

Signify Classified - Internal
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: CORELITE

Report Number: P621676

Luminaire Tested: VLT-FA-100U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621676
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FA-100U-050D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

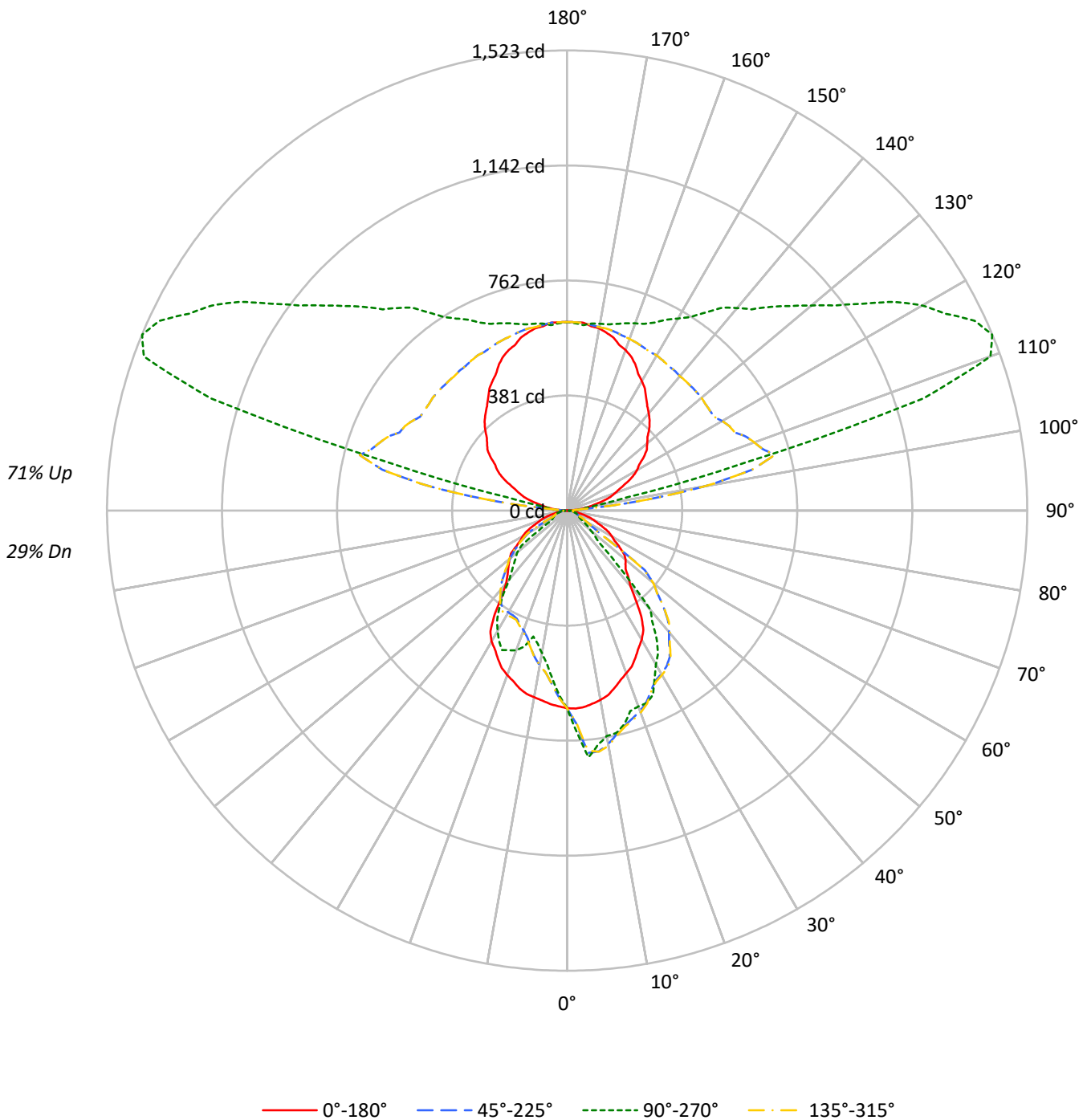
Lumens per Lamp: N/A
Luminaire Lumens: 4701.3 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (A_{in}): 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: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29				
1	93	89	86	83	84	80	77	75	63	61	59	48	46	45	33	32	32	25				
2	85	79	73	68	76	71	66	62	56	53	50	42	40	38	30	28	27	22				
3	78	69	63	57	70	63	57	52	50	46	42	38	35	33	27	25	24	19				
4	72	62	54	49	64	56	49	45	44	40	36	34	31	29	24	22	21	17				
5	66	55	47	42	59	50	43	38	40	35	32	31	27	25	22	20	18	15				
6	61	49	42	36	54	45	38	33	36	31	28	28	24	22	20	18	16	13				
7	56	45	37	32	50	40	34	29	33	28	24	25	22	19	18	16	15	12				
8	52	40	33	28	47	37	30	26	30	25	22	23	20	17	17	15	13	11				
9	48	37	30	25	43	33	27	23	27	23	19	21	18	16	16	14	12	10				
10	45	34	27	22	41	31	25	21	25	20	17	20	16	14	14	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4692	4692	4692	4692
5°	4700	5902	4628	4025
10°	4638	5520	4570	3494
15°	4511	5435	4526	3206
20°	4373	5267	4424	3759
25°	4239	5324	4287	4034
30°	4089	4871	4144	3808
35°	3747	4515	3653	3414
40°	3053	4019	2947	2778
45°	2775	1492	2801	2531
50°	2821	1136	2770	2406
55°	2662	882	2571	1440
60°	2453	677	2434	802
65°	2258	700	2214	847
70°	2010	739	1953	879
75°	1716	774	1641	904
80°	1293	798	1211	934
85°	873	708	766	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 5137 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.3
10°-20°	172.8	3.7
20°-30°	258.5	5.5
30°-40°	294.0	6.3
40°-50°	251.4	5.3
50°-60°	169.6	3.6
60°-70°	87.5	1.9
70°-80°	39.5	0.8
80°-90°	13.2	0.3
90°-100°	76.7	1.6
100°-110°	546.7	11.6
110°-120°	742.1	15.8
120°-130°	604.0	12.8
130°-140°	485.8	10.3
140°-150°	383.0	8.1
150°-160°	280.1	6.0
160°-170°	173.9	3.7
170°-180°	59.3	1.3
0°-30°	494.3	10.5
0°-40°	788.3	16.8
0°-60°	1209.3	25.7
0°-90°	1349.5	28.7
90°-120°	1365.5	29.0
90°-150°	2838.4	60.4
90°-180°	3352.0	71.3
0°-180°	4701.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	654	654	654	654	654	
5°	652	819	642	559	652	62
15°	607	732	609	432	607	171
25°	535	672	541	510	535	246
35°	428	515	417	390	428	261
45°	273	147	276	249	273	217
55°	213	70	206	115	213	190
65°	133	41	130	50	133	131
75°	62	28	59	33	62	66
85°	11	9	9	11	11	14
90°	0	12	0	12	0	2
95°	31	43	31	43	31	35
105°	122	600	122	600	122	128
115°	216	1487	216	1487	216	214
125°	310	1193	310	1193	310	275
135°	385	954	385	954	385	296
145°	455	800	455	800	455	286
155°	534	687	534	687	534	245
165°	593	640	593	640	593	166
175°	624	616	624	616	624	59
180°	624	624	624	624	624	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	655.9	678.3	706.5	725.8	734.1	725.8	701.7	678.1	648.5	639.6	618.7
5°	652.5	721.4	804.8	814.8	819.4	814.8	797.4	717.3	642.5	610.6	576.0
7.5°	644.5	765.0	803.8	781.3	781.5	785.6	805.0	761.3	634.1	584.0	541.5
10°	636.5	789.3	784.1	751.7	757.5	754.9	790.1	784.6	627.2	569.3	520.8
12.5°	625.8	796.9	758.1	747.4	753.8	750.2	761.9	792.7	621.3	558.8	496.8
15°	607.2	786.1	736.3	731.6	731.6	734.8	739.6	789.4	609.2	539.6	467.6
17.5°	588.1	764.4	721.1	698.0	695.5	699.8	726.5	770.0	592.1	518.4	439.2
20°	572.6	749.5	705.7	678.6	689.7	679.9	711.6	753.6	579.3	505.2	421.7
22.5°	558.8	731.0	686.0	674.5	689.2	674.7	691.4	735.0	564.4	490.3	408.4
25°	535.4	699.9	656.4	667.2	672.4	667.2	659.1	702.7	541.4	471.1	394.4
27.5°	512.1	667.2	634.4	641.6	625.7	637.9	638.0	667.3	517.7	448.9	390.1
30°	493.5	644.4	623.2	612.6	587.9	607.4	627.8	644.5	500.1	434.5	389.1
32.5°	469.0	623.5	612.0	575.6	559.7	573.0	617.2	623.1	473.0	421.4	388.0
35°	427.7	594.1	591.9	531.7	515.4	527.8	596.6	592.6	417.0	400.8	379.8
37.5°	372.2	567.9	553.5	487.3	461.4	484.1	557.9	565.1	350.8	381.9	360.5
40°	325.9	550.2	524.8	454.3	429.0	451.1	528.1	548.7	314.6	368.6	339.2
42.5°	299.8	534.6	494.4	419.4	262.4	414.1	497.8	532.6	292.2	351.4	320.6
45°	273.4	506.2	450.3	232.2	147.0	221.1	450.9	499.1	276.0	325.4	292.0
47.5°	261.8	471.2	404.1	139.8	124.1	135.8	403.7	463.5	261.9	299.4	264.7
50°	252.7	449.1	371.1	123.2	101.8	118.7	371.8	441.9	248.1	281.9	246.1
52.5°	237.8	422.8	323.8	102.1	87.9	99.6	315.9	414.5	233.7	262.8	222.7
55°	212.8	372.2	135.0	80.3	70.5	77.0	128.4	359.6	205.5	232.8	195.5
57.5°	186.4	316.8	94.7	62.5	54.7	61.8	94.0	304.1	182.9	197.2	170.5
60°	170.9	279.5	77.2	52.4	47.2	51.8	76.5	268.4	169.6	173.5	147.6
62.5°	155.5	241.7	63.8	46.1	44.6	45.5	63.7	229.6	153.1	153.4	104.0
65°	133.0	183.1	47.2	41.9	41.2	41.2	45.9	176.5	130.4	126.5	59.9
67.5°	110.1	131.5	37.9	38.6	37.9	37.9	37.2	127.8	107.5	100.8	45.2
70°	95.8	101.0	35.2	35.9	35.2	35.2	34.6	98.3	93.1	78.2	42.6
72.5°	81.9	68.9	32.6	32.7	32.6	32.6	31.9	64.7	79.3	55.0	38.8
75°	61.9	34.5	27.9	27.9	27.9	27.9	27.3	33.2	59.2	35.8	33.3
77.5°	43.0	22.8	23.1	23.0	23.0	22.5	22.5	22.6	40.4	24.7	26.9
80°	31.3	18.9	20.0	19.3	19.3	19.3	19.3	18.2	29.3	20.8	22.6
82.5°	22.2	15.1	16.2	15.6	15.6	15.6	15.6	14.9	20.2	17.0	18.4
85°	10.6	10.0	10.6	9.3	8.6	9.3	10.0	10.0	9.3	11.3	12.0
87.5°	3.2	5.5	5.8	5.5	5.5	5.5	5.3	5.0	2.7	6.0	6.4
90°	0.0	3.8	7.8	11.8	11.8	11.8	7.8	3.8	0.0	3.8	7.8
92.5°	9.4	13.3	17.3	24.4	27.5	24.4	17.3	13.3	9.4	13.3	17.3
95°	31.4	58.3	31.4	35.5	43.2	35.5	31.4	58.3	31.4	58.3	31.4
97.5°	55.7	111.7	230.7	68.1	58.9	68.1	230.7	111.7	55.7	111.7	230.7
100°	74.6	139.8	463.1	136.3	90.3	136.3	463.1	139.8	74.6	139.8	463.1
102.5°	93.4	161.7	626.3	359.7	197.0	359.7	626.3	161.7	93.4	161.7	626.3
105°	121.7	186.9	710.3	907.4	600.4	907.4	710.3	186.9	121.7	186.9	710.3
107.5°	149.9	199.0	678.1	1320.6	1236.9	1320.6	678.1	199.0	149.9	199.0	678.1
110°	168.7	214.8	659.3	1387.6	1491.2	1387.6	659.3	214.8	168.7	214.8	659.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	187.6	233.6	640.4	1348.4	1522.6	1348.4	640.4	233.6	187.6	233.6	640.4
115°	215.8	261.9	612.2	1272.4	1487.3	1272.4	612.2	261.9	215.8	261.9	612.2
117.5°	244.9	290.1	605.1	1190.1	1411.2	1190.1	605.1	290.1	244.9	290.1	605.1
120°	266.8	309.1	592.6	1127.6	1357.8	1127.6	592.6	309.1	266.8	309.1	592.6
122.5°	282.5	327.8	576.9	1073.8	1285.6	1073.8	576.9	327.8	282.5	327.8	576.9
125°	310.0	352.2	576.9	1008.8	1193.0	1008.8	576.9	352.2	310.0	352.2	576.9
127.5°	332.8	375.7	577.6	933.4	1115.3	933.4	577.6	375.7	332.8	375.7	577.6
130°	345.3	391.4	580.8	883.0	1055.6	883.0	580.8	391.4	345.3	391.4	580.8
132.5°	361.0	407.1	580.8	860.3	1002.2	860.3	580.8	407.1	361.0	407.1	580.8
135°	384.6	426.8	580.8	830.8	953.6	830.8	580.8	426.8	384.6	426.8	580.8
137.5°	404.2	449.5	580.8	798.2	903.4	798.2	580.8	449.5	404.2	449.5	580.8
140°	419.9	462.1	580.8	779.2	875.1	779.2	580.8	462.1	419.9	462.1	580.8
142.5°	435.6	474.7	583.9	757.1	846.8	757.1	583.9	474.7	435.6	474.7	583.9
145°	455.2	493.6	584.7	723.8	800.5	723.8	584.7	493.6	455.2	493.6	584.7
147.5°	478.8	512.5	589.4	699.9	758.9	699.9	589.4	512.5	478.8	512.5	589.4
150°	494.5	525.1	592.6	683.9	733.8	683.9	592.6	525.1	494.5	525.1	592.6
152.5°	510.1	537.8	592.6	671.2	711.9	671.2	592.6	537.8	510.1	537.8	592.6
155°	533.7	552.9	596.5	656.0	686.7	656.0	596.5	552.9	533.7	552.9	596.5
157.5°	552.5	570.9	601.2	646.4	668.7	646.4	601.2	570.9	552.5	570.9	601.2
160°	565.1	580.4	604.3	640.1	659.3	640.1	604.3	580.4	565.1	580.4	604.3
162.5°	574.5	589.9	607.5	636.8	649.9	636.8	607.5	589.9	574.5	589.9	607.5
165°	592.6	600.2	612.2	628.1	639.6	628.1	612.2	600.2	592.6	600.2	612.2
167.5°	602.8	609.7	616.1	624.1	631.0	624.1	616.1	609.7	602.8	609.7	616.1
170°	612.2	616.0	616.1	624.0	627.9	624.0	616.1	616.0	612.2	616.0	616.1
172.5°	615.3	622.2	619.2	620.9	624.7	620.9	619.2	622.2	615.3	622.2	619.2
175°	624.0	627.8	624.0	619.9	616.1	619.9	624.0	627.8	624.0	627.8	624.0
177.5°	624.0	627.0	624.0	623.9	620.8	623.9	624.0	627.0	624.0	627.0	624.0
180°	624.0	624.0	624.0	624.0	624.0	624.0	624.0	624.0	624.0	624.0	624.0

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	611.2	610.7	611.7	620.8	639.3	655.9
5°	556.7	558.7	560.6	576.0	608.2	652.5
7.5°	514.8	512.0	516.4	541.4	581.0	644.5
10°	486.0	479.5	486.0	520.1	566.3	636.5
12.5°	458.9	450.8	460.9	498.3	554.1	625.8
15°	423.8	431.6	427.1	468.9	535.7	607.2
17.5°	432.1	471.4	440.5	443.3	517.4	588.1
20°	451.8	492.2	464.9	426.3	505.7	572.6
22.5°	469.7	500.1	475.4	412.0	493.9	558.8
25°	483.4	509.5	482.1	399.1	476.9	535.4
27.5°	484.1	487.8	484.4	398.0	455.8	512.1
30°	475.2	459.6	473.9	399.1	440.8	493.5
32.5°	449.6	431.9	444.1	396.9	425.7	469.0
35°	413.2	389.7	406.6	385.8	402.3	427.7
37.5°	374.7	345.0	368.5	363.7	382.3	372.2
40°	348.7	296.6	343.5	341.9	371.4	325.9
42.5°	315.3	271.1	310.6	324.3	359.4	299.8
45°	254.6	249.4	252.0	294.6	333.8	273.4
47.5°	232.8	229.3	231.5	267.6	305.0	261.8
50°	220.0	215.5	218.7	250.1	286.5	252.7
52.5°	202.3	189.9	201.0	226.1	267.5	237.8
55°	152.1	115.1	151.5	198.9	238.8	212.8
57.5°	89.3	66.5	87.3	173.1	202.4	186.4
60°	60.4	55.9	61.1	152.3	178.1	170.9
62.5°	55.2	53.7	55.3	106.0	156.4	155.5
65°	50.5	49.9	50.5	61.2	129.1	133.0
67.5°	45.7	45.1	46.3	47.0	101.9	110.1
70°	42.6	41.9	42.6	43.2	78.2	95.8
72.5°	38.8	38.2	38.8	39.5	55.0	81.9
75°	33.2	32.6	33.2	33.9	36.5	61.9
77.5°	26.9	26.9	27.5	27.5	25.5	43.0
80°	22.6	22.6	23.3	23.3	22.2	31.3
82.5°	18.3	17.8	19.0	19.6	18.3	22.2
85°	11.3	10.6	11.9	12.6	11.9	10.6
87.5°	6.6	6.1	7.1	7.4	6.6	3.2
90°	11.8	11.8	11.8	7.8	3.8	0.0
92.5°	24.4	27.5	24.4	17.3	13.3	9.4
95°	35.5	43.2	35.5	31.4	58.3	31.4
97.5°	68.1	58.9	68.1	230.7	111.7	55.7
100°	136.3	90.3	136.3	463.1	139.8	74.6
102.5°	359.7	197.0	359.7	626.3	161.7	93.4
105°	907.4	600.4	907.4	710.3	186.9	121.7
107.5°	1320.6	1236.9	1320.6	678.1	199.0	149.9
110°	1387.6	1491.2	1387.6	659.3	214.8	168.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1348.4	1522.6	1348.4	640.4	233.6	187.6
115°	1272.4	1487.3	1272.4	612.2	261.9	215.8
117.5°	1190.1	1411.2	1190.1	605.1	290.1	244.9
120°	1127.6	1357.8	1127.6	592.6	309.1	266.8
122.5°	1073.8	1285.6	1073.8	576.9	327.8	282.5
125°	1008.8	1193.0	1008.8	576.9	352.2	310.0
127.5°	933.4	1115.3	933.4	577.6	375.7	332.8
130°	883.0	1055.6	883.0	580.8	391.4	345.3
132.5°	860.3	1002.2	860.3	580.8	407.1	361.0
135°	830.8	953.6	830.8	580.8	426.8	384.6
137.5°	798.2	903.4	798.2	580.8	449.5	404.2
140°	779.2	875.1	779.2	580.8	462.1	419.9
142.5°	757.1	846.8	757.1	583.9	474.7	435.6
145°	723.8	800.5	723.8	584.7	493.6	455.2
147.5°	699.9	758.9	699.9	589.4	512.5	478.8
150°	683.9	733.8	683.9	592.6	525.1	494.5
152.5°	671.2	711.9	671.2	592.6	537.8	510.1
155°	656.0	686.7	656.0	596.5	552.9	533.7
157.5°	646.4	668.7	646.4	601.2	570.9	552.5
160°	640.1	659.3	640.1	604.3	580.4	565.1
162.5°	636.8	649.9	636.8	607.5	589.9	574.5
165°	628.1	639.6	628.1	612.2	600.2	592.6
167.5°	624.1	631.0	624.1	616.1	609.7	602.8
170°	624.0	627.9	624.0	616.1	616.0	612.2
172.5°	620.9	624.7	620.9	619.2	622.2	615.3
175°	619.9	616.1	619.9	624.0	627.8	624.0
177.5°	623.9	620.8	623.9	624.0	627.0	624.0
180°	624.0	624.0	624.0	624.0	624.0	624.0

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