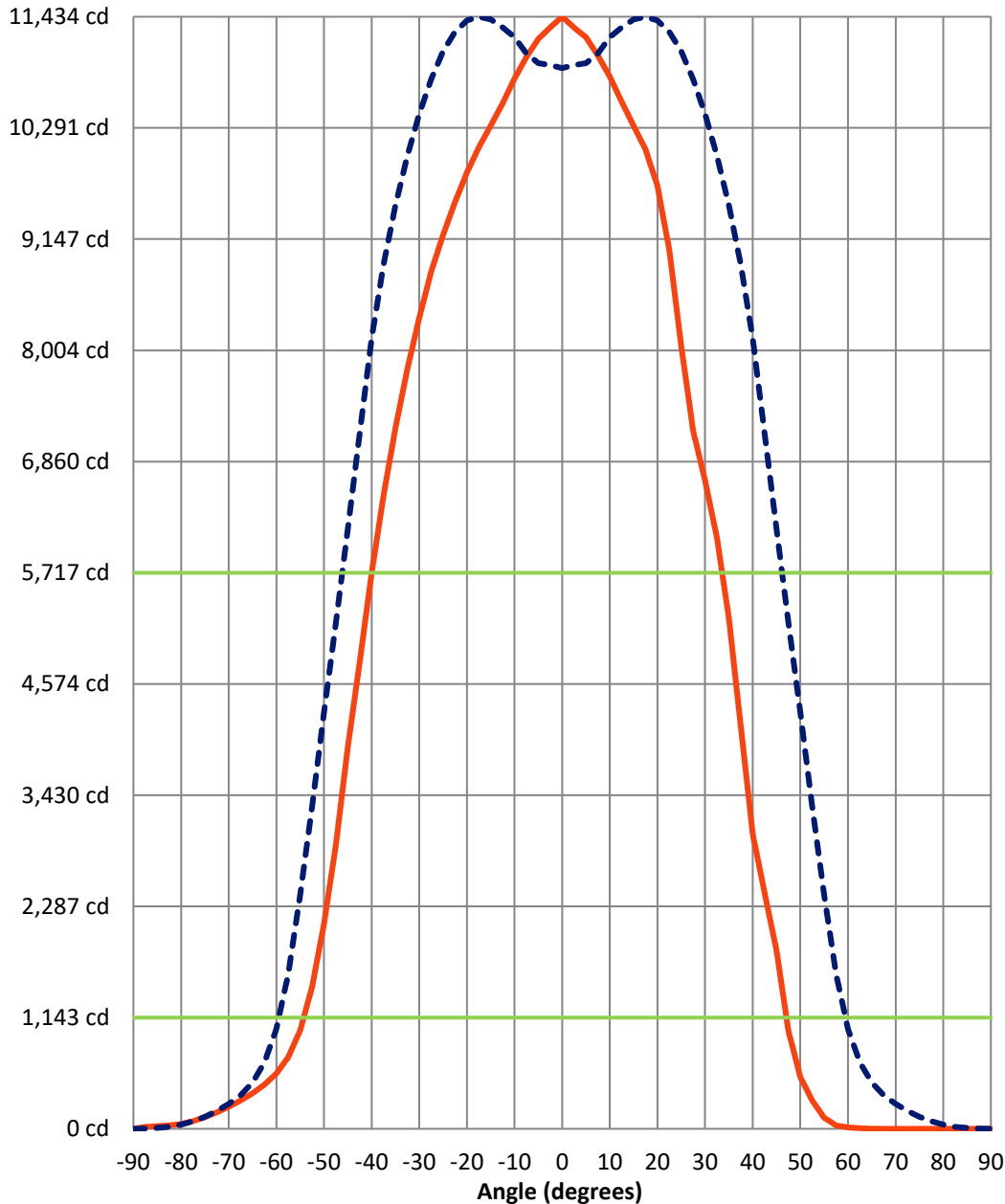
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
 H Angle: 92.3°
 V Angle: 73.6°
 Lumens: 15161.3
 Efficiency: 78.6%

Field:
 H Angle: 119°
 V Angle: 101.4°
 Lumens: 18651.7
 Efficiency: 96.7%

Spill:
 Lumens: 630.3
 Efficiency: 3.3%

— 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	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	1	0	0	0	0	0
70°	0	0	0	0	1	1	0	0	0	0	0
67.5°	0	0	0	0	1	1	1	1	1	1	1
65°	0	0	0	1	2	2	1	1	2	2	2
62.5°	0	1	0	1	2	3	2	2	3	4	4
60°	0	1	0	2	3	3	3	4	5	6	6
57.5°	0	1	1	2	3	4	5	6	8	9	11
55°	0	1	1	3	4	5	8	8	11	14	18
52.5°	0	1	1	3	5	6	10	12	14	22	27
50°	0	1	2	3	6	9	13	17	19	31	40
47.5°	0	1	2	4	7	12	16	21	29	41	56
45°	0	1	3	5	8	14	21	27	39	56	72
42.5°	0	1	3	5	9	17	26	35	50	72	96
40°	0	1	3	6	11	20	31	44	63	87	122
37.5°	0	1	4	7	13	23	36	54	78	107	149
35°	0	1	4	8	15	27	42	64	93	130	177
32.5°	0	1	5	9	17	31	48	73	108	152	206
30°	0	1	5	10	20	36	56	84	123	173	234
27.5°	0	1	5	11	22	40	64	96	139	193	261
25°	0	1	6	12	25	45	71	108	156	215	287
22.5°	0	1	6	13	27	49	79	120	173	237	318
20°	0	2	7	14	29	53	86	131	188	257	347
17.5°	0	2	7	15	31	57	92	142	203	276	374
15°	0	2	7	16	33	61	98	152	216	294	398
12.5°	0	2	8	16	35	64	103	159	227	310	419
10°	0	2	8	17	37	68	108	166	235	321	437
7.5°	0	2	8	18	40	71	113	172	242	330	450
5°	0	2	9	19	41	74	118	178	250	340	461
2.5°	0	2	9	19	42	76	120	181	253	342	471
0°	0	2	9	20	43	78	123	184	256	345	475
-2.5°	0	2	9	21	44	80	125	186	258	348	478
-5°	0	2	9	21	45	81	127	187	260	351	476
-7.5°	0	2	9	22	46	81	126	186	257	347	473
-10°	0	2	10	22	46	82	126	184	255	344	467
-12.5°	0	2	9	22	46	82	126	183	252	340	460
-15°	0	2	9	22	46	82	125	180	248	334	450
-17.5°	0	2	9	23	46	81	123	177	243	326	437
-20°	0	2	9	22	46	80	121	173	237	317	422



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 CATALOG NUMBER: NHRS50UBZ750-VS

CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	0	2	9	22	45	78	118	168	230	306	403
-25°	0	2	9	22	44	76	114	162	221	293	381
-27.5°	0	2	9	22	43	73	110	155	212	280	365
-30°	0	2	9	21	42	70	105	148	202	268	347
-32.5°	0	2	8	20	40	66	99	141	193	254	327
-35°	0	2	8	19	38	62	94	134	182	240	306
-37.5°	0	2	8	18	35	58	89	126	171	224	285
-40°	0	2	8	17	33	55	84	118	159	209	265
-42.5°	0	2	7	16	31	51	78	109	148	194	244
-45°	0	2	7	14	29	48	71	100	136	177	222
-47.5°	0	2	7	13	26	44	64	92	125	160	203
-50°	0	2	6	12	24	40	59	84	111	145	182
-52.5°	0	2	6	11	22	35	54	75	100	129	163
-55°	0	2	5	11	19	32	48	67	89	113	143
-57.5°	0	2	5	10	17	29	43	60	78	100	125
-60°	0	2	5	9	14	25	37	52	67	86	107
-62.5°	0	2	4	8	13	22	32	45	58	72	91
-65°	0	1	4	7	12	18	28	37	49	61	75
-67.5°	0	1	4	6	10	15	23	31	39	50	62
-70°	0	1	3	5	9	13	18	25	32	39	49
-72.5°	0	1	3	5	7	11	15	19	25	31	37
-75°	0	1	3	4	6	9	12	15	18	23	28
-77.5°	0	1	2	3	5	7	9	12	14	16	19
-80°	0	1	2	3	4	5	6	9	11	13	14
-82.5°	0	0	1	2	3	4	5	6	7	9	10
-85°	0	0	1	1	2	2	3	4	5	6	7
-87.5°	0	0	0	1	1	1	2	2	2	3	3
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P731781
 CATALOG NUMBER: NHRS50UBZ750-VS

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	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	1	1	1	0	1	0	0	0	0	0
65°	1	1	2	2	1	1	2	1	1	2	2
62.5°	2	3	4	4	4	3	4	5	5	5	5
60°	6	6	8	10	9	8	10	12	12	9	13
57.5°	11	12	16	19	20	16	23	25	28	26	30
55°	19	21	28	36	38	38	44	55	57	63	65
52.5°	33	35	48	58	66	71	83	102	120	125	136
50°	47	60	72	89	104	120	145	179	219	239	269
47.5°	70	86	105	127	155	193	236	309	361	447	521
45°	97	120	142	179	225	289	385	473	602	730	930
42.5°	126	156	193	234	321	432	559	726	907	1166	1415
40°	158	194	248	328	439	607	812	1030	1341	1696	2011
37.5°	193	246	312	422	610	834	1104	1471	1876	2348	2663
35°	228	298	398	547	784	1105	1504	1945	2446	3011	3410
32.5°	271	354	482	692	1003	1410	1939	2448	3029	3637	4133
30°	316	424	577	831	1241	1773	2368	2935	3604	4223	4729
27.5°	355	495	699	1023	1494	2116	2757	3448	4163	4820	5349
25°	392	554	815	1232	1793	2459	3157	3920	4721	5424	6020
22.5°	434	609	911	1436	2070	2800	3569	4385	5222	6025	6687
20°	479	688	1031	1598	2317	3132	3951	4826	5679	6482	7234
17.5°	520	759	1160	1769	2533	3418	4306	5275	6096	6883	7600
15°	558	823	1270	1918	2729	3635	4575	5565	6450	7218	7906
12.5°	591	878	1363	2043	2895	3818	4780	5751	6664	7463	8157
10°	620	926	1437	2145	3032	3966	4937	5891	6813	7637	8378
7.5°	642	964	1495	2222	3138	4080	5048	5984	6934	7792	8566
5°	660	994	1543	2302	3224	4169	5122	6032	7020	7922	8718
2.5°	675	1019	1583	2377	3298	4259	5201	6139	7128	8063	8848
0°	682	1027	1592	2404	3310	4279	5203	6166	7149	8123	8884
-2.5°	686	1032	1604	2414	3328	4288	5229	6175	7180	8105	8858
-5°	680	1020	1585	2375	3284	4228	5178	6104	7123	8021	8770
-7.5°	672	1003	1556	2330	3244	4196	5162	6105	7092	7978	8698
-10°	660	984	1525	2291	3202	4157	5120	6065	7023	7899	8606
-12.5°	647	961	1478	2224	3126	4081	5040	5984	6918	7790	8495
-15°	628	926	1413	2125	3015	3968	4923	5863	6777	7641	8352
-17.5°	605	880	1329	1994	2868	3818	4767	5727	6593	7440	8144
-20°	575	821	1227	1831	2688	3620	4556	5472	6364	7205	7930



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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°	540	750	1127	1692	2472	3370	4303	5216	6097	6952	7642
-25°	509	706	1040	1532	2223	3075	4010	4921	5787	6577	7270
-27.5°	482	657	931	1347	1945	2748	3660	4567	5375	6162	6878
-30°	452	598	812	1160	1706	2420	3254	4110	4898	5675	6411
-32.5°	418	540	725	1021	1459	2063	2781	3580	4364	5118	5884
-35°	385	495	650	873	1209	1728	2333	3008	3783	4512	5158
-37.5°	358	451	570	747	1025	1394	1903	2480	3139	3864	4411
-40°	330	403	511	656	838	1113	1514	1974	2526	3076	3667
-42.5°	304	370	456	558	706	907	1159	1556	1944	2378	2849
-45°	276	336	402	491	594	729	934	1158	1469	1763	2138
-47.5°	250	302	363	424	504	606	729	903	1060	1299	1523
-50°	224	272	321	372	432	503	596	690	813	933	1085
-52.5°	200	241	283	326	373	426	486	552	627	699	796
-55°	175	212	247	285	322	364	406	454	495	553	602
-57.5°	152	183	214	246	279	310	346	377	414	447	481
-60°	131	156	182	210	238	266	292	321	347	370	398
-62.5°	111	132	153	176	201	223	247	270	295	312	330
-65°	92	108	126	146	167	184	203	222	241	258	272
-67.5°	74	88	102	116	133	148	162	177	193	206	218
-70°	59	68	79	91	103	113	126	137	148	158	168
-72.5°	45	52	60	68	76	85	93	100	109	118	125
-75°	33	37	43	49	54	59	64	70	77	83	89
-77.5°	23	27	30	33	36	40	44	47	51	54	56
-80°	16	17	20	22	25	27	29	31	32	34	37
-82.5°	12	13	14	15	17	18	20	21	23	25	26
-85°	8	9	11	12	13	14	15	16	17	18	19
-87.5°	4	5	6	6	7	8	8	9	10	11	12
-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°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	1	1	1	1	1	1	1	1	1	1	1
62.5°	5	5	5	5	5	5	5	6	6	7	7
60°	14	12	11	12	12	12	13	14	13	13	13
57.5°	34	30	25	34	34	28	30	35	33	27	28
55°	74	80	74	91	102	98	94	114	124	124	122
52.5°	152	190	201	208	233	253	269	290	307	317	334
50°	339	387	403	373	475	525	489	532	572	554	544
47.5°	652	716	783	862	947	1002	1001	1007	1077	1116	1143
45°	1086	1208	1328	1469	1580	1631	1705	1832	1858	1906	1951
42.5°	1588	1725	1897	2090	2152	2266	2364	2425	2504	2541	2557
40°	2174	2282	2643	2817	2826	2892	3090	3034	3056	3144	3054
37.5°	2904	3223	3582	3750	3850	4036	4114	4136	4138	4147	4148
35°	3738	4148	4654	4794	4966	5143	5236	5248	5327	5346	5345
32.5°	4492	4952	5387	5649	5819	5936	6082	6074	6083	6097	6089
30°	5133	5644	6052	6298	6384	6537	6651	6665	6630	6588	6563
27.5°	5839	6315	6726	6893	6954	7139	7260	7177	7200	7024	7030
25°	6554	7035	7401	7631	7765	7985	8089	8047	8051	7906	7819
22.5°	7227	7687	8106	8459	8664	8871	9033	9032	9063	8959	8898
20°	7847	8316	8725	9121	9394	9564	9689	9694	9681	9590	9525
17.5°	8260	8828	9236	9592	9856	9982	10041	10068	10015	9951	9877
15°	8568	9156	9622	9913	10114	10244	10310	10312	10289	10232	10153
12.5°	8831	9417	9857	10145	10347	10472	10538	10559	10544	10493	10417
10°	9057	9621	10027	10320	10539	10689	10779	10818	10794	10738	10668
7.5°	9235	9756	10164	10483	10728	10889	10987	11035	11028	10968	10899
5°	9365	9850	10270	10602	10861	11046	11165	11222	11203	11152	11085
2.5°	9470	9938	10374	10702	10970	11158	11274	11322	11303	11242	11162
0°	9494	10002	10434	10790	11078	11277	11395	11434	11406	11324	11224
-2.5°	9450	9937	10367	10703	10984	11166	11279	11324	11299	11228	11145
-5°	9352	9828	10243	10582	10852	11038	11150	11206	11191	11135	11070
-7.5°	9259	9718	10113	10440	10695	10869	10968	11020	11021	10950	10880
-10°	9148	9587	9960	10265	10499	10665	10760	10798	10768	10715	10654
-12.5°	9017	9438	9790	10081	10296	10441	10518	10543	10533	10492	10410
-15°	8865	9272	9607	9874	10081	10215	10283	10314	10302	10244	10162
-17.5°	8680	9089	9403	9662	9873	9995	10060	10090	10052	9984	9912
-20°	8473	8891	9179	9430	9623	9749	9823	9831	9790	9710	9618



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 CATALOG NUMBER: NHRS50UBZ750-VS

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	8175	8605	8946	9172	9340	9467	9530	9527	9491	9399	9297
-25°	7837	8308	8640	8861	9035	9159	9189	9189	9130	9038	8949
-27.5°	7450	7902	8250	8500	8688	8769	8803	8812	8727	8630	8563
-30°	7027	7424	7775	8075	8232	8320	8363	8338	8272	8201	8145
-32.5°	6423	6891	7252	7531	7697	7793	7876	7810	7744	7714	7678
-35°	5747	6227	6662	6875	7055	7177	7229	7204	7153	7164	7141
-37.5°	4970	5480	5858	6129	6308	6455	6508	6509	6509	6518	6502
-40°	4158	4651	4987	5270	5469	5610	5677	5711	5761	5775	5757
-42.5°	3319	3728	4066	4336	4557	4698	4770	4798	4894	4937	4942
-45°	2507	2841	3118	3378	3577	3717	3809	3923	3972	4020	4054
-47.5°	1801	2035	2270	2464	2635	2775	2838	2920	3035	3093	3136
-50°	1250	1401	1575	1695	1855	1967	2011	2107	2200	2253	2298
-52.5°	883	993	1071	1150	1272	1346	1379	1458	1517	1550	1587
-55°	665	725	764	832	889	924	955	1012	1043	1049	1070
-57.5°	522	554	586	629	658	676	705	737	756	766	778
-60°	421	443	469	494	513	528	551	568	580	588	596
-62.5°	346	363	381	397	410	423	440	454	464	471	477
-65°	285	298	311	323	333	344	355	365	373	380	384
-67.5°	230	240	249	258	267	276	284	291	297	301	306
-70°	178	186	193	199	206	212	220	226	231	234	237
-72.5°	132	137	143	149	154	159	164	169	172	175	176
-75°	94	99	103	106	109	113	117	120	123	124	124
-77.5°	60	64	67	70	72	74	76	78	79	79	80
-80°	39	42	43	45	46	47	48	49	50	50	51
-82.5°	27	28	30	31	32	33	34	35	35	36	36
-85°	20	21	22	23	24	25	26	27	28	28	28
-87.5°	13	14	15	16	17	18	19	20	22	22	22
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P731781
 CATALOG NUMBER: NHRS50UBZ750-VS

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°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	1	1	1	1
62.5°	7	7	7	7	7	7	7	7	7	6	6
60°	14	14	14	14	14	14	14	13	13	13	14
57.5°	28	27	26	25	26	27	28	28	27	33	35
55°	112	95	86	81	86	95	112	122	124	124	114
52.5°	351	362	376	374	376	362	351	334	317	307	290
50°	550	546	555	566	555	546	550	544	554	572	532
47.5°	1134	1070	1038	1033	1038	1070	1134	1143	1116	1077	1007
45°	2004	2042	2109	2132	2109	2042	2004	1951	1906	1858	1832
42.5°	2587	2595	2614	2629	2614	2595	2587	2557	2541	2504	2425
40°	3048	3028	3015	3016	3015	3028	3048	3054	3144	3056	3034
37.5°	4194	4151	4087	4093	4087	4151	4194	4148	4147	4138	4136
35°	5367	5396	5445	5426	5445	5396	5367	5345	5346	5327	5248
32.5°	6074	6078	6079	6071	6079	6078	6074	6089	6097	6083	6074
30°	6510	6481	6434	6453	6434	6481	6510	6563	6588	6630	6665
27.5°	6932	6873	6806	6812	6806	6873	6932	7030	7024	7200	7177
25°	7792	7736	7624	7645	7624	7736	7792	7819	7906	8051	8047
22.5°	8811	8801	8808	8809	8808	8801	8811	8898	8959	9063	9032
20°	9439	9376	9350	9377	9350	9376	9439	9525	9590	9681	9694
17.5°	9782	9738	9727	9748	9727	9738	9782	9877	9951	10015	10068
15°	10074	10033	10024	10043	10024	10033	10074	10153	10232	10289	10312
12.5°	10341	10283	10273	10326	10273	10283	10341	10417	10493	10544	10559
10°	10596	10513	10501	10552	10501	10513	10596	10668	10738	10794	10818
7.5°	10819	10725	10699	10777	10699	10725	10819	10899	10968	11028	11035
5°	10984	10892	10809	10918	10809	10892	10984	11085	11152	11203	11222
2.5°	11045	10975	10918	10956	10918	10975	11045	11162	11242	11303	11322
0°	11056	10957	10936	10906	10936	10957	11056	11224	11324	11406	11434
-2.5°	11041	10966	10920	10895	10920	10966	11041	11145	11228	11299	11324
-5°	10958	10888	10805	10839	10805	10888	10958	11070	11135	11191	11206
-7.5°	10813	10702	10671	10705	10671	10702	10813	10880	10950	11021	11020
-10°	10563	10482	10464	10481	10464	10482	10563	10654	10715	10768	10798
-12.5°	10326	10266	10247	10228	10247	10266	10326	10410	10492	10533	10543
-15°	10085	10031	10007	9996	10007	10031	10085	10162	10244	10302	10314
-17.5°	9823	9764	9725	9709	9725	9764	9823	9912	9984	10052	10090
-20°	9534	9456	9412	9382	9412	9456	9534	9618	9710	9790	9831



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 CATALOG NUMBER: NHRS50UBZ750-VS

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	9217	9140	9090	9064	9090	9140	9217	9297	9399	9491	9527
-25°	8870	8807	8743	8733	8743	8807	8870	8949	9038	9130	9189
-27.5°	8483	8440	8380	8348	8380	8440	8483	8563	8630	8727	8812
-30°	8067	8042	8002	7961	8002	8042	8067	8145	8201	8272	8338
-32.5°	7631	7611	7581	7555	7581	7611	7631	7678	7714	7744	7810
-35°	7124	7110	7089	7045	7089	7110	7124	7141	7164	7153	7204
-37.5°	6514	6511	6503	6473	6503	6511	6514	6502	6518	6509	6509
-40°	5791	5795	5800	5774	5800	5795	5791	5757	5775	5761	5711
-42.5°	4985	4989	4997	4963	4997	4989	4985	4942	4937	4894	4798
-45°	4102	4104	4120	4108	4120	4104	4102	4054	4020	3972	3923
-47.5°	3181	3191	3206	3180	3206	3191	3181	3136	3093	3035	2920
-50°	2329	2330	2342	2323	2342	2330	2329	2298	2253	2200	2107
-52.5°	1605	1597	1607	1601	1607	1597	1605	1587	1550	1517	1458
-55°	1080	1079	1084	1078	1084	1079	1080	1070	1049	1043	1012
-57.5°	784	783	786	784	786	783	784	778	766	756	737
-60°	601	603	606	604	606	603	601	596	588	580	568
-62.5°	480	481	483	481	483	481	480	477	471	464	454
-65°	387	388	391	390	391	388	387	384	380	373	365
-67.5°	309	313	312	310	312	313	309	306	301	297	291
-70°	238	240	239	237	239	240	238	237	234	231	226
-72.5°	177	178	177	176	177	178	177	176	175	172	169
-75°	124	124	123	122	123	124	124	124	124	123	120
-77.5°	80	80	79	78	79	80	80	80	79	79	78
-80°	52	52	51	50	51	52	52	51	50	50	49
-82.5°	37	37	37	37	37	37	37	36	36	35	35
-85°	29	29	29	28	29	29	29	28	28	28	27
-87.5°	23	23	23	23	23	23	23	22	22	22	20
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P731781
 CATALOG NUMBER: NHRS50UBZ750-VS

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°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	1	1	1	1	1	1	1	2	2	1	1
62.5°	5	5	5	5	5	5	5	5	5	5	5
60°	13	12	12	12	11	12	14	13	9	12	12
57.5°	30	28	34	34	25	30	34	30	26	28	25
55°	94	98	102	91	74	80	74	65	63	57	55
52.5°	269	253	233	208	201	190	152	136	125	120	102
50°	489	525	475	373	403	387	339	269	239	219	179
47.5°	1001	1002	947	862	783	716	652	521	447	361	309
45°	1705	1631	1580	1469	1328	1208	1086	930	730	602	473
42.5°	2364	2266	2152	2090	1897	1725	1588	1415	1166	907	726
40°	3090	2892	2826	2817	2643	2282	2174	2011	1696	1341	1030
37.5°	4114	4036	3850	3750	3582	3223	2904	2663	2348	1876	1471
35°	5236	5143	4966	4794	4654	4148	3738	3410	3011	2446	1945
32.5°	6082	5936	5819	5649	5387	4952	4492	4133	3637	3029	2448
30°	6651	6537	6384	6298	6052	5644	5133	4729	4223	3604	2935
27.5°	7260	7139	6954	6893	6726	6315	5839	5349	4820	4163	3448
25°	8089	7985	7765	7631	7401	7035	6554	6020	5424	4721	3920
22.5°	9033	8871	8664	8459	8106	7687	7227	6687	6025	5222	4385
20°	9689	9564	9394	9121	8725	8316	7847	7234	6482	5679	4826
17.5°	10041	9982	9856	9592	9236	8828	8260	7600	6883	6096	5275
15°	10310	10244	10114	9913	9622	9156	8568	7906	7218	6450	5565
12.5°	10538	10472	10347	10145	9857	9417	8831	8157	7463	6664	5751
10°	10779	10689	10539	10320	10027	9621	9057	8378	7637	6813	5891
7.5°	10987	10889	10728	10483	10164	9756	9235	8566	7792	6934	5984
5°	11165	11046	10861	10602	10270	9850	9365	8718	7922	7020	6032
2.5°	11274	11158	10970	10702	10374	9938	9470	8848	8063	7128	6139
0°	11395	11277	11078	10790	10434	10002	9494	8884	8123	7149	6166
-2.5°	11279	11166	10984	10703	10367	9937	9450	8858	8105	7180	6175
-5°	11150	11038	10852	10582	10243	9828	9352	8770	8021	7123	6104
-7.5°	10968	10869	10695	10440	10113	9718	9259	8698	7978	7092	6105
-10°	10760	10665	10499	10265	9960	9587	9148	8606	7899	7023	6065
-12.5°	10518	10441	10296	10081	9790	9438	9017	8495	7790	6918	5984
-15°	10283	10215	10081	9874	9607	9272	8865	8352	7641	6777	5863
-17.5°	10060	9995	9873	9662	9403	9089	8680	8144	7440	6593	5727
-20°	9823	9749	9623	9430	9179	8891	8473	7930	7205	6364	5472



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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°	9530	9467	9340	9172	8946	8605	8175	7642	6952	6097	5216
-25°	9189	9159	9035	8861	8640	8308	7837	7270	6577	5787	4921
-27.5°	8803	8769	8688	8500	8250	7902	7450	6878	6162	5375	4567
-30°	8363	8320	8232	8075	7775	7424	7027	6411	5675	4898	4110
-32.5°	7876	7793	7697	7531	7252	6891	6423	5884	5118	4364	3580
-35°	7229	7177	7055	6875	6662	6227	5747	5158	4512	3783	3008
-37.5°	6508	6455	6308	6129	5858	5480	4970	4411	3864	3139	2480
-40°	5677	5610	5469	5270	4987	4651	4158	3667	3076	2526	1974
-42.5°	4770	4698	4557	4336	4066	3728	3319	2849	2378	1944	1556
-45°	3809	3717	3577	3378	3118	2841	2507	2138	1763	1469	1158
-47.5°	2838	2775	2635	2464	2270	2035	1801	1523	1299	1060	903
-50°	2011	1967	1855	1695	1575	1401	1250	1085	933	813	690
-52.5°	1379	1346	1272	1150	1071	993	883	796	699	627	552
-55°	955	924	889	832	764	725	665	602	553	495	454
-57.5°	705	676	658	629	586	554	522	481	447	414	377
-60°	551	528	513	494	469	443	421	398	370	347	321
-62.5°	440	423	410	397	381	363	346	330	312	295	270
-65°	355	344	333	323	311	298	285	272	258	241	222
-67.5°	284	276	267	258	249	240	230	218	206	193	177
-70°	220	212	206	199	193	186	178	168	158	148	137
-72.5°	164	159	154	149	143	137	132	125	118	109	100
-75°	117	113	109	106	103	99	94	89	83	77	70
-77.5°	76	74	72	70	67	64	60	56	54	51	47
-80°	48	47	46	45	43	42	39	37	34	32	31
-82.5°	34	33	32	31	30	28	27	26	25	23	21
-85°	26	25	24	23	22	21	20	19	18	17	16
-87.5°	19	18	17	16	15	14	13	12	11	10	9
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P731781
 CATALOG NUMBER: NHRS50UBZ750-VS

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°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	1	0	1	1	1	0	1	1	1	1
65°	2	1	1	2	2	1	1	2	2	2	1
62.5°	4	3	4	4	4	3	2	4	4	3	2
60°	10	8	9	10	8	6	6	6	6	5	4
57.5°	23	16	20	19	16	12	11	11	9	8	6
55°	44	38	38	36	28	21	19	18	14	11	8
52.5°	83	71	66	58	48	35	33	27	22	14	12
50°	145	120	104	89	72	60	47	40	31	19	17
47.5°	236	193	155	127	105	86	70	56	41	29	21
45°	385	289	225	179	142	120	97	72	56	39	27
42.5°	559	432	321	234	193	156	126	96	72	50	35
40°	812	607	439	328	248	194	158	122	87	63	44
37.5°	1104	834	610	422	312	246	193	149	107	78	54
35°	1504	1105	784	547	398	298	228	177	130	93	64
32.5°	1939	1410	1003	692	482	354	271	206	152	108	73
30°	2368	1773	1241	831	577	424	316	234	173	123	84
27.5°	2757	2116	1494	1023	699	495	355	261	193	139	96
25°	3157	2459	1793	1232	815	554	392	287	215	156	108
22.5°	3569	2800	2070	1436	911	609	434	318	237	173	120
20°	3951	3132	2317	1598	1031	688	479	347	257	188	131
17.5°	4306	3418	2533	1769	1160	759	520	374	276	203	142
15°	4575	3635	2729	1918	1270	823	558	398	294	216	152
12.5°	4780	3818	2895	2043	1363	878	591	419	310	227	159
10°	4937	3966	3032	2145	1437	926	620	437	321	235	166
7.5°	5048	4080	3138	2222	1495	964	642	450	330	242	172
5°	5122	4169	3224	2302	1543	994	660	461	340	250	178
2.5°	5201	4259	3298	2377	1583	1019	675	471	342	253	181
0°	5203	4279	3310	2404	1592	1027	682	475	345	256	184
-2.5°	5229	4288	3328	2414	1604	1032	686	478	348	258	186
-5°	5178	4228	3284	2375	1585	1020	680	476	351	260	187
-7.5°	5162	4196	3244	2330	1556	1003	672	473	347	257	186
-10°	5120	4157	3202	2291	1525	984	660	467	344	255	184
-12.5°	5040	4081	3126	2224	1478	961	647	460	340	252	183
-15°	4923	3968	3015	2125	1413	926	628	450	334	248	180
-17.5°	4767	3818	2868	1994	1329	880	605	437	326	243	177
-20°	4556	3620	2688	1831	1227	821	575	422	317	237	173



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 CATALOG NUMBER: NHRS50UBZ750-VS

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	4303	3370	2472	1692	1127	750	540	403	306	230	168
-25°	4010	3075	2223	1532	1040	706	509	381	293	221	162
-27.5°	3660	2748	1945	1347	931	657	482	365	280	212	155
-30°	3254	2420	1706	1160	812	598	452	347	268	202	148
-32.5°	2781	2063	1459	1021	725	540	418	327	254	193	141
-35°	2333	1728	1209	873	650	495	385	306	240	182	134
-37.5°	1903	1394	1025	747	570	451	358	285	224	171	126
-40°	1514	1113	838	656	511	403	330	265	209	159	118
-42.5°	1159	907	706	558	456	370	304	244	194	148	109
-45°	934	729	594	491	402	336	276	222	177	136	100
-47.5°	729	606	504	424	363	302	250	203	160	125	92
-50°	596	503	432	372	321	272	224	182	145	111	84
-52.5°	486	426	373	326	283	241	200	163	129	100	75
-55°	406	364	322	285	247	212	175	143	113	89	67
-57.5°	346	310	279	246	214	183	152	125	100	78	60
-60°	292	266	238	210	182	156	131	107	86	67	52
-62.5°	247	223	201	176	153	132	111	91	72	58	45
-65°	203	184	167	146	126	108	92	75	61	49	37
-67.5°	162	148	133	116	102	88	74	62	50	39	31
-70°	126	113	103	91	79	68	59	49	39	32	25
-72.5°	93	85	76	68	60	52	45	37	31	25	19
-75°	64	59	54	49	43	37	33	28	23	18	15
-77.5°	44	40	36	33	30	27	23	19	16	14	12
-80°	29	27	25	22	20	17	16	14	13	11	9
-82.5°	20	18	17	15	14	13	12	10	9	7	6
-85°	15	14	13	12	11	9	8	7	6	5	4
-87.5°	8	8	7	6	6	5	4	3	3	2	2
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P731781
 CATALOG NUMBER: NHRS50UBZ750-VS

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°	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0
72.5°	0	1	0	0	0	0	0
70°	0	1	1	0	0	0	0
67.5°	1	1	1	0	0	0	0
65°	1	2	2	1	0	0	0
62.5°	2	3	2	1	0	1	0
60°	3	3	3	2	0	1	0
57.5°	5	4	3	2	1	1	0
55°	8	5	4	3	1	1	0
52.5°	10	6	5	3	1	1	0
50°	13	9	6	3	2	1	0
47.5°	16	12	7	4	2	1	0
45°	21	14	8	5	3	1	0
42.5°	26	17	9	5	3	1	0
40°	31	20	11	6	3	1	0
37.5°	36	23	13	7	4	1	0
35°	42	27	15	8	4	1	0
32.5°	48	31	17	9	5	1	0
30°	56	36	20	10	5	1	0
27.5°	64	40	22	11	5	1	0
25°	71	45	25	12	6	1	0
22.5°	79	49	27	13	6	1	0
20°	86	53	29	14	7	2	0
17.5°	92	57	31	15	7	2	0
15°	98	61	33	16	7	2	0
12.5°	103	64	35	16	8	2	0
10°	108	68	37	17	8	2	0
7.5°	113	71	40	18	8	2	0
5°	118	74	41	19	9	2	0
2.5°	120	76	42	19	9	2	0
0°	123	78	43	20	9	2	0
-2.5°	125	80	44	21	9	2	0
-5°	127	81	45	21	9	2	0
-7.5°	126	81	46	22	9	2	0
-10°	126	82	46	22	10	2	0
-12.5°	126	82	46	22	9	2	0
-15°	125	82	46	22	9	2	0
-17.5°	123	81	46	23	9	2	0
-20°	121	80	46	22	9	2	0



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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	118	78	45	22	9	2	0
-25°	114	76	44	22	9	2	0
-27.5°	110	73	43	22	9	2	0
-30°	105	70	42	21	9	2	0
-32.5°	99	66	40	20	8	2	0
-35°	94	62	38	19	8	2	0
-37.5°	89	58	35	18	8	2	0
-40°	84	55	33	17	8	2	0
-42.5°	78	51	31	16	7	2	0
-45°	71	48	29	14	7	2	0
-47.5°	64	44	26	13	7	2	0
-50°	59	40	24	12	6	2	0
-52.5°	54	35	22	11	6	2	0
-55°	48	32	19	11	5	2	0
-57.5°	43	29	17	10	5	2	0
-60°	37	25	14	9	5	2	0
-62.5°	32	22	13	8	4	2	0
-65°	28	18	12	7	4	1	0
-67.5°	23	15	10	6	4	1	0
-70°	18	13	9	5	3	1	0
-72.5°	15	11	7	5	3	1	0
-75°	12	9	6	4	3	1	0
-77.5°	9	7	5	3	2	1	0
-80°	6	5	4	3	2	1	0
-82.5°	5	4	3	2	1	0	0
-85°	3	2	2	1	1	0	0
-87.5°	2	1	1	1	0	0	0
-90°	0	0	0	0	0	0	0

(END OF REPORT)