

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: P348874

Luminaire Tested: **ARCH-N-PA1-50-730-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348874  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-730-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4381 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

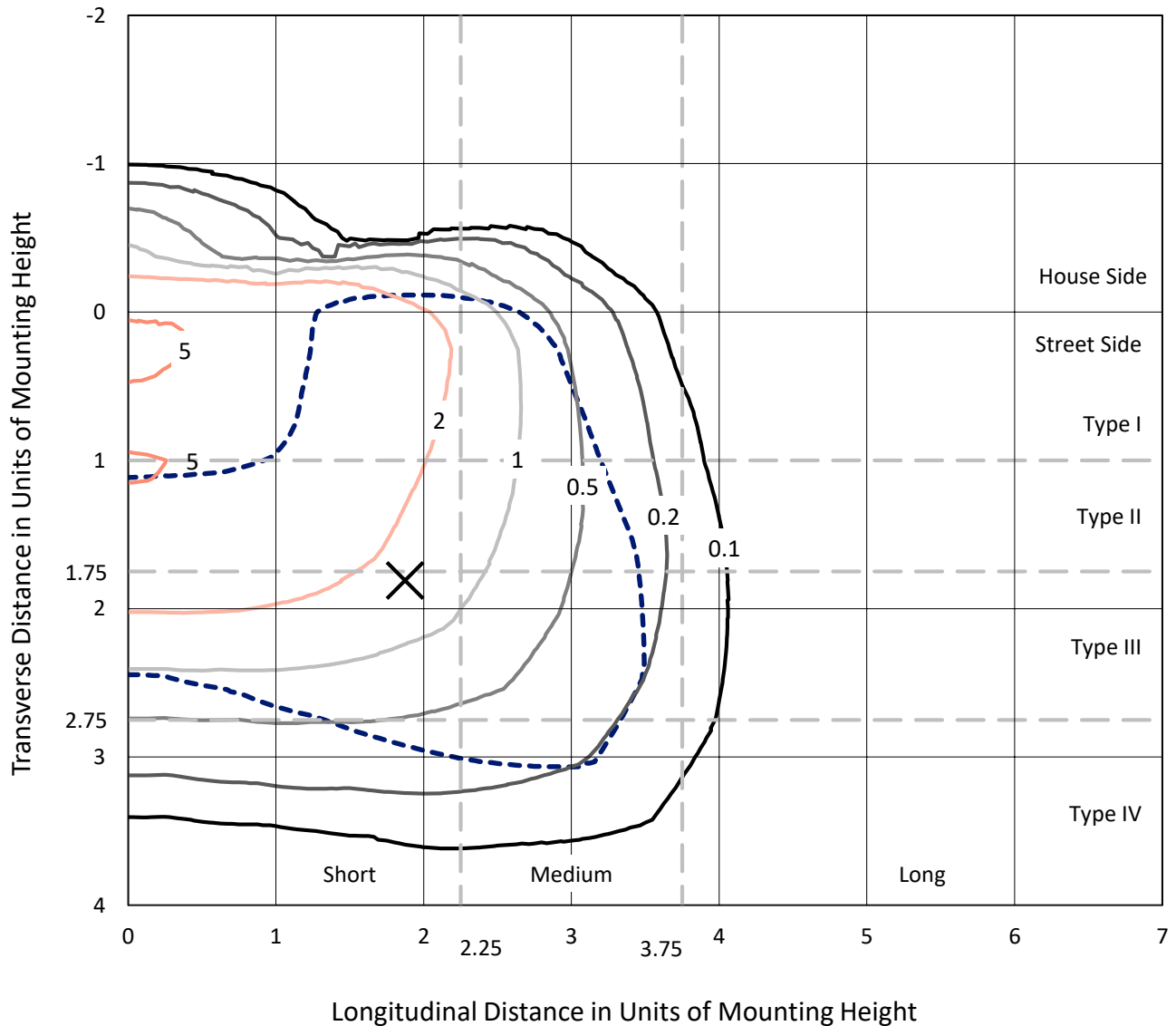
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

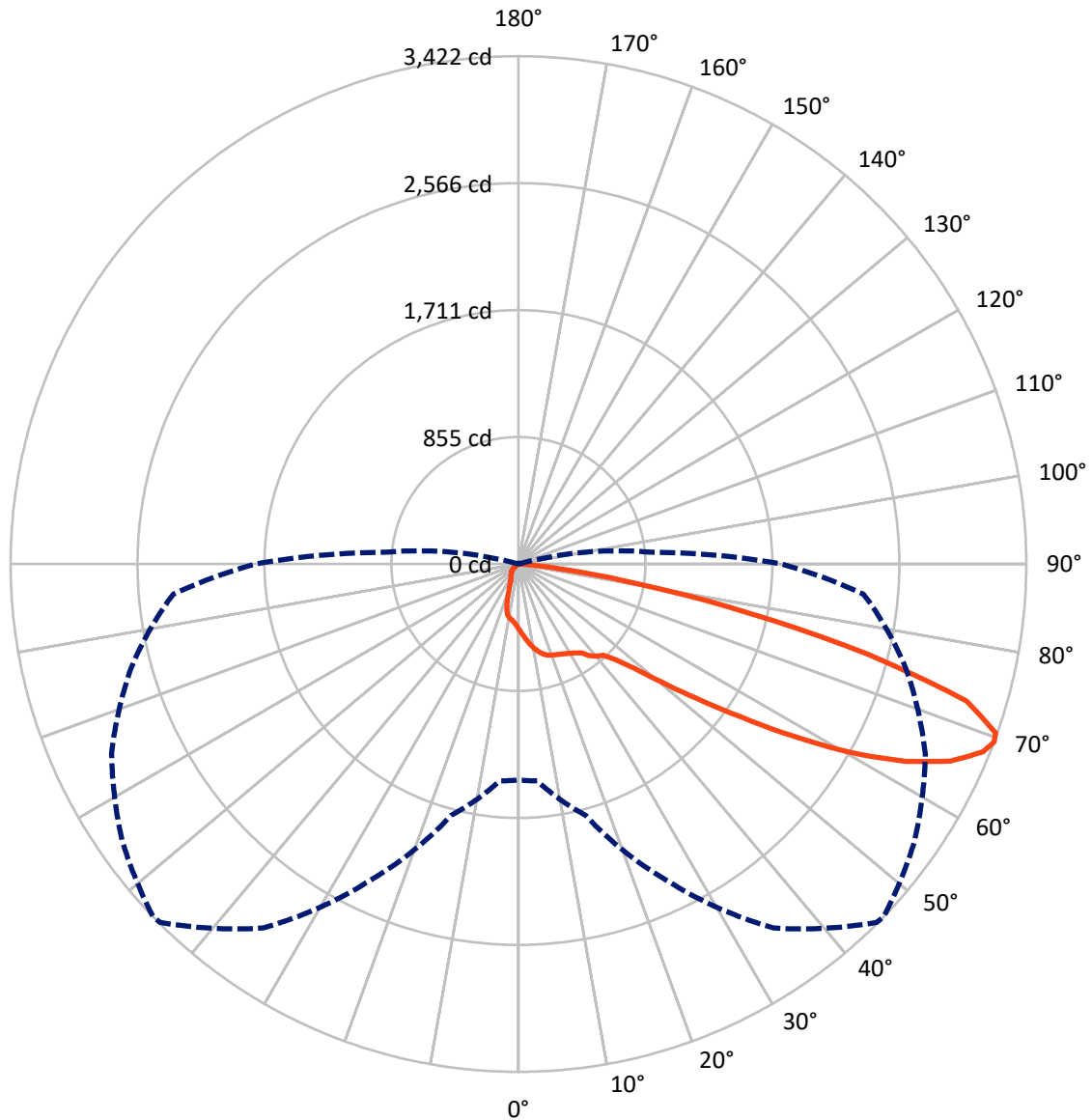


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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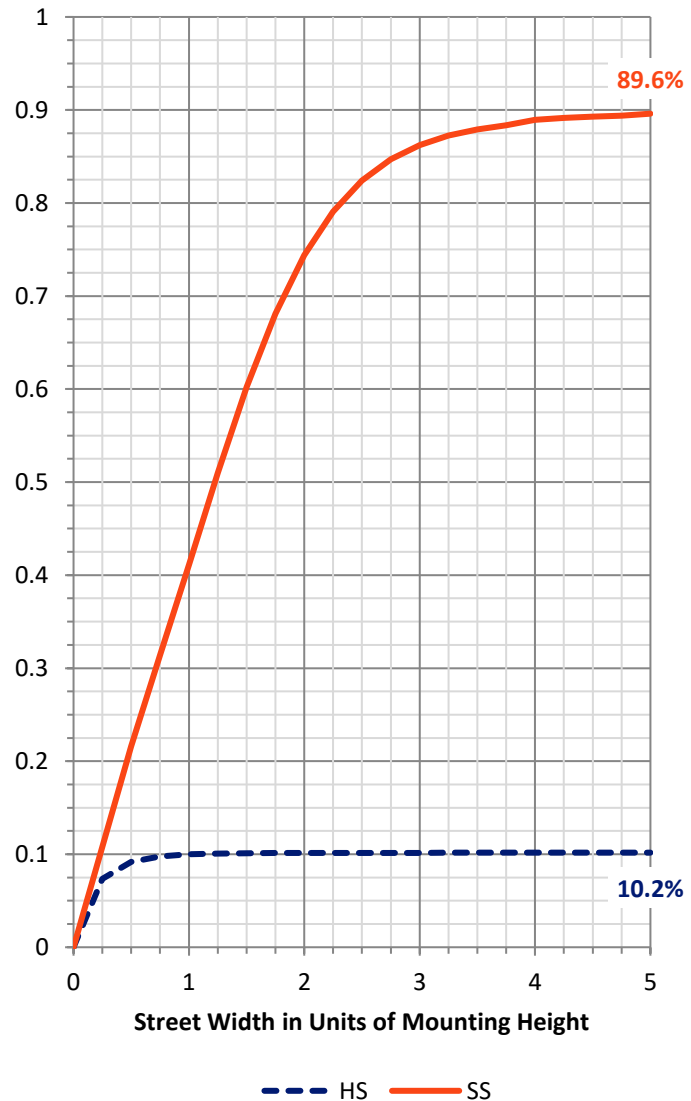
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	449.6	0.0	449.6
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	3931.4	0.0	3931.4
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	4381.0	0.0	4381.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.7	1.0
10°-20°	132.6	3.0
20°-30°	208.5	4.8
30°-40°	298.9	6.8
40°-50°	516.7	11.8
50°-60°	1020.7	23.3
60°-70°	1426.5	32.6
70°-80°	689.2	15.7
80°-90°	44.3	1.0
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°	4381.0	100.0
0°-180°	4381.0	100.0



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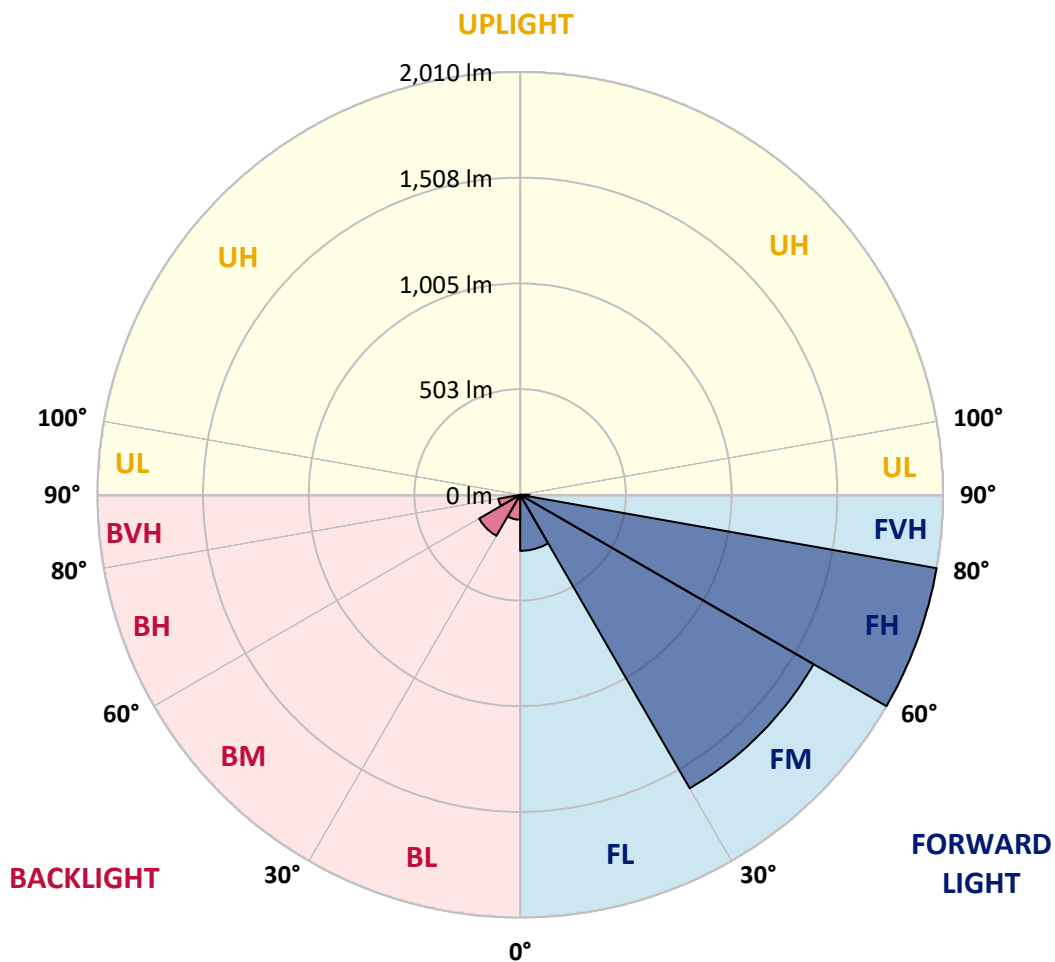
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	266.2	6.1			
FM	(30°-60°)	1611.0	36.8			
FH	(60°-80°)	2010.3	45.9			G2/5000
FVH	(80°-90°)	43.9	1.0			G1/100
BL	(0°-30°)	118.5	2.7	B1/500		
BM	(30°-60°)	225.3	5.1	B1/1000		
BH	(60°-80°)	105.4	2.4	B0/110		G0/110
BVH	(80°-90°)	0.4	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-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0
2.5°	487.6	487.0	484.1	482.9	475.9	471.8	470.2	465.0	457.7	450.3	442.0
5°	543.1	542.9	537.6	532.4	519.3	507.0	504.7	492.8	476.1	460.5	444.9
7.5°	599.8	597.1	591.8	581.9	562.8	543.1	541.3	524.4	500.8	478.2	455.8
10°	647.9	646.2	639.2	624.2	601.8	579.5	577.2	556.5	529.8	502.0	473.5
12.5°	685.2	684.0	674.8	656.1	632.3	609.0	606.0	587.5	558.9	527.9	494.2
15°	708.0	707.4	696.1	676.2	652.8	632.7	630.0	613.8	587.3	554.8	516.8
17.5°	713.4	713.6	701.9	681.8	662.4	648.1	646.0	633.7	611.5	579.3	539.4
20°	701.5	703.9	693.5	676.0	664.1	656.5	654.8	647.5	628.8	598.4	557.5
22.5°	684.6	685.9	678.7	667.0	662.0	663.5	662.7	658.5	642.7	614.8	575.4
25°	674.4	674.4	670.0	660.2	663.5	672.3	672.5	671.7	659.2	634.9	597.1
27.5°	673.9	672.7	667.8	660.4	669.4	683.0	683.8	689.4	681.5	659.4	624.2
30°	690.4	688.9	678.5	668.8	680.3	694.9	697.0	709.1	705.2	685.9	654.4
32.5°	728.8	723.7	700.4	684.6	693.3	710.7	713.4	732.7	738.9	718.5	683.6
35°	781.4	765.1	731.7	714.6	715.4	733.7	736.2	764.5	782.8	748.5	706.2
37.5°	853.9	845.9	791.4	745.8	749.5	777.3	784.5	815.3	810.1	764.9	731.9
40°	1012.9	1000.3	942.4	833.3	782.2	812.6	814.9	831.3	831.7	802.1	785.3
42.5°	1229.4	1224.2	1163.2	992.1	846.5	836.2	840.3	868.1	899.1	880.6	879.8
45°	1469.1	1466.4	1401.7	1202.9	976.5	913.7	918.8	956.0	1015.3	1019.4	1045.5
47.5°	1662.0	1660.7	1623.6	1438.1	1175.6	1044.9	1046.6	1086.0	1190.3	1241.9	1283.6
50°	1837.8	1843.8	1814.4	1692.6	1446.7	1250.5	1246.6	1272.9	1440.5	1525.0	1576.7
52.5°	2082.2	2090.7	2008.3	1930.0	1731.2	1505.7	1502.6	1530.1	1741.3	1804.5	1813.8
55°	2298.1	2283.7	2218.6	2196.0	2078.1	1820.7	1819.9	1844.2	2032.1	2059.0	2076.1
57.5°	2393.4	2387.9	2419.3	2471.1	2441.5	2193.2	2191.3	2172.8	2292.4	2295.2	2347.6
60°	2453.6	2460.4	2556.7	2716.3	2790.1	2593.9	2582.0	2469.2	2540.9	2534.5	2590.6
62.5°	2408.4	2421.8	2595.1	2861.1	3050.9	2943.7	2926.9	2740.8	2753.3	2731.3	2783.5
65°	2168.5	2189.3	2473.3	2833.8	3180.4	3217.1	3200.1	2980.5	2921.9	2885.8	2856.8
67.5°	1760.8	1773.1	2069.7	2596.2	3122.0	3380.2	3376.7	3190.6	3049.3	2859.7	2635.0
69°	1455.1	1467.2	1752.8	2346.0	2993.6	3415.1	3421.9	3258.0	3025.1	2701.1	2334.7
70°	1232.5	1245.4	1511.4	2131.5	2844.7	3398.9	3411.0	3251.6	2955.6	2517.5	2071.1
72.5°	646.4	657.5	930.5	1468.5	2319.1	3121.0	3157.8	2976.8	2505.4	1828.3	1224.7
75°	203.1	209.5	363.4	767.6	1587.8	2426.7	2435.1	2335.1	1779.1	1005.7	510.0
77.5°	77.4	75.6	121.0	282.8	802.7	1528.0	1579.6	1459.2	933.6	355.6	117.7
80°	41.7	41.9	62.9	117.1	343.4	785.3	828.8	707.2	331.7	110.9	27.1
82.5°	18.1	18.9	35.3	62.0	157.8	289.6	311.4	259.2	126.7	74.6	10.1
85°	3.9	4.3	17.0	33.7	64.3	81.3	85.2	84.0	80.7	57.9	3.9
87.5°	0.0	0.0	7.6	12.1	16.2	18.5	16.2	21.2	44.6	39.0	2.1
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°	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0
2.5°	439.4	435.7	429.3	422.3	417.4	412.3	408.1	406.3	404.2	402.8	404.7
5°	438.5	431.4	419.0	407.1	398.5	391.5	385.8	383.5	381.2	379.6	379.4
7.5°	445.7	435.7	416.8	399.3	386.0	376.5	368.7	365.4	362.8	361.5	360.5
10°	459.5	446.6	421.3	398.5	381.2	365.2	348.4	335.4	327.0	323.1	321.7
12.5°	477.4	461.1	429.9	402.8	377.7	346.9	311.2	280.4	260.5	253.9	250.0
15°	498.3	478.2	441.2	408.4	365.0	308.7	248.1	207.9	189.4	185.7	181.6
17.5°	518.5	496.3	454.8	409.4	337.1	246.7	181.8	154.5	147.3	149.7	150.4
20°	536.1	514.1	468.1	400.3	286.3	185.1	140.7	133.9	136.6	141.3	142.1
22.5°	554.0	531.4	480.5	376.5	221.4	140.5	126.7	128.4	131.1	135.8	136.6
25°	575.8	552.3	492.0	332.8	166.2	119.5	120.4	122.8	125.5	129.8	130.2
27.5°	600.8	578.8	499.6	275.9	123.2	109.9	112.6	116.3	118.9	123.0	123.9
30°	634.1	613.8	502.0	216.9	103.3	101.3	102.5	107.0	110.9	114.6	115.2
32.5°	665.3	648.3	493.8	163.7	95.7	93.3	93.3	95.9	100.4	103.9	104.8
35°	694.1	683.0	467.5	119.8	90.0	85.9	83.8	83.8	86.7	89.6	90.4
37.5°	732.1	731.7	425.0	95.5	84.4	79.7	75.4	72.1	71.1	71.7	72.1
40°	797.2	797.8	369.5	85.7	79.7	73.3	66.8	60.8	55.3	53.4	53.2
42.5°	898.9	889.6	311.4	80.9	75.6	66.8	56.9	48.9	40.3	37.6	37.4
45°	1060.3	1005.5	249.8	76.6	71.3	59.4	47.0	36.2	29.2	27.1	27.1
47.5°	1295.5	1157.7	193.5	71.9	65.5	50.9	35.5	26.1	21.4	20.3	20.5
50°	1538.7	1306.8	148.3	65.9	58.5	42.1	26.3	18.9	16.2	16.2	16.4
52.5°	1754.4	1416.1	115.6	59.6	49.9	33.1	19.9	14.8	13.6	13.4	13.6
55°	1956.3	1486.5	88.5	52.2	39.6	24.6	15.2	12.1	11.3	10.9	10.7
57.5°	2151.0	1521.5	66.3	42.1	28.8	17.9	12.1	10.3	9.4	8.8	8.6
60°	2280.7	1493.1	45.6	31.0	19.9	12.9	10.1	8.8	7.8	7.2	7.0
62.5°	2353.8	1415.7	29.4	22.4	14.2	9.7	8.0	7.4	6.0	5.3	5.3
65°	2324.2	1287.9	20.5	16.0	10.3	7.2	6.0	6.0	4.3	3.5	3.3
67.5°	2059.6	1088.1	15.6	11.9	7.4	5.3	4.5	5.1	2.7	1.6	1.6
69°	1772.1	901.7	13.4	9.9	6.2	4.3	3.9	4.7	1.8	1.2	1.0
70°	1540.2	777.9	12.1	8.6	5.1	3.7	3.5	4.5	1.8	1.0	0.8
72.5°	921.5	433.8	9.2	6.2	3.3	2.9	2.9	5.1	1.8	1.0	0.8
75°	372.4	152.8	6.8	4.3	2.5	2.5	3.5	6.6	1.6	0.8	0.6
77.5°	84.4	33.5	3.9	2.7	1.6	2.5	4.1	5.1	1.0	0.4	0.0
80°	20.5	8.2	2.5	1.6	1.0	1.8	3.1	2.9	0.2	0.0	0.0
82.5°	6.8	2.9	1.0	0.8	0.2	0.6	1.4	0.8	0.0	0.0	0.0
85°	2.9	1.6	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.8	0.6	0.0	0.0	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)