

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: P348552

Luminaire Tested: **ARCH-N-PA1-50-750-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348552  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6850 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

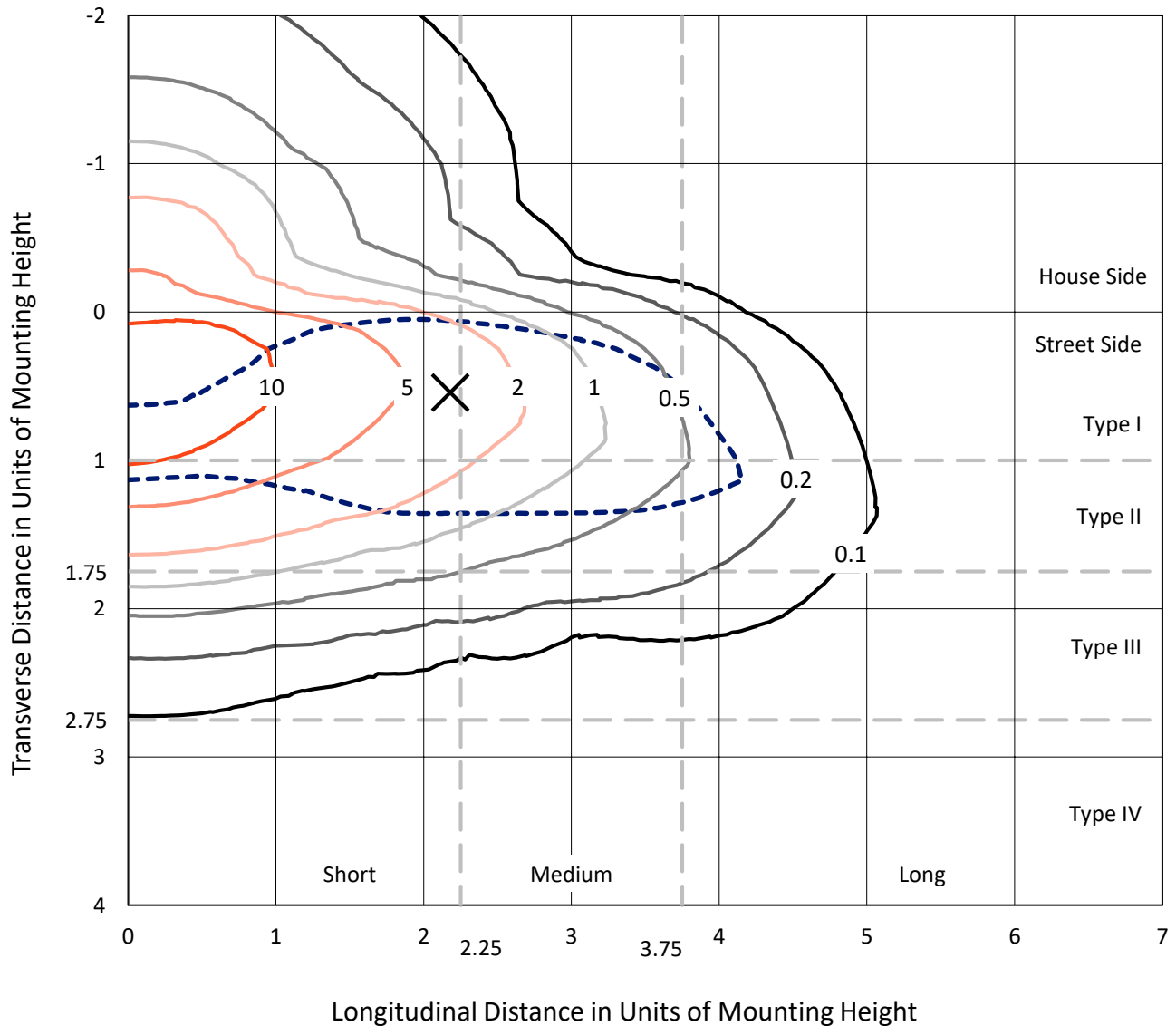
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

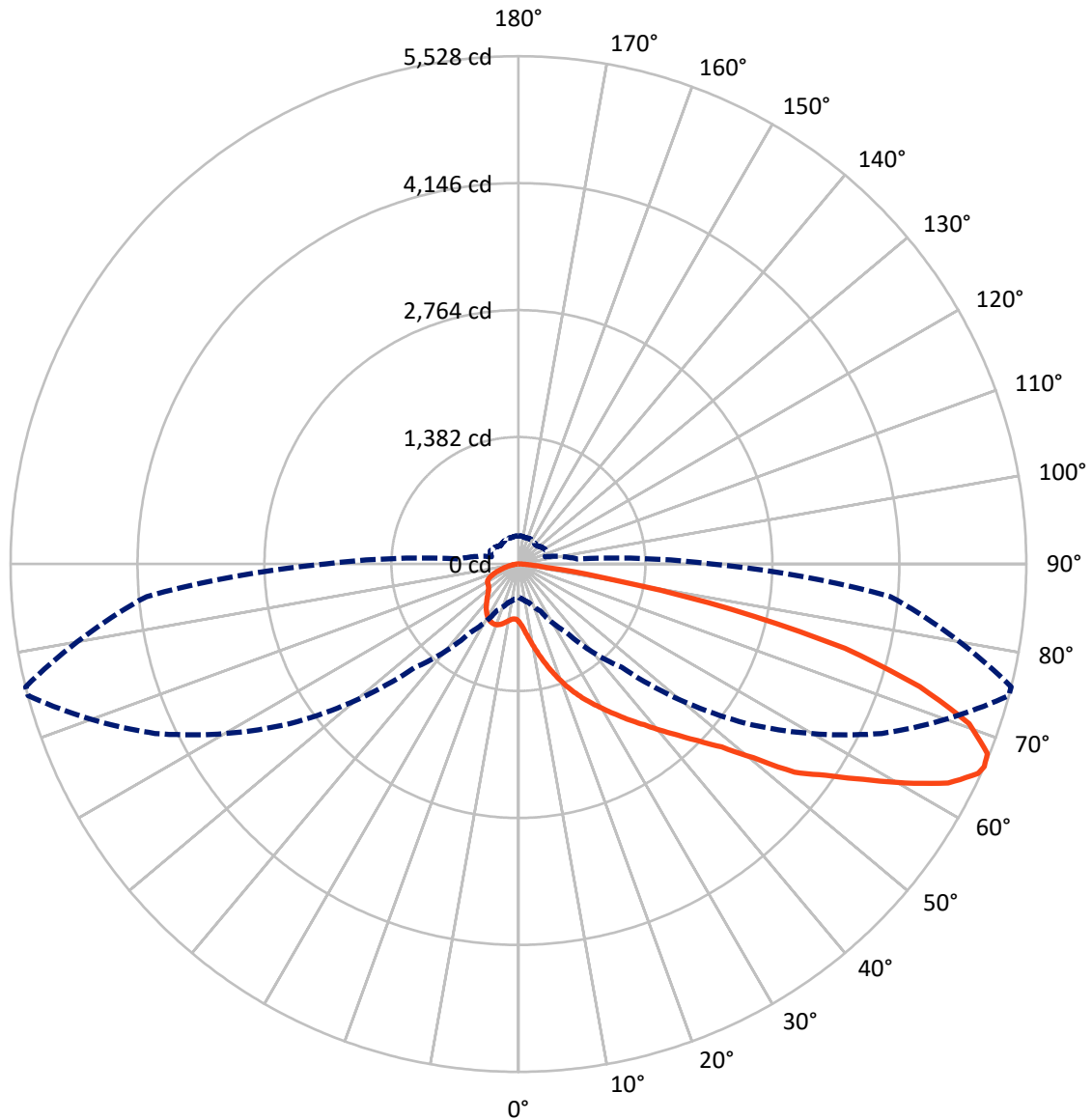


Based on 10 foot mounting height. Maximum calculated value = 16.6 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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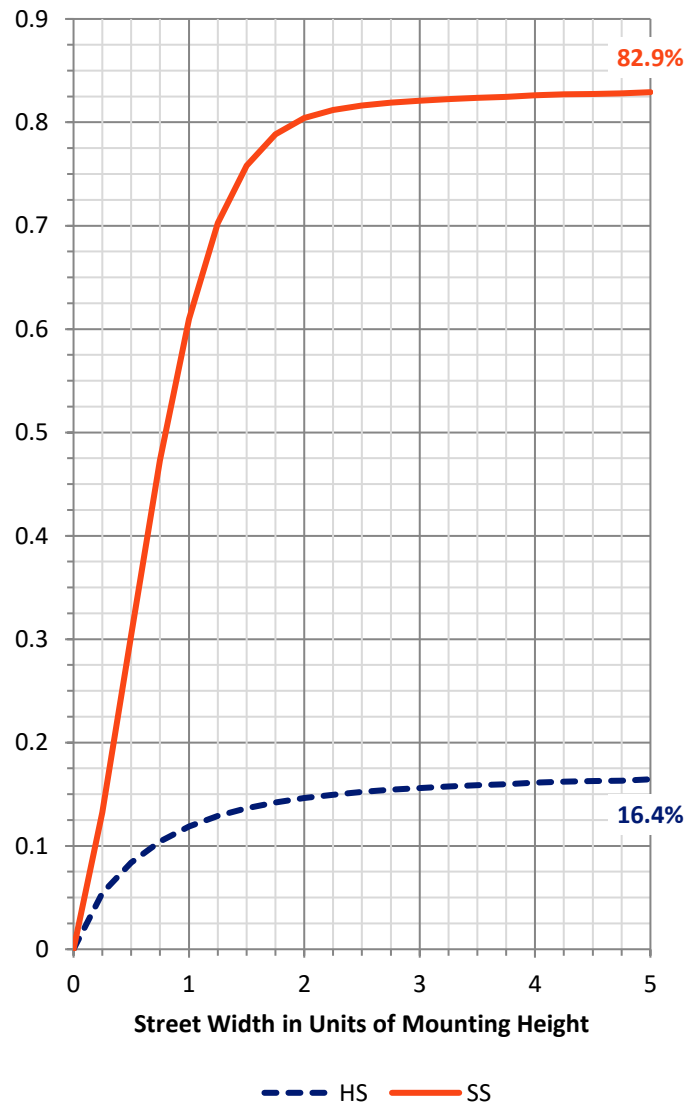
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1152.6	0.0	1152.6
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	5697.4	0.0	5697.4
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	6850.0	0.0	6850.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.6	1.1
10°-20°	298.7	4.4
20°-30°	580.5	8.5
30°-40°	947.5	13.8
40°-50°	1294.5	18.9
50°-60°	1507.8	22.0
60°-70°	1351.8	19.7
70°-80°	683.2	10.0
80°-90°	110.3	1.6
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°	6850.0	100.0
0°-180°	6850.0	100.0



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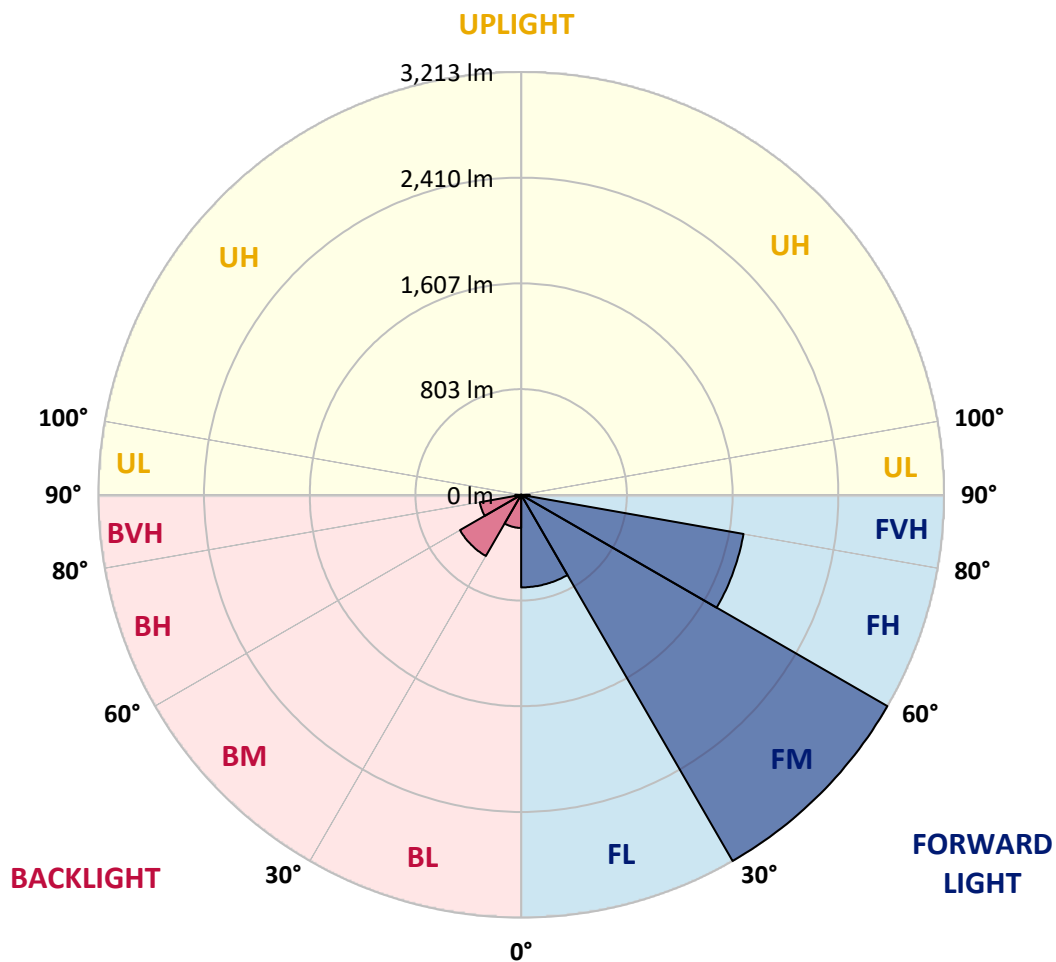
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	703.5	10.3			
FM (30°-60°)	3213.1	46.9			
FH (60°-80°)	1715.6	25.0			G1/1800
FVH (80°-90°)	65.2	1.0			G1/100
BL (0°-30°)	251.4	3.7	B1/500		
BM (30°-60°)	536.7	7.8	B1/1000		
BH (60°-80°)	319.3	4.7	B1/500		G1/500
BVH (80°-90°)	45.2	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	830.4	817.9	816.7	798.3	794.2	759.0	733.2	706.3	675.6	669.5	645.3
5°	1066.7	1065.5	1049.5	1019.5	996.0	936.0	876.7	813.9	745.1	733.9	679.5
7.5°	1279.3	1277.4	1265.1	1232.7	1198.8	1125.1	1040.4	944.2	832.5	816.0	725.8
10°	1440.6	1439.9	1435.8	1412.0	1383.2	1312.5	1219.0	1087.6	934.2	911.6	783.7
12.5°	1565.3	1566.7	1569.5	1561.1	1547.4	1487.2	1391.3	1239.7	1042.5	1020.2	848.1
15°	1649.7	1653.9	1668.3	1680.2	1687.4	1650.4	1557.6	1395.3	1163.9	1137.2	919.5
17.5°	1692.3	1696.9	1721.8	1757.6	1790.6	1786.9	1713.2	1543.7	1280.4	1254.6	996.2
20°	1729.0	1732.5	1760.4	1803.4	1861.8	1887.6	1846.2	1686.5	1408.1	1377.4	1077.6
22.5°	1835.5	1839.9	1848.3	1872.7	1924.4	1971.8	1951.8	1821.6	1525.1	1496.5	1154.8
25°	2041.1	2046.4	2028.3	2007.6	2017.4	2050.4	2054.1	1944.8	1643.7	1611.3	1237.9
27.5°	2288.8	2296.4	2265.5	2212.2	2165.7	2152.9	2148.5	2045.7	1756.9	1719.5	1320.0
30°	2531.3	2544.6	2504.3	2435.3	2349.9	2289.9	2245.5	2144.6	1868.5	1832.7	1397.4
32.5°	2768.3	2762.9	2704.6	2637.1	2537.1	2462.0	2354.6	2250.6	1994.1	1953.0	1474.4
35°	2930.6	2932.5	2878.3	2798.3	2702.9	2645.3	2500.6	2365.0	2122.3	2084.3	1561.8
37.5°	3068.7	3060.1	2998.7	2924.1	2842.0	2817.3	2671.5	2491.1	2261.1	2219.7	1654.8
40°	3114.8	3104.8	3064.5	3010.8	2945.0	2942.9	2860.1	2633.9	2418.1	2377.1	1759.7
42.5°	3086.9	3074.1	3057.6	3042.9	3022.7	3032.0	3037.3	2801.3	2590.6	2544.8	1881.1
45°	2983.8	2964.5	2976.2	3008.0	3052.0	3104.5	3197.3	2986.6	2783.9	2745.5	2023.7
47.5°	2825.5	2808.0	2844.3	2912.5	3032.0	3165.0	3348.7	3191.3	3014.5	2976.4	2226.7
50°	2602.7	2607.8	2659.7	2783.6	2964.3	3192.9	3535.2	3462.2	3349.9	3314.3	2503.6
52.5°	2237.1	2238.1	2384.1	2587.6	2844.3	3178.5	3638.7	3808.5	3807.8	3764.8	2767.3
55°	1897.6	1918.3	2033.9	2304.3	2649.9	3120.8	3711.0	3976.8	4108.5	4058.0	3013.2
57.5°	1566.0	1578.1	1687.6	1959.2	2372.5	2967.1	3785.2	4178.9	4455.0	4423.1	3318.7
60°	1188.8	1207.4	1320.7	1571.6	2017.6	2694.3	3792.2	4389.8	4869.1	4837.0	3659.9
62.5°	771.6	803.7	909.7	1144.8	1588.3	2302.0	3630.3	4527.7	5261.7	5250.3	3962.7
65°	443.5	467.7	541.4	722.8	1095.8	1809.5	3245.5	4474.7	5503.3	5496.8	4075.9
66°	362.3	377.4	433.9	564.9	904.2	1589.0	3021.8	4362.9	5527.2	5527.5	4062.9
67.5°	289.8	296.5	321.8	404.4	667.2	1259.5	2622.0	4116.1	5497.5	5505.6	3978.9
70°	239.8	243.2	251.2	271.2	364.2	759.5	1861.1	3475.0	5198.7	5204.9	3651.3
72.5°	215.1	217.2	220.2	223.0	257.0	424.4	1136.7	2779.9	4558.0	4566.1	3152.0
75°	194.9	196.0	195.6	195.8	215.6	270.5	587.4	2075.5	3685.5	3669.2	2414.6
77.5°	171.2	172.3	170.0	170.5	190.7	207.9	292.3	1453.0	2487.1	2372.2	1360.4
80°	144.6	145.6	144.6	146.3	166.0	157.0	170.0	817.4	1099.7	1040.2	483.7
82.5°	109.3	113.3	116.0	122.6	136.7	111.6	113.7	318.4	334.9	318.8	148.4
85°	47.9	58.4	87.4	93.7	102.8	67.0	74.6	129.8	136.3	132.1	54.0
87.5°	12.6	13.7	43.3	54.4	57.0	30.2	38.8	59.1	62.3	59.1	17.9
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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	632.5	621.1	600.7	582.5	568.8	559.5	550.2	545.6	542.8	540.0	540.4
5°	652.8	629.7	594.6	569.7	555.8	547.0	542.3	540.4	539.3	536.5	536.5
7.5°	683.2	650.7	602.3	576.7	565.8	559.1	556.3	555.3	553.9	550.7	551.1
10°	721.6	676.0	618.4	593.5	583.5	576.0	572.1	570.7	568.1	564.4	564.9
12.5°	766.7	707.4	639.5	613.5	601.4	591.4	584.9	580.9	576.5	571.6	571.8
15°	816.0	741.6	662.3	631.4	614.9	600.9	590.4	583.7	576.7	570.7	570.4
17.5°	866.0	774.6	679.7	641.1	618.8	600.4	586.3	575.8	567.2	559.7	559.1
20°	920.0	804.4	689.5	640.2	611.4	589.5	570.7	557.7	548.1	540.7	539.5
22.5°	974.8	832.3	691.1	630.7	594.9	568.1	548.4	533.9	524.2	516.5	513.7
25°	1025.1	853.9	684.4	612.3	571.8	543.0	523.7	509.1	501.1	492.1	489.3
27.5°	1070.9	869.0	670.9	588.8	546.0	517.7	499.5	487.0	478.4	471.4	469.1
30°	1112.1	877.2	648.8	560.9	519.5	493.7	478.4	469.8	462.3	453.5	451.8
32.5°	1151.1	877.2	620.4	530.4	493.2	472.5	463.5	458.1	449.8	441.1	438.8
35°	1190.2	871.8	587.0	498.6	469.1	457.4	457.0	450.7	437.9	426.3	423.2
37.5°	1231.4	860.9	549.3	468.8	449.3	450.7	454.6	440.7	422.5	406.0	401.6
40°	1277.9	845.8	510.2	443.0	432.8	447.7	448.4	426.3	390.9	375.8	371.8
42.5°	1332.5	830.7	473.9	420.2	419.8	438.6	436.5	395.1	373.9	366.3	364.2
45°	1404.4	822.1	439.5	398.6	409.5	423.9	416.3	377.9	369.1	364.6	362.8
47.5°	1517.6	826.5	407.9	381.4	399.3	409.3	378.6	370.9	364.6	359.3	357.4
50°	1659.5	823.9	382.3	369.5	387.7	393.9	361.6	361.8	358.6	352.5	349.8
52.5°	1766.2	803.9	365.8	362.8	377.4	366.7	350.9	353.0	351.4	342.5	339.5
55°	1869.2	786.7	357.4	360.2	370.0	332.8	338.4	343.5	341.8	333.2	331.8
57.5°	1997.4	783.5	352.3	360.9	363.7	315.8	326.3	333.0	331.8	328.1	327.4
60°	2154.3	784.4	347.7	362.1	356.7	303.2	314.9	323.5	324.2	323.5	323.0
62.5°	2240.6	759.0	336.0	358.8	344.4	292.3	303.0	315.6	315.8	317.2	317.0
65°	2167.4	683.2	314.4	347.4	323.7	283.2	292.8	306.5	303.0	309.3	309.3
66°	2096.2	639.5	303.7	340.0	314.9	279.8	289.5	301.8	297.4	306.0	306.0
67.5°	1950.9	565.8	284.4	324.2	302.3	274.9	285.8	294.2	288.1	300.9	300.0
70°	1685.3	437.7	245.6	288.4	281.6	267.7	280.7	278.8	270.0	289.5	285.8
72.5°	1420.9	332.5	197.2	241.4	250.2	258.6	273.5	259.3	248.1	261.9	253.7
75°	1102.5	250.0	155.8	187.7	211.4	244.4	264.9	236.7	220.7	219.3	214.9
77.5°	596.0	171.6	123.5	143.3	167.9	226.7	259.1	212.6	188.4	182.8	179.3
80°	236.0	111.6	89.8	108.6	117.4	201.2	245.1	184.4	155.3	149.8	144.4
82.5°	97.4	66.0	57.9	72.8	76.5	172.1	220.0	151.2	120.0	166.0	176.3
85°	41.9	36.3	34.4	37.7	43.3	120.7	175.1	115.3	129.5	115.6	91.9
87.5°	12.6	15.3	14.7	14.4	15.8	28.8	93.3	64.2	95.1	36.0	27.0
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)