

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: P573146

Luminaire Tested: **ARCH-S-PA2-40-730-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573146  
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-PA2-40-730-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6080 lumens  
Efficiency: N/A  
Efficacy: 139.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

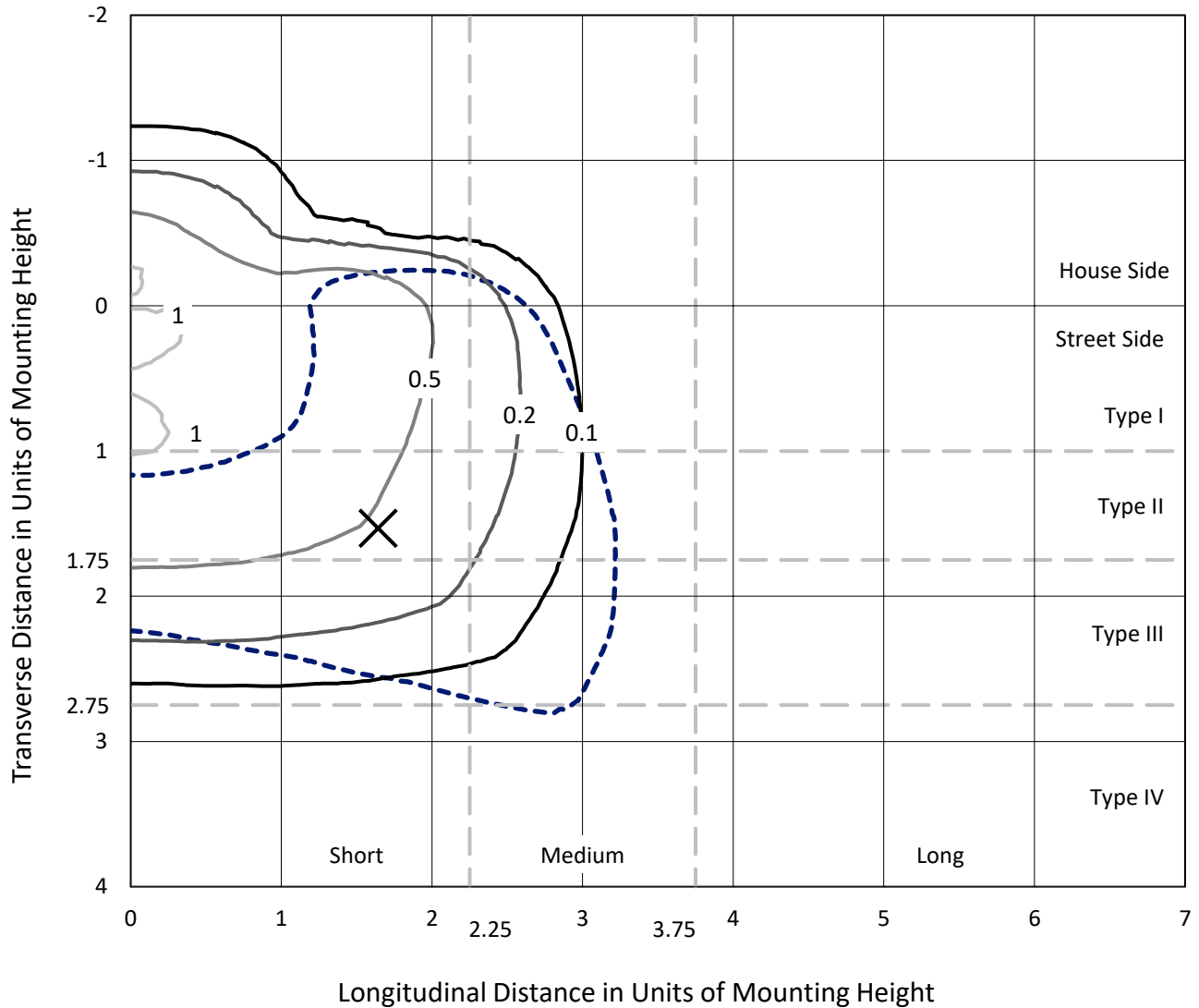
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573146  
 CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

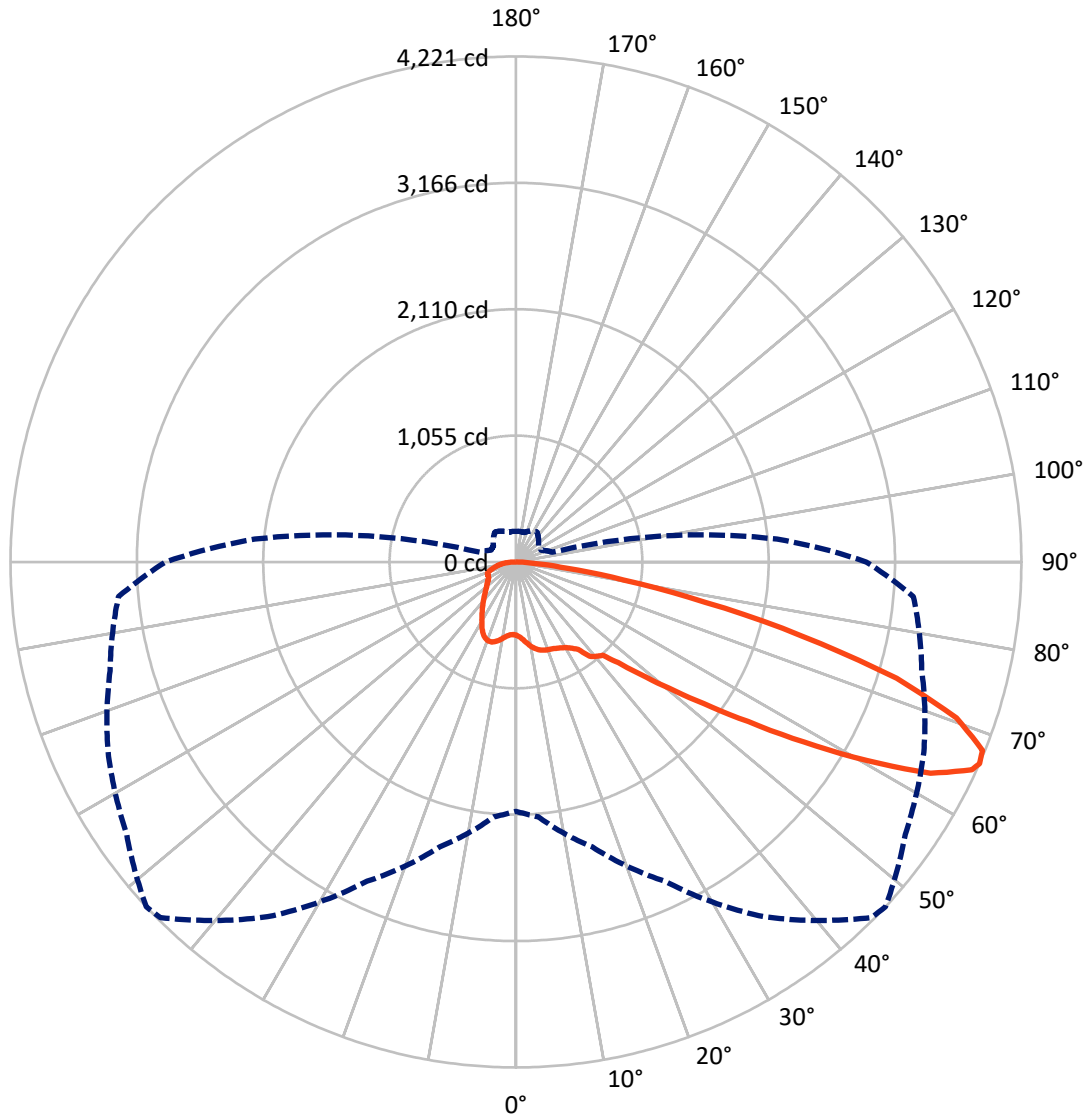
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P573146  
CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P573146  
 CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

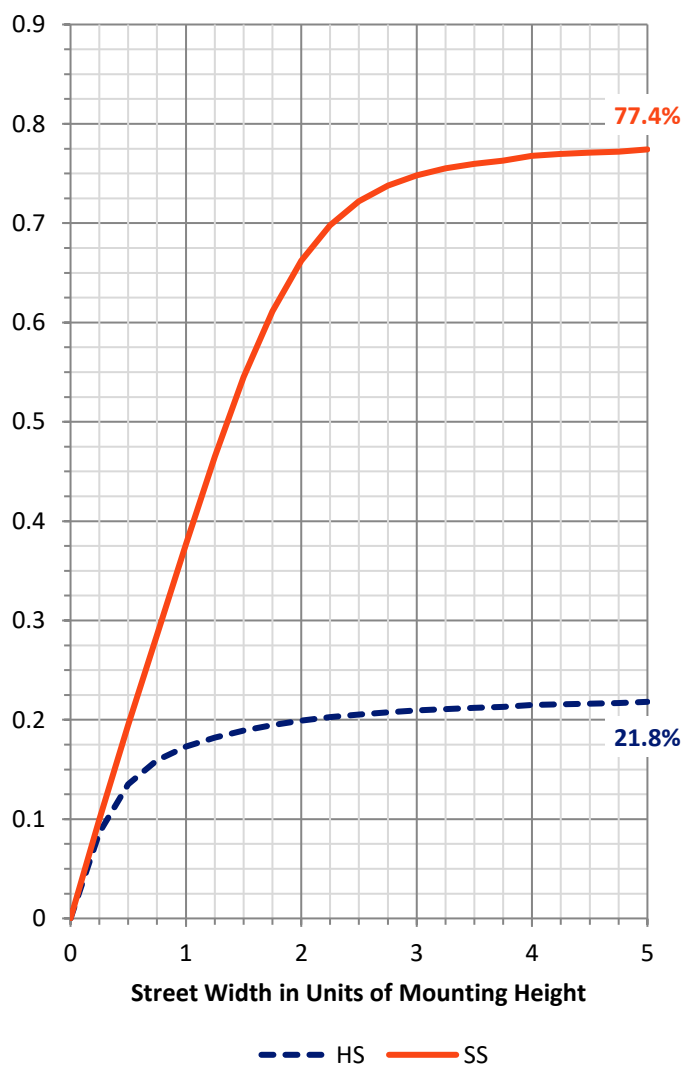
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1351.8	0.0	1351.8
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	4728.2	0.0	4728.2
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	6080.0	0.0	6080.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.2	1.0
10°-20°	204.1	3.4
20°-30°	340.3	5.6
30°-40°	494.2	8.1
40°-50°	755.9	12.4
50°-60°	1428.8	23.5
60°-70°	1846.2	30.4
70°-80°	829.9	13.6
80°-90°	118.4	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°	6080.0	100.0
0°-180°	6080.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P573146

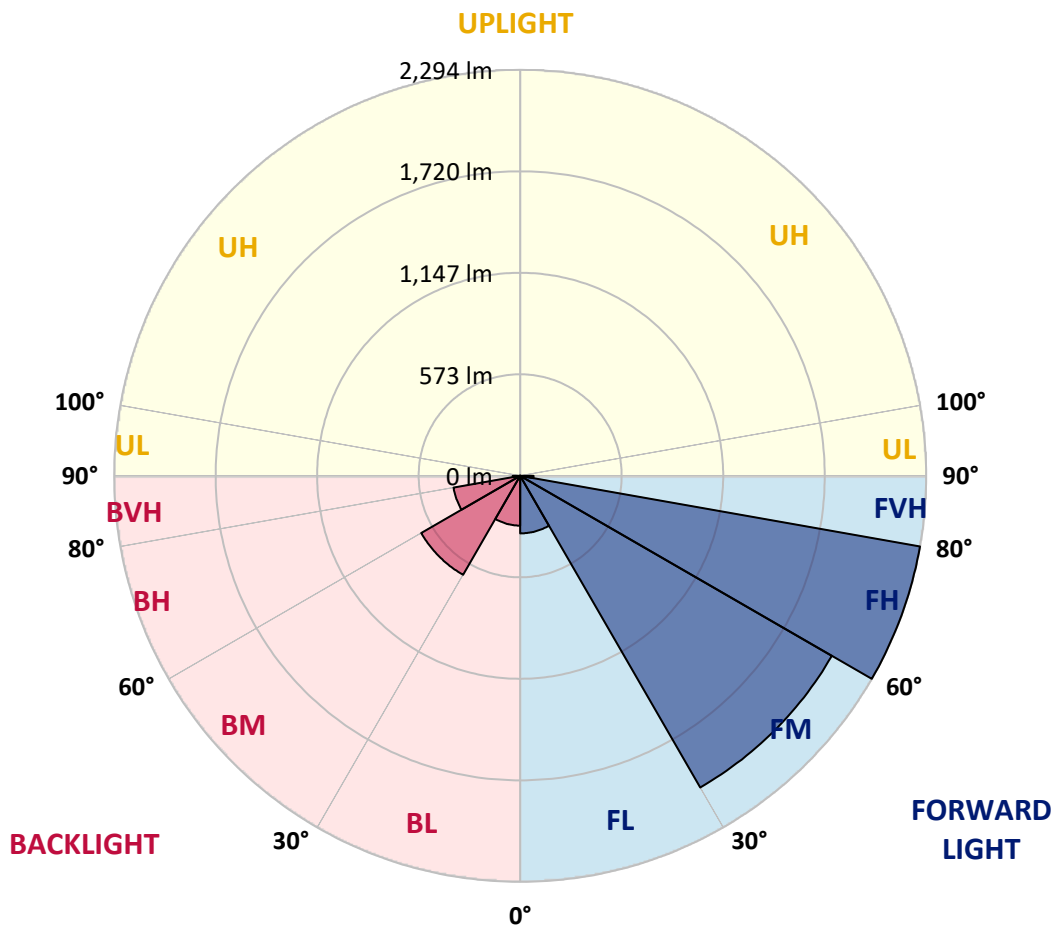
CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	325.3	5.4			
FM (30°-60°)	2033.3	33.4			
FH (60°-80°)	2293.6	37.7			G2/5000
FVH (80°-90°)	76.1	1.3			G1/100
BL (0°-30°)	281.3	4.6	B1/500		
BM (30°-60°)	645.7	10.6	B1/1000		
BH (60°-80°)	382.5	6.3	B1/500		G1/500
BVH (80°-90°)	42.3	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-G2**

Type III Short





REPORT NUMBER: P573146

CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2
2.5°	645.9	641.0	637.7	636.0	632.7	626.1	626.1	624.4	617.8	614.5	612.9
5°	697.1	693.8	685.6	679.0	669.0	655.8	654.2	644.3	631.0	621.1	614.5
7.5°	746.7	743.4	735.1	725.2	708.7	692.2	687.2	674.0	652.5	637.7	626.1
10°	789.6	784.7	774.8	761.6	743.4	725.2	720.3	705.4	683.9	662.4	642.6
12.5°	817.7	814.4	802.9	786.3	766.5	748.3	745.0	731.8	710.3	687.2	662.4
15°	830.9	829.3	816.1	799.5	779.7	764.9	763.2	751.6	733.5	710.3	682.3
17.5°	827.6	826.0	814.4	797.9	783.0	774.8	774.8	766.5	751.6	731.8	702.1
20°	811.1	811.1	801.2	789.6	781.4	779.7	779.7	778.1	768.2	751.6	721.9
22.5°	794.6	794.6	788.0	779.7	778.1	784.7	786.3	789.6	786.3	773.1	746.7
25°	797.9	796.2	788.0	778.1	779.7	794.6	797.9	806.2	804.5	794.6	771.5
27.5°	834.2	832.6	811.1	791.3	789.6	807.8	811.1	822.7	822.7	814.4	799.5
30°	925.1	928.4	888.8	839.2	814.4	826.0	829.3	842.5	849.1	852.4	840.8
32.5°	1063.9	1058.9	999.4	918.5	864.0	852.4	857.4	868.9	892.1	898.7	870.6
35°	1204.3	1207.6	1149.8	1047.3	943.3	900.3	897.0	913.5	948.2	918.5	868.9
37.5°	1334.8	1329.8	1262.1	1151.4	1047.3	997.8	999.4	992.8	963.1	903.6	880.5
40°	1476.9	1463.6	1407.5	1265.4	1133.2	1050.6	1035.8	979.6	954.8	930.1	926.7
42.5°	1617.3	1618.9	1572.7	1432.2	1235.7	1088.6	1065.5	1007.7	1024.2	1019.3	1016.0
45°	1794.0	1794.0	1747.8	1617.3	1397.6	1230.7	1199.3	1129.9	1156.4	1176.2	1215.8
47.5°	1955.9	1946.0	1932.8	1822.1	1609.0	1415.7	1402.5	1323.2	1392.6	1453.7	1534.7
50°	2127.7	2114.5	2106.2	2038.5	1886.5	1696.6	1656.9	1574.3	1726.3	1840.3	1990.6
52.5°	2395.3	2372.2	2329.3	2291.3	2231.8	2012.1	1962.5	1901.4	2098.0	2241.7	2549.0
55°	2636.5	2616.7	2575.4	2603.5	2595.2	2395.3	2352.4	2294.6	2507.7	2682.8	3034.6
57.5°	2725.7	2727.4	2783.6	2933.9	3013.2	2897.5	2836.4	2778.6	2958.7	3039.6	3356.8
60°	2767.0	2762.1	2907.4	3151.9	3409.6	3444.3	3366.7	3247.8	3315.5	3320.4	3629.4
62.5°	2677.8	2691.0	2890.9	3242.8	3647.5	3897.0	3885.4	3677.3	3614.5	3545.1	3702.0
65°	2339.2	2357.3	2651.4	3080.9	3685.5	4171.2	4182.8	3939.9	3764.8	3571.5	3495.5
66°	2081.5	2136.0	2463.1	2940.5	3616.1	4199.3	4220.8	3968.0	3758.2	3508.8	3332.0
67.5°	1746.1	1742.8	2107.9	2631.6	3422.9	4174.5	4202.6	3928.4	3669.0	3323.7	3004.9
70°	1068.8	1101.9	1415.7	1964.2	2833.1	3865.6	3903.6	3649.2	3284.1	2814.9	2221.9
72.5°	548.5	603.0	809.5	1277.0	2056.7	3194.9	3323.7	3064.4	2684.4	2036.9	1356.3
75°	290.7	287.4	381.6	692.2	1313.3	2397.0	2464.7	2297.9	1855.2	1214.2	690.5
77.5°	155.3	163.5	199.9	355.2	721.9	1531.4	1617.3	1481.8	1057.3	621.1	330.4
80°	105.7	110.7	135.5	199.9	391.5	830.9	910.2	789.6	553.4	294.0	155.3
82.5°	67.7	71.0	92.5	123.9	234.6	403.1	424.6	404.7	270.9	166.8	94.2
85°	41.3	43.0	56.2	79.3	147.0	163.5	170.2	171.8	152.0	109.0	51.2
87.5°	19.8	21.5	31.4	39.6	69.4	59.5	54.5	56.2	84.2	64.4	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P573146

CATALOG NUMBER: ARCH-S-PA2-40-730-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2	611.2
2.5°	611.2	609.6	606.3	604.6	606.3	606.3	606.3	607.9	611.2	611.2	612.9
5°	611.2	607.9	604.6	604.6	607.9	611.2	614.5	621.1	624.4	626.1	626.1
7.5°	619.5	616.2	612.9	612.9	617.8	624.4	631.0	639.3	647.6	654.2	654.2
10°	636.0	631.0	627.7	629.4	637.7	645.9	654.2	664.1	672.3	680.6	680.6
12.5°	654.2	649.2	644.3	647.6	659.1	669.0	677.3	682.3	690.5	697.1	697.1
15°	672.3	664.1	662.4	669.0	680.6	687.2	690.5	690.5	693.8	700.4	700.4
17.5°	692.2	683.9	682.3	688.9	698.8	698.8	692.2	687.2	685.6	690.5	692.2
20°	712.0	703.7	703.7	708.7	707.0	695.5	683.9	675.7	669.0	674.0	675.7
22.5°	736.8	728.5	725.2	718.6	703.7	680.6	662.4	652.5	647.6	650.9	654.2
25°	761.6	754.9	746.7	723.6	688.9	652.5	629.4	621.1	622.8	629.4	632.7
27.5°	792.9	789.6	769.8	720.3	662.4	612.9	589.7	588.1	594.7	604.6	609.6
30°	830.9	826.0	791.3	710.3	626.1	566.6	550.1	553.4	563.3	571.6	576.5
32.5°	857.4	854.1	801.2	687.2	581.5	525.3	512.1	512.1	517.1	528.6	533.6
35°	865.6	878.8	807.8	652.5	528.6	489.0	475.8	467.5	467.5	477.4	480.7
37.5°	893.7	923.4	811.1	606.3	485.7	455.9	439.4	424.6	419.6	417.9	417.9
40°	958.1	992.8	809.5	546.8	444.4	422.9	403.1	386.6	373.3	355.2	356.8
42.5°	1070.5	1096.9	804.5	484.0	408.0	393.2	373.3	353.5	332.0	312.2	310.6
45°	1286.9	1247.2	791.3	429.5	375.0	366.7	348.6	325.4	299.0	280.8	280.8
47.5°	1628.8	1519.8	783.0	378.3	345.3	343.6	327.1	302.3	275.9	262.7	261.0
50°	2098.0	1896.4	796.2	342.0	318.8	323.8	310.6	287.4	266.0	254.4	252.7
52.5°	2636.5	2301.2	811.1	318.8	299.0	308.9	302.3	280.8	259.4	249.4	247.8
55°	3052.8	2629.9	789.6	297.4	279.2	294.0	294.0	274.2	256.1	246.1	246.1
57.5°	3345.2	2762.1	715.3	277.5	262.7	280.8	285.8	270.9	254.4	251.1	251.1
60°	3470.8	2755.5	584.8	259.4	251.1	267.6	280.8	267.6	257.7	266.0	267.6
62.5°	3403.0	2611.7	454.3	246.1	242.8	264.3	285.8	280.8	269.3	275.9	279.2
65°	3097.4	2359.0	342.0	234.6	232.9	266.0	299.0	289.1	261.0	262.7	264.3
66°	2925.6	2188.8	313.9	231.3	229.6	267.6	305.6	285.8	254.4	257.7	256.1
67.5°	2558.9	1921.2	275.9	224.7	223.0	267.6	313.9	279.2	246.1	251.1	246.1
70°	1876.6	1359.6	236.2	216.4	213.1	262.7	312.2	266.0	228.0	224.7	216.4
72.5°	1088.6	822.7	209.8	206.5	198.2	231.3	292.4	244.5	208.1	198.2	190.0
75°	535.2	417.9	186.7	194.9	173.5	203.2	264.3	226.3	191.6	178.4	173.5
77.5°	246.1	211.5	168.5	178.4	153.6	175.1	241.2	206.5	170.2	150.3	145.4
80°	133.8	132.2	142.1	148.7	128.9	153.6	213.1	180.1	143.7	122.2	115.6
82.5°	82.6	84.2	104.1	114.0	100.8	133.8	188.3	150.3	109.0	85.9	87.6
85°	43.0	47.9	69.4	76.0	66.1	99.1	142.1	100.8	61.1	44.6	44.6
87.5°	14.9	19.8	34.7	41.3	36.3	59.5	89.2	47.9	13.2	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)