

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: P348642

Luminaire Tested: **ARCH-N-PA1-40-727-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348642  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4633 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 41  
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

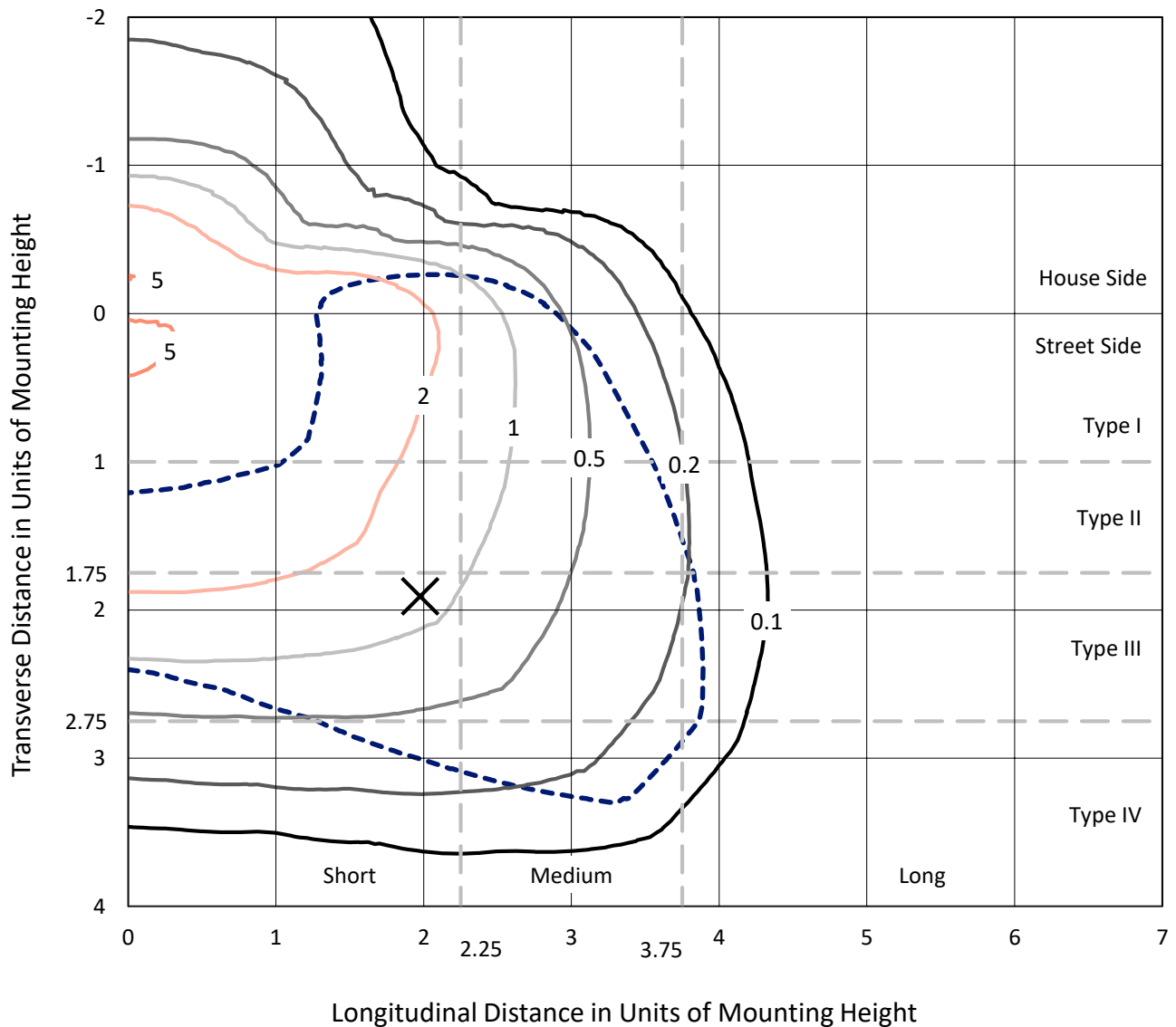


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### Iso-Footcandle Lines of Horizontal Illumination

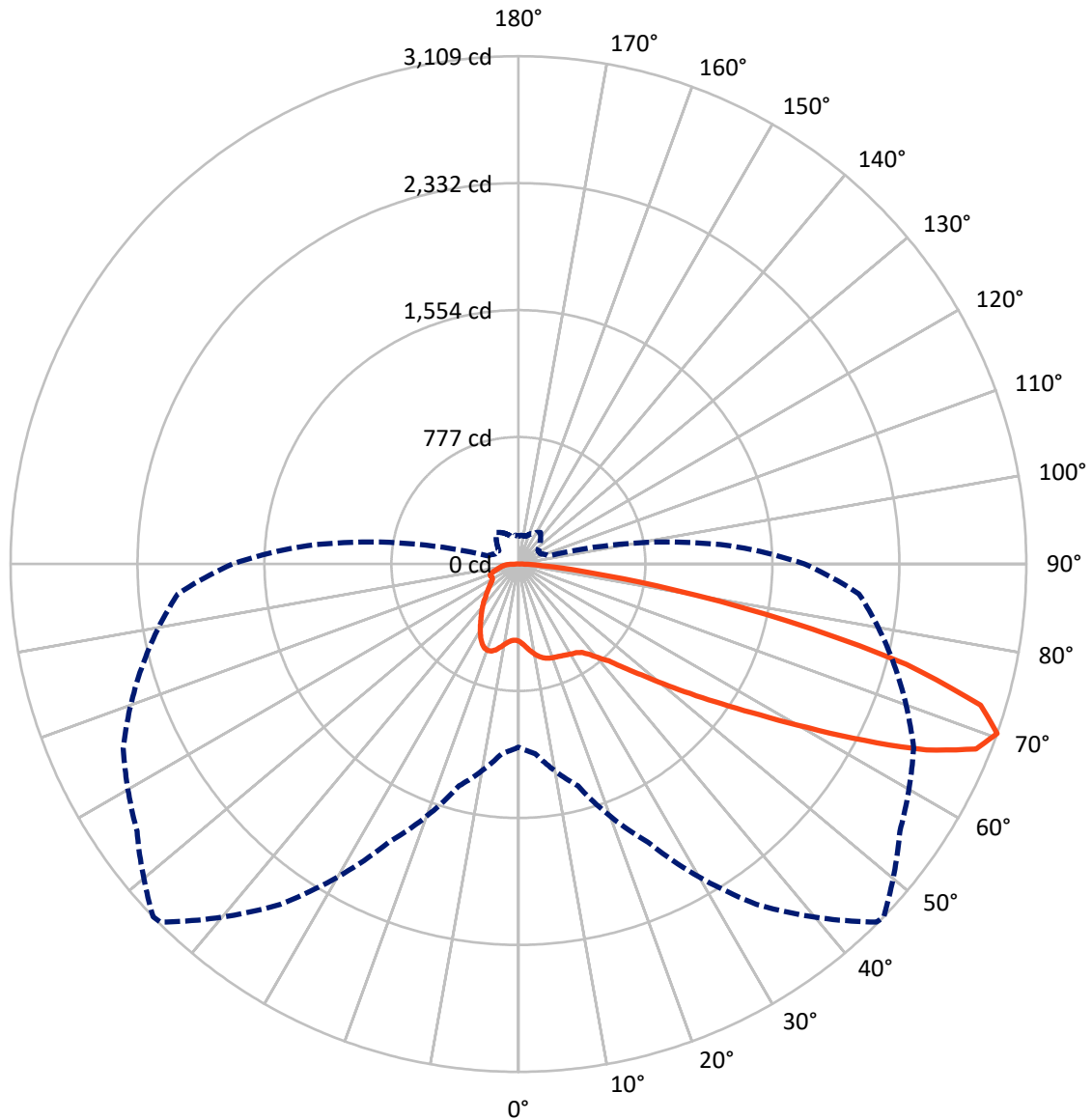
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical



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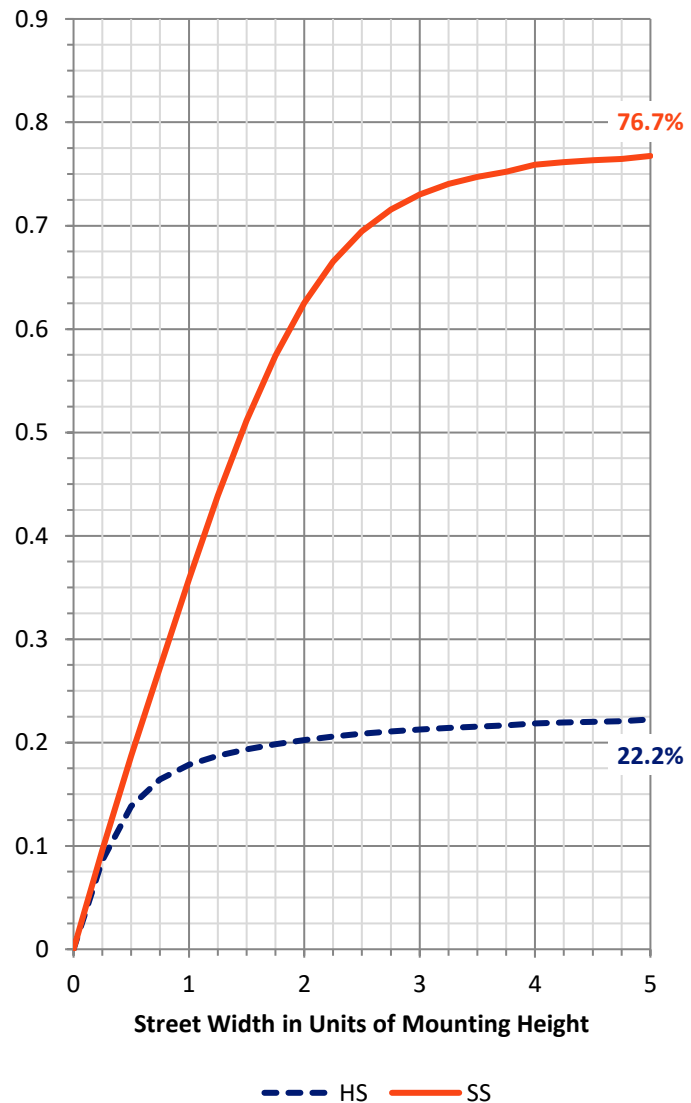
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1061.9	0.0	1061.9
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	3571.1	0.0	3571.1
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	4633.0	0.0	4633.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.1	1.0
10°-20°	160.3	3.5
20°-30°	267.3	5.8
30°-40°	379.3	8.2
40°-50°	558.0	12.0
50°-60°	944.9	20.4
60°-70°	1341.3	29.0
70°-80°	814.8	17.6
80°-90°	118.9	2.6
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°	4633.0	100.0
0°-180°	4633.0	100.0

**Coefficient of Utilization**



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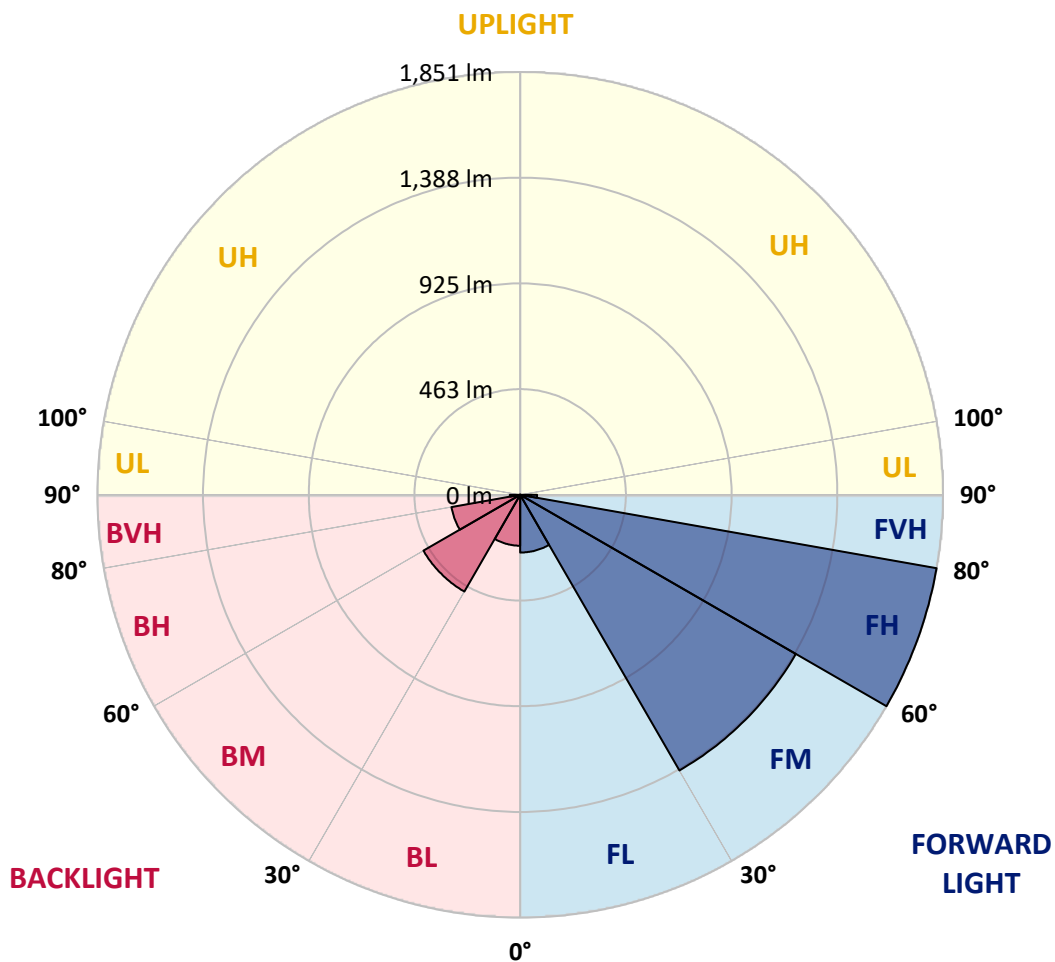
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	252.8	5.5			
FM	(30°-60°)	1393.4	30.1			
FH	(60°-80°)	1850.9	39.9			G2/5000
FVH	(80°-90°)	74.1	1.6			G1/100
BL	(0°-30°)	222.9	4.8	B1/500		
BM	(30°-60°)	488.8	10.6	B1/1000		
BH	(60°-80°)	305.3	6.6	B1/500		G1/500
BVH	(80°-90°)	44.8	1.0			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0
2.5°	495.6	496.0	496.6	495.0	490.6	489.3	488.8	484.2	481.2	476.8	473.0
5°	535.3	535.6	534.6	530.2	520.4	513.1	512.4	502.0	492.5	482.3	474.7
7.5°	576.7	577.1	574.1	565.7	551.9	539.2	538.4	524.2	509.7	494.4	483.0
10°	613.3	611.4	606.5	594.7	578.4	562.9	562.2	547.3	530.7	512.1	496.9
12.5°	637.7	636.1	629.8	615.5	597.6	583.3	582.0	568.3	552.1	531.8	513.6
15°	651.2	652.3	643.7	627.6	610.1	598.1	597.0	587.1	572.7	552.2	531.3
17.5°	652.9	653.9	645.6	629.6	615.3	607.1	606.6	600.1	589.7	570.0	548.1
20°	642.8	643.4	636.6	623.4	614.1	611.5	611.4	608.5	600.8	583.3	562.1
22.5°	628.0	628.5	623.6	614.1	610.9	614.9	616.0	614.9	609.3	593.0	573.0
25°	624.4	624.1	619.0	609.3	612.0	620.4	621.8	622.3	618.5	604.2	587.0
27.5°	642.0	640.9	631.2	615.7	617.4	627.6	629.5	634.1	631.7	619.1	602.8
30°	692.9	691.0	671.2	639.8	631.2	636.4	638.8	646.1	646.6	636.1	623.9
32.5°	778.8	776.4	740.9	684.8	654.5	645.5	647.7	658.6	664.5	656.4	643.2
35°	887.4	884.7	838.1	761.4	693.5	662.8	664.3	673.1	684.8	673.4	655.9
37.5°	1000.6	994.1	949.3	851.4	755.5	699.7	699.7	700.8	706.4	682.6	670.8
40°	1113.2	1106.7	1066.1	957.3	835.7	757.9	754.2	729.7	725.2	704.8	700.8
42.5°	1217.8	1215.9	1192.0	1077.0	929.9	815.1	810.0	768.3	769.3	756.6	756.8
45°	1329.1	1329.1	1309.6	1197.9	1039.6	907.1	902.0	840.6	850.2	844.3	858.4
47.5°	1420.0	1422.9	1420.2	1323.8	1167.3	1023.9	1014.7	940.9	967.5	987.6	1028.7
50°	1512.8	1517.2	1517.7	1461.9	1321.5	1162.8	1152.4	1073.9	1133.3	1191.0	1271.8
52.5°	1647.4	1657.4	1617.6	1599.6	1510.5	1327.7	1317.4	1245.0	1344.2	1425.2	1564.3
55°	1772.1	1763.4	1735.0	1746.1	1712.8	1515.4	1507.7	1444.1	1579.2	1684.5	1865.1
57.5°	1839.7	1839.1	1867.6	1915.2	1931.0	1746.9	1740.4	1678.6	1844.1	1923.2	2147.4
60°	1919.0	1920.1	1990.8	2098.8	2164.1	2035.2	2032.3	1985.4	2101.5	2146.2	2368.9
62.5°	1930.1	1950.0	2071.8	2257.6	2382.3	2372.0	2378.3	2261.8	2331.7	2324.1	2534.3
65°	1802.4	1828.7	2049.1	2305.7	2599.2	2740.3	2746.1	2539.7	2513.2	2476.1	2593.4
67.5°	1540.8	1579.8	1819.2	2201.2	2670.7	3012.5	3020.8	2755.2	2663.8	2527.7	2451.1
70°	1121.3	1164.6	1405.6	1880.0	2543.2	3099.6	3108.9	2850.5	2669.6	2381.0	2092.4
72.5°	677.3	711.3	909.9	1384.0	2146.5	2941.0	2957.6	2729.6	2437.3	2016.8	1545.1
75°	297.4	319.6	440.0	797.5	1536.7	2433.3	2454.1	2336.4	1980.3	1465.7	913.3
77.5°	126.7	133.0	180.4	346.4	868.7	1662.7	1691.3	1707.1	1343.6	797.5	385.9
80°	79.0	81.5	102.1	156.8	406.5	933.9	964.6	1004.4	667.2	293.2	134.8
82.5°	48.0	50.9	67.9	94.8	211.7	423.3	438.1	466.1	258.9	126.7	69.8
85°	28.9	30.9	41.5	59.9	120.5	166.5	166.3	183.9	121.9	81.5	36.8
87.5°	13.8	15.4	22.2	31.1	60.7	62.5	58.5	66.3	74.0	53.4	18.6
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°	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0
2.5°	471.7	471.1	469.0	467.4	467.1	466.1	465.4	465.8	466.5	466.6	466.6
5°	471.5	469.8	467.1	466.0	467.4	469.3	471.7	474.9	476.8	478.2	479.1
7.5°	479.1	475.8	472.8	472.2	475.0	480.1	485.5	492.1	496.7	499.9	500.6
10°	491.8	487.7	484.7	485.3	490.4	497.7	505.3	513.9	520.8	525.1	525.4
12.5°	506.4	502.5	499.6	502.3	510.7	519.6	527.5	535.0	541.3	545.6	545.6
15°	523.2	520.4	517.0	523.2	534.6	542.6	545.9	549.5	553.0	556.2	555.6
17.5°	539.4	536.7	535.0	542.3	554.1	557.8	555.6	552.9	552.9	554.6	554.9
20°	553.3	551.0	552.1	559.2	565.4	561.6	553.3	544.8	541.3	542.3	543.2
22.5°	565.6	564.4	567.8	571.1	566.7	553.3	538.1	526.6	522.3	522.0	522.3
25°	579.8	579.7	583.8	577.8	558.1	533.5	513.1	501.8	499.4	501.3	504.5
27.5°	597.6	599.3	601.4	579.4	540.7	503.6	482.8	475.0	477.4	482.0	485.0
30°	620.3	625.0	620.6	575.4	515.6	469.3	449.5	447.3	453.8	460.3	463.5
32.5°	642.3	649.7	639.0	565.1	483.3	433.0	417.6	417.0	424.9	431.3	435.7
35°	660.1	674.8	652.8	544.6	445.9	399.6	388.3	384.0	386.9	394.3	399.4
37.5°	683.2	707.8	662.3	513.4	405.3	372.0	358.8	349.0	346.4	349.5	352.0
40°	725.5	758.0	666.7	469.8	365.6	344.4	331.1	316.6	306.6	299.3	299.5
42.5°	794.7	823.5	663.9	416.8	329.0	317.4	302.4	285.7	269.5	253.1	251.8
45°	906.9	920.9	655.3	360.7	296.8	289.2	275.1	258.4	236.9	218.2	216.4
47.5°	1086.6	1055.6	642.0	311.7	268.4	265.3	252.3	233.1	210.2	195.2	193.9
50°	1331.5	1250.2	635.5	272.7	243.4	244.3	233.7	213.4	191.8	180.8	179.5
52.5°	1624.5	1476.8	648.0	242.6	223.2	226.6	218.6	199.6	181.5	172.8	171.6
55°	1928.5	1711.4	661.5	220.7	204.2	210.7	208.0	192.3	176.0	167.9	166.8
57.5°	2188.7	1886.6	634.5	202.9	187.3	197.4	199.8	187.7	173.1	165.8	164.6
60°	2352.4	1957.2	563.8	186.3	173.8	186.8	195.0	186.5	174.2	173.6	172.7
62.5°	2430.1	1951.0	457.7	173.1	165.4	182.2	198.5	193.6	186.9	192.6	193.1
65°	2395.3	1857.8	340.9	164.4	159.3	183.9	209.0	207.1	190.6	196.3	197.1
67.5°	2165.7	1635.3	252.4	156.8	152.7	188.8	228.0	211.5	183.4	187.6	185.0
70°	1750.4	1296.5	194.7	148.2	145.9	188.2	236.6	208.8	175.7	176.6	169.8
72.5°	1207.1	884.1	158.4	140.3	136.0	171.6	230.5	202.2	169.2	161.9	152.8
75°	656.4	474.5	134.6	132.1	118.8	150.6	219.4	197.4	163.3	153.6	148.6
77.5°	258.3	196.9	116.9	120.8	103.9	133.0	207.1	188.4	155.2	142.5	140.0
80°	105.4	100.5	96.9	104.5	89.3	116.4	192.2	177.7	145.6	132.2	127.2
82.5°	59.8	62.5	75.3	82.4	72.5	107.2	185.0	169.2	134.0	118.4	112.4
85°	30.6	36.6	52.5	59.1	53.3	91.2	170.4	148.1	107.5	90.7	91.2
87.5°	14.7	20.5	33.1	37.1	34.6	66.0	127.3	107.3	83.7	66.3	64.2
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)