

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: P833563

Luminaire Tested: **TTN-D2-740-U-MQ-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833563
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-UPL1
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: 5866.9 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G2

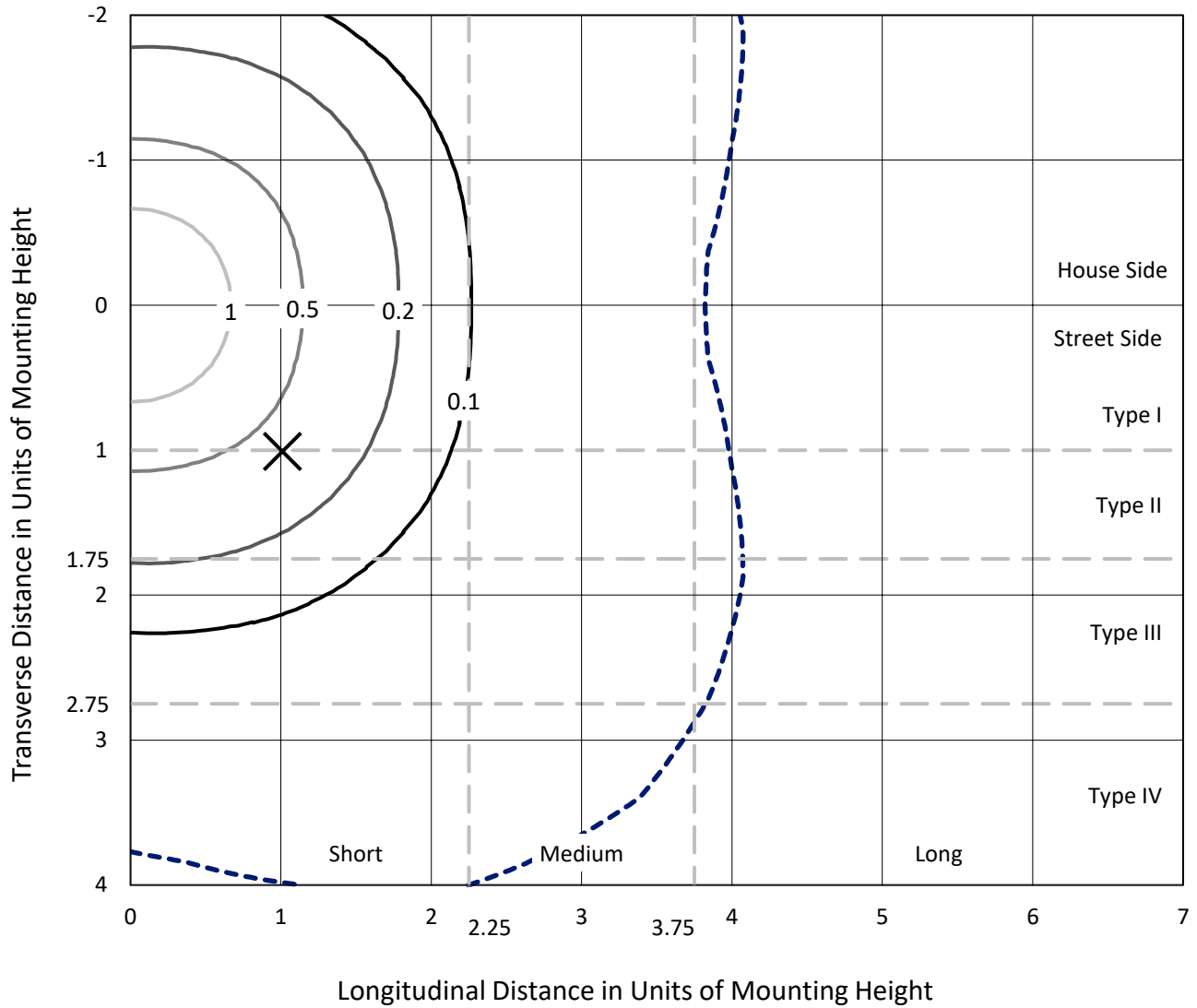
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833563
 CATALOG NUMBER: TTN-D2-740-U-MQ-UPL1

Iso-Footcandle Lines of Horizontal Illumination

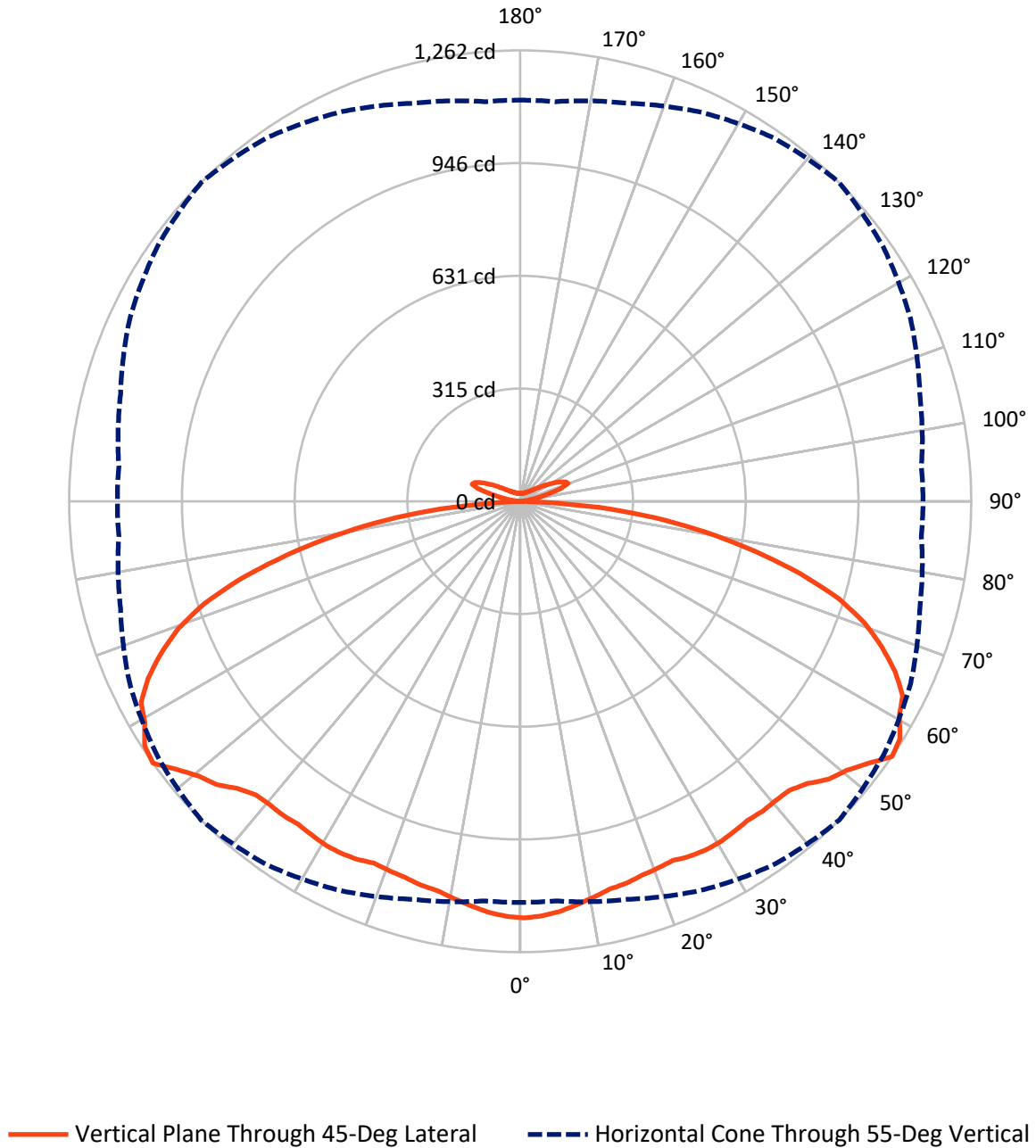
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P833563
CATALOG NUMBER: TTN-D2-740-U-MQ-UPL1

Luminous Intensity Polar Plot



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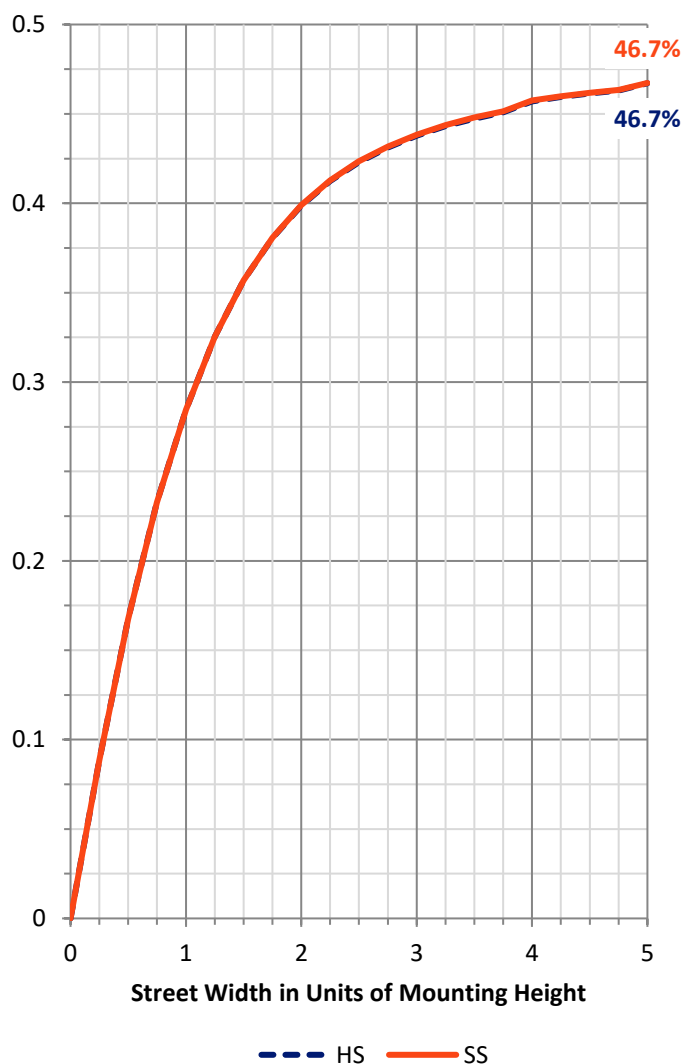
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2771.7	161.7	2933.4
	% Fixture	47.2	2.8	50.0
Street Side	Lumens	2771.7	161.7	2933.4
	% Fixture	47.2	2.8	50.0
Total	Lumens	5543.4	323.4	5866.9
	% Fixture	94.5	5.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	1.9
10°-20°	313.3	5.3
20°-30°	506.5	8.6
30°-40°	685.3	11.7
40°-50°	858.4	14.6
50°-60°	1052.0	17.9
60°-70°	1054.5	18.0
70°-80°	761.0	13.0
80°-90°	203.3	3.5
90°-100°	7.2	0.1
100°-110°	73.4	1.3
110°-120°	107.3	1.8
120°-130°	62.3	1.1
130°-140°	33.0	0.6
140°-150°	19.6	0.3
150°-160°	12.1	0.2
160°-170°	6.6	0.1
170°-180°	2.1	0.0
0°-90°	5543.4	94.5
0°-180°	5866.9	100.0

Coefficient of Utilization



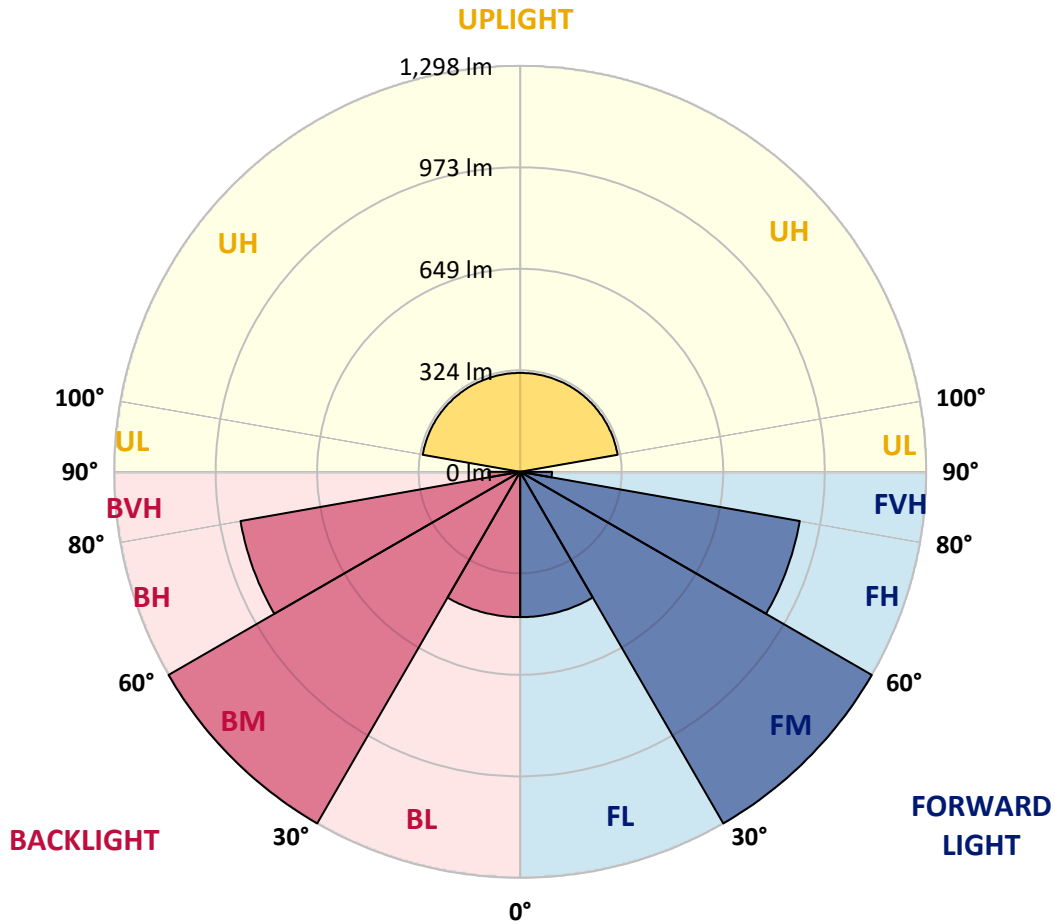
REPORT NUMBER: P833563
 CATALOG NUMBER: TTN-D2-740-U-MQ-UPL1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.5	7.9			
FM (30°-60°)	1297.8	22.1			
FH (60°-80°)	907.7	15.5			G1/1800
FVH (80°-90°)	101.7	1.7			G2/225
BL (0°-30°)	464.5	7.9	B1/500		
BM (30°-60°)	1297.8	22.1	B2/2500		
BH (60°-80°)	907.7	15.5	B2/1000		G1/1800
BVH (80°-90°)	101.7	1.7			G2/225
UL (90°-100°)	7.2	0.1		U1/10	
UH (100°-180°)	316.2	5.4		U3/500	

BUG Rating: B2-U3-G2

Type V Short





REPORT NUMBER: P833563

CATALOG NUMBER: TTN-D2-740-U-MQ-UPL1

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°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8
92.5°	2.8	2.8	2.8	3.9	4.4	3.9	4.4	3.3	3.3	2.8	2.8
95°	3.3	3.3	3.9	5.0	6.1	6.6	6.6	3.9	3.9	3.3	3.3
97.5°	4.4	5.0	5.0	6.1	10.0	18.3	11.1	5.5	5.5	5.0	4.4
100°	7.2	7.7	7.7	13.8	29.3	39.3	28.2	14.4	10.5	7.7	7.7
102.5°	23.2	24.3	29.9	44.8	66.4	60.3	50.9	48.1	33.2	26.6	25.5
105°	59.2	58.7	63.1	74.7	93.0	91.3	84.1	76.4	65.8	60.9	60.9
107.5°	78.0	78.0	81.9	91.9	105.7	123.4	125.1	99.0	86.9	81.3	80.8
110°	88.0	88.0	91.3	99.6	117.9	142.8	141.6	122.3	107.3	100.2	99.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	90.2	90.7	95.2	107.9	127.8	138.9	133.9	126.2	119.5	114.0	112.9
115°	93.5	93.5	98.5	110.7	121.7	126.2	120.6	114.5	110.1	107.9	109.0
117.5°	92.4	94.1	95.2	101.8	109.0	112.3	109.6	101.3	97.9	96.8	95.2
120°	85.8	85.8	86.9	90.2	94.1	95.7	94.6	89.1	86.3	85.8	84.7
122.5°	76.4	76.9	76.4	78.0	80.8	82.4	81.3	76.9	75.8	75.8	74.7
125°	67.0	67.0	66.4	67.5	69.2	68.6	69.2	67.0	66.4	66.4	65.8
127.5°	60.3	59.8	58.7	59.2	59.8	59.8	60.3	58.1	58.7	59.2	58.7
130°	53.7	53.7	52.6	52.6	52.6	51.5	52.6	51.5	52.0	52.6	53.1
132.5°	47.6	47.6	45.9	45.4	45.4	45.4	45.9	45.4	46.5	47.6	47.6
135°	42.6	42.6	40.9	41.5	41.5	40.9	41.5	40.9	42.1	42.6	42.6
137.5°	38.7	38.7	37.6	37.6	37.6	37.1	37.6	37.6	38.2	39.3	39.8
140°	35.4	35.4	34.9	34.9	34.3	34.9	34.9	34.9	35.4	36.0	36.0
142.5°	33.8	33.2	32.6	32.1	32.6	32.6	32.6	32.1	32.6	33.8	33.8
145°	31.0	31.0	30.4	30.4	30.4	31.0	30.4	30.4	31.0	31.0	31.5
147.5°	29.3	29.3	28.8	29.3	29.3	29.3	29.3	28.8	29.3	29.3	29.9
150°	28.8	28.2	27.7	28.2	28.2	27.7	27.7	27.7	27.7	28.2	28.2
152.5°	27.1	27.1	26.6	27.1	26.6	26.6	26.6	26.6	26.6	27.1	27.7
155°	26.0	26.0	25.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
157.5°	24.9	25.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.5	25.5
160°	24.3	24.3	24.3	24.3	23.8	23.8	23.8	24.3	24.3	24.3	24.9
162.5°	23.8	23.8	23.8	23.8	23.2	23.2	23.2	23.2	23.8	23.8	24.3
165°	23.8	23.2	23.2	23.2	22.7	22.7	22.7	22.7	23.2	23.8	23.2
167.5°	22.7	22.7	22.7	22.7	22.7	22.1	22.1	22.7	22.7	22.7	23.2
170°	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.7
172.5°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.7	22.7
175°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.7	22.7	22.7	22.1
177.5°	22.7	22.7	22.7	22.7	22.1	22.7	22.7	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7

(END OF REPORT)