

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: P348867

Luminaire Tested: **ARCH-N-PA1-50-727-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348867  
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-PA1-50-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4023 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - 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

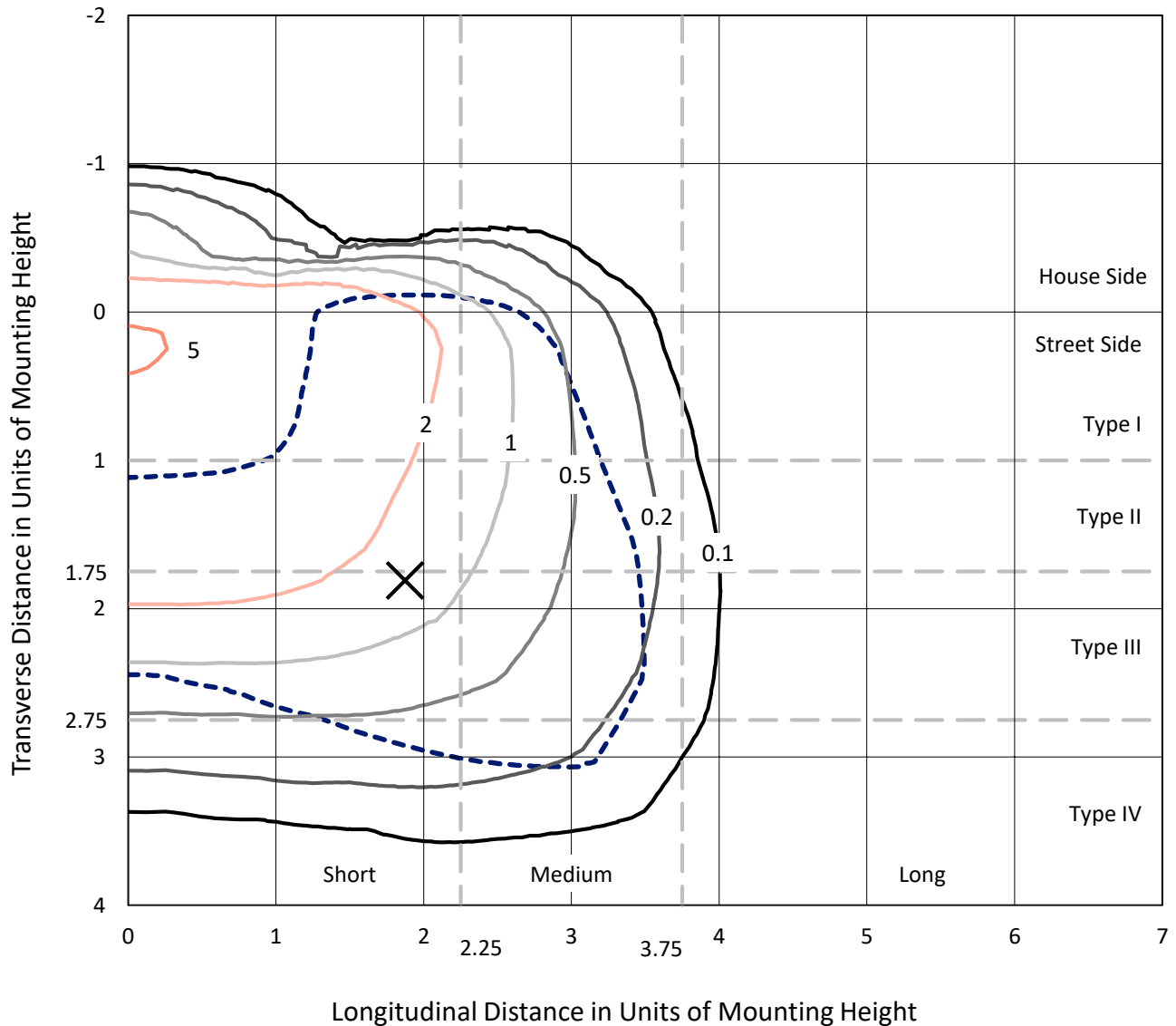


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

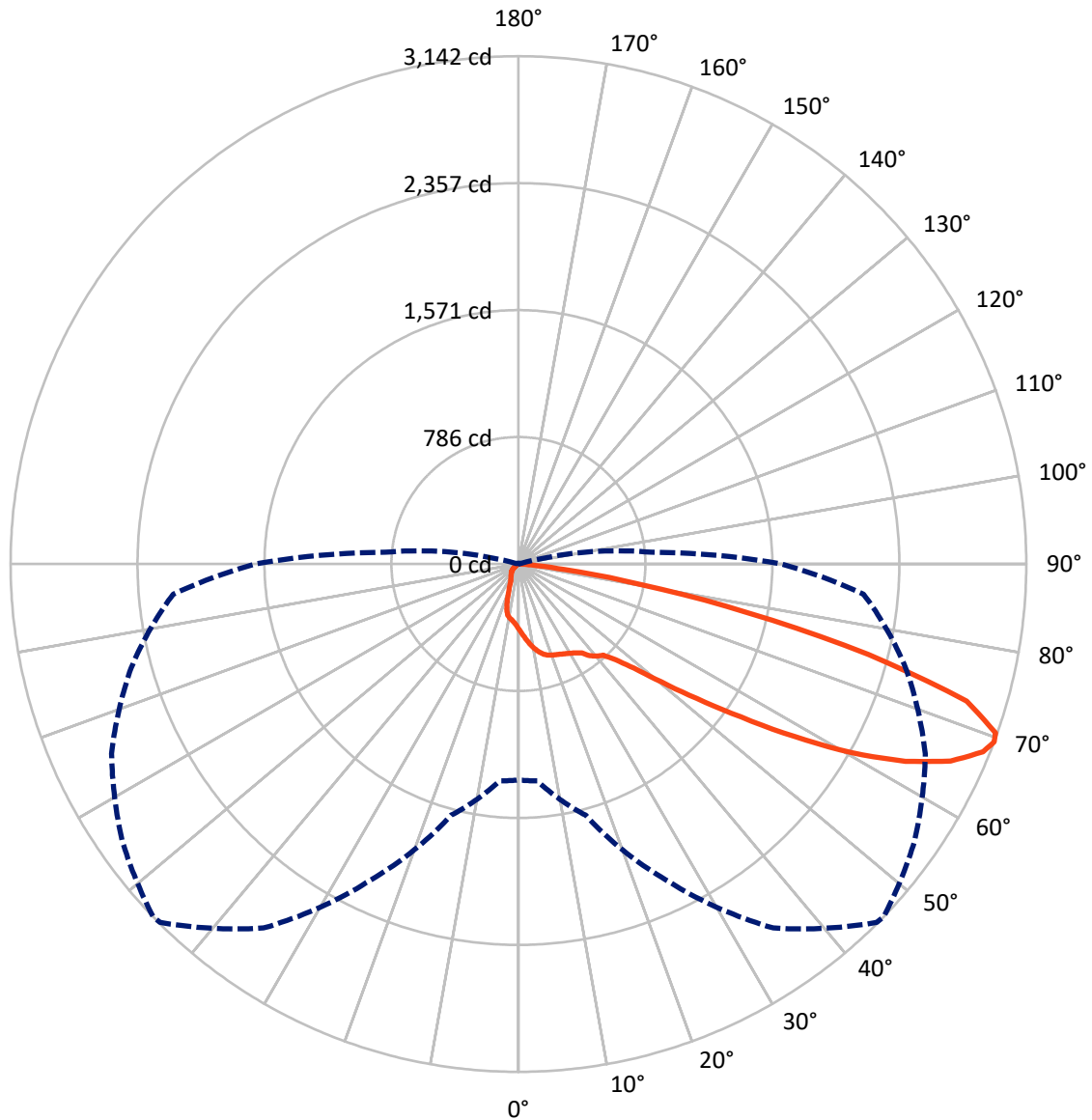


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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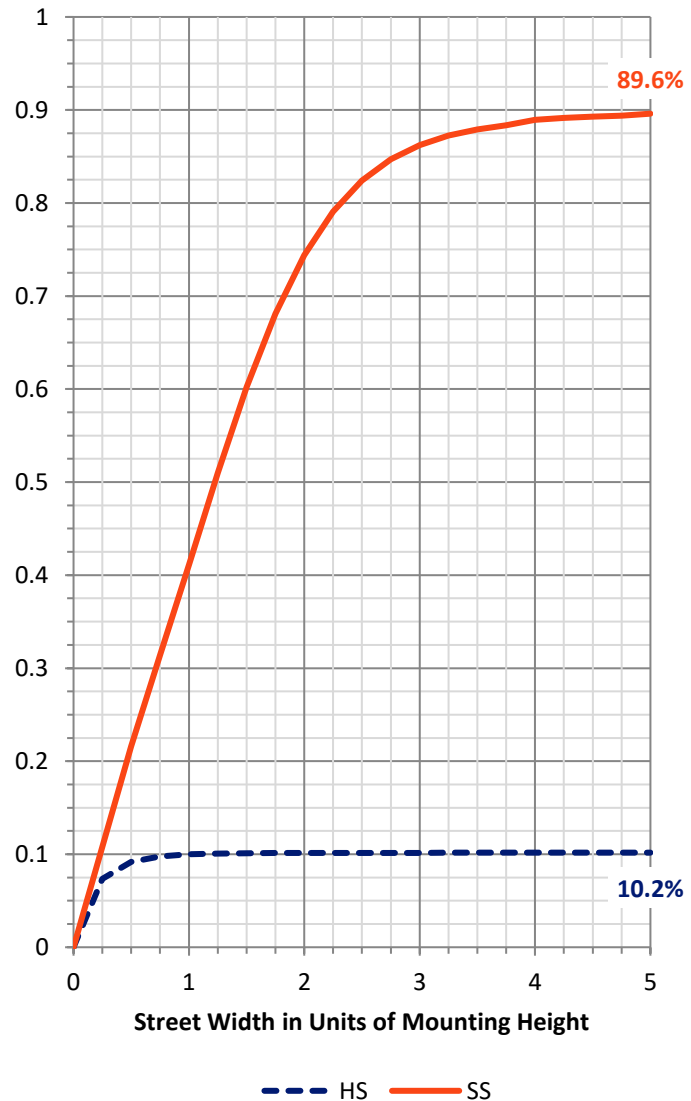
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	412.9	0.0	412.9
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	3610.1	0.0	3610.1
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	4023.0	0.0	4023.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.1	1.0
10°-20°	121.7	3.0
20°-30°	191.4	4.8
30°-40°	274.5	6.8
40°-50°	474.4	11.8
50°-60°	937.3	23.3
60°-70°	1310.0	32.6
70°-80°	632.9	15.7
80°-90°	40.7	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°	4023.0	100.0
0°-180°	4023.0	100.0



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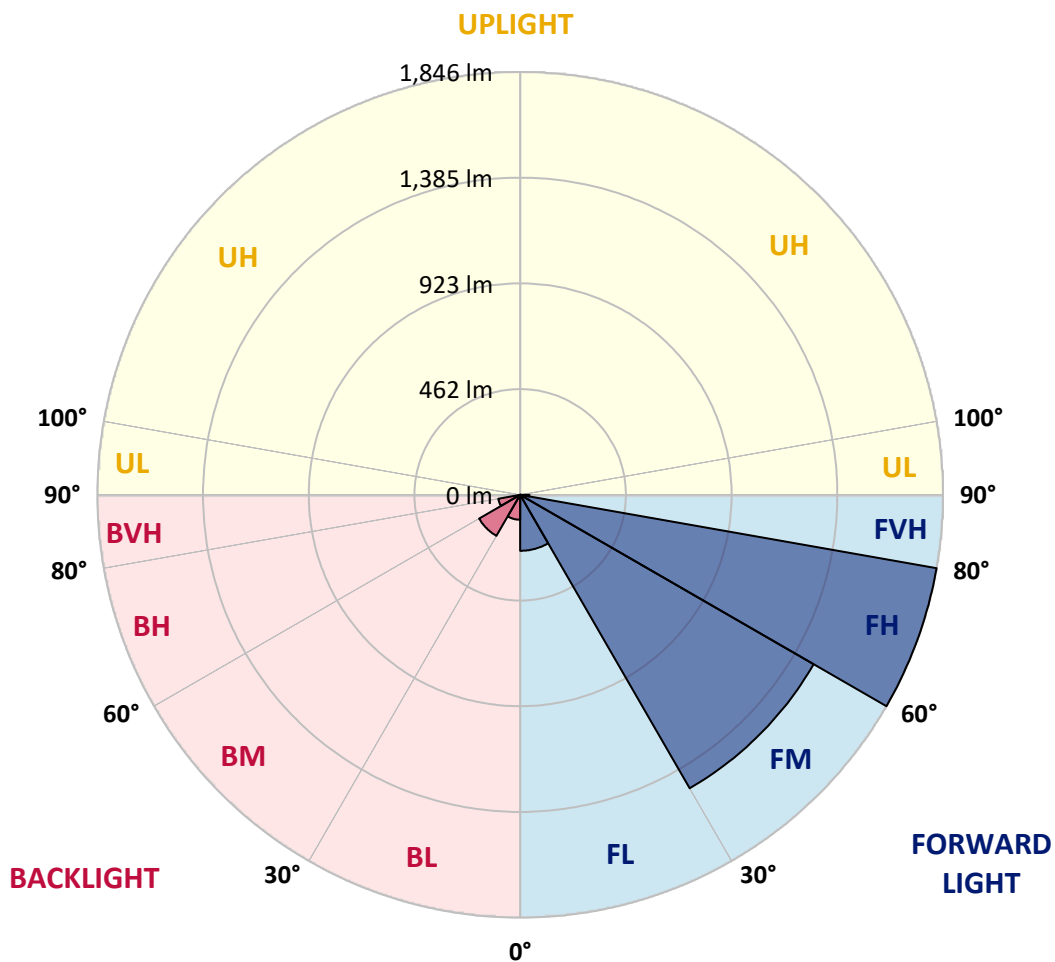
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	244.4	6.1			
FM	(30°-60°)	1479.3	36.8			
FH	(60°-80°)	1846.0	45.9			G2/5000
FVH	(80°-90°)	40.3	1.0			G1/100
BL	(0°-30°)	108.8	2.7	B0/110		
BM	(30°-60°)	206.9	5.1	B0/220		
BH	(60°-80°)	96.8	2.4	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1
2.5°	447.8	447.2	444.6	443.5	437.0	433.3	431.8	427.0	420.3	413.5	405.9
5°	498.7	498.5	493.6	488.9	476.8	465.5	463.4	452.5	437.2	422.9	408.6
7.5°	550.8	548.3	543.4	534.4	516.8	498.7	497.0	481.6	459.9	439.1	418.6
10°	594.9	593.4	587.0	573.2	552.7	532.1	530.0	511.0	486.5	461.0	434.8
12.5°	629.2	628.1	619.6	602.5	580.6	559.3	556.4	539.5	513.2	484.8	453.8
15°	650.2	649.6	639.2	621.0	599.4	581.0	578.5	563.6	539.3	509.5	474.6
17.5°	655.1	655.3	644.5	626.0	608.3	595.1	593.2	581.9	561.5	531.9	495.3
20°	644.2	646.4	636.8	620.8	609.8	602.8	601.3	594.5	577.4	549.5	511.9
22.5°	628.7	629.8	623.2	612.5	607.9	609.3	608.5	604.7	590.2	564.6	528.3
25°	619.3	619.3	615.3	606.2	609.3	617.4	617.6	616.8	605.3	583.0	548.3
27.5°	618.9	617.7	613.2	606.4	614.7	627.2	627.9	633.0	625.9	605.5	573.2
30°	634.0	632.6	623.0	614.2	624.7	638.1	640.0	651.1	647.5	629.8	601.0
32.5°	669.2	664.5	643.2	628.7	636.6	652.6	655.1	672.8	678.5	659.8	627.7
35°	717.5	702.6	671.9	656.2	657.0	673.8	676.0	702.1	718.8	687.3	648.5
37.5°	784.1	776.8	726.8	684.9	688.3	713.8	720.4	748.6	743.9	702.4	672.1
40°	930.1	918.6	865.4	765.2	718.3	746.2	748.3	763.4	763.7	736.6	721.1
42.5°	1128.9	1124.2	1068.2	911.1	777.3	767.9	771.7	797.1	825.6	808.6	807.9
45°	1349.0	1346.6	1287.2	1104.6	896.7	839.0	843.7	877.9	932.4	936.1	960.1
47.5°	1526.2	1525.0	1490.9	1320.6	1079.5	959.5	961.0	997.3	1093.1	1140.4	1178.7
50°	1687.6	1693.1	1666.1	1554.3	1328.5	1148.3	1144.8	1168.9	1322.8	1400.3	1447.9
52.5°	1912.1	1919.8	1844.2	1772.3	1589.7	1382.6	1379.8	1405.1	1599.0	1657.1	1665.6
55°	2110.3	2097.1	2037.3	2016.6	1908.3	1672.0	1671.2	1693.5	1866.1	1890.8	1906.4
57.5°	2197.8	2192.8	2221.6	2269.1	2242.0	2013.9	2012.2	1995.3	2105.0	2107.7	2155.8
60°	2253.1	2259.3	2347.8	2494.4	2562.1	2381.9	2371.0	2267.4	2333.3	2327.4	2378.9
62.5°	2211.6	2223.9	2383.1	2627.3	2801.6	2703.2	2687.7	2516.8	2528.3	2508.1	2556.0
65°	1991.3	2010.4	2271.2	2602.3	2920.5	2954.2	2938.6	2736.9	2683.2	2650.0	2623.4
67.5°	1616.9	1628.2	1900.6	2384.0	2866.9	3104.0	3100.8	2929.9	2800.1	2626.0	2419.7
69°	1336.2	1347.3	1609.5	2154.3	2749.0	3136.1	3142.3	2991.8	2777.9	2480.4	2143.9
70°	1131.7	1143.6	1387.9	1957.4	2612.3	3121.2	3132.3	2985.9	2714.1	2311.8	1901.9
72.5°	593.6	603.8	854.5	1348.5	2129.6	2866.0	2899.7	2733.5	2300.6	1678.9	1124.6
75°	186.5	192.4	333.7	704.9	1458.1	2228.4	2236.1	2144.3	1633.7	923.5	468.4
77.5°	71.1	69.4	111.1	259.7	737.1	1403.2	1450.5	1340.0	857.3	326.5	108.1
80°	38.3	38.5	57.7	107.5	315.4	721.1	761.1	649.4	304.6	101.9	24.9
82.5°	16.6	17.4	32.4	57.0	144.9	266.0	286.0	238.0	116.4	68.5	9.2
85°	3.6	4.0	15.7	30.9	59.0	74.7	78.3	77.1	74.1	53.2	3.6
87.5°	0.0	0.0	7.0	11.1	14.9	17.0	14.9	19.4	40.9	35.8	1.9
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°	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1
2.5°	403.5	400.1	394.2	387.8	383.3	378.6	374.8	373.1	371.2	369.9	371.6
5°	402.7	396.1	384.8	373.9	365.9	359.5	354.2	352.2	350.1	348.6	348.4
7.5°	409.3	400.1	382.7	366.7	354.4	345.7	338.6	335.6	333.1	332.0	331.0
10°	422.0	410.1	386.9	365.9	350.1	335.4	319.9	308.0	300.3	296.7	295.4
12.5°	438.4	423.5	394.8	369.9	346.9	318.6	285.8	257.5	239.2	233.1	229.6
15°	457.6	439.1	405.2	375.0	335.2	283.5	227.9	190.9	173.9	170.5	166.7
17.5°	476.1	455.7	417.6	375.9	309.5	226.5	166.9	141.8	135.2	137.5	138.1
20°	492.3	472.1	429.9	367.6	262.9	170.0	129.2	123.0	125.4	129.8	130.5
22.5°	508.7	488.0	441.2	345.7	203.3	129.0	116.4	117.9	120.3	124.7	125.4
25°	528.7	507.2	451.8	305.6	152.6	109.8	110.5	112.8	115.2	119.2	119.6
27.5°	551.7	531.5	458.7	253.3	113.2	100.9	103.4	106.8	109.2	113.0	113.7
30°	582.3	563.6	461.0	199.2	94.9	93.0	94.1	98.3	101.9	105.3	105.8
32.5°	611.0	595.3	453.5	150.3	87.9	85.6	85.6	88.1	92.2	95.4	96.2
35°	637.4	627.2	429.3	110.0	82.6	78.8	77.0	77.0	79.6	82.2	83.0
37.5°	672.3	671.9	390.3	87.7	77.5	73.2	69.2	66.2	65.3	65.8	66.2
40°	732.0	732.6	339.3	78.7	73.2	67.3	61.3	55.8	50.7	49.0	48.9
42.5°	825.4	816.9	286.0	74.3	69.4	61.3	52.2	44.9	37.0	34.5	34.3
45°	973.7	923.3	229.4	70.4	65.5	54.5	43.2	33.2	26.8	24.9	24.9
47.5°	1189.7	1063.1	177.7	66.0	60.2	46.8	32.6	24.0	19.6	18.7	18.9
50°	1413.0	1200.0	136.2	60.5	53.8	38.7	24.1	17.4	14.9	14.9	15.1
52.5°	1611.0	1300.4	106.2	54.7	45.8	30.4	18.3	13.6	12.4	12.3	12.4
55°	1796.5	1365.1	81.3	47.9	36.4	22.6	14.0	11.1	10.4	10.0	9.8
57.5°	1975.3	1397.1	60.9	38.7	26.4	16.4	11.1	9.4	8.7	8.1	7.9
60°	2094.3	1371.1	41.9	28.5	18.3	11.9	9.2	8.1	7.2	6.6	6.4
62.5°	2161.4	1300.0	27.0	20.6	13.0	8.9	7.4	6.8	5.5	4.9	4.9
65°	2134.3	1182.7	18.9	14.7	9.4	6.6	5.5	5.5	4.0	3.2	3.0
67.5°	1891.3	999.1	14.3	10.9	6.8	4.9	4.1	4.7	2.5	1.5	1.5
69°	1627.3	828.1	12.3	9.1	5.7	4.0	3.6	4.3	1.7	1.1	0.9
70°	1414.3	714.3	11.1	7.9	4.7	3.4	3.2	4.1	1.7	0.9	0.8
72.5°	846.2	398.4	8.5	5.7	3.0	2.6	2.6	4.7	1.7	0.9	0.8
75°	342.0	140.3	6.2	4.0	2.3	2.3	3.2	6.0	1.5	0.8	0.6
77.5°	77.5	30.7	3.6	2.5	1.5	2.3	3.8	4.7	0.9	0.4	0.0
80°	18.9	7.5	2.3	1.5	0.9	1.7	2.8	2.6	0.2	0.0	0.0
82.5°	6.2	2.6	0.9	0.8	0.2	0.6	1.3	0.8	0.0	0.0	0.0
85°	2.6	1.5	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.7	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)