Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P821263

Luminaire Tested: **TT-D1-740-24VDC-CQ-UPL**

Issue Date: 7/23/2020

Report Generated By 670245763

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P821263
	REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-1) AND
Test Lab:	INNOVATION CENTER
Issue Date:	7/23/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D1-740-24VDC-CQ-UPL
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	4000K, 70 CRI LEDS AND CONCENTRATED DISTRIBUTION
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4717.7 lumens
Efficiency:	N/A
Efficacy:	168.5 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification:	Type V - Short
BUG Rating:	B1 - U4 - G1

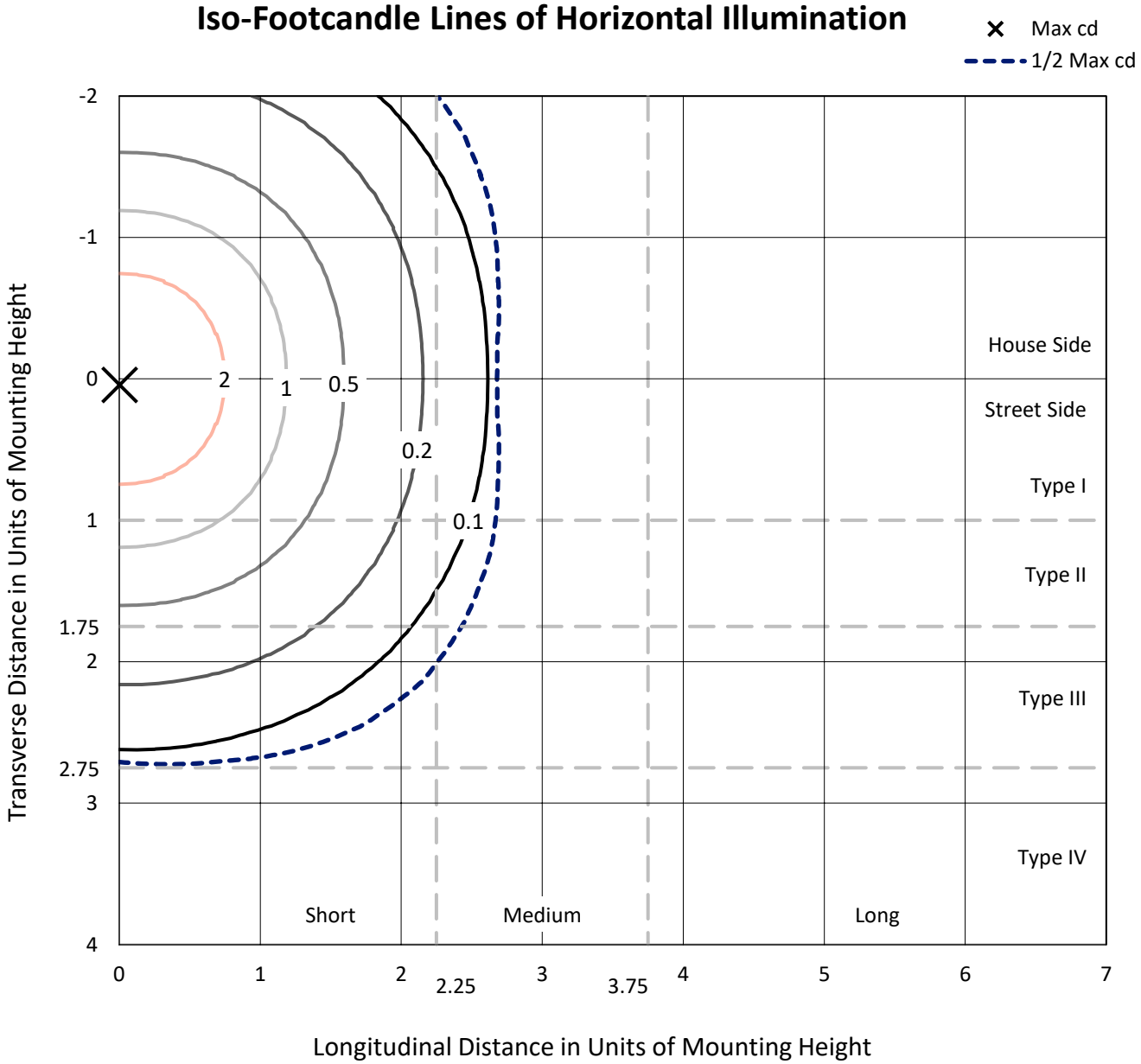
Input Watts (W):	28
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



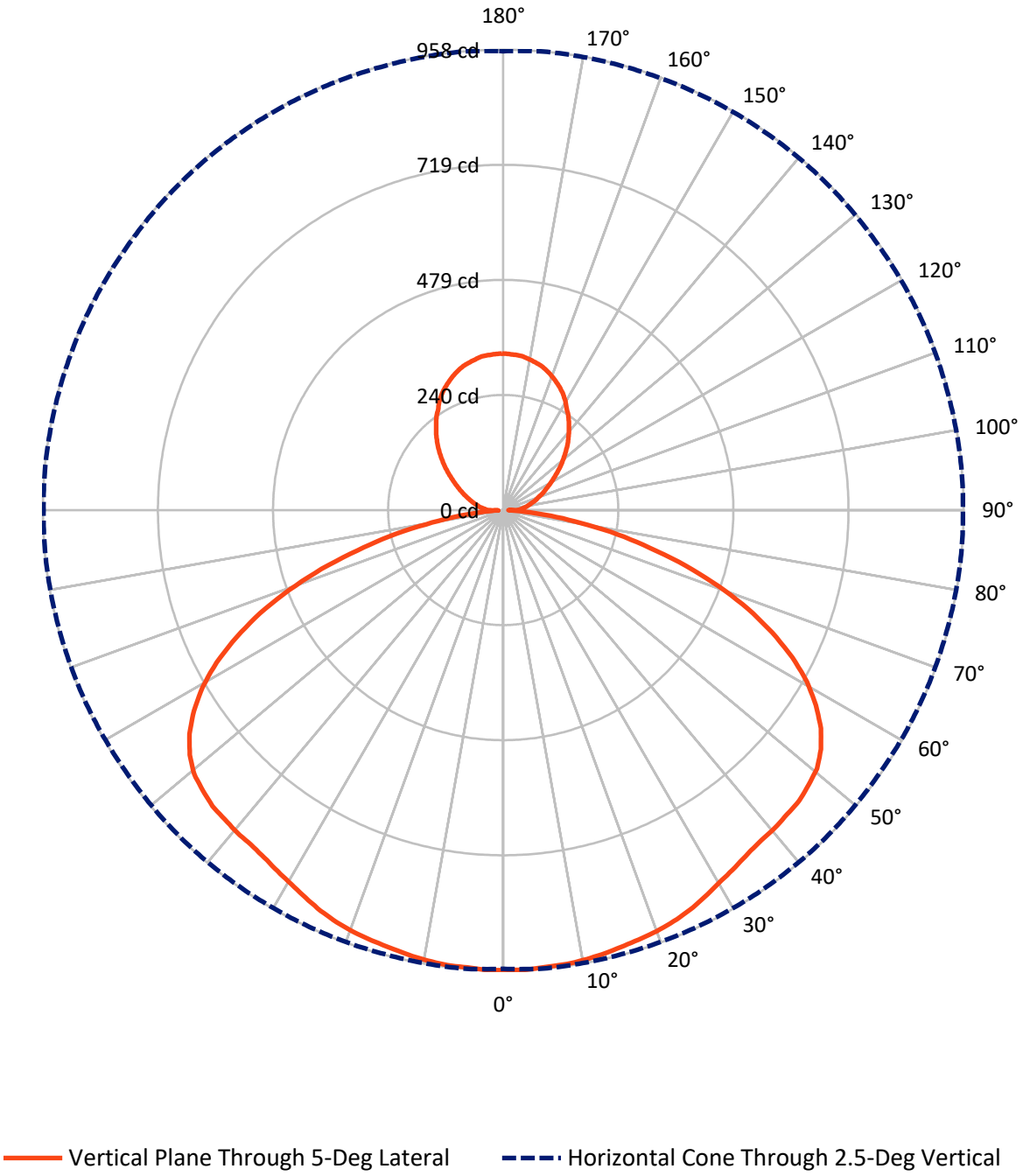
Based on 15 foot mounting height. Maximum calculated value = 4.3 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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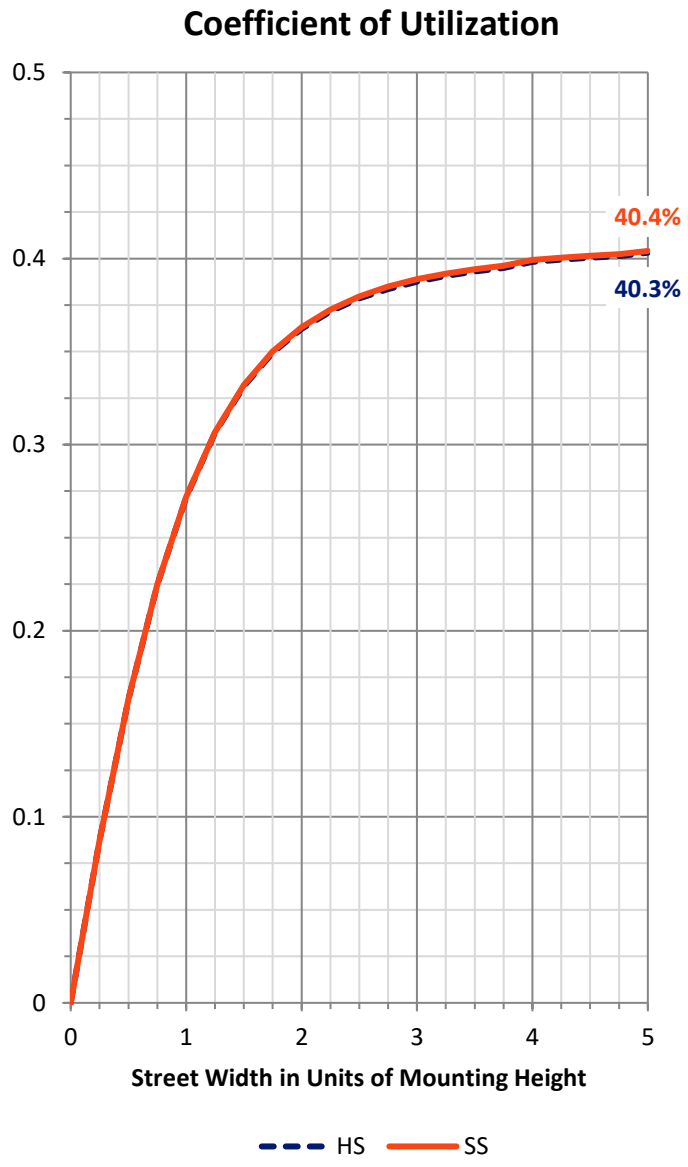
REPORT NUMBER: P821263
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1916.1	442.7	2358.9
	% Fixture	40.6	9.4	50.0
Street Side	Lumens	1916.1	442.7	2358.9
	% Fixture	40.6	9.4	50.0
Total	Lumens	3832.3	885.5	4717.7
	% Fixture	81.2	18.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.9
10°-20°	266.7	5.7
20°-30°	424.2	9.0
30°-40°	558.0	11.8
40°-50°	683.0	14.5
50°-60°	739.8	15.7
60°-70°	636.4	13.5
70°-80°	357.8	7.6
80°-90°	75.2	1.6
90°-100°	45.4	1.0
100°-110°	70.3	1.5
110°-120°	97.7	2.1
120°-130°	126.6	2.7
130°-140°	147.6	3.1
140°-150°	149.5	3.2
150°-160°	129.8	2.8
160°-170°	87.7	1.9
170°-180°	30.8	0.7
0°-90°	3832.3	81.2
0°-180°	4717.7	100.0



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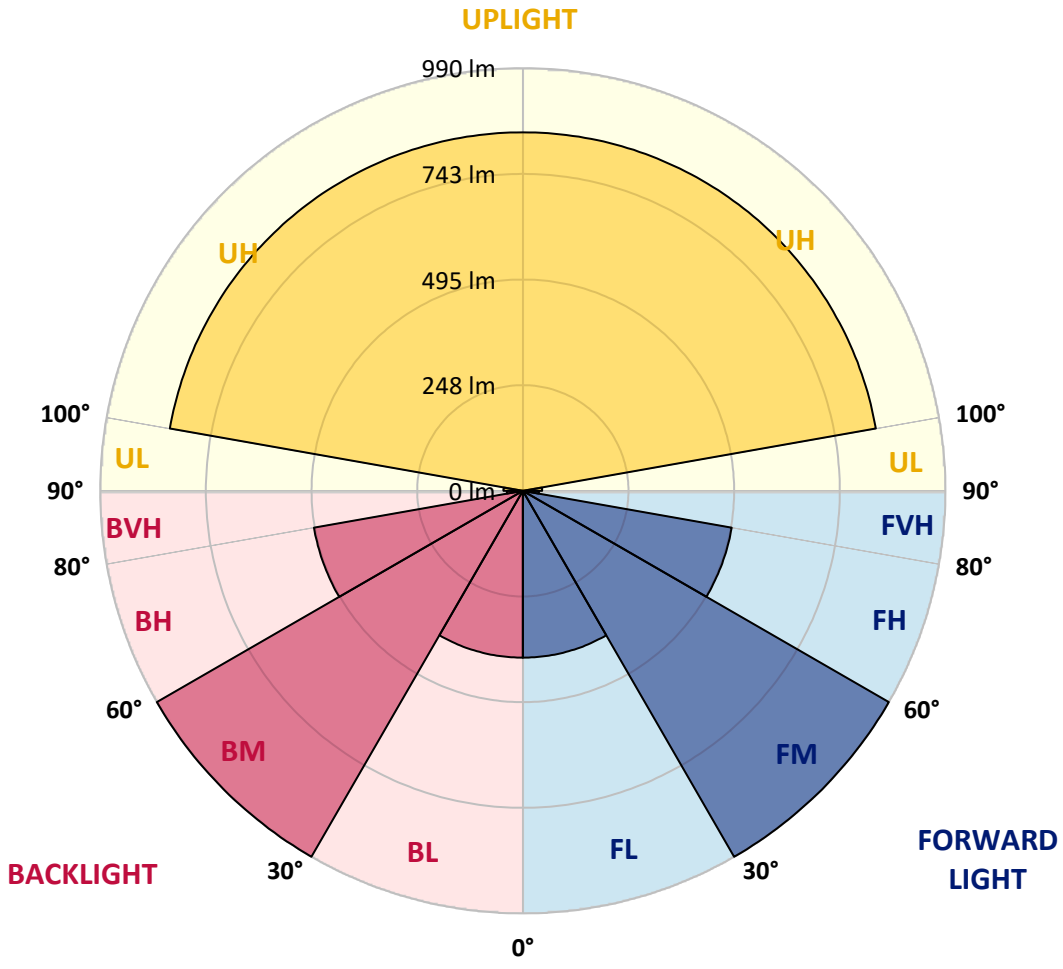
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	391.0	8.3			
FM	(30°-60°)	990.4	21.0			
FH	(60°-80°)	497.1	10.5			G0/660
FVH	(80°-90°)	37.6	0.8			G1/100
BL	(0°-30°)	391.0	8.3	B1/500		
BM	(30°-60°)	990.4	21.0	B1/1000		
BH	(60°-80°)	497.1	10.5	B1/500		G0/660
BVH	(80°-90°)	37.6	0.8			G1/100
UL	(90°-100°)	45.4	1.0		U2/50	
UH	(100°-180°)	840.1	17.8		U4/1000	

BUG Rating: B1-U4-G1
Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	957.7	957.7	957.7	957.7	957.7	957.7	957.7	957.7	957.7	957.7	957.7
2.5°	955.2	958.3	957.0	957.0	957.0	957.0	955.8	957.0	957.0	957.7	957.0
5°	955.8	955.2	955.2	955.8	955.8	956.4	955.2	955.8	956.4	956.4	957.0
7.5°	954.0	954.6	953.4	954.6	953.4	954.0	954.0	954.6	954.0	954.6	955.8
10°	950.3	951.0	950.3	950.3	950.3	951.6	949.1	951.0	950.3	951.0	950.3
12.5°	943.6	946.7	945.5	946.7	946.7	946.7	944.9	946.1	946.7	946.7	946.7
15°	940.6	941.2	939.4	941.8	942.4	943.0	940.6	941.8	941.8	942.4	943.0
17.5°	933.9	936.9	936.3	938.2	937.6	939.4	938.8	938.2	937.6	938.8	937.6
20°	929.0	932.1	931.5	933.3	933.9	935.7	933.9	933.9	932.1	932.7	934.5
22.5°	924.1	925.4	925.4	927.2	927.2	929.0	927.2	926.6	926.6	926.0	927.8
25°	916.2	916.8	916.2	918.1	919.3	920.5	919.9	918.7	918.1	918.1	917.4
27.5°	903.4	905.9	907.1	909.5	910.1	912.0	909.5	909.5	908.3	907.1	907.7
30°	893.7	894.9	894.9	900.4	900.4	903.4	900.4	899.8	899.2	898.6	897.3
32.5°	884.6	886.4	888.2	892.5	895.5	896.7	894.9	893.7	890.6	888.8	888.2
35°	877.2	877.8	881.5	887.6	891.3	894.3	891.9	888.8	884.6	881.5	883.9
37.5°	871.8	872.4	877.8	885.8	892.5	894.9	891.3	886.4	879.7	876.0	874.8
40°	866.9	870.5	876.6	887.6	894.9	898.6	895.5	888.8	879.1	871.8	871.1
42.5°	864.4	866.3	875.4	888.2	898.6	903.4	899.2	890.0	877.8	869.3	868.7
45°	858.4	863.8	872.4	888.8	900.4	906.5	900.4	888.8	874.2	864.4	862.6
47.5°	853.5	855.3	868.7	887.6	901.6	906.5	900.4	885.8	867.5	854.7	853.5
50°	841.9	846.2	859.6	879.7	896.1	901.0	893.7	874.2	853.5	839.5	837.0
52.5°	824.2	827.9	843.7	868.7	884.6	890.0	879.1	858.4	834.0	816.9	816.9
55°	796.8	802.3	818.8	844.3	864.4	869.3	856.5	834.6	807.2	790.1	789.5
57.5°	763.9	767.6	785.3	813.3	832.8	840.1	827.3	802.9	775.5	755.4	753.6
60°	721.3	726.2	745.0	771.8	792.0	798.0	787.1	762.7	734.7	713.4	713.4
62.5°	670.1	675.6	694.5	721.9	742.6	751.7	736.5	713.4	684.1	663.4	661.6
65°	610.4	615.3	632.3	661.0	682.3	689.0	677.4	653.1	625.0	605.5	603.7
67.5°	543.4	550.1	567.2	591.5	609.8	618.3	611.0	589.1	559.8	539.7	537.9
70°	470.9	475.8	489.2	511.7	532.4	538.5	527.6	512.9	485.5	467.3	464.8
72.5°	393.5	397.8	408.8	430.1	444.7	452.6	446.5	427.7	405.7	390.5	392.9
75°	315.6	315.0	327.1	342.4	355.8	361.3	357.0	344.8	324.7	311.9	311.3
77.5°	237.6	243.7	247.9	260.7	271.7	276.0	269.9	260.1	244.9	234.5	236.4
80°	166.9	163.3	171.2	179.1	186.4	190.7	187.0	181.5	171.2	163.3	162.0
82.5°	102.3	99.3	103.0	110.3	115.1	116.4	117.0	110.3	106.0	99.9	101.1
85°	45.1	45.7	48.7	53.6	54.2	54.8	54.8	53.6	48.7	48.1	46.9
87.5°	11.0	11.0	11.6	13.4	13.4	14.0	14.0	12.2	11.6	10.4	11.0
90°	32.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
92.5°	37.0	37.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
95°	42.0	42.0	42.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
97.5°	48.0	48.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
100°	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
102.5°	60.0	59.0	60.0	60.0	59.0	59.0	59.0	60.0	60.0	60.0	59.0
105°	66.0	66.0	66.0	66.0	66.0	66.0	66.0	67.0	66.0	66.0	66.0
107.5°	73.0	73.0	73.0	74.0	74.0	74.0	74.0	74.0	73.0	74.0	73.0
110°	80.0	80.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	89.0	*89.0*	89.0	89.0	89.0	90.0	90.0	90.0	90.0	90.0	89.0
115°	97.0	*97.0*	98.0	98.0	98.0	98.0	99.0	99.0	98.0	98.0	98.0
117.5°	107.0	*107.0*	107.0	107.0	107.0	108.0	108.0	108.0	108.0	108.0	107.0
120°	117.0	*117.0*	117.0	118.0	118.0	118.0	119.0	119.0	118.0	118.0	118.0
122.5°	129.0	*128.0*	129.0	129.0	129.0	129.0	130.0	130.0	130.0	130.0	129.0
125°	140.0	*140.0*	141.0	141.0	141.0	141.0	142.0	142.0	142.0	142.0	141.0
127.5°	153.0	*153.0*	153.0	153.0	153.0	154.0	154.0	154.0	154.0	154.0	154.0
130°	165.0	*165.0*	166.0	166.0	166.0	166.0	167.0	167.0	167.0	167.0	166.0
132.5°	179.0	*178.0*	179.0	178.0	178.0	179.0	179.0	180.0	179.0	180.0	179.0
135°	191.0	*191.0*	191.0	191.0	191.0	192.0	192.0	192.0	192.0	192.0	192.0
137.5°	204.0	*203.0*	204.0	203.0	203.0	204.0	204.0	204.0	204.0	204.0	204.0
140°	216.0	*215.0*	216.0	215.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0
142.5°	228.0	*227.0*	228.0	227.0	227.0	228.0	228.0	228.0	228.0	228.0	228.0
145°	239.0	*239.0*	239.0	238.0	239.0	239.0	239.0	239.0	239.0	239.0	239.0
147.5°	250.0	*249.0*	250.0	249.0	249.0	250.0	250.0	250.0	250.0	250.0	250.0
150°	263.0	*262.0*	263.0	262.0	263.0	263.0	263.0	263.0	263.0	263.0	263.0
152.5°	273.0	*273.0*	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0
155°	282.0	*282.0*	283.0	282.0	282.0	282.0	283.0	282.0	282.0	282.0	282.0
157.5°	290.0	*290.0*	290.0	290.0	290.0	290.0	291.0	291.0	290.0	291.0	290.0
160°	298.0	*298.0*	299.0	298.0	298.0	298.0	299.0	298.0	298.0	298.0	298.0
162.5°	306.0	*305.0*	306.0	305.0	306.0	306.0	306.0	306.0	306.0	306.0	306.0
165°	311.0	*311.0*	312.0	311.0	311.0	311.0	312.0	311.0	311.0	311.0	311.0
167.5°	316.0	*315.0*	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0
170°	319.0	*319.0*	320.0	319.0	319.0	319.0	320.0	319.0	319.0	319.0	319.0
172.5°	323.0	*323.0*	323.0	323.0	323.0	323.0	323.0	323.0	323.0	323.0	323.0
175°	324.0	*324.0*	325.0	324.0	325.0	324.0	325.0	324.0	324.0	324.0	324.0
177.5°	325.0	*325.0*	326.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
180°	326.0	*326.0*	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0

(END OF REPORT)