

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: P621604

Luminaire Tested: VLT-FA-050U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621604
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-930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

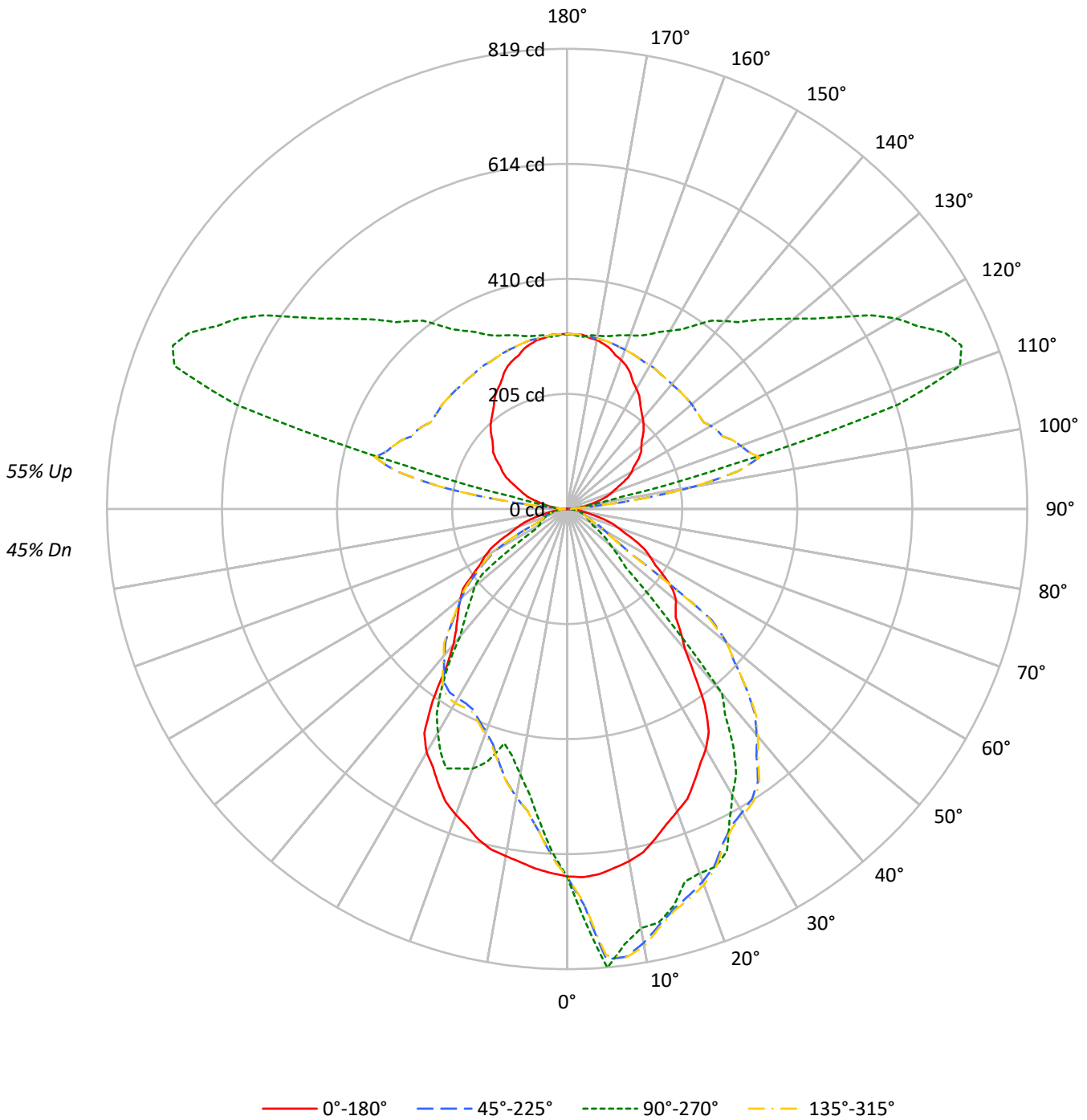
Lumens per Lamp: N/A
Luminaire Lumens: 3021.1 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29
Input Voltage (V): 120
Input Current (A_{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	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°	4692	4692	4692	4692
5°	4700	5902	4628	4025
10°	4638	5520	4570	3494
15°	4511	5435	4526	3206
20°	4373	5267	4424	3759
25°	4239	5324	4287	4034
30°	4089	4871	4144	3808
35°	3747	4515	3653	3414
40°	3053	4019	2947	2778
45°	2775	1492	2801	2531
50°	2821	1136	2770	2406
55°	2662	882	2571	1440
60°	2453	677	2434	802
65°	2258	700	2214	847
70°	2010	739	1953	879
75°	1716	774	1641	904
80°	1293	798	1211	934
85°	873	708	766	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 5137 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	2.1
10°-20°	172.8	5.7
20°-30°	258.5	8.6
30°-40°	294.0	9.7
40°-50°	251.4	8.3
50°-60°	169.6	5.6
60°-70°	87.5	2.9
70°-80°	39.5	1.3
80°-90°	12.5	0.4
90°-100°	38.3	1.3
100°-110°	272.7	9.0
110°-120°	370.3	12.3
120°-130°	301.4	10.0
130°-140°	242.4	8.0
140°-150°	191.1	6.3
150°-160°	139.7	4.6
160°-170°	86.8	2.9
170°-180°	29.6	1.0
0°-30°	494.3	16.4
0°-40°	788.3	26.1
0°-60°	1209.3	40.0
0°-90°	1348.8	44.6
90°-120°	681.3	22.6
90°-150°	1416.2	46.9
90°-180°	1672.0	55.3
0°-180°	3021.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	654	654	654	654	654	
5°	652	819	642	559	652	62
15°	607	732	609	432	607	171
25°	535	672	541	510	535	246
35°	428	515	417	390	428	261
45°	273	147	276	249	273	217
55°	213	70	206	115	213	190
65°	133	41	130	50	133	131
75°	62	28	59	33	62	66
85°	11	9	9	11	11	14
90°	0	6	0	6	0	1
95°	16	22	16	22	16	18
105°	61	300	61	300	61	64
115°	108	742	108	742	108	107
125°	155	595	155	595	155	137
135°	192	476	192	476	192	148
145°	227	399	227	399	227	143
155°	266	343	266	343	266	122
165°	296	319	296	319	296	83
175°	311	307	311	307	311	29
180°	311	311	311	311	311	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	655.9	678.3	706.5	725.8	734.1	725.8	701.7	678.1	648.5	639.6	618.7
5°	652.5	721.4	804.8	814.8	819.4	814.8	797.4	717.3	642.5	610.6	576.0
7.5°	644.5	765.0	803.8	781.3	781.5	785.6	805.0	761.3	634.1	584.0	541.5
10°	636.5	789.3	784.1	751.7	757.5	754.9	790.1	784.6	627.2	569.3	520.8
12.5°	625.8	796.9	758.1	747.4	753.8	750.2	761.9	792.7	621.3	558.8	496.8
15°	607.2	786.1	736.3	731.6	731.6	734.8	739.6	789.4	609.2	539.6	467.6
17.5°	588.1	764.4	721.1	698.0	695.5	699.8	726.5	770.0	592.1	518.4	439.2
20°	572.6	749.5	705.7	678.6	689.7	679.9	711.6	753.6	579.3	505.2	421.7
22.5°	558.8	731.0	686.0	674.5	689.2	674.7	691.4	735.0	564.4	490.3	408.4
25°	535.4	699.9	656.4	667.2	672.4	667.2	659.1	702.7	541.4	471.1	394.4
27.5°	512.1	667.2	634.4	641.6	625.7	637.9	638.0	667.3	517.7	448.9	390.1
30°	493.5	644.4	623.2	612.6	587.9	607.4	627.8	644.5	500.1	434.5	389.1
32.5°	469.0	623.5	612.0	575.6	559.7	573.0	617.2	623.1	473.0	421.4	388.0
35°	427.7	594.1	591.9	531.7	515.4	527.8	596.6	592.6	417.0	400.8	379.8
37.5°	372.2	567.9	553.5	487.3	461.4	484.1	557.9	565.1	350.8	381.9	360.5
40°	325.9	550.2	524.8	454.3	429.0	451.1	528.1	548.7	314.6	368.6	339.2
42.5°	299.8	534.6	494.4	419.4	262.4	414.1	497.8	532.6	292.2	351.4	320.6
45°	273.4	506.2	450.3	232.2	147.0	221.1	450.9	499.1	276.0	325.4	292.0
47.5°	261.8	471.2	404.1	139.8	124.1	135.8	403.7	463.5	261.9	299.4	264.7
50°	252.7	449.1	371.1	123.2	101.8	118.7	371.8	441.9	248.1	281.9	246.1
52.5°	237.8	422.8	323.8	102.1	87.9	99.6	315.9	414.5	233.7	262.8	222.7
55°	212.8	372.2	135.0	80.3	70.5	77.0	128.4	359.6	205.5	232.8	195.5
57.5°	186.4	316.8	94.7	62.5	54.7	61.8	94.0	304.1	182.9	197.2	170.5
60°	170.9	279.5	77.2	52.4	47.2	51.8	76.5	268.4	169.6	173.5	147.6
62.5°	155.5	241.7	63.8	46.1	44.6	45.5	63.7	229.6	153.1	153.4	104.0
65°	133.0	183.1	47.2	41.9	41.2	41.2	45.9	176.5	130.4	126.5	59.9
67.5°	110.1	131.5	37.9	38.6	37.9	37.9	37.2	127.8	107.5	100.8	45.2
70°	95.8	101.0	35.2	35.9	35.2	35.2	34.6	98.3	93.1	78.2	42.6
72.5°	81.9	68.9	32.6	32.7	32.6	32.6	31.9	64.7	79.3	55.0	38.8
75°	61.9	34.5	27.9	27.9	27.9	27.9	27.3	33.2	59.2	35.8	33.3
77.5°	43.0	22.8	23.1	23.0	23.0	22.5	22.5	22.6	40.4	24.7	26.9
80°	31.3	18.9	20.0	19.3	19.3	19.3	19.3	18.2	29.3	20.8	22.6
82.5°	22.2	15.1	16.2	15.6	15.6	15.6	15.6	14.9	20.2	17.0	18.4
85°	10.6	10.0	10.6	9.3	8.6	9.3	10.0	10.0	9.3	11.3	12.0
87.5°	3.2	5.1	5.0	4.4	4.4	4.4	4.5	4.6	2.7	5.6	5.6
90°	0.0	1.9	3.9	5.9	5.9	5.9	3.9	1.9	0.0	1.9	3.9
92.5°	4.7	6.6	8.6	12.2	13.7	12.2	8.6	6.6	4.7	6.6	8.6
95°	15.7	29.1	15.7	17.7	21.5	17.7	15.7	29.1	15.7	29.1	15.7
97.5°	27.8	55.8	115.1	34.0	29.4	34.0	115.1	55.8	27.8	55.8	115.1
100°	37.2	69.7	231.0	68.0	45.0	68.0	231.0	69.7	37.2	69.7	231.0
102.5°	46.6	80.7	312.5	179.5	98.3	179.5	312.5	80.7	46.6	80.7	312.5
105°	60.7	93.2	354.4	452.7	299.6	452.7	354.4	93.2	60.7	93.2	354.4
107.5°	74.8	99.3	338.3	658.9	617.1	658.9	338.3	99.3	74.8	99.3	338.3
110°	84.2	107.2	328.9	692.3	744.0	692.3	328.9	107.2	84.2	107.2	328.9



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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°	93.6	116.6	319.5	672.7	759.7	672.7	319.5	116.6	93.6	116.6	319.5
115°	107.7	130.7	305.4	634.8	742.0	634.8	305.4	130.7	107.7	130.7	305.4
117.5°	122.2	144.8	301.9	593.8	704.1	593.8	301.9	144.8	122.2	144.8	301.9
120°	133.1	154.2	295.6	562.6	677.4	562.6	295.6	154.2	133.1	154.2	295.6
122.5°	141.0	163.6	287.8	535.7	641.4	535.7	287.8	163.6	141.0	163.6	287.8
125°	154.7	175.7	287.8	503.3	595.2	503.3	287.8	175.7	154.7	175.7	287.8
127.5°	166.0	187.5	288.2	465.7	556.4	465.7	288.2	187.5	166.0	187.5	288.2
130°	172.3	195.3	289.8	440.5	526.7	440.5	289.8	195.3	172.3	195.3	289.8
132.5°	180.1	203.1	289.8	429.2	500.0	429.2	289.8	203.1	180.1	203.1	289.8
135°	191.9	212.9	289.8	414.5	475.8	414.5	289.8	212.9	191.9	212.9	289.8
137.5°	201.7	224.3	289.8	398.2	450.7	398.2	289.8	224.3	201.7	224.3	289.8
140°	209.5	230.6	289.8	388.7	436.6	388.7	289.8	230.6	209.5	230.6	289.8
142.5°	217.3	236.9	291.3	377.7	422.5	377.7	291.3	236.9	217.3	236.9	291.3
145°	227.1	246.3	291.7	361.1	399.4	361.1	291.7	246.3	227.1	246.3	291.7
147.5°	238.9	255.7	294.1	349.2	378.7	349.2	294.1	255.7	238.9	255.7	294.1
150°	246.7	262.0	295.6	341.2	366.1	341.2	295.6	262.0	246.7	262.0	295.6
152.5°	254.5	268.3	295.6	334.9	355.2	334.9	295.6	268.3	254.5	268.3	295.6
155°	266.3	275.8	297.6	327.3	342.6	327.3	297.6	275.8	266.3	275.8	297.6
157.5°	275.7	284.9	299.9	322.5	333.6	322.5	299.9	284.9	275.7	284.9	299.9
160°	281.9	289.6	301.5	319.4	328.9	319.4	301.5	289.6	281.9	289.6	301.5
162.5°	286.6	294.3	303.1	317.7	324.2	317.7	303.1	294.3	286.6	294.3	303.1
165°	295.6	299.5	305.4	313.4	319.1	313.4	305.4	299.5	295.6	299.5	305.4
167.5°	300.7	304.2	307.4	311.4	314.8	311.4	307.4	304.2	300.7	304.2	307.4
170°	305.4	307.3	307.4	311.3	313.3	311.3	307.4	307.3	305.4	307.3	307.4
172.5°	307.0	310.4	309.0	309.8	311.7	309.8	309.0	310.4	307.0	310.4	309.0
175°	311.3	313.2	311.3	309.3	307.4	309.3	311.3	313.2	311.3	313.2	311.3
177.5°	311.3	312.8	311.3	311.3	309.7	311.3	311.3	312.8	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	611.2	610.7	611.7	620.8	639.3	655.9
5°	556.7	558.7	560.6	576.0	608.2	652.5
7.5°	514.8	512.0	516.4	541.4	581.0	644.5
10°	486.0	479.5	486.0	520.1	566.3	636.5
12.5°	458.9	450.8	460.9	498.3	554.1	625.8
15°	423.8	431.6	427.1	468.9	535.7	607.2
17.5°	432.1	471.4	440.5	443.3	517.4	588.1
20°	451.8	492.2	464.9	426.3	505.7	572.6
22.5°	469.7	500.1	475.4	412.0	493.9	558.8
25°	483.4	509.5	482.1	399.1	476.9	535.4
27.5°	484.1	487.8	484.4	398.0	455.8	512.1
30°	475.2	459.6	473.9	399.1	440.8	493.5
32.5°	449.6	431.9	444.1	396.9	425.7	469.0
35°	413.2	389.7	406.6	385.8	402.3	427.7
37.5°	374.7	345.0	368.5	363.7	382.3	372.2
40°	348.7	296.6	343.5	341.9	371.4	325.9
42.5°	315.3	271.1	310.6	324.3	359.4	299.8
45°	254.6	249.4	252.0	294.6	333.8	273.4
47.5°	232.8	229.3	231.5	267.6	305.0	261.8
50°	220.0	215.5	218.7	250.1	286.5	252.7
52.5°	202.3	189.9	201.0	226.1	267.5	237.8
55°	152.1	115.1	151.5	198.9	238.8	212.8
57.5°	89.3	66.5	87.3	173.1	202.4	186.4
60°	60.4	55.9	61.1	152.3	178.1	170.9
62.5°	55.2	53.7	55.3	106.0	156.4	155.5
65°	50.5	49.9	50.5	61.2	129.1	133.0
67.5°	45.7	45.1	46.3	47.0	101.9	110.1
70°	42.6	41.9	42.6	43.2	78.2	95.8
72.5°	38.8	38.2	38.8	39.5	55.0	81.9
75°	33.2	32.6	33.2	33.9	36.5	61.9
77.5°	26.9	26.9	27.5	27.5	25.5	43.0
80°	22.6	22.6	23.3	23.3	22.2	31.3
82.5°	18.3	17.8	19.0	19.6	18.3	22.2
85°	11.3	10.6	11.9	12.6	11.9	10.6
87.5°	5.4	4.9	5.9	6.6	6.2	3.2
90°	5.9	5.9	5.9	3.9	1.9	0.0
92.5°	12.2	13.7	12.2	8.6	6.6	4.7
95°	17.7	21.5	17.7	15.7	29.1	15.7
97.5°	34.0	29.4	34.0	115.1	55.8	27.8
100°	68.0	45.0	68.0	231.0	69.7	37.2
102.5°	179.5	98.3	179.5	312.5	80.7	46.6
105°	452.7	299.6	452.7	354.4	93.2	60.7
107.5°	658.9	617.1	658.9	338.3	99.3	74.8
110°	692.3	744.0	692.3	328.9	107.2	84.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	672.7	759.7	672.7	319.5	116.6	93.6
115°	634.8	742.0	634.8	305.4	130.7	107.7
117.5°	593.8	704.1	593.8	301.9	144.8	122.2
120°	562.6	677.4	562.6	295.6	154.2	133.1
122.5°	535.7	641.4	535.7	287.8	163.6	141.0
125°	503.3	595.2	503.3	287.8	175.7	154.7
127.5°	465.7	556.4	465.7	288.2	187.5	166.0
130°	440.5	526.7	440.5	289.8	195.3	172.3
132.5°	429.2	500.0	429.2	289.8	203.1	180.1
135°	414.5	475.8	414.5	289.8	212.9	191.9
137.5°	398.2	450.7	398.2	289.8	224.3	201.7
140°	388.7	436.6	388.7	289.8	230.6	209.5
142.5°	377.7	422.5	377.7	291.3	236.9	217.3
145°	361.1	399.4	361.1	291.7	246.3	227.1
147.5°	349.2	378.7	349.2	294.1	255.7	238.9
150°	341.2	366.1	341.2	295.6	262.0	246.7
152.5°	334.9	355.2	334.9	295.6	268.3	254.5
155°	327.3	342.6	327.3	297.6	275.8	266.3
157.5°	322.5	333.6	322.5	299.9	284.9	275.7
160°	319.4	328.9	319.4	301.5	289.6	281.9
162.5°	317.7	324.2	317.7	303.1	294.3	286.6
165°	313.4	319.1	313.4	305.4	299.5	295.6
167.5°	311.4	314.8	311.4	307.4	304.2	300.7
170°	311.3	313.3	311.3	307.4	307.3	305.4
172.5°	309.8	311.7	309.8	309.0	310.4	307.0
175°	309.3	307.4	309.3	311.3	313.2	311.3
177.5°	311.3	309.7	311.3	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)