

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: P833530

Luminaire Tested: **TTN-D2-735-U-MQ-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833530
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-735-U-MQ-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5381.9 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

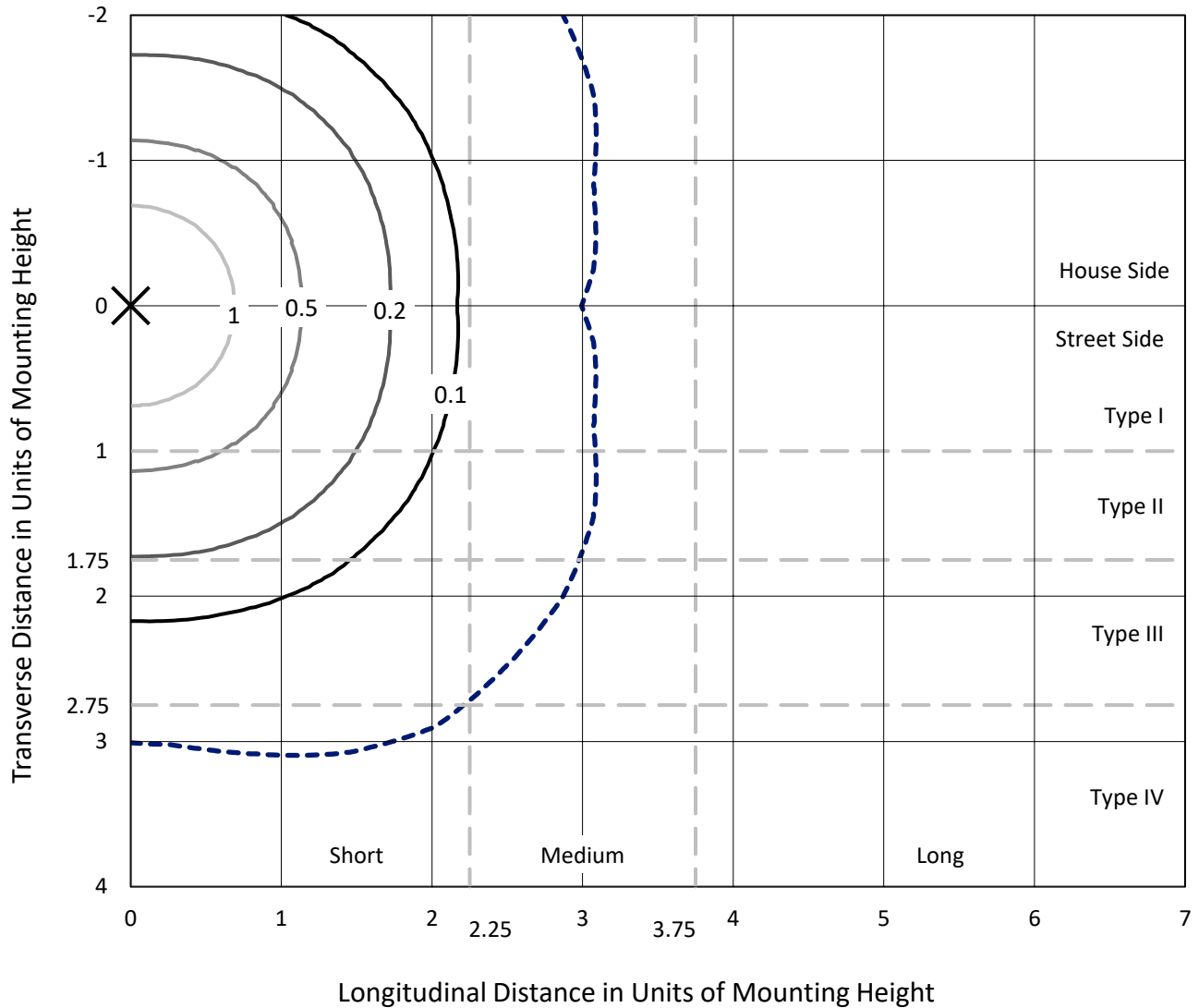
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

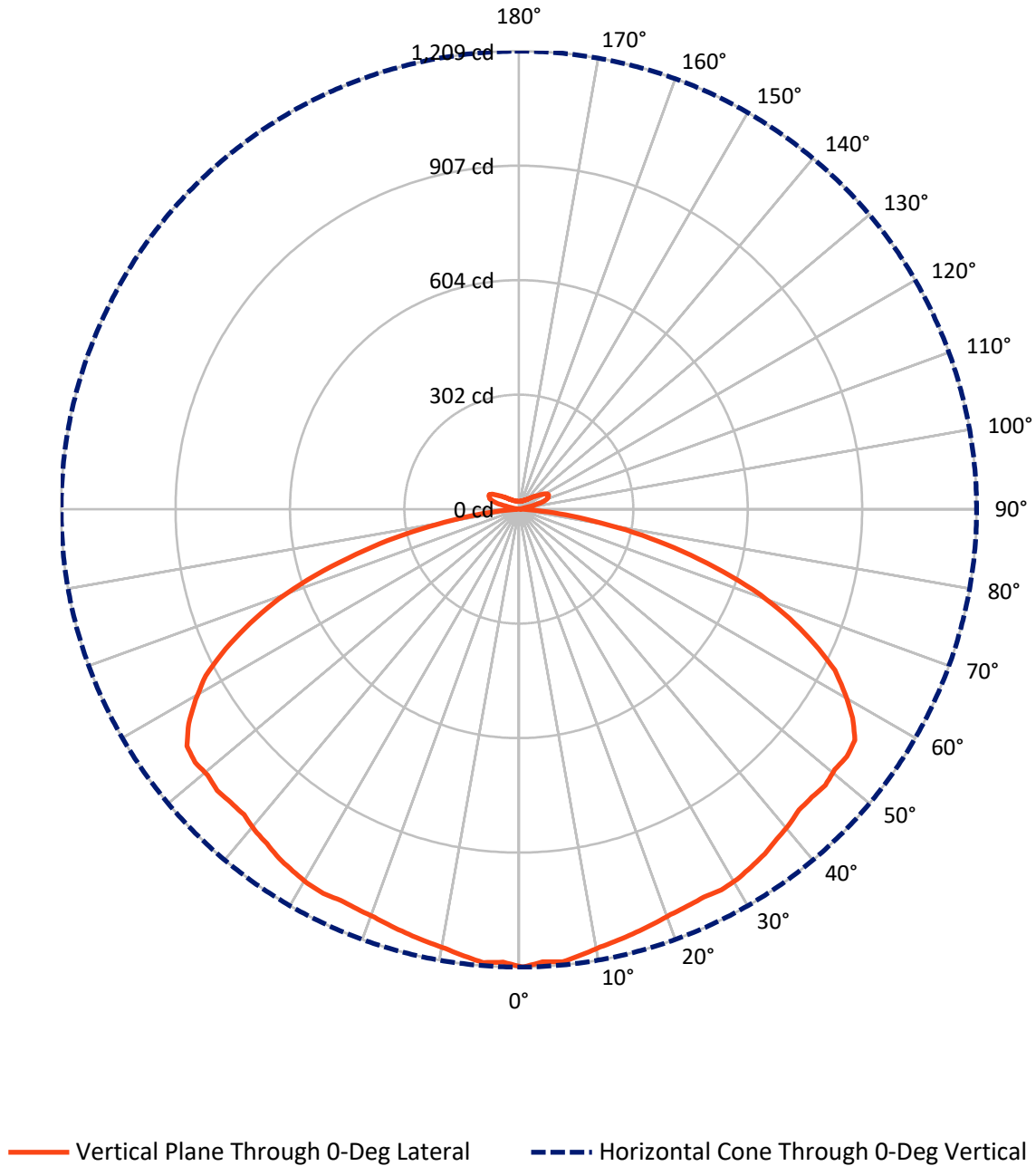
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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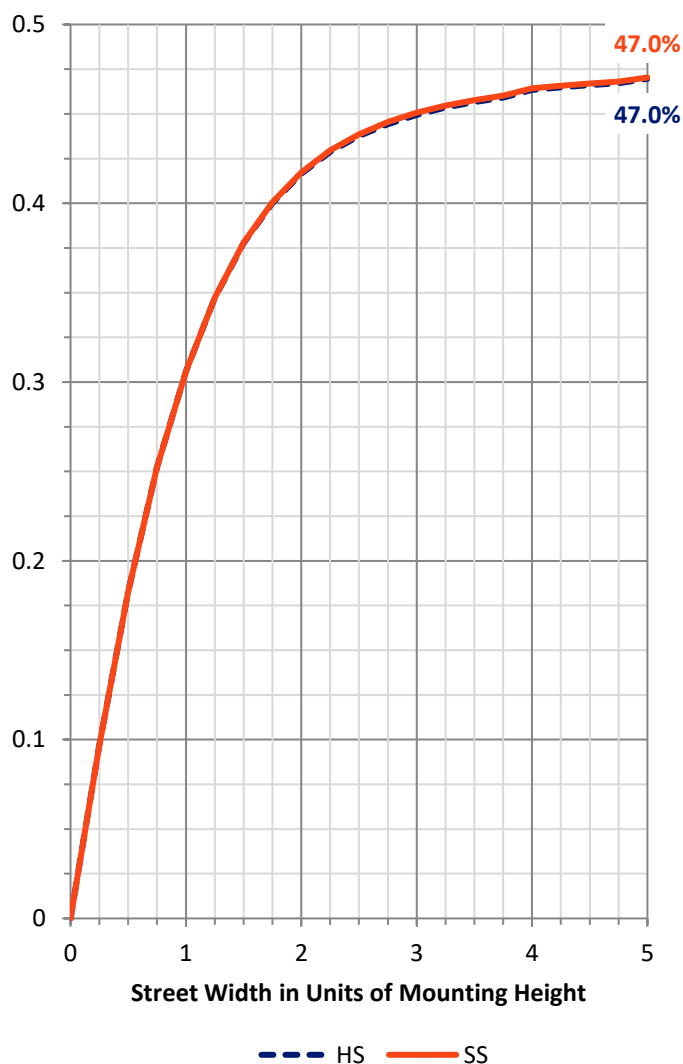
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2540.7	150.2	2691.0
	% Fixture	47.2	2.8	50.0
Street Side	Lumens	2540.7	150.2	2691.0
	% Fixture	47.2	2.8	50.0
Total	Lumens	5081.4	300.5	5381.9
	% Fixture	94.4	5.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	2.1
10°-20°	328.4	6.1
20°-30°	528.3	9.8
30°-40°	705.7	13.1
40°-50°	857.4	15.9
50°-60°	996.2	18.5
60°-70°	919.1	17.1
70°-80°	538.1	10.0
80°-90°	94.7	1.8
90°-100°	6.7	0.1
100°-110°	68.2	1.3
110°-120°	99.6	1.9
120°-130°	57.8	1.1
130°-140°	30.6	0.6
140°-150°	18.2	0.3
150°-160°	11.2	0.2
160°-170°	6.1	0.1
170°-180°	2.0	0.0
0°-90°	5081.4	94.4
0°-180°	5381.9	100.0

Coefficient of Utilization



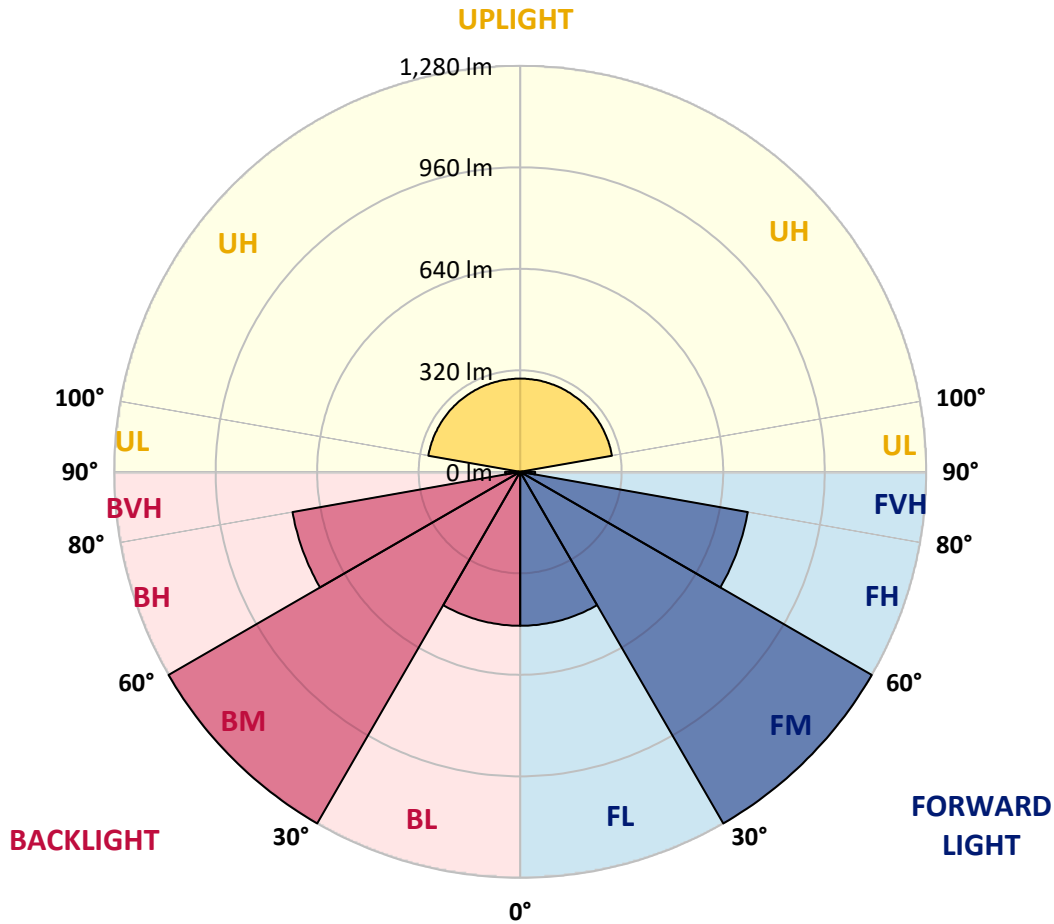
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	485.1	9.0			
FM (30°-60°)	1279.7	23.8			
FH (60°-80°)	728.6	13.5			G1/1800
FVH (80°-90°)	47.3	0.9			G1/100
BL (0°-30°)	485.1	9.0	B1/500		
BM (30°-60°)	1279.7	23.8	B2/2500		
BH (60°-80°)	728.6	13.5	B2/1000		G1/1800
BVH (80°-90°)	47.3	0.9			G1/100
UL (90°-100°)	6.7	0.1		U1/10	
UH (100°-180°)	293.8	5.5		U3/500	

BUG Rating: B2-U3-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8	1208.8
2.5°	1196.4	1200.5	1196.4	1196.4	1196.4	1196.4	1196.4	1196.4	1196.4	1196.4	1200.5
5°	1200.5	1200.5	1200.5	1200.5	1196.4	1196.4	1196.4	1196.4	1196.4	1200.5	1200.5
7.5°	1188.1	1188.1	1188.1	1188.1	1188.1	1184.0	1188.1	1188.1	1188.1	1188.1	1188.1
10°	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8	1175.8
12.5°	1167.5	1167.5	1167.5	1167.5	1167.5	1167.5	1167.5	1167.5	1167.5	1163.4	1163.4
15°	1159.3	1159.3	1159.3	1159.3	1163.4	1163.4	1159.3	1159.3	1159.3	1159.3	1159.3
17.5°	1151.0	1151.0	1151.0	1151.0	1155.1	1155.1	1155.1	1151.0	1151.0	1151.0	1151.0
20°	1142.8	1142.8	1142.8	1142.8	1146.9	1146.9	1146.9	1146.9	1146.9	1142.8	1142.8
22.5°	1138.6	1138.6	1138.6	1138.6	1142.8	1142.8	1142.8	1142.8	1138.6	1138.6	1138.6
25°	1134.5	1138.6	1138.6	1138.6	1142.8	1146.9	1146.9	1142.8	1138.6	1134.5	1134.5
27.5°	1138.6	1138.6	1138.6	1142.8	1142.8	1146.9	1146.9	1142.8	1138.6	1138.6	1138.6
30°	1134.5	1134.5	1134.5	1138.6	1142.8	1146.9	1142.8	1142.8	1138.6	1134.5	1134.5
32.5°	1126.3	1126.3	1130.4	1134.5	1138.6	1138.6	1138.6	1134.5	1130.4	1126.3	1126.3
35°	1118.0	1118.0	1118.0	1122.1	1130.4	1130.4	1130.4	1126.3	1122.1	1118.0	1113.9
37.5°	1105.6	1109.7	1109.7	1118.0	1122.1	1126.3	1122.1	1118.0	1109.7	1105.6	1105.6
40°	1097.4	1097.4	1101.5	1109.7	1118.0	1118.0	1113.9	1109.7	1101.5	1097.4	1097.4
42.5°	1085.0	1085.0	1093.2	1101.5	1113.9	1113.9	1109.7	1101.5	1093.2	1085.0	1085.0
45°	1085.0	1085.0	1093.2	1109.7	1118.0	1126.3	1118.0	1109.7	1093.2	1085.0	1080.9
47.5°	1089.1	1089.1	1097.4	1118.0	1134.5	1142.8	1130.4	1113.9	1097.4	1089.1	1085.0
50°	1080.9	1085.0	1101.5	1122.1	1142.8	1146.9	1142.8	1118.0	1101.5	1080.9	1080.9
52.5°	1085.0	1085.0	1105.6	1138.6	1159.3	1167.5	1159.3	1138.6	1101.5	1080.9	1080.9
55°	1076.7	1072.6	1101.5	1138.6	1171.6	1188.1	1171.6	1138.6	1097.4	1072.6	1068.5
57.5°	1039.6	1039.6	1076.7	1113.9	1155.1	1163.4	1151.0	1113.9	1072.6	1039.6	1031.4
60°	990.1	994.2	1031.4	1072.6	1109.7	1113.9	1105.6	1072.6	1031.4	994.2	981.9
62.5°	936.5	944.7	981.9	1023.1	1068.5	1076.7	1064.4	1023.1	973.6	948.9	928.2
65°	858.1	870.5	911.7	957.1	1006.6	1002.5	1002.5	953.0	915.9	874.6	854.0
67.5°	771.5	783.8	812.7	874.6	915.9	911.7	907.6	874.6	812.7	783.8	771.5
70°	676.6	684.8	713.7	775.6	812.7	816.8	804.5	771.5	713.7	693.1	672.5
72.5°	565.2	569.3	610.6	660.1	697.2	693.1	689.0	660.1	606.4	585.8	561.1
75°	445.5	449.7	486.8	532.2	561.1	556.9	552.8	532.2	486.8	462.1	441.4
77.5°	334.2	330.0	367.2	400.2	416.7	420.8	412.5	396.0	363.0	342.4	330.0
80°	218.6	214.5	247.5	272.3	284.7	284.7	280.5	268.2	243.4	226.9	218.6
82.5°	123.8	119.6	140.3	156.8	169.1	165.0	160.9	152.6	140.3	127.9	119.6
85°	45.4	45.4	57.8	66.0	74.3	74.3	70.1	66.0	53.6	49.5	45.4
87.5°	4.1	4.1	8.3	12.4	12.4	12.4	8.3	8.3	4.1	4.1	4.1
90°	2.6	2.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.6	2.6
92.5°	2.6	2.6	2.6	3.6	4.1	3.6	4.1	3.1	3.1	2.6	2.6
95°	3.1	3.1	3.6	4.6	5.7	6.2	6.2	3.6	3.6	3.1	3.1
97.5°	4.1	4.6	4.6	5.7	9.3	17.0	10.3	5.1	5.1	4.6	4.1
100°	6.7	7.2	7.2	12.9	27.2	36.5	26.2	13.4	9.8	7.2	7.2
102.5°	21.6	22.6	27.8	41.6	61.7	56.0	47.3	44.7	30.8	24.7	23.6
105°	55.0	54.5	58.6	69.4	86.4	84.8	78.1	70.9	61.2	56.5	56.5
107.5°	72.5	72.5	76.1	85.3	98.2	114.6	116.2	92.0	80.7	75.6	75.0
110°	81.7	81.7	84.8	92.5	109.5	132.6	131.6	113.6	99.7	93.0	92.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.8	84.3	88.4	100.2	118.7	129.0	124.4	117.2	111.0	105.9	104.9
115°	86.9	86.9	91.5	102.8	113.1	117.2	112.1	106.4	102.3	100.2	101.3
117.5°	85.8	87.4	88.4	94.6	101.3	104.4	101.8	94.1	91.0	90.0	88.4
120°	79.7	79.7	80.7	83.8	87.4	88.9	87.9	82.8	80.2	79.7	78.6
122.5°	70.9	71.5	70.9	72.5	75.0	76.6	75.6	71.5	70.4	70.4	69.4
125°	62.2	62.2	61.7	62.7	64.3	63.7	64.3	62.2	61.7	61.7	61.2
127.5°	56.0	55.5	54.5	55.0	55.5	55.5	56.0	54.0	54.5	55.0	54.5
130°	49.9	49.9	48.8	48.8	48.8	47.8	48.8	47.8	48.3	48.8	49.3
132.5°	44.2	44.2	42.7	42.2	42.2	42.2	42.7	42.2	43.2	44.2	44.2
135°	39.6	39.6	38.0	38.6	38.6	38.0	38.6	38.0	39.1	39.6	39.6
137.5°	36.0	36.0	35.0	35.0	35.0	34.4	35.0	35.0	35.5	36.5	37.0
140°	32.9	32.9	32.4	32.4	31.9	32.4	32.4	32.4	32.9	33.4	33.4
142.5°	31.4	30.8	30.3	29.8	30.3	30.3	30.3	29.8	30.3	31.4	31.4
145°	28.8	28.8	28.3	28.3	28.3	28.8	28.3	28.3	28.8	28.8	29.3
147.5°	27.2	27.2	26.7	27.2	27.2	27.2	27.2	26.7	27.2	27.2	27.8
150°	26.7	26.2	25.7	26.2	26.2	25.7	25.7	25.7	25.7	26.2	26.2
152.5°	25.2	25.2	24.7	25.2	24.7	24.7	24.7	24.7	24.7	25.2	25.7
155°	24.2	24.2	23.6	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
157.5°	23.1	23.6	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.6	23.6
160°	22.6	22.6	22.6	22.6	22.1	22.1	22.1	22.6	22.6	22.6	23.1
162.5°	22.1	22.1	22.1	22.1	21.6	21.6	21.6	21.6	22.1	22.1	22.6
165°	22.1	21.6	21.6	21.6	21.1	21.1	21.1	21.1	21.6	22.1	21.6
167.5°	21.1	21.1	21.1	21.1	21.1	20.6	20.6	21.1	21.1	21.1	21.6
170°	21.1	21.1	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	21.1
172.5°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	20.6	20.6	21.1	21.1
175°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	21.1	21.1	21.1	20.6
177.5°	21.1	21.1	21.1	21.1	20.6	21.1	21.1	21.1	21.1	21.1	21.1
180°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1

(END OF REPORT)