

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: P573031

Luminaire Tested: **ARCH-S-PA2-20-830-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573031  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-20-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 220mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2258 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G0

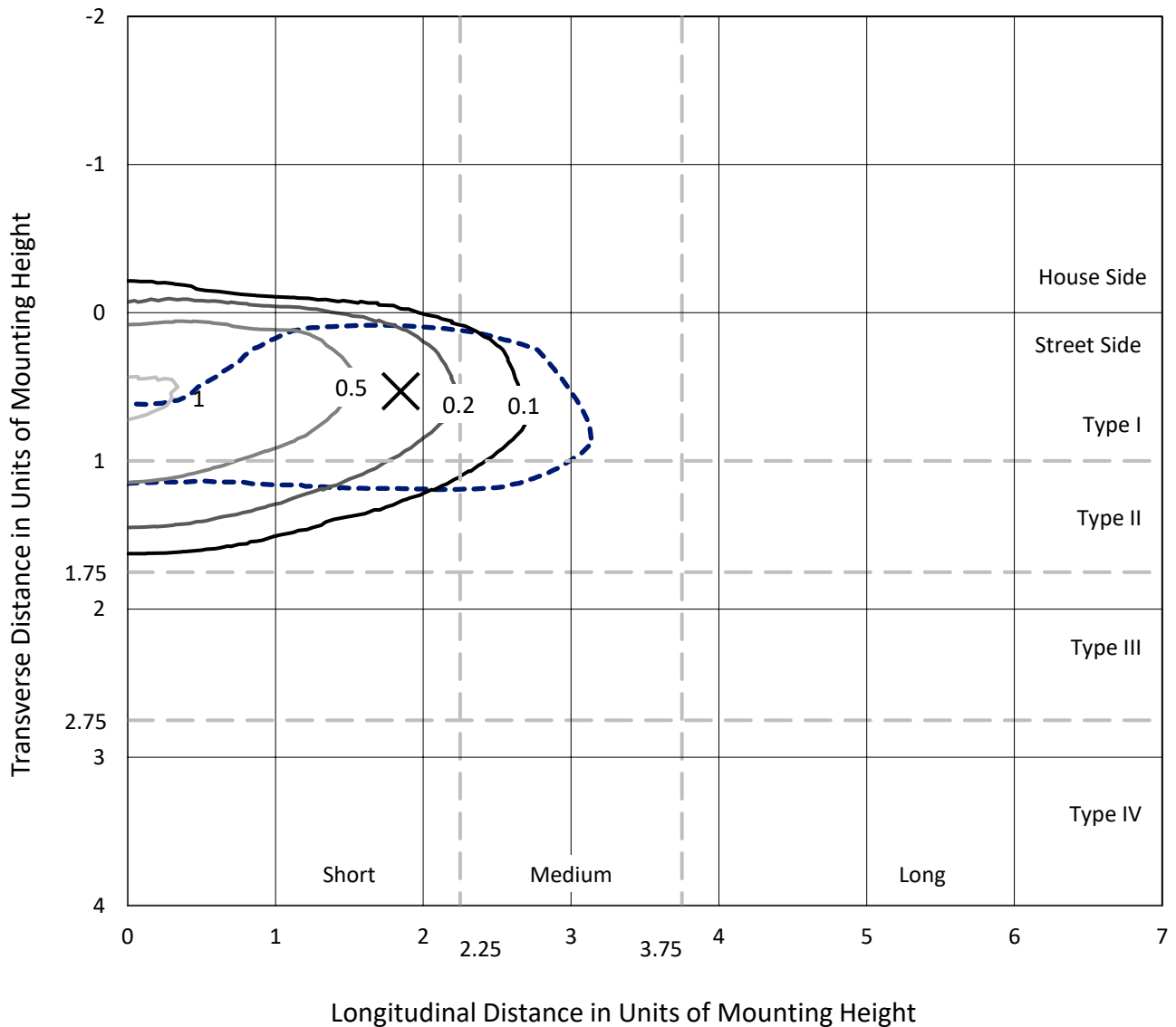
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

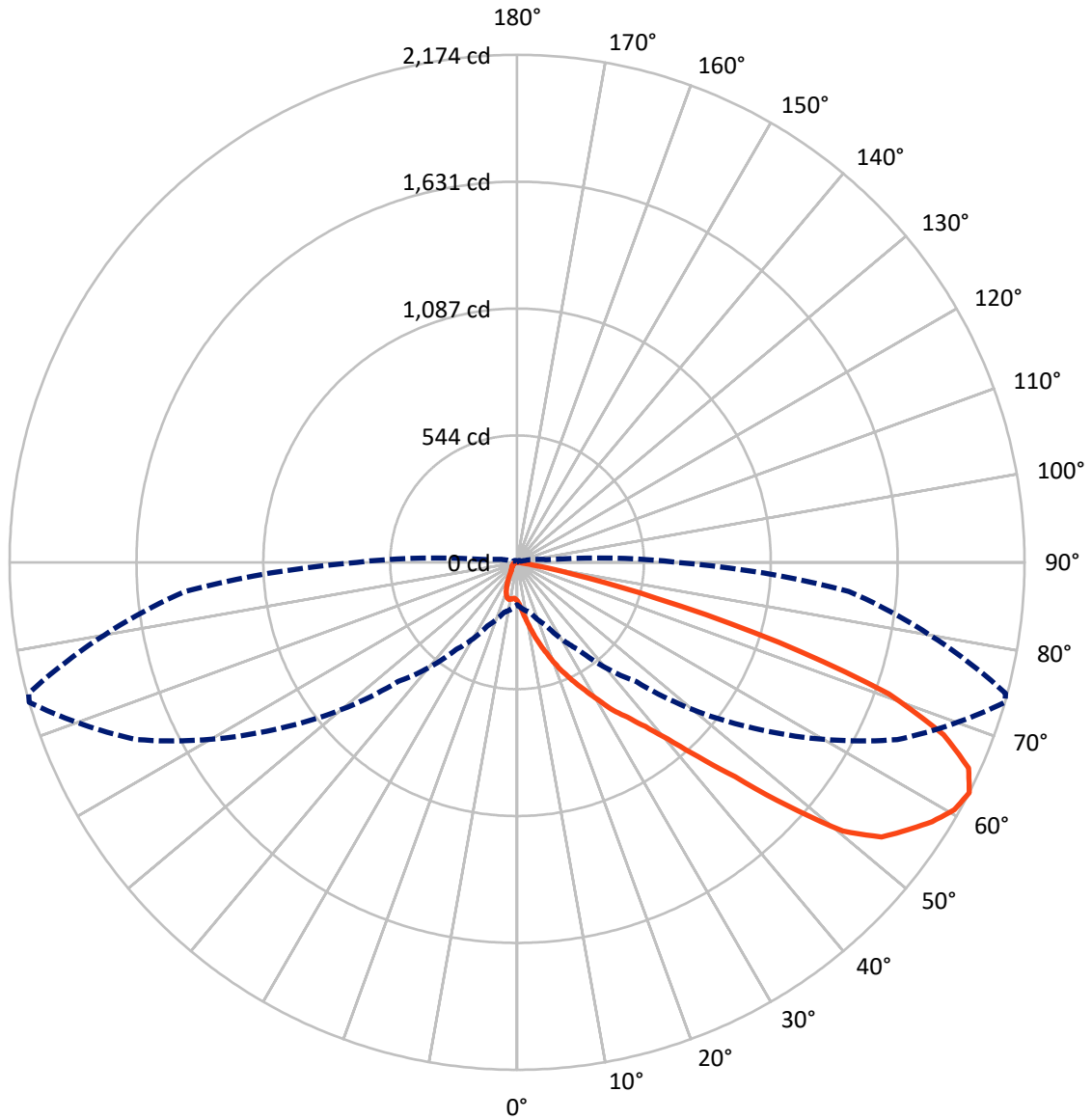
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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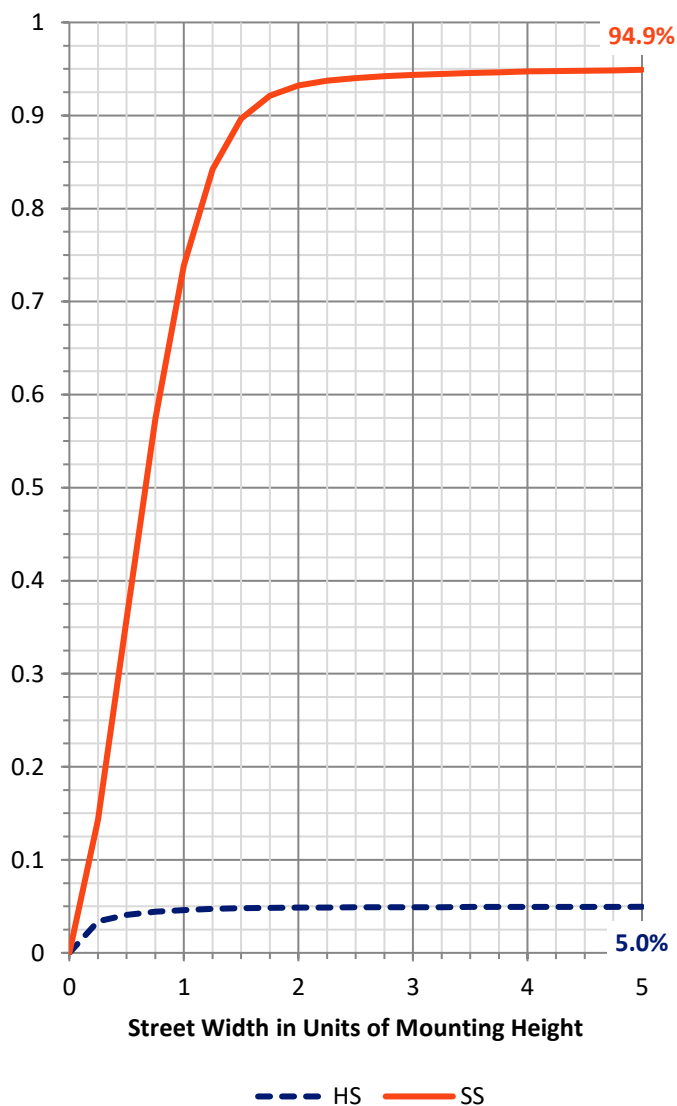
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	112.6	0.0	112.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	2145.4	0.0	2145.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	2258.0	0.0	2258.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.7	0.9
10°-20°	86.8	3.8
20°-30°	186.3	8.3
30°-40°	326.8	14.5
40°-50°	506.6	22.4
50°-60°	584.1	25.9
60°-70°	410.3	18.2
70°-80°	127.8	5.7
80°-90°	8.5	0.4
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°	2258.0	100.0
0°-180°	2258.0	100.0

**Coefficient of Utilization**

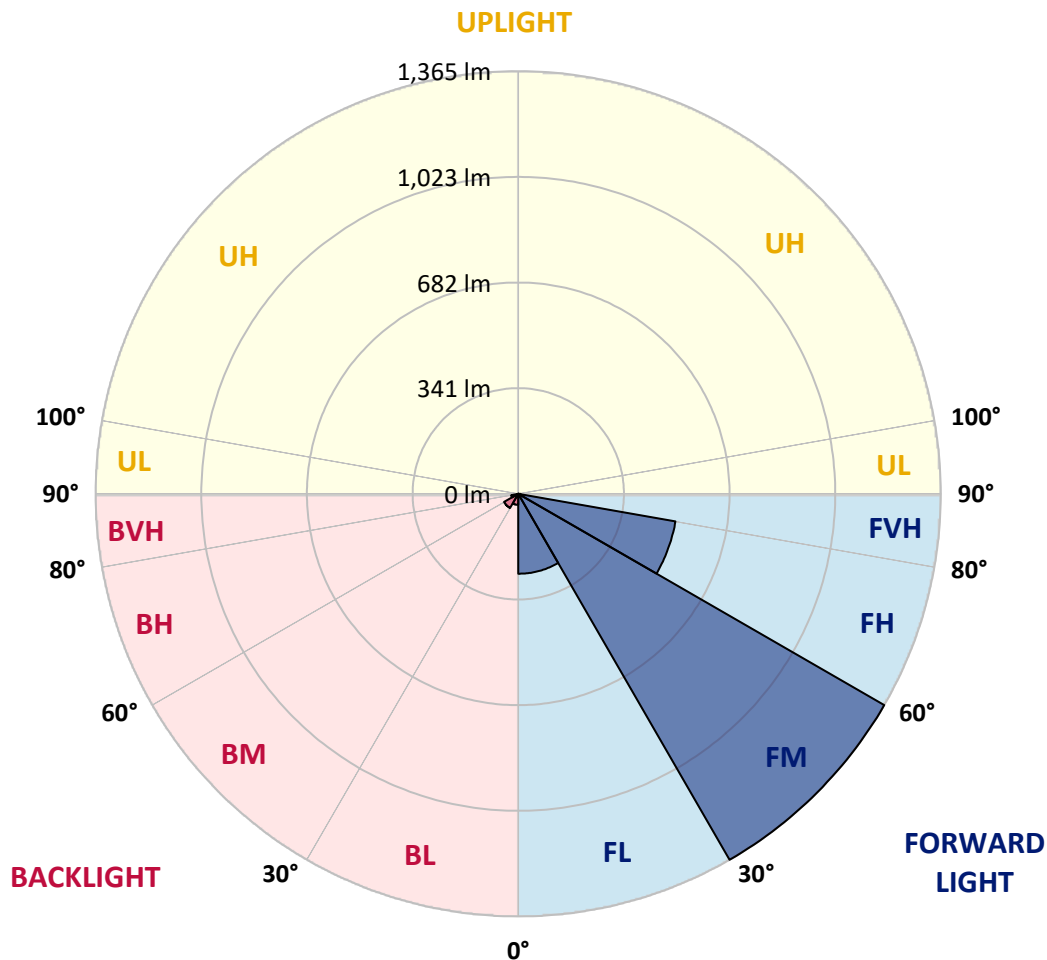


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	258.1	11.4			
FM (30°-60°)	1364.6	60.4			
FH (60°-80°)	515.4	22.8			G0/660
FVH (80°-90°)	7.3	0.3			G0/10
BL (0°-30°)	35.7	1.6	B0/110		
BM (30°-60°)	52.9	2.3	B0/220		
BH (60°-80°)	22.8	1.0	B0/110		G0/110
BVH (80°-90°)	1.2	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3
2.5°	229.7	225.7	220.9	216.9	209.0	203.4	196.3	188.3	179.6	178.8	171.6
5°	321.8	309.9	309.9	299.6	287.7	266.2	246.3	221.7	203.4	201.8	182.8
7.5°	416.4	406.9	401.3	385.4	366.3	342.5	310.7	269.4	236.0	230.5	199.5
10°	504.6	497.5	487.1	474.4	457.7	418.8	379.1	325.0	271.8	267.8	219.3
12.5°	573.0	564.2	559.5	553.9	532.4	501.4	449.8	381.4	317.9	309.1	239.2
15°	624.6	620.6	615.9	615.9	604.7	574.6	521.3	441.8	362.4	352.0	264.6
17.5°	665.9	661.2	660.4	665.1	662.0	640.5	590.4	499.9	408.5	400.5	290.9
20°	712.0	705.7	705.7	709.6	708.9	696.9	653.2	566.6	462.5	448.2	321.0
22.5°	777.2	773.2	770.0	763.7	758.9	747.8	709.6	631.8	514.2	500.6	352.0
25°	864.6	859.8	845.5	834.4	813.7	797.1	764.5	689.8	566.6	551.5	382.2
27.5°	949.6	940.1	926.6	912.3	889.2	860.6	820.1	744.6	621.4	605.5	413.2
30°	1039.4	1032.3	1015.6	992.5	963.9	932.2	883.7	810.6	684.2	666.7	446.6
32.5°	1111.0	1099.8	1084.7	1062.5	1033.1	1010.8	958.4	882.9	756.5	733.5	481.6
35°	1168.2	1159.4	1139.6	1118.1	1095.9	1089.5	1032.3	941.7	814.5	793.1	518.9
37.5°	1204.7	1196.0	1179.3	1157.8	1149.1	1160.2	1122.9	1022.0	892.4	865.4	561.8
40°	1233.3	1223.0	1209.5	1200.0	1196.8	1227.8	1223.8	1126.1	994.9	979.0	620.6
42.5°	1254.0	1243.7	1234.9	1234.1	1254.8	1315.2	1359.7	1271.5	1138.0	1105.4	696.1
45°	1227.8	1219.0	1223.8	1251.6	1301.7	1397.0	1524.2	1477.3	1310.4	1287.4	816.9
47.5°	1154.7	1149.1	1170.6	1221.4	1314.4	1447.1	1683.1	1703.0	1556.8	1521.8	973.5
50°	1040.2	1039.4	1073.6	1142.7	1274.7	1466.2	1763.4	1919.9	1809.5	1773.7	1100.6
52.5°	885.3	882.1	932.2	1028.3	1180.9	1430.4	1778.5	2006.6	1955.7	1913.6	1180.9
55°	709.6	702.5	762.1	867.8	1042.6	1326.3	1738.0	2025.6	2025.6	1987.5	1240.5
57.5°	499.1	510.2	559.5	686.6	871.8	1170.6	1637.8	2008.1	2096.4	2063.8	1320.8
60°	314.7	319.5	373.5	476.0	661.2	962.4	1459.0	1932.7	2152.8	2133.7	1385.1
62.5°	181.2	196.3	223.3	301.2	456.1	723.2	1238.1	1796.8	2174.2	2166.3	1427.2
65°	110.5	112.0	124.8	170.1	280.5	493.5	991.0	1607.6	2125.8	2132.9	1419.3
67.5°	82.6	82.6	86.6	107.3	159.7	313.9	731.1	1378.0	1970.8	1993.8	1344.6
70°	71.5	71.5	72.3	78.7	98.5	186.0	483.2	1111.0	1689.5	1687.1	1111.0
72.5°	56.4	58.8	63.6	66.8	74.7	108.9	282.9	776.4	1173.7	1201.5	715.2
75°	45.3	46.1	52.4	58.0	62.8	73.9	133.5	431.5	615.9	615.9	314.7
77.5°	35.0	36.6	40.5	46.1	52.4	52.4	55.6	166.9	238.4	230.5	93.0
80°	22.3	23.0	29.4	36.6	43.7	37.3	30.2	55.6	65.2	62.8	25.4
82.5°	13.5	14.3	19.1	29.4	29.4	20.7	19.1	23.0	20.7	19.1	10.3
85°	4.0	4.8	13.5	19.1	16.7	7.9	9.5	10.3	9.5	8.7	5.6
87.5°	0.8	0.8	4.0	4.8	4.0	4.0	3.2	4.0	4.0	4.0	2.4
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°	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3
2.5°	167.7	164.5	158.1	153.4	149.4	145.4	142.2	141.5	139.9	139.9	139.1
5°	174.8	167.7	155.8	147.8	141.5	135.9	131.1	126.4	124.8	123.2	124.0
7.5°	186.0	174.8	158.1	146.2	135.1	122.4	112.0	103.3	97.0	95.4	93.0
10°	200.3	183.6	162.1	143.0	122.4	100.1	85.8	77.1	73.9	69.9	70.7
12.5°	214.6	193.9	165.3	134.3	100.9	78.7	66.8	61.2	58.8	58.0	58.8
15°	231.3	205.0	163.7	118.4	81.1	63.6	56.4	54.0	52.4	52.4	51.7
17.5°	247.9	214.6	158.1	97.7	65.2	54.0	50.9	48.5	46.9	46.1	46.1
20°	266.2	223.3	145.4	77.9	54.0	49.3	46.1	42.9	41.3	41.3	41.3
22.5°	285.3	229.7	128.7	62.0	48.5	43.7	40.5	38.1	36.6	36.6	36.6
25°	302.0	232.8	108.9	51.7	44.5	39.7	36.6	34.2	33.4	32.6	32.6
27.5°	317.9	232.0	88.2	45.3	39.7	35.8	32.6	31.0	29.4	29.4	29.4
30°	333.8	227.3	69.9	41.3	36.6	31.8	29.4	27.8	27.0	26.2	26.2
32.5°	347.3	219.3	54.8	38.1	33.4	28.6	26.2	24.6	24.6	23.8	23.8
35°	360.8	207.4	46.1	35.8	30.2	26.2	23.8	23.0	22.3	22.3	22.3
37.5°	375.1	192.3	40.5	32.6	27.0	23.8	22.3	21.5	20.7	19.9	19.9
40°	392.6	177.2	38.1	30.2	24.6	21.5	19.9	19.1	18.3	18.3	18.3
42.5°	420.4	164.5	35.8	27.0	22.3	19.9	18.3	16.7	16.7	15.9	15.9
45°	472.8	159.7	33.4	24.6	20.7	17.5	16.7	15.1	14.3	14.3	14.3
47.5°	541.2	160.5	31.0	22.3	19.1	15.9	15.1	14.3	12.7	12.7	12.7
50°	597.6	156.6	28.6	20.7	16.7	15.1	13.5	12.7	11.9	11.9	11.9
52.5°	619.8	149.4	26.2	19.1	15.9	13.5	12.7	11.9	11.1	11.1	11.1
55°	642.1	146.2	23.8	16.7	14.3	13.5	11.9	11.1	10.3	9.5	9.5
57.5°	682.6	147.8	21.5	15.9	13.5	12.7	11.1	9.5	7.9	7.2	7.2
60°	704.1	142.2	19.9	14.3	12.7	11.9	9.5	7.2	5.6	4.8	4.8
62.5°	685.8	126.4	18.3	13.5	11.9	10.3	7.2	5.6	4.0	2.4	2.4
65°	634.9	104.1	16.7	12.7	10.3	7.9	6.4	4.0	2.4	1.6	1.6
67.5°	570.6	81.9	15.1	11.9	9.5	7.2	5.6	3.2	1.6	0.8	0.8
70°	460.9	58.8	14.3	11.1	8.7	6.4	4.8	3.2	1.6	0.8	0.8
72.5°	297.2	38.1	12.7	10.3	7.9	6.4	4.0	2.4	1.6	0.8	0.8
75°	137.5	25.4	11.9	9.5	7.9	5.6	4.0	3.2	1.6	0.8	0.8
77.5°	40.5	18.3	11.1	8.7	7.2	5.6	4.0	3.2	1.6	0.8	0.8
80°	16.7	12.7	8.7	7.9	7.2	5.6	4.0	3.2	1.6	0.8	0.8
82.5°	7.9	5.6	4.0	3.2	4.0	4.0	3.2	3.2	1.6	0.8	0.8
85°	4.0	2.4	1.6	1.6	1.6	0.8	0.8	1.6	1.6	0.8	0.8
87.5°	2.4	1.6	1.6	1.6	0.8	0.8	0.8	0.0	0.0	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)