

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: P621702

Luminaire Tested: VLT-FA-125U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621702  
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-940-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

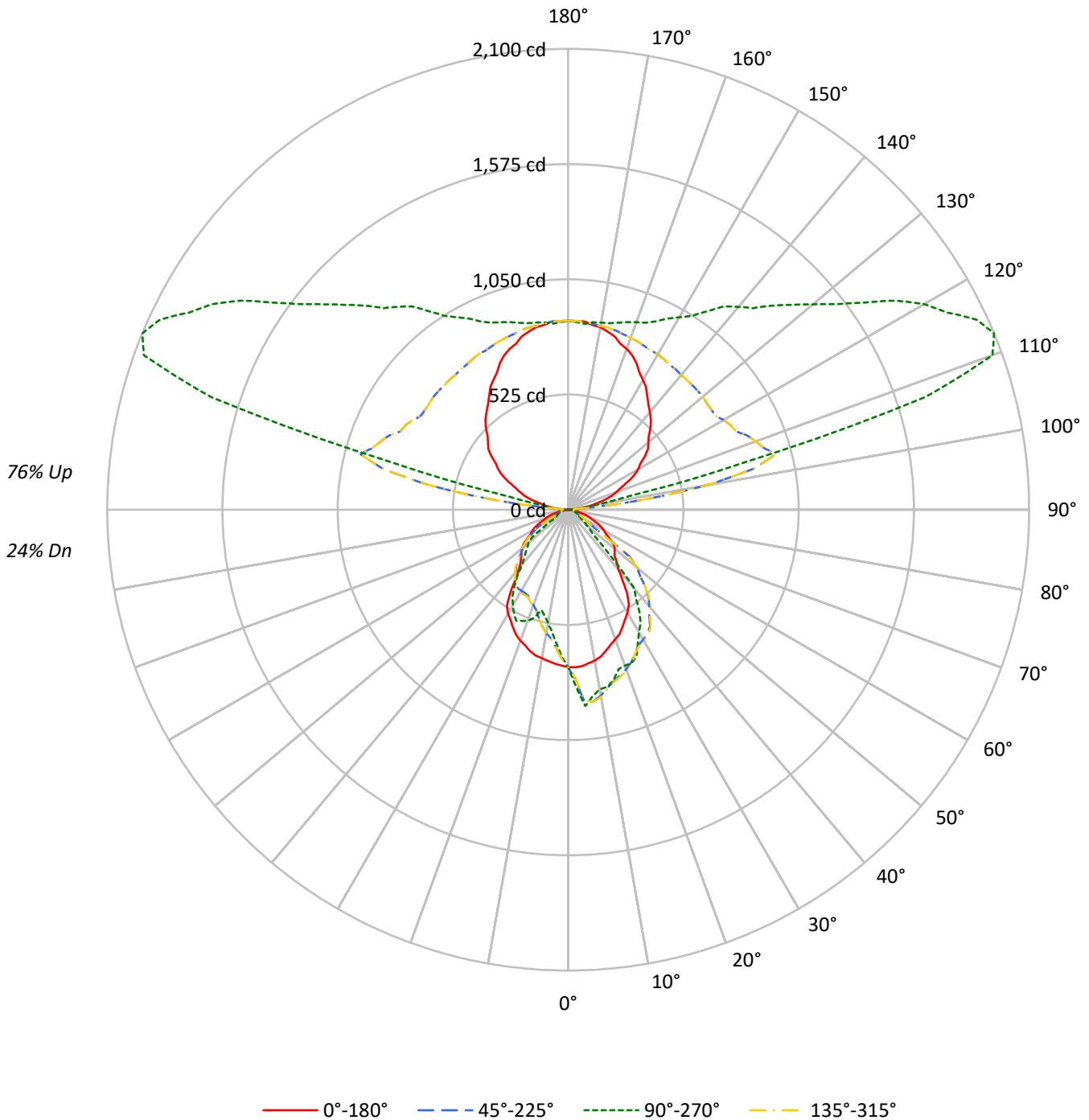
Lumens per Lamp: N/A  
Luminaire Lumens: 6101.7 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 52.6  
Input Voltage (V): 120  
Input Current (A<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			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°	5142	5142	5142	5142
5°	5151	6469	5073	4411
10°	5083	6050	5009	3830
15°	4944	5957	4960	3515
20°	4793	5772	4848	4119
25°	4646	5835	4698	4421
30°	4482	5340	4542	4174
35°	4106	4949	4004	3742
40°	3346	4405	3230	3045
45°	3040	1635	3070	2775
50°	3092	1245	3035	2637
55°	2919	967	2817	1578
60°	2688	743	2668	878
65°	2476	767	2426	929
70°	2203	810	2142	963
75°	1880	848	1799	990
80°	1417	872	1327	1025
85°	963	782	840	963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 5630 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	1.1
10°-20°	189.4	3.1
20°-30°	283.3	4.6
30°-40°	322.2	5.3
40°-50°	275.6	4.5
50°-60°	185.8	3.0
60°-70°	95.9	1.6
70°-80°	43.3	0.7
80°-90°	14.8	0.2
90°-100°	105.8	1.7
100°-110°	753.9	12.4
110°-120°	1023.4	16.8
120°-130°	833.0	13.7
130°-140°	670.0	11.0
140°-150°	528.2	8.7
150°-160°	386.2	6.3
160°-170°	239.9	3.9
170°-180°	81.8	1.3
0°-30°	541.8	8.9
0°-40°	864.1	14.2
0°-60°	1325.5	21.7
0°-90°	1479.5	24.2
90°-120°	1883.1	30.9
90°-150°	3914.2	64.2
90°-180°	4622.0	75.7
0°-180°	6101.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	717	717	717	717	717	
5°	715	898	704	612	715	68
15°	666	802	668	473	666	187
25°	587	737	593	558	587	270
35°	469	565	457	427	469	287
45°	300	161	302	273	300	238
55°	233	77	225	126	233	208
65°	146	45	143	55	146	144
75°	68	31	65	36	68	72
85°	12	10	10	12	12	15
90°	0	16	0	16	0	2
95°	43	60	43	60	43	48
105°	168	828	168	828	168	177
115°	298	2051	298	2051	298	295
125°	428	1645	428	1645	428	380
135°	530	1315	530	1315	530	408
145°	628	1104	628	1104	628	394
155°	736	947	736	947	736	338
165°	817	882	817	882	817	229
175°	860	850	860	850	860	81
180°	860	860	860	860	860	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	718.9	743.4	774.3	795.5	804.6	795.5	769.1	743.2	710.7	701.0	678.1
5°	715.1	790.7	882.0	893.1	898.1	893.1	874.0	786.1	704.2	669.3	631.3
7.5°	706.4	838.5	881.0	856.4	856.5	861.1	882.3	834.4	695.0	640.1	593.5
10°	697.6	865.1	859.4	823.9	830.3	827.4	866.0	859.9	687.4	624.0	570.8
12.5°	686.0	873.4	830.9	819.2	826.2	822.2	835.1	868.9	681.0	612.4	544.5
15°	665.5	861.6	807.0	801.9	801.9	805.4	810.6	865.2	667.7	591.5	512.5
17.5°	644.5	837.8	790.3	765.1	762.3	767.1	796.3	843.9	648.9	568.2	481.4
20°	627.6	821.5	773.4	743.8	755.9	745.2	780.0	825.9	634.9	553.7	462.2
22.5°	612.5	801.2	751.9	739.2	755.4	739.5	757.8	805.6	618.6	537.3	447.6
25°	586.8	767.1	719.5	731.3	737.0	731.3	722.4	770.1	593.4	516.4	432.3
27.5°	561.3	731.2	695.3	703.2	685.8	699.2	699.2	731.4	567.4	492.0	427.6
30°	540.9	706.3	683.0	671.5	644.4	665.8	688.1	706.4	548.2	476.2	426.4
32.5°	514.1	683.4	670.8	630.9	613.5	628.0	676.5	682.9	518.4	461.8	425.3
35°	468.7	651.2	648.8	582.8	564.9	578.5	653.9	649.5	457.1	439.2	416.2
37.5°	407.9	622.5	606.6	534.1	505.8	530.6	611.5	619.4	384.5	418.5	395.1
40°	357.2	603.1	575.2	498.0	470.2	494.4	578.8	601.4	344.8	404.0	371.8
42.5°	328.6	585.9	541.9	459.7	287.6	453.9	545.6	583.7	320.3	385.2	351.4
45°	299.6	554.8	493.5	254.5	161.1	242.4	494.2	547.0	302.5	356.7	320.0
47.5°	286.9	516.4	442.9	153.3	136.0	148.9	442.5	508.0	287.1	328.1	290.1
50°	277.0	492.3	406.8	135.1	111.5	130.1	407.5	484.3	271.9	309.0	269.7
52.5°	260.7	463.4	354.9	111.9	96.4	109.2	346.3	454.3	256.2	288.1	244.1
55°	233.3	407.9	148.0	88.0	77.3	84.4	140.7	394.2	225.2	255.2	214.3
57.5°	204.3	347.2	103.8	68.5	59.9	67.8	103.1	333.3	200.5	216.1	186.9
60°	187.3	306.4	84.6	57.5	51.8	56.7	83.8	294.2	185.9	190.2	161.8
62.5°	170.4	264.9	70.0	50.6	48.8	49.8	69.8	251.6	167.8	168.1	114.0
65°	145.8	200.7	51.8	45.9	45.2	45.2	50.3	193.5	142.9	138.6	65.6
67.5°	120.7	144.1	41.6	42.3	41.6	41.6	40.8	140.0	117.8	110.5	49.6
70°	105.0	110.7	38.6	39.3	38.6	38.6	37.9	107.8	102.1	85.7	46.7
72.5°	89.8	75.6	35.7	35.9	35.7	35.7	35.0	70.9	86.9	60.2	42.6
75°	67.8	37.9	30.6	30.6	30.6	30.6	29.9	36.4	64.9	39.2	36.4
77.5°	47.1	25.0	25.4	25.2	25.2	24.7	24.6	24.8	44.3	27.1	29.5
80°	34.3	20.7	21.9	21.1	21.1	21.1	21.1	20.0	32.1	22.8	24.8
82.5°	24.3	16.5	17.8	17.1	17.1	17.1	17.1	16.3	22.2	18.6	20.1
85°	11.7	11.0	11.7	10.2	9.5	10.2	10.9	10.9	10.2	12.3	13.1
87.5°	3.5	6.3	6.8	6.7	6.7	6.7	6.2	5.7	2.9	6.8	7.4
90°	0.0	5.3	10.8	16.2	16.2	16.2	10.8	5.3	0.0	5.3	10.8
92.5°	13.0	18.3	23.8	33.6	37.9	33.6	23.8	18.3	13.0	18.3	23.8
95°	43.3	80.3	43.3	48.9	59.5	48.9	43.3	80.3	43.3	80.3	43.3
97.5°	76.8	154.1	318.2	93.9	81.2	93.9	318.2	154.1	76.8	154.1	318.2
100°	102.8	192.8	638.6	188.0	124.5	188.0	638.6	192.8	102.8	192.8	638.6
102.5°	128.8	223.0	863.7	496.0	271.7	496.0	863.7	223.0	128.8	223.0	863.7
105°	167.8	257.7	979.5	1251.3	828.0	1251.3	979.5	257.7	167.8	257.7	979.5
107.5°	206.7	274.5	935.1	1821.1	1705.8	1821.1	935.1	274.5	206.7	274.5	935.1
110°	232.7	296.2	909.2	1913.6	2056.4	1913.6	909.2	296.2	232.7	296.2	909.2



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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°	258.7	322.2	883.2	1859.5	2099.7	1859.5	883.2	322.2	258.7	322.2	883.2
115°	297.6	361.1	844.2	1754.7	2051.0	1754.7	844.2	361.1	297.6	361.1	844.2
117.5°	337.7	400.1	834.5	1641.2	1946.0	1641.2	834.5	400.1	337.7	400.1	834.5
120°	368.0	426.2	817.2	1554.9	1872.4	1554.9	817.2	426.2	368.0	426.2	817.2
122.5°	389.6	452.1	795.5	1480.8	1772.9	1480.8	795.5	452.1	389.6	452.1	795.5
125°	427.5	485.7	795.5	1391.2	1645.1	1391.2	795.5	485.7	427.5	485.7	795.5
127.5°	458.9	518.2	796.6	1287.2	1538.0	1287.2	796.6	518.2	458.9	518.2	796.6
130°	476.2	539.7	800.9	1217.6	1455.7	1217.6	800.9	539.7	476.2	539.7	800.9
132.5°	497.9	561.4	800.9	1186.4	1382.1	1186.4	800.9	561.4	497.9	561.4	800.9
135°	530.3	588.5	800.9	1145.7	1315.0	1145.7	800.9	588.5	530.3	588.5	800.9
137.5°	557.4	619.8	800.9	1100.8	1245.8	1100.8	800.9	619.8	557.4	619.8	800.9
140°	579.0	637.3	800.9	1074.5	1206.8	1074.5	800.9	637.3	579.0	637.3	800.9
142.5°	600.7	654.7	805.3	1044.0	1167.8	1044.0	805.3	654.7	600.7	654.7	805.3
145°	627.8	680.7	806.3	998.1	1104.0	998.1	806.3	680.7	627.8	680.7	806.3
147.5°	660.2	706.8	812.8	965.1	1046.6	965.1	812.8	706.8	660.2	706.8	812.8
150°	681.9	724.2	817.2	943.2	1012.0	943.2	817.2	724.2	681.9	724.2	817.2
152.5°	703.5	741.6	817.2	925.6	981.7	925.6	817.2	741.6	703.5	741.6	817.2
155°	736.0	762.4	822.6	904.7	947.0	904.7	822.6	762.4	736.0	762.4	822.6
157.5°	762.0	787.4	829.1	891.5	922.1	891.5	829.1	787.4	762.0	787.4	829.1
160°	779.3	800.4	833.4	882.7	909.2	882.7	833.4	800.4	779.3	800.4	833.4
162.5°	792.3	813.4	837.7	878.2	896.2	878.2	837.7	813.4	792.3	813.4	837.7
165°	817.2	827.7	844.2	866.2	882.1	866.2	844.2	827.7	817.2	827.7	844.2
167.5°	831.2	840.8	849.6	860.7	870.2	860.7	849.6	840.8	831.2	840.8	849.6
170°	844.2	849.5	849.6	860.6	865.9	860.6	849.6	849.5	844.2	849.5	849.6
172.5°	848.5	858.1	854.0	856.2	861.5	856.2	854.0	858.1	848.5	858.1	854.0
175°	860.5	865.7	860.5	854.9	849.6	854.9	860.5	865.7	860.5	865.7	860.5
177.5°	860.5	864.7	860.5	860.4	856.1	860.4	860.5	864.7	860.5	864.7	860.5
180°	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	669.9	669.3	670.5	680.4	700.7	718.9
5°	610.2	612.3	614.5	631.3	666.6	715.1
7.5°	564.3	561.2	566.0	593.4	636.8	706.4
10°	532.7	525.6	532.7	570.0	620.6	697.6
12.5°	502.9	494.1	505.2	546.1	607.3	686.0
15°	464.5	473.1	468.1	513.9	587.1	665.5
17.5°	473.6	516.7	482.8	485.9	567.1	644.5
20°	495.2	539.4	509.5	467.3	554.2	627.6
22.5°	514.8	548.2	521.1	451.5	541.3	612.5
25°	529.9	558.4	528.4	437.4	522.7	586.8
27.5°	530.6	534.6	530.9	436.2	499.6	561.3
30°	520.8	503.7	519.4	437.4	483.2	540.9
32.5°	492.8	473.4	486.8	435.0	466.6	514.1
35°	452.8	427.2	445.7	422.8	440.9	468.7
37.5°	410.7	378.2	403.8	398.6	419.0	407.9
40°	382.1	325.1	376.4	374.7	407.1	357.2
42.5°	345.6	297.1	340.5	355.4	393.9	328.6
45°	279.1	273.4	276.2	322.9	365.9	299.6
47.5°	255.2	251.3	253.8	293.3	334.2	286.9
50°	241.2	236.2	239.7	274.1	314.1	277.0
52.5°	221.7	208.2	220.3	247.8	293.2	260.7
55°	166.7	126.1	166.0	218.0	261.8	233.3
57.5°	97.8	72.9	95.7	189.7	221.8	204.3
60°	66.2	61.2	66.9	166.9	195.2	187.3
62.5°	60.5	58.9	60.6	116.2	171.4	170.4
65°	55.4	54.7	55.4	67.1	141.5	145.8
67.5°	50.1	49.4	50.7	51.5	111.7	120.7
70°	46.6	45.9	46.6	47.4	85.7	105.0
72.5°	42.6	41.8	42.6	43.3	60.3	89.8
75°	36.4	35.7	36.4	37.2	40.0	67.8
77.5°	29.5	29.5	30.2	30.2	28.0	47.1
80°	24.8	24.8	25.5	25.5	24.3	34.3
82.5°	20.1	19.5	20.8	21.4	20.1	24.3
85°	12.4	11.7	13.1	13.9	13.1	11.7
87.5°	7.9	7.3	8.5	8.6	7.4	3.5
90°	16.2	16.2	16.2	10.8	5.3	0.0
92.5°	33.6	37.9	33.6	23.8	18.3	13.0
95°	48.9	59.5	48.9	43.3	80.3	43.3
97.5°	93.9	81.2	93.9	318.2	154.1	76.8
100°	188.0	124.5	188.0	638.6	192.8	102.8
102.5°	496.0	271.7	496.0	863.7	223.0	128.8
105°	1251.3	828.0	1251.3	979.5	257.7	167.8
107.5°	1821.1	1705.8	1821.1	935.1	274.5	206.7
110°	1913.6	2056.4	1913.6	909.2	296.2	232.7





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1859.5	2099.7	1859.5	883.2	322.2	258.7
115°	1754.7	2051.0	1754.7	844.2	361.1	297.6
117.5°	1641.2	1946.0	1641.2	834.5	400.1	337.7
120°	1554.9	1872.4	1554.9	817.2	426.2	368.0
122.5°	1480.8	1772.9	1480.8	795.5	452.1	389.6
125°	1391.2	1645.1	1391.2	795.5	485.7	427.5
127.5°	1287.2	1538.0	1287.2	796.6	518.2	458.9
130°	1217.6	1455.7	1217.6	800.9	539.7	476.2
132.5°	1186.4	1382.1	1186.4	800.9	561.4	497.9
135°	1145.7	1315.0	1145.7	800.9	588.5	530.3
137.5°	1100.8	1245.8	1100.8	800.9	619.8	557.4
140°	1074.5	1206.8	1074.5	800.9	637.3	579.0
142.5°	1044.0	1167.8	1044.0	805.3	654.7	600.7
145°	998.1	1104.0	998.1	806.3	680.7	627.8
147.5°	965.1	1046.6	965.1	812.8	706.8	660.2
150°	943.2	1012.0	943.2	817.2	724.2	681.9
152.5°	925.6	981.7	925.6	817.2	741.6	703.5
155°	904.7	947.0	904.7	822.6	762.4	736.0
157.5°	891.5	922.1	891.5	829.1	787.4	762.0
160°	882.7	909.2	882.7	833.4	800.4	779.3
162.5°	878.2	896.2	878.2	837.7	813.4	792.3
165°	866.2	882.1	866.2	844.2	827.7	817.2
167.5°	860.7	870.2	860.7	849.6	840.8	831.2
170°	860.6	865.9	860.6	849.6	849.5	844.2
172.5°	856.2	861.5	856.2	854.0	858.1	848.5
175°	854.9	849.6	854.9	860.5	865.7	860.5
177.5°	860.4	856.1	860.4	860.5	864.7	860.5
180°	860.5	860.5	860.5	860.5	860.5	860.5

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