

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: P621724

Luminaire Tested: VLT-FA-150U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621724
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-930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

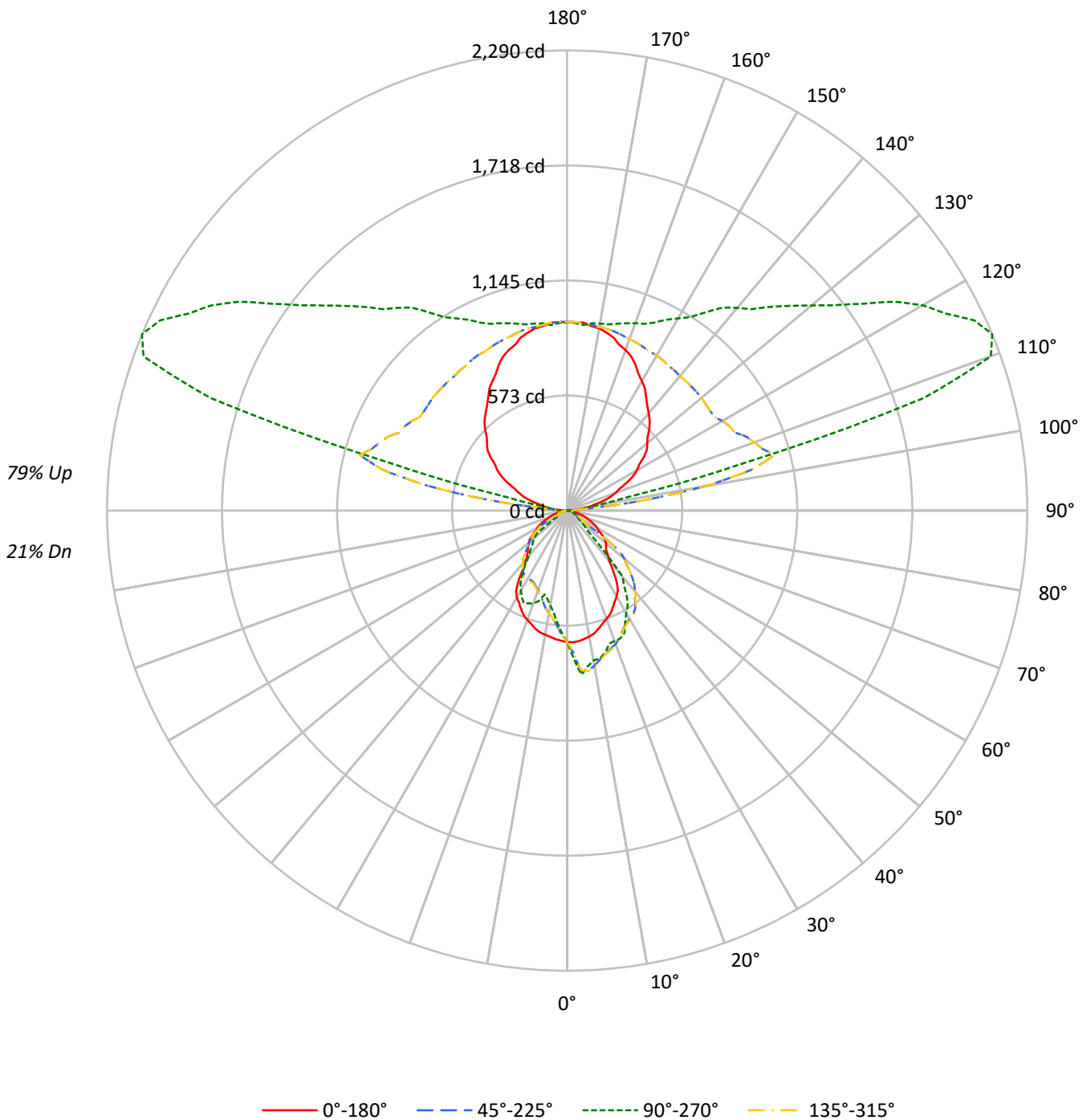
Lumens per Lamp: N/A
Luminaire Lumens: 6391.9 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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										
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	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°	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	1.0
10°-20°	172.8	2.7
20°-30°	258.5	4.0
30°-40°	294.0	4.6
40°-50°	251.4	3.9
50°-60°	169.6	2.7
60°-70°	87.5	1.4
70°-80°	39.5	0.6
80°-90°	13.9	0.2
90°-100°	115.4	1.8
100°-110°	822.3	12.9
110°-120°	1116.3	17.5
120°-130°	908.6	14.2
130°-140°	730.8	11.4
140°-150°	576.1	9.0
150°-160°	421.3	6.6
160°-170°	261.7	4.1
170°-180°	89.2	1.4
0°-30°	494.3	7.7
0°-40°	788.3	12.3
0°-60°	1209.3	18.9
0°-90°	1350.2	21.1
90°-120°	2054.0	32.1
90°-150°	4269.5	66.8
90°-180°	5042.0	78.9
0°-180°	6391.9	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	18	0	18	0	2
95°	47	65	47	65	47	53
105°	183	903	183	903	183	193
115°	325	2237	325	2237	325	322
125°	466	1794	466	1794	466	414
135°	578	1434	578	1434	578	445
145°	685	1204	685	1204	685	430
155°	803	1033	803	1033	803	369
165°	891	962	891	962	891	250
175°	939	927	939	927	939	89
180°	939	939	939	939	939	



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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	5.9	6.6	6.7	6.7	6.7	6.1	5.4	2.7	6.4	7.1
90°	0.0	5.8	11.8	17.7	17.7	17.7	11.8	5.8	0.0	5.8	11.8
92.5°	14.2	19.9	26.0	36.7	41.3	36.7	26.0	19.9	14.2	19.9	26.0
95°	47.2	87.6	47.2	53.4	64.9	53.4	47.2	87.6	47.2	87.6	47.2
97.5°	83.8	168.1	347.1	102.4	88.5	102.4	347.1	168.1	83.8	168.1	347.1
100°	112.2	210.3	696.5	205.0	135.8	205.0	696.5	210.3	112.2	210.3	696.5
102.5°	140.5	243.2	942.1	541.0	296.3	541.0	942.1	243.2	140.5	243.2	942.1
105°	183.0	281.1	1068.4	1364.9	903.1	1364.9	1068.4	281.1	183.0	281.1	1068.4
107.5°	225.5	299.4	1020.0	1986.4	1860.6	1986.4	1020.0	299.4	225.5	299.4	1020.0
110°	253.8	323.1	991.7	2087.3	2243.1	2087.3	991.7	323.1	253.8	323.1	991.7



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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°	282.2	351.4	963.3	2028.3	2290.3	2028.3	963.3	351.4	282.2	351.4	963.3
115°	324.7	393.9	920.8	1914.0	2237.2	1914.0	920.8	393.9	324.7	393.9	920.8
117.5°	368.3	436.4	910.2	1790.2	2122.7	1790.2	910.2	436.4	368.3	436.4	910.2
120°	401.4	464.9	891.3	1696.1	2042.4	1696.1	891.3	464.9	401.4	464.9	891.3
122.5°	425.0	493.1	867.7	1615.2	1933.8	1615.2	867.7	493.1	425.0	493.1	867.7
125°	466.3	529.8	867.7	1517.4	1794.5	1517.4	867.7	529.8	466.3	529.8	867.7
127.5°	500.6	565.2	868.9	1404.0	1677.6	1404.0	868.9	565.2	500.6	565.2	868.9
130°	519.5	588.7	873.6	1328.1	1587.9	1328.1	873.6	588.7	519.5	588.7	873.6
132.5°	543.1	612.3	873.6	1294.0	1507.6	1294.0	873.6	612.3	543.1	612.3	873.6
135°	578.5	642.0	873.6	1249.7	1434.4	1249.7	873.6	642.0	578.5	642.0	873.6
137.5°	608.0	676.1	873.6	1200.7	1358.8	1200.7	873.6	676.1	608.0	676.1	873.6
140°	631.6	695.1	873.6	1172.0	1316.3	1172.0	873.6	695.1	631.6	695.1	873.6
142.5°	655.2	714.1	878.3	1138.8	1273.8	1138.8	878.3	714.1	655.2	714.1	878.3
145°	684.7	742.4	879.5	1088.8	1204.2	1088.8	879.5	742.4	684.7	742.4	879.5
147.5°	720.1	770.9	886.6	1052.7	1141.6	1052.7	886.6	770.9	720.1	770.9	886.6
150°	743.8	789.9	891.3	1028.8	1103.8	1028.8	891.3	789.9	743.8	789.9	891.3
152.5°	767.4	808.9	891.3	1009.6	1070.8	1009.6	891.3	808.9	767.4	808.9	891.3
155°	802.8	831.6	897.2	986.8	1033.0	986.8	897.2	831.6	802.8	831.6	897.2
157.5°	831.1	858.8	904.3	972.4	1005.8	972.4	904.3	858.8	831.1	858.8	904.3
160°	850.0	873.1	909.0	962.8	991.7	962.8	909.0	873.1	850.0	873.1	909.0
162.5°	864.2	887.3	913.8	957.9	977.5	957.9	913.8	887.3	864.2	887.3	913.8
165°	891.3	902.9	920.8	944.9	962.2	944.9	920.8	902.9	891.3	902.9	920.8
167.5°	906.7	917.1	926.7	938.8	949.2	938.8	926.7	917.1	906.7	917.1	926.7
170°	920.8	926.6	926.7	938.7	944.5	938.7	926.7	926.6	920.8	926.6	926.7
172.5°	925.6	936.0	931.5	934.0	939.7	934.0	931.5	936.0	925.6	936.0	931.5
175°	938.6	944.3	938.6	932.5	926.7	932.5	938.6	944.3	938.6	944.3	938.6
177.5°	938.6	943.2	938.6	938.5	933.8	938.5	938.6	943.2	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6



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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°	7.8	7.3	8.3	8.2	6.9	3.2
90°	17.7	17.7	17.7	11.8	5.8	0.0
92.5°	36.7	41.3	36.7	26.0	19.9	14.2
95°	53.4	64.9	53.4	47.2	87.6	47.2
97.5°	102.4	88.5	102.4	347.1	168.1	83.8
100°	205.0	135.8	205.0	696.5	210.3	112.2
102.5°	541.0	296.3	541.0	942.1	243.2	140.5
105°	1364.9	903.1	1364.9	1068.4	281.1	183.0
107.5°	1986.4	1860.6	1986.4	1020.0	299.4	225.5
110°	2087.3	2243.1	2087.3	991.7	323.1	253.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2028.3	2290.3	2028.3	963.3	351.4	282.2
115°	1914.0	2237.2	1914.0	920.8	393.9	324.7
117.5°	1790.2	2122.7	1790.2	910.2	436.4	368.3
120°	1696.1	2042.4	1696.1	891.3	464.9	401.4
122.5°	1615.2	1933.8	1615.2	867.7	493.1	425.0
125°	1517.4	1794.5	1517.4	867.7	529.8	466.3
127.5°	1404.0	1677.6	1404.0	868.9	565.2	500.6
130°	1328.1	1587.9	1328.1	873.6	588.7	519.5
132.5°	1294.0	1507.6	1294.0	873.6	612.3	543.1
135°	1249.7	1434.4	1249.7	873.6	642.0	578.5
137.5°	1200.7	1358.8	1200.7	873.6	676.1	608.0
140°	1172.0	1316.3	1172.0	873.6	695.1	631.6
142.5°	1138.8	1273.8	1138.8	878.3	714.1	655.2
145°	1088.8	1204.2	1088.8	879.5	742.4	684.7
147.5°	1052.7	1141.6	1052.7	886.6	770.9	720.1
150°	1028.8	1103.8	1028.8	891.3	789.9	743.8
152.5°	1009.6	1070.8	1009.6	891.3	808.9	767.4
155°	986.8	1033.0	986.8	897.2	831.6	802.8
157.5°	972.4	1005.8	972.4	904.3	858.8	831.1
160°	962.8	991.7	962.8	909.0	873.1	850.0
162.5°	957.9	977.5	957.9	913.8	887.3	864.2
165°	944.9	962.2	944.9	920.8	902.9	891.3
167.5°	938.8	949.2	938.8	926.7	917.1	906.7
170°	938.7	944.5	938.7	926.7	926.6	920.8
172.5°	934.0	939.7	934.0	931.5	936.0	925.6
175°	932.5	926.7	932.5	938.6	944.3	938.6
177.5°	938.5	933.8	938.5	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6

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