

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: P832954

Luminaire Tested: **TTN-D0-830-U-DL-CG-UPL1**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832954  
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-D0-830-U-DL-CG-UPL1  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND DRIVE LANE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

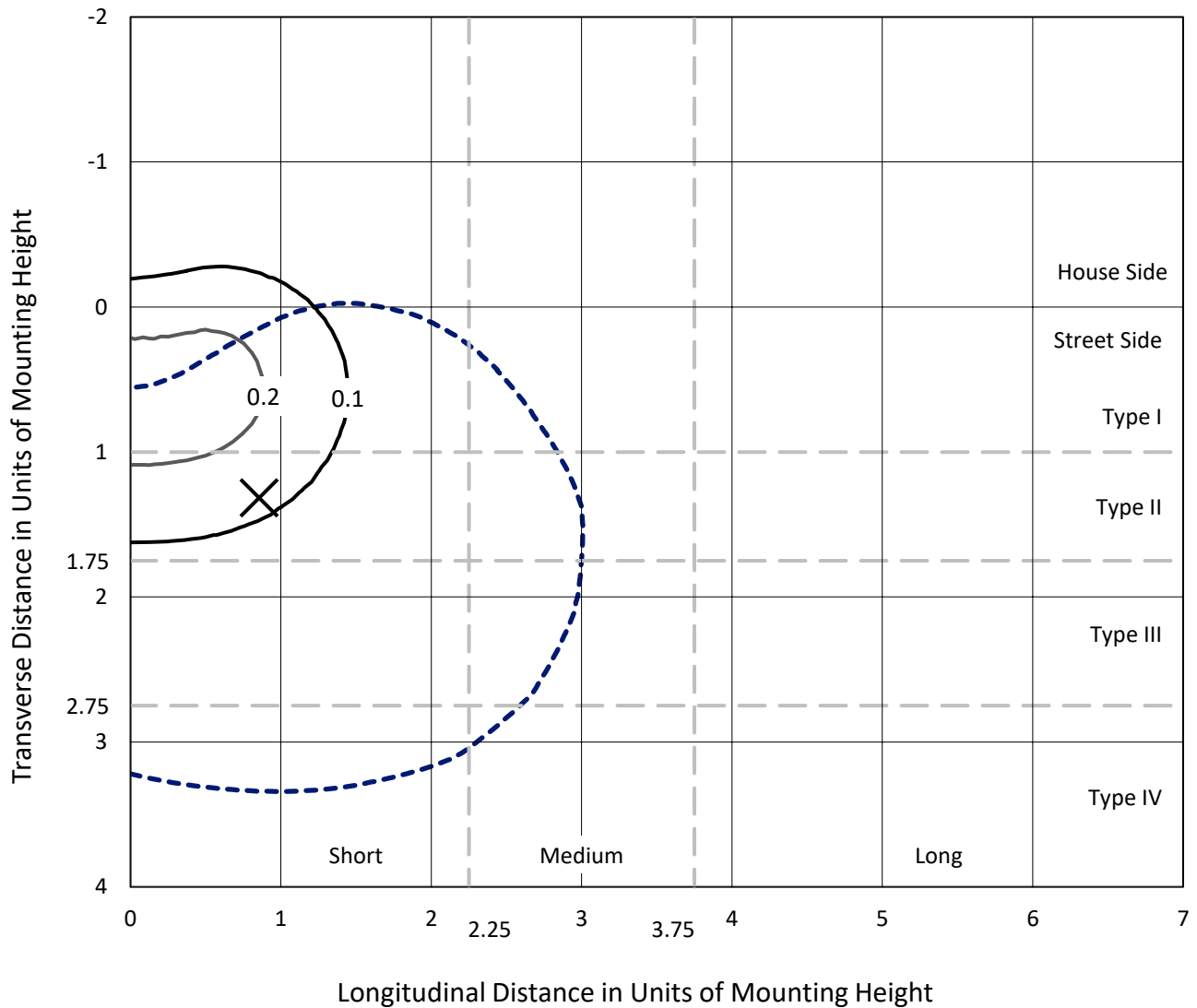
Lumens per Lamp: N/A  
Luminaire Lumens: 1318.9 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U3 - G1  
  
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (Ain): 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

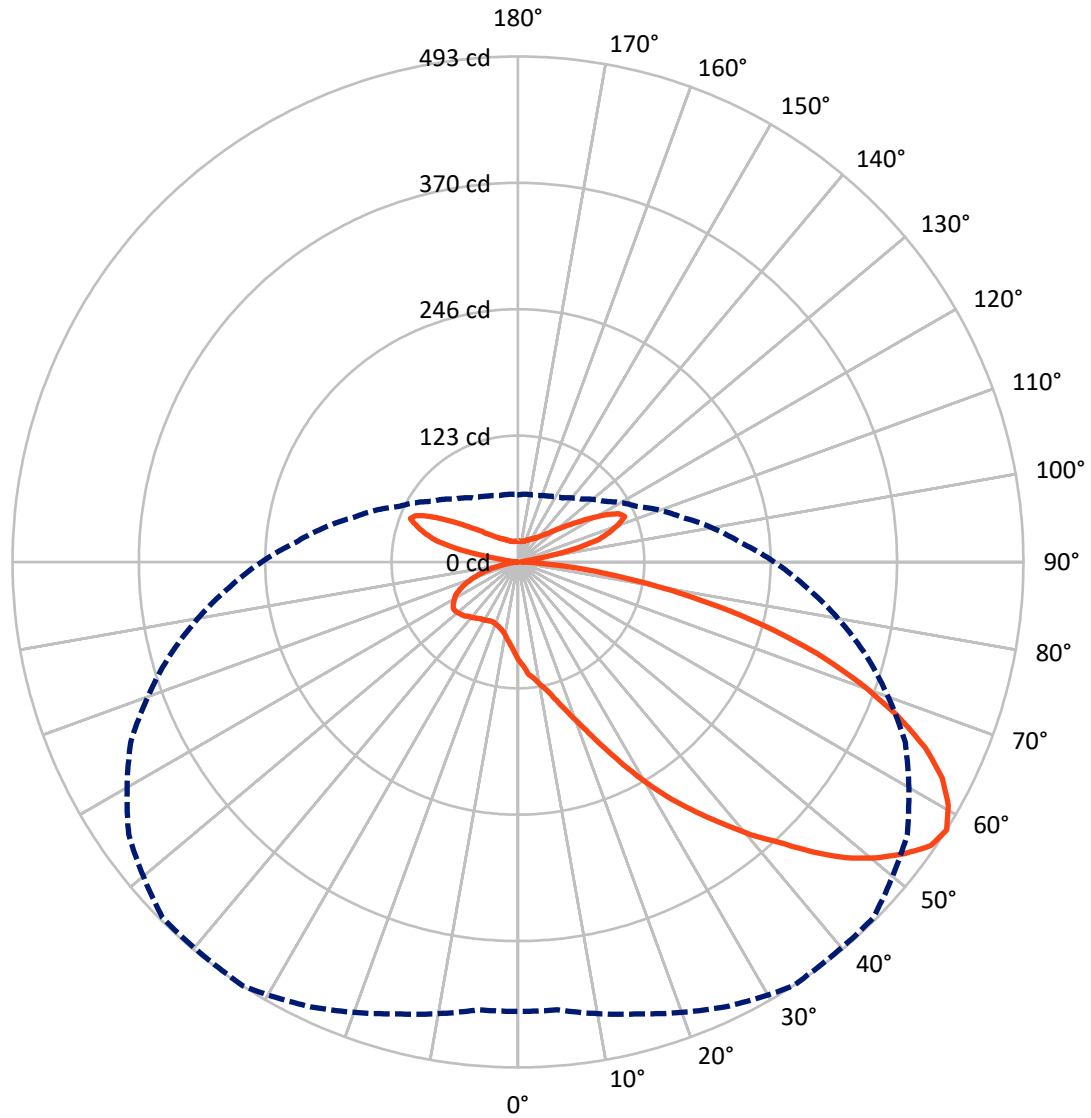
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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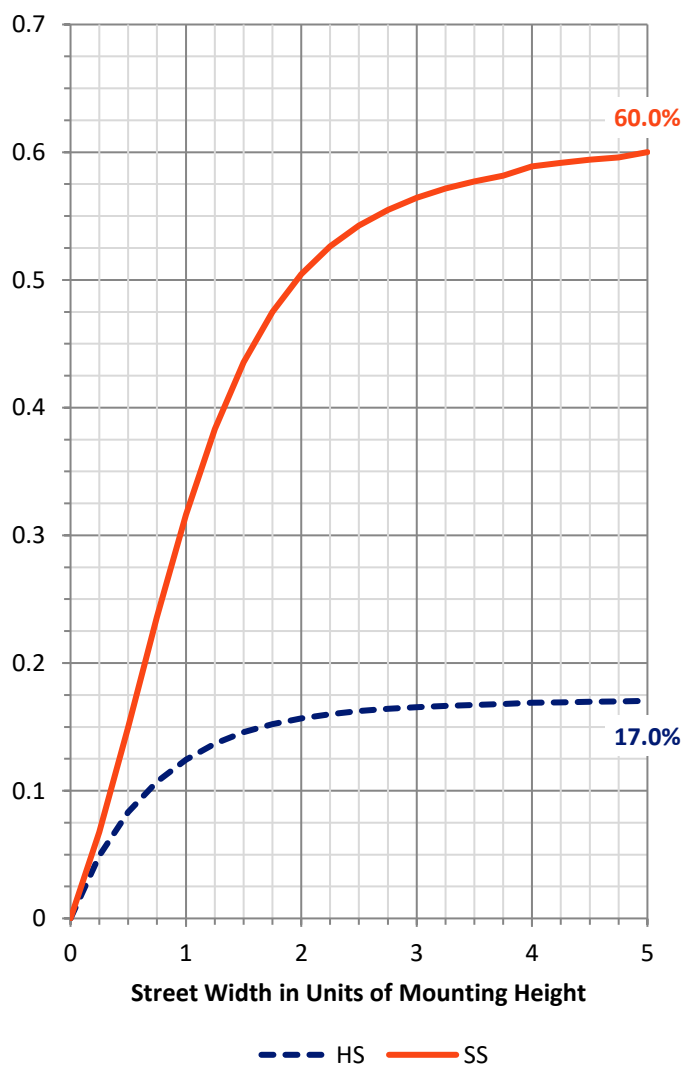
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	225.9	147.7	373.7
	% Fixture	17.1	11.2	28.3
<b>Street Side</b>	Lumens	797.5	147.7	945.2
	% Fixture	60.5	11.2	71.7
<b>Total</b>	Lumens	1023.4	295.5	1318.9
	% Fixture	77.6	22.4	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.2	0.7
10°-20°	29.7	2.3
20°-30°	62.7	4.8
30°-40°	113.9	8.6
40°-50°	180.0	13.6
50°-60°	239.1	18.1
60°-70°	230.1	17.4
70°-80°	135.1	10.2
80°-90°	23.6	1.8
90°-100°	6.6	0.5
100°-110°	67.0	5.1
110°-120°	98.0	7.4
120°-130°	56.9	4.3
130°-140°	30.1	2.3
140°-150°	17.9	1.4
150°-160°	11.0	0.8
160°-170°	6.0	0.5
170°-180°	2.0	0.1
0°-90°	1023.4	77.6
0°-180°	1318.9	100.0

**Coefficient of Utilization**



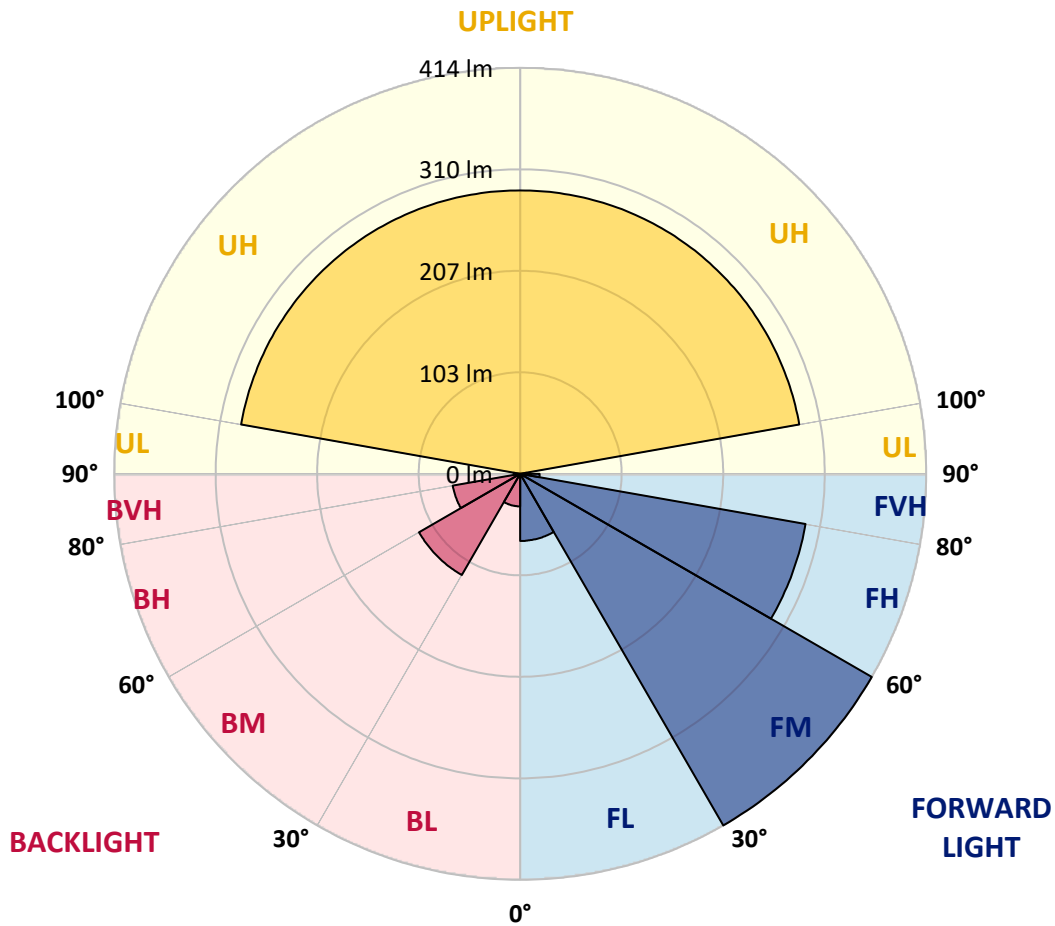
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	68.4	5.2			
FM (30°-60°)	413.9	31.4			
FH (60°-80°)	295.4	22.4			G0/660
FVH (80°-90°)	19.8	1.5			G1/100
BL (0°-30°)	33.2	2.5	B0/110		
BM (30°-60°)	119.1	9.0	B0/220		
BH (60°-80°)	69.8	5.3	B0/110		G0/110
BVH (80°-90°)	3.8	0.3			G0/10
UL (90°-100°)	6.6	0.5		U1/10	
UH (100°-180°)	288.9	21.9		U3/500	

**BUG Rating: B0-U3-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
2.5°	102.2	103.0	102.2	102.2	101.3	101.3	100.4	99.5	98.6	97.7	95.9
5°	113.8	113.8	112.9	111.1	110.2	109.3	107.5	104.8	103.0	100.4	97.7
7.5°	119.2	119.2	118.3	116.5	114.7	113.8	111.1	107.5	104.8	101.3	97.7
10°	126.3	127.2	125.5	123.7	121.9	121.0	117.4	112.9	108.4	103.9	98.6
12.5°	134.4	135.3	134.4	131.7	129.0	128.1	124.6	119.2	113.8	107.5	101.3
15°	145.2	147.0	144.3	142.5	139.8	138.9	134.4	128.1	121.9	113.8	105.7
17.5°	157.7	158.6	156.8	154.1	152.3	151.4	147.0	139.8	130.8	121.9	112.0
20°	172.0	172.9	172.0	168.5	166.7	165.8	161.3	153.2	142.5	132.6	120.1
22.5°	189.1	190.9	188.2	185.5	183.7	183.7	178.3	169.4	156.8	144.3	129.9
25°	208.8	211.5	207.9	206.1	204.3	203.4	198.9	188.2	173.8	158.6	140.7
27.5°	233.0	234.8	232.1	231.2	227.6	227.6	220.4	207.9	192.7	174.7	154.1
30°	254.5	256.3	254.5	254.5	251.8	250.9	243.7	231.2	212.4	190.9	165.8
32.5°	275.1	276.9	276.0	276.9	276.0	275.1	266.1	252.7	233.9	206.1	177.4
35°	295.7	298.4	297.5	300.2	299.3	298.4	291.2	275.1	252.7	224.9	190.0
37.5°	317.2	319.9	319.9	322.6	323.5	323.5	315.4	298.4	273.3	241.9	204.3
40°	340.5	343.2	343.2	347.7	349.5	349.5	340.5	323.5	295.7	260.8	219.5
42.5°	362.9	365.6	366.5	371.0	373.7	374.6	367.4	347.7	315.4	279.6	233.9
45°	384.4	387.1	389.8	398.8	403.2	402.3	397.0	376.4	340.5	299.3	249.1
47.5°	405.0	408.6	413.1	424.7	431.0	430.1	426.5	403.2	363.8	318.1	262.5
50°	421.2	423.8	432.8	445.3	453.4	454.3	448.9	426.5	383.5	332.4	272.4
52.5°	433.7	437.3	448.0	466.0	472.2	474.9	468.6	446.2	403.2	345.0	280.5
55°	442.7	442.7	458.8	479.4	488.4	490.2	490.2	462.4	414.9	353.1	285.0
57.5°	438.2	438.2	456.1	478.5	492.8	491.9	490.2	463.3	416.7	351.3	282.3
60°	425.6	428.3	445.3	467.8	482.1	481.2	475.8	451.6	407.7	344.1	276.9
62.5°	408.6	413.1	431.0	448.0	464.2	466.9	459.7	438.2	392.5	333.3	267.0
65°	376.4	382.6	405.0	423.8	436.4	441.8	432.8	413.1	371.9	312.7	246.4
67.5°	340.5	345.0	363.8	390.7	397.9	403.2	398.8	378.1	343.2	279.6	223.1
70°	299.3	306.5	319.0	345.9	353.9	359.3	359.3	338.7	305.6	245.5	195.3
72.5°	250.9	259.0	274.2	293.9	304.7	308.2	307.4	290.3	260.8	207.9	164.9
75°	198.0	204.3	222.2	236.6	248.2	250.9	250.0	235.7	208.8	167.6	130.8
77.5°	146.1	152.3	165.8	176.5	187.3	185.5	185.5	174.7	157.7	124.6	99.5
80°	95.9	101.3	112.9	116.5	128.1	127.2	127.2	119.2	107.5	83.3	66.3
82.5°	52.9	57.3	65.4	69.0	76.2	74.4	75.3	69.9	62.7	46.6	37.6
85°	18.8	22.4	26.9	29.6	33.2	33.2	33.2	28.7	26.9	17.9	15.2
87.5°	0.9	1.8	3.6	3.6	5.4	5.4	5.4	3.6	3.6	0.9	0.9
90°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5
92.5°	2.5	2.5	2.5	3.5	3.9	4.0	3.5	4.0	3.0	3.0	2.5
95°	3.0	3.0	3.5	4.5	5.4	5.6	6.1	6.1	3.5	3.5	3.0
97.5°	4.0	4.5	4.5	5.6	8.4	9.1	16.7	10.1	5.1	5.1	4.5
100°	6.6	7.1	7.1	12.6	24.0	26.8	35.9	25.8	13.1	9.6	7.1
102.5°	21.2	22.2	27.3	40.9	56.7	60.7	55.1	46.5	44.0	30.3	24.3
105°	54.1	53.6	57.6	68.2	81.6	84.9	83.4	76.8	69.8	60.2	55.6
107.5°	71.3	71.3	74.8	83.9	94.1	96.6	112.7	114.2	90.5	79.4	74.3
110°	80.4	80.4	83.4	91.0	104.4	107.7	130.4	129.4	111.7	98.1	91.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	82.4	82.9	86.9	98.6	113.2	116.8	126.9	122.3	115.3	109.2	104.1
115°	85.4	85.4	90.0	101.1	109.2	111.2	115.3	110.2	104.6	100.6	98.6
117.5°	84.4	85.9	86.9	93.0	98.3	99.6	102.6	100.1	92.5	89.5	88.5
120°	78.4	78.4	79.4	82.4	85.2	85.9	87.5	86.4	81.4	78.9	78.4
122.5°	69.8	70.3	69.8	71.3	73.3	73.8	75.3	74.3	70.3	69.3	69.3
125°	61.2	61.2	60.7	61.7	62.9	63.2	62.7	63.2	61.2	60.7	60.7
127.5°	55.1	54.6	53.6	54.1	54.5	54.6	54.6	55.1	53.1	53.6	54.1
130°	49.0	49.0	48.0	48.0	48.0	48.0	47.0	48.0	47.0	47.5	48.0
132.5°	43.5	43.5	42.0	41.5	41.5	41.5	41.5	42.0	41.5	42.5	43.5
135°	38.9	38.9	37.4	37.9	37.9	37.9	37.4	37.9	37.4	38.4	38.9
137.5°	35.4	35.4	34.4	34.4	34.4	34.4	33.9	34.4	34.4	34.9	35.9
140°	32.4	32.4	31.8	31.8	31.4	31.3	31.8	31.8	31.8	32.4	32.9
142.5°	30.8	30.3	29.8	29.3	29.7	29.8	29.8	29.8	29.3	29.8	30.8
145°	28.3	28.3	27.8	27.8	27.8	27.8	28.3	27.8	27.8	28.3	28.3
147.5°	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.8	26.3	26.8	26.8
150°	26.3	25.8	25.3	25.8	25.8	25.8	25.3	25.3	25.3	25.3	25.8
152.5°	24.8	24.8	24.3	24.8	24.4	24.3	24.3	24.3	24.3	24.3	24.8
155°	23.8	23.8	23.3	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
157.5°	22.7	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3
160°	22.2	22.2	22.2	22.2	21.8	21.7	21.7	21.7	22.2	22.2	22.2
162.5°	21.7	21.7	21.7	21.7	21.3	21.2	21.2	21.2	21.2	21.7	21.7
165°	21.7	21.2	21.2	21.2	20.8	20.7	20.7	20.7	20.7	21.2	21.7
167.5°	20.7	20.7	20.7	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7
170°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
172.5°	20.7	20.7	20.7	20.7	20.3	20.2	20.2	20.2	20.2	20.2	20.7
175°	20.7	20.7	20.7	20.7	20.3	20.2	20.2	20.2	20.7	20.7	20.7
177.5°	20.7	20.7	20.7	20.7	20.3	20.2	20.7	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
2.5°	95.0	94.1	93.2	91.4	90.5	89.6	88.7	87.8	87.8	87.8	87.8
5°	95.9	95.0	92.3	89.6	86.9	84.2	82.4	81.5	80.6	79.8	79.8
7.5°	95.9	94.1	90.5	86.9	84.2	80.6	78.0	75.3	73.5	72.6	72.6
10°	96.8	94.1	89.6	86.0	81.5	77.1	73.5	69.9	68.1	66.3	66.3
12.5°	98.6	95.9	89.6	85.1	79.8	74.4	69.9	66.3	63.6	61.8	61.8
15°	102.2	98.6	91.4	85.1	78.9	72.6	68.1	63.6	60.9	59.1	59.1
17.5°	107.5	103.0	94.1	85.1	78.0	71.7	66.3	61.8	58.2	56.5	56.5
20°	113.8	108.4	97.7	86.9	78.0	70.8	65.4	60.0	56.5	54.7	54.7
22.5°	122.8	114.7	102.2	89.6	79.8	71.7	64.5	59.1	55.6	53.8	53.8
25°	132.6	123.7	107.5	93.2	81.5	71.7	64.5	59.1	55.6	53.8	52.9
27.5°	143.4	133.5	113.8	96.8	83.3	73.5	65.4	59.1	55.6	53.8	53.8
30°	153.2	141.6	120.1	101.3	86.0	74.4	66.3	60.0	55.6	53.8	53.8
32.5°	164.0	150.5	126.3	105.7	88.7	76.2	67.2	60.9	56.5	54.7	53.8
35°	174.7	159.5	132.6	109.3	91.4	78.0	68.1	61.8	57.3	55.6	55.6
37.5°	186.4	169.4	138.9	113.8	94.1	79.8	69.9	62.7	58.2	56.5	56.5
40°	198.9	179.2	145.2	117.4	96.8	81.5	71.7	64.5	60.0	58.2	58.2
42.5°	211.5	190.0	152.3	121.9	99.5	83.3	72.6	66.3	61.8	60.0	60.0
45°	224.0	198.9	158.6	126.3	102.2	86.0	75.3	68.1	63.6	61.8	61.8
47.5°	235.7	208.8	164.0	129.0	104.8	87.8	76.2	69.9	65.4	64.5	63.6
50°	243.7	215.1	167.6	131.7	105.7	88.7	78.0	70.8	67.2	65.4	65.4
52.5°	250.0	221.3	170.3	133.5	106.6	89.6	78.9	72.6	69.0	67.2	66.3
55°	253.6	222.2	170.3	131.7	105.7	89.6	78.9	72.6	69.0	67.2	67.2
57.5°	250.0	217.7	166.7	128.1	103.0	86.9	76.2	70.8	67.2	66.3	65.4
60°	242.8	210.6	159.5	122.8	98.6	82.4	72.6	68.1	65.4	64.5	63.6
62.5°	233.0	201.6	152.3	115.6	92.3	77.1	69.9	64.5	62.7	61.8	60.9
65°	213.3	184.6	140.7	106.6	84.2	70.8	63.6	60.0	58.2	56.5	55.6
67.5°	191.8	165.8	124.6	95.9	74.4	63.6	57.3	53.8	51.1	51.1	50.2
70°	168.5	146.1	107.5	81.5	64.5	55.6	49.3	46.6	44.8	44.8	43.9
72.5°	140.7	122.8	89.6	66.3	52.9	45.7	41.2	38.5	37.6	37.6	36.7
75°	112.9	96.8	70.8	52.0	41.2	35.8	32.3	30.5	29.6	29.6	28.7
77.5°	83.3	70.8	51.1	37.6	29.6	26.0	23.3	22.4	21.5	21.5	20.6
80°	55.6	46.6	33.2	24.2	17.9	16.1	14.3	14.3	13.4	14.3	13.4
82.5°	30.5	25.1	17.9	12.5	9.0	8.1	7.2	7.2	8.1	8.1	7.2
85°	11.6	9.0	6.3	3.6	2.7	2.7	2.7	2.7	2.7	2.7	1.8
87.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
92.5°	2.5	2.5	3.0	3.0	4.0	3.5	4.0	3.5	2.5	2.5	2.5
95°	3.0	3.0	3.5	3.5	6.1	6.1	5.6	4.5	3.5	3.0	3.0
97.5°	4.0	4.5	5.1	5.1	10.1	16.7	9.1	5.6	4.5	4.5	4.0
100°	7.1	7.1	9.6	13.1	25.8	35.9	26.8	12.6	7.1	7.1	6.6
102.5°	23.3	24.3	30.3	44.0	46.5	55.1	60.7	40.9	27.3	22.2	21.2
105°	55.6	55.6	60.2	69.8	76.8	83.4	84.9	68.2	57.6	53.6	54.1
107.5°	73.8	74.3	79.4	90.5	114.2	112.7	96.6	83.9	74.8	71.3	71.3
110°	90.5	91.5	98.1	111.7	129.4	130.4	107.7	91.0	83.4	80.4	80.4



REPORT NUMBER: P832954  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	103.1	104.1	109.2	115.3	122.3	126.9	116.8	98.6	86.9	82.9	82.4
115°	99.6	98.6	100.6	104.6	110.2	115.3	111.2	101.1	90.0	85.4	85.4
117.5°	86.9	88.5	89.5	92.5	100.1	102.6	99.6	93.0	86.9	85.9	84.4
120°	77.3	78.4	78.9	81.4	86.4	87.5	85.9	82.4	79.4	78.4	78.4
122.5°	68.2	69.3	69.3	70.3	74.3	75.3	73.8	71.3	69.8	70.3	69.8
125°	60.2	60.7	60.7	61.2	63.2	62.7	63.2	61.7	60.7	61.2	61.2
127.5°	53.6	54.1	53.6	53.1	55.1	54.6	54.6	54.1	53.6	54.6	55.1
130°	48.5	48.0	47.5	47.0	48.0	47.0	48.0	48.0	48.0	49.0	49.0
132.5°	43.5	43.5	42.5	41.5	42.0	41.5	41.5	41.5	42.0	43.5	43.5
135°	38.9	38.9	38.4	37.4	37.9	37.4	37.9	37.9	37.4	38.9	38.9
137.5°	36.4	35.9	34.9	34.4	34.4	33.9	34.4	34.4	34.4	35.4	35.4
140°	32.9	32.9	32.4	31.8	31.8	31.8	31.3	31.8	31.8	32.4	32.4
142.5°	30.8	30.8	29.8	29.3	29.8	29.8	29.8	29.3	29.8	30.3	30.8
145°	28.8	28.3	28.3	27.8	27.8	28.3	27.8	27.8	27.8	28.3	28.3
147.5°	27.3	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.3	26.8	26.8
150°	25.8	25.8	25.3	25.3	25.3	25.3	25.8	25.8	25.3	25.8	26.3
152.5°	25.3	24.8	24.3	24.3	24.3	24.3	24.3	24.8	24.3	24.8	24.8
155°	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.3	23.8	23.8
157.5°	23.3	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3	22.7
160°	22.7	22.2	22.2	22.2	21.7	21.7	21.7	22.2	22.2	22.2	22.2
162.5°	22.2	21.7	21.7	21.2	21.2	21.2	21.2	21.7	21.7	21.7	21.7
165°	21.2	21.7	21.2	20.7	20.7	20.7	20.7	21.2	21.2	21.2	21.7
167.5°	21.2	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7	20.7	20.7
170°	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.7	20.7
172.5°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.7	20.7	20.7	20.7
175°	20.2	20.7	20.7	20.7	20.2	20.2	20.2	20.7	20.7	20.7	20.7
177.5°	20.7	20.7	20.7	20.7	20.7	20.7	20.2	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7

(END OF REPORT)