

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: P348639

Luminaire Tested: **ARCH-N-PA1-19-727-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-19-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 370mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2519 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 19  
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

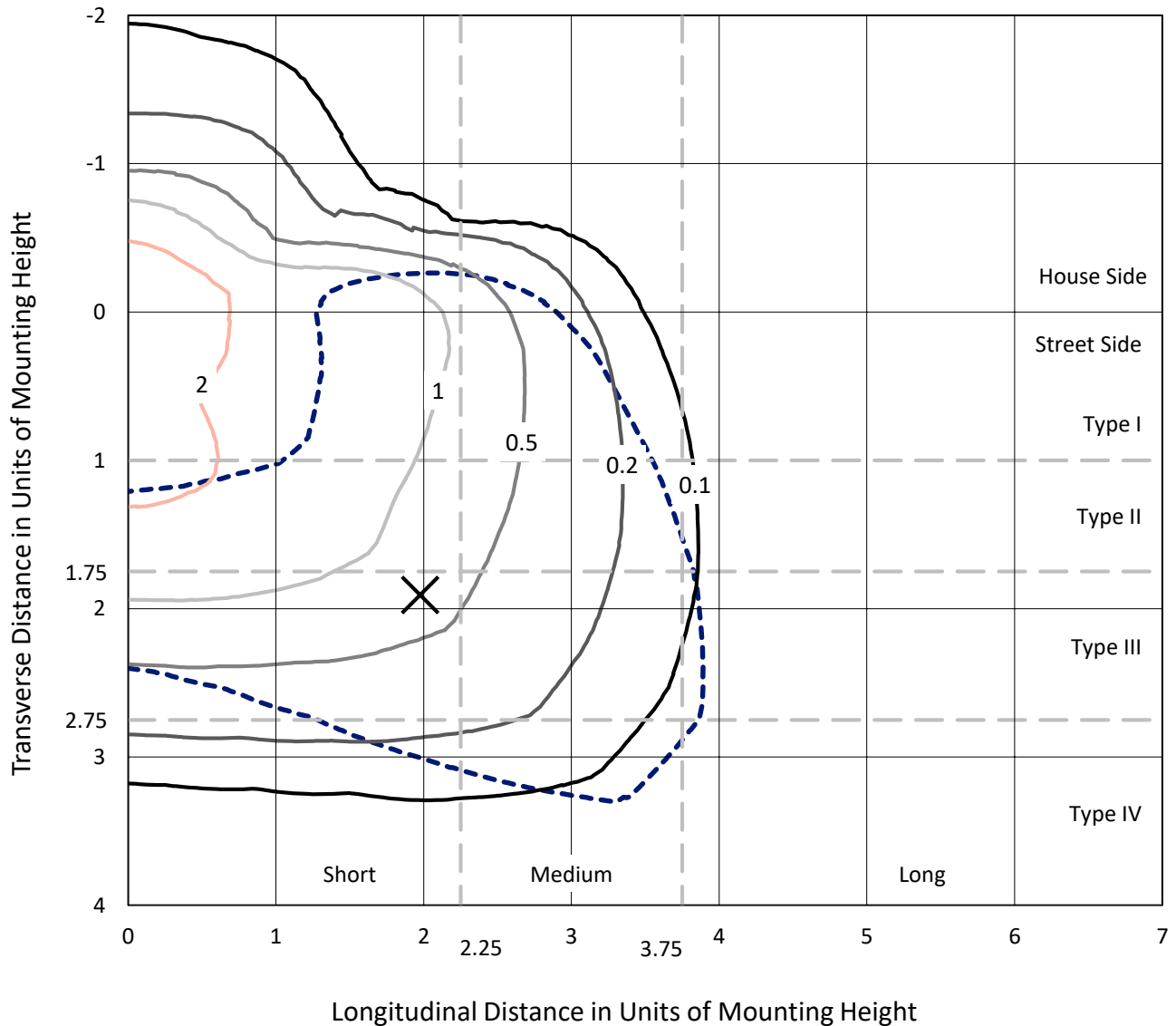


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

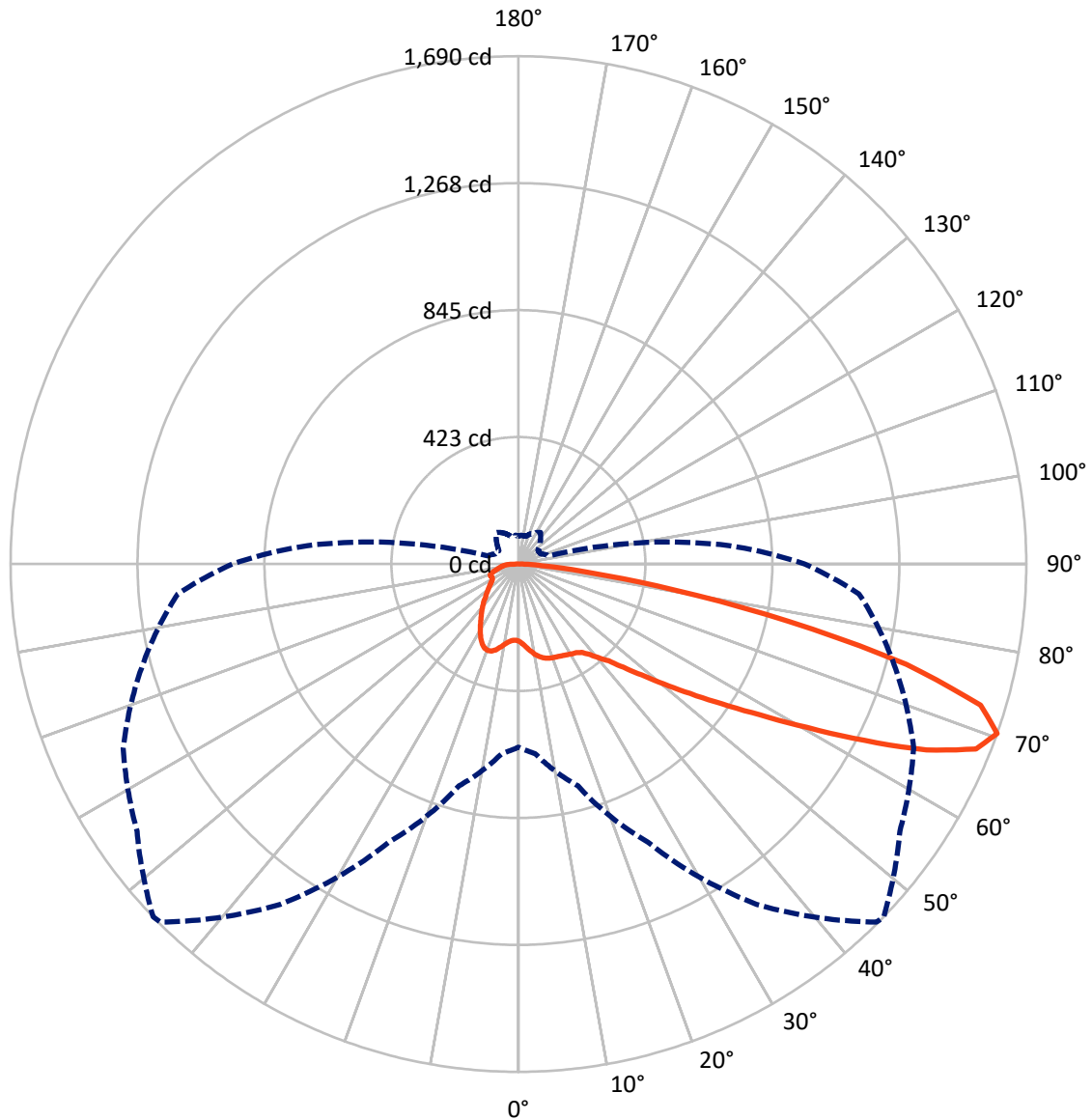


Based on 10 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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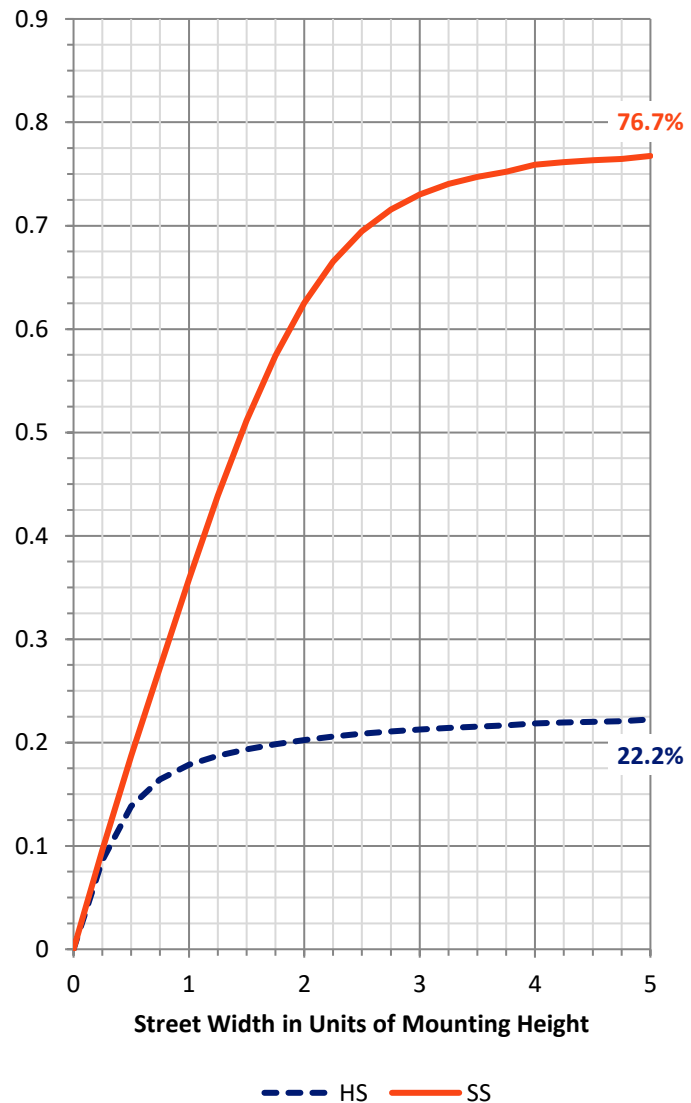
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	577.3	0.0	577.3
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	1941.7	0.0	1941.7
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	2519.0	0.0	2519.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.2	1.0
10°-20°	87.2	3.5
20°-30°	145.3	5.8
30°-40°	206.2	8.2
40°-50°	303.4	12.0
50°-60°	513.8	20.4
60°-70°	729.3	29.0
70°-80°	443.0	17.6
80°-90°	64.7	2.6
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°	2519.0	100.0
0°-180°	2519.0	100.0



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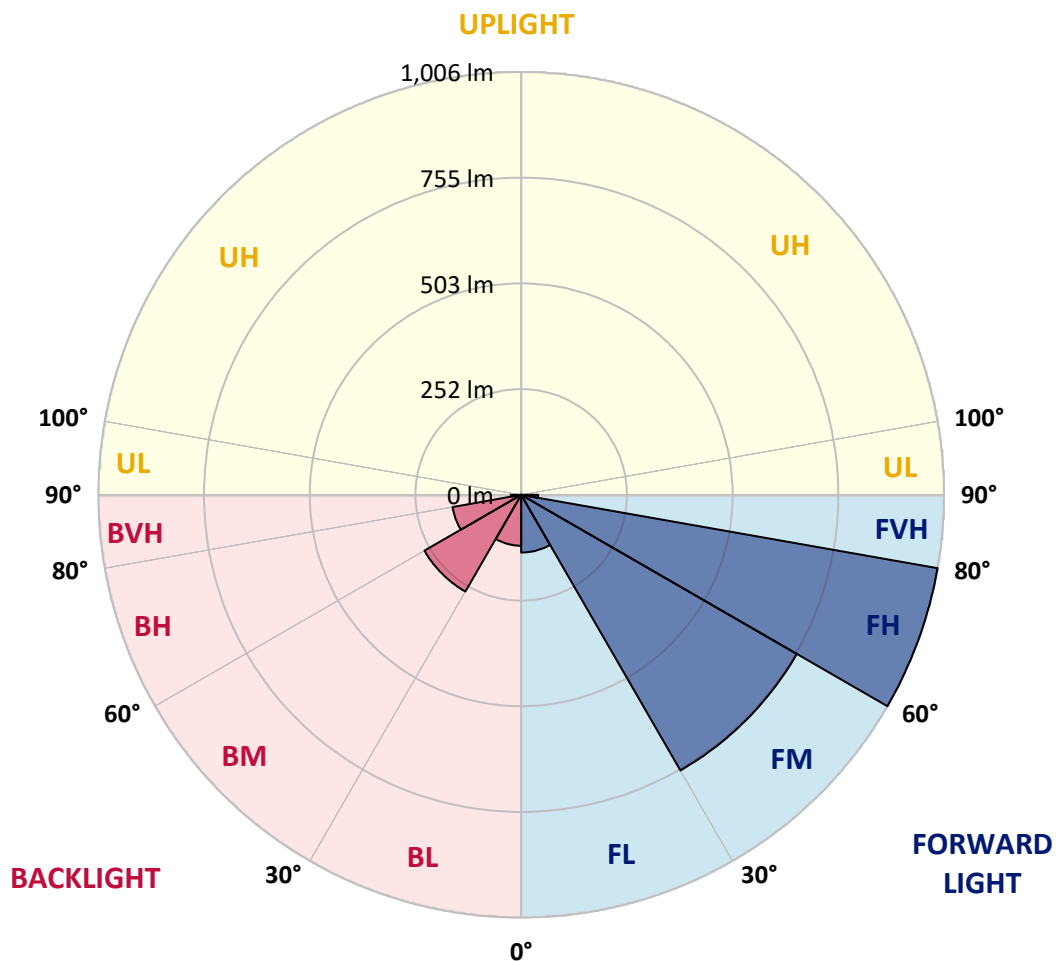
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	137.4	5.5			
FM	(30°-60°)	757.6	30.1			
FH	(60°-80°)	1006.3	39.9			G1/1800
FVH	(80°-90°)	40.3	1.6			G1/100
BL	(0°-30°)	121.2	4.8	B1/500		
BM	(30°-60°)	265.8	10.6	B1/1000		
BH	(60°-80°)	166.0	6.6	B1/500		G1/500
BVH	(80°-90°)	24.4	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6
2.5°	269.5	269.7	270.0	269.1	266.7	266.0	265.8	263.3	261.6	259.2	257.2
5°	291.0	291.2	290.7	288.3	282.9	279.0	278.6	272.9	267.8	262.2	258.1
7.5°	313.5	313.8	312.2	307.6	300.1	293.2	292.8	285.0	277.2	268.8	262.6
10°	333.4	332.4	329.7	323.4	314.5	306.0	305.7	297.6	288.5	278.4	270.2
12.5°	346.7	345.9	342.4	334.7	324.9	317.2	316.5	309.0	300.2	289.1	279.2
15°	354.1	354.7	350.0	341.2	331.7	325.2	324.6	319.2	311.4	300.3	288.9
17.5°	355.0	355.5	351.0	342.3	334.6	330.1	329.8	326.3	320.6	309.9	298.0
20°	349.5	349.8	346.1	339.0	333.9	332.5	332.4	330.9	326.6	317.2	305.6
22.5°	341.5	341.7	339.1	333.9	332.2	334.3	334.9	334.3	331.3	322.4	311.6
25°	339.5	339.3	336.6	331.3	332.8	337.3	338.1	338.4	336.3	328.5	319.1
27.5°	349.1	348.4	343.2	334.7	335.7	341.2	342.2	344.7	343.4	336.6	327.8
30°	376.7	375.7	364.9	347.8	343.2	346.0	347.3	351.3	351.6	345.9	339.2
32.5°	423.4	422.2	402.8	372.3	355.9	350.9	352.2	358.1	361.3	356.9	349.7
35°	482.5	481.0	455.7	414.0	377.1	360.3	361.2	365.9	372.3	366.1	356.6
37.5°	544.0	540.5	516.1	462.9	410.8	380.4	380.4	381.0	384.1	371.1	364.7
40°	605.3	601.7	579.7	520.5	454.4	412.1	410.1	396.7	394.3	383.2	381.0
42.5°	662.2	661.1	648.1	585.6	505.6	443.2	440.4	417.8	418.3	411.4	411.5
45°	722.7	722.7	712.1	651.3	565.3	493.2	490.4	457.1	462.2	459.0	466.7
47.5°	772.1	773.6	772.2	719.7	634.7	556.7	551.7	511.5	526.0	537.0	559.3
50°	822.5	824.9	825.2	794.8	718.5	632.2	626.5	583.9	616.2	647.6	691.5
52.5°	895.7	901.1	879.5	869.7	821.3	721.9	716.3	676.9	730.9	774.9	850.5
55°	963.5	958.8	943.4	949.4	931.3	824.0	819.7	785.2	858.6	915.9	1014.0
57.5°	1000.3	999.9	1015.4	1041.3	1049.9	949.8	946.3	912.7	1002.7	1045.7	1167.6
60°	1043.4	1044.0	1082.4	1141.1	1176.6	1106.5	1105.0	1079.5	1142.6	1166.9	1288.0
62.5°	1049.4	1060.3	1126.5	1227.5	1295.3	1289.6	1293.1	1229.7	1267.8	1263.6	1377.9
65°	980.0	994.3	1114.1	1253.6	1413.2	1489.9	1493.1	1380.9	1366.5	1346.3	1410.1
67.5°	837.8	859.0	989.1	1196.8	1452.1	1637.9	1642.4	1498.0	1448.4	1374.3	1332.7
70°	609.7	633.2	764.2	1022.2	1382.8	1685.3	1690.3	1549.8	1451.5	1294.6	1137.7
72.5°	368.3	386.7	494.7	752.5	1167.1	1599.0	1608.1	1484.1	1325.2	1096.5	840.1
75°	161.7	173.8	239.2	433.6	835.5	1323.0	1334.3	1270.3	1076.7	796.9	496.5
77.5°	68.9	72.3	98.1	188.4	472.3	904.0	919.6	928.2	730.5	433.6	209.8
80°	42.9	44.3	55.5	85.3	221.0	507.8	524.5	546.1	362.8	159.4	73.3
82.5°	26.1	27.7	36.9	51.6	115.1	230.2	238.2	253.4	140.8	68.9	37.9
85°	15.7	16.8	22.6	32.6	65.5	90.5	90.4	100.0	66.3	44.3	20.0
87.5°	7.5	8.4	12.1	16.9	33.0	34.0	31.8	36.0	40.3	29.1	10.1
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°	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6	256.6
2.5°	256.5	256.1	255.0	254.1	254.0	253.4	253.0	253.3	253.6	253.7	253.7
5°	256.4	255.4	254.0	253.4	254.1	255.2	256.5	258.2	259.2	260.0	260.5
7.5°	260.5	258.7	257.1	256.7	258.3	261.0	264.0	267.6	270.1	271.8	272.2
10°	267.4	265.2	263.5	263.9	266.6	270.6	274.7	279.4	283.2	285.5	285.7
12.5°	275.3	273.2	271.6	273.1	277.7	282.5	286.8	290.9	294.3	296.6	296.6
15°	284.5	282.9	281.1	284.5	290.7	295.0	296.8	298.8	300.7	302.4	302.1
17.5°	293.3	291.8	290.9	294.8	301.3	303.3	302.1	300.6	300.6	301.6	301.7
20°	300.9	299.6	300.2	304.1	307.4	305.3	300.9	296.2	294.3	294.8	295.3
22.5°	307.5	306.9	308.7	310.5	308.1	300.9	292.6	286.3	284.0	283.8	284.0
25°	315.3	315.2	317.4	314.1	303.4	290.1	279.0	272.8	271.6	272.6	274.3
27.5°	324.9	325.9	327.0	315.0	294.0	273.8	262.5	258.3	259.6	262.1	263.7
30°	337.2	339.8	337.4	312.8	280.3	255.2	244.4	243.2	246.7	250.3	252.0
32.5°	349.2	353.3	347.4	307.2	262.8	235.4	227.1	226.7	231.0	234.5	236.9
35°	358.9	366.9	354.9	296.1	242.4	217.2	211.1	208.8	210.3	214.4	217.2
37.5°	371.5	384.8	360.1	279.1	220.3	202.2	195.1	189.7	188.4	190.0	191.4
40°	394.5	412.2	362.5	255.4	198.8	187.2	180.0	172.2	166.7	162.8	162.8
42.5°	432.1	447.8	360.9	226.6	178.9	172.6	164.4	155.3	146.6	137.6	136.9
45°	493.1	500.7	356.3	196.1	161.4	157.2	149.6	140.5	128.8	118.6	117.7
47.5°	590.8	574.0	349.1	169.5	145.9	144.2	137.2	126.7	114.3	106.1	105.4
50°	724.0	679.7	345.5	148.3	132.3	132.8	127.1	116.0	104.3	98.3	97.6
52.5°	883.3	802.9	352.3	131.9	121.4	123.2	118.9	108.5	98.7	94.0	93.3
55°	1048.5	930.5	359.7	120.0	111.0	114.6	113.1	104.6	95.7	91.3	90.7
57.5°	1190.0	1025.8	345.0	110.3	101.8	107.3	108.6	102.1	94.1	90.2	89.5
60°	1279.0	1064.1	306.6	101.3	94.5	101.6	106.0	101.4	94.7	94.4	93.9
62.5°	1321.3	1060.8	248.9	94.1	89.9	99.1	107.9	105.3	101.6	104.7	105.0
65°	1302.3	1010.1	185.3	89.4	86.6	100.0	113.6	112.6	103.6	106.7	107.2
67.5°	1177.5	889.1	137.2	85.3	83.0	102.7	124.0	115.0	99.7	102.0	100.6
70°	951.7	704.9	105.9	80.6	79.3	102.3	128.6	113.5	95.5	96.0	92.3
72.5°	656.3	480.7	86.1	76.3	74.0	93.3	125.3	109.9	92.0	88.0	83.1
75°	356.9	258.0	73.2	71.8	64.6	81.9	119.3	107.3	88.8	83.5	80.8
77.5°	140.4	107.1	63.5	65.7	56.5	72.3	112.6	102.4	84.4	77.5	76.1
80°	57.3	54.7	52.7	56.8	48.5	63.3	104.5	96.6	79.1	71.9	69.1
82.5°	32.5	34.0	40.9	44.8	39.4	58.3	100.6	92.0	72.8	64.4	61.1
85°	16.6	19.9	28.5	32.2	29.0	49.6	92.7	80.5	58.4	49.3	49.6
87.5°	8.0	11.1	18.0	20.2	18.8	35.9	69.2	58.4	45.5	36.0	34.9
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)