

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: P228750

Luminaire Tested: **ISS-AF-350-LED-E1-RW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29765)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-350-LED-E1-RW
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2434.6 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G1

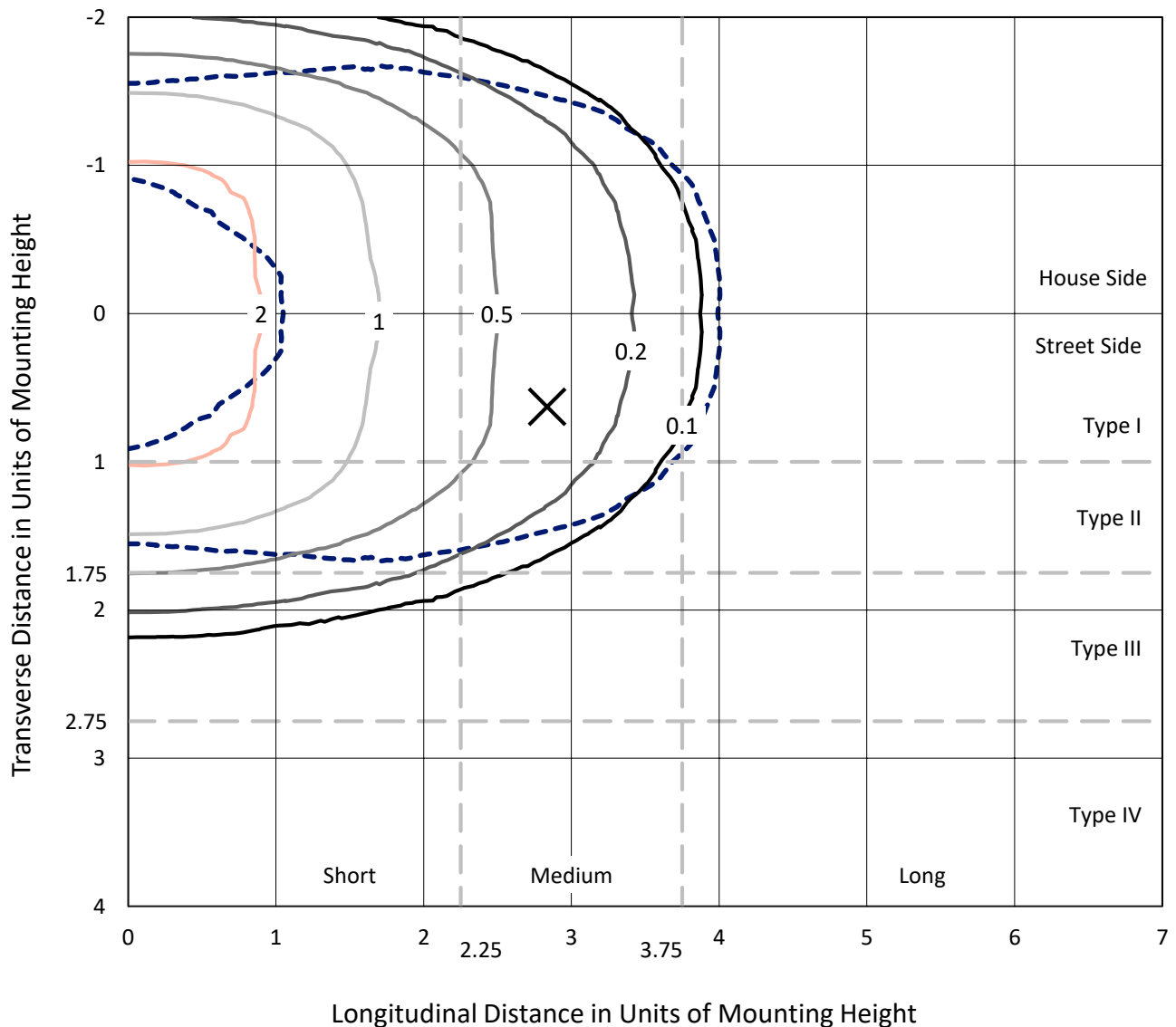
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

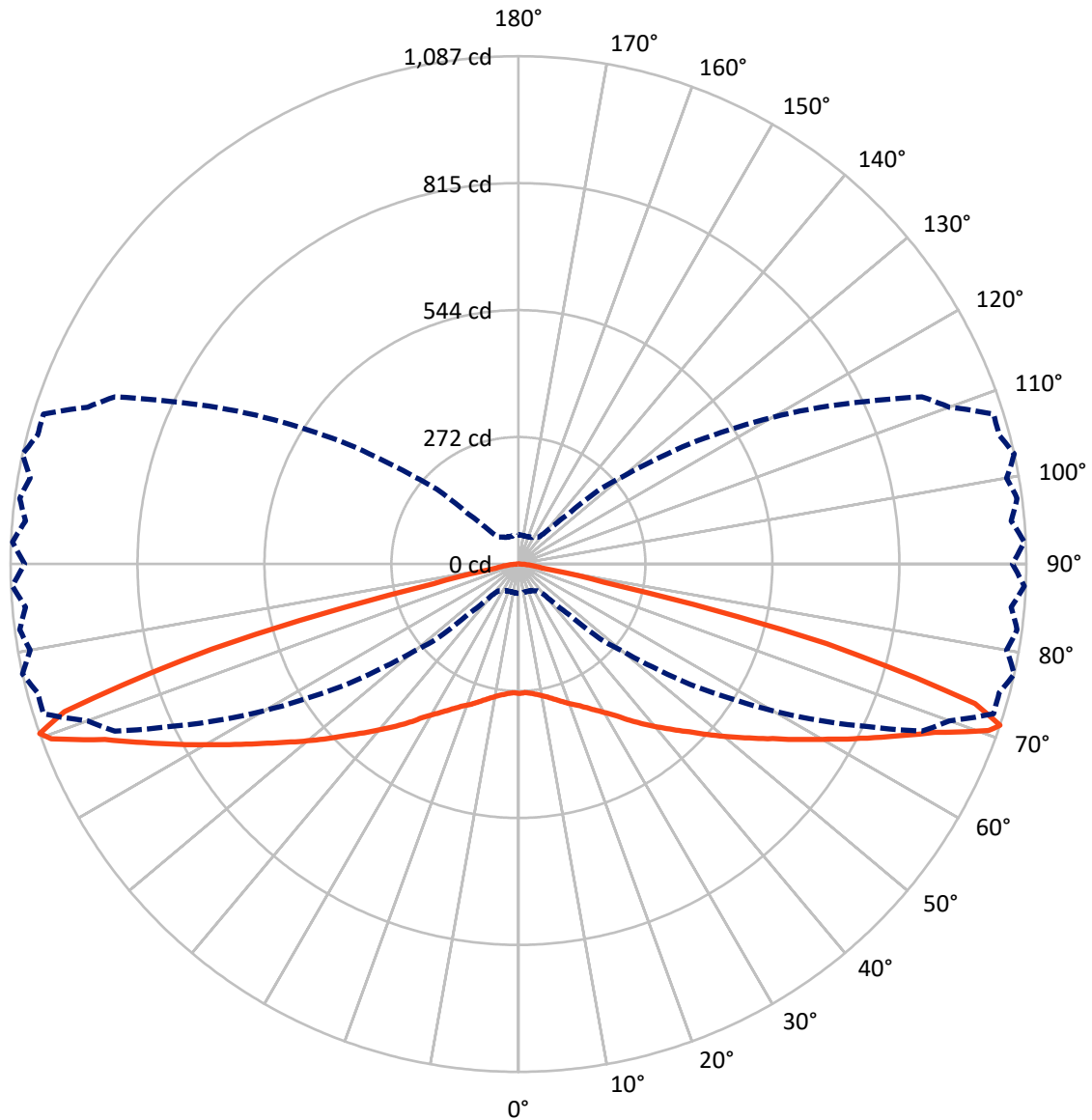


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1217.3	0.0	1217.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1217.3	0.0	1217.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	2434.6	0.0	2434.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	1.1
10°-20°	83.7	3.4
20°-30°	156.6	6.4
30°-40°	272.6	11.2
40°-50°	444.8	18.3
50°-60°	613.8	25.2
60°-70°	582.2	23.9
70°-80°	239.7	9.8
80°-90°	14.5	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2434.6	100.0
0°-180°	2434.6	100.0



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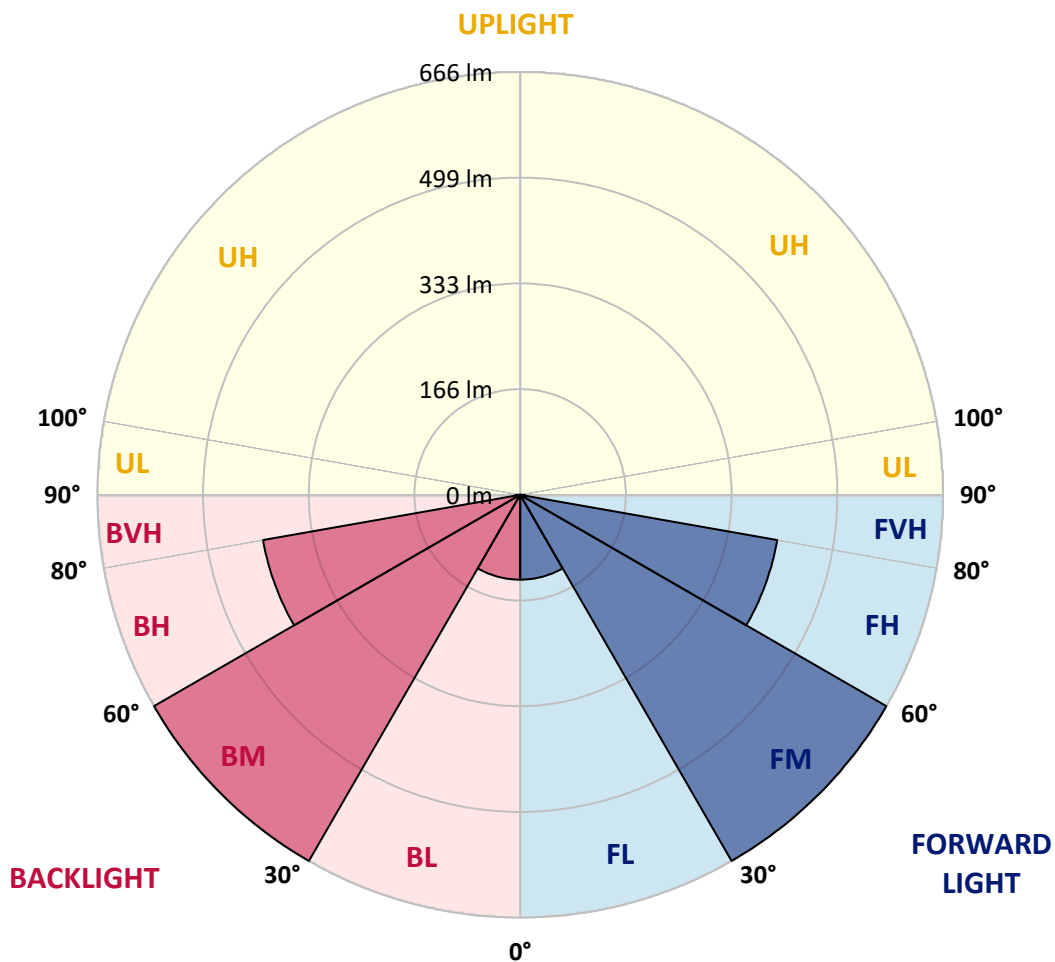
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	133.5	5.5			
FM	(30°-60°)	665.6	27.3			
FH	(60°-80°)	410.9	16.9			G0/660
FVH	(80°-90°)	7.2	0.3			G0/10
BL	(0°-30°)	133.5	5.5	B1/500		
BM	(30°-60°)	665.6	27.3	B1/1000		
BH	(60°-80°)	410.9	16.9	B1/500		G1/500
BVH	(80°-90°)	7.2	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2
2.5°	276.4	275.6	276.4	276.4	277.2	277.2	277.2	277.2	276.4	278.0	278.0
5°	276.4	276.4	277.2	277.2	278.9	280.5	278.0	278.9	279.7	278.9	280.5
7.5°	276.4	276.4	276.4	278.0	280.5	282.0	280.5	281.2	282.8	282.8	284.5
10°	274.0	273.2	274.8	278.0	282.0	284.5	283.7	286.9	286.1	286.9	288.5
12.5°	270.0	270.0	273.2	278.0	285.3	286.9	287.7	289.3	291.7	290.9	293.4
15°	270.8	271.6	274.8	281.2	290.1	291.7	292.6	292.6	296.6	294.9	299.8
17.5°	276.4	277.2	280.5	286.9	297.4	297.4	298.2	299.8	305.5	302.2	308.6
20°	285.3	286.1	289.3	296.6	306.3	305.5	307.1	308.6	315.9	312.7	319.2
22.5°	295.7	297.4	301.4	309.4	320.0	315.1	318.3	321.5	328.8	323.2	332.0
25°	310.3	312.7	316.7	325.6	336.9	331.2	334.4	336.9	344.9	336.9	345.8
27.5°	331.2	332.9	336.0	345.8	355.4	351.4	353.0	354.6	364.3	355.4	365.1
30°	356.2	358.6	361.8	370.7	380.3	373.9	377.2	378.8	386.8	378.0	386.1
32.5°	387.6	390.1	394.0	402.1	410.2	400.5	401.3	403.8	411.8	402.9	411.8
35°	424.7	426.3	432.0	441.6	447.2	432.0	432.8	432.8	443.2	431.2	440.8
37.5°	463.4	465.0	471.5	481.1	487.5	470.7	470.7	471.5	481.1	467.4	476.3
40°	503.7	508.5	515.8	525.4	530.3	511.0	512.5	511.8	523.0	506.9	515.8
42.5°	544.0	548.0	558.4	569.8	575.4	556.1	556.9	554.4	565.7	548.8	556.1
45°	578.6	581.9	594.7	610.9	619.7	599.6	599.6	599.6	610.9	589.9	598.7
47.5°	606.8	609.3	623.0	646.3	660.8	640.7	642.3	639.0	656.0	630.2	642.3
50°	627.0	627.8	645.5	672.1	697.1	678.5	681.0	682.6	698.7	676.2	686.6
52.5°	633.4	635.0	655.2	687.4	723.6	711.6	720.5	723.6	738.2	714.0	728.5
55°	610.9	614.9	645.5	693.0	742.3	738.2	748.7	755.1	773.7	753.5	768.8
57.5°	535.1	539.9	582.7	660.8	746.2	752.7	767.2	777.6	804.2	792.2	809.2
60°	427.1	431.2	474.6	569.0	695.5	735.0	768.0	797.8	825.2	827.7	849.4
62.5°	293.4	299.0	340.8	431.2	585.0	637.5	685.0	734.2	780.1	835.8	863.9
65°	143.4	146.7	182.1	269.1	429.5	496.4	552.0	621.3	664.1	743.8	789.7
67.5°	79.0	79.0	84.6	112.0	229.7	295.7	355.4	442.4	485.9	584.3	643.1
70°	66.1	66.1	64.4	68.5	87.1	103.1	133.8	183.7	244.2	343.3	396.5
71°	62.8	62.1	61.3	62.8	70.1	73.3	86.2	112.8	153.1	236.9	289.3
72.5°	58.8	57.2	54.8	55.6	59.6	59.6	62.1	66.1	81.4	111.2	149.0
75°	50.7	49.2	46.7	46.7	47.6	48.4	49.2	50.7	51.6	53.2	59.6
77.5°	41.9	40.3	37.8	37.8	37.0	37.8	39.5	40.3	38.7	41.9	42.8
80°	32.2	29.8	29.1	29.1	28.2	27.4	27.4	27.4	28.2	29.8	30.6
82.5°	20.2	18.5	19.3	18.5	17.7	17.7	17.7	17.7	18.5	18.5	20.2
85°	9.7	9.7	10.4	9.7	8.1	8.1	7.3	6.4	7.3	6.4	8.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°
0°	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2
2.5°	275.6	277.2	276.4	277.2	275.6	277.2	274.8	277.2	276.4	277.2	275.6
5°	278.0	280.5	278.0	281.2	278.0	281.2	278.0	281.2	278.9	281.2	278.0
7.5°	280.5	285.3	282.0	286.1	282.0	286.9	282.0	286.9	283.7	287.7	282.0
10°	285.3	290.9	286.1	290.9	286.1	291.7	286.1	292.6	287.7	294.1	286.9
12.5°	289.3	295.7	290.9	297.4	290.1	299.0	291.7	301.4	293.4	303.0	293.4
15°	294.9	303.0	298.2	305.5	298.2	307.8	299.0	310.3	301.4	311.9	301.4
17.5°	303.0	311.9	305.5	314.3	306.3	316.7	307.1	319.2	310.3	320.7	310.3
20°	314.3	321.5	315.1	324.8	315.9	325.6	317.5	327.1	320.0	329.6	320.0
22.5°	327.1	333.7	328.8	334.4	326.4	334.4	326.4	334.4	328.8	336.9	328.8
25°	341.7	346.6	340.8	346.6	339.3	345.8	338.5	344.9	339.3	346.6	340.8
27.5°	361.0	363.5	357.0	361.8	353.0	359.5	351.4	357.8	352.2	358.6	354.6
30°	382.0	384.4	378.0	381.2	371.5	375.5	366.7	372.4	367.4	372.4	369.9
32.5°	405.4	408.6	401.3	402.9	394.9	395.7	388.4	390.9	386.8	388.4	387.6
35°	432.0	436.0	427.9	430.4	421.5	421.5	415.0	414.2	412.7	411.0	411.0
37.5°	465.9	467.4	460.9	460.9	450.5	450.5	442.4	442.4	439.3	436.0	434.3
40°	502.9	503.7	493.2	492.3	481.9	481.9	473.0	470.7	465.0	460.9	458.6
42.5°	542.4	541.6	526.2	527.8	512.5	513.3	502.1	499.6	494.0	489.2	484.4
45°	582.7	579.4	564.2	563.3	545.5	546.4	532.7	531.1	523.0	518.2	512.5
47.5°	623.8	622.2	605.2	601.2	582.7	581.9	564.2	564.2	556.1	551.3	545.5
50°	666.5	665.6	646.3	643.9	624.5	621.3	600.4	600.4	590.8	589.1	581.0
52.5°	713.2	710.0	689.1	688.2	669.7	667.3	644.7	643.1	628.6	627.8	618.9
55°	759.1	753.5	739.8	733.4	714.8	714.0	693.9	689.9	671.3	671.3	660.0
57.5°	801.1	796.3	784.9	779.3	761.6	759.1	737.3	737.3	721.3	720.5	708.4
60°	844.5	846.2	834.1	831.7	814.8	814.0	792.2	792.2	776.1	775.3	761.6
62.5°	881.7	897.7	892.9	894.6	880.0	877.6	855.8	854.3	835.8	833.3	822.0
65°	845.4	901.8	938.0	962.2	960.7	959.8	938.9	935.6	912.3	905.8	887.3
67.5°	710.0	783.3	849.4	921.9	975.1	1015.4	1027.6	1022.6	1002.5	984.0	961.5
70°	475.5	560.1	643.9	734.2	825.2	913.9	1004.9	1044.4	1086.4	1071.8	1067.8
71°	361.8	448.9	532.7	627.8	724.5	822.8	934.9	981.5	1066.2	1065.4	1087.1
72.5°	203.9	281.2	370.7	453.7	544.8	646.3	761.6	813.1	934.9	959.0	1021.8
75°	65.3	89.4	118.5	187.0	243.4	336.0	421.5	473.0	553.6	593.9	681.8
77.5°	43.5	48.4	49.9	58.0	65.3	92.7	125.7	154.0	169.2	177.3	186.2
80°	31.4	33.9	35.5	39.5	40.3	45.1	45.1	49.9	49.2	52.4	49.9
82.5°	20.2	22.6	23.3	25.0	25.8	29.1	30.6	33.9	33.9	35.5	34.7
85°	9.7	11.3	11.3	12.9	12.9	15.3	15.3	17.7	17.7	20.2	19.3
87.5°	0.8	0.8	0.8	1.6	1.6	1.6	2.5	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	80°	82.5°	85°	87.5°	90°
0°	277.2	277.2	277.2	277.2	277.2
2.5°	278.0	277.2	278.0	276.4	278.0
5°	282.0	278.9	282.8	278.9	282.8
7.5°	288.5	284.5	289.3	282.8	288.5
10°	294.1	288.5	294.9	288.5	294.1
12.5°	303.8	294.9	305.5	294.9	305.5
15°	313.5	303.0	315.9	304.6	315.1
17.5°	322.3	312.7	324.8	313.5	324.0
20°	330.4	321.5	332.0	320.7	332.0
22.5°	338.5	332.9	340.8	332.9	340.8
25°	348.9	344.9	350.6	344.9	350.6
27.5°	361.0	359.5	362.6	358.6	363.5
30°	374.7	375.5	376.3	375.5	377.2
32.5°	391.7	395.7	394.0	394.0	394.0
35°	415.0	422.3	417.5	419.1	418.3
37.5°	436.8	447.2	440.8	443.2	441.6
40°	460.9	468.2	466.6	466.6	465.0
42.5°	487.5	496.4	494.0	494.8	493.2
45°	516.6	524.7	521.4	520.6	521.4
47.5°	549.6	558.4	554.4	553.6	554.4
50°	584.3	594.7	591.5	589.9	591.5
52.5°	622.2	635.0	633.4	631.8	634.2
55°	666.5	678.5	677.0	678.5	679.3
57.5°	710.7	724.5	721.3	725.3	726.9
60°	766.4	774.5	775.3	776.1	776.8
62.5°	822.8	826.0	828.5	830.8	831.7
65°	888.1	888.8	890.5	888.1	890.5
67.5°	950.9	945.3	944.5	946.9	948.5
70°	1048.4	1048.4	1040.4	1051.7	1042.0
71°	1061.3	1076.7	1059.0	1083.9	1057.3
72.5°	998.5	1026.7	1006.6	1029.1	1002.5
75°	694.7	760.0	759.1	791.4	765.6
77.5°	192.6	180.6	192.6	166.0	158.8
80°	52.4	47.6	51.6	43.5	49.2
82.5°	34.7	29.8	29.1	23.3	25.0
85°	20.2	15.3	15.3	12.1	12.9
87.5°	3.3	0.8	3.3	1.6	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)