

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  
(formerly Eaton)

Brand: EPHESUS

Report Number: P624175

Luminaire Tested: **EPH-VN-04-E-950-U-55**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624175  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-04-E-950-U-55  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 5 distribution lens  
Light Source: (64) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	26351.2 lumens	Max Intensity:	32202.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	86.7 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

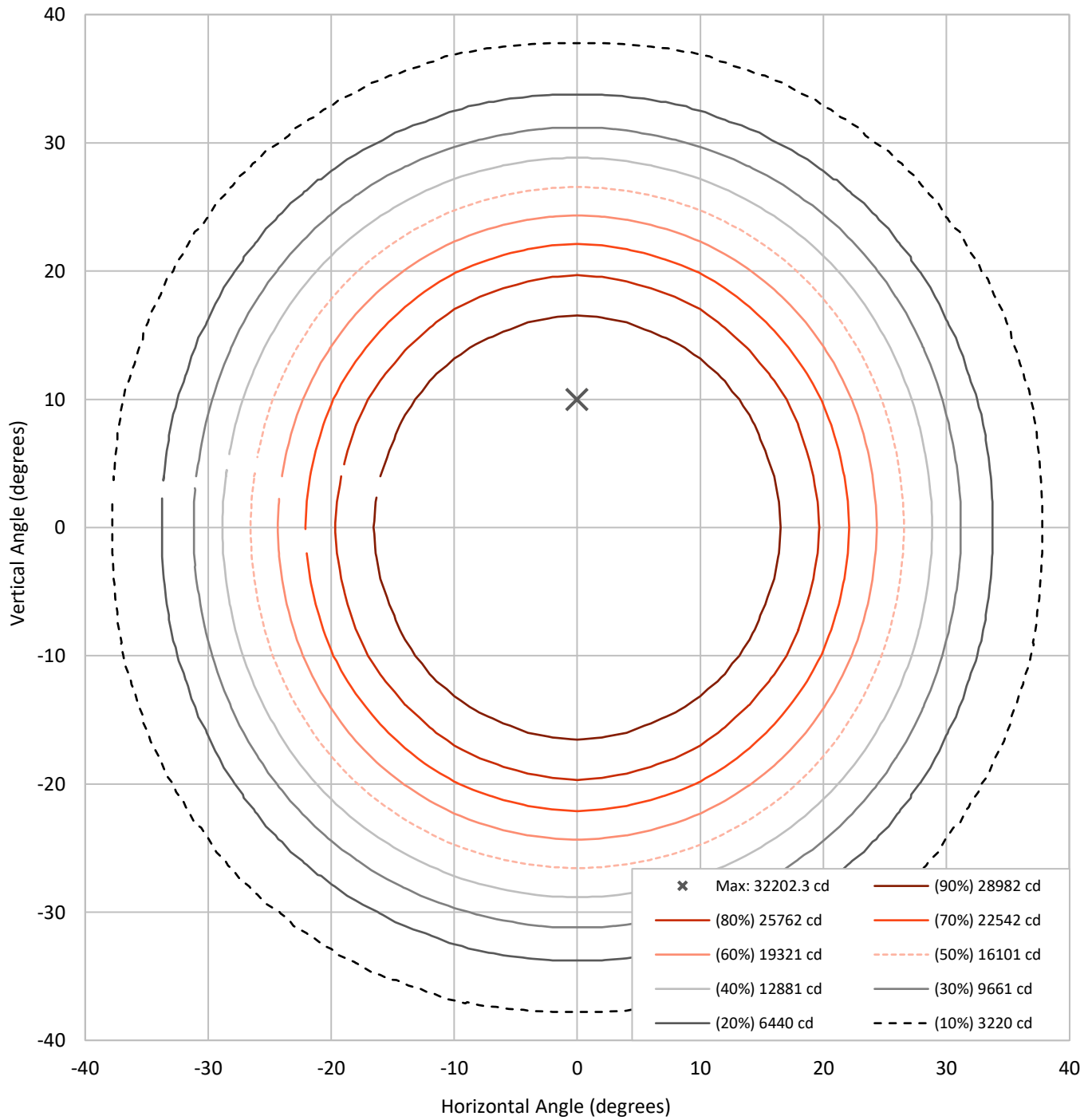
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	13097.2 lumens	Field Lumens:	17033.3 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

Input Watts (W): 303.8  
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





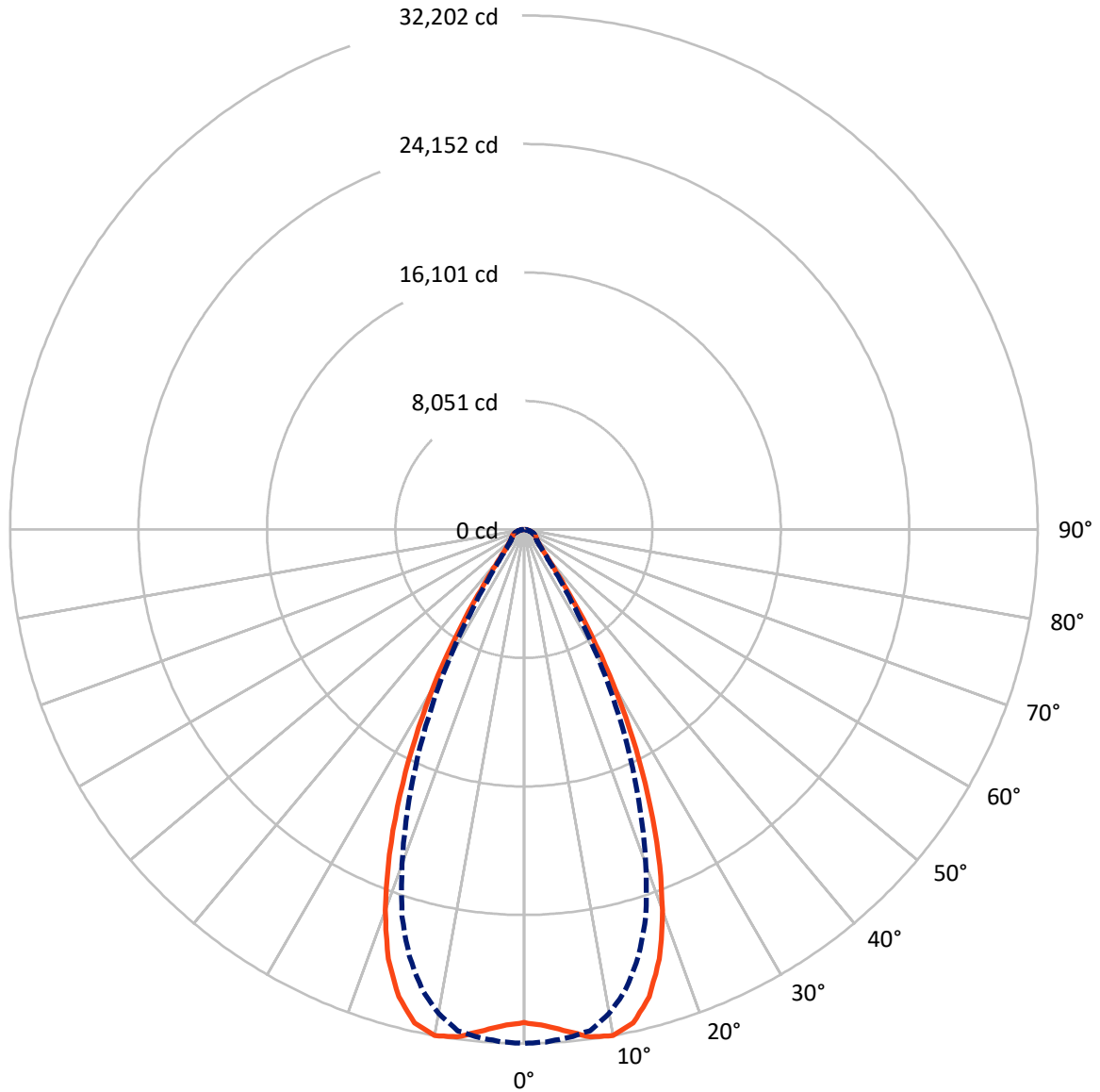
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### Lumen Table

90	0.8	5.8	15.1	24.3	28.2	24.3	15.1	5.8	0.8							
80	0.8	5.8	15.1	24.3	28.2	24.3	15.1	5.8	0.8							
70	2.6	2.9	6.0	9.8	13.8	17.3	19.8	21.1	21.1	19.8	17.3	13.8	9.8	6.0	2.9	2.6
60		4.4	9.1	14.5	19.4	23.6	26.8	28.6	28.6	26.8	23.6	19.4	14.5	9.1	4.4	
50	4.7	5.9	11.8	17.8	23.9	30.9	39.1	45.4	45.4	39.1	30.9	23.9	17.8	11.8	5.9	4.7
40		7.2	13.6	20.6	31.3	55.7	108.8	164.1	164.1	108.8	55.7	31.3	20.6	13.6	7.2	
30	6.2	8.2	15.0	24.2	50.5	161.0	373.1	529.5	529.5	373.1	161.0	50.5	24.2	15.0	8.2	6.2
20		8.8	16.0	28.8	93.3	351.4	687.5	876.5	876.5	687.5	351.4	93.3	28.8	16.0	8.8	
10	6.8	9.1	16.5	32.5	136.9	484.1	850.6	964.6	964.6	850.6	484.1	136.9	32.5	16.5	9.1	6.8
0		9.1	16.5	32.5	136.9	484.1	850.6	964.6	964.6	850.6	484.1	136.9	32.5	16.5	9.1	
-10	6.2	8.8	16.0	28.8	93.3	351.4	687.5	876.5	876.5	687.5	351.4	93.3	28.8	16.0	8.8	6.2
-20		8.2	15.0	24.2	50.5	161.0	373.1	529.5	529.5	373.1	161.0	50.5	24.2	15.0	8.2	
-30	4.7	7.2	13.6	20.6	31.3	55.7	108.8	164.1	164.1	108.8	55.7	31.3	20.6	13.6	7.2	4.7
-40		5.9	11.8	17.8	23.9	30.9	39.1	45.4	45.4	39.1	30.9	23.9	17.8	11.8	5.9	
-50	2.6	4.4	9.1	14.5	19.4	23.6	26.8	28.6	28.6	26.8	23.6	19.4	14.5	9.1	4.4	2.6
-60		2.9	6.0	9.8	13.8	17.3	19.8	21.1	21.1	19.8	17.3	13.8	9.8	6.0	2.9	
-70	0.8	5.8	15.1	24.3	28.2	24.3	15.1	5.8	0.8							
-80		0.8	5.8	15.1	24.3	28.2	24.3	15.1	5.8	0.8						
-90	0.8	5.8	15.1	24.3	28.2	24.3	15.1	5.8	0.8							

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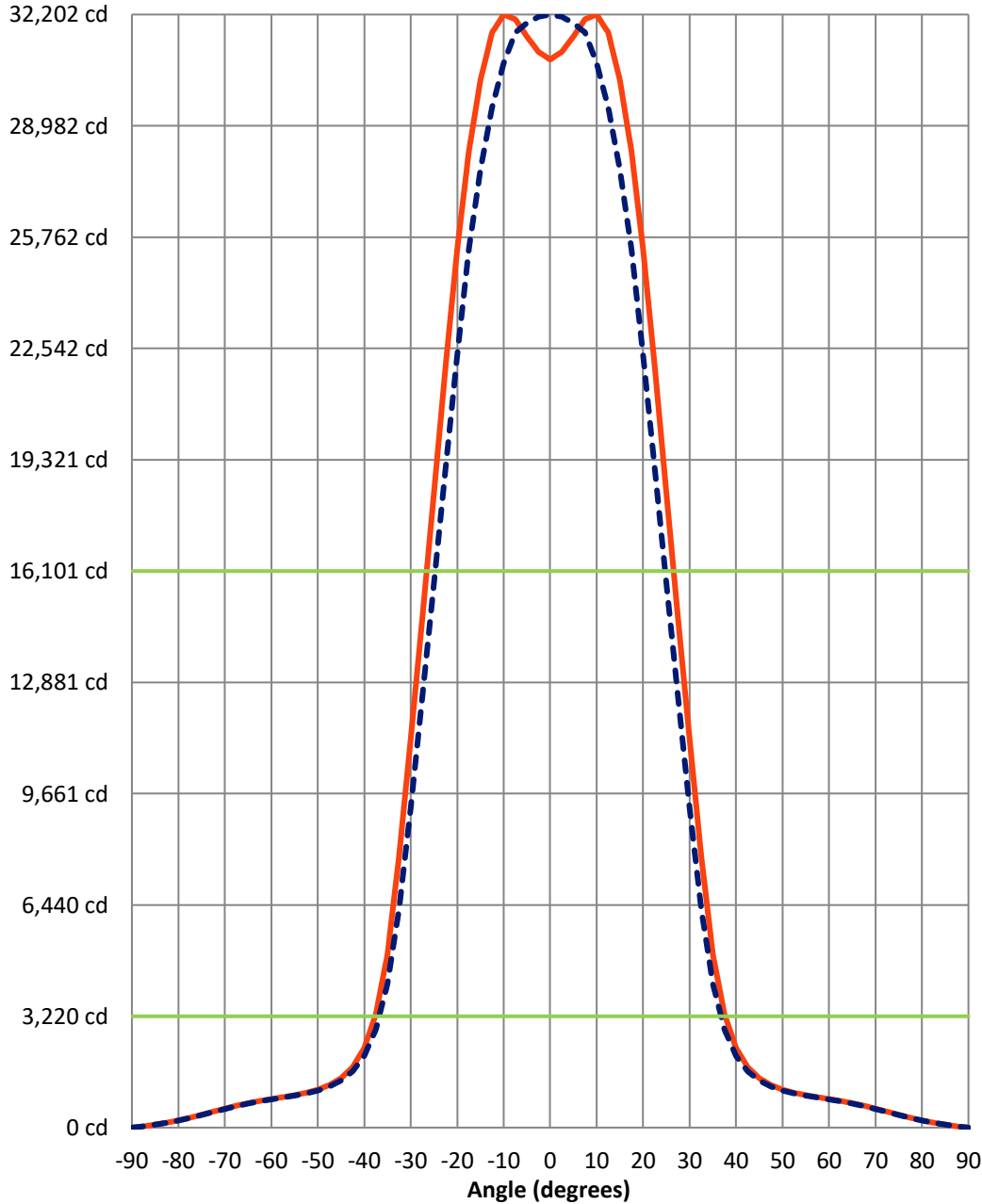
### Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg      - - - Horizontal Distribution Through 10-Deg

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 49.5°  
 V Angle: 53.1°  
 Lumens: 13097.2  
 Efficiency: 49.7%

**Field:**  
 H Angle: 73.6°  
 V Angle: 75.3°  
 Lumens: 17033.3  
 Efficiency: 64.6%

**Spill:**  
 Lumens: 9317.9  
 Efficiency: 35.4%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 10-Deg



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FIELD  
 BEAM

**CANDELA DISTRIBUTION:**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	32.8	32.8	32.8	32.8
85°	87.6	87.6	87.6	87.6	87.6	84.9	84.9	82.1	82.1	79.4	76.6
82.5°	142.3	142.3	142.3	142.3	139.6	139.6	136.9	134.1	131.4	128.7	125.9
80°	208.0	208.0	208.0	208.0	205.3	202.6	199.8	197.1	191.6	188.9	183.4
77.5°	284.7	284.7	284.7	281.9	279.2	276.5	271.0	265.5	260.0	254.6	249.1
75°	372.3	372.3	372.3	366.8	364.1	358.6	353.1	347.6	339.4	331.2	323.0
72.5°	462.6	462.6	462.6	457.1	451.7	446.2	440.7	432.5	424.3	413.3	402.4
70°	547.5	547.5	547.5	542.0	536.5	531.0	522.8	514.6	503.7	492.7	481.8
67.5°	635.1	635.1	635.1	626.9	621.4	615.9	607.7	596.7	585.8	572.1	558.4
65°	706.2	706.2	703.5	700.8	695.3	687.1	681.6	670.7	659.7	648.8	635.1
62.5°	771.9	771.9	769.2	766.5	761.0	752.8	744.6	736.4	725.4	711.7	698.0
60°	826.7	826.7	823.9	821.2	815.7	810.3	802.0	793.8	782.9	771.9	758.2
57.5°	881.4	881.4	878.7	876.0	870.5	862.3	854.1	845.8	834.9	821.2	807.5
55°	938.9	938.9	936.2	930.7	925.2	917.0	908.8	897.9	884.2	870.5	856.8
52.5°	1007.3	1007.3	1001.9	996.4	988.2	980.0	966.3	952.6	936.2	919.8	903.3
50°	1097.7	1097.7	1092.2	1084.0	1070.3	1056.6	1040.2	1018.3	999.1	977.2	955.3
47.5°	1231.8	1231.8	1220.9	1207.2	1188.0	1166.1	1136.0	1103.2	1075.8	1048.4	1015.6
45°	1428.9	1428.9	1412.5	1390.6	1360.5	1322.1	1278.3	1231.8	1185.3	1138.7	1092.2
42.5°	1749.2	1749.2	1719.1	1680.7	1628.7	1563.0	1480.9	1404.3	1338.6	1264.7	1201.7
40°	2302.1	2302.1	2244.6	2173.5	2074.9	1949.0	1798.4	1678.0	1563.0	1434.4	1346.8
37.5°	3284.8	3284.8	3172.6	3035.7	2844.1	2603.2	2313.1	2118.7	1905.2	1702.6	1554.8
35°	5020.3	5020.3	4804.1	4538.5	4169.0	3703.6	3208.2	2841.4	2433.5	2121.5	1845.0
32.5°	7867.2	7867.2	7478.5	6999.4	6339.7	5504.8	4711.0	4013.0	3284.8	2767.5	2269.3
30°	11250.6	11250.6	10741.4	10114.5	9255.0	8171.0	7040.5	5800.5	4650.8	3728.3	2975.5
27.5°	14748.9	14603.8	14165.8	13451.4	12471.4	11250.6	9840.8	8239.5	6684.6	5058.6	3982.9
25°	18367.7	18198.0	17697.0	16875.8	15753.5	14371.1	12783.5	10993.2	9074.4	7136.3	5274.9
22.5°	22024.8	21833.2	21263.8	20335.9	19076.7	17527.3	15728.9	13738.8	11595.5	9356.3	7136.3
20°	25405.4	25202.9	24606.1	23639.8	22336.9	20637.0	18638.7	16432.4	14061.8	11595.5	9074.4
17.5°	28235.9	28041.5	27466.7	26544.2	25405.4	23524.9	21447.2	19021.9	16432.4	13738.8	10993.2
15°	30302.6	30135.6	29645.6	28870.9	27710.3	26046.0	23930.0	21447.2	18638.7	15728.9	12783.5
12.5°	31674.0	31539.9	31153.9	30551.7	29511.5	28115.4	26046.0	23524.9	20637.0	17527.3	14371.1
10°	32202.3	32136.6	31955.9	31679.5	30792.6	29511.5	27710.3	25405.4	22336.9	19076.7	15753.5
7.5°	32062.7	32084.6	32147.6	32076.4	31679.5	30551.7	28870.9	26544.2	23639.8	20335.9	16875.8
5°	31564.5	31682.2	31975.1	32147.6	31955.9	31153.9	29645.6	27466.7	24606.1	21263.8	17697.0
2.5°	31121.1	31304.5	31682.2	32084.6	32136.6	31539.9	30135.6	28041.5	25202.9	21833.2	18198.0
0°	30902.1	31121.1	31564.5	32062.7	32202.3	31674.0	30302.6	28235.9	25405.4	22024.8	18367.7



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**CANDELA DISTRIBUTION (continued):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	32.8	30.1	30.1	30.1	27.4	27.4	27.4	24.6	24.6	21.9	21.9
85°	76.6	73.9	71.2	68.4	65.7	63.0	60.2	57.5	54.7	49.3	46.5
82.5°	123.2	120.4	117.7	112.2	109.5	104.0	98.5	93.1	87.6	84.9	79.4
80°	177.9	172.5	167.0	161.5	153.3	145.1	139.6	131.4	125.9	117.7	112.2
77.5°	240.9	232.7	224.5	213.5	205.3	197.1	186.1	177.9	167.0	156.0	145.1
75°	312.1	301.1	287.4	276.5	265.5	251.8	238.2	224.5	210.8	197.1	183.4
72.5°	388.7	375.0	361.3	347.6	331.2	312.1	295.6	276.5	260.0	243.6	224.5
70°	468.1	451.7	435.2	418.8	399.7	377.8	358.6	336.7	314.8	292.9	271.0
67.5°	542.0	525.6	506.4	490.0	468.1	446.2	421.6	396.9	372.3	344.9	317.5
65°	618.6	599.5	577.6	555.7	533.8	509.1	484.5	459.9	429.8	399.7	372.3
62.5°	681.6	665.2	646.0	624.1	599.5	572.1	547.5	514.6	484.5	454.4	418.8
60°	741.8	722.7	706.2	681.6	659.7	635.1	605.0	572.1	539.3	503.7	470.8
57.5°	793.8	777.4	758.2	736.4	711.7	687.1	659.7	629.6	591.3	555.7	517.4
55°	840.4	821.2	802.0	782.9	761.0	733.6	706.2	676.1	643.3	605.0	563.9
52.5°	886.9	867.7	845.8	826.7	802.0	777.4	750.0	719.9	687.1	651.5	607.7
50°	933.4	911.5	889.6	865.0	840.4	815.7	788.4	761.0	725.4	689.8	651.5
47.5°	988.2	960.8	933.4	906.1	881.4	851.3	823.9	793.8	763.7	725.4	687.1
45°	1056.6	1015.6	982.7	949.9	919.8	889.6	856.8	826.7	793.8	761.0	719.9
42.5°	1141.5	1086.7	1042.9	999.1	960.8	925.2	892.4	856.8	823.9	788.4	750.0
40°	1256.4	1182.5	1111.4	1056.6	1007.3	963.6	925.2	889.6	851.3	815.7	777.4
37.5°	1407.0	1303.0	1204.4	1125.1	1062.1	1007.3	960.8	919.8	881.4	840.4	802.0
35°	1634.2	1453.5	1327.6	1212.7	1125.1	1056.6	999.1	949.9	906.1	865.0	826.7
32.5°	1954.5	1675.3	1472.7	1327.6	1204.4	1111.4	1042.9	982.7	933.4	889.6	845.8
30°	2376.0	1990.1	1675.3	1453.5	1303.0	1182.5	1086.7	1015.6	960.8	911.5	867.7
27.5°	3043.9	2376.0	1954.5	1634.2	1407.0	1256.4	1141.5	1056.6	988.2	933.4	886.9
25°	3982.9	2975.5	2269.3	1845.0	1554.8	1346.8	1201.7	1092.2	1015.6	955.3	903.3
22.5°	5058.6	3728.3	2767.5	2121.5	1702.6	1434.4	1264.7	1138.7	1048.4	977.2	919.8
20°	6684.6	4650.8	3284.8	2433.5	1905.2	1563.0	1338.6	1185.3	1075.8	999.1	936.2
17.5°	8239.5	5800.5	4013.0	2841.4	2118.7	1678.0	1404.3	1231.8	1103.2	1018.3	952.6
15°	9840.8	7040.5	4711.0	3208.2	2313.1	1798.4	1480.9	1278.3	1136.0	1040.2	966.3
12.5°	11250.6	8171.0	5504.8	3703.6	2603.2	1949.0	1563.0	1322.1	1166.1	1056.6	980.0
10°	12471.4	9255.0	6339.7	4169.0	2844.1	2074.9	1628.7	1360.5	1188.0	1070.3	988.2
7.5°	13451.4	10114.5	6999.4	4538.5	3035.7	2173.5	1680.7	1390.6	1207.2	1084.0	996.4
5°	14165.8	10741.4	7478.5	4804.1	3172.6	2244.6	1719.1	1412.5	1220.9	1092.2	1001.9
2.5°	14603.8	11250.6	7867.2	5020.3	3284.8	2302.1	1749.2	1428.9	1231.8	1097.7	1007.3
0°	14748.9	11250.6	7867.2	5020.3	3284.8	2302.1	1749.2	1428.9	1231.8	1097.7	1007.3





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**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.2	19.2	16.4	16.4	13.7	13.7	10.9	10.9	8.2	8.2	5.5
85°	43.8	38.3	35.6	32.8	30.1	27.4	24.6	21.9	19.2	16.4	13.7
82.5°	73.9	68.4	60.2	54.7	49.3	43.8	35.6	32.8	27.4	21.9	19.2
80°	104.0	95.8	87.6	79.4	71.2	63.0	54.7	46.5	38.3	30.1	24.6
77.5°	134.1	123.2	115.0	104.0	93.1	82.1	71.2	60.2	49.3	38.3	30.1
75°	169.7	156.0	142.3	128.7	115.0	101.3	90.3	76.6	63.0	49.3	38.3
72.5°	208.0	188.9	172.5	156.0	136.9	123.2	106.8	93.1	76.6	60.2	46.5
70°	249.1	227.2	205.3	183.4	164.2	142.3	125.9	106.8	90.3	71.2	54.7
67.5°	290.2	265.5	240.9	213.5	188.9	167.0	142.3	123.2	101.3	82.1	63.0
65°	339.4	306.6	276.5	246.4	216.3	188.9	164.2	136.9	115.0	93.1	71.2
62.5°	386.0	350.4	314.8	279.2	246.4	213.5	183.4	156.0	128.7	104.0	79.4
60°	432.5	394.2	353.1	314.8	276.5	240.9	205.3	172.5	142.3	115.0	87.6
57.5°	479.0	435.2	394.2	350.4	306.6	265.5	227.2	188.9	156.0	123.2	95.8
55°	520.1	479.0	432.5	386.0	339.4	290.2	249.1	208.0	169.7	134.1	104.0
52.5°	563.9	517.4	470.8	418.8	372.3	317.5	271.0	224.5	183.4	145.1	112.2
50°	605.0	555.7	503.7	454.4	399.7	344.9	292.9	243.6	197.1	156.0	117.7
47.5°	643.3	591.3	539.3	484.5	429.8	372.3	314.8	260.0	210.8	167.0	125.9
45°	676.1	629.6	572.1	514.6	459.9	396.9	336.7	276.5	224.5	177.9	131.4
42.5°	706.2	659.7	605.0	547.5	484.5	421.6	358.6	295.6	238.2	186.1	139.6
40°	733.6	687.1	635.1	572.1	509.1	446.2	377.8	312.1	251.8	197.1	145.1
37.5°	761.0	711.7	659.7	599.5	533.8	468.1	399.7	331.2	265.5	205.3	153.3
35°	782.9	736.4	681.6	624.1	555.7	490.0	418.8	347.6	276.5	213.5	161.5
32.5°	802.0	758.2	706.2	646.0	577.6	506.4	435.2	361.3	287.4	224.5	167.0
30°	821.2	777.4	722.7	665.2	599.5	525.6	451.7	375.0	301.1	232.7	172.5
27.5°	840.4	793.8	741.8	681.6	618.6	542.0	468.1	388.7	312.1	240.9	177.9
25°	856.8	807.5	758.2	698.0	635.1	558.4	481.8	402.4	323.0	249.1	183.4
22.5°	870.5	821.2	771.9	711.7	648.8	572.1	492.7	413.3	331.2	254.6	188.9
20°	884.2	834.9	782.9	725.4	659.7	585.8	503.7	424.3	339.4	260.0	191.6
17.5°	897.9	845.8	793.8	736.4	670.7	596.7	514.6	432.5	347.6	265.5	197.1
15°	908.8	854.1	802.0	744.6	681.6	607.7	522.8	440.7	353.1	271.0	199.8
12.5°	917.0	862.3	810.3	752.8	687.1	615.9	531.0	446.2	358.6	276.5	202.6
10°	925.2	870.5	815.7	761.0	695.3	621.4	536.5	451.7	364.1	279.2	205.3
7.5°	930.7	876.0	821.2	766.5	700.8	626.9	542.0	457.1	366.8	281.9	208.0
5°	936.2	878.7	823.9	769.2	703.5	635.1	547.5	462.6	372.3	284.7	208.0
2.5°	938.9	881.4	826.7	771.9	706.2	635.1	547.5	462.6	372.3	284.7	208.0
0°	938.9	881.4	826.7	771.9	706.2	635.1	547.5	462.6	372.3	284.7	208.0



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.5	2.7	2.7	0.0
85°	8.2	5.5	2.7	0.0
82.5°	13.7	8.2	5.5	0.0
80°	19.2	13.7	5.5	0.0
77.5°	21.9	16.4	8.2	0.0
75°	27.4	19.2	8.2	0.0
72.5°	32.8	21.9	10.9	0.0
70°	35.6	24.6	10.9	0.0
67.5°	43.8	27.4	13.7	0.0
65°	49.3	30.1	13.7	0.0
62.5°	54.7	32.8	16.4	0.0
60°	60.2	35.6	16.4	0.0
57.5°	68.4	38.3	19.2	0.0
55°	73.9	43.8	19.2	0.0
52.5°	79.4	46.5	21.9	0.0
50°	84.9	49.3	21.9	0.0
47.5°	87.6	54.7	24.6	0.0
45°	93.1	57.5	24.6	0.0
42.5°	98.5	60.2	27.4	0.0
40°	104.0	63.0	27.4	0.0
37.5°	109.5	65.7	27.4	0.0
35°	112.2	68.4	30.1	0.0
32.5°	117.7	71.2	30.1	0.0
30°	120.4	73.9	30.1	0.0
27.5°	123.2	76.6	32.8	0.0
25°	125.9	76.6	32.8	0.0
22.5°	128.7	79.4	32.8	0.0
20°	131.4	82.1	32.8	0.0
17.5°	134.1	82.1	32.8	0.0
15°	136.9	84.9	35.6	0.0
12.5°	139.6	84.9	35.6	0.0
10°	139.6	87.6	35.6	0.0
7.5°	142.3	87.6	35.6	0.0
5°	142.3	87.6	35.6	0.0
2.5°	142.3	87.6	35.6	0.0
0°	142.3	87.6	35.6	0.0

(END OF REPORT)