

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: LUMARK

Report Number: P393781

Luminaire Tested: **NFFLD-C70-D-UNV-66-TS2**

Issue Date: 3/31/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393781  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P130629)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 3/31/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-C70-D-UNV-66-TS2  
Description: FLOODLIGHT WITH TOP AND SIDE VISORS  
Light Source: (2) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

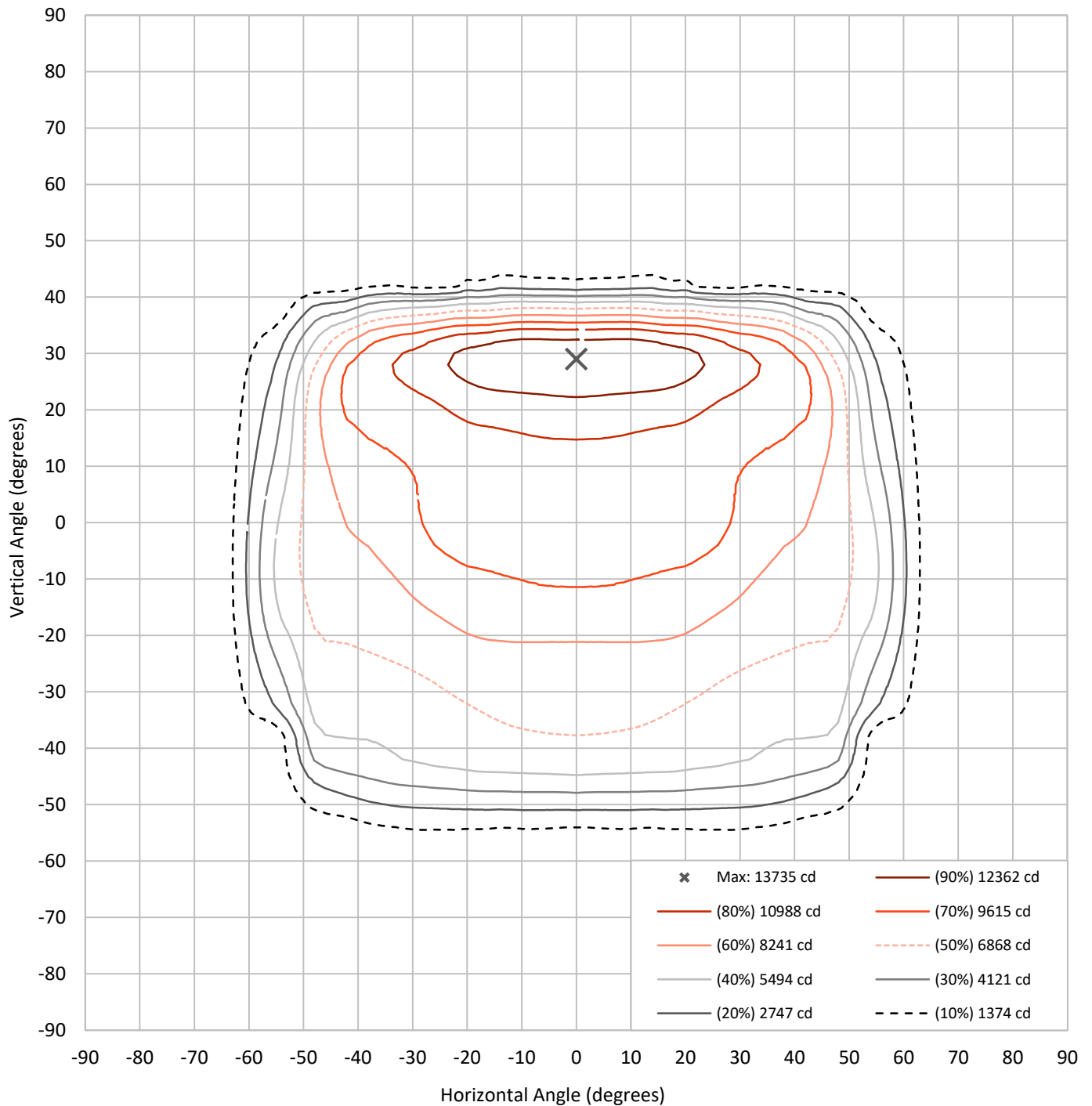
Lumens per Lamp:	N/A	NEMA Type:	6H x 5V
Luminaire Lumens:	22380 lumens	Max Intensity:	13735 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 29°V
Efficacy:	121.6 lumens/watt		
Luminous Opening:	(L: 1.33 ' x W: 0 ' x H: 0.67 ')		
Beam Angle (50%):	94.6°H x 75.7°V	Field Angle (10%):	119.6°H x 96.4°V
Beam Lumens:	16537 lumens	Field Lumens:	21801.9 lumens
Beam Efficiency:	73.9%	Field Efficiency:	97.4%
Input Watts (W):	184		
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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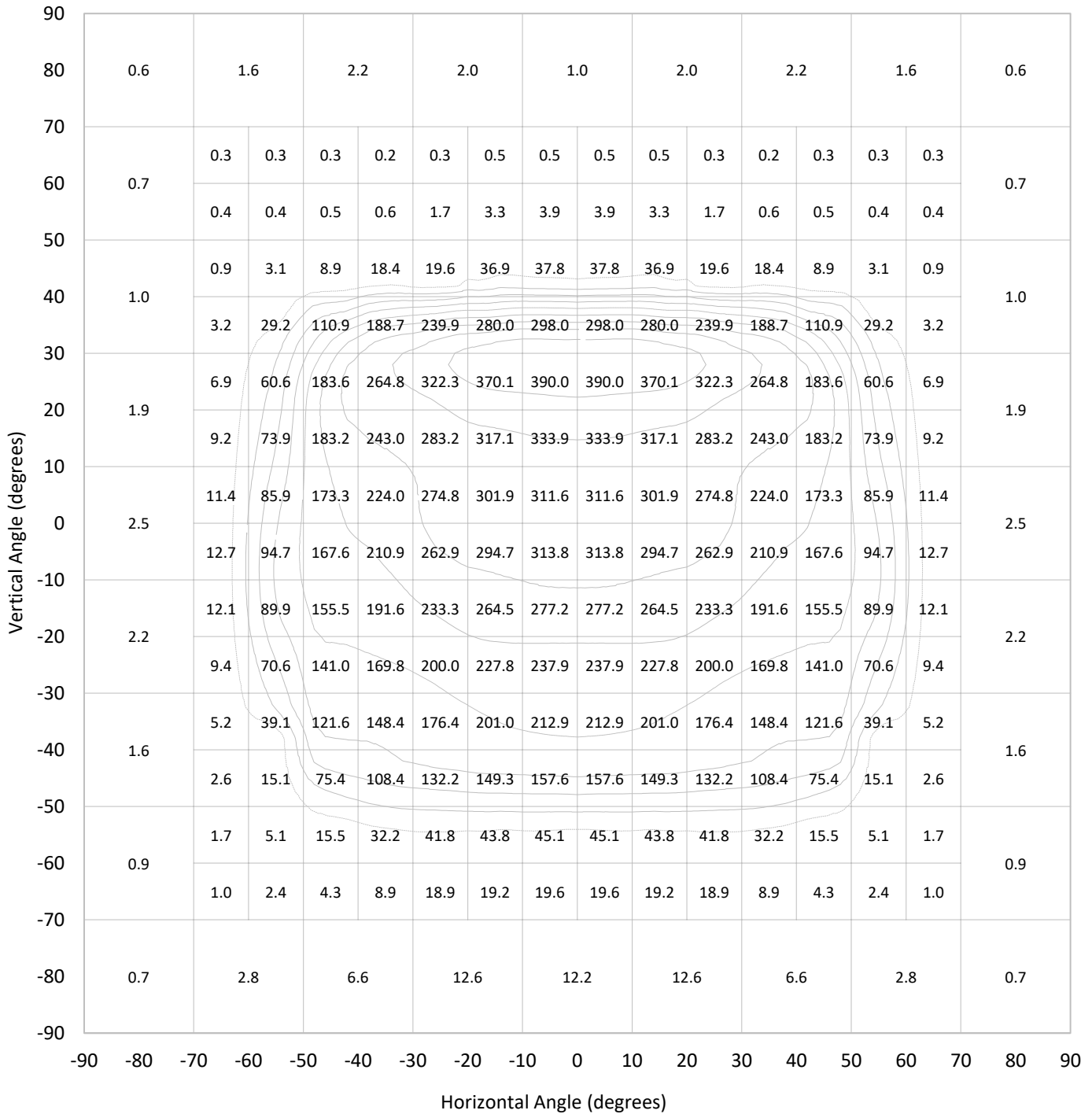
### Iso-Candela Plot





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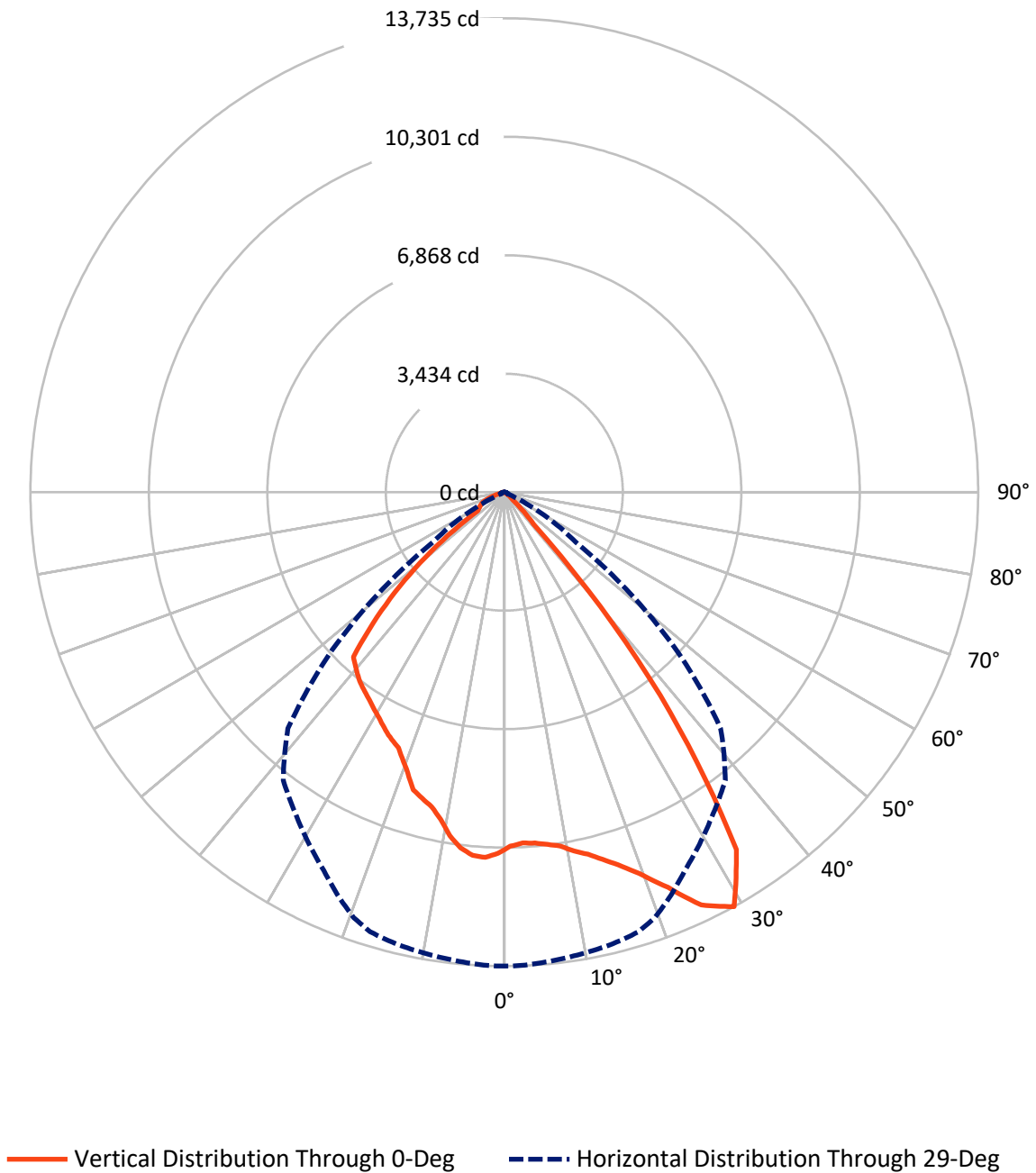
### Lumen Table



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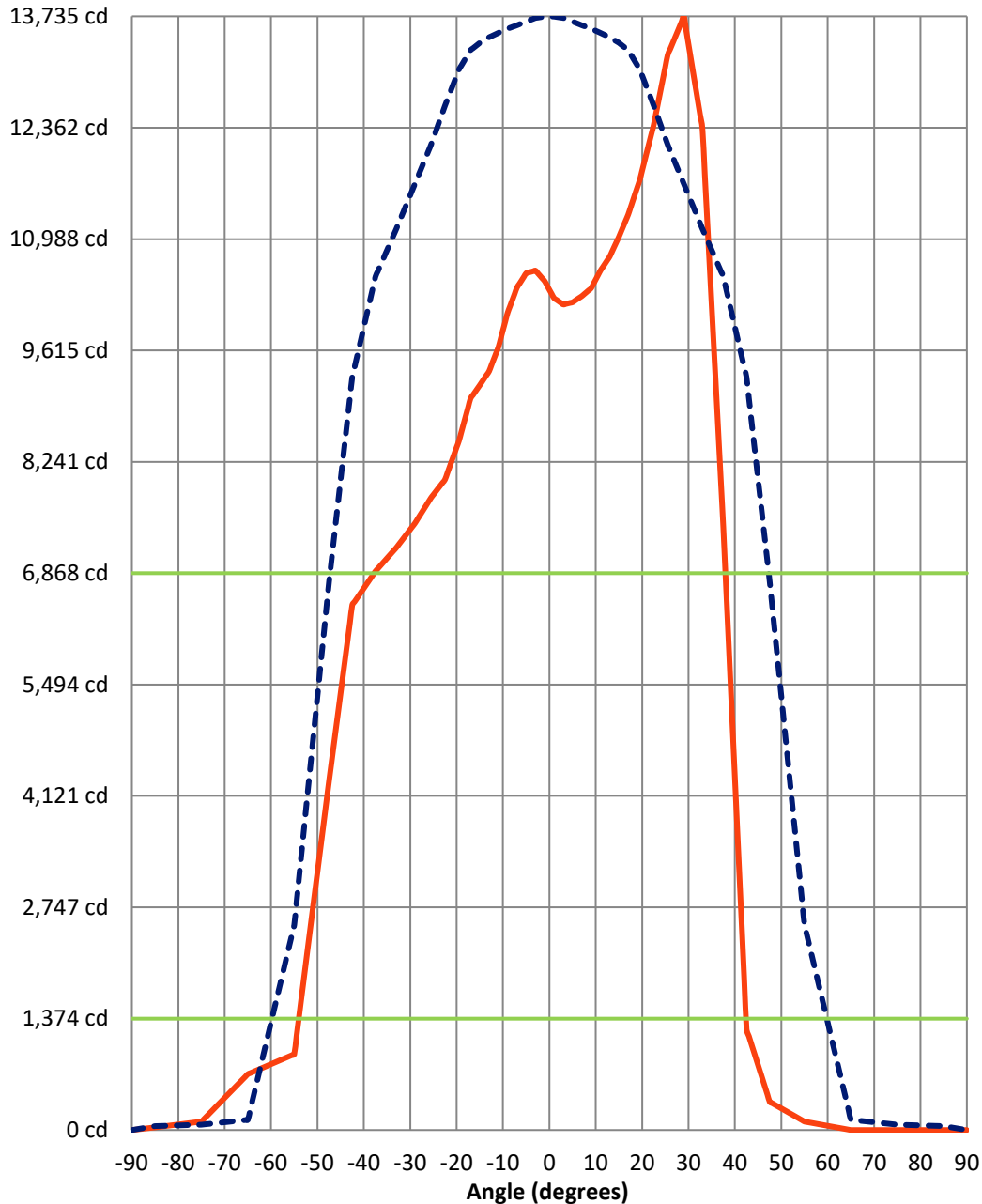
### Luminous Intensity Polar Plot



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### Luminous Intensity Plot



**Beam:**  
 H Angle: 94.6°  
 V Angle: 75.7°  
 Lumens: 16537  
 Efficiency: 73.9%

**Field:**  
 H Angle: 119.6°  
 V Angle: 96.4°  
 Lumens: 21801.9  
 Efficiency: 97.4%

**Spill:**  
 Lumens: 578.1  
 Efficiency: 2.6%

— Vertical Distribution through 0-Deg  
 - - - Horizontal Distribution through 29-Deg



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FIELD  
BEAM

**CANDELA DISTRIBUTION:**

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	5.2	12.2	12.2	13.8	17.4	22.6	26.0	29.4	30.9	33.0
75°	0.0	1.8	5.2	8.6	10.4	10.4	10.4	10.4	10.4	10.4	10.4
65°	0.0	0.0	3.6	5.2	6.8	6.8	8.6	8.6	8.6	8.6	6.8
55°	104.0	100.4	104.0	104.0	104.0	102.2	95.4	86.6	81.4	83.2	76.2
47.5°	348.1	349.9	346.6	339.5	336.2	332.5	325.5	318.7	303.1	296.4	290.9
42.5°	1249.0	1370.1	1341.0	1448.1	1408.3	1508.7	1656.1	1777.5	1784.3	977.0	1453.3
37.5°	7424.6	7454.0	7478.2	7547.4	7516.4	7552.8	7480.0	7329.2	7098.9	7005.3	7050.5
33°	12345.9	12290.5	12314.7	12393.0	12442.9	12501.9	12415.3	12259.3	11971.8	11770.8	11675.7
29°	13735.0	13731.6	13714.5	13671.0	13624.5	13582.9	13530.9	13477.1	13407.7	13317.7	13078.8
25.5°	13257.1	13234.5	13201.8	13130.8	13094.4	13059.6	13009.4	12959.2	12883.0	12775.7	12548.7
22.5°	12397.9	12384.1	12365.1	12304.3	12255.9	12217.7	12167.5	12144.9	12091.4	12029.0	11871.2
19.5°	11720.6	11706.9	11708.4	11679.0	11646.0	11597.7	11536.8	11481.4	11436.5	11403.7	11315.1
17°	11290.9	11270.1	11273.7	11265.1	11232.1	11176.7	11121.1	11046.8	10986.2	10949.5	10877.2
15°	11017.4	11001.5	11007.0	10987.7	10951.6	10897.8	10844.0	10778.2	10715.8	10644.8	10570.5
13°	10771.4	10755.6	10759.2	10741.8	10705.4	10663.8	10622.2	10561.6	10514.8	10447.2	10369.5
11°	10598.0	10587.6	10577.2	10566.8	10534.1	10494.3	10457.6	10407.4	10367.7	10307.1	10249.9
9°	10381.7	10388.5	10378.1	10372.9	10348.7	10314.1	10284.5	10249.9	10225.7	10191.1	10171.9
7°	10284.5	10289.9	10279.5	10274.1	10256.7	10237.7	10210.1	10189.1	10189.1	10194.5	10208.6
5°	10208.6	10213.5	10210.1	10211.7	10213.5	10204.9	10196.1	10201.3	10234.3	10262.1	10270.4
3°	10180.7	10182.3	10194.5	10206.5	10223.9	10239.5	10258.5	10289.9	10329.5	10331.3	10317.5
1°	10260.3	10256.7	10293.1	10324.5	10355.5	10379.9	10383.3	10371.3	10372.9	10353.9	10440.5
0°	10362.5	10355.5	10392.1	10407.4	10438.6	10447.2	10416.3	10386.7	10362.5	10319.1	10461.3
-1°	10468.0	10464.6	10483.9	10485.4	10501.0	10490.6	10433.4	10386.7	10336.5	10258.5	10291.2
-3°	10599.8	10603.2	10598.0	10577.2	10573.8	10521.8	10435.3	10362.5	10275.9	10156.3	10081.7
-5°	10566.8	10565.3	10546.3	10518.5	10480.2	10416.3	10307.1	10213.5	10102.7	9967.6	9894.8
-7°	10388.5	10393.7	10357.3	10338.0	10255.1	10159.9	10034.9	9922.6	9827.2	9735.4	9702.6
-9°	10080.1	10090.5	10037.0	10028.1	9908.5	9803.0	9713.0	9631.7	9581.2	9532.6	9515.4
-11°	9654.0	9667.8	9633.2	9652.2	9574.5	9534.4	9492.8	9440.8	9401.0	9361.3	9324.9
-13°	9357.9	9364.7	9349.1	9347.5	9316.3	9307.5	9286.7	9257.3	9226.1	9179.3	9130.7
-15°	9186.3	9193.3	9179.3	9170.7	9153.3	9148.1	9129.1	9091.1	9049.3	8988.7	8912.5
-17°	9021.7	9035.5	9020.2	9009.8	8992.4	8978.3	8964.5	8922.9	8867.6	8796.6	8671.8
-19.5°	8498.6	8519.2	8502.0	8498.6	8500.2	8508.8	8507.2	8474.2	8453.7	8417.0	8304.7
-22.5°	8022.1	8030.9	8027.3	8030.9	8036.1	8039.5	8036.1	8022.1	8001.6	7956.3	7840.1
-25.5°	7798.8	7804.0	7798.8	7800.3	7793.6	7788.4	7774.6	7748.3	7722.6	7675.8	7563.2
-29°	7481.8	7488.6	7487.0	7485.0	7478.2	7457.4	7428.0	7391.6	7355.5	7298.0	7190.9
-33°	7181.8	7187.3	7183.9	7171.4	7156.1	7131.9	7097.1	7048.7	6993.1	6922.1	6805.9
-37.5°	6890.9	6882.3	6884.1	6868.5	6851.1	6823.6	6788.7	6745.3	6679.5	6601.8	6490.8
-42.5°	6473.6	6437.2	6426.8	6364.4	6347.0	6276.0	6253.4	6213.6	6172.0	6180.9	6050.9
-47.5°	4304.6	4245.8	4264.8	4212.8	4245.8	4209.4	4242.4	4178.2	4188.6	4186.8	4129.6
-55°	935.4	925.0	958.0	990.8	1015.2	1025.4	989.2	956.2	968.4	1048.0	1010.0
-65°	689.5	687.7	687.7	684.3	679.1	675.4	677.3	680.6	680.6	691.3	715.5
-75°	104.0	102.2	104.0	102.2	95.4	98.8	107.4	104.0	107.4	107.4	107.4
-85°	33.0	33.0	30.9	36.4	38.2	45.0	52.0	55.4	58.8	60.8	60.8
-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):**

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	34.6	34.6	36.4	36.4	34.6	34.6	34.6	34.6	34.6	36.4	38.2
75°	12.2	13.8	15.6	19.0	20.8	24.2	24.2	27.8	30.9	34.6	38.2
65°	6.8	5.2	5.2	5.2	6.8	8.6	13.8	19.0	26.0	30.9	36.4
55°	62.4	41.3	19.0	17.4	17.4	15.6	13.8	15.6	26.0	30.9	36.4
47.5°	239.2	159.4	97.0	79.6	72.8	58.8	53.6	55.4	46.8	33.0	38.2
42.5°	381.1	382.7	313.5	965.1	816.1	318.7	331.0	227.0	65.8	38.2	40.0
37.5°	6974.1	6464.8	6317.6	5946.9	5451.6	3958.3	3554.5	341.4	85.0	48.4	43.4
33°	11535.3	11008.5	10256.7	10090.5	9226.1	7585.6	5453.4	1900.2	105.6	57.2	45.0
29°	12633.4	12153.8	11666.8	11112.8	10523.7	9283.3	6761.2	2529.1	126.4	65.8	48.4
25.5°	12211.0	11843.6	11429.7	10961.7	10613.6	9892.9	7687.7	2981.2	147.2	78.0	50.4
22.5°	11545.7	11190.5	10857.7	10535.9	10343.5	9905.2	8049.9	3286.2	169.8	91.8	53.6
19.5°	11033.0	10700.5	10400.4	10168.5	10092.1	9709.4	8146.9	3535.5	190.6	104.0	55.4
17°	10615.4	10331.3	10113.1	9969.4	9889.6	9428.9	8138.3	3741.7	211.4	109.2	55.4
15°	10345.3	10086.9	9932.7	9840.9	9697.2	9174.3	8086.0	3923.7	228.8	114.4	57.2
13°	10182.3	9986.5	9863.6	9725.0	9454.9	8911.0	8020.5	4114.3	240.7	117.8	57.2
11°	10090.5	9936.4	9820.4	9563.8	9193.3	8725.3	7965.2	4313.4	247.8	121.2	58.8
9°	10055.9	9898.1	9706.0	9359.5	9004.3	8597.4	7914.7	4537.0	252.7	124.8	58.8
7°	10111.3	9939.7	9650.6	9243.5	8848.6	8507.2	7878.3	4760.3	256.3	128.2	58.8
5°	10159.9	9995.1	9640.0	9120.3	8713.4	8417.0	7843.7	4980.3	259.7	131.8	60.8
3°	10194.5	10026.6	9624.4	8995.7	8597.4	8332.3	7815.9	5184.6	261.5	133.4	60.8
1°	10293.1	10009.2	9574.5	8893.6	8510.6	8270.1	7786.5	5371.8	258.2	133.4	60.8
0°	10227.3	9960.5	9524.0	8850.1	8465.6	8242.3	7772.8	5453.4	258.2	131.8	60.8
-1°	10093.9	9896.6	9465.3	8808.8	8425.8	8216.0	7765.7	5534.6	256.3	131.8	60.8
-3°	9894.8	9740.6	9342.0	8732.4	8334.1	8143.2	7746.8	5674.9	254.8	130.0	58.8
-5°	9723.4	9591.6	9210.5	8625.0	8217.9	8044.7	7696.3	5764.9	252.7	128.2	58.8
-7°	9576.0	9401.0	9026.9	8476.0	8086.0	7921.7	7642.8	5820.3	251.1	126.4	58.8
-9°	9388.8	9172.3	8791.4	8304.7	7940.7	7772.8	7568.4	5827.3	249.6	124.8	57.2
-11°	9181.1	8936.7	8562.9	8126.1	7800.3	7630.8	7473.0	5782.3	247.8	121.2	55.4
-13°	8954.1	8687.4	8344.5	7959.7	7655.0	7492.0	7370.8	5674.9	245.9	121.2	55.4
-15°	8704.8	8436.2	8120.9	7800.3	7523.2	7338.1	7253.1	5513.8	245.9	119.6	53.6
-17°	8436.2	8152.1	7880.1	7620.4	7370.8	7185.5	7117.9	5292.2	242.3	117.8	52.0
-19.5°	8075.9	7814.4	7594.2	7386.4	7157.6	6989.9	6939.5	4924.9	237.4	116.0	50.4
-22.5°	7616.8	7372.6	7192.2	7053.9	6903.1	6781.7	6771.3	4440.0	228.8	112.6	48.4
-25.5°	7360.4	7138.7	6965.5	6816.3	6700.3	6641.6	6622.3	3949.7	218.1	109.2	45.0
-29°	7024.5	6835.8	6676.1	6520.2	6419.8	6423.4	6438.8	3379.5	209.5	102.2	43.4
-33°	6652.0	6492.6	6331.4	6161.6	6054.3	6062.8	6085.5	2747.5	211.4	93.6	41.3
-37.5°	6354.0	6201.7	6009.3	5796.1	5615.9	5607.4	5531.2	372.3	216.6	81.4	40.0
-42.5°	5901.7	5839.5	5579.8	5396.0	5063.5	4765.5	4349.8	367.4	207.7	65.8	40.0
-47.5°	4031.1	3949.7	3871.7	3779.9	3473.4	3010.9	2369.8	344.7	183.5	50.4	38.2
-55°	1084.4	1077.4	1113.8	1018.6	840.0	323.9	334.3	216.6	121.2	40.0	38.2
-65°	765.7	776.1	609.9	323.9	227.0	159.4	227.0	130.0	65.8	38.2	38.2
-75°	107.4	98.8	72.8	79.6	83.2	83.2	78.0	50.4	41.3	40.0	38.2
-85°	60.8	60.8	58.8	57.2	55.4	52.0	50.4	46.8	45.0	41.3	40.0
-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):**

	90°
90°	0.0
85°	0.0
75°	0.0
65°	0.0
55°	0.0
47.5°	0.0
42.5°	0.0
37.5°	0.0
33°	0.0
29°	0.0
25.5°	0.0
22.5°	0.0
19.5°	0.0
17°	0.0
15°	0.0
13°	0.0
11°	0.0
9°	0.0
7°	0.0
5°	0.0
3°	0.0
1°	0.0
0°	0.0
-1°	0.0
-3°	0.0
-5°	0.0
-7°	0.0
-9°	0.0
-11°	0.0
-13°	0.0
-15°	0.0
-17°	0.0
-19.5°	0.0
-22.5°	0.0
-25.5°	0.0
-29°	0.0
-33°	0.0
-37.5°	0.0
-42.5°	0.0
-47.5°	0.0
-55°	0.0
-65°	0.0
-75°	0.0
-85°	0.0
-90°	0.0

(END OF REPORT)