

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: P834032

Luminaire Tested: **TTN-D3-830-U-CQ-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P834032  
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-D3-830-U-CQ-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

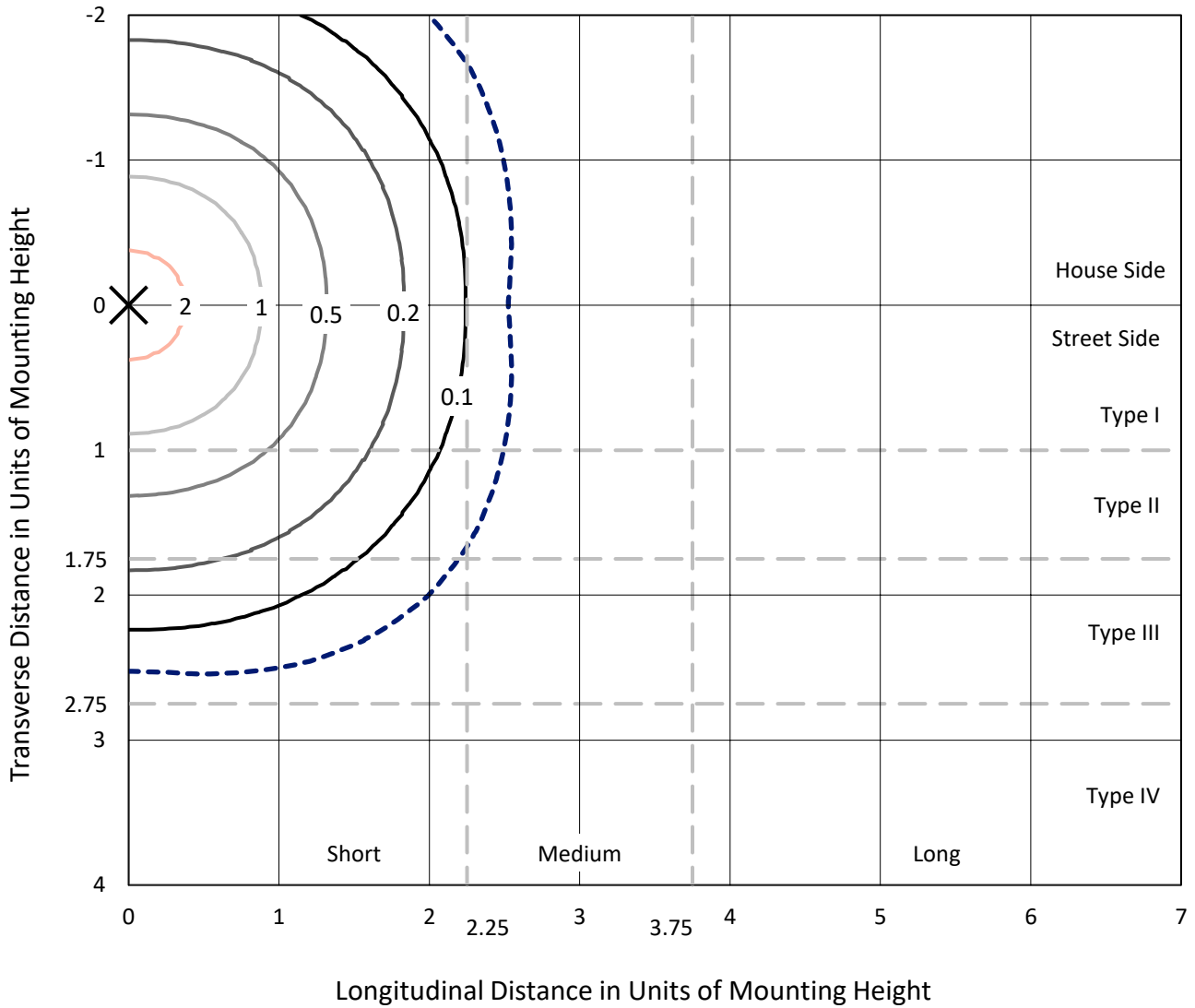
Lumens per Lamp: N/A  
Luminaire Lumens: 6874.7 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 63.7  
Input Voltage (V): NR  
Input Current (Ain): 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

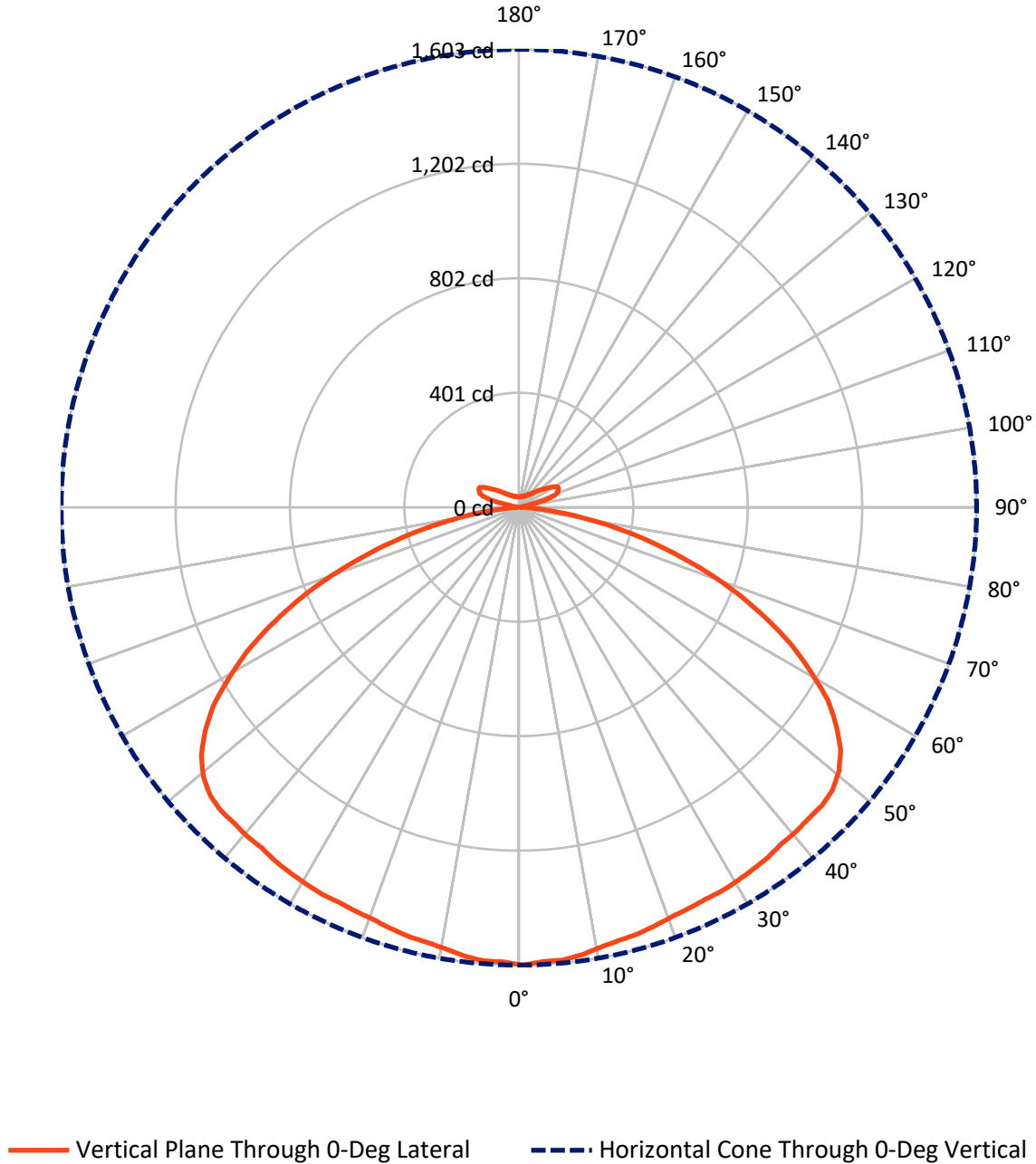
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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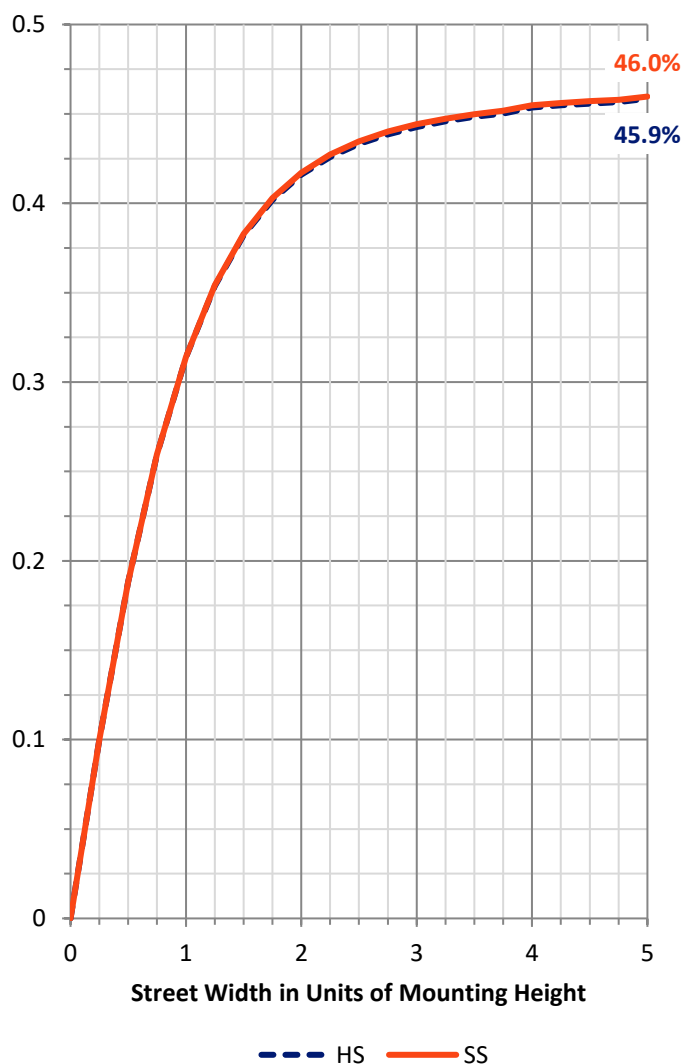
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3170.4	267.0	3437.4
	% Fixture	46.1	3.9	50.0
<b>Street Side</b>	Lumens	3170.4	267.0	3437.4
	% Fixture	46.1	3.9	50.0
<b>Total</b>	Lumens	6340.7	534.0	6874.7
	% Fixture	92.2	7.8	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.1	2.2
10°-20°	438.9	6.4
20°-30°	706.8	10.3
30°-40°	950.6	13.8
40°-50°	1172.9	17.1
50°-60°	1258.3	18.3
60°-70°	1020.4	14.8
70°-80°	540.8	7.9
80°-90°	100.7	1.5
90°-100°	11.9	0.2
100°-110°	121.1	1.8
110°-120°	177.1	2.6
120°-130°	102.8	1.5
130°-140°	54.4	0.8
140°-150°	32.3	0.5
150°-160°	19.9	0.3
160°-170°	10.9	0.2
170°-180°	3.5	0.1
0°-90°	6340.7	92.2
0°-180°	6874.7	100.0

**Coefficient of Utilization**



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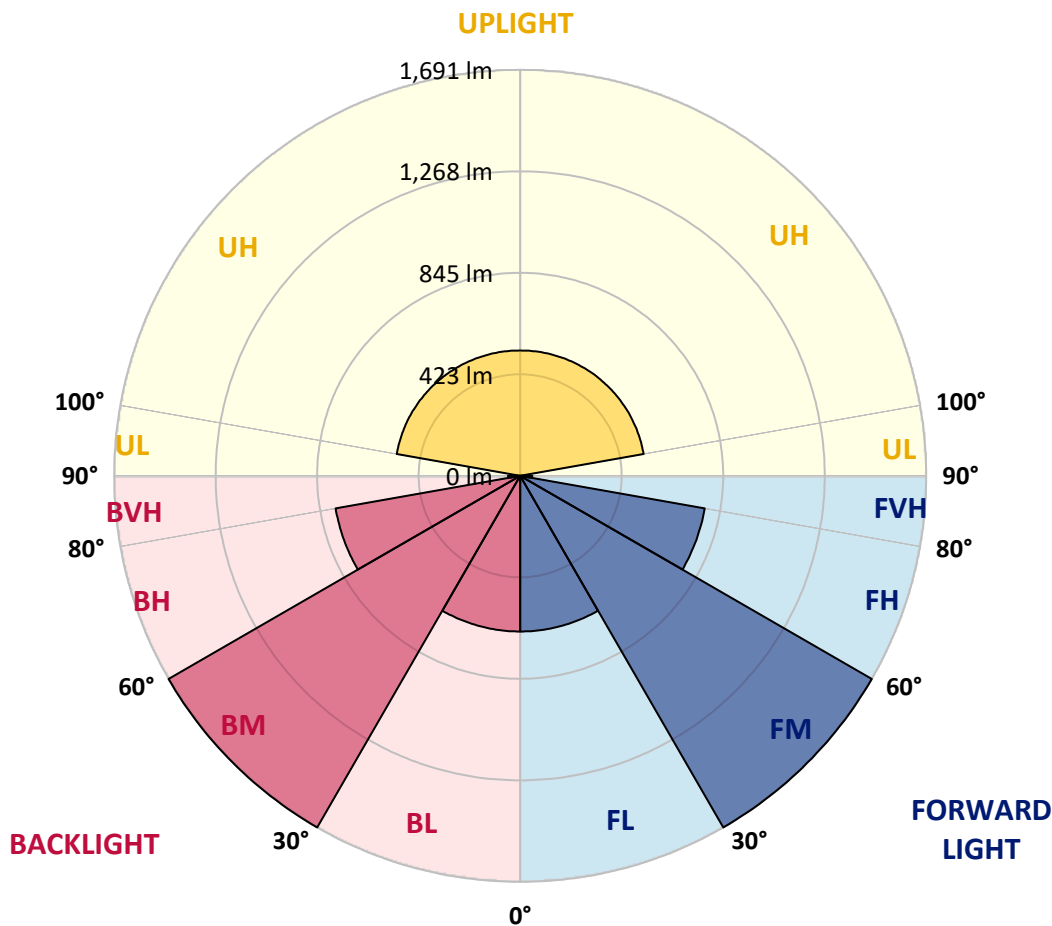
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	648.4	9.4			
FM (30°-60°)	1690.9	24.6			
FH (60°-80°)	780.6	11.4			G1/1800
FVH (80°-90°)	50.4	0.7			G1/100
BL (0°-30°)	648.4	9.4	B2/1000		
BM (30°-60°)	1690.9	24.6	B2/2500		
BH (60°-80°)	780.6	11.4	B2/1000		G1/1800
BVH (80°-90°)	50.4	0.7			G1/100
UL (90°-100°)	11.9	0.2		U2/50	
UH (100°-180°)	522.1	7.6		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°	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2	1603.2
2.5°	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8	1598.0
5°	1592.8	1592.8	1592.8	1592.8	1587.6	1592.8	1592.8	1592.8	1592.8	1592.8	1592.8
7.5°	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4	1582.4
10°	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8	1566.8
12.5°	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5	1556.5
15°	1551.3	1551.3	1551.3	1551.3	1551.3	1551.3	1551.3	1551.3	1551.3	1546.1	1546.1
17.5°	1540.9	1540.9	1540.9	1540.9	1546.1	1546.1	1546.1	1540.9	1540.9	1540.9	1540.9
20°	1530.5	1530.5	1530.5	1535.7	1535.7	1535.7	1535.7	1535.7	1530.5	1530.5	1530.5
22.5°	1525.3	1525.3	1525.3	1525.3	1530.5	1530.5	1530.5	1530.5	1525.3	1525.3	1525.3
25°	1520.1	1520.1	1525.3	1525.3	1530.5	1530.5	1530.5	1525.3	1525.3	1520.1	1520.1
27.5°	1520.1	1520.1	1525.3	1525.3	1530.5	1530.5	1530.5	1530.5	1525.3	1520.1	1520.1
30°	1515.0	1520.1	1520.1	1525.3	1530.5	1530.5	1530.5	1525.3	1520.1	1515.0	1515.0
32.5°	1509.8	1509.8	1515.0	1520.1	1525.3	1525.3	1525.3	1520.1	1515.0	1509.8	1504.6
35°	1504.6	1504.6	1504.6	1515.0	1520.1	1520.1	1520.1	1515.0	1504.6	1499.4	1499.4
37.5°	1494.2	1499.4	1504.6	1509.8	1520.1	1520.1	1520.1	1509.8	1499.4	1494.2	1489.0
40°	1494.2	1494.2	1504.6	1509.8	1525.3	1525.3	1520.1	1509.8	1499.4	1489.0	1483.8
42.5°	1489.0	1494.2	1504.6	1520.1	1535.7	1535.7	1530.5	1515.0	1499.4	1489.0	1483.8
45°	1489.0	1489.0	1504.6	1525.3	1546.1	1551.3	1540.9	1525.3	1504.6	1483.8	1483.8
47.5°	1478.6	1478.6	1499.4	1525.3	1551.3	1556.5	1551.3	1525.3	1499.4	1483.8	1478.6
50°	1452.7	1452.7	1478.6	1509.8	1540.9	1551.3	1540.9	1520.1	1483.8	1463.1	1457.9
52.5°	1411.2	1411.2	1437.1	1478.6	1509.8	1525.3	1515.0	1489.0	1452.7	1421.6	1416.4
55°	1348.9	1354.1	1380.1	1426.8	1463.1	1478.6	1468.3	1437.1	1395.6	1364.5	1354.1
57.5°	1276.3	1276.3	1312.6	1359.3	1395.6	1411.2	1400.8	1369.7	1323.0	1291.9	1281.5
60°	1177.7	1182.9	1214.0	1276.3	1312.6	1328.2	1317.8	1281.5	1229.6	1193.3	1182.9
62.5°	1079.1	1084.3	1115.5	1167.3	1208.9	1219.2	1208.9	1172.5	1125.8	1089.5	1079.1
65°	965.0	970.2	1006.5	1053.2	1084.3	1099.9	1084.3	1053.2	1011.7	975.4	970.2
67.5°	845.7	850.9	887.2	928.7	959.8	970.2	954.6	928.7	887.2	856.1	845.7
70°	721.2	726.4	757.5	793.8	819.7	830.1	819.7	788.6	757.5	726.4	721.2
72.5°	591.5	596.6	627.8	658.9	679.7	690.0	674.5	653.7	622.6	596.6	591.5
75°	466.9	466.9	492.9	518.8	539.6	544.8	534.4	518.8	492.9	472.1	461.8
77.5°	347.6	347.6	373.6	389.1	399.5	409.9	399.5	383.9	368.4	347.6	347.6
80°	233.5	233.5	254.2	264.6	275.0	280.2	275.0	264.6	254.2	238.7	233.5
82.5°	140.1	140.1	150.5	160.8	160.8	166.0	166.0	160.8	150.5	140.1	140.1
85°	62.3	57.1	67.4	72.6	72.6	77.8	77.8	72.6	67.4	62.3	62.3
87.5°	5.2	10.4	10.4	15.6	15.6	15.6	15.6	15.6	10.4	10.4	10.4
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)