

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: P397813

Luminaire Tested: **ARCH-S-PA1-40-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397813  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-830-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4817 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 40  
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

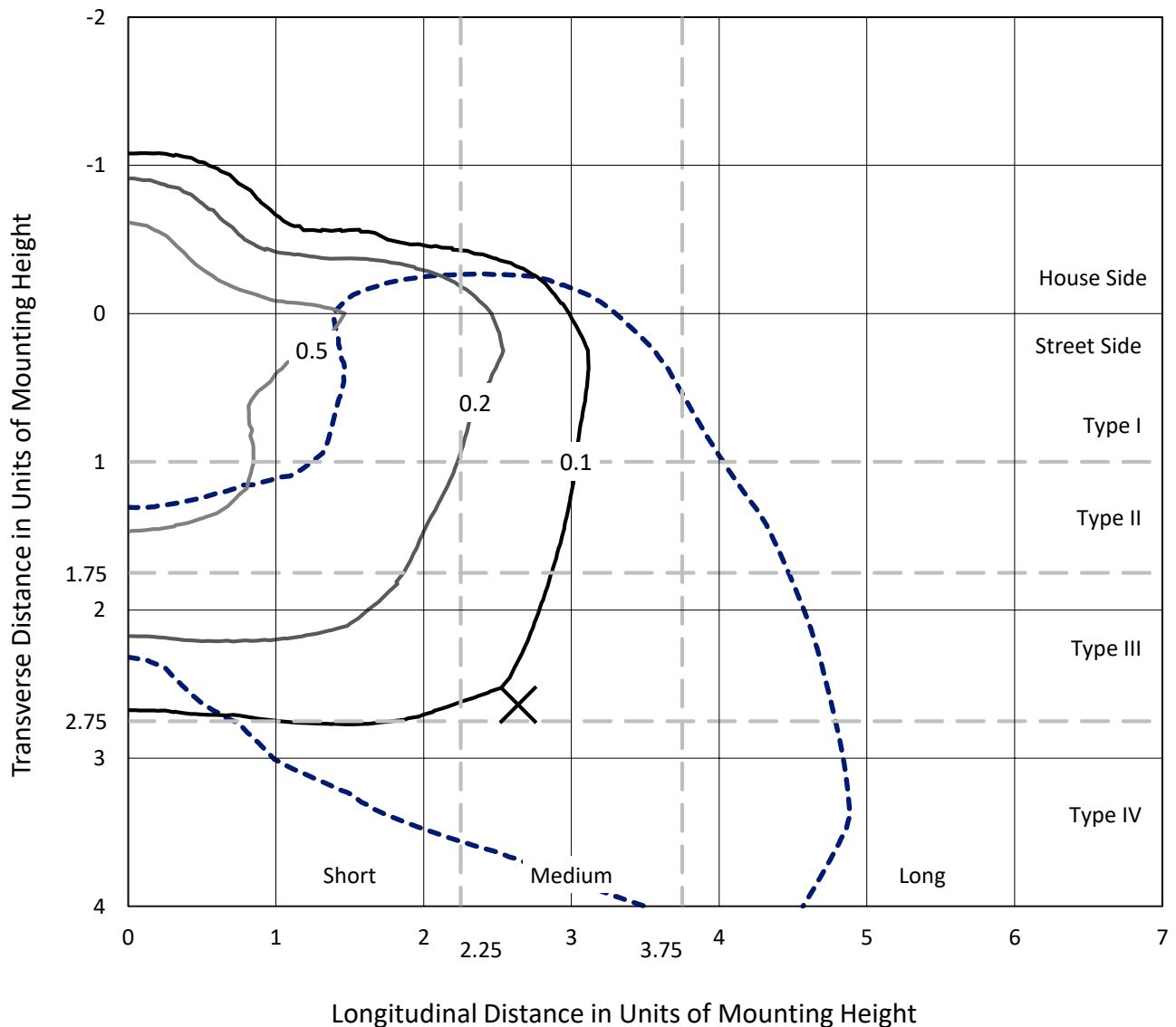


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

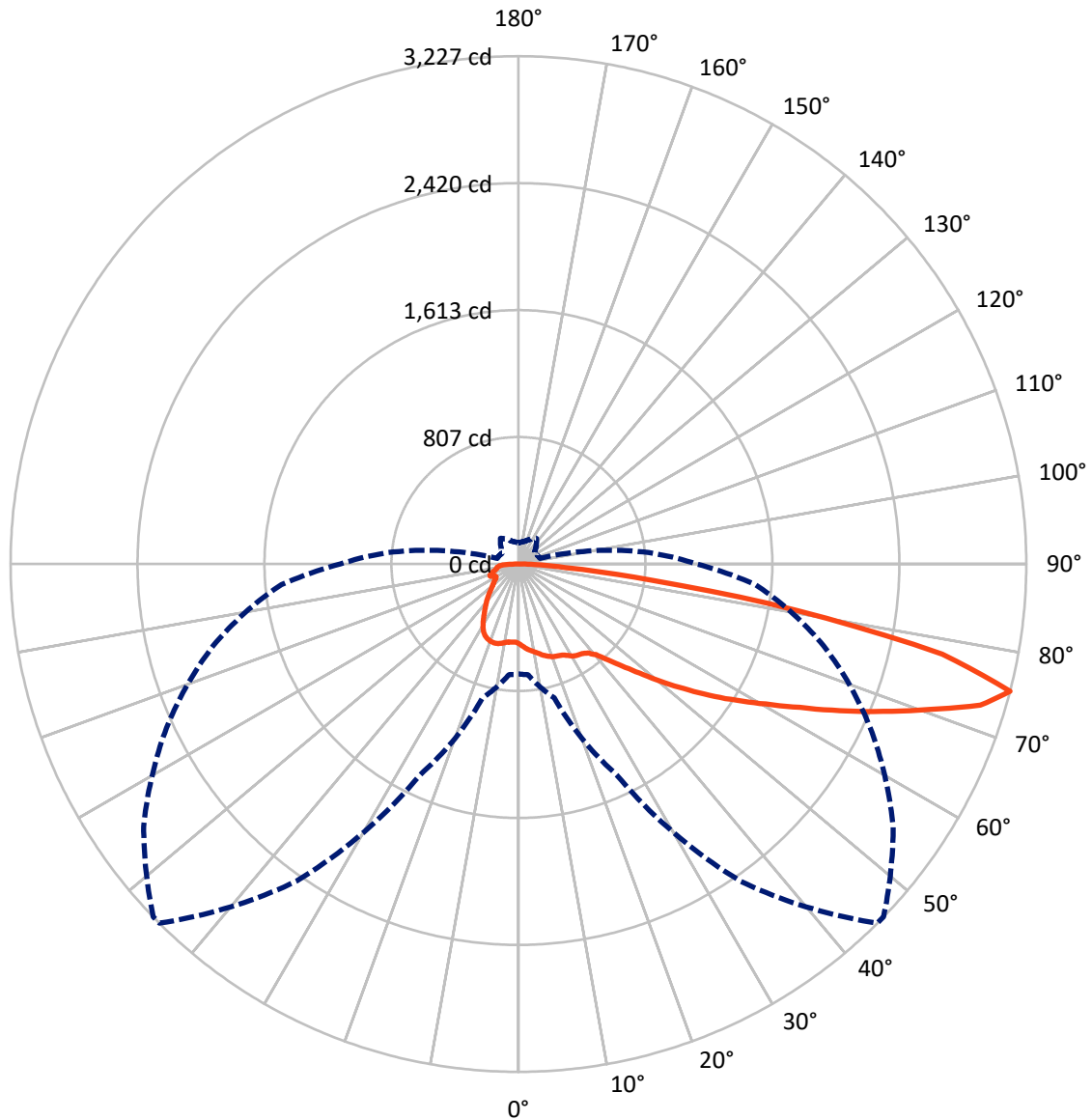


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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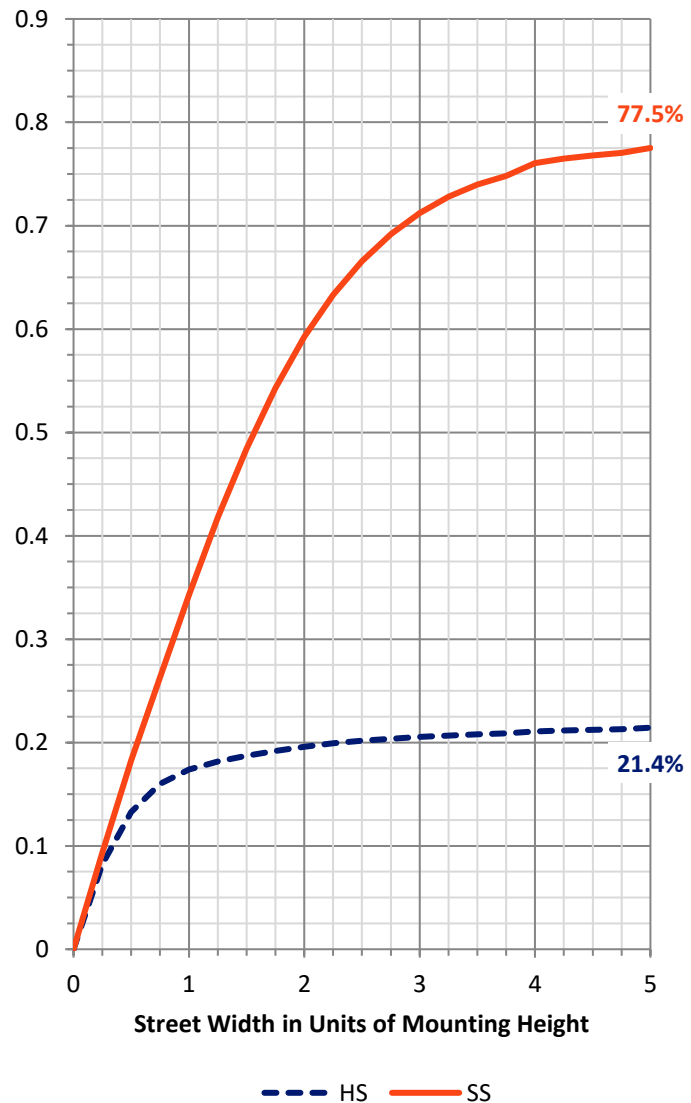
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1064.5	0.0	1064.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	3752.5	0.0	3752.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	4817.0	0.0	4817.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.0	1.0
10°-20°	159.2	3.3
20°-30°	271.4	5.6
30°-40°	380.3	7.9
40°-50°	558.8	11.6
50°-60°	889.3	18.5
60°-70°	1265.0	26.3
70°-80°	1059.2	22.0
80°-90°	183.8	3.8
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°	4817.0	100.0
0°-180°	4817.0	100.0



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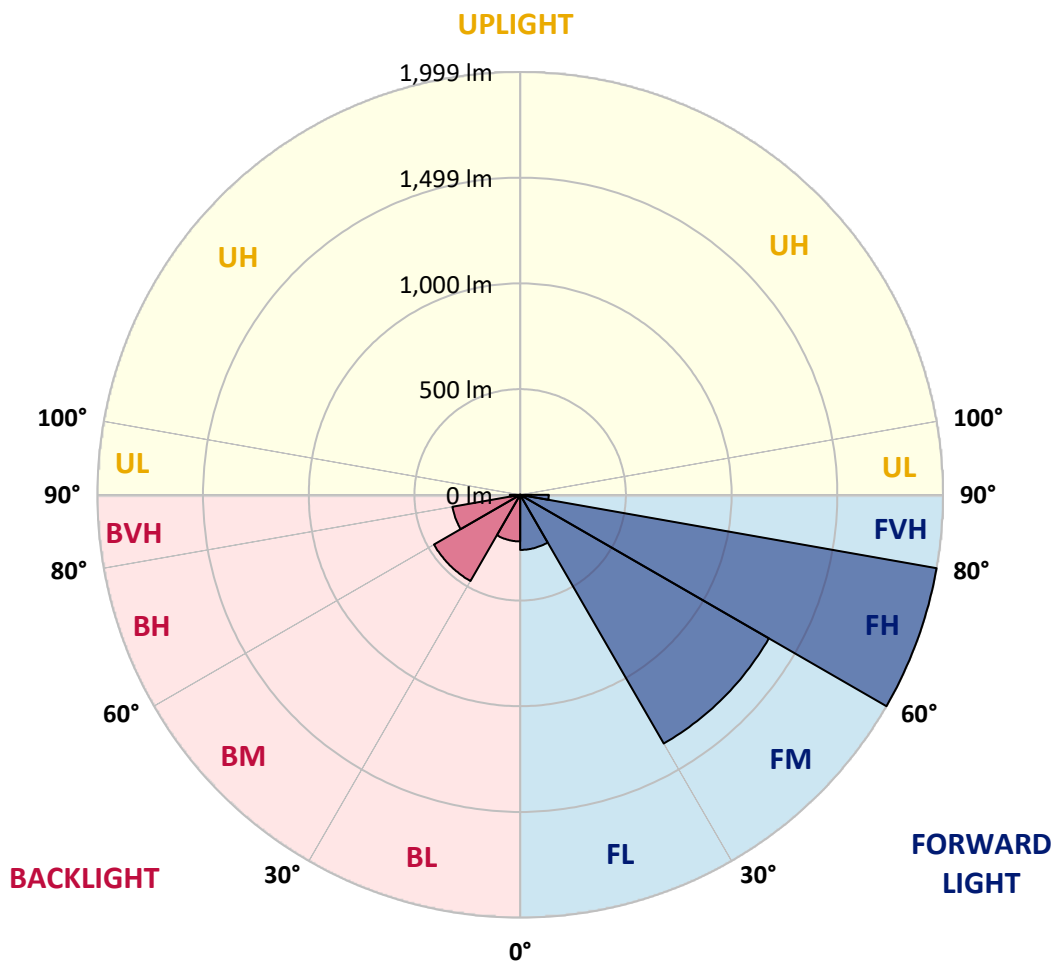
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	260.4	5.4			
FM (30°-60°)	1357.8	28.2			
FH (60°-80°)	1999.2	41.5			G2/5000
FVH (80°-90°)	135.1	2.8			G2/225
BL (0°-30°)	220.3	4.6	B1/500		
BM (30°-60°)	470.6	9.8	B1/1000		
BH (60°-80°)	325.0	6.7	B1/500		G1/500
BVH (80°-90°)	48.7	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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9
2.5°	534.9	532.3	531.0	531.0	525.8	522.6	522.0	517.5	513.6	509.8	506.5
5°	565.7	563.8	560.0	556.7	549.7	540.6	539.4	529.7	520.1	511.0	503.3
7.5°	594.1	590.2	585.7	579.3	567.7	555.4	553.5	540.0	526.5	513.0	502.7
10°	617.9	614.0	607.6	598.6	583.8	569.0	567.0	552.9	538.7	522.6	507.8
12.5°	640.4	637.2	627.5	615.3	597.9	584.4	582.5	570.3	555.4	537.4	518.1
15°	659.7	656.5	646.2	632.0	612.1	601.8	599.2	587.6	572.8	553.5	533.6
17.5°	669.4	669.4	658.4	643.0	624.3	616.6	614.7	600.5	587.0	568.3	548.4
20°	672.6	673.9	666.2	647.5	631.4	628.2	626.2	614.7	599.2	581.2	562.5
22.5°	674.5	677.1	670.7	649.4	635.9	634.0	632.7	625.0	612.7	595.4	576.7
25°	681.0	681.0	676.5	652.6	641.7	641.1	641.1	636.5	628.2	613.4	594.7
27.5°	690.6	690.0	684.2	659.7	654.6	656.5	655.9	655.2	649.4	634.6	614.7
30°	706.7	706.7	700.3	673.9	670.7	679.0	679.7	681.0	671.9	648.8	632.7
32.5°	731.2	728.6	722.1	688.0	682.9	690.6	691.9	691.3	683.5	661.6	653.9
35°	806.5	800.7	777.5	719.6	693.8	698.3	699.0	702.2	703.5	686.1	682.2
37.5°	938.4	930.7	895.3	794.2	728.6	717.6	717.0	725.4	732.4	717.0	717.0
40°	1081.9	1075.5	1054.9	923.0	792.9	756.9	754.3	762.1	771.1	760.1	763.3
42.5°	1205.5	1210.7	1212.6	1059.4	889.5	830.3	823.2	812.3	826.4	816.8	829.6
45°	1298.2	1295.6	1331.0	1199.1	1014.4	922.3	912.7	883.1	901.1	900.4	928.8
47.5°	1396.7	1392.2	1407.0	1330.4	1156.6	1035.0	1020.1	976.4	1003.4	1022.1	1069.1
50°	1490.0	1491.3	1496.4	1434.0	1311.1	1172.0	1153.4	1094.8	1133.4	1172.7	1239.0
52.5°	1611.6	1602.6	1596.2	1555.0	1484.2	1314.9	1302.7	1235.8	1289.8	1336.2	1424.3
55°	1717.8	1712.0	1708.2	1706.3	1629.0	1472.6	1459.7	1390.2	1468.1	1500.9	1630.9
57.5°	1831.1	1827.9	1848.5	1881.3	1850.4	1632.9	1619.4	1552.4	1639.3	1662.5	1854.9
60°	1914.1	1916.1	1972.7	2056.4	2035.1	1806.7	1790.6	1731.4	1806.0	1826.6	2078.9
62.5°	1914.8	1934.1	2065.4	2215.4	2239.8	2006.8	1988.2	1923.8	1977.2	1977.2	2279.7
65°	1732.0	1753.9	2048.7	2254.6	2447.1	2245.0	2226.9	2125.9	2145.9	2118.8	2468.3
67.5°	1549.9	1575.6	1853.0	2257.8	2592.5	2499.8	2478.6	2328.0	2293.9	2225.7	2600.3
70°	1428.9	1446.9	1678.6	2216.0	2680.1	2766.3	2750.2	2519.8	2410.4	2315.1	2572.6
72.5°	1202.9	1196.5	1417.9	2017.1	2729.0	3068.8	3055.3	2728.3	2511.4	2272.6	2194.1
75°	698.3	706.1	879.8	1477.8	2459.9	3226.5	3225.2	2906.6	2467.0	2007.5	1511.9
77.5°	201.5	207.2	289.0	649.4	1555.6	2752.1	2840.3	2658.2	2085.3	1430.8	783.9
80°	88.2	92.7	125.5	216.3	670.0	1797.6	1874.9	1797.6	1257.6	656.5	307.7
82.5°	52.1	55.4	81.7	133.9	321.2	855.4	959.6	838.0	542.6	278.7	127.4
85°	29.6	30.9	47.0	85.0	202.1	299.3	336.0	314.7	264.5	158.3	66.9
87.5°	13.5	14.2	23.2	39.9	113.3	101.0	104.9	139.0	153.2	96.5	33.5
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°	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9
2.5°	505.2	503.3	499.5	498.2	496.2	496.9	497.5	497.5	498.2	496.2	496.2
5°	500.1	496.9	493.0	493.0	493.0	498.2	502.7	505.2	506.5	506.5	505.2
7.5°	498.2	494.3	489.8	491.1	492.4	498.8	507.2	515.5	518.1	518.1	516.8
10°	502.0	498.2	494.9	496.9	500.1	505.2	511.7	519.4	525.8	526.5	525.8
12.5°	511.0	506.5	503.3	507.2	511.0	514.3	517.5	520.7	529.1	530.3	530.3
15°	525.8	521.3	517.5	520.7	522.0	522.0	522.0	522.0	530.3	531.6	531.6
17.5°	540.6	536.8	532.9	533.6	529.7	524.6	522.6	522.0	526.5	530.3	531.0
20°	554.8	551.6	547.7	541.3	531.6	522.0	518.8	518.8	521.3	527.1	527.1
22.5°	570.3	566.4	560.0	545.2	529.1	515.5	512.3	514.3	517.5	525.2	524.6
25°	587.6	582.5	571.5	543.9	520.7	504.6	505.2	511.0	516.8	525.2	525.2
27.5°	606.9	599.9	578.0	533.6	502.0	486.6	492.4	505.9	514.3	523.3	524.6
30°	628.2	621.7	583.1	515.5	471.8	457.6	471.8	493.7	506.5	514.9	516.8
32.5°	653.9	648.8	587.6	492.4	432.5	420.3	440.9	467.9	488.5	498.2	500.1
35°	686.1	681.0	593.4	466.0	395.8	383.0	401.6	429.3	456.3	468.6	472.4
37.5°	727.9	720.2	598.6	437.7	364.9	350.1	359.1	384.2	408.7	425.4	429.9
40°	781.4	769.1	603.1	405.5	337.9	321.2	324.4	336.6	350.8	365.6	371.4
42.5°	856.7	832.2	603.7	371.4	310.2	294.8	293.5	297.4	297.4	297.4	299.3
45°	961.6	915.2	605.0	339.2	281.9	265.8	262.0	260.7	251.0	232.3	231.1
47.5°	1094.2	1024.0	610.8	312.2	252.3	238.1	233.0	227.8	209.8	190.5	186.7
50°	1264.1	1150.2	622.4	286.4	227.2	217.5	211.1	198.9	178.9	164.1	160.3
52.5°	1459.7	1300.1	633.3	259.4	208.5	202.1	194.4	179.6	158.3	149.3	148.0
55°	1684.4	1467.5	655.2	235.6	192.4	187.9	180.9	166.7	150.6	144.2	143.5
57.5°	1914.1	1654.8	686.1	214.3	177.0	174.4	174.4	162.2	151.9	149.3	149.3
60°	2135.6	1815.7	662.3	194.4	162.8	164.1	176.4	173.1	165.4	168.6	170.6
62.5°	2307.4	1910.3	537.4	178.3	152.5	164.1	195.7	195.7	186.7	185.4	185.4
65°	2380.8	1909.0	377.8	166.1	148.7	180.2	218.2	207.9	184.1	175.1	173.1
67.5°	2362.1	1825.3	260.7	157.7	147.4	196.9	228.5	199.5	172.5	164.8	159.0
70°	2198.0	1648.3	200.8	150.0	145.5	189.9	225.3	189.9	163.5	156.4	151.3
72.5°	1773.2	1322.0	166.7	142.2	137.7	175.7	214.3	180.9	156.4	148.7	143.5
75°	1130.9	831.6	141.0	131.9	122.9	157.7	199.5	171.8	148.7	138.4	134.5
77.5°	543.9	358.5	122.9	119.7	110.7	146.1	184.7	160.3	138.4	130.0	127.4
80°	220.1	164.1	106.8	107.5	101.7	139.0	174.4	149.3	128.1	119.1	114.6
82.5°	114.6	95.3	90.1	92.7	92.7	132.6	166.7	140.3	119.1	115.2	100.4
85°	61.8	59.2	69.5	74.7	80.5	119.7	155.1	130.7	108.8	93.3	90.1
87.5°	30.3	38.6	39.3	45.1	56.0	95.9	130.7	109.4	90.8	75.3	74.0
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)