

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: P348980

Luminaire Tested: **ARCH-N-PA1-60-727-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348980  
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-PA1-60-727-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4570 lumens  
Efficiency: N/A  
Efficacy: 73.7 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

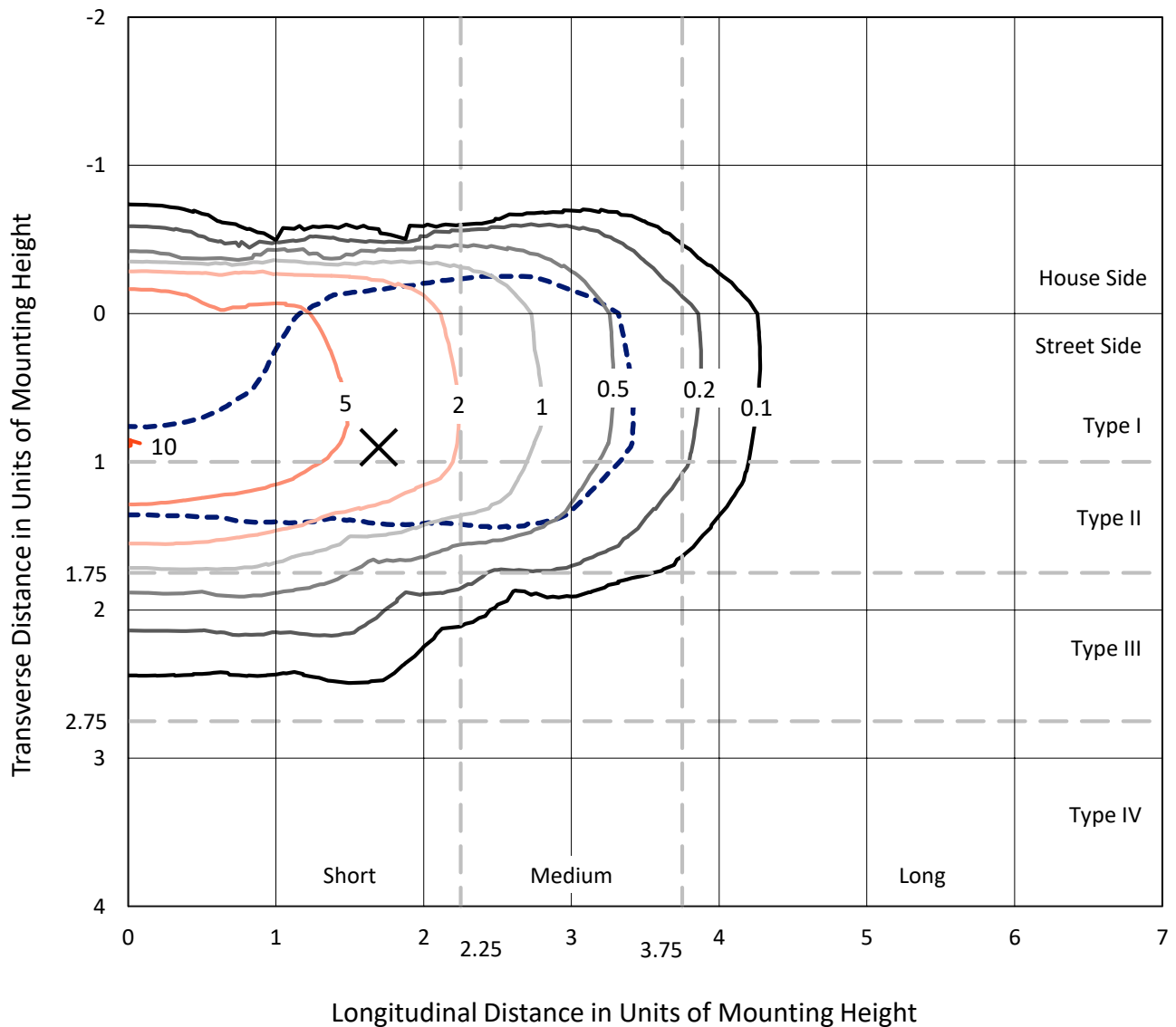
Input Watts (W): 62  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

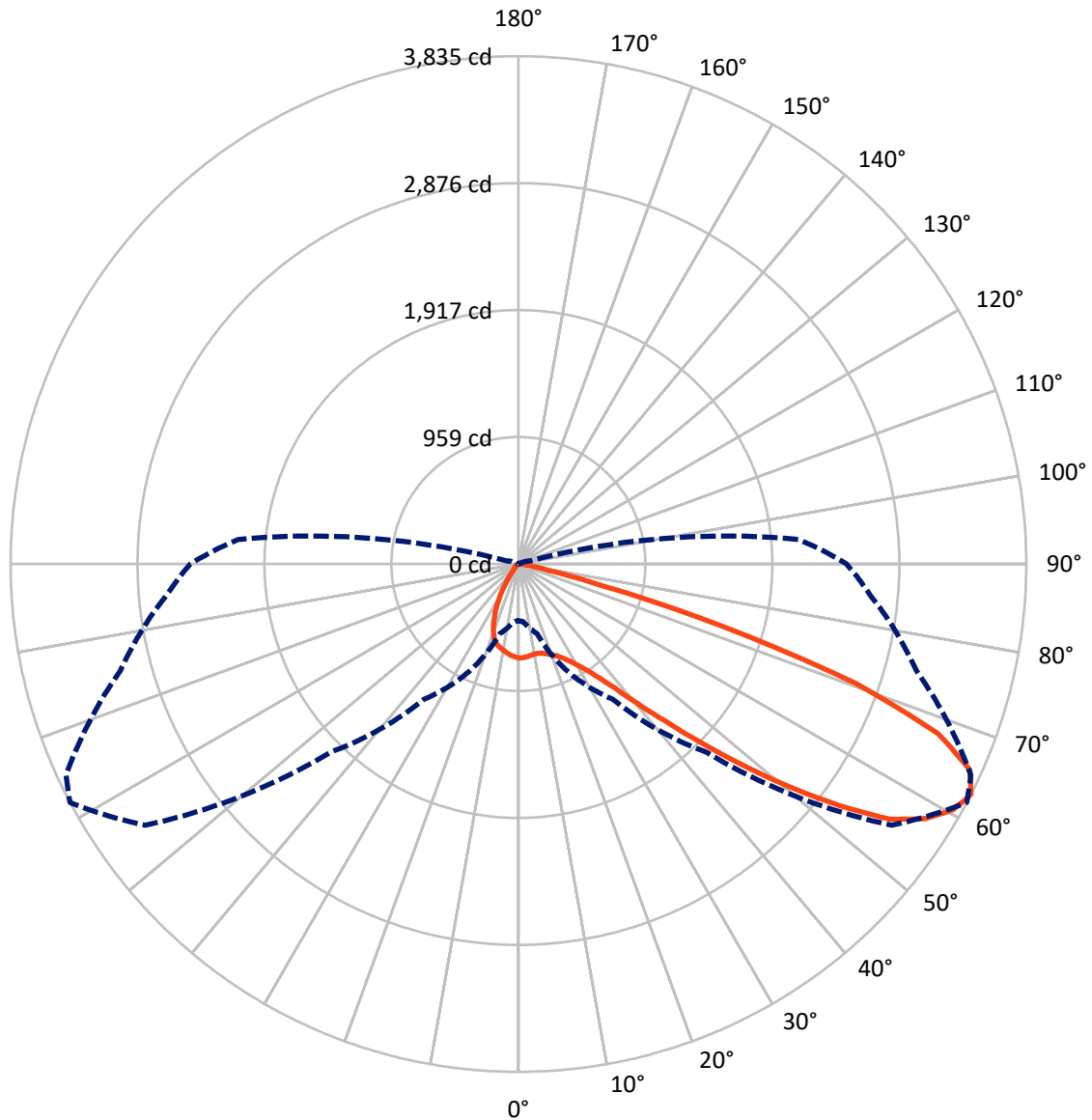
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.1 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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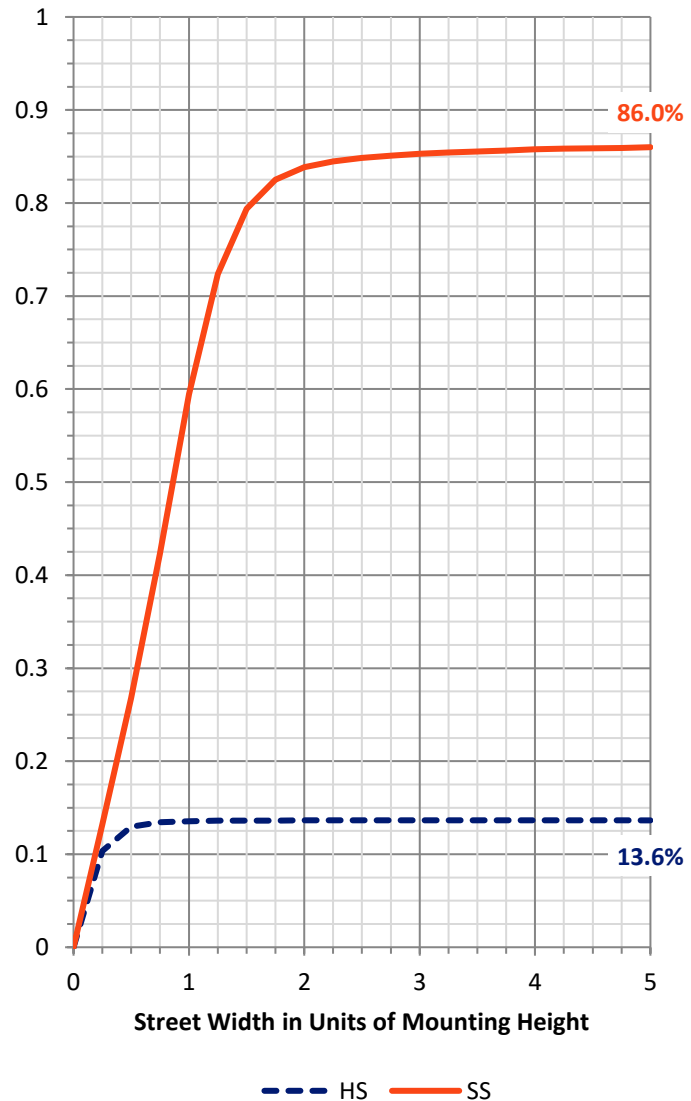
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	631.0	0.0	631.0
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	3939.0	0.0	3939.0
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	4570.0	0.0	4570.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	1.4
10°-20°	162.3	3.6
20°-30°	242.4	5.3
30°-40°	461.8	10.1
40°-50°	962.9	21.1
50°-60°	1279.3	28.0
60°-70°	997.3	21.8
70°-80°	376.9	8.2
80°-90°	22.6	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°	4570.0	100.0
0°-180°	4570.0	100.0

**Coefficient of Utilization**



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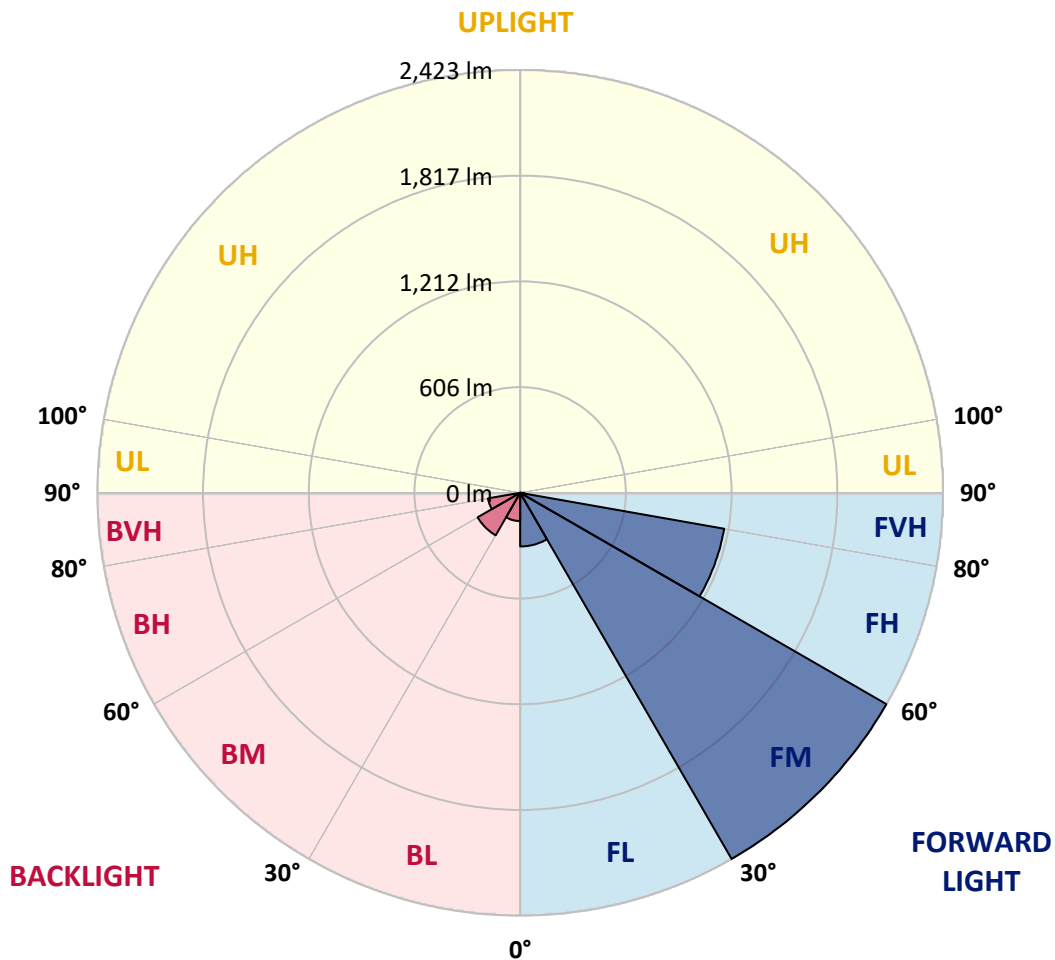
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	307.5	6.7			
FM	(30°-60°)	2423.0	53.0			
FH	(60°-80°)	1187.0	26.0			G1/1800
FVH	(80°-90°)	21.5	0.5			G1/100
BL	(0°-30°)	161.8	3.5	B1/500		
BM	(30°-60°)	280.9	6.1	B1/1000		
BH	(60°-80°)	187.2	4.1	B1/500		G1/500
BVH	(80°-90°)	1.1	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°	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0
2.5°	707.6	706.4	709.4	709.4	708.8	710.0	708.8	708.2	707.6	706.4	705.2
5°	689.1	689.1	693.3	695.1	696.8	700.4	701.6	702.8	702.2	703.4	704.0
7.5°	667.6	668.8	673.6	675.9	678.9	686.1	690.3	695.1	695.7	699.8	702.2
10°	649.7	650.9	655.6	658.6	662.8	672.4	681.3	689.7	690.9	698.6	700.4
12.5°	637.7	638.9	643.7	647.9	656.8	668.8	681.3	690.9	693.9	703.4	703.4
15°	633.0	634.2	640.1	647.3	659.2	674.8	690.3	700.4	706.4	714.2	710.6
17.5°	631.2	633.6	643.7	654.5	667.6	684.3	703.4	714.2	720.1	728.5	720.7
20°	636.5	639.5	652.7	667.6	681.3	698.6	719.5	731.5	737.5	742.8	727.9
22.5°	655.6	660.4	671.8	688.5	699.2	720.1	741.0	754.8	761.3	760.7	741.0
25°	701.6	707.6	713.0	721.9	726.7	751.8	773.9	787.6	792.4	790.6	767.9
27.5°	810.3	818.1	799.0	779.3	768.5	791.8	816.3	830.6	834.8	831.2	796.6
30°	993.6	994.2	950.6	888.5	842.5	840.2	870.0	889.1	889.1	882.0	837.2
32.5°	1260.5	1241.4	1186.5	1076.6	972.7	918.4	941.1	959.6	959.6	950.6	899.3
35°	1596.1	1581.8	1491.0	1359.1	1174.0	1043.8	1039.0	1056.9	1057.5	1055.1	996.6
37.5°	1937.7	1902.5	1826.6	1668.4	1451.0	1236.7	1179.3	1191.9	1200.8	1199.6	1126.8
40°	2255.4	2220.1	2156.2	2004.0	1791.4	1520.9	1383.5	1383.5	1384.1	1378.2	1290.4
42.5°	2505.0	2488.8	2441.1	2335.4	2171.2	1968.1	1658.8	1613.4	1603.9	1597.9	1482.7
45°	2666.8	2650.1	2624.4	2602.3	2549.1	2476.3	2028.4	1909.6	1894.1	1835.6	1695.2
47.5°	2675.7	2650.1	2667.4	2751.0	2871.0	2908.6	2484.7	2254.8	2213.6	2107.9	1908.4
50°	2476.3	2478.7	2546.2	2749.2	3073.4	3287.8	2968.3	2634.5	2569.4	2358.1	2096.5
52.5°	2109.7	2133.5	2238.0	2550.3	3083.0	3530.2	3389.3	3026.2	2897.3	2582.6	2229.1
55°	1651.7	1673.2	1843.9	2181.9	2850.7	3564.9	3695.6	3401.2	3230.5	2739.0	2347.9
57.5°	1168.0	1208.6	1420.6	1731.1	2407.6	3300.3	3779.2	3625.8	3460.4	2891.3	2459.6
60°	710.0	730.3	950.6	1311.9	1814.7	2746.8	3681.3	3769.1	3635.3	3023.3	2564.1
62.5°	426.9	438.9	544.6	903.5	1248.6	2011.1	3438.9	3834.8	3769.1	3111.0	2664.4
65°	252.6	260.3	309.9	545.8	831.8	1233.7	2915.2	3744.6	3797.7	3186.9	2722.9
67.5°	182.1	184.5	202.4	293.8	558.3	661.0	2027.3	3416.2	3615.0	3212.0	2688.3
70°	157.0	160.0	177.3	206.6	395.3	389.9	1055.1	2703.8	3064.5	3081.2	2542.0
72.5°	118.8	124.2	152.9	194.1	283.6	277.1	397.7	1612.2	2080.4	2529.4	2191.5
75°	80.6	83.6	113.5	164.8	221.5	206.6	208.4	647.3	1017.5	1586.0	1506.0
77.5°	50.8	53.1	69.3	118.2	189.9	145.7	147.5	229.9	367.2	672.4	645.5
80°	34.6	35.8	41.8	76.4	128.4	126.6	94.9	120.0	136.7	207.2	139.1
82.5°	20.9	20.9	27.5	45.4	77.6	100.3	59.7	66.3	72.8	77.0	31.6
85°	7.2	7.8	16.7	28.1	47.8	50.2	34.0	39.4	41.2	44.8	14.9
87.5°	3.0	2.4	9.0	15.5	20.3	23.3	19.7	17.9	19.7	26.3	6.6
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°	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0
2.5°	705.8	703.4	703.4	702.8	699.2	697.4	695.7	690.9	693.9	690.3	687.9
5°	702.2	700.4	697.4	694.5	686.1	678.9	675.9	670.0	669.4	664.6	662.2
7.5°	701.6	697.4	692.7	682.5	670.0	658.6	648.5	638.3	634.2	628.8	625.8
10°	698.6	693.3	684.3	668.2	649.7	631.8	609.1	581.0	560.1	548.2	546.4
12.5°	699.2	693.3	679.5	655.6	631.2	591.8	530.8	467.0	414.4	392.3	388.7
15°	704.0	697.4	676.5	644.3	602.5	515.9	404.3	306.3	238.3	213.8	208.4
17.5°	710.0	698.6	670.0	628.2	547.6	400.1	254.4	160.6	122.4	108.7	106.3
20°	713.6	698.0	659.2	603.7	464.0	267.5	138.5	94.3	83.0	80.0	78.8
22.5°	722.5	699.8	650.3	565.5	358.9	161.2	87.8	73.4	66.9	63.3	62.7
25°	741.0	711.8	650.9	515.9	251.4	97.3	71.1	59.7	53.7	50.2	49.0
27.5°	767.9	733.3	662.2	454.4	155.3	73.4	59.1	48.4	41.8	38.8	38.2
30°	801.9	759.5	675.4	374.4	96.7	61.5	47.8	37.6	32.8	31.1	30.5
32.5°	855.7	804.9	686.7	280.1	66.9	50.8	37.6	29.9	26.9	25.1	25.1
35°	944.7	883.2	705.2	187.5	53.1	40.6	30.5	24.5	22.1	20.9	20.9
37.5°	1070.1	994.8	714.2	116.4	43.6	31.6	24.5	20.3	18.5	17.3	17.3
40°	1222.9	1130.4	701.6	72.3	36.4	25.7	20.3	17.3	15.5	14.9	14.9
42.5°	1399.1	1286.2	662.2	51.4	30.5	20.9	17.3	14.9	13.7	13.1	13.1
45°	1596.1	1457.0	591.2	43.0	25.7	17.9	14.9	12.5	11.9	11.3	11.3
47.5°	1792.6	1630.2	499.2	37.0	21.5	14.9	12.5	10.7	10.2	9.6	9.6
50°	1964.0	1781.8	401.9	32.2	17.9	13.1	10.7	9.0	8.4	7.8	7.8
52.5°	2061.9	1872.0	311.1	26.9	15.5	11.3	8.4	7.2	6.6	6.0	6.0
55°	2167.6	1947.2	232.3	22.7	12.5	9.6	6.6	5.4	4.8	4.2	4.2
57.5°	2266.1	2014.7	172.6	18.5	10.7	7.2	5.4	4.2	3.6	3.0	3.0
60°	2361.6	2072.0	127.8	14.9	9.0	6.0	4.2	3.0	2.4	1.8	1.8
62.5°	2478.1	2124.6	93.7	11.9	7.8	4.2	3.0	1.8	1.2	0.6	0.6
65°	2564.7	2151.5	70.5	9.0	6.6	3.0	1.8	1.2	0.0	0.0	0.0
67.5°	2564.1	2099.5	51.4	6.6	4.8	2.4	1.2	0.0	0.0	0.0	0.0
70°	2444.0	1941.9	35.8	5.4	3.6	1.8	0.6	0.0	0.0	0.0	0.0
72.5°	2095.9	1535.8	23.3	3.6	3.0	1.2	0.6	0.0	0.0	0.0	0.0
75°	1414.6	779.9	13.7	3.0	2.4	1.2	0.6	0.0	0.0	0.0	0.0
77.5°	604.9	306.3	7.2	1.8	1.8	0.6	0.0	0.0	0.0	0.0	0.0
80°	126.6	74.0	3.0	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	21.5	10.7	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.4	3.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	0.6	0.6	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)