

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: LUMARK

Report Number: G2-16-1017-3

Luminaire Tested: **NFFLD-S-C70-D-UNV-33**

Test Date: 05/24/16

Test Information

Test Method: LM-79-08
Report Number: G2-16-1017-3
Test Lab: INNOVATION CENTER(G2)
Test Date: 05/24/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C70-D-UNV-33
Description: LOW WATTAGE LED FLOODLIGHT
Light Source: (2) CITIZEN 4000 70
CLU028-1204C4-40AL7K3
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER
OT50/UNV/0610C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2920.1 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Luminous Opening: (L: 0 ' x W: 0.46 ' x H: 0.33 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

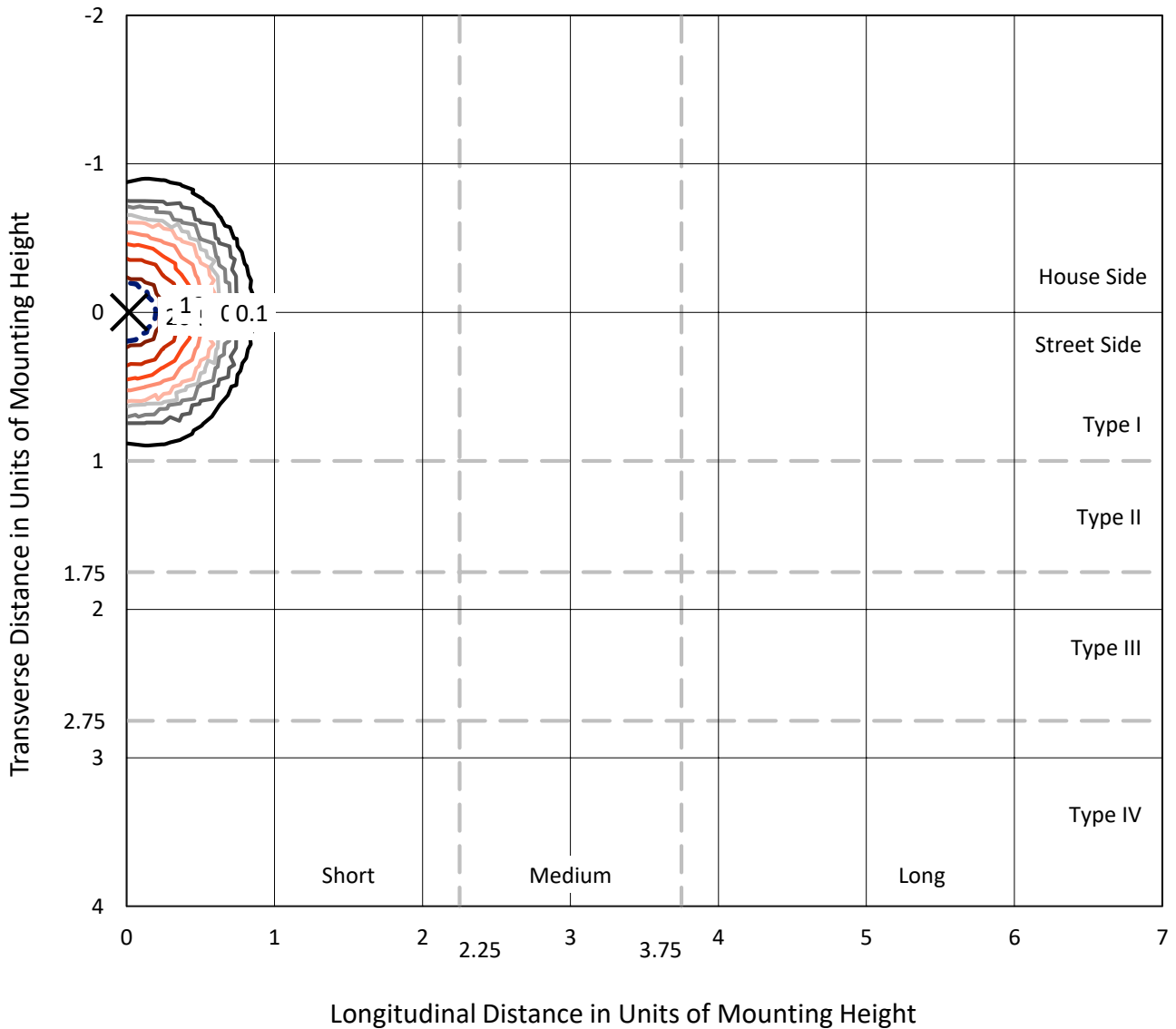
Input Watts (W): 25.9
Input Voltage (V): 120.1
Input Current (Ain): 0.217
Voltage Rise (V): NR
Power Factor: 0.9954
Total Harmonic Distortion (THDi): 8.28%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

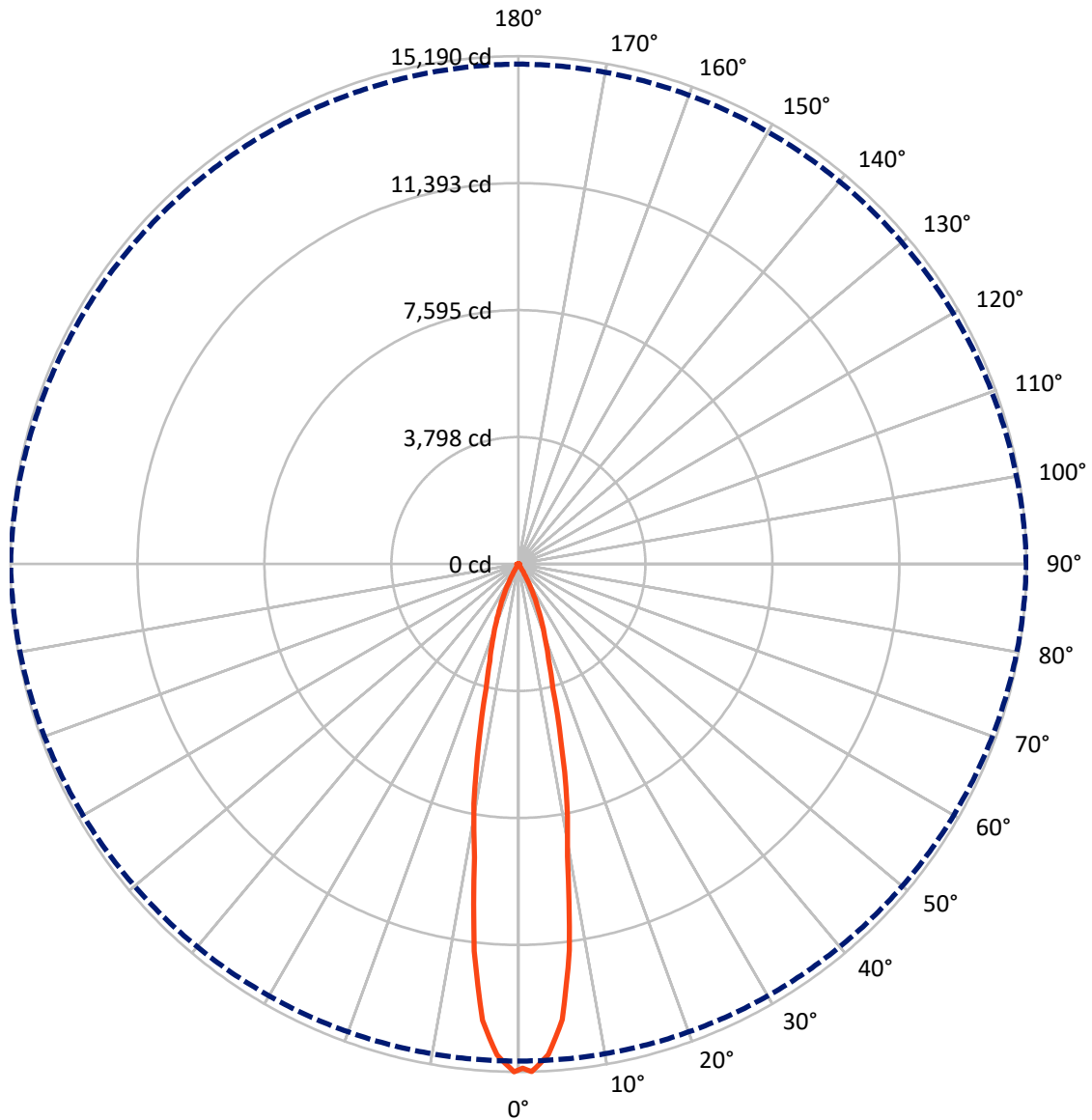
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 150.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 1-Deg Vertical

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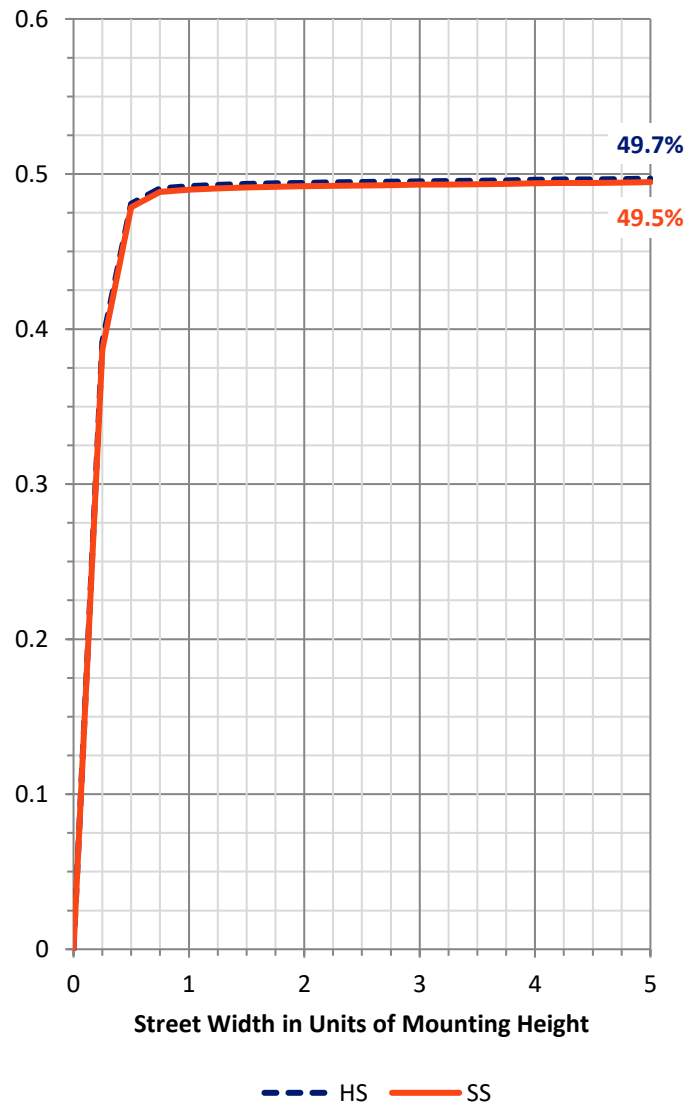
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1476.5	0.0	1476.5
	% Fixture	50.6	0.0	50.6
Street Side	Lumens	1443.6	0.0	1443.6
	% Fixture	49.4	0.0	49.4
Total	Lumens	2920.1	0.0	2920.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1097.6	37.6
10°-20°	1169.2	40.0
20°-30°	535.6	18.3
30°-40°	102.7	3.5
40°-50°	13.8	0.5
50°-60°	6.8	0.2
60°-70°	5.5	0.2
70°-80°	13.4	0.5
80°-90°	10.4	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2920.1	100.0
0°-180°	2920.1	100.0



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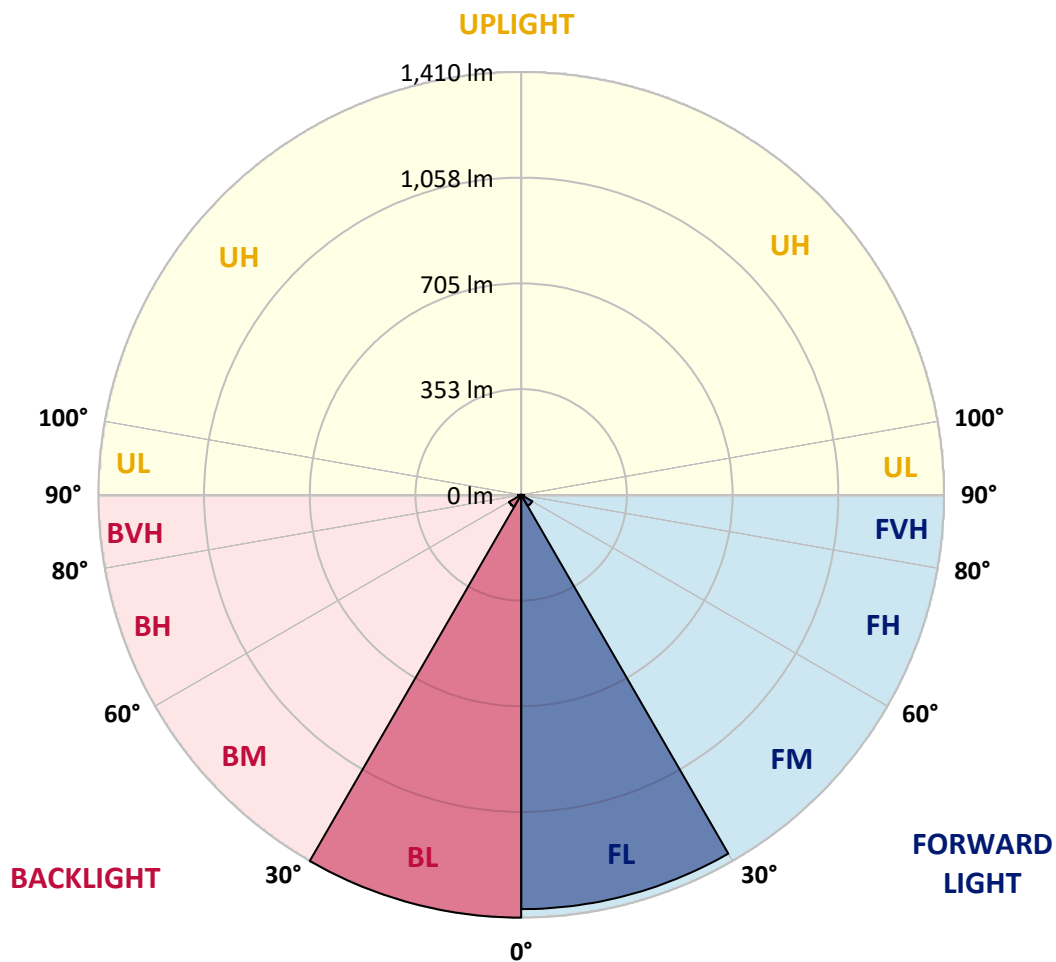
CATALOG NUMBER: NFFLD-S-C70-D-UNV-33

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1381.9	47.3			
FM (30°-60°)	42.9	1.5			
FH (60°-80°)	7.9	0.3			G0/660
FVH (80°-90°)	10.7	0.4			G1/100
BL (0°-30°)	1410.3	48.3	B3/2500		
BM (30°-60°)	47.1	1.6	B0/220		
BH (60°-80°)	8.1	0.3	B0/110		G0/660
BVH (80°-90°)	10.8	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076
1°	14866	14874	14890	14914	14947	14987	15033	15084	15137	15190	15127
3°	14518	14545	14580	14513	14485	14498	14553	14646	14670	14697	14682
5°	13334	13482	13391	13363	13400	13424	13426	13476	13612	13689	13679
7°	11289	11460	11269	11272	11419	11449	11375	11409	11544	11649	11620
9°	8610	8781	8847	8899	8884	8887	8946	8956	8843	8870	8868
11°	6990	7065	6998	7048	7091	7106	7112	7143	7214	7286	7253
13°	5466	5341	5328	5365	5375	5426	5459	5447	5431	5470	5455
15°	3908	3858	3930	3889	3952	4007	3924	3976	3916	3878	3922
17°	3020	2979	2996	2987	3013	2995	3009	3017	3021	3010	3026
19.5°	2252	2215	2241	2219	2231	2229	2242	2264	2261	2300	2267
22.5°	1578	1566	1581	1593	1578	1600	1600	1605	1617	1619	1629
25.5°	1016	999	1011	1019	1027	1042	1043	1054	1052	1054	1065
29°	450	446	468	447	469	465	483	502	477	464	484
33°	83	94	127	94	115	112	122	137	109	82	112
37.5°	27	32	35	32	31	30	30	30	28	24	29
42.5°	23	24	26	26	23	21	19	18	18	18	18
47.5°	12	15	19	17	15	12	10	10	9	9	9
55°	3	8	10	9	6	4	2	1	1	0	2
65°	2	9	8	6	4	3	2	2	3	2	3
75°	1	8	5	4	7	8	10	11	14	12	14
85°	0	5	16	29	36	38	39	41	42	45	42
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076
1°	15065	15011	14968	14939	14924	14923	14934	14952	14934	14923	14924
3°	14665	14605	14574	14576	14611	14674	14741	14817	14741	14674	14611
5°	13582	13575	13623	13664	13650	13659	13769	13939	13769	13659	13650
7°	11546	11544	11630	11658	11667	11750	11904	12071	11904	11750	11667
9°	9023	9069	9024	9010	9098	9161	9030	9136	9030	9161	9098
11°	7198	7174	7188	7177	7124	7161	7221	7322	7221	7161	7124
13°	5488	5486	5458	5427	5405	5382	5389	5523	5389	5382	5405
15°	3993	3947	4007	3988	3930	3976	3942	3843	3942	3976	3930
17°	3029	3048	3047	3055	3057	3068	3081	3104	3081	3068	3057
19.5°	2280	2289	2293	2300	2297	2316	2313	2347	2313	2316	2297
22.5°	1628	1635	1653	1655	1666	1671	1675	1668	1675	1671	1666
25.5°	1077	1076	1085	1100	1106	1109	1104	1103	1104	1109	1106
29°	518	508	504	523	518	533	520	512	520	533	518
33°	145	137	131	138	122	150	122	108	122	150	122
37.5°	30	33	33	34	34	39	34	28	34	39	34
42.5°	19	20	22	24	26	26	24	22	24	26	26
47.5°	11	11	13	16	18	18	16	12	16	18	18
55°	2	3	5	6	9	10	8	3	8	10	9
65°	3	3	3	4	6	8	9	2	9	8	6
75°	11	10	9	7	4	5	8	1	8	5	4
85°	42	39	38	37	29	16	5	0	5	16	29
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076	15076
1°	14939	14968	15011	15065	15127	15190	15137	15084	15033	14987	14947
3°	14576	14574	14605	14665	14682	14697	14670	14646	14553	14498	14485
5°	13664	13623	13575	13582	13679	13689	13612	13476	13426	13424	13400
7°	11658	11630	11544	11546	11620	11649	11544	11409	11375	11449	11419
9°	9010	9024	9069	9023	8868	8870	8843	8956	8946	8887	8884
11°	7177	7188	7174	7198	7253	7286	7214	7143	7112	7106	7091
13°	5427	5458	5486	5488	5455	5470	5431	5447	5459	5426	5375
15°	3988	4007	3947	3993	3922	3878	3916	3976	3924	4007	3952
17°	3055	3047	3048	3029	3026	3010	3021	3017	3009	2995	3013
19.5°	2300	2293	2289	2280	2267	2300	2261	2264	2242	2229	2231
22.5°	1655	1653	1635	1628	1629	1619	1617	1605	1600	1600	1578
25.5°	1100	1085	1076	1077	1065	1054	1052	1054	1043	1042	1027
29°	523	504	508	518	484	464	477	502	483	465	469
33°	138	131	137	145	112	82	109	137	122	112	115
37.5°	34	33	33	30	29	24	28	30	30	30	31
42.5°	24	22	20	19	18	18	18	18	19	21	23
47.5°	16	13	11	11	9	9	9	10	10	12	15
55°	6	5	3	2	2	0	1	1	2	4	6
65°	4	3	3	3	3	2	3	2	2	3	4
75°	7	9	10	11	14	12	14	11	10	8	7
85°	37	38	39	42	42	45	42	41	39	38	36
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	15076	15076	15076	15076
1°	14914	14890	14874	14866
3°	14513	14580	14545	14518
5°	13363	13391	13482	13334
7°	11272	11269	11460	11289
9°	8899	8847	8781	8610
11°	7048	6998	7065	6990
13°	5365	5328	5341	5466
15°	3889	3930	3858	3908
17°	2987	2996	2979	3020
19.5°	2219	2241	2215	2252
22.5°	1593	1581	1566	1578
25.5°	1019	1011	999	1016
29°	447	468	446	450
33°	94	127	94	83
37.5°	32	35	32	27
42.5°	26	26	24	23
47.5°	17	19	15	12
55°	9	10	8	3
65°	6	8	9	2
75°	4	5	8	1
85°	29	16	5	0
90°	0	0	0	0

(END OF REPORT)