

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: ALL-PRO

Report Number: P13818

Luminaire Tested: **FES0650LPCW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P13818
Test Lab: INNOVATION CENTER P-1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: ALL-PRO
Catalog Number: FES0650LPCW
Description: CONSUMER PRODUCTS WALL MOUNT 10W LED WHITE FIXTURE WITH 1%
DIFFUSE JELLY JAR LENS.
Light Source: (20) SAMSUNG 4700K LEDS
SPMWHT5225D5WAP
Ballast/Driver: (1) AUROLITE 150ma ELECTRONIC DRIVER
AD100300-02

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 666.4 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.27' x H: 0.21')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U3 - G1

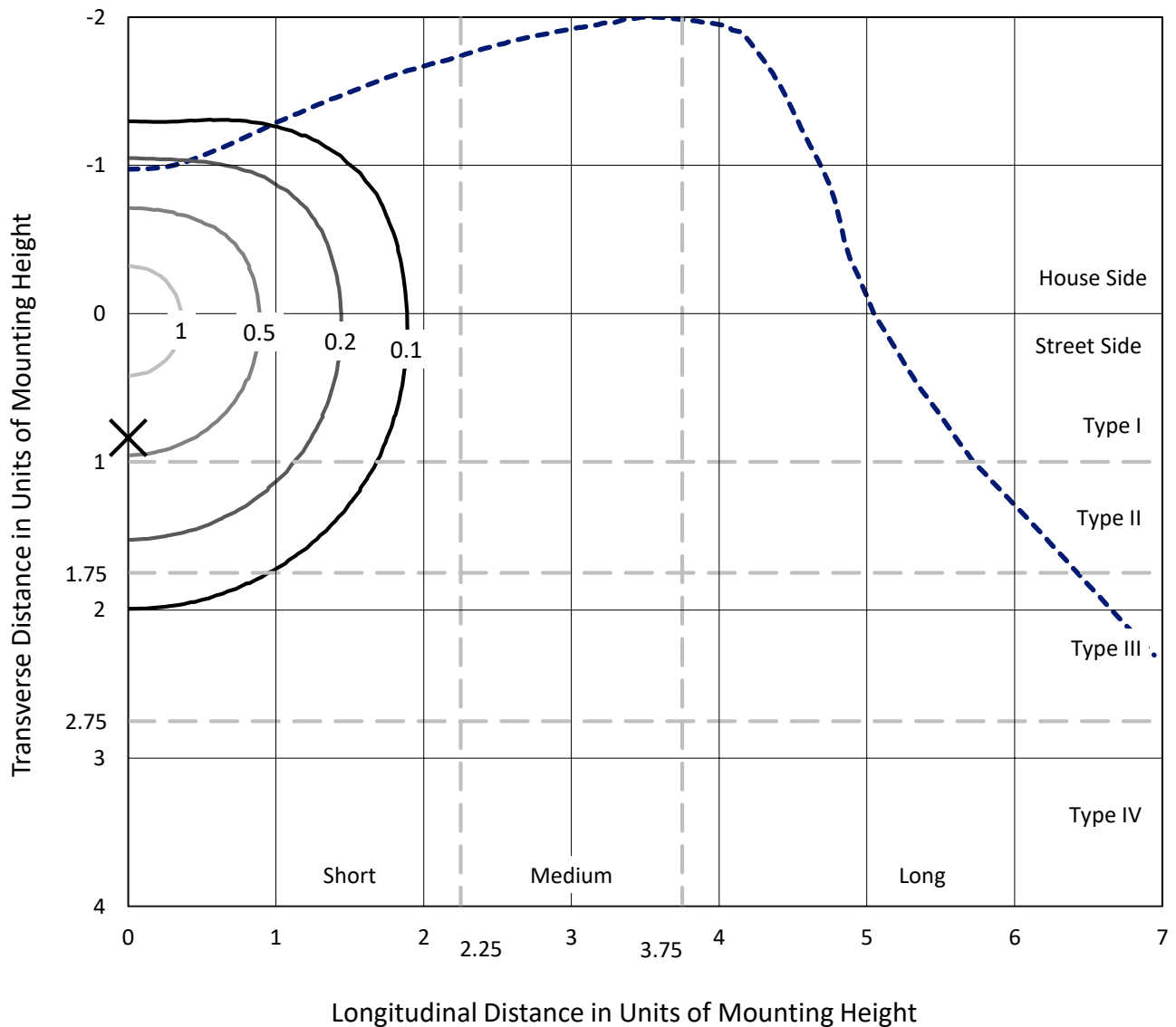
Input Watts (W): 11.2
Input Voltage (V): NR
Input Current (Ain): 0.16852
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

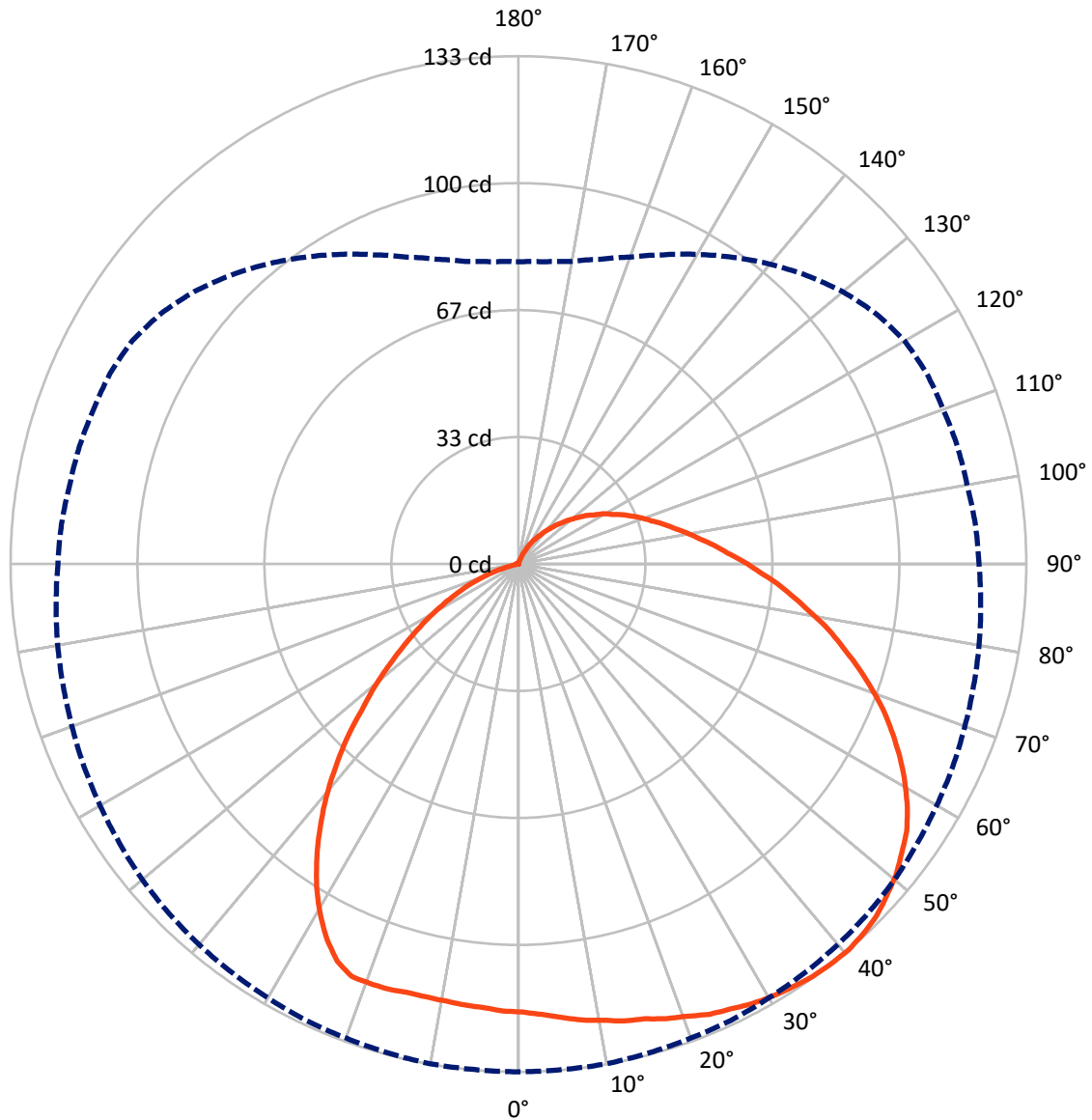
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 40-Deg Vertical

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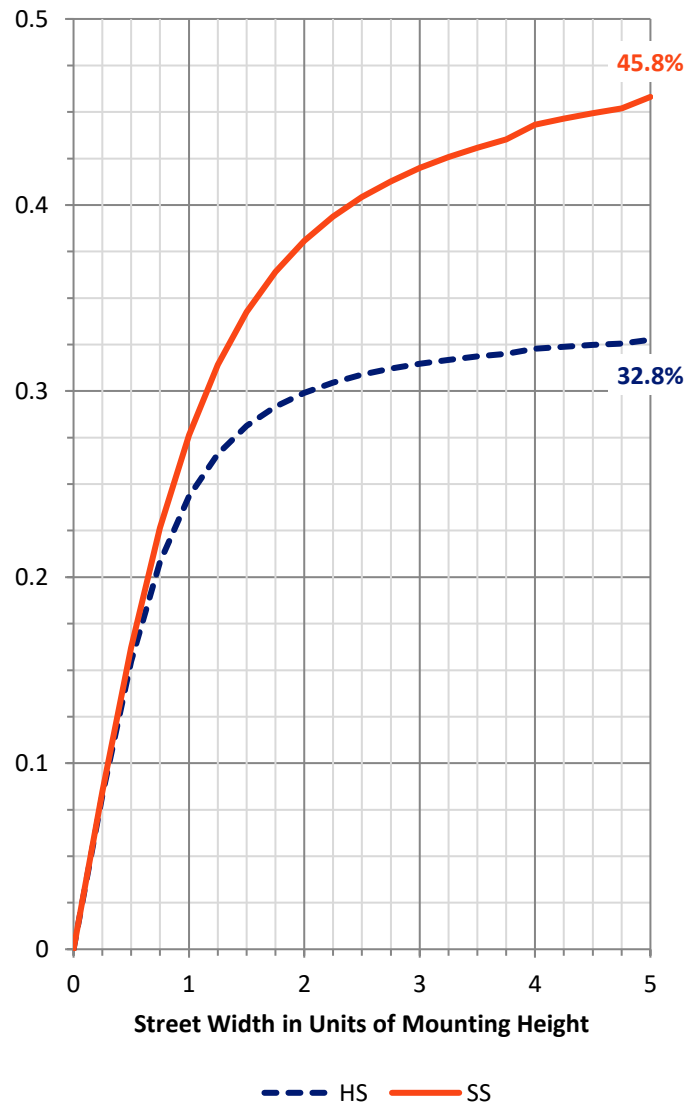
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	225.5	31.9	257.4
	% Fixture	33.8	4.8	38.6
Street Side	Lumens	326.4	82.6	409.1
	% Fixture	49.0	12.4	61.4
Total	Lumens	551.9	114.5	666.4
	% Fixture	82.8	17.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.3	1.7
10°-20°	34.0	5.1
20°-30°	56.5	8.5
30°-40°	74.7	11.2
40°-50°	85.5	12.8
50°-60°	87.6	13.1
60°-70°	81.1	12.2
70°-80°	68.0	10.2
80°-90°	53.4	8.0
90°-100°	40.1	6.0
100°-110°	29.5	4.4
110°-120°	20.7	3.1
120°-130°	13.1	2.0
130°-140°	7.2	1.1
140°-150°	3.1	0.5
150°-160°	0.8	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	551.9	82.8
0°-180°	666.4	100.0

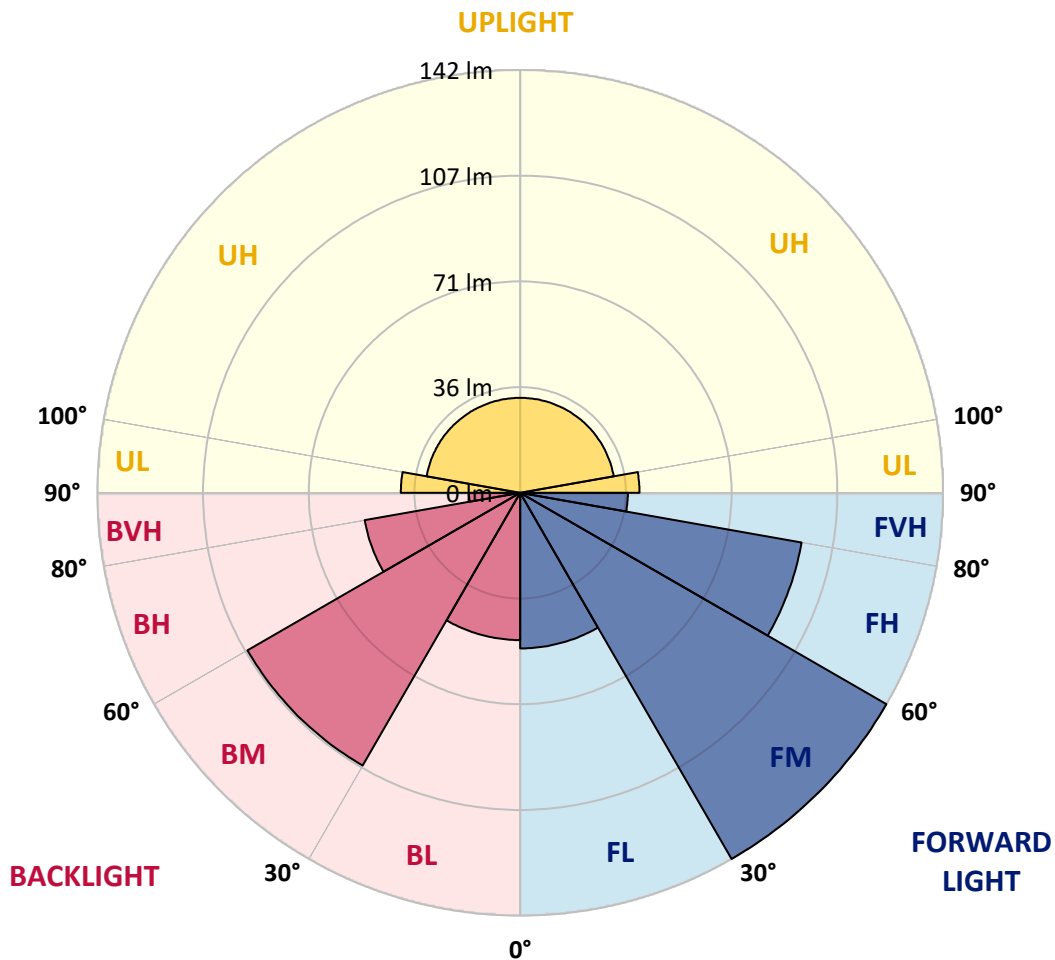


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	52.3	7.8			
FM	(30°-60°)	142.0	21.3			
FH	(60°-80°)	96.0	14.4			G0/660
FVH	(80°-90°)	36.2	5.4			G1/100
BL	(0°-30°)	49.5	7.4	B0/110		
BM	(30°-60°)	105.8	15.9	B0/220		
BH	(60°-80°)	53.0	8.0	B0/110		G0/110
BVH	(80°-90°)	17.2	2.6			G1/100
UL	(90°-100°)	40.1	6.0		U2/50	
UH	(100°-180°)	31.9	4.8		U2/50	

BUG Rating: B0-U3-G1
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
2.5°	118.2	118.2	118.2	118.3	118.1	118.1	118.1	118.2	118.1	118.1	118.0
5°	119.4	119.1	119.4	119.2	119.4	119.1	119.1	119.1	118.9	119.1	118.7
7.5°	120.7	120.3	120.5	120.2	120.2	120.2	120.0	119.9	119.8	119.7	119.5
10°	121.6	121.7	121.5	121.3	121.3	121.2	121.0	120.9	120.7	120.6	120.3
12.5°	122.9	122.6	122.7	122.6	122.4	122.4	122.2	122.3	121.7	121.6	121.2
15°	123.7	123.6	123.4	123.5	123.3	123.1	122.9	122.7	122.4	122.2	121.9
17.5°	125.3	125.0	125.0	125.0	125.2	124.6	124.4	124.0	123.8	123.4	123.1
20°	126.5	126.3	126.2	126.3	126.0	125.7	125.6	125.3	124.9	124.5	124.0
22.5°	128.2	128.3	128.1	127.7	127.5	127.6	127.0	126.9	126.2	125.9	125.2
25°	129.2	129.1	128.9	128.8	128.5	128.3	127.9	127.5	127.1	126.6	125.9
27.5°	130.5	130.3	130.4	130.2	129.9	129.6	129.1	128.7	128.2	127.8	127.1
30°	131.4	131.5	131.3	131.2	131.0	130.4	130.0	129.8	129.1	128.4	127.7
32.5°	132.1	132.1	132.1	131.8	131.5	131.2	130.7	130.1	129.6	128.8	128.1
35°	132.8	132.7	132.6	132.3	132.0	131.6	131.1	130.7	130.0	129.4	128.5
37.5°	133.0	132.8	132.7	132.5	132.2	131.7	131.3	130.7	130.2	129.4	128.5
40°	133.1	133.0	133.0	132.6	132.2	131.9	131.3	130.8	130.2	129.5	128.7
42.5°	132.5	132.2	132.1	131.9	131.6	131.2	130.7	130.1	129.5	128.7	127.8
45°	131.6	131.6	131.3	131.2	130.8	130.5	130.0	129.4	128.8	128.0	127.1
47.5°	129.9	129.7	129.5	129.6	129.0	128.8	128.3	128.0	127.3	126.4	125.4
50°	128.2	128.2	128.0	127.9	127.6	127.3	127.0	126.5	125.8	124.9	123.9
52.5°	125.8	125.6	125.6	125.4	125.2	125.1	124.6	124.0	123.5	122.7	121.5
55°	123.5	123.1	123.1	122.8	122.6	122.3	122.0	121.6	121.0	120.1	119.1
57.5°	120.2	120.2	120.0	119.8	119.7	119.4	119.1	118.9	118.1	117.2	116.3
60°	116.4	116.4	116.3	116.2	116.1	115.9	115.5	115.1	114.6	113.9	112.8
62.5°	112.3	112.3	112.3	112.3	112.4	112.0	111.8	111.5	110.9	110.1	109.0
65°	107.9	107.8	108.0	108.1	107.8	107.9	107.5	107.0	106.5	105.8	104.9
67.5°	103.4	103.4	103.4	103.5	103.6	103.6	103.4	103.0	102.4	101.7	100.9
70°	98.3	98.0	98.1	98.3	98.5	98.5	98.5	97.8	97.3	96.7	95.9
72.5°	93.2	93.3	93.4	93.7	94.3	94.1	93.8	93.5	93.0	92.5	91.6
75°	88.0	87.9	88.4	88.5	88.7	89.2	88.9	88.4	88.0	87.5	86.7
77.5°	83.2	83.0	83.2	83.5	83.9	84.3	84.2	83.9	83.4	82.9	82.1
80°	77.8	78.0	78.1	78.5	79.1	79.4	79.4	79.1	78.6	78.2	77.4
82.5°	72.9	72.9	73.1	73.5	74.2	74.4	74.6	74.4	73.9	73.5	72.8
85°	68.3	68.3	68.5	69.0	69.7	70.0	70.2	70.0	69.7	69.3	68.7
87.5°	63.4	63.5	63.7	64.3	64.9	65.5	65.6	65.5	65.3	65.0	64.4
90°	59.2	59.4	59.5	60.3	60.8	61.4	61.8	61.7	61.5	61.2	60.7
92.5°	54.9	55.0	55.2	55.9	56.5	57.2	57.6	57.4	57.3	57.3	56.7
95°	51.4	51.5	51.8	52.4	53.1	53.9	54.4	54.4	54.2	54.1	53.9
97.5°	47.8	47.9	48.0	48.8	49.5	50.3	50.8	50.9	50.8	51.0	50.4
100°	44.8	44.7	45.0	45.7	46.5	47.4	47.9	48.2	48.1	48.0	47.7
102.5°	41.8	41.8	42.1	42.8	43.6	44.3	45.0	45.2	45.2	44.9	44.8
105°	39.3	39.3	39.7	40.4	41.2	42.0	42.5	42.7	42.6	42.6	42.2
107.5°	36.6	36.7	37.0	37.8	38.5	39.1	39.7	39.9	39.9	39.7	39.4
110°	34.5	34.7	34.9	35.5	36.2	37.0	37.5	37.7	37.6	37.5	37.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	32.1	32.2	32.4	33.0	33.7	34.4	34.8	35.2	35.2	35.2	34.7
115°	30.0	30.0	30.4	30.9	31.6	32.2	32.5	32.8	33.0	32.9	32.6
117.5°	27.7	27.8	28.2	28.8	29.5	29.9	30.1	30.5	30.5	30.4	30.1
120°	26.0	26.0	26.1	26.7	27.4	27.7	28.2	28.2	28.3	28.2	27.8
122.5°	23.6	23.7	24.1	24.5	25.1	25.4	25.8	25.9	26.0	25.9	25.4
125°	21.9	21.8	22.1	22.7	23.1	23.5	23.7	23.9	23.9	23.7	23.4
127.5°	19.7	19.8	20.2	20.6	21.0	21.2	21.4	21.5	21.6	21.5	21.1
130°	18.0	18.1	18.4	18.8	19.2	19.3	19.5	19.6	19.5	19.4	19.1
132.5°	16.0	16.1	16.5	16.9	17.1	17.2	17.4	17.4	17.4	17.3	17.1
135°	14.5	14.6	14.9	15.2	15.3	15.5	15.7	15.7	15.6	15.6	15.3
137.5°	12.6	12.9	13.0	13.2	13.3	13.6	13.6	13.7	13.6	13.5	13.3
140°	11.2	11.4	11.4	11.7	11.7	12.0	12.0	12.1	12.0	12.0	11.7
142.5°	9.6	9.6	9.7	9.9	10.1	10.1	10.2	10.2	10.1	10.1	9.9
145°	8.2	8.1	8.3	8.4	8.6	8.6	8.5	8.6	8.5	8.5	8.3
147.5°	7.0	6.8	6.9	7.1	7.2	7.1	7.2	7.3	7.2	7.2	7.0
150°	5.6	5.4	5.6	5.6	5.7	5.6	5.7	5.8	5.6	5.6	5.5
152.5°	4.0	4.1	4.0	4.2	4.3	4.3	4.4	4.2	4.2	4.2	4.1
155°	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.3	3.3	3.2
157.5°	1.8	1.9	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.0
160°	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2
162.5°	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.6
165°	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1
167.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	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°	95°	100°	105°
0°	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
2.5°	118.1	117.8	117.9	117.9	117.9	117.8	117.7	117.7	117.6	117.6	117.5
5°	118.6	118.9	118.5	118.5	118.4	118.1	118.0	117.8	117.7	117.6	117.6
7.5°	119.4	119.2	119.0	118.9	118.6	118.5	118.4	118.3	117.9	117.9	117.6
10°	120.1	119.9	119.6	119.4	119.2	119.2	118.8	118.4	118.1	117.9	117.7
12.5°	121.0	120.7	120.4	120.0	119.7	119.4	119.0	118.9	118.5	118.2	117.9
15°	121.5	121.1	120.9	120.4	120.0	119.7	119.4	119.0	118.7	118.4	118.1
17.5°	122.6	122.3	121.8	121.9	121.4	120.6	120.2	119.8	119.4	119.2	119.2
20°	123.7	123.2	123.0	122.3	121.7	121.5	120.9	120.6	120.1	119.8	119.4
22.5°	124.8	124.3	123.8	123.4	122.7	122.1	121.7	121.3	120.9	120.5	120.2
25°	125.5	124.9	124.3	123.8	123.4	122.9	122.3	121.6	121.2	120.7	120.4
27.5°	126.5	125.9	125.3	124.6	123.9	123.3	122.6	122.2	121.7	121.3	120.9
30°	127.1	126.3	125.7	124.9	124.3	123.6	123.0	122.3	121.9	121.3	120.9
32.5°	127.5	126.7	126.0	125.1	124.4	123.7	122.9	122.2	121.7	121.1	120.9
35°	127.7	126.8	126.0	125.2	124.3	123.6	122.7	122.0	121.4	121.0	120.4
37.5°	127.6	126.7	125.8	124.8	124.0	123.0	122.2	121.5	120.7	120.1	119.8
40°	127.6	126.6	125.6	124.5	123.5	122.6	121.6	120.7	120.2	119.4	119.1
42.5°	126.8	125.7	124.7	123.4	122.3	121.3	120.3	119.4	118.6	118.2	117.5
45°	126.0	124.8	123.6	122.3	121.2	120.0	118.9	118.2	117.3	116.7	116.1
47.5°	124.4	123.0	121.6	120.4	119.2	117.9	116.7	115.8	114.9	114.5	113.9
50°	122.8	121.5	120.2	118.7	117.2	116.0	114.8	113.8	112.9	112.3	111.8
52.5°	120.4	119.0	117.5	116.1	114.7	113.2	111.9	111.0	110.2	109.5	108.9
55°	117.9	116.4	114.9	113.4	111.8	110.4	109.0	107.9	107.1	106.6	106.0
57.5°	115.1	113.6	111.8	110.3	108.7	107.1	105.7	104.6	103.8	103.3	102.6
60°	111.5	110.0	108.4	106.6	104.9	103.3	101.9	100.8	99.9	99.4	99.0
62.5°	107.8	106.3	104.5	102.7	100.9	99.3	97.8	96.6	95.8	95.2	95.2
65°	103.4	102.1	100.2	98.4	96.6	94.8	93.3	92.2	91.4	90.9	90.4
67.5°	99.7	98.0	96.2	94.2	92.4	90.7	89.0	87.8	87.1	86.6	86.3
70°	94.7	93.3	91.3	89.2	87.5	85.5	84.1	83.0	82.1	81.7	81.1
72.5°	90.4	89.0	87.1	85.0	83.1	81.2	79.5	78.5	77.7	77.1	76.9
75°	85.7	84.2	82.2	80.2	78.2	76.2	74.7	73.3	72.7	72.3	72.0
77.5°	81.1	79.7	77.8	75.7	73.7	71.7	70.0	68.9	68.2	68.0	67.5
80°	76.5	75.1	73.2	71.0	69.0	66.9	65.4	64.2	63.5	63.3	62.9
82.5°	71.8	70.7	68.8	66.7	64.5	62.5	60.7	59.6	59.2	58.7	58.6
85°	67.7	66.4	64.6	62.5	60.4	58.5	56.8	55.6	55.0	54.8	54.5
87.5°	63.5	62.3	60.5	58.5	56.3	54.2	52.6	51.5	51.0	50.6	50.3
90°	60.0	58.7	57.1	54.9	52.9	51.0	49.2	48.1	47.5	47.0	46.7
92.5°	55.9	54.9	53.1	51.3	49.2	47.0	45.4	44.2	43.5	43.2	42.5
95°	52.9	51.9	50.4	48.4	46.4	44.4	42.7	41.5	40.8	40.2	39.6
97.5°	49.9	48.9	47.3	45.3	43.5	41.3	39.5	38.6	37.8	37.3	36.5
100°	47.1	46.1	44.6	42.8	40.8	39.0	37.3	36.1	35.4	34.6	33.8
102.5°	44.1	43.3	41.8	40.1	38.3	36.3	34.7	33.6	32.8	32.1	31.3
105°	41.7	40.7	39.3	37.7	35.9	34.2	32.6	31.5	30.7	29.9	29.1
107.5°	39.0	38.1	36.7	35.0	33.5	31.8	30.3	29.2	28.4	27.5	26.6
110°	36.6	35.8	34.6	33.0	31.6	29.9	28.5	27.3	26.5	25.7	25.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	34.1	33.3	32.1	30.7	29.1	27.7	26.3	25.3	24.4	23.6	22.9
115°	32.0	31.2	29.9	28.6	27.2	25.9	24.5	23.5	22.8	21.8	21.1
117.5°	29.6	28.9	27.8	26.4	25.3	23.9	22.7	21.6	20.8	20.1	19.3
120°	27.4	26.7	25.8	24.6	23.4	22.1	20.9	20.0	19.2	18.4	17.6
122.5°	25.0	24.3	23.4	22.3	21.3	20.3	19.2	18.2	17.4	16.7	15.9
125°	22.9	22.3	21.4	20.6	19.7	18.5	17.5	16.7	15.9	15.2	14.5
127.5°	20.6	20.0	19.3	18.6	17.6	16.7	15.8	15.0	14.3	13.7	12.8
130°	18.8	18.2	17.6	16.8	16.1	15.1	14.4	13.6	12.9	12.3	11.4
132.5°	16.6	16.3	15.6	15.1	14.3	13.4	12.6	11.9	11.3	10.7	9.9
135°	14.9	14.6	14.0	13.4	12.7	12.1	11.3	10.7	10.1	9.5	8.8
137.5°	13.1	12.7	12.3	11.6	11.2	10.5	9.8	9.2	8.7	8.2	7.5
140°	11.4	11.0	10.6	10.3	9.8	9.1	8.6	8.0	7.4	7.0	6.4
142.5°	9.6	9.4	8.9	8.7	8.1	7.7	7.2	6.7	6.2	5.6	5.2
145°	8.2	8.0	7.5	7.3	6.9	6.4	5.9	5.5	5.0	4.8	4.2
147.5°	6.9	6.6	6.3	6.1	5.6	5.4	4.9	4.6	4.1	3.9	3.3
150°	5.3	5.2	5.0	4.8	4.4	4.2	3.8	3.5	3.1	2.7	2.4
152.5°	4.0	3.8	3.7	3.5	3.2	3.0	2.6	2.4	2.1	1.9	1.7
155°	3.1	3.0	2.9	2.6	2.6	2.3	2.0	1.9	1.5	1.5	1.2
157.5°	2.0	1.9	1.8	1.7	1.4	1.3	1.1	1.1	0.8	0.7	0.5
160°	1.2	1.0	1.1	0.8	0.9	0.7	0.6	0.5	0.4	0.3	0.2
162.5°	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.1	0.2	0.1
165°	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0
167.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
2.5°	117.4	117.4	117.4	117.2	117.3	117.2	117.2	117.2	117.2	117.1	117.1
5°	117.5	117.5	117.2	117.1	117.0	117.0	116.9	116.8	116.9	116.7	116.6
7.5°	117.4	117.3	117.1	117.0	116.8	116.6	116.5	116.6	116.5	116.5	116.4
10°	117.5	117.2	117.1	116.9	116.8	116.6	116.4	116.4	116.4	116.3	116.2
12.5°	117.5	117.4	117.2	116.9	116.9	116.8	116.7	116.6	116.5	116.5	116.4
15°	117.9	117.6	117.5	117.3	117.0	116.9	116.7	116.7	116.7	116.5	116.4
17.5°	118.5	118.5	118.2	118.1	117.8	117.5	117.5	117.3	117.2	117.0	116.9
20°	119.1	118.9	118.7	118.5	118.4	118.0	117.7	117.5	117.3	117.1	117.0
22.5°	120.0	119.5	119.3	119.0	118.9	118.5	118.6	118.1	117.7	117.5	117.3
25°	120.0	119.8	119.6	119.3	119.0	118.5	118.1	117.7	117.3	116.8	116.2
27.5°	120.7	120.3	119.9	119.5	119.1	118.5	118.3	117.3	116.1	114.7	113.2
30°	120.5	120.3	119.8	119.3	118.8	118.3	116.9	114.9	113.0	110.9	109.0
32.5°	120.3	120.0	119.5	118.9	118.2	116.4	114.0	111.3	108.6	106.0	103.8
35°	120.0	119.6	119.1	118.3	116.6	113.6	110.7	107.0	104.0	100.8	98.2
37.5°	119.3	118.7	118.0	116.6	113.7	110.1	106.4	102.5	98.6	94.9	91.8
40°	118.5	118.1	116.9	114.4	111.0	106.9	102.6	98.1	93.7	89.4	85.6
42.5°	116.9	116.4	114.8	111.7	107.7	103.1	98.1	93.1	88.2	83.2	78.8
45°	115.6	114.7	112.7	109.2	104.6	99.5	94.1	88.4	82.7	77.3	72.3
47.5°	113.1	112.3	109.8	105.7	100.9	95.2	89.2	83.2	76.9	71.0	65.5
50°	111.2	110.1	107.2	102.8	97.7	91.7	85.3	78.4	71.8	65.3	59.6
52.5°	108.3	107.0	103.8	99.4	93.7	87.3	80.4	73.2	66.3	59.3	53.4
55°	105.2	104.1	100.7	95.8	90.0	83.3	76.0	68.5	61.0	53.9	47.5
57.5°	102.0	100.7	97.5	92.3	86.4	79.2	71.7	63.8	56.2	49.1	42.3
60°	98.1	97.0	93.7	88.2	82.0	74.8	66.9	59.2	51.2	43.9	37.0
62.5°	94.2	93.4	89.7	84.2	77.7	70.3	62.5	54.6	46.7	39.4	32.5
65°	89.8	88.8	85.6	79.9	73.3	65.8	58.0	50.0	42.5	34.8	28.1
67.5°	85.6	84.7	81.4	75.7	69.2	61.8	54.2	46.3	38.6	31.0	24.3
70°	80.8	79.8	76.6	71.1	64.4	57.1	49.4	41.9	34.3	26.5	20.1
72.5°	76.3	75.7	72.6	67.0	60.5	53.3	45.8	38.2	30.6	23.4	16.8
75°	71.6	71.1	68.1	62.7	56.1	49.1	41.5	34.3	26.7	19.6	12.9
77.5°	67.2	66.7	64.1	58.6	52.1	45.3	37.9	30.8	23.6	16.7	9.9
80°	62.6	62.2	59.5	54.5	48.2	41.6	34.8	27.6	20.6	14.1	7.9
82.5°	58.3	57.8	55.4	50.4	44.7	38.3	32.1	25.5	19.1	13.0	7.4
85°	54.2	53.7	51.4	46.8	41.3	35.4	29.6	23.7	17.8	12.1	7.1
87.5°	50.0	49.4	47.2	42.9	37.8	32.5	27.0	21.5	16.0	10.7	6.1
90°	46.0	45.4	43.3	39.3	34.6	29.7	24.7	19.7	14.8	10.1	5.7
92.5°	42.0	41.1	39.3	35.3	31.0	26.4	22.0	17.5	13.1	8.7	4.7
95°	38.9	37.9	36.2	32.7	28.5	24.4	20.3	16.2	12.1	8.2	4.4
97.5°	35.5	34.6	32.9	29.6	26.0	22.0	18.2	14.4	10.7	7.2	3.9
100°	33.1	32.0	30.4	27.4	24.0	20.4	16.8	13.3	9.9	6.5	3.6
102.5°	30.3	29.3	27.6	25.0	21.8	18.5	15.3	12.1	8.8	5.7	2.8
105°	28.0	27.0	25.6	23.1	20.1	17.1	14.2	11.0	8.1	5.2	2.8
107.5°	25.8	24.6	23.3	21.0	18.3	15.5	12.6	9.8	7.2	4.5	2.1
110°	23.9	22.7	21.4	19.3	16.8	14.2	11.6	8.9	6.5	4.2	1.8



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	21.8	20.7	19.4	17.5	15.2	12.7	10.3	7.9	5.6	3.4	1.4	0°
115°	19.9	18.9	17.6	15.8	13.7	11.7	9.4	7.1	4.9	2.9	1.4	2.5°
117.5°	18.3	17.2	15.9	14.2	12.4	10.5	8.2	6.3	4.3	2.4	1.0	5°
120°	16.7	15.6	14.3	12.9	11.3	9.4	7.3	5.6	3.7	2.1	0.7	7.5°
122.5°	14.9	13.9	12.7	11.3	9.8	8.1	6.2	4.7	3.1	1.5	0.5	10°
125°	13.4	12.5	11.5	10.1	8.7	7.1	5.5	4.0	2.5	1.2	0.4	12.5°
127.5°	11.9	10.9	10.0	8.6	7.4	5.9	4.6	3.2	1.8	0.7	0.1	15°
130°	10.6	9.6	8.7	7.6	6.4	5.1	3.9	2.5	1.5	0.6	0.2	17.5°
132.5°	9.2	8.3	7.5	6.4	5.2	4.1	2.9	1.8	0.9	0.2	0.0	20°
135°	8.0	7.1	6.4	5.4	4.4	3.4	2.3	1.4	0.7	0.2	0.0	22.5°
137.5°	6.8	6.0	5.3	4.4	3.4	2.5	1.7	0.8	0.2	0.0	0.0	25°
140°	5.7	5.0	4.3	3.5	2.8	1.9	1.2	0.6	0.2	0.0	0.1	27.5°
142.5°	4.5	3.9	3.2	2.6	1.9	1.2	0.6	0.2	0.0	0.0	0.0	30°
145°	3.7	3.1	2.5	2.0	1.4	0.7	0.3	0.1	0.0	0.0	0.0	32.5°
147.5°	2.8	2.4	1.9	1.4	1.0	0.5	0.2	0.1	0.0	0.0	0.1	35°
150°	2.0	1.7	1.2	0.9	0.5	0.2	0.0	0.0	0.0	0.0	0.0	37.5°
152.5°	1.2	0.9	0.6	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	40°
155°	1.0	0.8	0.7	0.3	0.1	0.1	0.1	0.1	0.0	0.1	0.1	42.5°
157.5°	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	45°
160°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	47.5°
162.5°	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	50°
165°	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
167.5°	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	55°
170°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°
												110°

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DISTRIBUTION (continued):

165°	170°	175°	180°
117.4	117.4	117.4	117.4
117.2	117.0	117.1	117.2
116.6	116.6	116.6	116.6
116.4	116.4	116.2	116.4
116.2	116.1	116.1	116.1
116.2	116.3	116.1	116.0
116.2	116.1	116.1	116.0
116.8	116.6	116.6	116.5
116.8	116.8	116.7	116.6
117.0	116.8	116.7	116.6
115.6	114.8	114.4	114.4
112.1	111.3	110.8	110.5
107.4	106.4	105.7	105.5
102.0	100.8	99.9	99.8
96.1	94.6	93.6	93.3
89.4	87.7	86.7	86.3
82.7	80.5	79.5	79.2
75.4	73.1	72.0	71.6
68.5	65.8	64.4	64.1
61.2	58.1	56.5	56.2
54.8	51.3	49.9	49.5
48.2	44.6	43.2	42.9
42.3	38.4	37.1	36.9
36.9	32.9	31.9	31.5
31.4	27.6	26.6	26.5
26.8	22.9	22.1	21.9
22.2	18.6	17.8	17.7
18.5	14.8	14.2	14.1
14.3	10.5	10.1	10.1
11.0	7.6	7.1	7.0
7.4	4.1	4.0	3.9
4.5	1.5	1.2	1.1
3.1	0.3	0.1	0.1
2.6	0.3	0.2	0.2
2.5	0.4	0.4	0.3
2.2	0.3	0.1	0.3
2.0	0.3	0.3	0.4
1.4	0.1	0.0	0.0
1.4	0.3	0.3	0.3
1.1	0.2	0.1	0.1
1.1	0.4	0.2	0.2
0.9	0.1	0.1	0.1
0.9	0.3	0.3	0.3
0.6	0.2	0.1	0.1
0.7	0.4	0.3	0.5

CANDELA DISTRIBUTION:

	165°
112.5°	0.3
115°	0.5
117.5°	0.3
120°	0.3
122.5°	0.1
125°	0.2
127.5°	0.1
130°	0.1
132.5°	0.0
135°	0.1
137.5°	0.2
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.1
150°	0.0
152.5°	0.0
155°	0.1
157.5°	0.0
160°	0.1
162.5°	0.1
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

