

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P621579

Luminaire Tested: VLT-FA-025U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621579  
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-840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

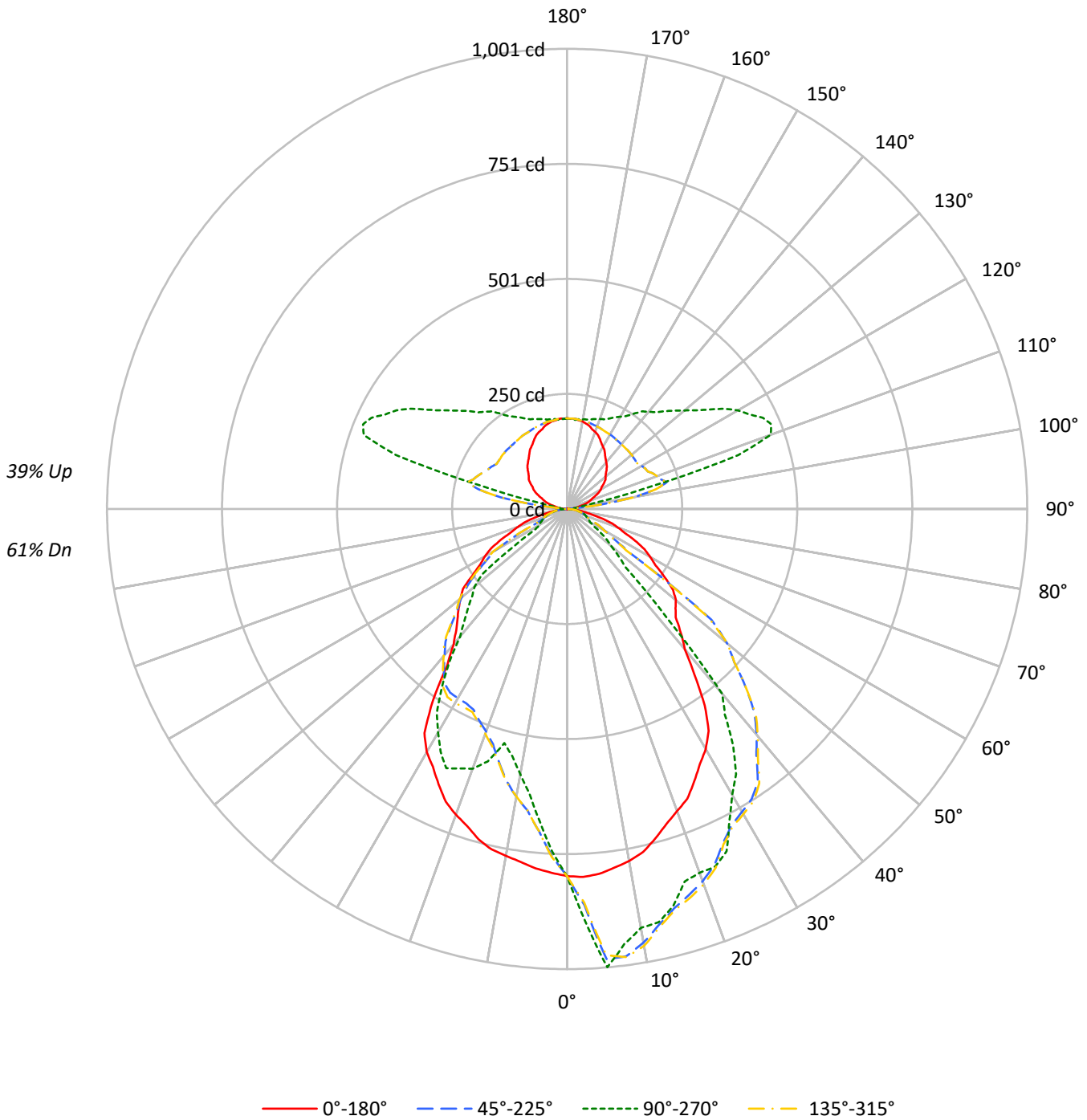
Lumens per Lamp: N/A  
Luminaire Lumens: 2705.2 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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			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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	101	97	94	90	95	91	88	85	80	78	76	70	68	66	60	59	58	53
2	93	86	80	76	87	81	76	72	71	68	64	62	60	57	54	52	50	46
3	86	77	70	64	80	72	66	61	64	59	55	56	52	50	49	46	44	40
4	79	68	61	55	74	65	58	53	57	52	48	51	47	43	44	41	39	36
5	73	62	54	48	68	58	51	46	52	46	42	46	42	38	40	37	34	31
6	67	56	48	42	63	53	46	40	47	41	37	42	37	34	37	33	31	28
7	62	51	43	37	58	48	41	36	43	37	33	38	34	30	34	30	28	25
8	58	46	39	33	54	44	37	32	39	34	30	35	31	27	31	28	25	23
9	54	42	35	30	51	40	34	29	36	31	27	33	28	25	29	25	23	21
10	51	39	32	27	48	37	31	26	34	28	24	30	26	23	27	23	21	19

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

	0°	90°	180°	270°
0°	5730	5730	5730	5730
5°	5740	7208	5652	4915
10°	5665	6742	5582	4268
15°	5509	6638	5528	3917
20°	5341	6432	5403	4590
25°	5177	6502	5235	4926
30°	4994	5950	5061	4651
35°	4575	5515	4462	4170
40°	3728	4908	3599	3394
45°	3389	1822	3421	3091
50°	3446	1388	3383	2938
55°	3252	1077	3140	1758
60°	2997	828	2972	979
65°	2759	856	2703	1034
70°	2455	904	2386	1074
75°	2093	945	2005	1103
80°	1579	975	1475	1141
85°	1070	873	939	1070

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6274 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	2.8
10°-20°	211.0	7.8
20°-30°	315.7	11.7
30°-40°	359.1	13.3
40°-50°	307.1	11.4
50°-60°	207.1	7.7
60°-70°	106.9	4.0
70°-80°	48.3	1.8
80°-90°	14.8	0.5
90°-100°	24.2	0.9
100°-110°	172.6	6.4
110°-120°	234.3	8.7
120°-130°	190.7	7.0
130°-140°	153.4	5.7
140°-150°	120.9	4.5
150°-160°	88.4	3.3
160°-170°	54.9	2.0
170°-180°	18.7	0.7
0°-30°	603.8	22.3
0°-40°	962.8	35.6
0°-60°	1477.0	54.6
0°-90°	1646.9	60.9
90°-120°	431.2	15.9
90°-150°	896.2	33.1
90°-180°	1058.0	39.1
0°-180°	2705.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	798	798	798	798	798	
5°	797	1001	785	682	797	75
15°	742	894	744	527	742	209
25°	654	821	661	622	654	301
35°	522	630	509	476	522	319
45°	334	180	337	305	334	265
55°	260	86	251	140	260	232
65°	162	50	159	61	162	161
75°	76	34	72	40	76	81
85°	13	11	11	13	13	17
90°	0	4	0	4	0	1
95°	10	14	10	14	10	11
105°	38	190	38	190	38	40
115°	68	470	68	470	68	68
125°	98	377	98	377	98	87
135°	121	301	121	301	121	93
145°	144	253	144	253	144	90
155°	168	217	168	217	168	77
165°	187	202	187	202	187	53
175°	197	194	197	194	197	19
180°	197	197	197	197	197	



TEST NUMBER: P621579

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	801.1	828.4	862.8	886.4	896.6	886.4	857.0	828.2	792.0	781.2	755.6
5°	796.9	881.0	982.9	995.2	1000.7	995.2	973.9	876.0	784.7	745.8	703.4
7.5°	787.1	934.4	981.7	954.3	954.4	959.5	983.2	929.8	774.4	713.3	661.4
10°	777.4	964.0	957.7	918.1	925.2	922.0	965.0	958.2	766.0	695.3	636.0
12.5°	764.4	973.3	925.8	912.9	920.7	916.2	930.6	968.2	758.8	682.4	606.8
15°	741.6	960.0	899.2	893.5	893.5	897.5	903.3	964.1	744.1	659.1	571.0
17.5°	718.2	933.6	880.7	852.5	849.5	854.7	887.3	940.4	723.1	633.2	536.4
20°	699.4	915.4	861.8	828.8	842.3	830.4	869.2	920.4	707.5	617.0	515.0
22.5°	682.5	892.8	837.8	823.7	841.7	824.1	844.5	897.7	689.3	598.8	498.7
25°	653.9	854.8	801.7	814.9	821.2	814.9	805.0	858.2	661.2	575.4	481.7
27.5°	625.5	814.8	774.8	783.6	764.2	779.1	779.1	815.0	632.3	548.3	476.5
30°	602.7	787.0	761.1	748.2	718.1	741.9	766.8	787.2	610.8	530.6	475.2
32.5°	572.8	761.5	747.5	703.0	683.6	699.8	753.8	761.0	577.7	514.6	473.9
35°	522.3	725.6	722.9	649.4	629.5	644.6	728.6	723.8	509.3	489.5	463.8
37.5°	454.6	693.6	676.0	595.2	563.6	591.2	681.3	690.2	428.4	466.4	440.3
40°	398.0	672.0	640.9	554.9	523.9	550.9	645.0	670.1	384.2	450.1	414.3
42.5°	366.2	652.9	603.9	512.3	320.5	505.7	607.9	650.5	356.9	429.2	391.5
45°	333.9	618.2	549.9	283.6	179.5	270.1	550.7	609.5	337.1	397.5	356.6
47.5°	319.7	575.5	493.5	170.8	151.6	165.9	493.1	566.1	319.9	365.6	323.3
50°	308.7	548.5	453.3	150.5	124.3	144.9	454.1	539.7	303.0	344.3	300.5
52.5°	290.5	516.4	395.4	124.7	107.4	121.7	385.8	506.2	285.4	321.0	272.0
55°	259.9	454.5	164.9	98.0	86.1	94.0	156.8	439.2	251.0	284.4	238.8
57.5°	227.6	386.9	115.7	76.3	66.8	75.5	114.9	371.4	223.4	240.9	208.3
60°	208.8	341.4	94.2	64.0	57.7	63.2	93.4	327.9	207.1	211.9	180.3
62.5°	189.9	295.2	78.0	56.3	54.4	55.5	77.8	280.4	187.0	187.3	127.0
65°	162.5	223.6	57.7	51.2	50.4	50.4	56.0	215.6	159.2	154.4	73.1
67.5°	134.5	160.6	46.3	47.1	46.3	46.3	45.5	156.0	131.3	123.2	55.2
70°	117.0	123.3	43.1	43.8	43.1	43.1	42.2	120.1	113.7	95.5	52.0
72.5°	100.1	84.2	39.8	40.0	39.8	39.8	39.0	79.0	96.8	67.1	47.4
75°	75.5	42.2	34.1	34.1	34.1	34.1	33.3	40.5	72.3	43.7	40.6
77.5°	52.5	27.9	28.3	28.1	28.1	27.5	27.5	27.6	49.4	30.2	32.8
80°	38.2	23.1	24.4	23.6	23.6	23.6	23.6	22.2	35.7	25.4	27.6
82.5°	27.1	18.4	19.8	19.0	19.0	19.0	19.0	18.2	24.7	20.7	22.4
85°	13.0	12.2	13.0	11.4	10.6	11.4	12.2	12.2	11.4	13.8	14.6
87.5°	3.9	6.0	5.7	4.6	4.6	4.6	5.0	5.4	3.2	6.7	6.3
90°	0.0	1.2	2.5	3.7	3.7	3.7	2.5	1.2	0.0	1.2	2.5
92.5°	3.0	4.2	5.5	7.7	8.7	7.7	5.5	4.2	3.0	4.2	5.5
95°	9.9	18.4	9.9	11.2	13.6	11.2	9.9	18.4	9.9	18.4	9.9
97.5°	17.6	35.3	72.9	21.5	18.6	21.5	72.9	35.3	17.6	35.3	72.9
100°	23.5	44.1	146.2	43.0	28.5	43.0	146.2	44.1	23.5	44.1	146.2
102.5°	29.5	51.1	197.8	113.6	62.2	113.6	197.8	51.1	29.5	51.1	197.8
105°	38.4	59.0	224.3	286.5	189.6	286.5	224.3	59.0	38.4	59.0	224.3
107.5°	47.3	62.8	214.1	417.0	390.5	417.0	214.1	62.8	47.3	62.8	214.1
110°	53.3	67.8	208.2	438.1	470.8	438.1	208.2	67.8	53.3	67.8	208.2



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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°	59.2	73.8	202.2	425.7	480.7	425.7	202.2	73.8	59.2	73.8	202.2
115°	68.1	82.7	193.3	401.8	469.6	401.8	193.3	82.7	68.1	82.7	193.3
117.5°	77.3	91.6	191.1	375.8	445.6	375.8	191.1	91.6	77.3	91.6	191.1
120°	84.3	97.6	187.1	356.0	428.7	356.0	187.1	97.6	84.3	97.6	187.1
122.5°	89.2	103.5	182.1	339.0	405.9	339.0	182.1	103.5	89.2	103.5	182.1
125°	97.9	111.2	182.1	318.5	376.7	318.5	182.1	111.2	97.9	111.2	182.1
127.5°	105.1	118.6	182.4	294.7	352.1	294.7	182.4	118.6	105.1	118.6	182.4
130°	109.0	123.6	183.4	278.8	333.3	278.8	183.4	123.6	109.0	123.6	183.4
132.5°	114.0	128.5	183.4	271.6	316.4	271.6	183.4	128.5	114.0	128.5	183.4
135°	121.4	134.8	183.4	262.3	301.1	262.3	183.4	134.8	121.4	134.8	183.4
137.5°	127.6	141.9	183.4	252.0	285.2	252.0	183.4	141.9	127.6	141.9	183.4
140°	132.6	145.9	183.4	246.0	276.3	246.0	183.4	145.9	132.6	145.9	183.4
142.5°	137.5	149.9	184.4	239.0	267.4	239.0	184.4	149.9	137.5	149.9	184.4
145°	143.7	155.8	184.6	228.5	252.8	228.5	184.6	155.8	143.7	155.8	184.6
147.5°	151.2	161.8	186.1	221.0	239.6	221.0	186.1	161.8	151.2	161.8	186.1
150°	156.1	165.8	187.1	216.0	231.7	216.0	187.1	165.8	156.1	165.8	187.1
152.5°	161.1	169.8	187.1	211.9	224.8	211.9	187.1	169.8	161.1	169.8	187.1
155°	168.5	174.6	188.3	207.1	216.8	207.1	188.3	174.6	168.5	174.6	188.3
157.5°	174.5	180.3	189.8	204.1	211.1	204.1	189.8	180.3	174.5	180.3	189.8
160°	178.4	183.3	190.8	202.1	208.2	202.1	190.8	183.3	178.4	183.3	190.8
162.5°	181.4	186.2	191.8	201.1	205.2	201.1	191.8	186.2	181.4	186.2	191.8
165°	187.1	189.5	193.3	198.3	202.0	198.3	193.3	189.5	187.1	189.5	193.3
167.5°	190.3	192.5	194.5	197.1	199.2	197.1	194.5	192.5	190.3	192.5	194.5
170°	193.3	194.5	194.5	197.0	198.2	197.0	194.5	194.5	193.3	194.5	194.5
172.5°	194.3	196.5	195.5	196.0	197.3	196.0	195.5	196.5	194.3	196.5	195.5
175°	197.0	198.2	197.0	195.7	194.5	195.7	197.0	198.2	197.0	198.2	197.0
177.5°	197.0	198.0	197.0	197.0	196.0	197.0	197.0	198.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	746.5	745.8	747.1	758.2	780.7	801.1
5°	679.9	682.3	684.7	703.4	742.8	796.9
7.5°	628.8	625.3	630.7	661.2	709.6	787.1
10°	593.6	585.7	593.6	635.2	691.6	777.4
12.5°	560.4	550.6	563.0	608.6	676.7	764.4
15°	517.6	527.2	521.6	572.7	654.3	741.6
17.5°	527.8	575.8	537.9	541.5	632.0	718.2
20°	551.9	601.1	567.7	520.7	617.6	699.4
22.5°	573.7	610.8	580.7	503.1	603.2	682.5
25°	590.4	622.2	588.9	487.4	582.4	653.9
27.5°	591.3	595.7	591.6	486.1	556.7	625.5
30°	580.4	561.3	578.8	487.4	538.4	602.7
32.5°	549.1	527.5	542.4	484.8	519.9	572.8
35°	504.6	476.0	496.7	471.1	491.3	522.3
37.5°	457.6	421.4	450.0	444.2	466.9	454.6
40°	425.8	362.3	419.5	417.5	453.6	398.0
42.5°	385.1	331.1	379.4	396.1	438.9	366.2
45°	311.0	304.6	307.8	359.8	407.7	333.9
47.5°	284.4	280.1	282.8	326.9	372.5	319.7
50°	268.7	263.2	267.2	305.4	350.0	308.7
52.5°	247.1	232.0	245.5	276.2	326.7	290.5
55°	185.8	140.5	185.0	242.9	291.7	259.9
57.5°	109.0	81.2	106.6	211.4	247.1	227.6
60°	73.8	68.2	74.6	186.0	217.5	208.8
62.5°	67.4	65.6	67.5	129.5	191.0	189.9
65°	61.7	60.9	61.7	74.7	157.7	162.5
67.5°	55.9	55.1	56.5	57.3	124.5	134.5
70°	52.0	51.2	52.0	52.8	95.5	117.0
72.5°	47.4	46.6	47.4	48.3	67.2	100.1
75°	40.6	39.8	40.6	41.4	44.6	75.5
77.5°	32.8	32.8	33.6	33.6	31.2	52.5
80°	27.6	27.6	28.4	28.4	27.1	38.2
82.5°	22.4	21.8	23.2	23.9	22.4	27.1
85°	13.8	13.0	14.6	15.4	14.6	13.0
87.5°	5.9	5.3	6.6	7.6	7.3	3.9
90°	3.7	3.7	3.7	2.5	1.2	0.0
92.5°	7.7	8.7	7.7	5.5	4.2	3.0
95°	11.2	13.6	11.2	9.9	18.4	9.9
97.5°	21.5	18.6	21.5	72.9	35.3	17.6
100°	43.0	28.5	43.0	146.2	44.1	23.5
102.5°	113.6	62.2	113.6	197.8	51.1	29.5
105°	286.5	189.6	286.5	224.3	59.0	38.4
107.5°	417.0	390.5	417.0	214.1	62.8	47.3
110°	438.1	470.8	438.1	208.2	67.8	53.3





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	425.7	480.7	425.7	202.2	73.8	59.2
115°	401.8	469.6	401.8	193.3	82.7	68.1
117.5°	375.8	445.6	375.8	191.1	91.6	77.3
120°	356.0	428.7	356.0	187.1	97.6	84.3
122.5°	339.0	405.9	339.0	182.1	103.5	89.2
125°	318.5	376.7	318.5	182.1	111.2	97.9
127.5°	294.7	352.1	294.7	182.4	118.6	105.1
130°	278.8	333.3	278.8	183.4	123.6	109.0
132.5°	271.6	316.4	271.6	183.4	128.5	114.0
135°	262.3	301.1	262.3	183.4	134.8	121.4
137.5°	252.0	285.2	252.0	183.4	141.9	127.6
140°	246.0	276.3	246.0	183.4	145.9	132.6
142.5°	239.0	267.4	239.0	184.4	149.9	137.5
145°	228.5	252.8	228.5	184.6	155.8	143.7
147.5°	221.0	239.6	221.0	186.1	161.8	151.2
150°	216.0	231.7	216.0	187.1	165.8	156.1
152.5°	211.9	224.8	211.9	187.1	169.8	161.1
155°	207.1	216.8	207.1	188.3	174.6	168.5
157.5°	204.1	211.1	204.1	189.8	180.3	174.5
160°	202.1	208.2	202.1	190.8	183.3	178.4
162.5°	201.1	205.2	201.1	191.8	186.2	181.4
165°	198.3	202.0	198.3	193.3	189.5	187.1
167.5°	197.1	199.2	197.1	194.5	192.5	190.3
170°	197.0	198.2	197.0	194.5	194.5	193.3
172.5°	196.0	197.3	196.0	195.5	196.5	194.3
175°	195.7	194.5	195.7	197.0	198.2	197.0
177.5°	197.0	196.0	197.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)