

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: McGRAW-EDISON

Report Number: P13513

Luminaire Tested: **BSL-XX-42-CFL-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P13513
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: BSL-XX-42-CFL-UNV
Description: MCGRAW-EDISON BLACK SQUARE LOUVERED CFL BOLLARD, WITH PRISMATIC GLASS REFRACTOR.
Light Source: 4PIN BASE TTT VERTICAL BASE DOWN CFL 42WATT F42TBX-A-4P-HEXA-LL-USA-GE
Ballast/Driver: -

Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 497 lumens
Efficiency: 15.5%
Efficacy: 10.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 0.58' x H: 0.46')
IES Classification: Type V - Short - Cutoff
BUG Rating: B1 - U1 - G1

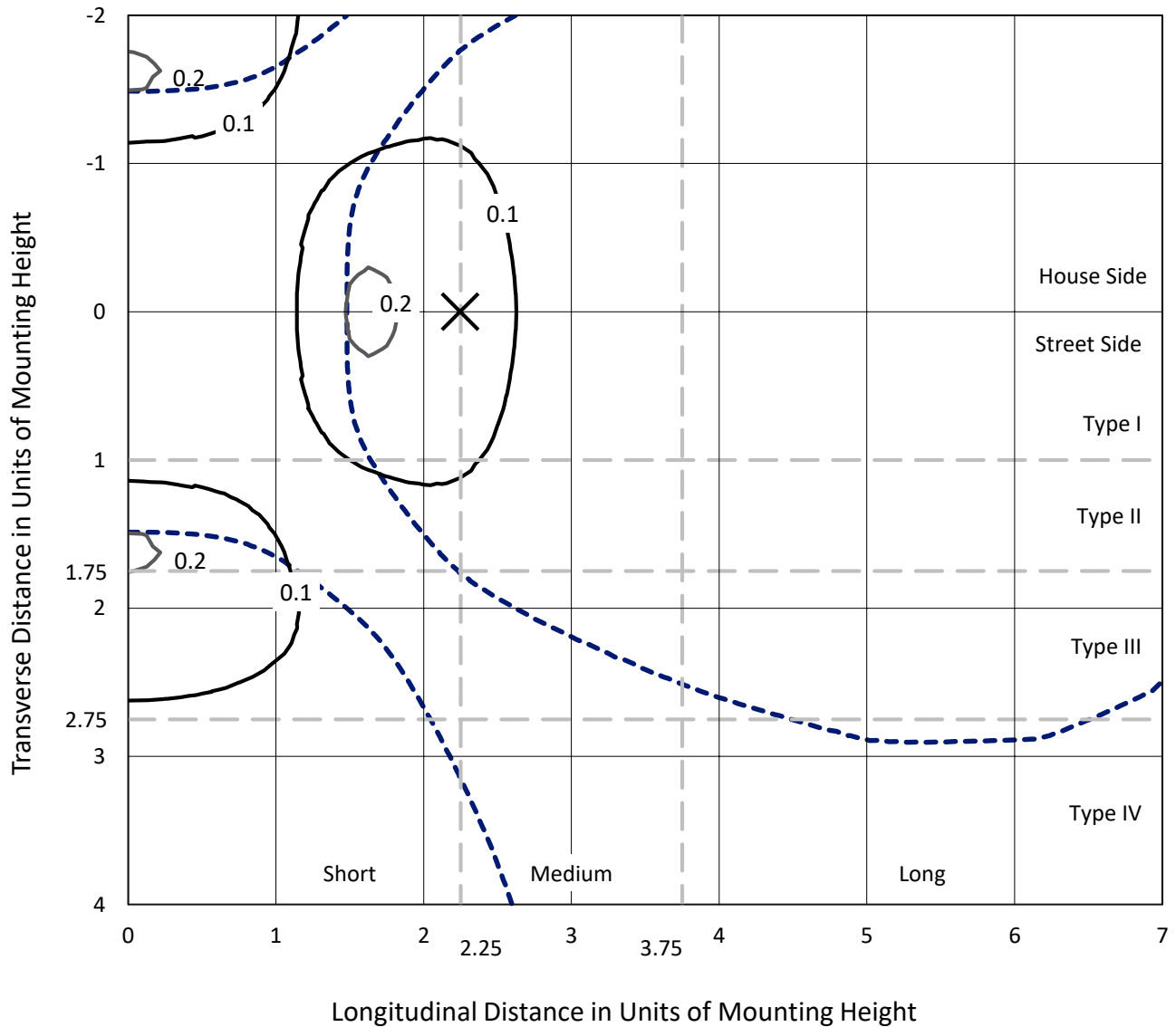
Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

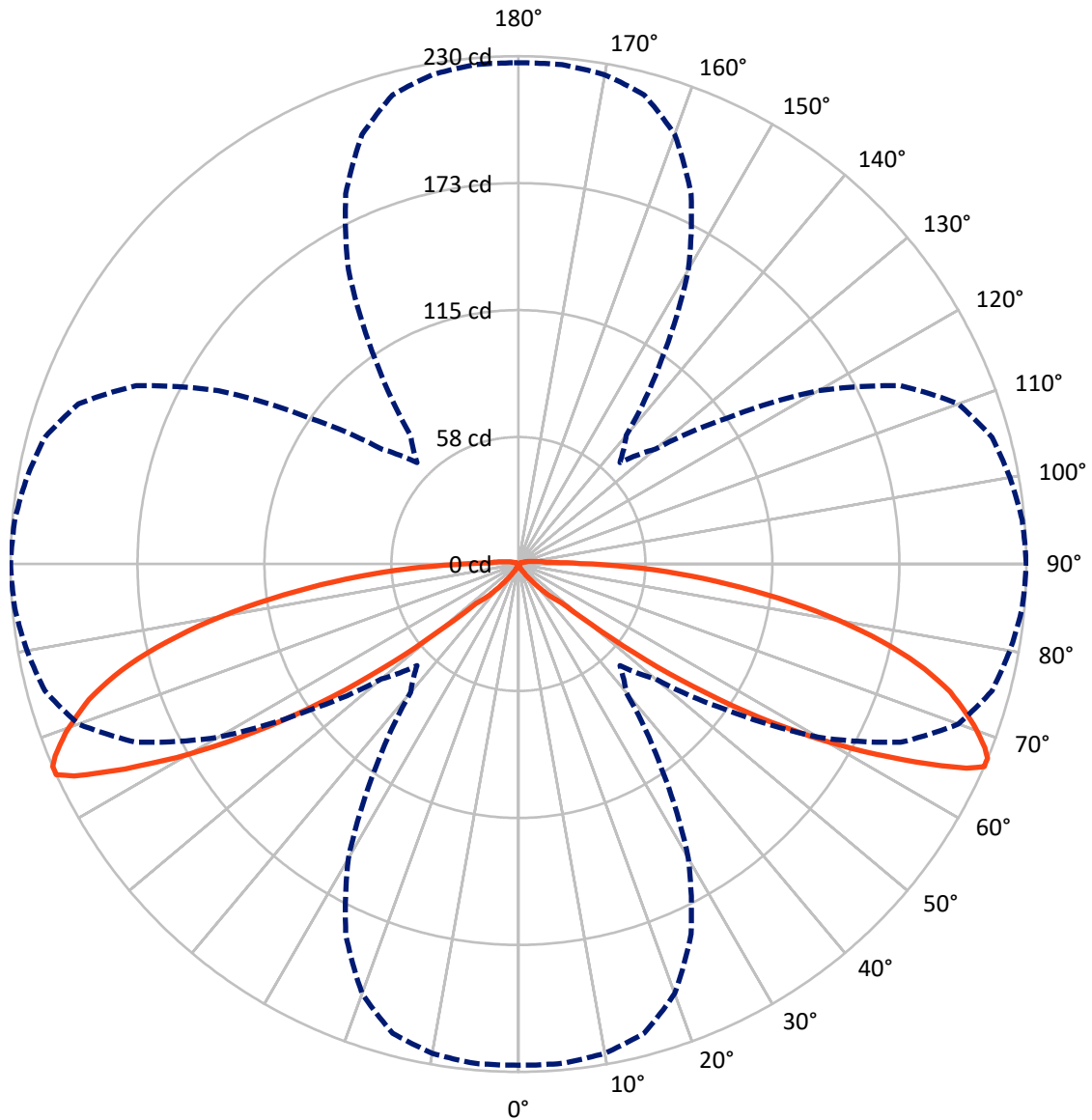
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.2 fc
 Type V - Short - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

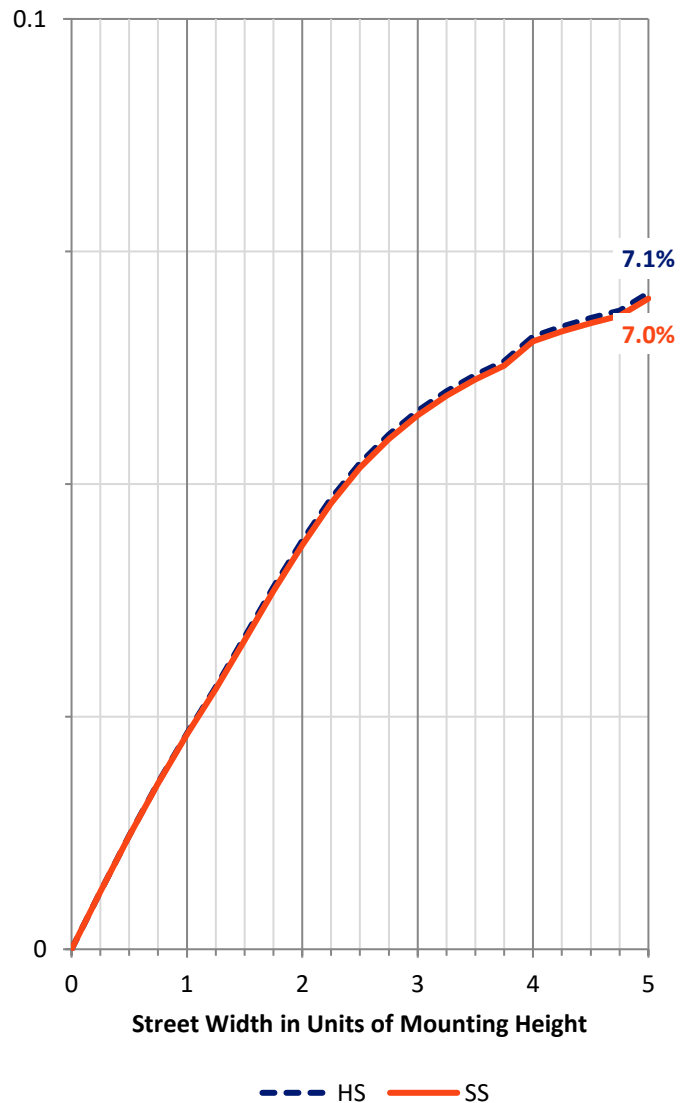
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	241.5	6.9	248.5
	% Lamp	7.5	0.2	7.8
Street Side	Lumens	241.5	6.9	248.5
	% Lamp	7.5	0.2	7.8
Total	Lumens	483.1	13.9	497.0
	% Lamp	15.1	0.4	15.5

Coefficient of Utilization



ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.2	0.0	0.0
20°-30°	0.8	0.2	0.0
30°-40°	3.8	0.8	0.1
40°-50°	14.3	2.9	0.4
50°-60°	63.5	12.8	2.0
60°-70°	159.1	32.0	5.0
70°-80°	164.8	33.2	5.1
80°-90°	76.6	15.4	2.4
90°-100°	9.7	2.0	0.3
100°-110°	3.0	0.6	0.1
110°-120°	0.9	0.2	0.0
120°-130°	0.3	0.1	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°	483.1	97.2	15.1
0°-180°	497.0	100.0	15.5

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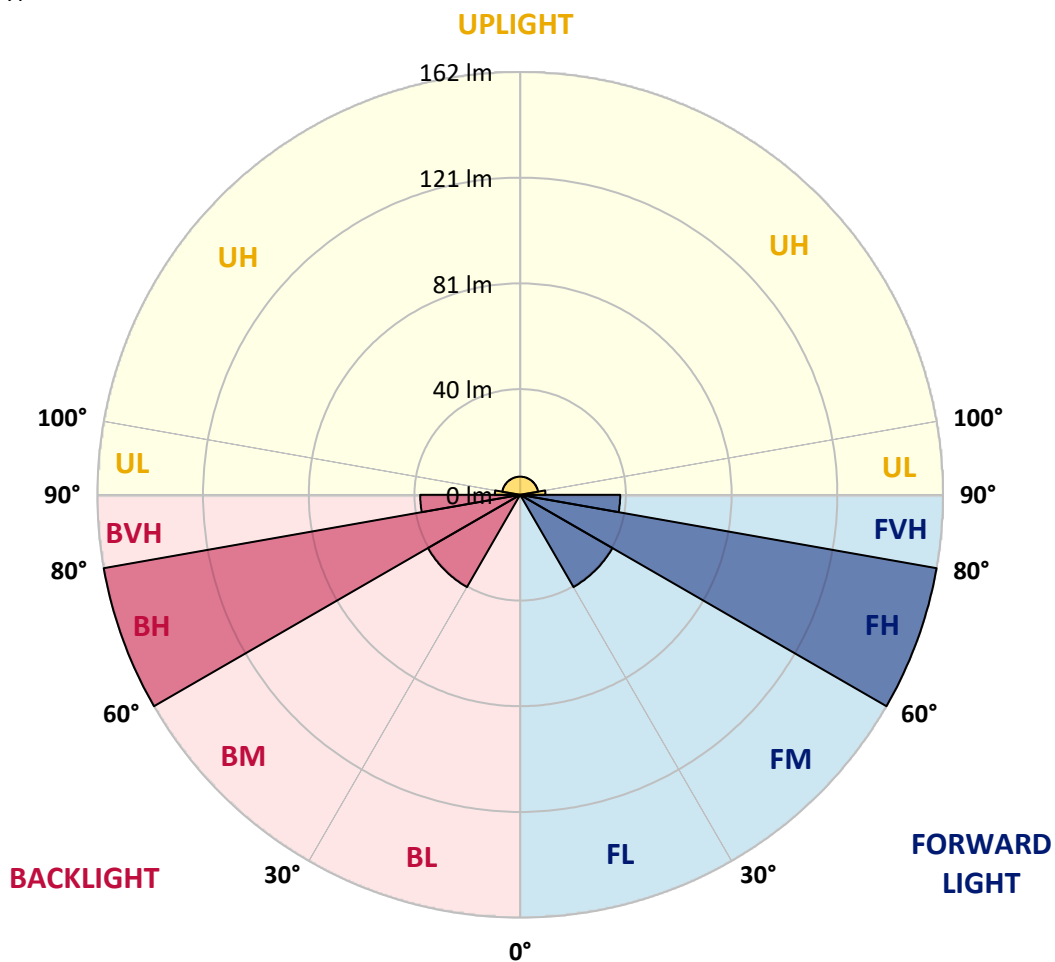
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	0.5	0.0			
FM (30°-60°)	40.8	1.3			
FH (60°-80°)	161.9	5.1			G0/660
FVH (80°-90°)	38.3	1.2			G1/100
BL (0°-30°)	0.5	0.0	B0/110		
BM (30°-60°)	40.8	1.3	B0/220		
BH (60°-80°)	161.9	5.1	B1/500		G0/660
BVH (80°-90°)	38.3	1.2			G1/100
UL (90°-100°)	9.7	0.3		U1/10	
UH (100°-180°)	6.9	0.2		U1/10	
Trapped Light	2703.0	84.5			

BUG Rating: B1-U1-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	0	0	0	0	0	0	0	0	0	0	0
2.5°	0	0	0	0	0	0	0	0	0	0	0
5°	0	0	0	0	0	0	0	0	0	0	0
7.5°	0	0	0	0	0	0	0	0	0	0	0
10°	0	0	0	0	0	0	0	0	0	0	0
12.5°	0	0	0	0	0	0	0	0	0	0	0
15°	0	1	0	1	0	1	1	0	1	0	0
17.5°	1	1	1	1	1	1	1	1	1	1	1
20°	0	1	1	1	1	1	1	1	1	1	1
22.5°	1	1	1	1	1	1	1	1	1	1	1
25°	1	2	1	1	1	1	2	1	2	1	2
27.5°	2	2	2	2	2	2	2	2	2	2	2
30°	3	3	3	3	3	3	3	3	2	2	3
32.5°	5	5	5	4	4	4	4	3	3	3	3
35°	7	7	7	6	6	5	5	4	4	4	4
37.5°	9	9	9	8	8	7	6	6	5	5	5
40°	13	13	12	12	11	10	9	8	7	7	7
42.5°	17	17	16	16	15	13	12	11	10	10	10
45°	22	22	21	20	19	18	16	14	13	12	13
47.5°	27	26	26	25	23	22	19	17	16	15	15
50°	42	40	38	34	30	28	25	22	20	19	19
52.5°	71	69	66	59	50	39	31	27	24	23	24
55°	102	101	97	90	79	65	50	35	29	27	28
56°	114	113	108	101	91	77	59	42	31	28	30
57°	126	125	121	113	103	88	69	49	35	30	34
58°	137	136	132	125	114	98	79	56	38	31	39
59°	149	148	145	137	126	109	88	64	44	35	44
60°	161	160	157	149	137	120	98	71	48	40	50
61°	173	172	169	161	149	131	108	79	53	45	55
62°	185	184	180	173	161	142	117	86	58	49	60
63°	197	196	193	185	173	153	126	93	63	54	66
64°	207	206	203	196	183	163	135	98	66	57	71
65°	219	218	215	208	195	174	145	106	71	62	76
66°	227	227	225	220	207	185	154	113	76	65	81
67°	228	228	228	226	216	195	164	120	80	70	86
68°	225	225	226	224	217	202	172	127	85	73	91
69°	222	222	222	221	215	201	178	133	89	77	95
70°	218	218	218	217	211	198	175	137	93	81	100
71°	213	213	213	213	206	194	172	135	96	84	103
72°	209	208	209	208	202	189	169	132	96	87	102
73°	203	202	203	202	197	185	164	129	94	87	100
74°	196	196	197	196	191	180	160	125	92	85	98
75°	189	189	190	189	184	173	154	121	88	82	94
76°	181	181	182	182	177	167	148	116	85	79	91
77°	171	172	173	173	169	159	141	111	81	75	86



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
78°	162	162	163	163	159	150	133	105	77	71	81
79°	152	152	153	153	150	140	125	98	72	66	76
80°	141	141	142	143	139	131	116	90	67	61	70
81°	130	130	131	132	128	120	106	83	61	56	64
82.5°	113	113	114	114	111	104	92	71	52	48	55
85°	85	85	85	85	83	76	67	52	38	34	39
87.5°	57	57	57	56	54	49	42	33	24	21	25
90°	29	29	28	27	26	23	18	14	9	8	10
92.5°	14	14	13	13	12	10	8	6	3	3	4
95°	11	11	10	10	9	8	6	4	3	2	3
97.5°	8	8	8	8	7	6	4	3	2	2	2
100°	6	6	6	6	5	4	3	2	2	1	1
102.5°	5	5	5	5	4	3	3	2	1	1	1
105°	4	4	4	4	3	3	2	2	1	1	1
107.5°	3	3	3	3	3	2	2	1	1	1	1
110°	2	2	2	2	2	2	1	1	1	1	1
112.5°	1	1	1	1	1	1	1	0	0	0	0
115°	1	1	1	1	1	1	1	1	1	0	0
117.5°	1	1	1	1	1	1	1	1	0	0	0
120°	1	1	1	1	1	1	1	0	0	0	0
122.5°	1	1	1	1	1	0	0	0	0	0	0
125°	1	0	1	1	1	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	0	0	0	0	0	0	0	0
2.5°	0	0	0	0	0	0	0	0
5°	0	0	0	0	0	0	0	0
7.5°	0	0	0	0	0	0	0	0
10°	0	0	0	0	0	0	0	0
12.5°	0	0	0	0	0	0	0	0
15°	1	0	1	0	0	0	1	0
17.5°	1	1	1	1	1	1	1	1
20°	1	1	1	1	1	1	1	1
22.5°	1	1	1	1	1	1	1	2
25°	1	2	2	2	2	2	2	2
27.5°	2	2	2	3	3	3	3	3
30°	3	3	3	3	4	4	4	4
32.5°	4	4	4	5	5	5	5	5
35°	5	5	6	6	7	7	7	7
37.5°	6	7	7	8	9	9	9	9
40°	8	9	10	11	12	12	13	13
42.5°	11	12	13	14	16	16	17	17
45°	14	15	17	19	20	21	21	22
47.5°	17	19	21	23	25	26	26	26
50°	21	24	27	30	34	38	42	43
52.5°	26	30	40	51	61	67	71	72
55°	35	50	67	81	91	98	102	103
56°	42	60	78	93	104	110	114	116
57°	49	70	90	106	116	123	127	129
58°	57	79	101	117	128	135	139	141
59°	65	90	113	130	141	147	152	154
60°	72	100	125	142	153	159	164	166
61°	80	110	136	155	165	171	176	178
62°	87	120	147	166	177	183	187	189
63°	94	129	158	178	189	195	199	201
64°	101	138	169	189	200	205	210	212
65°	108	147	180	201	212	217	221	223
66°	115	157	191	212	222	226	229	230
67°	122	167	201	221	226	227	228	230
68°	128	175	207	221	224	225	225	227
69°	134	179	206	218	221	221	222	223
70°	137	177	202	214	217	217	217	219
71°	136	174	198	210	212	213	213	214
72°	133	170	193	205	208	208	208	209
73°	129	165	188	200	203	203	203	204
74°	125	161	183	194	197	197	197	197
75°	121	155	177	187	190	189	189	190
76°	116	149	170	180	182	182	181	182
77°	111	142	162	172	173	173	172	173



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
78°	105	134	153	162	164	163	162	163
79°	98	125	144	152	154	153	152	153
80°	90	117	134	142	143	142	142	142
81°	83	107	122	130	132	131	130	131
82.5°	71	92	106	113	114	114	113	113
85°	52	67	78	83	85	85	85	84
87.5°	33	43	49	54	56	56	56	56
90°	13	18	22	25	27	28	28	28
92.5°	6	8	10	12	13	13	13	13
95°	4	6	8	9	10	10	10	11
97.5°	3	5	6	7	8	8	8	8
100°	2	3	4	5	6	6	6	6
102.5°	2	3	4	4	5	5	5	5
105°	2	2	3	3	4	4	4	4
107.5°	1	2	2	3	3	3	3	3
110°	1	1	2	2	2	2	2	2
112.5°	0	1	1	1	1	1	2	2
115°	0	0	1	1	1	1	1	1
117.5°	1	1	1	1	1	1	1	1
120°	0	1	1	1	1	1	1	1
122.5°	0	0	0	1	1	1	1	1
125°	0	0	0	1	0	0	1	1
127.5°	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0

(END OF REPORT)