

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: P348812

Luminaire Tested: **ARCH-N-PA1-60-727-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348812  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
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-T3-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: 4485 lumens  
Efficiency: N/A  
Efficacy: 72.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - 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

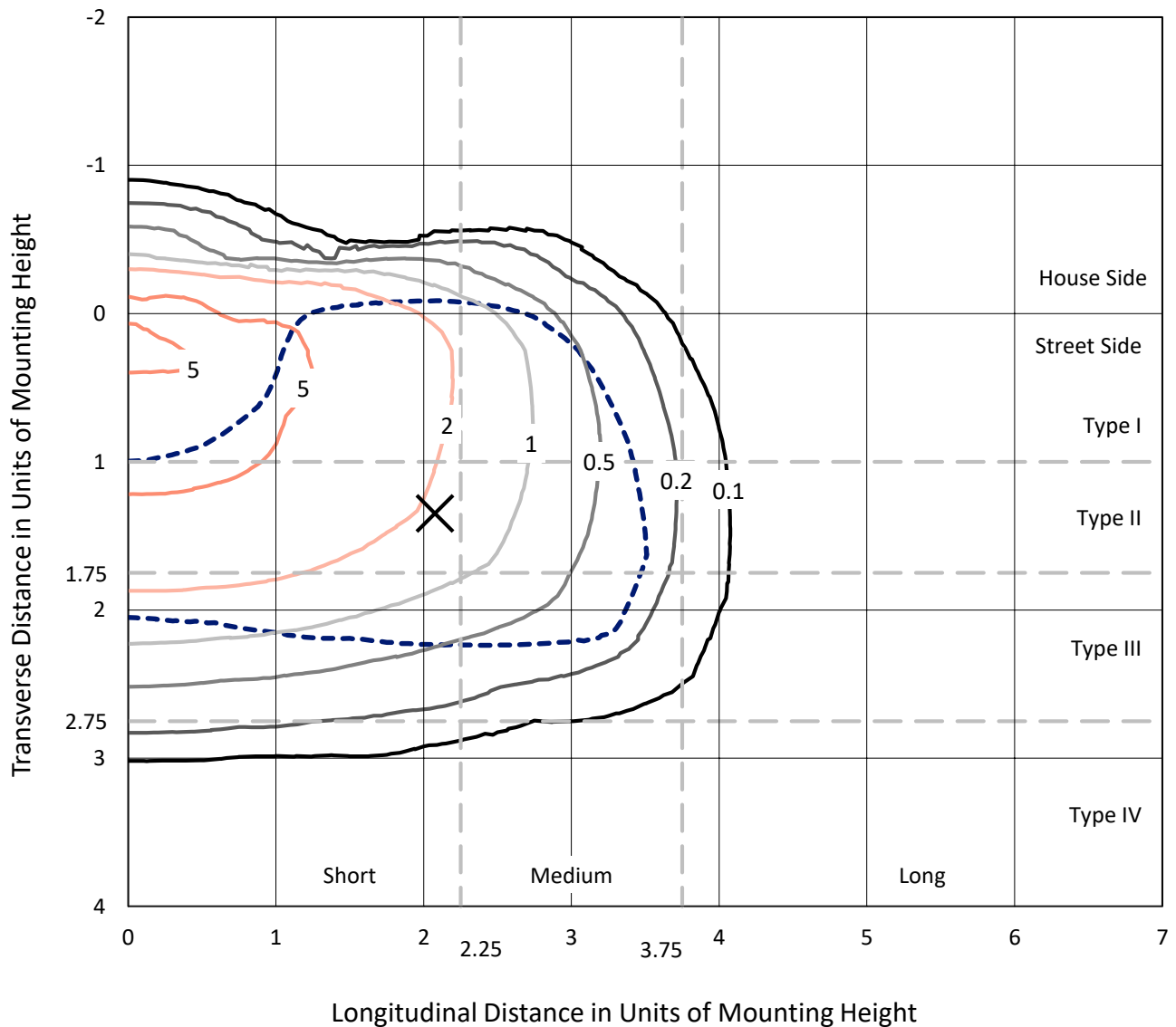


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

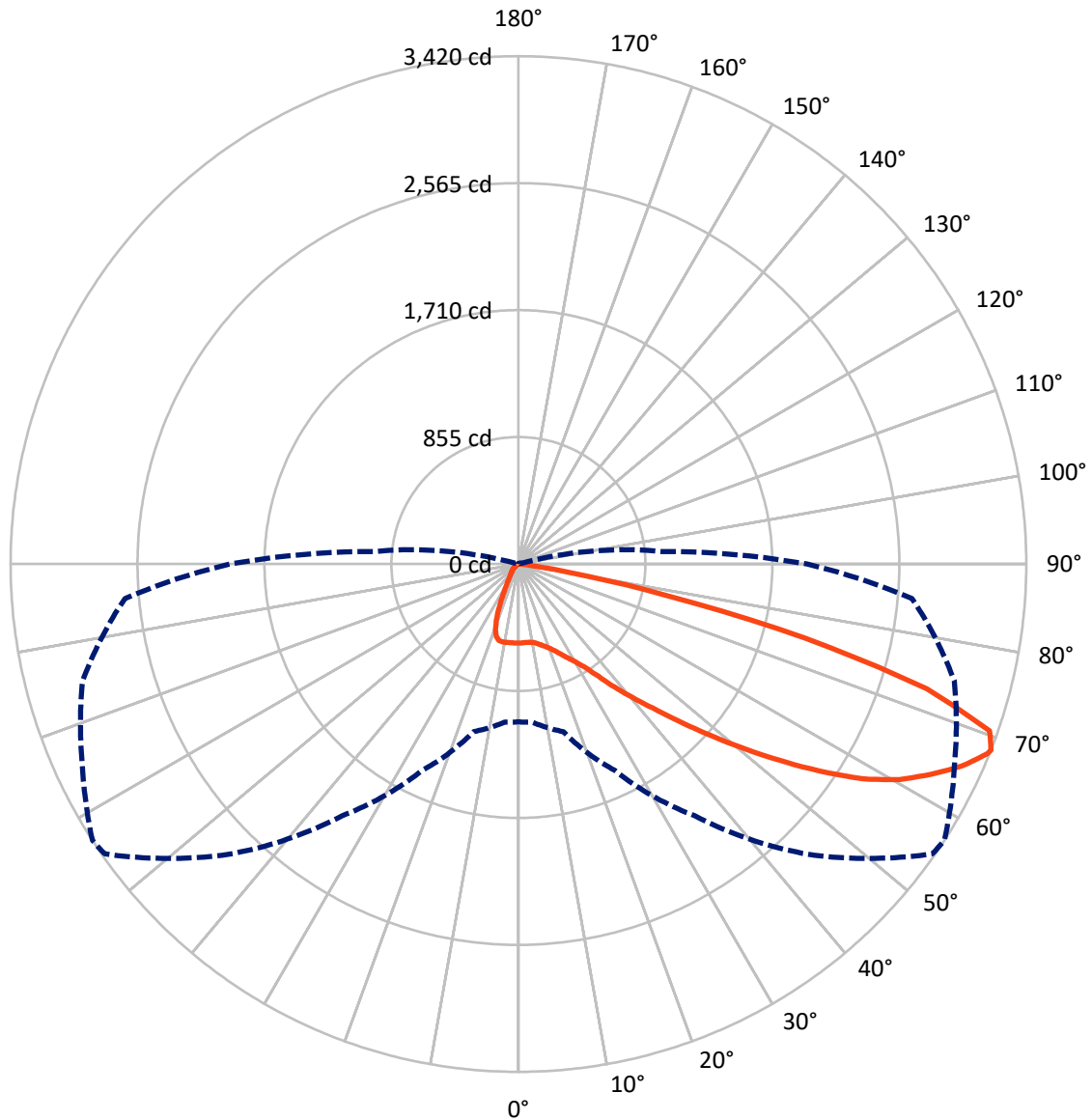


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



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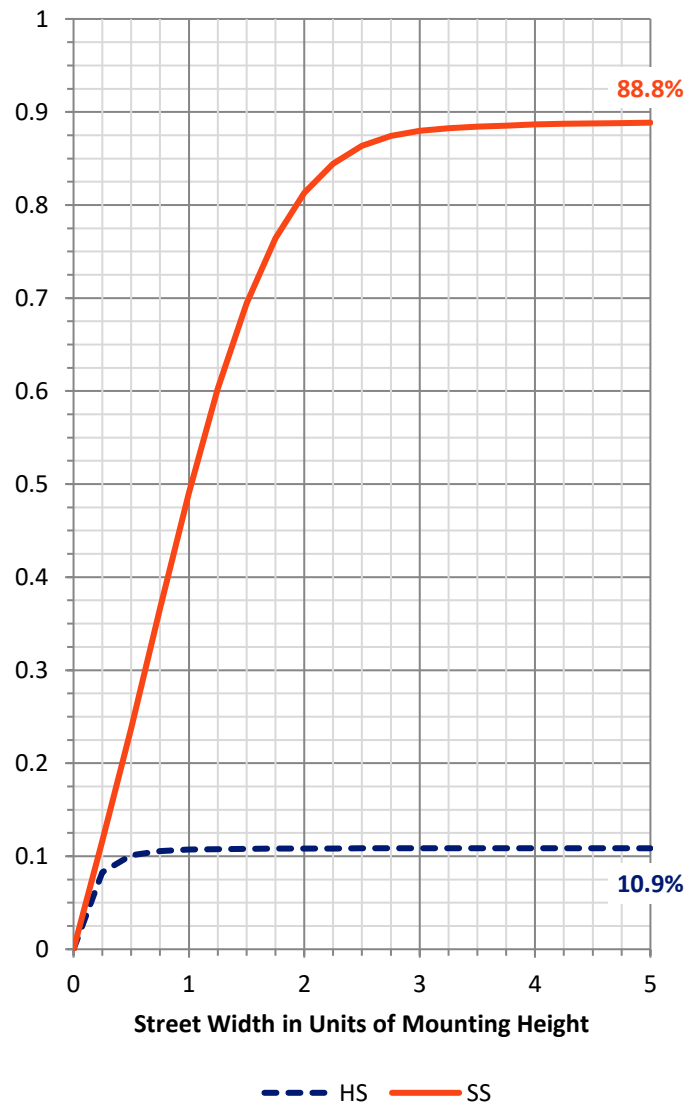
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	491.8	0.0	491.8
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	3993.2	0.0	3993.2
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	4485.0	0.0	4485.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	1.1
10°-20°	138.2	3.1
20°-30°	238.4	5.3
30°-40°	411.5	9.2
40°-50°	703.9	15.7
50°-60°	1126.1	25.1
60°-70°	1301.1	29.0
70°-80°	497.2	11.1
80°-90°	18.6	0.4
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°	4485.0	100.0
0°-180°	4485.0	100.0

**Coefficient of Utilization**



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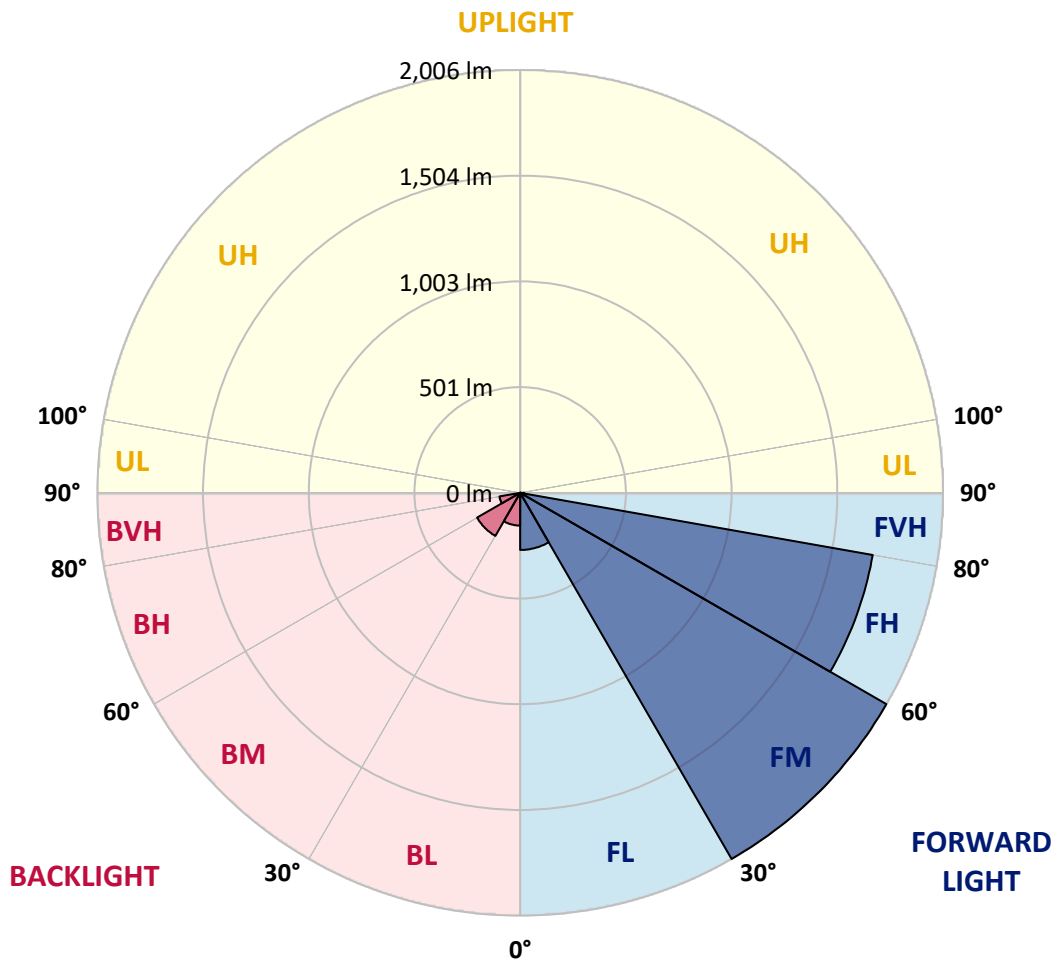
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	271.1	6.0			
FM	(30°-60°)	2005.7	44.7			
FH	(60°-80°)	1698.2	37.9			G1/1800
FVH	(80°-90°)	18.3	0.4			G1/100
BL	(0°-30°)	155.4	3.5	B1/500		
BM	(30°-60°)	235.9	5.3	B1/1000		
BH	(60°-80°)	100.2	2.2	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: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9
2.5°	520.4	522.8	524.5	525.5	526.8	529.5	530.4	531.7	532.3	532.3	533.8
5°	499.9	502.4	506.0	509.0	514.9	522.5	528.1	530.2	534.0	537.4	539.3
7.5°	480.8	483.7	488.0	495.0	505.2	517.5	528.9	531.9	539.3	546.5	550.1
10°	468.5	470.8	476.3	486.3	499.6	516.8	532.9	536.5	549.3	561.4	568.1
12.5°	464.2	466.3	472.1	483.3	499.9	520.0	542.3	547.6	566.2	583.8	593.4
15°	470.4	470.8	476.9	487.6	503.9	527.8	557.7	564.1	587.7	610.6	622.4
17.5°	494.1	492.2	495.4	500.1	513.0	538.2	574.1	583.6	615.0	641.9	653.2
20°	553.5	553.5	546.3	533.6	533.8	554.4	596.1	606.9	645.3	676.5	686.7
22.5°	655.1	653.2	638.8	607.6	579.0	582.1	623.1	637.1	681.8	715.1	718.5
25°	777.2	774.9	752.6	708.7	659.1	627.1	659.5	675.7	725.3	754.8	747.8
27.5°	906.6	904.7	882.6	828.1	757.5	698.8	703.0	718.3	769.6	798.7	776.4
30°	1031.9	1032.6	1010.7	954.7	874.8	790.2	758.2	767.1	812.7	842.1	810.3
32.5°	1151.1	1152.0	1133.1	1070.5	995.9	896.4	834.5	832.2	862.7	891.8	855.3
35°	1257.4	1259.5	1246.6	1198.0	1118.9	1014.8	933.5	928.0	933.8	966.6	924.2
37.5°	1359.8	1361.1	1351.3	1310.4	1244.2	1144.8	1058.7	1050.8	1038.5	1063.8	1015.2
40°	1472.0	1468.8	1457.6	1420.5	1363.6	1288.3	1193.1	1179.5	1158.1	1180.6	1134.8
42.5°	1576.3	1572.7	1574.6	1532.6	1484.7	1435.9	1349.8	1326.5	1314.0	1339.9	1281.5
45°	1706.8	1704.8	1711.2	1674.7	1635.9	1600.5	1529.5	1504.0	1498.5	1528.8	1459.1
47.5°	1835.5	1840.1	1859.9	1844.4	1828.7	1797.5	1719.7	1708.2	1711.6	1748.3	1646.3
50°	1942.8	1948.3	2002.4	2020.2	2042.9	2024.6	1946.6	1939.6	1953.0	1986.1	1847.8
52.5°	2020.4	2031.6	2098.9	2180.9	2263.7	2276.0	2198.1	2191.8	2209.8	2214.9	2003.4
55°	2074.3	2084.2	2160.4	2310.5	2478.9	2531.9	2483.6	2459.0	2455.6	2405.3	2167.2
57.5°	2083.8	2082.8	2192.2	2394.3	2647.7	2784.5	2754.0	2729.8	2660.2	2581.3	2354.8
60°	2030.0	2036.1	2163.1	2423.3	2753.8	2975.6	2977.9	2946.5	2838.2	2752.5	2536.8
62.5°	1864.1	1889.1	2017.4	2347.2	2752.5	3052.6	3142.1	3118.1	2988.5	2892.7	2721.3
65°	1595.2	1604.1	1726.5	2086.4	2566.5	3020.3	3289.9	3281.0	3124.0	3028.8	2816.1
67.5°	1164.9	1145.6	1274.1	1642.9	2172.9	2832.4	3395.9	3407.1	3228.6	3056.8	2715.2
68°	1063.1	1068.8	1168.9	1533.3	2069.8	2766.1	3402.9	3420.1	3239.0	3038.6	2660.0
70°	633.7	644.7	734.0	1055.7	1574.6	2390.5	3327.4	3366.6	3177.0	2850.5	2300.8
72.5°	161.8	175.0	259.4	472.5	899.4	1684.3	2808.9	2875.3	2758.4	2312.4	1553.2
75°	66.6	70.0	92.7	155.7	335.1	758.8	1851.4	1993.5	1912.3	1384.4	702.0
77.5°	46.0	48.4	59.6	86.3	145.1	257.2	907.7	1010.3	910.2	472.5	153.1
80°	33.1	35.0	42.6	57.5	83.3	91.8	295.8	342.1	271.7	103.7	38.0
82.5°	19.7	21.2	31.8	40.9	50.7	43.9	73.6	83.6	78.7	51.5	17.0
85°	9.8	11.5	21.4	29.3	27.4	18.5	22.5	25.0	31.0	31.4	9.1
87.5°	0.6	1.3	12.5	17.6	7.6	4.2	6.6	8.1	11.0	15.5	3.8
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°	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9	532.9
2.5°	534.4	534.6	533.1	532.5	532.9	530.4	529.3	529.8	529.8	530.4	529.3
5°	539.7	539.7	537.2	533.8	531.9	527.0	523.8	523.0	522.3	521.9	521.1
7.5°	551.2	549.9	545.4	538.0	531.7	521.1	513.0	508.8	506.6	505.8	505.2
10°	569.6	567.3	559.9	546.1	531.5	512.6	495.0	482.5	472.1	467.8	465.3
12.5°	594.4	591.0	578.5	555.6	530.0	495.2	457.0	420.3	386.2	372.2	365.2
15°	623.1	618.2	598.5	563.7	521.3	456.0	373.0	308.8	261.5	243.7	236.0
17.5°	652.1	645.8	615.9	568.8	495.2	374.7	261.7	197.7	166.1	157.6	154.6
20°	681.4	672.1	630.9	565.0	436.2	270.2	172.6	144.4	135.3	132.8	131.9
22.5°	709.2	694.7	644.5	550.1	345.5	181.3	136.6	127.7	124.7	123.2	122.8
25°	733.3	713.2	656.4	504.3	244.5	137.0	123.0	120.0	116.2	113.5	113.7
27.5°	756.0	731.6	663.6	428.8	163.1	117.1	113.9	109.9	102.9	98.8	98.8
30°	783.4	756.2	668.9	330.0	120.0	103.5	100.9	94.8	85.3	80.0	80.0
32.5°	824.5	793.6	665.5	231.6	99.5	91.0	85.0	76.6	66.2	61.1	60.9
35°	887.5	851.3	641.3	151.8	87.8	79.1	69.6	59.2	50.0	45.8	45.6
37.5°	972.3	928.5	587.0	108.6	78.7	68.1	56.6	45.2	38.4	35.6	35.4
40°	1082.4	1018.2	509.4	88.0	70.2	57.5	43.7	35.0	30.3	28.2	28.4
42.5°	1214.5	1114.2	416.3	75.9	61.9	47.3	34.1	27.6	24.6	23.1	22.7
45°	1361.3	1209.0	318.7	67.7	53.7	38.2	26.7	21.8	19.5	18.7	18.7
47.5°	1522.7	1301.3	233.3	60.4	44.7	29.5	21.4	17.8	15.9	15.3	15.1
50°	1669.2	1365.3	168.2	52.8	36.7	23.3	17.4	14.8	13.6	12.7	12.7
52.5°	1791.4	1385.5	123.8	44.5	29.7	18.7	14.4	12.7	11.5	10.8	10.8
55°	1898.9	1377.2	92.0	36.7	24.0	15.3	12.3	10.8	9.8	9.1	9.1
57.5°	2002.0	1350.5	68.7	29.9	19.3	12.3	10.4	9.1	8.1	7.6	7.6
60°	2086.1	1305.9	51.1	24.2	15.5	10.0	8.7	7.4	6.6	5.9	5.9
62.5°	2154.4	1256.7	37.5	19.9	12.3	7.8	6.8	6.2	4.9	4.2	4.2
65°	2154.9	1175.1	28.2	16.5	9.5	6.2	5.1	4.9	3.2	2.5	2.3
67.5°	1999.0	1013.1	21.6	14.2	7.4	4.7	3.8	4.0	1.7	1.1	0.8
68°	1942.4	971.9	20.4	14.0	7.0	4.5	3.6	4.0	1.5	0.8	0.6
70°	1637.6	773.2	16.3	13.6	6.2	3.4	3.0	4.0	1.3	0.6	0.4
72.5°	1047.4	448.7	12.1	10.8	4.7	2.5	1.9	3.6	1.3	0.4	0.2
75°	445.8	139.1	8.3	7.6	2.8	1.9	1.3	2.3	0.8	0.2	0.0
77.5°	93.9	31.4	4.9	4.7	1.9	1.3	0.8	0.6	0.2	0.0	0.0
80°	24.2	9.1	2.5	2.3	1.1	0.6	0.4	0.0	0.0	0.0	0.0
82.5°	7.6	3.6	1.5	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	2.1	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.6	0.2	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)