

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: P621612

Luminaire Tested: VLT-FA-050U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621612
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-050U-075D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

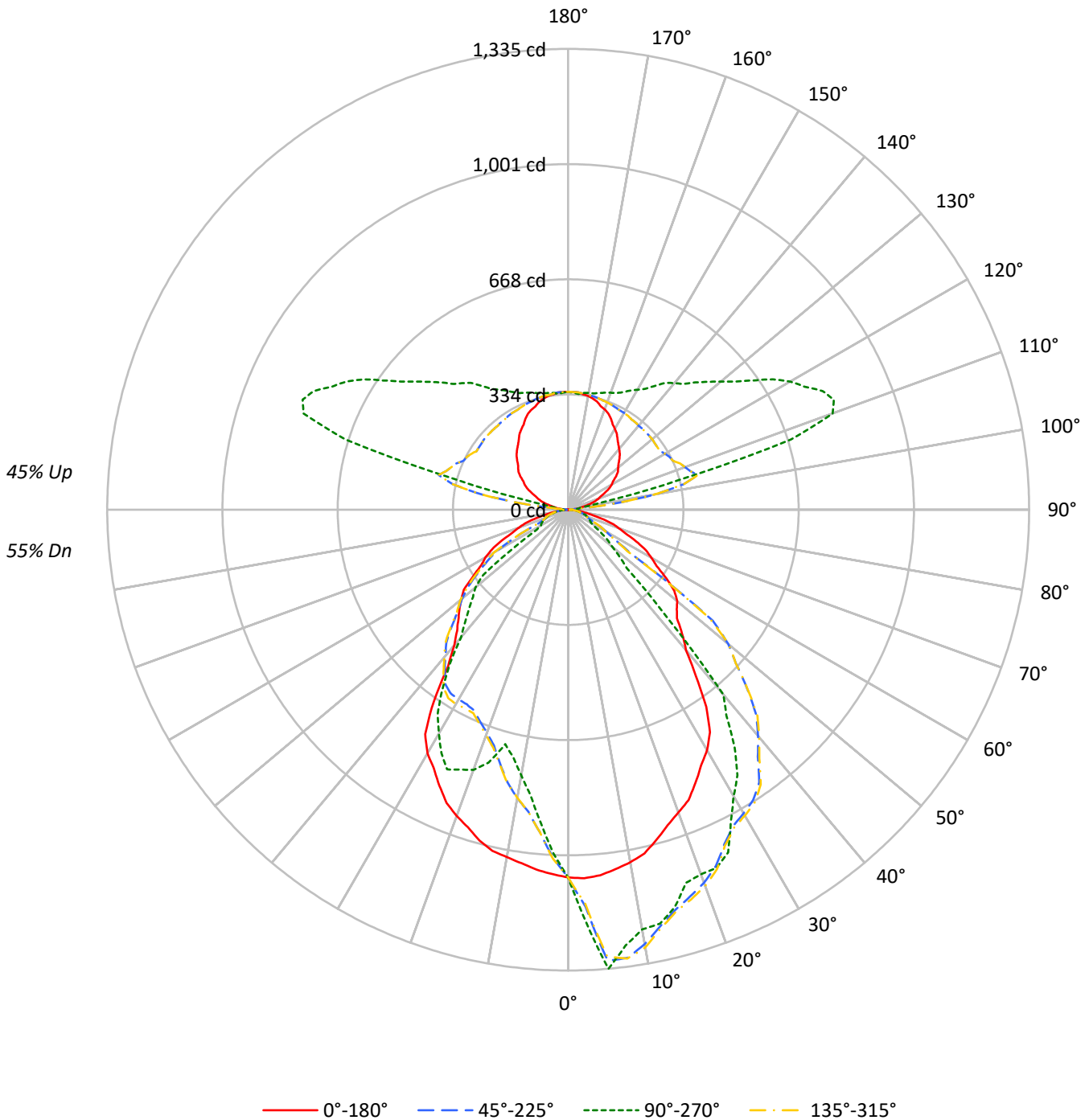
Lumens per Lamp: N/A
Luminaire Lumens: 4030.2 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.2
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	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				
1	100	96	92	89	92	89	86	83	77	74	72	65	64	62	55	54	53	48				
2	92	85	79	74	85	79	74	70	68	65	61	58	56	53	49	47	46	41				
3	84	75	68	63	78	70	64	59	61	56	53	52	49	46	44	42	40	36				
4	77	67	60	54	72	63	56	51	55	50	46	47	43	40	40	37	35	32				
5	71	60	53	47	66	57	50	44	49	44	40	43	39	36	37	34	31	28				
6	66	54	47	41	61	51	44	39	45	39	35	39	35	31	34	30	28	25				
7	61	49	42	36	57	46	40	35	41	35	31	36	31	28	31	28	25	23				
8	57	45	37	32	53	42	36	31	37	32	28	33	28	25	28	25	23	20				
9	53	41	34	29	49	39	32	28	34	29	25	30	26	23	26	23	21	18				
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	24	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7645	7645	7645	7645
5°	7658	9617	7540	6557
10°	7557	8994	7446	5693
15°	7350	8856	7375	5225
20°	7126	8582	7208	6124
25°	6907	8675	6984	6573
30°	6663	7938	6752	6205
35°	6104	7358	5953	5563
40°	4974	6548	4802	4527
45°	4520	2431	4564	4124
50°	4597	1851	4512	3920
55°	4339	1437	4190	2346
60°	3997	1104	3965	1306
65°	3680	1141	3606	1380
70°	3275	1204	3183	1433
75°	2795	1262	2673	1472
80°	2103	1298	1971	1521
85°	1424	1161	1251	1424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 8369 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	2.6
10°-20°	281.5	7.0
20°-30°	421.2	10.5
30°-40°	479.0	11.9
40°-50°	409.7	10.2
50°-60°	276.3	6.9
60°-70°	142.6	3.5
70°-80°	64.4	1.6
80°-90°	19.9	0.5
90°-100°	41.9	1.0
100°-110°	298.9	7.4
110°-120°	405.8	10.1
120°-130°	330.3	8.2
130°-140°	265.7	6.6
140°-150°	209.4	5.2
150°-160°	153.1	3.8
160°-170°	95.1	2.4
170°-180°	32.4	0.8
0°-30°	805.5	20.0
0°-40°	1284.5	31.9
0°-60°	1970.5	48.9
0°-90°	2197.4	54.5
90°-120°	746.7	18.5
90°-150°	1552.1	38.5
90°-180°	1833.0	45.5
0°-180°	4030.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1065	1065	1065	1065	1065	
5°	1063	1335	1047	910	1063	101
15°	989	1192	993	703	989	278
25°	872	1096	882	830	872	402
35°	697	840	680	635	697	426
45°	445	240	450	406	445	353
55°	347	115	335	188	347	309
65°	217	67	212	81	217	214
75°	101	46	96	53	101	107
85°	17	14	15	17	17	22
90°	0	6	0	6	0	1
95°	17	24	17	24	17	19
105°	66	328	66	328	66	70
115°	118	813	118	813	118	117
125°	170	652	170	652	170	151
135°	210	522	210	522	210	162
145°	249	438	249	438	249	156
155°	292	376	292	376	292	134
165°	324	350	324	350	324	91
175°	341	337	341	337	341	32
180°	341	341	341	341	341	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	1068.7	1105.2	1151.1	1182.6	1196.2	1182.6	1143.3	1104.9	1056.6	1042.2	1008.0
5°	1063.1	1175.4	1311.3	1327.7	1335.1	1327.7	1299.3	1168.7	1046.8	994.9	938.5
7.5°	1050.1	1246.5	1309.7	1273.1	1273.3	1280.1	1311.7	1240.4	1033.2	951.6	882.3
10°	1037.1	1286.1	1277.7	1224.8	1234.3	1230.1	1287.4	1278.3	1021.9	927.6	848.5
12.5°	1019.7	1298.4	1235.2	1217.9	1228.2	1222.3	1241.5	1291.7	1012.4	910.4	809.5
15°	989.4	1280.8	1199.6	1192.1	1192.1	1197.3	1205.1	1286.2	992.7	879.3	761.8
17.5°	958.2	1245.6	1174.9	1137.3	1133.3	1140.3	1183.8	1254.6	964.7	844.7	715.7
20°	933.1	1221.3	1149.8	1105.8	1123.8	1107.9	1159.5	1227.9	943.9	823.1	687.1
22.5°	910.5	1191.1	1117.7	1099.0	1122.9	1099.4	1126.6	1197.7	919.6	798.8	665.4
25°	872.4	1140.4	1069.6	1087.1	1095.6	1087.1	1073.9	1144.9	882.1	767.7	642.6
27.5°	834.4	1087.0	1033.6	1045.4	1019.5	1039.4	1039.5	1087.2	843.5	731.4	635.7
30°	804.1	1049.9	1015.4	998.2	958.0	989.8	1023.0	1050.2	814.9	707.9	634.0
32.5°	764.2	1016.0	997.2	937.9	912.0	933.6	1005.7	1015.3	770.7	686.6	632.2
35°	696.8	968.1	964.5	866.3	839.9	860.0	972.1	965.6	679.5	653.0	618.8
37.5°	606.4	925.4	901.8	794.0	751.9	788.7	909.0	920.8	571.5	622.2	587.4
40°	531.0	896.6	855.0	740.3	699.0	735.0	860.4	894.0	512.6	600.5	552.7
42.5°	488.5	871.0	805.6	683.4	427.6	674.7	811.0	867.8	476.2	572.6	522.3
45°	445.4	824.7	733.7	378.3	239.5	360.3	734.7	813.2	449.7	530.3	475.7
47.5°	426.5	767.7	658.4	227.9	202.2	221.3	657.8	755.2	426.8	487.8	431.3
50°	411.8	731.8	604.7	200.8	165.8	193.4	605.8	720.0	404.2	459.3	401.0
52.5°	387.5	688.9	527.5	166.4	143.3	162.3	514.7	675.4	380.8	428.3	362.8
55°	346.8	606.4	220.0	130.8	114.9	125.5	209.2	586.0	334.9	379.4	318.6
57.5°	303.6	516.2	154.3	101.8	89.1	100.7	153.2	495.5	298.0	321.3	277.9
60°	278.5	455.5	125.7	85.4	76.9	84.4	124.6	437.4	276.3	282.7	240.6
62.5°	253.4	393.9	104.0	75.1	72.6	74.1	103.8	374.1	249.5	249.9	169.5
65°	216.7	298.3	76.9	68.2	67.2	67.2	74.8	287.6	212.4	206.0	97.5
67.5°	179.5	214.2	61.8	62.8	61.8	61.8	60.7	208.2	175.1	164.3	73.7
70°	156.1	164.5	57.4	58.5	57.4	57.4	56.4	160.2	151.7	127.3	69.4
72.5°	133.5	112.3	53.1	53.3	53.1	53.1	52.0	105.4	129.2	89.5	63.3
75°	100.8	56.3	45.5	45.5	45.5	45.5	44.4	54.1	96.4	58.3	54.2
77.5°	70.0	37.2	37.7	37.5	37.5	36.6	36.6	36.9	65.9	40.2	43.8
80°	50.9	30.8	32.5	31.4	31.4	31.4	31.4	29.7	47.7	33.9	36.8
82.5°	36.2	24.5	26.4	25.4	25.4	25.4	25.4	24.3	32.9	27.6	29.9
85°	17.3	16.3	17.3	15.1	14.1	15.1	16.3	16.2	15.2	18.4	19.5
87.5°	5.2	8.2	7.8	6.5	6.5	6.5	6.9	7.3	4.3	9.0	8.7
90°	0.0	2.1	4.3	6.4	6.4	6.4	4.3	2.1	0.0	2.1	4.3
92.5°	5.2	7.2	9.4	13.3	15.0	13.3	9.4	7.2	5.2	7.2	9.4
95°	17.2	31.9	17.2	19.4	23.6	19.4	17.2	31.9	17.2	31.9	17.2
97.5°	30.5	61.1	126.2	37.2	32.2	37.2	126.2	61.1	30.5	61.1	126.2
100°	40.8	76.4	253.2	74.5	49.4	74.5	253.2	76.4	40.8	76.4	253.2
102.5°	51.1	88.4	342.5	196.7	107.7	196.7	342.5	88.4	51.1	88.4	342.5
105°	66.5	102.2	388.4	496.2	328.3	496.2	388.4	102.2	66.5	102.2	388.4
107.5°	82.0	108.8	370.8	722.1	676.4	722.1	370.8	108.8	82.0	108.8	370.8
110°	92.3	117.5	360.5	758.8	815.4	758.8	360.5	117.5	92.3	117.5	360.5



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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°	102.6	127.8	350.2	737.4	832.6	737.4	350.2	127.8	102.6	127.8	350.2
115°	118.0	143.2	334.8	695.8	813.3	695.8	334.8	143.2	118.0	143.2	334.8
117.5°	133.9	158.7	330.9	650.8	771.7	650.8	330.9	158.7	133.9	158.7	330.9
120°	145.9	169.0	324.0	616.6	742.5	616.6	324.0	169.0	145.9	169.0	324.0
122.5°	154.5	179.3	315.4	587.2	703.0	587.2	315.4	179.3	154.5	179.3	315.4
125°	169.5	192.6	315.4	551.6	652.4	551.6	315.4	192.6	169.5	192.6	315.4
127.5°	182.0	205.5	315.9	510.4	609.9	510.4	315.9	205.5	182.0	205.5	315.9
130°	188.8	214.0	317.6	482.8	577.2	482.8	317.6	214.0	188.8	214.0	317.6
132.5°	197.4	222.6	317.6	470.4	548.1	470.4	317.6	222.6	197.4	222.6	317.6
135°	210.3	233.4	317.6	454.3	521.5	454.3	317.6	233.4	210.3	233.4	317.6
137.5°	221.0	245.8	317.6	436.5	494.0	436.5	317.6	245.8	221.0	245.8	317.6
140°	229.6	252.7	317.6	426.1	478.5	426.1	317.6	252.7	229.6	252.7	317.6
142.5°	238.2	259.6	319.3	414.0	463.1	414.0	319.3	259.6	238.2	259.6	319.3
145°	248.9	269.9	319.7	395.8	437.8	395.8	319.7	269.9	248.9	269.9	319.7
147.5°	261.8	280.3	322.3	382.7	415.0	382.7	322.3	280.3	261.8	280.3	322.3
150°	270.4	287.2	324.0	374.0	401.3	374.0	324.0	287.2	270.4	287.2	324.0
152.5°	279.0	294.1	324.0	367.0	389.3	367.0	324.0	294.1	279.0	294.1	324.0
155°	291.8	302.3	326.2	358.7	375.5	358.7	326.2	302.3	291.8	302.3	326.2
157.5°	302.1	312.2	328.8	353.5	365.7	353.5	328.8	312.2	302.1	312.2	328.8
160°	309.0	317.4	330.5	350.0	360.5	350.0	330.5	317.4	309.0	317.4	330.5
162.5°	314.2	322.6	332.2	348.2	355.4	348.2	332.2	322.6	314.2	322.6	332.2
165°	324.0	328.2	334.8	343.5	349.8	343.5	334.8	328.2	324.0	328.2	334.8
167.5°	329.6	333.4	336.9	341.3	345.1	341.3	336.9	333.4	329.6	333.4	336.9
170°	334.8	336.9	336.9	341.2	343.3	341.2	336.9	336.9	334.8	336.9	336.9
172.5°	336.5	340.3	338.6	339.5	341.6	339.5	338.6	340.3	336.5	340.3	338.6
175°	341.2	343.3	341.2	339.0	336.9	339.0	341.2	343.3	341.2	343.3	341.2
177.5°	341.2	342.9	341.2	341.2	339.5	341.2	341.2	342.9	341.2	342.9	341.2
180°	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	995.9	995.0	996.7	1011.5	1041.6	1068.7
5°	907.1	910.3	913.5	938.5	991.0	1063.1
7.5°	838.9	834.2	841.4	882.1	946.7	1050.1
10°	791.9	781.3	791.9	847.4	922.6	1037.1
12.5°	747.7	734.5	751.1	811.9	902.8	1019.7
15°	690.6	703.3	695.9	764.0	872.8	989.4
17.5°	704.1	768.1	717.7	722.4	843.1	958.2
20°	736.2	801.9	757.4	694.6	823.9	933.1
22.5°	765.3	814.9	774.7	671.2	804.8	910.5
25°	787.7	830.1	785.6	650.2	777.0	872.4
27.5°	788.8	794.8	789.3	648.5	742.7	834.4
30°	774.3	748.8	772.1	650.2	718.3	804.1
32.5°	732.6	703.7	723.7	646.7	693.6	764.2
35°	673.2	635.0	662.6	628.5	655.5	696.8
37.5°	610.5	562.2	600.4	592.6	623.0	606.4
40°	568.1	483.3	559.6	557.0	605.2	531.0
42.5°	513.8	441.7	506.1	528.4	585.6	488.5
45°	414.9	406.4	410.6	480.1	543.9	445.4
47.5°	379.4	373.7	377.3	436.1	496.9	426.5
50°	358.5	351.1	356.4	407.5	466.9	411.8
52.5°	329.6	309.5	327.5	368.5	435.8	387.5
55°	247.9	187.5	246.8	324.0	389.2	346.8
57.5°	145.5	108.4	142.3	282.0	329.7	303.6
60°	98.4	91.0	99.5	248.2	290.2	278.5
62.5°	89.9	87.6	90.1	172.7	254.8	253.4
65°	82.3	81.3	82.3	99.7	210.4	216.7
67.5°	74.5	73.5	75.4	76.5	166.1	179.5
70°	69.3	68.3	69.3	70.4	127.4	156.1
72.5°	63.3	62.2	63.3	64.4	89.6	133.5
75°	54.2	53.1	54.2	55.3	59.5	100.8
77.5°	43.8	43.8	44.8	44.9	41.6	70.0
80°	36.8	36.8	37.9	37.9	36.1	50.9
82.5°	29.9	29.0	30.9	31.9	29.8	36.2
85°	18.4	17.3	19.5	20.6	19.5	17.3
87.5°	8.2	7.4	9.1	10.4	9.9	5.2
90°	6.4	6.4	6.4	4.3	2.1	0.0
92.5°	13.3	15.0	13.3	9.4	7.2	5.2
95°	19.4	23.6	19.4	17.2	31.9	17.2
97.5°	37.2	32.2	37.2	126.2	61.1	30.5
100°	74.5	49.4	74.5	253.2	76.4	40.8
102.5°	196.7	107.7	196.7	342.5	88.4	51.1
105°	496.2	328.3	496.2	388.4	102.2	66.5
107.5°	722.1	676.4	722.1	370.8	108.8	82.0
110°	758.8	815.4	758.8	360.5	117.5	92.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	737.4	832.6	737.4	350.2	127.8	102.6
115°	695.8	813.3	695.8	334.8	143.2	118.0
117.5°	650.8	771.7	650.8	330.9	158.7	133.9
120°	616.6	742.5	616.6	324.0	169.0	145.9
122.5°	587.2	703.0	587.2	315.4	179.3	154.5
125°	551.6	652.4	551.6	315.4	192.6	169.5
127.5°	510.4	609.9	510.4	315.9	205.5	182.0
130°	482.8	577.2	482.8	317.6	214.0	188.8
132.5°	470.4	548.1	470.4	317.6	222.6	197.4
135°	454.3	521.5	454.3	317.6	233.4	210.3
137.5°	436.5	494.0	436.5	317.6	245.8	221.0
140°	426.1	478.5	426.1	317.6	252.7	229.6
142.5°	414.0	463.1	414.0	319.3	259.6	238.2
145°	395.8	437.8	395.8	319.7	269.9	248.9
147.5°	382.7	415.0	382.7	322.3	280.3	261.8
150°	374.0	401.3	374.0	324.0	287.2	270.4
152.5°	367.0	389.3	367.0	324.0	294.1	279.0
155°	358.7	375.5	358.7	326.2	302.3	291.8
157.5°	353.5	365.7	353.5	328.8	312.2	302.1
160°	350.0	360.5	350.0	330.5	317.4	309.0
162.5°	348.2	355.4	348.2	332.2	322.6	314.2
165°	343.5	349.8	343.5	334.8	328.2	324.0
167.5°	341.3	345.1	341.3	336.9	333.4	329.6
170°	341.2	343.3	341.2	336.9	336.9	334.8
172.5°	339.5	341.6	339.5	338.6	340.3	336.5
175°	339.0	336.9	339.0	341.2	343.3	341.2
177.5°	341.2	339.5	341.2	341.2	342.9	341.2
180°	341.2	341.2	341.2	341.2	341.2	341.2

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