

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: P621627

Luminaire Tested: VLT-FA-075U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621627
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-840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

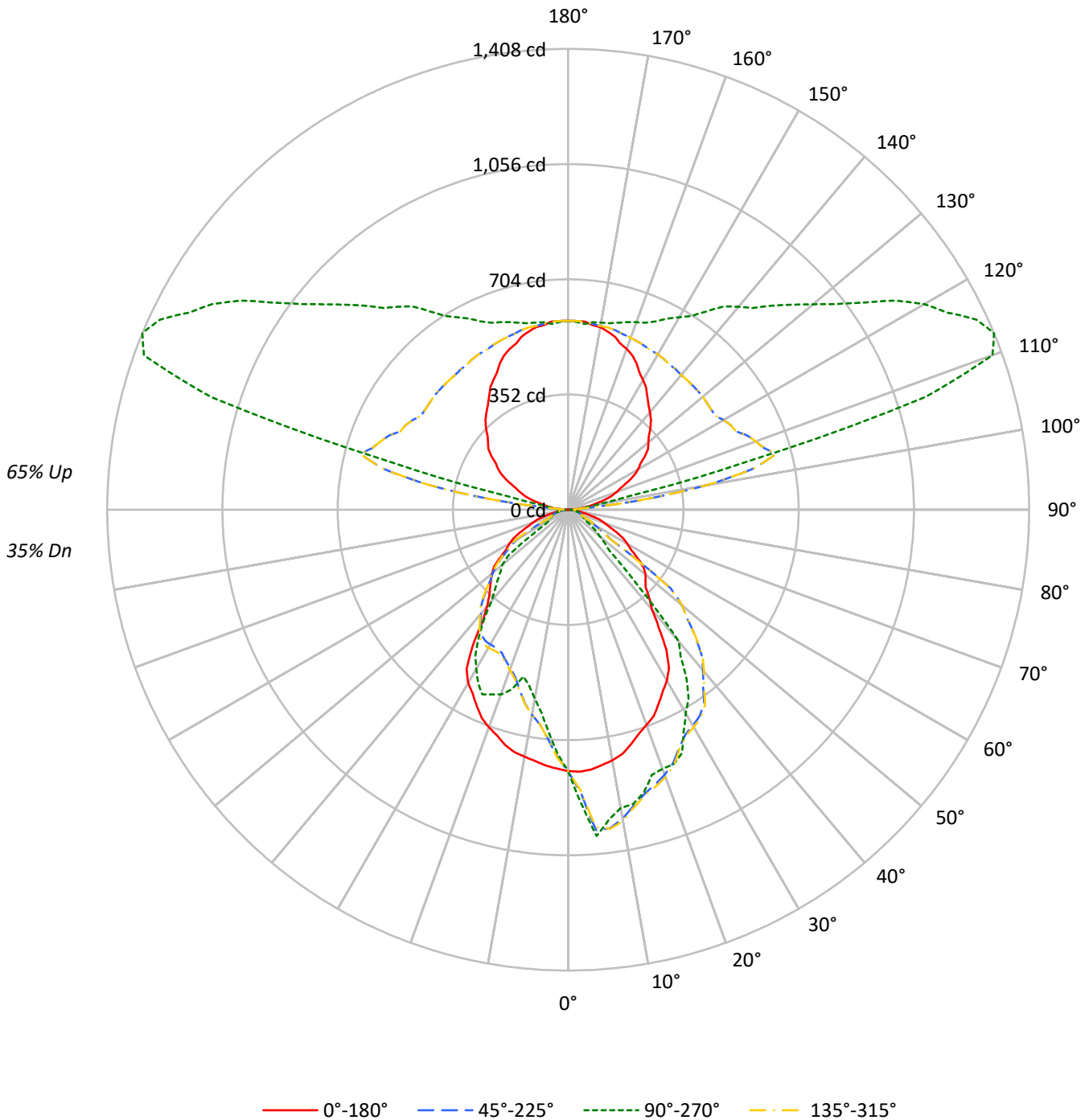
Lumens per Lamp: N/A
Luminaire Lumens: 4747.2 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.2
Input Voltage (V): 120
Input Current (A_{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			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	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°	5730	5730	5730	5730
5°	5740	7208	5652	4915
10°	5665	6742	5582	4268
15°	5509	6638	5528	3917
20°	5341	6432	5403	4590
25°	5177	6502	5235	4926
30°	4994	5950	5061	4651
35°	4575	5515	4462	4170
40°	3728	4908	3599	3394
45°	3389	1822	3421	3091
50°	3446	1388	3383	2938
55°	3252	1077	3140	1758
60°	2997	828	2972	979
65°	2759	856	2703	1034
70°	2455	904	2386	1074
75°	2093	945	2005	1103
80°	1579	975	1475	1141
85°	1070	873	939	1070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6274 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	1.6
10°-20°	211.0	4.4
20°-30°	315.7	6.7
30°-40°	359.1	7.6
40°-50°	307.1	6.5
50°-60°	207.1	4.4
60°-70°	106.9	2.3
70°-80°	48.3	1.0
80°-90°	15.7	0.3
90°-100°	70.9	1.5
100°-110°	505.5	10.6
110°-120°	686.3	14.5
120°-130°	558.6	11.8
130°-140°	449.3	9.5
140°-150°	354.2	7.5
150°-160°	259.0	5.5
160°-170°	160.9	3.4
170°-180°	54.9	1.2
0°-30°	603.8	12.7
0°-40°	962.8	20.3
0°-60°	1477.0	31.1
0°-90°	1647.8	34.7
90°-120°	1262.7	26.6
90°-150°	2624.7	55.3
90°-180°	3099.0	65.3
0°-180°	4747.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	798	798	798	798	798	
5°	797	1001	785	682	797	75
15°	742	894	744	527	742	209
25°	654	821	661	622	654	301
35°	522	630	509	476	522	319
45°	334	180	337	305	334	265
55°	260	86	251	140	260	232
65°	162	50	159	61	162	161
75°	76	34	72	40	76	81
85°	13	11	11	13	13	17
90°	0	11	0	11	0	2
95°	29	40	29	40	29	32
105°	112	555	112	555	112	119
115°	200	1375	200	1375	200	198
125°	287	1103	287	1103	287	255
135°	356	882	356	882	356	274
145°	421	740	421	740	421	264
155°	494	635	494	635	494	227
165°	548	592	548	592	548	154
175°	577	570	577	570	577	55
180°	577	577	577	577	577	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	801.1	828.4	862.8	886.4	896.6	886.4	857.0	828.2	792.0	781.2	755.6
5°	796.9	881.0	982.9	995.2	1000.7	995.2	973.9	876.0	784.7	745.8	703.4
7.5°	787.1	934.4	981.7	954.3	954.4	959.5	983.2	929.8	774.4	713.3	661.4
10°	777.4	964.0	957.7	918.1	925.2	922.0	965.0	958.2	766.0	695.3	636.0
12.5°	764.4	973.3	925.8	912.9	920.7	916.2	930.6	968.2	758.8	682.4	606.8
15°	741.6	960.0	899.2	893.5	893.5	897.5	903.3	964.1	744.1	659.1	571.0
17.5°	718.2	933.6	880.7	852.5	849.5	854.7	887.3	940.4	723.1	633.2	536.4
20°	699.4	915.4	861.8	828.8	842.3	830.4	869.2	920.4	707.5	617.0	515.0
22.5°	682.5	892.8	837.8	823.7	841.7	824.1	844.5	897.7	689.3	598.8	498.7
25°	653.9	854.8	801.7	814.9	821.2	814.9	805.0	858.2	661.2	575.4	481.7
27.5°	625.5	814.8	774.8	783.6	764.2	779.1	779.1	815.0	632.3	548.3	476.5
30°	602.7	787.0	761.1	748.2	718.1	741.9	766.8	787.2	610.8	530.6	475.2
32.5°	572.8	761.5	747.5	703.0	683.6	699.8	753.8	761.0	577.7	514.6	473.9
35°	522.3	725.6	722.9	649.4	629.5	644.6	728.6	723.8	509.3	489.5	463.8
37.5°	454.6	693.6	676.0	595.2	563.6	591.2	681.3	690.2	428.4	466.4	440.3
40°	398.0	672.0	640.9	554.9	523.9	550.9	645.0	670.1	384.2	450.1	414.3
42.5°	366.2	652.9	603.9	512.3	320.5	505.7	607.9	650.5	356.9	429.2	391.5
45°	333.9	618.2	549.9	283.6	179.5	270.1	550.7	609.5	337.1	397.5	356.6
47.5°	319.7	575.5	493.5	170.8	151.6	165.9	493.1	566.1	319.9	365.6	323.3
50°	308.7	548.5	453.3	150.5	124.3	144.9	454.1	539.7	303.0	344.3	300.5
52.5°	290.5	516.4	395.4	124.7	107.4	121.7	385.8	506.2	285.4	321.0	272.0
55°	259.9	454.5	164.9	98.0	86.1	94.0	156.8	439.2	251.0	284.4	238.8
57.5°	227.6	386.9	115.7	76.3	66.8	75.5	114.9	371.4	223.4	240.9	208.3
60°	208.8	341.4	94.2	64.0	57.7	63.2	93.4	327.9	207.1	211.9	180.3
62.5°	189.9	295.2	78.0	56.3	54.4	55.5	77.8	280.4	187.0	187.3	127.0
65°	162.5	223.6	57.7	51.2	50.4	50.4	56.0	215.6	159.2	154.4	73.1
67.5°	134.5	160.6	46.3	47.1	46.3	46.3	45.5	156.0	131.3	123.2	55.2
70°	117.0	123.3	43.1	43.8	43.1	43.1	42.2	120.1	113.7	95.5	52.0
72.5°	100.1	84.2	39.8	40.0	39.8	39.8	39.0	79.0	96.8	67.1	47.4
75°	75.5	42.2	34.1	34.1	34.1	34.1	33.3	40.5	72.3	43.7	40.6
77.5°	52.5	27.9	28.3	28.1	28.1	27.5	27.5	27.6	49.4	30.2	32.8
80°	38.2	23.1	24.4	23.6	23.6	23.6	23.6	22.2	35.7	25.4	27.6
82.5°	27.1	18.4	19.8	19.0	19.0	19.0	19.0	18.2	24.7	20.7	22.4
85°	13.0	12.2	13.0	11.4	10.6	11.4	12.2	12.2	11.4	13.8	14.6
87.5°	3.9	6.5	6.7	6.1	6.1	6.1	6.0	5.9	3.2	7.1	7.3
90°	0.0	3.5	7.3	10.9	10.9	10.9	7.3	3.5	0.0	3.5	7.3
92.5°	8.7	12.3	16.0	22.6	25.4	22.6	16.0	12.3	8.7	12.3	16.0
95°	29.0	53.9	29.0	32.8	39.9	32.8	29.0	53.9	29.0	53.9	29.0
97.5°	51.5	103.3	213.4	62.9	54.4	62.9	213.4	103.3	51.5	103.3	213.4
100°	68.9	129.3	428.2	126.0	83.5	126.0	428.2	129.3	68.9	129.3	428.2
102.5°	86.4	149.5	579.2	332.6	182.2	332.6	579.2	149.5	86.4	149.5	579.2
105°	112.5	172.8	656.8	839.1	555.2	839.1	656.8	172.8	112.5	172.8	656.8
107.5°	138.6	184.0	627.1	1221.2	1143.8	1221.2	627.1	184.0	138.6	184.0	627.1
110°	156.0	198.6	609.6	1283.1	1378.9	1283.1	609.6	198.6	156.0	198.6	609.6



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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°	173.5	216.0	592.2	1246.9	1408.0	1246.9	592.2	216.0	173.5	216.0	592.2
115°	199.6	242.2	566.1	1176.6	1375.3	1176.6	566.1	242.2	199.6	242.2	566.1
117.5°	226.4	268.3	559.6	1100.5	1304.9	1100.5	559.6	268.3	226.4	268.3	559.6
120°	246.8	285.8	548.0	1042.7	1255.6	1042.7	548.0	285.8	246.8	285.8	548.0
122.5°	261.3	303.1	533.4	992.9	1188.8	992.9	533.4	303.1	261.3	303.1	533.4
125°	286.7	325.7	533.4	932.8	1103.2	932.8	533.4	325.7	286.7	325.7	533.4
127.5°	307.7	347.5	534.2	863.1	1031.3	863.1	534.2	347.5	307.7	347.5	534.2
130°	319.3	361.9	537.1	816.5	976.2	816.5	537.1	361.9	319.3	361.9	537.1
132.5°	333.9	376.4	537.1	795.5	926.8	795.5	537.1	376.4	333.9	376.4	537.1
135°	355.6	394.7	537.1	768.3	881.8	768.3	537.1	394.7	355.6	394.7	537.1
137.5°	373.8	415.6	537.1	738.1	835.4	738.1	537.1	415.6	373.8	415.6	537.1
140°	388.3	427.3	537.1	720.5	809.2	720.5	537.1	427.3	388.3	427.3	537.1
142.5°	402.8	439.0	540.0	700.1	783.1	700.1	540.0	439.0	402.8	439.0	540.0
145°	420.9	456.4	540.7	669.3	740.3	669.3	540.7	456.4	420.9	456.4	540.7
147.5°	442.7	473.9	545.0	647.2	701.8	647.2	545.0	473.9	442.7	473.9	545.0
150°	457.2	485.6	548.0	632.5	678.6	632.5	548.0	485.6	457.2	485.6	548.0
152.5°	471.7	497.3	548.0	620.7	658.3	620.7	548.0	497.3	471.7	497.3	548.0
155°	493.5	511.3	551.6	606.7	635.0	606.7	551.6	511.3	493.5	511.3	551.6
157.5°	510.9	528.0	555.9	597.8	618.3	597.8	555.9	528.0	510.9	528.0	555.9
160°	522.5	536.7	558.8	591.9	609.6	591.9	558.8	536.7	522.5	536.7	558.8
162.5°	531.3	545.5	561.7	588.9	600.9	588.9	561.7	545.5	531.3	545.5	561.7
165°	548.0	555.0	566.1	580.9	591.5	580.9	566.1	555.0	548.0	555.0	566.1
167.5°	557.4	563.8	569.7	577.1	583.5	577.1	569.7	563.8	557.4	563.8	569.7
170°	566.1	569.6	569.7	577.1	580.6	577.1	569.7	569.6	566.1	569.6	569.7
172.5°	569.0	575.4	572.6	574.2	577.7	574.2	572.6	575.4	569.0	575.4	572.6
175°	577.0	580.5	577.0	573.3	569.7	573.3	577.0	580.5	577.0	580.5	577.0
177.5°	577.0	579.8	577.0	576.9	574.1	576.9	577.0	579.8	577.0	579.8	577.0
180°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	746.5	745.8	747.1	758.2	780.7	801.1
5°	679.9	682.3	684.7	703.4	742.8	796.9
7.5°	628.8	625.3	630.7	661.2	709.6	787.1
10°	593.6	585.7	593.6	635.2	691.6	777.4
12.5°	560.4	550.6	563.0	608.6	676.7	764.4
15°	517.6	527.2	521.6	572.7	654.3	741.6
17.5°	527.8	575.8	537.9	541.5	632.0	718.2
20°	551.9	601.1	567.7	520.7	617.6	699.4
22.5°	573.7	610.8	580.7	503.1	603.2	682.5
25°	590.4	622.2	588.9	487.4	582.4	653.9
27.5°	591.3	595.7	591.6	486.1	556.7	625.5
30°	580.4	561.3	578.8	487.4	538.4	602.7
32.5°	549.1	527.5	542.4	484.8	519.9	572.8
35°	504.6	476.0	496.7	471.1	491.3	522.3
37.5°	457.6	421.4	450.0	444.2	466.9	454.6
40°	425.8	362.3	419.5	417.5	453.6	398.0
42.5°	385.1	331.1	379.4	396.1	438.9	366.2
45°	311.0	304.6	307.8	359.8	407.7	333.9
47.5°	284.4	280.1	282.8	326.9	372.5	319.7
50°	268.7	263.2	267.2	305.4	350.0	308.7
52.5°	247.1	232.0	245.5	276.2	326.7	290.5
55°	185.8	140.5	185.0	242.9	291.7	259.9
57.5°	109.0	81.2	106.6	211.4	247.1	227.6
60°	73.8	68.2	74.6	186.0	217.5	208.8
62.5°	67.4	65.6	67.5	129.5	191.0	189.9
65°	61.7	60.9	61.7	74.7	157.7	162.5
67.5°	55.9	55.1	56.5	57.3	124.5	134.5
70°	52.0	51.2	52.0	52.8	95.5	117.0
72.5°	47.4	46.6	47.4	48.3	67.2	100.1
75°	40.6	39.8	40.6	41.4	44.6	75.5
77.5°	32.8	32.8	33.6	33.6	31.2	52.5
80°	27.6	27.6	28.4	28.4	27.1	38.2
82.5°	22.4	21.8	23.2	23.9	22.4	27.1
85°	13.8	13.0	14.6	15.4	14.6	13.0
87.5°	7.4	6.7	8.0	8.6	7.8	3.9
90°	10.9	10.9	10.9	7.3	3.5	0.0
92.5°	22.6	25.4	22.6	16.0	12.3	8.7
95°	32.8	39.9	32.8	29.0	53.9	29.0
97.5°	62.9	54.4	62.9	213.4	103.3	51.5
100°	126.0	83.5	126.0	428.2	129.3	68.9
102.5°	332.6	182.2	332.6	579.2	149.5	86.4
105°	839.1	555.2	839.1	656.8	172.8	112.5
107.5°	1221.2	1143.8	1221.2	627.1	184.0	138.6
110°	1283.1	1378.9	1283.1	609.6	198.6	156.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1246.9	1408.0	1246.9	592.2	216.0	173.5
115°	1176.6	1375.3	1176.6	566.1	242.2	199.6
117.5°	1100.5	1304.9	1100.5	559.6	268.3	226.4
120°	1042.7	1255.6	1042.7	548.0	285.8	246.8
122.5°	992.9	1188.8	992.9	533.4	303.1	261.3
125°	932.8	1103.2	932.8	533.4	325.7	286.7
127.5°	863.1	1031.3	863.1	534.2	347.5	307.7
130°	816.5	976.2	816.5	537.1	361.9	319.3
132.5°	795.5	926.8	795.5	537.1	376.4	333.9
135°	768.3	881.8	768.3	537.1	394.7	355.6
137.5°	738.1	835.4	738.1	537.1	415.6	373.8
140°	720.5	809.2	720.5	537.1	427.3	388.3
142.5°	700.1	783.1	700.1	540.0	439.0	402.8
145°	669.3	740.3	669.3	540.7	456.4	420.9
147.5°	647.2	701.8	647.2	545.0	473.9	442.7
150°	632.5	678.6	632.5	548.0	485.6	457.2
152.5°	620.7	658.3	620.7	548.0	497.3	471.7
155°	606.7	635.0	606.7	551.6	511.3	493.5
157.5°	597.8	618.3	597.8	555.9	528.0	510.9
160°	591.9	609.6	591.9	558.8	536.7	522.5
162.5°	588.9	600.9	588.9	561.7	545.5	531.3
165°	580.9	591.5	580.9	566.1	555.0	548.0
167.5°	577.1	583.5	577.1	569.7	563.8	557.4
170°	577.1	580.6	577.1	569.7	569.6	566.1
172.5°	574.2	577.7	574.2	572.6	575.4	569.0
175°	573.3	569.7	573.3	577.0	580.5	577.0
177.5°	576.9	574.1	576.9	577.0	579.8	577.0
180°	577.0	577.0	577.0	577.0	577.0	577.0

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