

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: P348999

Luminaire Tested: **ARCH-N-PA1-40-750-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348999  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-750-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3967 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

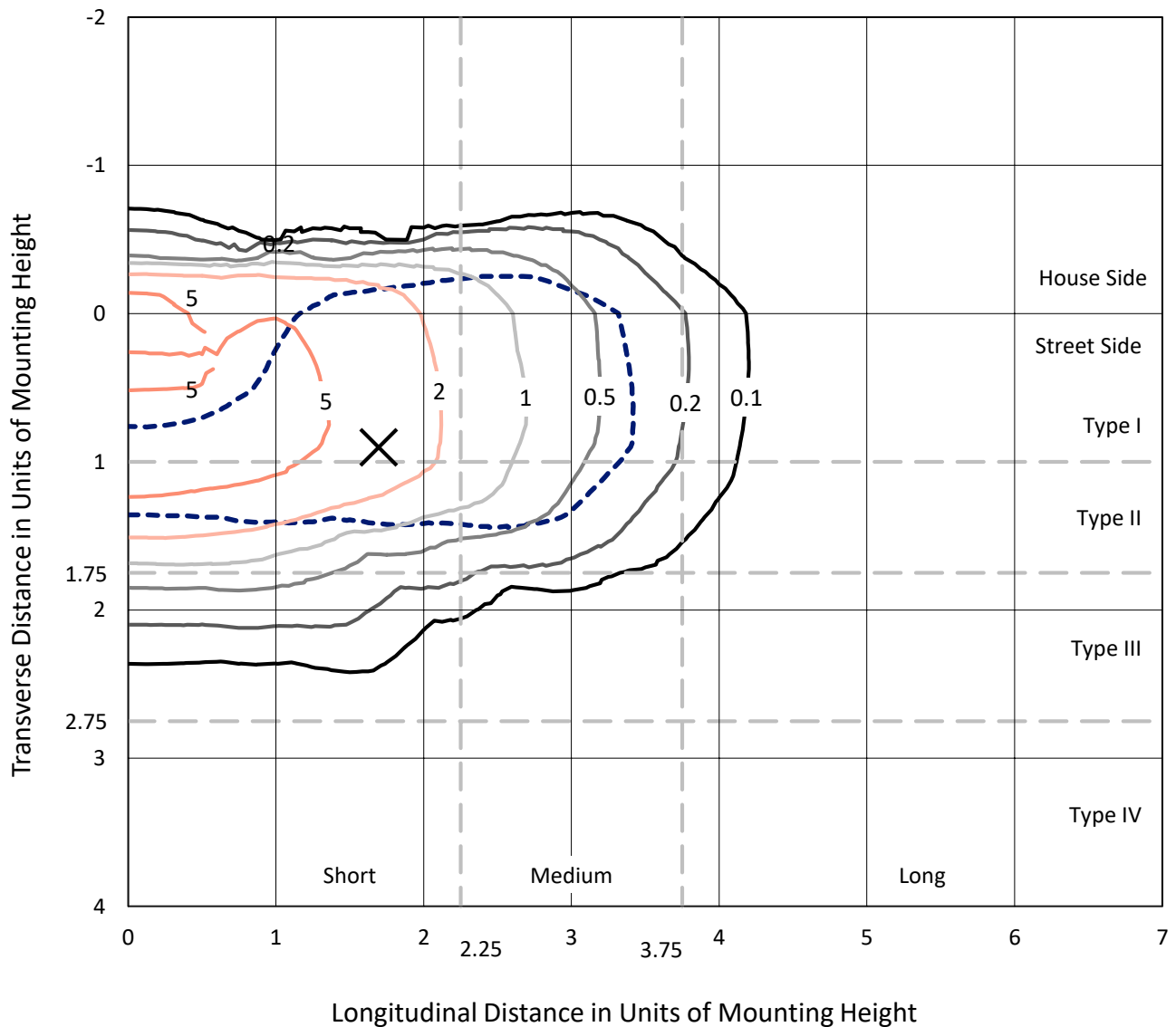
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

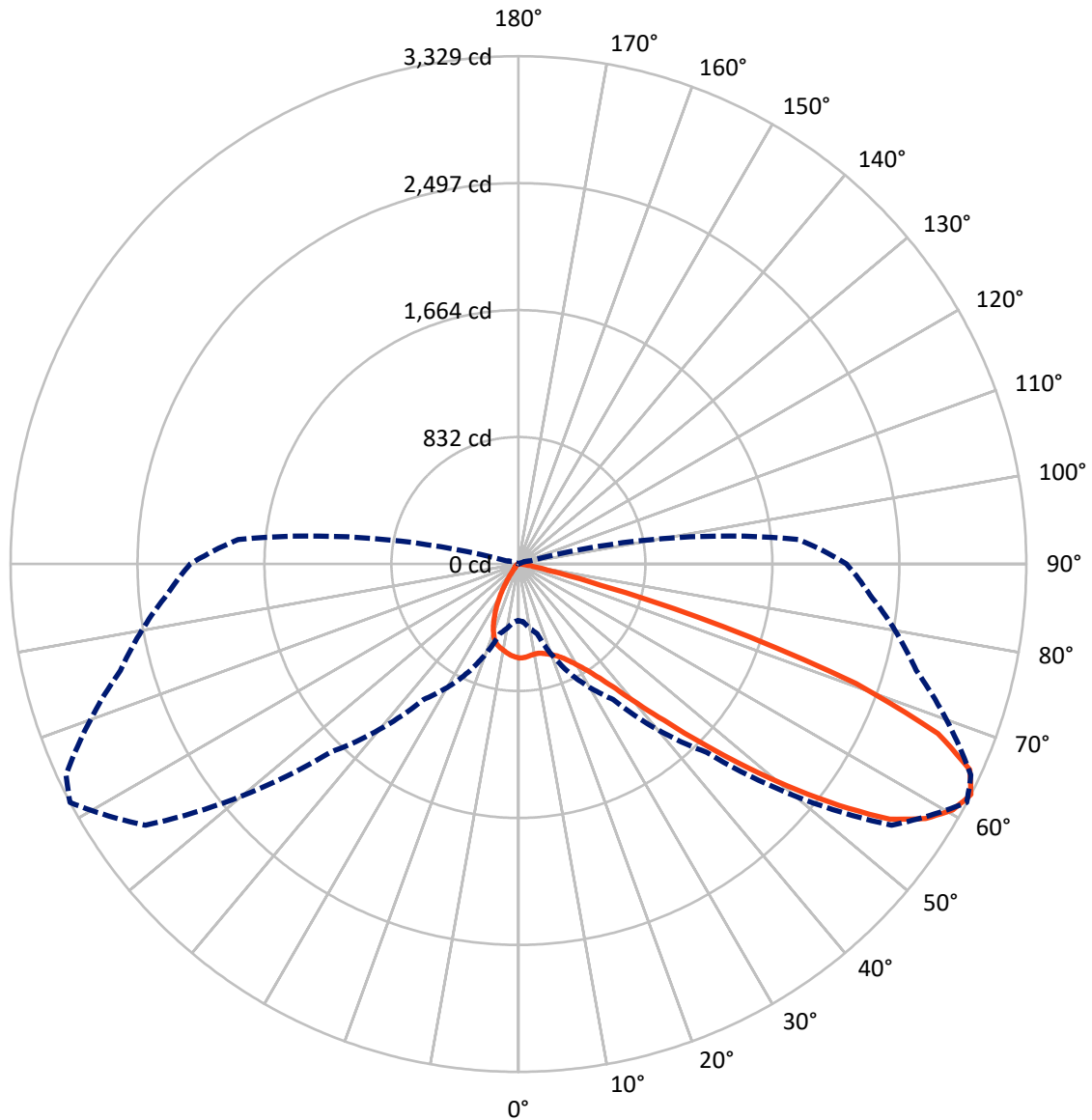
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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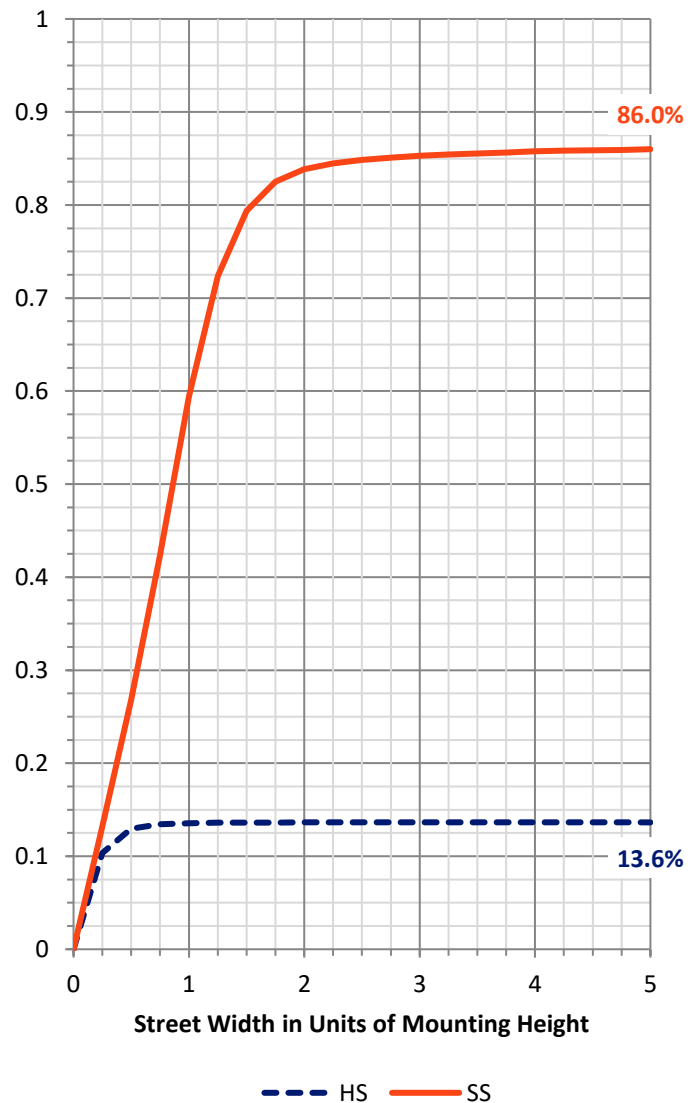
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	547.7	0.0	547.7
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	3419.3	0.0	3419.3
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	3967.0	0.0	3967.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.1	1.4
10°-20°	140.9	3.6
20°-30°	210.4	5.3
30°-40°	400.8	10.1
40°-50°	835.8	21.1
50°-60°	1110.5	28.0
60°-70°	865.7	21.8
70°-80°	327.2	8.2
80°-90°	19.6	0.5
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°	3967.0	100.0
0°-180°	3967.0	100.0



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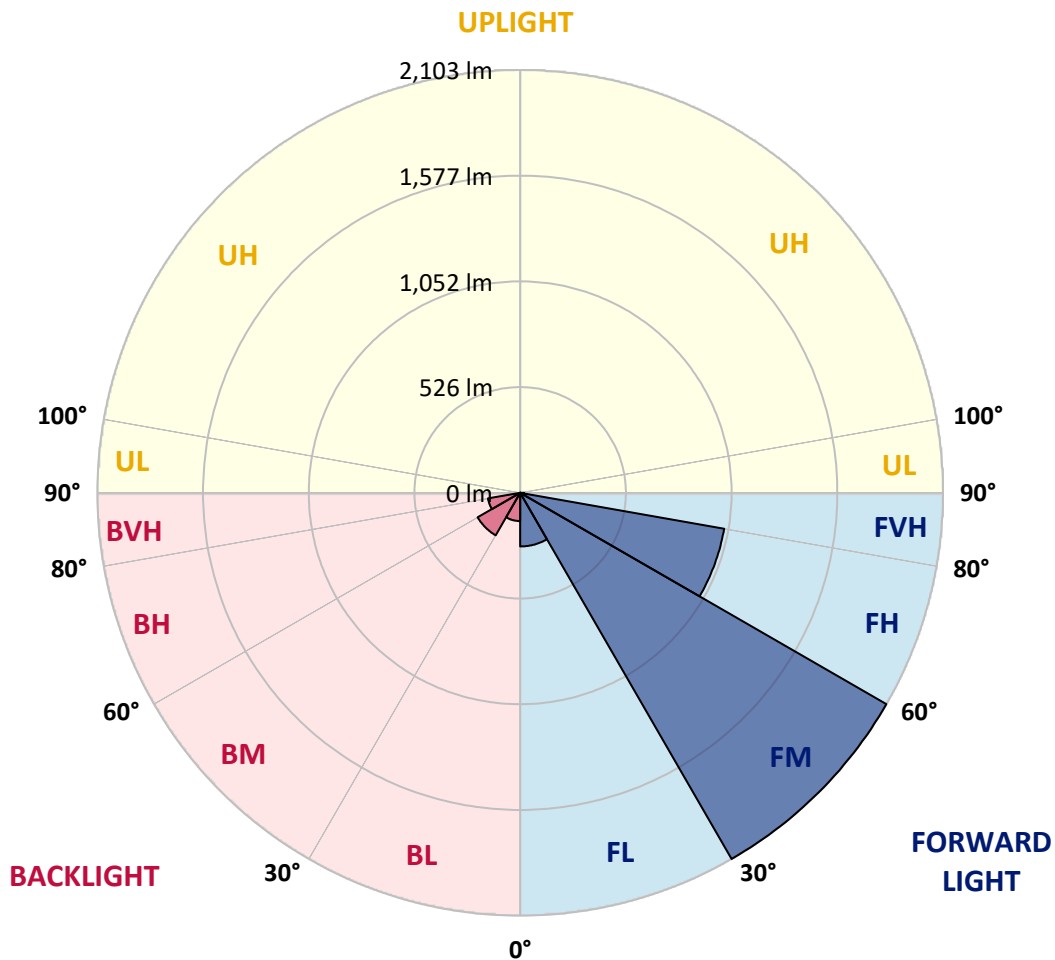
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	266.9	6.7			
FM (30°-60°)	2103.3	53.0			
FH (60°-80°)	1030.4	26.0			G1/1800
FVH (80°-90°)	18.7	0.5			G1/100
BL (0°-30°)	140.5	3.5	B1/500		
BM (30°-60°)	243.8	6.1	B1/1000		
BH (60°-80°)	162.5	4.1	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
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°	62°	65°	75°	85°
0°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	614.2	613.2	615.8	615.8	615.3	616.3	615.3	614.8	614.2	613.2	612.2
5°	598.2	598.2	601.8	603.3	604.9	608.0	609.0	610.1	609.6	610.6	611.1
7.5°	579.5	580.5	584.7	586.8	589.4	595.6	599.2	603.3	603.9	607.5	609.6
10°	564.0	565.0	569.1	571.7	575.4	583.6	591.4	598.7	599.7	606.5	608.0
12.5°	553.6	554.6	558.8	562.4	570.2	580.5	591.4	599.7	602.3	610.6	610.6
15°	549.4	550.5	555.7	561.9	572.2	585.7	599.2	608.0	613.2	619.9	616.8
17.5°	547.9	550.0	558.8	568.1	579.5	594.0	610.6	619.9	625.1	632.4	625.6
20°	552.5	555.1	566.5	579.5	591.4	606.5	624.6	635.0	640.1	644.8	631.9
22.5°	569.1	573.3	583.1	597.6	607.0	625.1	643.3	655.2	660.9	660.4	643.3
25°	609.0	614.2	618.9	626.7	630.8	652.6	671.8	683.7	687.8	686.3	666.6
27.5°	703.4	710.1	693.5	676.4	667.1	687.3	708.6	721.0	724.6	721.5	691.5
30°	862.5	863.0	825.2	771.3	731.4	729.3	755.2	771.8	771.8	765.6	726.7
32.5°	1094.2	1077.6	1029.9	934.6	844.4	797.2	816.9	833.0	833.0	825.2	780.6
35°	1385.5	1373.1	1294.3	1179.7	1019.1	906.1	901.9	917.5	918.0	915.9	865.1
37.5°	1682.0	1651.4	1585.6	1448.2	1259.6	1073.5	1023.7	1034.6	1042.4	1041.3	978.1
40°	1957.8	1927.2	1871.7	1739.5	1555.0	1320.2	1201.0	1201.0	1201.5	1196.3	1120.1
42.5°	2174.4	2160.4	2119.0	2027.2	1884.7	1708.4	1439.9	1400.6	1392.3	1387.1	1287.0
45°	2314.9	2300.4	2278.1	2258.9	2212.8	2149.6	1760.8	1657.6	1644.2	1593.4	1471.6
47.5°	2322.7	2300.4	2315.4	2388.0	2492.2	2524.8	2156.8	1957.2	1921.5	1829.7	1656.6
50°	2149.6	2151.6	2210.2	2386.4	2667.9	2854.0	2576.7	2286.9	2230.4	2046.9	1819.9
52.5°	1831.3	1852.0	1942.7	2213.8	2676.2	3064.4	2942.1	2626.9	2515.0	2241.8	1935.0
55°	1433.7	1452.4	1600.6	1894.0	2474.6	3094.5	3208.0	2952.5	2804.2	2377.6	2038.1
57.5°	1013.9	1049.1	1233.1	1502.7	2089.9	2864.9	3280.6	3147.4	3003.8	2509.8	2135.0
60°	616.3	633.9	825.2	1138.8	1575.2	2384.4	3195.6	3271.8	3155.6	2624.4	2225.7
62.5°	370.6	381.0	472.7	784.2	1083.8	1745.8	2985.1	3328.8	3271.8	2700.5	2312.8
65°	219.3	226.0	269.0	473.8	722.0	1070.9	2530.5	3250.5	3296.6	2766.4	2363.6
67.5°	158.1	160.2	175.7	255.0	484.6	573.8	1759.8	2965.4	3138.0	2788.1	2333.6
70°	136.3	138.9	153.9	179.3	343.1	338.5	915.9	2347.0	2660.1	2674.6	2206.6
72.5°	103.1	107.8	132.7	168.5	246.2	240.5	345.2	1399.5	1805.9	2195.7	1902.3
75°	70.0	72.6	98.5	143.1	192.3	179.3	180.9	561.9	883.2	1376.7	1307.3
77.5°	44.1	46.1	60.1	102.6	164.8	126.5	128.0	199.6	318.8	583.6	560.3
80°	30.1	31.1	36.3	66.3	111.4	109.9	82.4	104.2	118.7	179.9	120.8
82.5°	18.1	18.1	23.8	39.4	67.4	87.1	51.8	57.5	63.2	66.9	27.5
85°	6.2	6.7	14.5	24.4	41.5	43.5	29.5	34.2	35.8	38.9	13.0
87.5°	2.6	2.1	7.8	13.5	17.6	20.2	17.1	15.6	17.1	22.8	5.7
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°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	612.7	610.6	610.6	610.1	607.0	605.4	603.9	599.7	602.3	599.2	597.1
5°	609.6	608.0	605.4	602.8	595.6	589.4	586.8	581.6	581.1	576.9	574.8
7.5°	609.0	605.4	601.3	592.5	581.6	571.7	562.9	554.1	550.5	545.8	543.2
10°	606.5	601.8	594.0	580.0	564.0	548.4	528.7	504.3	486.2	475.8	474.3
12.5°	607.0	601.8	589.9	569.1	547.9	513.7	460.8	405.3	359.7	340.5	337.4
15°	611.1	605.4	587.3	559.3	523.0	447.8	350.9	265.9	206.8	185.6	180.9
17.5°	616.3	606.5	581.6	545.3	475.3	347.3	220.8	139.4	106.3	94.3	92.3
20°	619.4	605.9	572.2	524.0	402.7	232.2	120.3	81.9	72.0	69.5	68.4
22.5°	627.2	607.5	564.5	490.9	311.5	140.0	76.2	63.8	58.1	54.9	54.4
25°	643.3	617.9	565.0	447.8	218.2	84.5	61.7	51.8	46.7	43.5	42.5
27.5°	666.6	636.5	574.8	394.5	134.8	63.8	51.3	42.0	36.3	33.7	33.2
30°	696.1	659.3	586.2	325.0	84.0	53.4	41.5	32.7	28.5	27.0	26.4
32.5°	742.8	698.7	596.1	243.1	58.1	44.1	32.7	25.9	23.3	21.8	21.8
35°	820.0	766.6	612.2	162.8	46.1	35.2	26.4	21.3	19.2	18.1	18.1
37.5°	928.9	863.6	619.9	101.1	37.8	27.5	21.3	17.6	16.1	15.0	15.0
40°	1061.6	981.2	609.0	62.7	31.6	22.3	17.6	15.0	13.5	13.0	13.0
42.5°	1214.5	1116.5	574.8	44.6	26.4	18.1	15.0	13.0	11.9	11.4	11.4
45°	1385.5	1264.7	513.2	37.3	22.3	15.6	13.0	10.9	10.4	9.8	9.8
47.5°	1556.1	1415.1	433.3	32.1	18.7	13.0	10.9	9.3	8.8	8.3	8.3
50°	1704.8	1546.7	348.8	28.0	15.6	11.4	9.3	7.8	7.3	6.7	6.7
52.5°	1789.8	1625.0	270.1	23.3	13.5	9.8	7.3	6.2	5.7	5.2	5.2
55°	1881.6	1690.3	201.6	19.7	10.9	8.3	5.7	4.7	4.1	3.6	3.6
57.5°	1967.1	1748.9	149.8	16.1	9.3	6.2	4.7	3.6	3.1	2.6	2.6
60°	2050.0	1798.6	110.9	13.0	7.8	5.2	3.6	2.6	2.1	1.6	1.6
62.5°	2151.1	1844.3	81.4	10.4	6.7	3.6	2.6	1.6	1.0	0.5	0.5
65°	2226.3	1867.6	61.2	7.8	5.7	2.6	1.6	1.0	0.0	0.0	0.0
67.5°	2225.7	1822.5	44.6	5.7	4.1	2.1	1.0	0.0	0.0	0.0	0.0
70°	2121.6	1685.6	31.1	4.7	3.1	1.6	0.5	0.0	0.0	0.0	0.0
72.5°	1819.4	1333.2	20.2	3.1	2.6	1.0	0.5	0.0	0.0	0.0	0.0
75°	1227.9	677.0	11.9	2.6	2.1	1.0	0.5	0.0	0.0	0.0	0.0
77.5°	525.1	265.9	6.2	1.6	1.6	0.5	0.0	0.0	0.0	0.0	0.0
80°	109.9	64.3	2.6	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	18.7	9.3	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	2.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)