

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: P621699

Luminaire Tested: VLT-FA-125U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621699
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-125U-050D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

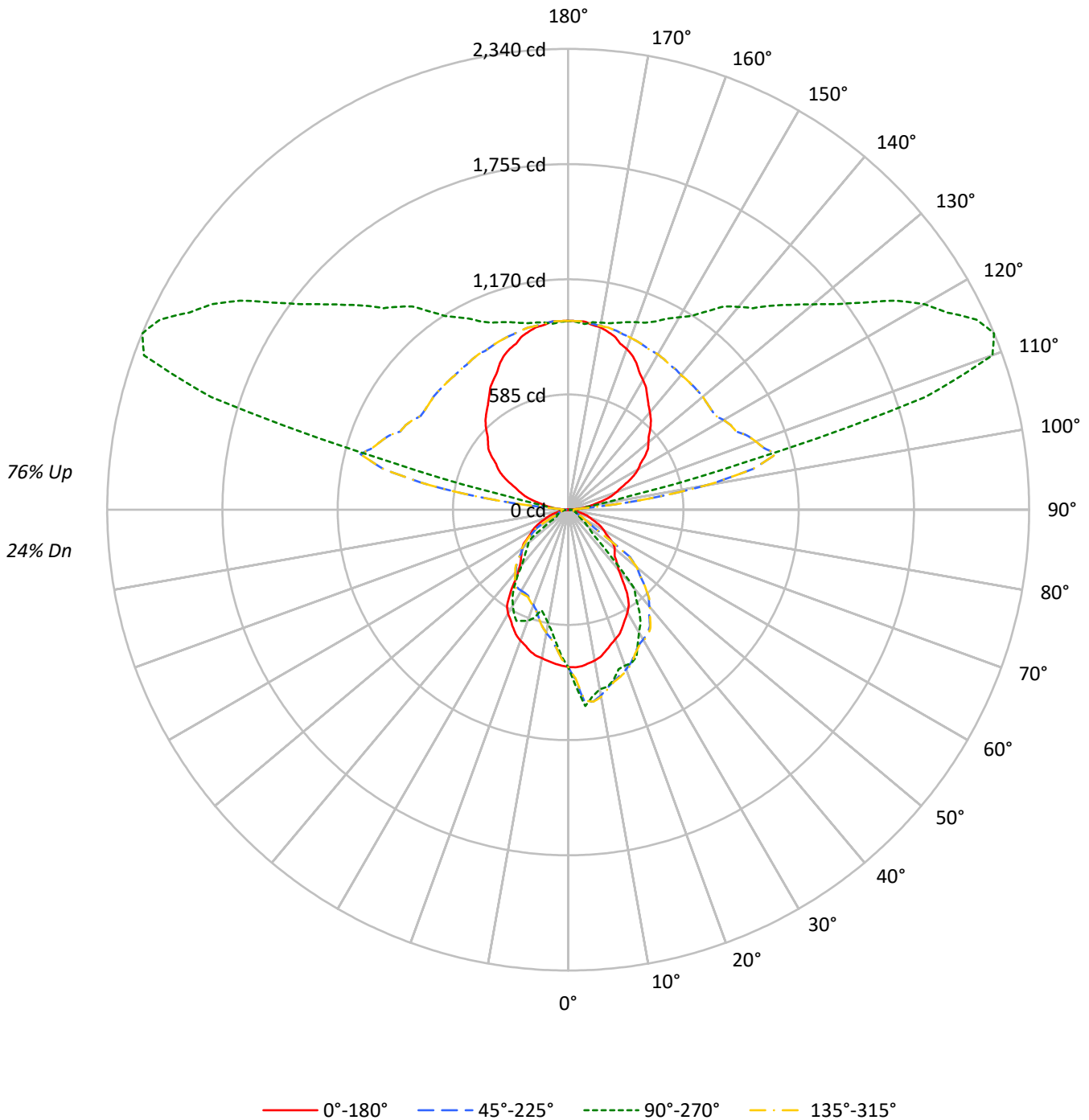
Lumens per Lamp: N/A
Luminaire Lumens: 6799.2 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.6
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	0
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69		50	50	50		32	32	32	24
1	92	88	85	82	82	79	76	73	61	59	57		44	43	42		29	29	28	21
2	84	78	72	67	75	69	65	61	54	51	48		39	38	36		26	25	24	18
3	77	68	62	56	69	61	56	51	48	44	41		35	33	31		24	22	21	16
4	71	61	53	48	63	54	48	43	43	38	35		32	29	27		21	20	18	14
5	65	54	47	41	58	49	42	37	38	34	30		28	25	23		19	18	16	12
6	60	48	41	36	53	44	37	32	34	30	26		26	23	20		18	16	14	11
7	55	44	36	31	49	39	33	28	31	27	23		23	20	18		16	14	13	10
8	51	40	32	27	46	36	29	25	28	24	21		21	18	16		15	13	12	9
9	48	36	29	24	42	33	26	22	26	21	18		20	17	14		14	12	11	8
10	44	33	26	22	40	30	24	20	24	19	16		18	15	13		13	11	10	8

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	1.1
10°-20°	211.0	3.1
20°-30°	315.7	4.6
30°-40°	359.1	5.3
40°-50°	307.1	4.5
50°-60°	207.1	3.0
60°-70°	106.9	1.6
70°-80°	48.3	0.7
80°-90°	16.5	0.2
90°-100°	117.9	1.7
100°-110°	840.0	12.4
110°-120°	1140.5	16.8
120°-130°	928.2	13.7
130°-140°	746.5	11.0
140°-150°	588.6	8.7
150°-160°	430.4	6.3
160°-170°	267.3	3.9
170°-180°	91.2	1.3
0°-30°	603.8	8.9
0°-40°	962.8	14.2
0°-60°	1477.0	21.7
0°-90°	1648.7	24.2
90°-120°	2098.4	30.9
90°-150°	4361.7	64.2
90°-180°	5150.0	75.7
0°-180°	6799.2	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	18	0	18	0	3
95°	48	66	48	66	48	54
105°	187	923	187	923	187	197
115°	332	2286	332	2286	332	329
125°	476	1833	476	1833	476	423
135°	591	1465	591	1465	591	455
145°	700	1230	700	1230	700	439
155°	820	1055	820	1055	820	376
165°	911	983	911	983	911	256
175°	959	947	959	947	959	91
180°	959	959	959	959	959	



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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	7.0	7.6	7.5	7.5	7.5	7.0	6.3	3.2	7.6	8.3
90°	0.0	5.9	12.1	18.1	18.1	18.1	12.1	5.9	0.0	5.9	12.1
92.5°	14.5	20.4	26.5	37.5	42.2	37.5	26.5	20.4	14.5	20.4	26.5
95°	48.2	89.5	48.2	54.5	66.3	54.5	48.2	89.5	48.2	89.5	48.2
97.5°	85.6	171.7	354.6	104.6	90.5	104.6	354.6	171.7	85.6	171.7	354.6
100°	114.6	214.8	711.6	209.5	138.7	209.5	711.6	214.8	114.6	214.8	711.6
102.5°	143.5	248.5	962.4	552.7	302.7	552.7	962.4	248.5	143.5	248.5	962.4
105°	186.9	287.2	1091.5	1394.3	922.6	1394.3	1091.5	287.2	186.9	287.2	1091.5
107.5°	230.4	305.8	1042.0	2029.3	1900.7	2029.3	1042.0	305.8	230.4	305.8	1042.0
110°	259.3	330.1	1013.1	2132.3	2291.5	2132.3	1013.1	330.1	259.3	330.1	1013.1



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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°	288.2	359.0	984.1	2072.1	2339.7	2072.1	984.1	359.0	288.2	359.0	984.1
115°	331.7	402.4	940.7	1955.3	2285.5	1955.3	940.7	402.4	331.7	402.4	940.7
117.5°	376.3	445.9	929.9	1828.9	2168.5	1828.9	929.9	445.9	376.3	445.9	929.9
120°	410.1	474.9	910.6	1732.7	2086.5	1732.7	910.6	474.9	410.1	474.9	910.6
122.5°	434.2	503.8	886.4	1650.0	1975.5	1650.0	886.4	503.8	434.2	503.8	886.4
125°	476.4	541.2	886.4	1550.2	1833.2	1550.2	886.4	541.2	476.4	541.2	886.4
127.5°	511.4	577.4	887.7	1434.3	1713.8	1434.3	887.7	577.4	511.4	577.4	887.7
130°	530.7	601.4	892.5	1356.8	1622.1	1356.8	892.5	601.4	530.7	601.4	892.5
132.5°	554.8	625.5	892.5	1322.0	1540.1	1322.0	892.5	625.5	554.8	625.5	892.5
135°	591.0	655.8	892.5	1276.7	1465.4	1276.7	892.5	655.8	591.0	655.8	892.5
137.5°	621.1	690.7	892.5	1226.6	1388.2	1226.6	892.5	690.7	621.1	690.7	892.5
140°	645.2	710.1	892.5	1197.3	1344.7	1197.3	892.5	710.1	645.2	710.1	892.5
142.5°	669.4	729.5	897.3	1163.4	1301.3	1163.4	897.3	729.5	669.4	729.5	897.3
145°	699.5	758.5	898.5	1112.2	1230.2	1112.2	898.5	758.5	699.5	758.5	898.5
147.5°	735.7	787.6	905.7	1075.5	1166.3	1075.5	905.7	787.6	735.7	787.6	905.7
150°	759.8	807.0	910.6	1051.0	1127.7	1051.0	910.6	807.0	759.8	807.0	910.6
152.5°	783.9	826.4	910.6	1031.4	1093.9	1031.4	910.6	826.4	783.9	826.4	910.6
155°	820.1	849.6	916.6	1008.1	1055.3	1008.1	916.6	849.6	820.1	849.6	916.6
157.5°	849.1	877.4	923.8	993.4	1027.6	993.4	923.8	877.4	849.1	877.4	923.8
160°	868.4	891.9	928.7	983.6	1013.1	983.6	928.7	891.9	868.4	891.9	928.7
162.5°	882.8	906.4	933.5	978.6	998.6	978.6	933.5	906.4	882.8	906.4	933.5
165°	910.6	922.4	940.7	965.2	982.9	965.2	940.7	922.4	910.6	922.4	940.7
167.5°	926.2	936.9	946.8	959.1	969.7	959.1	946.8	936.9	926.2	936.9	946.8
170°	940.7	946.6	946.8	958.9	964.8	958.9	946.8	946.6	940.7	946.6	946.8
172.5°	945.5	956.2	951.6	954.1	960.0	954.1	951.6	956.2	945.5	956.2	951.6
175°	958.8	964.7	958.8	952.6	946.8	952.6	958.8	964.7	958.8	964.7	958.8
177.5°	958.8	963.5	958.8	958.7	954.0	958.7	958.8	963.5	958.8	963.5	958.8
180°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8



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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°	8.8	8.2	9.4	9.6	8.3	3.9
90°	18.1	18.1	18.1	12.1	5.9	0.0
92.5°	37.5	42.2	37.5	26.5	20.4	14.5
95°	54.5	66.3	54.5	48.2	89.5	48.2
97.5°	104.6	90.5	104.6	354.6	171.7	85.6
100°	209.5	138.7	209.5	711.6	214.8	114.6
102.5°	552.7	302.7	552.7	962.4	248.5	143.5
105°	1394.3	922.6	1394.3	1091.5	287.2	186.9
107.5°	2029.3	1900.7	2029.3	1042.0	305.8	230.4
110°	2132.3	2291.5	2132.3	1013.1	330.1	259.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2072.1	2339.7	2072.1	984.1	359.0	288.2
115°	1955.3	2285.5	1955.3	940.7	402.4	331.7
117.5°	1828.9	2168.5	1828.9	929.9	445.9	376.3
120°	1732.7	2086.5	1732.7	910.6	474.9	410.1
122.5°	1650.0	1975.5	1650.0	886.4	503.8	434.2
125°	1550.2	1833.2	1550.2	886.4	541.2	476.4
127.5°	1434.3	1713.8	1434.3	887.7	577.4	511.4
130°	1356.8	1622.1	1356.8	892.5	601.4	530.7
132.5°	1322.0	1540.1	1322.0	892.5	625.5	554.8
135°	1276.7	1465.4	1276.7	892.5	655.8	591.0
137.5°	1226.6	1388.2	1226.6	892.5	690.7	621.1
140°	1197.3	1344.7	1197.3	892.5	710.1	645.2
142.5°	1163.4	1301.3	1163.4	897.3	729.5	669.4
145°	1112.2	1230.2	1112.2	898.5	758.5	699.5
147.5°	1075.5	1166.3	1075.5	905.7	787.6	735.7
150°	1051.0	1127.7	1051.0	910.6	807.0	759.8
152.5°	1031.4	1093.9	1031.4	910.6	826.4	783.9
155°	1008.1	1055.3	1008.1	916.6	849.6	820.1
157.5°	993.4	1027.6	993.4	923.8	877.4	849.1
160°	983.6	1013.1	983.6	928.7	891.9	868.4
162.5°	978.6	998.6	978.6	933.5	906.4	882.8
165°	965.2	982.9	965.2	940.7	922.4	910.6
167.5°	959.1	969.7	959.1	946.8	936.9	926.2
170°	958.9	964.8	958.9	946.8	946.6	940.7
172.5°	954.1	960.0	954.1	951.6	956.2	945.5
175°	952.6	946.8	952.6	958.8	964.7	958.8
177.5°	958.7	954.0	958.7	958.8	963.5	958.8
180°	958.8	958.8	958.8	958.8	958.8	958.8

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