

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P397708

Luminaire Tested: **ARCH-S-PA1-30-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397708  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4755 lumens  
Efficiency: N/A  
Efficacy: 153.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 31  
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: 28.75 FT

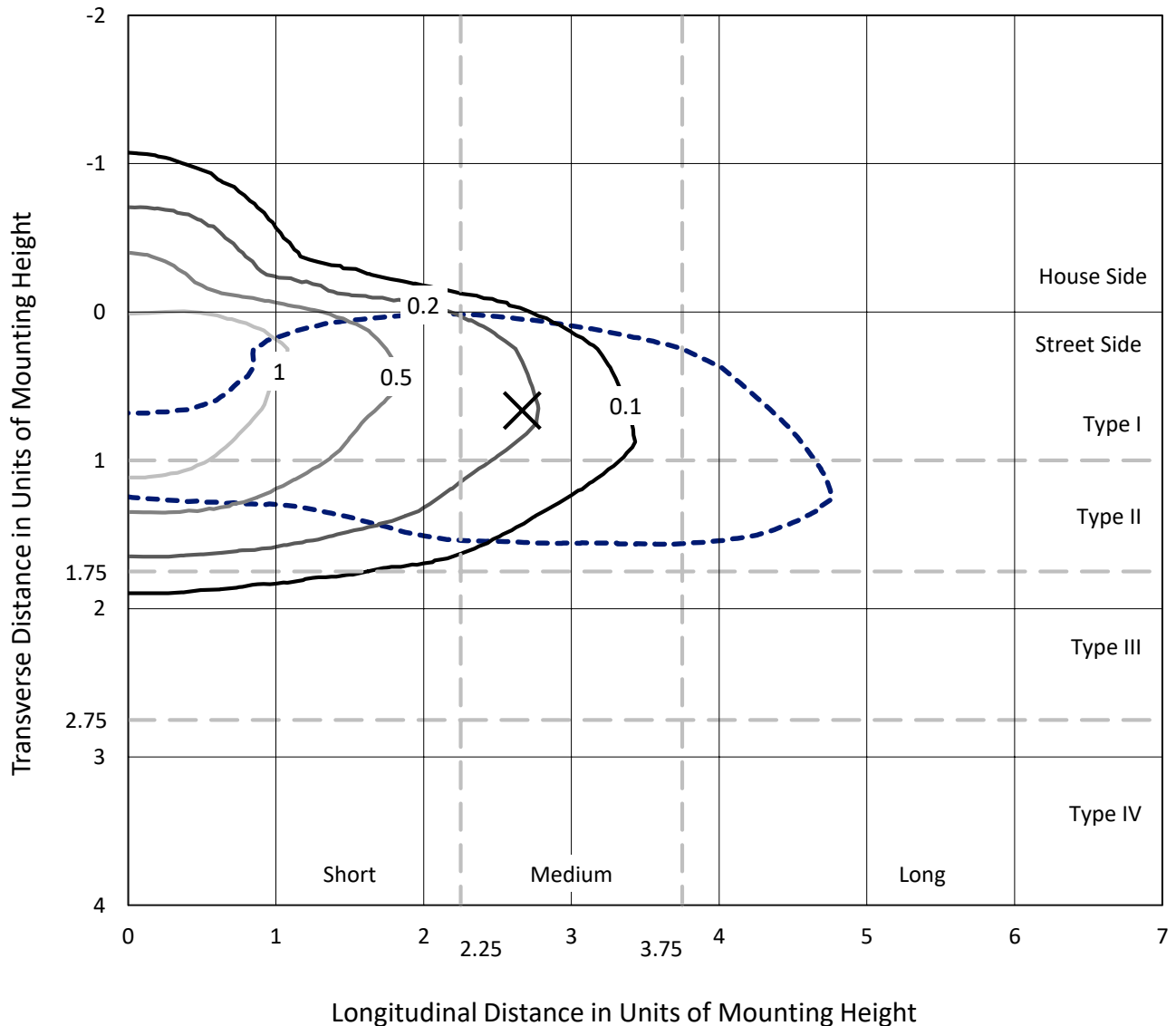


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

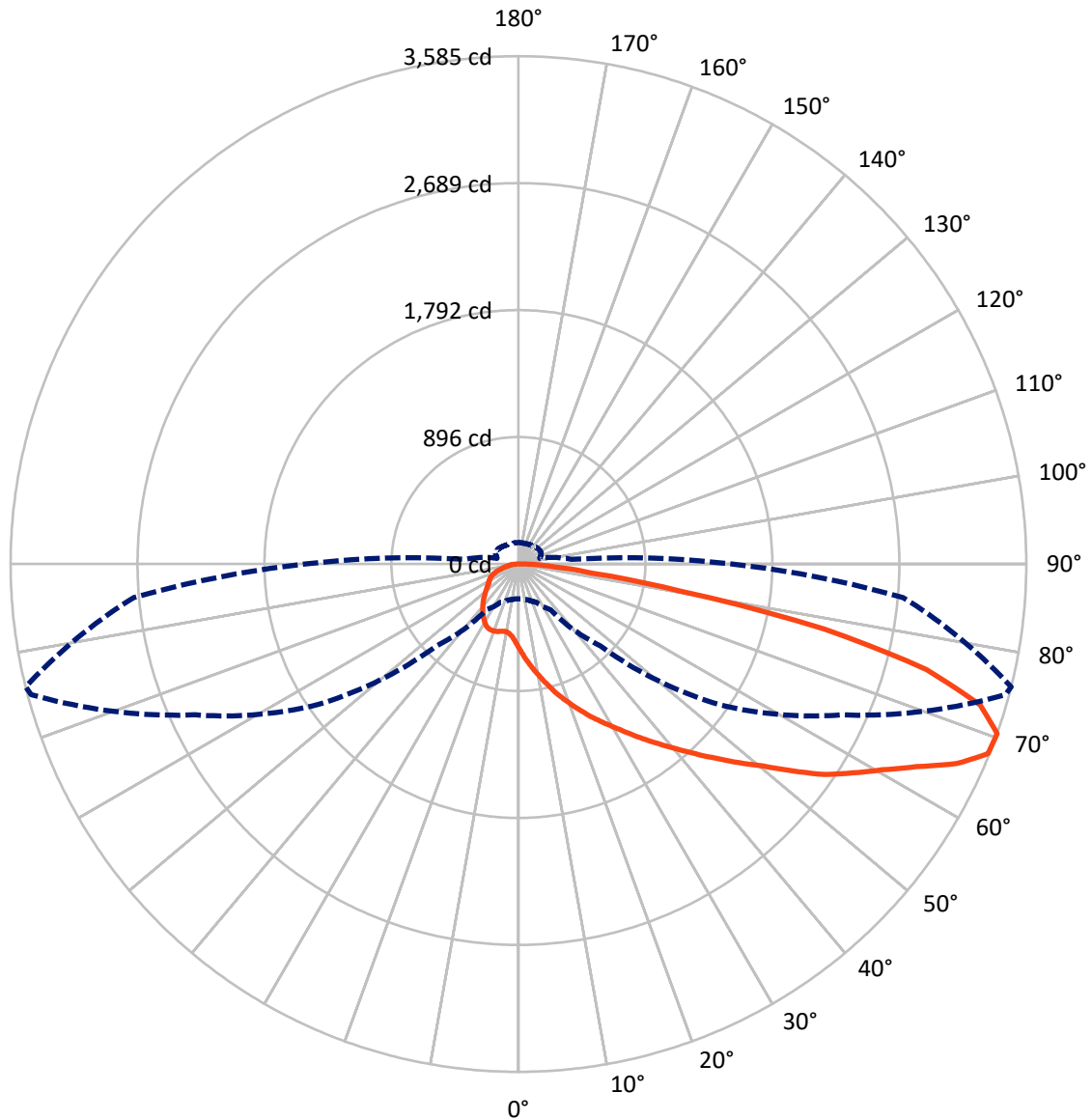


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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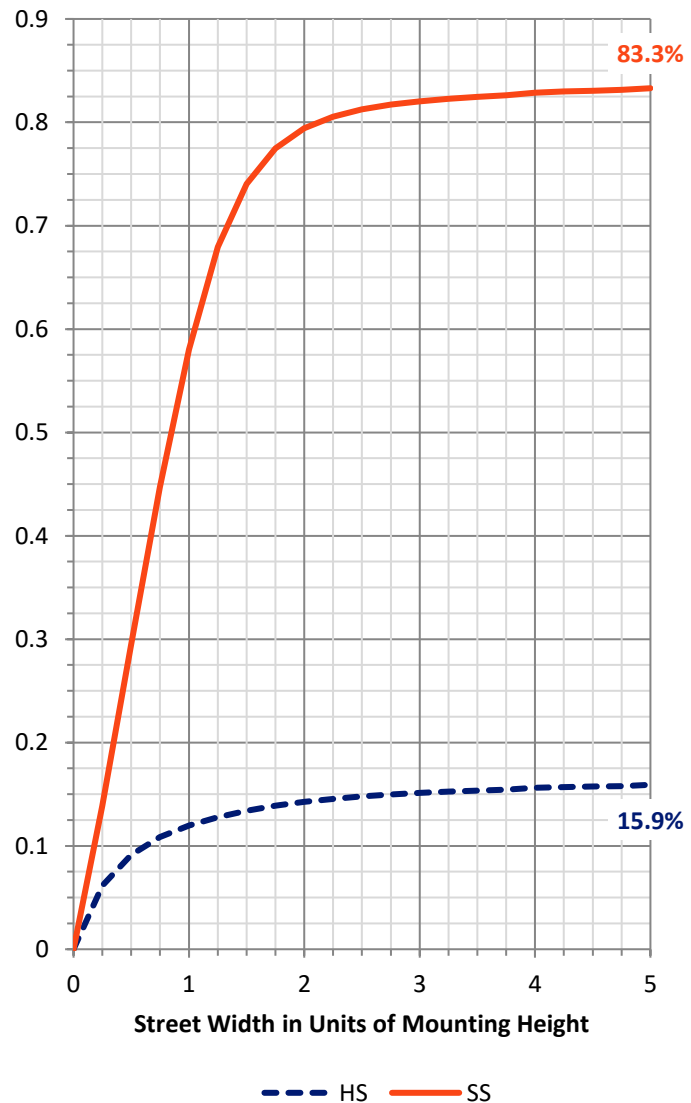
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	776.3	0.0	776.3
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	3978.7	0.0	3978.7
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	4755.0	0.0	4755.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.8	1.3
10°-20°	210.0	4.4
20°-30°	375.7	7.9
30°-40°	607.7	12.8
40°-50°	879.2	18.5
50°-60°	1006.3	21.2
60°-70°	925.7	19.5
70°-80°	572.4	12.0
80°-90°	116.2	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4755.0	100.0
0°-180°	4755.0	100.0

**Coefficient of Utilization**



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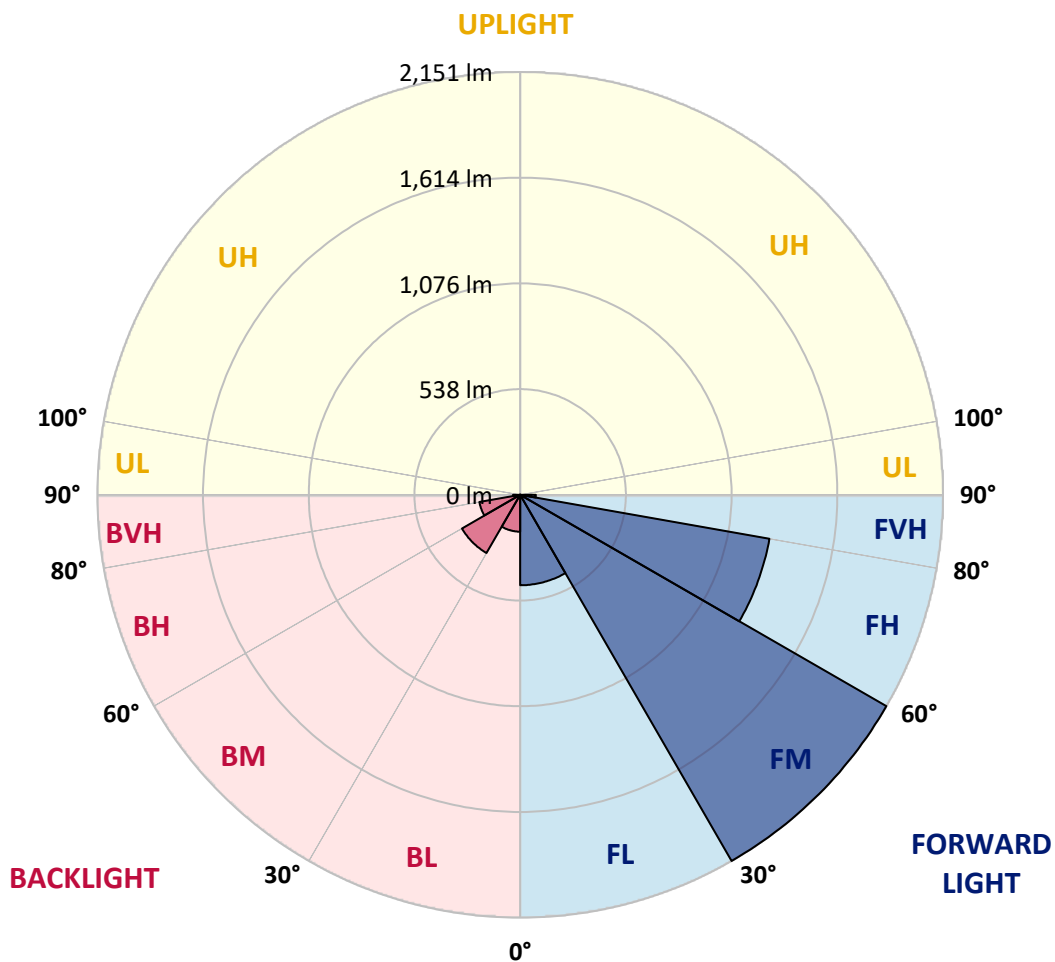
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.0	9.7			
FM (30°-60°)	2151.4	45.2			
FH (60°-80°)	1287.5	27.1			G1/1800
FVH (80°-90°)	79.8	1.7			G1/100
BL (0°-30°)	187.5	3.9	B1/500		
BM (30°-60°)	341.8	7.2	B1/1000		
BH (60°-80°)	210.6	4.4	B1/500		G1/500
BVH (80°-90°)	36.4	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6
2.5°	757.8	752.2	751.6	742.8	734.7	712.8	697.2	669.7	642.2	641.5	614.0
5°	876.0	870.4	867.3	856.6	842.9	814.1	786.0	743.4	696.6	693.4	641.5
7.5°	956.0	951.0	944.8	940.4	927.3	901.6	867.3	816.6	752.2	745.9	673.4
10°	1009.8	1006.7	1005.4	1002.3	994.2	973.5	940.4	886.6	807.9	801.0	707.2
12.5°	1032.9	1031.7	1037.3	1046.1	1049.2	1041.1	1009.2	958.5	869.1	861.6	747.8
15°	1006.1	1007.3	1021.7	1051.7	1083.6	1101.1	1082.3	1032.9	938.5	927.9	795.3
17.5°	993.6	995.4	1005.4	1034.2	1079.2	1133.6	1142.4	1103.6	1005.4	990.4	845.4
20°	1015.4	1017.9	1025.4	1048.0	1079.2	1137.4	1183.0	1171.1	1071.1	1055.5	893.5
22.5°	1071.1	1074.2	1073.6	1088.0	1109.2	1149.2	1205.5	1234.9	1139.9	1122.4	943.5
25°	1189.9	1187.4	1166.1	1159.3	1164.9	1190.5	1235.5	1296.2	1211.8	1194.3	996.1
27.5°	1351.2	1348.1	1309.3	1274.3	1243.0	1254.3	1278.1	1345.6	1284.9	1264.9	1046.1
30°	1523.8	1520.0	1475.0	1418.1	1348.7	1332.5	1329.3	1388.7	1358.7	1337.5	1099.2
32.5°	1692.0	1688.9	1640.7	1574.4	1478.8	1430.0	1400.0	1436.9	1442.5	1421.9	1157.4
35°	1845.2	1845.2	1803.9	1725.1	1617.0	1543.2	1493.8	1496.3	1538.8	1515.0	1223.7
37.5°	1981.5	1980.9	1935.8	1858.3	1754.5	1670.1	1608.8	1568.2	1630.7	1610.1	1293.1
40°	2089.7	2085.3	2052.1	1984.6	1880.2	1796.4	1734.5	1652.6	1733.3	1714.5	1366.8
42.5°	2168.4	2165.9	2143.4	2084.7	1985.2	1906.5	1863.9	1758.9	1849.6	1830.8	1453.1
45°	2199.1	2204.1	2204.1	2148.4	2069.6	1997.7	1979.0	1875.8	1975.2	1956.5	1545.7
47.5°	2149.7	2162.8	2189.7	2193.5	2124.0	2075.3	2081.5	1993.4	2104.7	2094.7	1647.0
50°	1995.2	2019.6	2078.4	2184.7	2145.9	2134.7	2169.1	2113.4	2243.5	2240.3	1770.1
52.5°	1596.9	1656.3	1839.5	2030.3	2130.9	2162.2	2256.0	2248.5	2422.3	2427.3	1930.8
55°	1224.9	1247.4	1459.4	1783.9	2039.0	2153.4	2314.1	2380.4	2616.1	2622.4	2078.4
57.5°	990.4	1005.4	1121.1	1459.4	1829.5	2105.9	2359.8	2457.3	2765.0	2781.2	2209.7
60°	784.7	806.6	884.1	1116.7	1536.3	1991.5	2391.7	2543.0	2925.0	2949.4	2366.7
62.5°	583.4	594.0	667.2	827.2	1216.2	1785.8	2374.8	2636.1	3121.4	3150.7	2555.5
65°	415.2	424.6	476.5	588.4	899.1	1507.5	2276.6	2705.5	3367.7	3397.7	2745.6
67.5°	310.8	314.5	343.9	411.4	605.9	1171.1	2077.8	2693.7	3547.8	3574.7	2821.8
70°	245.7	247.0	261.4	297.6	393.9	815.4	1729.5	2519.2	3560.9	3584.7	2725.6
72.5°	203.8	203.2	211.3	228.8	274.5	515.8	1281.2	2195.3	3392.1	3408.4	2456.7
75°	168.2	169.4	175.1	185.1	209.5	340.1	830.4	1751.4	2992.5	2975.0	2061.5
77.5°	141.3	140.7	143.2	151.9	169.4	244.5	486.5	1265.5	2217.8	2209.1	1353.1
80°	113.8	115.0	118.8	126.3	142.6	186.3	287.6	789.7	1189.9	1158.0	646.5
82.5°	76.3	88.2	95.7	104.4	123.2	137.6	182.6	401.4	532.1	524.0	293.3
85°	36.3	48.1	71.3	81.3	100.0	86.3	123.8	191.3	266.4	263.2	105.7
87.5°	7.5	7.5	38.1	45.6	61.9	36.9	68.8	83.2	128.8	120.7	43.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6
2.5°	597.8	580.9	547.1	520.2	492.7	477.1	457.7	448.3	446.4	441.4	445.2
5°	608.4	575.2	511.5	469.6	441.4	427.7	420.8	418.3	417.7	416.4	416.4
7.5°	622.8	572.1	489.0	446.4	428.3	423.9	425.8	429.6	430.2	431.4	430.8
10°	640.3	572.7	476.5	440.8	432.1	432.7	438.9	443.9	446.4	448.3	447.7
12.5°	664.7	580.3	474.6	444.6	440.8	443.3	449.6	454.6	457.1	457.7	457.7
15°	696.6	595.9	479.0	452.7	449.6	451.4	455.2	457.1	457.7	457.1	457.1
17.5°	731.6	614.6	485.2	457.7	452.7	450.8	449.6	447.7	443.9	441.4	441.4
20°	765.3	631.5	488.3	457.1	448.3	440.8	433.3	423.9	417.7	412.7	412.7
22.5°	799.1	647.2	488.3	450.2	436.4	422.1	406.4	391.4	382.0	375.8	375.8
25°	834.7	662.2	484.6	438.3	417.7	397.0	375.8	357.0	347.7	341.4	340.1
27.5°	864.8	670.9	474.6	421.4	394.5	368.3	343.9	324.5	317.6	312.0	312.0
30°	896.6	676.5	455.8	399.5	368.3	338.3	313.3	297.6	290.1	282.0	281.4
32.5°	932.3	680.3	434.6	376.4	341.4	309.5	288.3	275.7	259.5	250.7	249.5
35°	973.5	685.3	412.1	350.2	314.5	285.7	273.2	252.6	237.0	229.5	228.8
37.5°	1017.3	689.0	387.7	327.0	290.1	270.1	257.6	233.2	219.5	208.2	207.0
40°	1063.6	689.0	362.7	304.5	270.7	263.2	239.5	217.6	194.5	188.8	187.6
42.5°	1114.9	687.8	337.6	282.6	252.6	247.6	228.8	205.7	193.8	188.8	187.6
45°	1169.3	683.4	313.9	257.6	233.9	223.8	209.5	203.2	198.2	198.2	198.2
47.5°	1231.2	679.7	287.0	235.1	220.1	208.8	198.2	194.5	193.8	195.7	197.6
50°	1310.6	678.4	264.5	218.8	209.5	196.3	195.1	192.0	192.6	192.6	192.6
52.5°	1406.9	667.2	243.2	207.0	198.8	183.2	187.0	190.1	191.3	190.7	190.1
55°	1477.5	647.2	225.1	198.8	191.3	178.2	183.2	188.2	189.5	187.6	187.6
57.5°	1541.3	619.0	210.7	192.6	186.3	175.1	180.7	185.7	184.5	183.8	183.2
60°	1614.5	592.1	199.5	189.5	181.3	173.8	178.8	182.0	180.1	178.8	178.2
62.5°	1693.9	565.9	191.3	189.5	177.6	173.2	177.0	178.2	174.5	173.2	173.2
65°	1730.8	524.6	182.6	189.5	175.7	171.9	173.2	171.9	168.2	168.2	167.6
67.5°	1670.1	456.4	171.3	187.0	178.2	170.1	167.6	165.7	161.3	161.3	160.1
70°	1502.5	375.2	155.1	178.8	178.8	169.4	160.1	155.7	150.7	152.6	150.1
72.5°	1283.7	297.6	135.1	165.1	175.1	168.8	151.9	145.1	140.7	142.6	138.8
75°	1039.8	230.7	111.3	143.2	165.7	165.7	143.8	134.4	129.4	129.4	125.1
77.5°	662.8	170.7	90.7	118.8	148.8	161.3	136.9	122.6	115.0	113.2	110.0
80°	328.3	120.1	74.4	94.4	126.9	151.3	131.9	108.8	98.2	94.4	88.8
82.5°	174.5	83.2	59.4	73.8	101.3	136.3	125.7	93.8	80.7	75.0	68.8
85°	78.2	51.3	47.5	56.3	76.9	111.9	113.2	76.9	61.9	73.8	54.4
87.5°	28.8	23.1	23.1	28.8	44.4	46.9	80.0	49.4	39.4	26.9	21.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)