

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: P621678

Luminaire Tested: VLT-FA-100U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621678
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-940-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

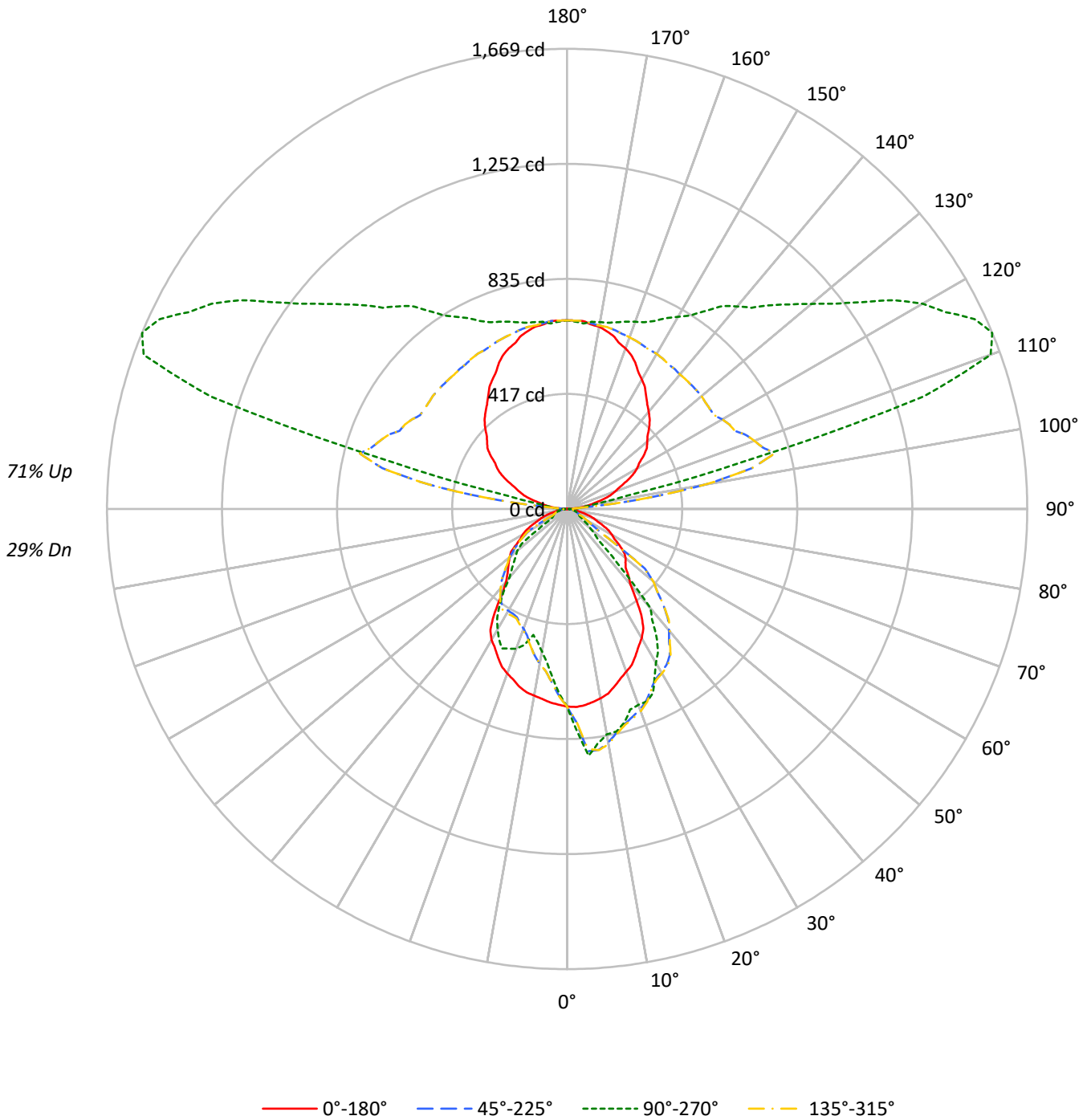
Lumens per Lamp: N/A
Luminaire Lumens: 5152.7 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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



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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	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°	5142	5142	5142	5142
5°	5151	6469	5073	4411
10°	5083	6050	5009	3830
15°	4944	5957	4960	3515
20°	4793	5772	4848	4119
25°	4646	5835	4698	4421
30°	4482	5340	4542	4174
35°	4106	4949	4004	3742
40°	3346	4405	3230	3045
45°	3040	1635	3070	2775
50°	3092	1245	3035	2637
55°	2919	967	2817	1578
60°	2688	743	2668	878
65°	2476	767	2426	929
70°	2203	810	2142	963
75°	1880	848	1799	990
80°	1417	872	1327	1025
85°	963	782	840	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5630 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.3
10°-20°	189.4	3.7
20°-30°	283.3	5.5
30°-40°	322.2	6.3
40°-50°	275.6	5.3
50°-60°	185.8	3.6
60°-70°	95.9	1.9
70°-80°	43.3	0.8
80°-90°	14.4	0.3
90°-100°	84.1	1.6
100°-110°	599.2	11.6
110°-120°	813.4	15.8
120°-130°	662.0	12.8
130°-140°	532.5	10.3
140°-150°	419.8	8.1
150°-160°	306.9	6.0
160°-170°	190.7	3.7
170°-180°	65.0	1.3
0°-30°	541.8	10.5
0°-40°	864.1	16.8
0°-60°	1325.5	25.7
0°-90°	1479.2	28.7
90°-120°	1496.6	29.0
90°-150°	3111.0	60.4
90°-180°	3674.0	71.3
0°-180°	5152.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	717	717	717	717	717	
5°	715	898	704	612	715	68
15°	666	802	668	473	666	187
25°	587	737	593	558	587	270
35°	469	565	457	427	469	287
45°	300	161	302	273	300	238
55°	233	77	225	126	233	208
65°	146	45	143	55	146	144
75°	68	31	65	36	68	72
85°	12	10	10	12	12	15
90°	0	13	0	13	0	2
95°	34	47	34	47	34	38
105°	133	658	133	658	133	141
115°	237	1630	237	1630	237	235
125°	340	1308	340	1308	340	302
135°	422	1045	422	1045	422	324
145°	499	877	499	877	499	313
155°	585	753	585	753	585	269
165°	650	701	650	701	650	182
175°	684	675	684	675	684	65
180°	684	684	684	684	684	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	718.9	743.4	774.3	795.5	804.6	795.5	769.1	743.2	710.7	701.0	678.1
5°	715.1	790.7	882.0	893.1	898.1	893.1	874.0	786.1	704.2	669.3	631.3
7.5°	706.4	838.5	881.0	856.4	856.5	861.1	882.3	834.4	695.0	640.1	593.5
10°	697.6	865.1	859.4	823.9	830.3	827.4	866.0	859.9	687.4	624.0	570.8
12.5°	686.0	873.4	830.9	819.2	826.2	822.2	835.1	868.9	681.0	612.4	544.5
15°	665.5	861.6	807.0	801.9	801.9	805.4	810.6	865.2	667.7	591.5	512.5
17.5°	644.5	837.8	790.3	765.1	762.3	767.1	796.3	843.9	648.9	568.2	481.4
20°	627.6	821.5	773.4	743.8	755.9	745.2	780.0	825.9	634.9	553.7	462.2
22.5°	612.5	801.2	751.9	739.2	755.4	739.5	757.8	805.6	618.6	537.3	447.6
25°	586.8	767.1	719.5	731.3	737.0	731.3	722.4	770.1	593.4	516.4	432.3
27.5°	561.3	731.2	695.3	703.2	685.8	699.2	699.2	731.4	567.4	492.0	427.6
30°	540.9	706.3	683.0	671.5	644.4	665.8	688.1	706.4	548.2	476.2	426.4
32.5°	514.1	683.4	670.8	630.9	613.5	628.0	676.5	682.9	518.4	461.8	425.3
35°	468.7	651.2	648.8	582.8	564.9	578.5	653.9	649.5	457.1	439.2	416.2
37.5°	407.9	622.5	606.6	534.1	505.8	530.6	611.5	619.4	384.5	418.5	395.1
40°	357.2	603.1	575.2	498.0	470.2	494.4	578.8	601.4	344.8	404.0	371.8
42.5°	328.6	585.9	541.9	459.7	287.6	453.9	545.6	583.7	320.3	385.2	351.4
45°	299.6	554.8	493.5	254.5	161.1	242.4	494.2	547.0	302.5	356.7	320.0
47.5°	286.9	516.4	442.9	153.3	136.0	148.9	442.5	508.0	287.1	328.1	290.1
50°	277.0	492.3	406.8	135.1	111.5	130.1	407.5	484.3	271.9	309.0	269.7
52.5°	260.7	463.4	354.9	111.9	96.4	109.2	346.3	454.3	256.2	288.1	244.1
55°	233.3	407.9	148.0	88.0	77.3	84.4	140.7	394.2	225.2	255.2	214.3
57.5°	204.3	347.2	103.8	68.5	59.9	67.8	103.1	333.3	200.5	216.1	186.9
60°	187.3	306.4	84.6	57.5	51.8	56.7	83.8	294.2	185.9	190.2	161.8
62.5°	170.4	264.9	70.0	50.6	48.8	49.8	69.8	251.6	167.8	168.1	114.0
65°	145.8	200.7	51.8	45.9	45.2	45.2	50.3	193.5	142.9	138.6	65.6
67.5°	120.7	144.1	41.6	42.3	41.6	41.6	40.8	140.0	117.8	110.5	49.6
70°	105.0	110.7	38.6	39.3	38.6	38.6	37.9	107.8	102.1	85.7	46.7
72.5°	89.8	75.6	35.7	35.9	35.7	35.7	35.0	70.9	86.9	60.2	42.6
75°	67.8	37.9	30.6	30.6	30.6	30.6	29.9	36.4	64.9	39.2	36.4
77.5°	47.1	25.0	25.4	25.2	25.2	24.7	24.6	24.8	44.3	27.1	29.5
80°	34.3	20.7	21.9	21.1	21.1	21.1	21.1	20.0	32.1	22.8	24.8
82.5°	24.3	16.5	17.8	17.1	17.1	17.1	17.1	16.3	22.2	18.6	20.1
85°	11.7	11.0	11.7	10.2	9.5	10.2	10.9	10.9	10.2	12.3	13.1
87.5°	3.5	6.1	6.4	6.1	6.1	6.1	5.8	5.5	2.9	6.6	7.0
90°	0.0	4.2	8.6	12.9	12.9	12.9	8.6	4.2	0.0	4.2	8.6
92.5°	10.3	14.5	18.9	26.7	30.1	26.7	18.9	14.5	10.3	14.5	18.9
95°	34.4	63.8	34.4	38.9	47.3	38.9	34.4	63.8	34.4	63.8	34.4
97.5°	61.1	122.5	252.9	74.6	64.5	74.6	252.9	122.5	61.1	122.5	252.9
100°	81.7	153.2	507.5	149.4	98.9	149.4	507.5	153.2	81.7	153.2	507.5
102.5°	102.4	177.2	686.5	394.2	215.9	394.2	686.5	177.2	102.4	177.2	686.5
105°	133.3	204.8	778.5	994.5	658.1	994.5	778.5	204.8	133.3	204.8	778.5
107.5°	164.3	218.1	743.2	1447.4	1355.7	1447.4	743.2	218.1	164.3	218.1	743.2
110°	184.9	235.4	722.6	1520.9	1634.4	1520.9	722.6	235.4	184.9	235.4	722.6



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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°	205.6	256.1	701.9	1477.9	1668.8	1477.9	701.9	256.1	205.6	256.1	701.9
115°	236.6	287.0	671.0	1394.6	1630.1	1394.6	671.0	287.0	236.6	287.0	671.0
117.5°	268.4	318.0	663.2	1304.4	1546.7	1304.4	663.2	318.0	268.4	318.0	663.2
120°	292.5	338.7	649.5	1235.9	1488.2	1235.9	649.5	338.7	292.5	338.7	649.5
122.5°	309.7	359.3	632.3	1176.9	1409.0	1176.9	632.3	359.3	309.7	359.3	632.3
125°	339.8	386.0	632.3	1105.7	1307.5	1105.7	632.3	386.0	339.8	386.0	632.3
127.5°	364.7	411.8	633.1	1023.0	1222.4	1023.0	633.1	411.8	364.7	411.8	633.1
130°	378.5	429.0	636.6	967.7	1157.0	967.7	636.6	429.0	378.5	429.0	636.6
132.5°	395.7	446.2	636.6	942.9	1098.5	942.9	636.6	446.2	395.7	446.2	636.6
135°	421.5	467.8	636.6	910.6	1045.2	910.6	636.6	467.8	421.5	467.8	636.6
137.5°	443.0	492.6	636.6	874.9	990.1	874.9	636.6	492.6	443.0	492.6	636.6
140°	460.2	506.5	636.6	854.0	959.1	854.0	636.6	506.5	460.2	506.5	636.6
142.5°	477.4	520.3	640.0	829.8	928.2	829.8	640.0	520.3	477.4	520.3	640.0
145°	498.9	541.0	640.9	793.3	877.4	793.3	640.9	541.0	498.9	541.0	640.9
147.5°	524.7	561.7	646.0	767.1	831.8	767.1	646.0	561.7	524.7	561.7	646.0
150°	541.9	575.6	649.5	749.6	804.3	749.6	649.5	575.6	541.9	575.6	649.5
152.5°	559.1	589.4	649.5	735.6	780.2	735.6	649.5	589.4	559.1	589.4	649.5
155°	585.0	606.0	653.8	719.0	752.7	719.0	653.8	606.0	585.0	606.0	653.8
157.5°	605.6	625.8	658.9	708.5	732.9	708.5	658.9	625.8	605.6	625.8	658.9
160°	619.4	636.2	662.4	701.6	722.6	701.6	662.4	636.2	619.4	636.2	662.4
162.5°	629.7	646.5	665.8	698.0	712.3	698.0	665.8	646.5	629.7	646.5	665.8
165°	649.5	657.9	671.0	688.5	701.1	688.5	671.0	657.9	649.5	657.9	671.0
167.5°	660.7	668.2	675.3	684.0	691.6	684.0	675.3	668.2	660.7	668.2	675.3
170°	671.0	675.2	675.3	684.0	688.2	684.0	675.3	675.2	671.0	675.2	675.3
172.5°	674.4	682.0	678.7	680.5	684.7	680.5	678.7	682.0	674.4	682.0	678.7
175°	683.9	688.1	683.9	679.5	675.3	679.5	683.9	688.1	683.9	688.1	683.9
177.5°	683.9	687.2	683.9	683.8	680.4	683.8	683.9	687.2	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	669.9	669.3	670.5	680.4	700.7	718.9
5°	610.2	612.3	614.5	631.3	666.6	715.1
7.5°	564.3	561.2	566.0	593.4	636.8	706.4
10°	532.7	525.6	532.7	570.0	620.6	697.6
12.5°	502.9	494.1	505.2	546.1	607.3	686.0
15°	464.5	473.1	468.1	513.9	587.1	665.5
17.5°	473.6	516.7	482.8	485.9	567.1	644.5
20°	495.2	539.4	509.5	467.3	554.2	627.6
22.5°	514.8	548.2	521.1	451.5	541.3	612.5
25°	529.9	558.4	528.4	437.4	522.7	586.8
27.5°	530.6	534.6	530.9	436.2	499.6	561.3
30°	520.8	503.7	519.4	437.4	483.2	540.9
32.5°	492.8	473.4	486.8	435.0	466.6	514.1
35°	452.8	427.2	445.7	422.8	440.9	468.7
37.5°	410.7	378.2	403.8	398.6	419.0	407.9
40°	382.1	325.1	376.4	374.7	407.1	357.2
42.5°	345.6	297.1	340.5	355.4	393.9	328.6
45°	279.1	273.4	276.2	322.9	365.9	299.6
47.5°	255.2	251.3	253.8	293.3	334.2	286.9
50°	241.2	236.2	239.7	274.1	314.1	277.0
52.5°	221.7	208.2	220.3	247.8	293.2	260.7
55°	166.7	126.1	166.0	218.0	261.8	233.3
57.5°	97.8	72.9	95.7	189.7	221.8	204.3
60°	66.2	61.2	66.9	166.9	195.2	187.3
62.5°	60.5	58.9	60.6	116.2	171.4	170.4
65°	55.4	54.7	55.4	67.1	141.5	145.8
67.5°	50.1	49.4	50.7	51.5	111.7	120.7
70°	46.6	45.9	46.6	47.4	85.7	105.0
72.5°	42.6	41.8	42.6	43.3	60.3	89.8
75°	36.4	35.7	36.4	37.2	40.0	67.8
77.5°	29.5	29.5	30.2	30.2	28.0	47.1
80°	24.8	24.8	25.5	25.5	24.3	34.3
82.5°	20.1	19.5	20.8	21.4	20.1	24.3
85°	12.4	11.7	13.1	13.9	13.1	11.7
87.5°	7.2	6.7	7.8	8.1	7.2	3.5
90°	12.9	12.9	12.9	8.6	4.2	0.0
92.5°	26.7	30.1	26.7	18.9	14.5	10.3
95°	38.9	47.3	38.9	34.4	63.8	34.4
97.5°	74.6	64.5	74.6	252.9	122.5	61.1
100°	149.4	98.9	149.4	507.5	153.2	81.7
102.5°	394.2	215.9	394.2	686.5	177.2	102.4
105°	994.5	658.1	994.5	778.5	204.8	133.3
107.5°	1447.4	1355.7	1447.4	743.2	218.1	164.3
110°	1520.9	1634.4	1520.9	722.6	235.4	184.9



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1477.9	1668.8	1477.9	701.9	256.1	205.6
115°	1394.6	1630.1	1394.6	671.0	287.0	236.6
117.5°	1304.4	1546.7	1304.4	663.2	318.0	268.4
120°	1235.9	1488.2	1235.9	649.5	338.7	292.5
122.5°	1176.9	1409.0	1176.9	632.3	359.3	309.7
125°	1105.7	1307.5	1105.7	632.3	386.0	339.8
127.5°	1023.0	1222.4	1023.0	633.1	411.8	364.7
130°	967.7	1157.0	967.7	636.6	429.0	378.5
132.5°	942.9	1098.5	942.9	636.6	446.2	395.7
135°	910.6	1045.2	910.6	636.6	467.8	421.5
137.5°	874.9	990.1	874.9	636.6	492.6	443.0
140°	854.0	959.1	854.0	636.6	506.5	460.2
142.5°	829.8	928.2	829.8	640.0	520.3	477.4
145°	793.3	877.4	793.3	640.9	541.0	498.9
147.5°	767.1	831.8	767.1	646.0	561.7	524.7
150°	749.6	804.3	749.6	649.5	575.6	541.9
152.5°	735.6	780.2	735.6	649.5	589.4	559.1
155°	719.0	752.7	719.0	653.8	606.0	585.0
157.5°	708.5	732.9	708.5	658.9	625.8	605.6
160°	701.6	722.6	701.6	662.4	636.2	619.4
162.5°	698.0	712.3	698.0	665.8	646.5	629.7
165°	688.5	701.1	688.5	671.0	657.9	649.5
167.5°	684.0	691.6	684.0	675.3	668.2	660.7
170°	684.0	688.2	684.0	675.3	675.2	671.0
172.5°	680.5	684.7	680.5	678.7	682.0	674.4
175°	679.5	675.3	679.5	683.9	688.1	683.9
177.5°	683.8	680.4	683.8	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)