

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: P621677

Luminaire Tested: VLT-FA-100U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621677  
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-100U-050D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

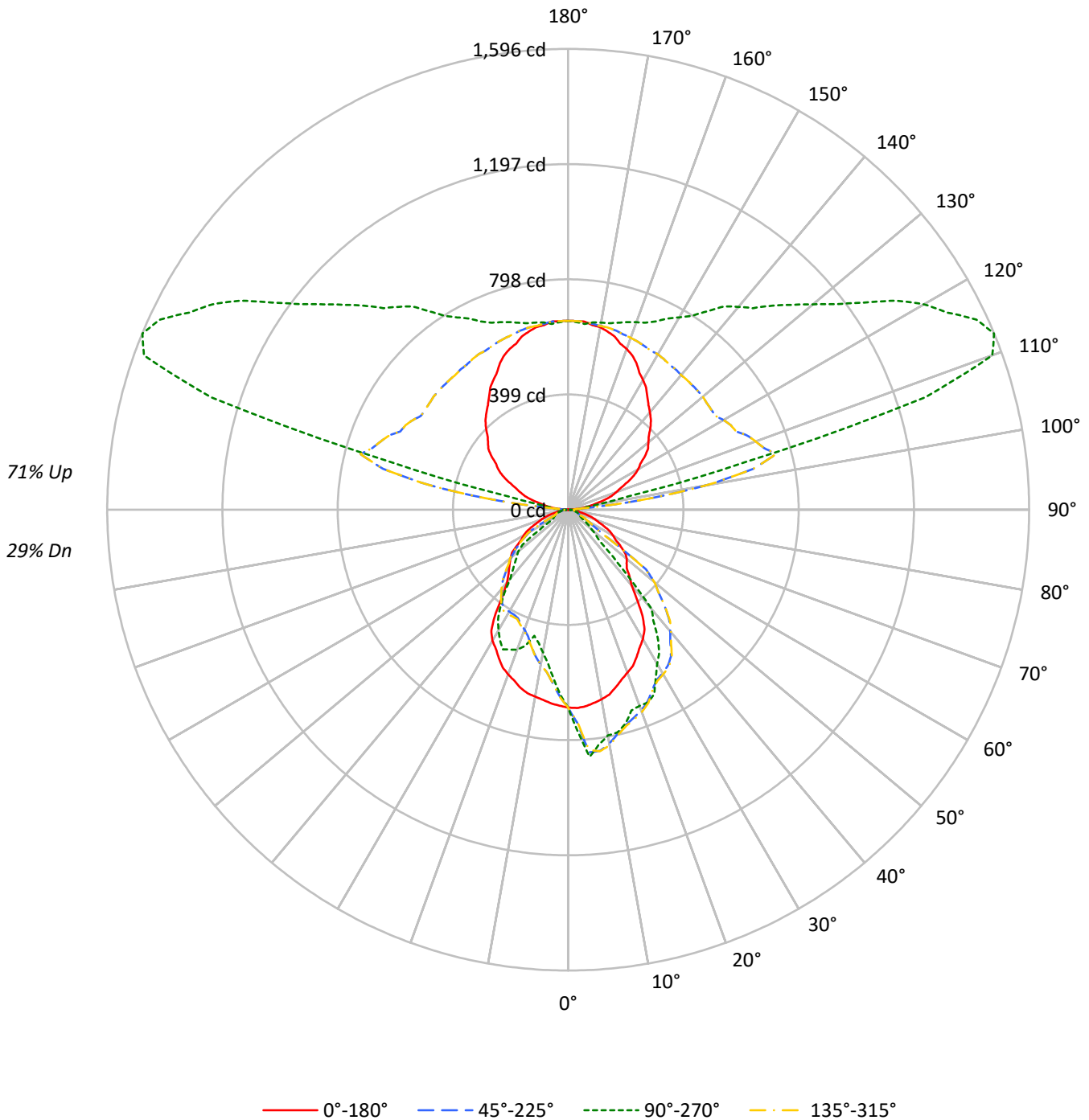
Lumens per Lamp: N/A  
Luminaire Lumens: 4926.9 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 43.4  
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



TEST NUMBER: P621677  
CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

### 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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	93	89	86	83	84	80	77	75	63	61	59	48	46	45	33	32	32	25
2	85	79	73	68	76	71	66	62	56	53	50	42	40	38	30	28	27	22
3	78	69	63	57	70	63	57	52	50	46	42	38	35	33	27	25	24	19
4	72	62	54	49	64	56	49	45	44	40	36	34	31	29	24	22	21	17
5	66	55	47	42	59	50	43	38	40	35	32	31	27	25	22	20	18	15
6	61	49	42	36	54	45	38	33	36	31	28	28	24	22	20	18	16	13
7	56	45	37	32	50	40	34	29	33	28	24	25	22	19	18	16	15	12
8	52	40	33	28	47	37	30	26	30	25	22	23	20	17	17	15	13	11
9	48	37	30	25	43	33	27	23	27	23	19	21	18	16	16	14	12	10
10	45	34	27	22	41	31	25	21	25	20	17	20	16	14	14	12	11	9

**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



TEST NUMBER: P621677

CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.1	1.3
10°-20°	181.1	3.7
20°-30°	270.9	5.5
30°-40°	308.1	6.3
40°-50°	263.5	5.3
50°-60°	177.7	3.6
60°-70°	91.7	1.9
70°-80°	41.4	0.8
80°-90°	13.8	0.3
90°-100°	80.4	1.6
100°-110°	572.9	11.6
110°-120°	777.8	15.8
120°-130°	633.0	12.8
130°-140°	509.1	10.3
140°-150°	401.4	8.1
150°-160°	293.5	6.0
160°-170°	182.3	3.7
170°-180°	62.2	1.3
0°-30°	518.1	10.5
0°-40°	826.2	16.8
0°-60°	1267.4	25.7
0°-90°	1414.3	28.7
90°-120°	1431.1	29.0
90°-150°	2974.6	60.4
90°-180°	3513.0	71.3
0°-180°	4926.9	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	12	0	12	0	2
95°	33	45	33	45	33	37
105°	128	629	128	629	128	134
115°	226	1559	226	1559	226	225
125°	325	1250	325	1250	325	289
135°	403	999	403	999	403	310
145°	477	839	477	839	477	300
155°	559	720	559	720	559	257
165°	621	670	621	670	621	174
175°	654	646	654	646	654	62
180°	654	654	654	654	654	



TEST NUMBER: P621677

CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

**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	5.8	6.1	5.8	5.8	5.8	5.5	5.2	2.8	6.3	6.7
90°	0.0	4.0	8.2	12.3	12.3	12.3	8.2	4.0	0.0	4.0	8.2
92.5°	9.9	13.9	18.1	25.6	28.8	25.6	18.1	13.9	9.9	13.9	18.1
95°	32.9	61.0	32.9	37.2	45.2	37.2	32.9	61.0	32.9	61.0	32.9
97.5°	58.4	117.1	241.8	71.3	61.7	71.3	241.8	117.1	58.4	117.1	241.8
100°	78.1	146.5	485.3	142.8	94.6	142.8	485.3	146.5	78.1	146.5	485.3
102.5°	97.9	169.5	656.4	376.9	206.5	376.9	656.4	169.5	97.9	169.5	656.4
105°	127.5	195.8	744.4	950.9	629.2	950.9	744.4	195.8	127.5	195.8	744.4
107.5°	157.1	208.6	710.6	1383.9	1296.3	1383.9	710.6	208.6	157.1	208.6	710.6
110°	176.8	225.1	690.9	1454.2	1562.8	1454.2	690.9	225.1	176.8	225.1	690.9



TEST NUMBER: P621677

CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	196.6	244.8	671.2	1413.1	1595.7	1413.1	671.2	244.8	196.6	244.8	671.2
115°	226.2	274.4	641.6	1333.5	1558.7	1333.5	641.6	274.4	226.2	274.4	641.6
117.5°	256.6	304.1	634.2	1247.3	1478.9	1247.3	634.2	304.1	256.6	304.1	634.2
120°	279.7	323.9	621.0	1181.7	1422.9	1181.7	621.0	323.9	279.7	323.9	621.0
122.5°	296.1	343.6	604.5	1125.3	1347.3	1125.3	604.5	343.6	296.1	343.6	604.5
125°	324.9	369.1	604.5	1057.2	1250.2	1057.2	604.5	369.1	324.9	369.1	604.5
127.5°	348.7	393.8	605.4	978.2	1168.8	978.2	605.4	393.8	348.7	393.8	605.4
130°	361.9	410.2	608.7	925.3	1106.3	925.3	608.7	410.2	361.9	410.2	608.7
132.5°	378.4	426.6	608.7	901.6	1050.3	901.6	608.7	426.6	378.4	426.6	608.7
135°	403.0	447.3	608.7	870.7	999.3	870.7	608.7	447.3	403.0	447.3	608.7
137.5°	423.6	471.0	608.7	836.5	946.7	836.5	608.7	471.0	423.6	471.0	608.7
140°	440.0	484.3	608.7	816.6	917.1	816.6	608.7	484.3	440.0	484.3	608.7
142.5°	456.5	497.5	611.9	793.4	887.5	793.4	611.9	497.5	456.5	497.5	611.9
145°	477.1	517.3	612.8	758.5	839.0	758.5	612.8	517.3	477.1	517.3	612.8
147.5°	501.7	537.1	617.7	733.4	795.4	733.4	617.7	537.1	501.7	537.1	617.7
150°	518.2	550.4	621.0	716.8	769.0	716.8	621.0	550.4	518.2	550.4	621.0
152.5°	534.6	563.6	621.0	703.4	746.0	703.4	621.0	563.6	534.6	563.6	621.0
155°	559.3	579.4	625.1	687.5	719.7	687.5	625.1	579.4	559.3	579.4	625.1
157.5°	579.0	598.3	630.0	677.5	700.8	677.5	630.0	598.3	579.0	598.3	630.0
160°	592.2	608.3	633.3	670.8	690.9	670.8	633.3	608.3	592.2	608.3	633.3
162.5°	602.1	618.2	636.6	667.4	681.0	667.4	636.6	618.2	602.1	618.2	636.6
165°	621.0	629.0	641.6	658.3	670.3	658.3	641.6	629.0	621.0	629.0	641.6
167.5°	631.7	638.9	645.7	654.1	661.3	654.1	645.7	638.9	631.7	638.9	645.7
170°	641.6	645.6	645.7	654.0	658.0	654.0	645.7	645.6	641.6	645.6	645.7
172.5°	644.8	652.1	649.0	650.7	654.7	650.7	649.0	652.1	644.8	652.1	649.0
175°	653.9	657.9	653.9	649.7	645.7	649.7	653.9	657.9	653.9	657.9	653.9
177.5°	653.9	657.1	653.9	653.8	650.6	653.8	653.9	657.1	653.9	657.1	653.9
180°	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9



TEST NUMBER: P621677

CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

**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°	6.9	6.4	7.5	7.8	6.9	3.3
90°	12.3	12.3	12.3	8.2	4.0	0.0
92.5°	25.6	28.8	25.6	18.1	13.9	9.9
95°	37.2	45.2	37.2	32.9	61.0	32.9
97.5°	71.3	61.7	71.3	241.8	117.1	58.4
100°	142.8	94.6	142.8	485.3	146.5	78.1
102.5°	376.9	206.5	376.9	656.4	169.5	97.9
105°	950.9	629.2	950.9	744.4	195.8	127.5
107.5°	1383.9	1296.3	1383.9	710.6	208.6	157.1
110°	1454.2	1562.8	1454.2	690.9	225.1	176.8





TEST NUMBER: P621677

CATALOG NUMBER: VLT-FA-100U-050D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1413.1	1595.7	1413.1	671.2	244.8	196.6
115°	1333.5	1558.7	1333.5	641.6	274.4	226.2
117.5°	1247.3	1478.9	1247.3	634.2	304.1	256.6
120°	1181.7	1422.9	1181.7	621.0	323.9	279.7
122.5°	1125.3	1347.3	1125.3	604.5	343.6	296.1
125°	1057.2	1250.2	1057.2	604.5	369.1	324.9
127.5°	978.2	1168.8	978.2	605.4	393.8	348.7
130°	925.3	1106.3	925.3	608.7	410.2	361.9
132.5°	901.6	1050.3	901.6	608.7	426.6	378.4
135°	870.7	999.3	870.7	608.7	447.3	403.0
137.5°	836.5	946.7	836.5	608.7	471.0	423.6
140°	816.6	917.1	816.6	608.7	484.3	440.0
142.5°	793.4	887.5	793.4	611.9	497.5	456.5
145°	758.5	839.0	758.5	612.8	517.3	477.1
147.5°	733.4	795.4	733.4	617.7	537.1	501.7
150°	716.8	769.0	716.8	621.0	550.4	518.2
152.5°	703.4	746.0	703.4	621.0	563.6	534.6
155°	687.5	719.7	687.5	625.1	579.4	559.3
157.5°	677.5	700.8	677.5	630.0	598.3	579.0
160°	670.8	690.9	670.8	633.3	608.3	592.2
162.5°	667.4	681.0	667.4	636.6	618.2	602.1
165°	658.3	670.3	658.3	641.6	629.0	621.0
167.5°	654.1	661.3	654.1	645.7	638.9	631.7
170°	654.0	658.0	654.0	645.7	645.6	641.6
172.5°	650.7	654.7	650.7	649.0	652.1	644.8
175°	649.7	645.7	649.7	653.9	657.9	653.9
177.5°	653.8	650.6	653.8	653.9	657.1	653.9
180°	653.9	653.9	653.9	653.9	653.9	653.9

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