

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: P833682

Luminaire Tested: **TTN-D2-830-U-MQ-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833682
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-MQ-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5544.6 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

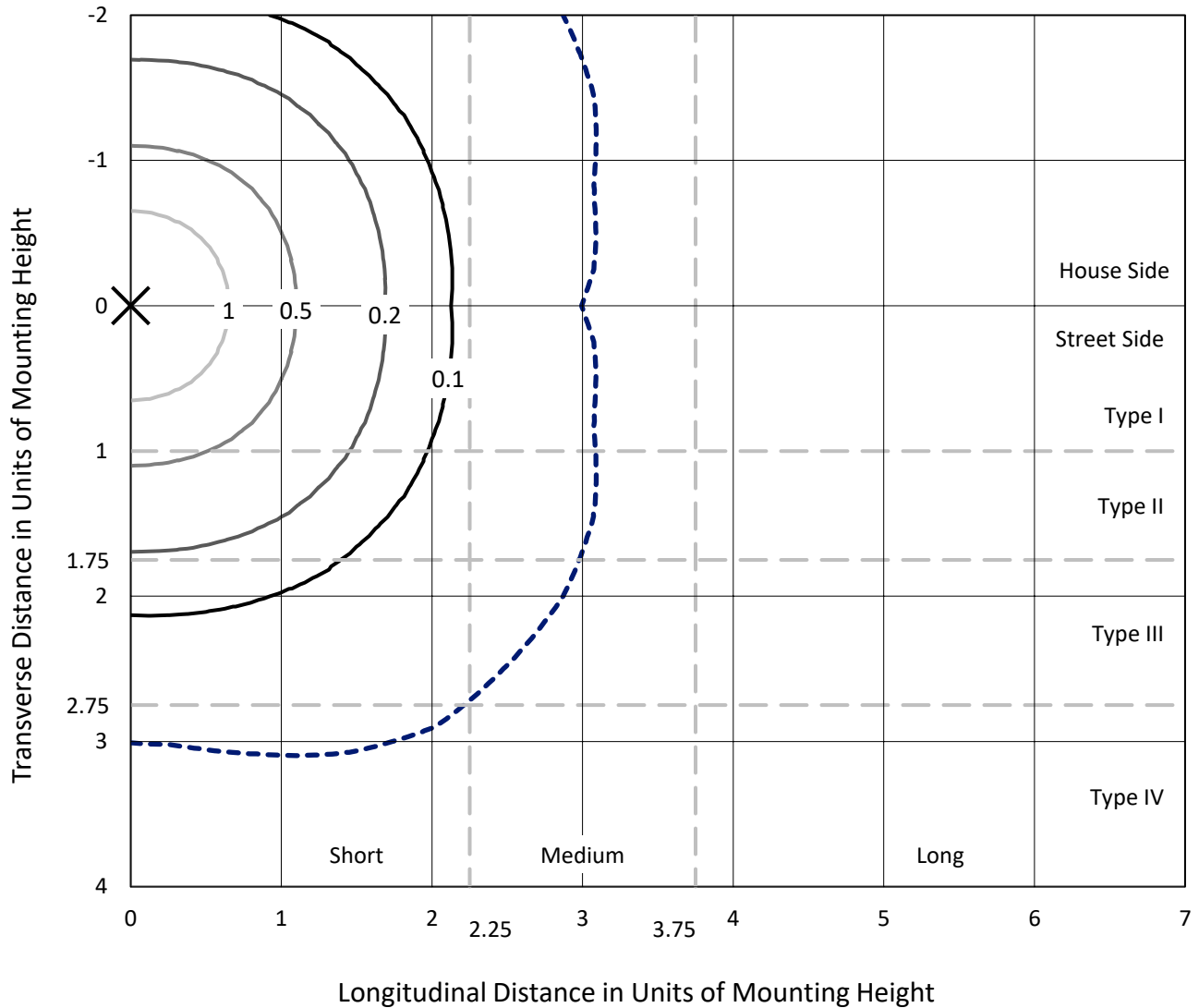
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

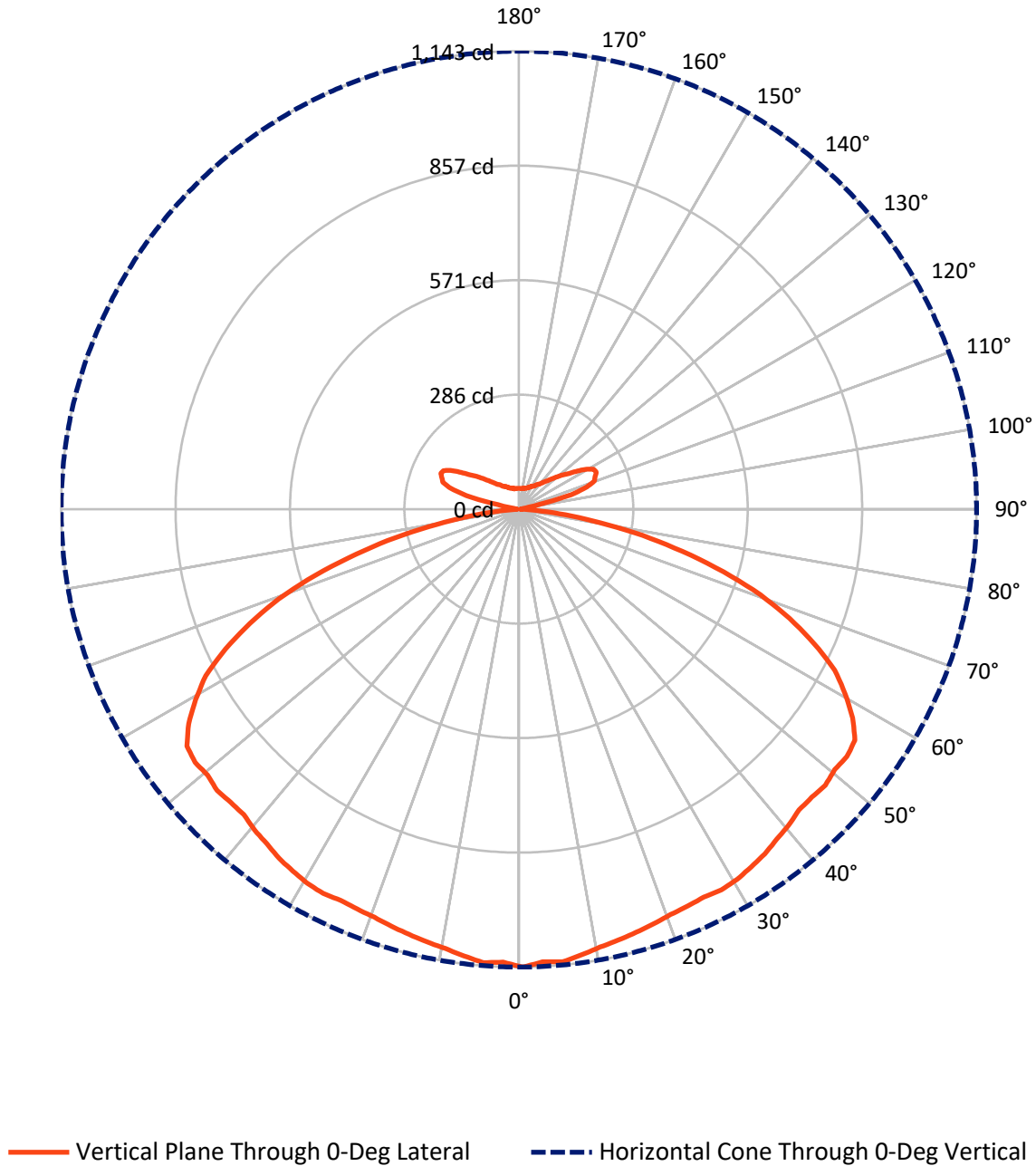
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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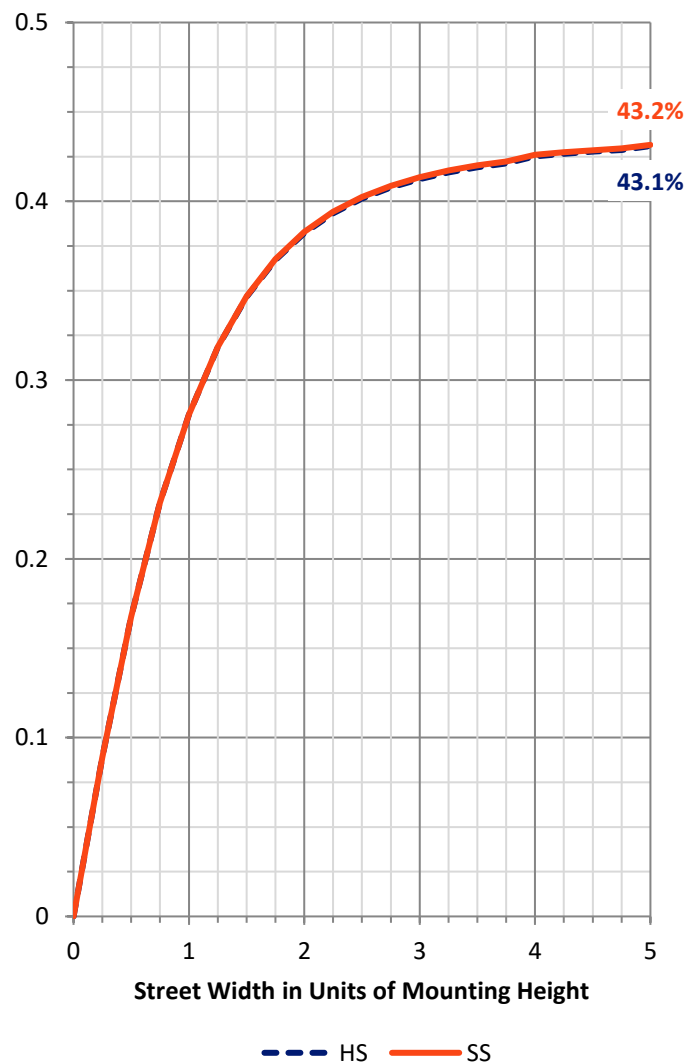
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2402.0	370.3	2772.3
	% Fixture	43.3	6.7	50.0
Street Side	Lumens	2402.0	370.3	2772.3
	% Fixture	43.3	6.7	50.0
Total	Lumens	4803.9	740.7	5544.6
	% Fixture	86.6	13.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	1.9
10°-20°	310.4	5.6
20°-30°	499.3	9.0
30°-40°	667.1	12.0
40°-50°	810.5	14.6
50°-60°	941.7	17.0
60°-70°	868.8	15.7
70°-80°	508.6	9.2
80°-90°	90.1	1.6
90°-100°	16.5	0.3
100°-110°	168.0	3.0
110°-120°	245.6	4.4
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°	4803.9	86.6
0°-180°	5544.6	100.0

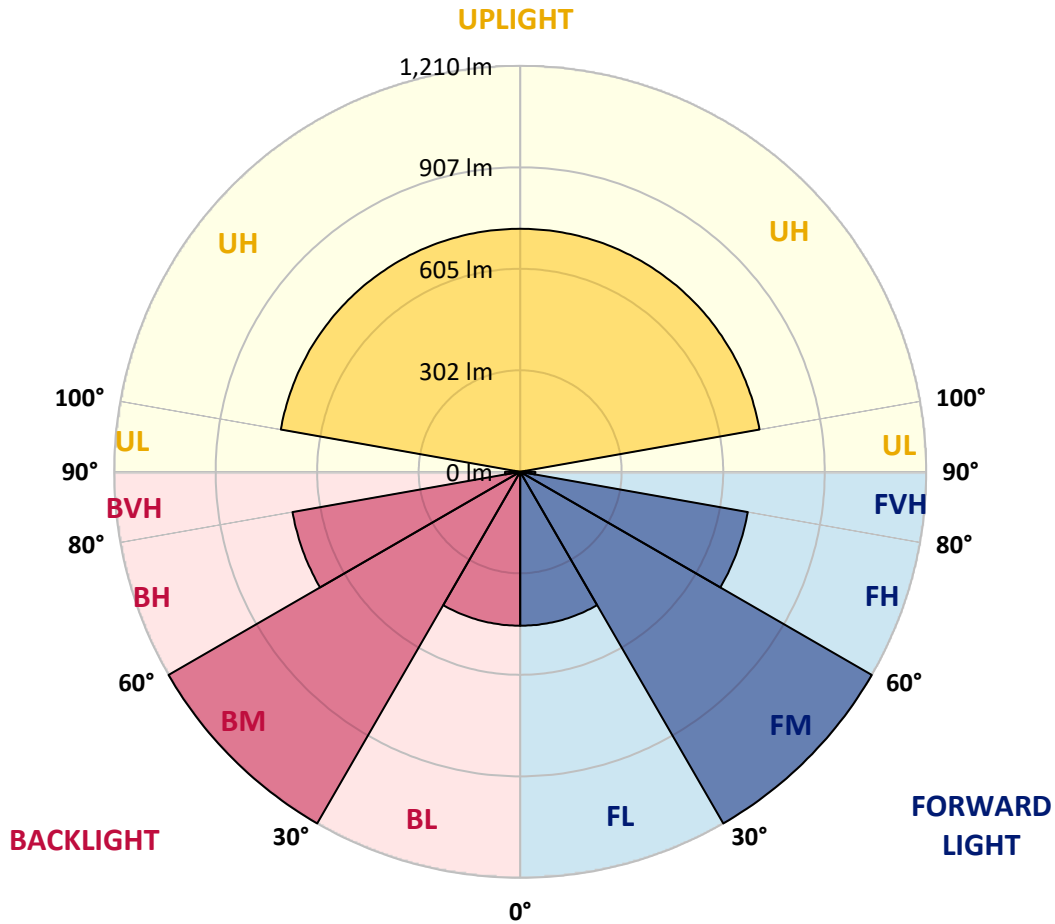


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	458.5	8.3			
FM (30°-60°)	1209.6	21.8			
FH (60°-80°)	688.7	12.4			G1/1800
FVH (80°-90°)	45.1	0.8			G1/100
BL (0°-30°)	458.5	8.3	B1/500		
BM (30°-60°)	1209.6	21.8	B2/2500		
BH (60°-80°)	688.7	12.4	B2/1000		G1/1800
BVH (80°-90°)	45.1	0.8			G1/100
UL (90°-100°)	16.5	0.3		U2/50	
UH (100°-180°)	724.2	13.1		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°	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6
2.5°	1130.9	1134.8	1130.9	1130.9	1130.9	1130.9	1130.9	1130.9	1130.9	1130.9	1134.8
5°	1134.8	1134.8	1134.8	1134.8	1130.9	1130.9	1130.9	1130.9	1130.9	1134.8	1134.8
7.5°	1123.1	1123.1	1123.1	1123.1	1123.1	1119.2	1123.1	1123.1	1123.1	1123.1	1123.1
10°	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4
12.5°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1099.7	1099.7
15°	1095.8	1095.8	1095.8	1095.8	1099.7	1099.7	1095.8	1095.8	1095.8	1095.8	1095.8
17.5°	1088.0	1088.0	1088.0	1088.0	1091.9	1091.9	1091.9	1088.0	1088.0	1088.0	1088.0
20°	1080.2	1080.2	1080.2	1080.2	1084.1	1084.1	1084.1	1084.1	1084.1	1080.2	1080.2
22.5°	1076.3	1076.3	1076.3	1076.3	1080.2	1080.2	1080.2	1080.2	1076.3	1076.3	1076.3
25°	1072.4	1076.3	1076.3	1076.3	1080.2	1084.1	1084.1	1080.2	1076.3	1072.4	1072.4
27.5°	1076.3	1076.3	1076.3	1080.2	1080.2	1084.1	1084.1	1080.2	1076.3	1076.3	1076.3
30°	1072.4	1072.4	1072.4	1076.3	1080.2	1084.1	1080.2	1080.2	1076.3	1072.4	1072.4
32.5°	1064.6	1064.6	1068.5	1072.4	1076.3	1076.3	1076.3	1072.4	1068.5	1064.6	1064.6
35°	1056.8	1056.8	1056.8	1060.7	1068.5	1068.5	1068.5	1064.6	1060.7	1056.8	1052.9
37.5°	1045.1	1049.0	1049.0	1056.8	1060.7	1064.6	1060.7	1056.8	1049.0	1045.1	1045.1
40°	1037.3	1037.3	1041.2	1049.0	1056.8	1056.8	1052.9	1049.0	1041.2	1037.3	1037.3
42.5°	1025.6	1025.6	1033.4	1041.2	1052.9	1052.9	1049.0	1041.2	1033.4	1025.6	1025.6
45°	1025.6	1025.6	1033.4	1049.0	1056.8	1064.6	1056.8	1049.0	1033.4	1025.6	1021.7
47.5°	1029.5	1029.5	1037.3	1056.8	1072.4	1080.2	1068.5	1052.9	1037.3	1029.5	1025.6
50°	1021.7	1025.6	1041.2	1060.7	1080.2	1084.1	1080.2	1056.8	1041.2	1021.7	1021.7
52.5°	1025.6	1025.6	1045.1	1076.3	1095.8	1103.6	1095.8	1076.3	1041.2	1021.7	1021.7
55°	1017.8	1013.9	1041.2	1076.3	1107.5	1123.1	1107.5	1076.3	1037.3	1013.9	1010.0
57.5°	982.7	982.7	1017.8	1052.9	1091.9	1099.7	1088.0	1052.9	1013.9	982.7	974.9
60°	935.9	939.8	974.9	1013.9	1049.0	1052.9	1045.1	1013.9	974.9	939.8	928.1
62.5°	885.2	893.0	928.1	967.1	1010.0	1017.8	1006.1	967.1	920.3	896.9	877.4
65°	811.1	822.8	861.8	904.7	951.5	947.6	947.6	900.8	865.7	826.7	807.2
67.5°	729.3	741.0	768.2	826.7	865.7	861.8	857.9	826.7	768.2	741.0	729.3
70°	639.6	647.4	674.7	733.2	768.2	772.1	760.4	729.3	674.7	655.2	635.7
72.5°	534.3	538.2	577.2	624.0	659.1	655.2	651.3	624.0	573.3	553.8	530.4
75°	421.2	425.1	460.2	503.1	530.4	526.5	522.6	503.1	460.2	436.8	417.3
77.5°	315.9	312.0	347.1	378.3	393.9	397.8	390.0	374.4	343.2	323.7	312.0
80°	206.7	202.8	234.0	257.4	269.1	269.1	265.2	253.5	230.1	214.5	206.7
82.5°	117.0	113.1	132.6	148.2	159.9	156.0	152.1	144.3	132.6	120.9	113.1
85°	42.9	42.9	54.6	62.4	70.2	70.2	66.3	62.4	50.7	46.8	42.9
87.5°	3.9	3.9	7.8	11.7	11.7	11.7	7.8	7.8	3.9	3.9	3.9
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	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)