

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: P833915

Luminaire Tested: **TTN-D3-740-U-DL-CG-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833915  
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-D3-740-U-DL-CG-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND DRIVE LANE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

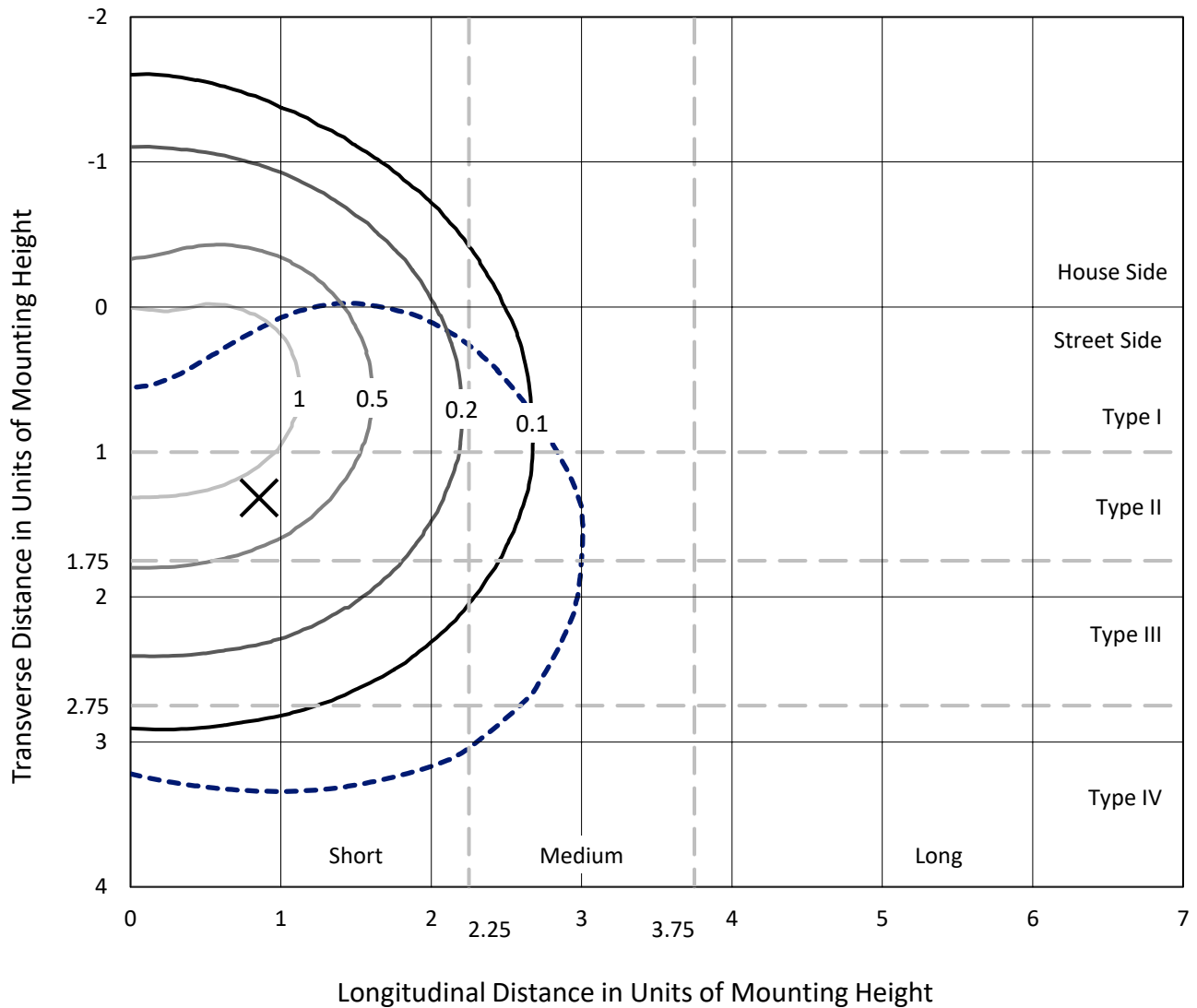
Lumens per Lamp: N/A  
Luminaire Lumens: 7197.7 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U4 - G2  
  
Input Watts (W): 63.7  
Input Voltage (V): NR  
Input Current (Ain): 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

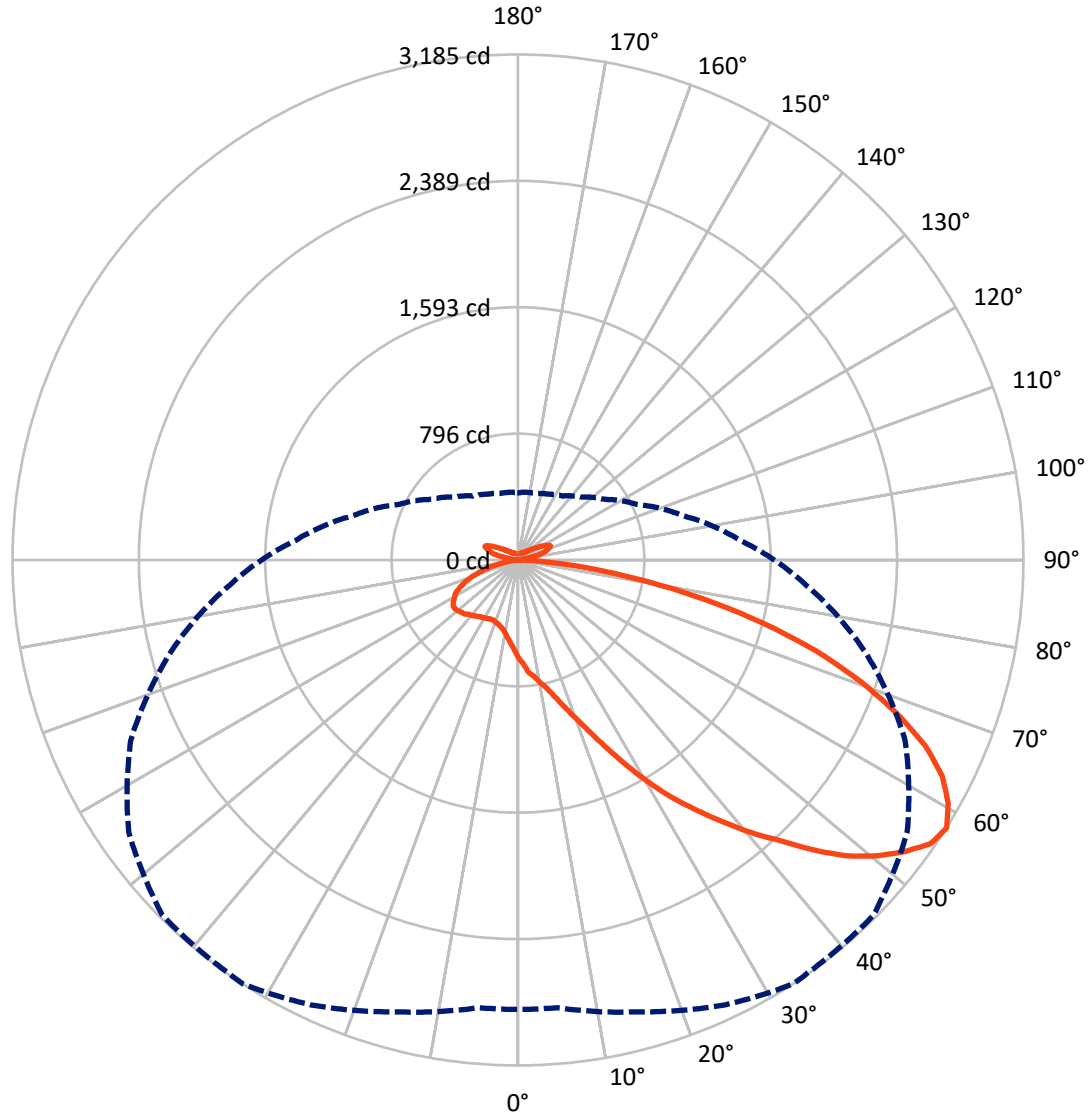
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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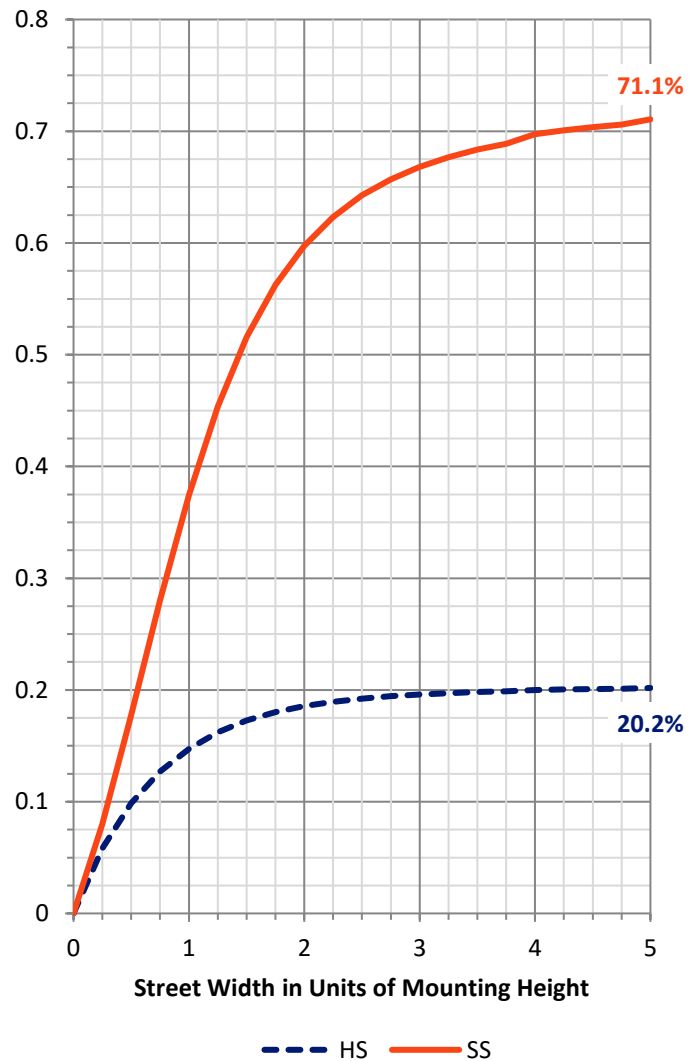
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1459.4	292.5	1751.9
	% Fixture	20.3	4.1	24.3
<b>Street Side</b>	Lumens	5153.4	292.5	5445.8
	% Fixture	71.6	4.1	75.7
<b>Total</b>	Lumens	6612.8	584.9	7197.7
	% Fixture	91.9	8.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.3	0.8
10°-20°	192.3	2.7
20°-30°	405.4	5.6
30°-40°	736.3	10.2
40°-50°	1163.5	16.2
50°-60°	1545.1	21.5
60°-70°	1487.2	20.7
70°-80°	873.0	12.1
80°-90°	150.6	2.1
90°-100°	13.1	0.2
100°-110°	132.7	1.8
110°-120°	194.0	2.7
120°-130°	112.6	1.6
130°-140°	59.7	0.8
140°-150°	35.4	0.5
150°-160°	21.8	0.3
160°-170°	11.9	0.2
170°-180°	3.9	0.1
0°-90°	6612.8	91.9
0°-180°	7197.7	100.0

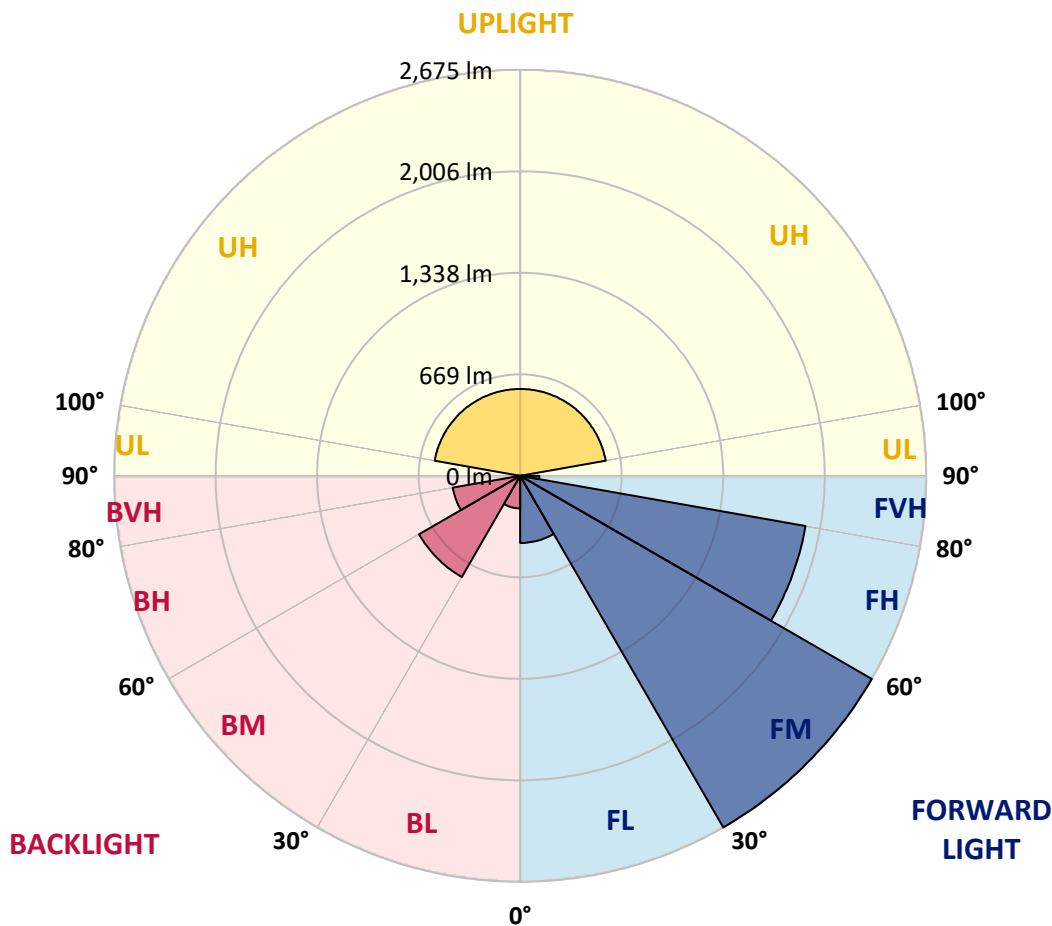


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	442.4	6.1			
FM (30°-60°)	2675.0	37.2			
FH (60°-80°)	1909.0	26.5			G2/5000
FVH (80°-90°)	127.0	1.8			G2/225
BL (0°-30°)	214.6	3.0	B1/500		
BM (30°-60°)	769.9	10.7	B1/1000		
BH (60°-80°)	451.2	6.3	B1/500		G1/500
BVH (80°-90°)	23.7	0.3			G1/100
UL (90°-100°)	13.1	0.2		U2/50	
UH (100°-180°)	571.8	7.9		U4/1000	

**BUG Rating: B1-U4-G2**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7
2.5°	660.2	666.0	660.2	660.2	654.5	654.5	648.7	642.9	637.1	631.3	619.7
5°	735.5	735.5	729.7	718.2	712.4	706.6	695.0	677.6	666.0	648.7	631.3
7.5°	770.3	770.3	764.5	752.9	741.3	735.5	718.2	695.0	677.6	654.5	631.3
10°	816.6	822.4	810.8	799.2	787.7	781.9	758.7	729.7	700.8	671.8	637.1
12.5°	868.7	874.5	868.7	851.4	834.0	828.2	805.0	770.3	735.5	695.0	654.5
15°	938.2	949.8	932.5	920.9	903.5	897.7	868.7	828.2	787.7	735.5	683.4
17.5°	1019.3	1025.1	1013.5	996.2	984.6	978.8	949.8	903.5	845.6	787.7	724.0
20°	1112.0	1117.8	1112.0	1088.8	1077.2	1071.5	1042.5	990.4	920.9	857.2	776.1
22.5°	1222.0	1233.6	1216.2	1198.9	1187.3	1187.3	1152.5	1094.6	1013.5	932.5	839.8
25°	1349.5	1366.8	1343.7	1332.1	1320.5	1314.7	1285.7	1216.2	1123.6	1025.1	909.3
27.5°	1505.8	1517.4	1500.0	1494.2	1471.1	1471.1	1424.7	1343.7	1245.2	1129.4	996.2
30°	1644.8	1656.4	1644.8	1644.8	1627.4	1621.7	1575.3	1494.2	1372.6	1233.6	1071.5
32.5°	1778.0	1789.6	1783.8	1789.6	1783.8	1778.0	1720.1	1633.2	1511.6	1332.1	1146.7
35°	1911.2	1928.6	1922.8	1940.2	1934.4	1928.6	1882.3	1778.0	1633.2	1453.7	1227.8
37.5°	2050.2	2067.6	2067.6	2085.0	2090.8	2090.8	2038.7	1928.6	1766.4	1563.7	1320.5
40°	2200.8	2218.2	2218.2	2247.2	2258.7	2258.7	2200.8	2090.8	1911.2	1685.4	1418.9
42.5°	2345.6	2363.0	2368.8	2397.7	2415.1	2420.9	2374.6	2247.2	2038.7	1807.0	1511.6
45°	2484.6	2502.0	2519.4	2577.3	2606.2	2600.4	2565.7	2432.5	2200.8	1934.4	1610.1
47.5°	2617.8	2641.0	2669.9	2745.2	2785.8	2780.0	2756.8	2606.2	2351.4	2056.0	1696.9
50°	2722.1	2739.4	2797.4	2878.4	2930.6	2936.4	2901.6	2756.8	2478.8	2148.7	1760.7
52.5°	2803.1	2826.3	2895.8	3011.6	3052.2	3069.6	3029.0	2884.2	2606.2	2229.8	1812.8
55°	2861.1	2861.1	2965.3	3098.5	3156.4	3168.0	3168.0	2988.5	2681.5	2281.9	1841.7
57.5°	2832.1	2832.1	2947.9	3092.7	3185.4	3179.6	3168.0	2994.3	2693.1	2270.3	1824.4
60°	2751.0	2768.4	2878.4	3023.2	3115.9	3110.1	3075.4	2919.0	2635.2	2224.0	1789.6
62.5°	2641.0	2669.9	2785.8	2895.8	3000.1	3017.4	2971.1	2832.1	2536.7	2154.5	1725.9
65°	2432.5	2473.0	2617.8	2739.4	2820.5	2855.3	2797.4	2669.9	2403.5	2021.3	1592.7
67.5°	2200.8	2229.8	2351.4	2525.2	2571.5	2606.2	2577.3	2444.1	2218.2	1807.0	1442.1
70°	1934.4	1980.7	2061.8	2235.6	2287.7	2322.4	2322.4	2189.2	1974.9	1586.9	1262.6
72.5°	1621.7	1673.8	1772.2	1899.7	1969.2	1992.3	1986.5	1876.5	1685.4	1343.7	1065.7
75°	1280.0	1320.5	1436.3	1529.0	1604.3	1621.7	1615.9	1523.2	1349.5	1083.0	845.6
77.5°	944.0	984.6	1071.5	1141.0	1210.5	1198.9	1198.9	1129.4	1019.3	805.0	642.9
80°	619.7	654.5	729.7	752.9	828.2	822.4	822.4	770.3	695.0	538.6	428.6
82.5°	341.7	370.7	422.8	446.0	492.3	480.7	486.5	451.7	405.4	301.2	243.2
85°	121.6	144.8	173.7	191.1	214.3	214.3	214.3	185.3	173.7	115.8	98.5
87.5°	5.8	11.6	23.2	23.2	34.7	34.7	34.7	23.2	23.2	5.8	5.8
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
92.5°	5.0	5.0	5.0	7.0	7.8	8.0	7.0	8.0	6.0	6.0	5.0
95°	6.0	6.0	7.0	9.0	10.6	11.0	12.0	12.0	7.0	7.0	6.0
97.5°	8.0	9.0	9.0	11.0	16.6	18.0	33.0	20.0	10.0	10.0	9.0
100°	13.0	14.0	14.0	25.0	47.4	53.0	71.1	51.0	26.0	19.0	14.0
102.5°	42.0	44.0	54.0	81.1	112.3	120.1	109.1	92.1	87.1	60.0	48.0
105°	107.1	106.1	114.1	135.1	161.5	168.1	165.1	152.1	138.1	119.1	110.1
107.5°	141.1	141.1	148.1	166.1	186.1	191.1	223.2	226.2	179.1	157.1	147.1
110°	159.1	159.1	165.1	180.1	206.6	213.2	258.2	256.2	221.2	194.1	181.1



REPORT NUMBER: P833915  
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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	163.1	164.1	172.1	195.1	224.0	231.2	251.2	242.2	228.2	216.2	206.2
115°	169.1	169.1	178.1	200.2	216.2	220.2	228.2	218.2	207.2	199.2	195.1
117.5°	167.1	170.1	172.1	184.1	194.5	197.1	203.2	198.1	183.1	177.1	175.1
120°	155.1	155.1	157.1	163.1	168.7	170.1	173.1	171.1	161.1	156.1	155.1
122.5°	138.1	139.1	138.1	141.1	145.1	146.1	149.1	147.1	139.1	137.1	137.1
125°	121.1	121.1	120.1	122.1	124.5	125.1	124.1	125.1	121.1	120.1	120.1
127.5°	109.1	108.1	106.1	107.1	107.9	108.1	108.1	109.1	105.1	106.1	107.1
130°	97.1	97.1	95.1	95.1	95.1	95.1	93.1	95.1	93.1	94.1	95.1
132.5°	86.1	86.1	83.1	82.1	82.1	82.1	82.1	83.1	82.1	84.1	86.1
135°	77.1	77.1	74.1	75.1	75.1	75.1	74.1	75.1	74.1	76.1	77.1
137.5°	70.1	70.1	68.1	68.1	68.1	68.1	67.1	68.1	68.1	69.1	71.1
140°	64.0	64.0	63.0	63.0	62.2	62.0	63.0	63.0	63.0	64.0	65.0
142.5°	61.0	60.0	59.0	58.0	58.8	59.0	59.0	59.0	58.0	59.0	61.0
145°	56.0	56.0	55.0	55.0	55.0	55.0	56.0	55.0	55.0	56.0	56.0
147.5°	53.0	53.0	52.0	53.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0
150°	52.0	51.0	50.0	51.0	51.0	51.0	50.0	50.0	50.0	50.0	51.0
152.5°	49.0	49.0	48.0	49.0	48.2	48.0	48.0	48.0	48.0	48.0	49.0
155°	47.0	47.0	46.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
157.5°	45.0	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0
160°	44.0	44.0	44.0	44.0	43.2	43.0	43.0	43.0	44.0	44.0	44.0
162.5°	43.0	43.0	43.0	43.0	42.2	42.0	42.0	42.0	42.0	43.0	43.0
165°	43.0	42.0	42.0	42.0	41.2	41.0	41.0	41.0	41.0	42.0	43.0
167.5°	41.0	41.0	41.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0
170°	41.0	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
172.5°	41.0	41.0	41.0	41.0	40.2	40.0	40.0	40.0	40.0	40.0	41.0
175°	41.0	41.0	41.0	41.0	40.2	40.0	40.0	40.0	41.0	41.0	41.0
177.5°	41.0	41.0	41.0	41.0	40.2	40.0	41.0	41.0	41.0	41.0	41.0
180°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7
2.5°	613.9	608.1	602.3	590.7	585.0	579.2	573.4	567.6	567.6	567.6	567.6
5°	619.7	613.9	596.5	579.2	561.8	544.4	532.8	527.0	521.2	515.5	515.5
7.5°	619.7	608.1	585.0	561.8	544.4	521.2	503.9	486.5	474.9	469.1	469.1
10°	625.5	608.1	579.2	556.0	527.0	498.1	474.9	451.7	440.2	428.6	428.6
12.5°	637.1	619.7	579.2	550.2	515.5	480.7	451.7	428.6	411.2	399.6	399.6
15°	660.2	637.1	590.7	550.2	509.7	469.1	440.2	411.2	393.8	382.2	382.2
17.5°	695.0	666.0	608.1	550.2	503.9	463.3	428.6	399.6	376.5	364.9	364.9
20°	735.5	700.8	631.3	561.8	503.9	457.5	422.8	388.0	364.9	353.3	353.3
22.5°	793.5	741.3	660.2	579.2	515.5	463.3	417.0	382.2	359.1	347.5	347.5
25°	857.2	799.2	695.0	602.3	527.0	463.3	417.0	382.2	359.1	347.5	341.7
27.5°	926.7	863.0	735.5	625.5	538.6	474.9	422.8	382.2	359.1	347.5	347.5
30°	990.4	915.1	776.1	654.5	556.0	480.7	428.6	388.0	359.1	347.5	347.5
32.5°	1059.9	973.0	816.6	683.4	573.4	492.3	434.4	393.8	364.9	353.3	347.5
35°	1129.4	1030.9	857.2	706.6	590.7	503.9	440.2	399.6	370.7	359.1	359.1
37.5°	1204.7	1094.6	897.7	735.5	608.1	515.5	451.7	405.4	376.5	364.9	364.9
40°	1285.7	1158.3	938.2	758.7	625.5	527.0	463.3	417.0	388.0	376.5	376.5
42.5°	1366.8	1227.8	984.6	787.7	642.9	538.6	469.1	428.6	399.6	388.0	388.0
45°	1447.9	1285.7	1025.1	816.6	660.2	556.0	486.5	440.2	411.2	399.6	399.6
47.5°	1523.2	1349.5	1059.9	834.0	677.6	567.6	492.3	451.7	422.8	417.0	411.2
50°	1575.3	1390.0	1083.0	851.4	683.4	573.4	503.9	457.5	434.4	422.8	422.8
52.5°	1615.9	1430.5	1100.4	863.0	689.2	579.2	509.7	469.1	446.0	434.4	428.6
55°	1639.0	1436.3	1100.4	851.4	683.4	579.2	509.7	469.1	446.0	434.4	434.4
57.5°	1615.9	1407.4	1077.2	828.2	666.0	561.8	492.3	457.5	434.4	428.6	422.8
60°	1569.5	1361.0	1030.9	793.5	637.1	532.8	469.1	440.2	422.8	417.0	411.2
62.5°	1505.8	1303.1	984.6	747.1	596.5	498.1	451.7	417.0	405.4	399.6	393.8
65°	1378.4	1193.1	909.3	689.2	544.4	457.5	411.2	388.0	376.5	364.9	359.1
67.5°	1239.4	1071.5	805.0	619.7	480.7	411.2	370.7	347.5	330.1	330.1	324.3
70°	1088.8	944.0	695.0	527.0	417.0	359.1	318.5	301.2	289.6	289.6	283.8
72.5°	909.3	793.5	579.2	428.6	341.7	295.4	266.4	249.0	243.2	243.2	237.5
75°	729.7	625.5	457.5	335.9	266.4	231.7	208.5	196.9	191.1	191.1	185.3
77.5°	538.6	457.5	330.1	243.2	191.1	168.0	150.6	144.8	139.0	139.0	133.2
80°	359.1	301.2	214.3	156.4	115.8	104.2	92.7	92.7	86.9	92.7	86.9
82.5°	196.9	162.2	115.8	81.1	57.9	52.1	46.3	46.3	52.1	52.1	46.3
85°	75.3	57.9	40.5	23.2	17.4	17.4	17.4	17.4	17.4	17.4	11.6
87.5°	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
92.5°	5.0	5.0	6.0	6.0	8.0	7.0	8.0	7.0	5.0	5.0	5.0
95°	6.0	6.0	7.0	7.0	12.0	12.0	11.0	9.0	7.0	6.0	6.0
97.5°	8.0	9.0	10.0	10.0	20.0	33.0	18.0	11.0	9.0	9.0	8.0
100°	14.0	14.0	19.0	26.0	51.0	71.1	53.0	25.0	14.0	14.0	13.0
102.5°	46.0	48.0	60.0	87.1	92.1	109.1	120.1	81.1	54.0	44.0	42.0
105°	110.1	110.1	119.1	138.1	152.1	165.1	168.1	135.1	114.1	106.1	107.1
107.5°	146.1	147.1	157.1	179.1	226.2	223.2	191.1	166.1	148.1	141.1	141.1
110°	179.1	181.1	194.1	221.2	256.2	258.2	213.2	180.1	165.1	159.1	159.1



REPORT NUMBER: P833915  
 CATALOG NUMBER: TTN-D3-740-U-DL-CG-UPL2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	204.2	206.2	216.2	228.2	242.2	251.2	231.2	195.1	172.1	164.1	163.1
115°	197.1	195.1	199.2	207.2	218.2	228.2	220.2	200.2	178.1	169.1	169.1
117.5°	172.1	175.1	177.1	183.1	198.1	203.2	197.1	184.1	172.1	170.1	167.1
120°	153.1	155.1	156.1	161.1	171.1	173.1	170.1	163.1	157.1	155.1	155.1
122.5°	135.1	137.1	137.1	139.1	147.1	149.1	146.1	141.1	138.1	139.1	138.1
125°	119.1	120.1	120.1	121.1	125.1	124.1	125.1	122.1	120.1	121.1	121.1
127.5°	106.1	107.1	106.1	105.1	109.1	108.1	108.1	107.1	106.1	108.1	109.1
130°	96.1	95.1	94.1	93.1	95.1	93.1	95.1	95.1	95.1	97.1	97.1
132.5°	86.1	86.1	84.1	82.1	83.1	82.1	82.1	82.1	83.1	86.1	86.1
135°	77.1	77.1	76.1	74.1	75.1	74.1	75.1	75.1	74.1	77.1	77.1
137.5°	72.1	71.1	69.1	68.1	68.1	67.1	68.1	68.1	68.1	70.1	70.1
140°	65.0	65.0	64.0	63.0	63.0	63.0	62.0	63.0	63.0	64.0	64.0
142.5°	61.0	61.0	59.0	58.0	59.0	59.0	59.0	58.0	59.0	60.0	61.0
145°	57.0	56.0	56.0	55.0	55.0	56.0	55.0	55.0	55.0	56.0	56.0
147.5°	54.0	53.0	53.0	52.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0
150°	51.0	51.0	50.0	50.0	50.0	50.0	51.0	51.0	50.0	51.0	52.0
152.5°	50.0	49.0	48.0	48.0	48.0	48.0	48.0	49.0	48.0	49.0	49.0
155°	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	46.0	47.0	47.0
157.5°	46.0	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	45.0
160°	45.0	44.0	44.0	44.0	43.0	43.0	43.0	44.0	44.0	44.0	44.0
162.5°	44.0	43.0	43.0	42.0	42.0	42.0	42.0	43.0	43.0	43.0	43.0
165°	42.0	43.0	42.0	41.0	41.0	41.0	41.0	42.0	42.0	42.0	43.0
167.5°	42.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	41.0	41.0
170°	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0
172.5°	41.0	41.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0	41.0	41.0
175°	40.0	41.0	41.0	41.0	40.0	40.0	40.0	41.0	41.0	41.0	41.0
177.5°	41.0	41.0	41.0	41.0	41.0	41.0	40.0	41.0	41.0	41.0	41.0
180°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0

(END OF REPORT)