

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: P621605

Luminaire Tested: VLT-FA-050U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621605  
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-050D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

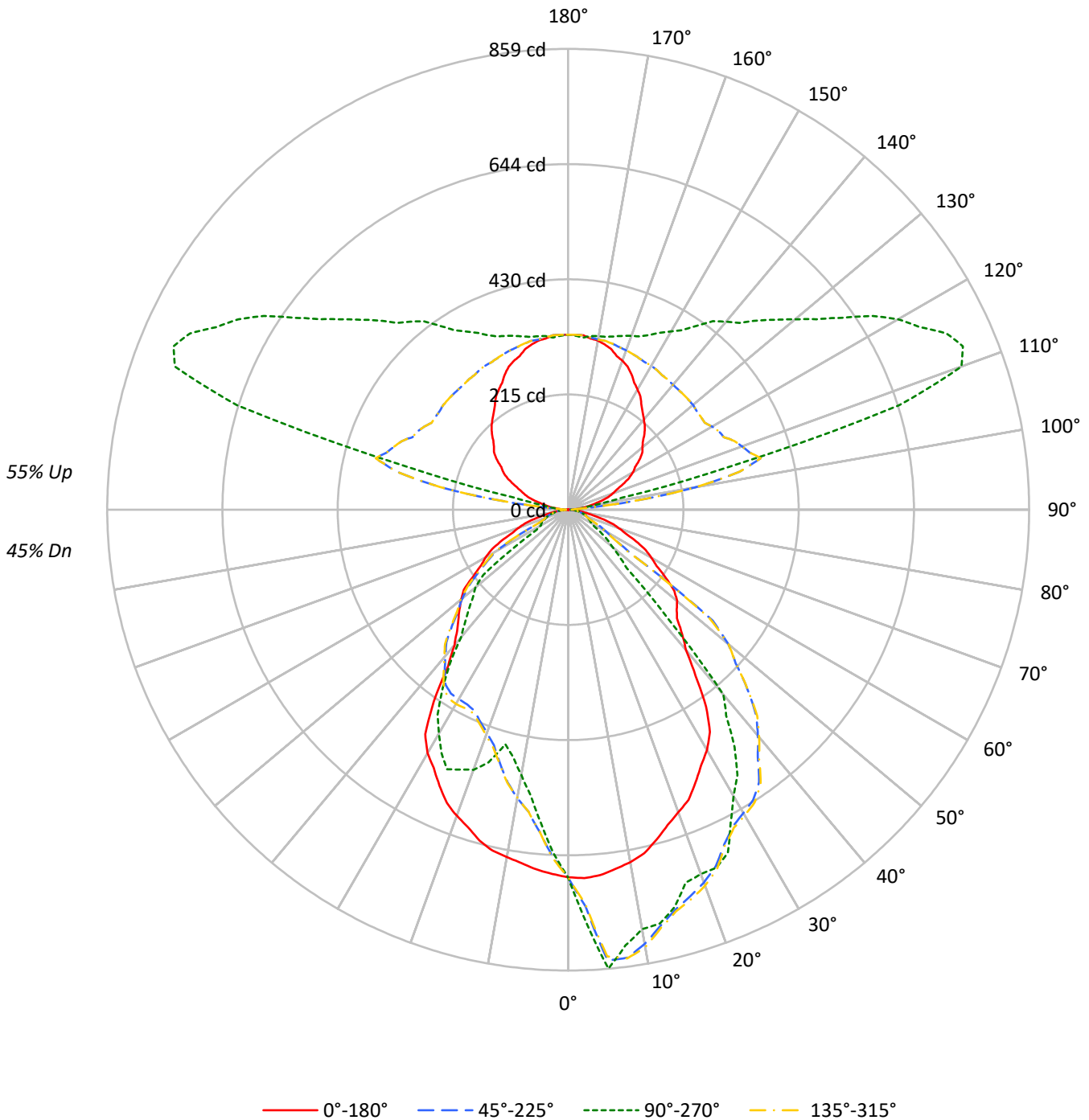
Lumens per Lamp: N/A  
Luminaire Lumens: 3166.0 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29  
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	
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	93	90	87	89	86	83	80	72	69	67	58	57	56	46	46	45	39
2	89	82	77	72	82	76	71	67	64	60	57	52	50	48	42	40	39	34
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30
4	75	65	58	52	69	60	54	49	51	46	42	42	39	36	34	32	30	26
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23
6	64	52	45	39	59	49	42	37	41	36	32	35	31	28	28	26	23	21
7	59	47	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18
8	55	43	36	31	51	40	34	29	34	29	26	29	25	22	24	21	19	17
9	51	40	32	27	47	37	30	26	32	27	23	27	23	20	22	19	17	15
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14

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

	0°	90°	180°	270°
0°	4917	4917	4917	4917
5°	4926	6186	4850	4218
10°	4860	5785	4790	3662
15°	4728	5696	4743	3361
20°	4583	5520	4636	3939
25°	4443	5580	4493	4227
30°	4286	5106	4343	3991
35°	3926	4732	3828	3578
40°	3199	4212	3088	2912
45°	2907	1563	2936	2653
50°	2957	1190	2903	2521
55°	2790	925	2695	1509
60°	2570	710	2550	840
65°	2367	734	2319	888
70°	2106	774	2048	921
75°	1797	812	1719	948
80°	1355	835	1269	979
85°	922	749	807	922

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 5384 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.1	2.1
10°-20°	181.1	5.7
20°-30°	270.9	8.6
30°-40°	308.1	9.7
40°-50°	263.5	8.3
50°-60°	177.7	5.6
60°-70°	91.7	2.9
70°-80°	41.4	1.3
80°-90°	13.1	0.4
90°-100°	40.1	1.3
100°-110°	285.8	9.0
110°-120°	388.0	12.3
120°-130°	315.8	10.0
130°-140°	254.0	8.0
140°-150°	200.3	6.3
150°-160°	146.4	4.6
160°-170°	90.9	2.9
170°-180°	31.0	1.0
0°-30°	518.1	16.4
0°-40°	826.2	26.1
0°-60°	1267.4	40.0
0°-90°	1413.6	44.6
90°-120°	714.0	22.6
90°-150°	1484.1	46.9
90°-180°	1752.0	55.3
0°-180°	3166.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	685	685	685	685	685	
5°	684	859	673	586	684	65
15°	636	767	638	452	636	179
25°	561	705	567	534	561	258
35°	448	540	437	408	448	274
45°	286	154	289	261	286	227
55°	223	74	215	121	223	199
65°	139	43	137	52	139	138
75°	65	29	62	34	65	69
85°	11	9	10	11	11	14
90°	0	6	0	6	0	1
95°	16	23	16	23	16	18
105°	64	314	64	314	64	67
115°	113	778	113	778	113	112
125°	162	624	162	624	162	144
135°	201	499	201	499	201	155
145°	238	419	238	419	238	149
155°	279	359	279	359	279	128
165°	310	334	310	334	310	87
175°	326	322	326	322	326	31
180°	326	326	326	326	326	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2
2.5°	687.4	710.8	740.4	760.6	769.4	760.6	735.3	710.7	679.6	670.3	648.4
5°	683.8	756.0	843.4	853.9	858.7	853.9	835.7	751.7	673.3	639.9	603.6
7.5°	675.4	801.8	842.4	818.8	819.0	823.3	843.7	797.8	664.5	612.0	567.5
10°	667.0	827.2	821.8	787.8	793.9	791.2	828.0	822.2	657.3	596.6	545.8
12.5°	655.9	835.1	794.4	783.3	790.0	786.2	798.5	830.8	651.1	585.6	520.7
15°	636.4	823.8	771.6	766.7	766.7	770.1	775.1	827.2	638.5	565.5	490.0
17.5°	616.3	801.1	755.7	731.5	728.9	733.4	761.4	806.9	620.5	543.3	460.3
20°	600.1	785.5	739.5	711.2	722.8	712.6	745.8	789.7	607.1	529.4	441.9
22.5°	585.6	766.1	718.9	706.8	722.2	707.1	724.6	770.3	591.5	513.8	428.0
25°	561.1	733.5	687.9	699.2	704.7	699.2	690.7	736.4	567.4	493.8	413.3
27.5°	536.7	699.2	664.8	672.4	655.7	668.6	668.6	699.3	542.5	470.4	408.9
30°	517.2	675.3	653.1	642.1	616.2	636.6	658.0	675.4	524.1	455.3	407.7
32.5°	491.5	653.5	641.4	603.2	586.6	600.5	646.8	653.0	495.7	441.6	406.6
35°	448.2	622.6	620.3	557.2	540.2	553.1	625.2	621.0	437.0	420.0	398.0
37.5°	390.0	595.2	580.0	510.7	483.6	507.3	584.6	592.2	367.6	400.2	377.8
40°	341.5	576.7	549.9	476.1	449.6	472.7	553.4	575.0	329.7	386.2	355.5
42.5°	314.2	560.2	518.2	439.6	275.0	434.0	521.6	558.2	306.3	368.3	336.0
45°	286.5	530.5	471.9	243.3	154.0	231.7	472.6	523.0	289.3	341.1	306.0
47.5°	274.3	493.8	423.5	146.6	130.1	142.3	423.1	485.8	274.5	313.7	277.4
50°	264.9	470.7	388.9	129.1	106.6	124.4	389.6	463.1	260.0	295.4	257.9
52.5°	249.2	443.1	339.3	107.0	92.1	104.4	331.1	434.4	244.9	275.5	233.4
55°	223.0	390.0	141.5	84.1	73.9	80.7	134.5	376.9	215.4	244.0	204.9
57.5°	195.3	332.0	99.3	65.5	57.3	64.8	98.6	318.7	191.7	206.7	178.7
60°	179.1	292.9	80.9	54.9	49.5	54.3	80.2	281.3	177.7	181.8	154.7
62.5°	163.0	253.3	66.9	48.3	46.7	47.7	66.8	240.6	160.5	160.7	109.0
65°	139.4	191.9	49.5	43.9	43.2	43.2	48.1	185.0	136.6	132.5	62.7
67.5°	115.4	137.8	39.7	40.4	39.7	39.7	39.0	133.9	112.6	105.7	47.4
70°	100.4	105.8	36.9	37.6	36.9	36.9	36.2	103.0	97.6	81.9	44.6
72.5°	85.9	72.2	34.2	34.3	34.2	34.2	33.5	67.8	83.1	57.6	40.7
75°	64.8	36.2	29.3	29.3	29.3	29.3	28.6	34.8	62.0	37.5	34.9
77.5°	45.0	23.9	24.3	24.1	24.1	23.6	23.6	23.7	42.4	25.9	28.2
80°	32.8	19.8	20.9	20.2	20.2	20.2	20.2	19.1	30.7	21.8	23.7
82.5°	23.3	15.8	17.0	16.3	16.3	16.3	16.3	15.6	21.2	17.8	19.2
85°	11.2	10.5	11.2	9.7	9.1	9.7	10.5	10.4	9.8	11.8	12.5
87.5°	3.3	5.4	5.3	4.6	4.6	4.6	4.7	4.8	2.8	5.9	5.8
90°	0.0	2.0	4.1	6.2	6.2	6.2	4.1	2.0	0.0	2.0	4.1
92.5°	4.9	6.9	9.0	12.8	14.4	12.8	9.0	6.9	4.9	6.9	9.0
95°	16.4	30.5	16.4	18.6	22.6	18.6	16.4	30.5	16.4	30.5	16.4
97.5°	29.1	58.4	120.6	35.6	30.8	35.6	120.6	58.4	29.1	58.4	120.6
100°	39.0	73.1	242.1	71.3	47.2	71.3	242.1	73.1	39.0	73.1	242.1
102.5°	48.8	84.5	327.5	188.1	103.0	188.1	327.5	84.5	48.8	84.5	327.5
105°	63.6	97.7	371.4	474.4	313.9	474.4	371.4	97.7	63.6	97.7	371.4
107.5°	78.4	104.1	354.6	690.5	646.7	690.5	354.6	104.1	78.4	104.1	354.6
110°	88.2	112.3	344.7	725.5	779.7	725.5	344.7	112.3	88.2	112.3	344.7



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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°	98.1	122.2	334.9	705.0	796.1	705.0	334.9	122.2	98.1	122.2	334.9
115°	112.9	136.9	320.1	665.3	777.6	665.3	320.1	136.9	112.9	136.9	320.1
117.5°	128.0	151.7	316.4	622.3	737.8	622.3	316.4	151.7	128.0	151.7	316.4
120°	139.5	161.6	309.8	589.6	709.9	589.6	309.8	161.6	139.5	161.6	309.8
122.5°	147.7	171.4	301.6	561.4	672.2	561.4	301.6	171.4	147.7	171.4	301.6
125°	162.1	184.2	301.6	527.5	623.8	527.5	301.6	184.2	162.1	184.2	301.6
127.5°	174.0	196.5	302.0	488.0	583.1	488.0	302.0	196.5	174.0	196.5	302.0
130°	180.6	204.6	303.7	461.7	551.9	461.7	303.7	204.6	180.6	204.6	303.7
132.5°	188.8	212.8	303.7	449.8	524.0	449.8	303.7	212.8	188.8	212.8	303.7
135°	201.1	223.1	303.7	434.4	498.6	434.4	303.7	223.1	201.1	223.1	303.7
137.5°	211.3	235.0	303.7	417.4	472.3	417.4	303.7	235.0	211.3	235.0	303.7
140°	219.5	241.6	303.7	407.4	457.6	407.4	303.7	241.6	219.5	241.6	303.7
142.5°	227.8	248.2	305.3	395.8	442.8	395.8	305.3	248.2	227.8	248.2	305.3
145°	238.0	258.1	305.7	378.4	418.6	378.4	305.7	258.1	238.0	258.1	305.7
147.5°	250.3	268.0	308.2	365.9	396.8	365.9	308.2	268.0	250.3	268.0	308.2
150°	258.5	274.6	309.8	357.6	383.7	357.6	309.8	274.6	258.5	274.6	309.8
152.5°	266.7	281.2	309.8	350.9	372.2	350.9	309.8	281.2	266.7	281.2	309.8
155°	279.0	289.1	311.9	343.0	359.1	343.0	311.9	289.1	279.0	289.1	311.9
157.5°	288.9	298.5	314.3	338.0	349.6	338.0	314.3	298.5	288.9	298.5	314.3
160°	295.5	303.5	316.0	334.7	344.7	334.7	316.0	303.5	295.5	303.5	316.0
162.5°	300.4	308.4	317.6	333.0	339.8	333.0	317.6	308.4	300.4	308.4	317.6
165°	309.8	313.8	320.1	328.4	334.4	328.4	320.1	313.8	309.8	313.8	320.1
167.5°	315.2	318.8	322.1	326.3	329.9	326.3	322.1	318.8	315.2	318.8	322.1
170°	320.1	322.1	322.1	326.3	328.3	326.3	322.1	322.1	320.1	322.1	322.1
172.5°	321.7	325.3	323.8	324.6	326.7	324.6	323.8	325.3	321.7	325.3	323.8
175°	326.2	328.2	326.2	324.1	322.1	324.1	326.2	328.2	326.2	328.2	326.2
177.5°	326.2	327.8	326.2	326.2	324.6	326.2	326.2	327.8	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	685.2	685.2	685.2	685.2	685.2	685.2
2.5°	640.5	640.0	641.1	650.6	669.9	687.4
5°	583.4	585.5	587.5	603.6	637.4	683.8
7.5°	539.6	536.6	541.2	567.4	608.9	675.4
10°	509.4	502.5	509.4	545.1	593.4	667.0
12.5°	480.9	472.4	483.1	522.2	580.6	655.9
15°	444.2	452.4	447.6	491.4	561.4	636.4
17.5°	452.9	494.0	461.6	464.6	542.3	616.3
20°	473.5	515.8	487.2	446.8	529.9	600.1
22.5°	492.3	524.1	498.3	431.7	517.6	585.6
25°	506.6	533.9	505.3	418.2	499.8	561.1
27.5°	507.4	511.2	507.6	417.1	477.7	536.7
30°	498.0	481.6	496.6	418.2	462.0	517.2
32.5°	471.2	452.6	465.4	416.0	446.1	491.5
35°	433.0	408.4	426.2	404.3	421.6	448.2
37.5°	392.7	361.6	386.1	381.1	400.7	390.0
40°	365.4	310.9	359.9	358.3	389.2	341.5
42.5°	330.4	284.1	325.5	339.9	376.6	314.2
45°	266.8	261.4	264.1	308.8	349.9	286.5
47.5°	244.0	240.3	242.6	280.5	319.6	274.3
50°	230.6	225.8	229.2	262.1	300.3	264.9
52.5°	212.0	199.1	210.7	237.0	280.3	249.2
55°	159.4	120.6	158.7	208.4	250.3	223.0
57.5°	93.6	69.7	91.5	181.4	212.1	195.3
60°	63.3	58.5	64.0	159.6	186.6	179.1
62.5°	57.8	56.3	58.0	111.1	163.9	163.0
65°	53.0	52.3	53.0	64.1	135.3	139.4
67.5°	47.9	47.3	48.5	49.2	106.8	115.4
70°	44.6	43.9	44.6	45.3	82.0	100.4
72.5°	40.7	40.0	40.7	41.4	57.7	85.9
75°	34.8	34.2	34.8	35.5	38.2	64.8
77.5°	28.2	28.2	28.8	28.9	26.8	45.0
80°	23.7	23.7	24.4	24.4	23.2	32.8
82.5°	19.2	18.7	19.9	20.5	19.2	23.3
85°	11.8	11.2	12.5	13.2	12.5	11.2
87.5°	5.7	5.1	6.2	7.0	6.5	3.3
90°	6.2	6.2	6.2	4.1	2.0	0.0
92.5°	12.8	14.4	12.8	9.0	6.9	4.9
95°	18.6	22.6	18.6	16.4	30.5	16.4
97.5°	35.6	30.8	35.6	120.6	58.4	29.1
100°	71.3	47.2	71.3	242.1	73.1	39.0
102.5°	188.1	103.0	188.1	327.5	84.5	48.8
105°	474.4	313.9	474.4	371.4	97.7	63.6
107.5°	690.5	646.7	690.5	354.6	104.1	78.4
110°	725.5	779.7	725.5	344.7	112.3	88.2





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	705.0	796.1	705.0	334.9	122.2	98.1
115°	665.3	777.6	665.3	320.1	136.9	112.9
117.5°	622.3	737.8	622.3	316.4	151.7	128.0
120°	589.6	709.9	589.6	309.8	161.6	139.5
122.5°	561.4	672.2	561.4	301.6	171.4	147.7
125°	527.5	623.8	527.5	301.6	184.2	162.1
127.5°	488.0	583.1	488.0	302.0	196.5	174.0
130°	461.7	551.9	461.7	303.7	204.6	180.6
132.5°	449.8	524.0	449.8	303.7	212.8	188.8
135°	434.4	498.6	434.4	303.7	223.1	201.1
137.5°	417.4	472.3	417.4	303.7	235.0	211.3
140°	407.4	457.6	407.4	303.7	241.6	219.5
142.5°	395.8	442.8	395.8	305.3	248.2	227.8
145°	378.4	418.6	378.4	305.7	258.1	238.0
147.5°	365.9	396.8	365.9	308.2	268.0	250.3
150°	357.6	383.7	357.6	309.8	274.6	258.5
152.5°	350.9	372.2	350.9	309.8	281.2	266.7
155°	343.0	359.1	343.0	311.9	289.1	279.0
157.5°	338.0	349.6	338.0	314.3	298.5	288.9
160°	334.7	344.7	334.7	316.0	303.5	295.5
162.5°	333.0	339.8	333.0	317.6	308.4	300.4
165°	328.4	334.4	328.4	320.1	313.8	309.8
167.5°	326.3	329.9	326.3	322.1	318.8	315.2
170°	326.3	328.3	326.3	322.1	322.1	320.1
172.5°	324.6	326.7	324.6	323.8	325.3	321.7
175°	324.1	322.1	324.1	326.2	328.2	326.2
177.5°	326.2	324.6	326.2	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)