

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: P397727

Luminaire Tested: **ARCH-S-PA1-30-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397727  
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-PA1-30-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 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: 2372 lumens  
Efficiency: N/A  
Efficacy: 76.5 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

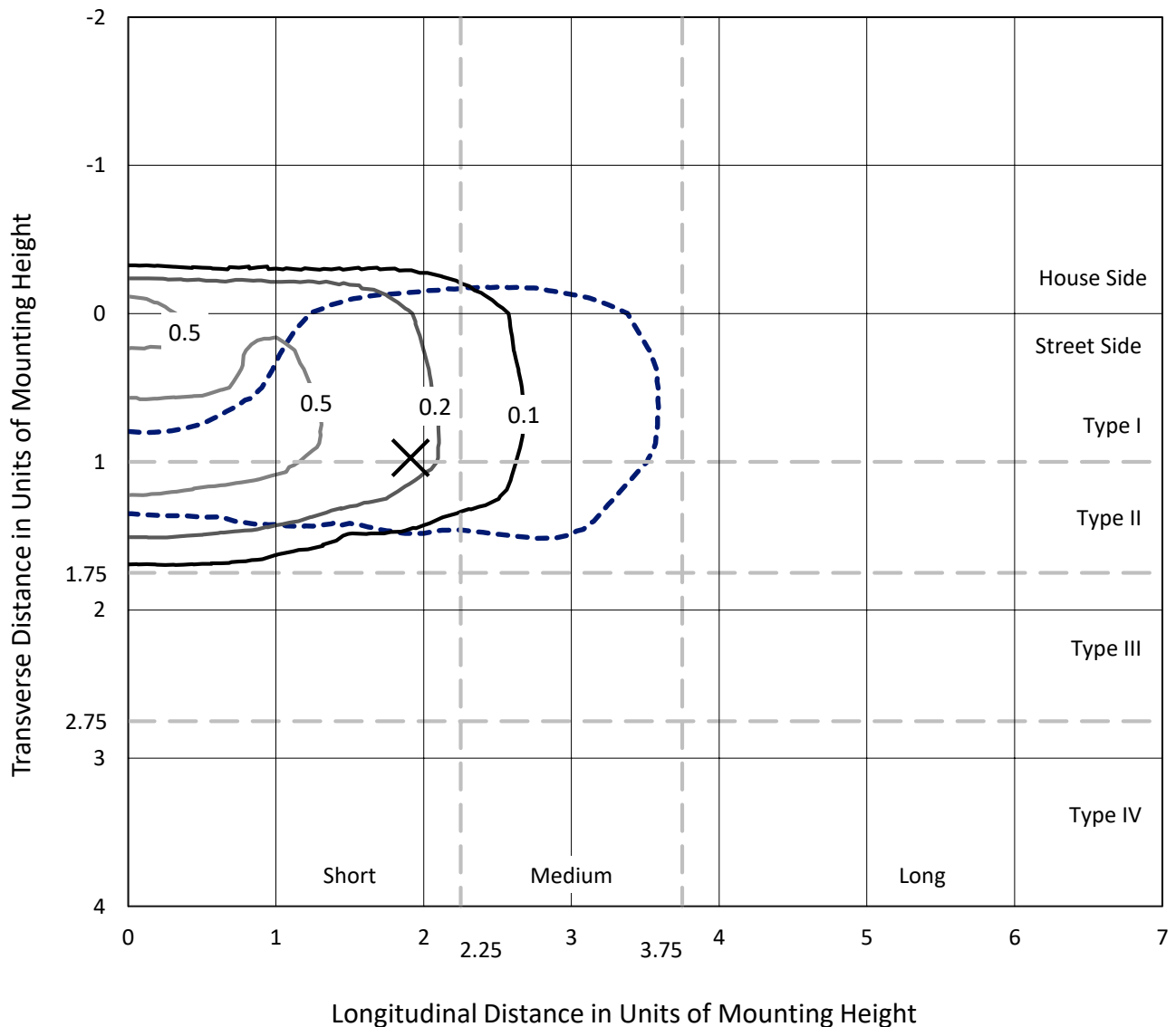
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

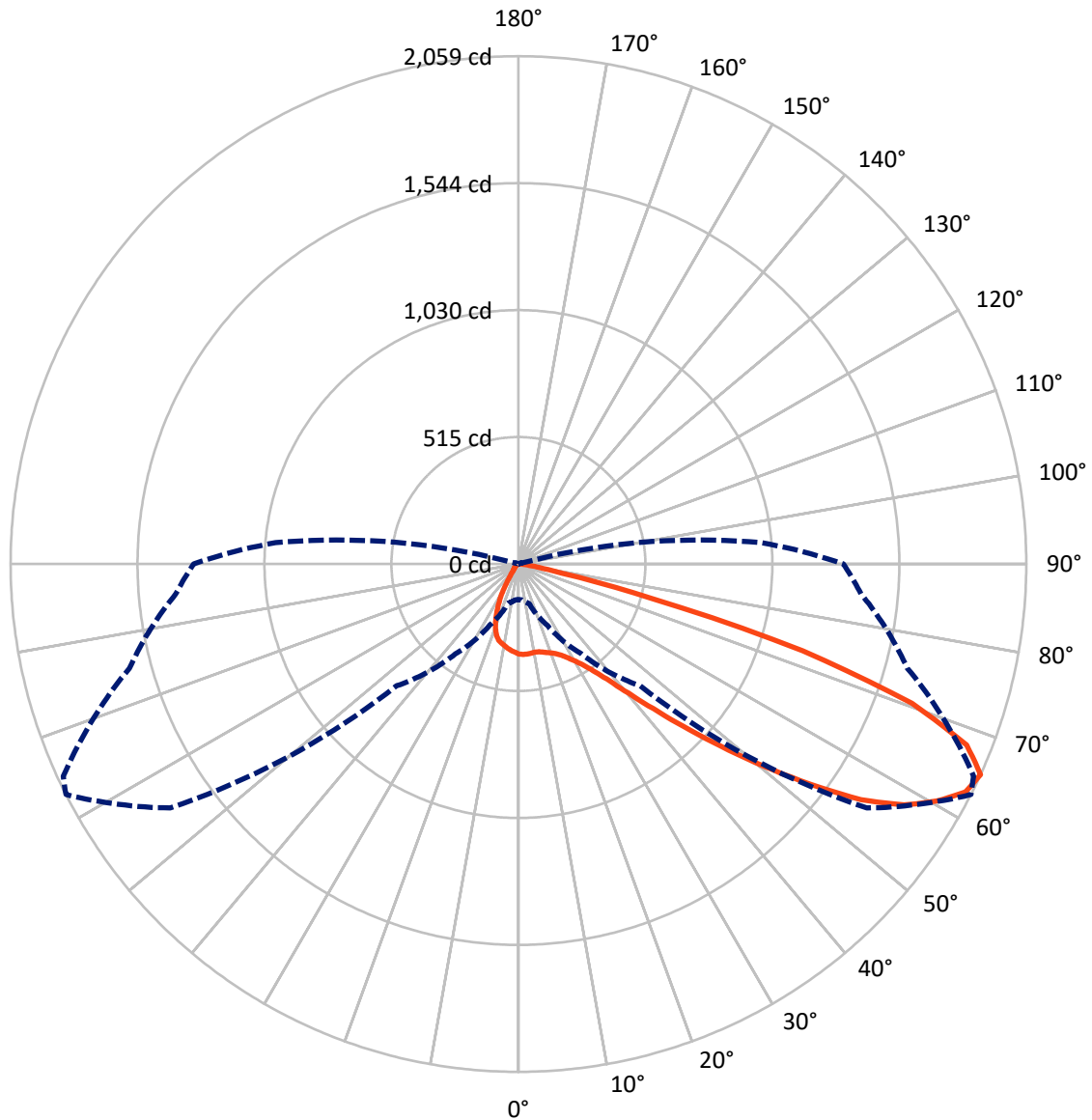


Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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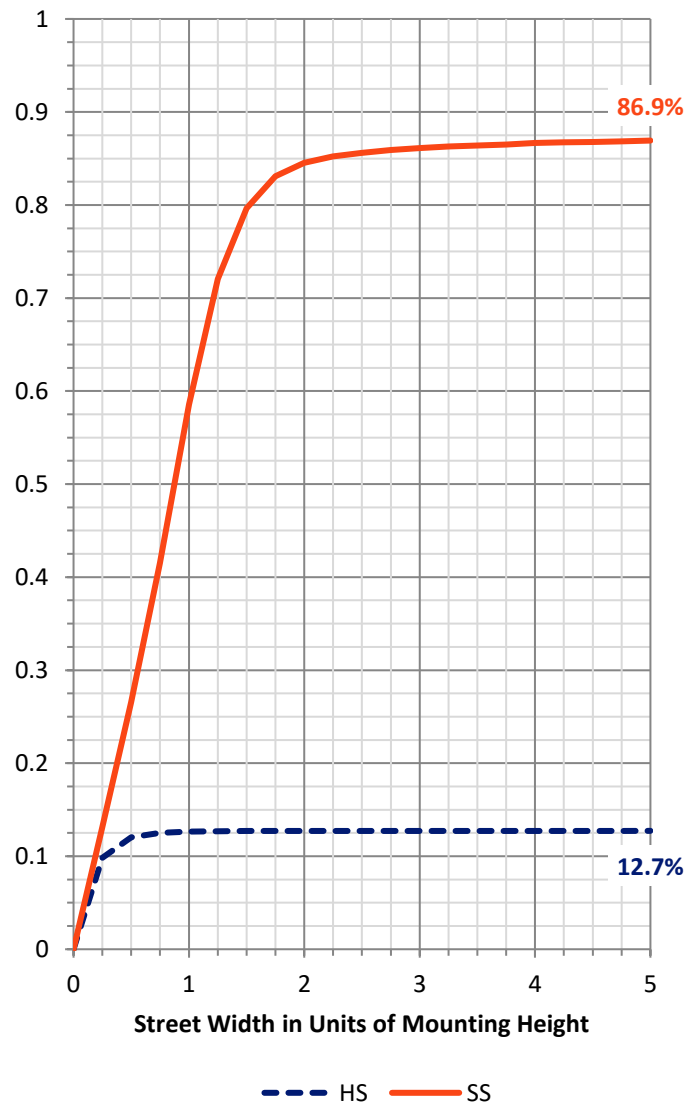
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	305.3	0.0	305.3
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	2066.7	0.0	2066.7
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	2372.0	0.0	2372.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.3	1.4
10°-20°	82.2	3.5
20°-30°	121.9	5.1
30°-40°	226.4	9.5
40°-50°	479.5	20.2
50°-60°	663.1	28.0
60°-70°	530.8	22.4
70°-80°	220.5	9.3
80°-90°	14.2	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°	2372.0	100.0
0°-180°	2372.0	100.0



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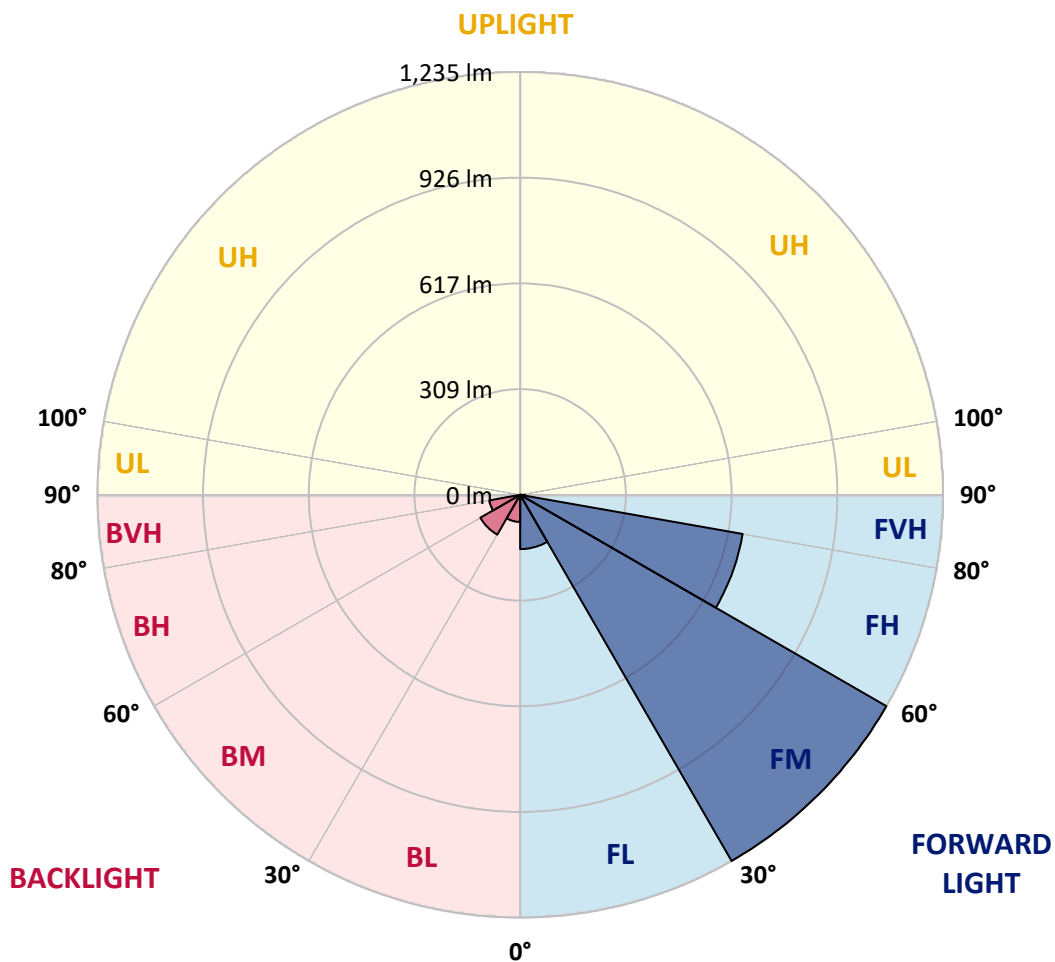
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	158.4	6.7			
FM	(30°-60°)	1234.9	52.1			
FH	(60°-80°)	659.9	27.8			G0/660
FVH	(80°-90°)	13.5	0.6			G1/100
BL	(0°-30°)	79.1	3.3	B0/110		
BM	(30°-60°)	134.1	5.7	B0/220		
BH	(60°-80°)	91.4	3.9	B0/110		G0/110
BVH	(80°-90°)	0.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4
2.5°	371.7	370.8	369.9	369.4	369.4	369.0	367.2	366.8	365.9	365.0	364.1
5°	368.1	366.8	366.3	366.8	367.2	368.1	367.2	367.2	366.3	365.4	363.6
7.5°	359.1	358.2	358.7	360.0	360.5	363.6	364.1	365.4	365.4	364.5	363.2
10°	348.4	347.9	347.9	350.2	352.4	356.9	360.0	363.6	364.1	364.1	361.8
12.5°	340.3	339.9	341.2	343.9	348.4	354.2	359.6	365.0	365.9	366.3	362.7
15°	335.4	335.4	337.2	342.6	348.8	356.9	363.2	370.3	371.2	370.8	365.9
17.5°	330.9	331.4	335.0	343.9	351.1	361.8	369.4	377.5	377.9	377.5	369.4
20°	329.1	330.0	335.4	347.0	355.1	367.2	377.1	385.1	385.6	383.8	373.0
22.5°	334.1	334.5	341.2	353.8	361.4	374.8	387.4	395.0	395.4	392.7	378.4
25°	351.1	351.1	356.9	367.6	374.4	387.8	401.2	410.2	410.2	407.1	390.5
27.5°	390.9	387.4	386.0	389.1	391.4	405.7	420.0	431.2	430.8	426.3	406.2
30°	468.0	459.0	444.7	428.5	420.5	430.3	443.8	458.1	457.7	450.5	425.4
32.5°	597.4	584.4	550.4	507.8	473.3	462.1	474.7	490.3	490.8	482.3	456.3
35°	778.7	758.1	697.2	638.1	559.3	516.8	520.3	537.4	542.7	538.3	508.3
37.5°	953.4	934.6	876.4	794.4	687.4	600.5	585.3	600.1	606.3	606.3	574.5
40°	1129.4	1107.4	1055.9	973.5	860.7	731.3	676.6	688.7	695.4	696.8	655.1
42.5°	1270.4	1256.1	1216.7	1152.6	1047.0	960.5	808.3	801.6	807.8	802.9	748.7
45°	1368.0	1356.8	1329.5	1305.3	1253.9	1210.4	984.3	939.0	943.1	926.1	854.0
47.5°	1388.2	1375.7	1369.8	1403.4	1440.1	1450.9	1200.6	1102.5	1098.5	1060.8	963.2
50°	1300.4	1301.8	1323.3	1419.1	1572.2	1669.0	1451.3	1287.0	1272.2	1188.5	1064.9
52.5°	1111.0	1132.5	1186.7	1342.1	1612.5	1827.5	1702.1	1482.7	1459.8	1312.5	1141.0
55°	869.2	897.0	986.1	1164.7	1528.4	1898.2	1913.5	1686.0	1634.0	1405.7	1200.1
57.5°	646.2	654.7	758.6	921.6	1329.1	1828.8	2021.8	1842.7	1776.0	1480.0	1258.8
60°	402.6	407.9	517.7	701.7	1006.7	1572.2	2021.8	1950.6	1887.0	1546.7	1312.5
62.5°	250.3	252.1	293.3	480.9	684.2	1166.1	1938.1	2034.4	1983.3	1594.6	1358.6
65°	144.2	146.0	165.2	271.8	445.1	698.1	1724.0	2059.0	2036.2	1632.7	1394.5
67.5°	105.2	106.1	113.7	152.7	291.1	358.7	1295.0	1960.0	1988.7	1651.5	1393.6
70°	91.4	92.7	102.5	119.1	210.0	220.3	659.2	1692.7	1772.9	1624.6	1351.9
72.5°	70.3	72.1	86.9	112.0	154.0	158.5	238.7	1204.6	1325.9	1456.7	1237.7
75°	48.4	50.2	64.9	92.2	127.2	118.7	131.2	554.4	699.5	977.1	942.2
77.5°	30.9	31.3	40.8	67.2	109.7	84.2	90.0	180.9	253.9	442.0	444.7
80°	20.6	21.0	25.1	43.4	75.2	77.9	55.5	83.7	91.8	129.0	89.6
82.5°	12.5	12.5	17.0	27.3	45.7	64.5	36.3	43.9	47.0	49.7	23.3
85°	4.9	4.9	10.3	17.9	28.7	30.0	22.8	25.5	26.9	29.1	10.7
87.5°	1.3	1.3	5.8	9.9	12.5	13.9	13.9	12.5	13.4	16.6	5.4
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°	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4	365.4
2.5°	363.6	362.3	360.5	358.7	356.9	355.6	354.2	354.2	353.3	352.0	351.1
5°	362.7	360.5	356.5	353.3	348.4	344.8	342.1	339.9	338.5	335.4	335.0
7.5°	361.4	358.7	352.9	346.6	338.5	332.3	326.0	321.5	317.0	313.5	312.6
10°	359.1	356.0	347.5	338.5	327.3	315.7	300.9	283.9	268.2	259.3	256.6
12.5°	359.1	355.1	343.9	331.8	315.7	287.0	249.4	211.8	182.7	169.7	166.1
15°	361.4	356.0	341.2	324.7	294.7	236.4	175.5	125.8	94.0	84.2	81.9
17.5°	363.6	356.0	337.2	314.8	256.1	171.5	99.9	66.3	56.0	53.7	53.7
20°	364.5	355.1	331.8	296.4	204.6	106.6	59.6	49.7	45.7	44.3	44.3
22.5°	368.1	355.6	327.8	270.0	148.7	62.7	47.0	41.6	37.6	36.3	36.3
25°	377.1	360.9	328.7	236.4	95.4	47.5	39.9	34.5	30.5	28.7	28.7
27.5°	391.4	373.0	333.6	197.5	60.0	40.8	33.6	27.8	24.6	22.8	22.8
30°	407.5	386.5	335.9	152.7	44.8	34.5	27.3	21.9	19.7	18.4	17.9
32.5°	435.7	409.7	334.1	104.8	36.7	29.1	21.9	17.5	15.7	15.2	15.2
35°	480.9	450.5	330.5	65.8	30.5	23.3	17.5	14.3	13.0	12.5	12.1
37.5°	542.3	510.0	319.7	43.4	25.1	18.4	14.3	12.1	10.7	10.3	10.3
40°	617.1	578.1	299.1	33.1	21.5	14.8	12.1	10.3	9.4	9.0	9.0
42.5°	702.6	653.8	266.4	28.7	17.9	12.5	10.3	8.5	8.1	7.6	7.6
45°	796.2	733.1	221.2	25.5	15.2	10.3	8.5	7.6	6.7	6.7	6.3
47.5°	895.6	812.8	170.2	22.4	13.0	9.0	7.6	6.3	5.8	5.4	5.4
50°	991.4	884.0	119.6	19.3	10.7	7.6	6.3	5.4	4.9	4.5	4.5
52.5°	1059.1	927.0	84.6	16.6	9.0	6.7	4.9	4.0	3.6	3.6	3.6
55°	1113.2	953.8	59.1	13.9	7.6	5.8	4.0	3.1	3.1	2.7	2.7
57.5°	1164.3	971.3	43.4	11.6	6.3	4.5	3.1	2.2	2.2	1.8	1.8
60°	1217.1	980.7	33.1	9.4	5.4	3.6	2.2	1.8	1.3	1.3	1.3
62.5°	1270.4	986.5	25.5	7.6	4.5	2.7	1.8	1.3	0.9	0.4	0.4
65°	1317.0	988.3	19.7	5.8	3.6	1.8	1.3	0.4	0.0	0.0	0.0
67.5°	1330.9	967.7	15.2	4.5	2.7	1.3	0.9	0.0	0.0	0.0	0.0
70°	1293.3	913.1	11.6	3.6	2.2	0.9	0.4	0.0	0.0	0.0	0.0
72.5°	1147.7	765.7	9.0	2.2	1.8	0.9	0.4	0.0	0.0	0.0	0.0
75°	821.3	408.4	6.3	1.8	1.3	0.4	0.0	0.0	0.0	0.0	0.0
77.5°	377.9	158.1	4.5	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0
80°	73.9	39.4	1.8	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.0	6.7	0.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.8	2.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.9	0.4	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)