

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: LUMIERE

Report Number: P10063

Luminaire Tested: **1235E-SQ-x-20T3**

Issue Date: 05/15/06

Test Information

Test Method: LM-79-08
Report Number: P10063
Test Lab: PEACHTREE CITY
Issue Date: 05/15/06
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 1235E-SQ-x-20T3
Description: LUMIERE 5 INCH INCANDESCENT STEP LIGHT
WITH EYELID FACEPLATE, SAND BLASTED LENS
WITH REFLECTOR
Light Source: BI PIN T3 CLEAR QUARTZ HALOGEN INCANDESCENT LAMP
Q20T3/CL/CD 20WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 350 (1 lamp)
Luminaire Lumens: 75.3 lumens
Efficiency: 21.5%
Efficacy: 3.8 lumens/watt
Luminous Opening: Circular (Dia: 0.33' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U2 - G1

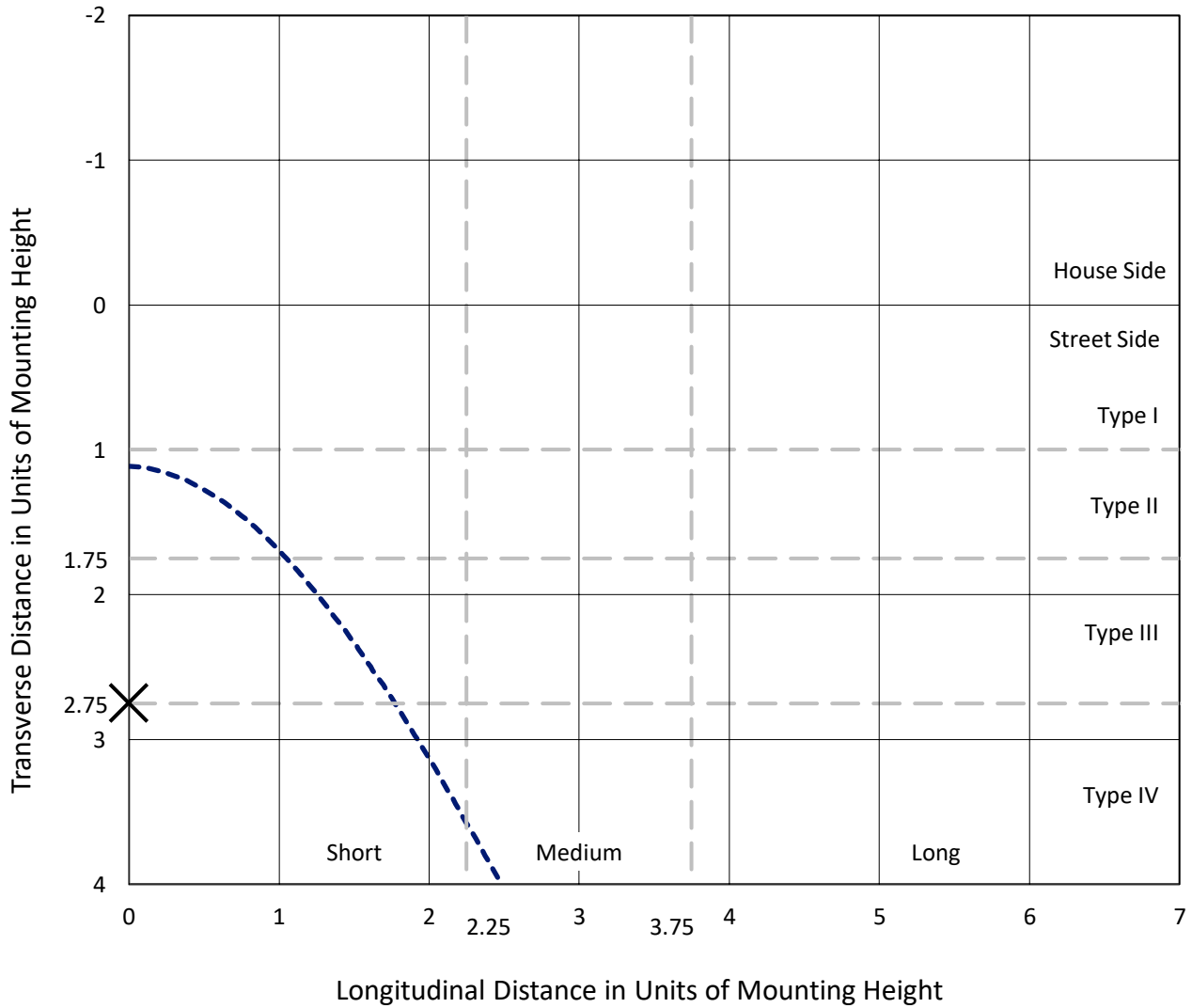
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

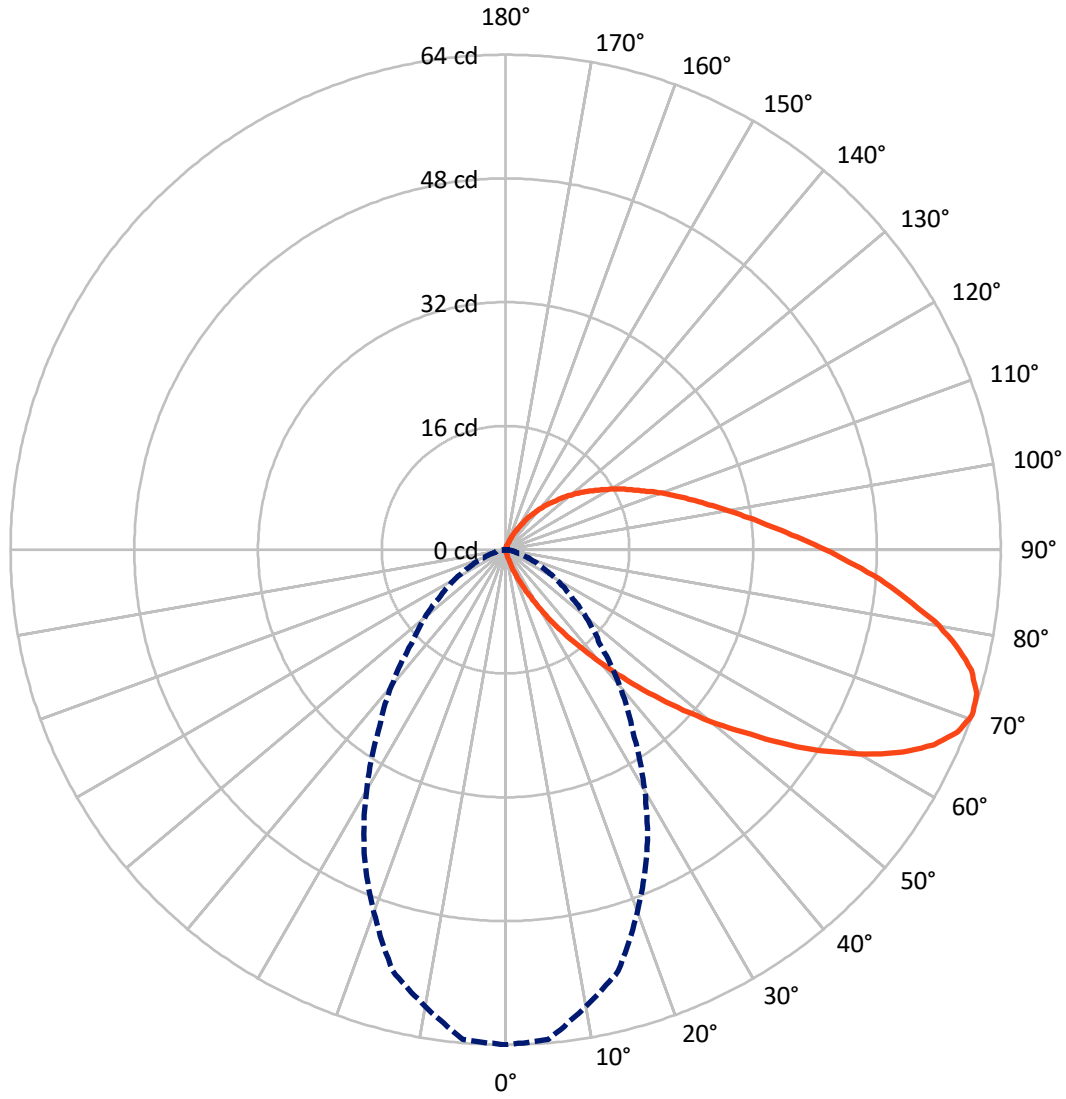
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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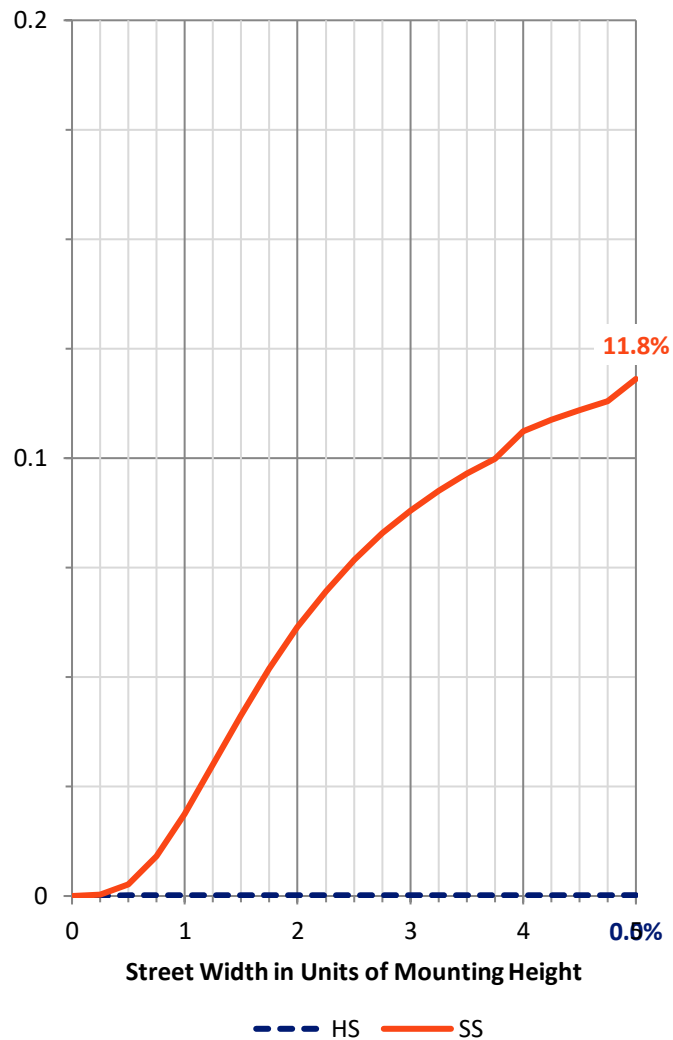
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	0.1	0.1	0.2
	% Lamp	0.0	0.0	0.1
Street Side	Lumens	50.4	24.7	75.1
	% Lamp	14.4	7.1	21.5
Total	Lumens	50.5	24.8	75.3
	% Lamp	14.4	7.1	21.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.1	0.1	0.0
20°-30°	0.5	0.7	0.2
30°-40°	1.9	2.5	0.5
40°-50°	4.3	5.7	1.2
50°-60°	7.9	10.5	2.3
60°-70°	11.6	15.4	3.3
70°-80°	12.9	17.2	3.7
80°-90°	11.3	14.9	3.2
90°-100°	8.6	11.4	2.5
100°-110°	6.4	8.5	1.8
110°-120°	4.5	5.9	1.3
120°-130°	2.9	3.8	0.8
130°-140°	1.6	2.1	0.5
140°-150°	0.7	0.9	0.2
150°-160°	0.2	0.2	0.1
160°-170°	0.0	0.1	0.0
170°-180°	0.0	0.0	0.0
0°-90°	50.5	67.0	14.4
0°-180°	75.3	100.0	21.5

Coefficient of Utilization

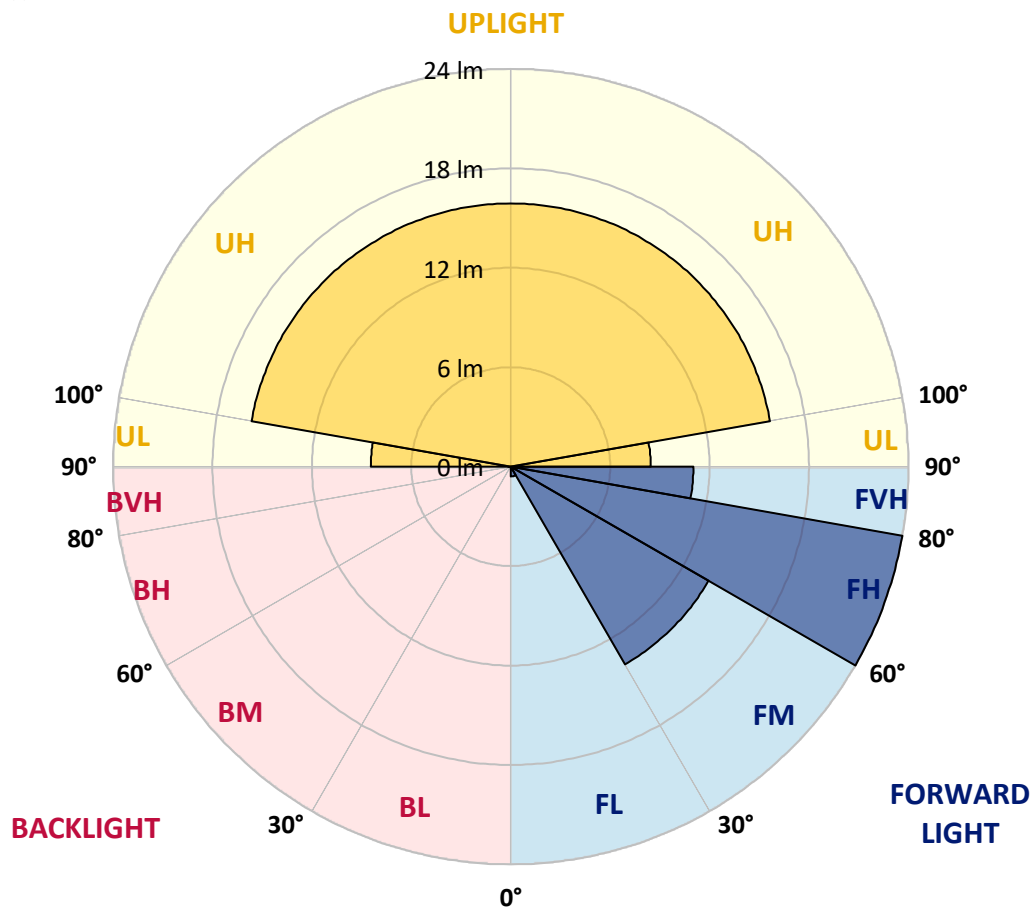


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	0.6	0.2			
FM (30°-60°)	14.1	4.0			
FH (60°-80°)	24.5	7.0			G0/660
FVH (80°-90°)	11.2	3.2			G1/100
BL (0°-30°)	0.0	0.0	B0/110		
BM (30°-60°)	0.0	0.0	B0/220		
BH (60°-80°)	0.0	0.0	B0/110		G0/110
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	8.6	2.5		U1/10	
UH (100°-180°)	16.2	4.6		U2/50	
Trapped Light	274.7	78.5			

BUG Rating: B0-U2-G1
 Type IV Short





REPORT NUMBER: P10063 CATALOG

NUMBER: 1235E-SQ-x-20T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
7.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
10°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
12.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
15°	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1
17.5°	1.5	1.6	1.3	1.0	0.6	0.3	0.2	0.2	0.1	0.1	0.1
20°	2.6	2.6	2.3	1.8	1.2	0.6	0.3	0.2	0.1	0.1	0.1
22.5°	3.8	3.8	3.4	2.8	1.9	1.0	0.5	0.2	0.1	0.1	0.1
25°	5.3	5.2	4.7	3.8	2.8	1.6	0.8	0.3	0.1	0.1	0.1
27.5°	6.9	6.9	6.2	5.1	3.7	2.3	1.1	0.4	0.2	0.1	0.1
30°	8.9	8.9	8.0	6.6	4.8	3.0	1.5	0.6	0.2	0.1	0.1
32.5°	11.2	11.0	10.0	8.2	6.0	3.8	2.0	0.7	0.2	0.1	0.1
35°	13.7	13.6	12.3	10.0	7.3	4.6	2.5	0.9	0.2	0.1	0.1
37.5°	16.3	16.2	14.7	12.0	8.6	5.5	3.1	1.1	0.3	0.1	0.1
40°	19.5	19.3	17.4	14.1	10.2	6.5	3.7	1.4	0.4	0.1	0.1
42.5°	22.9	22.6	20.4	16.4	11.8	7.6	4.3	1.7	0.5	0.1	0.1
45°	26.8	26.5	23.6	18.8	13.4	8.6	4.9	2.0	0.6	0.1	0.1
47.5°	30.8	30.5	27.2	21.4	15.2	9.7	5.5	2.3	0.7	0.1	0.1
50°	35.1	34.8	31.0	24.3	17.1	10.8	6.1	2.6	0.8	0.1	0.1
52.5°	39.4	39.2	34.8	27.2	18.8	11.8	6.8	3.0	0.9	0.1	0.1
55°	44.3	43.8	38.9	30.2	20.7	12.8	7.4	3.3	1.0	0.1	0.1
57.5°	48.9	48.5	43.0	33.2	22.5	13.7	7.9	3.6	1.1	0.2	0.1
60°	53.3	52.8	46.8	36.0	24.1	14.6	8.4	3.9	1.2	0.2	0.1
62.5°	57.3	56.7	50.1	38.5	25.7	15.4	8.9	4.2	1.3	0.2	0.1
65°	60.4	59.8	53.1	40.6	27.0	16.1	9.3	4.5	1.4	0.2	0.1
67.5°	62.6	62.1	55.1	42.2	27.9	16.7	9.7	4.7	1.5	0.2	0.1
70°	63.6	63.1	56.0	43.0	28.5	17.1	10.0	4.9	1.6	0.3	0.1
72.5°	63.3	62.8	55.9	43.1	28.7	17.3	10.2	5.1	1.7	0.3	0.1
75°	61.8	61.2	54.8	42.4	28.4	17.4	10.4	5.3	1.8	0.3	0.1
77.5°	59.2	58.6	52.6	41.0	27.8	17.3	10.6	5.5	1.8	0.3	0.1
80°	55.9	55.4	49.8	39.2	27.1	17.2	10.6	5.6	1.9	0.3	0.2
82.5°	51.9	51.7	46.8	37.2	26.1	16.9	10.6	5.6	1.9	0.4	0.2
85°	48.2	47.9	43.3	34.8	24.9	16.5	10.6	5.6	2.0	0.4	0.2
87.5°	44.1	43.9	40.0	32.4	23.6	16.0	10.4	5.6	2.0	0.4	0.2
90°	40.4	40.1	36.6	30.0	22.3	15.4	10.2	5.5	1.9	0.4	0.2
92.5°	36.8	36.7	33.5	27.8	21.0	14.8	9.9	5.4	1.9	0.4	0.2
95°	33.7	33.5	30.8	25.8	19.7	14.2	9.5	5.2	1.8	0.4	0.2
97.5°	31.0	30.8	28.5	24.1	18.6	13.6	9.2	5.0	1.8	0.4	0.2
100°	28.6	28.4	26.3	22.4	17.6	12.9	8.8	4.8	1.7	0.3	0.2
102.5°	26.3	26.3	24.3	20.9	16.5	12.3	8.4	4.6	1.6	0.3	0.2
105°	24.4	24.3	22.6	19.5	15.5	11.6	8.0	4.3	1.5	0.3	0.2
107.5°	22.6	22.5	21.0	18.1	14.6	10.9	7.5	4.0	1.4	0.3	0.2
110°	21.0	20.9	19.5	16.9	13.7	10.3	7.0	3.8	1.3	0.3	0.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	19.3	19.3	18.0	15.7	12.7	9.6	6.6	3.4	1.2	0.3	0.2
115°	17.9	17.8	16.7	14.6	11.8	8.9	6.1	3.2	1.1	0.2	0.2
117.5°	16.6	16.5	15.5	13.5	10.9	8.2	5.6	2.8	0.9	0.2	0.1
120°	15.3	15.2	14.3	12.4	10.0	7.6	5.1	2.5	0.8	0.2	0.1
122.5°	14.0	14.0	13.1	11.4	9.2	6.9	4.6	2.2	0.7	0.2	0.1
125°	12.9	12.8	12.0	10.5	8.5	6.3	4.1	2.0	0.6	0.2	0.1
127.5°	11.8	11.7	11.0	9.5	7.7	5.7	3.6	1.7	0.5	0.2	0.1
130°	10.7	10.7	9.9	8.6	6.9	5.1	3.1	1.4	0.5	0.2	0.1
132.5°	9.6	9.6	8.9	7.7	6.2	4.4	2.7	1.2	0.4	0.1	0.1
135°	8.5	8.5	7.9	6.9	5.5	3.8	2.3	1.0	0.4	0.1	0.1
137.5°	7.6	7.6	7.1	6.1	4.7	3.2	1.9	0.8	0.3	0.1	0.1
140°	6.7	6.6	6.1	5.2	4.0	2.7	1.5	0.7	0.3	0.1	0.1
142.5°	5.7	5.6	5.2	4.4	3.3	2.2	1.2	0.6	0.2	0.1	0.1
145°	4.7	4.7	4.3	3.6	2.7	1.7	1.0	0.5	0.2	0.1	0.1
147.5°	3.8	3.7	3.4	2.8	2.1	1.4	0.8	0.4	0.2	0.1	0.1
150°	2.9	2.9	2.7	2.2	1.6	1.0	0.6	0.4	0.2	0.1	0.1
152.5°	2.2	2.2	2.0	1.6	1.1	0.7	0.5	0.3	0.2	0.1	0.1
155°	1.5	1.5	1.4	1.1	0.8	0.6	0.4	0.3	0.2	0.1	0.1
157.5°	1.0	1.0	0.9	0.7	0.6	0.5	0.4	0.2	0.1	0.1	0.1
160°	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1
162.5°	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.1
165°	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
167.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
170°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
172.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
177.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
95°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
97.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
100°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
102.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
105°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
107.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
110°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1



REPORT NUMBER: P10063
 CATALOG NUMBER: 1235E-SQ-x-20T3

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
115°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.1	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

(END OF REPORT)