

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: P572975

Luminaire Tested: **ARCH-S-PA2-20-727-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572975  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-20-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 220mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3078 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

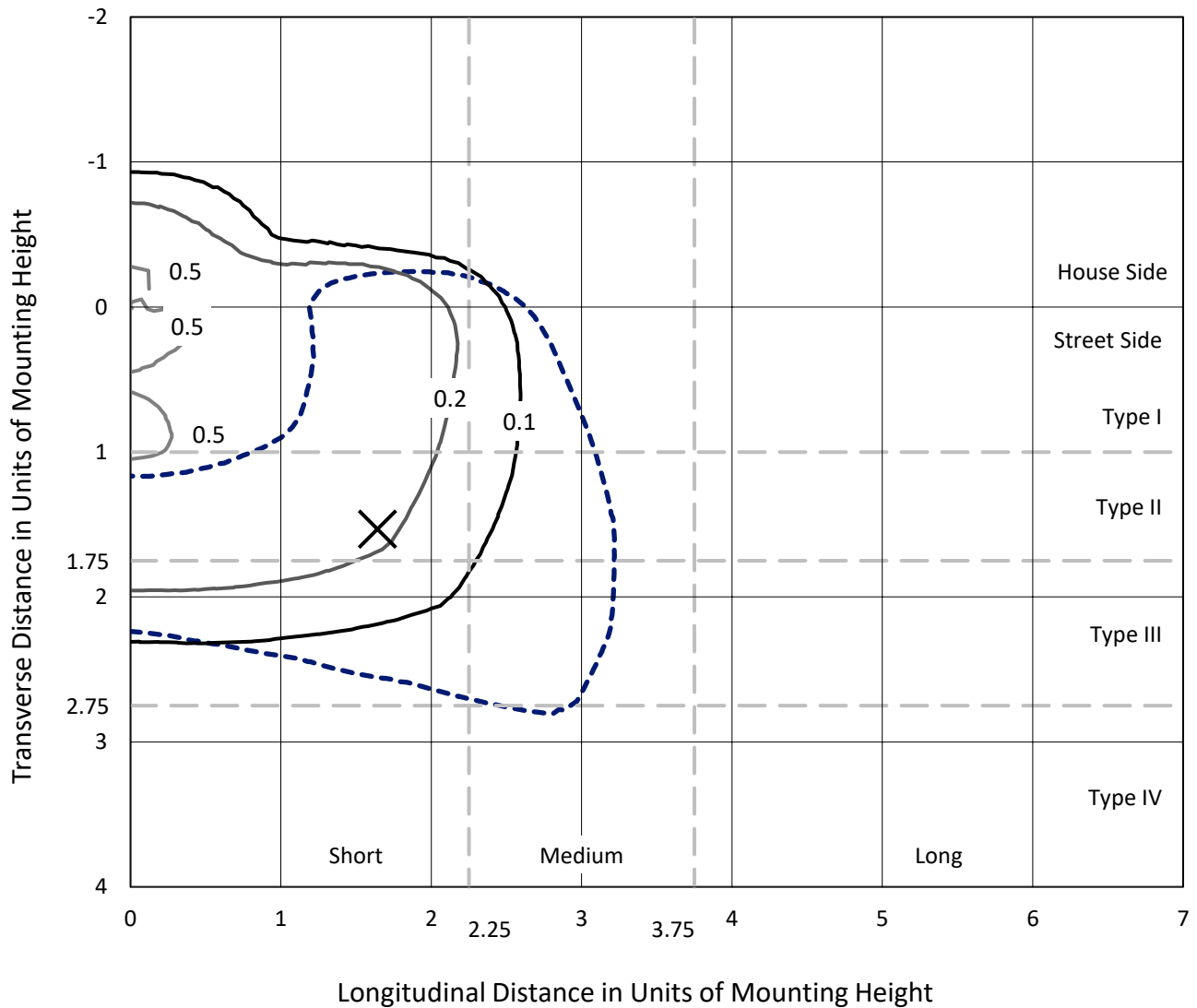
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

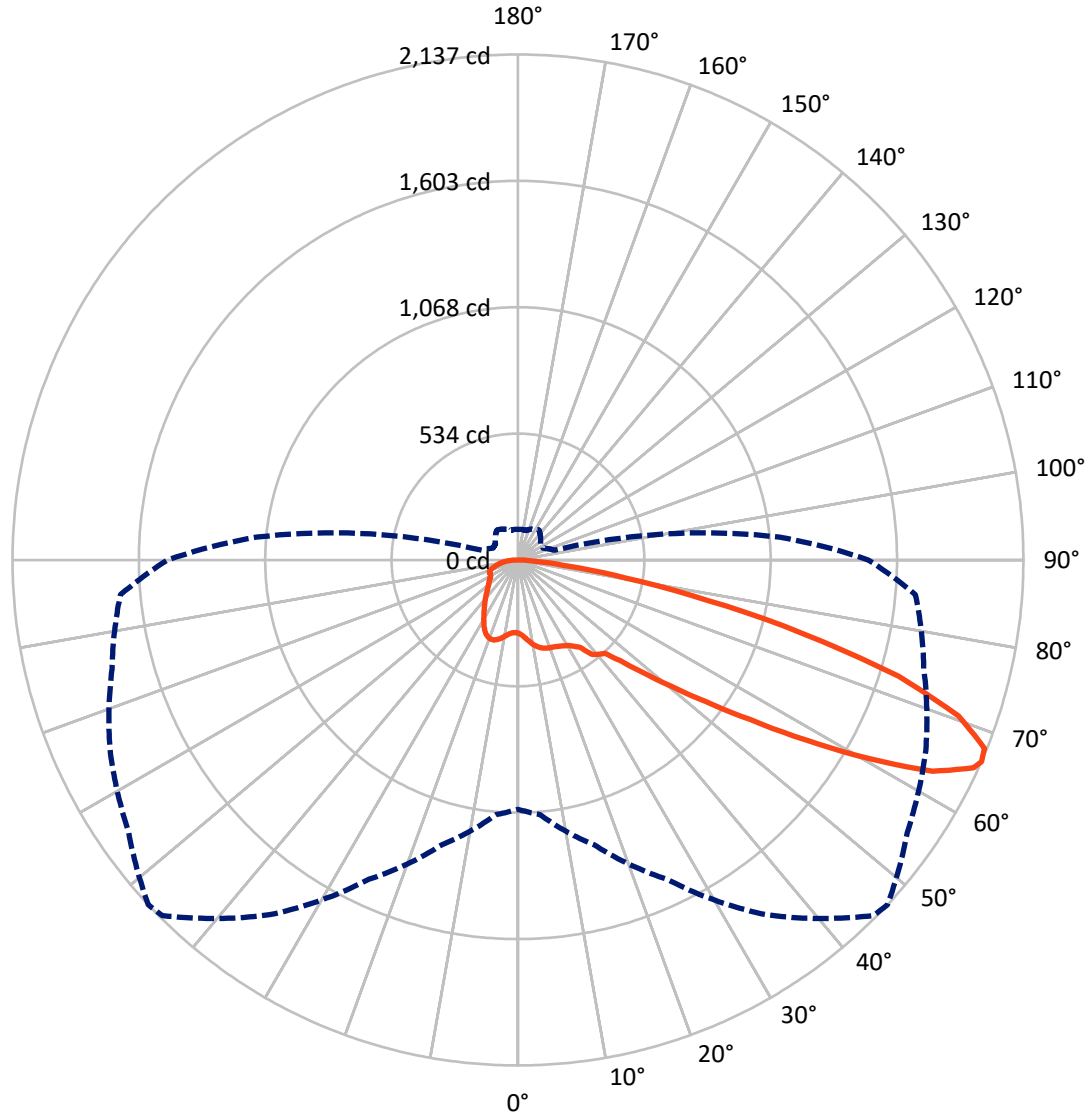
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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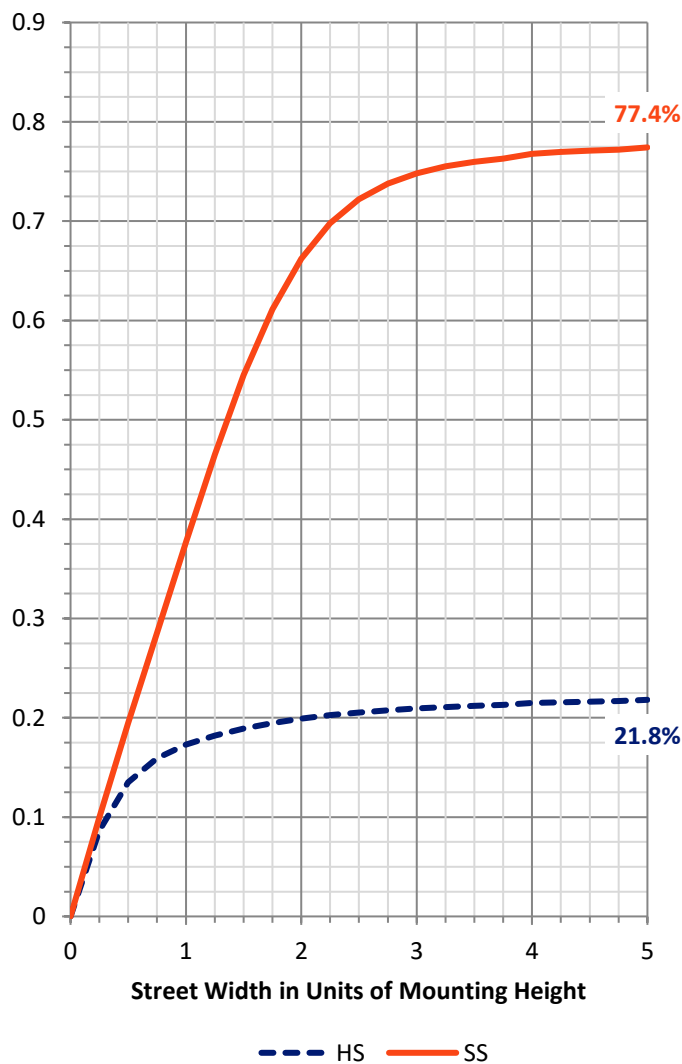
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	684.3	0.0	684.3
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	2393.7	0.0	2393.7
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	3078.0	0.0	3078.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.5	1.0
10°-20°	103.3	3.4
20°-30°	172.3	5.6
30°-40°	250.2	8.1
40°-50°	382.7	12.4
50°-60°	723.3	23.5
60°-70°	934.6	30.4
70°-80°	420.1	13.6
80°-90°	59.9	1.9
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°	3078.0	100.0
0°-180°	3078.0	100.0

**Coefficient of Utilization**



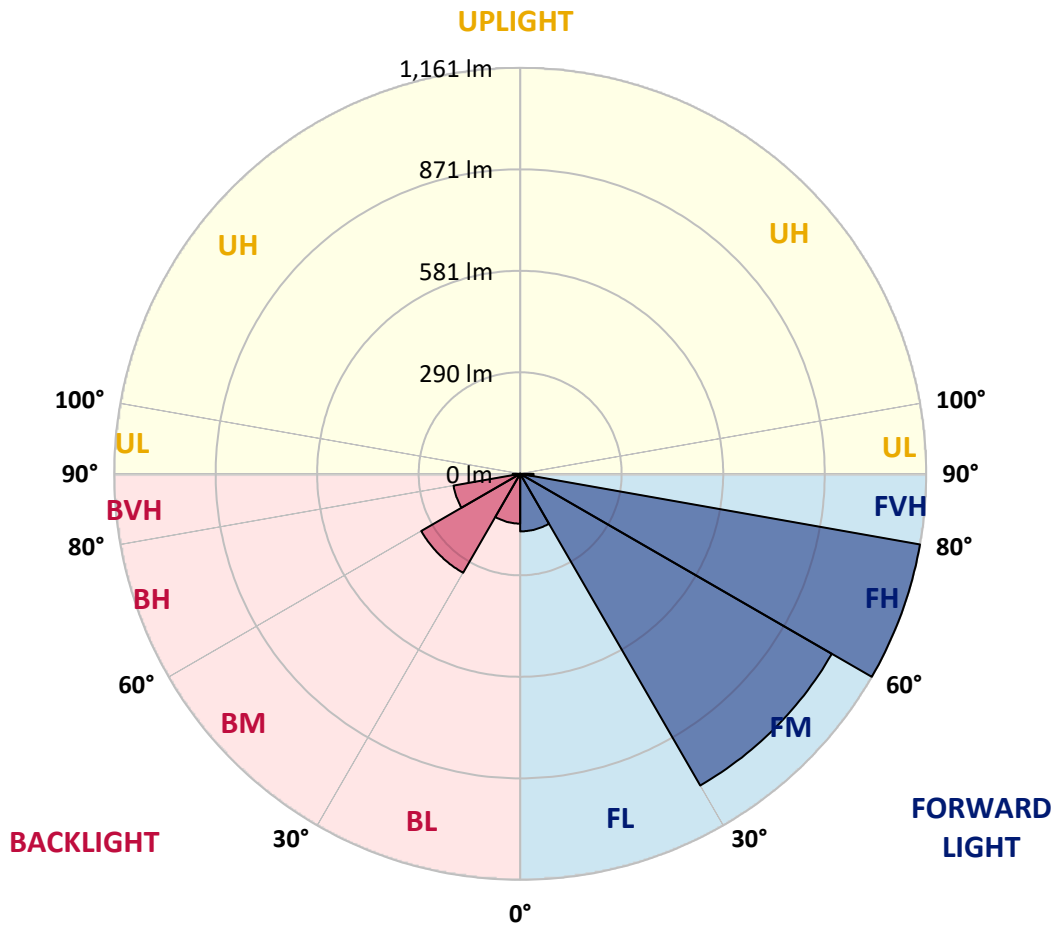
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	164.7	5.4			
FM (30°-60°)	1029.3	33.4			
FH (60°-80°)	1161.1	37.7			G1/1800
FVH (80°-90°)	38.5	1.3			G1/100
BL (0°-30°)	142.4	4.6	B1/500		
BM (30°-60°)	326.9	10.6	B1/1000		
BH (60°-80°)	193.6	6.3	B1/500		G1/500
BVH (80°-90°)	21.4	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
2.5°	327.0	324.5	322.8	322.0	320.3	317.0	317.0	316.1	312.8	311.1	310.3
5°	352.9	351.2	347.1	343.7	338.7	332.0	331.2	326.2	319.5	314.5	311.1
7.5°	378.0	376.3	372.2	367.1	358.8	350.4	347.9	341.2	330.3	322.8	317.0
10°	399.8	397.2	392.2	385.5	376.3	367.1	364.6	357.1	346.2	335.4	325.3
12.5°	414.0	412.3	406.4	398.1	388.0	378.8	377.2	370.5	359.6	347.9	335.4
15°	420.7	419.8	413.1	404.8	394.7	387.2	386.4	380.5	371.3	359.6	345.4
17.5°	419.0	418.2	412.3	403.9	396.4	392.2	392.2	388.0	380.5	370.5	355.4
20°	410.6	410.6	405.6	399.8	395.6	394.7	394.7	393.9	388.9	380.5	365.5
22.5°	402.3	402.3	398.9	394.7	393.9	397.2	398.1	399.8	398.1	391.4	378.0
25°	403.9	403.1	398.9	393.9	394.7	402.3	403.9	408.1	407.3	402.3	390.6
27.5°	422.3	421.5	410.6	400.6	399.8	409.0	410.6	416.5	416.5	412.3	404.8
30°	468.3	470.0	449.9	424.8	412.3	418.2	419.8	426.5	429.9	431.5	425.7
32.5°	538.6	536.1	506.0	465.0	437.4	431.5	434.0	439.9	451.6	454.9	440.7
35°	609.7	611.3	582.1	530.2	477.5	455.8	454.1	462.5	480.0	465.0	439.9
37.5°	675.7	673.2	638.9	582.9	530.2	505.1	506.0	502.6	487.6	457.5	445.8
40°	747.7	741.0	712.5	640.6	573.7	531.9	524.4	495.9	483.4	470.8	469.2
42.5°	818.7	819.6	796.2	725.1	625.6	551.1	539.4	510.1	518.5	516.0	514.3
45°	908.2	908.2	884.8	818.7	707.5	623.0	607.2	572.0	585.4	595.4	615.5
47.5°	990.2	985.2	978.5	922.4	814.6	716.7	710.0	669.9	705.0	735.9	776.9
50°	1077.2	1070.5	1066.3	1032.0	955.1	858.9	838.8	797.0	873.9	931.6	1007.7
52.5°	1212.6	1200.9	1179.2	1160.0	1129.8	1018.6	993.5	962.6	1062.1	1134.9	1290.4
55°	1334.7	1324.7	1303.8	1318.0	1313.8	1212.6	1190.9	1161.6	1269.5	1358.2	1536.3
57.5°	1379.9	1380.7	1409.2	1485.3	1525.4	1466.9	1435.9	1406.7	1497.8	1538.8	1699.4
60°	1400.8	1398.3	1471.9	1595.7	1726.1	1743.7	1704.4	1644.2	1678.5	1681.0	1837.4
62.5°	1355.6	1362.3	1463.5	1641.7	1846.6	1972.8	1967.0	1861.6	1829.8	1794.7	1874.2
65°	1184.2	1193.4	1342.3	1559.7	1865.8	2111.7	2117.5	1994.6	1905.9	1808.1	1769.6
66°	1053.7	1081.3	1246.9	1488.6	1830.7	2125.9	2136.8	2008.8	1902.6	1776.3	1686.8
67.5°	884.0	882.3	1067.1	1332.2	1732.8	2113.3	2127.6	1988.7	1857.4	1682.6	1521.2
70°	541.1	557.8	716.7	994.4	1434.3	1957.0	1976.2	1847.4	1662.6	1425.1	1124.8
72.5°	277.7	305.3	409.8	646.5	1041.2	1617.4	1682.6	1551.3	1359.0	1031.2	686.6
75°	147.2	145.5	193.2	350.4	664.9	1213.5	1247.8	1163.3	939.2	614.7	349.6
77.5°	78.6	82.8	101.2	179.8	365.5	775.3	818.7	750.2	535.2	314.5	167.3
80°	53.5	56.0	68.6	101.2	198.2	420.7	460.8	399.8	280.2	148.9	78.6
82.5°	34.3	36.0	46.8	62.7	118.8	204.1	214.9	204.9	137.2	84.5	47.7
85°	20.9	21.7	28.4	40.1	74.4	82.8	86.1	87.0	76.9	55.2	25.9
87.5°	10.0	10.9	15.9	20.1	35.1	30.1	27.6	28.4	42.7	32.6	11.7
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°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
2.5°	309.4	308.6	306.9	306.1	306.9	306.9	306.9	307.8	309.4	309.4	310.3
5°	309.4	307.8	306.1	306.1	307.8	309.4	311.1	314.5	316.1	317.0	317.0
7.5°	313.6	311.9	310.3	310.3	312.8	316.1	319.5	323.6	327.8	331.2	331.2
10°	322.0	319.5	317.8	318.6	322.8	327.0	331.2	336.2	340.4	344.6	344.6
12.5°	331.2	328.7	326.2	327.8	333.7	338.7	342.9	345.4	349.6	352.9	352.9
15°	340.4	336.2	335.4	338.7	344.6	347.9	349.6	349.6	351.2	354.6	354.6
17.5°	350.4	346.2	345.4	348.7	353.8	353.8	350.4	347.9	347.1	349.6	350.4
20°	360.4	356.3	356.3	358.8	357.9	352.1	346.2	342.0	338.7	341.2	342.0
22.5°	373.0	368.8	367.1	363.8	356.3	344.6	335.4	330.3	327.8	329.5	331.2
25°	385.5	382.2	378.0	366.3	348.7	330.3	318.6	314.5	315.3	318.6	320.3
27.5°	401.4	399.8	389.7	364.6	335.4	310.3	298.6	297.7	301.1	306.1	308.6
30°	420.7	418.2	400.6	359.6	317.0	286.9	278.5	280.2	285.2	289.4	291.9
32.5°	434.0	432.4	405.6	347.9	294.4	265.9	259.3	259.3	261.8	267.6	270.1
35°	438.2	444.9	409.0	330.3	267.6	247.5	240.9	236.7	236.7	241.7	243.4
37.5°	452.4	467.5	410.6	306.9	245.9	230.8	222.5	214.9	212.4	211.6	211.6
40°	485.1	502.6	409.8	276.8	225.0	214.1	204.1	195.7	189.0	179.8	180.6
42.5°	541.9	555.3	407.3	245.0	206.6	199.0	189.0	179.0	168.1	158.1	157.2
45°	651.5	631.4	400.6	217.4	189.8	185.7	176.5	164.8	151.4	142.2	142.2
47.5°	824.6	769.4	396.4	191.5	174.8	174.0	165.6	153.0	139.7	133.0	132.1
50°	1062.1	960.1	403.1	173.1	161.4	163.9	157.2	145.5	134.6	128.8	128.0
52.5°	1334.7	1165.0	410.6	161.4	151.4	156.4	153.0	142.2	131.3	126.3	125.4
55°	1545.5	1331.4	399.8	150.5	141.3	148.9	148.9	138.8	129.6	124.6	124.6
57.5°	1693.5	1398.3	362.1	140.5	133.0	142.2	144.7	137.2	128.8	127.1	127.1
60°	1757.1	1395.0	296.1	131.3	127.1	135.5	142.2	135.5	130.5	134.6	135.5
62.5°	1722.8	1322.2	230.0	124.6	122.9	133.8	144.7	142.2	136.3	139.7	141.3
65°	1568.1	1194.2	173.1	118.8	117.9	134.6	151.4	146.4	132.1	133.0	133.8
66°	1481.1	1108.1	158.9	117.1	116.2	135.5	154.7	144.7	128.8	130.5	129.6
67.5°	1295.4	972.6	139.7	113.7	112.9	135.5	158.9	141.3	124.6	127.1	124.6
70°	950.0	688.3	119.6	109.6	107.9	133.0	158.1	134.6	115.4	113.7	109.6
72.5°	551.1	416.5	106.2	104.5	100.4	117.1	148.0	123.8	105.4	100.4	96.2
75°	271.0	211.6	94.5	98.7	87.8	102.9	133.8	114.6	97.0	90.3	87.8
77.5°	124.6	107.0	85.3	90.3	77.8	88.6	122.1	104.5	86.1	76.1	73.6
80°	67.7	66.9	71.9	75.3	65.2	77.8	107.9	91.2	72.8	61.9	58.5
82.5°	41.8	42.7	52.7	57.7	51.0	67.7	95.3	76.1	55.2	43.5	44.3
85°	21.7	24.3	35.1	38.5	33.5	50.2	71.9	51.0	30.9	22.6	22.6
87.5°	7.5	10.0	17.6	20.9	18.4	30.1	45.2	24.3	6.7	0.0	0.0
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)