

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: P234714

Luminaire Tested: **ARCH-AF16-60-D-U-T3-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234714  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF16-60-D-U-T3-8027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5216 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 63  
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

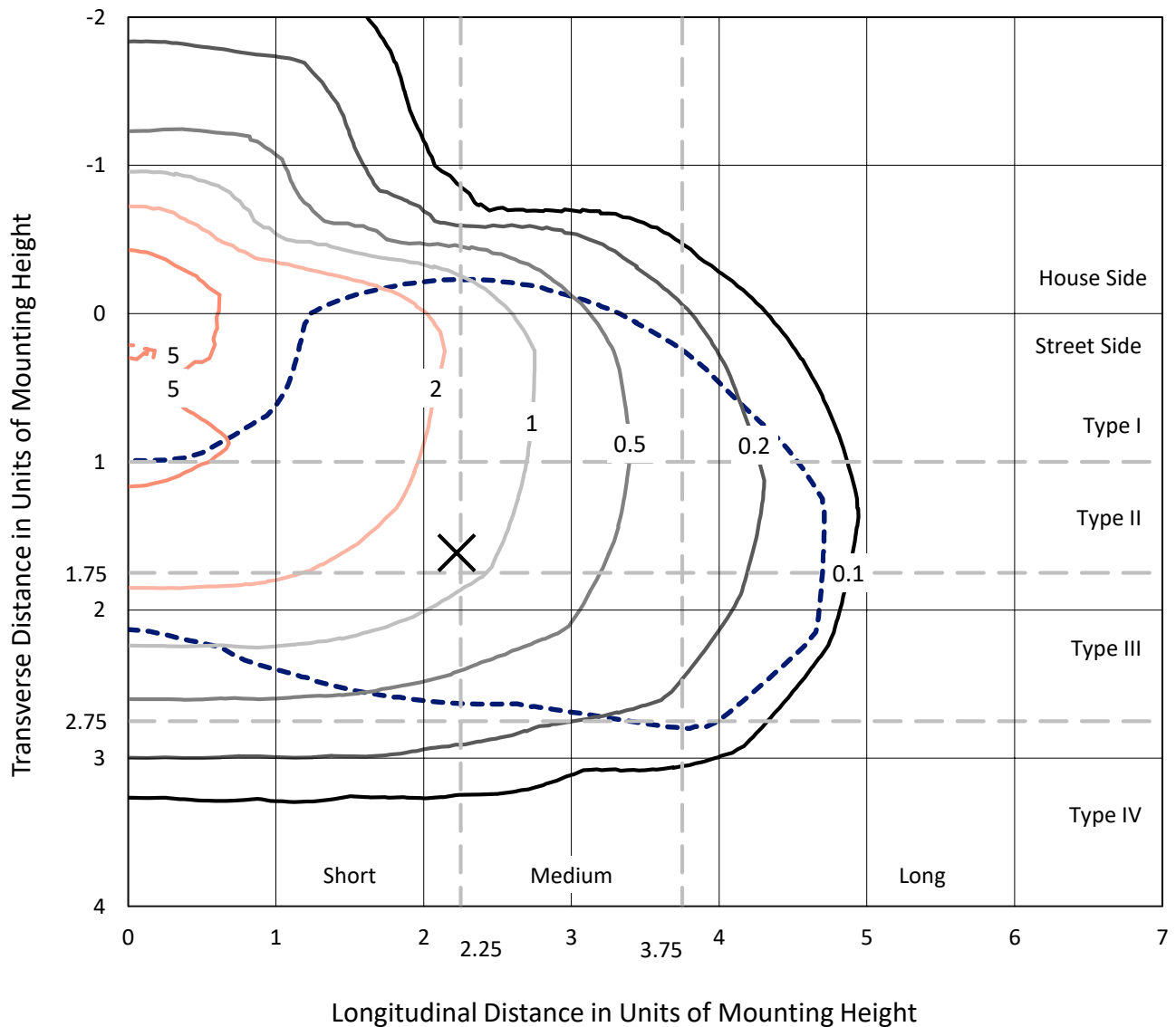




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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

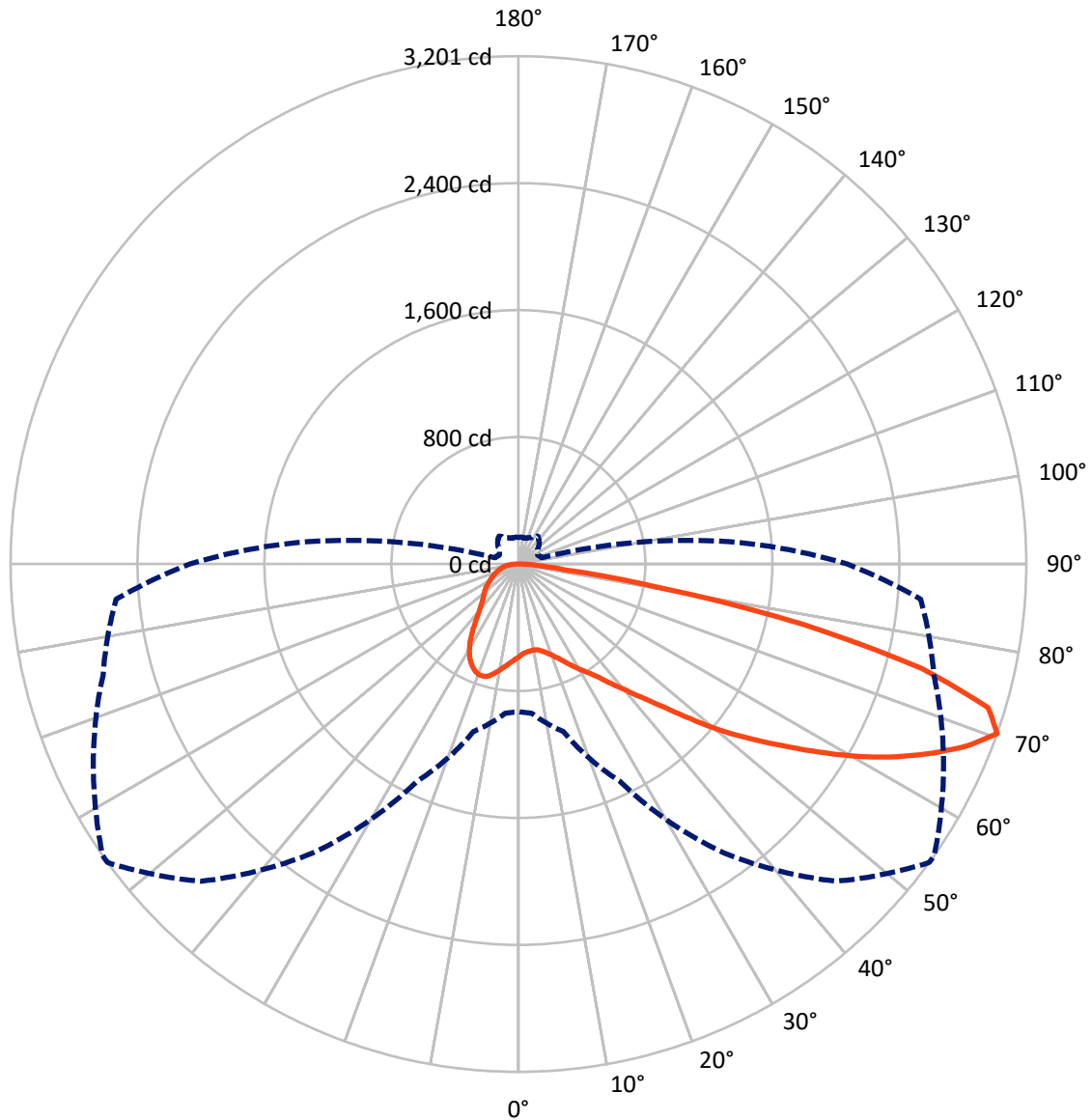


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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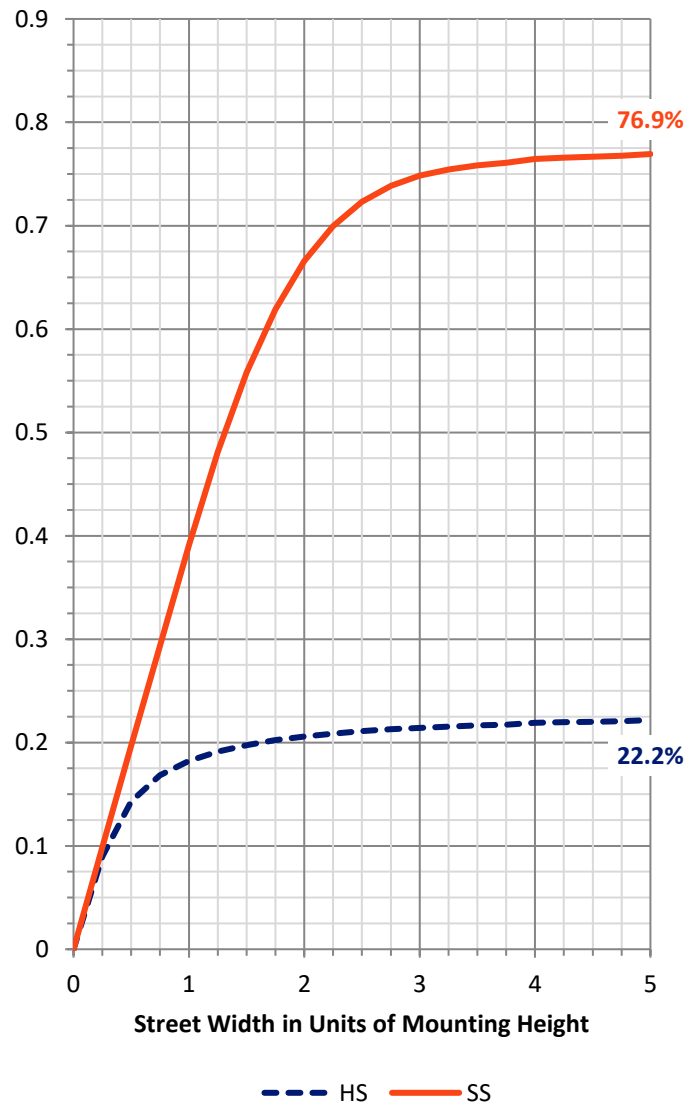
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1183.0	0.0	1183.0
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	4033.0	0.0	4033.0
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	5216.0	0.0	5216.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.3	1.1
10°-20°	183.0	3.5
20°-30°	317.9	6.1
30°-40°	464.6	8.9
40°-50°	729.2	14.0
50°-60°	1121.3	21.5
60°-70°	1370.0	26.3
70°-80°	849.4	16.3
80°-90°	123.4	2.4
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°	5216.0	100.0
0°-180°	5216.0	100.0

**Coefficient of Utilization**



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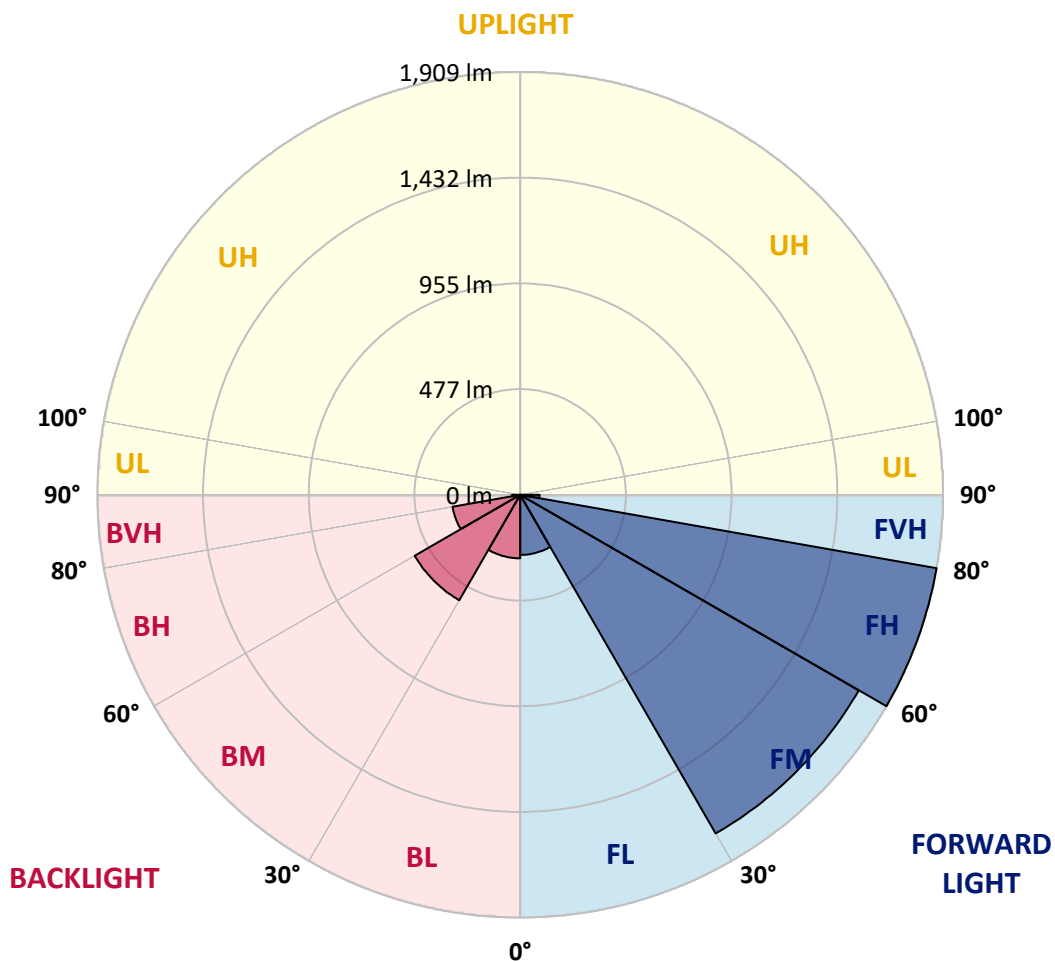
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	271.4	5.2			
FM	(30°-60°)	1765.4	33.8			
FH	(60°-80°)	1909.1	36.6			G2/5000
FVH	(80°-90°)	87.1	1.7			G1/100
BL	(0°-30°)	286.8	5.5	B1/500		
BM	(30°-60°)	549.7	10.5	B1/1000		
BH	(60°-80°)	310.2	5.9	B1/500		G1/500
BVH	(80°-90°)	36.3	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6
2.5°	560.6	558.7	558.7	561.6	562.6	565.4	565.4	566.4	569.2	574.0	579.7
5°	543.5	542.5	543.5	547.3	549.2	554.9	556.8	557.8	563.5	571.1	579.7
7.5°	526.3	525.3	527.2	532.9	538.7	547.3	552.0	553.0	561.6	572.1	583.6
10°	520.5	519.6	522.4	527.2	532.9	542.5	550.1	551.1	563.5	575.9	592.2
12.5°	528.2	527.2	530.1	534.9	540.6	547.3	555.9	556.8	573.1	589.3	606.5
15°	547.3	547.3	548.2	551.1	556.8	562.6	570.2	571.1	588.3	607.4	624.6
17.5°	576.9	575.0	575.0	574.0	577.8	580.7	590.3	591.2	609.4	626.5	643.7
20°	613.2	612.2	608.4	603.6	602.7	604.6	614.1	615.1	633.2	647.6	663.8
22.5°	657.1	658.1	649.5	639.0	634.2	637.1	645.6	646.6	660.0	672.4	686.7
25°	715.4	712.5	700.1	684.8	675.3	675.3	683.9	683.9	696.3	703.9	713.5
27.5°	770.8	765.0	753.6	731.6	716.3	719.2	727.8	727.8	739.2	742.1	746.9
30°	830.9	825.2	810.9	783.2	763.1	761.2	771.7	770.8	786.0	785.1	781.3
32.5°	904.5	901.6	877.7	842.4	815.7	809.0	818.5	819.5	829.0	826.2	813.7
35°	1007.6	1006.7	984.7	922.6	887.3	874.9	880.6	880.6	887.3	879.6	858.6
37.5°	1137.5	1139.4	1120.3	1028.6	979.0	958.0	958.9	958.0	959.9	951.3	929.3
40°	1267.4	1272.2	1271.2	1160.4	1097.4	1061.1	1047.7	1045.8	1050.6	1046.8	1025.8
42.5°	1438.4	1449.8	1423.1	1322.8	1252.1	1191.0	1154.7	1149.9	1160.4	1165.2	1145.2
45°	1616.0	1612.2	1570.2	1497.6	1433.6	1355.3	1286.5	1278.9	1286.5	1300.8	1279.8
47.5°	1708.7	1705.8	1695.3	1659.0	1649.5	1559.7	1455.6	1448.9	1434.6	1454.6	1429.8
50°	1861.5	1864.4	1821.4	1817.6	1857.7	1808.0	1646.6	1631.3	1605.5	1621.8	1600.7
52.5°	1972.3	1959.9	1933.1	1966.5	2091.7	2064.9	1826.1	1819.5	1795.6	1791.8	1782.2
55°	2017.2	2017.2	2021.9	2099.3	2277.9	2242.6	2021.0	2027.7	1995.2	1968.5	1980.9
57.5°	2030.5	2036.3	2077.3	2205.3	2496.6	2381.1	2235.9	2245.4	2198.6	2145.2	2184.3
60°	1964.6	1981.8	2080.2	2265.5	2619.8	2528.1	2462.2	2465.1	2397.3	2319.0	2387.7
62.5°	1795.6	1816.6	1992.3	2290.3	2599.8	2679.1	2676.2	2682.9	2590.2	2492.8	2578.8
65°	1588.3	1609.3	1796.5	2220.6	2584.5	2787.0	2872.0	2890.1	2770.7	2639.9	2698.2
67.5°	1283.7	1311.3	1489.0	1985.6	2510.0	2875.8	3055.4	3074.5	2910.2	2716.3	2687.6
70°	930.3	943.6	1092.6	1509.1	2206.3	2827.1	3200.5	3199.6	2956.0	2710.6	2544.4
72.5°	447.9	458.4	587.4	937.0	1577.8	2399.2	3095.5	3113.6	2893.0	2627.5	2216.8
75°	184.3	194.8	237.8	395.4	828.1	1585.5	2623.7	2666.6	2627.5	2358.1	1734.5
77.5°	114.6	118.4	139.4	204.4	378.2	740.2	1836.7	1894.9	2082.1	1889.2	1145.2
80°	86.0	88.8	104.1	143.3	238.8	273.2	912.1	985.7	1261.7	1084.0	518.6
82.5°	71.6	72.6	83.1	104.1	162.4	156.6	292.3	325.7	588.3	413.6	178.6
85°	66.9	68.8	74.5	74.5	103.2	98.4	121.3	127.0	171.0	141.4	62.1
87.5°	34.4	32.5	65.9	58.3	53.5	47.8	51.6	55.4	64.0	67.8	27.7
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°	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6	583.6
2.5°	581.7	584.5	589.3	594.1	599.8	606.5	610.3	615.1	618.9	617.0	616.0
5°	584.5	589.3	599.8	609.4	620.8	634.2	642.8	652.3	660.0	661.9	659.0
7.5°	589.3	597.9	612.2	629.4	644.7	661.9	675.3	688.6	698.2	700.1	700.1
10°	600.8	610.3	629.4	652.3	670.5	688.6	703.9	714.4	723.0	726.8	726.8
12.5°	617.0	628.5	651.4	679.1	699.1	716.3	724.9	729.7	733.5	737.3	738.3
15°	636.1	648.5	676.2	705.8	726.8	735.4	735.4	734.5	734.5	736.4	738.3
17.5°	655.2	668.6	697.2	728.7	742.1	737.3	730.7	727.8	725.9	724.9	727.8
20°	675.3	688.6	717.3	746.9	743.1	723.0	713.5	706.8	701.0	698.2	702.0
22.5°	697.2	709.6	739.2	759.3	730.7	700.1	681.9	671.4	661.9	656.2	660.0
25°	723.0	735.4	764.1	763.1	708.7	665.7	637.1	619.9	609.4	603.6	603.6
27.5°	753.6	764.1	791.8	753.6	678.1	619.9	577.8	561.6	558.7	554.0	554.0
30°	785.1	793.7	817.6	731.6	636.1	559.7	513.8	506.2	507.2	502.4	503.3
32.5°	817.6	826.2	832.8	699.1	581.7	491.9	461.3	455.6	454.6	450.8	447.0
35°	863.4	875.8	834.8	655.2	515.8	435.5	413.6	407.8	402.1	388.7	388.7
37.5°	933.1	946.5	830.0	600.8	447.9	391.6	371.5	363.9	354.3	341.0	336.2
40°	1028.6	1028.6	819.5	539.6	393.5	356.3	337.1	327.6	317.1	303.7	300.9
42.5°	1141.3	1114.6	803.2	477.5	353.4	332.4	315.2	304.7	292.3	277.0	275.1
45°	1273.1	1200.6	780.3	422.2	323.8	318.0	307.5	289.4	268.4	252.1	249.3
47.5°	1401.1	1277.9	758.3	383.0	298.9	312.3	303.7	273.2	244.5	221.6	218.7
50°	1541.5	1346.7	732.6	350.5	279.8	308.5	298.9	249.3	217.8	201.5	199.6
52.5°	1681.9	1416.4	704.9	316.1	263.6	300.9	287.5	232.1	216.8	194.8	192.0
55°	1830.0	1497.6	672.4	277.9	244.5	285.6	272.2	231.1	223.5	194.8	188.2
57.5°	1974.2	1587.4	619.9	240.7	223.5	262.7	266.5	225.4	209.2	192.9	185.3
60°	2133.7	1682.9	532.9	209.2	205.3	243.6	258.8	213.0	192.9	187.2	183.4
62.5°	2261.7	1768.8	416.4	187.2	190.1	228.3	249.3	205.3	186.2	181.5	180.5
65°	2317.1	1770.8	298.9	168.1	174.8	213.9	239.7	198.7	180.5	178.6	177.6
67.5°	2258.8	1673.3	210.1	150.0	158.5	200.6	227.3	192.0	174.8	175.7	173.8
70°	2070.7	1468.0	153.8	132.8	143.3	186.2	213.9	183.4	168.1	170.0	167.1
72.5°	1732.5	1144.2	123.2	118.4	130.8	171.0	200.6	173.8	157.6	158.5	152.8
75°	1279.8	758.3	103.2	106.0	116.5	156.6	183.4	161.4	146.1	142.3	138.5
77.5°	761.2	389.7	85.0	92.6	104.1	139.4	164.3	146.1	133.7	127.0	124.2
80°	314.2	157.6	69.7	78.3	90.7	124.2	145.2	128.0	119.4	112.7	108.9
82.5°	125.1	77.4	55.4	64.0	76.4	107.9	127.0	112.7	104.1	99.3	88.8
85°	47.8	38.2	37.2	44.9	57.3	83.1	105.1	94.6	87.9	75.5	72.6
87.5°	19.1	17.2	17.2	22.0	32.5	52.5	75.5	65.9	68.8	54.4	55.4
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)