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: P198229

Luminaire Tested: **TT-C1-LED-E1-CQ-8030-UPL**

Issue Date: 3/3/2020

Report Generated By E9970913

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P198229
	REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab:	INNOVATION CENTER-P3
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-C1-LED-E1-CQ-8030-UPL
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	CONCENTRATED DISTRIBUTION
Light Source:	(168) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4237 lumens
Efficiency:	N/A
Efficacy:	93.3 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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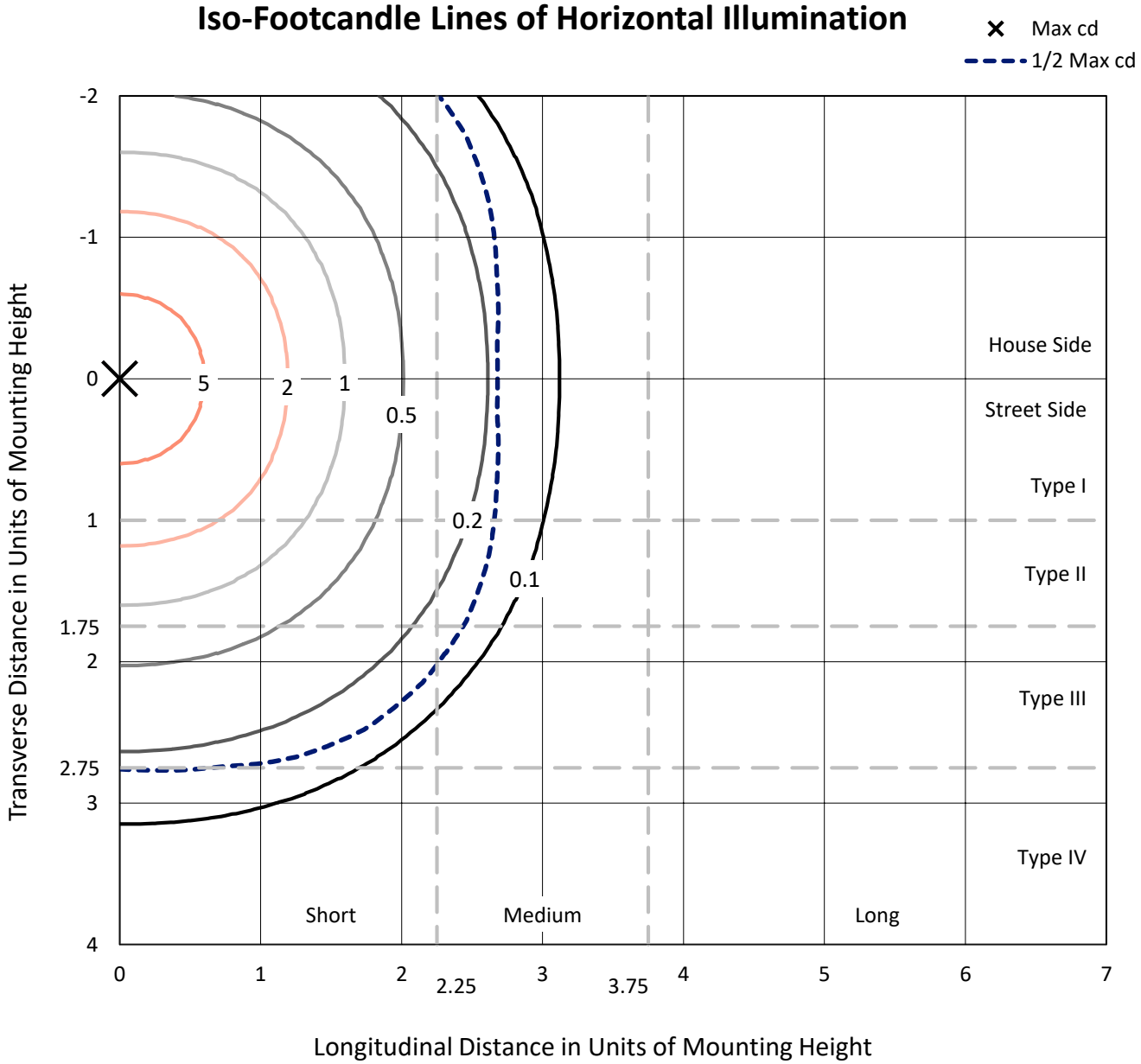
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
Type V - Short - Non-Cutoff

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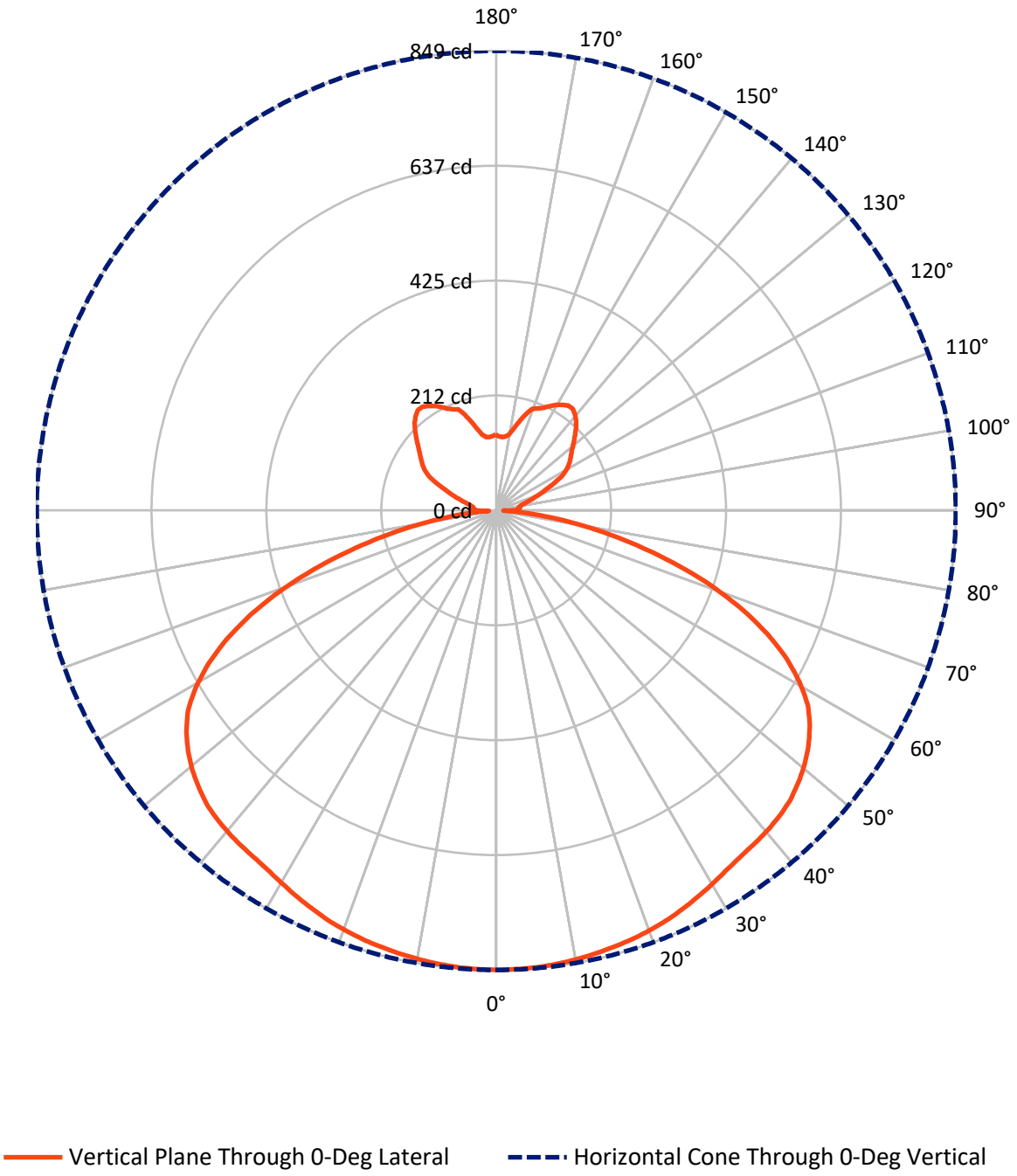
Luminous Intensity Polar Plot



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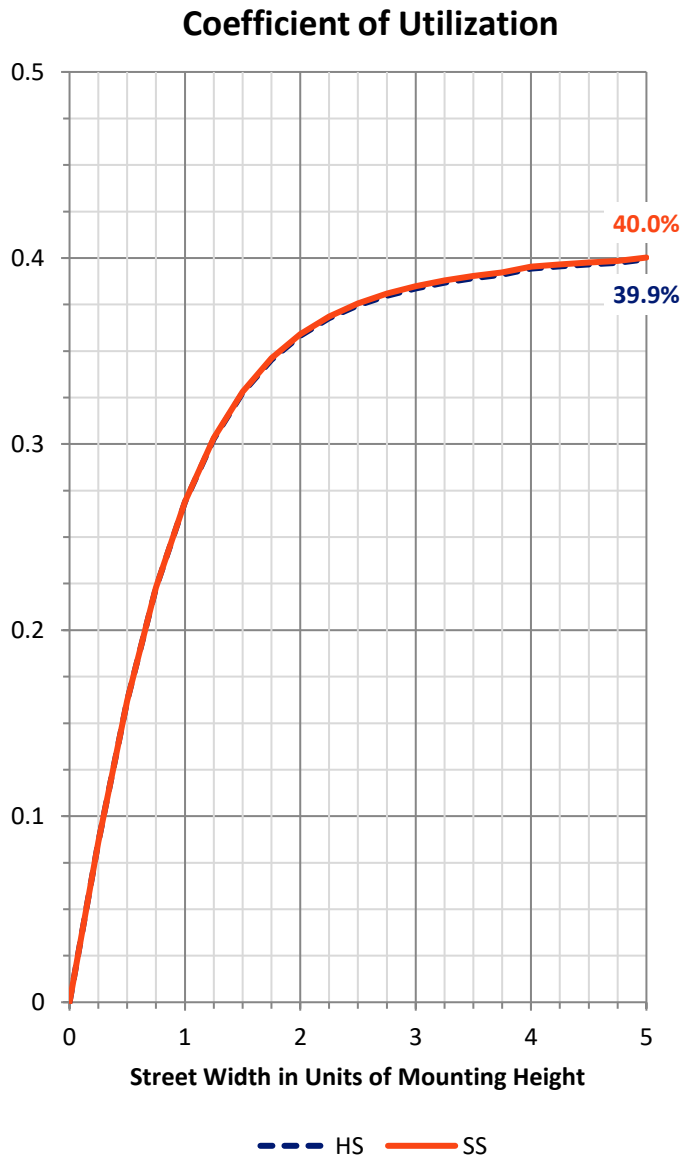
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1705.8	412.7	2118.5
	% Fixture	40.3	9.7	50.0
Street Side	Lumens	1705.8	412.7	2118.5
	% Fixture	40.3	9.7	50.0
Total	Lumens	3411.7	825.3	4237.0
	% Fixture	80.5	19.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.9
10°-20°	236.3	5.6
20°-30°	375.9	8.9
30°-40°	497.2	11.7
40°-50°	606.7	14.3
50°-60°	655.2	15.5
60°-70°	567.4	13.4
70°-80°	321.7	7.6
80°-90°	70.6	1.7
90°-100°	38.4	0.9
100°-110°	59.5	1.4
110°-120°	119.6	2.8
120°-130°	148.9	3.5
130°-140°	153.3	3.6
140°-150°	136.3	3.2
150°-160°	103.9	2.5
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3411.7	80.5
0°-180°	4237.0	100.0



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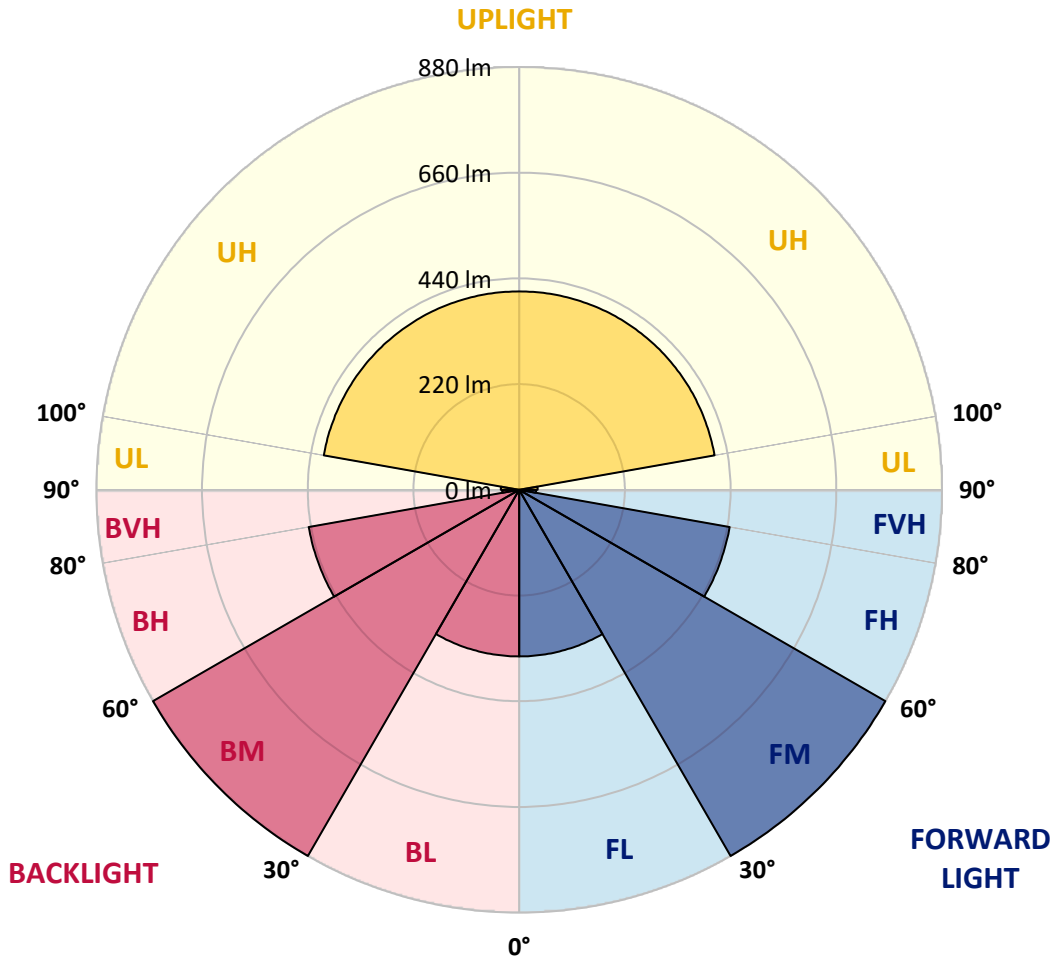
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	346.5	8.2			
FM	(30°-60°)	879.5	20.8			
FH	(60°-80°)	444.6	10.5			G0/660
FVH	(80°-90°)	35.3	0.8			G1/100
BL	(0°-30°)	346.5	8.2	B1/500		
BM	(30°-60°)	879.5	20.8	B1/1000		
BH	(60°-80°)	444.6	10.5	B1/500		G0/660
BVH	(80°-90°)	35.3	0.8			G1/100
UL	(90°-100°)	38.4	0.9		U2/50	
UH	(100°-180°)	412.7	9.7		U3/500	

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°	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1	849.1
2.5°	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5
5°	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4
7.5°	845.0	845.0	845.0	845.0	845.0	845.6	845.0	845.0	845.0	845.0	845.6
10°	842.1	842.1	842.7	842.7	842.1	842.1	842.1	842.1	842.1	842.1	842.1
12.5°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.0	838.0	838.0
15°	834.5	834.5	834.5	835.1	835.1	835.1	835.1	834.5	833.9	833.3	833.9
17.5°	830.4	830.4	831.0	831.5	831.5	831.5	831.5	830.4	829.8	829.2	829.2
20°	825.1	825.7	825.7	826.3	826.8	826.8	826.8	826.3	825.1	823.9	823.9
22.5°	819.2	819.8	820.4	821.0	821.6	821.0	821.0	820.4	819.2	818.6	818.1
25°	811.6	811.6	812.8	813.9	814.5	814.5	814.5	813.4	812.2	811.6	811.0
27.5°	804.0	804.0	805.2	806.9	807.5	808.1	806.9	806.3	804.6	803.4	803.4
30°	795.8	795.8	797.5	799.9	801.6	802.2	801.6	799.3	796.9	795.8	795.8
32.5°	788.1	788.7	790.5	794.0	796.9	798.1	797.5	794.6	791.7	789.3	788.7
35°	782.3	782.9	786.4	790.5	795.2	796.9	795.2	792.3	787.6	784.0	784.0
37.5°	778.8	778.8	783.5	790.5	795.8	798.1	795.8	791.7	785.2	780.5	780.5
40°	774.7	775.8	781.7	790.5	798.1	801.6	798.7	792.8	784.6	778.8	778.2
42.5°	769.4	771.1	777.6	789.3	798.7	804.0	801.0	794.0	784.0	777.6	777.0
45°	762.3	762.9	771.1	785.2	797.5	804.6	802.2	793.4	782.3	774.7	773.5
47.5°	751.2	752.4	762.3	778.8	794.0	801.6	799.9	789.9	775.8	767.0	765.3
50°	738.3	739.5	751.2	770.0	787.0	795.8	792.8	780.5	765.3	753.5	752.4
52.5°	722.5	724.8	737.7	758.8	777.0	785.2	780.5	764.7	747.1	734.2	733.0
55°	703.1	705.5	720.1	742.4	760.6	767.0	760.6	741.8	723.1	708.4	705.5
57.5°	679.1	680.8	694.9	718.4	736.0	741.2	733.0	713.7	691.4	675.6	673.8
60°	643.9	646.2	662.7	684.4	701.9	708.4	700.2	676.7	652.7	636.9	636.3
62.5°	601.7	605.8	619.8	643.3	659.1	667.9	656.8	632.7	608.7	590.5	590.5
65°	550.6	553.6	568.8	591.7	606.9	614.6	603.4	581.1	554.8	538.9	537.2
67.5°	492.0	494.4	507.8	531.3	547.7	554.2	541.9	520.7	496.1	479.1	477.3
70°	426.9	430.4	440.4	462.1	476.8	480.3	470.9	451.0	428.7	413.4	412.3
72.5°	356.0	358.9	371.8	388.8	400.5	401.7	395.8	381.2	358.3	346.0	344.2
75°	283.2	287.9	299.1	313.7	322.5	322.5	319.0	308.5	288.5	279.1	279.1
77.5°	214.6	217.0	228.7	238.7	245.7	249.2	245.1	235.7	219.9	213.5	209.9
80°	149.5	151.9	157.2	164.8	171.8	174.2	169.5	161.9	153.1	148.4	146.0
82.5°	91.5	93.8	96.8	100.9	105.6	107.9	105.0	100.3	92.7	92.1	91.5
85°	44.0	45.2	47.5	48.7	51.0	51.6	52.2	49.8	47.5	44.6	45.7
87.5°	13.5	13.5	14.1	14.7	15.8	15.8	15.8	15.2	14.1	13.5	13.5
90°	36.0	36.0	36.0	34.0	29.0	26.0	28.0	32.0	34.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	28.0	32.0	35.0	36.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	34.0	37.0	39.0	38.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	33.0	34.0	36.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	38.0	38.0	37.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	43.0	44.0	42.0	41.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	54.0	53.0	49.0	48.0	49.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	60.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	75.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	*101.0*	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.0
115°	*121.0*	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	113.0
117.5°	*140.0*	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	129.0
120°	*152.0*	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	142.0
122.5°	*161.0*	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	150.0
125°	*169.0*	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.0
127.5°	*177.0*	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	163.0
130°	*187.0*	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.0
132.5°	*198.0*	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	176.0
135°	*210.0*	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.0
137.5°	*221.0*	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.0
140°	*229.0*	226.0	216.0	200.0	207.0	213.0	212.0	217.0	209.0	195.0	195.0
142.5°	*235.0*	231.0	218.0	201.0	208.0	218.0	220.0	223.0	211.0	198.0	198.0
145°	*235.0*	230.0	218.0	202.0	211.0	223.0	230.0	227.0	211.0	201.0	202.0
147.5°	*230.0*	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	206.0
150°	*224.0*	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	211.0
152.5°	*216.0*	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	216.0
155°	*208.0*	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.0
157.5°	*203.0*	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	219.0
160°	*199.0*	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	215.0
162.5°	*185.0*	184.0	193.0	193.0	198.0	198.0	196.0	200.0	204.0	207.0	207.0
165°	*169.0*	167.0	173.0	173.0	176.0	177.0	176.0	181.0	185.0	190.0	192.0
167.5°	*154.0*	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	174.0
170°	*142.0*	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	160.0
172.5°	*137.0*	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	151.0
175°	*136.0*	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	144.0
177.5°	*137.0*	136.0	139.0	138.0	140.0	139.0	138.0	140.0	140.0	141.0	141.0
180°	*140.0*	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)