

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: P833565

Luminaire Tested: **TTN-D2-740-U-MQ-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833565
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-D2-740-U-MQ-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6355.6 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G2

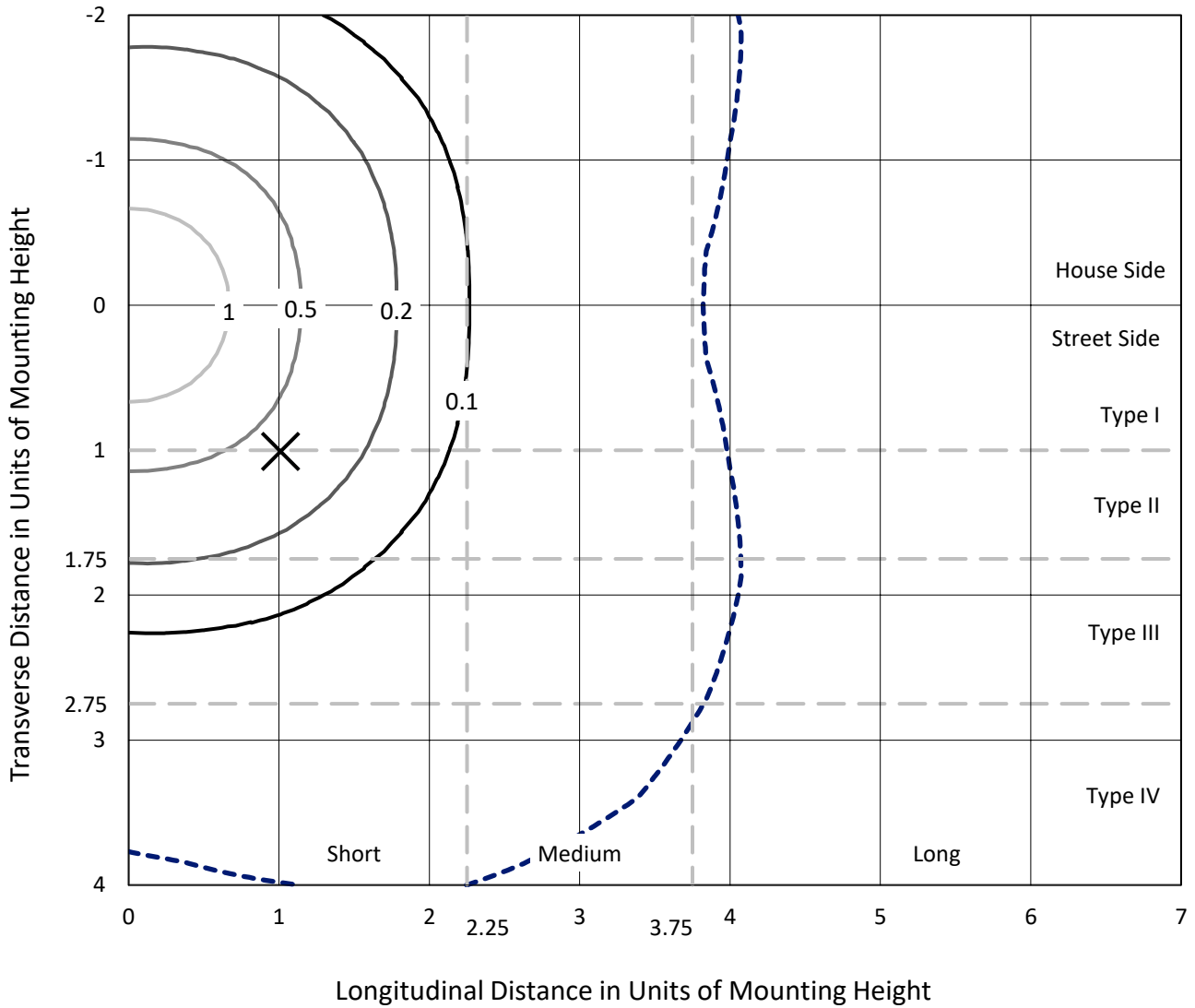
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

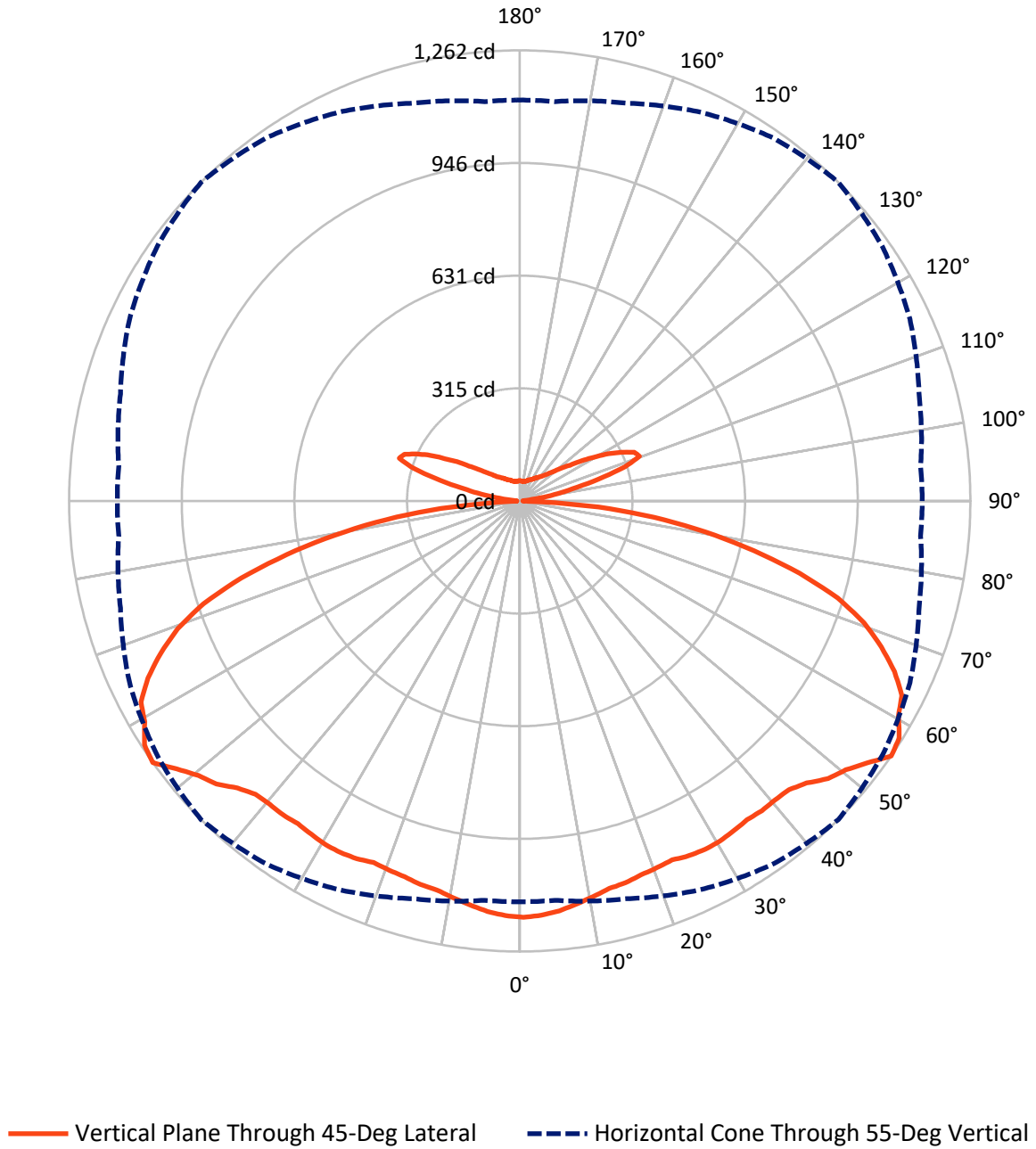
✕ Max cd
 - - - 1/2 Max cd



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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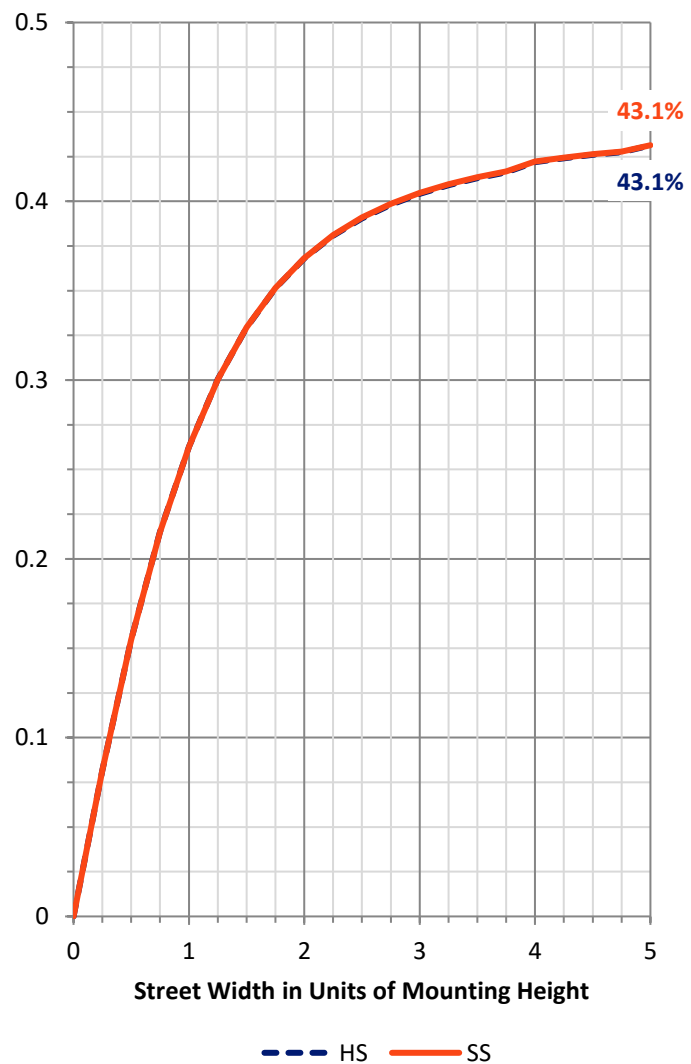
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2772.1	405.8	3177.8
	% Fixture	43.6	6.4	50.0
Street Side	Lumens	2772.1	405.8	3177.8
	% Fixture	43.6	6.4	50.0
Total	Lumens	5544.1	811.5	6355.6
	% Fixture	87.2	12.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	1.7
10°-20°	313.3	4.9
20°-30°	506.5	8.0
30°-40°	685.3	10.8
40°-50°	858.4	13.5
50°-60°	1052.0	16.6
60°-70°	1054.5	16.6
70°-80°	761.0	12.0
80°-90°	204.0	3.2
90°-100°	18.1	0.3
100°-110°	184.1	2.9
110°-120°	269.1	4.2
120°-130°	156.2	2.5
130°-140°	82.7	1.3
140°-150°	49.1	0.8
150°-160°	30.3	0.5
160°-170°	16.5	0.3
170°-180°	5.4	0.1
0°-90°	5544.1	87.2
0°-180°	6355.6	100.0

Coefficient of Utilization

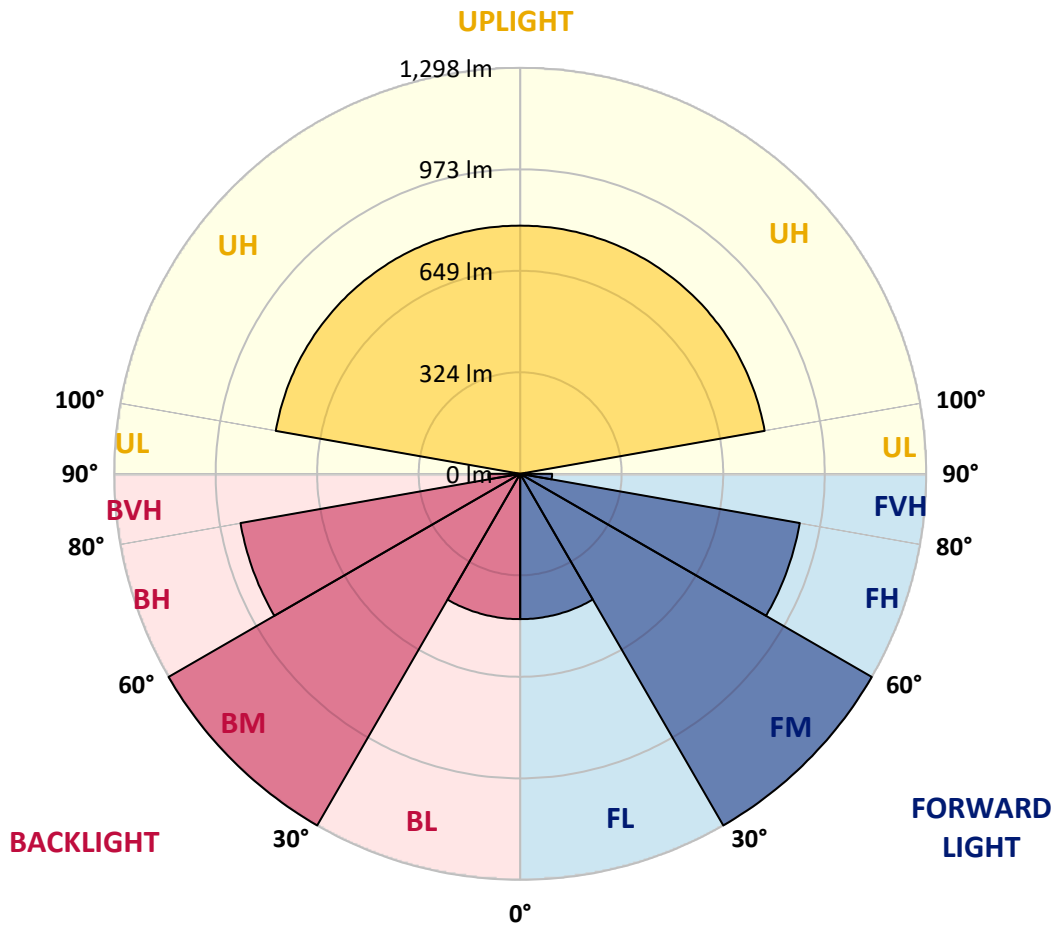


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.5	7.3			
FM (30°-60°)	1297.8	20.4			
FH (60°-80°)	907.7	14.3			G1/1800
FVH (80°-90°)	102.0	1.6			G2/225
BL (0°-30°)	464.5	7.3	B1/500		
BM (30°-60°)	1297.8	20.4	B2/2500		
BH (60°-80°)	907.7	14.3	B2/1000		G1/1800
BVH (80°-90°)	102.0	1.6			G2/225
UL (90°-100°)	18.1	0.3		U2/50	
UH (100°-180°)	793.4	12.5		U4/1000	

BUG Rating: B2-U4-G2
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2	1166.2
2.5°	1161.9	1161.9	1161.9	1157.5	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9
5°	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2	1153.2
7.5°	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1
10°	1122.7	1122.7	1122.7	1122.7	1127.0	1127.0	1127.0	1127.0	1122.7	1122.7	1122.7
12.5°	1109.6	1109.6	1109.6	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1109.6
15°	1105.3	1105.3	1105.3	1105.3	1109.6	1109.6	1109.6	1109.6	1105.3	1105.3	1105.3
17.5°	1096.6	1096.6	1096.6	1100.9	1100.9	1100.9	1100.9	1100.9	1096.6	1096.6	1096.6
20°	1087.9	1087.9	1092.2	1092.2	1096.6	1096.6	1096.6	1092.2	1092.2	1087.9	1092.2
22.5°	1087.9	1087.9	1087.9	1092.2	1092.2	1092.2	1092.2	1087.9	1087.9	1087.9	1087.9
25°	1087.9	1087.9	1092.2	1096.6	1096.6	1100.9	1096.6	1092.2	1087.9	1087.9	1087.9
27.5°	1092.2	1092.2	1096.6	1100.9	1100.9	1105.3	1100.9	1096.6	1092.2	1092.2	1092.2
30°	1092.2	1092.2	1096.6	1100.9	1100.9	1105.3	1100.9	1096.6	1092.2	1092.2	1092.2
32.5°	1083.5	1087.9	1092.2	1096.6	1100.9	1100.9	1100.9	1096.6	1092.2	1087.9	1087.9
35°	1079.2	1083.5	1087.9	1092.2	1096.6	1096.6	1096.6	1092.2	1087.9	1083.5	1083.5
37.5°	1074.8	1074.8	1083.5	1087.9	1092.2	1100.9	1096.6	1087.9	1083.5	1079.2	1079.2
40°	1070.5	1074.8	1079.2	1087.9	1092.2	1100.9	1096.6	1087.9	1079.2	1074.8	1074.8
42.5°	1070.5	1070.5	1079.2	1087.9	1096.6	1105.3	1100.9	1092.2	1079.2	1074.8	1070.5
45°	1074.8	1079.2	1092.2	1109.6	1118.3	1127.0	1122.7	1109.6	1087.9	1079.2	1074.8
47.5°	1092.2	1096.6	1109.6	1127.0	1148.8	1161.9	1148.8	1127.0	1109.6	1096.6	1092.2
50°	1100.9	1105.3	1127.0	1148.8	1179.3	1183.6	1179.3	1148.8	1127.0	1105.3	1105.3
52.5°	1118.3	1118.3	1144.4	1183.6	1209.7	1218.4	1209.7	1188.0	1144.4	1122.7	1118.3
55°	1122.7	1122.7	1153.2	1201.0	1240.2	1261.9	1240.2	1205.4	1157.5	1127.0	1127.0
57.5°	1096.6	1105.3	1144.4	1192.3	1240.2	1253.2	1240.2	1196.7	1148.8	1109.6	1105.3
60°	1066.1	1079.2	1114.0	1170.6	1205.4	1218.4	1209.7	1170.6	1118.3	1079.2	1074.8
62.5°	1035.7	1053.1	1092.2	1135.7	1188.0	1201.0	1188.0	1135.7	1092.2	1053.1	1035.7
65°	970.4	987.8	1044.4	1096.6	1144.4	1153.2	1148.8	1096.6	1044.4	987.8	979.1
67.5°	905.1	918.2	957.3	1040.0	1079.2	1092.2	1083.5	1035.7	961.7	918.2	913.8
70°	835.5	848.5	883.4	961.7	1000.8	1022.6	1005.2	961.7	883.4	848.5	844.2
72.5°	744.1	761.5	800.7	870.3	909.5	931.2	913.8	870.3	800.7	757.2	748.5
75°	635.3	648.4	696.2	752.8	792.0	809.4	796.3	757.2	696.2	648.4	644.0
77.5°	517.8	530.9	574.4	631.0	652.7	670.1	657.1	626.6	574.4	530.9	526.5
80°	391.6	404.7	443.9	487.4	509.1	526.5	513.5	483.0	443.9	404.7	400.3
82.5°	256.7	269.8	304.6	339.4	361.2	378.6	365.5	335.1	309.0	269.8	265.4
85°	108.8	121.8	152.3	187.1	204.5	221.9	208.9	182.8	152.3	126.2	121.8
87.5°	8.7	13.1	13.1	17.4	13.1	21.8	13.1	13.1	13.1	13.1	13.1
90°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9
92.5°	6.9	6.9	6.9	9.7	11.1	9.7	11.1	8.3	8.3	6.9	6.9
95°	8.3	8.3	9.7	12.5	15.3	16.7	16.7	9.7	9.7	8.3	8.3
97.5°	11.1	12.5	12.5	15.3	25.0	45.8	27.8	13.9	13.9	12.5	11.1
100°	18.0	19.4	19.4	34.7	73.6	98.6	70.8	36.1	26.4	19.4	19.4
102.5°	58.3	61.1	75.0	112.5	166.6	151.3	127.7	120.8	83.3	66.6	63.9
105°	148.6	147.2	158.3	187.4	233.3	229.1	211.0	191.6	165.2	152.7	152.7
107.5°	195.8	195.8	205.5	230.5	265.2	309.6	313.8	248.5	218.0	204.1	202.7
110°	220.8	220.8	229.1	249.9	295.7	358.2	355.4	306.8	269.4	251.3	248.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	226.3	227.7	238.8	270.7	320.7	348.5	336.0	316.6	299.9	286.0	283.2
115°	234.6	234.6	247.1	277.7	305.5	316.6	302.7	287.4	276.3	270.7	273.5
117.5°	231.9	236.0	238.8	255.5	273.5	281.8	274.9	254.1	245.8	243.0	238.8
120°	215.2	215.2	218.0	226.3	236.0	240.2	237.4	223.5	216.6	215.2	212.4
122.5°	191.6	193.0	191.6	195.8	202.7	206.9	204.1	193.0	190.2	190.2	187.4
125°	168.0	168.0	166.6	169.4	173.6	172.2	173.6	168.0	166.6	166.6	165.2
127.5°	151.3	149.9	147.2	148.6	149.9	149.9	151.3	145.8	147.2	148.6	147.2
130°	134.7	134.7	131.9	131.9	131.9	129.1	131.9	129.1	130.5	131.9	133.3
132.5°	119.4	119.4	115.2	113.9	113.9	113.9	115.2	113.9	116.6	119.4	119.4
135°	106.9	106.9	102.7	104.1	104.1	102.7	104.1	102.7	105.5	106.9	106.9
137.5°	97.2	97.2	94.4	94.4	94.4	93.0	94.4	94.4	95.8	98.6	100.0
140°	88.9	88.9	87.5	87.5	86.1	87.5	87.5	87.5	88.9	90.2	90.2
142.5°	84.7	83.3	81.9	80.5	81.9	81.9	81.9	80.5	81.9	84.7	84.7
145°	77.8	77.8	76.4	76.4	76.4	77.8	76.4	76.4	77.8	77.8	79.1
147.5°	73.6	73.6	72.2	73.6	73.6	73.6	73.6	72.2	73.6	73.6	75.0
150°	72.2	70.8	69.4	70.8	70.8	69.4	69.4	69.4	69.4	70.8	70.8
152.5°	68.0	68.0	66.6	68.0	66.6	66.6	66.6	66.6	66.6	68.0	69.4
155°	65.3	65.3	63.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
157.5°	62.5	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9	63.9
160°	61.1	61.1	61.1	61.1	59.7	59.7	59.7	61.1	61.1	61.1	62.5
162.5°	59.7	59.7	59.7	59.7	58.3	58.3	58.3	58.3	59.7	59.7	61.1
165°	59.7	58.3	58.3	58.3	56.9	56.9	56.9	56.9	58.3	59.7	58.3
167.5°	56.9	56.9	56.9	56.9	56.9	55.5	55.5	56.9	56.9	56.9	58.3
170°	56.9	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.9
172.5°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	55.5	55.5	56.9	56.9
175°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	56.9	56.9	56.9	55.5
177.5°	56.9	56.9	56.9	56.9	55.5	56.9	56.9	56.9	56.9	56.9	56.9
180°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9

(END OF REPORT)