

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: P198288

Luminaire Tested: **TT-C1-LED-E1-WQ-SG-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198288
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-WQ-SG-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH SOFTENING GLASS LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3760.9 lumens
Efficiency: N/A
Efficacy: 82.8 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

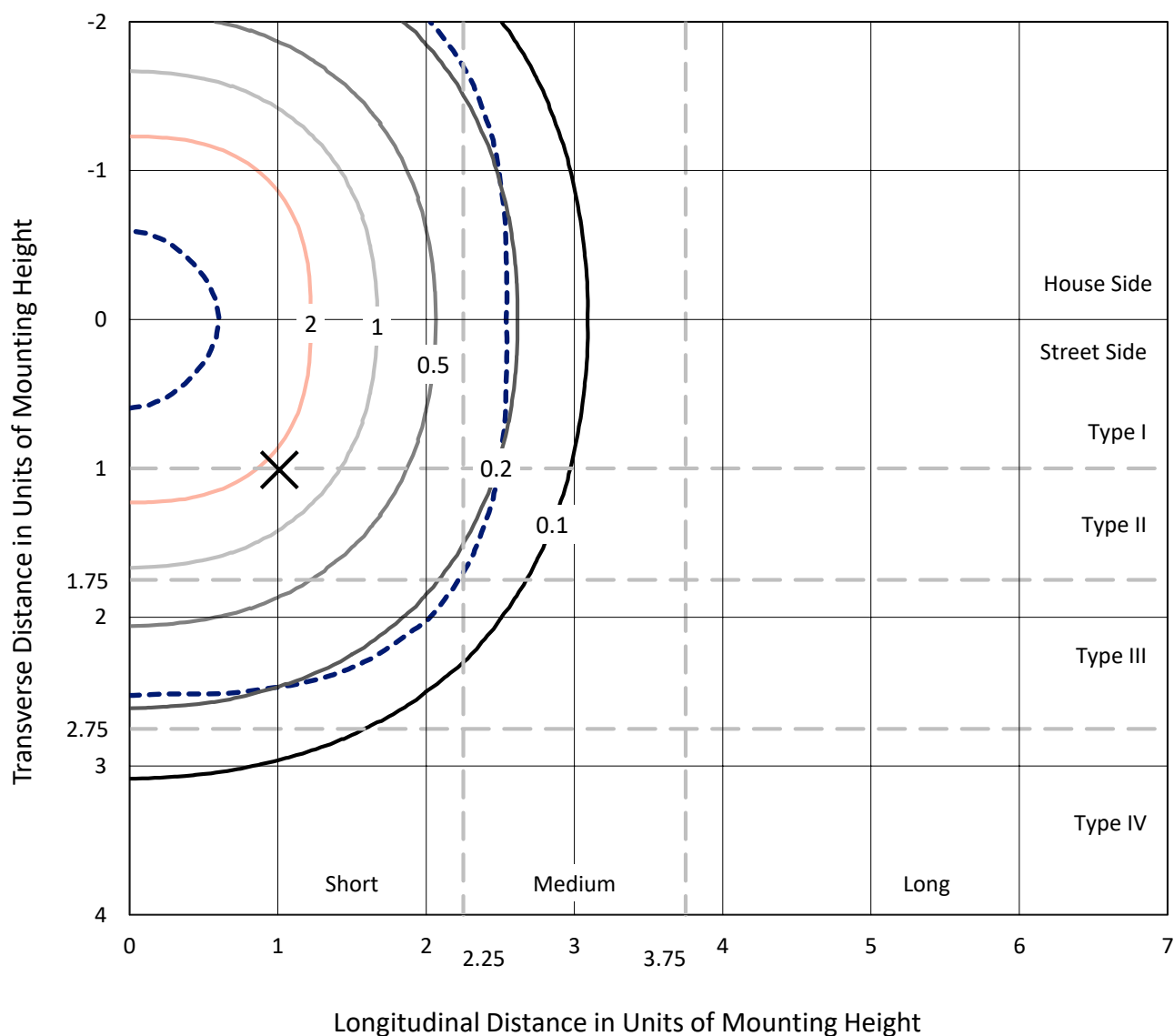


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

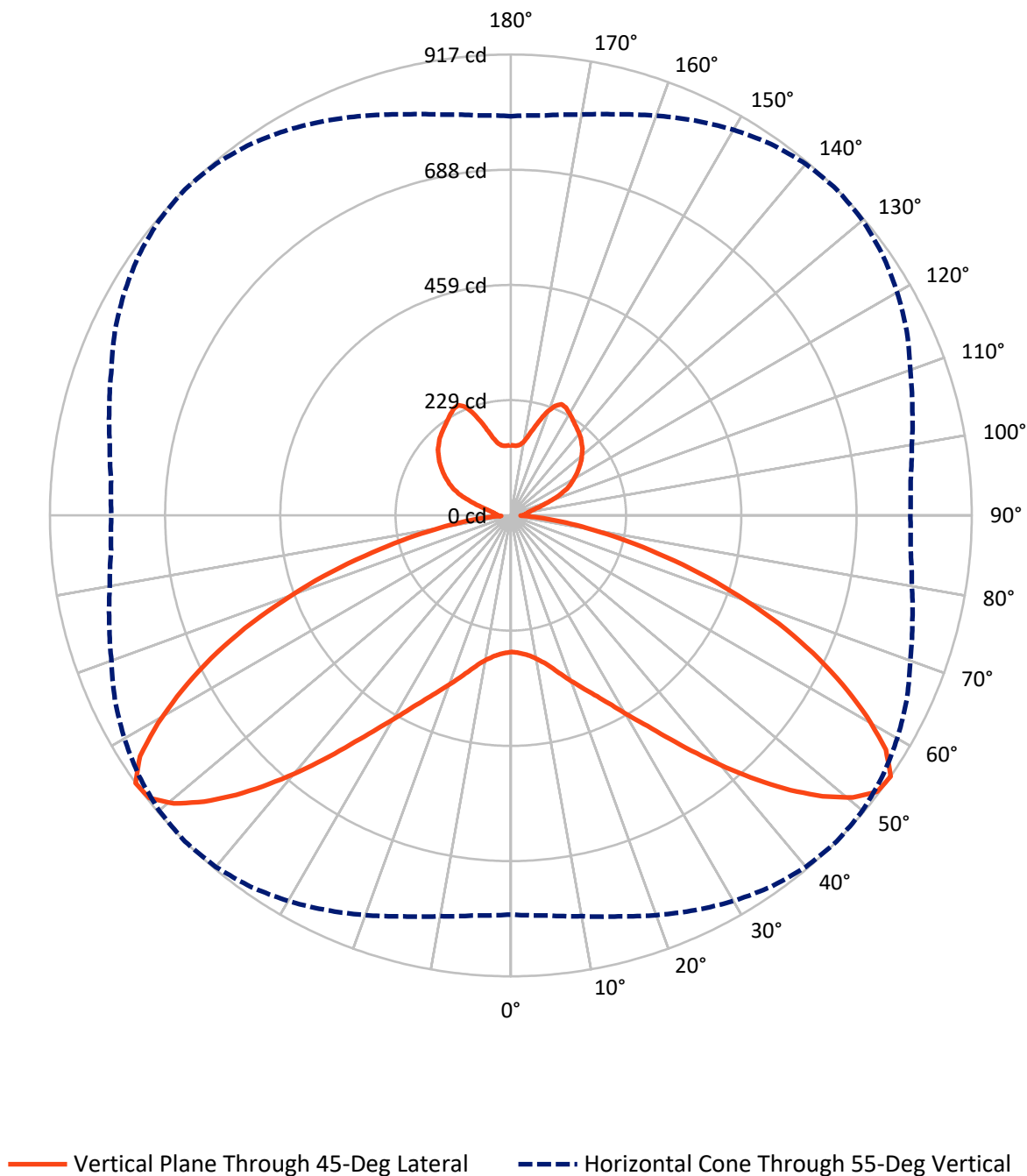


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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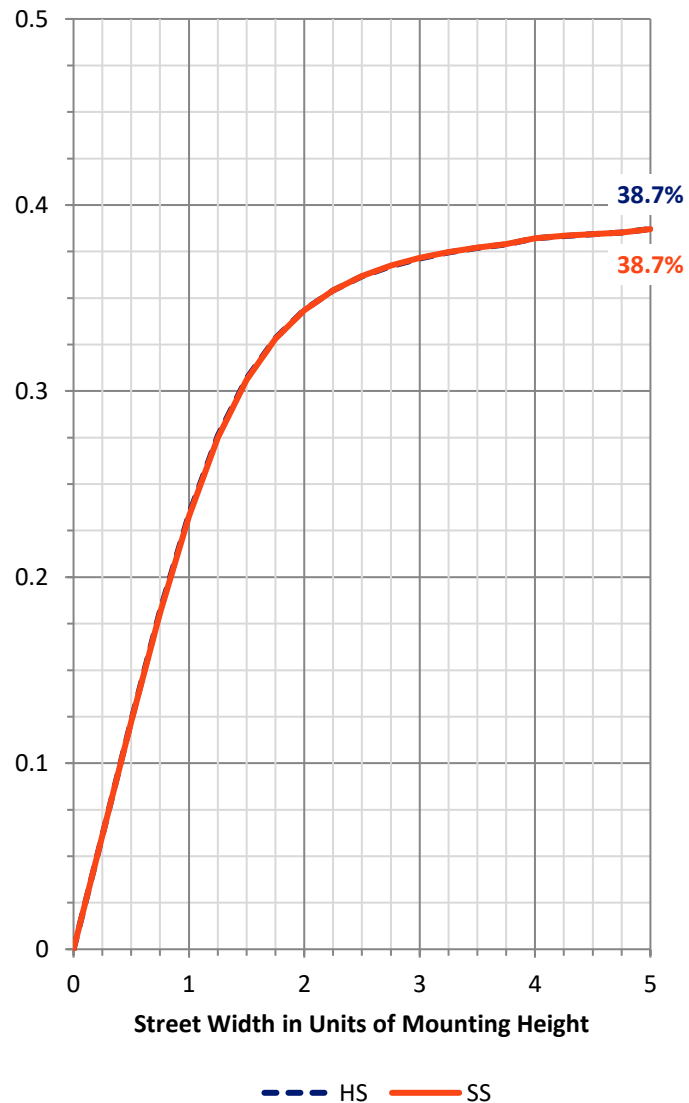
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1468.5	412.0	1880.5
	% Fixture	39.0	11.0	50.0
Street Side	Lumens	1468.5	412.0	1880.5
	% Fixture	39.0	11.0	50.0
Total	Lumens	2936.9	824.0	3760.9
	% Fixture	78.1	21.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	0.7
10°-20°	91.0	2.4
20°-30°	185.4	4.9
30°-40°	338.5	9.0
40°-50°	574.8	15.3
50°-60°	748.6	19.9
60°-70°	605.4	16.1
70°-80°	297.5	7.9
80°-90°	68.8	1.8
90°-100°	38.3	1.0
100°-110°	59.4	1.6
110°-120°	119.3	3.2
120°-130°	148.7	4.0
130°-140°	153.2	4.1
140°-150°	136.0	3.6
150°-160°	103.7	2.8
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2936.9	78.1
0°-180°	3760.9	100.0

Coefficient of Utilization



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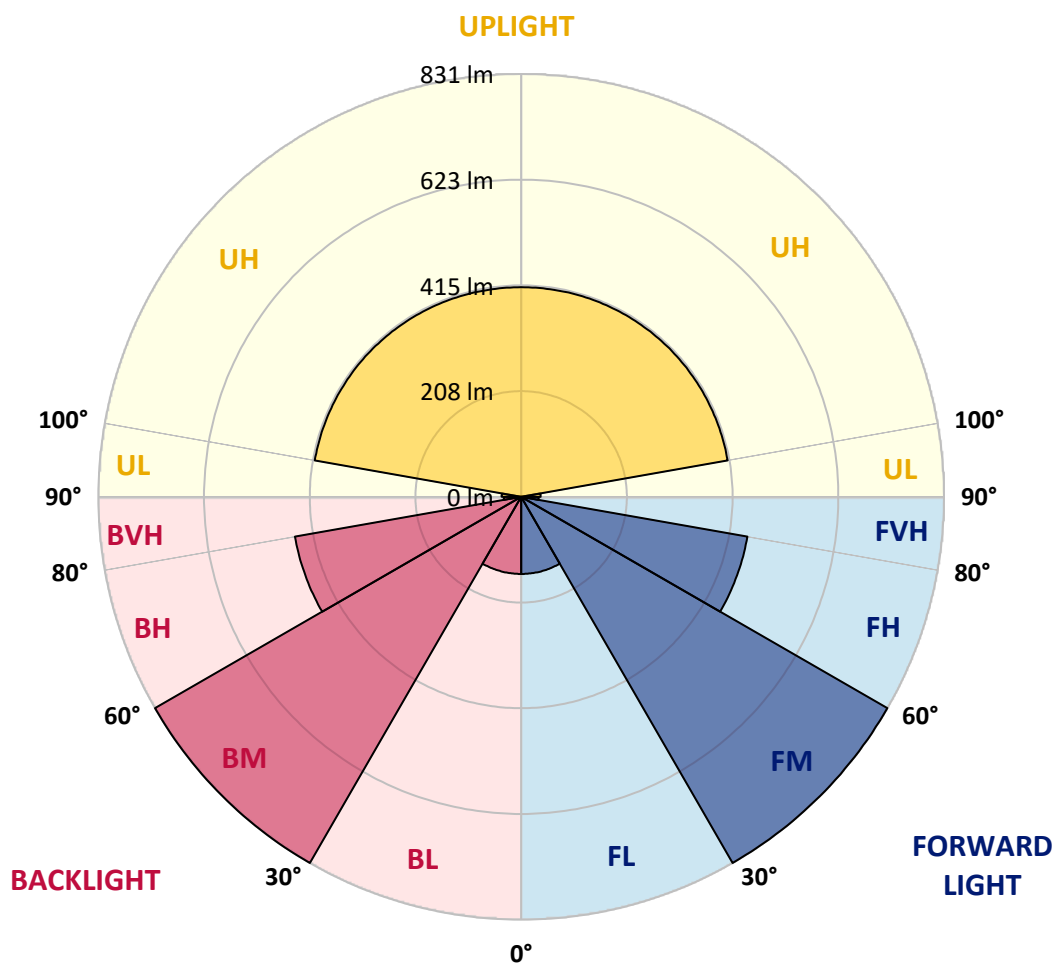
CATALOG NUMBER: TT-C1-LED-E1-WQ-SG-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	151.6	4.0			
FM	(30°-60°)	831.0	22.1			
FH	(60°-80°)	451.5	12.0			G0/660
FVH	(80°-90°)	34.4	0.9			G1/100
BL	(0°-30°)	151.6	4.0	B1/500		
BM	(30°-60°)	831.0	22.1	B1/1000		
BH	(60°-80°)	451.5	12.0	B1/500		G0/660
BVH	(80°-90°)	34.4	0.9			G1/100
UL	(90°-100°)	38.3	1.0		U2/50	
UH	(100°-180°)	412.0	11.0		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°	271.7	271.7	271.7	271.7	271.7	271.7	271.7	271.7	271.7	271.7	271.7
2.5°	272.9	272.9	272.9	272.9	272.9	272.9	273.5	273.5	273.5	273.5	273.5
5°	276.5	276.5	276.5	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1
7.5°	281.9	281.3	281.9	281.9	281.9	282.5	282.5	281.9	282.5	282.5	282.5
10°	289.7	289.1	289.7	289.7	289.7	290.3	290.3	290.3	290.3	290.9	290.9
12.5°	301.1	300.5	301.1	301.7	301.1	301.7	301.7	301.7	301.7	301.7	301.7
15°	315.5	314.9	315.5	316.1	315.5	316.7	316.7	316.1	316.1	316.7	316.7
17.5°	332.9	331.7	332.3	332.9	332.9	334.1	334.1	333.5	334.1	334.7	334.1
20°	350.9	349.7	350.3	352.1	352.1	352.7	353.9	353.3	353.9	354.5	353.9
22.5°	370.7	370.1	370.7	372.5	372.5	373.1	374.9	374.9	374.9	375.5	374.9
25°	392.3	391.7	392.3	394.1	394.1	395.3	397.7	397.7	398.3	398.9	398.3
27.5°	417.5	416.9	418.1	419.9	420.5	422.3	425.3	425.9	426.5	427.1	425.9
30°	446.9	445.7	447.5	450.5	451.7	454.1	457.7	458.9	459.5	461.3	460.1
32.5°	480.5	479.3	481.7	485.3	487.1	490.7	495.5	496.7	498.5	499.7	497.9
35°	520.1	519.5	521.9	527.3	530.3	534.5	541.1	542.9	544.1	546.5	544.1
37.5°	563.8	563.2	567.4	573.4	578.8	585.4	592.6	595.6	597.4	600.4	597.4
40°	612.4	611.8	617.2	624.4	631.0	639.4	648.4	652.6	656.2	659.2	655.6
42.5°	662.2	662.2	668.8	676.6	686.2	696.4	706.6	711.4	717.4	719.2	715.0
45°	710.2	710.8	717.4	727.0	740.8	754.0	765.4	771.4	778.0	779.8	774.4
47.5°	755.8	756.4	762.4	775.0	790.6	805.6	819.4	827.8	834.4	835.0	830.8
50°	793.0	795.4	803.2	814.6	830.8	846.4	863.2	874.0	880.6	882.4	878.2
52.5°	807.4	811.6	820.6	835.0	853.6	869.8	888.4	902.2	910.0	913.0	909.4
55°	794.2	799.0	809.8	826.0	846.4	866.8	886.0	902.2	913.0	917.2	913.6
57.5°	764.8	765.4	776.2	792.4	811.0	832.0	850.6	865.6	875.8	880.0	879.4
60°	713.8	713.8	724.0	739.6	754.0	775.6	791.2	802.6	809.8	814.6	813.4
62.5°	645.4	645.4	654.4	670.6	685.0	703.6	718.6	730.6	735.4	740.8	742.0
65°	569.2	569.2	577.6	593.8	607.0	623.8	638.2	649.6	654.4	661.0	659.8
67.5°	488.3	487.7	495.5	509.3	521.9	537.5	551.3	562.0	567.4	575.2	569.8
70°	404.9	404.9	411.5	422.3	431.3	446.9	460.1	470.9	475.1	481.7	478.7
72.5°	325.7	325.1	330.5	338.9	346.1	359.9	367.7	379.7	383.3	392.3	387.5
75°	254.3	253.1	257.3	263.3	268.1	277.1	283.1	292.7	295.7	301.7	299.3
77.5°	191.3	190.7	192.5	196.7	200.3	207.5	209.9	214.7	217.1	223.1	218.3
80°	137.4	135.6	137.4	139.8	141.0	146.4	147.0	148.8	150.0	154.2	149.4
82.5°	92.4	90.0	91.2	93.0	93.0	96.0	96.6	96.0	98.4	99.6	97.2
85°	52.8	51.0	51.6	52.8	52.2	54.0	54.0	53.4	55.2	55.2	54.0
87.5°	17.4	16.2	16.8	17.4	17.4	18.0	18.6	18.0	19.2	19.2	18.0
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°	271.7	271.7	271.7	271.7	271.7	271.7	271.7	271.7
2.5°	273.5	273.5	273.5	273.5	273.5	273.5	273.5	273.5
5°	277.1	277.1	277.1	277.1	277.1	276.5	276.5	276.5
7.5°	282.5	282.5	282.5	282.5	282.5	281.9	281.9	281.9
10°	290.9	290.3	290.3	290.3	290.3	289.7	290.3	289.7
12.5°	301.7	302.3	302.3	301.7	302.3	301.1	301.1	301.1
15°	316.7	316.1	316.1	316.1	316.1	315.5	315.5	315.5
17.5°	333.5	333.5	332.9	332.9	332.3	331.7	331.7	331.7
20°	353.3	352.7	352.1	351.5	350.9	349.7	349.1	349.1
22.5°	373.7	373.1	372.5	371.9	371.3	370.1	368.9	368.9
25°	396.5	395.3	394.7	393.5	392.3	391.1	390.5	389.9
27.5°	424.1	422.9	421.1	419.3	416.9	416.3	415.1	415.1
30°	457.1	455.3	452.9	449.9	447.5	445.1	443.9	443.3
32.5°	495.5	493.1	488.9	485.3	481.1	478.7	476.9	475.7
35°	540.5	536.9	532.1	526.7	521.3	517.1	514.1	514.1
37.5°	593.2	587.8	580.6	574.0	566.2	561.4	557.8	555.4
40°	650.8	643.0	634.0	625.6	616.6	610.0	604.6	605.2
42.5°	707.8	701.2	690.4	680.2	668.8	659.8	653.2	652.6
45°	767.8	759.4	746.2	733.0	719.8	709.0	701.2	700.0
47.5°	823.6	814.6	799.0	782.8	768.4	756.4	748.0	746.8
50°	869.2	858.4	842.2	824.8	809.2	796.0	787.0	784.6
52.5°	898.6	886.6	869.2	848.2	831.4	816.4	805.6	802.6
55°	903.4	887.8	869.2	845.8	827.2	810.4	798.4	794.8
57.5°	870.4	853.6	836.8	816.4	797.8	779.8	770.2	765.4
60°	806.2	793.0	779.2	760.6	745.6	728.8	721.0	718.6
62.5°	732.4	721.0	708.4	689.2	676.6	661.6	654.4	651.4
65°	653.2	640.0	628.0	612.4	598.6	586.0	575.8	574.6
67.5°	565.6	551.9	541.7	527.9	514.1	502.1	495.5	491.9
70°	473.3	461.9	451.7	436.7	427.7	416.3	411.5	407.9
72.5°	381.5	374.9	362.3	352.7	342.5	333.5	330.5	326.9
75°	295.1	287.3	277.7	271.7	263.9	259.1	256.7	254.3
77.5°	216.5	209.9	204.5	202.1	198.5	193.7	191.9	190.1
80°	150.0	147.0	143.4	142.8	140.4	136.8	136.2	135.6
82.5°	97.2	95.4	94.2	94.2	93.0	90.6	90.0	90.0
85°	54.0	53.4	54.0	53.4	52.2	51.0	51.0	51.0
87.5°	18.0	18.0	18.6	19.2	17.4	17.4	16.8	16.8
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)