

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: P397682

Luminaire Tested: **ARCH-S-PA1-30-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-727-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2699 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B0 - U0 - G1

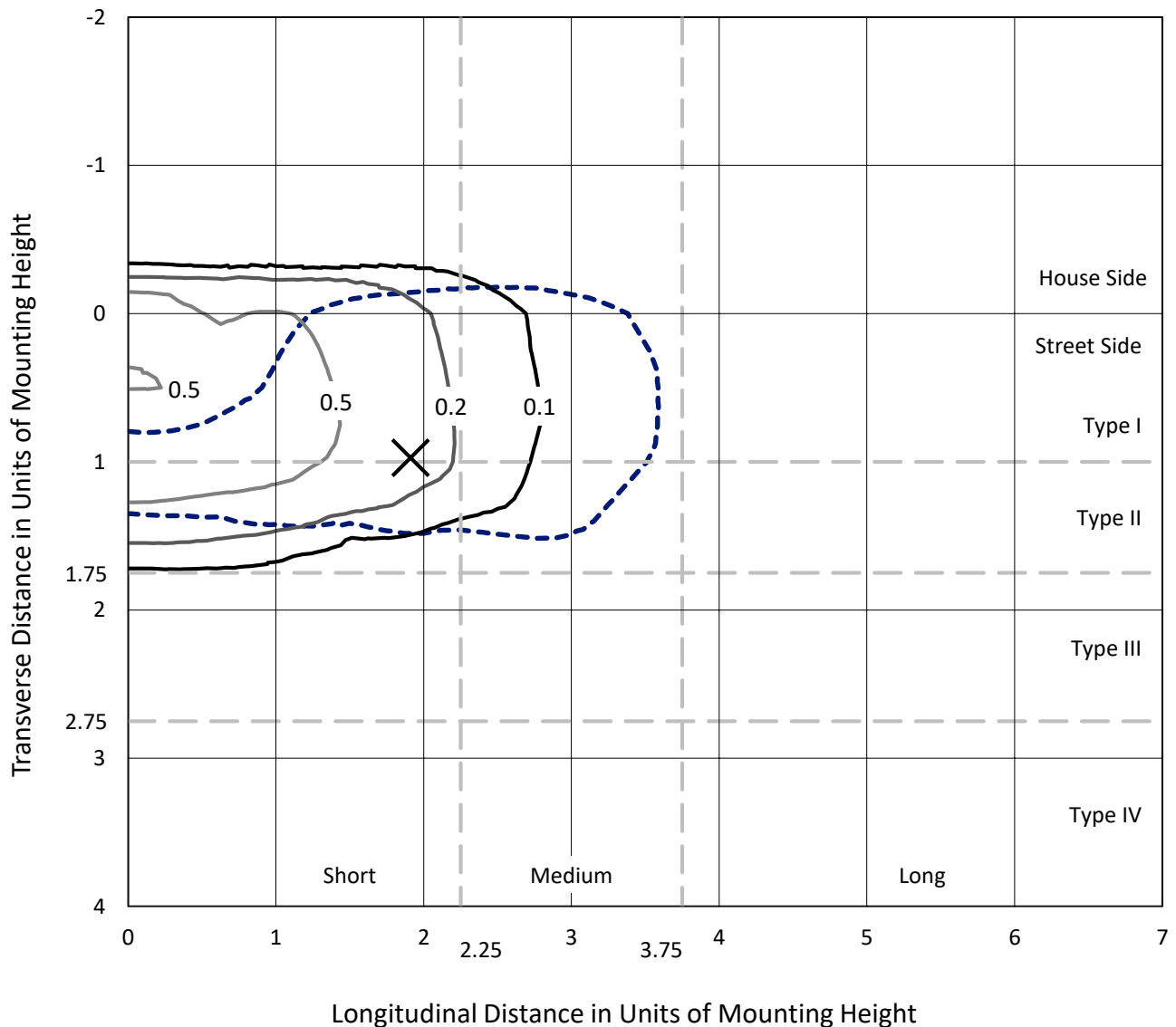
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397682  
 CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

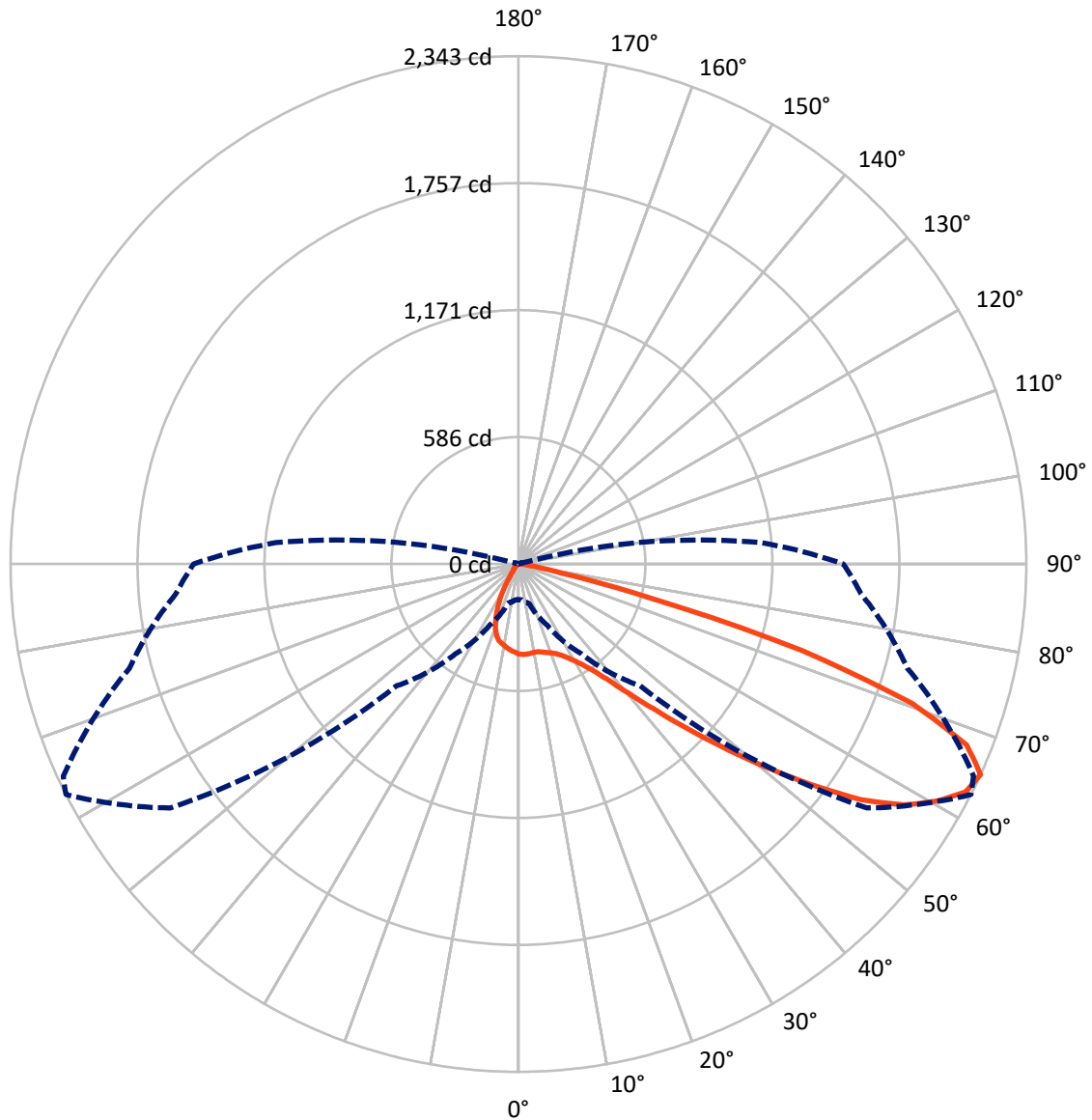
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P397682  
CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P397682

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U-HSS

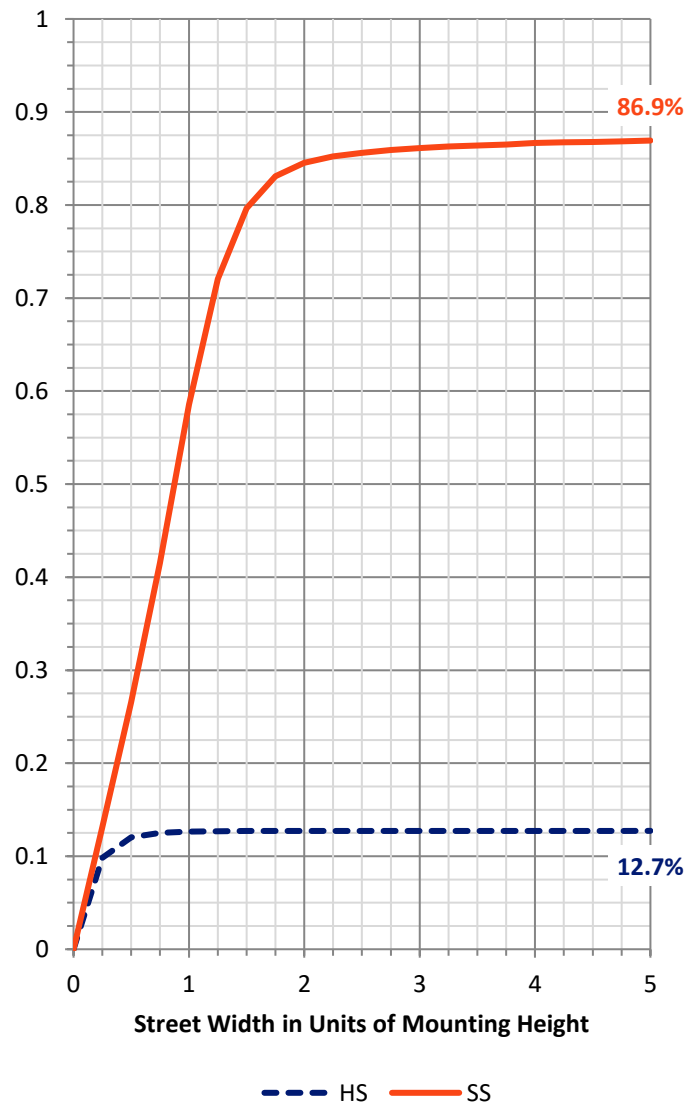
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	347.3	0.0	347.3
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	2351.6	0.0	2351.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	2699.0	0.0	2699.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.9	1.4
10°-20°	93.6	3.5
20°-30°	138.7	5.1
30°-40°	257.6	9.5
40°-50°	545.6	20.2
50°-60°	754.5	28.0
60°-70°	604.0	22.4
70°-80°	250.9	9.3
80°-90°	16.1	0.6
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°	2699.0	100.0
0°-180°	2699.0	100.0



REPORT NUMBER: P397682

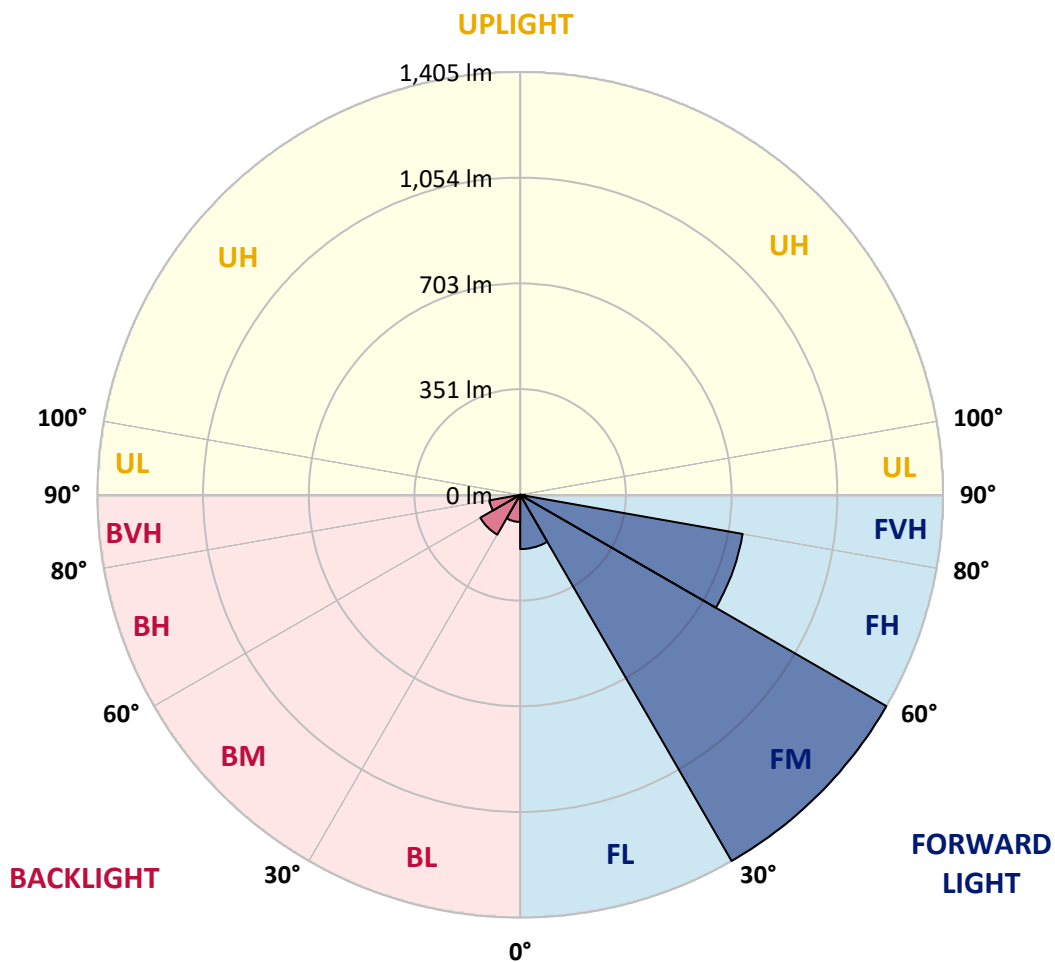
CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	180.2	6.7			
FM	(30°-60°)	1405.1	52.1			
FH	(60°-80°)	750.9	27.8			G1/1800
FVH	(80°-90°)	15.4	0.6			G1/100
BL	(0°-30°)	90.0	3.3	B0/110		
BM	(30°-60°)	152.6	5.7	B0/220		
BH	(60°-80°)	104.0	3.9	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





REPORT NUMBER: P397682

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8
2.5°	422.9	421.9	420.9	420.4	420.4	419.9	417.8	417.3	416.3	415.3	414.3
5°	418.8	417.3	416.8	417.3	417.8	418.8	417.8	417.8	416.8	415.8	413.7
7.5°	408.6	407.6	408.1	409.7	410.2	413.7	414.3	415.8	415.8	414.8	413.2
10°	396.4	395.9	395.9	398.5	401.0	406.1	409.7	413.7	414.3	414.3	411.7
12.5°	387.2	386.7	388.3	391.3	396.4	403.0	409.2	415.3	416.3	416.8	412.7
15°	381.6	381.6	383.7	389.8	396.9	406.1	413.2	421.4	422.4	421.9	416.3
17.5°	376.5	377.1	381.1	391.3	399.5	411.7	420.4	429.5	430.0	429.5	420.4
20°	374.5	375.5	381.6	394.9	404.1	417.8	429.0	438.2	438.7	436.7	424.4
22.5°	380.1	380.6	388.3	402.5	411.2	426.5	440.7	449.4	449.9	446.9	430.6
25°	399.5	399.5	406.1	418.3	426.0	441.3	456.5	466.7	466.7	463.2	444.3
27.5°	444.8	440.7	439.2	442.8	445.3	461.6	477.9	490.7	490.2	485.1	462.2
30°	532.5	522.3	506.0	487.6	478.5	489.7	505.0	521.3	520.7	512.6	484.1
32.5°	679.7	664.9	626.2	577.8	538.6	525.8	540.1	557.9	558.5	548.8	519.2
35°	886.1	862.6	793.3	726.1	636.4	588.0	592.1	611.4	617.6	612.5	578.3
37.5°	1084.8	1063.4	997.2	903.9	782.1	683.3	666.0	682.8	689.9	689.9	653.7
40°	1285.1	1260.1	1201.5	1107.7	979.3	832.1	769.9	783.7	791.3	792.8	745.5
42.5°	1445.6	1429.3	1384.4	1311.5	1191.3	1093.0	919.7	912.1	919.2	913.6	851.9
45°	1556.6	1543.9	1512.8	1485.3	1426.7	1377.3	1120.0	1068.5	1073.1	1053.7	971.7
47.5°	1579.6	1565.3	1558.7	1596.9	1638.7	1650.9	1366.1	1254.5	1249.9	1207.1	1096.0
50°	1479.7	1481.2	1505.7	1614.7	1789.0	1899.0	1651.4	1464.4	1447.6	1352.3	1211.7
52.5°	1264.2	1288.6	1350.3	1527.1	1834.8	2079.4	1936.8	1687.1	1661.1	1493.5	1298.3
55°	989.0	1020.6	1122.0	1325.3	1739.1	2159.9	2177.3	1918.4	1859.3	1599.4	1365.6
57.5°	735.3	744.9	863.2	1048.6	1512.3	2081.0	2300.6	2096.7	2020.8	1684.0	1432.3
60°	458.1	464.2	589.0	798.4	1145.4	1789.0	2300.6	2219.5	2147.2	1759.9	1493.5
62.5°	284.8	286.9	333.7	547.2	778.6	1326.8	2205.3	2314.8	2256.7	1814.5	1545.9
65°	164.1	166.1	188.0	309.3	506.5	794.4	1961.7	2342.9	2316.9	1857.8	1586.7
67.5°	119.7	120.8	129.4	173.8	331.2	408.1	1473.6	2230.2	2262.9	1879.2	1585.7
70°	103.9	105.5	116.7	135.5	239.0	250.7	750.0	1926.1	2017.3	1848.6	1538.3
72.5°	80.0	82.0	98.9	127.4	175.3	180.4	271.6	1370.7	1508.7	1657.5	1408.4
75°	55.0	57.1	73.9	105.0	144.7	135.0	149.3	630.8	795.9	1111.8	1072.1
77.5°	35.2	35.7	46.4	76.4	124.8	95.8	102.4	205.9	288.9	502.9	506.0
80°	23.4	23.9	28.5	49.4	85.6	88.7	63.2	95.3	104.5	146.7	101.9
82.5°	14.3	14.3	19.4	31.1	52.0	73.4	41.3	49.9	53.5	56.6	26.5
85°	5.6	5.6	11.7	20.4	32.6	34.1	26.0	29.0	30.6	33.1	12.2
87.5°	1.5	1.5	6.6	11.2	14.3	15.8	15.8	14.3	15.3	18.9	6.1
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: P397682

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8	415.8
2.5°	413.7	412.2	410.2	408.1	406.1	404.6	403.0	403.0	402.0	400.5	399.5
5°	412.7	410.2	405.6	402.0	396.4	392.3	389.3	386.7	385.2	381.6	381.1
7.5°	411.2	408.1	401.5	394.4	385.2	378.1	370.9	365.8	360.8	356.7	355.7
10°	408.6	405.1	395.4	385.2	372.5	359.2	342.4	323.0	305.2	295.0	292.0
12.5°	408.6	404.1	391.3	377.6	359.2	326.6	283.8	241.0	207.9	193.1	189.0
15°	411.2	405.1	388.3	369.4	335.3	269.0	199.7	143.2	107.0	95.8	93.2
17.5°	413.7	405.1	383.7	358.2	291.5	195.2	113.6	75.4	63.7	61.1	61.1
20°	414.8	404.1	377.6	337.3	232.9	121.3	67.8	56.6	52.0	50.4	50.4
22.5°	418.8	404.6	373.0	307.3	169.2	71.3	53.5	47.4	42.8	41.3	41.3
25°	429.0	410.7	374.0	269.0	108.5	54.0	45.3	39.2	34.6	32.6	32.6
27.5°	445.3	424.4	379.6	224.7	68.3	46.4	38.2	31.6	28.0	26.0	26.0
30°	463.7	439.7	382.2	173.8	51.0	39.2	31.1	25.0	22.4	20.9	20.4
32.5°	495.8	466.2	380.1	119.2	41.8	33.1	25.0	19.9	17.8	17.3	17.3
35°	547.2	512.6	376.0	74.9	34.6	26.5	19.9	16.3	14.8	14.3	13.8
37.5°	617.0	580.4	363.8	49.4	28.5	20.9	16.3	13.8	12.2	11.7	11.7
40°	702.1	657.8	340.4	37.7	24.5	16.8	13.8	11.7	10.7	10.2	10.2
42.5°	799.5	743.9	303.2	32.6	20.4	14.3	11.7	9.7	9.2	8.7	8.7
45°	906.0	834.1	251.7	29.0	17.3	11.7	9.7	8.7	7.6	7.6	7.1
47.5°	1019.1	924.8	193.6	25.5	14.8	10.2	8.7	7.1	6.6	6.1	6.1
50°	1128.1	1005.8	136.0	21.9	12.2	8.7	7.1	6.1	5.6	5.1	5.1
52.5°	1205.1	1054.7	96.3	18.9	10.2	7.6	5.6	4.6	4.1	4.1	4.1
55°	1266.7	1085.3	67.3	15.8	8.7	6.6	4.6	3.6	3.6	3.1	3.1
57.5°	1324.8	1105.2	49.4	13.2	7.1	5.1	3.6	2.5	2.5	2.0	2.0
60°	1384.9	1115.9	37.7	10.7	6.1	4.1	2.5	2.0	1.5	1.5	1.5
62.5°	1445.6	1122.5	29.0	8.7	5.1	3.1	2.0	1.5	1.0	0.5	0.5
65°	1498.5	1124.5	22.4	6.6	4.1	2.0	1.5	0.5	0.0	0.0	0.0
67.5°	1514.3	1101.1	17.3	5.1	3.1	1.5	1.0	0.0	0.0	0.0	0.0
70°	1471.5	1038.9	13.2	4.1	2.5	1.0	0.5	0.0	0.0	0.0	0.0
72.5°	1305.9	871.3	10.2	2.5	2.0	1.0	0.5	0.0	0.0	0.0	0.0
75°	934.5	464.7	7.1	2.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	430.0	179.9	5.1	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
80°	84.1	44.8	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.4	7.6	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.6	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.0	0.5	0.0	0.0	0.0	0.0	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)