

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: P621582

Luminaire Tested: VLT-FA-025U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621582
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-940-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

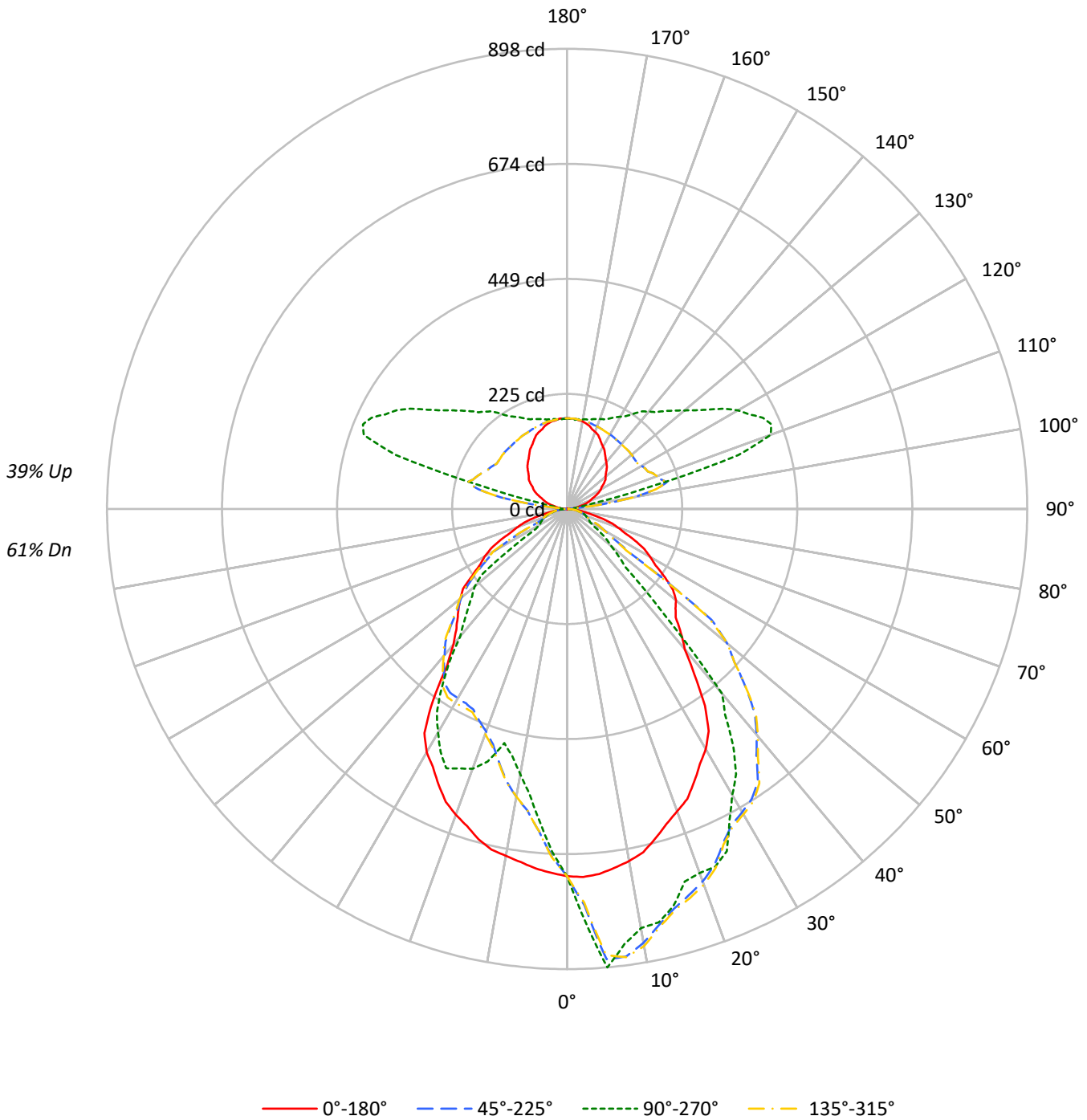
Lumens per Lamp: N/A
Luminaire Lumens: 2427.8 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 22.7
Input Voltage (V): 120
Input Current (A_{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: P621582
CATALOG NUMBER: VLT-FA-025U-050D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: VLT-FA-025U-050D-940-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	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	49	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°	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



TEST NUMBER: P621582

CATALOG NUMBER: VLT-FA-025U-050D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	2.8
10°-20°	189.4	7.8
20°-30°	283.3	11.7
30°-40°	322.2	13.3
40°-50°	275.6	11.4
50°-60°	185.8	7.7
60°-70°	95.9	4.0
70°-80°	43.3	1.8
80°-90°	13.3	0.5
90°-100°	21.7	0.9
100°-110°	154.9	6.4
110°-120°	210.3	8.7
120°-130°	171.2	7.1
130°-140°	137.7	5.7
140°-150°	108.5	4.5
150°-160°	79.4	3.3
160°-170°	49.3	2.0
170°-180°	16.8	0.7
0°-30°	541.8	22.3
0°-40°	864.1	35.6
0°-60°	1325.5	54.6
0°-90°	1478.0	60.9
90°-120°	386.9	15.9
90°-150°	804.3	33.1
90°-180°	950.0	39.1
0°-180°	2427.8	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	3	0	3	0	1
95°	9	12	9	12	9	10
105°	34	170	34	170	34	36
115°	61	421	61	421	61	61
125°	88	338	88	338	88	78
135°	109	270	109	270	109	84
145°	129	227	129	227	129	81
155°	151	195	151	195	151	69
165°	168	181	168	181	168	47
175°	177	175	177	175	177	17
180°	177	177	177	177	177	



TEST NUMBER: P621582

CATALOG NUMBER: VLT-FA-025U-050D-940-UNV-STD-W-4

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	5.4	5.1	4.2	4.2	4.2	4.5	4.8	2.9	6.0	5.7
90°	0.0	1.1	2.2	3.3	3.3	3.3	2.2	1.1	0.0	1.1	2.2
92.5°	2.7	3.8	4.9	6.9	7.8	6.9	4.9	3.8	2.7	3.8	4.9
95°	8.9	16.5	8.9	10.1	12.2	10.1	8.9	16.5	8.9	16.5	8.9
97.5°	15.8	31.7	65.4	19.3	16.7	19.3	65.4	31.7	15.8	31.7	65.4
100°	21.1	39.6	131.2	38.6	25.6	38.6	131.2	39.6	21.1	39.6	131.2
102.5°	26.5	45.8	177.5	101.9	55.8	101.9	177.5	45.8	26.5	45.8	177.5
105°	34.5	53.0	201.3	257.1	170.1	257.1	201.3	53.0	34.5	53.0	201.3
107.5°	42.5	56.4	192.1	374.2	350.5	374.2	192.1	56.4	42.5	56.4	192.1
110°	47.8	60.9	186.8	393.2	422.5	393.2	186.8	60.9	47.8	60.9	186.8



TEST NUMBER: P621582

CATALOG NUMBER: VLT-FA-025U-050D-940-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°	53.2	66.2	181.5	382.1	431.4	382.1	181.5	66.2	53.2	66.2	181.5
115°	61.2	74.2	173.5	360.5	421.4	360.5	173.5	74.2	61.2	74.2	173.5
117.5°	69.4	82.2	171.5	337.2	399.9	337.2	171.5	82.2	69.4	82.2	171.5
120°	75.6	87.6	167.9	319.5	384.7	319.5	167.9	87.6	75.6	87.6	167.9
122.5°	80.1	92.9	163.5	304.3	364.3	304.3	163.5	92.9	80.1	92.9	163.5
125°	87.8	99.8	163.5	285.8	338.0	285.8	163.5	99.8	87.8	99.8	163.5
127.5°	94.3	106.5	163.7	264.5	316.0	264.5	163.7	106.5	94.3	106.5	163.7
130°	97.8	110.9	164.6	250.2	299.1	250.2	164.6	110.9	97.8	110.9	164.6
132.5°	102.3	115.3	164.6	243.8	284.0	243.8	164.6	115.3	102.3	115.3	164.6
135°	109.0	120.9	164.6	235.4	270.2	235.4	164.6	120.9	109.0	120.9	164.6
137.5°	114.5	127.4	164.6	226.2	256.0	226.2	164.6	127.4	114.5	127.4	164.6
140°	119.0	130.9	164.6	220.8	248.0	220.8	164.6	130.9	119.0	130.9	164.6
142.5°	123.4	134.5	165.5	214.5	240.0	214.5	165.5	134.5	123.4	134.5	165.5
145°	129.0	139.9	165.7	205.1	226.8	205.1	165.7	139.9	129.0	139.9	165.7
147.5°	135.7	145.2	167.0	198.3	215.0	198.3	167.0	145.2	135.7	145.2	167.0
150°	140.1	148.8	167.9	193.8	207.9	193.8	167.9	148.8	140.1	148.8	167.9
152.5°	144.6	152.4	167.9	190.2	201.7	190.2	167.9	152.4	144.6	152.4	167.9
155°	151.2	156.7	169.0	185.9	194.6	185.9	169.0	156.7	151.2	156.7	169.0
157.5°	156.6	161.8	170.3	183.2	189.5	183.2	170.3	161.8	156.6	161.8	170.3
160°	160.1	164.5	171.2	181.4	186.8	181.4	171.2	164.5	160.1	164.5	171.2
162.5°	162.8	167.1	172.1	180.4	184.1	180.4	172.1	167.1	162.8	167.1	172.1
165°	167.9	170.1	173.5	178.0	181.2	178.0	173.5	170.1	167.9	170.1	173.5
167.5°	170.8	172.7	174.6	176.8	178.8	176.8	174.6	172.7	170.8	172.7	174.6
170°	173.5	174.5	174.6	176.8	177.9	176.8	174.6	174.5	173.5	174.5	174.6
172.5°	174.4	176.3	175.5	175.9	177.0	175.9	175.5	176.3	174.4	176.3	175.5
175°	176.8	177.9	176.8	175.7	174.6	175.7	176.8	177.9	176.8	177.9	176.8
177.5°	176.8	177.7	176.8	176.8	175.9	176.8	176.8	177.7	176.8	177.7	176.8
180°	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8



TEST NUMBER: P621582

CATALOG NUMBER: VLT-FA-025U-050D-940-UNV-STD-W-4

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°	5.3	4.7	5.9	6.9	6.6	3.5
90°	3.3	3.3	3.3	2.2	1.1	0.0
92.5°	6.9	7.8	6.9	4.9	3.8	2.7
95°	10.1	12.2	10.1	8.9	16.5	8.9
97.5°	19.3	16.7	19.3	65.4	31.7	15.8
100°	38.6	25.6	38.6	131.2	39.6	21.1
102.5°	101.9	55.8	101.9	177.5	45.8	26.5
105°	257.1	170.1	257.1	201.3	53.0	34.5
107.5°	374.2	350.5	374.2	192.1	56.4	42.5
110°	393.2	422.5	393.2	186.8	60.9	47.8



TEST NUMBER: P621582

CATALOG NUMBER: VLT-FA-025U-050D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	382.1	431.4	382.1	181.5	66.2	53.2
115°	360.5	421.4	360.5	173.5	74.2	61.2
117.5°	337.2	399.9	337.2	171.5	82.2	69.4
120°	319.5	384.7	319.5	167.9	87.6	75.6
122.5°	304.3	364.3	304.3	163.5	92.9	80.1
125°	285.8	338.0	285.8	163.5	99.8	87.8
127.5°	264.5	316.0	264.5	163.7	106.5	94.3
130°	250.2	299.1	250.2	164.6	110.9	97.8
132.5°	243.8	284.0	243.8	164.6	115.3	102.3
135°	235.4	270.2	235.4	164.6	120.9	109.0
137.5°	226.2	256.0	226.2	164.6	127.4	114.5
140°	220.8	248.0	220.8	164.6	130.9	119.0
142.5°	214.5	240.0	214.5	165.5	134.5	123.4
145°	205.1	226.8	205.1	165.7	139.9	129.0
147.5°	198.3	215.0	198.3	167.0	145.2	135.7
150°	193.8	207.9	193.8	167.9	148.8	140.1
152.5°	190.2	201.7	190.2	167.9	152.4	144.6
155°	185.9	194.6	185.9	169.0	156.7	151.2
157.5°	183.2	189.5	183.2	170.3	161.8	156.6
160°	181.4	186.8	181.4	171.2	164.5	160.1
162.5°	180.4	184.1	180.4	172.1	167.1	162.8
165°	178.0	181.2	178.0	173.5	170.1	167.9
167.5°	176.8	178.8	176.8	174.6	172.7	170.8
170°	176.8	177.9	176.8	174.6	174.5	173.5
172.5°	175.9	177.0	175.9	175.5	176.3	174.4
175°	175.7	174.6	175.7	176.8	177.9	176.8
177.5°	176.8	175.9	176.8	176.8	177.7	176.8
180°	176.8	176.8	176.8	176.8	176.8	176.8

(END OF REPORT)