

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: P832864

Luminaire Tested: **TTN-D0-750-U-DL-CG-UPL1**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832864  
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-D0-750-U-DL-CG-UPL1  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
5000K, 70 CRI LEDS AND DRIVE LANE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

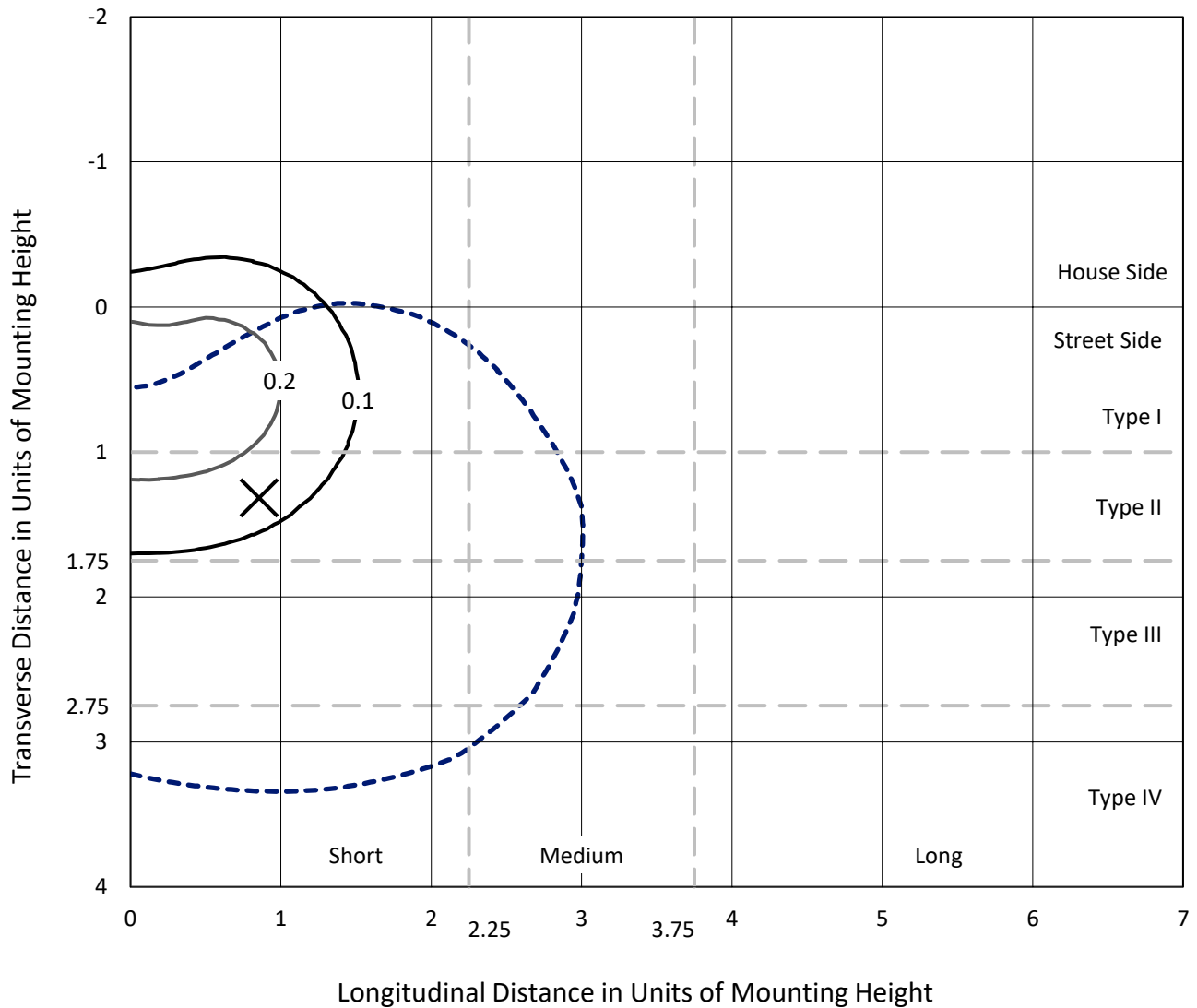
Lumens per Lamp: N/A  
Luminaire Lumens: 1465.8 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U3 - G1  
  
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (Ain): 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

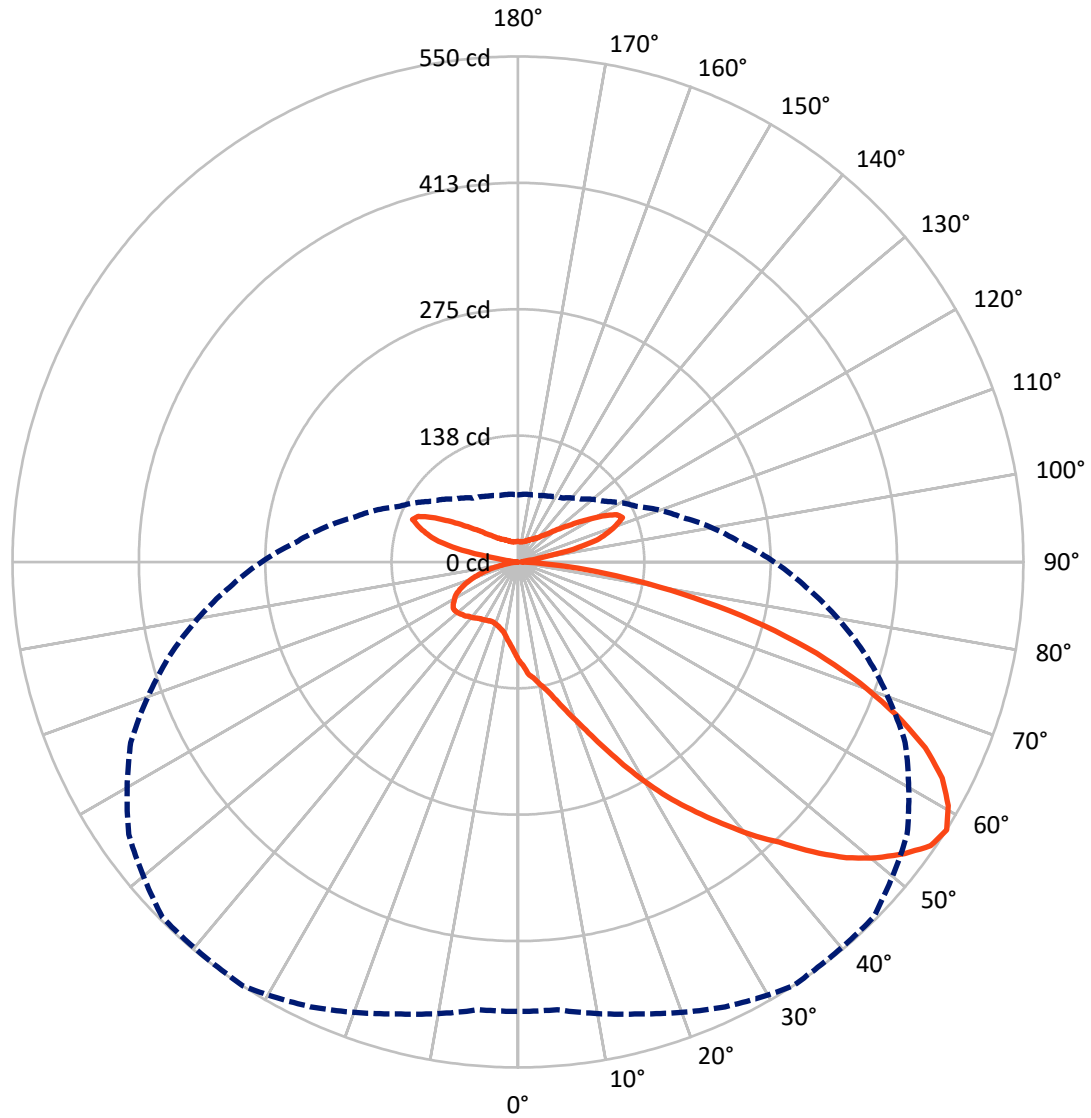
× Max cd  
 - - - 1/2 Max cd



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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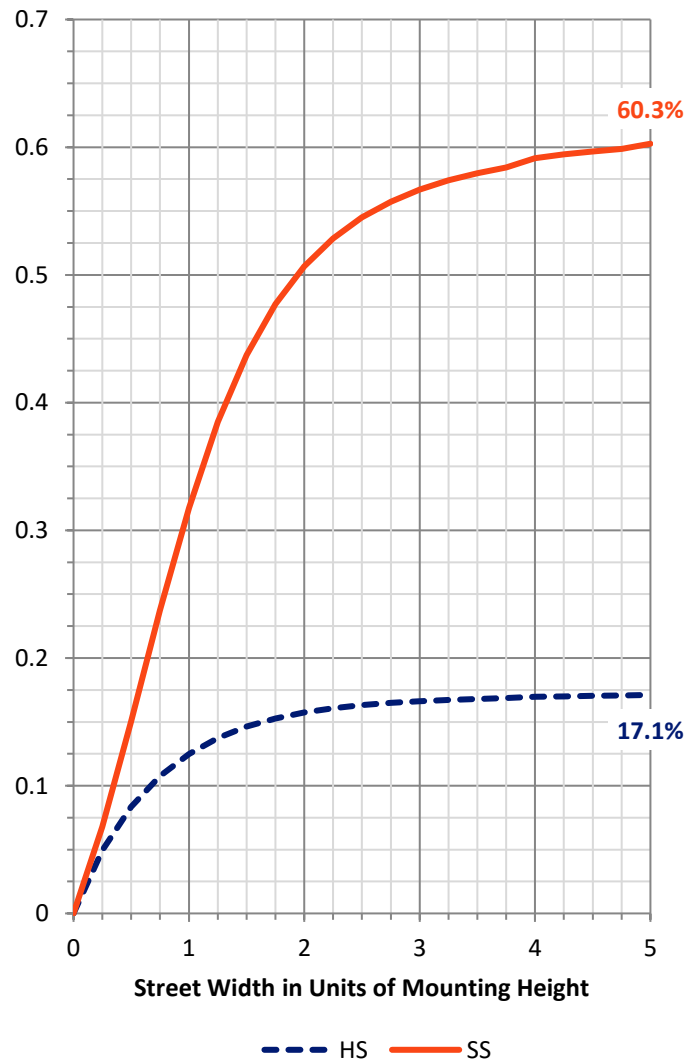
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	252.2	161.7	413.9
	% Fixture	17.2	11.0	28.2
<b>Street Side</b>	Lumens	890.2	161.7	1051.9
	% Fixture	60.7	11.0	71.8
<b>Total</b>	Lumens	1142.4	323.4	1465.8
	% Fixture	77.9	22.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.2	0.7
10°-20°	33.2	2.3
20°-30°	70.0	4.8
30°-40°	127.2	8.7
40°-50°	200.9	13.7
50°-60°	266.9	18.2
60°-70°	256.9	17.5
70°-80°	150.8	10.3
80°-90°	26.3	1.8
90°-100°	7.2	0.5
100°-110°	73.4	5.0
110°-120°	107.3	7.3
120°-130°	62.3	4.2
130°-140°	33.0	2.2
140°-150°	19.6	1.3
150°-160°	12.1	0.8
160°-170°	6.6	0.4
170°-180°	2.1	0.1
0°-90°	1142.4	77.9
0°-180°	1465.8	100.0

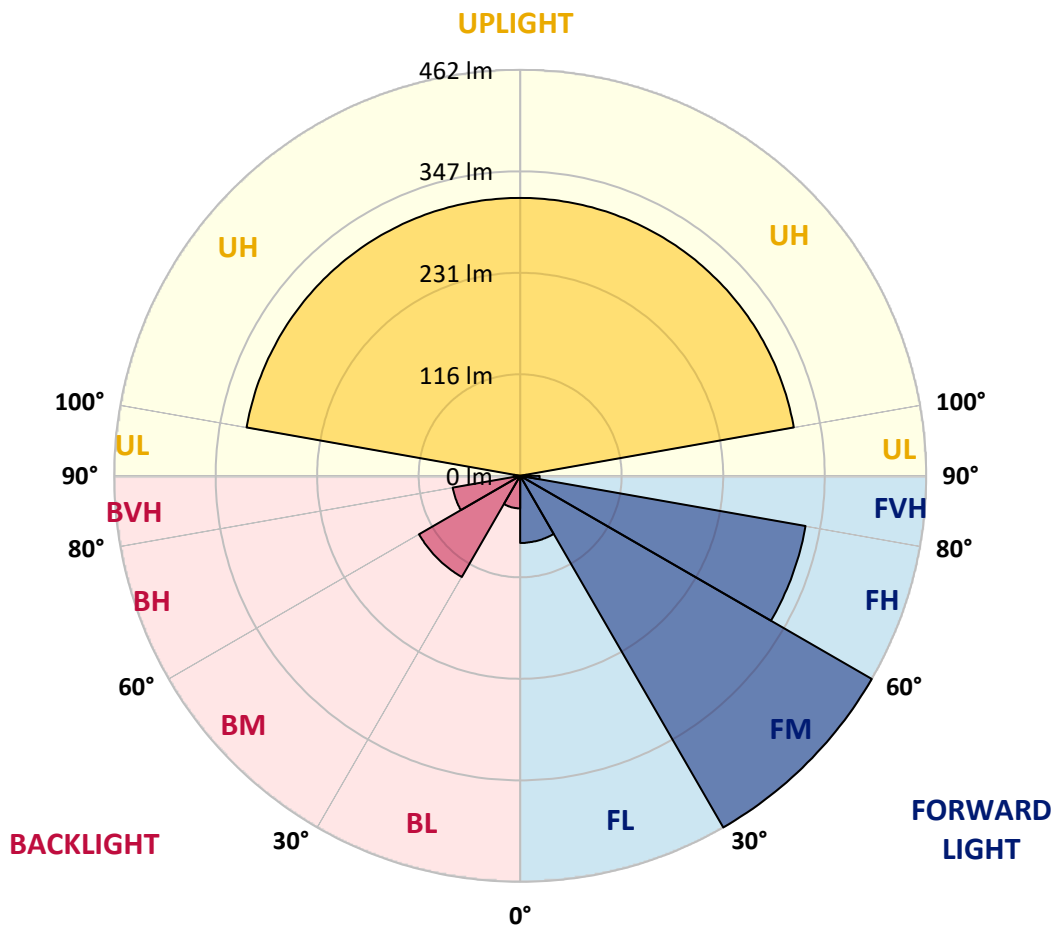


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	76.4	5.2			
FM (30°-60°)	462.0	31.5			
FH (60°-80°)	329.7	22.5			G0/660
FVH (80°-90°)	22.1	1.5			G1/100
BL (0°-30°)	37.1	2.5	B0/110		
BM (30°-60°)	133.0	9.1	B0/220		
BH (60°-80°)	77.9	5.3	B0/110		G0/110
BVH (80°-90°)	4.2	0.3			G0/10
UL (90°-100°)	7.2	0.5		U1/10	
UH (100°-180°)	316.2	21.6		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°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	114.0	115.0	114.0	114.0	113.0	113.0	112.0	111.0	110.0	109.0	107.0
5°	127.0	127.0	126.0	124.0	123.0	122.0	120.0	117.0	115.0	112.0	109.0
7.5°	133.0	133.0	132.0	130.0	128.0	127.0	124.0	120.0	117.0	113.0	109.0
10°	141.0	142.0	140.0	138.0	136.0	135.0	131.0	126.0	121.0	116.0	110.0
12.5°	150.0	151.0	150.0	147.0	144.0	143.0	139.0	133.0	127.0	120.0	113.0
15°	162.1	164.1	161.0	159.0	156.0	155.0	150.0	143.0	136.0	127.0	118.0
17.5°	176.1	177.1	175.1	172.1	170.1	169.1	164.1	156.0	146.0	136.0	125.0
20°	192.1	193.1	192.1	188.1	186.1	185.1	180.1	171.1	159.0	148.0	134.0
22.5°	211.1	213.1	210.1	207.1	205.1	205.1	199.1	189.1	175.1	161.0	145.0
25°	233.1	236.1	232.1	230.1	228.1	227.1	222.1	210.1	194.1	177.1	157.0
27.5°	260.1	262.1	259.1	258.1	254.1	254.1	246.1	232.1	215.1	195.1	172.1
30°	284.1	286.1	284.1	284.1	281.1	280.1	272.1	258.1	237.1	213.1	185.1
32.5°	307.1	309.1	308.1	309.1	308.1	307.1	297.1	282.1	261.1	230.1	198.1
35°	330.1	333.1	332.1	335.1	334.1	333.1	325.1	307.1	282.1	251.1	212.1
37.5°	354.1	357.1	357.1	360.1	361.1	361.1	352.1	333.1	305.1	270.1	228.1
40°	380.1	383.1	383.1	388.1	390.1	390.1	380.1	361.1	330.1	291.1	245.1
42.5°	405.1	408.1	409.1	414.1	417.1	418.1	410.1	388.1	352.1	312.1	261.1
45°	429.1	432.1	435.1	445.1	450.1	449.1	443.1	420.1	380.1	334.1	278.1
47.5°	452.1	456.1	461.1	474.1	481.1	480.1	476.1	450.1	406.1	355.1	293.1
50°	470.1	473.1	483.1	497.2	506.2	507.2	501.2	476.1	428.1	371.1	304.1
52.5°	484.1	488.2	500.2	520.2	527.2	530.2	523.2	498.2	450.1	385.1	313.1
55°	494.2	494.2	512.2	535.2	545.2	547.2	547.2	516.2	463.1	394.1	318.1
57.5°	489.2	489.2	509.2	534.2	550.2	549.2	547.2	517.2	465.1	392.1	315.1
60°	475.1	478.1	497.2	522.2	538.2	537.2	531.2	504.2	455.1	384.1	309.1
62.5°	456.1	461.1	481.1	500.2	518.2	521.2	513.2	489.2	438.1	372.1	298.1
65°	420.1	427.1	452.1	473.1	487.2	493.2	483.1	461.1	415.1	349.1	275.1
67.5°	380.1	385.1	406.1	436.1	444.1	450.1	445.1	422.1	383.1	312.1	249.1
70°	334.1	342.1	356.1	386.1	395.1	401.1	401.1	378.1	341.1	274.1	218.1
72.5°	280.1	289.1	306.1	328.1	340.1	344.1	343.1	324.1	291.1	232.1	184.1
75°	221.1	228.1	248.1	264.1	277.1	280.1	279.1	263.1	233.1	187.1	146.0
77.5°	163.1	170.1	185.1	197.1	209.1	207.1	207.1	195.1	176.1	139.0	111.0
80°	107.0	113.0	126.0	130.0	143.0	142.0	142.0	133.0	120.0	93.0	74.0
82.5°	59.0	64.0	73.0	77.0	85.0	83.0	84.0	78.0	70.0	52.0	42.0
85°	21.0	25.0	30.0	33.0	37.0	37.0	37.0	32.0	30.0	20.0	17.0
87.5°	1.0	2.0	4.0	4.0	6.0	6.0	6.0	4.0	4.0	1.0	1.0
90°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8
92.5°	2.8	2.8	2.8	3.9	4.3	4.4	3.9	4.4	3.3	3.3	2.8
95°	3.3	3.3	3.9	5.0	5.9	6.1	6.6	6.6	3.9	3.9	3.3
97.5°	4.4	5.0	5.0	6.1	9.2	10.0	18.3	11.1	5.5	5.5	5.0
100°	7.2	7.7	7.7	13.8	26.2	29.3	39.3	28.2	14.4	10.5	7.7
102.5°	23.2	24.3	29.9	44.8	62.1	66.4	60.3	50.9	48.1	33.2	26.6
105°	59.2	58.7	63.1	74.7	89.3	93.0	91.3	84.1	76.4	65.8	60.9
107.5°	78.0	78.0	81.9	91.9	102.9	105.7	123.4	125.1	99.0	86.9	81.3
110°	88.0	88.0	91.3	99.6	114.2	117.9	142.8	141.6	122.3	107.3	100.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	90.2	90.7	95.2	107.9	123.8	127.8	138.9	133.9	126.2	119.5	114.0
115°	93.5	93.5	98.5	110.7	119.5	121.7	126.2	120.6	114.5	110.1	107.9
117.5°	92.4	94.1	95.2	101.8	107.6	109.0	112.3	109.6	101.3	97.9	96.8
120°	85.8	85.8	86.9	90.2	93.3	94.1	95.7	94.6	89.1	86.3	85.8
122.5°	76.4	76.9	76.4	78.0	80.2	80.8	82.4	81.3	76.9	75.8	75.8
125°	67.0	67.0	66.4	67.5	68.9	69.2	68.6	69.2	67.0	66.4	66.4
127.5°	60.3	59.8	58.7	59.2	59.7	59.8	59.8	60.3	58.1	58.7	59.2
130°	53.7	53.7	52.6	52.6	52.6	52.6	51.5	52.6	51.5	52.0	52.6
132.5°	47.6	47.6	45.9	45.4	45.4	45.4	45.4	45.9	45.4	46.5	47.6
135°	42.6	42.6	40.9	41.5	41.5	41.5	40.9	41.5	40.9	42.1	42.6
137.5°	38.7	38.7	37.6	37.6	37.6	37.6	37.1	37.6	37.6	38.2	39.3
140°	35.4	35.4	34.9	34.9	34.4	34.3	34.9	34.9	34.9	35.4	36.0
142.5°	33.8	33.2	32.6	32.1	32.5	32.6	32.6	32.6	32.1	32.6	33.8
145°	31.0	31.0	30.4	30.4	30.4	30.4	31.0	30.4	30.4	31.0	31.0
147.5°	29.3	29.3	28.8	29.3	29.3	29.3	29.3	29.3	28.8	29.3	29.3
150°	28.8	28.2	27.7	28.2	28.2	28.2	27.7	27.7	27.7	27.7	28.2
152.5°	27.1	27.1	26.6	27.1	26.7	26.6	26.6	26.6	26.6	26.6	27.1
155°	26.0	26.0	25.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
157.5°	24.9	25.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.5
160°	24.3	24.3	24.3	24.3	23.9	23.8	23.8	23.8	24.3	24.3	24.3
162.5°	23.8	23.8	23.8	23.8	23.3	23.2	23.2	23.2	23.2	23.8	23.8
165°	23.8	23.2	23.2	23.2	22.8	22.7	22.7	22.7	22.7	23.2	23.8
167.5°	22.7	22.7	22.7	22.7	22.7	22.7	22.1	22.1	22.7	22.7	22.7
170°	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
172.5°	22.7	22.7	22.7	22.7	22.2	22.1	22.1	22.1	22.1	22.1	22.7
175°	22.7	22.7	22.7	22.7	22.2	22.1	22.1	22.1	22.7	22.7	22.7
177.5°	22.7	22.7	22.7	22.7	22.2	22.1	22.7	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	106.0	105.0	104.0	102.0	101.0	100.0	99.0	98.0	98.0	98.0	98.0
5°	107.0	106.0	103.0	100.0	97.0	94.0	92.0	91.0	90.0	89.0	89.0
7.5°	107.0	105.0	101.0	97.0	94.0	90.0	87.0	84.0	82.0	81.0	81.0
10°	108.0	105.0	100.0	96.0	91.0	86.0	82.0	78.0	76.0	74.0	74.0
12.5°	110.0	107.0	100.0	95.0	89.0	83.0	78.0	74.0	71.0	69.0	69.0
15°	114.0	110.0	102.0	95.0	88.0	81.0	76.0	71.0	68.0	66.0	66.0
17.5°	120.0	115.0	105.0	95.0	87.0	80.0	74.0	69.0	65.0	63.0	63.0
20°	127.0	121.0	109.0	97.0	87.0	79.0	73.0	67.0	63.0	61.0	61.0
22.5°	137.0	128.0	114.0	100.0	89.0	80.0	72.0	66.0	62.0	60.0	60.0
25°	148.0	138.0	120.0	104.0	91.0	80.0	72.0	66.0	62.0	60.0	59.0
27.5°	160.0	149.0	127.0	108.0	93.0	82.0	73.0	66.0	62.0	60.0	60.0
30°	171.1	158.0	134.0	113.0	96.0	83.0	74.0	67.0	62.0	60.0	60.0
32.5°	183.1	168.1	141.0	118.0	99.0	85.0	75.0	68.0	63.0	61.0	60.0
35°	195.1	178.1	148.0	122.0	102.0	87.0	76.0	69.0	64.0	62.0	62.0
37.5°	208.1	189.1	155.0	127.0	105.0	89.0	78.0	70.0	65.0	63.0	63.0
40°	222.1	200.1	162.1	131.0	108.0	91.0	80.0	72.0	67.0	65.0	65.0
42.5°	236.1	212.1	170.1	136.0	111.0	93.0	81.0	74.0	69.0	67.0	67.0
45°	250.1	222.1	177.1	141.0	114.0	96.0	84.0	76.0	71.0	69.0	69.0
47.5°	263.1	233.1	183.1	144.0	117.0	98.0	85.0	78.0	73.0	72.0	71.0
50°	272.1	240.1	187.1	147.0	118.0	99.0	87.0	79.0	75.0	73.0	73.0
52.5°	279.1	247.1	190.1	149.0	119.0	100.0	88.0	81.0	77.0	75.0	74.0
55°	283.1	248.1	190.1	147.0	118.0	100.0	88.0	81.0	77.0	75.0	75.0
57.5°	279.1	243.1	186.1	143.0	115.0	97.0	85.0	79.0	75.0	74.0	73.0
60°	271.1	235.1	178.1	137.0	110.0	92.0	81.0	76.0	73.0	72.0	71.0
62.5°	260.1	225.1	170.1	129.0	103.0	86.0	78.0	72.0	70.0	69.0	68.0
65°	238.1	206.1	157.0	119.0	94.0	79.0	71.0	67.0	65.0	63.0	62.0
67.5°	214.1	185.1	139.0	107.0	83.0	71.0	64.0	60.0	57.0	57.0	56.0
70°	188.1	163.1	120.0	91.0	72.0	62.0	55.0	52.0	50.0	50.0	49.0
72.5°	157.0	137.0	100.0	74.0	59.0	51.0	46.0	43.0	42.0	42.0	41.0
75°	126.0	108.0	79.0	58.0	46.0	40.0	36.0	34.0	33.0	33.0	32.0
77.5°	93.0	79.0	57.0	42.0	33.0	29.0	26.0	25.0	24.0	24.0	23.0
80°	62.0	52.0	37.0	27.0	20.0	18.0	16.0	16.0	15.0	16.0	15.0
82.5°	34.0	28.0	20.0	14.0	10.0	9.0	8.0	8.0	9.0	9.0	8.0
85°	13.0	10.0	7.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0
87.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8
92.5°	2.8	2.8	3.3	3.3	4.4	3.9	4.4	3.9	2.8	2.8	2.8
95°	3.3	3.3	3.9	3.9	6.6	6.6	6.1	5.0	3.9	3.3	3.3
97.5°	4.4	5.0	5.5	5.5	11.1	18.3	10.0	6.1	5.0	5.0	4.4
100°	7.7	7.7	10.5	14.4	28.2	39.3	29.3	13.8	7.7	7.7	7.2
102.5°	25.5	26.6	33.2	48.1	50.9	60.3	66.4	44.8	29.9	24.3	23.2
105°	60.9	60.9	65.8	76.4	84.1	91.3	93.0	74.7	63.1	58.7	59.2
107.5°	80.8	81.3	86.9	99.0	125.1	123.4	105.7	91.9	81.9	78.0	78.0
110°	99.0	100.2	107.3	122.3	141.6	142.8	117.9	99.6	91.3	88.0	88.0



REPORT NUMBER: P832864  
 CATALOG NUMBER: TTN-D0-750-U-DL-CG-UPL1

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	112.9	114.0	119.5	126.2	133.9	138.9	127.8	107.9	95.2	90.7	90.2
115°	109.0	107.9	110.1	114.5	120.6	126.2	121.7	110.7	98.5	93.5	93.5
117.5°	95.2	96.8	97.9	101.3	109.6	112.3	109.0	101.8	95.2	94.1	92.4
120°	84.7	85.8	86.3	89.1	94.6	95.7	94.1	90.2	86.9	85.8	85.8
122.5°	74.7	75.8	75.8	76.9	81.3	82.4	80.8	78.0	76.4	76.9	76.4
125°	65.8	66.4	66.4	67.0	69.2	68.6	69.2	67.5	66.4	67.0	67.0
127.5°	58.7	59.2	58.7	58.1	60.3	59.8	59.8	59.2	58.7	59.8	60.3
130°	53.1	52.6	52.0	51.5	52.6	51.5	52.6	52.6	52.6	53.7	53.7
132.5°	47.6	47.6	46.5	45.4	45.9	45.4	45.4	45.4	45.9	47.6	47.6
135°	42.6	42.6	42.1	40.9	41.5	40.9	41.5	41.5	40.9	42.6	42.6
137.5°	39.8	39.3	38.2	37.6	37.6	37.1	37.6	37.6	37.6	38.7	38.7
140°	36.0	36.0	35.4	34.9	34.9	34.9	34.3	34.9	34.9	35.4	35.4
142.5°	33.8	33.8	32.6	32.1	32.6	32.6	32.6	32.1	32.6	33.2	33.8
145°	31.5	31.0	31.0	30.4	30.4	31.0	30.4	30.4	30.4	31.0	31.0
147.5°	29.9	29.3	29.3	28.8	29.3	29.3	29.3	29.3	28.8	29.3	29.3
150°	28.2	28.2	27.7	27.7	27.7	27.7	28.2	28.2	27.7	28.2	28.8
152.5°	27.7	27.1	26.6	26.6	26.6	26.6	26.6	27.1	26.6	27.1	27.1
155°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.5	26.0	26.0
157.5°	25.5	25.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.5	24.9
160°	24.9	24.3	24.3	24.3	23.8	23.8	23.8	24.3	24.3	24.3	24.3
162.5°	24.3	23.8	23.8	23.2	23.2	23.2	23.2	23.8	23.8	23.8	23.8
165°	23.2	23.8	23.2	22.7	22.7	22.7	22.7	23.2	23.2	23.2	23.8
167.5°	23.2	22.7	22.7	22.7	22.1	22.1	22.7	22.7	22.7	22.7	22.7
170°	22.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.7	22.7
172.5°	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.7	22.7	22.7	22.7
175°	22.1	22.7	22.7	22.7	22.1	22.1	22.1	22.7	22.7	22.7	22.7
177.5°	22.7	22.7	22.7	22.7	22.7	22.7	22.1	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7

(END OF REPORT)