

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: P621673

Luminaire Tested: VLT-FA-100U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621673
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

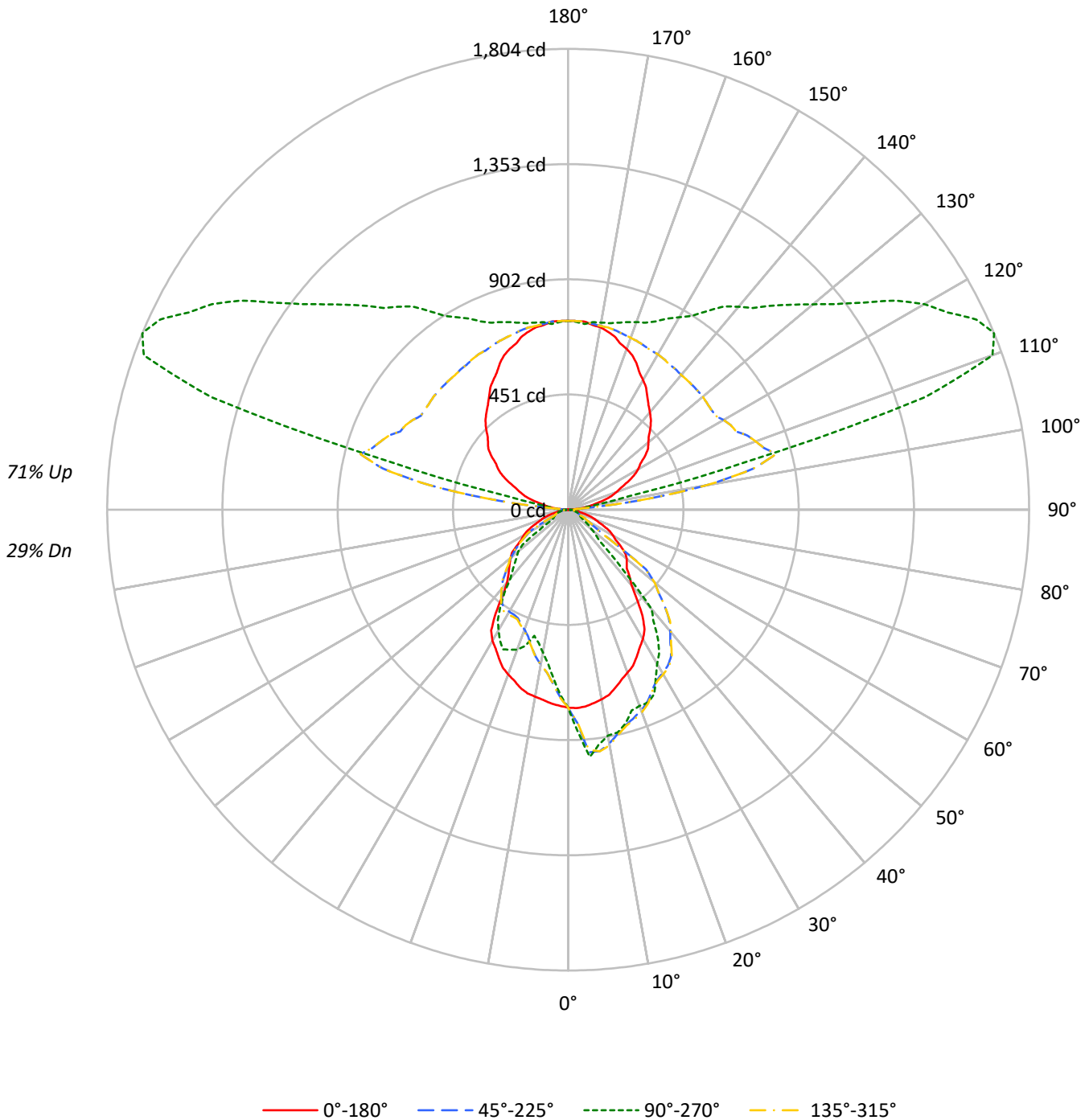
Lumens per Lamp: N/A
Luminaire Lumens: 5570.5 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): 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: P621673
CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621673

CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

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	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°	5559	5559	5559	5559
5°	5569	6994	5484	4769
10°	5496	6540	5415	4140
15°	5345	6440	5363	3800
20°	5181	6241	5242	4454
25°	5023	6308	5079	4780
30°	4845	5772	4910	4513
35°	4439	5350	4328	4045
40°	3618	4762	3492	3293
45°	3287	1768	3318	2999
50°	3344	1346	3281	2850
55°	3155	1045	3046	1705
60°	2906	804	2885	950
65°	2676	830	2623	1004
70°	2381	877	2314	1041
75°	2032	918	1944	1070
80°	1529	946	1434	1107
85°	1037	840	906	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6087 cd/sqm



TEST NUMBER: P621673
 CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	1.3
10°-20°	204.7	3.7
20°-30°	306.3	5.5
30°-40°	348.4	6.3
40°-50°	297.9	5.3
50°-60°	200.9	3.6
60°-70°	103.7	1.9
70°-80°	46.8	0.8
80°-90°	15.6	0.3
90°-100°	90.9	1.6
100°-110°	647.7	11.6
110°-120°	879.4	15.8
120°-130°	715.7	12.8
130°-140°	575.6	10.3
140°-150°	453.8	8.1
150°-160°	331.8	6.0
160°-170°	206.1	3.7
170°-180°	70.3	1.3
0°-30°	585.8	10.5
0°-40°	934.1	16.8
0°-60°	1432.9	25.7
0°-90°	1599.1	28.7
90°-120°	1618.0	29.0
90°-150°	3363.2	60.4
90°-180°	3971.0	71.3
0°-180°	5570.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	775	775	775	775	775	
5°	773	971	761	662	773	73
15°	720	867	722	512	720	203
25°	634	797	642	604	634	292
35°	507	611	494	462	507	310
45°	324	174	327	296	324	257
55°	252	84	244	136	252	225
65°	158	49	154	59	158	156
75°	73	33	70	39	73	78
85°	13	10	11	13	13	16
90°	0	14	0	14	0	2
95°	37	51	37	51	37	42
105°	144	711	144	711	144	152
115°	256	1762	256	1762	256	254
125°	367	1414	367	1414	367	326
135°	456	1130	456	1130	456	351
145°	539	949	539	949	539	339
155°	632	814	632	814	632	290
165°	702	758	702	758	702	197
175°	739	730	739	730	739	70
180°	739	739	739	739	739	



TEST NUMBER: P621673

CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	777.2	803.7	837.1	860.0	869.9	860.0	831.4	803.5	768.4	757.9	733.1
5°	773.1	854.8	953.6	965.5	970.9	965.5	944.9	849.9	761.3	723.5	682.5
7.5°	763.6	906.5	952.5	925.8	926.0	930.9	953.9	902.1	751.3	692.0	641.6
10°	754.2	935.3	929.1	890.7	897.6	894.5	936.2	929.6	743.1	674.6	617.1
12.5°	741.6	944.2	898.2	885.6	893.2	888.9	902.8	939.3	736.2	662.1	588.7
15°	719.5	931.4	872.4	866.9	866.9	870.7	876.3	935.3	721.9	639.4	554.0
17.5°	696.8	905.8	854.4	827.1	824.2	829.2	860.9	912.4	701.5	614.3	520.4
20°	678.5	888.1	836.1	804.1	817.2	805.7	843.2	892.9	686.4	598.6	499.6
22.5°	662.1	866.2	812.8	799.2	816.6	799.5	819.3	870.9	668.8	580.9	483.9
25°	634.4	829.3	777.8	790.6	796.7	790.6	781.0	832.6	641.5	558.3	467.3
27.5°	606.8	790.5	751.7	760.2	741.4	755.9	755.9	790.7	613.4	531.9	462.3
30°	584.7	763.5	738.4	725.9	696.6	719.8	743.9	763.7	592.6	514.8	461.0
32.5°	555.7	738.8	725.2	682.0	663.2	679.0	731.3	738.3	560.5	499.3	459.8
35°	506.7	704.0	701.4	630.0	610.7	625.4	706.9	702.2	494.1	474.9	450.0
37.5°	441.0	672.9	655.8	577.4	546.8	573.6	661.0	669.6	415.6	452.5	427.1
40°	386.2	652.0	621.8	538.4	508.3	534.5	625.7	650.2	372.8	436.7	401.9
42.5°	355.3	633.4	585.8	497.0	311.0	490.7	589.8	631.1	346.3	416.4	379.8
45°	323.9	599.8	533.5	275.1	174.2	262.0	534.3	591.3	327.0	385.6	346.0
47.5°	310.2	558.3	478.8	165.7	147.1	160.9	478.4	549.2	310.3	354.7	313.6
50°	299.5	532.2	439.7	146.0	120.6	140.6	440.5	523.6	293.9	334.0	291.6
52.5°	281.8	501.0	383.6	121.0	104.2	118.1	374.3	491.1	276.9	311.4	263.8
55°	252.2	441.0	160.0	95.1	83.5	91.2	152.1	426.1	243.5	275.9	231.7
57.5°	220.8	375.4	112.2	74.0	64.8	73.3	111.4	360.3	216.7	233.7	202.1
60°	202.5	331.2	91.4	62.1	56.0	61.3	90.6	318.1	201.0	205.6	175.0
62.5°	184.2	286.4	75.7	54.6	52.8	53.9	75.5	272.0	181.4	181.7	123.3
65°	157.6	216.9	56.0	49.6	48.9	48.9	54.4	209.2	154.5	149.8	70.9
67.5°	130.5	155.8	44.9	45.7	44.9	44.9	44.1	151.4	127.4	119.5	53.6
70°	113.5	119.6	41.8	42.5	41.8	41.8	41.0	116.5	110.3	92.6	50.4
72.5°	97.1	81.7	38.6	38.8	38.6	38.6	37.8	76.7	93.9	65.1	46.0
75°	73.3	40.9	33.1	33.1	33.1	33.1	32.3	39.3	70.1	42.4	39.4
77.5°	50.9	27.0	27.4	27.3	27.3	26.7	26.6	26.8	47.9	29.3	31.8
80°	37.0	22.4	23.6	22.9	22.9	22.9	22.9	21.6	34.7	24.7	26.8
82.5°	26.3	17.8	19.2	18.4	18.4	18.4	18.4	17.6	24.0	20.1	21.8
85°	12.6	11.8	12.6	11.0	10.2	11.0	11.8	11.8	11.0	13.3	14.2
87.5°	3.8	6.5	6.9	6.6	6.6	6.6	6.3	5.9	3.2	7.1	7.5
90°	0.0	4.5	9.3	13.9	13.9	13.9	9.3	4.5	0.0	4.5	9.3
92.5°	11.2	15.7	20.5	28.9	32.5	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.0	37.2	42.1	51.1	42.1	37.2	69.0	37.2	69.0	37.2
97.5°	66.0	132.4	273.4	80.7	69.7	80.7	273.4	132.4	66.0	132.4	273.4
100°	88.3	165.6	548.7	161.5	106.9	161.5	548.7	165.6	88.3	165.6	548.7
102.5°	110.7	191.6	742.1	426.2	233.4	426.2	742.1	191.6	110.7	191.6	742.1
105°	144.1	221.4	841.6	1075.1	711.4	1075.1	841.6	221.4	144.1	221.4	841.6
107.5°	177.6	235.8	803.5	1564.7	1465.6	1564.7	803.5	235.8	177.6	235.8	803.5
110°	199.9	254.5	781.2	1644.2	1766.9	1644.2	781.2	254.5	199.9	254.5	781.2



TEST NUMBER: P621673

CATALOG NUMBER: VLT-FA-100U-050D-830-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°	222.3	276.8	758.9	1597.7	1804.1	1597.7	758.9	276.8	222.3	276.8	758.9
115°	255.7	310.3	725.4	1507.7	1762.3	1507.7	725.4	310.3	255.7	310.3	725.4
117.5°	290.1	343.8	717.0	1410.2	1672.1	1410.2	717.0	343.8	290.1	343.8	717.0
120°	316.2	366.2	702.1	1336.0	1608.8	1336.0	702.1	366.2	316.2	366.2	702.1
122.5°	334.8	388.4	683.5	1272.3	1523.3	1272.3	683.5	388.4	334.8	388.4	683.5
125°	367.3	417.3	683.5	1195.3	1413.5	1195.3	683.5	417.3	367.3	417.3	683.5
127.5°	394.3	445.2	684.5	1106.0	1321.5	1106.0	684.5	445.2	394.3	445.2	684.5
130°	409.2	463.7	688.2	1046.2	1250.8	1046.2	688.2	463.7	409.2	463.7	688.2
132.5°	427.8	482.3	688.2	1019.3	1187.6	1019.3	688.2	482.3	427.8	482.3	688.2
135°	455.7	505.7	688.2	984.4	1129.9	984.4	688.2	505.7	455.7	505.7	688.2
137.5°	478.9	532.6	688.2	945.8	1070.4	945.8	688.2	532.6	478.9	532.6	688.2
140°	497.5	547.5	688.2	923.2	1036.9	923.2	688.2	547.5	497.5	547.5	688.2
142.5°	516.1	562.5	691.9	897.0	1003.4	897.0	691.9	562.5	516.1	562.5	691.9
145°	539.4	584.8	692.8	857.6	948.6	857.6	692.8	584.8	539.4	584.8	692.8
147.5°	567.3	607.3	698.4	829.3	899.3	829.3	698.4	607.3	567.3	607.3	698.4
150°	585.9	622.3	702.1	810.4	869.5	810.4	702.1	622.3	585.9	622.3	702.1
152.5°	604.5	637.2	702.1	795.3	843.5	795.3	702.1	637.2	604.5	637.2	702.1
155°	632.4	655.1	706.8	777.3	813.7	777.3	706.8	655.1	632.4	655.1	706.8
157.5°	654.7	676.5	712.4	766.0	792.3	766.0	712.4	676.5	654.7	676.5	712.4
160°	669.6	687.8	716.1	758.4	781.2	758.4	716.1	687.8	669.6	687.8	716.1
162.5°	680.7	698.9	719.8	754.6	770.0	754.6	719.8	698.9	680.7	698.9	719.8
165°	702.1	711.2	725.4	744.3	757.9	744.3	725.4	711.2	702.1	711.2	725.4
167.5°	714.2	722.4	730.0	739.5	747.7	739.5	730.0	722.4	714.2	722.4	730.0
170°	725.4	729.9	730.0	739.4	744.0	739.4	730.0	729.9	725.4	729.9	730.0
172.5°	729.1	737.3	733.7	735.7	740.3	735.7	733.7	737.3	729.1	737.3	733.7
175°	739.3	743.9	739.3	734.6	730.0	734.6	739.3	743.9	739.3	743.9	739.3
177.5°	739.3	743.0	739.3	739.2	735.6	739.2	739.3	743.0	739.3	743.0	739.3
180°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3



TEST NUMBER: P621673

CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	724.2	723.6	724.8	735.6	757.5	777.2
5°	659.7	662.0	664.3	682.5	720.7	773.1
7.5°	610.0	606.7	611.9	641.5	688.4	763.6
10°	575.9	568.2	575.9	616.3	671.0	754.2
12.5°	543.7	534.1	546.2	590.4	656.5	741.6
15°	502.2	511.5	506.1	555.6	634.7	719.5
17.5°	512.0	558.6	521.9	525.3	613.1	696.8
20°	535.4	583.2	550.8	505.1	599.2	678.5
22.5°	556.6	592.6	563.3	488.1	585.2	662.1
25°	572.8	603.7	571.3	472.8	565.0	634.4
27.5°	573.7	578.0	574.0	471.6	540.1	606.8
30°	563.0	544.6	561.5	472.8	522.3	584.7
32.5°	532.7	511.8	526.3	470.3	504.4	555.7
35°	489.5	461.8	481.8	457.1	476.7	506.7
37.5°	444.0	408.8	436.6	430.9	453.0	441.0
40°	413.1	351.5	407.0	405.1	440.1	386.2
42.5°	373.6	321.2	368.1	384.3	425.8	355.3
45°	301.7	295.5	298.6	349.1	395.6	323.9
47.5°	275.9	271.7	274.3	317.1	361.3	310.2
50°	260.7	255.3	259.2	296.3	339.5	299.5
52.5°	239.7	225.1	238.2	267.9	316.9	281.8
55°	180.3	136.3	179.5	235.6	283.0	252.2
57.5°	105.8	78.8	103.5	205.1	239.8	220.8
60°	71.6	66.2	72.4	180.5	211.0	202.5
62.5°	65.4	63.7	65.5	125.6	185.3	184.2
65°	59.9	59.1	59.9	72.5	153.0	157.6
67.5°	54.2	53.4	54.8	55.6	120.8	130.5
70°	50.4	49.6	50.4	51.2	92.7	113.5
72.5°	46.0	45.2	46.0	46.8	65.2	97.1
75°	39.4	38.6	39.4	40.2	43.2	73.3
77.5°	31.8	31.8	32.6	32.6	30.3	50.9
80°	26.8	26.8	27.6	27.6	26.3	37.0
82.5°	21.7	21.1	22.5	23.2	21.7	26.3
85°	13.4	12.6	14.2	15.0	14.2	12.6
87.5°	7.8	7.2	8.4	8.8	7.8	3.8
90°	13.9	13.9	13.9	9.3	4.5	0.0
92.5°	28.9	32.5	28.9	20.5	15.7	11.2
95°	42.1	51.1	42.1	37.2	69.0	37.2
97.5°	80.7	69.7	80.7	273.4	132.4	66.0
100°	161.5	106.9	161.5	548.7	165.6	88.3
102.5°	426.2	233.4	426.2	742.1	191.6	110.7
105°	1075.1	711.4	1075.1	841.6	221.4	144.1
107.5°	1564.7	1465.6	1564.7	803.5	235.8	177.6
110°	1644.2	1766.9	1644.2	781.2	254.5	199.9



TEST NUMBER: P621673

CATALOG NUMBER: VLT-FA-100U-050D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1597.7	1804.1	1597.7	758.9	276.8	222.3
115°	1507.7	1762.3	1507.7	725.4	310.3	255.7
117.5°	1410.2	1672.1	1410.2	717.0	343.8	290.1
120°	1336.0	1608.8	1336.0	702.1	366.2	316.2
122.5°	1272.3	1523.3	1272.3	683.5	388.4	334.8
125°	1195.3	1413.5	1195.3	683.5	417.3	367.3
127.5°	1106.0	1321.5	1106.0	684.5	445.2	394.3
130°	1046.2	1250.8	1046.2	688.2	463.7	409.2
132.5°	1019.3	1187.6	1019.3	688.2	482.3	427.8
135°	984.4	1129.9	984.4	688.2	505.7	455.7
137.5°	945.8	1070.4	945.8	688.2	532.6	478.9
140°	923.2	1036.9	923.2	688.2	547.5	497.5
142.5°	897.0	1003.4	897.0	691.9	562.5	516.1
145°	857.6	948.6	857.6	692.8	584.8	539.4
147.5°	829.3	899.3	829.3	698.4	607.3	567.3
150°	810.4	869.5	810.4	702.1	622.3	585.9
152.5°	795.3	843.5	795.3	702.1	637.2	604.5
155°	777.3	813.7	777.3	706.8	655.1	632.4
157.5°	766.0	792.3	766.0	712.4	676.5	654.7
160°	758.4	781.2	758.4	716.1	687.8	669.6
162.5°	754.6	770.0	754.6	719.8	698.9	680.7
165°	744.3	757.9	744.3	725.4	711.2	702.1
167.5°	739.5	747.7	739.5	730.0	722.4	714.2
170°	739.4	744.0	739.4	730.0	729.9	725.4
172.5°	735.7	740.3	735.7	733.7	737.3	729.1
175°	734.6	730.0	734.6	739.3	743.9	739.3
177.5°	739.2	735.6	739.2	739.3	743.0	739.3
180°	739.3	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)