

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: P621578

Luminaire Tested: VLT-FA-025U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621578  
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-025U-050D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

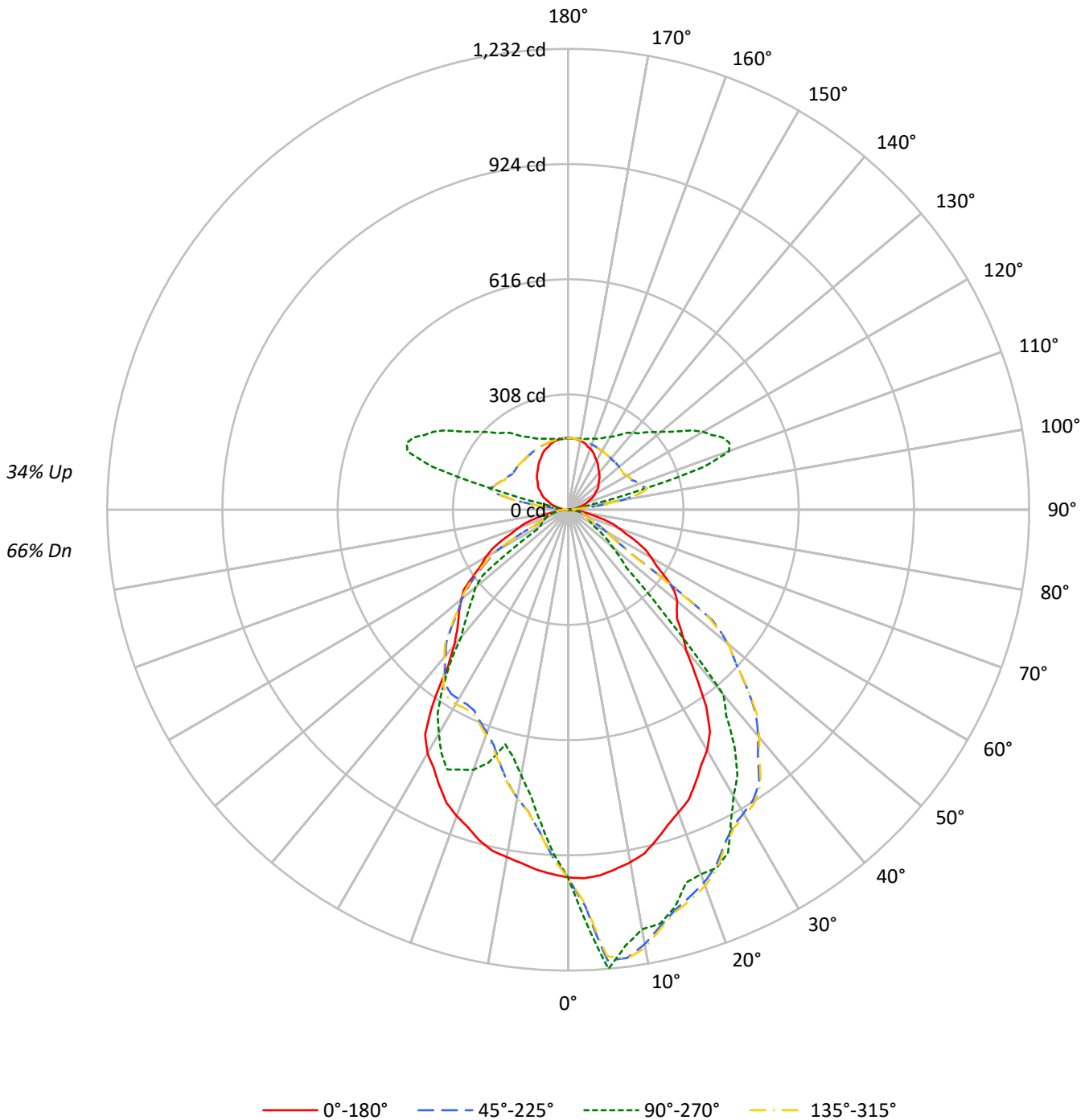
Lumens per Lamp: N/A  
Luminaire Lumens: 3055.1 lumens  
Efficiency: N/A  
Efficacy: 134.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 22.7  
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	
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	0	
RCR																						
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66				
1	103	99	95	92	97	93	90	87	83	80	78	73	72	70	65	63	62	58				
2	94	87	82	77	89	83	78	73	74	70	67	66	63	60	58	56	54	51				
3	87	78	71	65	82	74	68	63	66	61	57	59	55	52	53	50	47	44				
4	80	70	62	56	75	66	59	54	60	54	50	53	49	46	48	44	42	39				
5	74	63	55	49	70	60	53	47	54	48	44	48	44	40	43	40	37	34				
6	68	57	49	43	64	54	47	42	49	43	39	44	39	36	40	36	33	31				
7	63	52	44	38	60	49	42	37	45	39	35	40	36	32	37	33	30	27				
8	59	47	39	34	56	45	38	33	41	35	31	37	32	29	34	30	27	25				
9	55	43	36	31	52	41	35	30	38	32	28	34	30	26	31	27	24	22				
10	52	40	33	28	49	38	32	27	35	29	26	32	27	24	29	25	22	21				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	7054	7054	7054	7054
5°	7066	8875	6958	6051
10°	6973	8299	6871	5254
15°	6783	8172	6805	4821
20°	6575	7919	6651	5651
25°	6374	8005	6445	6065
30°	6148	7325	6231	5726
35°	5633	6789	5493	5133
40°	4590	6042	4431	4178
45°	4171	2243	4212	3806
50°	4242	1708	4164	3617
55°	4003	1326	3866	2164
60°	3688	1019	3660	1206
65°	3396	1053	3328	1273
70°	3021	1112	2937	1322
75°	2578	1164	2468	1359
80°	1942	1198	1818	1405
85°	1317	1070	1153	1317

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7723 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	3.1
10°-20°	259.8	8.5
20°-30°	388.7	12.7
30°-40°	442.0	14.5
40°-50°	378.0	12.4
50°-60°	254.9	8.3
60°-70°	131.6	4.3
70°-80°	59.4	1.9
80°-90°	18.1	0.6
90°-100°	23.5	0.8
100°-110°	167.6	5.5
110°-120°	227.5	7.4
120°-130°	185.2	6.1
130°-140°	149.0	4.9
140°-150°	117.4	3.8
150°-160°	85.9	2.8
160°-170°	53.3	1.7
170°-180°	18.2	0.6
0°-30°	743.3	24.3
0°-40°	1185.3	38.8
0°-60°	1818.3	59.5
0°-90°	2027.4	66.4
90°-120°	418.7	13.7
90°-150°	870.3	28.5
90°-180°	1028.0	33.6
0°-180°	3055.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	983	983	983	983	983	
5°	981	1232	966	840	981	93
15°	913	1100	916	649	913	257
25°	805	1011	814	766	805	370
35°	643	775	627	586	643	393
45°	411	221	415	375	411	326
55°	320	106	309	173	320	285
65°	200	62	196	75	200	198
75°	93	42	89	49	93	99
85°	16	13	14	16	16	20
90°	0	4	0	4	0	1
95°	10	13	10	13	10	11
105°	37	184	37	184	37	39
115°	66	456	66	456	66	66
125°	95	366	95	366	95	84
135°	118	292	118	292	118	91
145°	140	245	140	245	140	88
155°	164	211	164	211	164	75
165°	182	196	182	196	182	51
175°	191	189	191	189	191	18
180°	191	191	191	191	191	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	986.2	1019.8	1062.2	1091.3	1103.8	1091.3	1055.0	1019.6	975.0	961.7	930.2
5°	981.0	1084.6	1210.0	1225.2	1232.0	1225.2	1199.0	1078.4	966.0	918.1	866.0
7.5°	969.0	1150.3	1208.6	1174.8	1175.0	1181.3	1210.4	1144.7	953.4	878.1	814.2
10°	957.0	1186.8	1179.0	1130.2	1139.0	1135.1	1188.0	1179.6	943.0	856.0	783.0
12.5°	941.0	1198.2	1139.8	1123.8	1133.4	1127.9	1145.6	1191.9	934.2	840.1	747.0
15°	913.0	1181.9	1107.0	1100.0	1100.0	1104.9	1112.0	1186.8	916.0	811.4	703.0
17.5°	884.2	1149.4	1084.2	1049.5	1045.8	1052.3	1092.4	1157.7	890.2	779.5	660.4
20°	861.0	1127.0	1061.0	1020.4	1037.0	1022.3	1070.0	1133.0	871.0	759.5	634.0
22.5°	840.2	1099.1	1031.4	1014.1	1036.2	1014.5	1039.6	1105.2	848.6	737.1	614.0
25°	805.0	1052.4	987.0	1003.2	1011.0	1003.2	991.0	1056.5	814.0	708.4	593.0
27.5°	770.0	1003.1	953.8	964.7	940.8	959.2	959.2	1003.3	778.4	675.0	586.6
30°	742.0	968.8	937.0	921.2	884.0	913.3	944.0	969.1	752.0	653.2	585.0
32.5°	705.2	937.5	920.2	865.5	841.6	861.5	928.0	936.9	711.2	633.6	583.4
35°	643.0	893.3	890.0	799.4	775.0	793.6	897.0	891.0	627.0	602.6	571.0
37.5°	559.6	853.9	832.2	732.7	693.8	727.8	838.8	849.7	527.4	574.1	542.0
40°	490.0	827.3	789.0	683.1	645.0	678.2	794.0	825.0	473.0	554.2	510.0
42.5°	450.8	803.8	743.4	630.6	394.6	622.6	748.4	800.8	439.4	528.4	482.0
45°	411.0	761.0	677.0	349.1	221.0	332.5	678.0	750.4	415.0	489.3	439.0
47.5°	393.6	708.4	607.6	210.3	186.6	204.2	607.0	696.9	393.8	450.1	398.0
50°	380.0	675.3	558.0	185.3	153.0	178.4	559.0	664.4	373.0	423.8	370.0
52.5°	357.6	635.7	486.8	153.5	132.2	149.8	475.0	623.2	351.4	395.2	334.8
55°	320.0	559.6	203.0	120.7	106.0	115.8	193.0	540.7	309.0	350.1	294.0
57.5°	280.2	476.3	142.4	93.9	82.2	93.0	141.4	457.3	275.0	296.5	256.4
60°	257.0	420.3	116.0	78.8	71.0	77.8	115.0	403.6	255.0	260.9	222.0
62.5°	233.8	363.5	96.0	69.3	67.0	68.4	95.8	345.2	230.2	230.6	156.4
65°	200.0	275.3	71.0	63.0	62.0	62.0	69.0	265.4	196.0	190.1	90.0
67.5°	165.6	197.7	57.0	58.0	57.0	57.0	56.0	192.1	161.6	151.6	68.0
70°	144.0	151.8	53.0	54.0	53.0	53.0	52.0	147.8	140.0	117.5	64.0
72.5°	123.2	103.6	49.0	49.2	49.0	49.0	48.0	97.3	119.2	82.6	58.4
75°	93.0	51.9	42.0	42.0	42.0	42.0	41.0	49.9	89.0	53.8	50.0
77.5°	64.6	34.3	34.8	34.6	34.6	33.8	33.8	34.0	60.8	37.1	40.4
80°	47.0	28.4	30.0	29.0	29.0	29.0	29.0	27.4	44.0	31.3	34.0
82.5°	33.4	22.6	24.4	23.4	23.4	23.4	23.4	22.4	30.4	25.5	27.6
85°	16.0	15.0	16.0	14.0	13.0	14.0	15.0	15.0	14.0	16.9	18.0
87.5°	4.8	7.4	6.9	5.5	5.5	5.5	6.1	6.6	4.0	8.1	7.7
90°	0.0	1.2	2.4	3.6	3.6	3.6	2.4	1.2	0.0	1.2	2.4
92.5°	2.9	4.1	5.3	7.5	8.4	7.5	5.3	4.1	2.9	4.1	5.3
95°	9.6	17.9	9.6	10.9	13.2	10.9	9.6	17.9	9.6	17.9	9.6
97.5°	17.1	34.3	70.7	20.9	18.0	20.9	70.7	34.3	17.1	34.3	70.7
100°	22.9	42.9	142.0	41.8	27.7	41.8	142.0	42.9	22.9	42.9	142.0
102.5°	28.6	49.6	192.0	110.3	60.4	110.3	192.0	49.6	28.6	49.6	192.0
105°	37.3	57.3	217.8	278.2	184.1	278.2	217.8	57.3	37.3	57.3	217.8
107.5°	46.0	61.0	207.9	404.9	379.2	404.9	207.9	61.0	46.0	61.0	207.9
110°	51.7	65.9	202.1	425.4	457.2	425.4	202.1	65.9	51.7	65.9	202.1



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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°	57.5	71.6	196.4	413.4	466.8	413.4	196.4	71.6	57.5	71.6	196.4
115°	66.2	80.3	187.7	390.1	456.0	390.1	187.7	80.3	66.2	80.3	187.7
117.5°	75.1	89.0	185.5	364.9	432.7	364.9	185.5	89.0	75.1	89.0	185.5
120°	81.8	94.8	181.7	345.7	416.3	345.7	181.7	94.8	81.8	94.8	181.7
122.5°	86.6	100.5	176.9	329.2	394.2	329.2	176.9	100.5	86.6	100.5	176.9
125°	95.1	108.0	176.9	309.3	365.8	309.3	176.9	108.0	95.1	108.0	176.9
127.5°	102.0	115.2	177.1	286.2	341.9	286.2	177.1	115.2	102.0	115.2	177.1
130°	105.9	120.0	178.1	270.7	323.7	270.7	178.1	120.0	105.9	120.0	178.1
132.5°	110.7	124.8	178.1	263.8	307.3	263.8	178.1	124.8	110.7	124.8	178.1
135°	117.9	130.9	178.1	254.7	292.4	254.7	178.1	130.9	117.9	130.9	178.1
137.5°	123.9	137.8	178.1	244.7	277.0	244.7	178.1	137.8	123.9	137.8	178.1
140°	128.7	141.7	178.1	238.9	268.3	238.9	178.1	141.7	128.7	141.7	178.1
142.5°	133.6	145.6	179.0	232.1	259.6	232.1	179.0	145.6	133.6	145.6	179.0
145°	139.6	151.3	179.3	221.9	245.4	221.9	179.3	151.3	139.6	151.3	179.3
147.5°	146.8	157.1	180.7	214.6	232.7	214.6	180.7	157.1	146.8	157.1	180.7
150°	151.6	161.0	181.7	209.7	225.0	209.7	181.7	161.0	151.6	161.0	181.7
152.5°	156.4	164.9	181.7	205.8	218.3	205.8	181.7	164.9	156.4	164.9	181.7
155°	163.6	169.5	182.9	201.1	210.6	201.1	182.9	169.5	163.6	169.5	182.9
157.5°	169.4	175.1	184.3	198.2	205.0	198.2	184.3	175.1	169.4	175.1	184.3
160°	173.3	178.0	185.3	196.2	202.1	196.2	185.3	178.0	173.3	178.0	185.3
162.5°	176.1	180.8	186.3	195.2	199.2	195.2	186.3	180.8	176.1	180.8	186.3
165°	181.7	184.0	187.7	192.6	196.1	192.6	187.7	184.0	181.7	184.0	187.7
167.5°	184.8	186.9	188.9	191.4	193.5	191.4	188.9	186.9	184.8	186.9	188.9
170°	187.7	188.9	188.9	191.3	192.5	191.3	188.9	188.9	187.7	188.9	188.9
172.5°	188.7	190.8	189.9	190.4	191.5	190.4	189.9	190.8	188.7	190.8	189.9
175°	191.3	192.5	191.3	190.1	188.9	190.1	191.3	192.5	191.3	192.5	191.3
177.5°	191.3	192.2	191.3	191.3	190.3	191.3	191.3	192.2	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	919.0	918.2	919.8	933.4	961.2	986.2
5°	837.1	840.0	842.9	866.0	914.5	981.0
7.5°	774.1	769.8	776.5	814.0	873.6	969.0
10°	730.8	721.0	730.8	782.0	851.4	957.0
12.5°	689.9	677.8	693.1	749.2	833.1	941.0
15°	637.3	649.0	642.2	705.0	805.4	913.0
17.5°	649.7	708.8	662.3	666.6	778.0	884.2
20°	679.4	740.0	698.9	641.0	760.3	861.0
22.5°	706.2	752.0	714.8	619.4	742.6	840.2
25°	726.9	766.0	724.9	600.0	717.0	805.0
27.5°	727.9	733.4	728.3	598.4	685.3	770.0
30°	714.5	691.0	712.5	600.0	662.8	742.0
32.5°	676.0	649.4	667.8	596.8	640.1	705.2
35°	621.2	586.0	611.4	580.0	604.9	643.0
37.5°	563.4	518.8	554.0	546.8	574.9	559.6
40°	524.2	446.0	516.4	514.0	558.4	490.0
42.5°	474.1	407.6	467.0	487.6	540.4	450.8
45°	382.8	375.0	378.9	443.0	501.9	411.0
47.5°	350.1	344.8	348.1	402.4	458.5	393.6
50°	330.8	324.0	328.9	376.0	430.8	380.0
52.5°	304.2	285.6	302.2	340.0	402.2	357.6
55°	228.7	173.0	227.8	299.0	359.1	320.0
57.5°	134.2	100.0	131.3	260.2	304.3	280.2
60°	90.8	84.0	91.8	229.0	267.8	257.0
62.5°	83.0	80.8	83.1	159.4	235.2	233.8
65°	76.0	75.0	76.0	92.0	194.1	200.0
67.5°	68.8	67.8	69.6	70.6	153.3	165.6
70°	64.0	63.0	64.0	65.0	117.6	144.0
72.5°	58.4	57.4	58.4	59.4	82.7	123.2
75°	50.0	49.0	50.0	51.0	54.9	93.0
77.5°	40.4	40.4	41.4	41.4	38.4	64.6
80°	34.0	34.0	35.0	35.0	33.3	47.0
82.5°	27.6	26.8	28.6	29.4	27.5	33.4
85°	17.0	16.0	18.0	19.0	18.0	16.0
87.5°	7.1	6.3	7.9	9.3	8.9	4.8
90°	3.6	3.6	3.6	2.4	1.2	0.0
92.5°	7.5	8.4	7.5	5.3	4.1	2.9
95°	10.9	13.2	10.9	9.6	17.9	9.6
97.5°	20.9	18.0	20.9	70.7	34.3	17.1
100°	41.8	27.7	41.8	142.0	42.9	22.9
102.5°	110.3	60.4	110.3	192.0	49.6	28.6
105°	278.2	184.1	278.2	217.8	57.3	37.3
107.5°	404.9	379.2	404.9	207.9	61.0	46.0
110°	425.4	457.2	425.4	202.1	65.9	51.7





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.4	466.8	413.4	196.4	71.6	57.5
115°	390.1	456.0	390.1	187.7	80.3	66.2
117.5°	364.9	432.7	364.9	185.5	89.0	75.1
120°	345.7	416.3	345.7	181.7	94.8	81.8
122.5°	329.2	394.2	329.2	176.9	100.5	86.6
125°	309.3	365.8	309.3	176.9	108.0	95.1
127.5°	286.2	341.9	286.2	177.1	115.2	102.0
130°	270.7	323.7	270.7	178.1	120.0	105.9
132.5°	263.8	307.3	263.8	178.1	124.8	110.7
135°	254.7	292.4	254.7	178.1	130.9	117.9
137.5°	244.7	277.0	244.7	178.1	137.8	123.9
140°	238.9	268.3	238.9	178.1	141.7	128.7
142.5°	232.1	259.6	232.1	179.0	145.6	133.6
145°	221.9	245.4	221.9	179.3	151.3	139.6
147.5°	214.6	232.7	214.6	180.7	157.1	146.8
150°	209.7	225.0	209.7	181.7	161.0	151.6
152.5°	205.8	218.3	205.8	181.7	164.9	156.4
155°	201.1	210.6	201.1	182.9	169.5	163.6
157.5°	198.2	205.0	198.2	184.3	175.1	169.4
160°	196.2	202.1	196.2	185.3	178.0	173.3
162.5°	195.2	199.2	195.2	186.3	180.8	176.1
165°	192.6	196.1	192.6	187.7	184.0	181.7
167.5°	191.4	193.5	191.4	188.9	186.9	184.8
170°	191.3	192.5	191.3	188.9	188.9	187.7
172.5°	190.4	191.5	190.4	189.9	190.8	188.7
175°	190.1	188.9	190.1	191.3	192.5	191.3
177.5°	191.3	190.3	191.3	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3

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