

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: AMETRIX

Report Number: P189143

Luminaire Tested: A06-SI-A-1-LED-40K-D-120-S

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P189143  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL87330-GONIOPHOTOMETRY)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: AMETRIX  
Catalog Number: A06-SI-A-1-LED-40K-D-120-S  
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING  
6-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS  
Light Source: (182) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

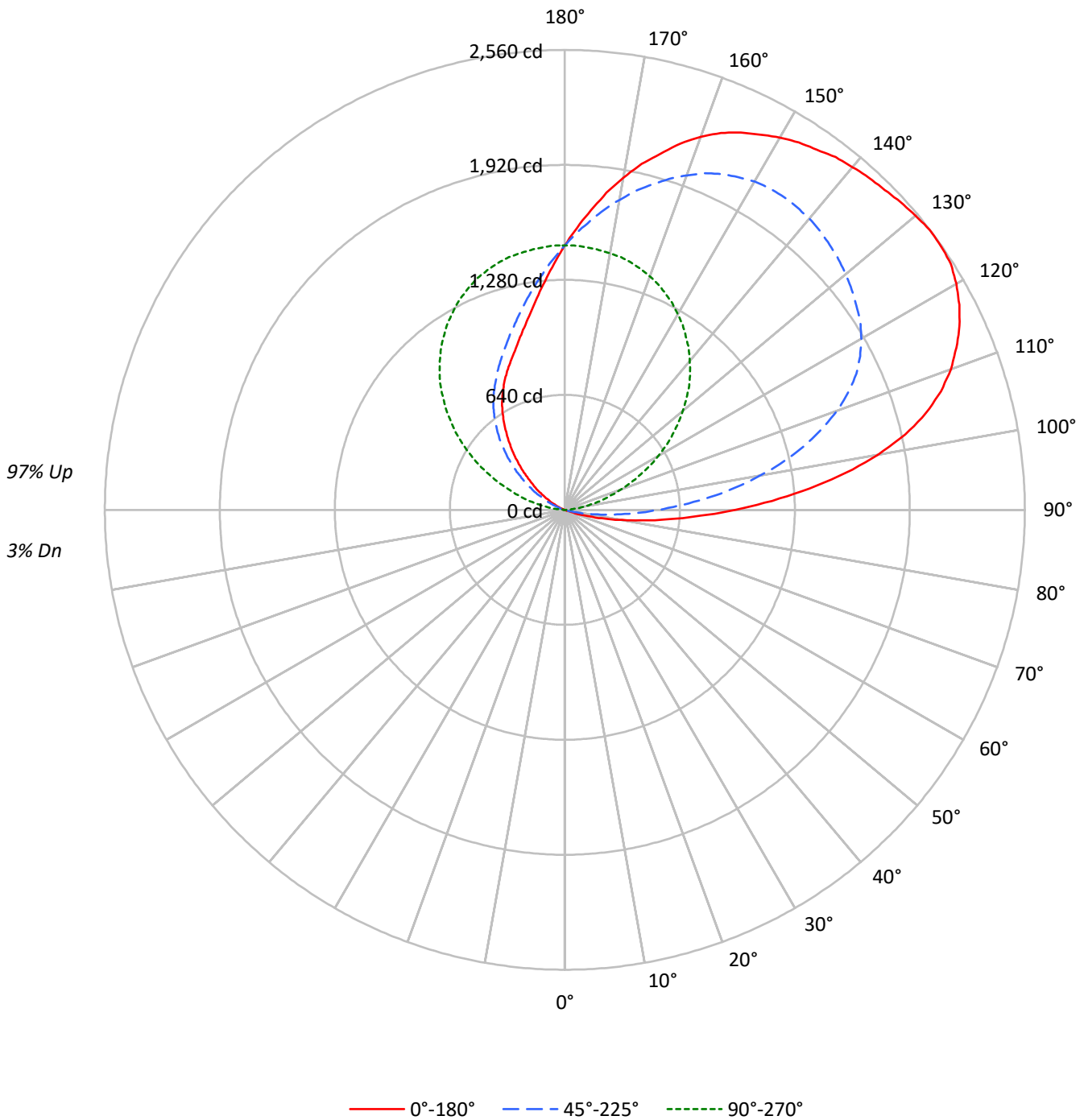
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6257.1 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular w/ Sides (W: 6.35' x L: 0.29' x H: 0.11')  
CIE Type: Indirect  
  
Input Watts (W): 60.6  
Input Voltage (V): NR  
Input Current (Ain): 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	96	96	96	96	82	82	82	82	57	57	57	34	34	34	13	13	13	3
1	86	82	78	74	74	70	67	64	48	46	45	28	27	26	10	9	9	1
2	78	71	65	60	67	61	56	52	42	39	36	25	23	21	8	8	7	0
3	71	62	55	50	61	54	48	43	37	33	30	22	20	18	7	7	6	0
4	65	55	47	42	55	47	41	36	33	29	26	19	17	15	7	6	5	0
5	59	49	41	35	51	42	36	31	29	25	22	17	15	13	6	5	4	0
6	55	43	36	30	46	37	31	26	26	22	19	15	13	11	5	4	4	0
7	50	39	31	26	43	33	27	23	23	19	16	14	11	10	5	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	8	4	3	3	0
9	43	32	25	20	37	27	21	17	19	15	12	11	9	7	4	3	2	0
10	40	29	22	17	34	25	19	15	17	13	11	10	8	7	4	3	2	0

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

	0°	45°	90°	135°	180°
0°	0	0	0	0	0
5°	0	0	0	0	0
10°	0	0	0	0	0
15°	0	0	0	0	0
20°	0	0	0	0	0
25°	0	0	0	0	0
30°	0	0	0	0	0
35°	0	0	0	0	0
40°	0	0	0	0	0
45°	0	0	0	0	0
50°	0	0	0	0	0
55°	0	0	0	0	0
60°	0	0	0	0	0
65°	0	0	0	0	0
70°	265	0	0	0	0
75°	1363	210	0	0	0
80°	3519	1606	0	0	0
85°	7480	4697	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 14664 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.5	0.0
70°-80°	31.2	0.5
80°-90°	162.3	2.6
90°-100°	419.9	6.7
100°-110°	699.5	11.2
110°-120°	890.8	14.2
120°-130°	983.2	15.7
130°-140°	971.5	15.5
140°-150°	867.2	13.9
150°-160°	672.8	10.8
160°-170°	417.7	6.7
170°-180°	140.5	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	194.0	3.1
90°-120°	2010.2	32.1
90°-150°	4832.1	77.2
90°-180°	6063.0	96.9
0°-180°	6257.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	4
75°	145	19	0	0	0	167
85°	591	292	0	0	0	431
90°	946	522	0	0	0	521
95°	1368	811	38	3	3	1200
105°	2082	1384	220	9	13	2179
115°	2424	1789	465	101	38	2395
125°	2556	1981	733	270	170	2286
135°	2519	2085	978	481	362	1952
145°	2446	2126	1176	692	588	1538
155°	2318	2063	1327	874	792	1072
165°	2050	1874	1424	1072	981	586
175°	1673	1613	1465	1330	1277	166
180°	1472	1472	1472	1472	1472	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	31.4	34.6	25.2	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	78.6	78.6	66.0	44.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	144.6	144.6	128.9	100.6	59.7	18.9	0.0	0.0	0.0	0.0	0.0
77.5°	226.4	223.3	204.4	169.8	119.5	62.9	9.4	0.0	0.0	0.0	0.0
80°	327.0	323.9	301.9	257.8	198.1	122.6	47.2	0.0	0.0	0.0	0.0
82.5°	446.5	443.4	415.1	364.8	292.4	201.2	100.6	22.0	0.0	0.0	0.0
85°	591.2	588.0	553.4	493.7	408.8	292.4	166.7	66.0	6.3	0.0	0.0
87.5°	757.8	745.2	713.8	641.5	531.4	399.3	248.4	119.5	28.3	0.0	0.0
90°	946.5	933.9	896.2	811.3	679.2	522.0	345.9	185.5	66.0	6.3	0.0
92.5°	1154.0	1150.9	1094.3	993.7	839.6	657.2	459.1	264.1	116.3	31.4	12.6
95°	1367.8	1364.7	1301.8	1185.5	1012.5	811.3	575.4	352.2	179.2	69.2	37.7
97.5°	1578.5	1575.4	1496.8	1377.3	1185.5	962.2	701.2	449.7	248.4	116.3	75.5
100°	1770.3	1764.1	1682.3	1556.5	1355.3	1106.9	827.0	547.1	320.7	166.7	116.3
102.5°	1940.1	1927.6	1849.0	1716.9	1512.5	1251.5	949.6	647.8	402.5	226.4	166.7
105°	2081.6	2065.9	1993.6	1858.4	1647.7	1383.6	1072.3	751.5	484.2	289.3	220.1
107.5°	2194.8	2182.3	2106.8	1977.9	1770.3	1499.9	1188.6	852.2	569.2	355.3	273.6
110°	2286.0	2276.6	2207.4	2078.5	1874.1	1613.1	1295.5	952.8	657.2	427.6	336.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	2358.4	2352.1	2286.0	2157.1	1965.3	1707.5	1389.9	1047.1	742.1	500.0	399.3
115°	2424.4	2418.1	2355.2	2232.6	2040.8	1789.2	1477.9	1138.3	830.1	572.3	465.4
117.5°	2474.7	2468.4	2405.5	2286.0	2100.5	1852.1	1550.2	1223.2	921.3	647.8	534.6
120°	2515.6	2506.2	2449.5	2333.2	2150.8	1905.6	1613.1	1305.0	1006.2	723.2	600.6
122.5°	2547.0	2537.6	2484.1	2364.6	2188.6	1949.6	1672.9	1383.6	1088.0	795.6	669.8
125°	2556.5	2550.2	2499.9	2380.4	2207.4	1981.0	1726.3	1452.7	1160.3	867.9	732.7
127.5°	2559.6	2553.3	2503.0	2386.7	2223.1	2012.5	1773.5	1515.6	1229.5	933.9	795.6
130°	2547.0	2547.0	2496.7	2386.7	2232.6	2040.8	1817.5	1575.4	1289.2	996.8	858.4
132.5°	2534.5	2531.3	2487.3	2383.5	2242.0	2065.9	1858.4	1625.7	1345.8	1056.5	918.2
135°	2518.7	2518.7	2477.9	2383.5	2251.4	2084.8	1893.0	1669.7	1393.0	1110.0	977.9
137.5°	2506.2	2506.2	2468.4	2380.4	2257.7	2103.7	1924.4	1704.3	1440.2	1163.5	1031.4
140°	2490.4	2490.4	2452.7	2374.1	2260.9	2116.2	1943.3	1732.6	1471.6	1210.6	1081.7
142.5°	2474.7	2474.7	2437.0	2364.6	2260.9	2122.5	1962.2	1754.6	1506.2	1254.6	1132.0
145°	2446.4	2449.5	2418.1	2348.9	2251.4	2125.7	1968.4	1767.2	1531.4	1295.5	1176.0
147.5°	2424.4	2424.4	2396.1	2330.1	2238.9	2122.5	1968.4	1773.5	1553.4	1330.1	1220.1
150°	2392.9	2392.9	2364.6	2311.2	2226.3	2109.9	1965.3	1776.6	1569.1	1361.6	1257.8
152.5°	2355.2	2358.4	2330.1	2279.7	2198.0	2087.9	1946.4	1770.3	1578.5	1389.9	1295.5
155°	2317.5	2320.6	2295.5	2245.2	2166.5	2062.8	1927.6	1764.1	1588.0	1415.0	1327.0
157.5°	2270.3	2273.5	2248.3	2198.0	2125.7	2028.2	1896.1	1751.5	1594.3	1433.9	1358.4
160°	2210.6	2213.7	2185.4	2141.4	2072.2	1981.0	1864.7	1732.6	1591.1	1452.7	1383.6
162.5°	2138.2	2138.2	2116.2	2075.4	2009.3	1930.7	1826.9	1710.6	1588.0	1465.3	1405.6
165°	2050.2	2056.5	2037.6	1999.9	1943.3	1874.1	1782.9	1682.3	1578.5	1474.8	1424.4
167.5°	1971.6	1968.4	1952.7	1924.4	1874.1	1817.5	1738.9	1654.0	1569.1	1484.2	1440.2
170°	1877.3	1874.1	1861.5	1836.4	1798.6	1751.5	1688.6	1622.6	1556.5	1484.2	1449.6
172.5°	1779.8	1773.5	1764.1	1748.3	1720.0	1685.4	1638.3	1588.0	1537.7	1484.2	1459.0
175°	1672.9	1672.9	1666.6	1654.0	1635.1	1613.1	1581.7	1547.1	1515.6	1481.1	1465.3
177.5°	1572.2	1572.2	1569.1	1562.8	1553.4	1543.9	1528.2	1512.5	1496.8	1477.9	1471.6
180°	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6	1471.6



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
0°	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	3.1	3.1
95°	0.0	3.1	3.1	3.1
97.5°	3.1	3.1	6.3	6.3
100°	9.4	6.3	6.3	6.3
102.5°	31.4	9.4	9.4	9.4
105°	56.6	9.4	12.6	12.6
107.5°	91.2	18.9	12.6	12.6
110°	128.9	37.7	15.7	15.7



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CATALOG NUMBER: A06-SI-A-1-LED-40K-D-120-S

**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
112.5°	169.8	66.0	28.3	22.0
115°	213.8	100.6	50.3	37.7
117.5°	261.0	135.2	81.8	62.9
120°	311.3	176.1	113.2	94.3
122.5°	364.8	223.3	154.1	128.9
125°	415.1	270.4	195.0	169.8
127.5°	468.5	320.7	239.0	213.8
130°	522.0	374.2	286.1	257.8
132.5°	575.4	427.6	339.6	308.2
135°	628.9	481.1	393.1	361.6
137.5°	679.2	537.7	449.7	418.2
140°	729.5	588.0	506.3	474.8
142.5°	783.0	641.5	562.9	531.4
145°	830.1	691.8	616.3	588.0
147.5°	880.5	739.0	672.9	644.6
150°	927.6	783.0	723.2	698.1
152.5°	974.8	827.0	767.3	745.2
155°	1025.1	874.2	811.3	792.4
157.5°	1072.3	918.2	855.3	836.4
160°	1119.4	965.4	902.5	880.5
162.5°	1166.6	1018.8	949.6	927.6
165°	1216.9	1072.3	1003.1	981.1
167.5°	1260.9	1132.0	1062.8	1040.8
170°	1305.0	1194.9	1132.0	1110.0
172.5°	1345.8	1260.9	1210.6	1188.6
175°	1386.7	1330.1	1292.4	1276.7
177.5°	1430.7	1402.4	1377.3	1371.0
180°	1471.6	1471.6	1471.6	1471.6

(END OF REPORT)