

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: INVUE

Report Number: P95403

Luminaire Tested: **VFS-K-B40-3-LED-E1-TS**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95403
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22640)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B40-3-LED-E1-TS
Description: ARCHITECTURAL FLOOD LUMINAIRE
TIGHT SPOT DISTRIBUTION
WITH 40 LED'S, 350mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 2V
Luminaire Lumens:	3877.5 lumens	Max Intensity:	43972 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	86.2 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	14°H x 13.9°V	Field Angle (10%):	29.1°H x 28.7°V
Beam Lumens:	1445.9 lumens	Field Lumens:	2907.6 lumens
Beam Efficiency:	37.3%	Field Efficiency:	75.0%

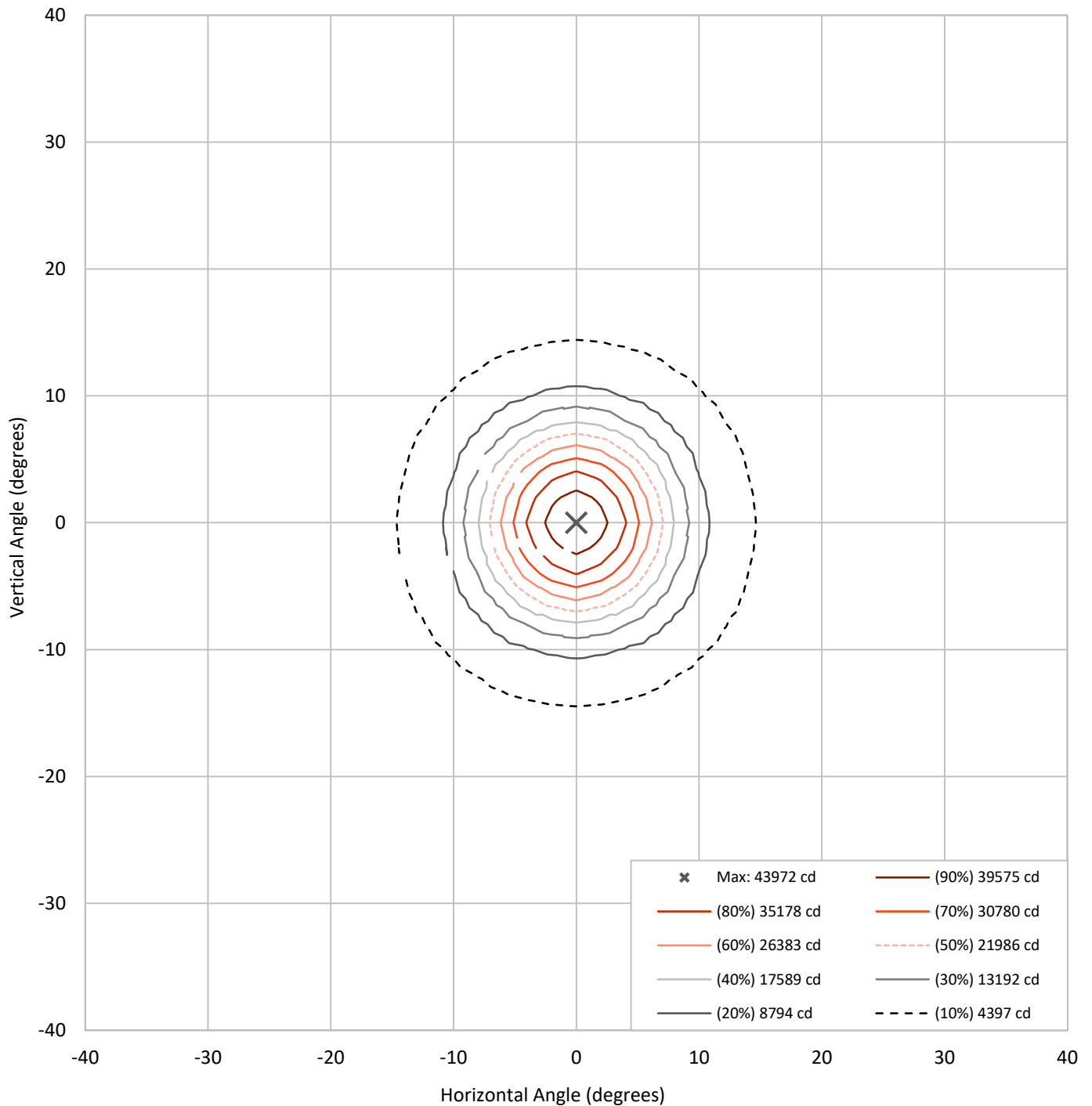
Input Watts (W): 45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Candela Plot





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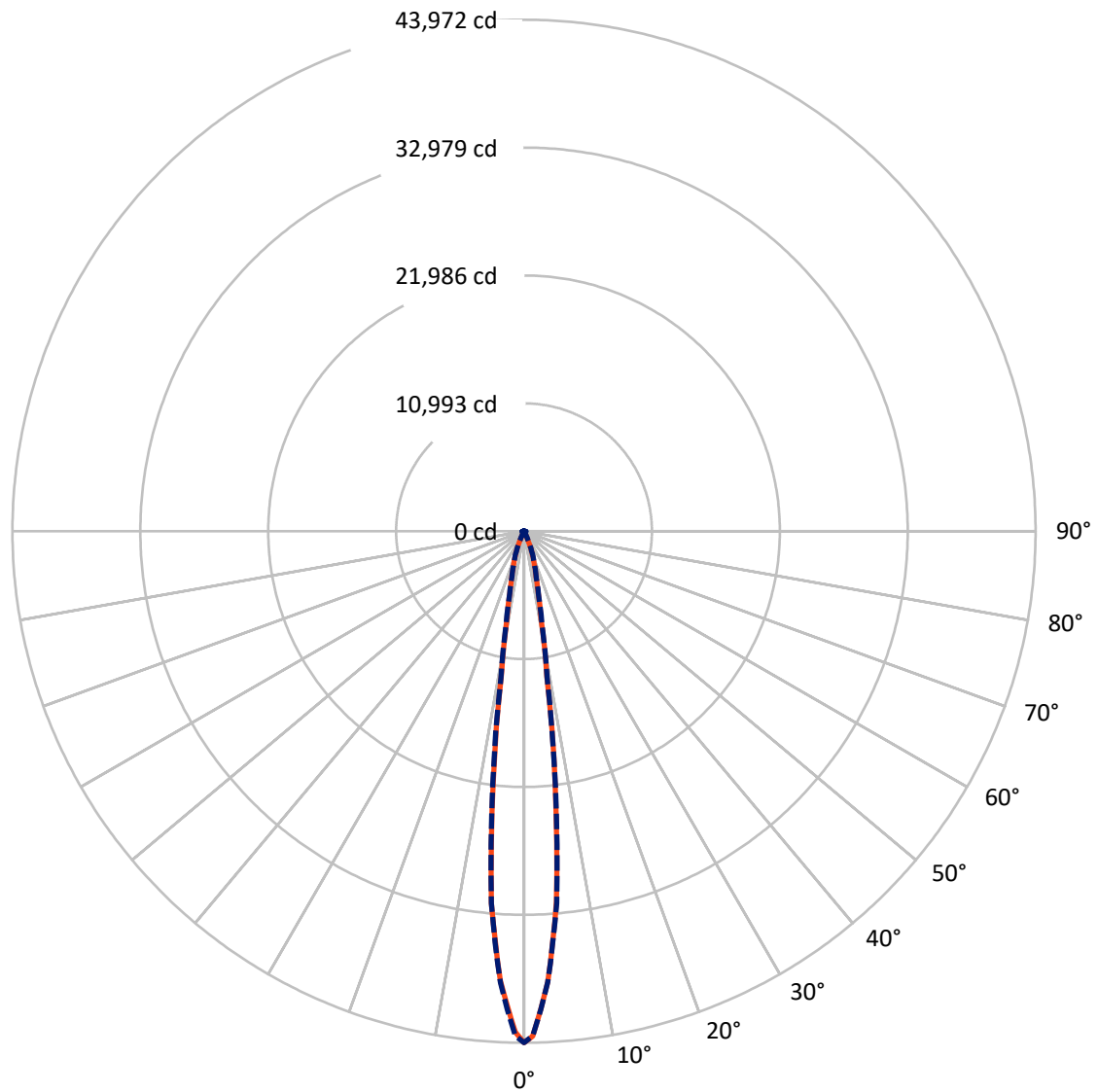
Lumen Table

90	3.6	6.7		5.1		1.3		0.5		1.3		5.1		6.7		3.6			
80	3.6	6.7		5.1		1.3		0.5		1.3		5.1		6.7		3.6			
70	2.6	0.6	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.6	2.6			
60		0.3	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.3				
50	1.7	0.3	0.1	0.1	0.2	0.5	0.6	0.4	0.4	0.6	0.5	0.2	0.1	0.1	0.3	1.7			
40		0.1	0.1	0.1	0.2	0.5	0.7	0.7	0.7	0.7	0.5	0.2	0.1	0.1	0.1				
30	1.3	0.1	0.0	0.0	0.1	0.7	5.2	18.5	18.5	5.2	0.7	0.1	0.0	0.0	0.1	1.3			
20		0.0	0.0	0.0	0.2	4.9	49.1	117.2	117.2	49.1	4.9	0.2	0.0	0.0	0.0				
10	1.1	0.0	0.0	0.0	0.5	17.7	116.0	606.2	606.2	116.0	17.7	0.5	0.0	0.0	0.0	1.1			
0		0.0	0.0	0.0	0.4	17.8	117.3	604.7	604.7	117.3	17.8	0.4	0.0	0.0	0.0				
-10	1.2	0.0	0.0	0.0	0.1	5.0	50.8	119.0	119.0	50.8	5.0	0.1	0.0	0.0	0.0	1.2			
-20		0.1	0.0	0.0	0.1	0.7	5.8	19.8	19.8	5.8	0.7	0.1	0.0	0.0	0.1				
-30	1.6	0.1	0.1	0.0	0.1	0.3	0.6	0.6	0.6	0.6	0.3	0.1	0.0	0.1	0.1	1.6			
-40		0.2	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.4	0.2	0.1	0.1	0.1	0.2				
-50	2.6	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.3	2.6			
-60		0.7	0.3	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.3	0.7				
-70	3.7	6.8		5.3		1.3		0.7		1.3		5.3		6.8		3.7			
-80		6.8		5.3		1.3		0.7		1.3		5.3		6.8					
-90	3.7	6.8		5.3		1.3		0.7		1.3		5.3		6.8		3.7			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
	Horizontal Angle (degrees)																		

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Luminous Intensity Polar Plot

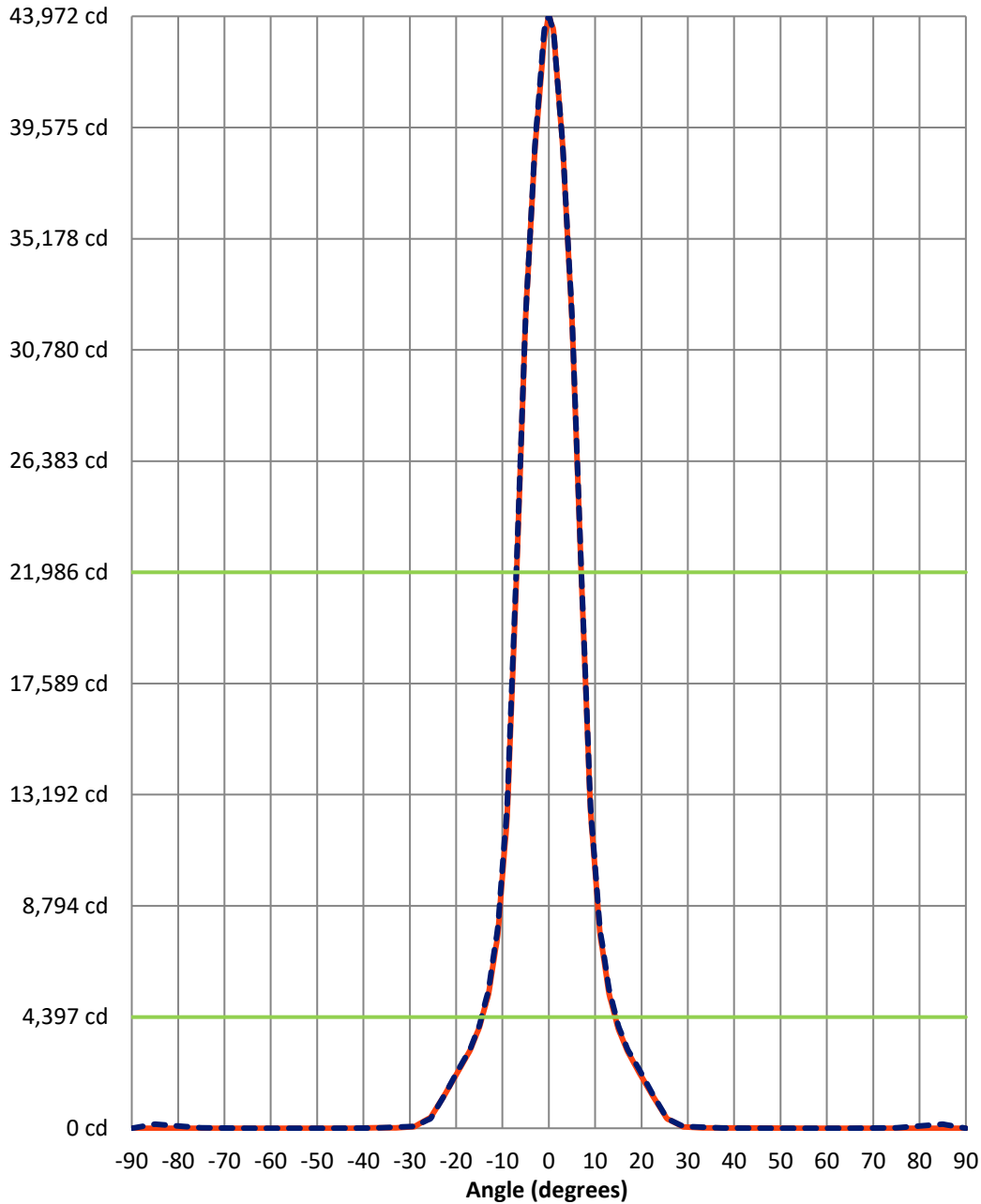


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 14°
 V Angle: 13.9°
 Lumens: 1445.9
 Efficiency: 37.3%

Field:
 H Angle: 29.1°
 V Angle: 28.7°
 Lumens: 2907.6
 Efficiency: 75.0%

Spill:
 Lumens: 969.9
 Efficiency: 25.0%

— Vertical Distribution through 0-Deg
 - - Horizontal Distribution through 0-Deg



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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	0	12	4	0	0	0	2	2	4	12	18
75°	0	0	6	10	10	8	2	0	0	6	0
65°	0	0	6	8	16	14	4	8	6	2	2
55°	0	0	0	12	10	10	14	16	14	4	6
47.5°	8	8	12	8	14	20	18	20	20	16	16
42.5°	12	6	10	16	20	22	16	22	26	18	24
37.5°	12	14	24	24	28	20	24	22	31	28	24
33°	16	14	20	18	28	22	28	14	22	22	18
29°	57	51	55	45	45	43	47	35	33	26	20
25.5°	382	399	328	266	199	132	94	77	53	47	35
22.5°	1261	1280	1202	1078	928	712	519	332	201	126	71
19.5°	2201	2199	2144	2022	1863	1613	1310	942	618	354	144
17°	3043	3057	2897	2732	2508	2248	1992	1668	1255	818	376
15°	3930	3946	3796	3531	3202	2799	2445	2099	1733	1259	655
13°	5326	5340	5069	4626	4117	3519	2994	2516	2112	1674	1013
11°	7779	7832	7272	6394	5480	4488	3670	2976	2453	1989	1345
9°	12576	12606	11166	9260	7504	5816	4549	3546	2838	2282	1646
7°	21925	21856	18465	13959	10312	7462	5519	4193	3230	2541	1872
5°	31942	31830	28441	21231	14187	9376	6501	4740	3623	2801	2065
3°	38818	38535	34869	28262	18636	11249	7340	5187	3894	2980	2197
1°	43411	42868	38447	31659	21693	12511	7856	5446	4034	3094	2317
0°	43972	43397	38844	32113	22080	12720	7960	5492	4058	3121	2327
-1°	43065	42483	38335	31718	21624	12553	7907	5454	4048	3106	2295
-3°	38700	38134	35011	28305	18556	11323	7435	5240	3908	3009	2205
-5°	32096	31474	28144	21406	14032	9465	6577	4803	3619	2809	2051
-7°	21689	21042	18862	14091	10265	7612	5627	4260	3285	2569	1894
-9°	12323	12026	11085	9368	7547	5983	4648	3670	2915	2329	1686
-11°	7681	7567	7213	6473	5529	4622	3755	3090	2512	2034	1379
-13°	5322	5259	5187	4732	4172	3605	3066	2590	2160	1701	1033
-15°	3991	3940	3930	3635	3273	2901	2527	2173	1798	1312	704
-17°	3080	3072	3060	2838	2577	2333	2055	1743	1310	844	403
-19.5°	2274	2260	2254	2112	1933	1709	1404	1050	671	378	163
-22.5°	1314	1324	1294	1129	968	773	578	372	214	126	67
-25.5°	431	429	421	321	244	163	120	94	75	57	43
-29°	65	49	67	61	55	57	45	26	35	35	24
-33°	16	10	22	26	26	33	31	20	28	26	20
-37.5°	20	2	4	4	12	14	8	14	18	16	10
-42.5°	0	4	6	14	16	20	12	20	22	16	18
-47.5°	0	0	0	0	10	12	8	10	14	10	6
-55°	0	4	2	8	10	8	16	14	14	12	10
-65°	0	0	8	14	12	12	10	2	10	8	2
-75°	0	0	20	18	12	6	12	10	8	2	6
-85°	0	6	0	0	0	0	0	0	0	8	18
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	33	43	69	98	130	153	173	195	214	230	246
75°	2	8	2	0	6	12	22	41	114	181	232
65°	2	4	2	2	2	2	2	14	31	128	222
55°	6	2	2	2	4	2	2	2	16	71	205
47.5°	24	20	8	6	4	8	10	8	20	49	205
42.5°	20	28	10	8	8	4	4	6	18	47	201
37.5°	24	28	20	12	10	8	12	4	14	43	195
33°	14	10	12	4	0	0	2	0	4	37	183
29°	12	10	20	0	0	0	0	0	0	33	179
25.5°	24	22	18	2	0	0	0	0	0	28	177
22.5°	43	28	20	16	6	8	0	2	12	31	183
19.5°	41	14	0	0	0	0	0	0	0	20	165
17°	110	39	18	10	0	0	0	0	0	24	171
15°	201	47	18	8	0	0	0	0	0	18	167
13°	350	75	22	20	2	0	0	0	0	16	165
11°	537	104	26	12	0	0	0	0	2	14	163
9°	745	163	39	16	2	0	0	0	0	18	165
7°	946	216	45	12	0	0	0	0	0	14	159
5°	1121	301	75	31	10	4	4	0	0	20	167
3°	1233	352	71	20	12	2	0	0	0	18	163
1°	1302	380	65	24	6	0	0	0	0	16	159
0°	1318	387	73	45	10	4	0	0	0	18	163
-1°	1300	382	63	31	6	2	0	0	0	12	159
-3°	1243	356	69	26	12	6	0	0	0	16	163
-5°	1105	287	41	6	0	0	0	0	0	8	151
-7°	958	228	45	14	0	0	0	0	0	12	157
-9°	783	177	49	20	4	8	0	4	2	18	167
-11°	557	108	22	4	0	0	0	0	0	10	161
-13°	354	63	4	2	0	0	0	0	0	8	157
-15°	210	55	14	8	0	0	0	0	0	14	163
-17°	102	28	2	4	0	0	0	0	0	12	161
-19.5°	55	18	6	6	0	0	0	0	0	16	165
-22.5°	35	24	16	6	0	0	0	0	0	24	171
-25.5°	33	24	22	12	0	0	0	8	6	31	177
-29°	20	12	20	4	4	0	0	2	4	26	179
-33°	16	14	16	8	10	0	2	4	10	35	185
-37.5°	6	8	4	2	0	0	0	2	6	37	185
-42.5°	16	12	12	10	4	12	0	6	10	45	197
-47.5°	8	4	0	0	0	0	0	2	8	39	193
-55°	6	6	6	8	2	2	4	4	22	75	207
-65°	2	0	0	0	4	2	4	14	35	134	218
-75°	8	8	8	12	22	18	28	53	124	191	242
-85°	28	35	61	94	118	151	169	187	203	228	242
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	90°
90°	0
85°	0
75°	0
65°	0
55°	0
47.5°	0
42.5°	0
37.5°	0
33°	0
29°	0
25.5°	0
22.5°	0
19.5°	0
17°	0
15°	0
13°	0
11°	0
9°	0
7°	0
5°	0
3°	0
1°	0
0°	0
-1°	0
-3°	0
-5°	0
-7°	0
-9°	0
-11°	0
-13°	0
-15°	0
-17°	0
-19.5°	0
-22.5°	0
-25.5°	0
-29°	0
-33°	0
-37.5°	0
-42.5°	0
-47.5°	0
-55°	0
-65°	0
-75°	0
-85°	0
-90°	0

(END OF REPORT)