

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: P397775

Luminaire Tested: **ARCH-S-PA1-40-740-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397775  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-740-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6102 lumens  
Efficiency: N/A  
Efficacy: 152.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

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

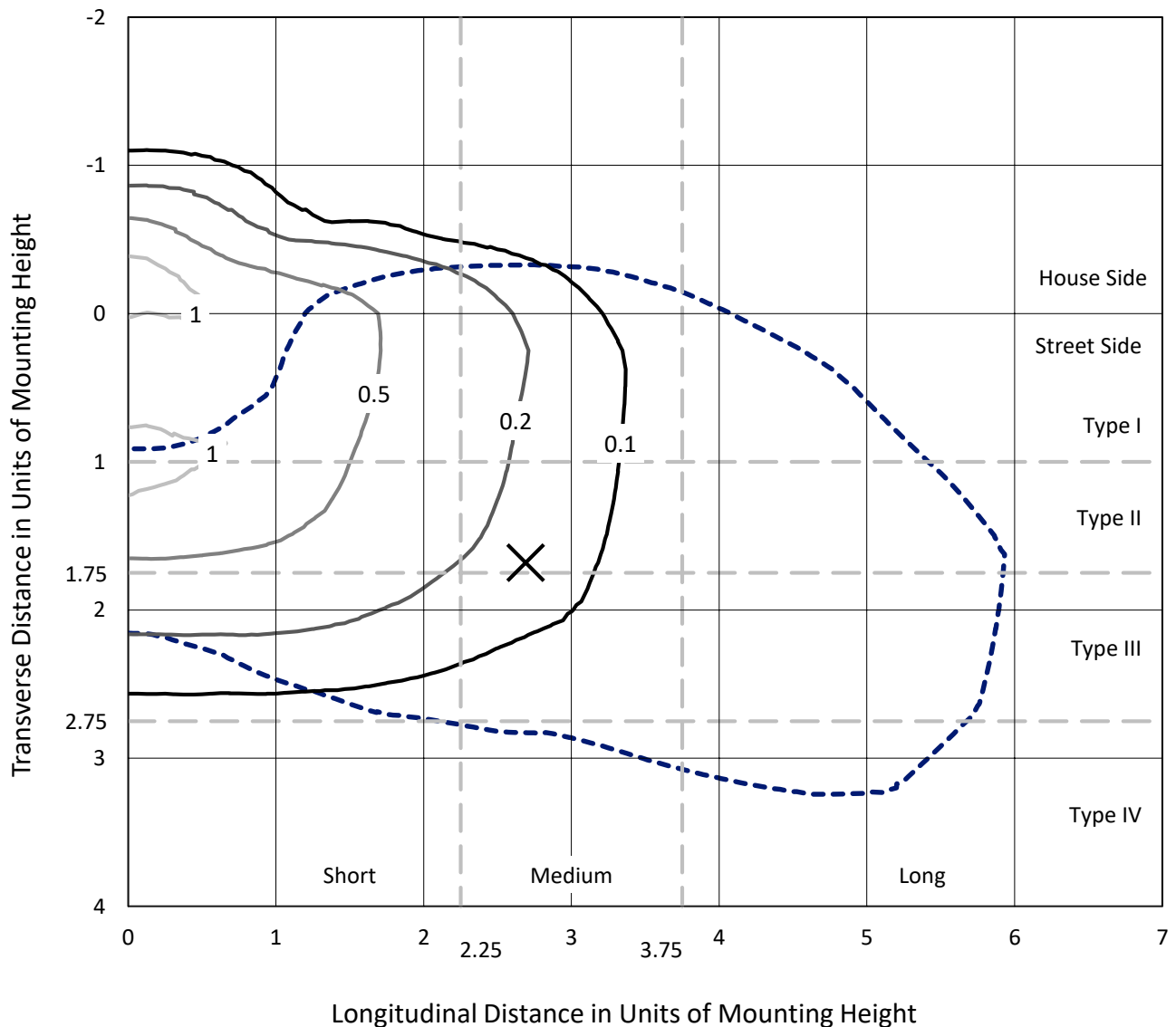


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

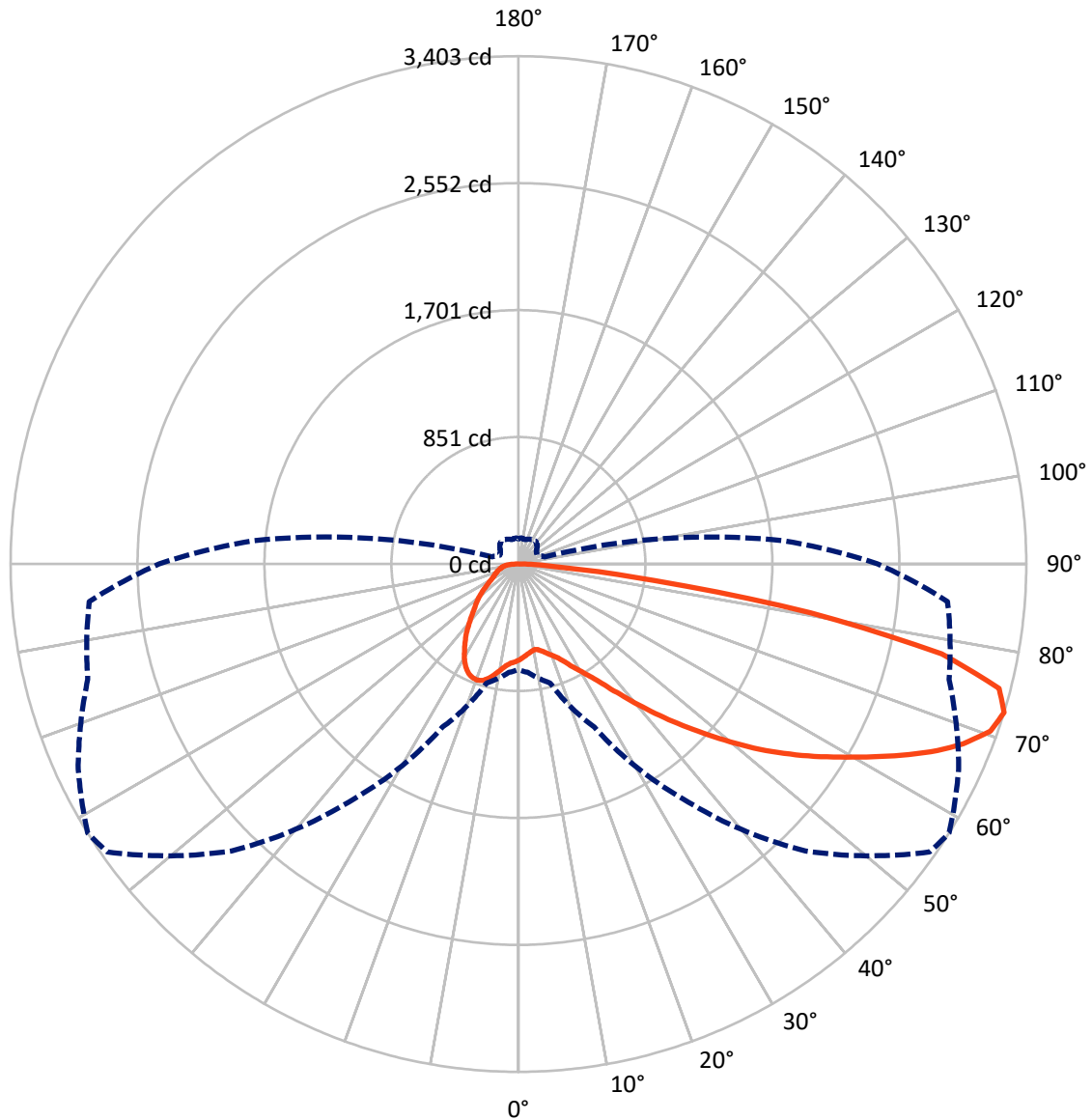


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical



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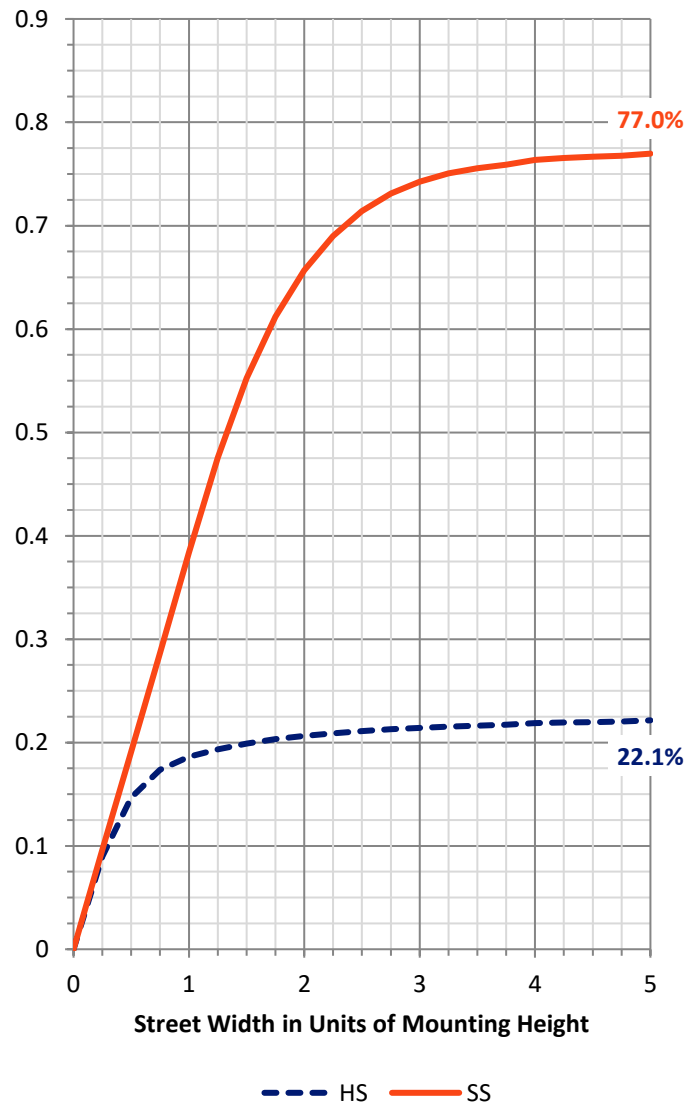
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1383.9	0.0	1383.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	4718.1	0.0	4718.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	6102.0	0.0	6102.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	1.0
10°-20°	196.9	3.2
20°-30°	352.7	5.8
30°-40°	530.6	8.7
40°-50°	859.2	14.1
50°-60°	1293.4	21.2
60°-70°	1522.2	24.9
70°-80°	1079.4	17.7
80°-90°	205.7	3.4
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°	6102.0	100.0
0°-180°	6102.0	100.0

**Coefficient of Utilization**



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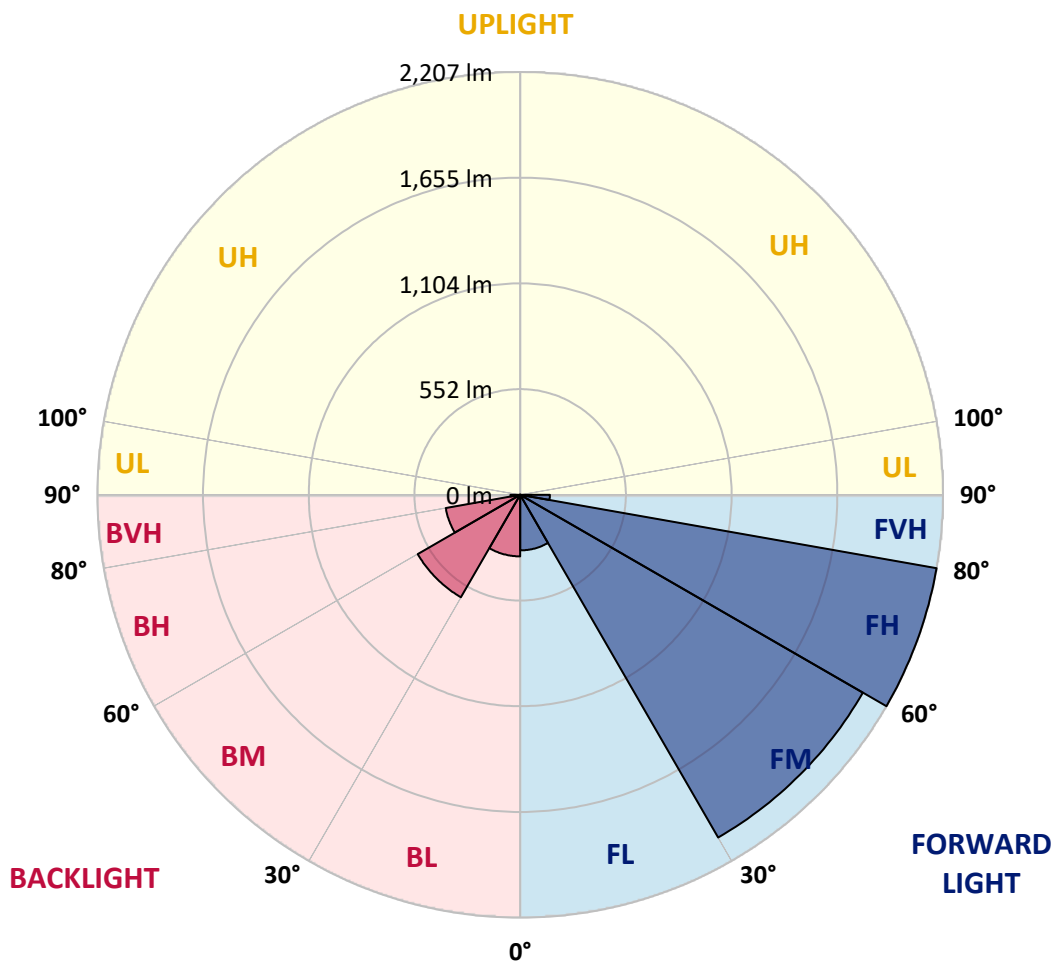
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	290.2	4.8			
FM (30°-60°)	2065.7	33.9			
FH (60°-80°)	2207.1	36.2			G2/5000
FVH (80°-90°)	155.1	2.5			G2/225
BL (0°-30°)	321.4	5.3	B1/500		
BM (30°-60°)	617.5	10.1	B1/1000		
BH (60°-80°)	394.4	6.5	B1/500		G1/500
BVH (80°-90°)	50.5	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-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6
2.5°	619.5	616.2	617.0	617.0	620.3	621.9	622.7	625.1	626.7	630.7	636.4
5°	590.5	588.0	588.9	589.7	595.3	600.9	605.8	609.0	613.8	620.3	628.3
7.5°	569.5	567.9	568.7	570.3	575.2	581.6	589.7	594.5	601.7	613.8	627.5
10°	554.2	554.2	555.0	558.2	563.1	571.1	577.6	583.2	597.7	619.5	640.4
12.5°	542.1	542.1	544.5	551.0	559.0	567.1	582.4	588.9	608.2	638.0	663.0
15°	541.3	542.1	542.9	548.6	557.4	575.2	597.7	607.4	630.7	666.2	695.2
17.5°	554.2	555.0	551.8	553.4	563.9	588.9	618.7	629.9	659.7	698.4	728.2
20°	593.7	593.7	584.0	575.2	582.4	609.8	643.6	654.9	687.9	730.6	760.4
22.5°	674.2	678.3	655.7	636.4	625.1	640.4	671.0	683.1	720.2	766.1	795.9
25°	771.7	775.7	745.1	717.7	696.8	694.4	714.5	727.4	758.0	805.5	830.5
27.5°	866.0	858.7	830.5	804.7	778.2	756.4	771.7	783.0	818.4	854.7	870.0
30°	940.1	934.4	907.0	888.5	863.5	835.4	826.5	838.6	867.6	901.4	909.5
32.5°	1022.2	1018.2	990.8	966.7	945.7	919.1	899.8	905.4	921.5	945.7	950.5
35°	1127.0	1135.8	1106.8	1057.7	1034.3	1008.5	994.8	996.5	1008.5	1023.8	1015.8
37.5°	1237.3	1247.8	1249.4	1172.1	1140.7	1117.3	1102.8	1108.4	1122.9	1133.4	1108.4
40°	1441.9	1431.5	1389.6	1332.4	1284.0	1261.5	1241.3	1240.5	1251.0	1269.5	1224.4
42.5°	1713.4	1703.7	1619.1	1545.0	1468.5	1442.7	1403.3	1386.3	1391.2	1414.5	1351.7
45°	1973.6	1969.6	1901.9	1815.7	1723.9	1673.9	1583.7	1542.6	1538.6	1557.1	1482.2
47.5°	2204.8	2187.1	2137.9	2071.1	2061.4	1930.9	1765.0	1709.4	1690.0	1700.5	1616.7
50°	2452.1	2391.7	2324.0	2282.9	2353.0	2231.4	1947.8	1889.8	1842.3	1849.5	1762.5
52.5°	2583.4	2481.9	2437.6	2449.7	2543.9	2497.2	2146.8	2075.9	1999.4	2009.8	1907.5
55°	2470.6	2469.8	2489.1	2564.1	2695.4	2641.4	2336.1	2256.3	2172.6	2175.0	2074.3
57.5°	2315.9	2347.4	2447.2	2612.4	2883.0	2792.8	2522.2	2437.6	2361.1	2349.0	2263.6
60°	2175.0	2209.6	2354.6	2604.3	2948.3	2931.4	2699.4	2625.3	2563.2	2527.8	2462.6
62.5°	1960.7	1986.5	2191.9	2552.8	2893.5	3031.3	2879.0	2828.3	2781.6	2708.2	2676.8
65°	1708.6	1717.4	1934.1	2382.8	2825.0	3069.9	3057.9	3035.3	2990.2	2882.2	2888.7
67.5°	1435.5	1453.2	1643.3	2111.3	2675.2	3052.2	3196.4	3214.9	3161.8	2999.9	3024.0
70°	1144.7	1166.4	1310.6	1736.0	2420.7	2975.7	3324.5	3354.3	3252.0	3038.5	3049.0
72.5°	708.1	729.0	825.7	1205.9	1918.8	2718.7	3364.0	3402.6	3254.4	2987.0	2886.3
75°	244.9	247.3	323.0	578.4	1139.0	2052.5	3235.1	3326.1	3152.1	2799.3	2511.7
77.5°	112.0	116.0	143.4	238.4	505.1	1107.6	2671.2	2899.2	2841.2	2506.1	1933.3
80°	77.3	78.9	99.1	142.6	291.6	389.9	1686.0	1983.3	2084.8	1940.6	1238.9
82.5°	58.0	59.6	76.5	96.7	210.2	189.3	642.0	921.5	1145.5	1124.5	518.0
85°	55.6	54.8	59.6	64.4	140.2	112.8	207.8	285.2	447.1	382.6	130.5
87.5°	24.2	26.6	61.2	36.2	73.3	52.4	90.2	105.5	136.1	118.4	46.7
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°	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6
2.5°	638.8	640.4	645.2	652.5	656.5	664.6	670.2	673.4	675.9	676.7	676.7
5°	633.2	636.4	646.9	658.9	670.2	687.1	702.4	711.3	717.7	720.2	721.0
7.5°	634.8	642.8	658.1	675.9	690.4	712.1	730.6	748.4	762.9	768.5	768.5
10°	650.1	661.4	682.3	705.7	724.2	746.7	766.1	781.4	798.3	808.0	809.6
12.5°	673.4	687.1	714.5	740.3	761.2	779.0	796.7	808.0	816.0	823.3	824.9
15°	706.5	723.4	750.8	777.4	795.9	807.2	812.0	812.0	811.2	812.0	813.6
17.5°	739.5	755.6	783.0	809.6	818.4	812.0	806.4	804.7	803.9	802.3	803.1
20°	771.7	787.0	810.4	830.5	823.3	800.7	793.5	792.7	790.2	788.6	787.0
22.5°	803.9	815.2	834.5	841.8	812.8	780.6	771.7	766.9	763.7	759.6	755.6
25°	841.0	844.2	858.7	847.4	787.0	743.5	730.6	723.4	720.2	716.1	712.9
27.5°	875.6	875.6	878.0	838.6	749.2	694.4	675.0	662.2	661.4	660.5	659.7
30°	907.0	903.0	895.0	812.0	700.0	634.0	605.0	592.1	596.9	600.9	601.7
32.5°	944.1	936.0	913.5	775.7	641.2	566.3	530.9	525.2	530.9	535.7	532.5
35°	1002.1	987.6	932.8	733.9	584.8	504.3	470.4	462.4	460.8	460.0	453.5
37.5°	1085.1	1060.1	948.1	688.7	529.2	449.5	424.5	407.6	392.3	376.2	373.8
40°	1186.6	1143.9	958.6	637.2	470.4	403.6	377.0	355.2	329.5	301.3	298.1
42.5°	1297.7	1234.1	963.4	580.0	418.9	365.7	332.7	305.3	276.3	254.6	250.5
45°	1417.8	1331.6	959.4	525.2	377.0	333.5	296.4	266.6	243.3	228.0	224.7
47.5°	1534.6	1443.5	948.1	481.7	344.8	306.1	268.2	240.9	223.1	206.2	202.2
50°	1684.4	1550.7	934.4	447.9	309.3	278.7	250.5	221.5	201.4	193.3	191.7
52.5°	1850.3	1657.8	918.3	405.2	274.7	257.0	239.2	213.5	207.0	191.7	189.3
55°	2030.0	1785.1	915.1	351.2	244.1	241.7	228.0	220.7	222.3	191.7	187.7
57.5°	2219.3	1921.2	922.4	297.2	219.1	228.0	232.8	227.2	224.7	195.7	187.7
60°	2416.6	2052.5	900.6	247.3	199.8	216.7	238.4	223.9	206.2	194.1	188.5
62.5°	2608.4	2162.9	806.4	211.9	185.3	213.5	235.2	211.9	191.7	191.7	189.3
65°	2747.7	2212.0	630.7	186.1	175.6	209.4	229.6	203.8	187.7	193.3	190.1
67.5°	2763.8	2161.3	423.7	165.9	167.6	202.2	216.7	196.6	183.7	198.2	193.3
70°	2664.7	2029.2	259.4	150.6	157.1	189.3	205.4	189.3	178.0	194.1	186.9
72.5°	2407.8	1782.7	182.9	137.7	145.8	177.2	194.9	182.9	170.0	175.6	168.4
75°	1975.2	1381.5	145.0	125.7	134.5	165.9	186.1	173.2	160.3	157.9	153.1
77.5°	1399.2	885.3	116.8	116.0	122.4	152.2	174.0	161.9	149.0	144.2	141.0
80°	804.7	434.2	100.7	104.7	111.2	138.6	159.5	149.0	136.9	129.7	124.9
82.5°	307.7	151.4	88.6	91.0	98.3	124.1	145.0	136.1	124.1	130.5	109.6
85°	99.9	83.0	72.5	74.9	82.2	103.1	128.1	120.8	107.1	95.1	87.8
87.5°	44.3	45.1	38.7	42.7	51.6	68.5	93.4	88.6	78.1	65.2	62.8
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)