

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: P834034

Luminaire Tested: **TTN-D3-830-U-DL-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P834034
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-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: 6220.9 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B1 - U3 - G2

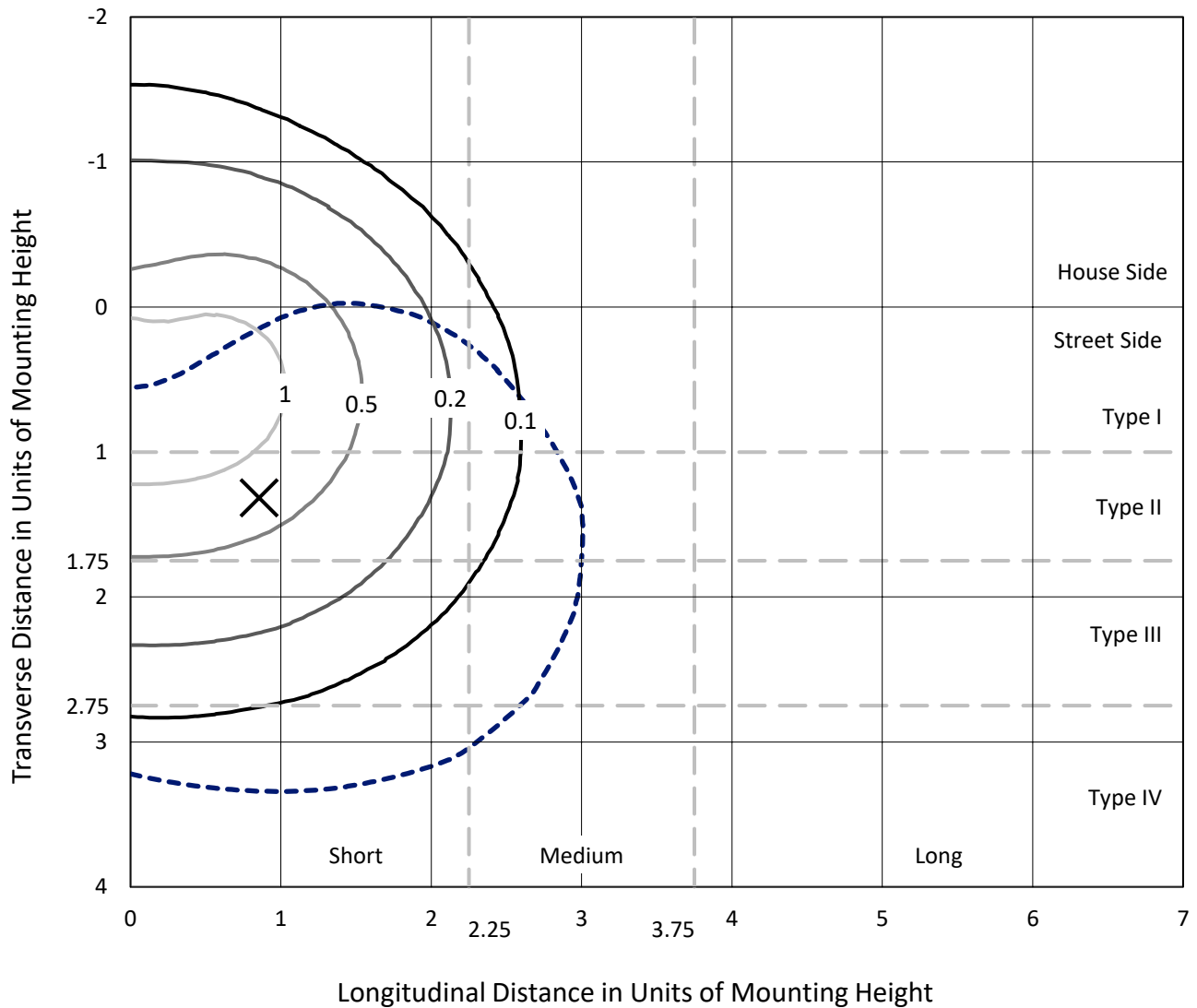
Input Watts (W): 61.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

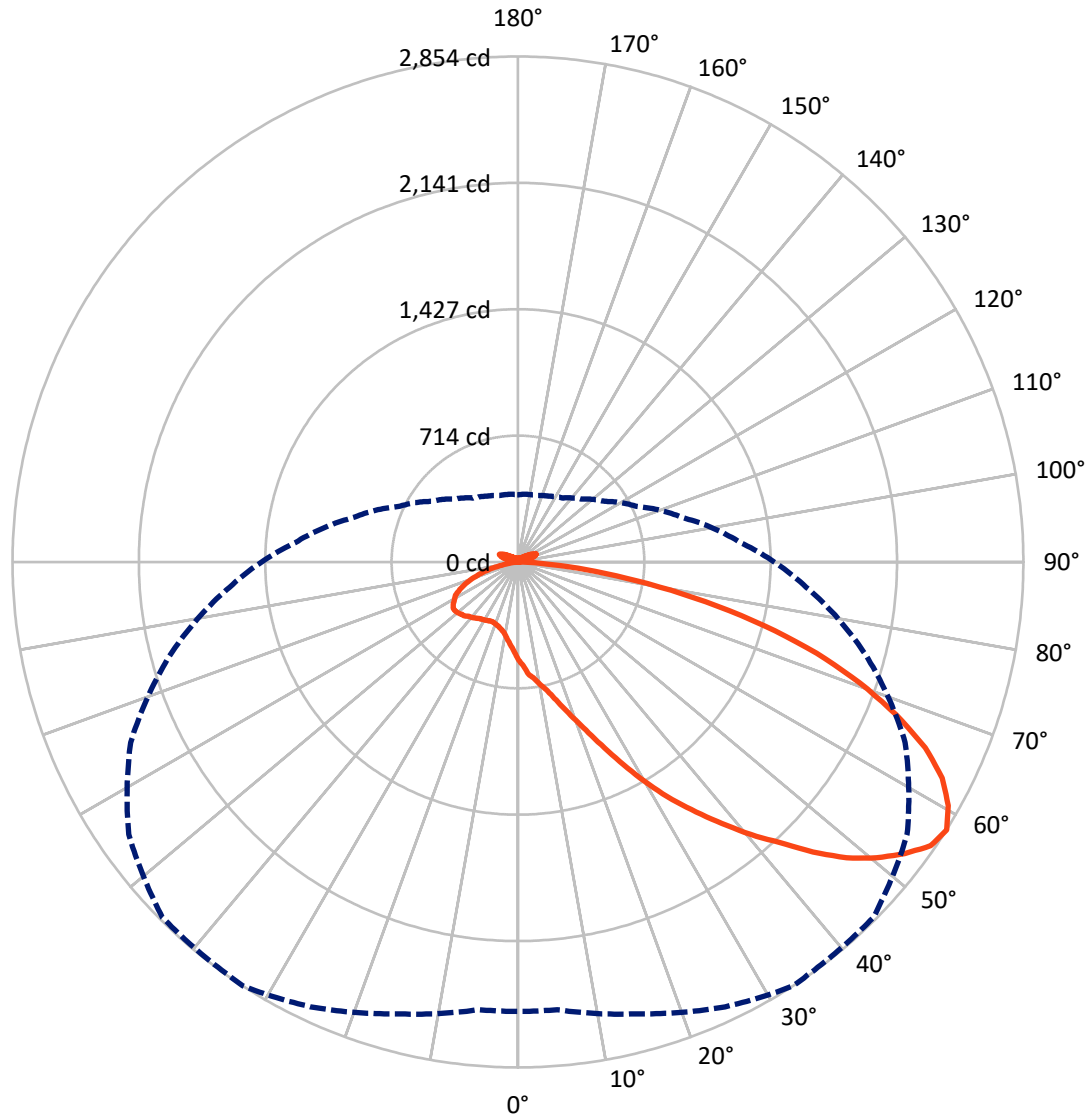
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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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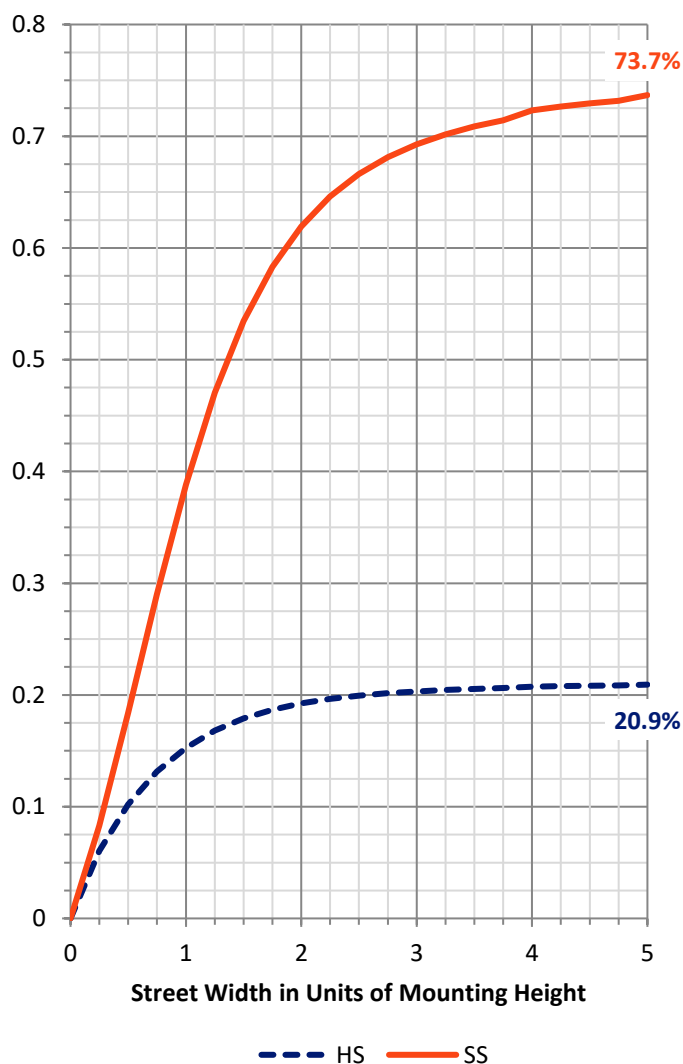
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1307.6	147.7	1455.3
	% Fixture	21.0	2.4	23.4
Street Side	Lumens	4617.8	147.7	4765.5
	% Fixture	74.2	2.4	76.6
Total	Lumens	5925.4	295.5	6220.9
	% Fixture	95.3	4.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	0.9
10°-20°	172.3	2.8
20°-30°	363.3	5.8
30°-40°	659.8	10.6
40°-50°	1042.6	16.8
50°-60°	1384.6	22.3
60°-70°	1332.7	21.4
70°-80°	782.3	12.6
80°-90°	134.7	2.2
90°-100°	6.6	0.1
100°-110°	67.0	1.1
110°-120°	98.0	1.6
120°-130°	56.9	0.9
130°-140°	30.1	0.5
140°-150°	17.9	0.3
150°-160°	11.0	0.2
160°-170°	6.0	0.1
170°-180°	2.0	0.0
0°-90°	5925.4	95.3
0°-180°	6220.9	100.0

Coefficient of Utilization

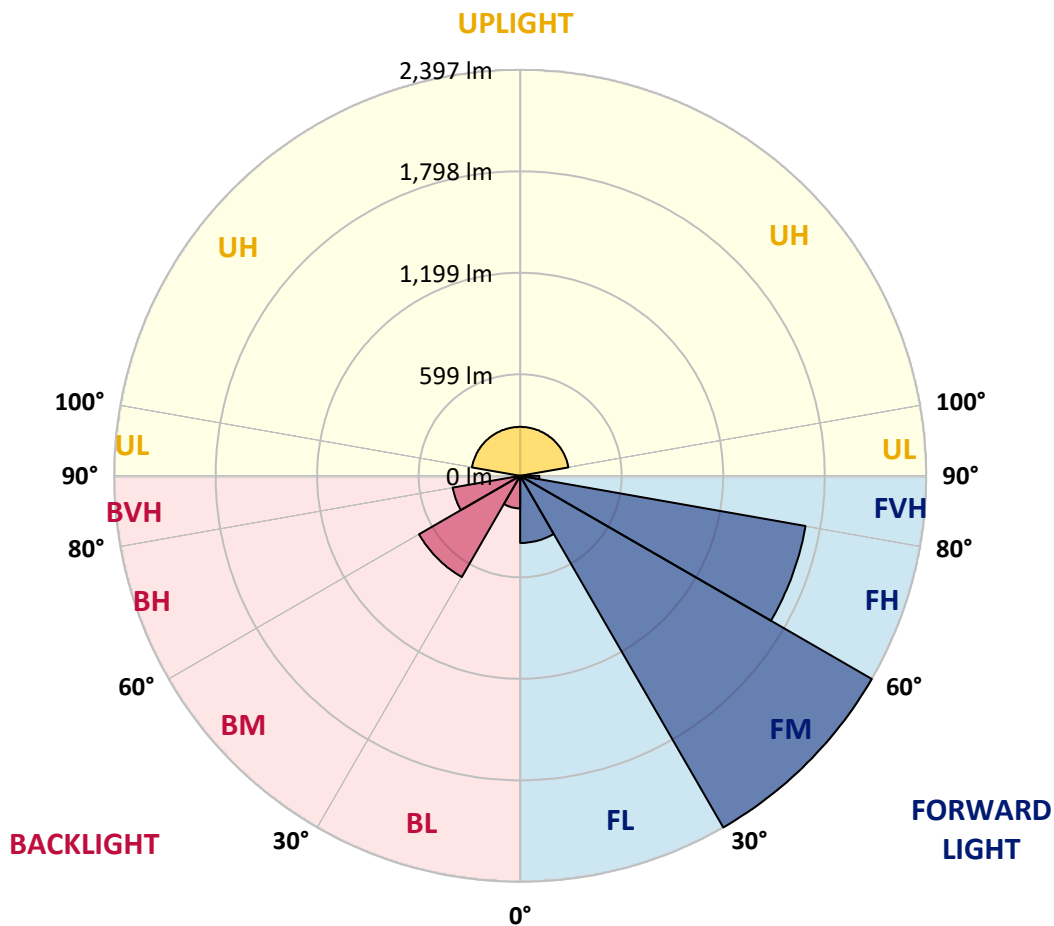


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	396.4	6.4			
FM (30°-60°)	2397.1	38.5			
FH (60°-80°)	1710.7	27.5			G1/1800
FVH (80°-90°)	113.6	1.8			G2/225
BL (0°-30°)	192.3	3.1	B1/500		
BM (30°-60°)	689.9	11.1	B1/1000		
BH (60°-80°)	404.3	6.5	B1/500		G1/500
BVH (80°-90°)	21.1	0.3			G1/100
UL (90°-100°)	6.6	0.1		U1/10	
UH (100°-180°)	288.9	4.6		U3/500	

BUG Rating: B1-U3-G2
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3
2.5°	591.6	596.8	591.6	591.6	586.5	586.5	581.3	576.1	570.9	565.7	555.3
5°	659.1	659.1	653.9	643.5	638.4	633.2	622.8	607.2	596.8	581.3	565.7
7.5°	690.3	690.3	685.1	674.7	664.3	659.1	643.5	622.8	607.2	586.5	565.7
10°	731.8	737.0	726.6	716.2	705.8	700.6	679.9	653.9	628.0	602.0	570.9
12.5°	778.5	783.7	778.5	762.9	747.3	742.2	721.4	690.3	659.1	622.8	586.5
15°	840.8	851.1	835.6	825.2	809.6	804.4	778.5	742.2	705.8	659.1	612.4
17.5°	913.4	918.6	908.2	892.7	882.3	877.1	851.1	809.6	757.7	705.8	648.7
20°	996.5	1001.6	996.5	975.7	965.3	960.1	934.2	887.5	825.2	768.1	695.4
22.5°	1095.1	1105.4	1089.9	1074.3	1063.9	1063.9	1032.8	980.9	908.2	835.6	752.5
25°	1209.2	1224.8	1204.0	1193.7	1183.3	1178.1	1152.2	1089.9	1006.8	918.6	814.8
27.5°	1349.4	1359.7	1344.2	1339.0	1318.2	1318.2	1276.7	1204.0	1115.8	1012.0	892.7
30°	1473.9	1484.3	1473.9	1473.9	1458.4	1453.2	1411.6	1339.0	1230.0	1105.4	960.1
32.5°	1593.3	1603.7	1598.5	1603.7	1598.5	1593.3	1541.4	1463.5	1354.6	1193.7	1027.6
35°	1712.7	1728.2	1723.0	1738.6	1733.4	1728.2	1686.7	1593.3	1463.5	1302.7	1100.3
37.5°	1837.2	1852.8	1852.8	1868.4	1873.5	1873.5	1826.8	1728.2	1582.9	1401.3	1183.3
40°	1972.2	1987.7	1987.7	2013.7	2024.0	2024.0	1972.2	1873.5	1712.7	1510.3	1271.5
42.5°	2101.9	2117.5	2122.7	2148.6	2164.2	2169.4	2127.8	2013.7	1826.8	1619.2	1354.6
45°	2226.5	2242.0	2257.6	2309.5	2335.4	2330.3	2299.1	2179.7	1972.2	1733.4	1442.8
47.5°	2345.8	2366.6	2392.5	2460.0	2496.3	2491.1	2470.4	2335.4	2107.1	1842.4	1520.6
50°	2439.2	2454.8	2506.7	2579.4	2626.1	2631.3	2600.1	2470.4	2221.3	1925.4	1577.7
52.5°	2511.9	2532.7	2594.9	2698.7	2735.1	2750.6	2714.3	2584.6	2335.4	1998.1	1624.4
55°	2563.8	2563.8	2657.2	2776.6	2828.5	2838.9	2838.9	2678.0	2402.9	2044.8	1650.4
57.5°	2537.8	2537.8	2641.6	2771.4	2854.4	2849.2	2838.9	2683.2	2413.3	2034.4	1634.8
60°	2465.2	2480.8	2579.4	2709.1	2792.1	2787.0	2755.8	2615.7	2361.4	1992.9	1603.7
62.5°	2366.6	2392.5	2496.3	2594.9	2688.4	2703.9	2662.4	2537.8	2273.2	1930.6	1546.6
65°	2179.7	2216.1	2345.8	2454.8	2527.5	2558.6	2506.7	2392.5	2153.8	1811.3	1427.2
67.5°	1972.2	1998.1	2107.1	2262.8	2304.3	2335.4	2309.5	2190.1	1987.7	1619.2	1292.3
70°	1733.4	1774.9	1847.6	2003.3	2050.0	2081.1	2081.1	1961.8	1769.7	1422.0	1131.4
72.5°	1453.2	1499.9	1588.1	1702.3	1764.6	1785.3	1780.1	1681.5	1510.3	1204.0	954.9
75°	1147.0	1183.3	1287.1	1370.1	1437.6	1453.2	1448.0	1364.9	1209.2	970.5	757.7
77.5°	845.9	882.3	960.1	1022.4	1084.7	1074.3	1074.3	1012.0	913.4	721.4	576.1
80°	555.3	586.5	653.9	674.7	742.2	737.0	737.0	690.3	622.8	482.7	384.1
82.5°	306.2	332.2	378.9	399.6	441.1	430.8	435.9	404.8	363.3	269.9	218.0
85°	109.0	129.7	155.7	171.3	192.0	192.0	192.0	166.1	155.7	103.8	88.2
87.5°	5.2	10.4	20.8	20.8	31.1	31.1	31.1	20.8	20.8	5.2	5.2
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°	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3	555.3
2.5°	550.1	544.9	539.7	529.4	524.2	519.0	513.8	508.6	508.6	508.6	508.6
5°	555.3	550.1	534.6	519.0	503.4	487.8	477.5	472.3	467.1	461.9	461.9
7.5°	555.3	544.9	524.2	503.4	487.8	467.1	451.5	435.9	425.6	420.4	420.4
10°	560.5	544.9	519.0	498.2	472.3	446.3	425.6	404.8	394.4	384.1	384.1
12.5°	570.9	555.3	519.0	493.0	461.9	430.8	404.8	384.1	368.5	358.1	358.1
15°	591.6	570.9	529.4	493.0	456.7	420.4	394.4	368.5	352.9	342.5	342.5
17.5°	622.8	596.8	544.9	493.0	451.5	415.2	384.1	358.1	337.3	327.0	327.0
20°	659.1	628.0	565.7	503.4	451.5	410.0	378.9	347.7	327.0	316.6	316.6
22.5°	711.0	664.3	591.6	519.0	461.9	415.2	373.7	342.5	321.8	311.4	311.4
25°	768.1	716.2	622.8	539.7	472.3	415.2	373.7	342.5	321.8	311.4	306.2
27.5°	830.4	773.3	659.1	560.5	482.7	425.6	378.9	342.5	321.8	311.4	311.4
30°	887.5	820.0	695.4	586.5	498.2	430.8	384.1	347.7	321.8	311.4	311.4
32.5°	949.7	871.9	731.8	612.4	513.8	441.1	389.2	352.9	327.0	316.6	311.4
35°	1012.0	923.8	768.1	633.2	529.4	451.5	394.4	358.1	332.2	321.8	321.8
37.5°	1079.5	980.9	804.4	659.1	544.9	461.9	404.8	363.3	337.3	327.0	327.0
40°	1152.2	1038.0	840.8	679.9	560.5	472.3	415.2	373.7	347.7	337.3	337.3
42.5°	1224.8	1100.3	882.3	705.8	576.1	482.7	420.4	384.1	358.1	347.7	347.7
45°	1297.5	1152.2	918.6	731.8	591.6	498.2	435.9	394.4	368.5	358.1	358.1
47.5°	1364.9	1209.2	949.7	747.3	607.2	508.6	441.1	404.8	378.9	373.7	368.5
50°	1411.6	1245.6	970.5	762.9	612.4	513.8	451.5	410.0	389.2	378.9	378.9
52.5°	1448.0	1281.9	986.1	773.3	617.6	519.0	456.7	420.4	399.6	389.2	384.1
55°	1468.7	1287.1	986.1	762.9	612.4	519.0	456.7	420.4	399.6	389.2	389.2
57.5°	1448.0	1261.1	965.3	742.2	596.8	503.4	441.1	410.0	389.2	384.1	378.9
60°	1406.5	1219.6	923.8	711.0	570.9	477.5	420.4	394.4	378.9	373.7	368.5
62.5°	1349.4	1167.7	882.3	669.5	534.6	446.3	404.8	373.7	363.3	358.1	352.9
65°	1235.2	1069.1	814.8	617.6	487.8	410.0	368.5	347.7	337.3	327.0	321.8
67.5°	1110.6	960.1	721.4	555.3	430.8	368.5	332.2	311.4	295.8	295.8	290.6
70°	975.7	845.9	622.8	472.3	373.7	321.8	285.4	269.9	259.5	259.5	254.3
72.5°	814.8	711.0	519.0	384.1	306.2	264.7	238.7	223.2	218.0	218.0	212.8
75°	653.9	560.5	410.0	301.0	238.7	207.6	186.8	176.5	171.3	171.3	166.1
77.5°	482.7	410.0	295.8	218.0	171.3	150.5	134.9	129.7	124.6	124.6	119.4
80°	321.8	269.9	192.0	140.1	103.8	93.4	83.0	83.0	77.8	83.0	77.8
82.5°	176.5	145.3	103.8	72.7	51.9	46.7	41.5	41.5	46.7	46.7	41.5
85°	67.5	51.9	36.3	20.8	15.6	15.6	15.6	15.6	15.6	15.6	10.4
87.5°	5.2	5.2	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



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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)