

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: SHAPER

Report Number: P368750

Luminaire Tested: **674-WP-31-L3/840**

Issue Date: 11/13/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368750  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 11/13/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 674-WP-31-L3/840  
Description: 31" 674 SERIES LUMINOUS WALL SCONCE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

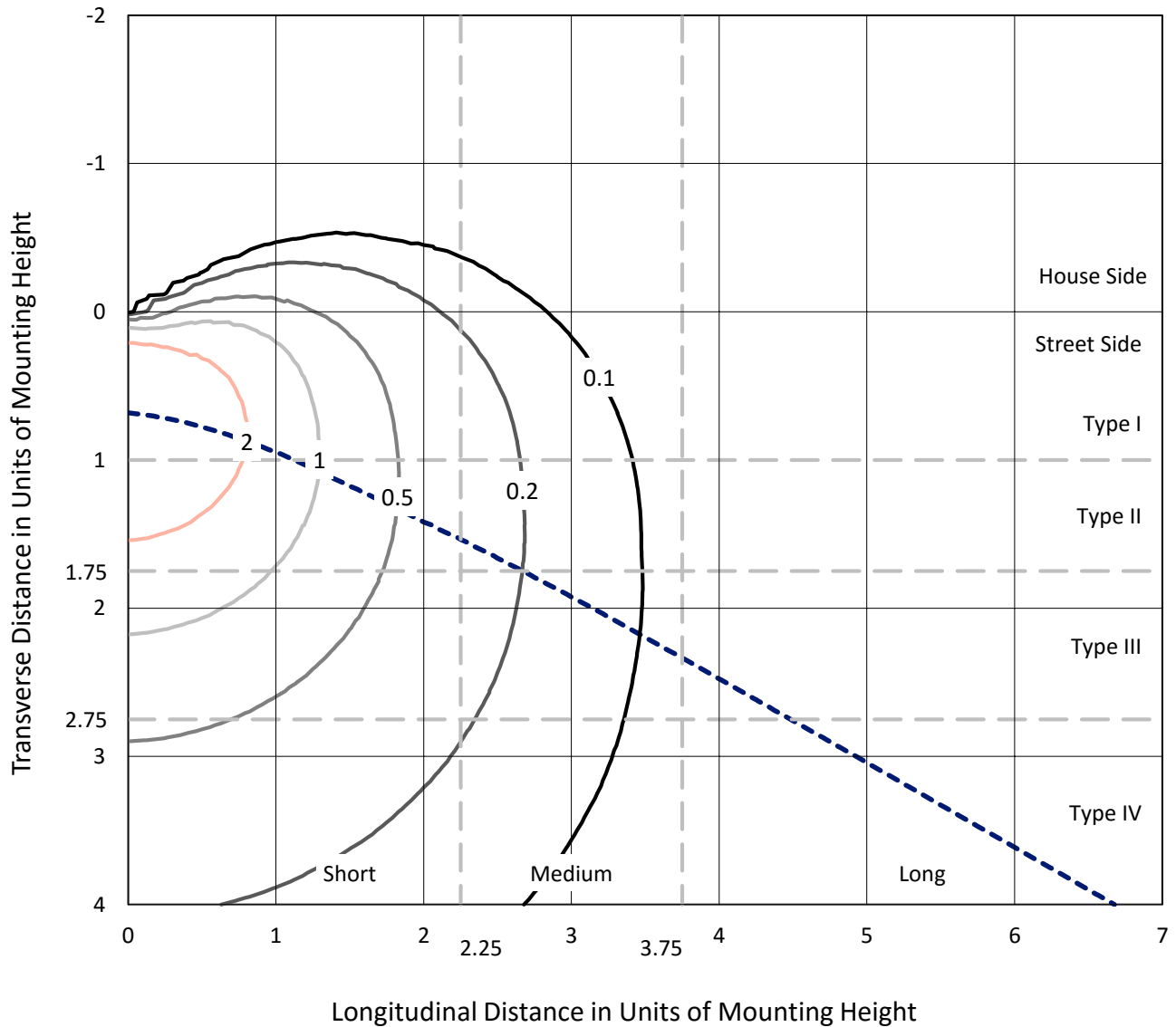
Lumens per Lamp: N/A  
Luminaire Lumens: 1742.5 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.21' x H: 2.58')  
IES Classification: Type - Short - Non-Cutoff  
BUG Rating: B0 - U4 - G2

Input Watts (W): 21.2  
Input Voltage (V): 120  
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: 24 FT

REPORT NUMBER: P368750  
 CATALOG NUMBER: 674-WP-31-L3/840

### Iso-Footcandle Lines of Horizontal Illumination

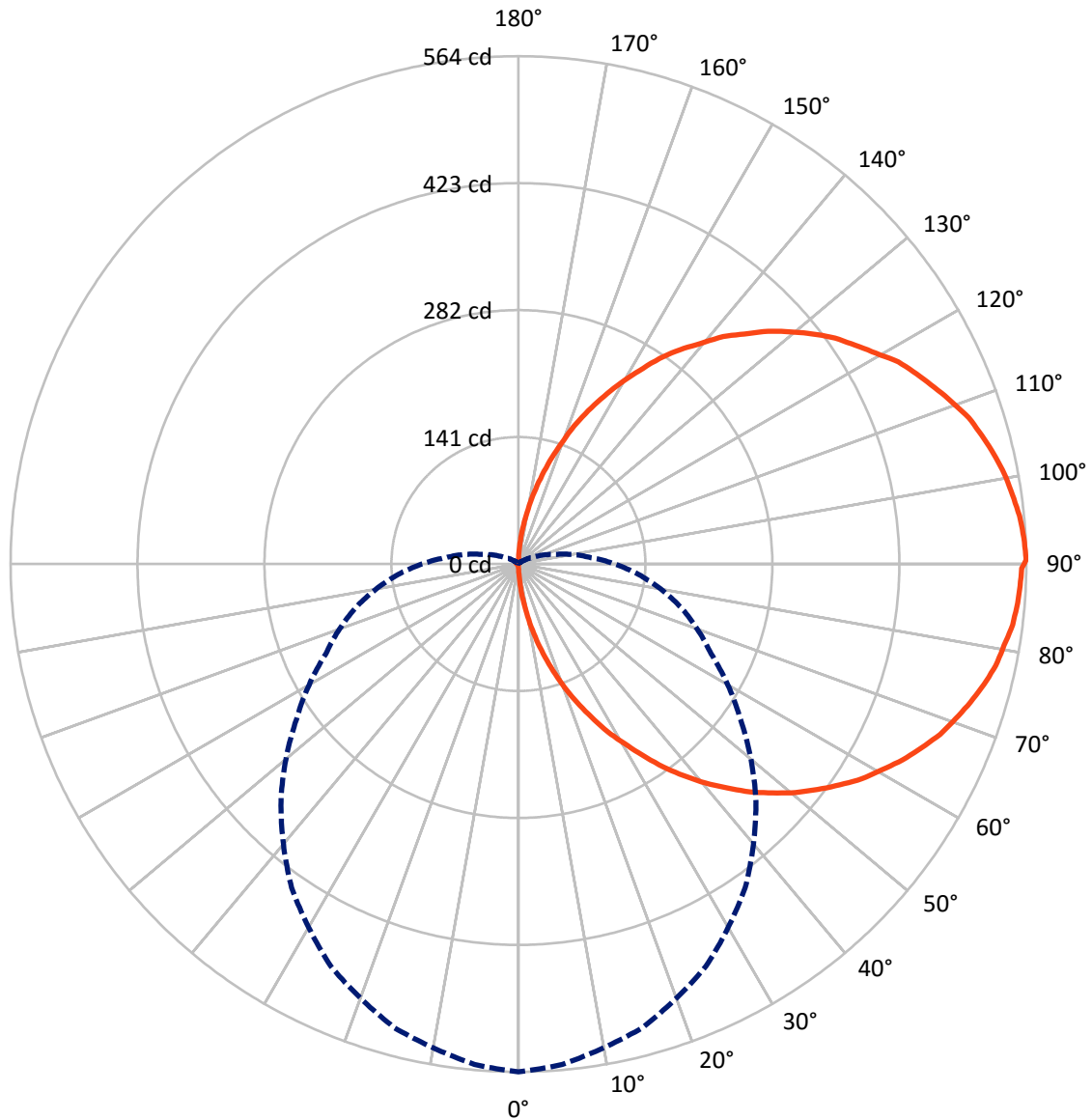
× Max cd  
 - - - 1/2 Max cd



Based on 6 foot mounting height. Maximum calculated value = 4.2 fc  
 Type - Short - Non-Cutoff

REPORT NUMBER: P368750  
CATALOG NUMBER: 674-WP-31-L3/840

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 90-Deg Vertical

REPORT NUMBER: P368750

CATALOG NUMBER: 674-WP-31-L3/840

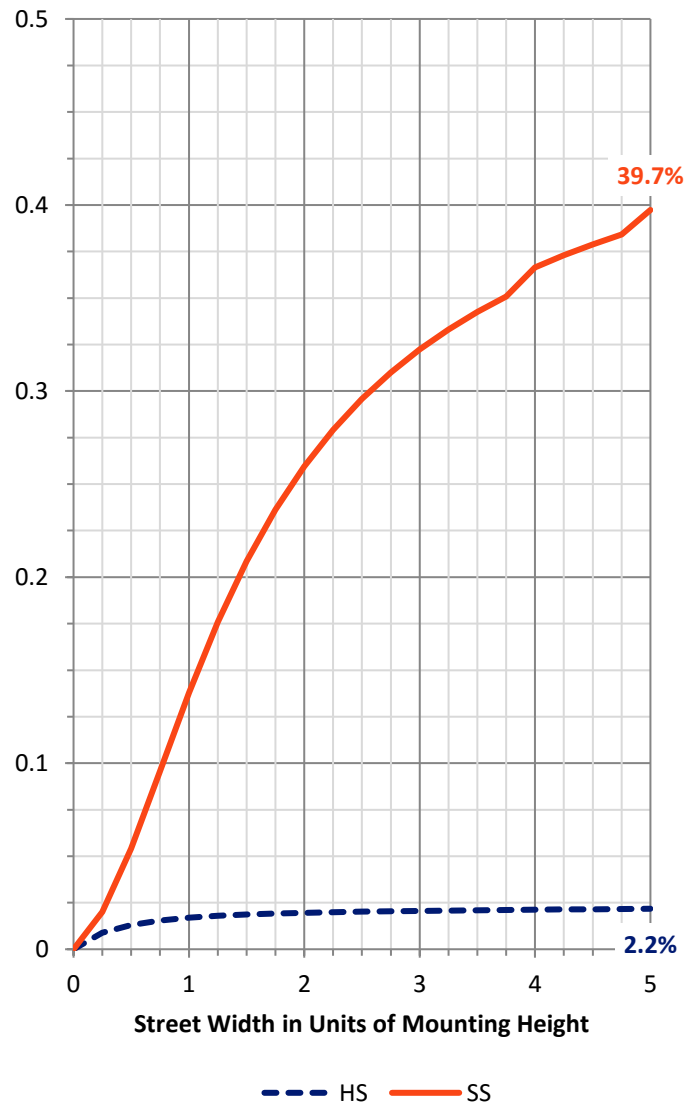
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	40.1	39.5	79.6
	% Fixture	2.3	2.3	4.6
<b>Street Side</b>	Lumens	832.5	830.4	1662.9
	% Fixture	47.8	47.7	95.4
<b>Total</b>	Lumens	872.6	869.9	1742.5
	% Fixture	50.1	49.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1.3	0.1
10°-20°	10.1	0.6
20°-30°	28.9	1.7
30°-40°	57.1	3.3
40°-50°	92.1	5.3
50°-60°	128.7	7.4
60°-70°	162.4	9.3
70°-80°	188.8	10.8
80°-90°	203.4	11.7
90°-100°	204.2	11.7
100°-110°	188.6	10.8
110°-120°	161.8	9.3
120°-130°	127.8	7.3
130°-140°	91.3	5.2
140°-150°	56.7	3.3
150°-160°	28.6	1.6
160°-170°	9.8	0.6
170°-180°	1.2	0.1
0°-90°	872.6	50.1
0°-180°	1742.5	100.0



REPORT NUMBER: P368750

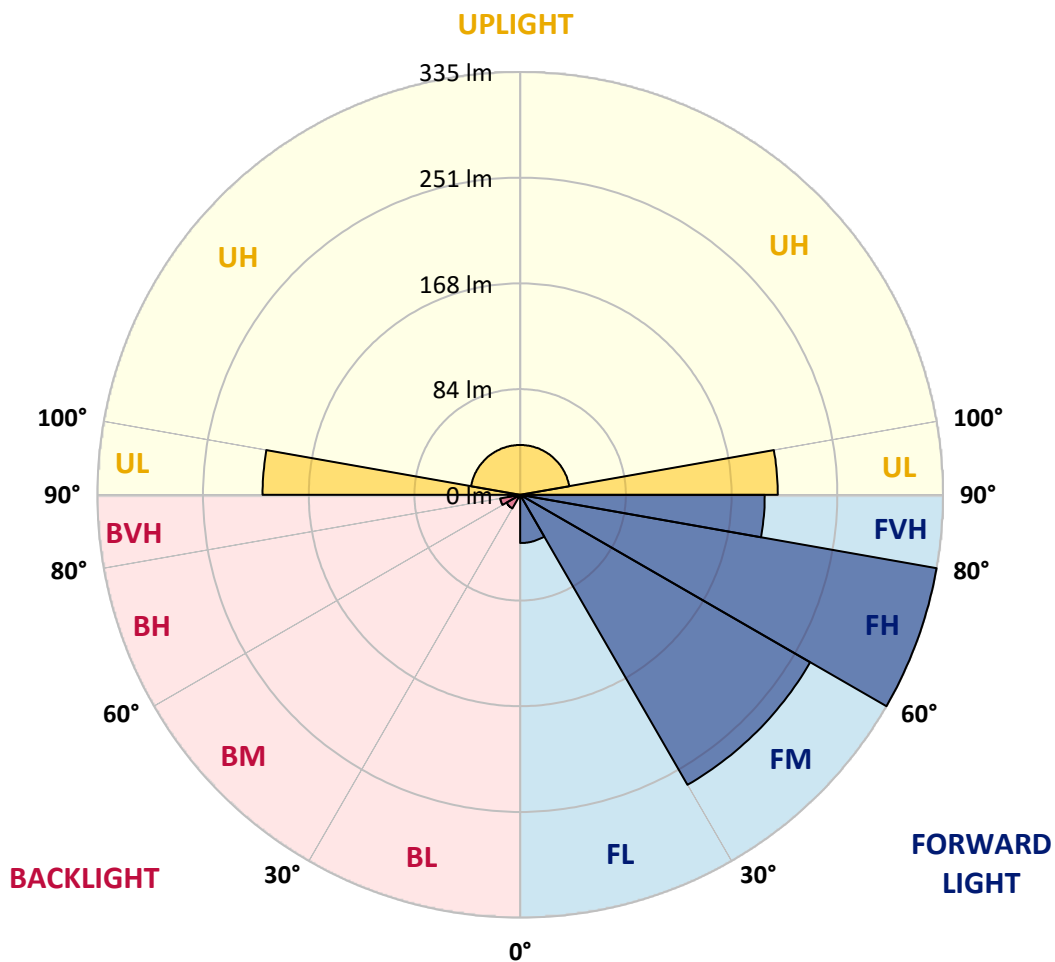
CATALOG NUMBER: 674-WP-31-L3/840

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	38.2	2.2			
FM	(30°-60°)	265.4	15.2			
FH	(60°-80°)	335.1	19.2			G0/660
FVH	(80°-90°)	193.8	11.1			G2/225
BL	(0°-30°)	2.0	0.1	B0/110		
BM	(30°-60°)	12.5	0.7	B0/220		
BH	(60°-80°)	16.1	0.9	B0/110		G0/110
BVH	(80°-90°)	9.5	0.5			G0/10
UL	(90°-100°)	204.2	11.7		U3/500	
UH	(100°-180°)	39.5	2.3		U2/50	

**BUG Rating: B0-U4-G2**

Type Short





REPORT NUMBER: P368750

CATALOG NUMBER: 674-WP-31-L3/840

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2	2	2	2	2	2	2	2	2	2	2
2.5°	11	9	9	9	7	7	6	5	4	3	3
5°	27	26	25	24	20	17	14	11	9	6	5
7.5°	44	43	41	39	33	28	23	18	15	10	8
10°	63	61	59	54	47	40	32	25	20	14	12
12.5°	83	81	78	72	62	53	42	33	26	19	15
15°	103	102	97	89	78	66	52	41	32	23	19
17.5°	125	122	117	107	94	79	63	49	39	28	22
20°	146	143	137	125	110	92	73	58	45	32	26
22.5°	167	164	157	143	126	106	84	66	52	37	30
25°	188	186	177	161	142	119	95	75	59	42	34
27.5°	211	207	197	180	159	134	107	84	66	47	38
30°	231	230	219	199	176	148	117	93	73	52	41
32.5°	253	251	238	218	192	162	128	102	80	57	45
35°	277	274	261	237	209	176	140	111	87	62	50
37.5°	298	296	282	256	226	190	151	120	94	67	54
40°	320	317	301	276	242	204	163	129	101	72	58
42.5°	340	337	321	294	259	217	174	137	108	77	62
45°	361	357	341	312	276	231	185	146	115	82	66
47.5°	380	376	359	329	291	244	195	154	122	87	69
50°	399	395	376	345	306	258	205	163	128	92	73
52.5°	416	412	392	360	320	270	214	170	134	96	76
55°	433	429	409	375	334	282	224	178	140	100	80
57.5°	450	445	423	390	346	293	233	185	145	104	83
60°	464	460	438	403	358	303	241	191	151	108	86
62.5°	479	474	452	416	369	314	249	197	156	112	89
65°	492	487	464	427	380	322	258	204	161	115	92
67.5°	505	499	476	439	390	331	265	209	165	118	94
70°	515	510	486	449	399	339	273	214	169	121	97
72.5°	525	520	495	458	407	346	279	219	173	124	99
75°	534	529	504	466	415	352	284	223	176	126	101
77.5°	542	536	512	473	420	358	288	226	179	128	103
80°	547	542	517	478	425	361	291	229	181	130	104
82.5°	553	547	522	482	430	365	294	231	183	131	105
85°	556	550	525	486	433	368	297	233	184	132	106
87.5°	558	552	528	488	435	370	298	234	185	133	106
89°	559	553	528	488	435	370	298	234	185	133	107
90°	564	558	533	493	439	373	301	236	187	134	107
92.5°	562	557	531	492	438	372	300	235	186	133	107
95°	559	554	528	489	435	370	298	233	185	132	106
97.5°	554	549	524	484	431	366	295	231	183	131	105
100°	549	544	519	480	427	363	292	229	181	130	104
102.5°	542	538	513	474	421	358	288	226	178	128	102
105°	534	529	504	466	414	352	283	222	176	126	100
107.5°	526	520	495	457	407	345	278	218	172	123	98



REPORT NUMBER: P368750

CATALOG NUMBER: 674-WP-31-L3/840

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	514	510	485	448	398	338	272	213	168	120	96
112.5°	502	498	475	438	389	330	266	208	164	117	94
115°	490	486	463	427	379	321	257	202	159	114	91
117.5°	478	473	450	415	368	312	248	196	155	111	88
120°	461	458	436	402	356	302	240	189	149	107	85
122.5°	446	443	421	388	344	291	232	183	144	103	82
125°	432	427	406	374	331	280	223	175	139	99	79
127.5°	415	410	390	359	318	269	213	168	133	94	76
130°	397	393	373	343	303	254	204	160	127	90	72
132.5°	379	375	356	327	289	242	194	152	120	86	68
135°	358	356	338	310	274	229	183	144	114	81	65
137.5°	340	336	319	293	256	216	173	136	107	76	61
140°	317	316	299	275	240	202	162	127	100	71	57
142.5°	298	295	280	254	224	188	151	119	93	66	53
145°	277	274	258	235	208	175	139	110	86	61	49
147.5°	253	250	238	217	191	161	128	101	79	56	45
150°	231	229	216	198	175	147	117	92	72	51	41
152.5°	209	207	197	179	158	132	106	83	65	46	37
155°	187	185	176	160	141	118	95	74	58	41	33
157.5°	165	163	155	141	124	104	83	65	51	36	29
160°	141	142	134	122	108	91	72	57	44	32	25
162.5°	120	120	114	104	92	77	61	48	38	27	22
165°	98	99	93	85	75	64	50	40	31	22	18
167.5°	78	79	74	68	60	51	41	32	25	18	15
170°	58	59	55	51	45	38	31	25	19	14	11
172.5°	40	41	38	35	31	27	22	17	14	10	8
175°	23	24	22	20	18	16	13	10	8	6	5
177.5°	7	7	7	6	6	5	5	4	4	3	3
180°	2	2	2	2	2	2	2	2	2	2	2





REPORT NUMBER: P368750

CATALOG NUMBER: 674-WP-31-L3/840

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2	2	2	2	2	2	2	2	2	2
2.5°	3	3	3	2	2	1	1	1	0	0
5°	4	3	3	2	2	1	1	0	0	0
7.5°	7	4	3	2	2	1	1	1	0	0
10°	9	5	3	2	2	1	1	1	0	0
12.5°	12	7	3	2	2	1	1	0	0	0
15°	14	8	4	2	1	1	1	0	0	0
17.5°	17	9	4	2	1	1	1	0	0	0
20°	20	10	5	2	1	1	1	0	0	0
22.5°	23	12	5	2	1	1	1	0	0	0
25°	26	13	6	2	1	1	1	0	0	0
27.5°	29	15	6	2	1	1	1	0	0	0
30°	32	16	7	2	1	1	1	0	0	0
32.5°	35	18	7	2	1	1	1	0	0	0
35°	38	19	8	3	1	1	1	0	0	0
37.5°	41	21	9	3	1	1	0	0	0	0
40°	44	22	9	3	1	1	0	0	0	0
42.5°	47	24	10	3	1	1	1	0	0	0
45°	50	25	10	3	1	1	1	0	0	0
47.5°	53	27	11	3	1	1	1	0	0	0
50°	55	28	12	4	1	1	1	0	0	0
52.5°	58	29	12	4	1	1	1	0	0	0
55°	60	31	13	4	1	1	1	0	0	0
57.5°	63	32	13	4	1	1	1	0	0	0
60°	65	33	14	4	1	1	1	1	0	1
62.5°	68	34	14	4	1	1	1	1	1	1
65°	70	35	14	5	1	1	1	1	1	1
67.5°	72	36	15	5	1	1	1	1	1	1
70°	73	37	15	5	1	1	1	1	1	1
72.5°	75	38	16	5	1	1	1	1	1	1
75°	77	39	16	5	1	1	1	1	1	1
77.5°	78	40	16	5	2	1	1	1	1	1
80°	79	40	17	5	2	1	1	1	1	1
82.5°	80	41	17	6	2	1	1	1	1	1
85°	80	41	17	6	2	1	1	1	1	1
87.5°	81	41	17	6	2	2	1	1	1	1
89°	81	41	17	6	2	2	2	2	2	2
90°	81	41	17	6	2	2	2	2	1	1
92.5°	81	41	17	6	2	2	1	1	1	1
95°	80	41	17	5	2	1	1	1	1	1
97.5°	80	40	16	5	2	1	1	1	1	1
100°	79	40	16	5	2	1	1	1	1	1
102.5°	77	39	16	5	1	1	1	1	1	1
105°	76	38	16	5	1	1	1	1	1	1
107.5°	74	37	15	5	1	1	1	1	1	1



REPORT NUMBER: P368750

CATALOG NUMBER: 674-WP-31-L3/840

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	73	37	15	5	1	1	1	1	1	1
112.5°	71	36	14	5	1	1	1	1	1	1
115°	69	35	14	4	1	1	1	1	1	1
117.5°	67	33	14	4	1	1	1	1	1	1
120°	64	32	13	4	1	1	1	1	0	0
122.5°	62	31	13	4	1	1	1	1	0	0
125°	60	30	12	4	1	1	1	0	0	0
127.5°	57	29	12	4	1	1	1	0	0	0
130°	54	27	11	3	1	1	1	0	0	0
132.5°	52	26	10	3	1	1	1	0	0	0
135°	49	25	10	3	1	1	1	0	0	0
137.5°	46	23	9	3	1	1	1	0	0	0
140°	43	22	9	3	1	1	1	0	0	0
142.5°	40	20	8	3	1	1	1	0	0	0
145°	37	19	8	2	1	1	1	0	0	0
147.5°	34	17	7	2	1	1	1	0	0	0
150°	31	16	7	2	1	1	1	0	0	0
152.5°	28	15	6	2	1	1	1	0	0	0
155°	25	13	6	2	1	1	1	0	0	0
157.5°	22	12	5	2	1	1	1	0	0	0
160°	19	10	4	2	1	1	1	0	0	0
162.5°	17	9	4	2	1	1	1	0	0	0
165°	14	7	4	2	2	1	1	0	0	0
167.5°	11	6	3	2	2	1	1	0	0	0
170°	9	5	3	2	2	1	1	0	0	0
172.5°	6	4	3	2	2	1	1	0	0	0
175°	4	3	3	2	2	1	1	1	0	0
177.5°	3	3	3	2	2	1	1	1	0	0
180°	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)