

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: P348815

Luminaire Tested: **ARCH-N-PA1-20-730-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348815  
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-PA1-20-730-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2183 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

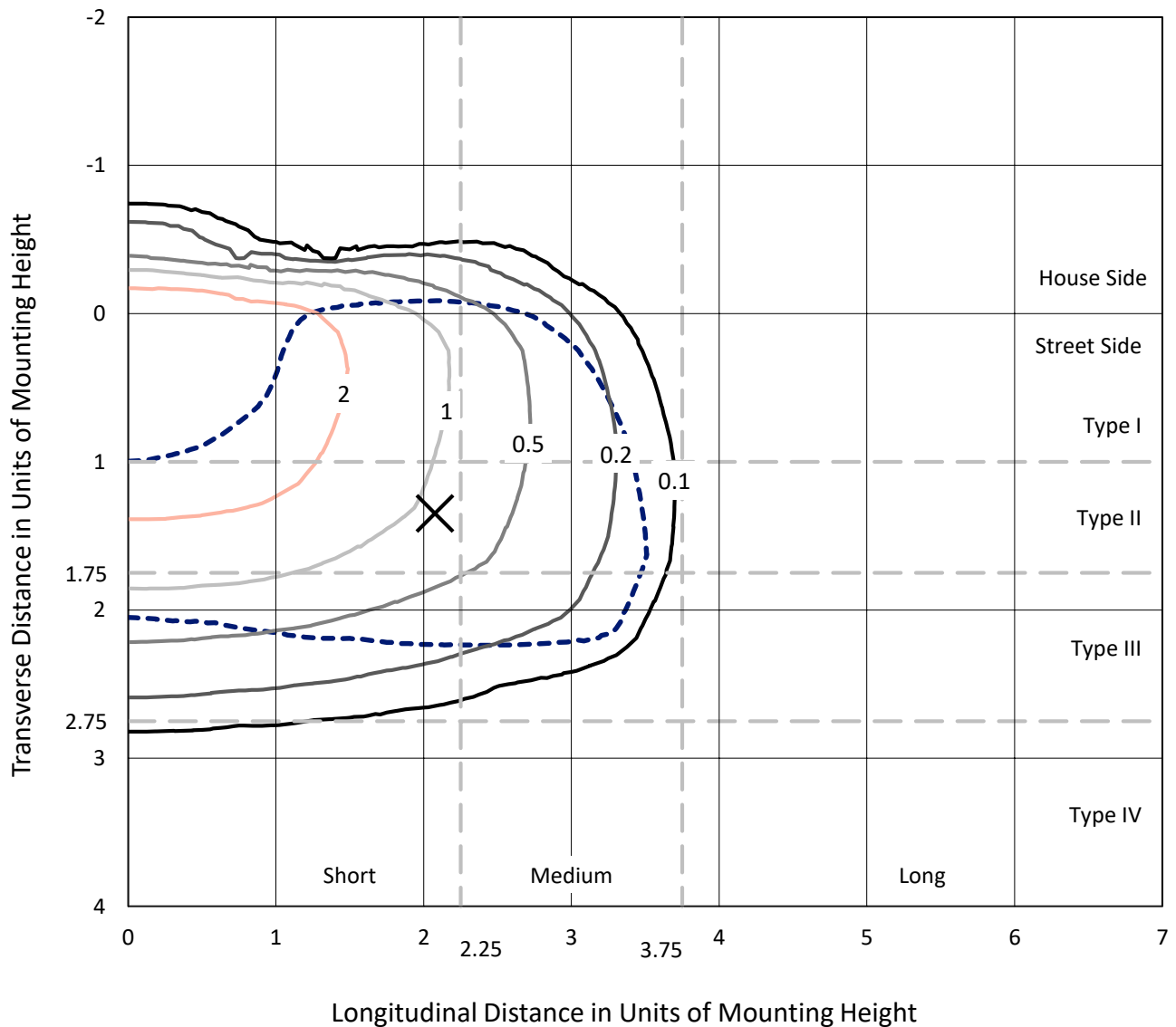


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

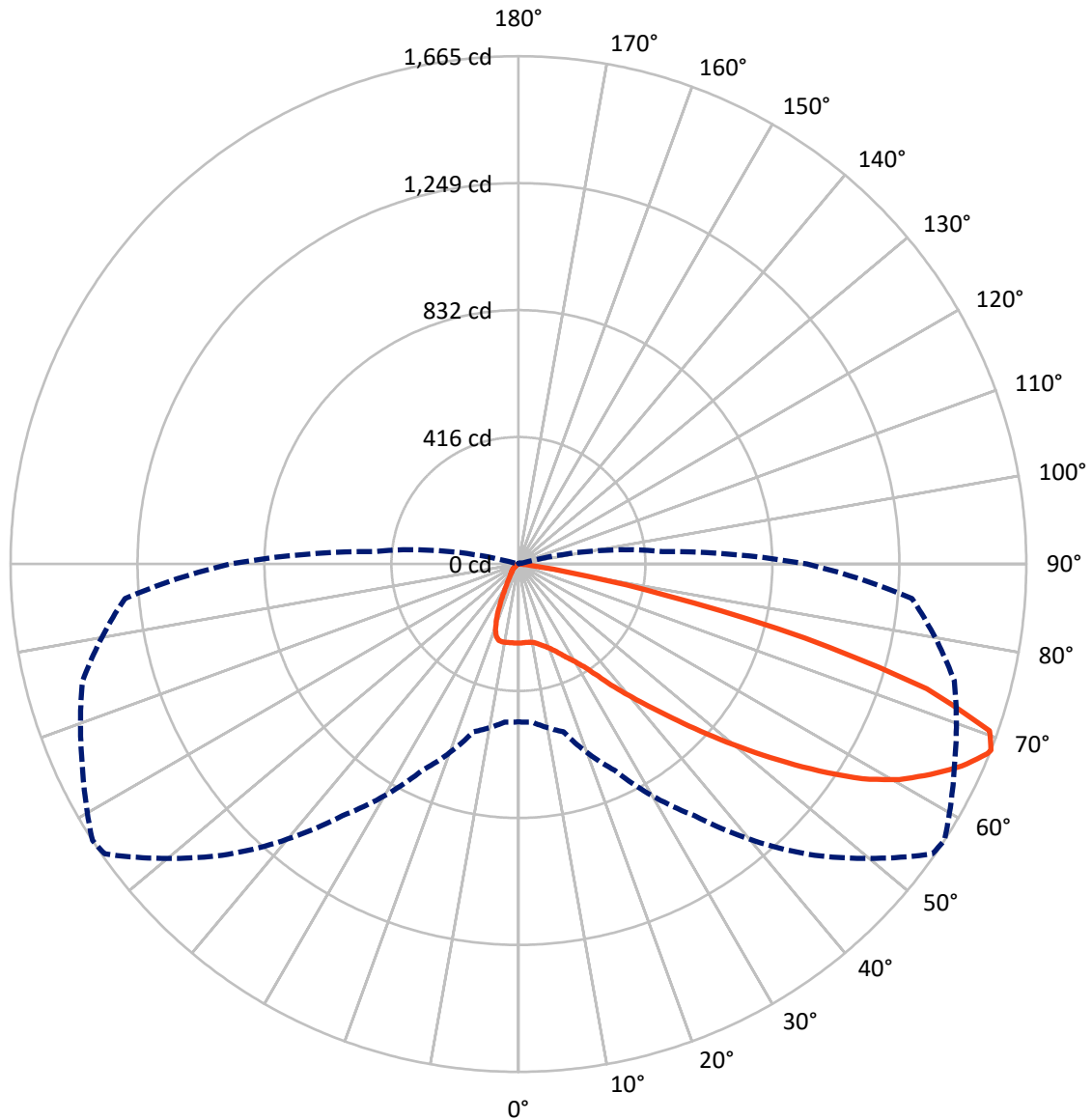


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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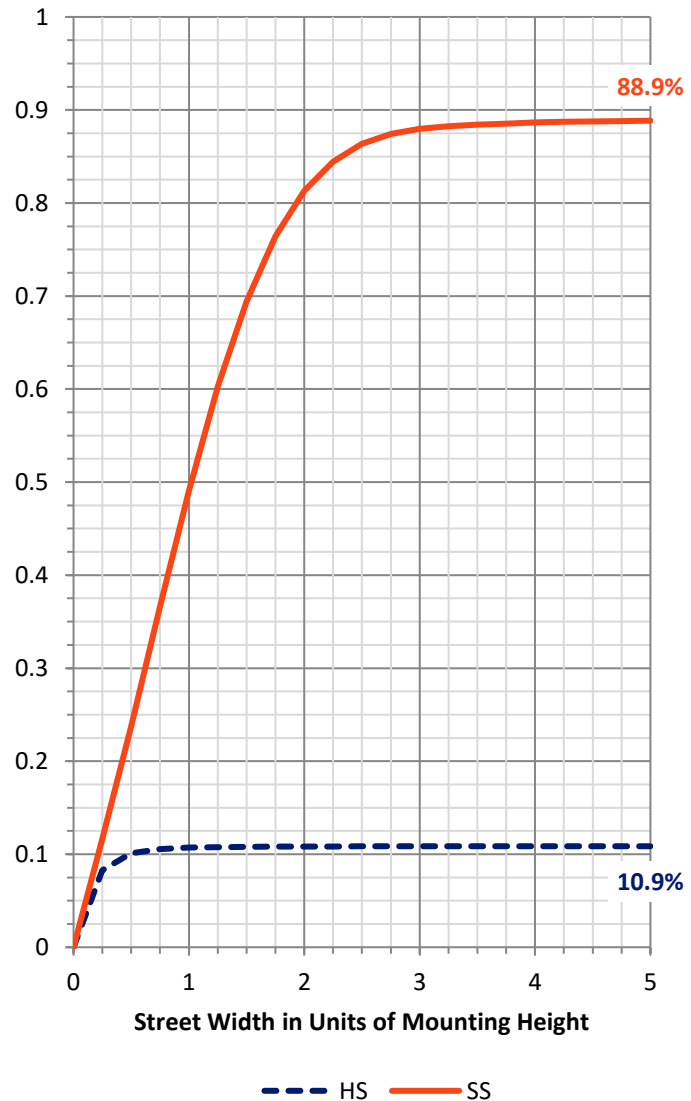
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	239.4	0.0	239.4
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	1943.6	0.0	1943.6
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	2183.0	0.0	2183.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.3	1.1
10°-20°	67.3	3.1
20°-30°	116.0	5.3
30°-40°	200.3	9.2
40°-50°	342.6	15.7
50°-60°	548.1	25.1
60°-70°	633.3	29.0
70°-80°	242.0	11.1
80°-90°	9.1	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°	2183.0	100.0
0°-180°	2183.0	100.0



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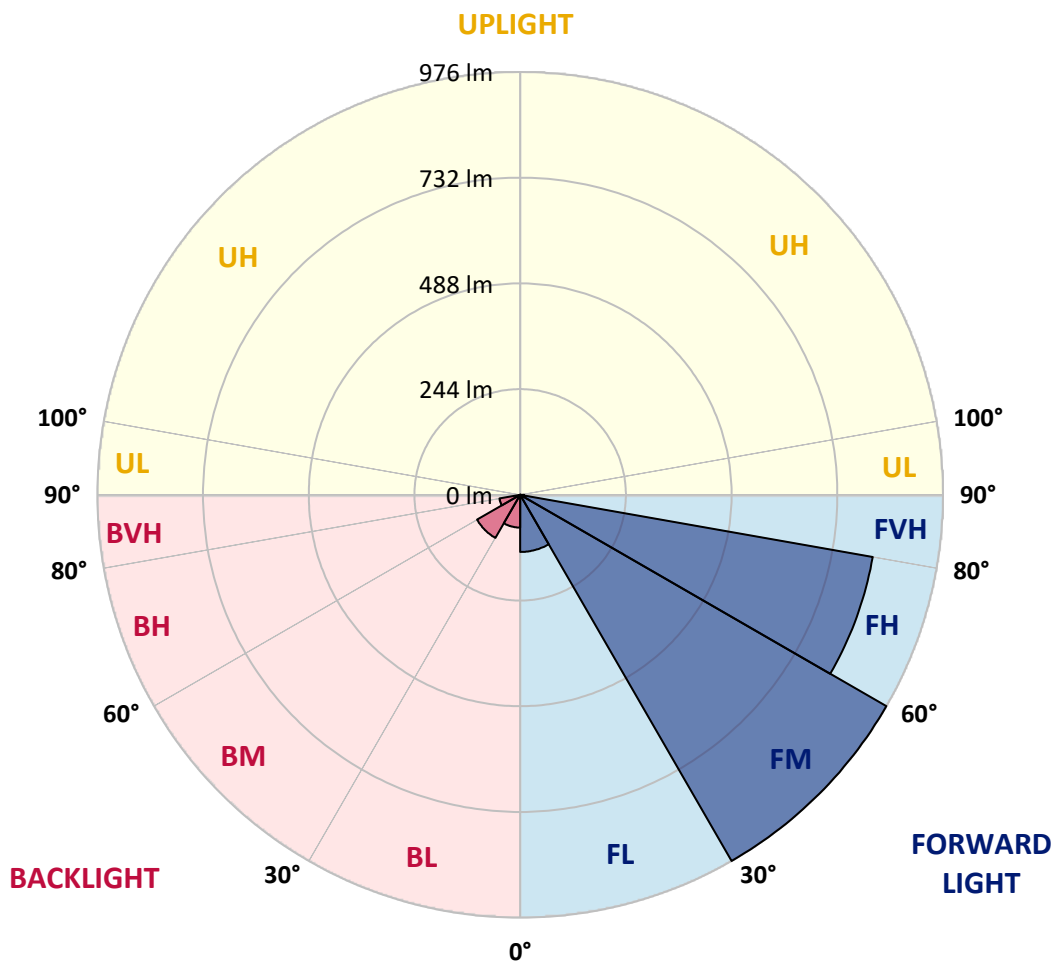
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	131.9	6.0			
FM (30°-60°)	976.2	44.7			
FH (60°-80°)	826.6	37.9			G1/1800
FVH (80°-90°)	8.9	0.4			G0/10
BL (0°-30°)	75.7	3.5	B0/110		
BM (30°-60°)	114.8	5.3	B0/220		
BH (60°-80°)	48.7	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°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	253.3	254.4	255.3	255.8	256.4	257.7	258.2	258.8	259.1	259.1	259.8
5°	243.3	244.5	246.3	247.7	250.6	254.3	257.0	258.1	259.9	261.6	262.5
7.5°	234.0	235.5	237.5	240.9	245.9	251.9	257.4	258.9	262.5	266.0	267.8
10°	228.0	229.2	231.8	236.7	243.2	251.6	259.4	261.2	267.3	273.2	276.5
12.5°	226.0	227.0	229.8	235.2	243.3	253.1	263.9	266.5	275.6	284.2	288.8
15°	228.9	229.2	232.1	237.3	245.3	256.9	271.5	274.6	286.0	297.2	303.0
17.5°	240.5	239.6	241.1	243.4	249.7	262.0	279.4	284.1	299.3	312.5	317.9
20°	269.4	269.4	265.9	259.7	259.8	269.8	290.2	295.4	314.1	329.3	334.2
22.5°	318.9	317.9	310.9	295.7	281.8	283.3	303.3	310.1	331.9	348.1	349.7
25°	378.3	377.2	366.3	345.0	320.8	305.2	321.0	328.9	353.0	367.4	364.0
27.5°	441.3	440.3	429.6	403.1	368.7	340.1	342.2	349.6	374.6	388.7	377.9
30°	502.3	502.6	492.0	464.7	425.8	384.6	369.0	373.4	395.5	409.9	394.4
32.5°	560.3	560.7	551.5	521.1	484.7	436.3	406.2	405.0	419.9	434.1	416.3
35°	612.0	613.0	606.7	583.1	544.6	493.9	454.4	451.7	454.5	470.5	449.8
37.5°	661.9	662.5	657.7	637.8	605.6	557.2	515.3	511.5	505.5	517.8	494.1
40°	716.5	714.9	709.4	691.4	663.7	627.1	580.7	574.1	563.7	574.6	552.3
42.5°	767.3	765.5	766.4	746.0	722.7	698.9	657.0	645.7	639.6	652.2	623.8
45°	830.7	829.8	832.9	815.1	796.3	779.0	744.4	732.1	729.4	744.1	710.2
47.5°	893.4	895.7	905.3	897.7	890.1	874.9	837.0	831.5	833.1	851.0	801.3
50°	945.6	948.3	974.6	983.3	994.3	985.5	947.5	944.1	950.6	966.7	899.4
52.5°	983.4	988.9	1021.6	1061.5	1101.8	1107.8	1069.9	1066.8	1075.6	1078.1	975.1
55°	1009.6	1014.5	1051.5	1124.6	1206.6	1232.4	1208.8	1196.9	1195.2	1170.7	1054.8
57.5°	1014.3	1013.7	1067.0	1165.4	1288.7	1355.3	1340.4	1328.7	1294.8	1256.4	1146.2
60°	988.0	991.0	1052.9	1179.5	1340.3	1448.3	1449.4	1434.2	1381.4	1339.7	1234.7
62.5°	907.3	919.5	982.0	1142.5	1339.7	1485.8	1529.3	1517.7	1454.6	1408.0	1324.6
65°	776.4	780.8	840.3	1015.5	1249.2	1470.1	1601.3	1597.0	1520.6	1474.2	1370.7
67.5°	567.0	557.6	620.2	799.7	1057.6	1378.6	1652.9	1658.4	1571.5	1487.8	1321.6
68°	517.5	520.2	569.0	746.3	1007.5	1346.3	1656.3	1664.7	1576.5	1479.0	1294.7
70°	308.4	313.8	357.3	513.8	766.4	1163.5	1619.6	1638.7	1546.4	1387.4	1119.9
72.5°	78.8	85.2	126.2	230.0	437.8	819.8	1367.2	1399.5	1342.6	1125.5	756.0
75°	32.4	34.1	45.1	75.8	163.1	369.3	901.1	970.3	930.8	673.8	341.7
77.5°	22.4	23.5	29.0	42.0	70.6	125.2	441.8	491.8	443.0	230.0	74.5
80°	16.1	17.0	20.7	28.0	40.6	44.7	144.0	166.5	132.2	50.5	18.5
82.5°	9.6	10.3	15.5	19.9	24.7	21.4	35.8	40.7	38.3	25.1	8.3
85°	4.7	5.6	10.4	14.2	13.3	9.0	10.9	12.2	15.1	15.3	4.4
87.5°	0.3	0.6	6.1	8.6	3.7	2.1	3.2	3.9	5.4	7.5	1.9
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°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	260.1	260.2	259.5	259.2	259.4	258.2	257.6	257.8	257.8	258.2	257.6
5°	262.7	262.7	261.5	259.8	258.9	256.5	255.0	254.5	254.2	254.0	253.6
7.5°	268.3	267.7	265.5	261.9	258.8	253.6	249.7	247.6	246.6	246.2	245.9
10°	277.3	276.1	272.5	265.8	258.7	249.5	240.9	234.8	229.8	227.7	226.5
12.5°	289.3	287.7	281.6	270.4	258.0	241.0	222.4	204.6	188.0	181.2	177.7
15°	303.3	300.9	291.3	274.4	253.7	221.9	181.6	150.3	127.3	118.6	114.9
17.5°	317.4	314.3	299.8	276.8	241.0	182.4	127.4	96.2	80.8	76.7	75.2
20°	331.7	327.1	307.1	275.0	212.3	131.5	84.0	70.3	65.9	64.6	64.2
22.5°	345.2	338.2	313.7	267.8	168.1	88.3	66.5	62.1	60.7	60.0	59.8
25°	356.9	347.1	319.5	245.5	119.0	66.7	59.9	58.4	56.6	55.2	55.3
27.5°	368.0	356.1	323.0	208.7	79.4	57.0	55.4	53.5	50.1	48.1	48.1
30°	381.3	368.1	325.6	160.6	58.4	50.4	49.1	46.1	41.5	38.9	38.9
32.5°	401.3	386.3	323.9	112.7	48.4	44.3	41.4	37.3	32.2	29.7	29.6
35°	432.0	414.3	312.1	73.9	42.7	38.5	33.9	28.8	24.4	22.3	22.2
37.5°	473.3	451.9	285.7	52.8	38.3	33.1	27.6	22.0	18.7	17.3	17.2
40°	526.8	495.6	247.9	42.8	34.2	28.0	21.3	17.0	14.8	13.7	13.8
42.5°	591.2	542.3	202.6	37.0	30.1	23.0	16.6	13.4	12.0	11.3	11.0
45°	662.6	588.5	155.1	32.9	26.1	18.6	13.0	10.6	9.5	9.1	9.1
47.5°	741.1	633.4	113.5	29.4	21.8	14.3	10.4	8.7	7.7	7.4	7.3
50°	812.5	664.5	81.9	25.7	17.9	11.4	8.5	7.2	6.6	6.2	6.2
52.5°	871.9	674.4	60.3	21.7	14.5	9.1	7.0	6.2	5.6	5.3	5.3
55°	924.3	670.3	44.8	17.9	11.7	7.4	6.0	5.3	4.7	4.4	4.4
57.5°	974.4	657.3	33.4	14.6	9.4	6.0	5.1	4.4	3.9	3.7	3.7
60°	1015.4	635.6	24.9	11.8	7.5	4.9	4.2	3.6	3.2	2.9	2.9
62.5°	1048.6	611.7	18.3	9.7	6.0	3.8	3.3	3.0	2.4	2.1	2.1
65°	1048.8	572.0	13.7	8.1	4.6	3.0	2.5	2.4	1.5	1.2	1.1
67.5°	973.0	493.1	10.5	6.9	3.6	2.3	1.9	2.0	0.8	0.5	0.4
68°	945.4	473.1	9.9	6.8	3.4	2.2	1.8	2.0	0.7	0.4	0.3
70°	797.1	376.3	7.9	6.6	3.0	1.7	1.4	2.0	0.6	0.3	0.2
72.5°	509.8	218.4	5.9	5.3	2.3	1.2	0.9	1.8	0.6	0.2	0.1
75°	217.0	67.7	4.0	3.7	1.3	0.9	0.6	1.1	0.4	0.1	0.0
77.5°	45.7	15.3	2.4	2.3	0.9	0.6	0.4	0.3	0.1	0.0	0.0
80°	11.8	4.4	1.2	1.1	0.5	0.3	0.2	0.0	0.0	0.0	0.0
82.5°	3.7	1.8	0.7	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	1.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	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)