

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: P832835

Luminaire Tested: **TTN-D0-740-U-DL-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832835
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-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: 1727.6 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B0 - U4 - G1

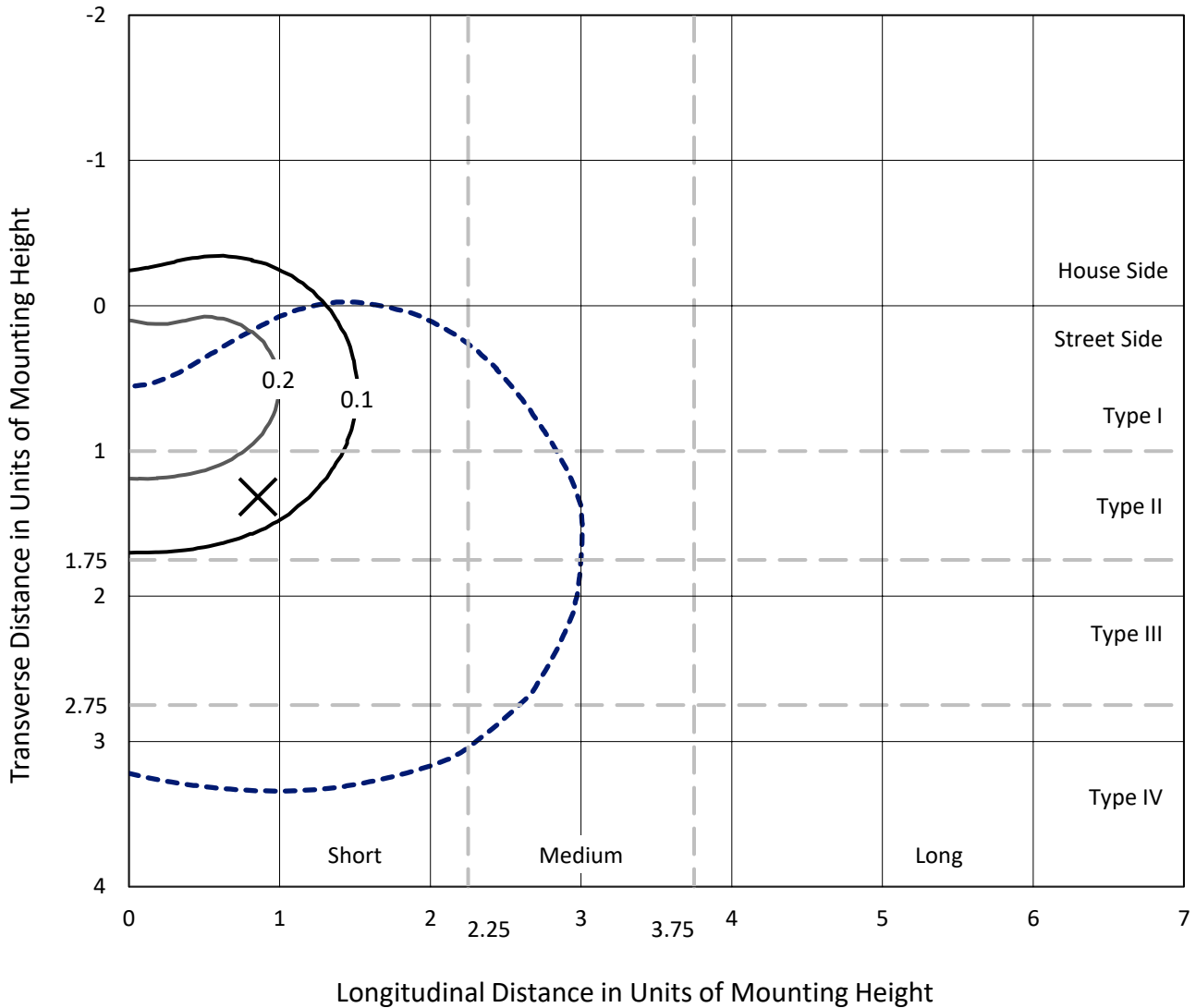
Input Watts (W): 15.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

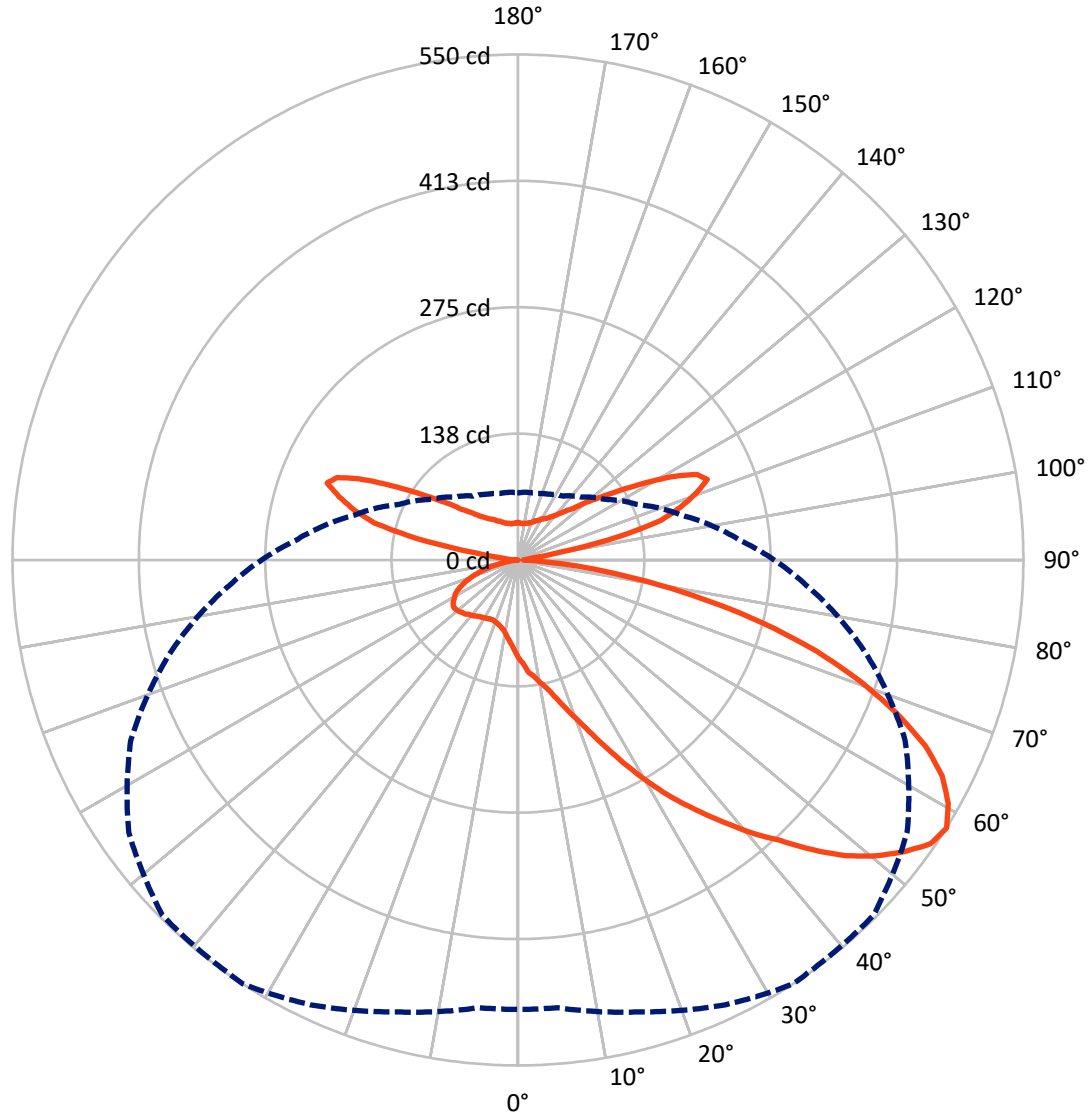
× Max cd
 - - - 1/2 Max cd



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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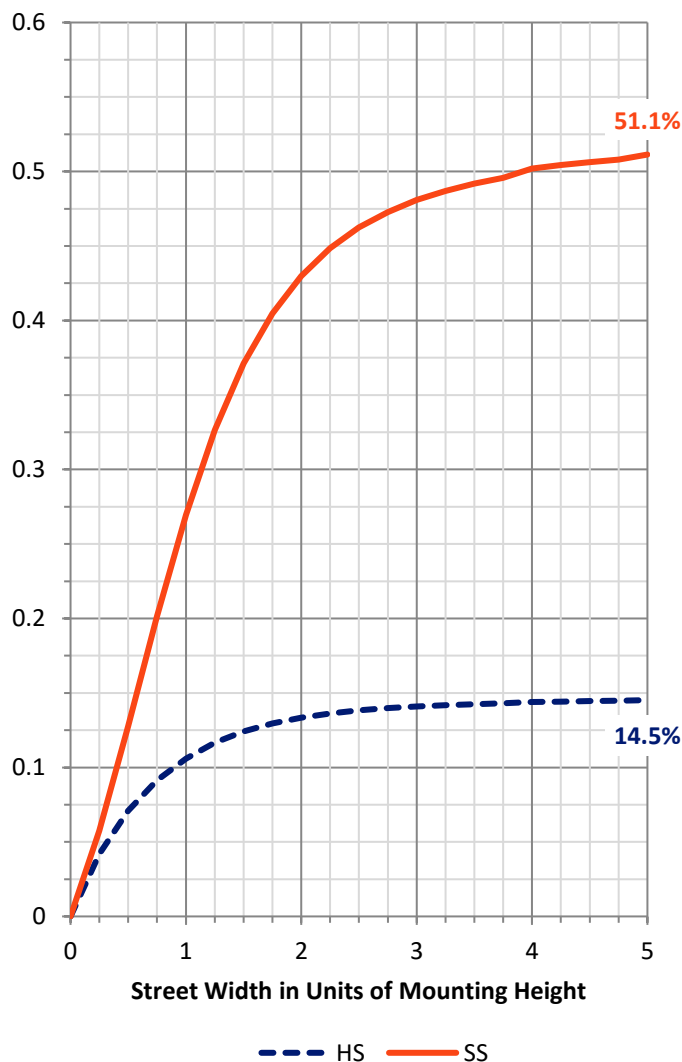
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	252.3	292.5	544.8
	% Fixture	14.6	16.9	31.5
Street Side	Lumens	890.4	292.5	1182.8
	% Fixture	51.5	16.9	68.5
Total	Lumens	1142.7	584.9	1727.6
	% Fixture	66.1	33.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.2	0.6
10°-20°	33.2	1.9
20°-30°	70.0	4.1
30°-40°	127.2	7.4
40°-50°	200.9	11.6
50°-60°	266.9	15.4
60°-70°	256.9	14.9
70°-80°	150.8	8.7
80°-90°	26.7	1.5
90°-100°	13.1	0.8
100°-110°	132.7	7.7
110°-120°	194.0	11.2
120°-130°	112.6	6.5
130°-140°	59.7	3.5
140°-150°	35.4	2.0
150°-160°	21.8	1.3
160°-170°	11.9	0.7
170°-180°	3.9	0.2
0°-90°	1142.7	66.1
0°-180°	1727.6	100.0



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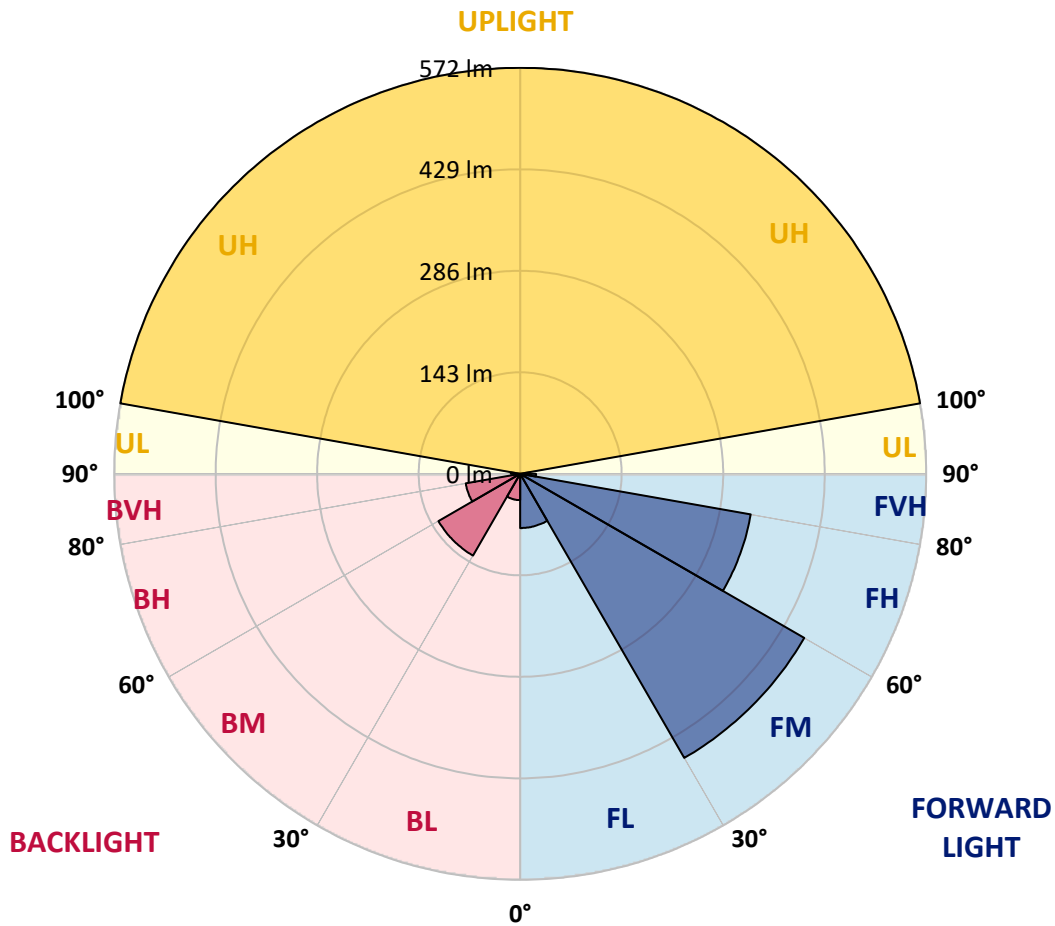
CATALOG NUMBER: TTN-D0-740-U-DL-CG-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	76.4	4.4			
FM (30°-60°)	462.0	26.7			
FH (60°-80°)	329.7	19.1			G0/660
FVH (80°-90°)	22.3	1.3			G1/100
BL (0°-30°)	37.1	2.1	B0/110		
BM (30°-60°)	133.0	7.7	B0/220		
BH (60°-80°)	77.9	4.5	B0/110		G0/110
BVH (80°-90°)	4.4	0.3			G0/10
UL (90°-100°)	13.1	0.8		U2/50	
UH (100°-180°)	571.8	33.1		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°	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°	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



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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°	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°	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: P832835
 CATALOG NUMBER: TTN-D0-740-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)