

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: ARFL50DBZ-45W-3000K

Issue Date: 3/30/2023

Test Information

Test Method: LM-79-2019
Report Number: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (2022-08-03)
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ARFL50DBZ-45W-3000K
Description: SLIM WALL OR FLOODLIGHT
Light Source:
Ballast/Driver: -

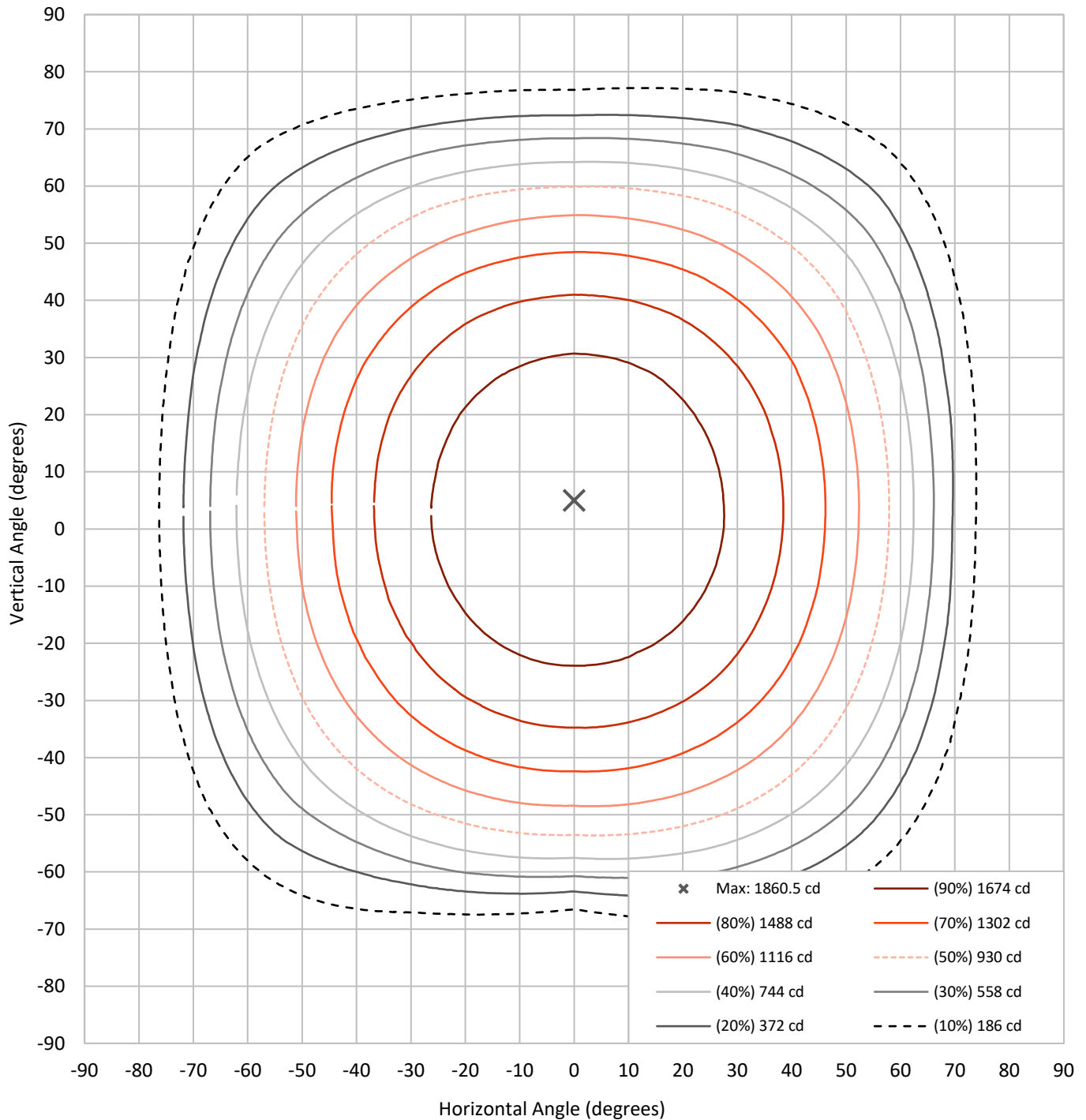
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	5165.3 lumens	Max Intensity:	1860.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 5°V
Efficacy:	117.1 lumens/watt		
Luminous Opening:	Rectangular w/ Sides (W: 0.34' x L: 0.58' x H: 0.15')		
Beam Angle (50%):	114.9°H x 113.4°V	Field Angle (10%):	150.2°H x 143.3°V
Beam Lumens:	4138.2 lumens	Field Lumens:	5088 lumens
Beam Efficiency:	80.1%	Field Efficiency:	98.5%
Input Watts (W):	44.1		
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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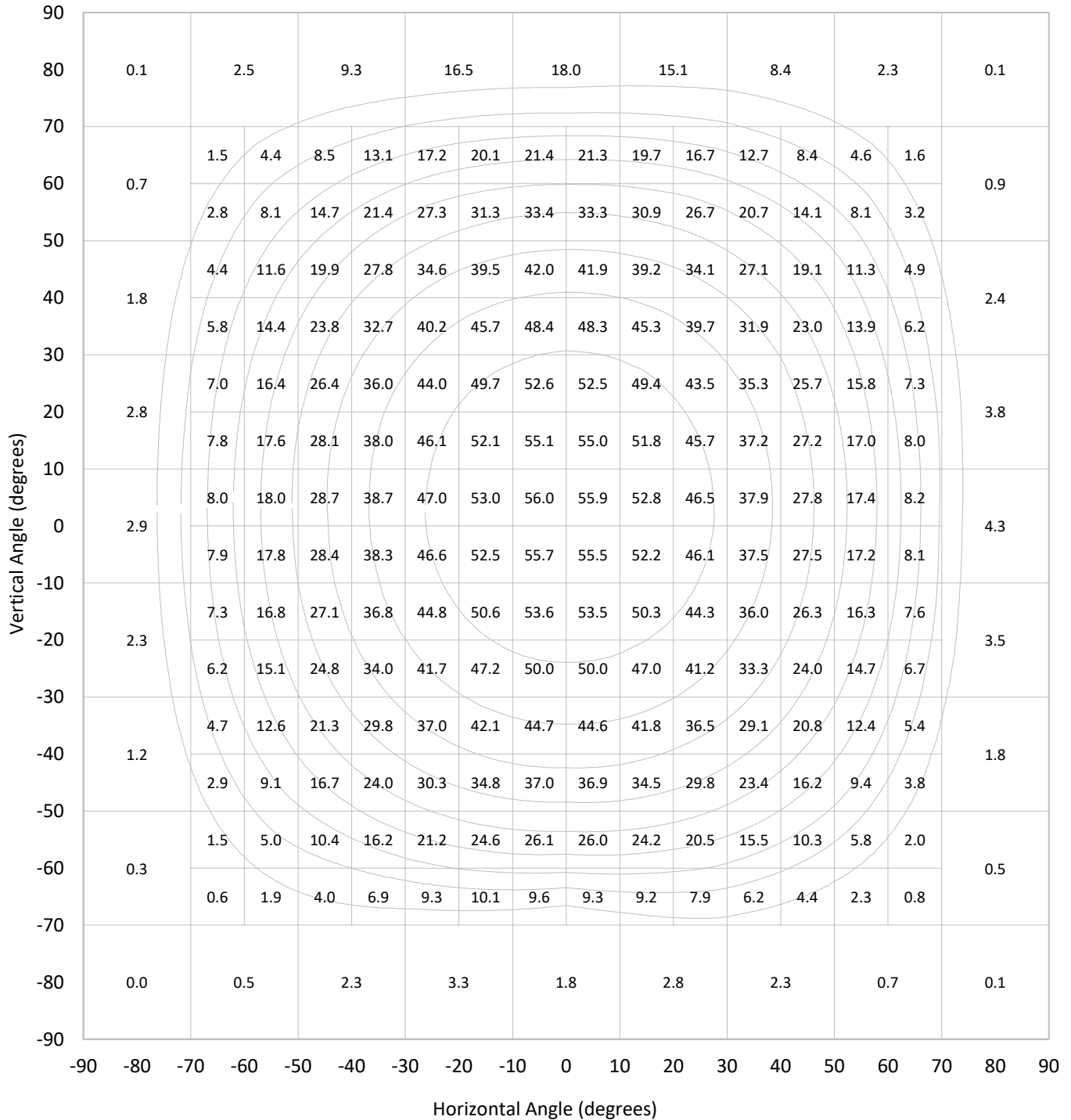
Iso-Candela Plot





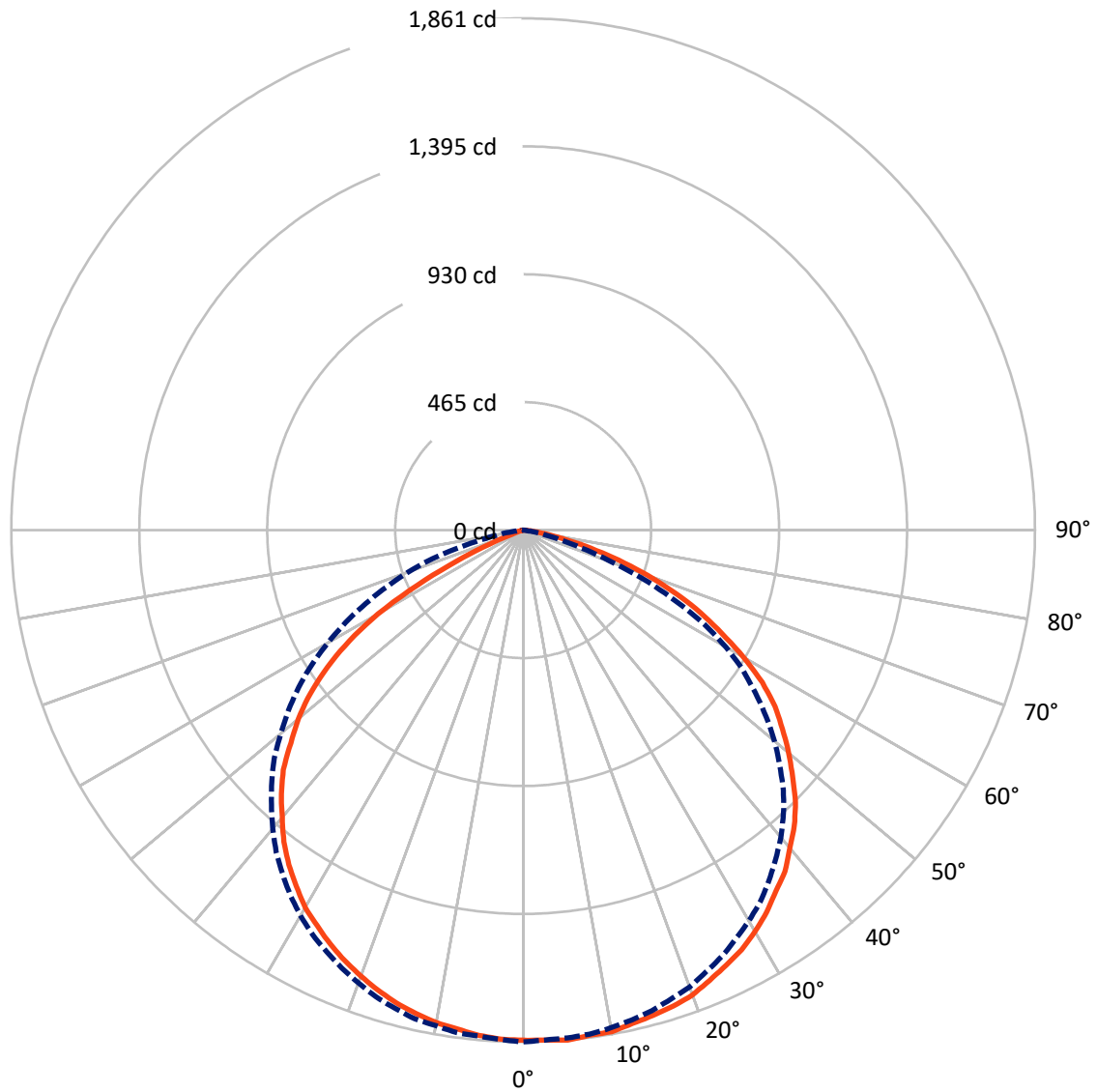
REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
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Lumen Table



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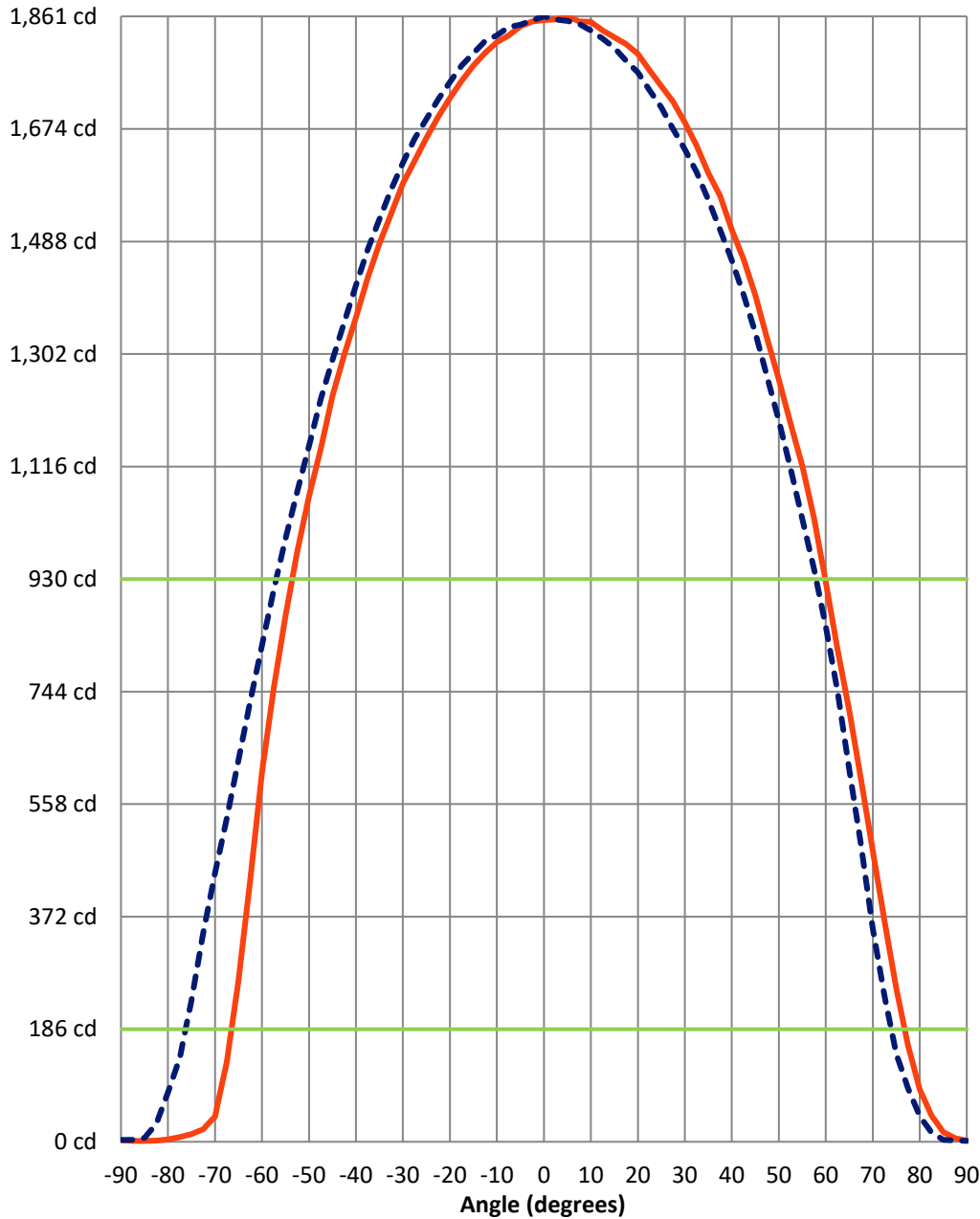
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 5-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 114.9°
 V Angle: 113.4°
 Lumens: 4138.2
 Efficiency: 80.1%

Field:
 H Angle: 150.2°
 V Angle: 143.3°
 Lumens: 5088
 Efficiency: 98.5%

Spill:
 Lumens: 77.3
 Efficiency: 1.5%

— Vertical Distribution through 0-Deg
 - - Horizontal Distribution through 5-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
90°	3.0	3.0	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.6	2.6
87.5°	3.0	3.1	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.3	4.5
85°	3.0	3.1	3.2	3.4	3.6	3.8	4.1	4.5	4.9	5.4	6.0
82.5°	3.0	3.1	3.3	3.5	3.8	4.2	4.7	5.4	6.2	7.2	8.6
80°	3.0	3.1	3.3	3.6	4.1	4.6	5.5	6.5	8.4	10.7	14.2
77.5°	3.0	3.1	3.4	3.8	4.4	5.2	6.6	8.9	12.5	17.8	23.7
75°	3.0	3.2	3.5	3.9	4.7	6.1	8.4	13.0	18.9	25.5	34.6
72.5°	3.0	3.2	3.5	4.1	5.1	7.4	11.8	18.0	25.1	37.2	52.0
70°	3.0	3.2	3.6	4.3	5.9	9.4	15.6	23.0	36.1	53.4	71.5
67.5°	3.0	3.2	3.6	4.5	6.7	12.1	19.5	31.9	50.4	70.2	90.7
65°	3.0	3.2	3.7	4.9	8.1	14.9	25.0	43.1	65.0	87.3	114.6
62.5°	3.0	3.3	3.8	5.3	9.9	17.7	32.5	56.3	78.5	108.4	143.0
60°	3.0	3.3	3.9	5.8	11.6	21.7	42.6	67.1	96.7	131.8	174.2
57.5°	3.0	3.3	3.9	6.3	13.5	27.2	53.2	80.0	116.0	157.3	208.1
55°	3.0	3.3	4.0	7.3	15.3	33.5	61.7	95.6	135.9	184.7	245.0
52.5°	3.0	3.3	4.1	8.3	17.5	41.8	70.3	111.1	156.1	214.5	277.6
50°	3.0	3.3	4.3	9.1	21.2	49.8	83.2	126.4	178.1	244.6	310.8
47.5°	3.0	3.3	4.5	10.0	24.7	55.8	95.5	141.9	201.7	272.7	344.0
45°	3.0	3.3	4.7	11.0	28.5	61.5	106.9	157.6	226.5	300.0	375.6
42.5°	3.0	3.3	4.8	12.0	34.0	68.9	117.7	173.3	249.8	327.6	404.5
40°	3.0	3.4	4.9	12.8	39.3	78.2	128.5	190.9	271.9	355.2	429.5
37.5°	3.0	3.4	5.1	13.6	44.3	87.0	138.5	209.1	292.4	379.4	455.9
35°	3.0	3.4	5.3	15.1	48.1	94.7	148.6	226.4	313.3	401.1	480.4
32.5°	3.0	3.4	5.6	16.9	51.3	101.4	158.3	243.0	334.7	419.8	501.9
30°	3.0	3.4	5.9	18.4	54.2	107.5	167.1	258.2	353.6	438.8	520.9
27.5°	3.0	3.4	6.1	19.8	56.9	113.1	177.9	271.2	370.1	457.0	538.0
25°	3.0	3.4	6.3	21.0	60.0	118.3	188.1	283.0	385.0	472.6	556.5
22.5°	3.0	3.4	6.4	22.1	64.4	122.9	197.2	294.8	396.6	486.1	573.4
20°	3.0	3.3	6.5	23.4	68.4	126.7	205.5	307.0	406.8	497.8	587.6
17.5°	3.0	3.3	6.6	25.1	71.9	130.0	213.2	317.7	415.9	507.1	599.9
15°	3.0	3.3	6.7	26.5	74.9	132.8	219.7	327.0	424.6	514.9	610.1
12.5°	3.0	3.3	6.7	27.7	77.4	135.2	225.1	334.3	431.8	521.1	618.1
10°	3.0	3.3	6.7	28.6	79.4	136.9	229.3	339.3	437.4	527.0	624.2
7.5°	3.0	3.3	6.6	29.2	80.8	137.9	232.2	343.0	441.3	531.5	628.5
5°	3.0	3.3	6.5	29.5	81.7	138.3	233.8	345.1	443.7	534.1	631.0
2.5°	3.0	3.3	6.4	29.5	82.1	138.0	234.2	345.9	444.5	534.9	631.5
0°	3.0	3.3	6.3	29.3	81.9	137.1	233.3	345.1	443.6	533.9	630.1
-2.5°	3.0	3.3	6.3	29.0	81.0	135.9	231.1	342.3	440.5	530.7	626.8
-5°	3.0	3.3	6.3	28.4	79.5	134.0	227.5	338.0	435.7	525.7	621.7
-7.5°	3.0	3.3	6.2	27.6	77.6	131.6	222.7	332.2	429.4	518.8	614.6
-10°	3.0	3.3	6.1	26.5	75.1	128.6	216.6	325.0	421.5	510.1	605.7
-12.5°	3.0	3.3	6.0	25.1	72.1	125.0	209.3	316.3	411.9	500.0	594.9
-15°	3.0	3.3	5.9	23.6	68.6	120.9	200.8	305.3	400.8	489.5	582.2
-17.5°	3.0	3.2	5.8	21.7	64.7	116.5	191.1	292.4	388.2	477.5	567.5
-20°	3.0	3.2	5.7	19.7	60.3	112.0	180.3	277.9	375.4	463.9	550.8

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Scaled Data Report



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CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	3.0	3.2	5.5	18.2	55.5	107.0	169.6	262.0	361.5	447.7	532.3
-25°	3.0	3.2	5.3	16.9	50.4	101.7	158.6	246.8	346.4	429.6	511.0
-27.5°	3.0	3.2	5.1	15.6	46.7	96.0	146.8	231.9	327.4	409.5	488.0
-30°	3.0	3.2	4.9	14.1	43.5	89.7	134.9	215.9	306.5	387.1	466.2
-32.5°	3.0	3.2	4.6	12.6	40.2	83.0	125.7	197.4	283.1	364.1	442.4
-35°	3.0	3.2	4.4	11.0	36.7	76.0	115.9	177.3	257.3	342.0	415.5
-37.5°	3.0	3.2	4.2	9.6	32.8	68.1	106.3	158.0	232.7	316.0	386.1
-40°	3.0	3.2	4.1	8.9	28.1	58.9	97.3	140.2	209.7	286.5	355.4
-42.5°	3.0	3.2	4.0	8.1	23.3	49.5	88.0	123.8	184.1	253.7	327.2
-45°	3.0	3.2	3.8	7.3	18.4	42.1	77.9	110.3	157.0	222.1	292.8
-47.5°	3.0	3.2	3.7	6.5	15.4	36.8	67.4	97.5	134.8	192.7	254.9
-50°	3.0	3.2	3.6	6.0	12.8	31.4	55.5	85.7	115.0	160.3	216.9
-52.5°	3.0	3.2	3.4	5.4	10.1	24.9	43.3	73.1	98.3	132.3	181.8
-55°	3.0	3.1	3.4	4.9	8.6	18.5	35.8	59.8	84.3	109.1	144.3
-57.5°	3.0	3.1	3.4	4.4	7.5	14.2	28.9	45.5	69.5	90.2	115.4
-60°	3.0	3.1	3.3	4.1	6.3	10.8	21.4	34.6	53.8	74.3	92.6
-62.5°	3.0	3.1	3.3	3.9	5.6	8.5	14.8	26.5	38.1	56.7	74.1
-65°	3.0	3.1	3.3	3.6	4.8	7.1	10.9	18.4	28.2	39.6	54.9
-67.5°	3.0	3.1	3.2	3.5	4.2	5.9	8.3	12.5	19.5	27.2	36.7
-70°	3.0	3.1	3.2	3.4	3.9	5.0	6.6	8.7	12.5	18.0	23.8
-72.5°	3.0	3.1	3.2	3.3	3.6	4.3	5.4	6.9	8.5	11.4	14.8
-75°	3.0	3.0	3.1	3.2	3.4	3.8	4.4	5.5	6.6	7.9	9.5
-77.5°	3.0	3.0	3.1	3.2	3.3	3.5	3.9	4.4	5.2	6.0	6.9
-80°	3.0	3.0	3.1	3.1	3.2	3.3	3.5	3.8	4.2	4.7	5.2
-82.5°	3.0	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.6	3.8	4.1
-85°	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.4
-87.5°	3.0	3.0	3.0	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0
-90°	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.4	3.4



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	2.5	2.5	2.7	2.8	3.0	3.1	3.3	3.4	3.6	3.7	3.9
87.5°	4.8	5.1	5.2	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.7
85°	6.8	7.6	8.0	8.4	8.8	9.5	10.2	10.8	11.3	11.8	12.3
82.5°	10.5	12.6	14.1	16.8	19.2	21.5	23.7	25.8	28.0	30.0	32.0
80°	19.1	24.5	28.1	31.5	35.3	40.8	46.0	51.0	56.3	61.3	65.9
77.5°	29.8	38.0	46.5	54.3	62.7	70.6	77.8	84.7	91.4	97.8	103.8
75°	46.5	60.4	72.5	82.3	91.9	101.8	111.7	124.2	135.7	147.4	157.7
72.5°	68.5	84.1	98.4	111.0	128.0	145.1	162.6	179.5	195.8	212.1	228.1
70°	89.1	108.8	131.9	154.5	177.4	201.4	224.9	247.9	269.6	291.3	312.4
67.5°	114.5	143.6	176.7	207.1	237.3	265.7	291.7	319.4	346.9	374.7	400.2
65°	147.3	185.6	229.5	265.5	295.1	328.2	360.4	392.1	422.6	452.1	482.6
62.5°	184.2	232.0	279.9	317.1	354.5	390.2	425.3	459.5	495.9	528.7	559.9
60°	224.8	276.6	326.0	370.2	409.6	447.8	488.5	527.1	563.6	600.4	636.6
57.5°	265.2	318.9	371.7	419.7	461.4	506.8	548.6	590.1	632.2	673.0	713.4
55°	302.6	361.0	415.4	465.9	515.1	561.0	607.5	654.7	699.6	746.5	792.9
52.5°	340.8	401.0	455.7	513.0	564.4	615.3	667.0	717.1	768.3	821.3	868.6
50°	377.6	437.5	498.7	556.0	613.7	669.6	724.3	779.2	836.3	886.1	932.0
47.5°	411.7	475.3	537.3	599.0	662.5	721.3	780.2	840.3	894.6	943.7	989.5
45°	442.2	510.4	574.6	642.7	707.0	770.5	834.9	894.0	946.9	996.7	1047.3
42.5°	475.1	542.5	612.8	681.3	750.4	820.4	883.8	941.2	995.8	1050.5	1099.9
40°	503.9	574.6	648.8	721.6	794.4	862.8	926.1	986.6	1045.6	1099.8	1150.8
37.5°	530.2	606.5	681.8	756.9	832.0	901.5	968.5	1032.2	1090.6	1146.5	1196.3
35°	555.4	636.2	715.3	794.6	868.6	939.1	1006.7	1072.4	1133.6	1187.6	1236.9
32.5°	581.3	662.3	743.5	824.5	899.5	971.9	1042.3	1109.4	1171.4	1223.1	1274.5
30°	605.2	689.5	773.5	853.7	930.8	1003.8	1074.7	1142.6	1200.9	1257.9	1310.3
27.5°	626.5	713.1	798.7	879.2	957.2	1032.2	1103.7	1169.7	1231.4	1288.0	1343.2
25°	645.1	733.0	820.5	902.9	981.4	1057.5	1129.4	1192.7	1255.7	1315.7	1368.7
22.5°	663.1	753.5	840.5	924.8	1003.2	1079.5	1150.5	1217.5	1280.2	1339.0	1393.1
20°	680.1	771.7	857.8	942.2	1022.5	1098.1	1168.1	1236.7	1300.6	1357.3	1412.4
17.5°	694.2	785.4	873.0	957.4	1038.6	1114.3	1183.8	1253.8	1316.8	1375.4	1432.1
15°	704.6	797.0	885.9	970.0	1051.7	1126.7	1199.7	1269.1	1329.6	1386.9	1446.2
12.5°	712.9	806.4	896.4	980.0	1061.2	1136.2	1211.3	1279.8	1340.0	1398.5	1457.3
10°	719.4	813.4	904.3	988.1	1068.1	1143.2	1218.9	1287.3	1348.5	1410.1	1465.9
7.5°	724.8	818.1	909.3	993.6	1072.5	1147.7	1224.2	1291.2	1354.1	1414.6	1471.7
5°	727.8	820.4	911.9	996.6	1074.5	1149.8	1227.3	1292.3	1354.4	1415.8	1474.7
2.5°	728.5	820.5	912.2	996.8	1073.8	1149.2	1227.5	1290.8	1352.1	1414.1	1474.6
0°	727.0	818.4	910.0	994.4	1070.5	1145.9	1224.7	1286.8	1347.6	1409.7	1471.3
-2.5°	723.3	815.1	906.3	990.8	1067.1	1142.5	1220.5	1283.5	1344.8	1406.3	1467.1
-5°	717.5	809.5	900.1	984.5	1061.1	1136.3	1213.2	1277.6	1339.9	1400.3	1459.6
-7.5°	709.3	801.6	891.4	975.5	1052.5	1127.4	1202.9	1269.0	1332.2	1391.6	1448.9
-10°	698.9	791.5	880.3	963.6	1041.4	1115.9	1190.3	1257.4	1318.5	1380.0	1434.4
-12.5°	687.3	778.9	866.8	949.1	1027.8	1101.6	1175.2	1242.8	1301.3	1360.8	1416.7
-15°	673.9	764.0	851.0	933.0	1011.5	1084.7	1156.6	1225.4	1283.4	1341.4	1397.1
-17.5°	658.6	746.6	832.6	914.7	993.1	1064.9	1134.6	1202.2	1262.9	1322.1	1376.8
-20°	639.7	727.1	811.7	892.7	972.1	1042.1	1111.0	1176.8	1238.4	1292.9	1349.3



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 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	618.2	703.8	788.4	867.8	945.0	1016.3	1084.8	1149.7	1211.9	1267.2	1321.9
-25°	595.6	678.5	762.3	841.3	916.7	988.8	1055.6	1119.3	1178.0	1234.4	1284.5
-27.5°	571.9	653.4	734.1	812.3	885.7	958.9	1023.1	1086.3	1144.7	1200.6	1252.6
-30°	545.9	625.1	703.0	780.4	851.4	921.9	987.3	1050.0	1108.4	1160.8	1214.0
-32.5°	517.9	593.8	668.5	744.5	816.3	883.8	951.5	1009.7	1067.9	1121.3	1170.4
-35°	487.1	562.0	634.9	707.2	778.6	842.0	906.9	968.5	1023.5	1076.5	1126.0
-37.5°	456.9	527.9	597.5	665.2	734.7	800.5	860.1	921.0	974.8	1027.0	1076.2
-40°	425.2	491.4	558.9	624.4	689.6	754.3	812.4	869.2	925.4	973.3	1021.3
-42.5°	390.2	454.0	518.3	580.8	641.2	703.4	762.5	814.0	868.2	919.6	963.7
-45°	352.5	415.8	475.3	535.7	593.4	648.0	703.5	758.3	806.3	856.7	903.6
-47.5°	318.9	374.0	431.9	487.9	543.5	591.6	640.9	693.1	743.1	788.1	834.5
-50°	278.4	331.6	385.8	438.9	489.0	532.3	576.3	622.8	672.1	716.8	758.8
-52.5°	234.4	291.0	336.8	388.0	431.3	469.3	509.3	550.0	592.8	638.7	679.3
-55°	193.1	242.6	293.5	333.8	372.0	406.4	439.5	475.1	511.3	549.5	589.4
-57.5°	151.9	195.3	240.1	284.1	311.1	342.5	371.6	399.6	428.4	460.0	492.0
-60°	116.9	150.0	188.5	225.3	257.9	280.6	304.0	327.3	349.9	371.8	395.2
-62.5°	90.4	111.5	139.1	170.6	198.2	223.7	244.6	258.0	275.2	291.3	307.2
-65°	69.8	83.1	100.0	119.0	144.2	165.3	184.2	200.5	212.7	219.3	228.5
-67.5°	48.7	61.8	71.8	84.4	98.1	113.1	129.7	142.6	153.3	161.7	167.8
-70°	30.2	39.0	49.4	58.9	66.2	75.3	84.2	92.3	102.4	109.4	113.3
-72.5°	18.3	22.8	28.5	34.8	42.6	49.0	53.8	58.6	63.0	67.1	70.2
-75°	11.1	13.2	15.2	19.1	22.5	26.4	29.5	33.6	36.6	38.7	40.1
-77.5°	7.8	8.6	9.6	10.6	12.1	13.2	15.2	16.5	17.6	18.4	18.3
-80°	5.9	6.5	6.9	7.3	7.7	8.2	8.6	9.0	9.5	9.8	9.8
-82.5°	4.5	4.8	5.1	5.4	5.7	5.9	6.1	6.2	6.4	6.4	6.5
-85°	3.6	3.7	4.0	4.1	4.3	4.5	4.6	4.7	4.8	4.9	4.9
-87.5°	3.1	3.1	3.3	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.4
-90°	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.1



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
90°	4.0	4.2	4.3	4.1	3.9	3.7	3.4	3.2	3.0	2.8	2.6
87.5°	5.8	5.9	5.9	6.0	6.1	6.1	6.2	6.2	6.2	6.2	6.2
85°	13.1	14.0	14.7	15.3	15.9	16.3	16.6	16.8	17.0	17.0	17.0
82.5°	34.6	37.2	39.5	41.2	42.5	43.5	44.4	45.2	45.7	46.0	46.0
80°	70.1	74.0	77.6	80.2	82.4	84.4	86.1	87.4	88.3	89.0	89.2
77.5°	110.6	117.4	123.3	128.7	134.0	138.8	143.2	147.1	150.7	153.9	156.4
75°	167.5	176.4	183.8	194.1	204.7	214.1	223.0	231.6	238.9	244.7	249.2
72.5°	243.9	259.9	275.2	289.4	302.8	315.8	328.4	339.1	348.0	354.9	360.0
70°	333.8	356.0	376.5	394.4	410.6	425.3	438.5	450.1	459.9	467.9	474.2
67.5°	424.9	448.7	472.2	494.3	512.0	527.8	542.1	554.8	566.0	575.6	584.1
65°	511.3	537.2	561.5	584.5	605.9	625.9	642.9	658.2	672.0	684.3	694.5
62.5°	590.4	621.0	649.0	675.7	701.0	723.9	744.2	762.0	777.7	790.5	800.6
60°	671.1	705.4	739.6	773.2	803.2	828.7	850.7	868.5	884.1	896.6	906.8
57.5°	754.4	795.0	835.5	871.5	901.1	922.1	942.8	962.0	978.2	992.1	1004.5
55°	840.3	880.8	916.0	949.5	978.8	1000.6	1021.6	1042.1	1061.7	1078.3	1090.3
52.5°	911.0	950.5	984.9	1015.8	1047.5	1074.9	1095.6	1116.7	1135.0	1150.0	1162.5
50°	974.1	1011.5	1051.1	1082.8	1114.8	1143.0	1166.3	1186.8	1205.6	1222.0	1235.0
47.5°	1034.0	1074.0	1112.9	1148.2	1179.6	1209.3	1234.0	1255.2	1273.8	1289.9	1303.5
45°	1090.8	1134.0	1172.5	1208.9	1241.1	1272.1	1298.5	1320.2	1338.4	1354.7	1368.8
42.5°	1146.6	1189.1	1227.6	1265.0	1300.2	1330.3	1356.0	1378.2	1398.3	1415.9	1430.4
40°	1197.0	1238.6	1280.1	1317.3	1351.1	1381.7	1410.0	1435.1	1454.7	1470.8	1483.2
37.5°	1242.0	1286.3	1327.1	1364.6	1398.7	1432.9	1460.9	1483.4	1500.8	1519.6	1534.3
35°	1284.4	1329.4	1370.6	1409.2	1444.7	1476.1	1503.2	1528.3	1548.0	1565.6	1579.3
32.5°	1323.9	1368.8	1411.3	1449.6	1484.0	1516.0	1543.8	1569.3	1589.4	1605.3	1619.0
30°	1359.9	1405.1	1447.2	1485.8	1520.5	1552.4	1580.4	1604.7	1624.9	1638.9	1653.7
27.5°	1391.0	1437.3	1480.4	1518.5	1553.5	1584.0	1610.4	1632.9	1656.7	1673.4	1686.8
25°	1419.8	1467.8	1509.4	1547.7	1580.2	1610.4	1637.6	1663.3	1683.3	1705.5	1718.7
22.5°	1445.6	1492.9	1535.0	1570.5	1603.9	1635.8	1663.3	1689.5	1710.2	1733.0	1744.1
20°	1466.9	1514.5	1555.8	1590.7	1627.3	1657.6	1686.6	1710.1	1732.6	1753.4	1764.9
17.5°	1484.1	1531.8	1570.6	1612.1	1646.3	1676.0	1702.0	1727.7	1752.9	1768.6	1786.6
15°	1499.2	1544.5	1585.5	1626.5	1659.1	1688.5	1717.1	1744.6	1765.9	1784.9	1800.4
12.5°	1511.3	1554.6	1600.3	1639.2	1672.1	1699.9	1730.0	1756.1	1779.7	1798.8	1814.1
10°	1517.4	1562.4	1609.5	1647.0	1678.1	1712.1	1740.8	1767.4	1789.3	1808.7	1823.8
7.5°	1521.9	1569.8	1615.1	1654.4	1684.6	1720.0	1747.5	1775.6	1799.0	1813.1	1829.4
5°	1525.1	1574.3	1618.4	1658.3	1690.7	1723.1	1751.8	1779.3	1799.7	1819.7	1829.2
2.5°	1525.6	1575.0	1618.5	1656.6	1693.8	1723.3	1752.6	1779.8	1800.1	1817.9	1833.0
0°	1522.7	1572.3	1615.6	1653.1	1693.0	1720.5	1749.9	1776.3	1798.9	1815.9	1833.6
-2.5°	1517.8	1566.9	1609.5	1649.2	1687.2	1715.9	1743.6	1769.9	1791.0	1808.1	1823.5
-5°	1509.2	1558.3	1601.1	1642.8	1677.2	1708.9	1735.5	1760.4	1778.9	1799.5	1811.3
-7.5°	1497.2	1546.7	1591.3	1631.1	1663.8	1697.5	1724.5	1749.1	1766.0	1784.8	1801.9
-10°	1483.9	1533.4	1576.8	1615.5	1650.3	1683.0	1708.5	1728.8	1750.2	1768.1	1787.1
-12.5°	1471.2	1516.5	1557.4	1591.1	1632.5	1664.4	1691.5	1716.9	1736.0	1752.1	1766.4
-15°	1452.0	1494.2	1537.1	1578.0	1611.3	1645.0	1672.7	1697.9	1718.7	1734.1	1745.1
-17.5°	1426.6	1471.7	1516.7	1549.4	1581.7	1619.3	1648.6	1673.0	1696.1	1713.4	1727.3
-20°	1398.9	1448.9	1485.9	1527.4	1561.0	1589.2	1620.4	1646.2	1666.8	1685.6	1702.7



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	1371.5	1416.1	1459.5	1496.1	1531.9	1564.0	1589.1	1615.5	1636.0	1653.4	1668.3
-25°	1338.7	1383.8	1428.4	1463.8	1497.8	1530.9	1558.0	1580.5	1607.1	1618.7	1633.9
-27.5°	1301.3	1349.3	1389.4	1430.7	1461.5	1490.7	1520.9	1545.1	1566.9	1583.2	1601.4
-30°	1262.1	1308.6	1351.7	1387.4	1423.7	1451.2	1477.7	1500.1	1526.0	1542.6	1557.2
-32.5°	1219.8	1262.9	1305.9	1345.2	1377.6	1408.8	1434.5	1456.7	1476.7	1493.3	1508.7
-35°	1172.2	1217.4	1256.3	1293.3	1329.4	1362.0	1385.7	1410.0	1429.0	1444.5	1459.4
-37.5°	1122.2	1164.7	1205.9	1241.6	1271.6	1304.7	1333.2	1358.2	1374.0	1391.6	1405.5
-40°	1066.5	1108.8	1148.6	1184.6	1219.9	1244.9	1269.5	1295.1	1316.0	1333.5	1347.1
-42.5°	1006.2	1047.1	1085.4	1122.9	1154.8	1183.3	1212.0	1232.0	1250.2	1266.3	1280.3
-45°	945.5	981.8	1017.7	1052.3	1083.5	1115.1	1140.4	1161.4	1179.6	1196.8	1210.0
-47.5°	877.6	916.8	949.1	979.0	1008.0	1035.9	1062.0	1084.7	1104.4	1119.3	1130.9
-50°	800.8	840.9	876.1	907.4	933.4	957.2	979.9	1001.8	1020.7	1036.5	1048.8
-52.5°	718.1	753.3	790.5	823.7	852.3	876.7	898.3	916.9	933.8	947.3	958.5
-55°	630.8	663.7	695.1	724.1	753.0	781.4	803.1	821.7	836.8	849.4	859.0
-57.5°	525.7	560.2	594.9	623.6	647.0	668.6	689.1	707.6	723.9	737.0	746.8
-60°	421.2	446.7	473.6	500.6	525.6	547.5	566.6	579.7	591.4	601.5	609.5
-62.5°	322.7	337.1	355.4	373.6	391.2	407.5	422.1	434.2	443.7	450.2	453.5
-65°	237.0	244.6	253.0	260.8	270.1	277.6	286.7	293.0	296.8	298.8	298.0
-67.5°	170.1	169.4	170.1	171.1	174.9	177.4	178.3	179.0	177.5	173.8	169.1
-70°	115.5	116.2	114.6	113.0	112.7	111.0	107.6	102.9	98.4	92.1	84.3
-72.5°	72.7	73.8	72.6	71.4	70.8	69.7	67.9	64.9	60.7	55.6	49.9
-75°	41.2	41.5	40.9	41.4	41.9	41.5	40.4	38.8	36.5	33.5	30.0
-77.5°	18.6	18.7	18.0	18.5	19.5	20.0	19.9	19.5	18.6	17.4	15.9
-80°	9.9	9.6	9.0	8.6	8.4	8.1	7.8	7.5	7.1	6.6	6.2
-82.5°	6.5	6.5	6.5	6.2	5.9	5.6	5.3	4.9	4.5	4.1	3.7
-85°	5.0	5.0	5.0	4.8	4.5	4.2	3.9	3.6	3.3	3.0	2.7
-87.5°	4.6	4.7	4.8	4.5	4.2	4.0	3.7	3.4	3.1	2.9	2.6
-90°	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.7



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
90°	2.4	2.1	1.9	1.7	1.9	2.0	2.2	2.4	2.5	2.7	2.9
87.5°	6.2	6.2	6.1	6.1	6.3	6.4	6.6	6.7	6.8	6.9	7.0
85°	16.9	16.7	16.4	16.1	16.8	17.5	18.1	18.6	19.0	19.3	19.5
82.5°	45.7	45.2	44.4	43.5	45.2	46.6	47.9	48.9	49.6	50.0	50.1
80°	89.1	88.6	87.8	86.6	89.7	92.3	94.5	96.3	97.7	98.5	98.9
77.5°	158.3	159.4	159.7	159.3	163.4	166.8	169.3	170.9	171.8	171.9	171.2
75°	252.3	254.1	254.6	253.8	257.7	260.4	261.8	262.1	261.1	259.0	255.6
72.5°	363.5	365.5	365.9	364.7	367.6	368.8	368.6	366.9	363.7	359.2	353.5
70°	478.6	481.2	482.1	481.1	483.5	484.1	482.9	479.9	475.1	468.5	460.2
67.5°	590.8	595.5	598.2	598.7	600.2	599.5	596.9	592.4	586.1	577.9	567.8
65°	702.4	708.1	711.5	712.6	713.7	712.5	709.1	703.4	695.5	685.5	673.2
62.5°	807.7	812.2	814.3	813.9	816.5	816.7	814.6	810.1	802.7	792.6	779.8
60°	915.0	920.9	924.4	925.2	926.7	925.5	921.6	915.3	906.7	895.7	882.2
57.5°	1014.5	1022.3	1027.7	1030.6	1030.1	1027.0	1021.4	1013.5	1002.5	989.4	975.0
55°	1100.2	1108.2	1113.9	1117.4	1116.1	1112.5	1106.6	1098.4	1088.0	1074.4	1058.8
52.5°	1172.4	1179.9	1184.9	1187.5	1186.7	1183.4	1177.4	1169.1	1158.9	1146.6	1131.4
50°	1245.1	1252.7	1257.8	1260.3	1260.2	1257.3	1251.5	1242.7	1230.9	1217.2	1200.7
47.5°	1314.1	1321.4	1326.1	1328.2	1327.8	1324.8	1319.0	1310.6	1299.6	1286.8	1272.0
45°	1380.6	1389.8	1396.2	1399.7	1397.7	1392.8	1385.3	1375.6	1363.7	1349.6	1332.5
42.5°	1441.7	1450.2	1456.0	1459.0	1457.2	1452.5	1445.1	1435.8	1424.1	1407.6	1389.1
40°	1492.9	1500.3	1505.2	1507.7	1507.0	1503.8	1498.0	1489.7	1478.0	1462.3	1443.3
37.5°	1546.0	1554.8	1560.7	1563.9	1563.0	1560.0	1554.1	1542.7	1527.9	1511.6	1495.1
35°	1589.6	1596.1	1599.9	1601.5	1601.9	1600.3	1596.1	1587.8	1574.1	1563.3	1543.2
32.5°	1629.7	1637.7	1643.4	1646.9	1645.3	1641.1	1634.8	1626.7	1615.3	1602.4	1583.4
30°	1666.2	1675.1	1681.4	1685.1	1683.0	1678.6	1672.4	1662.4	1649.1	1635.3	1618.7
27.5°	1700.0	1709.3	1715.7	1719.5	1717.2	1712.1	1705.3	1695.5	1681.5	1669.9	1646.3
25°	1732.0	1738.6	1742.9	1745.2	1744.4	1741.0	1734.6	1725.1	1713.0	1696.1	1674.6
22.5°	1755.6	1765.3	1768.8	1771.3	1770.4	1767.3	1760.8	1751.4	1738.7	1720.0	1699.7
20°	1776.9	1787.2	1794.2	1798.5	1796.1	1789.2	1780.0	1774.5	1761.5	1743.0	1722.0
17.5°	1794.4	1805.0	1811.4	1814.6	1812.2	1807.8	1802.7	1794.8	1777.1	1763.5	1740.5
15°	1813.5	1821.0	1824.4	1826.0	1826.0	1823.2	1814.4	1804.7	1793.4	1777.9	1759.1
12.5°	1826.2	1833.9	1837.5	1837.3	1837.1	1833.8	1830.3	1818.7	1803.1	1787.0	1773.3
10°	1835.8	1845.1	1850.3	1851.3	1852.0	1847.3	1836.5	1827.1	1815.2	1796.0	1779.0
7.5°	1839.9	1850.0	1851.2	1852.3	1852.7	1852.5	1846.3	1830.1	1818.3	1805.0	1781.6
5°	1842.8	1846.7	1853.9	1860.5	1855.3	1853.0	1848.0	1837.1	1823.7	1808.5	1787.1
2.5°	1843.2	1850.0	1855.1	1855.5	1853.3	1852.2	1846.7	1838.7	1824.9	1809.3	1788.5
0°	1842.0	1845.2	1848.3	1854.4	1853.8	1851.1	1845.4	1833.6	1824.9	1809.0	1786.9
-2.5°	1837.0	1844.7	1849.3	1852.0	1851.5	1852.2	1845.0	1831.8	1820.3	1801.8	1780.9
-5°	1828.4	1835.0	1839.2	1843.9	1844.5	1844.7	1834.5	1825.6	1811.5	1790.2	1772.4
-7.5°	1815.4	1825.0	1828.3	1829.1	1832.7	1830.5	1824.5	1815.8	1797.0	1778.1	1759.4
-10°	1802.0	1814.1	1817.4	1817.8	1819.1	1816.7	1810.0	1796.1	1779.3	1764.8	1745.5
-12.5°	1781.5	1792.0	1798.8	1800.1	1801.1	1796.4	1786.7	1776.8	1761.8	1745.5	1725.1
-15°	1759.8	1768.4	1776.3	1779.2	1778.2	1774.0	1765.6	1750.8	1740.2	1723.1	1707.6
-17.5°	1735.3	1743.6	1750.7	1753.8	1751.9	1745.8	1739.0	1727.8	1715.6	1702.0	1683.6
-20°	1711.6	1719.2	1724.2	1725.4	1724.3	1719.7	1712.0	1701.5	1691.5	1675.0	1656.2



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	1681.3	1690.0	1694.0	1694.4	1693.9	1690.6	1685.6	1674.6	1657.1	1643.8	1625.3
-25°	1646.2	1653.8	1658.3	1659.6	1659.3	1655.3	1647.6	1638.5	1624.5	1611.3	1594.4
-27.5°	1609.6	1615.7	1620.3	1621.7	1621.5	1617.9	1612.1	1604.0	1591.3	1575.5	1555.4
-30°	1569.3	1577.3	1582.4	1584.3	1583.9	1580.3	1573.6	1563.0	1549.4	1533.6	1513.8
-32.5°	1521.9	1529.8	1533.6	1534.3	1534.8	1532.0	1525.7	1515.6	1503.5	1487.3	1467.7
-35°	1470.0	1477.8	1483.0	1484.9	1485.1	1481.5	1474.6	1465.0	1453.2	1438.9	1420.4
-37.5°	1416.3	1423.3	1427.2	1428.0	1428.8	1426.5	1420.9	1411.3	1399.1	1385.1	1362.3
-40°	1354.9	1360.2	1362.9	1362.6	1364.6	1363.1	1357.8	1348.5	1337.5	1323.2	1304.6
-42.5°	1290.7	1297.3	1300.6	1300.8	1301.9	1299.9	1294.7	1286.4	1275.4	1259.9	1241.5
-45°	1219.9	1227.3	1231.7	1232.6	1233.1	1230.0	1223.8	1214.9	1204.0	1191.0	1175.0
-47.5°	1139.4	1144.4	1146.3	1145.1	1148.2	1148.2	1145.2	1138.5	1128.8	1116.2	1100.1
-50°	1058.0	1064.0	1066.9	1066.5	1069.1	1068.3	1064.2	1056.9	1046.3	1033.2	1017.0
-52.5°	967.2	973.0	975.7	975.2	977.8	977.4	973.8	967.4	958.4	947.0	931.6
-55°	866.0	870.2	871.1	868.7	873.1	874.1	872.0	867.1	859.5	849.0	836.1
-57.5°	752.4	754.6	753.6	749.4	755.7	758.8	758.7	755.5	748.6	739.0	726.3
-60°	614.8	617.0	615.6	610.0	618.4	622.6	623.3	620.9	615.9	609.0	600.7
-62.5°	453.6	450.2	443.2	432.6	446.8	457.5	464.9	469.4	471.2	470.5	467.6
-65°	294.5	288.1	278.8	266.4	284.0	298.6	310.4	319.4	325.8	329.6	332.6
-67.5°	162.8	154.5	144.0	131.4	150.0	166.4	180.7	192.7	203.2	212.8	220.4
-70°	75.2	64.9	53.7	41.8	59.0	75.4	90.8	104.7	117.0	127.2	135.2
-72.5°	43.4	36.3	28.7	20.8	31.5	41.9	51.6	60.4	68.1	74.8	80.3
-75°	26.1	21.9	17.4	12.7	18.5	24.0	29.2	34.0	38.2	41.6	44.2
-77.5°	14.1	12.2	10.0	7.8	10.3	12.7	14.9	16.8	18.5	19.7	20.7
-80°	5.7	5.1	4.5	3.9	4.8	5.6	6.4	7.1	7.7	8.3	8.8
-82.5°	3.3	2.9	2.4	2.0	2.5	3.0	3.5	3.9	4.4	4.8	5.2
-85°	2.4	2.1	1.7	1.4	1.7	2.1	2.4	2.7	3.0	3.3	3.6
-87.5°	2.3	2.0	1.7	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9
-90°	2.7	2.7	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
90°	3.0	3.2	3.4	3.5	3.7	3.5	3.3	3.1	2.9	2.7	2.5
87.5°	7.1	7.1	7.1	7.2	7.2	6.9	6.6	6.3	6.0	5.8	5.5
85°	19.6	19.6	19.4	19.1	18.7	17.5	16.3	15.0	14.1	13.2	12.1
82.5°	49.9	49.6	49.0	48.1	46.6	43.7	40.6	37.5	35.0	32.3	29.5
80°	98.7	98.0	96.8	94.8	91.6	85.9	79.8	73.9	68.7	63.1	57.0
77.5°	169.5	166.9	163.3	158.7	152.4	142.1	131.7	122.0	113.8	105.3	96.3
75°	251.1	246.5	241.6	235.9	227.1	213.5	199.3	184.7	169.8	154.9	140.6
72.5°	346.4	338.1	329.6	321.0	308.6	290.2	270.5	250.9	231.3	211.4	192.9
70°	450.2	438.7	425.7	412.1	394.7	373.6	350.2	326.6	303.7	278.7	252.6
67.5°	555.7	542.1	527.0	510.0	487.0	461.8	436.5	410.3	382.6	350.6	318.9
65°	658.8	642.2	625.5	607.9	582.2	553.9	524.0	492.1	459.2	428.2	394.9
62.5°	764.0	744.8	723.4	700.3	672.6	643.3	614.3	579.7	541.7	502.3	462.6
60°	866.6	848.5	827.5	800.5	767.3	732.1	698.4	662.3	625.3	584.4	537.9
57.5°	960.0	942.4	921.0	892.9	859.9	824.0	785.0	743.1	702.4	660.0	615.9
55°	1040.9	1021.1	998.1	971.5	941.7	905.3	866.6	824.3	779.2	731.2	685.3
52.5°	1113.3	1092.9	1069.7	1041.7	1010.3	975.3	939.9	896.5	851.5	802.5	750.9
50°	1179.9	1159.3	1135.1	1106.0	1075.0	1040.9	1002.8	961.6	916.9	867.6	815.1
47.5°	1250.3	1226.2	1199.2	1166.7	1135.6	1100.1	1062.6	1021.3	975.6	927.8	873.3
45°	1313.0	1291.7	1264.4	1229.3	1196.0	1156.5	1117.7	1076.1	1031.1	981.3	928.9
42.5°	1370.4	1347.8	1318.7	1288.5	1253.7	1214.7	1170.9	1127.3	1081.3	1032.3	978.0
40°	1423.4	1396.0	1369.6	1340.8	1304.9	1267.9	1223.9	1178.6	1128.5	1078.4	1024.7
37.5°	1472.3	1445.6	1416.5	1385.0	1352.7	1314.0	1272.9	1225.5	1176.4	1121.4	1067.1
35°	1517.4	1491.3	1460.7	1428.8	1394.0	1356.4	1315.9	1270.1	1219.5	1164.1	1105.9
32.5°	1561.8	1532.5	1501.8	1468.3	1434.5	1395.1	1353.7	1309.2	1259.2	1206.6	1140.9
30°	1597.1	1569.0	1540.4	1505.6	1468.2	1432.2	1390.0	1345.6	1294.9	1237.9	1178.1
27.5°	1625.9	1602.5	1572.5	1539.0	1502.3	1461.2	1420.8	1376.7	1328.6	1268.2	1205.6
25°	1651.4	1629.2	1600.7	1568.8	1530.4	1491.6	1448.2	1399.1	1349.1	1294.0	1231.5
22.5°	1676.0	1650.3	1626.1	1593.9	1559.2	1517.0	1471.3	1428.1	1376.3	1320.1	1255.1
20°	1696.7	1671.5	1641.2	1614.3	1579.6	1538.0	1494.7	1445.3	1391.3	1336.9	1274.6
17.5°	1717.6	1688.4	1661.2	1627.8	1595.0	1557.7	1511.3	1462.7	1413.6	1355.9	1292.3
15°	1732.2	1704.0	1676.1	1644.5	1613.4	1571.6	1525.7	1479.1	1426.9	1369.2	1307.7
12.5°	1747.0	1720.3	1685.8	1656.6	1619.5	1582.5	1540.3	1491.0	1438.2	1378.5	1318.6
10°	1757.2	1727.9	1697.1	1664.1	1628.2	1591.2	1548.0	1499.1	1447.6	1389.6	1327.8
7.5°	1765.9	1735.2	1707.3	1669.8	1636.2	1599.8	1553.8	1504.2	1453.9	1397.3	1334.2
5°	1767.9	1738.2	1709.8	1674.3	1640.6	1603.0	1557.0	1507.8	1457.1	1400.5	1337.4
2.5°	1766.8	1738.0	1710.3	1675.9	1642.3	1601.9	1557.4	1508.6	1457.4	1401.0	1337.7
0°	1764.5	1735.0	1708.5	1674.6	1640.9	1599.3	1554.8	1506.2	1455.0	1398.8	1335.0
-2.5°	1758.6	1729.9	1703.0	1669.3	1635.4	1594.1	1549.3	1500.9	1450.0	1393.7	1330.1
-5°	1748.8	1721.9	1695.1	1661.2	1626.7	1587.1	1541.0	1492.7	1442.4	1385.7	1322.5
-7.5°	1735.7	1711.1	1685.1	1648.4	1614.8	1576.4	1530.0	1481.7	1432.1	1374.8	1312.2
-10°	1722.9	1696.7	1669.1	1632.7	1598.1	1561.4	1516.0	1467.8	1419.1	1360.7	1299.2
-12.5°	1705.0	1681.7	1651.7	1621.2	1579.6	1542.7	1498.5	1451.0	1401.8	1343.9	1281.6
-15°	1684.5	1660.1	1627.2	1599.1	1564.4	1521.7	1478.1	1432.3	1381.8	1324.2	1260.3
-17.5°	1662.4	1635.9	1609.4	1569.8	1539.0	1498.5	1454.3	1410.5	1359.0	1301.7	1237.5
-20°	1634.5	1610.6	1578.1	1549.7	1510.9	1471.3	1429.1	1384.2	1333.6	1276.7	1212.7



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	1605.9	1579.2	1552.6	1517.2	1481.3	1440.5	1401.2	1355.1	1302.5	1245.4	1185.2
-25°	1570.7	1547.7	1516.8	1484.4	1448.5	1410.9	1368.6	1324.0	1271.7	1213.3	1152.8
-27.5°	1534.6	1508.4	1479.5	1448.3	1413.6	1374.5	1333.4	1285.1	1233.7	1179.0	1120.1
-30°	1492.1	1466.9	1439.7	1408.9	1372.5	1335.0	1291.7	1246.1	1195.0	1139.9	1078.3
-32.5°	1447.7	1423.0	1396.1	1362.6	1328.8	1290.2	1249.4	1202.3	1151.4	1097.8	1036.5
-35°	1399.7	1371.4	1345.1	1314.7	1279.4	1243.5	1201.2	1155.2	1106.6	1048.0	992.2
-37.5°	1341.7	1318.0	1292.7	1260.8	1229.1	1191.4	1149.4	1104.9	1051.7	1001.5	946.3
-40°	1284.3	1259.0	1235.4	1206.3	1172.6	1134.0	1092.9	1045.4	1000.3	948.5	895.4
-42.5°	1222.5	1201.1	1174.5	1144.5	1108.9	1071.1	1029.3	988.7	942.1	893.6	839.7
-45°	1155.8	1132.9	1104.7	1073.5	1040.1	1005.0	967.3	926.7	881.5	831.9	777.5
-47.5°	1078.6	1054.3	1028.9	1001.0	971.8	937.0	900.7	858.9	813.7	763.7	711.5
-50°	997.8	977.3	954.2	927.1	897.7	863.6	825.3	783.8	738.8	692.2	644.2
-52.5°	914.2	895.0	872.7	845.3	814.1	779.6	742.6	703.0	661.8	617.6	568.6
-55°	819.8	800.9	778.1	751.4	722.2	690.4	656.6	619.5	579.2	533.8	483.8
-57.5°	711.2	694.2	676.2	654.2	627.0	596.7	563.6	525.9	485.0	444.8	403.1
-60°	591.1	579.5	566.6	548.6	521.7	491.5	459.5	427.9	394.6	358.2	319.4
-62.5°	462.1	454.0	444.5	432.2	410.7	387.7	362.2	334.7	305.1	274.6	241.5
-65°	334.0	333.3	330.6	325.6	310.0	290.9	269.7	246.8	222.1	197.7	175.0
-67.5°	225.8	229.4	230.3	228.9	217.4	201.9	185.5	169.4	153.2	138.7	124.0
-70°	141.6	145.3	146.1	145.8	139.7	130.6	121.2	111.7	101.9	93.2	85.2
-72.5°	84.2	86.2	87.0	86.8	83.8	79.4	74.6	69.8	64.6	59.0	53.1
-75°	45.8	46.8	47.1	46.3	44.7	43.1	40.8	38.3	36.1	33.0	29.8
-77.5°	21.6	22.1	22.2	21.9	21.2	20.6	19.5	18.5	18.1	17.4	16.3
-80°	9.1	9.4	9.5	9.8	10.1	10.4	10.2	9.8	9.4	8.8	7.9
-82.5°	5.6	6.0	6.3	6.6	6.9	6.6	6.3	5.9	5.6	5.2	4.9
-85°	3.9	4.2	4.4	4.6	4.8	4.5	4.3	4.0	3.8	3.6	3.3
-87.5°	3.2	3.4	3.6	3.8	4.0	3.8	3.6	3.3	3.1	2.9	2.6
-90°	3.1	3.1	3.2	3.2	3.3	3.2	3.2	3.1	3.1	3.0	3.0



REPORT NUMBER: P670551 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: ARFL50DBZ-45W-3000K

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
90°	2.3	2.1	1.9	1.7	1.5	1.3	1.3	1.3	1.4	1.4	1.4
87.5°	5.3	5.0	4.8	4.6	4.3	4.1	3.7	3.4	3.1	2.9	2.7
85°	11.0	9.8	8.6	7.8	7.2	6.5	5.7	4.9	4.2	3.7	3.3
82.5°	26.6	23.9	21.1	18.2	15.1	12.9	10.2	7.8	6.1	5.1	4.2
80°	51.4	45.7	39.8	35.0	30.6	25.7	19.8	14.6	10.6	7.8	5.4
77.5°	86.7	76.8	68.2	59.0	50.7	41.8	32.4	24.6	17.9	12.4	8.4
75°	126.4	114.5	102.8	90.3	77.6	64.3	49.1	36.7	26.7	18.7	12.5
72.5°	174.4	156.4	139.1	122.6	108.2	90.5	70.5	52.8	38.0	26.2	17.6
70°	226.5	201.5	179.5	158.9	139.2	116.4	93.6	71.8	52.2	35.7	23.4
67.5°	289.4	258.5	226.6	196.5	171.9	144.2	116.2	91.2	68.1	47.5	30.8
65°	357.2	317.3	282.2	246.7	208.3	172.6	140.9	110.9	84.1	60.3	39.4
62.5°	426.6	387.5	340.9	297.4	255.4	206.4	166.1	132.1	100.6	73.1	49.3
60°	491.1	446.8	405.7	356.6	299.6	246.7	195.5	153.7	118.2	86.3	59.3
57.5°	564.7	510.3	458.4	414.4	352.6	285.9	229.9	176.9	136.3	100.5	69.3
55°	635.8	581.2	519.7	460.8	401.7	331.5	263.4	206.1	154.7	114.9	79.5
52.5°	699.4	645.8	586.1	513.7	441.3	376.3	300.7	233.1	176.2	129.5	90.6
50°	759.6	703.4	645.5	571.4	487.1	413.6	340.4	263.2	198.8	144.2	101.6
47.5°	817.2	757.8	695.8	622.4	538.8	450.9	377.4	295.1	220.0	160.4	112.9
45°	869.7	809.5	741.5	666.8	587.5	494.4	408.3	327.4	245.0	177.3	123.8
42.5°	920.1	856.6	786.5	709.3	627.3	539.8	439.4	358.8	269.5	193.5	134.2
40°	965.6	899.1	828.8	751.7	665.3	578.2	477.2	384.7	293.0	210.1	145.5
37.5°	1007.1	940.3	866.3	790.1	703.6	610.6	515.0	409.1	319.6	228.7	156.7
35°	1043.8	977.1	904.4	825.9	740.4	642.0	548.5	435.2	342.8	245.8	167.2
32.5°	1077.0	1010.4	938.3	856.8	772.7	675.0	573.7	465.1	362.4	260.8	177.0
30°	1107.2	1039.9	968.1	888.3	802.0	706.0	597.4	493.4	379.5	277.1	186.6
27.5°	1136.3	1066.5	994.6	916.3	827.8	733.6	620.7	519.5	394.4	294.8	198.1
25°	1165.7	1090.3	1017.8	940.6	851.1	757.5	645.6	536.2	412.5	310.6	208.4
22.5°	1187.8	1112.6	1038.2	961.1	873.6	778.1	668.3	550.8	431.2	322.3	216.8
20°	1206.9	1133.3	1056.2	978.6	893.0	796.3	688.4	564.3	447.7	332.6	222.9
17.5°	1224.1	1151.8	1071.5	993.5	909.8	811.0	705.5	575.9	462.1	341.2	227.6
15°	1238.4	1165.4	1084.3	1005.5	922.8	823.6	718.4	586.4	474.2	346.6	230.8
12.5°	1249.3	1175.9	1095.6	1015.1	932.5	834.3	728.9	597.4	483.8	350.4	234.2
10°	1256.9	1184.1	1104.4	1022.4	939.8	842.7	736.9	606.0	488.6	352.7	238.2
7.5°	1261.9	1189.6	1110.2	1027.2	944.5	848.5	741.9	611.9	490.4	353.3	240.4
5°	1264.8	1192.4	1113.0	1029.6	946.8	851.7	744.4	615.0	490.3	352.5	240.9
2.5°	1264.7	1192.3	1112.9	1029.5	946.7	852.3	744.5	615.2	488.3	350.1	239.5
0°	1261.7	1189.5	1110.0	1026.8	944.3	850.1	742.1	612.3	484.5	346.3	236.3
-2.5°	1257.2	1185.1	1105.7	1022.6	940.2	845.8	738.3	609.1	482.2	344.6	234.4
-5°	1249.9	1178.0	1098.7	1015.9	933.7	838.9	732.0	602.8	478.0	341.4	230.8
-7.5°	1239.7	1168.2	1088.9	1006.8	924.8	829.2	723.3	593.4	471.9	336.7	225.3
-10°	1227.3	1155.9	1076.3	995.3	913.5	816.9	712.1	581.1	463.9	330.5	218.2
-12.5°	1212.3	1140.5	1060.9	981.4	899.6	802.0	697.9	565.9	452.9	322.6	209.4
-15°	1193.8	1121.0	1043.2	964.9	883.4	784.7	680.9	547.8	437.1	313.1	201.7
-17.5°	1171.3	1098.6	1022.3	945.8	863.6	765.1	661.6	530.4	418.8	302.0	194.6
-20°	1147.5	1073.7	998.7	923.7	839.2	743.2	637.8	512.0	398.1	287.7	186.7



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CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	1119.5	1047.0	974.2	898.8	812.2	718.5	610.6	491.5	375.9	271.5	177.8
-25°	1086.2	1017.1	946.4	871.3	782.7	691.5	579.8	470.0	351.9	253.7	166.6
-27.5°	1051.3	983.6	915.2	838.9	751.3	660.4	545.4	446.3	328.3	233.3	153.3
-30°	1015.9	950.3	880.6	801.9	717.8	625.0	513.7	413.4	307.0	211.3	139.1
-32.5°	974.4	912.0	843.2	762.6	681.9	585.2	482.0	378.5	283.2	192.7	128.2
-35°	934.0	869.9	798.5	721.9	641.3	539.9	449.0	343.8	256.7	177.7	118.1
-37.5°	887.4	823.9	751.6	679.4	594.9	498.7	407.9	311.5	228.2	160.1	107.8
-40°	837.7	771.5	703.7	631.9	542.6	457.4	363.6	279.7	198.3	139.9	97.3
-42.5°	780.2	717.7	653.5	578.3	492.5	410.4	321.2	245.6	177.8	124.2	86.6
-45°	720.0	663.1	597.2	517.5	442.8	358.1	281.8	210.5	155.6	110.6	75.9
-47.5°	658.9	601.1	533.0	461.6	384.8	309.6	241.5	180.8	130.7	96.8	65.0
-50°	590.9	530.1	468.6	400.1	328.5	262.5	201.6	155.1	114.6	83.0	54.2
-52.5°	513.2	458.5	400.0	336.1	273.6	217.2	170.2	127.2	98.0	69.2	44.6
-55°	436.6	384.2	329.4	274.9	222.4	177.6	139.2	108.9	81.2	56.2	35.6
-57.5°	356.4	310.5	262.4	217.9	178.3	144.5	114.6	89.2	65.1	44.3	28.6
-60°	280.9	240.4	203.4	171.4	142.3	115.5	92.9	70.3	49.9	33.9	22.1
-62.5°	210.0	181.0	156.3	131.7	112.1	91.8	71.3	52.9	37.3	26.0	16.0
-65°	154.2	134.9	114.9	102.0	85.7	67.9	51.9	38.1	27.8	18.5	11.1
-67.5°	108.4	98.0	86.0	73.0	60.1	47.1	35.7	27.4	19.2	12.3	7.6
-70°	76.2	66.8	57.1	48.3	39.6	31.1	25.0	17.7	12.0	7.8	5.4
-72.5°	47.2	41.2	35.3	29.3	25.6	20.3	14.0	10.3	7.3	5.2	3.9
-75°	26.0	23.8	21.4	17.8	13.2	10.5	7.8	6.0	4.7	3.7	3.0
-77.5°	14.5	12.0	10.5	8.6	7.0	5.5	4.6	4.0	3.4	2.9	2.4
-80°	7.2	6.3	5.4	4.8	4.3	3.8	3.3	2.9	2.5	2.2	1.9
-82.5°	4.5	4.1	3.8	3.4	3.0	2.5	2.3	2.0	1.8	1.7	1.6
-85°	3.0	2.7	2.4	2.1	1.8	1.6	1.5	1.4	1.4	1.4	1.5
-87.5°	2.4	2.2	2.0	1.7	1.5	1.3	1.3	1.4	1.4	1.4	1.4
-90°	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.1

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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	1.4	1.4	1.4	1.5	1.5	1.5	1.5
87.5°	2.4	2.2	2.1	1.9	1.7	1.6	1.5
85°	2.9	2.5	2.2	2.0	1.8	1.6	1.5
82.5°	3.4	2.9	2.5	2.1	1.9	1.7	1.5
80°	4.3	3.4	2.7	2.3	1.9	1.7	1.5
77.5°	5.7	4.1	3.1	2.4	2.0	1.7	1.5
75°	7.8	5.1	3.5	2.6	2.1	1.7	1.5
72.5°	11.0	6.5	3.9	2.8	2.1	1.7	1.5
70°	14.6	8.5	4.9	3.1	2.2	1.7	1.5
67.5°	19.0	10.8	5.8	3.3	2.3	1.8	1.5
65°	24.0	13.5	7.0	3.7	2.4	1.8	1.5
62.5°	29.4	16.7	8.4	4.2	2.5	1.8	1.5
60°	36.5	20.0	9.7	4.6	2.6	1.8	1.5
57.5°	43.9	23.7	11.7	5.1	2.7	1.8	1.5
55°	51.0	27.7	13.6	5.8	2.8	1.9	1.5
52.5°	57.9	32.9	15.5	6.4	2.9	1.9	1.5
50°	65.6	37.8	17.7	7.0	3.1	1.9	1.5
47.5°	72.9	42.4	19.7	7.7	3.2	1.9	1.5
45°	80.7	46.6	21.7	8.7	3.4	1.9	1.5
42.5°	88.0	51.1	24.7	9.6	3.5	1.9	1.5
40°	95.9	55.8	27.5	10.4	3.6	2.0	1.5
37.5°	103.2	60.0	30.0	11.1	3.6	2.0	1.5
35°	110.0	64.4	32.2	11.9	3.7	2.0	1.5
32.5°	116.2	68.6	34.1	12.6	3.9	2.0	1.5
30°	121.8	72.3	35.8	13.2	4.0	2.0	1.5
27.5°	127.6	75.7	37.1	13.6	4.0	2.0	1.5
25°	132.7	79.2	38.4	14.0	4.0	2.0	1.5
22.5°	136.8	82.2	40.0	14.2	4.0	2.0	1.5
20°	140.2	84.7	41.2	14.5	4.0	2.0	1.5
17.5°	143.3	86.6	42.2	15.1	4.0	2.0	1.5
15°	145.5	88.0	42.8	15.5	3.9	2.0	1.5
12.5°	146.7	88.9	43.1	15.7	3.8	2.0	1.5
10°	147.2	89.3	43.1	15.7	3.7	2.0	1.5
7.5°	146.7	89.1	42.9	15.6	3.6	2.0	1.5
5°	145.5	88.5	42.3	15.4	3.4	2.0	1.5
2.5°	143.5	87.3	41.5	15.0	3.3	2.0	1.5
0°	140.7	85.6	40.4	14.5	3.1	2.0	1.5
-2.5°	140.0	85.1	40.1	14.4	3.1	1.9	1.5
-5°	138.5	84.2	39.6	14.2	3.1	1.9	1.5
-7.5°	136.3	82.8	38.9	13.8	3.1	1.9	1.5
-10°	133.5	80.9	37.9	13.3	3.1	1.9	1.5
-12.5°	130.0	78.5	36.7	12.8	3.0	1.9	1.5
-15°	125.9	75.7	35.2	12.1	3.0	1.9	1.5
-17.5°	121.1	72.5	33.5	11.2	3.0	1.9	1.5
-20°	115.7	68.8	31.6	10.3	2.9	1.9	1.5

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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	110.3	64.8	29.5	9.6	2.9	1.9	1.5
-25°	104.5	60.3	27.2	9.1	2.8	1.9	1.5
-27.5°	98.1	55.4	25.3	8.6	2.7	1.8	1.5
-30°	91.3	50.9	23.5	8.0	2.7	1.8	1.5
-32.5°	84.3	46.4	21.5	7.4	2.6	1.8	1.5
-35°	76.8	41.6	19.4	6.7	2.5	1.8	1.5
-37.5°	69.0	36.9	17.1	6.1	2.4	1.8	1.5
-40°	61.0	32.7	14.9	5.4	2.4	1.8	1.5
-42.5°	52.6	28.3	12.5	4.8	2.3	1.7	1.5
-45°	45.6	24.3	10.0	4.1	2.3	1.7	1.5
-47.5°	38.3	20.8	8.7	3.4	2.2	1.7	1.5
-50°	32.3	17.1	7.5	3.1	2.1	1.7	1.5
-52.5°	26.5	13.8	6.3	2.9	2.1	1.7	1.5
-55°	21.5	10.4	5.3	2.7	2.0	1.7	1.5
-57.5°	16.6	8.2	4.3	2.5	2.0	1.6	1.5
-60°	12.4	6.6	3.3	2.4	1.9	1.6	1.5
-62.5°	8.7	5.2	3.0	2.2	1.8	1.6	1.5
-65°	6.7	4.0	2.7	2.1	1.8	1.6	1.5
-67.5°	5.0	3.2	2.4	2.0	1.7	1.6	1.5
-70°	3.6	2.8	2.2	1.9	1.7	1.6	1.5
-72.5°	3.0	2.4	2.0	1.8	1.6	1.6	1.5
-75°	2.5	2.1	1.8	1.7	1.6	1.5	1.5
-77.5°	2.1	1.9	1.7	1.6	1.6	1.5	1.5
-80°	1.8	1.7	1.6	1.6	1.5	1.5	1.5
-82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
-85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
-87.5°	1.4	1.4	1.5	1.5	1.5	1.5	1.5
-90°	2.1	2.0	1.9	1.8	1.7	1.6	1.5

(END OF REPORT)