

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: P459565

Luminaire Tested: **ARCH-L-PA3-90-AMB-U-T4W**

Issue Date: 1/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459565  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-905-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-AMB-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) NARROW BAND AMBER, 500mA LIGHT ENGINES WITH 24 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4011 lumens  
Efficiency: N/A  
Efficacy: 44.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

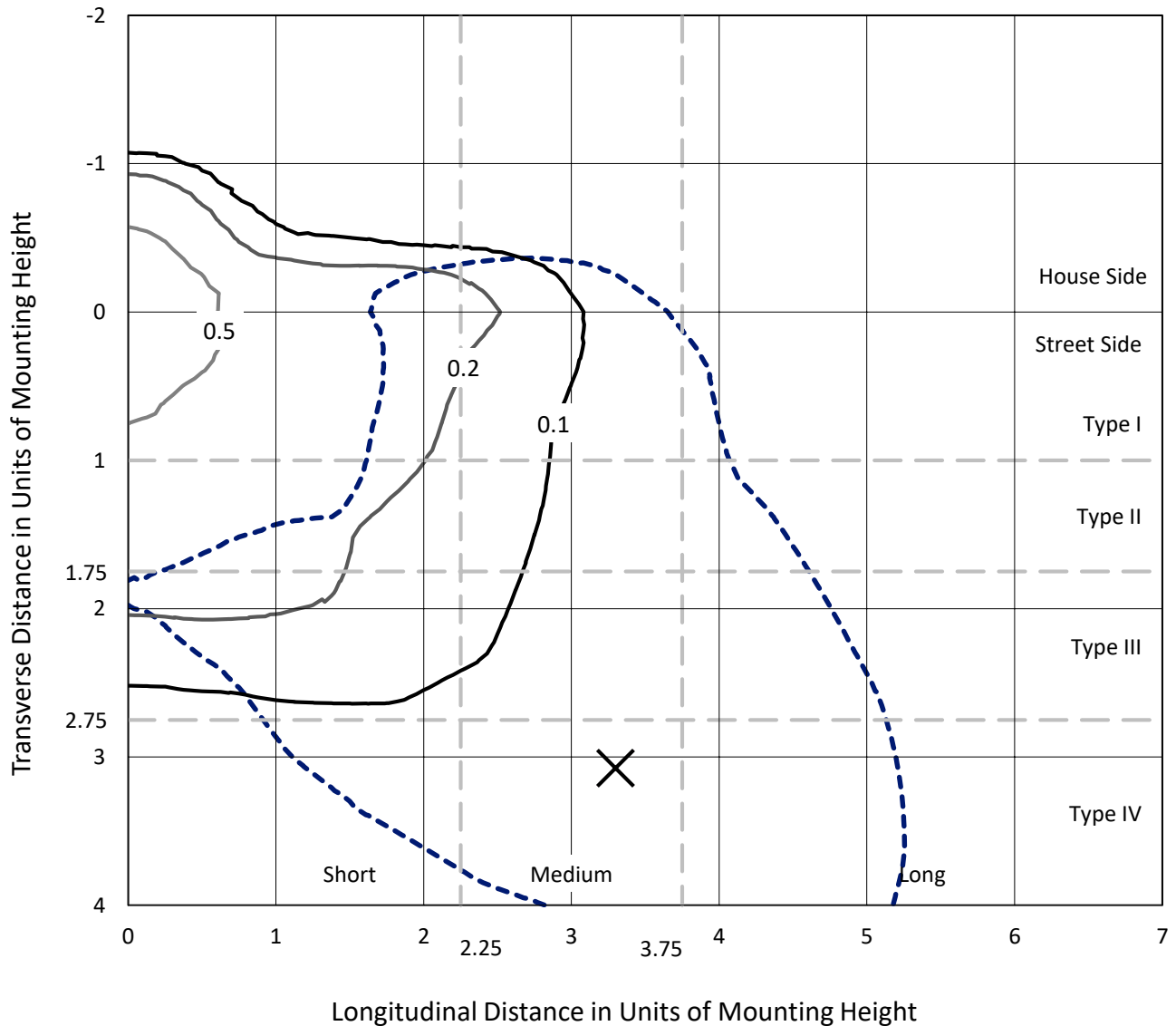
Input Watts (W): 89.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

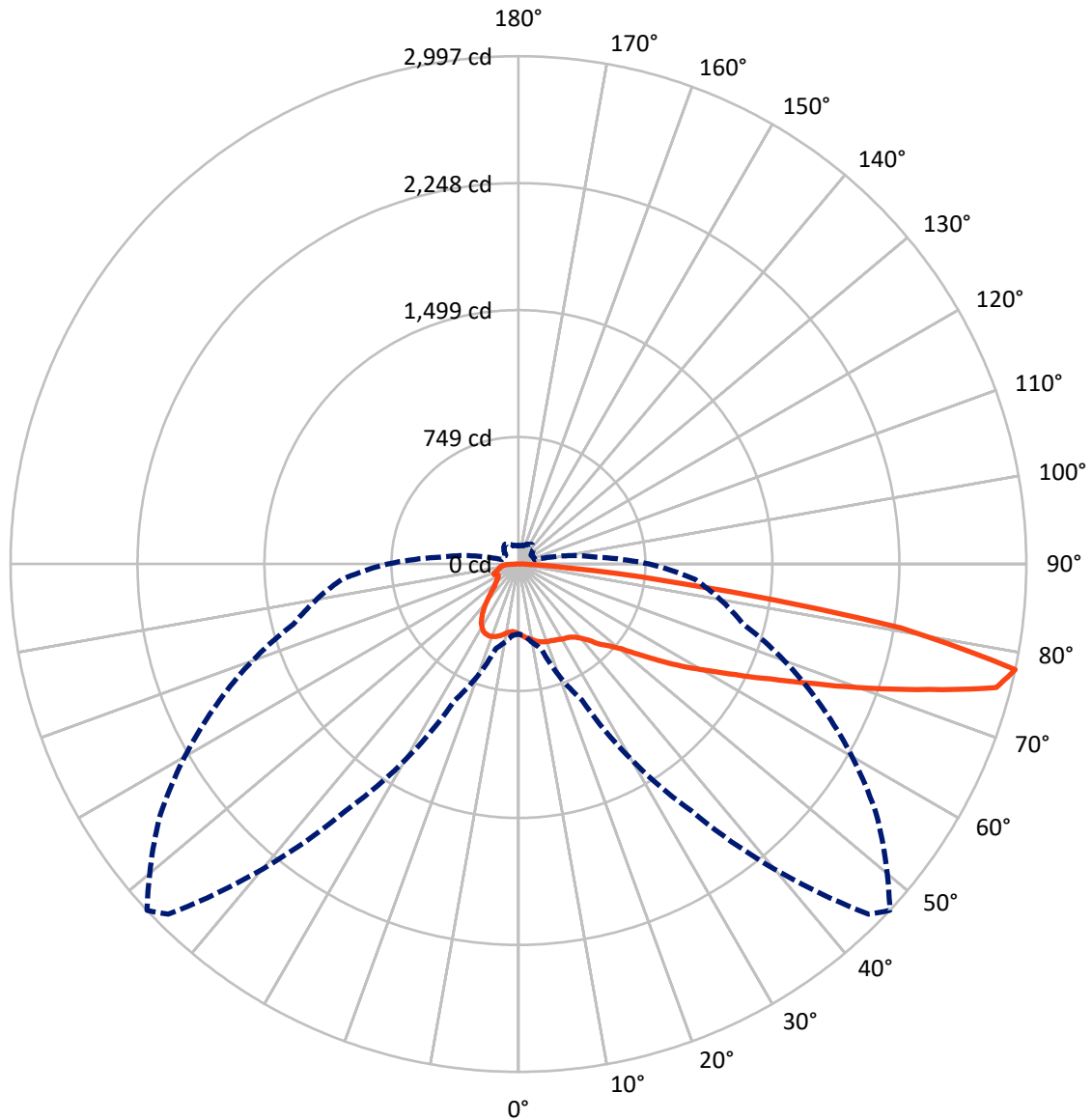
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 77.5-Deg Vertical

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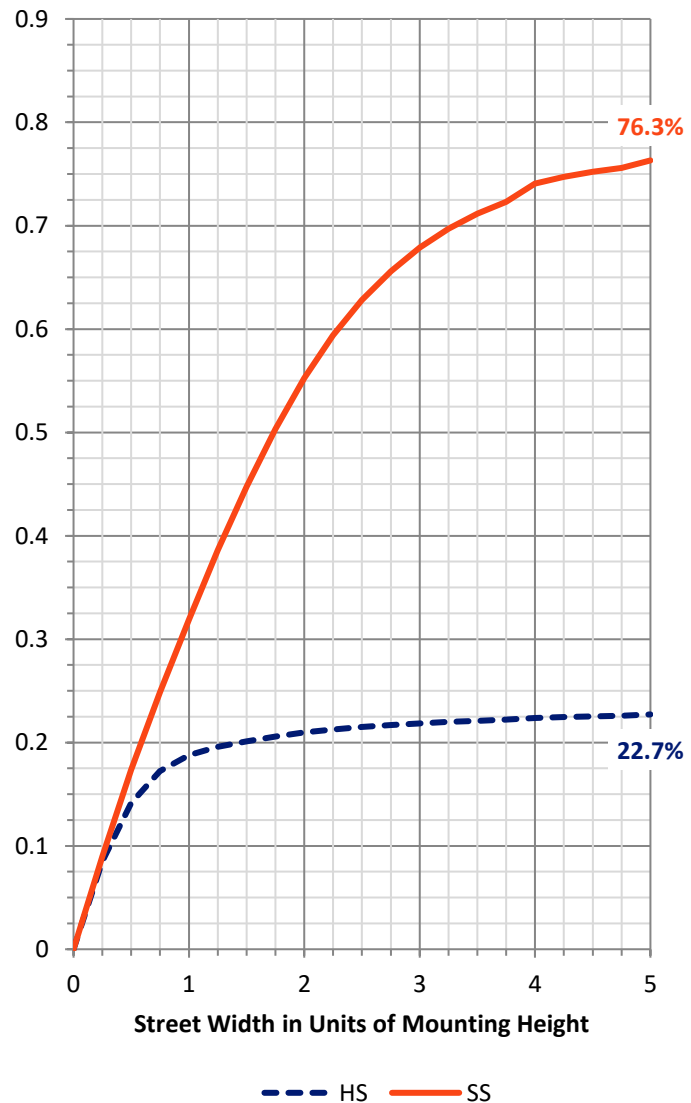
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	937.8	0.0	937.8
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	3073.2	0.0	3073.2
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	4011.0	0.0	4011.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.6	1.0
10°-20°	129.1	3.2
20°-30°	222.7	5.6
30°-40°	310.9	7.8
40°-50°	409.7	10.2
50°-60°	647.2	16.1
60°-70°	1047.6	26.1
70°-80°	1010.3	25.2
80°-90°	192.9	4.8
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°	4011.0	100.0
0°-180°	4011.0	100.0



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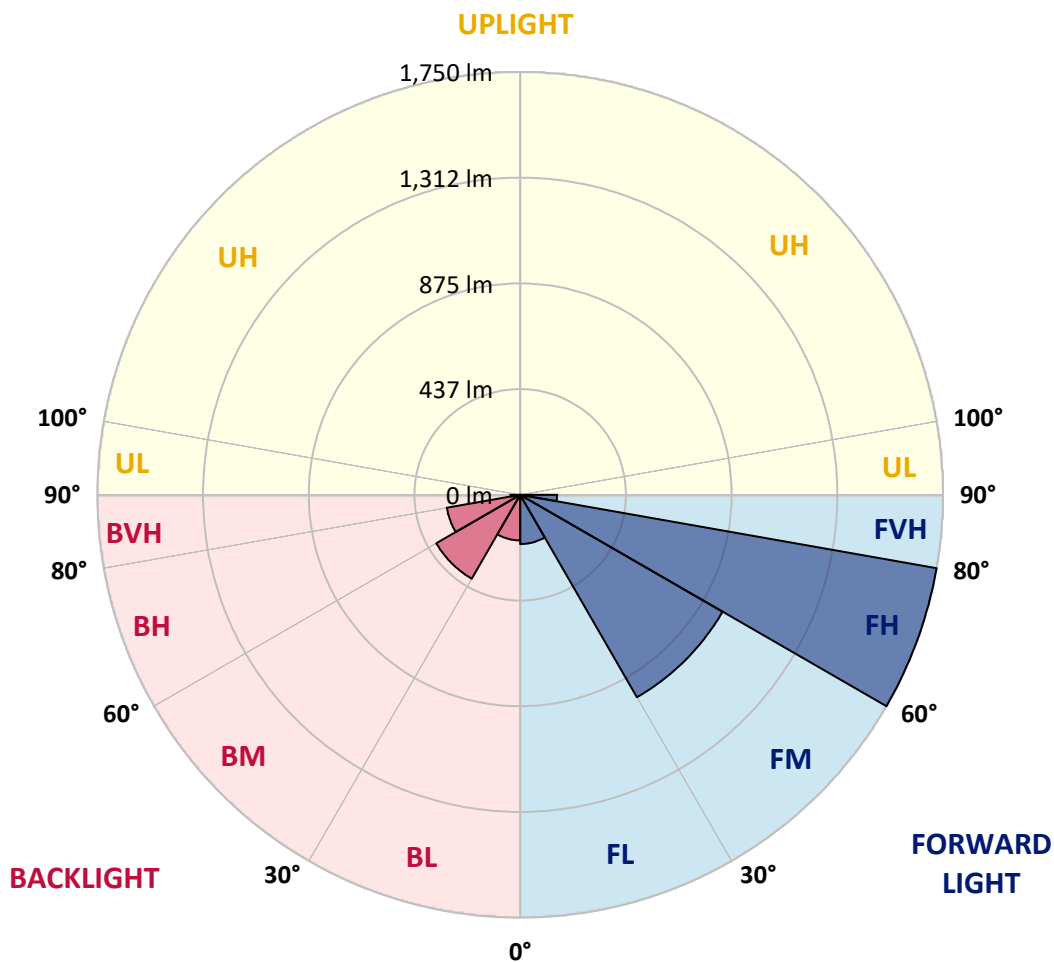
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	203.8	5.1			
FM	(30°-60°)	967.0	24.1			
FH	(60°-80°)	1749.7	43.6			G1/1800
FVH	(80°-90°)	152.6	3.8			G2/225
BL	(0°-30°)	188.7	4.7	B1/500		
BM	(30°-60°)	400.7	10.0	B1/1000		
BH	(60°-80°)	308.2	7.7	B1/500		G1/500
BVH	(80°-90°)	40.3	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°	47°	55°	65°	75°	85°
0°	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4
2.5°	432.2	432.2	432.2	429.1	429.1	422.8	422.8	419.7	416.5	413.4	410.3
5°	457.3	460.4	457.3	451.0	444.7	435.3	435.3	429.1	422.8	413.4	407.2
7.5°	479.2	479.2	472.9	466.7	457.3	447.9	444.7	438.5	425.9	416.5	407.2
10°	491.7	488.6	485.4	479.2	466.7	457.3	454.1	447.9	435.3	422.8	410.3
12.5°	501.1	501.1	498.0	485.4	476.1	466.7	466.7	457.3	447.9	435.3	419.7
15°	510.5	513.6	507.4	494.8	482.3	476.1	476.1	469.8	460.4	447.9	429.1
17.5°	513.6	513.6	510.5	494.8	488.6	482.3	482.3	479.2	469.8	457.3	438.5
20°	510.5	513.6	513.6	494.8	488.6	488.6	488.6	485.4	476.1	466.7	451.0
22.5°	516.8	516.8	516.8	494.8	491.7	491.7	491.7	491.7	485.4	476.1	460.4
25°	516.8	516.8	516.8	494.8	491.7	494.8	498.0	498.0	494.8	485.4	469.8
27.5°	523.0	523.0	519.9	498.0	498.0	501.1	504.2	507.4	507.4	498.0	482.3
30°	535.6	532.4	532.4	504.2	501.1	510.5	513.6	519.9	519.9	510.5	494.8
32.5°	554.4	551.2	548.1	516.8	510.5	516.8	519.9	529.3	535.6	523.0	510.5
35°	582.5	576.3	566.9	538.7	526.2	529.3	529.3	541.8	551.2	541.8	526.2
37.5°	620.1	613.9	601.3	570.0	551.2	548.1	548.1	560.6	573.1	566.9	551.2
40°	667.1	664.0	664.0	613.9	579.4	576.3	576.3	582.5	598.2	595.1	582.5
42.5°	751.7	754.8	761.1	667.1	617.0	620.1	617.0	613.9	629.5	629.5	617.0
45°	855.0	842.5	858.1	742.3	667.1	670.2	676.5	657.7	670.2	670.2	660.8
47.5°	980.3	967.8	942.7	848.8	742.3	720.3	720.3	714.1	729.7	729.7	720.3
50°	1083.6	1074.3	1046.1	952.1	861.3	789.2	786.1	789.2	804.9	814.3	814.3
52.5°	1190.1	1174.5	1140.0	1074.3	992.8	889.5	883.2	880.1	908.3	933.3	945.8
55°	1243.4	1234.0	1224.6	1202.7	1118.1	1014.7	1002.2	992.8	1042.9	1077.4	1102.4
57.5°	1346.7	1343.6	1343.6	1359.3	1296.6	1152.6	1136.9	1127.5	1208.9	1243.4	1284.1
60°	1465.7	1462.6	1506.5	1537.8	1468.9	1299.8	1271.6	1287.2	1387.4	1431.3	1490.8
62.5°	1515.9	1540.9	1647.4	1744.5	1697.5	1456.3	1437.6	1472.0	1587.9	1616.1	1719.4
65°	1428.2	1440.7	1681.8	1860.4	1966.9	1659.9	1634.9	1685.0	1797.7	1804.0	1944.9
67.5°	1284.1	1302.9	1534.6	1910.5	2164.2	1901.1	1882.3	1913.6	1988.8	1932.4	2114.1
70°	1161.9	1177.6	1368.7	1866.6	2289.4	2201.7	2192.4	2151.6	2110.9	1966.9	2198.6
72.5°	1080.5	1080.5	1240.2	1732.0	2383.4	2533.7	2533.7	2367.7	2154.8	1894.8	2114.1
75°	845.6	836.2	1005.4	1465.7	2292.6	2875.1	2912.7	2571.3	2151.6	1757.0	1672.5
77.5°	413.4	422.8	516.8	886.3	1778.9	2922.1	2997.3	2580.7	1966.9	1374.9	1046.1
80°	119.0	125.3	172.3	291.3	933.3	2142.2	2289.4	1966.9	1384.3	855.0	482.3
82.5°	43.8	47.0	78.3	140.9	410.3	886.3	1021.0	914.5	676.5	394.6	169.1
85°	25.1	25.1	43.8	81.4	216.1	250.6	294.4	322.6	303.8	172.3	68.9
87.5°	9.4	12.5	21.9	40.7	128.4	65.8	65.8	119.0	144.1	84.6	25.1
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°	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4
2.5°	407.2	407.2	404.0	404.0	404.0	404.0	404.0	404.0	407.2	407.2	407.2
5°	404.0	400.9	397.8	397.8	397.8	400.9	404.0	410.3	413.4	413.4	413.4
7.5°	404.0	400.9	397.8	397.8	400.9	404.0	410.3	416.5	422.8	425.9	425.9
10°	407.2	404.0	400.9	404.0	407.2	413.4	419.7	425.9	432.2	438.5	438.5
12.5°	413.4	410.3	407.2	413.4	419.7	425.9	429.1	432.2	438.5	444.7	447.9
15°	422.8	419.7	416.5	425.9	432.2	438.5	441.6	441.6	444.7	454.1	454.1
17.5°	432.2	425.9	429.1	438.5	444.7	447.9	447.9	447.9	447.9	457.3	460.4
20°	441.6	438.5	441.6	454.1	454.1	454.1	451.0	454.1	457.3	466.7	466.7
22.5°	454.1	451.0	457.3	463.5	460.4	457.3	454.1	457.3	457.3	469.8	469.8
25°	466.7	466.7	476.1	476.1	460.4	454.1	454.1	460.4	463.5	476.1	476.1
27.5°	479.2	485.4	491.7	479.2	457.3	447.9	451.0	460.4	469.8	479.2	482.3
30°	491.7	501.1	504.2	472.9	441.6	432.2	444.7	460.4	469.8	479.2	485.4
32.5°	507.4	519.9	513.6	454.1	413.4	413.4	432.2	454.1	466.7	472.9	476.1
35°	529.3	541.8	513.6	429.1	379.0	382.1	407.2	435.3	454.1	460.4	463.5
37.5°	557.5	573.1	516.8	394.6	341.4	344.5	369.6	397.8	425.9	435.3	438.5
40°	591.9	610.7	513.6	357.0	303.8	300.7	319.5	347.6	379.0	394.6	397.8
42.5°	632.7	651.4	510.5	319.5	269.3	256.8	266.2	288.1	316.3	328.9	328.9
45°	676.5	701.6	510.5	288.1	241.2	219.2	222.4	231.8	241.2	244.3	241.2
47.5°	742.3	761.1	510.5	266.2	216.1	187.9	184.8	187.9	184.8	172.3	172.3
50°	842.5	845.6	510.5	250.6	197.3	172.3	162.9	156.6	147.2	137.8	137.8
52.5°	980.3	955.2	513.6	231.8	178.5	159.7	150.3	140.9	128.4	122.1	122.1
55°	1149.4	1105.6	519.9	209.8	162.9	150.3	140.9	134.7	125.3	119.0	122.1
57.5°	1362.4	1306.0	529.3	187.9	147.2	140.9	137.8	131.5	125.3	125.3	128.4
60°	1644.3	1556.6	535.6	169.1	134.7	137.8	140.9	140.9	134.7	140.9	140.9
62.5°	2004.4	1819.7	466.7	156.6	128.4	137.8	156.6	156.6	150.3	153.5	153.5
65°	2352.1	2013.8	319.5	147.2	125.3	153.5	172.3	162.9	147.2	137.8	137.8
67.5°	2511.8	2089.0	206.7	137.8	119.0	166.0	172.3	153.5	137.8	131.5	128.4
70°	2427.2	1966.9	159.7	128.4	119.0	159.7	166.0	147.2	131.5	128.4	125.3
72.5°	2051.4	1597.3	134.7	119.0	112.7	144.1	156.6	140.9	125.3	122.1	119.0
75°	1406.2	989.7	119.0	109.6	100.2	131.5	147.2	134.7	122.1	115.9	112.7
77.5°	770.5	460.4	100.2	97.1	90.8	122.1	140.9	128.4	112.7	109.6	106.5
80°	313.2	200.4	84.6	84.6	84.6	115.9	131.5	119.0	103.4	100.2	94.0
82.5°	144.1	94.0	65.8	72.0	75.2	109.6	125.3	112.7	97.1	97.1	87.7
85°	65.8	59.5	47.0	53.2	59.5	97.1	115.9	103.4	90.8	84.6	78.3
87.5°	28.2	34.5	28.2	31.3	43.8	81.4	103.4	94.0	81.4	72.0	72.0
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)