

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: P621675

Luminaire Tested: VLT-FA-100U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621675
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-840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

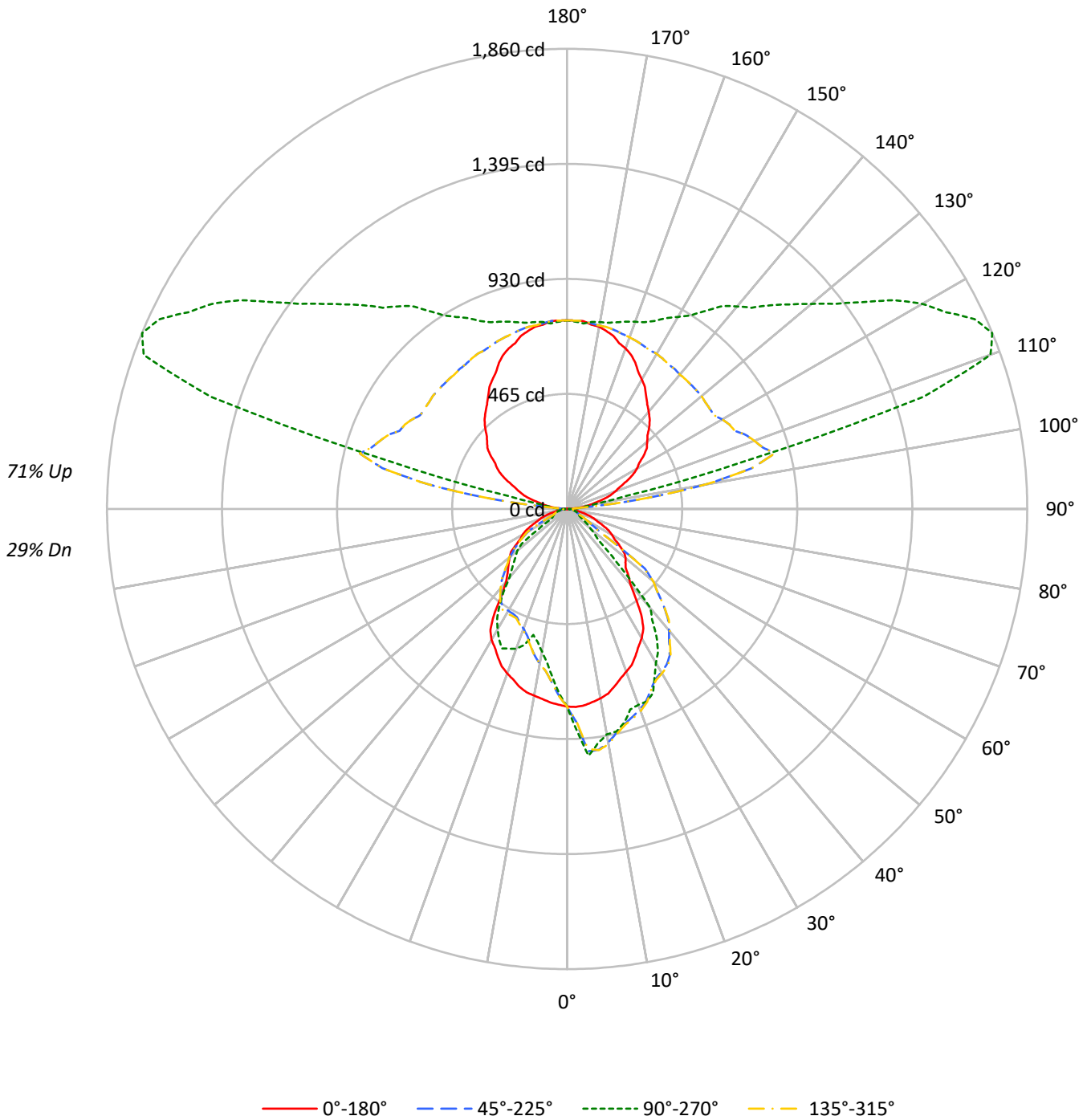
Lumens per Lamp: N/A
Luminaire Lumens: 5741.8 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
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



TEST NUMBER: P621675
CATALOG NUMBER: VLT-FA-100U-050D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-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°	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



TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	1.3
10°-20°	211.0	3.7
20°-30°	315.7	5.5
30°-40°	359.1	6.3
40°-50°	307.1	5.3
50°-60°	207.1	3.6
60°-70°	106.9	1.9
70°-80°	48.3	0.8
80°-90°	16.1	0.3
90°-100°	93.7	1.6
100°-110°	667.6	11.6
110°-120°	906.4	15.8
120°-130°	737.7	12.8
130°-140°	593.3	10.3
140°-150°	467.8	8.1
150°-160°	342.0	6.0
160°-170°	212.4	3.7
170°-180°	72.4	1.3
0°-30°	603.8	10.5
0°-40°	962.8	16.8
0°-60°	1477.0	25.7
0°-90°	1648.2	28.7
90°-120°	1667.7	29.0
90°-150°	3466.6	60.4
90°-180°	4094.0	71.3
0°-180°	5741.8	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	14	0	14	0	2
95°	38	53	38	53	38	43
105°	149	733	149	733	149	157
115°	264	1816	264	1816	264	262
125°	379	1457	379	1457	379	336
135°	470	1165	470	1165	470	361
145°	556	978	556	978	556	349
155°	652	839	652	839	652	299
165°	724	781	724	781	724	203
175°	762	752	762	752	762	72
180°	762	762	762	762	762	



TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-UNV-STD-W-4

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	6.7	7.1	6.8	6.8	6.8	6.5	6.1	3.2	7.4	7.8
90°	0.0	4.7	9.6	14.4	14.4	14.4	9.6	4.7	0.0	4.7	9.6
92.5°	11.5	16.2	21.1	29.8	33.5	29.8	21.1	16.2	11.5	16.2	21.1
95°	38.3	71.1	38.3	43.3	52.7	43.3	38.3	71.1	38.3	71.1	38.3
97.5°	68.1	136.5	281.8	83.1	71.9	83.1	281.8	136.5	68.1	136.5	281.8
100°	91.1	170.7	565.5	166.5	110.2	166.5	565.5	170.7	91.1	170.7	565.5
102.5°	114.1	197.5	764.9	439.3	240.6	439.3	764.9	197.5	114.1	197.5	764.9
105°	148.6	228.2	867.5	1108.2	733.3	1108.2	867.5	228.2	148.6	228.2	867.5
107.5°	183.1	243.1	828.2	1612.8	1510.7	1612.8	828.2	243.1	183.1	243.1	828.2
110°	206.1	262.3	805.2	1694.7	1821.3	1694.7	805.2	262.3	206.1	262.3	805.2



TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-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°	229.1	285.3	782.2	1646.8	1859.6	1646.8	782.2	285.3	229.1	285.3	782.2
115°	263.6	319.8	747.7	1554.0	1816.5	1554.0	747.7	319.8	263.6	319.8	747.7
117.5°	299.1	354.4	739.0	1453.6	1723.5	1453.6	739.0	354.4	299.1	354.4	739.0
120°	325.9	377.5	723.7	1377.1	1658.3	1377.1	723.7	377.5	325.9	377.5	723.7
122.5°	345.1	400.4	704.5	1311.4	1570.1	1311.4	704.5	400.4	345.1	400.4	704.5
125°	378.6	430.2	704.5	1232.1	1457.0	1232.1	704.5	430.2	378.6	430.2	704.5
127.5°	406.4	458.9	705.5	1140.0	1362.1	1140.0	705.5	458.9	406.4	458.9	705.5
130°	421.8	478.0	709.3	1078.4	1289.3	1078.4	709.3	478.0	421.8	478.0	709.3
132.5°	440.9	497.2	709.3	1050.7	1224.1	1050.7	709.3	497.2	440.9	497.2	709.3
135°	469.7	521.2	709.3	1014.7	1164.6	1014.7	709.3	521.2	469.7	521.2	709.3
137.5°	493.7	549.0	709.3	974.9	1103.3	974.9	709.3	549.0	493.7	549.0	709.3
140°	512.8	564.4	709.3	951.6	1068.8	951.6	709.3	564.4	512.8	564.4	709.3
142.5°	532.0	579.8	713.2	924.6	1034.3	924.6	713.2	579.8	532.0	579.8	713.2
145°	556.0	602.8	714.1	884.0	977.7	884.0	714.1	602.8	556.0	602.8	714.1
147.5°	584.7	626.0	719.9	854.8	926.9	854.8	719.9	626.0	584.7	626.0	719.9
150°	603.9	641.4	723.7	835.3	896.2	835.3	723.7	641.4	603.9	641.4	723.7
152.5°	623.1	656.8	723.7	819.7	869.4	819.7	723.7	656.8	623.1	656.8	723.7
155°	651.8	675.2	728.5	801.2	838.7	801.2	728.5	675.2	651.8	675.2	728.5
157.5°	674.8	697.3	734.3	789.5	816.7	789.5	734.3	697.3	674.8	697.3	734.3
160°	690.2	708.9	738.1	781.8	805.2	781.8	738.1	708.9	690.2	708.9	738.1
162.5°	701.7	720.4	741.9	777.7	793.7	777.7	741.9	720.4	701.7	720.4	741.9
165°	723.7	733.1	747.7	767.2	781.2	767.2	747.7	733.1	723.7	733.1	747.7
167.5°	736.2	744.6	752.5	762.2	770.7	762.2	752.5	744.6	736.2	744.6	752.5
170°	747.7	752.4	752.5	762.2	766.8	762.2	752.5	752.4	747.7	752.4	752.5
172.5°	751.5	759.9	756.3	758.3	763.0	758.3	756.3	759.9	751.5	759.9	756.3
175°	762.1	766.7	762.1	757.2	752.5	757.2	762.1	766.7	762.1	766.7	762.1
177.5°	762.1	765.8	762.1	762.0	758.2	762.0	762.1	765.8	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1



TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-UNV-STD-W-4

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°	8.1	7.4	8.7	9.1	8.0	3.9
90°	14.4	14.4	14.4	9.6	4.7	0.0
92.5°	29.8	33.5	29.8	21.1	16.2	11.5
95°	43.3	52.7	43.3	38.3	71.1	38.3
97.5°	83.1	71.9	83.1	281.8	136.5	68.1
100°	166.5	110.2	166.5	565.5	170.7	91.1
102.5°	439.3	240.6	439.3	764.9	197.5	114.1
105°	1108.2	733.3	1108.2	867.5	228.2	148.6
107.5°	1612.8	1510.7	1612.8	828.2	243.1	183.1
110°	1694.7	1821.3	1694.7	805.2	262.3	206.1



TEST NUMBER: P621675

CATALOG NUMBER: VLT-FA-100U-050D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1646.8	1859.6	1646.8	782.2	285.3	229.1
115°	1554.0	1816.5	1554.0	747.7	319.8	263.6
117.5°	1453.6	1723.5	1453.6	739.0	354.4	299.1
120°	1377.1	1658.3	1377.1	723.7	377.5	325.9
122.5°	1311.4	1570.1	1311.4	704.5	400.4	345.1
125°	1232.1	1457.0	1232.1	704.5	430.2	378.6
127.5°	1140.0	1362.1	1140.0	705.5	458.9	406.4
130°	1078.4	1289.3	1078.4	709.3	478.0	421.8
132.5°	1050.7	1224.1	1050.7	709.3	497.2	440.9
135°	1014.7	1164.6	1014.7	709.3	521.2	469.7
137.5°	974.9	1103.3	974.9	709.3	549.0	493.7
140°	951.6	1068.8	951.6	709.3	564.4	512.8
142.5°	924.6	1034.3	924.6	713.2	579.8	532.0
145°	884.0	977.7	884.0	714.1	602.8	556.0
147.5°	854.8	926.9	854.8	719.9	626.0	584.7
150°	835.3	896.2	835.3	723.7	641.4	603.9
152.5°	819.7	869.4	819.7	723.7	656.8	623.1
155°	801.2	838.7	801.2	728.5	675.2	651.8
157.5°	789.5	816.7	789.5	734.3	697.3	674.8
160°	781.8	805.2	781.8	738.1	708.9	690.2
162.5°	777.7	793.7	777.7	741.9	720.4	701.7
165°	767.2	781.2	767.2	747.7	733.1	723.7
167.5°	762.2	770.7	762.2	752.5	744.6	736.2
170°	762.2	766.8	762.2	752.5	752.4	747.7
172.5°	758.3	763.0	758.3	756.3	759.9	751.5
175°	757.2	752.5	757.2	762.1	766.7	762.1
177.5°	762.0	758.2	762.0	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1

(END OF REPORT)