

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: P265936

Luminaire Tested: **ARCH-AF24-40-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265936  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-40-D-U-T3-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4461.8 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

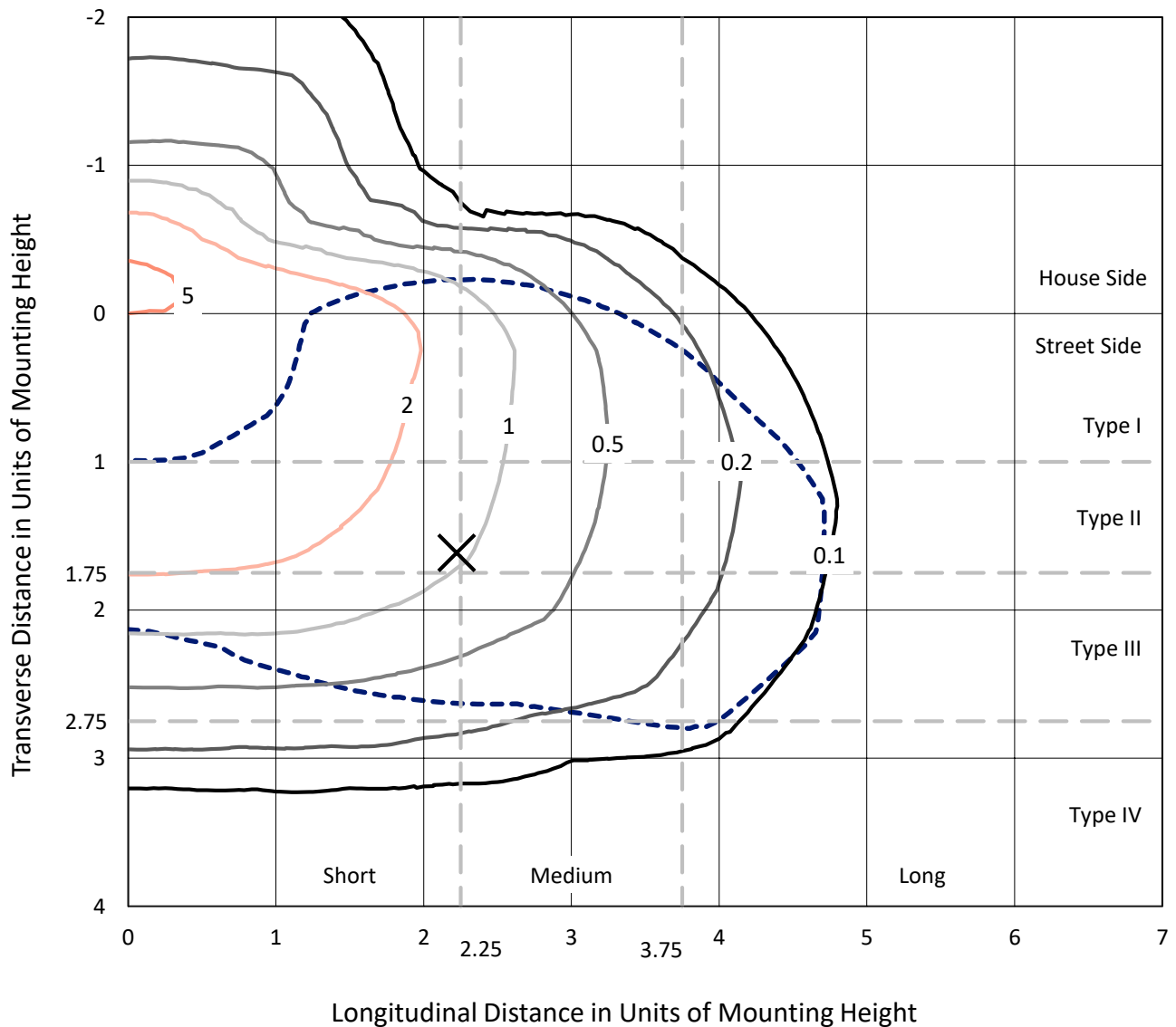
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

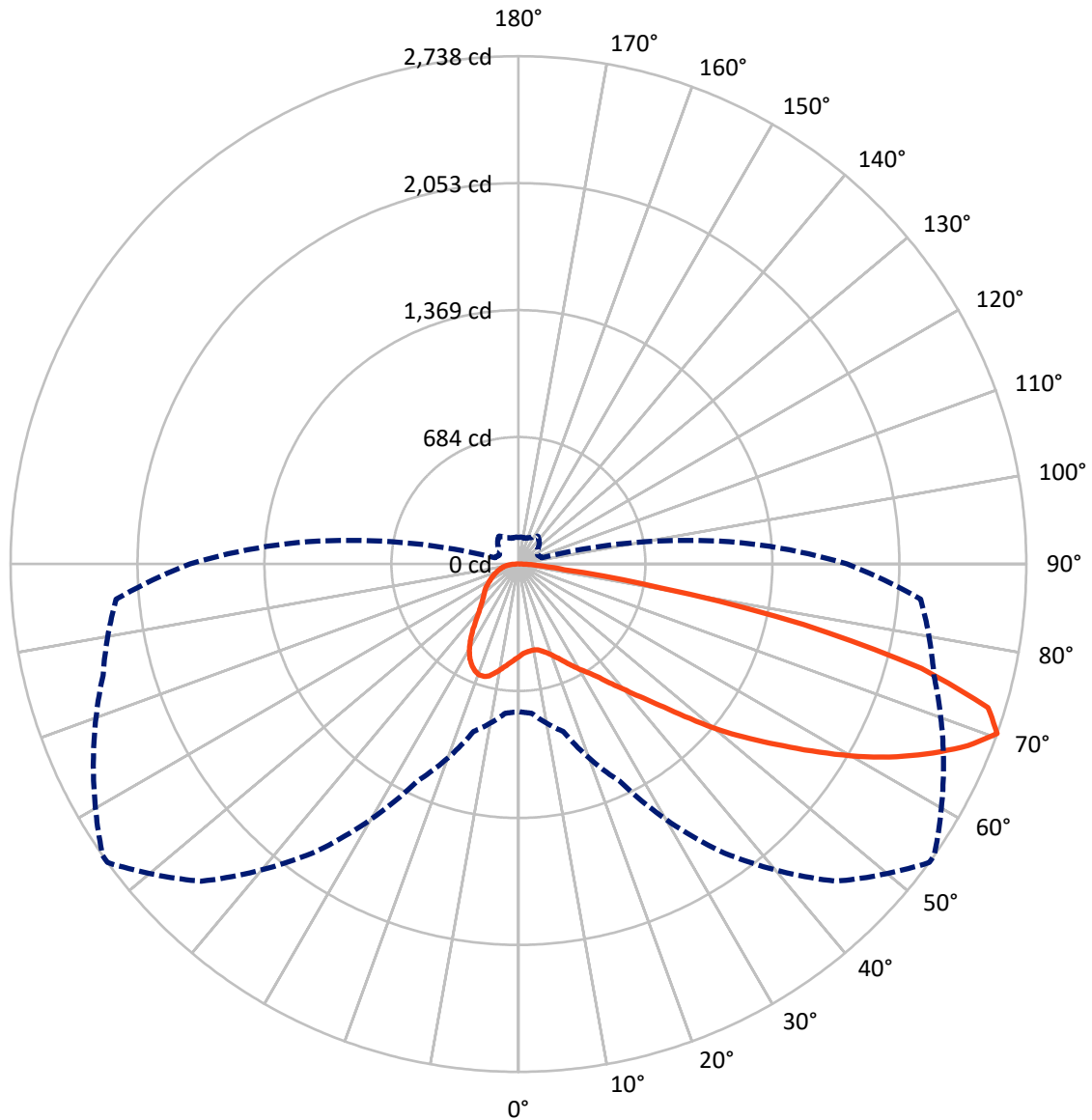
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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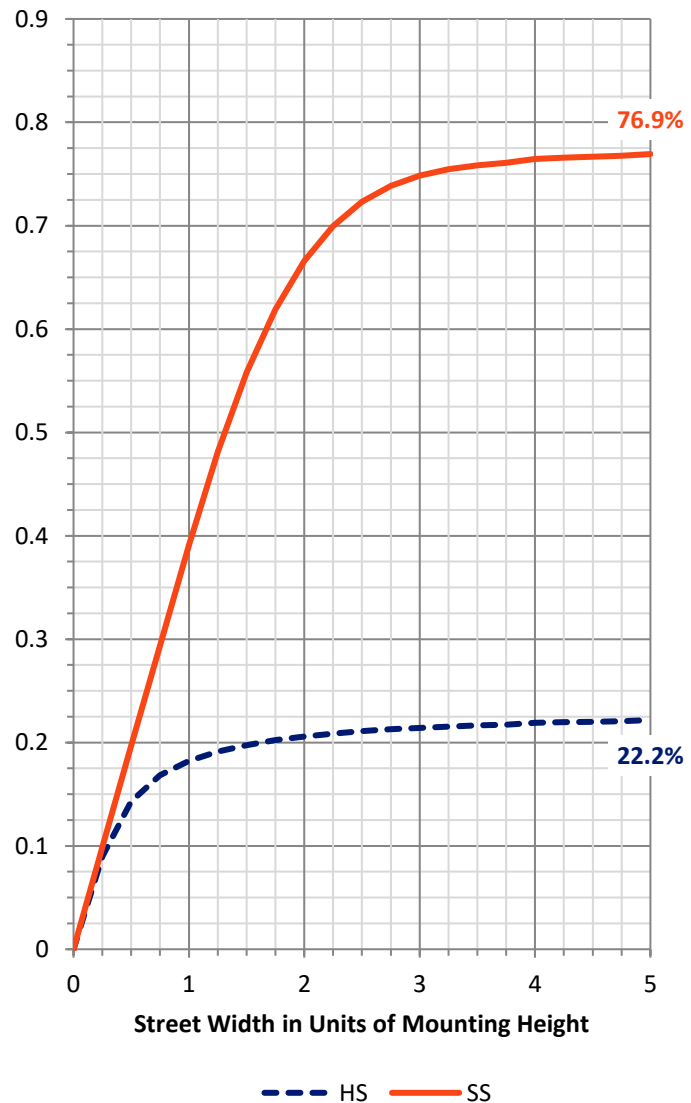
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1011.9	0.0	1011.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	3449.9	0.0	3449.9
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	4461.8	0.0	4461.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	1.1
10°-20°	156.5	3.5
20°-30°	272.0	6.1
30°-40°	397.4	8.9
40°-50°	623.7	14.0
50°-60°	959.2	21.5
60°-70°	1171.9	26.3
70°-80°	726.6	16.3
80°-90°	105.5	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°	4461.8	100.0
0°-180°	4461.8	100.0

**Coefficient of Utilization**



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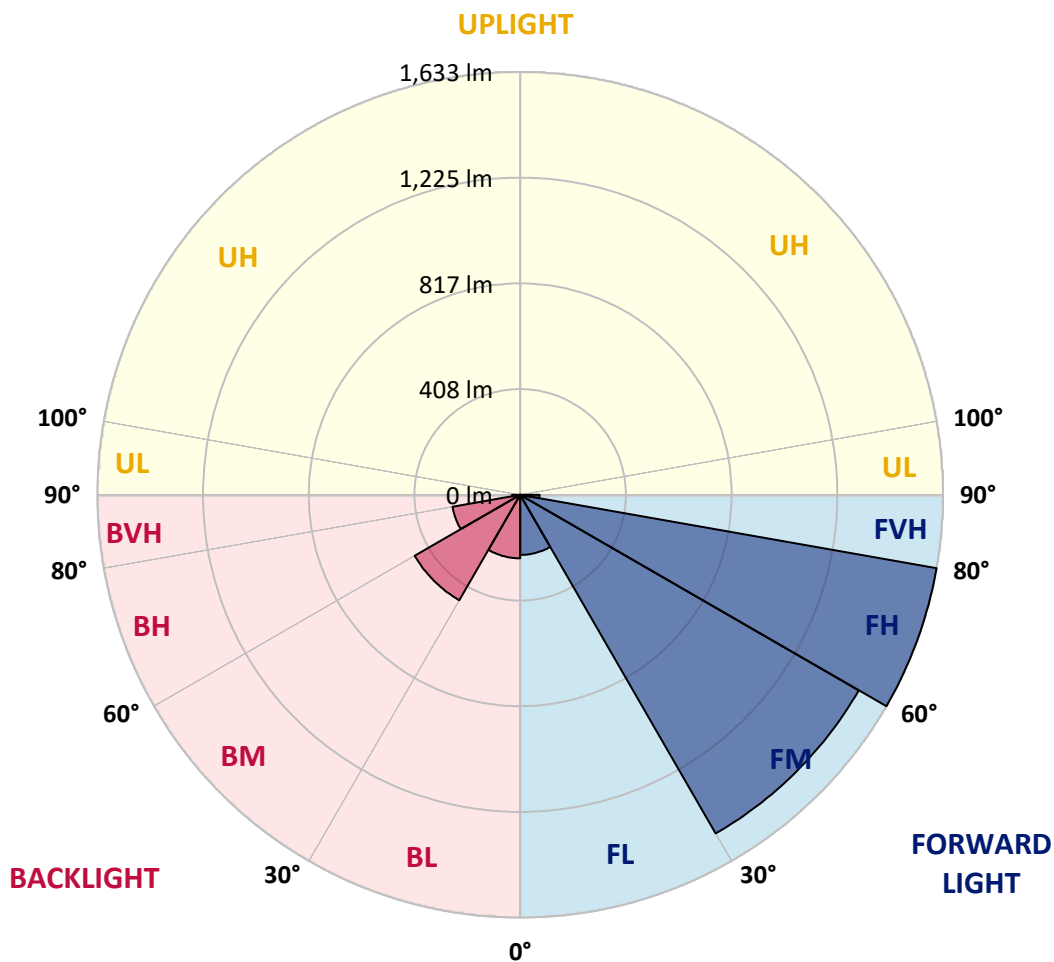
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	232.1	5.2			
FM	(30°-60°)	1510.1	33.8			
FH	(60°-80°)	1633.1	36.6			G1/1800
FVH	(80°-90°)	74.5	1.7			G1/100
BL	(0°-30°)	245.3	5.5	B1/500		
BM	(30°-60°)	470.2	10.5	B1/1000		
BH	(60°-80°)	265.3	5.9	B1/500		G1/500
BVH	(80°-90°)	31.0	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	479.5	478.0	478.0	480.5	481.2	483.6	483.6	484.5	486.9	491.1	496.0
5°	464.9	464.1	464.9	468.1	469.8	474.7	476.3	477.1	482.0	488.6	496.0
7.5°	450.2	449.3	450.9	455.9	460.8	468.1	472.1	473.0	480.5	489.3	499.2
10°	445.3	444.4	446.8	450.9	455.9	464.1	470.6	471.4	482.0	492.6	506.6
12.5°	451.8	450.9	453.5	457.5	462.4	468.1	475.6	476.3	490.1	504.0	518.9
15°	468.1	468.1	468.9	471.4	476.3	481.2	487.8	488.6	503.3	519.6	534.3
17.5°	493.4	491.8	491.8	491.1	494.2	496.8	504.8	505.7	521.2	536.0	550.7
20°	524.5	523.7	520.4	516.3	515.5	517.2	525.2	526.1	541.7	554.0	567.8
22.5°	562.1	562.9	555.5	546.6	542.4	544.9	552.3	553.0	564.6	575.2	587.4
25°	611.9	609.5	598.9	585.8	577.6	577.6	584.9	584.9	595.5	602.1	610.3
27.5°	659.4	654.4	644.7	625.8	612.7	615.2	622.5	622.5	632.3	634.8	638.9
30°	710.7	705.9	693.6	670.0	652.8	651.1	660.2	659.4	672.4	671.6	668.2
32.5°	773.7	771.3	750.9	720.6	697.8	692.1	700.1	700.9	709.1	706.6	696.0
35°	862.0	861.1	842.3	789.3	759.0	748.4	753.3	753.3	759.0	752.5	734.5
37.5°	973.0	974.8	958.3	879.9	837.4	819.4	820.2	819.4	821.1	813.8	794.9
40°	1084.2	1088.2	1087.4	992.6	938.6	907.6	896.2	894.6	898.8	895.4	877.5
42.5°	1230.4	1240.2	1217.4	1131.5	1071.0	1018.8	987.7	983.6	992.6	996.7	979.6
45°	1382.3	1379.1	1343.1	1281.1	1226.4	1159.4	1100.6	1094.0	1100.6	1112.7	1094.8
47.5°	1461.6	1459.1	1450.1	1419.1	1411.0	1334.2	1245.1	1239.4	1227.2	1244.3	1223.0
50°	1592.3	1594.9	1558.0	1554.7	1589.0	1546.6	1408.5	1395.4	1373.4	1387.3	1369.2
52.5°	1687.0	1676.4	1653.6	1682.2	1789.2	1766.3	1562.2	1556.5	1535.9	1532.7	1524.6
55°	1725.6	1725.6	1729.5	1795.7	1948.6	1918.3	1728.8	1734.4	1706.7	1683.9	1694.5
57.5°	1737.0	1741.9	1776.9	1886.4	2135.6	2036.7	1912.6	1920.8	1880.7	1835.0	1868.5
60°	1680.5	1695.3	1779.5	1938.0	2241.0	2162.6	2106.3	2108.7	2050.7	1983.6	2042.4
62.5°	1535.9	1554.0	1704.3	1959.2	2223.8	2291.7	2289.2	2295.0	2215.7	2132.3	2205.9
65°	1358.6	1376.7	1536.8	1899.6	2210.8	2384.0	2456.8	2472.2	2370.1	2258.2	2308.0
67.5°	1098.1	1121.8	1273.6	1698.5	2147.0	2460.0	2613.6	2629.9	2489.5	2323.6	2299.0
70°	795.8	807.1	934.6	1290.9	1887.2	2418.2	2737.8	2737.0	2528.5	2318.6	2176.6
72.5°	383.1	392.2	502.4	801.5	1349.7	2052.3	2647.9	2663.5	2474.7	2247.6	1896.2
75°	157.7	166.6	203.5	338.2	708.4	1356.3	2244.2	2281.1	2247.6	2017.1	1483.7
77.5°	98.1	101.2	119.3	174.8	323.5	633.1	1571.0	1620.9	1781.1	1616.1	979.6
80°	73.5	75.9	89.0	122.6	204.3	233.6	780.3	843.1	1079.3	927.3	443.7
82.5°	61.3	62.2	71.1	89.0	138.9	133.9	250.0	278.7	503.3	353.8	152.8
85°	57.2	58.7	63.7	63.7	88.3	84.1	103.8	108.7	146.2	120.9	53.1
87.5°	29.5	27.8	56.4	49.9	45.8	40.9	44.1	47.4	54.7	58.0	23.6
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°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	497.5	499.9	504.0	508.3	513.1	518.9	522.0	526.1	529.5	527.8	526.9
5°	499.9	504.0	513.1	521.2	531.1	542.4	549.9	557.9	564.6	566.2	563.7
7.5°	504.0	511.5	523.7	538.4	551.5	566.2	577.6	589.1	597.3	598.9	598.9
10°	513.9	522.0	538.4	557.9	573.6	589.1	602.1	611.0	618.5	621.7	621.7
12.5°	527.8	537.5	557.2	580.8	598.0	612.7	620.1	624.2	627.5	630.7	631.6
15°	544.2	554.8	578.4	603.8	621.7	629.2	629.2	628.3	628.3	629.9	631.6
17.5°	560.5	572.0	596.5	623.3	634.8	630.7	625.0	622.5	620.9	620.1	622.5
20°	577.6	589.1	613.5	638.9	635.6	618.5	610.3	604.6	599.7	597.3	600.4
22.5°	596.5	607.1	632.3	649.6	625.0	598.9	583.3	574.3	566.2	561.4	564.6
25°	618.5	629.2	653.5	652.8	606.3	569.4	544.9	530.2	521.2	516.3	516.3
27.5°	644.7	653.5	677.3	644.7	580.0	530.2	494.2	480.5	478.0	473.9	473.9
30°	671.6	678.8	699.3	625.8	544.2	478.7	439.5	433.1	433.8	429.7	430.6
32.5°	699.3	706.6	712.4	598.0	497.5	420.8	394.6	389.8	388.8	385.6	382.4
35°	738.5	749.1	714.1	560.5	441.2	372.5	353.8	348.8	344.0	332.6	332.6
37.5°	798.2	809.6	710.0	513.9	383.1	335.0	317.8	311.4	303.1	291.7	287.5
40°	879.9	879.9	700.9	461.5	336.7	304.7	288.4	280.2	271.3	259.8	257.4
42.5°	976.3	953.5	687.2	408.5	302.3	284.4	269.6	260.6	250.0	237.0	235.3
45°	1089.0	1026.9	667.5	361.1	276.9	272.0	263.1	247.6	229.5	215.8	213.3
47.5°	1198.6	1093.1	648.7	327.6	255.7	267.2	259.8	233.6	209.1	189.5	187.0
50°	1318.6	1151.9	626.7	299.9	239.4	263.9	255.7	213.3	186.3	172.4	170.8
52.5°	1438.7	1211.6	602.9	270.4	225.5	257.4	246.0	198.5	185.5	166.6	164.2
55°	1565.3	1281.1	575.2	237.7	209.1	244.2	232.8	197.6	191.2	166.6	160.9
57.5°	1688.8	1357.9	530.2	205.9	191.2	224.7	227.9	192.7	178.9	165.0	158.6
60°	1825.1	1439.5	455.9	178.9	175.7	208.3	221.4	182.1	165.0	160.2	156.8
62.5°	1934.7	1513.0	356.2	160.2	162.7	195.2	213.3	175.7	159.3	155.2	154.4
65°	1982.0	1514.7	255.7	143.8	149.5	183.1	205.1	169.9	154.4	152.8	152.0
67.5°	1932.3	1431.4	179.8	128.3	135.6	171.5	194.5	164.2	149.5	150.3	148.7
70°	1771.3	1255.7	131.5	113.5	122.6	159.3	183.1	156.8	143.8	145.4	143.0
72.5°	1482.1	978.8	105.5	101.2	111.8	146.2	171.5	148.7	134.7	135.6	130.8
75°	1094.8	648.7	88.3	90.6	99.7	133.9	156.8	138.1	125.0	121.7	118.4
77.5°	651.1	333.4	72.8	79.2	89.0	119.3	140.6	125.0	114.4	108.7	106.2
80°	268.9	134.7	59.6	67.1	77.7	106.2	124.1	109.5	102.1	96.4	93.2
82.5°	107.0	66.1	47.4	54.7	65.3	92.3	108.7	96.4	89.0	85.0	75.9
85°	40.9	32.7	31.9	38.4	49.0	71.1	89.9	80.8	75.2	64.6	62.2
87.5°	16.3	14.7	14.7	18.8	27.8	44.9	64.6	56.4	58.7	46.5	47.4
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)