

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: P621625

Luminaire Tested: VLT-FA-075U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621625  
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-075U-050D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

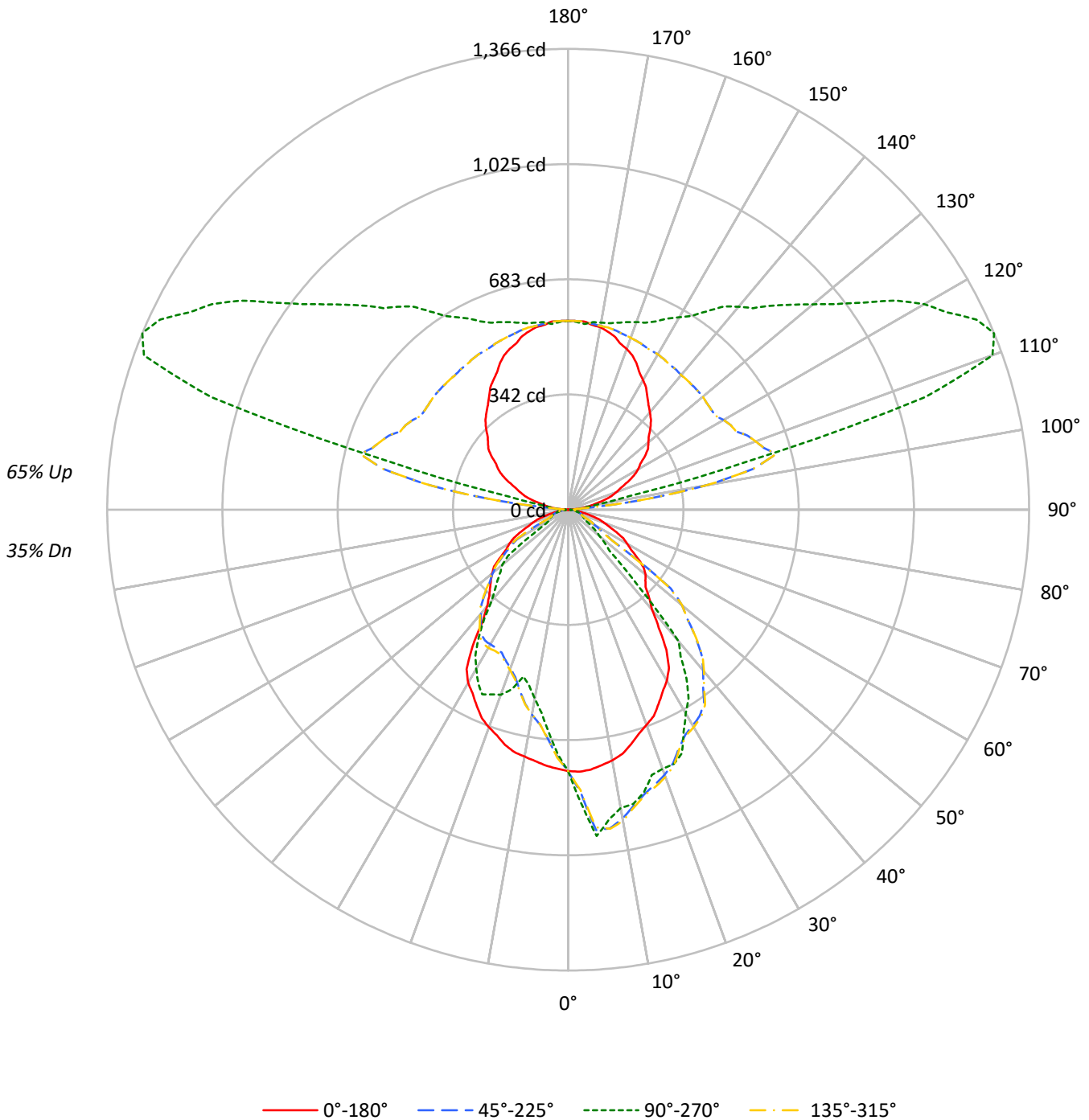
Lumens per Lamp: N/A  
Luminaire Lumens: 4605.6 lumens  
Efficiency: N/A  
Efficacy: 130.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 35.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				
1	95	91	87	84	86	82	79	77	66	64	62	52	50	49	38	37	37	30				
2	87	80	74	70	78	73	68	64	59	55	53	46	44	42	34	33	32	26				
3	80	71	64	59	72	64	59	54	52	48	45	41	38	36	31	29	28	23				
4	73	63	56	50	66	57	51	46	47	42	39	37	34	31	28	26	24	20				
5	67	56	49	43	61	51	45	40	42	37	34	33	30	27	25	23	21	18				
6	62	51	43	37	56	46	40	35	38	33	29	30	27	24	23	21	19	16				
7	57	46	38	33	52	42	35	31	34	30	26	28	24	22	21	19	17	14				
8	53	41	34	29	48	38	32	27	31	27	23	25	22	19	20	17	15	13				
9	49	38	31	26	45	35	28	24	29	24	21	23	20	17	18	16	14	12				
10	46	35	28	23	42	32	26	22	27	22	19	22	18	16	17	14	13	11				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	5559	5559	5559	5559
5°	5569	6994	5484	4769
10°	5496	6540	5415	4140
15°	5345	6440	5363	3800
20°	5181	6241	5242	4454
25°	5023	6308	5079	4780
30°	4845	5772	4910	4513
35°	4439	5350	4328	4045
40°	3618	4762	3492	3293
45°	3287	1768	3318	2999
50°	3344	1346	3281	2850
55°	3155	1045	3046	1705
60°	2906	804	2885	950
65°	2676	830	2623	1004
70°	2381	877	2314	1041
75°	2032	918	1944	1070
80°	1529	946	1434	1107
85°	1037	840	906	1037

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6087 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.7	1.6
10°-20°	204.7	4.4
20°-30°	306.3	6.7
30°-40°	348.4	7.6
40°-50°	297.9	6.5
50°-60°	200.9	4.4
60°-70°	103.7	2.3
70°-80°	46.8	1.0
80°-90°	15.2	0.3
90°-100°	68.8	1.5
100°-110°	490.4	10.6
110°-120°	665.8	14.5
120°-130°	541.9	11.8
130°-140°	435.8	9.5
140°-150°	343.6	7.5
150°-160°	251.2	5.5
160°-170°	156.1	3.4
170°-180°	53.2	1.2
0°-30°	585.8	12.7
0°-40°	934.1	20.3
0°-60°	1432.9	31.1
0°-90°	1598.6	34.7
90°-120°	1225.1	26.6
90°-150°	2546.4	55.3
90°-180°	3007.0	65.3
0°-180°	4605.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	775	775	775	775	775	
5°	773	971	761	662	773	73
15°	720	867	722	512	720	203
25°	634	797	642	604	634	292
35°	507	611	494	462	507	310
45°	324	174	327	296	324	257
55°	252	84	244	136	252	225
65°	158	49	154	59	158	156
75°	73	33	70	39	73	78
85°	13	10	11	13	13	16
90°	0	11	0	11	0	2
95°	28	39	28	39	28	31
105°	109	539	109	539	109	115
115°	194	1334	194	1334	194	192
125°	278	1070	278	1070	278	247
135°	345	856	345	856	345	265
145°	408	718	408	718	408	257
155°	479	616	479	616	479	220
165°	532	574	532	574	532	149
175°	560	553	560	553	560	53
180°	560	560	560	560	560	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	777.2	803.7	837.1	860.0	869.9	860.0	831.4	803.5	768.4	757.9	733.1
5°	773.1	854.8	953.6	965.5	970.9	965.5	944.9	849.9	761.3	723.5	682.5
7.5°	763.6	906.5	952.5	925.8	926.0	930.9	953.9	902.1	751.3	692.0	641.6
10°	754.2	935.3	929.1	890.7	897.6	894.5	936.2	929.6	743.1	674.6	617.1
12.5°	741.6	944.2	898.2	885.6	893.2	888.9	902.8	939.3	736.2	662.1	588.7
15°	719.5	931.4	872.4	866.9	866.9	870.7	876.3	935.3	721.9	639.4	554.0
17.5°	696.8	905.8	854.4	827.1	824.2	829.2	860.9	912.4	701.5	614.3	520.4
20°	678.5	888.1	836.1	804.1	817.2	805.7	843.2	892.9	686.4	598.6	499.6
22.5°	662.1	866.2	812.8	799.2	816.6	799.5	819.3	870.9	668.8	580.9	483.9
25°	634.4	829.3	777.8	790.6	796.7	790.6	781.0	832.6	641.5	558.3	467.3
27.5°	606.8	790.5	751.7	760.2	741.4	755.9	755.9	790.7	613.4	531.9	462.3
30°	584.7	763.5	738.4	725.9	696.6	719.8	743.9	763.7	592.6	514.8	461.0
32.5°	555.7	738.8	725.2	682.0	663.2	679.0	731.3	738.3	560.5	499.3	459.8
35°	506.7	704.0	701.4	630.0	610.7	625.4	706.9	702.2	494.1	474.9	450.0
37.5°	441.0	672.9	655.8	577.4	546.8	573.6	661.0	669.6	415.6	452.5	427.1
40°	386.2	652.0	621.8	538.4	508.3	534.5	625.7	650.2	372.8	436.7	401.9
42.5°	355.3	633.4	585.8	497.0	311.0	490.7	589.8	631.1	346.3	416.4	379.8
45°	323.9	599.8	533.5	275.1	174.2	262.0	534.3	591.3	327.0	385.6	346.0
47.5°	310.2	558.3	478.8	165.7	147.1	160.9	478.4	549.2	310.3	354.7	313.6
50°	299.5	532.2	439.7	146.0	120.6	140.6	440.5	523.6	293.9	334.0	291.6
52.5°	281.8	501.0	383.6	121.0	104.2	118.1	374.3	491.1	276.9	311.4	263.8
55°	252.2	441.0	160.0	95.1	83.5	91.2	152.1	426.1	243.5	275.9	231.7
57.5°	220.8	375.4	112.2	74.0	64.8	73.3	111.4	360.3	216.7	233.7	202.1
60°	202.5	331.2	91.4	62.1	56.0	61.3	90.6	318.1	201.0	205.6	175.0
62.5°	184.2	286.4	75.7	54.6	52.8	53.9	75.5	272.0	181.4	181.7	123.3
65°	157.6	216.9	56.0	49.6	48.9	48.9	54.4	209.2	154.5	149.8	70.9
67.5°	130.5	155.8	44.9	45.7	44.9	44.9	44.1	151.4	127.4	119.5	53.6
70°	113.5	119.6	41.8	42.5	41.8	41.8	41.0	116.5	110.3	92.6	50.4
72.5°	97.1	81.7	38.6	38.8	38.6	38.6	37.8	76.7	93.9	65.1	46.0
75°	73.3	40.9	33.1	33.1	33.1	33.1	32.3	39.3	70.1	42.4	39.4
77.5°	50.9	27.0	27.4	27.3	27.3	26.7	26.6	26.8	47.9	29.3	31.8
80°	37.0	22.4	23.6	22.9	22.9	22.9	22.9	21.6	34.7	24.7	26.8
82.5°	26.3	17.8	19.2	18.4	18.4	18.4	18.4	17.6	24.0	20.1	21.8
85°	12.6	11.8	12.6	11.0	10.2	11.0	11.8	11.8	11.0	13.3	14.2
87.5°	3.8	6.3	6.5	5.9	5.9	5.9	5.8	5.7	3.2	6.9	7.1
90°	0.0	3.4	7.0	10.6	10.6	10.6	7.0	3.4	0.0	3.4	7.0
92.5°	8.4	11.9	15.5	21.9	24.6	21.9	15.5	11.9	8.4	11.9	15.5
95°	28.2	52.3	28.2	31.8	38.7	31.8	28.2	52.3	28.2	52.3	28.2
97.5°	50.0	100.3	207.0	61.1	52.8	61.1	207.0	100.3	50.0	100.3	207.0
100°	66.9	125.4	415.4	122.3	81.0	122.3	415.4	125.4	66.9	125.4	415.4
102.5°	83.8	145.1	561.9	322.7	176.7	322.7	561.9	145.1	83.8	145.1	561.9
105°	109.1	167.7	637.2	814.0	538.6	814.0	637.2	167.7	109.1	167.7	637.2
107.5°	134.5	178.5	608.4	1184.7	1109.7	1184.7	608.4	178.5	134.5	178.5	608.4
110°	151.4	192.7	591.5	1244.9	1337.8	1244.9	591.5	192.7	151.4	192.7	591.5



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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°	168.3	209.6	574.6	1209.7	1366.0	1209.7	574.6	209.6	168.3	209.6	574.6
115°	193.6	234.9	549.2	1141.5	1334.3	1141.5	549.2	234.9	193.6	234.9	549.2
117.5°	219.7	260.3	542.9	1067.7	1266.0	1067.7	542.9	260.3	219.7	260.3	542.9
120°	239.4	277.3	531.6	1011.6	1218.1	1011.6	531.6	277.3	239.4	277.3	531.6
122.5°	253.5	294.1	517.5	963.3	1153.3	963.3	517.5	294.1	253.5	294.1	517.5
125°	278.1	316.0	517.5	905.0	1070.3	905.0	517.5	316.0	278.1	316.0	517.5
127.5°	298.5	337.1	518.2	837.4	1000.5	837.4	518.2	337.1	298.5	337.1	518.2
130°	309.8	351.1	521.0	792.1	947.0	792.1	521.0	351.1	309.8	351.1	521.0
132.5°	323.9	365.2	521.0	771.8	899.2	771.8	521.0	365.2	323.9	365.2	521.0
135°	345.0	382.9	521.0	745.3	855.5	745.3	521.0	382.9	345.0	382.9	521.0
137.5°	362.6	403.2	521.0	716.1	810.4	716.1	521.0	403.2	362.6	403.2	521.0
140°	376.7	414.6	521.0	699.0	785.1	699.0	521.0	414.6	376.7	414.6	521.0
142.5°	390.8	425.9	523.9	679.2	759.7	679.2	523.9	425.9	390.8	425.9	523.9
145°	408.4	442.8	524.6	649.4	718.2	649.4	524.6	442.8	408.4	442.8	524.6
147.5°	429.5	459.8	528.8	627.9	680.9	627.9	528.8	459.8	429.5	459.8	528.8
150°	443.6	471.1	531.6	613.6	658.3	613.6	531.6	471.1	443.6	471.1	531.6
152.5°	457.7	482.5	531.6	602.1	638.6	602.1	531.6	482.5	457.7	482.5	531.6
155°	478.8	496.0	535.1	588.6	616.1	588.6	535.1	496.0	478.8	496.0	535.1
157.5°	495.7	512.2	539.4	579.9	599.9	579.9	539.4	512.2	495.7	512.2	539.4
160°	507.0	520.7	542.2	574.2	591.5	574.2	542.2	520.7	507.0	520.7	542.2
162.5°	515.4	529.2	545.0	571.3	583.0	571.3	545.0	529.2	515.4	529.2	545.0
165°	531.6	538.5	549.2	563.5	573.9	563.5	549.2	538.5	531.6	538.5	549.2
167.5°	540.8	547.0	552.7	559.9	566.1	559.9	552.7	547.0	540.8	547.0	552.7
170°	549.2	552.7	552.7	559.9	563.3	559.9	552.7	552.7	549.2	552.7	552.7
172.5°	552.0	558.2	555.5	557.0	560.5	557.0	555.5	558.2	552.0	558.2	555.5
175°	559.8	563.2	559.8	556.2	552.7	556.2	559.8	563.2	559.8	563.2	559.8
177.5°	559.8	562.5	559.8	559.7	557.0	559.7	559.8	562.5	559.8	562.5	559.8
180°	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	724.2	723.6	724.8	735.6	757.5	777.2
5°	659.7	662.0	664.3	682.5	720.7	773.1
7.5°	610.0	606.7	611.9	641.5	688.4	763.6
10°	575.9	568.2	575.9	616.3	671.0	754.2
12.5°	543.7	534.1	546.2	590.4	656.5	741.6
15°	502.2	511.5	506.1	555.6	634.7	719.5
17.5°	512.0	558.6	521.9	525.3	613.1	696.8
20°	535.4	583.2	550.8	505.1	599.2	678.5
22.5°	556.6	592.6	563.3	488.1	585.2	662.1
25°	572.8	603.7	571.3	472.8	565.0	634.4
27.5°	573.7	578.0	574.0	471.6	540.1	606.8
30°	563.0	544.6	561.5	472.8	522.3	584.7
32.5°	532.7	511.8	526.3	470.3	504.4	555.7
35°	489.5	461.8	481.8	457.1	476.7	506.7
37.5°	444.0	408.8	436.6	430.9	453.0	441.0
40°	413.1	351.5	407.0	405.1	440.1	386.2
42.5°	373.6	321.2	368.1	384.3	425.8	355.3
45°	301.7	295.5	298.6	349.1	395.6	323.9
47.5°	275.9	271.7	274.3	317.1	361.3	310.2
50°	260.7	255.3	259.2	296.3	339.5	299.5
52.5°	239.7	225.1	238.2	267.9	316.9	281.8
55°	180.3	136.3	179.5	235.6	283.0	252.2
57.5°	105.8	78.8	103.5	205.1	239.8	220.8
60°	71.6	66.2	72.4	180.5	211.0	202.5
62.5°	65.4	63.7	65.5	125.6	185.3	184.2
65°	59.9	59.1	59.9	72.5	153.0	157.6
67.5°	54.2	53.4	54.8	55.6	120.8	130.5
70°	50.4	49.6	50.4	51.2	92.7	113.5
72.5°	46.0	45.2	46.0	46.8	65.2	97.1
75°	39.4	38.6	39.4	40.2	43.2	73.3
77.5°	31.8	31.8	32.6	32.6	30.3	50.9
80°	26.8	26.8	27.6	27.6	26.3	37.0
82.5°	21.7	21.1	22.5	23.2	21.7	26.3
85°	13.4	12.6	14.2	15.0	14.2	12.6
87.5°	7.1	6.5	7.8	8.3	7.6	3.8
90°	10.6	10.6	10.6	7.0	3.4	0.0
92.5°	21.9	24.6	21.9	15.5	11.9	8.4
95°	31.8	38.7	31.8	28.2	52.3	28.2
97.5°	61.1	52.8	61.1	207.0	100.3	50.0
100°	122.3	81.0	122.3	415.4	125.4	66.9
102.5°	322.7	176.7	322.7	561.9	145.1	83.8
105°	814.0	538.6	814.0	637.2	167.7	109.1
107.5°	1184.7	1109.7	1184.7	608.4	178.5	134.5
110°	1244.9	1337.8	1244.9	591.5	192.7	151.4





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1209.7	1366.0	1209.7	574.6	209.6	168.3
115°	1141.5	1334.3	1141.5	549.2	234.9	193.6
117.5°	1067.7	1266.0	1067.7	542.9	260.3	219.7
120°	1011.6	1218.1	1011.6	531.6	277.3	239.4
122.5°	963.3	1153.3	963.3	517.5	294.1	253.5
125°	905.0	1070.3	905.0	517.5	316.0	278.1
127.5°	837.4	1000.5	837.4	518.2	337.1	298.5
130°	792.1	947.0	792.1	521.0	351.1	309.8
132.5°	771.8	899.2	771.8	521.0	365.2	323.9
135°	745.3	855.5	745.3	521.0	382.9	345.0
137.5°	716.1	810.4	716.1	521.0	403.2	362.6
140°	699.0	785.1	699.0	521.0	414.6	376.7
142.5°	679.2	759.7	679.2	523.9	425.9	390.8
145°	649.4	718.2	649.4	524.6	442.8	408.4
147.5°	627.9	680.9	627.9	528.8	459.8	429.5
150°	613.6	658.3	613.6	531.6	471.1	443.6
152.5°	602.1	638.6	602.1	531.6	482.5	457.7
155°	588.6	616.1	588.6	535.1	496.0	478.8
157.5°	579.9	599.9	579.9	539.4	512.2	495.7
160°	574.2	591.5	574.2	542.2	520.7	507.0
162.5°	571.3	583.0	571.3	545.0	529.2	515.4
165°	563.5	573.9	563.5	549.2	538.5	531.6
167.5°	559.9	566.1	559.9	552.7	547.0	540.8
170°	559.9	563.3	559.9	552.7	552.7	549.2
172.5°	557.0	560.5	557.0	555.5	558.2	552.0
175°	556.2	552.7	556.2	559.8	563.2	559.8
177.5°	559.7	557.0	559.7	559.8	562.5	559.8
180°	559.8	559.8	559.8	559.8	559.8	559.8

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