

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: P621725

Luminaire Tested: VLT-FA-150U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621725
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-150U-050D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

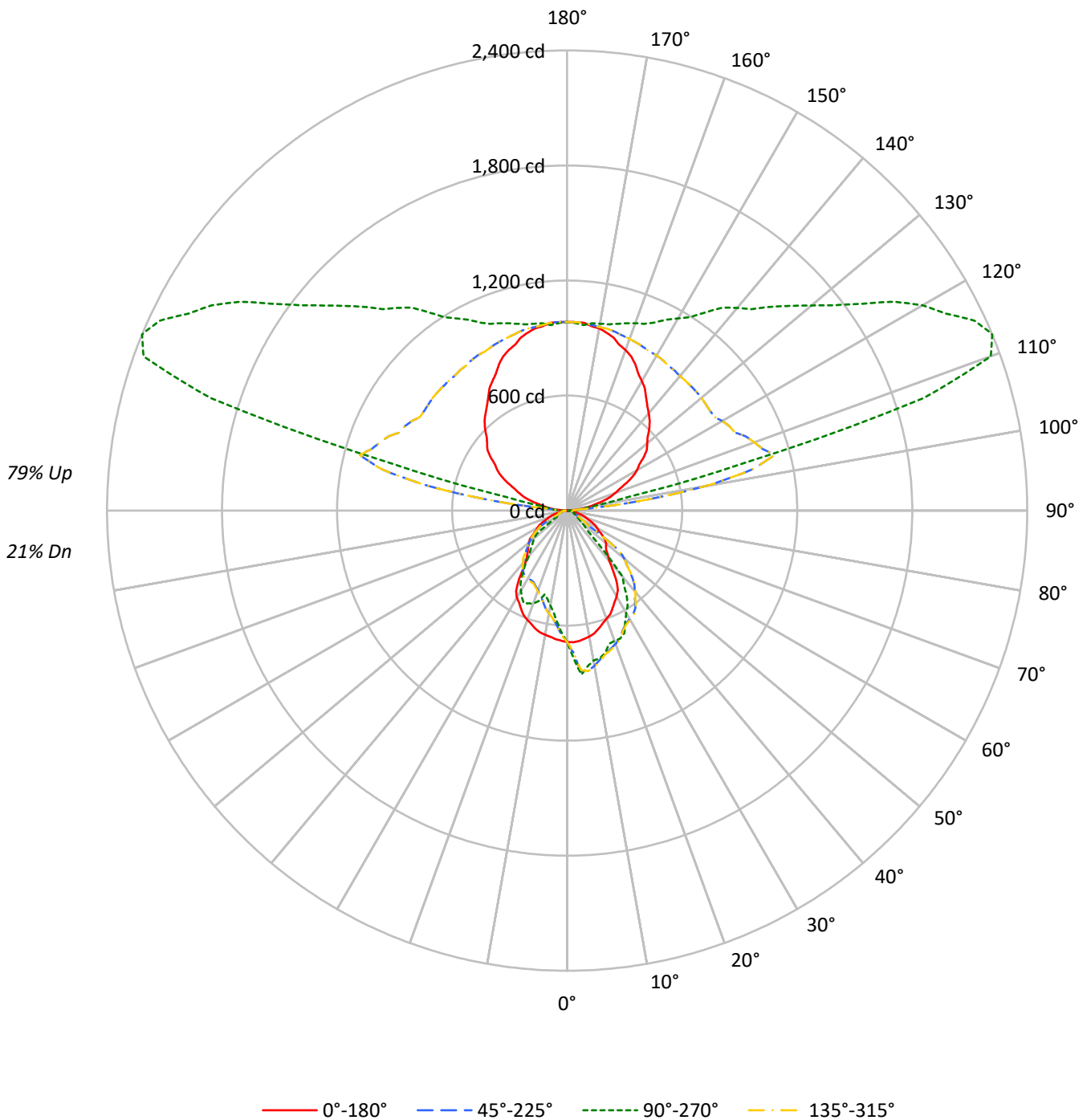
Lumens per Lamp: N/A
Luminaire Lumens: 6698.6 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	18
2	84	77	71	67	74	68	64	60	52	49	47	38	36	34	24	23	22	16
3	77	68	61	56	68	60	55	50	46	43	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	24	21	19	16	14	13	10
7	55	43	36	31	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	24	27	23	20	20	17	15	13	12	10	8
9	47	36	28	24	42	32	26	22	25	21	18	19	16	13	12	11	9	7
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4917	4917	4917	4917
5°	4926	6186	4850	4218
10°	4860	5785	4790	3662
15°	4728	5696	4743	3361
20°	4583	5520	4636	3939
25°	4443	5580	4493	4227
30°	4286	5106	4343	3991
35°	3926	4732	3828	3578
40°	3199	4212	3088	2912
45°	2907	1563	2936	2653
50°	2957	1190	2903	2521
55°	2790	925	2695	1509
60°	2570	710	2550	840
65°	2367	734	2319	888
70°	2106	774	2048	921
75°	1797	812	1719	948
80°	1355	835	1269	979
85°	922	749	807	922

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 5384 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	1.0
10°-20°	181.1	2.7
20°-30°	270.9	4.0
30°-40°	308.1	4.6
40°-50°	263.5	3.9
50°-60°	177.7	2.7
60°-70°	91.7	1.4
70°-80°	41.4	0.6
80°-90°	14.5	0.2
90°-100°	120.9	1.8
100°-110°	861.8	12.9
110°-120°	1169.9	17.5
120°-130°	952.2	14.2
130°-140°	765.8	11.4
140°-150°	603.8	9.0
150°-160°	441.5	6.6
160°-170°	274.2	4.1
170°-180°	93.5	1.4
0°-30°	518.1	7.7
0°-40°	826.2	12.3
0°-60°	1267.4	18.9
0°-90°	1415.0	21.1
90°-120°	2152.6	32.1
90°-150°	4474.4	66.8
90°-180°	5284.0	78.9
0°-180°	6698.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	685	685	685	685	685	
5°	684	859	673	586	684	65
15°	636	767	638	452	636	179
25°	561	705	567	534	561	258
35°	448	540	437	408	448	274
45°	286	154	289	261	286	227
55°	223	74	215	121	223	199
65°	139	43	137	52	139	138
75°	65	29	62	34	65	69
85°	11	9	10	11	11	14
90°	0	19	0	19	0	2
95°	50	68	50	68	50	55
105°	192	946	192	946	192	202
115°	340	2344	340	2344	340	338
125°	489	1881	489	1881	489	434
135°	606	1503	606	1503	606	466
145°	718	1262	718	1262	718	451
155°	841	1083	841	1083	841	386
165°	934	1008	934	1008	934	262
175°	984	971	984	971	984	93
180°	984	984	984	984	984	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2
2.5°	687.4	710.8	740.4	760.6	769.4	760.6	735.3	710.7	679.6	670.3	648.4
5°	683.8	756.0	843.4	853.9	858.7	853.9	835.7	751.7	673.3	639.9	603.6
7.5°	675.4	801.8	842.4	818.8	819.0	823.3	843.7	797.8	664.5	612.0	567.5
10°	667.0	827.2	821.8	787.8	793.9	791.2	828.0	822.2	657.3	596.6	545.8
12.5°	655.9	835.1	794.4	783.3	790.0	786.2	798.5	830.8	651.1	585.6	520.7
15°	636.4	823.8	771.6	766.7	766.7	770.1	775.1	827.2	638.5	565.5	490.0
17.5°	616.3	801.1	755.7	731.5	728.9	733.4	761.4	806.9	620.5	543.3	460.3
20°	600.1	785.5	739.5	711.2	722.8	712.6	745.8	789.7	607.1	529.4	441.9
22.5°	585.6	766.1	718.9	706.8	722.2	707.1	724.6	770.3	591.5	513.8	428.0
25°	561.1	733.5	687.9	699.2	704.7	699.2	690.7	736.4	567.4	493.8	413.3
27.5°	536.7	699.2	664.8	672.4	655.7	668.6	668.6	699.3	542.5	470.4	408.9
30°	517.2	675.3	653.1	642.1	616.2	636.6	658.0	675.4	524.1	455.3	407.7
32.5°	491.5	653.5	641.4	603.2	586.6	600.5	646.8	653.0	495.7	441.6	406.6
35°	448.2	622.6	620.3	557.2	540.2	553.1	625.2	621.0	437.0	420.0	398.0
37.5°	390.0	595.2	580.0	510.7	483.6	507.3	584.6	592.2	367.6	400.2	377.8
40°	341.5	576.7	549.9	476.1	449.6	472.7	553.4	575.0	329.7	386.2	355.5
42.5°	314.2	560.2	518.2	439.6	275.0	434.0	521.6	558.2	306.3	368.3	336.0
45°	286.5	530.5	471.9	243.3	154.0	231.7	472.6	523.0	289.3	341.1	306.0
47.5°	274.3	493.8	423.5	146.6	130.1	142.3	423.1	485.8	274.5	313.7	277.4
50°	264.9	470.7	388.9	129.1	106.6	124.4	389.6	463.1	260.0	295.4	257.9
52.5°	249.2	443.1	339.3	107.0	92.1	104.4	331.1	434.4	244.9	275.5	233.4
55°	223.0	390.0	141.5	84.1	73.9	80.7	134.5	376.9	215.4	244.0	204.9
57.5°	195.3	332.0	99.3	65.5	57.3	64.8	98.6	318.7	191.7	206.7	178.7
60°	179.1	292.9	80.9	54.9	49.5	54.3	80.2	281.3	177.7	181.8	154.7
62.5°	163.0	253.3	66.9	48.3	46.7	47.7	66.8	240.6	160.5	160.7	109.0
65°	139.4	191.9	49.5	43.9	43.2	43.2	48.1	185.0	136.6	132.5	62.7
67.5°	115.4	137.8	39.7	40.4	39.7	39.7	39.0	133.9	112.6	105.7	47.4
70°	100.4	105.8	36.9	37.6	36.9	36.9	36.2	103.0	97.6	81.9	44.6
72.5°	85.9	72.2	34.2	34.3	34.2	34.2	33.5	67.8	83.1	57.6	40.7
75°	64.8	36.2	29.3	29.3	29.3	29.3	28.6	34.8	62.0	37.5	34.9
77.5°	45.0	23.9	24.3	24.1	24.1	23.6	23.6	23.7	42.4	25.9	28.2
80°	32.8	19.8	20.9	20.2	20.2	20.2	20.2	19.1	30.7	21.8	23.7
82.5°	23.3	15.8	17.0	16.3	16.3	16.3	16.3	15.6	21.2	17.8	19.2
85°	11.2	10.5	11.2	9.7	9.1	9.7	10.5	10.4	9.8	11.8	12.5
87.5°	3.3	6.2	6.9	7.1	7.1	7.1	6.4	5.6	2.8	6.7	7.5
90°	0.0	6.0	12.4	18.6	18.6	18.6	12.4	6.0	0.0	6.0	12.4
92.5°	14.8	20.9	27.2	38.5	43.3	38.5	27.2	20.9	14.8	20.9	27.2
95°	49.5	91.8	49.5	56.0	68.0	56.0	49.5	91.8	49.5	91.8	49.5
97.5°	87.8	176.2	363.7	107.3	92.8	107.3	363.7	176.2	87.8	176.2	363.7
100°	117.5	220.4	730.0	214.9	142.3	214.9	730.0	220.4	117.5	220.4	730.0
102.5°	147.2	254.9	987.3	567.0	310.5	567.0	987.3	254.9	147.2	254.9	987.3
105°	191.8	294.6	1119.7	1430.4	946.5	1430.4	1119.7	294.6	191.8	294.6	1119.7
107.5°	236.3	313.7	1069.0	2081.7	1949.9	2081.7	1069.0	313.7	236.3	313.7	1069.0
110°	266.0	338.6	1039.3	2187.4	2350.7	2187.4	1039.3	338.6	266.0	338.6	1039.3



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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°	295.7	368.3	1009.6	2125.6	2400.2	2125.6	1009.6	368.3	295.7	368.3	1009.6
115°	340.2	412.8	965.0	2005.8	2344.5	2005.8	965.0	412.8	340.2	412.8	965.0
117.5°	386.0	457.4	953.9	1876.1	2224.5	1876.1	953.9	457.4	386.0	457.4	953.9
120°	420.7	487.2	934.1	1777.5	2140.4	1777.5	934.1	487.2	420.7	487.2	934.1
122.5°	445.4	516.8	909.4	1692.7	2026.6	1692.7	909.4	516.8	445.4	516.8	909.4
125°	488.7	555.2	909.4	1590.2	1880.6	1590.2	909.4	555.2	488.7	555.2	909.4
127.5°	524.6	592.3	910.6	1471.4	1758.1	1471.4	910.6	592.3	524.6	592.3	910.6
130°	544.4	617.0	915.5	1391.9	1664.1	1391.9	915.5	617.0	544.4	617.0	915.5
132.5°	569.1	641.7	915.5	1356.1	1579.9	1356.1	915.5	641.7	569.1	641.7	915.5
135°	606.2	672.8	915.5	1309.7	1503.2	1309.7	915.5	672.8	606.2	672.8	915.5
137.5°	637.2	708.5	915.5	1258.3	1424.0	1258.3	915.5	708.5	637.2	708.5	915.5
140°	661.9	728.5	915.5	1228.3	1379.5	1228.3	915.5	728.5	661.9	728.5	915.5
142.5°	686.7	748.4	920.5	1193.4	1335.0	1193.4	920.5	748.4	686.7	748.4	920.5
145°	717.6	778.1	921.7	1141.0	1262.0	1141.0	921.7	778.1	717.6	778.1	921.7
147.5°	754.7	807.9	929.2	1103.2	1196.4	1103.2	929.2	807.9	754.7	807.9	929.2
150°	779.5	827.8	934.1	1078.2	1156.8	1078.2	934.1	827.8	779.5	827.8	934.1
152.5°	804.2	847.7	934.1	1058.0	1122.2	1058.0	934.1	847.7	804.2	847.7	934.1
155°	841.3	871.6	940.3	1034.2	1082.6	1034.2	940.3	871.6	841.3	871.6	940.3
157.5°	871.0	900.0	947.7	1019.0	1054.1	1019.0	947.7	900.0	871.0	900.0	947.7
160°	890.8	915.0	952.7	1009.0	1039.3	1009.0	952.7	915.0	890.8	915.0	952.7
162.5°	905.7	929.8	957.6	1003.9	1024.4	1003.9	957.6	929.8	905.7	929.8	957.6
165°	934.1	946.2	965.0	990.2	1008.3	990.2	965.0	946.2	934.1	946.2	965.0
167.5°	950.2	961.1	971.2	983.8	994.7	983.8	971.2	961.1	950.2	961.1	971.2
170°	965.0	971.1	971.2	983.7	989.8	983.7	971.2	971.1	965.0	971.1	971.2
172.5°	970.0	980.9	976.2	978.8	984.8	978.8	976.2	980.9	970.0	980.9	976.2
175°	983.6	989.6	983.6	977.3	971.2	977.3	983.6	989.6	983.6	989.6	983.6
177.5°	983.6	988.4	983.6	983.5	978.6	983.5	983.6	988.4	983.6	988.4	983.6
180°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	685.2	685.2	685.2	685.2	685.2	685.2
2.5°	640.5	640.0	641.1	650.6	669.9	687.4
5°	583.4	585.5	587.5	603.6	637.4	683.8
7.5°	539.6	536.6	541.2	567.4	608.9	675.4
10°	509.4	502.5	509.4	545.1	593.4	667.0
12.5°	480.9	472.4	483.1	522.2	580.6	655.9
15°	444.2	452.4	447.6	491.4	561.4	636.4
17.5°	452.9	494.0	461.6	464.6	542.3	616.3
20°	473.5	515.8	487.2	446.8	529.9	600.1
22.5°	492.3	524.1	498.3	431.7	517.6	585.6
25°	506.6	533.9	505.3	418.2	499.8	561.1
27.5°	507.4	511.2	507.6	417.1	477.7	536.7
30°	498.0	481.6	496.6	418.2	462.0	517.2
32.5°	471.2	452.6	465.4	416.0	446.1	491.5
35°	433.0	408.4	426.2	404.3	421.6	448.2
37.5°	392.7	361.6	386.1	381.1	400.7	390.0
40°	365.4	310.9	359.9	358.3	389.2	341.5
42.5°	330.4	284.1	325.5	339.9	376.6	314.2
45°	266.8	261.4	264.1	308.8	349.9	286.5
47.5°	244.0	240.3	242.6	280.5	319.6	274.3
50°	230.6	225.8	229.2	262.1	300.3	264.9
52.5°	212.0	199.1	210.7	237.0	280.3	249.2
55°	159.4	120.6	158.7	208.4	250.3	223.0
57.5°	93.6	69.7	91.5	181.4	212.1	195.3
60°	63.3	58.5	64.0	159.6	186.6	179.1
62.5°	57.8	56.3	58.0	111.1	163.9	163.0
65°	53.0	52.3	53.0	64.1	135.3	139.4
67.5°	47.9	47.3	48.5	49.2	106.8	115.4
70°	44.6	43.9	44.6	45.3	82.0	100.4
72.5°	40.7	40.0	40.7	41.4	57.7	85.9
75°	34.8	34.2	34.8	35.5	38.2	64.8
77.5°	28.2	28.2	28.8	28.9	26.8	45.0
80°	23.7	23.7	24.4	24.4	23.2	32.8
82.5°	19.2	18.7	19.9	20.5	19.2	23.3
85°	11.8	11.2	12.5	13.2	12.5	11.2
87.5°	8.2	7.6	8.7	8.6	7.3	3.3
90°	18.6	18.6	18.6	12.4	6.0	0.0
92.5°	38.5	43.3	38.5	27.2	20.9	14.8
95°	56.0	68.0	56.0	49.5	91.8	49.5
97.5°	107.3	92.8	107.3	363.7	176.2	87.8
100°	214.9	142.3	214.9	730.0	220.4	117.5
102.5°	567.0	310.5	567.0	987.3	254.9	147.2
105°	1430.4	946.5	1430.4	1119.7	294.6	191.8
107.5°	2081.7	1949.9	2081.7	1069.0	313.7	236.3
110°	2187.4	2350.7	2187.4	1039.3	338.6	266.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2125.6	2400.2	2125.6	1009.6	368.3	295.7
115°	2005.8	2344.5	2005.8	965.0	412.8	340.2
117.5°	1876.1	2224.5	1876.1	953.9	457.4	386.0
120°	1777.5	2140.4	1777.5	934.1	487.2	420.7
122.5°	1692.7	2026.6	1692.7	909.4	516.8	445.4
125°	1590.2	1880.6	1590.2	909.4	555.2	488.7
127.5°	1471.4	1758.1	1471.4	910.6	592.3	524.6
130°	1391.9	1664.1	1391.9	915.5	617.0	544.4
132.5°	1356.1	1579.9	1356.1	915.5	641.7	569.1
135°	1309.7	1503.2	1309.7	915.5	672.8	606.2
137.5°	1258.3	1424.0	1258.3	915.5	708.5	637.2
140°	1228.3	1379.5	1228.3	915.5	728.5	661.9
142.5°	1193.4	1335.0	1193.4	920.5	748.4	686.7
145°	1141.0	1262.0	1141.0	921.7	778.1	717.6
147.5°	1103.2	1196.4	1103.2	929.2	807.9	754.7
150°	1078.2	1156.8	1078.2	934.1	827.8	779.5
152.5°	1058.0	1122.2	1058.0	934.1	847.7	804.2
155°	1034.2	1082.6	1034.2	940.3	871.6	841.3
157.5°	1019.0	1054.1	1019.0	947.7	900.0	871.0
160°	1009.0	1039.3	1009.0	952.7	915.0	890.8
162.5°	1003.9	1024.4	1003.9	957.6	929.8	905.7
165°	990.2	1008.3	990.2	965.0	946.2	934.1
167.5°	983.8	994.7	983.8	971.2	961.1	950.2
170°	983.7	989.8	983.7	971.2	971.1	965.0
172.5°	978.8	984.8	978.8	976.2	980.9	970.0
175°	977.3	971.2	977.3	983.6	989.6	983.6
177.5°	983.5	978.6	983.5	983.6	988.4	983.6
180°	983.6	983.6	983.6	983.6	983.6	983.6

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