

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: P833673

Luminaire Tested: **TTN-D2-830-U-CQ-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833673
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-CQ-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5505.8 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

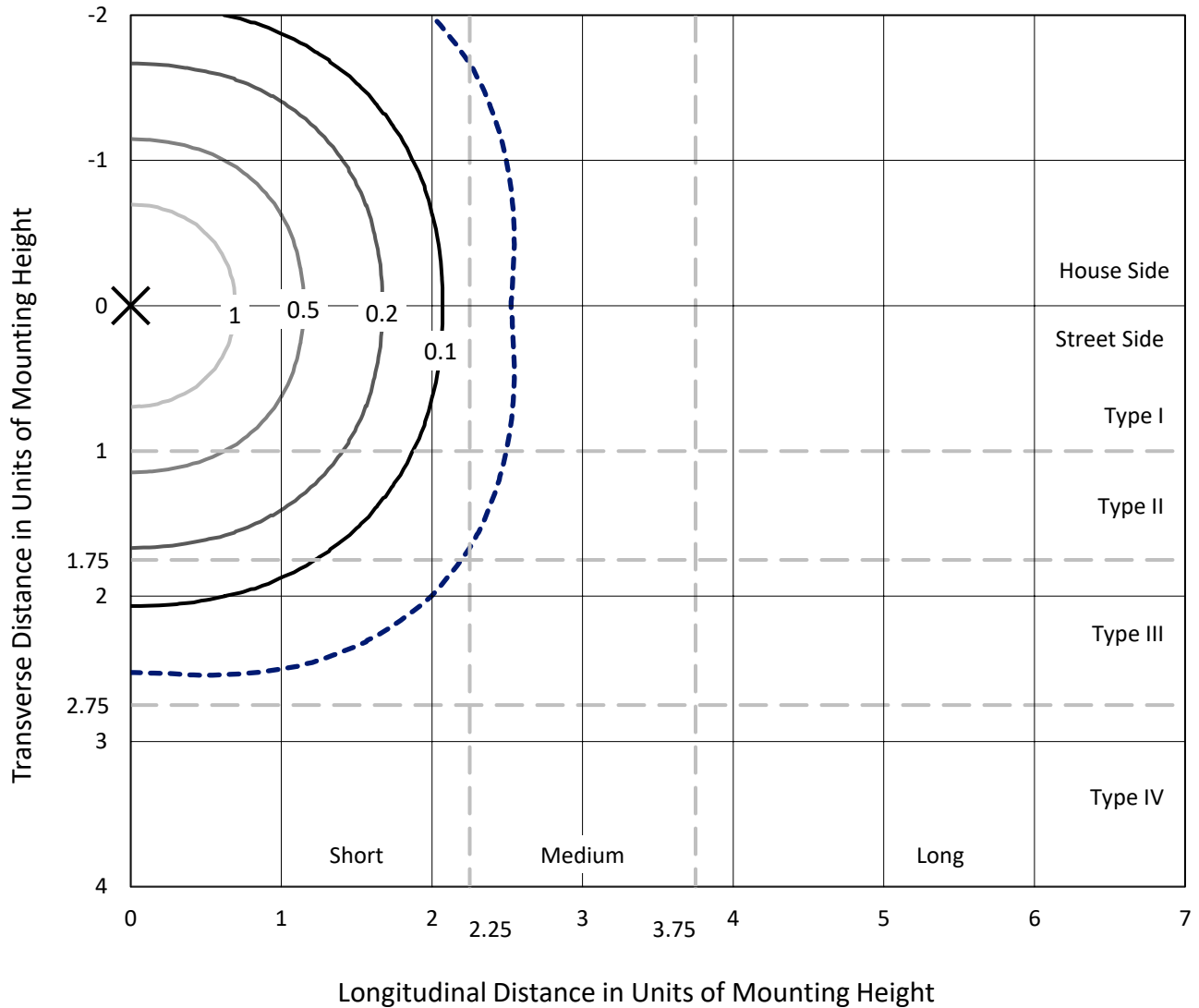
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

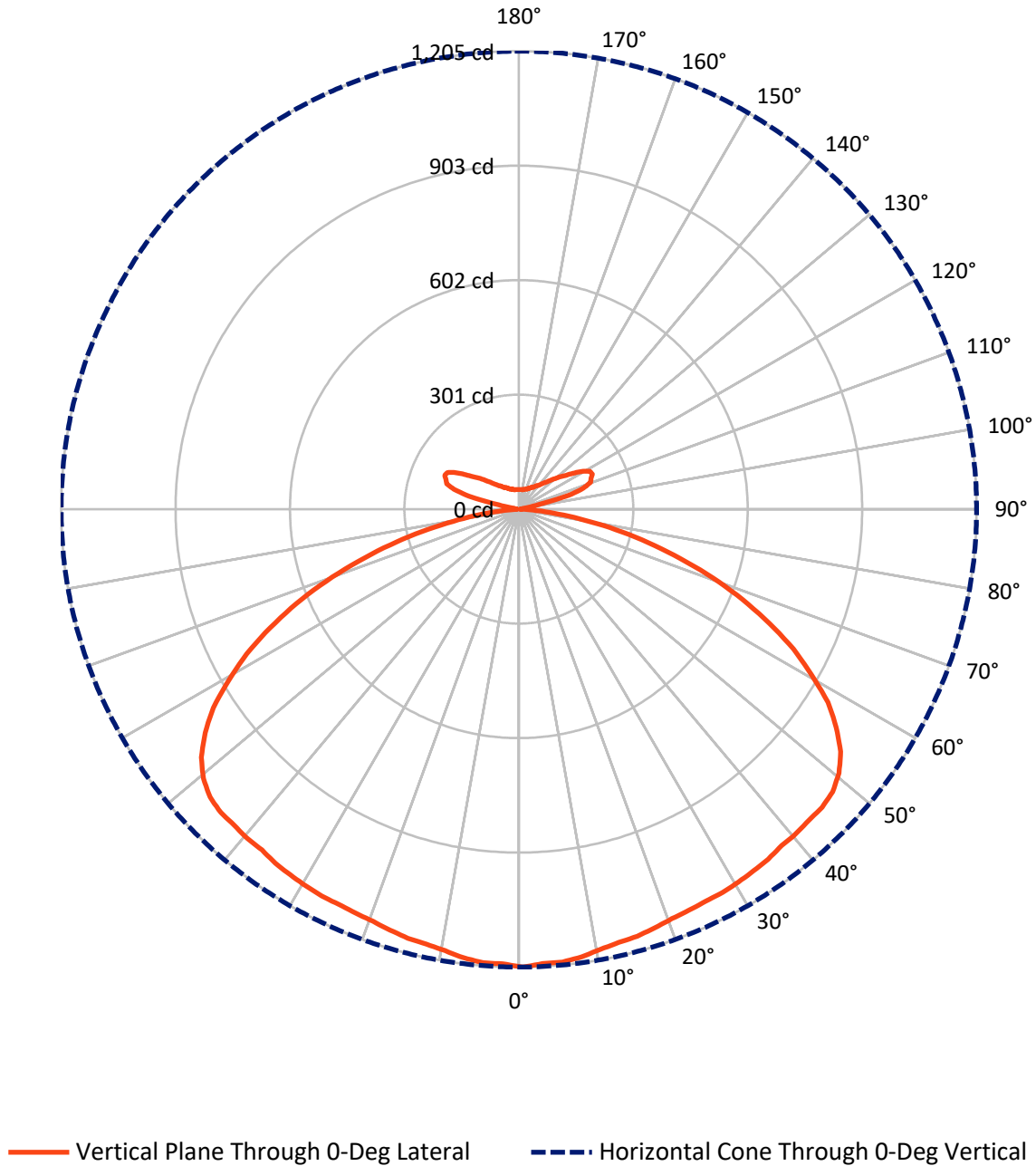
✕ Max cd
 - - - 1/2 Max cd



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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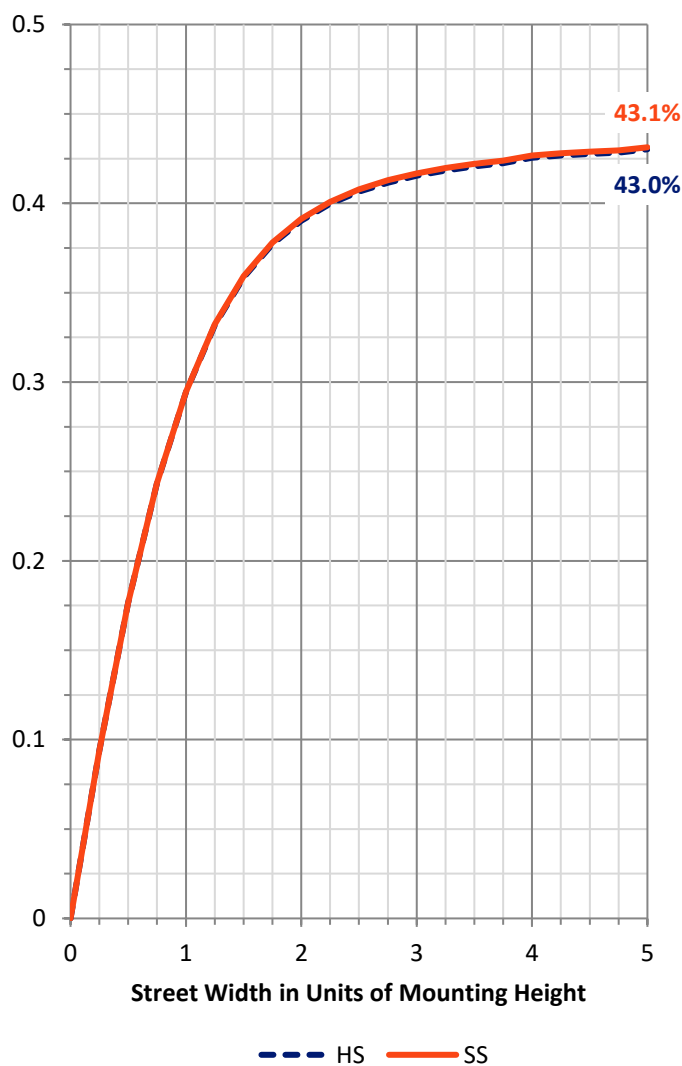
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2382.5	370.3	2752.9
	% Fixture	43.3	6.7	50.0
Street Side	Lumens	2382.5	370.3	2752.9
	% Fixture	43.3	6.7	50.0
Total	Lumens	4765.1	740.7	5505.8
	% Fixture	86.5	13.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	2.1
10°-20°	329.8	6.0
20°-30°	531.1	9.6
30°-40°	714.3	13.0
40°-50°	881.4	16.0
50°-60°	945.6	17.2
60°-70°	766.8	13.9
70°-80°	406.4	7.4
80°-90°	76.2	1.4
90°-100°	16.5	0.3
100°-110°	168.0	3.1
110°-120°	245.6	4.5
120°-130°	142.5	2.6
130°-140°	75.5	1.4
140°-150°	44.9	0.8
150°-160°	27.6	0.5
160°-170°	15.1	0.3
170°-180°	4.9	0.1
0°-90°	4765.1	86.5
0°-180°	5505.8	100.0

Coefficient of Utilization



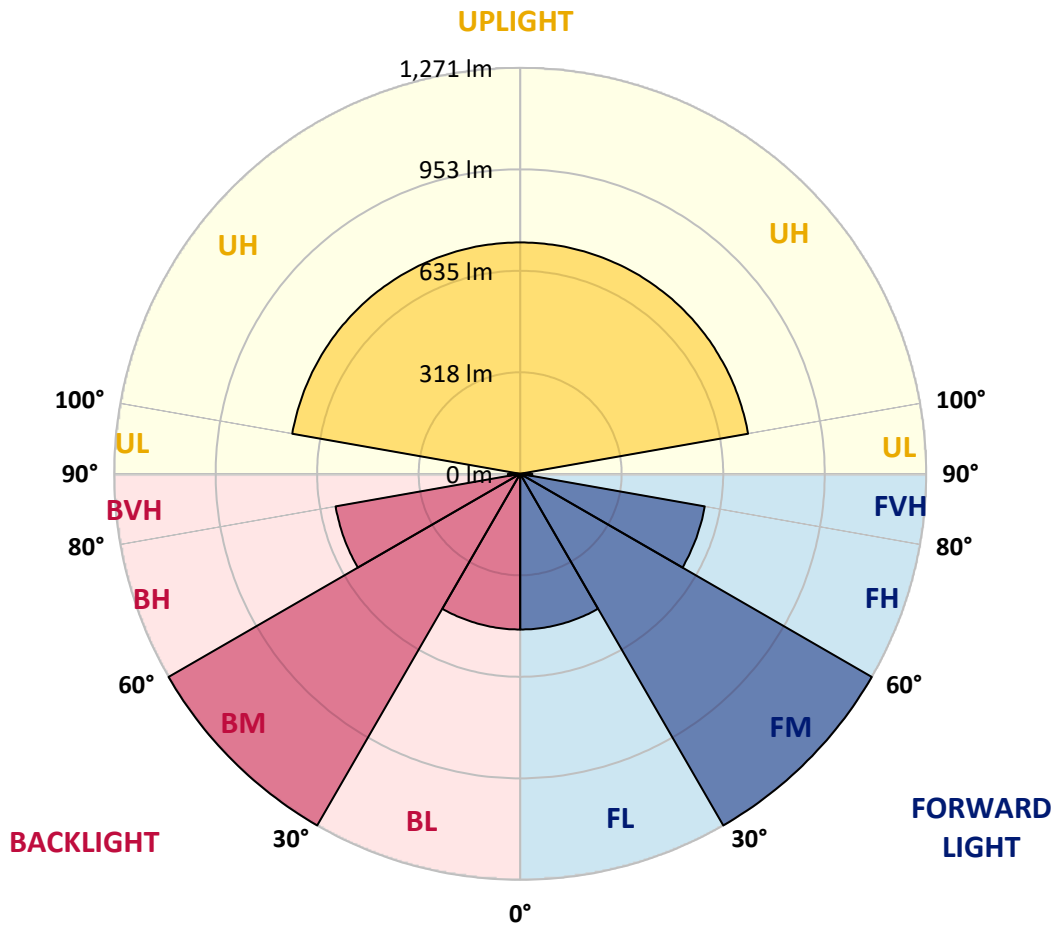
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	487.3	8.8			
FM (30°-60°)	1270.6	23.1			
FH (60°-80°)	586.6	10.7			G0/660
FVH (80°-90°)	38.1	0.7			G1/100
BL (0°-30°)	487.3	8.8	B1/500		
BM (30°-60°)	1270.6	23.1	B2/2500		
BH (60°-80°)	586.6	10.7	B2/1000		G0/660
BVH (80°-90°)	38.1	0.7			G1/100
UL (90°-100°)	16.5	0.3		U2/50	
UH (100°-180°)	724.2	13.2		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°	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6	1204.6
2.5°	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8	1200.7
5°	1196.8	1196.8	1196.8	1196.8	1193.0	1196.8	1196.8	1196.8	1196.8	1196.8	1196.8
7.5°	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1	1189.1
10°	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4	1177.4
12.5°	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6
15°	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1161.8	1161.8
17.5°	1157.9	1157.9	1157.9	1157.9	1161.8	1161.8	1161.8	1157.9	1157.9	1157.9	1157.9
20°	1150.1	1150.1	1150.1	1154.0	1154.0	1154.0	1154.0	1154.0	1150.1	1150.1	1150.1
22.5°	1146.2	1146.2	1146.2	1146.2	1150.1	1150.1	1150.1	1150.1	1146.2	1146.2	1146.2
25°	1142.3	1142.3	1146.2	1146.2	1150.1	1150.1	1150.1	1146.2	1146.2	1142.3	1142.3
27.5°	1142.3	1142.3	1146.2	1146.2	1150.1	1150.1	1150.1	1150.1	1146.2	1142.3	1142.3
30°	1138.4	1142.3	1142.3	1146.2	1150.1	1150.1	1150.1	1146.2	1142.3	1138.4	1138.4
32.5°	1134.5	1134.5	1138.4	1142.3	1146.2	1146.2	1146.2	1142.3	1138.4	1134.5	1130.6
35°	1130.6	1130.6	1130.6	1138.4	1142.3	1142.3	1142.3	1138.4	1130.6	1126.7	1126.7
37.5°	1122.8	1126.7	1130.6	1134.5	1142.3	1142.3	1142.3	1134.5	1126.7	1122.8	1118.9
40°	1122.8	1122.8	1130.6	1134.5	1146.2	1146.2	1142.3	1134.5	1126.7	1118.9	1115.0
42.5°	1118.9	1122.8	1130.6	1142.3	1154.0	1154.0	1150.1	1138.4	1126.7	1118.9	1115.0
45°	1118.9	1118.9	1130.6	1146.2	1161.8	1165.7	1157.9	1146.2	1130.6	1115.0	1115.0
47.5°	1111.1	1111.1	1126.7	1146.2	1165.7	1169.6	1165.7	1146.2	1126.7	1115.0	1111.1
50°	1091.6	1091.6	1111.1	1134.5	1157.9	1165.7	1157.9	1142.3	1115.0	1099.4	1095.5
52.5°	1060.4	1060.4	1079.9	1111.1	1134.5	1146.2	1138.4	1118.9	1091.6	1068.2	1064.3
55°	1013.6	1017.5	1037.0	1072.1	1099.4	1111.1	1103.3	1079.9	1048.7	1025.3	1017.5
57.5°	959.0	959.0	986.3	1021.4	1048.7	1060.4	1052.6	1029.2	994.1	970.7	962.9
60°	885.0	888.9	912.3	959.0	986.3	998.0	990.2	962.9	924.0	896.7	888.9
62.5°	810.9	814.8	838.2	877.2	908.4	916.2	908.4	881.1	846.0	818.7	810.9
65°	725.1	729.0	756.3	791.4	814.8	826.5	814.8	791.4	760.2	732.9	729.0
67.5°	635.5	639.4	666.6	697.8	721.2	729.0	717.3	697.8	666.6	643.3	635.5
70°	541.9	545.8	569.2	596.5	616.0	623.8	616.0	592.6	569.2	545.8	541.9
72.5°	444.4	448.3	471.7	495.1	510.7	518.5	506.8	491.2	467.8	448.3	444.4
75°	350.9	350.9	370.4	389.9	405.4	409.3	401.5	389.9	370.4	354.8	347.0
77.5°	261.2	261.2	280.7	292.4	300.2	308.0	300.2	288.5	276.8	261.2	261.2
80°	175.4	175.4	191.0	198.8	206.6	210.5	206.6	198.8	191.0	179.3	175.4
82.5°	105.3	105.3	113.1	120.9	120.9	124.8	124.8	120.9	113.1	105.3	105.3
85°	46.8	42.9	50.7	54.6	54.6	58.5	58.5	54.6	50.7	46.8	46.8
87.5°	3.9	7.8	7.8	11.7	11.7	11.7	11.7	11.7	7.8	7.8	7.8
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

(END OF REPORT)