

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: P621577

Luminaire Tested: VLT-FA-025U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621577
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

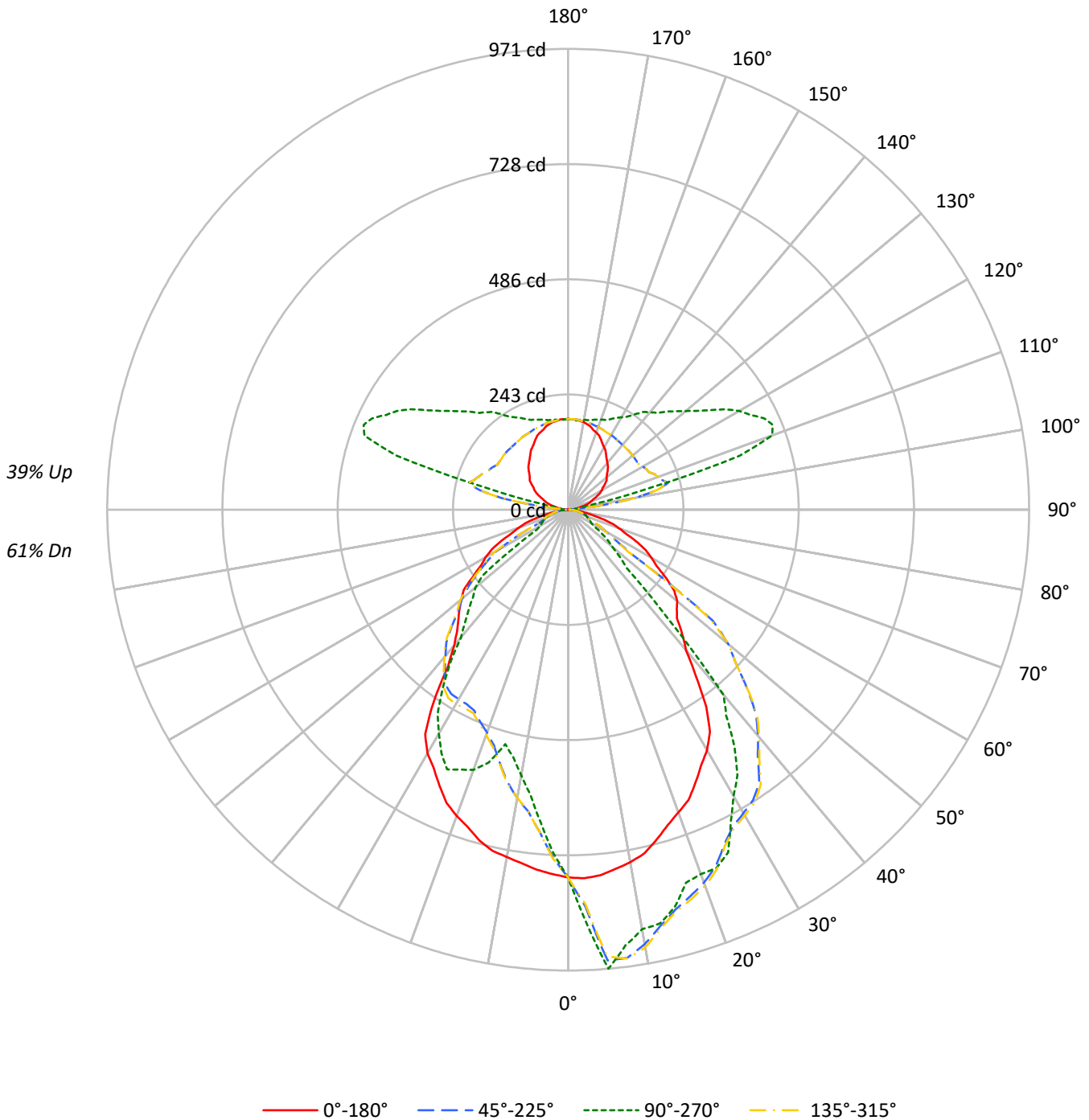
Lumens per Lamp: N/A
Luminaire Lumens: 2624.5 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	66	66	66	66	66	66	61														
1	101	97	94	90	95	91	88	85	80	78	76	70	68	66	60	59	58	58	58	58	58	58	58	53														
2	93	86	80	76	87	81	76	72	71	68	64	62	60	57	54	52	50	50	50	50	50	50	50	46														
3	86	77	70	64	80	72	66	61	64	59	55	56	52	50	49	46	44	44	44	44	44	44	44	40														
4	79	68	61	55	74	65	58	53	57	52	48	51	47	43	44	41	39	39	39	39	39	39	39	36														
5	73	62	54	48	68	58	51	46	52	46	42	46	42	38	40	37	34	34	34	34	34	34	34	31														
6	67	56	48	42	63	53	46	40	47	41	37	42	37	34	37	33	31	31	31	31	31	31	31	28														
7	62	51	43	37	58	48	41	36	43	37	33	38	34	30	34	30	28	28	28	28	28	28	28	25														
8	58	46	39	33	54	44	37	32	39	34	30	35	31	27	31	28	25	25	25	25	25	25	25	23														
9	54	42	35	30	51	40	34	29	36	31	27	33	28	25	29	25	23	23	23	23	23	23	23	21														
10	51	39	32	27	48	37	31	26	34	28	24	30	26	23	27	23	21	21	21	21	21	21	21	19														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5559	5559	5559	5559
5°	5569	6994	5484	4769
10°	5496	6540	5415	4140
15°	5345	6440	5363	3800
20°	5181	6241	5242	4454
25°	5023	6308	5079	4780
30°	4845	5772	4910	4513
35°	4439	5350	4328	4045
40°	3618	4762	3492	3293
45°	3287	1768	3318	2999
50°	3344	1346	3281	2850
55°	3155	1045	3046	1705
60°	2906	804	2885	950
65°	2676	830	2623	1004
70°	2381	877	2314	1041
75°	2032	918	1944	1070
80°	1529	946	1434	1107
85°	1037	840	906	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6087 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	2.8
10°-20°	204.7	7.8
20°-30°	306.3	11.7
30°-40°	348.4	13.3
40°-50°	297.9	11.4
50°-60°	200.9	7.7
60°-70°	103.7	4.0
70°-80°	46.8	1.8
80°-90°	14.4	0.5
90°-100°	23.5	0.9
100°-110°	167.4	6.4
110°-120°	227.3	8.7
120°-130°	185.0	7.0
130°-140°	148.8	5.7
140°-150°	117.3	4.5
150°-160°	85.8	3.3
160°-170°	53.3	2.0
170°-180°	18.2	0.7
0°-30°	585.8	22.3
0°-40°	934.1	35.6
0°-60°	1432.9	54.6
0°-90°	1597.8	60.9
90°-120°	418.3	15.9
90°-150°	869.5	33.1
90°-180°	1027.0	39.1
0°-180°	2624.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	775	775	775	775	775	
5°	773	971	761	662	773	73
15°	720	867	722	512	720	203
25°	634	797	642	604	634	292
35°	507	611	494	462	507	310
45°	324	174	327	296	324	257
55°	252	84	244	136	252	225
65°	158	49	154	59	158	156
75°	73	33	70	39	73	78
85°	13	10	11	13	13	16
90°	0	4	0	4	0	1
95°	10	13	10	13	10	11
105°	37	184	37	184	37	39
115°	66	456	66	456	66	66
125°	95	365	95	365	95	84
135°	118	292	118	292	118	91
145°	139	245	139	245	139	88
155°	164	210	164	210	164	75
165°	182	196	182	196	182	51
175°	191	189	191	189	191	18
180°	191	191	191	191	191	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	777.2	803.7	837.1	860.0	869.9	860.0	831.4	803.5	768.4	757.9	733.1
5°	773.1	854.8	953.6	965.5	970.9	965.5	944.9	849.9	761.3	723.5	682.5
7.5°	763.6	906.5	952.5	925.8	926.0	930.9	953.9	902.1	751.3	692.0	641.6
10°	754.2	935.3	929.1	890.7	897.6	894.5	936.2	929.6	743.1	674.6	617.1
12.5°	741.6	944.2	898.2	885.6	893.2	888.9	902.8	939.3	736.2	662.1	588.7
15°	719.5	931.4	872.4	866.9	866.9	870.7	876.3	935.3	721.9	639.4	554.0
17.5°	696.8	905.8	854.4	827.1	824.2	829.2	860.9	912.4	701.5	614.3	520.4
20°	678.5	888.1	836.1	804.1	817.2	805.7	843.2	892.9	686.4	598.6	499.6
22.5°	662.1	866.2	812.8	799.2	816.6	799.5	819.3	870.9	668.8	580.9	483.9
25°	634.4	829.3	777.8	790.6	796.7	790.6	781.0	832.6	641.5	558.3	467.3
27.5°	606.8	790.5	751.7	760.2	741.4	755.9	755.9	790.7	613.4	531.9	462.3
30°	584.7	763.5	738.4	725.9	696.6	719.8	743.9	763.7	592.6	514.8	461.0
32.5°	555.7	738.8	725.2	682.0	663.2	679.0	731.3	738.3	560.5	499.3	459.8
35°	506.7	704.0	701.4	630.0	610.7	625.4	706.9	702.2	494.1	474.9	450.0
37.5°	441.0	672.9	655.8	577.4	546.8	573.6	661.0	669.6	415.6	452.5	427.1
40°	386.2	652.0	621.8	538.4	508.3	534.5	625.7	650.2	372.8	436.7	401.9
42.5°	355.3	633.4	585.8	497.0	311.0	490.7	589.8	631.1	346.3	416.4	379.8
45°	323.9	599.8	533.5	275.1	174.2	262.0	534.3	591.3	327.0	385.6	346.0
47.5°	310.2	558.3	478.8	165.7	147.1	160.9	478.4	549.2	310.3	354.7	313.6
50°	299.5	532.2	439.7	146.0	120.6	140.6	440.5	523.6	293.9	334.0	291.6
52.5°	281.8	501.0	383.6	121.0	104.2	118.1	374.3	491.1	276.9	311.4	263.8
55°	252.2	441.0	160.0	95.1	83.5	91.2	152.1	426.1	243.5	275.9	231.7
57.5°	220.8	375.4	112.2	74.0	64.8	73.3	111.4	360.3	216.7	233.7	202.1
60°	202.5	331.2	91.4	62.1	56.0	61.3	90.6	318.1	201.0	205.6	175.0
62.5°	184.2	286.4	75.7	54.6	52.8	53.9	75.5	272.0	181.4	181.7	123.3
65°	157.6	216.9	56.0	49.6	48.9	48.9	54.4	209.2	154.5	149.8	70.9
67.5°	130.5	155.8	44.9	45.7	44.9	44.9	44.1	151.4	127.4	119.5	53.6
70°	113.5	119.6	41.8	42.5	41.8	41.8	41.0	116.5	110.3	92.6	50.4
72.5°	97.1	81.7	38.6	38.8	38.6	38.6	37.8	76.7	93.9	65.1	46.0
75°	73.3	40.9	33.1	33.1	33.1	33.1	32.3	39.3	70.1	42.4	39.4
77.5°	50.9	27.0	27.4	27.3	27.3	26.7	26.6	26.8	47.9	29.3	31.8
80°	37.0	22.4	23.6	22.9	22.9	22.9	22.9	21.6	34.7	24.7	26.8
82.5°	26.3	17.8	19.2	18.4	18.4	18.4	18.4	17.6	24.0	20.1	21.8
85°	12.6	11.8	12.6	11.0	10.2	11.0	11.8	11.8	11.0	13.3	14.2
87.5°	3.8	5.9	5.5	4.5	4.5	4.5	4.9	5.2	3.2	6.5	6.2
90°	0.0	1.2	2.4	3.6	3.6	3.6	2.4	1.2	0.0	1.2	2.4
92.5°	2.9	4.1	5.3	7.5	8.4	7.5	5.3	4.1	2.9	4.1	5.3
95°	9.6	17.8	9.6	10.9	13.2	10.9	9.6	17.8	9.6	17.8	9.6
97.5°	17.1	34.2	70.7	20.9	18.0	20.9	70.7	34.2	17.1	34.2	70.7
100°	22.8	42.8	141.8	41.8	27.6	41.8	141.8	42.8	22.8	42.8	141.8
102.5°	28.6	49.5	191.9	110.2	60.3	110.2	191.9	49.5	28.6	49.5	191.9
105°	37.3	57.2	217.6	277.9	183.9	277.9	217.6	57.2	37.3	57.2	217.6
107.5°	45.9	61.0	207.7	404.5	378.9	404.5	207.7	61.0	45.9	61.0	207.7
110°	51.7	65.8	201.9	425.1	456.8	425.1	201.9	65.8	51.7	65.8	201.9



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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°	57.5	71.6	196.2	413.0	466.4	413.0	196.2	71.6	57.5	71.6	196.2
115°	66.1	80.2	187.5	389.8	455.6	389.8	187.5	80.2	66.1	80.2	187.5
117.5°	75.0	88.9	185.4	364.6	432.3	364.6	185.4	88.9	75.0	88.9	185.4
120°	81.7	94.7	181.5	345.4	415.9	345.4	181.5	94.7	81.7	94.7	181.5
122.5°	86.5	100.4	176.7	328.9	393.8	328.9	176.7	100.4	86.5	100.4	176.7
125°	95.0	107.9	176.7	309.0	365.4	309.0	176.7	107.9	95.0	107.9	176.7
127.5°	101.9	115.1	176.9	285.9	341.6	285.9	176.9	115.1	101.9	115.1	176.9
130°	105.8	119.9	177.9	270.5	323.4	270.5	177.9	119.9	105.8	119.9	177.9
132.5°	110.6	124.7	177.9	263.5	307.0	263.5	177.9	124.7	110.6	124.7	177.9
135°	117.8	130.7	177.9	254.5	292.1	254.5	177.9	130.7	117.8	130.7	177.9
137.5°	123.8	137.7	177.9	244.5	276.7	244.5	177.9	137.7	123.8	137.7	177.9
140°	128.6	141.6	177.9	238.7	268.1	238.7	177.9	141.6	128.6	141.6	177.9
142.5°	133.4	145.4	178.9	231.9	259.4	231.9	178.9	145.4	133.4	145.4	178.9
145°	139.4	151.2	179.1	221.7	245.2	221.7	179.1	151.2	139.4	151.2	179.1
147.5°	146.7	157.0	180.6	214.4	232.5	214.4	180.6	157.0	146.7	157.0	180.6
150°	151.5	160.9	181.5	209.5	224.8	209.5	181.5	160.9	151.5	160.9	181.5
152.5°	156.3	164.7	181.5	205.6	218.1	205.6	181.5	164.7	156.3	164.7	181.5
155°	163.5	169.4	182.7	201.0	210.4	201.0	182.7	169.4	163.5	169.4	182.7
157.5°	169.3	174.9	184.2	198.0	204.8	198.0	184.2	174.9	169.3	174.9	184.2
160°	173.1	177.8	185.1	196.1	201.9	196.1	185.1	177.8	173.1	177.8	185.1
162.5°	176.0	180.7	186.1	195.1	199.1	195.1	186.1	180.7	176.0	180.7	186.1
165°	181.5	183.9	187.5	192.4	195.9	192.4	187.5	183.9	181.5	183.9	187.5
167.5°	184.6	186.8	188.7	191.2	193.3	191.2	188.7	186.8	184.6	186.8	188.7
170°	187.5	188.7	188.7	191.2	192.3	191.2	188.7	188.7	187.5	188.7	188.7
172.5°	188.5	190.6	189.7	190.2	191.4	190.2	189.7	190.6	188.5	190.6	189.7
175°	191.1	192.3	191.1	189.9	188.7	189.9	191.1	192.3	191.1	192.3	191.1
177.5°	191.1	192.1	191.1	191.1	190.2	191.1	191.1	192.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	724.2	723.6	724.8	735.6	757.5	777.2
5°	659.7	662.0	664.3	682.5	720.7	773.1
7.5°	610.0	606.7	611.9	641.5	688.4	763.6
10°	575.9	568.2	575.9	616.3	671.0	754.2
12.5°	543.7	534.1	546.2	590.4	656.5	741.6
15°	502.2	511.5	506.1	555.6	634.7	719.5
17.5°	512.0	558.6	521.9	525.3	613.1	696.8
20°	535.4	583.2	550.8	505.1	599.2	678.5
22.5°	556.6	592.6	563.3	488.1	585.2	662.1
25°	572.8	603.7	571.3	472.8	565.0	634.4
27.5°	573.7	578.0	574.0	471.6	540.1	606.8
30°	563.0	544.6	561.5	472.8	522.3	584.7
32.5°	532.7	511.8	526.3	470.3	504.4	555.7
35°	489.5	461.8	481.8	457.1	476.7	506.7
37.5°	444.0	408.8	436.6	430.9	453.0	441.0
40°	413.1	351.5	407.0	405.1	440.1	386.2
42.5°	373.6	321.2	368.1	384.3	425.8	355.3
45°	301.7	295.5	298.6	349.1	395.6	323.9
47.5°	275.9	271.7	274.3	317.1	361.3	310.2
50°	260.7	255.3	259.2	296.3	339.5	299.5
52.5°	239.7	225.1	238.2	267.9	316.9	281.8
55°	180.3	136.3	179.5	235.6	283.0	252.2
57.5°	105.8	78.8	103.5	205.1	239.8	220.8
60°	71.6	66.2	72.4	180.5	211.0	202.5
62.5°	65.4	63.7	65.5	125.6	185.3	184.2
65°	59.9	59.1	59.9	72.5	153.0	157.6
67.5°	54.2	53.4	54.8	55.6	120.8	130.5
70°	50.4	49.6	50.4	51.2	92.7	113.5
72.5°	46.0	45.2	46.0	46.8	65.2	97.1
75°	39.4	38.6	39.4	40.2	43.2	73.3
77.5°	31.8	31.8	32.6	32.6	30.3	50.9
80°	26.8	26.8	27.6	27.6	26.3	37.0
82.5°	21.7	21.1	22.5	23.2	21.7	26.3
85°	13.4	12.6	14.2	15.0	14.2	12.6
87.5°	5.8	5.1	6.4	7.4	7.1	3.8
90°	3.6	3.6	3.6	2.4	1.2	0.0
92.5°	7.5	8.4	7.5	5.3	4.1	2.9
95°	10.9	13.2	10.9	9.6	17.8	9.6
97.5°	20.9	18.0	20.9	70.7	34.2	17.1
100°	41.8	27.6	41.8	141.8	42.8	22.8
102.5°	110.2	60.3	110.2	191.9	49.5	28.6
105°	277.9	183.9	277.9	217.6	57.2	37.3
107.5°	404.5	378.9	404.5	207.7	61.0	45.9
110°	425.1	456.8	425.1	201.9	65.8	51.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.0	466.4	413.0	196.2	71.6	57.5
115°	389.8	455.6	389.8	187.5	80.2	66.1
117.5°	364.6	432.3	364.6	185.4	88.9	75.0
120°	345.4	415.9	345.4	181.5	94.7	81.7
122.5°	328.9	393.8	328.9	176.7	100.4	86.5
125°	309.0	365.4	309.0	176.7	107.9	95.0
127.5°	285.9	341.6	285.9	176.9	115.1	101.9
130°	270.5	323.4	270.5	177.9	119.9	105.8
132.5°	263.5	307.0	263.5	177.9	124.7	110.6
135°	254.5	292.1	254.5	177.9	130.7	117.8
137.5°	244.5	276.7	244.5	177.9	137.7	123.8
140°	238.7	268.1	238.7	177.9	141.6	128.6
142.5°	231.9	259.4	231.9	178.9	145.4	133.4
145°	221.7	245.2	221.7	179.1	151.2	139.4
147.5°	214.4	232.5	214.4	180.6	157.0	146.7
150°	209.5	224.8	209.5	181.5	160.9	151.5
152.5°	205.6	218.1	205.6	181.5	164.7	156.3
155°	201.0	210.4	201.0	182.7	169.4	163.5
157.5°	198.0	204.8	198.0	184.2	174.9	169.3
160°	196.1	201.9	196.1	185.1	177.8	173.1
162.5°	195.1	199.1	195.1	186.1	180.7	176.0
165°	192.4	195.9	192.4	187.5	183.9	181.5
167.5°	191.2	193.3	191.2	188.7	186.8	184.6
170°	191.2	192.3	191.2	188.7	188.7	187.5
172.5°	190.2	191.4	190.2	189.7	190.6	188.5
175°	189.9	188.7	189.9	191.1	192.3	191.1
177.5°	191.1	190.2	191.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)