

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: P198248

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198248
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-CG-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3807.9 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - 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

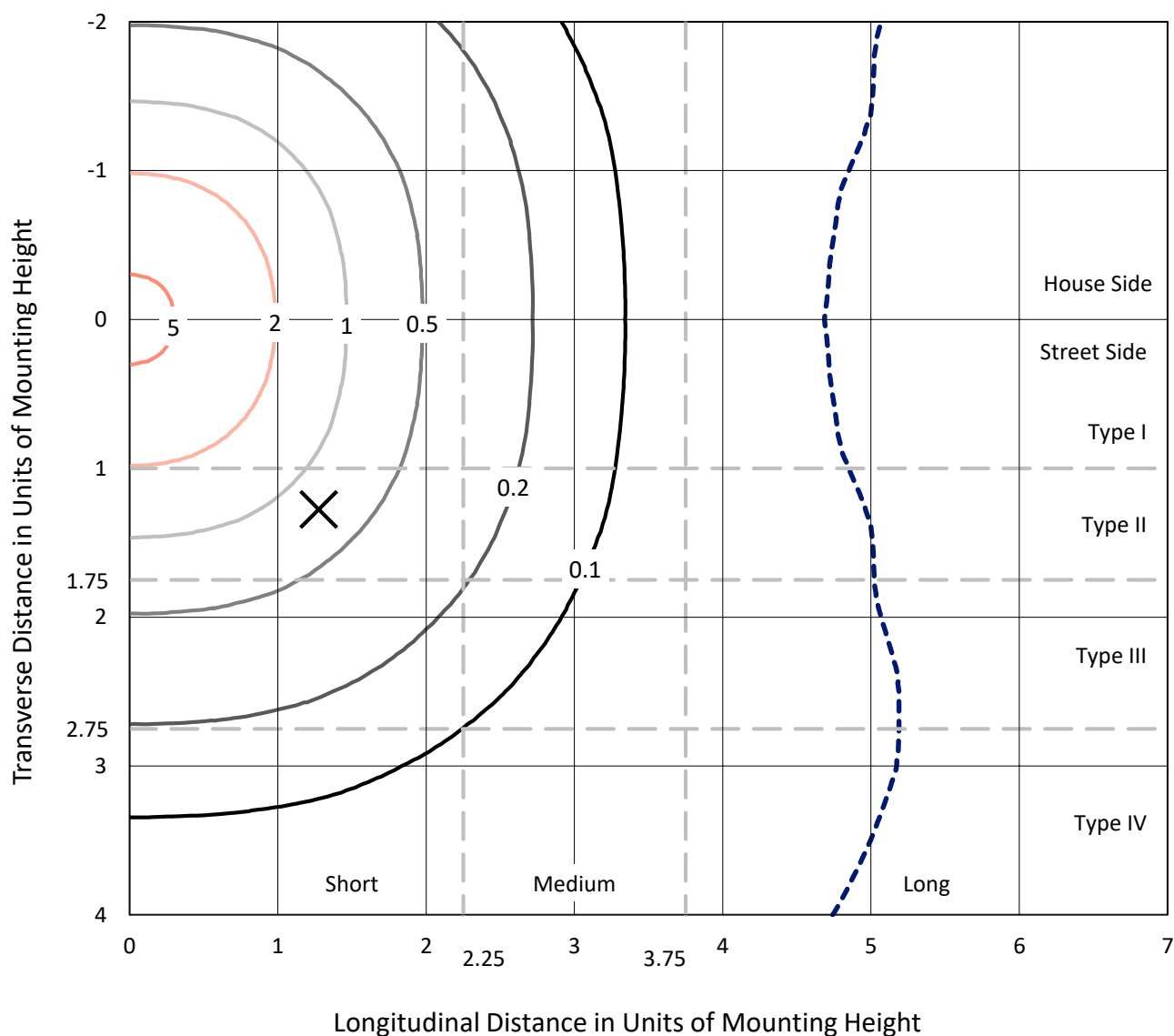


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

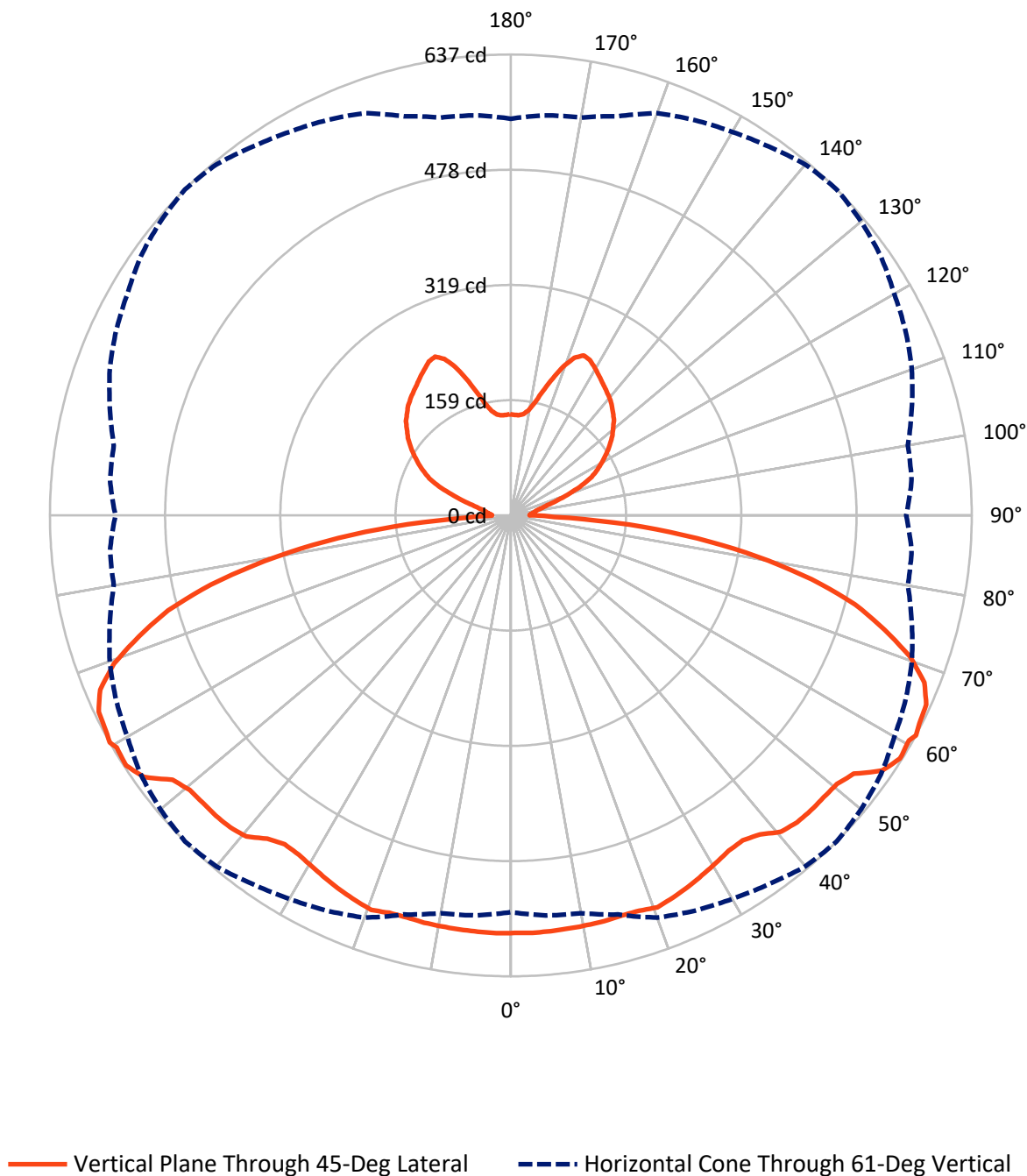


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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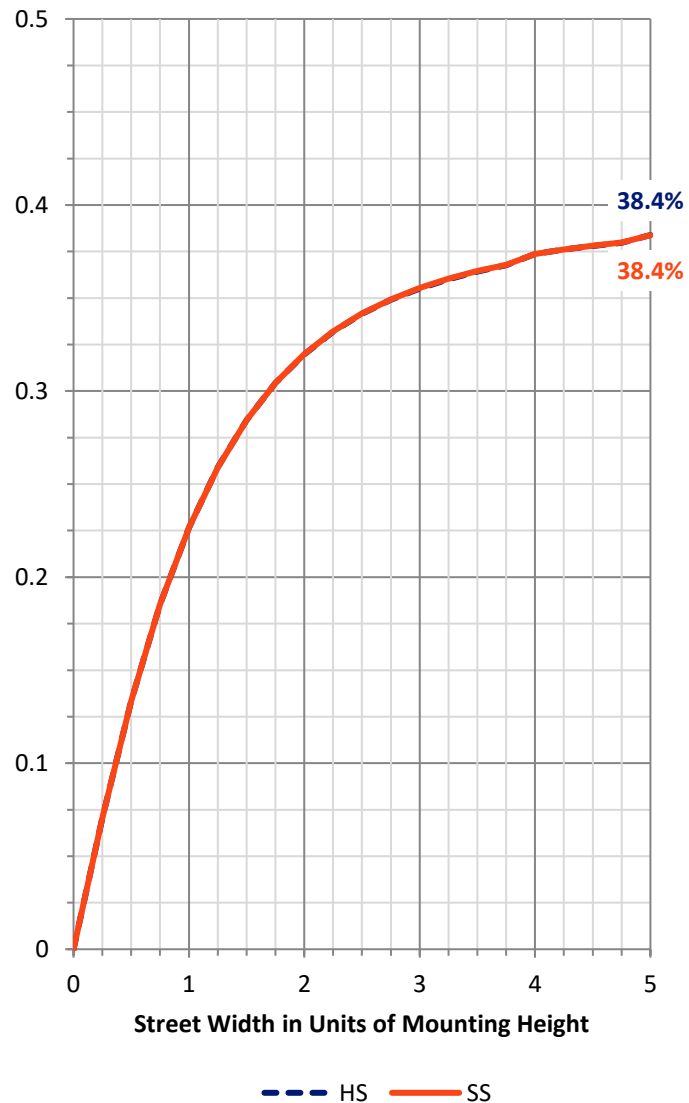
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.0	412.0	1904.0
	% Fixture	39.2	10.8	50.0
Street Side	Lumens	1492.0	412.0	1904.0
	% Fixture	39.2	10.8	50.0
Total	Lumens	2984.0	824.0	3807.9
	% Fixture	78.4	21.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.4
10°-20°	162.8	4.3
20°-30°	262.0	6.9
30°-40°	347.0	9.1
40°-50°	438.3	11.5
50°-60°	525.1	13.8
60°-70°	574.2	15.1
70°-80°	459.6	12.1
80°-90°	159.9	4.2
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°	2984.0	78.4
0°-180°	3807.9	100.0

Coefficient of Utilization



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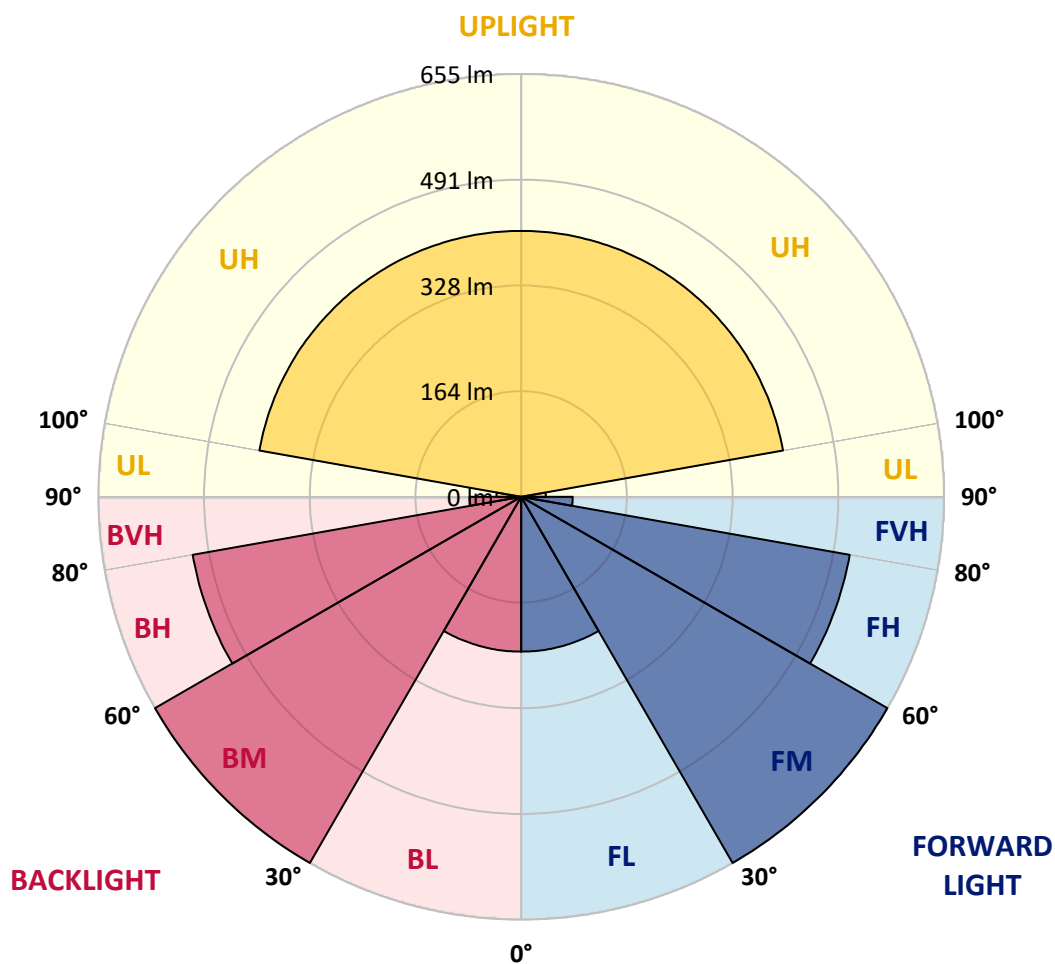
CATALOG NUMBER: TT-C1-LED-E1-MQ-CG-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	239.9	6.3			
FM	(30°-60°)	655.2	17.2			
FH	(60°-80°)	516.9	13.6			G0/660
FVH	(80°-90°)	79.9	2.1			G1/100
BL	(0°-30°)	239.9	6.3	B1/500		
BM	(30°-60°)	655.2	17.2	B1/1000		
BH	(60°-80°)	516.9	13.6	B2/1000		G0/660
BVH	(80°-90°)	79.9	2.1			G1/100
UL	(90°-100°)	38.3	1.0		U2/50	
UH	(100°-180°)	412.0	10.8		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
2.5°	577.8	577.3	577.8	577.8	577.8	577.8	577.8	577.8	577.8	577.8	577.8
5°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
7.5°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	577.3	576.7	577.3
10°	575.6	575.6	575.6	575.6	576.1	576.1	576.1	576.1	576.1	576.1	576.1
12.5°	574.5	574.5	574.5	574.5	575.1	575.1	575.1	575.1	575.6	575.6	575.1
15°	573.4	572.8	572.8	573.4	573.4	573.9	573.9	573.9	574.5	573.9	573.9
17.5°	572.3	571.7	572.3	572.8	572.8	573.4	573.9	573.9	574.5	574.5	574.5
20°	573.9	573.4	573.9	574.5	575.1	576.1	576.7	577.3	577.8	578.4	578.4
22.5°	570.6	570.1	570.6	570.6	571.2	571.7	572.8	573.4	573.9	573.9	573.9
25°	565.6	565.6	566.2	566.2	566.8	567.3	567.8	568.4	568.4	568.9	568.4
27.5°	560.1	560.1	560.6	560.6	561.8	561.8	562.3	562.8	563.4	563.4	563.4
30°	553.4	553.4	553.9	554.5	555.6	556.2	556.7	557.3	557.9	557.9	557.9
32.5°	547.3	546.7	547.3	548.4	550.1	551.2	552.3	552.9	552.9	552.9	553.4
35°	542.3	542.9	544.0	545.1	547.3	548.4	549.5	551.2	551.7	551.7	551.7
37.5°	543.4	544.0	545.6	547.9	550.6	553.9	556.2	558.4	560.1	559.5	558.9
40°	550.6	551.7	554.5	557.9	562.3	566.8	570.1	572.8	574.5	575.1	574.5
42.5°	551.7	552.9	555.1	560.1	565.1	570.1	574.5	577.3	579.5	580.1	579.5
45°	551.2	551.2	554.5	560.1	565.1	570.1	575.6	579.5	581.7	581.7	581.7
47.5°	547.3	549.0	551.2	556.7	563.4	568.4	573.9	577.8	580.6	582.3	580.6
50°	547.3	547.3	551.2	555.1	561.2	570.1	577.8	581.7	584.5	584.0	584.5
52.5°	546.2	549.5	551.7	557.3	568.4	577.3	583.4	589.0	592.8	593.4	592.3
55°	556.2	556.7	561.8	572.3	582.8	592.8	603.9	612.2	618.9	622.8	617.2
57.5°	563.9	561.2	571.2	580.1	592.3	607.3	623.9	630.5	635.5	634.4	636.1
60°	553.4	557.3	564.5	573.9	593.4	608.3	617.2	624.5	630.5	632.2	630.0
61°	548.4	555.1	558.4	571.2	591.7	602.8	612.2	622.2	633.4	637.2	632.2
62.5°	540.1	550.6	549.5	570.1	582.8	595.6	613.3	625.0	632.8	633.9	632.8
65°	540.6	539.0	551.7	566.8	579.5	602.3	617.2	624.5	628.9	631.1	630.0
67.5°	522.9	517.4	532.9	543.4	565.1	582.8	597.3	607.8	614.5	616.7	613.9
70°	481.8	485.7	496.8	512.9	530.7	552.3	565.6	579.5	585.0	585.6	585.6
72.5°	442.4	444.6	455.7	470.7	491.2	510.1	523.4	534.5	539.6	540.1	541.2
75°	390.2	392.4	405.2	419.1	439.6	455.7	465.1	478.5	485.7	491.8	486.8
77.5°	329.7	333.6	343.6	358.6	377.5	386.3	403.0	418.5	423.6	425.2	423.6
80°	261.5	266.5	275.3	295.3	303.6	318.1	334.1	340.8	345.3	346.4	346.9
82.5°	188.2	192.0	201.5	215.4	224.8	236.4	247.6	255.9	260.9	259.8	259.2
85°	111.0	112.1	122.1	131.6	138.8	146.0	154.8	161.0	162.1	164.3	163.7
87.5°	33.3	33.8	38.3	43.3	46.7	50.0	55.5	62.7	64.4	60.0	60.5
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

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0
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°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
2.5°	577.8	577.8	577.8	577.8	577.8	577.8	577.3	577.8
5°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
7.5°	577.3	576.7	576.7	576.7	576.7	576.7	576.7	576.7
10°	576.1	576.1	576.1	576.1	575.6	575.6	575.6	575.6
12.5°	575.1	575.1	575.1	575.1	574.5	574.5	574.5	574.5
15°	573.9	573.9	573.9	573.9	573.4	573.4	573.4	573.4
17.5°	574.5	573.9	573.4	573.4	572.8	572.3	572.3	572.3
20°	577.8	577.3	576.1	575.1	574.5	573.9	573.9	573.9
22.5°	573.4	572.8	571.7	571.2	571.2	570.6	570.1	570.1
25°	568.4	567.3	567.3	566.8	566.8	565.6	565.6	565.1
27.5°	562.8	562.3	561.8	561.2	561.2	560.6	560.1	559.5
30°	557.9	556.7	555.6	555.1	554.5	553.9	553.9	553.9
32.5°	552.9	551.7	551.2	549.5	548.4	547.9	547.3	547.3
35°	551.2	549.5	548.4	546.7	545.1	544.0	543.4	542.3
37.5°	557.9	555.6	553.9	551.2	547.3	545.6	544.0	543.4
40°	572.3	570.1	566.8	562.3	557.9	554.5	551.7	550.6
42.5°	577.3	574.5	570.1	565.6	560.1	555.1	552.9	551.7
45°	578.9	576.1	570.1	564.5	559.5	555.1	551.7	550.6
47.5°	577.3	573.4	567.8	563.4	556.2	550.6	548.4	546.7
50°	581.1	577.8	570.6	560.6	554.5	551.2	547.3	546.7
52.5°	589.0	582.8	576.1	568.9	557.3	550.6	548.4	545.6
55°	612.2	603.9	592.3	580.6	573.4	562.8	556.2	556.2
57.5°	630.0	623.3	608.3	592.8	579.5	571.7	561.8	562.3
60°	625.0	616.2	608.9	593.4	574.5	563.9	560.1	552.9
61°	624.5	612.2	602.3	590.0	573.9	557.3	556.2	546.7
62.5°	625.5	614.5	595.6	582.8	570.6	549.0	548.4	539.6
65°	624.5	613.9	604.5	580.6	563.9	555.1	536.2	543.4
67.5°	607.3	597.8	580.6	567.3	541.7	530.7	520.1	520.1
70°	580.1	566.2	549.5	532.9	515.7	496.8	487.3	481.8
72.5°	534.5	522.9	509.5	491.8	470.7	453.5	444.6	440.7
75°	477.4	464.6	452.9	439.6	417.4	403.0	393.5	390.8
77.5°	417.4	406.3	385.8	373.0	358.0	341.4	333.1	329.7
80°	340.8	334.7	320.3	299.7	292.5	272.0	266.5	261.5
82.5°	255.9	249.2	235.9	221.5	212.6	200.9	190.9	189.9
85°	161.0	156.5	148.2	137.6	126.6	119.9	111.0	113.3
87.5°	60.0	57.2	52.2	45.5	40.5	36.1	31.6	33.3
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
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)