

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: P832955

Luminaire Tested: **TTN-D0-830-U-DL-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832955
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-UPL2
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: 1557.8 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B0 - U4 - G1

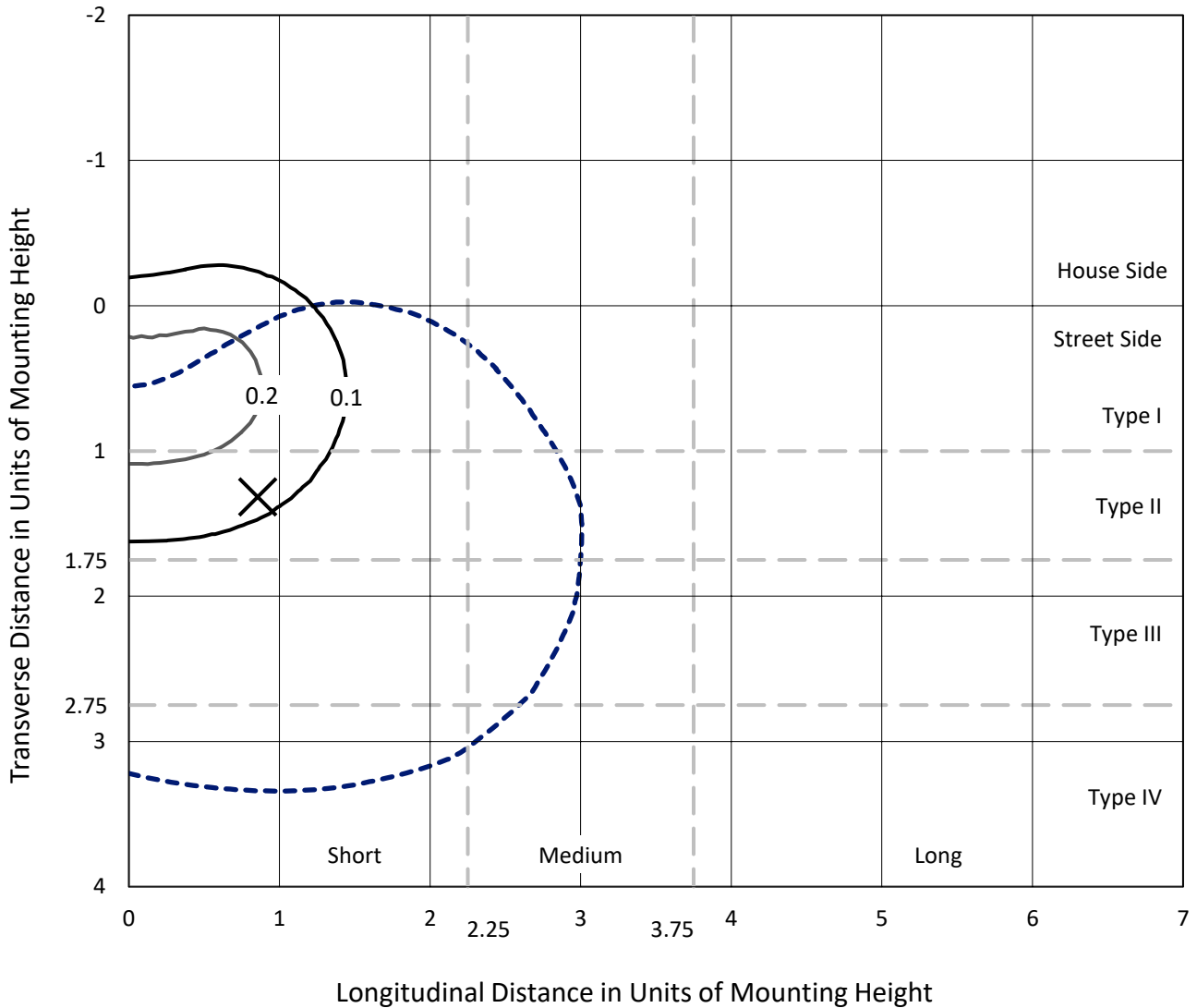
Input Watts (W): 15.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

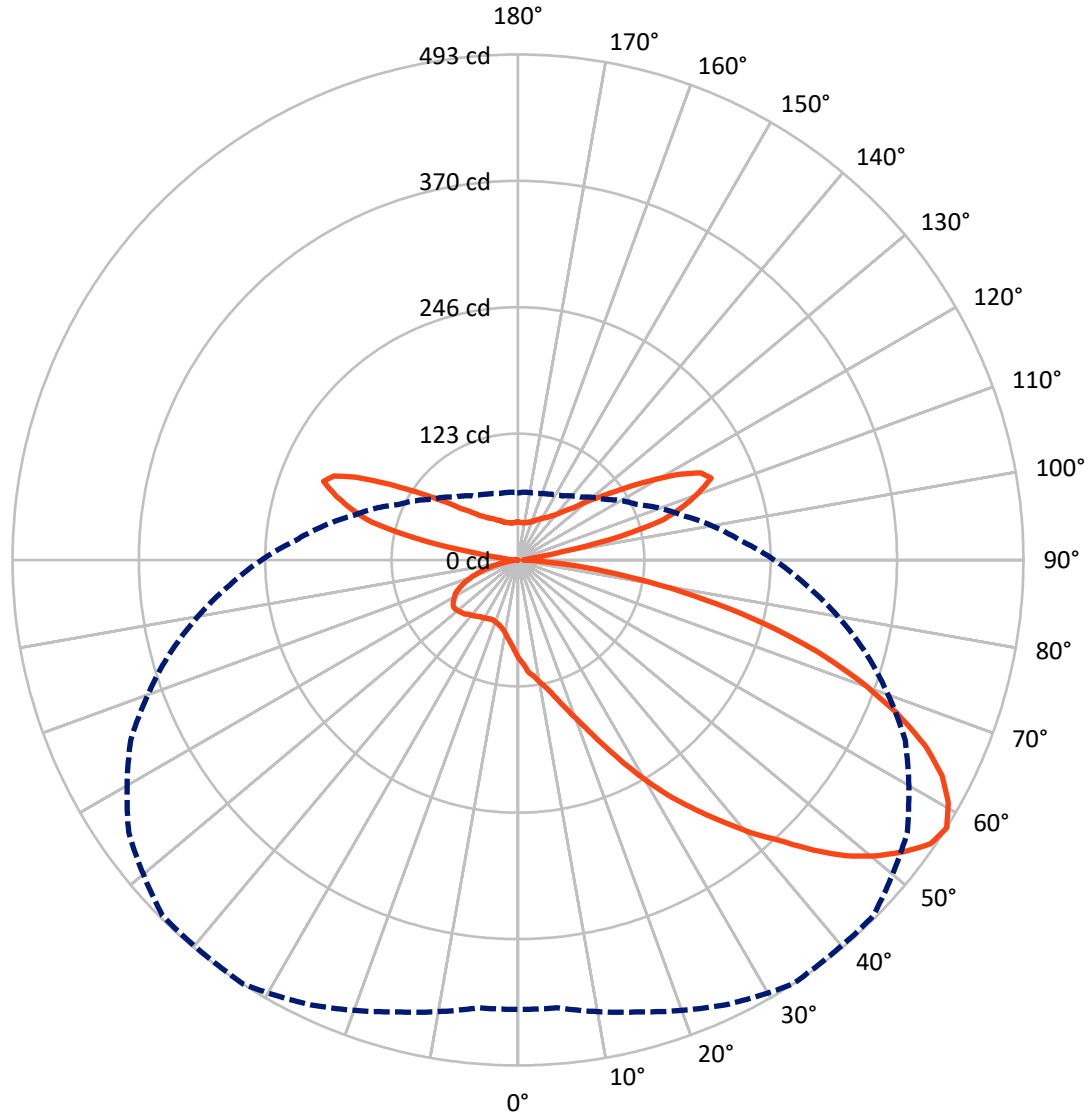
× Max cd
 - - - 1/2 Max cd



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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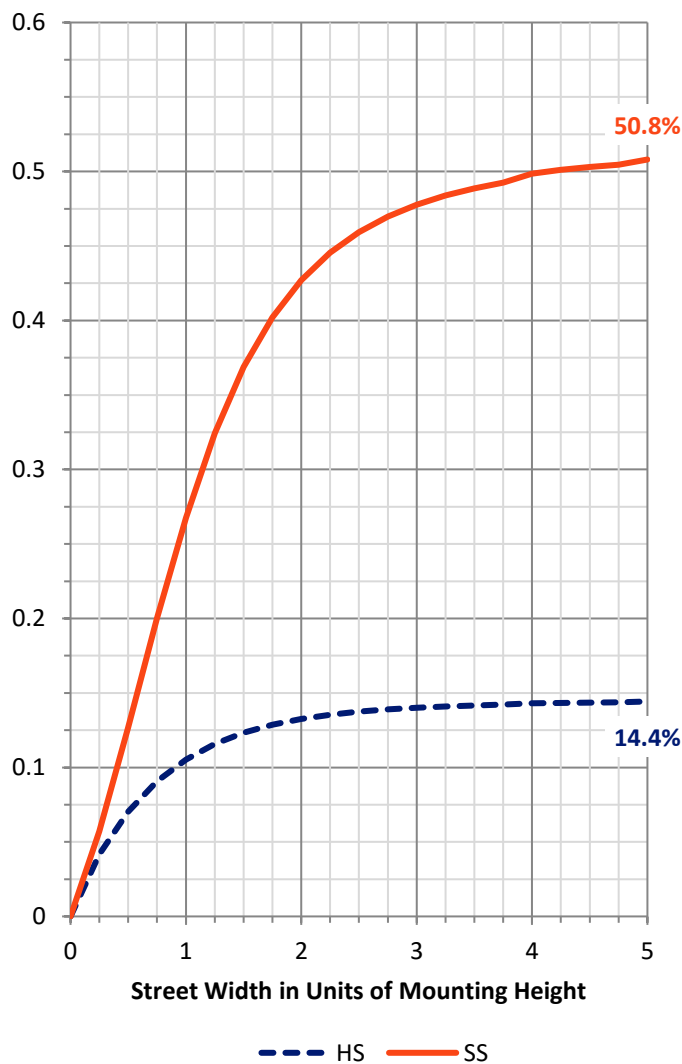
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	226.1	267.0	493.1
	% Fixture	14.5	17.1	31.7
Street Side	Lumens	797.6	267.0	1064.7
	% Fixture	51.2	17.1	68.3
Total	Lumens	1023.7	534.0	1557.8
	% Fixture	65.7	34.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.2	0.6
10°-20°	29.7	1.9
20°-30°	62.7	4.0
30°-40°	113.9	7.3
40°-50°	180.0	11.6
50°-60°	239.1	15.3
60°-70°	230.1	14.8
70°-80°	135.1	8.7
80°-90°	23.9	1.5
90°-100°	11.9	0.8
100°-110°	121.1	7.8
110°-120°	177.1	11.4
120°-130°	102.8	6.6
130°-140°	54.4	3.5
140°-150°	32.3	2.1
150°-160°	19.9	1.3
160°-170°	10.9	0.7
170°-180°	3.5	0.2
0°-90°	1023.7	65.7
0°-180°	1557.8	100.0

Coefficient of Utilization



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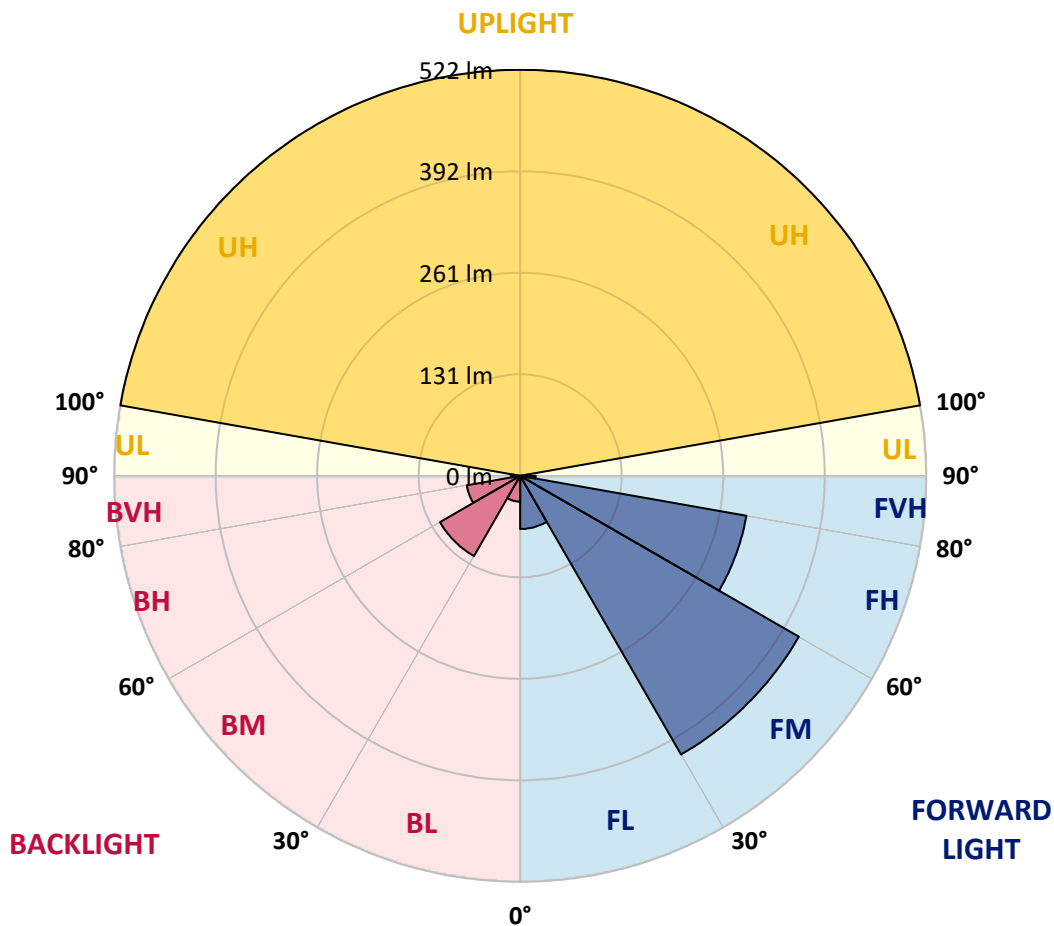
CATALOG NUMBER: TTN-D0-830-U-DL-CG-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	68.4	4.4			
FM (30°-60°)	413.9	26.6			
FH (60°-80°)	295.4	19.0			G0/660
FVH (80°-90°)	19.9	1.3			G1/100
BL (0°-30°)	33.2	2.1	B0/110		
BM (30°-60°)	119.1	7.6	B0/220		
BH (60°-80°)	69.8	4.5	B0/110		G0/110
BVH (80°-90°)	4.0	0.3			G0/10
UL (90°-100°)	11.9	0.8		U2/50	
UH (100°-180°)	522.1	33.5		U4/1000	

BUG Rating: B0-U4-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°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6
92.5°	4.6	4.6	4.6	6.4	7.1	7.3	6.4	7.3	5.5	5.5	4.6
95°	5.5	5.5	6.4	8.2	9.7	10.1	11.0	11.0	6.4	6.4	5.5
97.5°	7.3	8.2	8.2	10.1	15.1	16.4	30.2	18.3	9.1	9.1	8.2
100°	11.9	12.8	12.8	22.8	43.3	48.4	64.9	46.6	23.8	17.4	12.8
102.5°	38.4	40.2	49.3	74.0	102.5	109.6	99.6	84.1	79.5	54.8	43.9
105°	97.8	96.8	104.2	123.3	147.5	153.5	150.8	138.9	126.1	108.7	100.5
107.5°	128.8	128.8	135.2	151.7	169.9	174.5	203.7	206.5	163.5	143.4	134.3
110°	145.3	145.3	150.8	164.5	188.6	194.6	235.7	233.9	201.9	177.3	165.4



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 CATALOG NUMBER: TTN-D0-830-U-DL-CG-UPL2

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	148.9	149.8	157.1	178.2	204.5	211.1	229.3	221.1	208.3	197.4	188.2
115°	154.4	154.4	162.6	182.7	197.3	201.0	208.3	199.2	189.1	181.8	178.2
117.5°	152.6	155.3	157.1	168.1	177.6	180.0	185.5	180.9	167.2	161.7	159.9
120°	141.6	141.6	143.4	148.9	154.0	155.3	158.1	156.2	147.1	142.5	141.6
122.5°	126.1	127.0	126.1	128.8	132.5	133.4	136.1	134.3	127.0	125.2	125.2
125°	110.6	110.6	109.6	111.5	113.7	114.2	113.3	114.2	110.6	109.6	109.6
127.5°	99.6	98.7	96.8	97.8	98.5	98.7	98.7	99.6	95.9	96.8	97.8
130°	88.6	88.6	86.8	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	74.9	75.8	74.9	76.7	78.6
135°	70.4	70.4	67.6	68.5	68.5	68.5	67.6	68.5	67.6	69.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9
140°	58.5	58.5	57.6	57.6	56.8	56.6	57.6	57.6	57.6	58.5	59.4
142.5°	55.7	54.8	53.9	53.0	53.7	53.9	53.9	53.9	53.0	53.9	55.7
145°	51.2	51.2	50.3	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	48.4	47.5	48.4	48.4
150°	47.5	46.6	45.7	46.6	46.6	46.6	45.7	45.7	45.7	45.7	46.6
152.5°	44.8	44.8	43.9	44.8	44.1	43.9	43.9	43.9	43.9	43.9	44.8
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0
160°	40.2	40.2	40.2	40.2	39.5	39.3	39.3	39.3	40.2	40.2	40.2
162.5°	39.3	39.3	39.3	39.3	38.6	38.4	38.4	38.4	38.4	39.3	39.3
165°	39.3	38.4	38.4	38.4	37.7	37.5	37.5	37.5	37.5	38.4	39.3
167.5°	37.5	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
172.5°	37.5	37.5	37.5	37.5	36.7	36.5	36.5	36.5	36.5	36.5	37.5
175°	37.5	37.5	37.5	37.5	36.7	36.5	36.5	36.5	37.5	37.5	37.5
177.5°	37.5	37.5	37.5	37.5	36.7	36.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5



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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°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	5.5	5.5	7.3	6.4	7.3	6.4	4.6	4.6	4.6
95°	5.5	5.5	6.4	6.4	11.0	11.0	10.1	8.2	6.4	5.5	5.5
97.5°	7.3	8.2	9.1	9.1	18.3	30.2	16.4	10.1	8.2	8.2	7.3
100°	12.8	12.8	17.4	23.8	46.6	64.9	48.4	22.8	12.8	12.8	11.9
102.5°	42.0	43.9	54.8	79.5	84.1	99.6	109.6	74.0	49.3	40.2	38.4
105°	100.5	100.5	108.7	126.1	138.9	150.8	153.5	123.3	104.2	96.8	97.8
107.5°	133.4	134.3	143.4	163.5	206.5	203.7	174.5	151.7	135.2	128.8	128.8
110°	163.5	165.4	177.3	201.9	233.9	235.7	194.6	164.5	150.8	145.3	145.3



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 CATALOG NUMBER: TTN-D0-830-U-DL-CG-UPL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	186.4	188.2	197.4	208.3	221.1	229.3	211.1	178.2	157.1	149.8	148.9
115°	180.0	178.2	181.8	189.1	199.2	208.3	201.0	182.7	162.6	154.4	154.4
117.5°	157.1	159.9	161.7	167.2	180.9	185.5	180.0	168.1	157.1	155.3	152.6
120°	139.8	141.6	142.5	147.1	156.2	158.1	155.3	148.9	143.4	141.6	141.6
122.5°	123.3	125.2	125.2	127.0	134.3	136.1	133.4	128.8	126.1	127.0	126.1
125°	108.7	109.6	109.6	110.6	114.2	113.3	114.2	111.5	109.6	110.6	110.6
127.5°	96.8	97.8	96.8	95.9	99.6	98.7	98.7	97.8	96.8	98.7	99.6
130°	87.7	86.8	85.9	85.0	86.8	85.0	86.8	86.8	86.8	88.6	88.6
132.5°	78.6	78.6	76.7	74.9	75.8	74.9	74.9	74.9	75.8	78.6	78.6
135°	70.4	70.4	69.4	67.6	68.5	67.6	68.5	68.5	67.6	70.4	70.4
137.5°	65.8	64.9	63.0	62.1	62.1	61.2	62.1	62.1	62.1	64.0	64.0
140°	59.4	59.4	58.5	57.6	57.6	57.6	56.6	57.6	57.6	58.5	58.5
142.5°	55.7	55.7	53.9	53.0	53.9	53.9	53.9	53.0	53.9	54.8	55.7
145°	52.1	51.2	51.2	50.3	50.3	51.2	50.3	50.3	50.3	51.2	51.2
147.5°	49.3	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4
150°	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6	45.7	46.6	47.5
152.5°	45.7	44.8	43.9	43.9	43.9	43.9	43.9	44.8	43.9	44.8	44.8
155°	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.0	42.9	42.9
157.5°	42.0	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	41.1
160°	41.1	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	40.2
162.5°	40.2	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	39.3	39.3
165°	38.4	39.3	38.4	37.5	37.5	37.5	37.5	38.4	38.4	38.4	39.3
167.5°	38.4	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	37.5	37.5
170°	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
172.5°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5	37.5	37.5
175°	36.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	37.5
177.5°	37.5	37.5	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

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