

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: P832839

Luminaire Tested: **TTN-D0-740-U-DL-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832839  
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-D0-740-U-DL-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND DRIVE LANE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

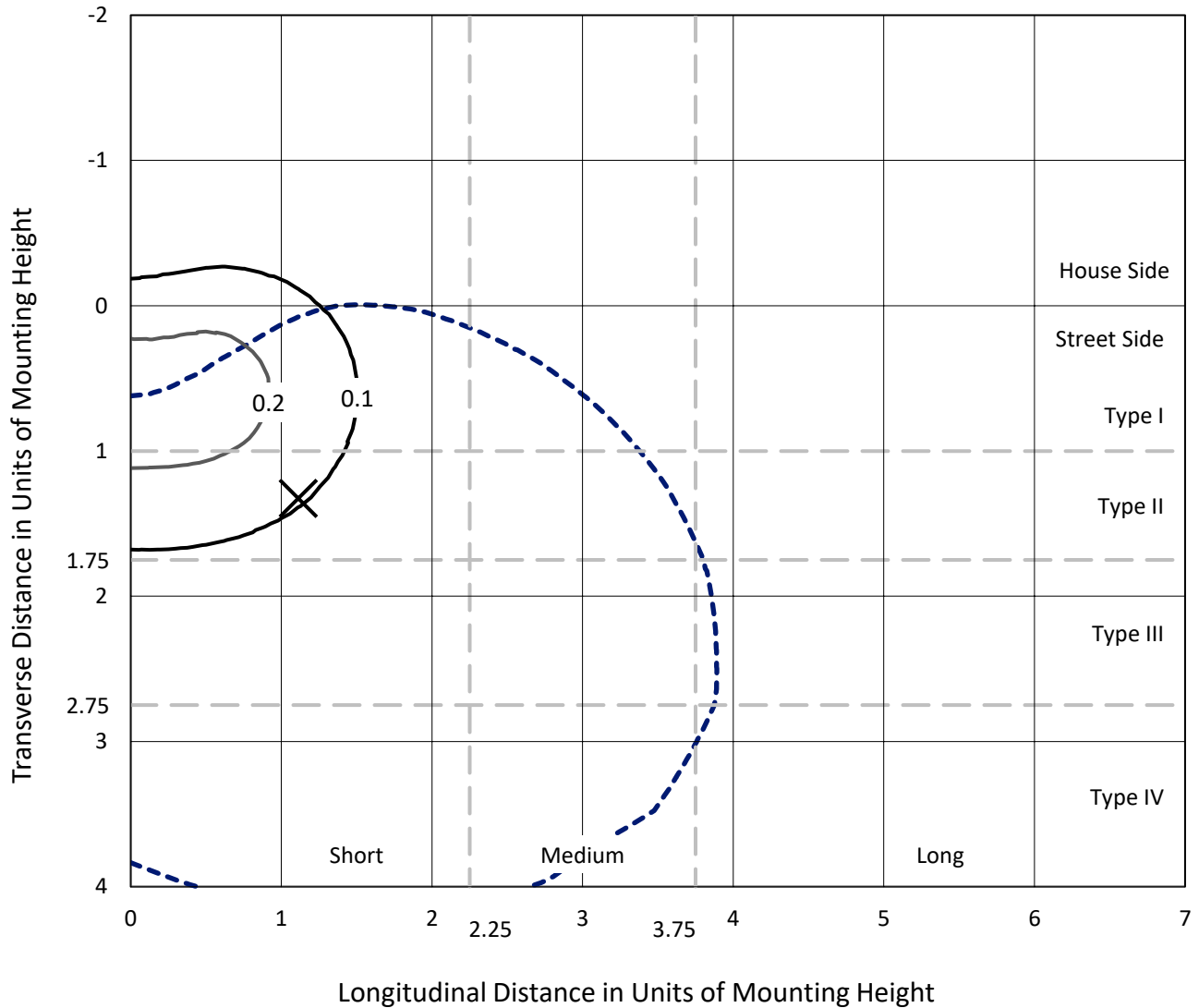
Lumens per Lamp: N/A  
Luminaire Lumens: 1964.6 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U4 - G1  
  
Input Watts (W): 17.7  
Input Voltage (V): NR  
Input Current (Ain): 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

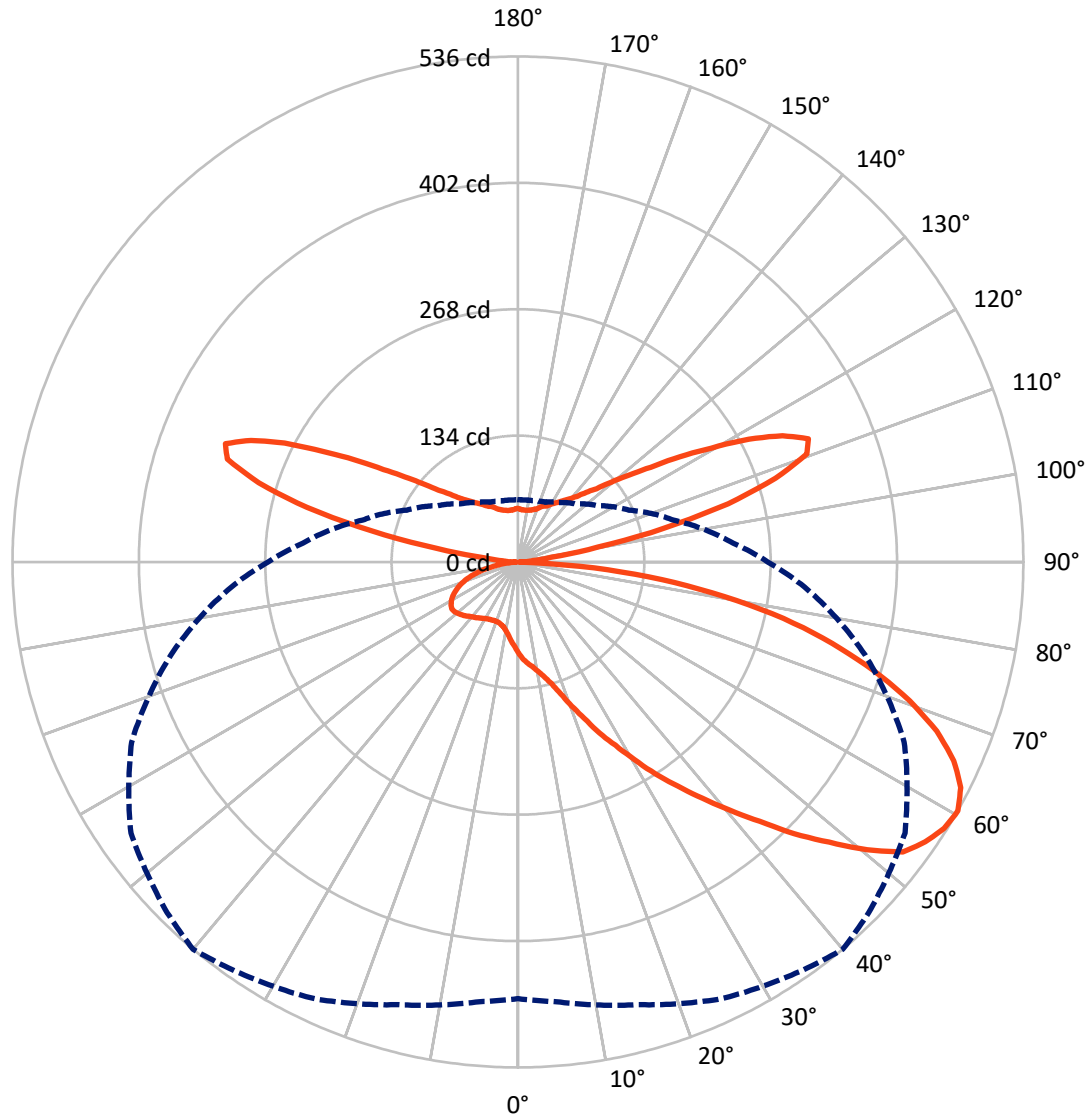
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 60-Deg Vertical

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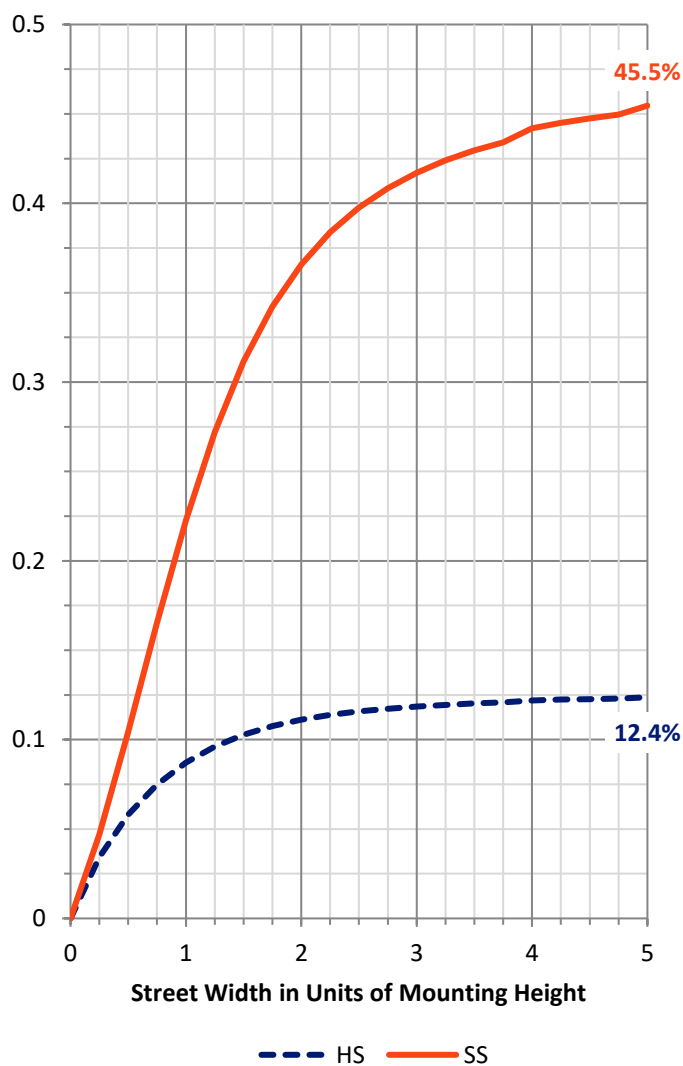
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	245.8	405.8	651.6
	% Fixture	12.5	20.7	33.2
<b>Street Side</b>	Lumens	907.2	405.8	1313.0
	% Fixture	46.2	20.7	66.8
<b>Total</b>	Lumens	1153.0	811.5	1964.6
	% Fixture	58.7	41.3	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.1	0.5
10°-20°	29.2	1.5
20°-30°	61.7	3.1
30°-40°	112.7	5.7
40°-50°	183.2	9.3
50°-60°	254.6	13.0
60°-70°	264.0	13.4
70°-80°	189.2	9.6
80°-90°	49.3	2.5
90°-100°	18.1	0.9
100°-110°	184.1	9.4
110°-120°	269.1	13.7
120°-130°	156.2	7.9
130°-140°	82.7	4.2
140°-150°	49.1	2.5
150°-160°	30.3	1.5
160°-170°	16.5	0.8
170°-180°	5.4	0.3
0°-90°	1153.0	58.7
0°-180°	1964.6	100.0

**Coefficient of Utilization**



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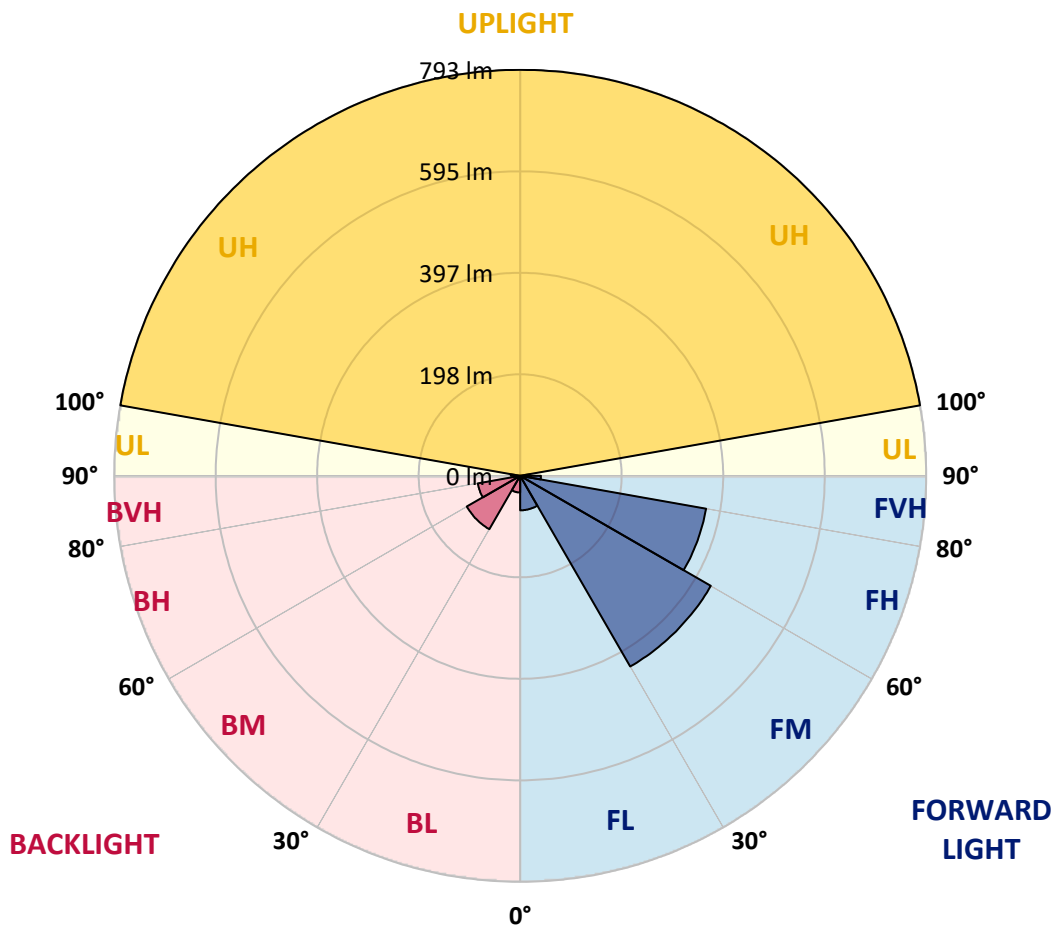
CATALOG NUMBER: TTN-D0-740-U-DL-UPL3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	67.4	3.4			
FM (30°-60°)	430.2	21.9			
FH (60°-80°)	368.9	18.8			G0/660
FVH (80°-90°)	40.7	2.1			G1/100
BL (0°-30°)	32.6	1.7	B0/110		
BM (30°-60°)	120.4	6.1	B0/220		
BH (60°-80°)	84.2	4.3	B0/110		G0/110
BVH (80°-90°)	8.6	0.4			G0/10
UL (90°-100°)	18.1	0.9		U2/50	
UH (100°-180°)	793.4	40.4		U4/1000	

**BUG Rating: B0-U4-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
2.5°	104.0	104.0	104.0	104.0	103.0	103.0	102.0	101.0	100.0	99.0	97.0
5°	113.0	113.0	112.0	111.0	109.0	108.0	107.0	105.0	103.0	101.0	98.0
7.5°	117.0	117.0	117.0	116.0	113.0	112.0	110.0	107.0	104.0	101.0	97.0
10°	124.0	124.0	123.0	122.0	119.0	118.0	116.0	112.0	107.0	102.0	97.0
12.5°	133.0	132.0	131.0	130.0	127.0	125.0	122.0	118.0	112.0	106.0	100.0
15°	144.0	142.0	142.0	140.0	137.0	134.0	132.0	126.0	120.0	112.0	104.0
17.5°	156.0	155.0	154.0	152.0	149.0	147.0	144.0	137.0	129.0	119.0	110.0
20°	171.0	169.0	170.0	167.0	164.0	163.0	158.0	150.0	140.0	129.0	118.0
22.5°	189.0	187.0	187.0	184.0	182.0	180.0	175.0	166.0	153.0	141.0	127.0
25°	209.1	207.1	207.1	205.1	203.0	201.0	195.0	185.0	170.0	155.0	139.0
27.5°	231.1	229.1	229.1	228.1	223.1	220.1	215.1	204.1	189.0	170.0	151.0
30°	254.1	252.1	254.1	252.1	249.1	243.1	237.1	225.1	208.1	187.0	164.0
32.5°	272.1	272.1	273.1	275.1	273.1	268.1	261.1	251.1	228.1	202.0	176.0
35°	293.1	293.1	295.1	298.1	297.1	292.1	285.1	274.1	250.1	219.1	189.0
37.5°	316.1	316.1	318.1	323.1	321.1	318.1	313.1	299.1	272.1	236.1	203.0
40°	341.1	340.1	342.1	349.1	350.1	346.1	340.1	326.1	295.1	258.1	218.1
42.5°	366.1	365.1	369.1	376.1	377.1	376.1	370.1	354.1	319.1	280.1	233.1
45°	391.1	391.1	397.1	408.1	413.1	411.1	406.1	386.1	349.1	303.1	253.1
47.5°	417.1	417.1	425.1	439.1	445.1	444.1	442.1	418.1	378.1	327.1	270.1
50°	437.1	437.1	450.1	466.1	476.1	480.1	470.1	448.1	403.1	348.1	284.1
52.5°	457.1	457.1	470.1	495.1	505.1	511.1	498.1	475.1	431.1	367.1	297.1
55°	467.1	469.1	487.1	511.1	527.1	524.1	529.1	498.1	449.1	381.1	305.1
57.5°	468.1	471.1	491.1	516.1	534.1	533.1	534.1	506.1	456.1	384.1	306.1
60°	463.1	468.1	486.1	511.1	528.1	536.1	526.1	501.1	452.1	381.1	305.1
62.5°	451.1	461.1	480.1	499.1	524.1	527.1	519.1	498.1	441.1	378.1	300.1
65°	424.1	435.1	462.1	484.1	504.1	508.1	499.1	481.1	430.1	364.1	284.1
67.5°	397.1	404.1	427.1	461.1	475.1	479.1	476.1	455.1	411.1	336.1	265.1
70°	366.1	375.1	393.1	428.1	442.1	441.1	450.1	426.1	382.1	312.1	245.1
72.5°	324.1	337.1	355.1	384.1	401.1	395.1	409.1	389.1	344.1	282.1	218.1
75°	275.1	286.1	309.1	332.1	351.1	344.1	355.1	341.1	300.1	246.1	187.0
77.5°	220.1	233.1	254.1	275.1	288.1	288.1	293.1	281.1	249.1	202.0	153.0
80°	163.0	175.0	194.0	209.1	221.1	222.1	227.1	221.1	192.0	157.0	117.0
82.5°	108.0	114.0	131.0	143.0	155.0	154.0	162.0	158.0	134.0	108.0	78.0
85°	46.0	50.0	64.0	74.0	85.0	81.0	92.0	91.0	72.0	52.0	35.0
87.5°	2.0	3.0	3.0	2.0	3.0	1.0	3.0	4.0	3.0	2.0	2.0
90°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9
92.5°	6.9	6.9	6.9	9.7	11.1	10.4	9.7	11.1	8.3	8.3	6.9
95°	8.3	8.3	9.7	12.5	15.3	16.0	16.7	16.7	9.7	9.7	8.3
97.5°	11.1	12.5	12.5	15.3	25.0	35.4	45.8	27.8	13.9	13.9	12.5
100°	18.0	19.4	19.4	34.7	73.6	86.1	98.6	70.8	36.1	26.4	19.4
102.5°	58.3	61.1	75.0	112.5	166.6	159.0	151.3	127.7	120.8	83.3	66.6
105°	148.6	147.2	158.3	187.4	233.3	231.2	229.1	211.0	191.6	165.2	152.7
107.5°	195.8	195.8	205.5	230.5	265.2	287.4	309.6	313.8	248.5	218.0	204.1
110°	220.8	220.8	229.1	249.9	295.7	327.0	358.2	355.4	306.8	269.4	251.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
112.5°	226.3	227.7	238.8	270.7	320.7	334.6	348.5	336.0	316.6	299.9	286.0
115°	234.6	234.6	247.1	277.7	305.5	311.0	316.6	302.7	287.4	276.3	270.7
117.5°	231.9	236.0	238.8	255.5	273.5	277.6	281.8	274.9	254.1	245.8	243.0
120°	215.2	215.2	218.0	226.3	236.0	238.1	240.2	237.4	223.5	216.6	215.2
122.5°	191.6	193.0	191.6	195.8	202.7	204.8	206.9	204.1	193.0	190.2	190.2
125°	168.0	168.0	166.6	169.4	173.6	172.9	172.2	173.6	168.0	166.6	166.6
127.5°	151.3	149.9	147.2	148.6	149.9	149.9	149.9	151.3	145.8	147.2	148.6
130°	134.7	134.7	131.9	131.9	131.9	130.5	129.1	131.9	129.1	130.5	131.9
132.5°	119.4	119.4	115.2	113.9	113.9	113.9	113.9	115.2	113.9	116.6	119.4
135°	106.9	106.9	102.7	104.1	104.1	103.4	102.7	104.1	102.7	105.5	106.9
137.5°	97.2	97.2	94.4	94.4	94.4	93.7	93.0	94.4	94.4	95.8	98.6
140°	88.9	88.9	87.5	87.5	86.1	86.8	87.5	87.5	87.5	88.9	90.2
142.5°	84.7	83.3	81.9	80.5	81.9	81.9	81.9	81.9	80.5	81.9	84.7
145°	77.8	77.8	76.4	76.4	76.4	77.1	77.8	76.4	76.4	77.8	77.8
147.5°	73.6	73.6	72.2	73.6	73.6	73.6	73.6	73.6	72.2	73.6	73.6
150°	72.2	70.8	69.4	70.8	70.8	70.1	69.4	69.4	69.4	69.4	70.8
152.5°	68.0	68.0	66.6	68.0	66.6	66.6	66.6	66.6	66.6	66.6	68.0
155°	65.3	65.3	63.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
157.5°	62.5	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9
160°	61.1	61.1	61.1	61.1	59.7	59.7	59.7	59.7	61.1	61.1	61.1
162.5°	59.7	59.7	59.7	59.7	58.3	58.3	58.3	58.3	58.3	59.7	59.7
165°	59.7	58.3	58.3	58.3	56.9	56.9	56.9	56.9	56.9	58.3	59.7
167.5°	56.9	56.9	56.9	56.9	56.9	56.2	55.5	55.5	56.9	56.9	56.9
170°	56.9	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
172.5°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	55.5	55.5	55.5	56.9
175°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	55.5	56.9	56.9	56.9
177.5°	56.9	56.9	56.9	56.9	55.5	56.2	56.9	56.9	56.9	56.9	56.9
180°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
2.5°	97.0	96.0	94.0	93.0	92.0	90.0	90.0	89.0	89.0	89.0	88.0
5°	97.0	95.0	93.0	90.0	88.0	86.0	84.0	82.0	81.0	81.0	80.0
7.5°	95.0	93.0	90.0	87.0	84.0	80.0	78.0	74.0	73.0	72.0	72.0
10°	95.0	93.0	88.0	84.0	80.0	76.0	73.0	69.0	66.0	65.0	65.0
12.5°	96.0	93.0	88.0	83.0	78.0	73.0	69.0	65.0	62.0	60.0	60.0
15°	100.0	96.0	90.0	83.0	77.0	71.0	67.0	62.0	59.0	57.0	57.0
17.5°	105.0	101.0	92.0	84.0	77.0	70.0	65.0	60.0	57.0	55.0	54.0
20°	112.0	106.0	96.0	85.0	77.0	70.0	64.0	59.0	55.0	53.0	53.0
22.5°	120.0	113.0	100.0	87.0	78.0	70.0	64.0	58.0	54.0	52.0	52.0
25°	130.0	121.0	106.0	91.0	80.0	71.0	64.0	58.0	54.0	52.0	52.0
27.5°	141.0	131.0	112.0	95.0	82.0	72.0	64.0	58.0	54.0	52.0	52.0
30°	151.0	140.0	118.0	99.0	85.0	73.0	65.0	59.0	55.0	53.0	52.0
32.5°	162.0	148.0	124.0	103.0	87.0	75.0	66.0	60.0	55.0	53.0	53.0
35°	173.0	158.0	130.0	108.0	90.0	77.0	67.0	61.0	56.0	54.0	54.0
37.5°	185.0	169.0	137.0	112.0	93.0	79.0	69.0	62.0	57.0	55.0	55.0
40°	199.0	180.0	144.0	117.0	96.0	81.0	70.0	64.0	59.0	57.0	57.0
42.5°	212.1	190.0	151.0	121.0	99.0	83.0	72.0	65.0	61.0	59.0	59.0
45°	225.1	202.0	158.0	126.0	102.0	86.0	74.0	68.0	63.0	61.0	61.0
47.5°	240.1	213.1	166.0	130.0	105.0	88.0	76.0	70.0	65.0	64.0	63.0
50°	252.1	221.1	171.0	134.0	107.0	90.0	78.0	71.0	67.0	65.0	65.0
52.5°	263.1	229.1	175.0	136.0	108.0	91.0	80.0	73.0	69.0	67.0	67.0
55°	269.1	232.1	178.0	136.0	109.0	92.0	80.0	73.0	69.0	68.0	67.0
57.5°	269.1	232.1	176.0	134.0	107.0	90.0	79.0	72.0	69.0	67.0	67.0
60°	265.1	229.1	171.0	130.0	104.0	87.0	77.0	70.0	67.0	66.0	66.0
62.5°	259.1	224.1	167.0	125.0	100.0	83.0	74.0	67.0	65.0	65.0	64.0
65°	243.1	209.1	158.0	118.0	94.0	78.0	70.0	64.0	62.0	61.0	60.0
67.5°	226.1	195.0	144.0	110.0	86.0	73.0	65.0	60.0	57.0	57.0	56.0
70°	209.1	180.0	131.0	99.0	77.0	67.0	59.0	54.0	52.0	52.0	52.0
72.5°	186.0	161.0	116.0	87.0	68.0	59.0	53.0	48.0	47.0	47.0	46.0
75°	159.0	137.0	98.0	74.0	57.0	50.0	45.0	40.0	40.0	40.0	40.0
77.5°	130.0	111.0	78.0	59.0	45.0	40.0	37.0	33.0	33.0	33.0	33.0
80°	98.0	82.0	57.0	43.0	33.0	29.0	27.0	25.0	26.0	26.0	25.0
82.5°	64.0	54.0	36.0	27.0	21.0	19.0	19.0	17.0	18.0	18.0	18.0
85°	28.0	24.0	15.0	12.0	10.0	10.0	10.0	9.0	10.0	10.0	10.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	1.0	2.0	1.0
90°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9
92.5°	6.9	6.9	8.3	8.3	11.1	9.7	11.1	9.7	6.9	6.9	6.9
95°	8.3	8.3	9.7	9.7	16.7	16.7	15.3	12.5	9.7	8.3	8.3
97.5°	11.1	12.5	13.9	13.9	27.8	45.8	25.0	15.3	12.5	12.5	11.1
100°	19.4	19.4	26.4	36.1	70.8	98.6	73.6	34.7	19.4	19.4	18.0
102.5°	63.9	66.6	83.3	120.8	127.7	151.3	166.6	112.5	75.0	61.1	58.3
105°	152.7	152.7	165.2	191.6	211.0	229.1	233.3	187.4	158.3	147.2	148.6
107.5°	202.7	204.1	218.0	248.5	313.8	309.6	265.2	230.5	205.5	195.8	195.8
110°	248.5	251.3	269.4	306.8	355.4	358.2	295.7	249.9	229.1	220.8	220.8



REPORT NUMBER: P832839  
 CATALOG NUMBER: TTN-D0-740-U-DL-UPL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	283.2	286.0	299.9	316.6	336.0	348.5	320.7	270.7	238.8	227.7	226.3
115°	273.5	270.7	276.3	287.4	302.7	316.6	305.5	277.7	247.1	234.6	234.6
117.5°	238.8	243.0	245.8	254.1	274.9	281.8	273.5	255.5	238.8	236.0	231.9
120°	212.4	215.2	216.6	223.5	237.4	240.2	236.0	226.3	218.0	215.2	215.2
122.5°	187.4	190.2	190.2	193.0	204.1	206.9	202.7	195.8	191.6	193.0	191.6
125°	165.2	166.6	166.6	168.0	173.6	172.2	173.6	169.4	166.6	168.0	168.0
127.5°	147.2	148.6	147.2	145.8	151.3	149.9	149.9	148.6	147.2	149.9	151.3
130°	133.3	131.9	130.5	129.1	131.9	129.1	131.9	131.9	131.9	134.7	134.7
132.5°	119.4	119.4	116.6	113.9	115.2	113.9	113.9	113.9	115.2	119.4	119.4
135°	106.9	106.9	105.5	102.7	104.1	102.7	104.1	104.1	102.7	106.9	106.9
137.5°	100.0	98.6	95.8	94.4	94.4	93.0	94.4	94.4	94.4	97.2	97.2
140°	90.2	90.2	88.9	87.5	87.5	87.5	86.1	87.5	87.5	88.9	88.9
142.5°	84.7	84.7	81.9	80.5	81.9	81.9	81.9	80.5	81.9	83.3	84.7
145°	79.1	77.8	77.8	76.4	76.4	77.8	76.4	76.4	76.4	77.8	77.8
147.5°	75.0	73.6	73.6	72.2	73.6	73.6	73.6	73.6	72.2	73.6	73.6
150°	70.8	70.8	69.4	69.4	69.4	69.4	70.8	70.8	69.4	70.8	72.2
152.5°	69.4	68.0	66.6	66.6	66.6	66.6	66.6	68.0	66.6	68.0	68.0
155°	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	63.9	65.3	65.3
157.5°	63.9	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9	62.5
160°	62.5	61.1	61.1	61.1	59.7	59.7	59.7	61.1	61.1	61.1	61.1
162.5°	61.1	59.7	59.7	58.3	58.3	58.3	58.3	59.7	59.7	59.7	59.7
165°	58.3	59.7	58.3	56.9	56.9	56.9	56.9	58.3	58.3	58.3	59.7
167.5°	58.3	56.9	56.9	56.9	55.5	55.5	56.9	56.9	56.9	56.9	56.9
170°	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.9	56.9
172.5°	56.9	56.9	55.5	55.5	55.5	55.5	55.5	56.9	56.9	56.9	56.9
175°	55.5	56.9	56.9	56.9	55.5	55.5	55.5	56.9	56.9	56.9	56.9
177.5°	56.9	56.9	56.9	56.9	56.9	56.9	55.5	56.9	56.9	56.9	56.9
180°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9

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