

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: P198254

Luminaire Tested: **TT-C1-LED-E1-MQ-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198254
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-MQ-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3814.5 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - U4 - G1

Input Watts (W): 45.4
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: 25 FT



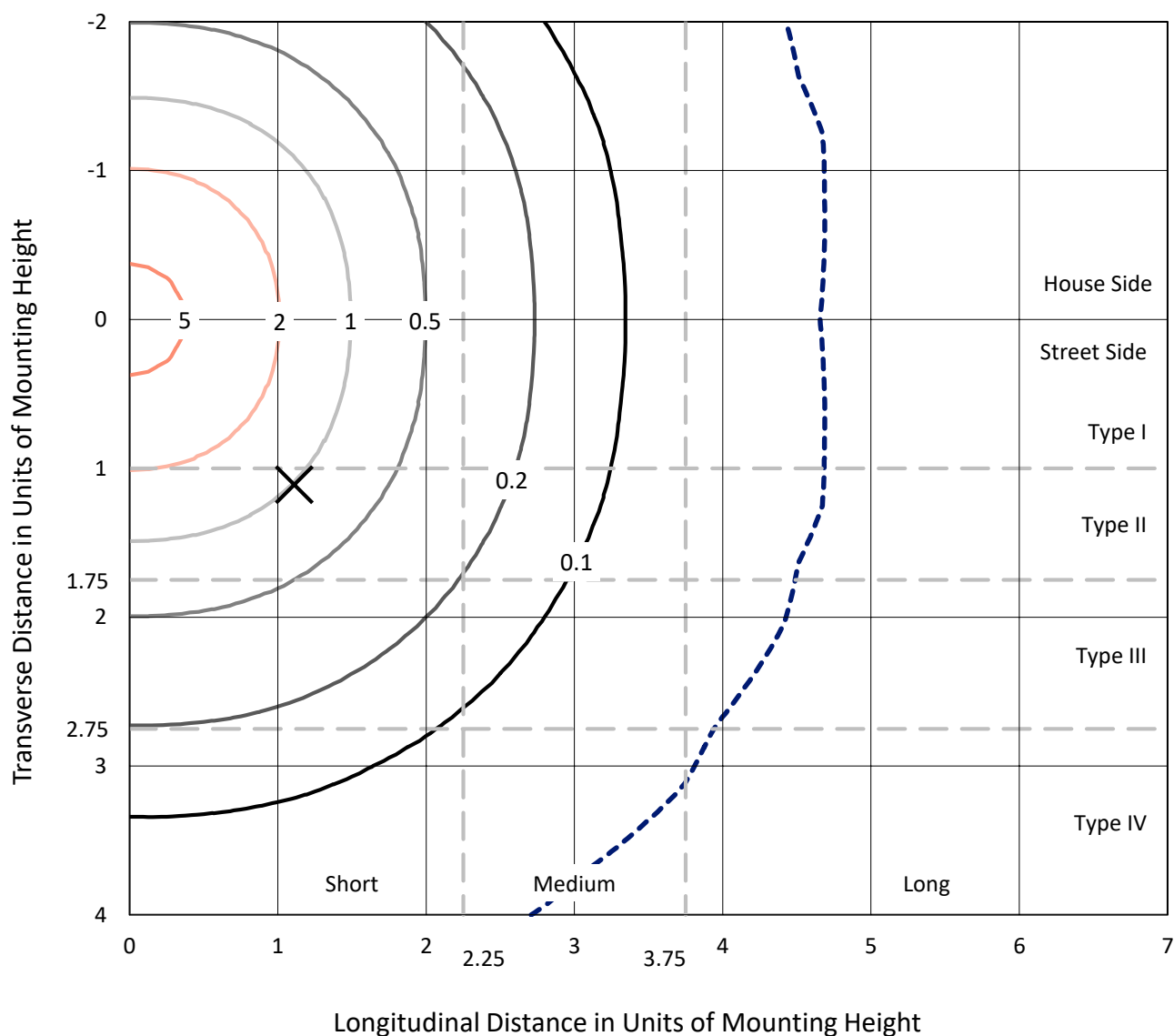
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

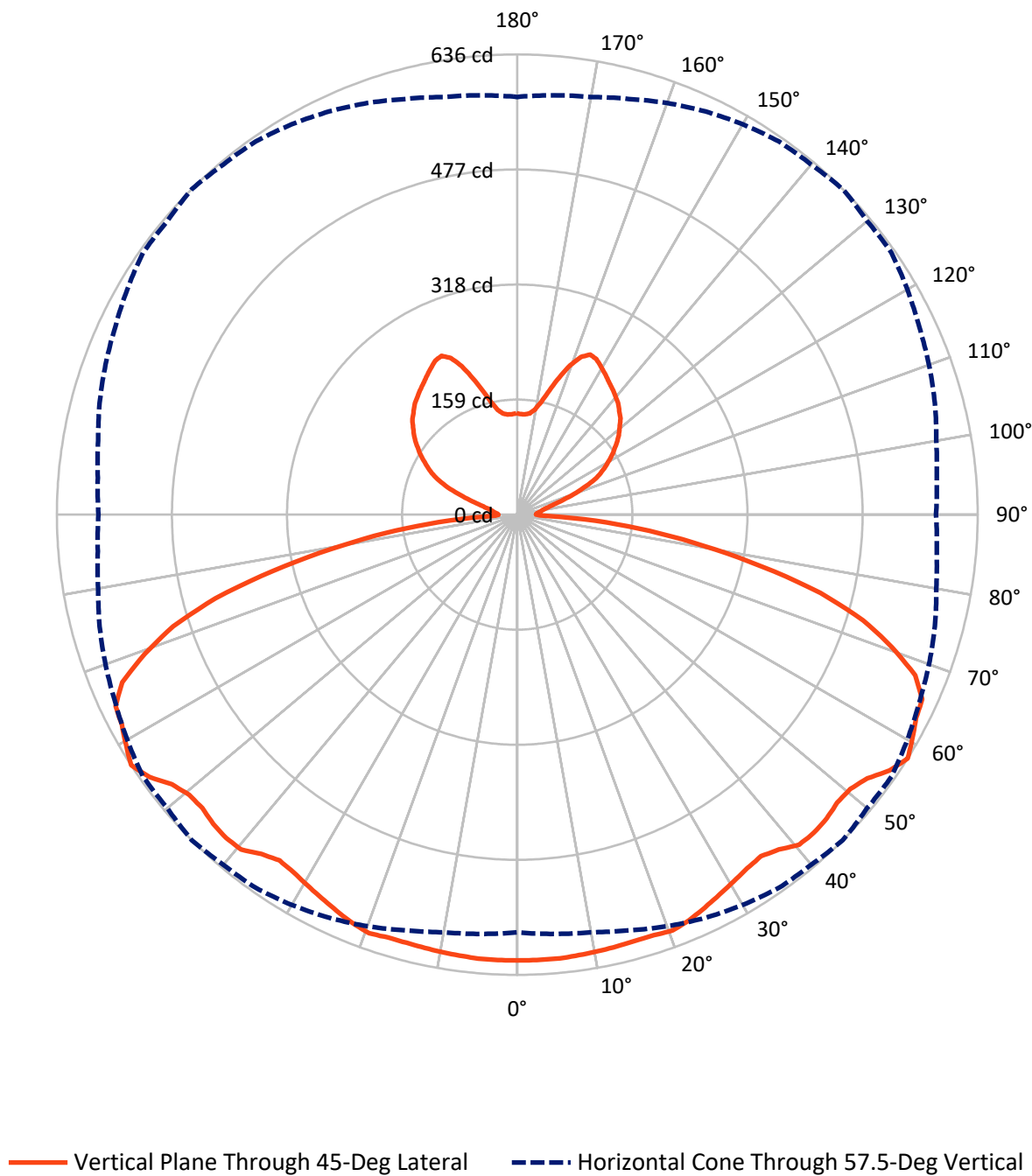


Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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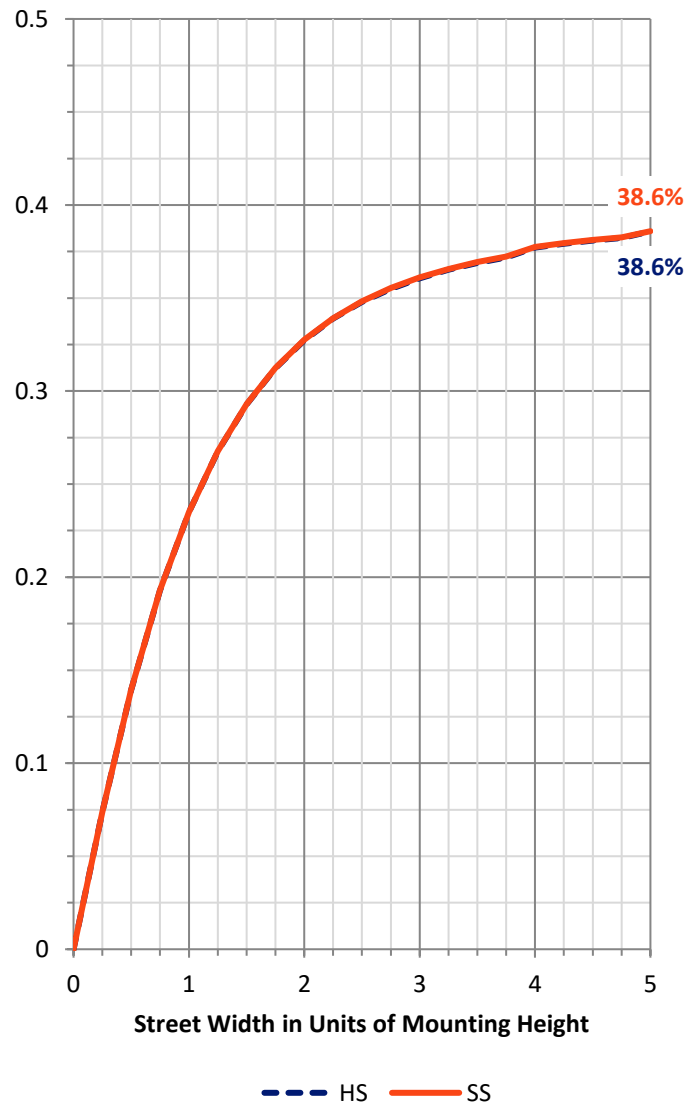
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1495.3	412.0	1907.3
	% Fixture	39.2	10.8	50.0
Street Side	Lumens	1495.3	412.0	1907.3
	% Fixture	39.2	10.8	50.0
Total	Lumens	2990.6	824.0	3814.5
	% Fixture	78.4	21.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.5
10°-20°	173.1	4.5
20°-30°	277.3	7.3
30°-40°	365.0	9.6
40°-50°	454.7	11.9
50°-60°	535.6	14.0
60°-70°	569.4	14.9
70°-80°	427.0	11.2
80°-90°	129.8	3.4
90°-100°	38.3	1.0
100°-110°	59.4	1.6
110°-120°	119.3	3.1
120°-130°	148.7	3.9
130°-140°	153.2	4.0
140°-150°	136.0	3.6
150°-160°	103.7	2.7
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2990.6	78.4
0°-180°	3814.5	100.0

Coefficient of Utilization



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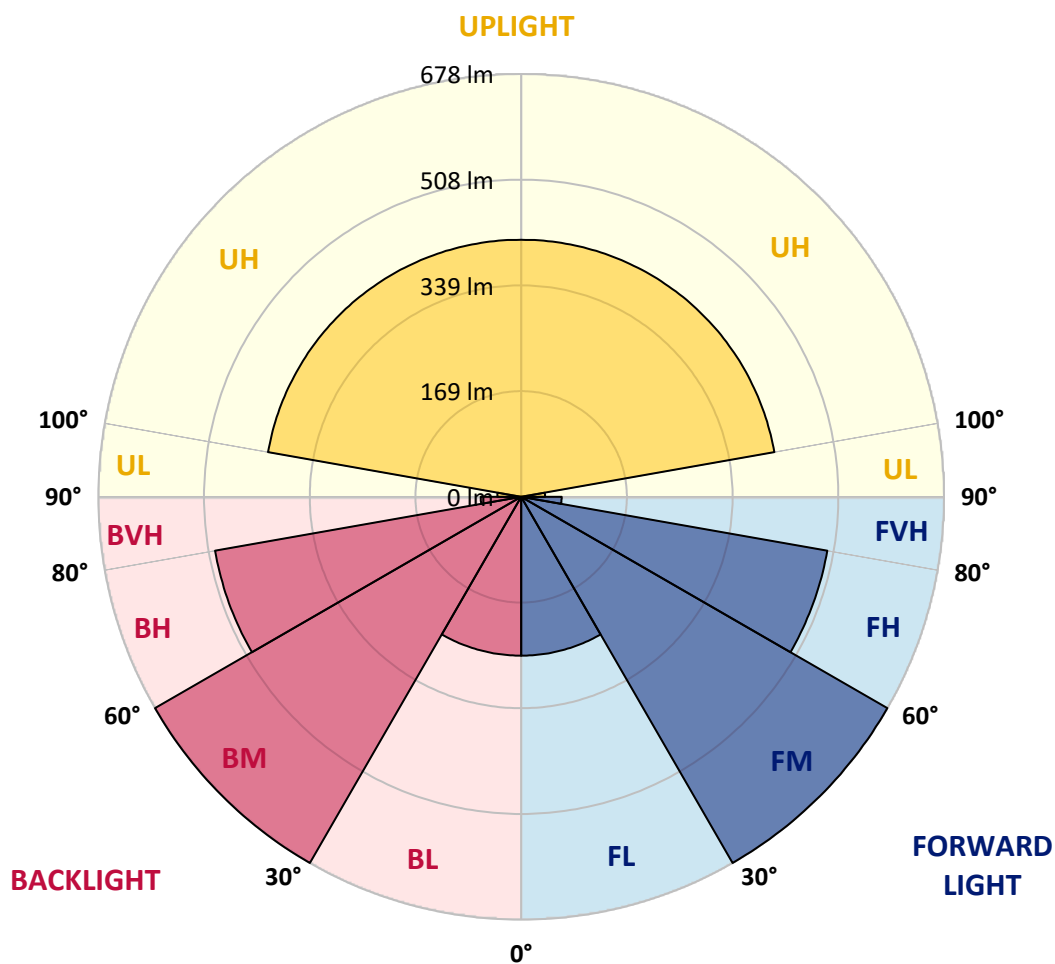
CATALOG NUMBER: TT-C1-LED-E1-MQ-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	254.6	6.7			
FM	(30°-60°)	677.6	17.8			
FH	(60°-80°)	498.2	13.1			G0/660
FVH	(80°-90°)	64.9	1.7			G1/100
BL	(0°-30°)	254.6	6.7	B1/500		
BM	(30°-60°)	677.6	17.8	B1/1000		
BH	(60°-80°)	498.2	13.1	B1/500		G0/660
BVH	(80°-90°)	64.9	1.7			G1/100
UL	(90°-100°)	38.3	1.0		U2/50	
UH	(100°-180°)	412.0	10.8		U3/500	

BUG Rating: B1-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0
2.5°	615.3	615.3	615.3	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0
5°	615.3	615.3	615.3	615.3	615.3	615.3	616.0	616.0	616.0	616.0	616.0
7.5°	614.1	614.1	614.1	614.1	614.1	614.7	614.7	614.7	614.7	614.7	614.7
10°	612.8	612.8	612.8	612.8	613.5	613.5	613.5	613.5	613.5	613.5	613.5
12.5°	611.6	611.6	611.0	611.6	611.6	611.6	612.2	612.2	612.2	612.2	612.2
15°	609.1	609.1	609.7	609.7	610.3	610.3	610.3	610.3	611.0	611.0	611.0
17.5°	607.8	607.8	608.5	609.1	609.1	609.7	610.3	610.3	611.0	611.0	611.0
20°	609.7	609.7	609.7	610.3	611.0	611.6	612.2	612.8	612.8	613.5	612.8
22.5°	606.0	606.0	606.0	606.6	606.6	606.6	607.2	607.8	607.8	608.5	607.8
25°	599.1	599.1	599.7	599.7	600.3	600.3	601.0	601.0	601.0	601.6	601.6
27.5°	592.2	591.6	592.8	592.8	593.5	593.5	594.1	594.7	594.7	594.7	595.3
30°	584.7	584.7	585.3	585.3	586.0	586.6	587.2	587.8	587.8	588.5	588.5
32.5°	576.6	577.2	577.8	578.5	579.1	580.3	581.0	581.6	582.2	582.8	582.2
35°	570.9	571.6	572.2	573.4	575.3	576.6	577.8	579.1	579.7	579.7	579.7
37.5°	572.2	572.8	574.1	576.6	579.7	581.6	584.1	586.0	586.6	587.2	587.2
40°	579.1	580.3	582.2	585.3	589.1	592.2	596.0	597.8	599.1	599.7	599.1
42.5°	578.5	580.3	582.2	586.0	590.3	593.5	597.2	599.1	600.3	601.0	600.3
45°	576.6	577.8	579.7	583.5	586.6	591.0	594.7	596.6	598.5	599.1	598.5
47.5°	572.2	572.2	572.8	576.6	581.0	586.6	589.7	592.8	594.7	594.7	594.7
50°	566.6	569.1	570.3	575.3	579.7	584.7	590.3	594.7	595.3	596.0	595.3
52.5°	566.6	567.2	571.6	574.7	583.5	591.0	596.6	601.0	604.7	605.3	605.3
55°	576.6	577.8	580.3	587.8	594.7	606.0	615.3	619.1	621.6	624.1	621.6
57.5°	577.2	581.6	586.0	594.7	605.3	614.7	622.8	629.7	631.6	636.0	631.0
60°	569.7	570.9	575.3	586.0	599.7	609.7	617.2	623.5	629.7	627.2	629.7
62.5°	557.8	560.9	567.2	575.3	586.6	598.5	609.7	611.6	621.0	618.5	622.2
65°	548.4	550.9	557.2	569.1	582.8	590.3	602.8	610.3	609.7	614.7	609.1
67.5°	525.3	527.2	532.8	544.7	557.8	569.1	572.8	584.7	586.0	592.8	586.6
70°	487.1	491.5	499.7	510.9	521.5	530.9	537.8	544.1	547.8	549.1	547.8
72.5°	439.6	446.5	452.8	463.4	474.0	480.3	484.6	493.4	495.9	499.7	498.4
75°	390.8	390.8	397.1	405.2	413.4	417.1	419.6	425.2	428.4	432.7	429.0
77.5°	323.9	327.7	333.3	340.2	338.9	340.8	340.8	343.9	342.7	345.8	348.3
80°	253.9	257.6	262.6	267.7	267.0	262.6	265.8	262.0	260.8	261.4	263.3
82.5°	181.4	183.9	188.2	191.4	191.4	188.2	189.5	185.7	187.0	183.9	186.4
85°	103.8	106.9	110.1	113.2	113.2	111.3	113.2	108.2	108.8	108.8	108.8
87.5°	25.6	28.1	29.4	31.3	30.0	33.1	35.0	31.9	32.5	31.3	33.1
90°	36.0	36.0	36.0	36.0	35.0	34.0	31.0	29.0	27.0	26.0	26.0
92.5°	40.0	39.0	39.0	38.0	36.0	34.0	32.0	29.0	27.0	27.0	27.0
95°	44.0	43.0	42.0	41.0	38.0	36.0	34.0	32.0	31.0	30.0	30.0
97.5°	42.0	42.0	41.0	40.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.0
102.5°	51.0	51.0	50.0	49.0	47.0	46.0	45.0	44.0	42.0	42.0	42.0
105°	60.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	51.0	52.0	52.0
107.5°	72.0	72.0	72.0	70.0	68.0	67.0	66.0	66.0	66.0	68.0	68.0
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	103.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	120.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.0
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	148.0
122.5°	161.0	162.0	163.0	164.0	159.0	154.0	153.0	155.0	156.0	158.0	158.0
125°	169.0	169.0	170.0	172.0	168.0	163.0	160.0	165.0	166.0	168.0	167.0
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	175.0
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	183.0
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	191.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	197.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	203.0
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.0
142.5°	235.0	231.0	225.0	218.0	206.0	201.0	202.0	208.0	212.0	218.0	218.0
145°	235.0	230.0	225.0	218.0	207.0	202.0	204.0	211.0	215.0	223.0	225.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	233.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	239.0
152.5°	216.0	214.0	216.0	221.0	220.0	220.0	224.0	230.0	234.0	241.0	241.0
155°	208.0	207.0	211.0	219.0	222.0	224.0	229.0	237.0	239.0	243.0	239.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	230.0
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	216.0
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	196.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	175.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.0
170°	142.0	141.0	142.0	145.0	144.0	144.0	146.0	147.0	146.0	147.0	147.0
172.5°	137.0	135.0	136.0	139.0	139.0	138.0	140.0	141.0	140.0	141.0	140.0
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.0
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0
2.5°	616.0	615.3	616.0	616.0	616.0	616.0	615.3	615.3
5°	616.0	616.0	616.0	615.3	615.3	615.3	615.3	615.3
7.5°	614.7	614.7	614.7	614.1	614.1	614.1	614.1	614.1
10°	613.5	613.5	612.8	612.8	612.8	612.8	612.8	612.8
12.5°	612.2	612.2	611.6	611.6	611.6	611.6	611.6	611.0
15°	611.0	611.0	610.3	610.3	609.7	609.7	609.1	609.1
17.5°	611.0	610.3	609.7	609.1	609.1	608.5	607.8	607.8
20°	612.8	612.2	611.6	611.0	610.3	609.7	609.7	609.1
22.5°	607.8	607.2	606.6	606.6	606.0	606.0	606.0	605.3
25°	601.6	601.0	601.0	599.7	599.7	599.1	599.1	598.5
27.5°	594.7	594.1	594.1	593.5	592.8	592.2	591.6	591.6
30°	587.8	587.2	587.2	586.6	585.3	585.3	584.7	584.1
32.5°	581.6	581.6	581.0	579.7	578.5	577.8	576.6	576.6
35°	579.7	578.5	577.2	575.3	573.4	572.2	571.6	570.9
37.5°	586.6	584.7	581.6	579.7	577.2	574.7	573.4	572.2
40°	598.5	595.3	592.2	589.1	585.3	582.2	579.7	579.1
42.5°	599.1	597.2	594.1	590.3	586.0	582.2	579.7	579.1
45°	597.2	594.7	591.0	586.6	583.5	579.1	577.2	576.6
47.5°	592.8	590.3	586.6	580.3	575.9	572.8	572.2	572.2
50°	595.3	590.3	584.1	580.3	575.9	570.9	569.1	567.8
52.5°	601.0	596.0	592.2	584.1	574.7	570.3	567.8	565.9
55°	619.1	616.6	605.3	594.1	587.2	581.6	579.1	577.8
57.5°	631.0	622.2	612.8	605.3	597.2	587.8	581.6	578.5
60°	624.7	615.3	611.0	601.0	584.1	574.1	570.3	568.4
62.5°	611.0	611.0	599.1	583.5	577.2	568.4	561.6	559.1
65°	610.3	602.2	590.3	584.7	569.7	556.6	549.7	548.4
67.5°	584.1	572.8	569.7	557.2	544.7	532.8	527.8	525.3
70°	544.1	540.3	530.9	522.8	511.5	499.0	492.2	489.7
72.5°	493.4	487.1	482.8	475.9	465.3	449.6	444.0	440.9
75°	424.6	421.5	421.5	414.0	404.0	394.6	394.0	392.7
77.5°	341.4	342.7	345.8	337.7	340.8	335.8	331.4	328.3
80°	259.5	265.1	265.8	267.7	269.5	262.6	259.5	255.8
82.5°	184.5	187.6	191.4	192.0	193.2	188.2	185.7	182.0
85°	108.8	110.7	113.8	113.8	113.8	109.4	108.2	105.1
87.5°	31.9	31.9	33.8	31.9	31.9	31.9	28.8	30.6
90°	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	140.0	140.0	138.0	140.0	141.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)