

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: P833696

Luminaire Tested: **TTN-D2-830-U-WQ-SG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833696
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-D2-830-U-WQ-SG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4943.8 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

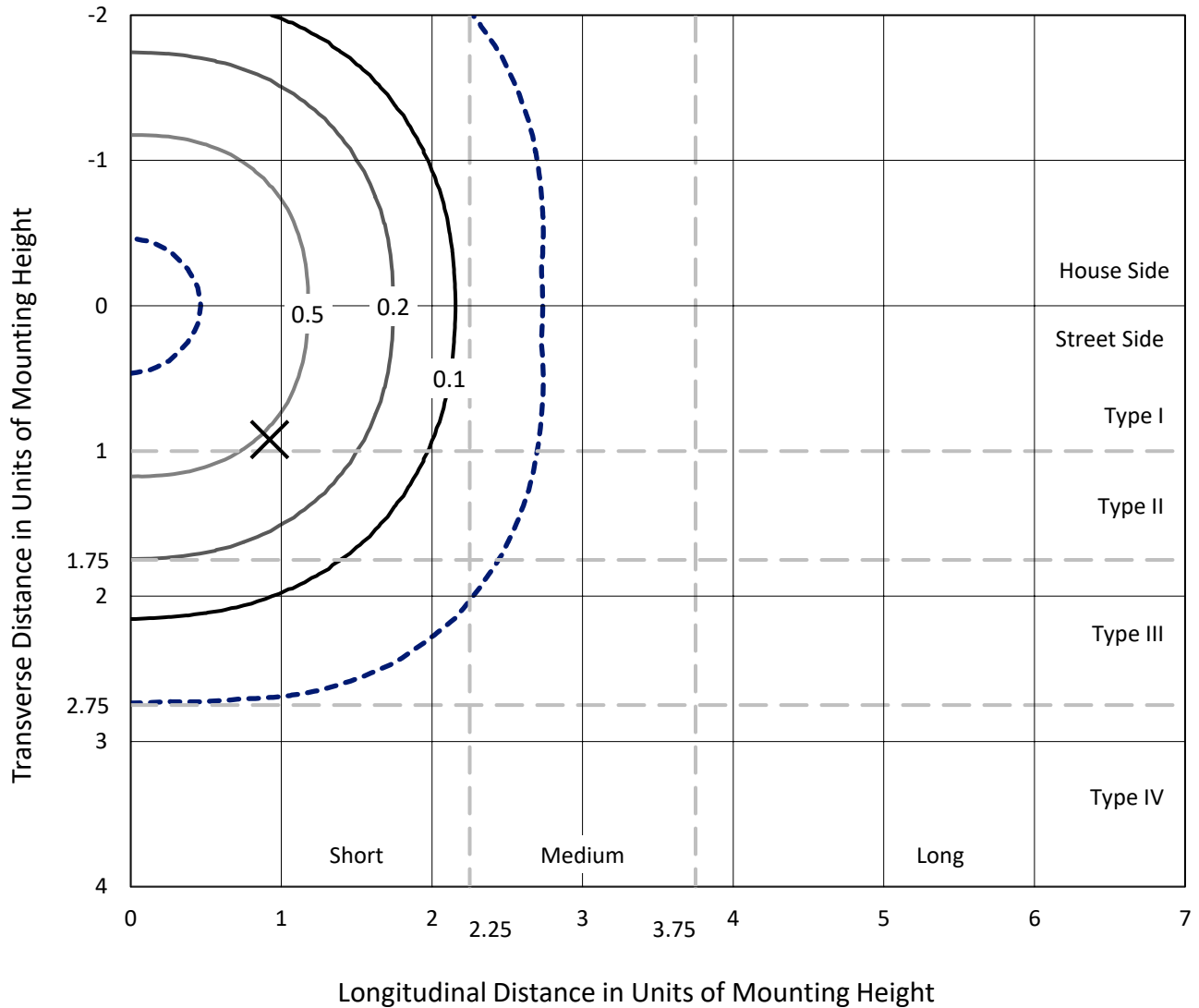
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

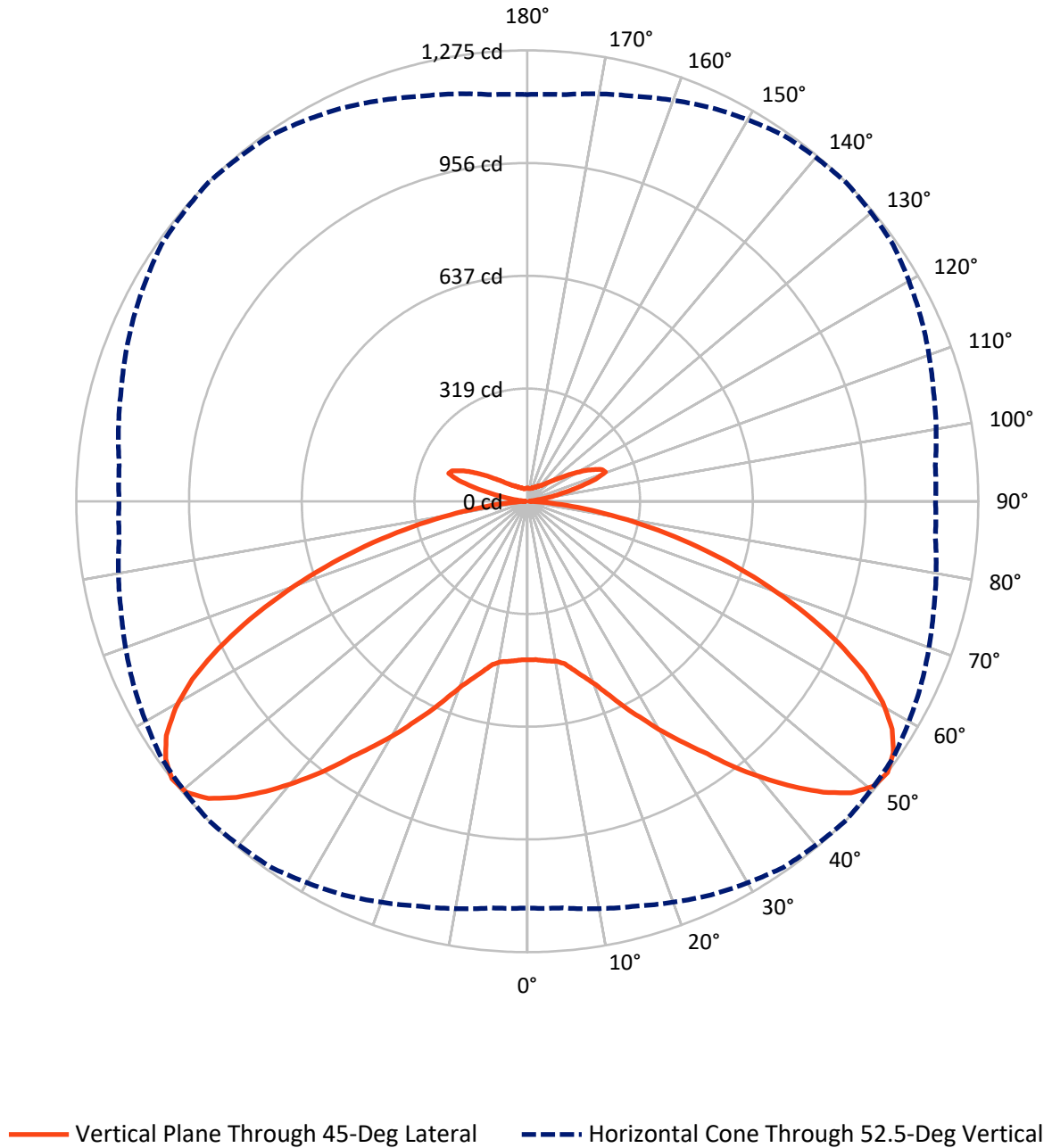
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type V - Short - N/A

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CATALOG NUMBER: TTN-D2-830-U-WQ-SG-UPL2

Luminous Intensity Polar Plot



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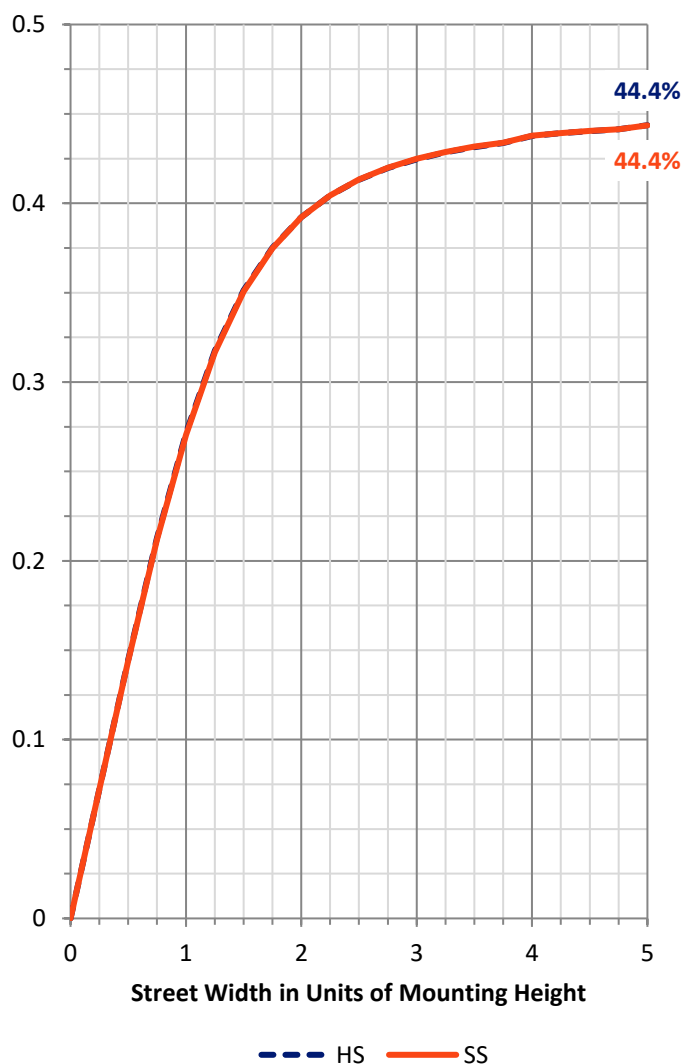
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2204.9	267.0	2471.9
	% Fixture	44.6	5.4	50.0
Street Side	Lumens	2204.9	267.0	2471.9
	% Fixture	44.6	5.4	50.0
Total	Lumens	4409.7	534.0	4943.8
	% Fixture	89.2	10.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	0.9
10°-20°	142.3	2.9
20°-30°	300.3	6.1
30°-40°	548.5	11.1
40°-50°	873.2	17.7
50°-60°	1055.9	21.4
60°-70°	887.8	18.0
70°-80°	470.6	9.5
80°-90°	87.8	1.8
90°-100°	11.9	0.2
100°-110°	121.1	2.5
110°-120°	177.1	3.6
120°-130°	102.8	2.1
130°-140°	54.4	1.1
140°-150°	32.3	0.7
150°-160°	19.9	0.4
160°-170°	10.9	0.2
170°-180°	3.5	0.1
0°-90°	4409.7	89.2
0°-180°	4943.8	100.0

Coefficient of Utilization

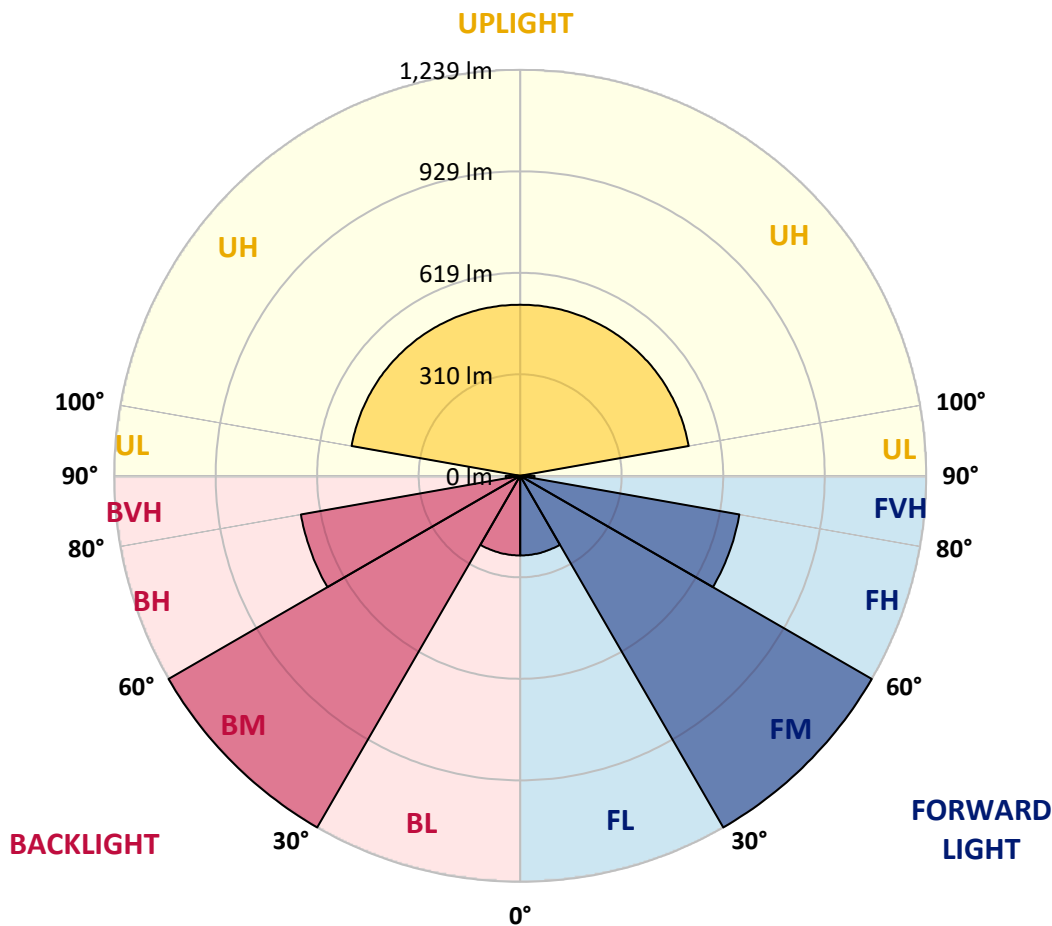


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 CATALOG NUMBER: TTN-D2-830-U-WQ-SG-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	242.9	4.9			
FM (30°-60°)	1238.8	25.1			
FH (60°-80°)	679.2	13.7			G1/1800
FVH (80°-90°)	43.9	0.9			G1/100
BL (0°-30°)	242.9	4.9	B1/500		
BM (30°-60°)	1238.8	25.1	B2/2500		
BH (60°-80°)	679.2	13.7	B2/1000		G1/1800
BVH (80°-90°)	43.9	0.9			G1/100
UL (90°-100°)	11.9	0.2		U2/50	
UH (100°-180°)	522.1	10.6		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
5°	452.1	452.1	448.3	452.1	452.1	452.1	452.1	452.1	452.1	452.1	452.1
7.5°	452.1	452.1	452.1	456.0	456.0	456.0	456.0	452.1	452.1	452.1	452.1
10°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
12.5°	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6
15°	491.1	491.1	491.1	491.1	495.0	495.0	495.0	491.1	491.1	491.1	491.1
17.5°	514.5	514.5	518.4	518.4	522.3	522.3	522.3	518.4	514.5	518.4	514.5
20°	549.6	549.6	549.6	553.5	557.4	557.4	557.4	549.6	549.6	549.6	549.6
22.5°	588.6	588.6	588.6	592.5	596.4	596.4	596.4	588.6	588.6	588.6	588.6
25°	635.3	635.3	635.3	639.2	643.1	647.0	647.0	639.2	635.3	635.3	631.4
27.5°	682.1	682.1	689.9	693.8	697.7	697.7	697.7	689.9	686.0	686.0	686.0
30°	736.7	736.7	744.5	748.4	756.2	756.2	756.2	744.5	740.6	736.7	736.7
32.5°	787.4	791.3	799.1	806.9	814.6	814.6	818.5	803.0	795.2	791.3	791.3
35°	841.9	845.8	853.6	865.3	873.1	877.0	880.9	865.3	853.6	849.7	849.7
37.5°	904.3	908.2	919.9	931.6	947.2	955.0	958.9	935.5	916.0	908.2	908.2
40°	974.5	978.4	990.1	1005.6	1021.2	1029.0	1032.9	1009.5	990.1	982.3	978.4
42.5°	1032.9	1040.7	1052.4	1075.8	1091.4	1103.1	1103.1	1075.8	1052.4	1040.7	1040.7
45°	1087.5	1095.3	1114.8	1138.2	1161.6	1173.2	1169.4	1142.1	1114.8	1099.2	1095.3
47.5°	1130.4	1138.2	1161.6	1188.8	1220.0	1231.7	1227.8	1196.6	1161.6	1142.1	1138.2
50°	1153.8	1157.7	1184.9	1223.9	1255.1	1266.8	1259.0	1227.8	1188.8	1161.6	1157.7
52.5°	1149.9	1153.8	1184.9	1227.8	1262.9	1274.6	1262.9	1227.8	1188.8	1157.7	1153.8
55°	1126.5	1130.4	1161.6	1208.3	1243.4	1255.1	1243.4	1208.3	1165.5	1134.3	1130.4
57.5°	1083.6	1087.5	1118.7	1165.5	1204.4	1216.1	1200.5	1161.6	1118.7	1087.5	1087.5
60°	1021.2	1025.1	1056.3	1107.0	1142.1	1153.8	1134.3	1103.1	1060.2	1025.1	1021.2
62.5°	939.4	939.4	974.5	1025.1	1056.3	1071.9	1052.4	1017.3	978.4	939.4	943.3
65°	841.9	838.0	873.1	919.9	955.0	966.7	947.2	916.0	877.0	841.9	841.9
67.5°	740.6	740.6	767.9	806.9	838.0	849.7	830.2	803.0	771.8	740.6	740.6
70°	631.4	631.4	650.9	689.9	717.2	725.0	713.3	686.0	658.7	631.4	631.4
72.5°	522.3	518.4	537.9	569.1	592.5	600.3	588.6	573.0	541.8	522.3	522.3
75°	413.2	409.3	421.0	448.3	467.7	475.5	463.8	452.1	428.8	413.2	413.2
77.5°	307.9	304.0	315.7	339.1	350.8	354.7	346.9	339.1	319.6	307.9	307.9
80°	210.5	206.6	214.4	230.0	241.7	241.7	237.8	233.9	218.3	210.5	214.4
82.5°	124.7	120.8	128.6	140.3	148.1	144.2	144.2	140.3	128.6	124.7	124.7
85°	54.6	50.7	54.6	62.4	70.2	66.3	66.3	66.3	58.5	54.6	54.6
87.5°	7.8	7.8	7.8	11.7	15.6	11.7	11.7	11.7	7.8	7.8	7.8
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)