

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: P348808

Luminaire Tested: **ARCH-N-PA1-20-727-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348808  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2005 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 24  
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

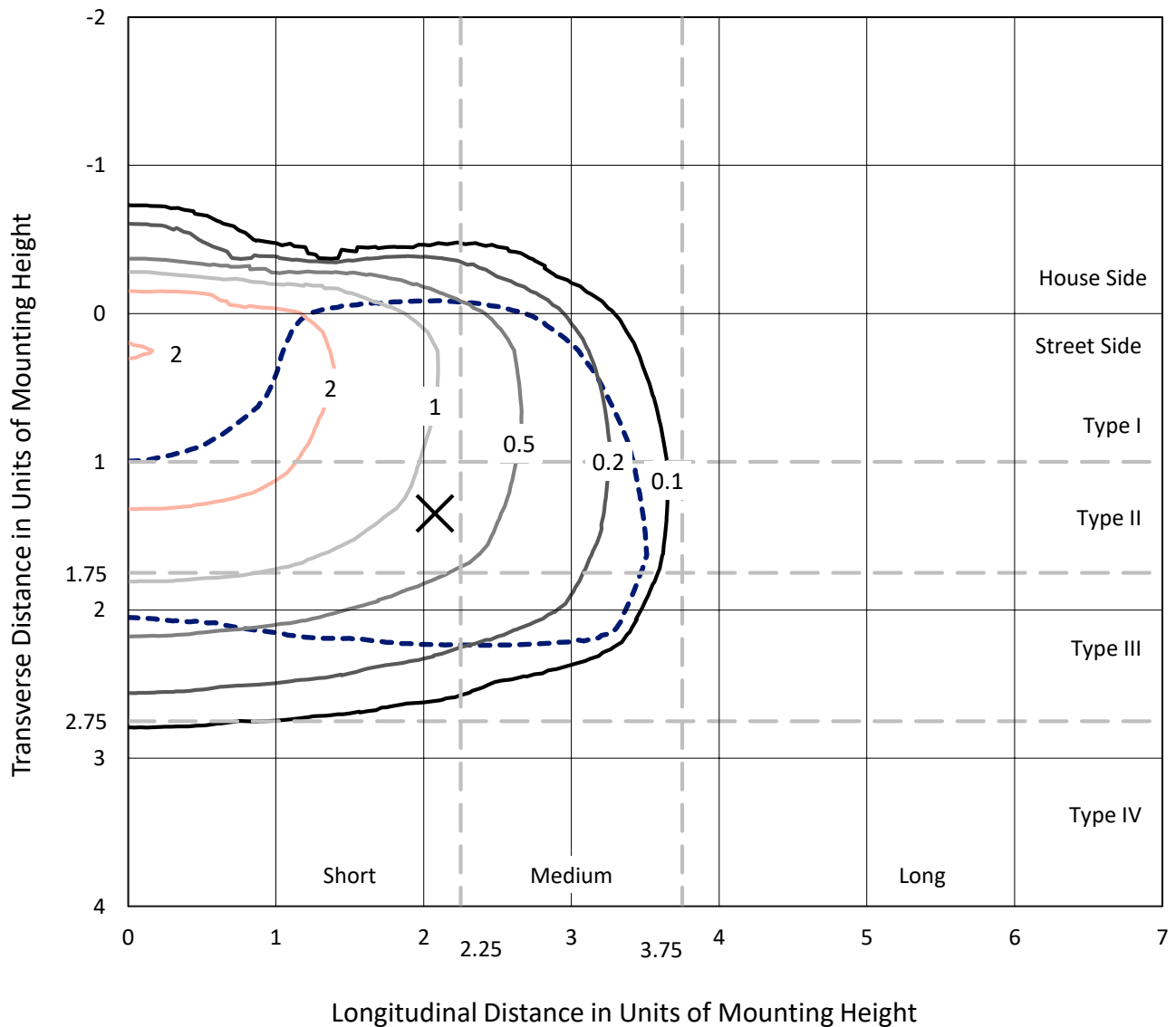


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

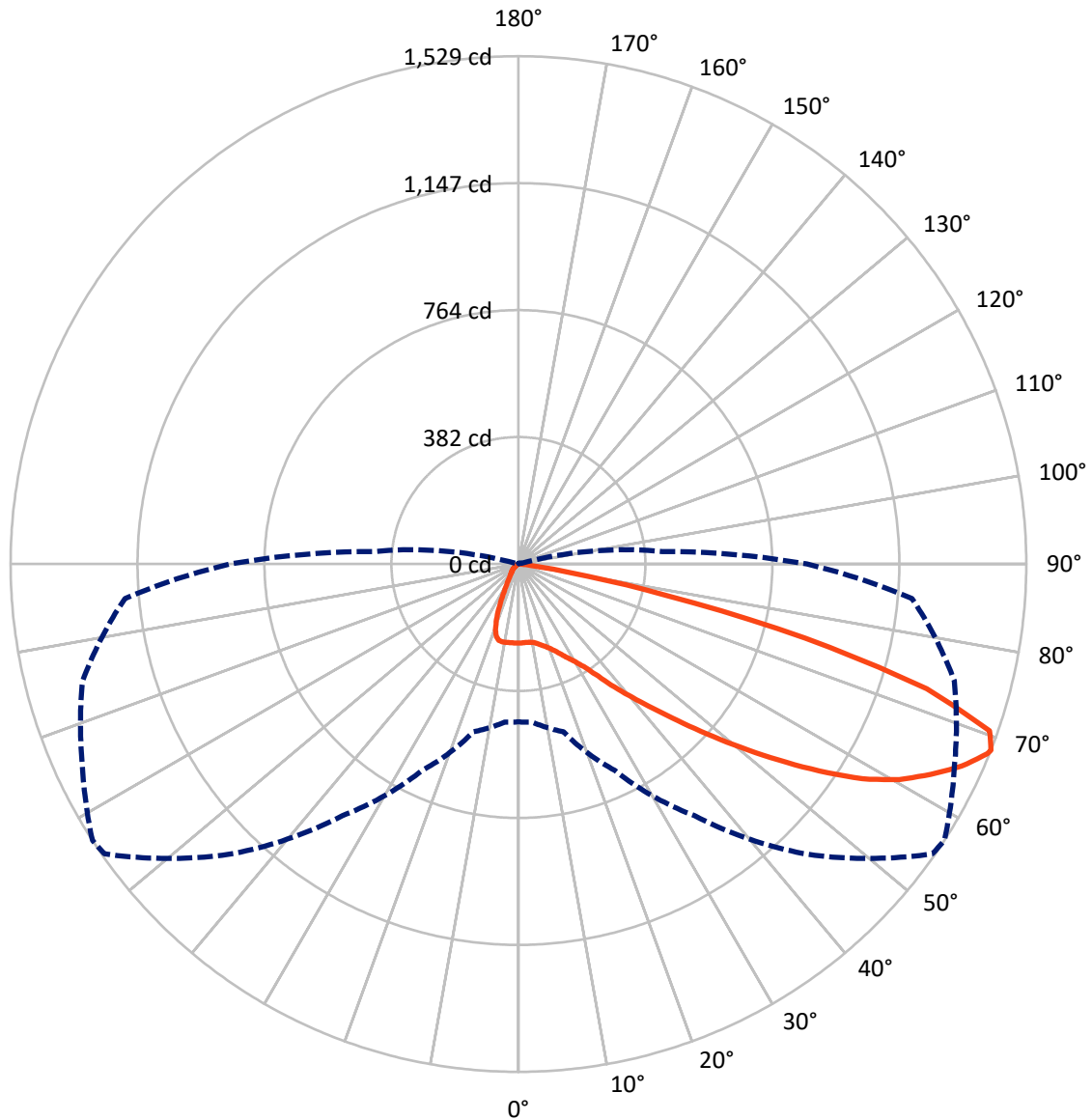


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical



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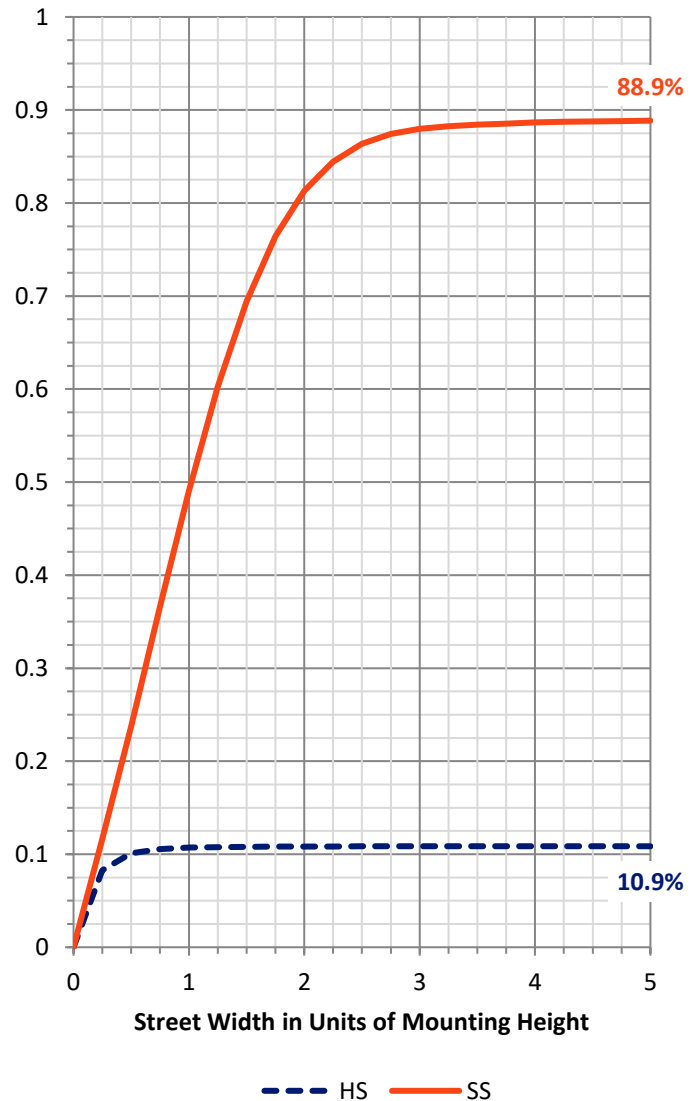
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	219.9	0.0	219.9
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	1785.1	0.0	1785.1
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	2005.0	0.0	2005.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.3	1.1
10°-20°	61.8	3.1
20°-30°	106.6	5.3
30°-40°	184.0	9.2
40°-50°	314.7	15.7
50°-60°	503.4	25.1
60°-70°	581.7	29.0
70°-80°	222.3	11.1
80°-90°	8.3	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°	2005.0	100.0
0°-180°	2005.0	100.0

**Coefficient of Utilization**



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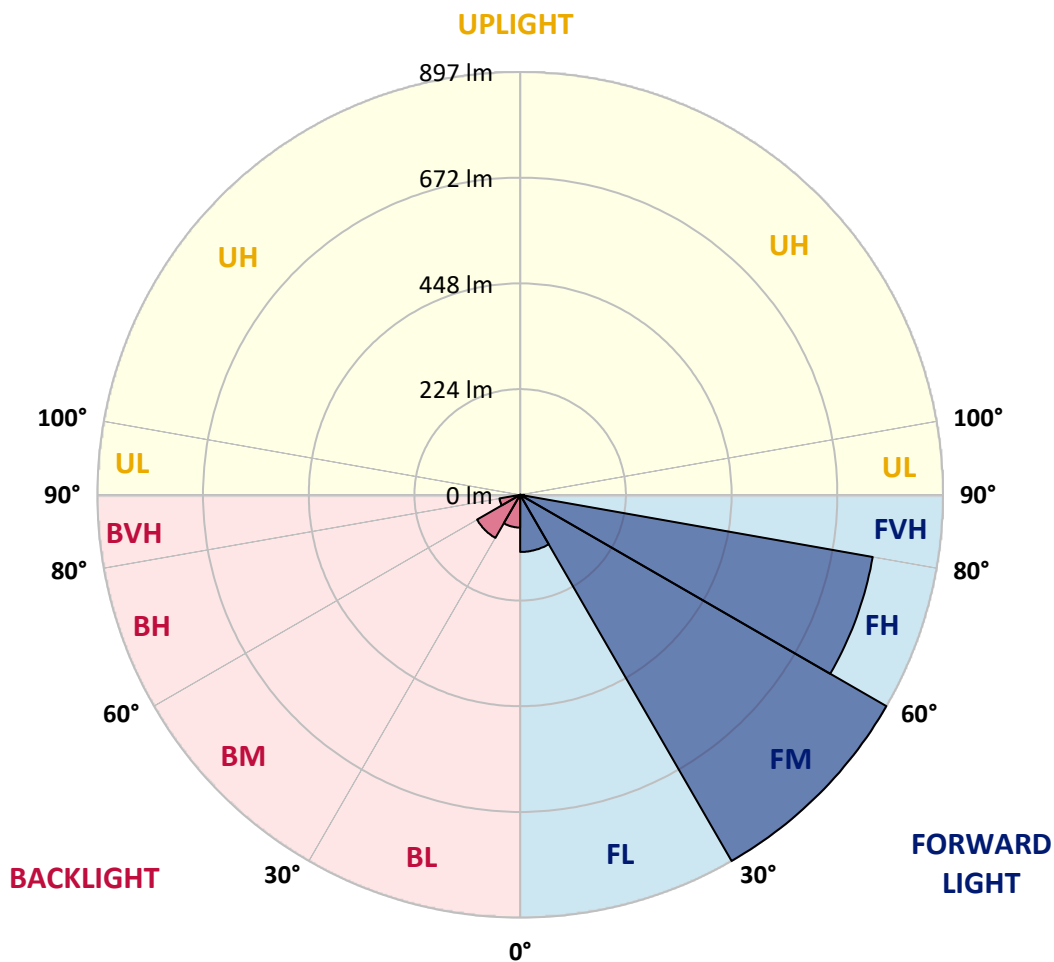
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	121.2	6.0			
FM (30°-60°)	896.6	44.7			
FH (60°-80°)	759.2	37.9			G1/1800
FVH (80°-90°)	8.2	0.4			G0/10
BL (0°-30°)	69.5	3.5	B0/110		
BM (30°-60°)	105.4	5.3	B0/220		
BH (60°-80°)	44.8	2.2	B0/110		G0/110
BVH (80°-90°)	0.2	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2
2.5°	232.7	233.7	234.5	234.9	235.5	236.7	237.1	237.7	238.0	238.0	238.6
5°	223.5	224.6	226.2	227.5	230.2	233.6	236.1	237.0	238.7	240.2	241.1
7.5°	214.9	216.3	218.1	221.3	225.8	231.3	236.4	237.8	241.1	244.3	245.9
10°	209.4	210.5	212.9	217.4	223.4	231.0	238.2	239.9	245.5	251.0	254.0
12.5°	207.5	208.5	211.0	216.1	223.5	232.5	242.4	244.8	253.1	261.0	265.3
15°	210.3	210.5	213.2	218.0	225.3	236.0	249.3	252.2	262.7	272.9	278.3
17.5°	220.9	220.0	221.5	223.6	229.3	240.6	256.6	260.9	274.9	287.0	292.0
20°	247.4	247.4	244.2	238.5	238.6	247.8	266.5	271.3	288.5	302.4	307.0
22.5°	292.9	292.0	285.6	271.6	258.8	260.2	278.5	284.8	304.8	319.7	321.2
25°	347.5	346.4	336.5	316.8	294.7	280.3	294.8	302.1	324.2	337.4	334.3
27.5°	405.3	404.4	394.6	370.2	338.6	312.4	314.3	321.1	344.1	357.0	347.1
30°	461.3	461.6	451.8	426.8	391.1	353.2	338.9	342.9	363.3	376.5	362.3
32.5°	514.6	515.0	506.5	478.6	445.2	400.7	373.1	372.0	385.7	398.7	382.4
35°	562.1	563.1	557.3	535.6	500.2	453.6	417.3	414.9	417.4	432.1	413.2
37.5°	607.9	608.5	604.1	585.8	556.2	511.8	473.3	469.8	464.3	475.5	453.8
40°	658.0	656.6	651.6	635.0	609.6	575.9	533.4	527.3	517.7	527.8	507.3
42.5°	704.7	703.1	703.9	685.2	663.7	641.9	603.4	593.0	587.4	599.0	572.9
45°	763.0	762.1	765.0	748.7	731.3	715.5	683.7	672.4	669.9	683.5	652.3
47.5°	820.5	822.6	831.4	824.5	817.5	803.6	768.8	763.7	765.2	781.6	736.0
50°	868.5	871.0	895.2	903.1	913.3	905.1	870.2	867.1	873.1	887.9	826.0
52.5°	903.2	908.2	938.3	975.0	1012.0	1017.5	982.7	979.8	987.9	990.2	895.6
55°	927.3	931.8	965.8	1032.9	1108.2	1131.9	1110.3	1099.3	1097.8	1075.3	968.8
57.5°	931.6	931.1	980.0	1070.4	1183.6	1244.8	1231.1	1220.3	1189.2	1154.0	1052.7
60°	907.5	910.2	967.0	1083.3	1231.1	1330.2	1331.3	1317.2	1268.8	1230.5	1134.1
62.5°	833.3	844.5	901.9	1049.3	1230.5	1364.6	1404.6	1393.9	1336.0	1293.2	1216.5
65°	713.1	717.1	771.8	932.7	1147.3	1350.2	1470.7	1466.7	1396.6	1354.0	1258.9
67.5°	520.8	512.1	569.6	734.5	971.4	1266.2	1518.1	1523.1	1443.3	1366.5	1213.8
68°	475.3	477.8	522.6	685.4	925.3	1236.6	1521.3	1528.9	1448.0	1358.4	1189.1
70°	283.3	288.2	328.1	471.9	703.9	1068.7	1487.5	1505.0	1420.3	1274.3	1028.5
72.5°	72.3	78.2	115.9	211.2	402.1	752.9	1255.7	1285.4	1233.1	1033.8	694.4
75°	29.8	31.3	41.4	69.6	149.8	339.2	827.7	891.2	854.9	618.9	313.8
77.5°	20.6	21.6	26.6	38.6	64.8	115.0	405.8	451.7	406.9	211.2	68.4
80°	14.8	15.6	19.1	25.7	37.3	41.1	132.3	152.9	121.4	46.4	17.0
82.5°	8.8	9.5	14.2	18.3	22.7	19.6	32.9	37.4	35.2	23.0	7.6
85°	4.4	5.1	9.6	13.1	12.2	8.2	10.0	11.2	13.8	14.0	4.1
87.5°	0.3	0.6	5.6	7.9	3.4	1.9	2.9	3.6	4.9	6.9	1.7
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°	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2	238.2
2.5°	238.9	239.0	238.3	238.1	238.2	237.1	236.6	236.8	236.8	237.1	236.6
5°	241.3	241.3	240.1	238.6	237.8	235.6	234.2	233.8	233.5	233.3	232.9
7.5°	246.4	245.8	243.8	240.5	237.7	232.9	229.3	227.4	226.5	226.1	225.8
10°	254.6	253.6	250.3	244.1	237.6	229.1	221.3	215.7	211.0	209.1	208.0
12.5°	265.7	264.2	258.6	248.4	236.9	221.4	204.3	187.9	172.6	166.4	163.3
15°	278.5	276.4	267.5	252.0	233.0	203.8	166.8	138.0	116.9	108.9	105.5
17.5°	291.5	288.7	275.3	254.3	221.4	167.5	117.0	88.4	74.2	70.4	69.1
20°	304.6	300.4	282.0	252.6	195.0	120.8	77.2	64.6	60.5	59.3	59.0
22.5°	317.0	310.6	288.1	245.9	154.4	81.1	61.1	57.1	55.7	55.1	54.9
25°	327.8	318.8	293.4	225.4	109.3	61.2	55.0	53.7	52.0	50.7	50.8
27.5°	338.0	327.1	296.6	191.7	72.9	52.3	50.9	49.1	46.0	44.2	44.2
30°	350.2	338.1	299.0	147.5	53.7	46.3	45.1	42.4	38.1	35.7	35.7
32.5°	368.6	354.8	297.5	103.5	44.5	40.7	38.0	34.2	29.6	27.3	27.2
35°	396.8	380.6	286.7	67.9	39.2	35.4	31.1	26.5	22.4	20.5	20.4
37.5°	434.7	415.1	262.4	48.5	35.2	30.4	25.3	20.2	17.2	15.9	15.8
40°	483.9	455.2	227.7	39.3	31.4	25.7	19.5	15.6	13.6	12.6	12.7
42.5°	543.0	498.1	186.1	33.9	27.7	21.1	15.3	12.3	11.0	10.3	10.1
45°	608.6	540.5	142.5	30.2	24.0	17.1	11.9	9.8	8.7	8.3	8.3
47.5°	680.7	581.7	104.3	27.0	20.0	13.2	9.6	8.0	7.1	6.8	6.7
50°	746.2	610.4	75.2	23.6	16.4	10.4	7.8	6.6	6.1	5.7	5.7
52.5°	800.8	619.4	55.4	19.9	13.3	8.3	6.4	5.7	5.1	4.8	4.8
55°	848.9	615.7	41.1	16.4	10.7	6.8	5.5	4.8	4.4	4.1	4.1
57.5°	895.0	603.7	30.7	13.4	8.6	5.5	4.6	4.1	3.6	3.4	3.4
60°	932.6	583.8	22.8	10.8	6.9	4.5	3.9	3.3	2.9	2.7	2.7
62.5°	963.1	561.8	16.8	8.9	5.5	3.5	3.0	2.7	2.2	1.9	1.9
65°	963.3	525.3	12.6	7.4	4.3	2.7	2.3	2.2	1.4	1.1	1.0
67.5°	893.6	452.9	9.7	6.4	3.3	2.1	1.7	1.8	0.8	0.5	0.4
68°	868.3	434.5	9.1	6.3	3.1	2.0	1.6	1.8	0.7	0.4	0.3
70°	732.1	345.7	7.3	6.1	2.7	1.5	1.3	1.8	0.6	0.3	0.2
72.5°	468.2	200.6	5.4	4.8	2.1	1.1	0.9	1.6	0.6	0.2	0.1
75°	199.3	62.2	3.7	3.4	1.2	0.9	0.6	1.0	0.4	0.1	0.0
77.5°	42.0	14.0	2.2	2.1	0.9	0.6	0.4	0.3	0.1	0.0	0.0
80°	10.8	4.1	1.1	1.0	0.5	0.3	0.2	0.0	0.0	0.0	0.0
82.5°	3.4	1.6	0.7	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.3	0.1	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)