

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: 18223

Luminaire Tested: **VW-SH-1T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 18223  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VW-SH-1T5  
Description: - DIRECT/INDIRECT LUMINAIRE - VERTECHS WALL - WHITE INTERIOR WITH  
SPECULAR REFLECTOR AND SEMI-SPECULAR 46 CELL LOUVER  
Light Source: ONE PHILIPS 54 WATT T5 LAMP  
  
F54T5/TL841. LUMEN RATING = 4500 LMS.  
  
Ballast/Driver: -

**Summary**

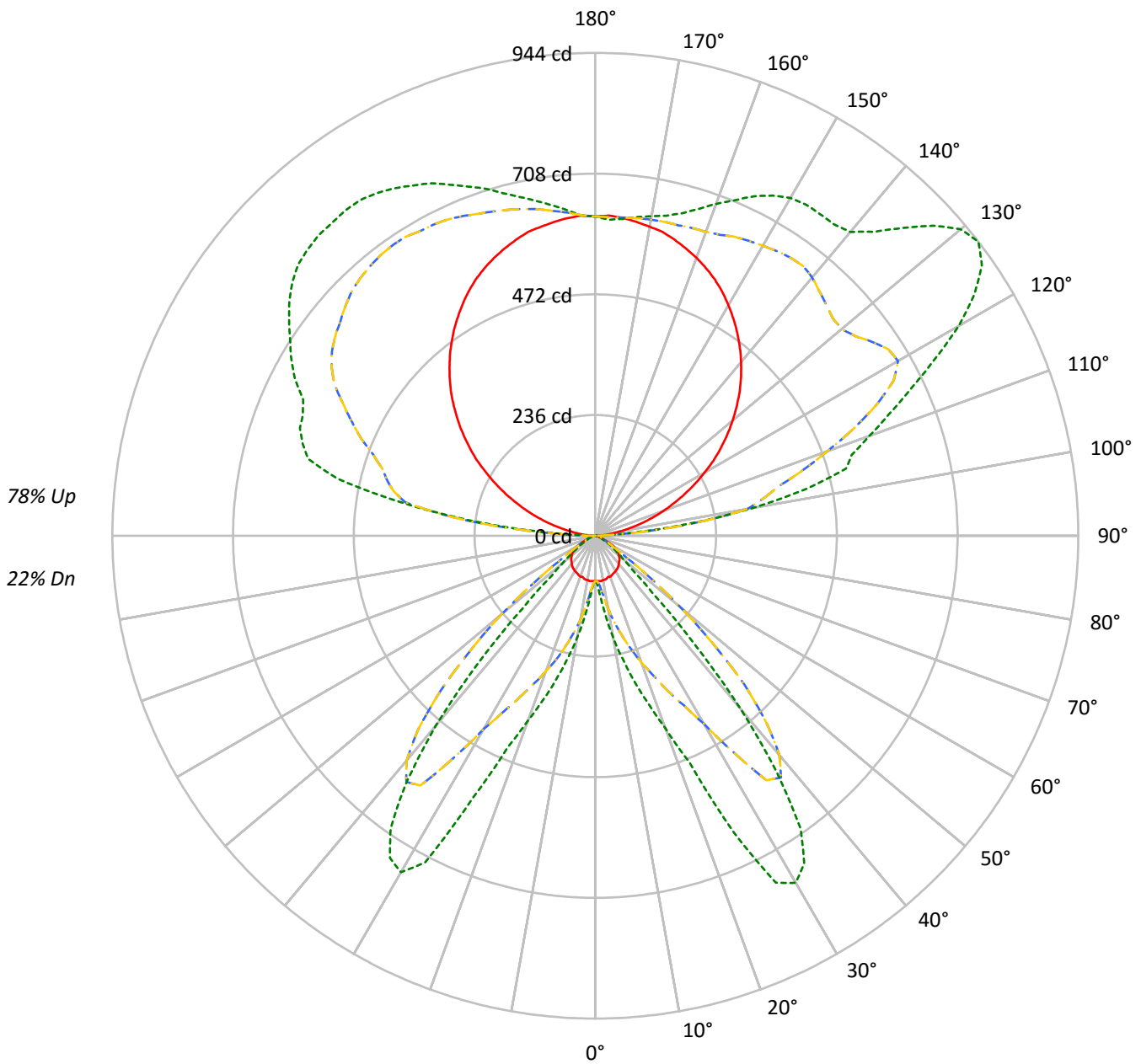
Lumens per Lamp: 4500 (1 lamp)  
Luminaire Lumens: 3861.3 lumens  
Efficiency: 85.8%  
Efficacy: 63.3 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 2.11 / 1.92  
Luminous Opening: Rectangular (W 0.23' x L: 3.58' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 61  
Input Voltage (V): NR  
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: 25 FT



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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°    - - - 135°-315°



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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	86	86	86	86	77	77	77	77	58	58	58	42	42	42	26	26	26	19
1	79	76	73	70	70	67	65	63	52	50	49	37	36	35	24	23	23	17
2	72	66	62	58	64	59	55	52	46	43	41	33	31	30	22	21	20	15
3	66	59	53	48	58	52	47	44	40	37	34	29	27	26	19	18	17	13
4	60	52	46	41	53	46	41	37	36	32	29	26	24	22	17	16	15	11
5	55	46	40	35	49	41	36	32	32	28	25	24	21	19	16	14	13	10
6	51	41	35	30	45	37	31	27	29	25	22	21	19	17	14	13	11	9
7	47	37	30	26	41	33	28	24	26	22	19	19	16	15	13	11	10	8
8	43	33	27	23	38	30	24	21	23	19	17	17	15	13	12	10	9	7
9	40	30	24	20	36	27	22	18	21	17	15	16	13	11	11	9	8	6
10	37	27	22	18	33	25	20	16	19	16	13	14	12	10	10	8	7	5

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

	0°	90°	180°	270°
0°	1156	1156	1156	1156
5°	1169	1601	1169	1610
10°	1167	2708	1167	2667
15°	1172	3988	1172	3887
20°	1188	5576	1188	5345
25°	1183	9220	1183	8141
30°	1202	11828	1202	11466
35°	1221	11166	1221	11128
40°	1222	7536	1222	8270
45°	1233	2930	1233	3744
50°	1222	1481	1222	1702
55°	1190	1019	1190	1039
60°	1072	607	1072	711
65°	674	458	674	535
70°	405	436	405	505
75°	328	414	328	495
80°	361	429	361	429
85°	345	720	345	480



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	11.6	0.3	0.3
10°-20°	58.8	1.5	1.3
20°-30°	164.5	4.3	3.7
30°-40°	285.9	7.4	6.4
40°-50°	213.8	5.5	4.8
50°-60°	93.5	2.4	2.1
60°-70°	24.3	0.6	0.5
70°-80°	9.4	0.2	0.2
80°-90°	4.0	0.1	0.1
90°-100°	127.5	3.3	2.8
100°-110°	385.0	10.0	8.6
110°-120°	494.4	12.8	11.0
120°-130°	541.2	14.0	12.0
130°-140°	490.3	12.7	10.9
140°-150°	411.0	10.6	9.1
150°-160°	303.8	7.9	6.8
160°-170°	182.1	4.7	4.0
170°-180°	60.2	1.6	1.3
0°-30°	234.8	6.1	5.2
0°-40°	520.7	13.5	11.6
0°-60°	828.1	21.4	18.4
0°-90°	865.8	22.4	19.2
90°-120°	1007.0	26.1	22.4
90°-150°	2449.4	63.4	54.4
90°-180°	2995.0	77.6	66.6
0°-180°	3861.3	100.0	85.8

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	88	88	88	88	88	
5°	89	122	89	123	89	8
15°	87	295	87	287	87	24
25°	82	639	82	564	82	38
35°	76	700	76	697	76	48
45°	67	158	67	202	67	51
55°	52	45	52	46	52	46
65°	22	15	22	17	22	23
75°	6	8	6	10	6	7
85°	2	5	2	3	2	2
90°	0	0	0	0	0	1
95°	20	83	20	147	20	22
105°	92	507	92	581	92	99
115°	192	681	192	630	192	191
125°	300	922	300	731	300	268
135°	399	851	399	794	399	307
145°	484	767	484	801	484	303
155°	553	732	553	760	553	254
165°	599	652	599	693	599	169
175°	623	622	623	639	623	59
180°	624	624	624	624	624	



TEST NUMBER: 18223  
 CATALOG NUMBER: VW-SH-1T5

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
2.5°	88.7	87.8	89.6	88.7	95.2	88.7	89.6	87.8	88.7	93.7	93.7
5°	89.1	87.8	97.7	103.6	122.0	103.6	97.7	87.8	89.1	104.5	109.5
7.5°	89.1	88.7	116.1	132.6	160.1	132.6	116.1	88.7	89.1	114.5	136.0
10°	87.9	92.8	145.1	173.4	204.0	173.4	145.1	92.8	87.9	127.0	166.0
12.5°	87.9	99.6	174.1	205.9	246.4	205.9	174.1	99.6	87.9	140.1	194.1
15°	86.6	111.1	202.5	252.3	294.7	252.3	202.5	111.1	86.6	156.7	222.4
17.5°	84.0	119.5	232.4	292.2	343.7	292.2	232.4	119.5	84.0	168.5	253.0
20°	85.4	138.5	263.0	341.2	400.8	341.2	263.0	138.5	85.4	182.5	281.3
22.5°	84.0	151.7	294.7	395.8	478.1	395.8	294.7	151.7	84.0	195.9	312.8
25°	82.0	165.1	333.7	468.1	639.2	468.1	333.7	165.1	82.0	209.0	346.8
27.5°	80.7	180.9	373.4	604.3	764.6	604.3	373.4	180.9	80.7	223.1	386.7
30°	79.6	194.1	424.1	714.7	783.6	714.7	424.1	194.1	79.6	236.5	436.6
32.5°	77.9	207.4	501.4	732.2	759.6	732.2	501.4	207.4	77.9	251.4	513.9
35°	76.5	221.5	583.5	708.8	699.7	708.8	583.5	221.5	76.5	265.5	595.9
37.5°	74.2	238.0	595.9	644.2	581.0	644.2	595.9	238.0	74.2	283.8	606.8
40°	71.6	256.4	559.4	552.0	441.6	552.0	559.4	256.4	71.6	300.4	573.5
42.5°	68.7	272.9	494.6	405.1	284.7	405.1	494.6	272.9	68.7	317.8	511.4
45°	66.7	287.9	412.6	272.3	158.5	272.3	412.6	287.9	66.7	328.7	425.0
47.5°	63.7	295.4	310.3	161.0	96.2	161.0	310.3	295.4	63.7	333.7	327.8
50°	60.1	296.3	215.8	92.1	72.8	92.1	215.8	296.3	60.1	318.7	238.9
52.5°	56.8	286.3	134.5	69.6	53.8	69.6	134.5	286.3	56.8	275.4	150.1
55°	52.2	244.8	75.3	52.2	44.7	52.2	75.3	244.8	52.2	204.9	87.8
57.5°	46.4	190.9	46.3	42.2	35.6	42.2	46.3	190.9	46.4	148.5	53.8
60°	41.0	113.6	33.8	32.2	23.2	32.2	33.8	113.6	41.0	83.7	37.2
62.5°	31.4	65.6	24.8	23.8	18.9	23.8	24.8	65.6	31.4	43.1	27.2
65°	21.8	32.2	18.2	17.3	14.8	17.3	18.2	32.2	21.8	23.2	20.7
67.5°	13.9	20.7	15.7	13.9	12.3	13.9	15.7	20.7	13.9	15.7	16.4
70°	10.6	15.7	13.2	12.3	11.4	12.3	13.2	15.7	10.6	11.4	13.9
72.5°	8.5	12.3	9.8	10.7	8.9	10.7	9.8	12.3	8.5	8.9	10.7
75°	6.5	10.7	9.8	9.8	8.2	9.8	9.8	10.7	6.5	7.3	9.8
77.5°	3.6	8.2	8.9	7.3	8.2	7.3	8.9	8.2	3.6	7.3	8.9
80°	4.8	8.2	7.3	7.3	5.7	7.3	7.3	8.2	4.8	4.8	7.3
82.5°	3.6	4.8	6.4	7.3	5.7	7.3	6.4	4.8	3.6	3.9	3.2
85°	2.3	5.7	3.9	5.7	4.8	5.7	3.9	5.7	2.3	1.4	3.2
87.5°	1.1	3.2	3.2	3.9	3.2	3.9	3.2	3.2	1.1	1.4	3.2
90°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
92.5°	7.3	48.8	13.2	30.6	5.7	30.6	13.2	48.8	7.3	22.3	56.3
95°	19.8	118.6	98.6	126.1	82.8	126.1	98.6	118.6	19.8	109.5	166.6
97.5°	33.0	147.6	204.0	243.9	193.4	243.9	204.0	147.6	33.0	170.9	284.7
100°	50.5	219.0	302.0	410.8	312.8	410.8	302.0	219.0	50.5	193.4	376.8
102.5°	70.0	244.8	336.2	447.2	421.6	447.2	336.2	244.8	70.0	204.0	404.2
105°	92.1	294.7	368.6	472.2	507.1	472.2	368.6	294.7	92.1	257.3	421.6
107.5°	116.1	321.2	424.1	511.4	525.4	511.4	424.1	321.2	116.1	300.4	436.6
110°	141.8	331.2	481.5	570.3	569.4	570.3	481.5	331.2	141.8	328.7	461.5



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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°	166.3	334.4	546.1	625.9	621.8	625.9	546.1	334.4	166.3	349.3	494.6
115°	192.5	349.3	606.8	694.8	680.7	694.8	606.8	349.3	192.5	364.3	524.5
117.5°	219.0	366.8	657.4	758.7	748.0	758.7	657.4	366.8	219.0	385.1	554.5
120°	246.4	389.2	683.2	818.5	820.1	818.5	683.2	389.2	246.4	405.1	587.8
122.5°	273.9	421.6	678.9	873.4	878.4	873.4	678.9	421.6	273.9	425.7	610.9
125°	299.6	430.7	660.8	880.8	922.3	880.8	660.8	430.7	299.6	435.0	628.3
127.5°	325.3	448.2	640.8	863.4	943.9	863.4	640.8	448.2	325.3	462.2	640.8
130°	350.6	464.0	628.3	832.6	932.3	832.6	628.3	464.0	350.6	480.6	650.8
132.5°	374.7	479.0	629.3	794.5	897.4	794.5	629.3	479.0	374.7	497.1	663.3
135°	398.9	492.1	638.3	757.1	850.9	757.1	638.3	492.1	398.9	513.9	673.9
137.5°	421.6	505.5	648.3	740.5	806.0	740.5	648.3	505.5	421.6	528.6	681.4
140°	443.2	518.0	659.2	739.6	775.2	739.6	659.2	518.0	443.2	542.9	686.4
142.5°	464.0	527.9	665.7	743.0	767.1	743.0	665.7	527.9	464.0	554.5	690.7
145°	483.9	546.1	664.2	744.6	767.1	744.6	664.2	546.1	483.9	565.3	692.3
147.5°	502.6	551.1	659.9	743.7	767.1	743.7	659.9	551.1	502.6	570.3	692.3
150°	520.5	563.5	654.9	731.2	762.8	731.2	654.9	563.5	520.5	586.0	687.3
152.5°	537.5	573.5	649.9	718.8	749.6	718.8	649.9	573.5	537.5	595.3	685.7
155°	552.8	583.5	644.9	703.1	732.2	703.1	644.9	583.5	552.8	604.3	682.3
157.5°	566.1	591.9	636.7	685.7	709.7	685.7	636.7	591.9	566.1	612.5	676.4
160°	578.1	600.9	632.4	669.8	690.7	669.8	632.4	600.9	578.1	618.4	669.8
162.5°	588.9	606.8	630.8	652.4	669.8	652.4	630.8	606.8	588.9	623.4	664.8
165°	598.9	612.5	628.3	643.3	652.4	643.3	628.3	612.5	598.9	625.9	659.9
167.5°	608.4	619.3	628.3	633.3	640.8	633.3	628.3	619.3	608.4	628.3	654.2
170°	613.4	620.0	627.4	631.7	634.2	631.7	627.4	620.0	613.4	629.9	648.3
172.5°	618.7	623.4	625.9	625.9	628.3	625.9	625.9	623.4	618.7	630.8	640.8
175°	623.4	624.9	624.3	621.8	621.8	621.8	624.3	624.9	623.4	629.9	634.2
177.5°	626.6	626.8	623.4	618.4	618.4	618.4	623.4	626.8	626.6	629.9	627.4
180°	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9



TEST NUMBER: 18223  
 CATALOG NUMBER: VW-SH-1T5

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	88.4	88.4	88.4	88.4	88.4	88.4
2.5°	102.7	93.7	102.7	93.7	93.7	88.7
5°	137.6	122.7	137.6	109.5	104.5	89.1
7.5°	170.9	160.1	170.9	136.0	114.5	89.1
10°	208.3	200.9	208.3	166.0	127.0	87.9
12.5°	247.3	242.3	247.3	194.1	140.1	87.9
15°	291.3	287.2	291.3	222.4	156.7	86.6
17.5°	331.2	333.7	331.2	253.0	168.5	84.0
20°	377.7	384.2	377.7	281.3	182.5	85.4
22.5°	434.1	447.2	434.1	312.8	195.9	84.0
25°	535.4	564.4	535.4	346.8	209.0	82.0
27.5°	689.8	719.7	689.8	386.7	223.1	80.7
30°	723.1	759.6	723.1	436.6	236.5	79.6
32.5°	711.3	747.1	711.3	513.9	251.4	77.9
35°	668.2	697.3	668.2	595.9	265.5	76.5
37.5°	576.9	604.3	576.9	606.8	283.8	74.2
40°	463.1	484.6	463.1	573.5	300.4	71.6
42.5°	346.2	344.3	346.2	511.4	317.8	68.7
45°	213.3	202.5	213.3	425.0	328.7	66.7
47.5°	117.0	114.5	117.0	327.8	333.7	63.7
50°	77.1	83.7	77.1	238.9	318.7	60.1
52.5°	58.1	58.8	58.1	150.1	275.4	56.8
55°	42.2	45.6	42.2	87.8	204.9	52.2
57.5°	33.1	35.6	33.1	53.8	148.5	46.4
60°	25.7	27.2	25.7	37.2	83.7	41.0
62.5°	18.9	20.7	18.9	27.2	43.1	31.4
65°	17.3	17.3	17.3	20.7	23.2	21.8
67.5°	12.3	14.8	12.3	16.4	15.7	13.9
70°	11.4	13.2	11.4	13.9	11.4	10.6
72.5°	8.9	10.7	8.9	10.7	8.9	8.5
75°	7.3	9.8	7.3	9.8	7.3	6.5
77.5°	7.3	7.3	7.3	8.9	7.3	3.6
80°	5.7	5.7	5.7	7.3	4.8	4.8
82.5°	4.8	5.7	4.8	3.2	3.9	3.6
85°	3.9	3.2	3.9	3.2	1.4	2.3
87.5°	2.3	3.2	2.3	3.2	1.4	1.1
90°	0.5	0.5	0.5	0.5	0.5	0.5
92.5°	13.9	38.8	13.9	56.3	22.3	7.3
95°	104.5	146.7	104.5	166.6	109.5	19.8
97.5°	227.4	272.9	227.4	284.7	170.9	33.0
100°	356.1	397.6	356.1	376.8	193.4	50.5
102.5°	412.6	516.4	412.6	404.2	204.0	70.0
105°	532.9	581.0	532.9	421.6	257.3	92.1
107.5°	552.9	600.0	552.9	436.6	300.4	116.1
110°	565.3	614.3	565.3	461.5	328.7	141.8





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 CATALOG NUMBER: VW-SH-1T5

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	575.3	618.4	575.3	494.6	349.3	166.3
115°	588.5	629.9	588.5	524.5	364.3	192.5
117.5°	629.3	661.7	629.3	554.5	385.1	219.0
120°	649.9	685.7	649.9	587.8	405.1	246.4
122.5°	674.8	707.2	674.8	610.9	425.7	273.9
125°	685.7	730.6	685.7	628.3	435.0	299.6
127.5°	723.1	753.7	723.1	640.8	462.2	325.3
130°	743.0	772.7	743.0	650.8	480.6	350.6
132.5°	754.6	787.0	754.6	663.3	497.1	374.7
135°	762.8	793.6	762.8	673.9	513.9	398.9
137.5°	767.7	798.6	767.7	681.4	528.6	421.6
140°	771.1	799.5	771.1	686.4	542.9	443.2
142.5°	774.5	802.0	774.5	690.7	554.5	464.0
145°	774.5	801.1	774.5	692.3	565.3	483.9
147.5°	771.1	794.5	771.1	692.3	570.3	502.6
150°	762.1	784.5	762.1	687.3	586.0	520.5
152.5°	751.2	772.0	751.2	685.7	595.3	537.5
155°	740.5	760.3	740.5	682.3	604.3	552.8
157.5°	727.2	743.0	727.2	676.4	612.5	566.1
160°	714.7	726.3	714.7	669.8	618.4	578.1
162.5°	701.3	711.3	701.3	664.8	623.4	588.9
165°	688.2	693.2	688.2	659.9	625.9	598.9
167.5°	673.2	678.2	673.2	654.2	628.3	608.4
170°	668.2	664.8	668.2	648.3	629.9	613.4
172.5°	650.8	651.7	650.8	640.8	630.8	618.7
175°	639.2	639.2	639.2	634.2	629.9	623.4
177.5°	629.3	626.8	629.3	627.4	629.9	626.6
180°	623.9	623.9	623.9	623.9	623.9	623.9

(END OF REPORT)