

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: P397726

Luminaire Tested: **ARCH-S-PA1-30-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397726  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
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-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3496 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - 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

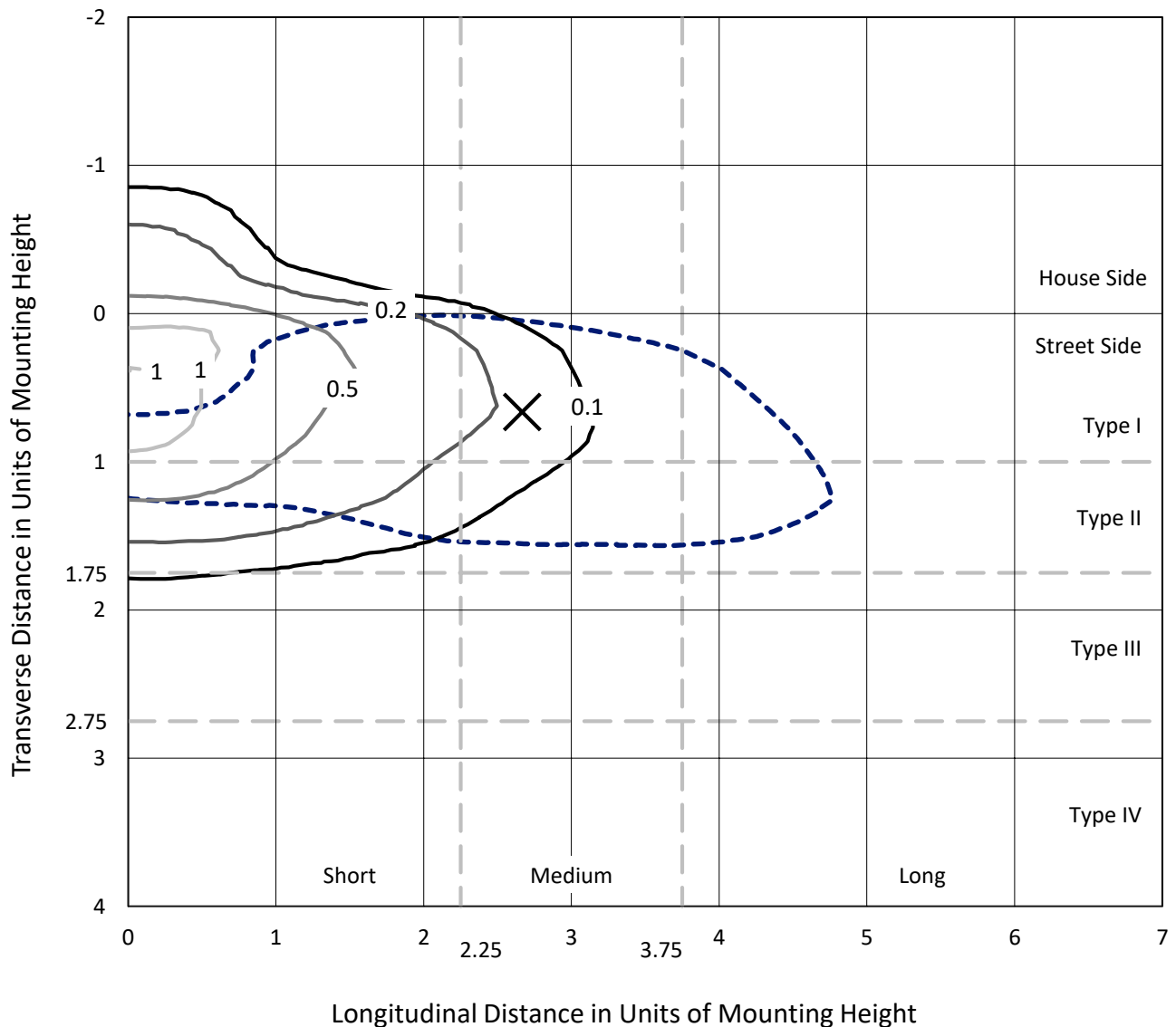


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

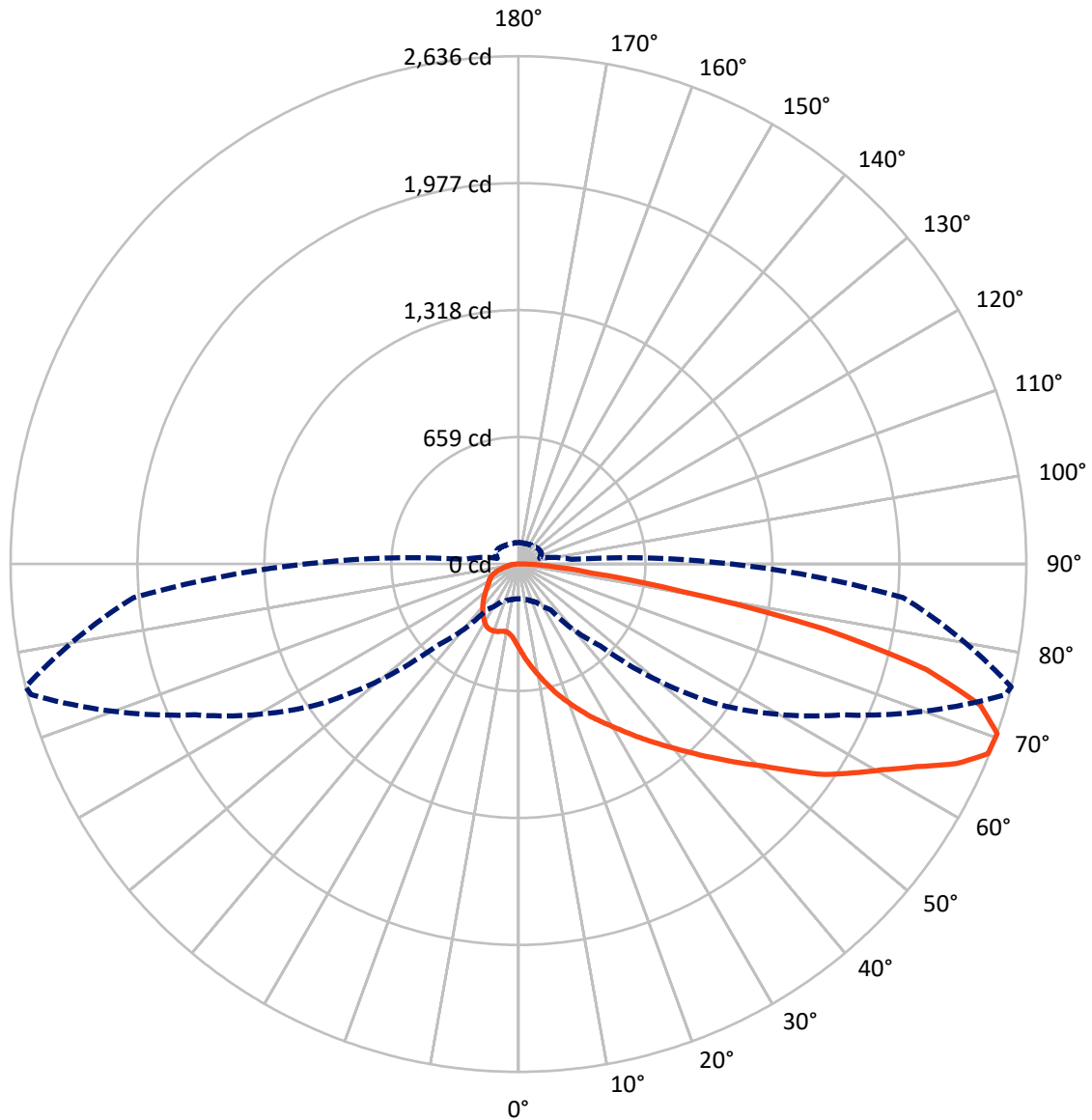


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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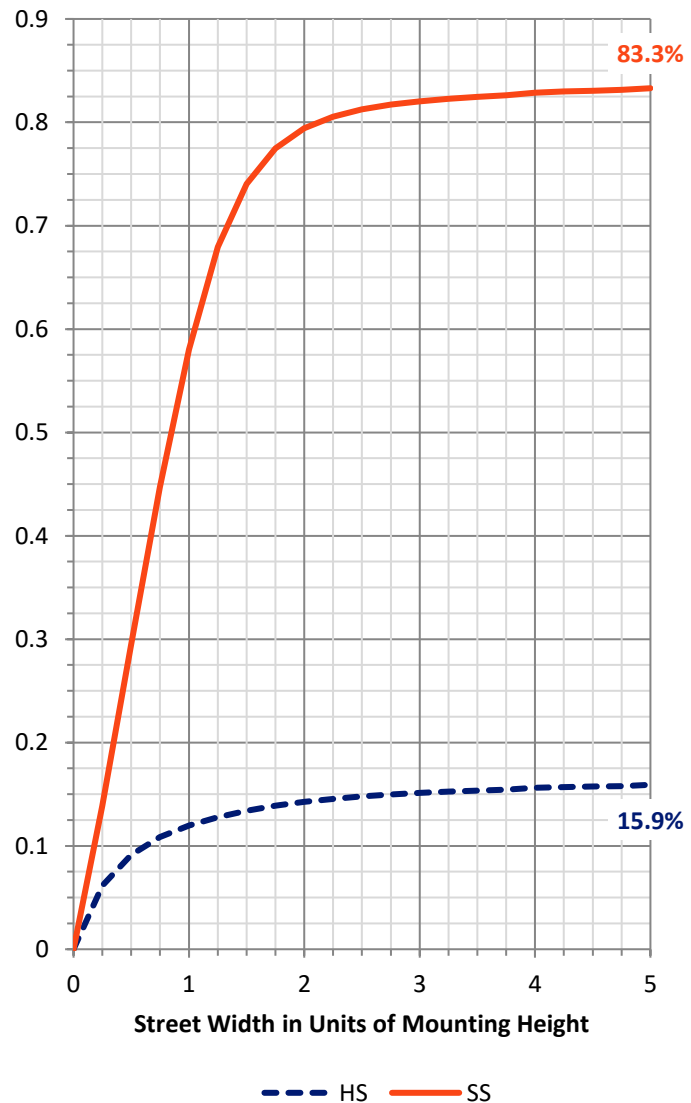
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	570.8	0.0	570.8
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	2925.2	0.0	2925.2
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	3496.0	0.0	3496.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.4	1.3
10°-20°	154.4	4.4
20°-30°	276.2	7.9
30°-40°	446.8	12.8
40°-50°	646.4	18.5
50°-60°	739.8	21.2
60°-70°	680.6	19.5
70°-80°	420.9	12.0
80°-90°	85.5	2.4
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°	3496.0	100.0
0°-180°	3496.0	100.0

**Coefficient of Utilization**



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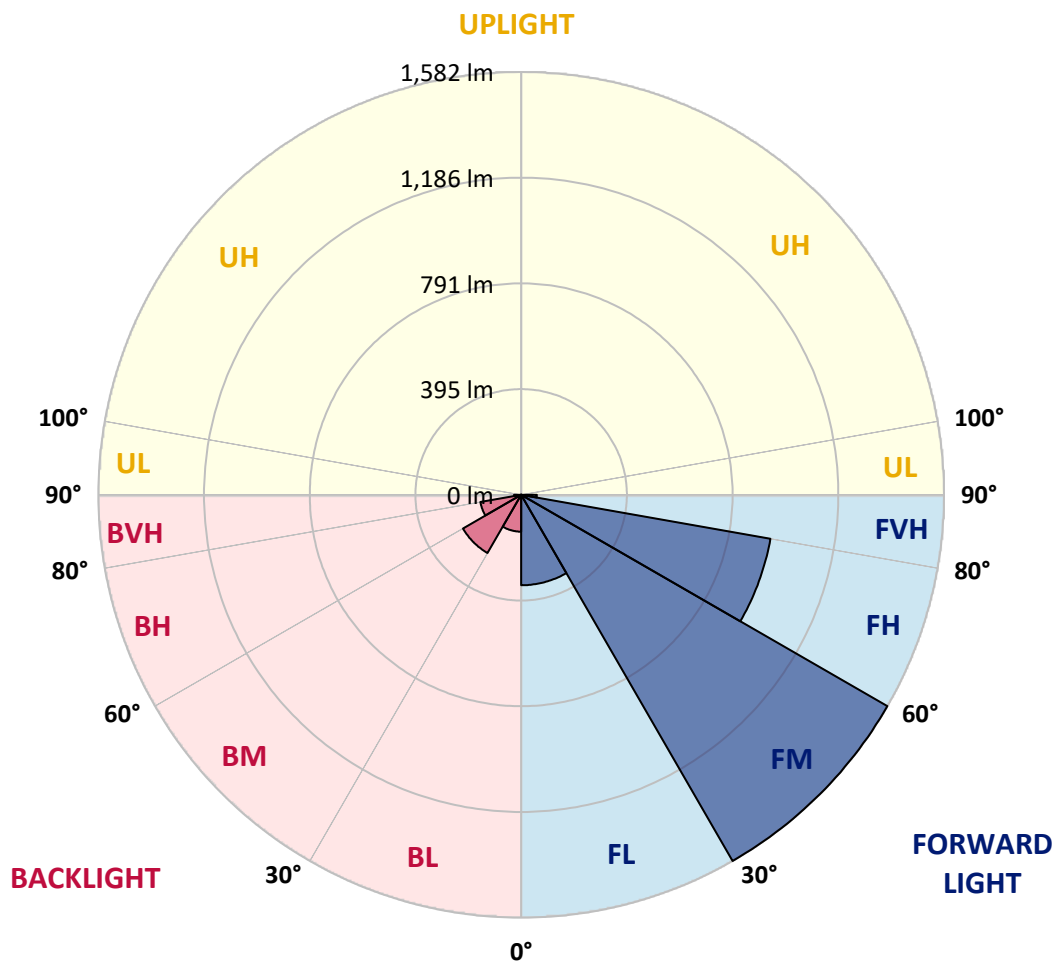
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	338.2	9.7			
FM	(30°-60°)	1581.8	45.2			
FH	(60°-80°)	946.6	27.1			G1/1800
FVH	(80°-90°)	58.7	1.7			G1/100
BL	(0°-30°)	137.9	3.9	B1/500		
BM	(30°-60°)	251.3	7.2	B1/1000		
BH	(60°-80°)	154.8	4.4	B1/500		G1/500
BVH	(80°-90°)	26.8	0.8			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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2
2.5°	557.2	553.0	552.6	546.1	540.2	524.1	512.6	492.4	472.1	471.7	451.4
5°	644.1	639.9	637.6	629.8	619.7	598.6	577.9	546.6	512.1	509.8	471.7
7.5°	702.9	699.2	694.6	691.4	681.8	662.9	637.6	600.4	553.0	548.4	495.1
10°	742.4	740.1	739.2	736.9	730.9	715.8	691.4	651.9	594.0	588.9	519.9
12.5°	759.5	758.5	762.7	769.1	771.4	765.4	742.0	704.7	639.0	633.5	549.8
15°	739.7	740.6	751.2	773.2	796.7	809.6	795.8	759.5	690.0	682.2	584.8
17.5°	730.5	731.9	739.2	760.4	793.5	833.5	839.9	811.4	739.2	728.2	621.5
20°	746.6	748.4	753.9	770.5	793.5	836.2	869.8	861.0	787.5	776.0	656.9
22.5°	787.5	789.8	789.3	799.9	815.5	845.0	886.3	907.9	838.1	825.2	693.7
25°	874.8	873.0	857.4	852.3	856.5	875.3	908.4	953.0	890.9	878.1	732.3
27.5°	993.4	991.1	962.6	936.9	913.9	922.2	939.7	989.3	944.7	930.0	769.1
30°	1120.3	1117.6	1084.5	1042.6	991.6	979.7	977.4	1021.0	999.0	983.3	808.2
32.5°	1244.0	1241.7	1206.3	1157.6	1087.2	1051.4	1029.3	1056.4	1060.6	1045.4	850.9
35°	1356.6	1356.6	1326.3	1268.4	1188.8	1134.6	1098.3	1100.1	1131.4	1113.9	899.7
37.5°	1456.8	1456.4	1423.3	1366.3	1290.0	1227.9	1182.8	1153.0	1198.9	1183.8	950.7
40°	1536.4	1533.2	1508.8	1459.1	1382.4	1320.8	1275.3	1215.0	1274.3	1260.5	1004.9
42.5°	1594.3	1592.5	1575.9	1532.7	1459.6	1401.7	1370.4	1293.2	1359.8	1346.0	1068.4
45°	1616.8	1620.5	1620.5	1579.6	1521.7	1468.8	1455.0	1379.1	1452.2	1438.5	1136.4
47.5°	1580.5	1590.2	1609.9	1612.7	1561.7	1525.8	1530.4	1465.6	1547.4	1540.0	1210.9
50°	1467.0	1484.9	1528.1	1606.2	1577.7	1569.5	1594.8	1553.8	1649.5	1647.2	1301.5
52.5°	1174.1	1217.8	1352.5	1492.7	1566.7	1589.7	1658.7	1653.1	1780.9	1784.6	1419.6
55°	900.6	917.1	1073.0	1311.6	1499.1	1583.3	1701.4	1750.1	1923.5	1928.0	1528.1
57.5°	728.2	739.2	824.3	1073.0	1345.1	1548.3	1735.0	1806.7	2032.9	2044.8	1624.6
60°	576.9	593.0	650.0	821.1	1129.5	1464.2	1758.4	1869.7	2150.6	2168.5	1740.0
62.5°	428.9	436.7	490.5	608.2	894.1	1312.9	1746.0	1938.2	2294.9	2316.5	1878.9
65°	305.3	312.1	350.3	432.6	661.1	1108.4	1673.8	1989.2	2476.0	2498.1	2018.6
67.5°	228.5	231.2	252.8	302.5	445.5	861.0	1527.6	1980.5	2608.4	2628.2	2074.7
70°	180.7	181.6	192.2	218.8	289.6	599.5	1271.6	1852.2	2618.1	2635.6	2003.9
72.5°	149.9	149.4	155.4	168.3	201.8	379.3	942.0	1614.1	2494.0	2505.9	1806.2
75°	123.7	124.6	128.7	136.1	154.0	250.1	610.5	1287.7	2200.2	2187.3	1515.7
77.5°	103.9	103.4	105.3	111.7	124.6	179.7	357.7	930.5	1630.6	1624.2	994.8
80°	83.7	84.6	87.3	92.9	104.8	137.0	211.5	580.6	874.8	851.4	475.3
82.5°	56.1	64.8	70.3	76.8	90.6	101.1	134.2	295.1	391.2	385.2	215.6
85°	26.7	35.4	52.4	59.8	73.6	63.4	91.0	140.7	195.8	193.5	77.7
87.5°	5.5	5.5	28.0	33.6	45.5	27.1	50.6	61.1	94.7	88.7	31.7
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°	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2	437.2
2.5°	439.5	427.1	402.3	382.5	362.3	350.8	336.5	329.6	328.2	324.6	327.3
5°	447.3	422.9	376.0	345.2	324.6	314.4	309.4	307.5	307.1	306.2	306.2
7.5°	457.9	420.6	359.5	328.2	314.9	311.7	313.1	315.8	316.3	317.2	316.7
10°	470.7	421.1	350.3	324.1	317.7	318.1	322.7	326.4	328.2	329.6	329.2
12.5°	488.7	426.6	348.9	326.9	324.1	325.9	330.5	334.2	336.1	336.5	336.5
15°	512.1	438.1	352.1	332.8	330.5	331.9	334.7	336.1	336.5	336.1	336.1
17.5°	537.9	451.9	356.7	336.5	332.8	331.5	330.5	329.2	326.4	324.6	324.6
20°	562.7	464.3	359.0	336.1	329.6	324.1	318.6	311.7	307.1	303.4	303.4
22.5°	587.5	475.8	359.0	331.0	320.9	310.3	298.8	287.8	280.9	276.3	276.3
25°	613.7	486.8	356.3	322.3	307.1	291.9	276.3	262.5	255.6	251.0	250.1
27.5°	635.8	493.3	348.9	309.8	290.1	270.8	252.8	238.6	233.5	229.4	229.4
30°	659.2	497.4	335.1	293.8	270.8	248.7	230.3	218.8	213.3	207.3	206.9
32.5°	685.4	500.2	319.5	276.7	251.0	227.6	211.9	202.7	190.8	184.3	183.4
35°	715.8	503.8	303.0	257.4	231.2	210.1	200.9	185.7	174.2	168.7	168.3
37.5°	748.0	506.6	285.0	240.4	213.3	198.6	189.4	171.5	161.4	153.1	152.2
40°	782.0	506.6	266.6	223.9	199.1	193.5	176.1	160.0	143.0	138.8	137.9
42.5°	819.7	505.7	248.2	207.8	185.7	182.0	168.3	151.2	142.5	138.8	137.9
45°	859.7	502.5	230.8	189.4	171.9	164.6	154.0	149.4	145.7	145.7	145.7
47.5°	905.2	499.7	211.0	172.9	161.8	153.5	145.7	143.0	142.5	143.9	145.3
50°	963.6	498.8	194.5	160.9	154.0	144.4	143.4	141.1	141.6	141.6	141.6
52.5°	1034.4	490.5	178.8	152.2	146.2	134.7	137.5	139.8	140.7	140.2	139.8
55°	1086.3	475.8	165.5	146.2	140.7	131.0	134.7	138.4	139.3	137.9	137.9
57.5°	1133.2	455.1	154.9	141.6	137.0	128.7	132.9	136.5	135.6	135.2	134.7
60°	1187.0	435.4	146.6	139.3	133.3	127.8	131.5	133.8	132.4	131.5	131.0
62.5°	1245.4	416.0	140.7	139.3	130.6	127.3	130.1	131.0	128.3	127.3	127.3
65°	1272.5	385.7	134.2	139.3	129.2	126.4	127.3	126.4	123.7	123.7	123.2
67.5°	1227.9	335.6	126.0	137.5	131.0	125.0	123.2	121.8	118.6	118.6	117.7
70°	1104.7	275.8	114.0	131.5	131.5	124.6	117.7	114.5	110.8	112.2	110.3
72.5°	943.8	218.8	99.3	121.4	128.7	124.1	111.7	106.7	103.4	104.8	102.1
75°	764.5	169.6	81.8	105.3	121.8	121.8	105.7	98.8	95.2	95.2	91.9
77.5°	487.3	125.5	66.7	87.3	109.4	118.6	100.7	90.1	84.6	83.2	80.9
80°	241.4	88.3	54.7	69.4	93.3	111.3	97.0	80.0	72.2	69.4	65.3
82.5°	128.3	61.1	43.7	54.2	74.5	100.2	92.4	69.0	59.3	55.2	50.6
85°	57.5	37.7	34.9	41.4	56.5	82.3	83.2	56.5	45.5	54.2	40.0
87.5°	21.1	17.0	17.0	21.1	32.6	34.5	58.8	36.3	29.0	19.8	15.6
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)