

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: P400534

Luminaire Tested: **ARCH-L-PA3-90-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-827-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11501 lumens  
Efficiency: N/A  
Efficacy: 123.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

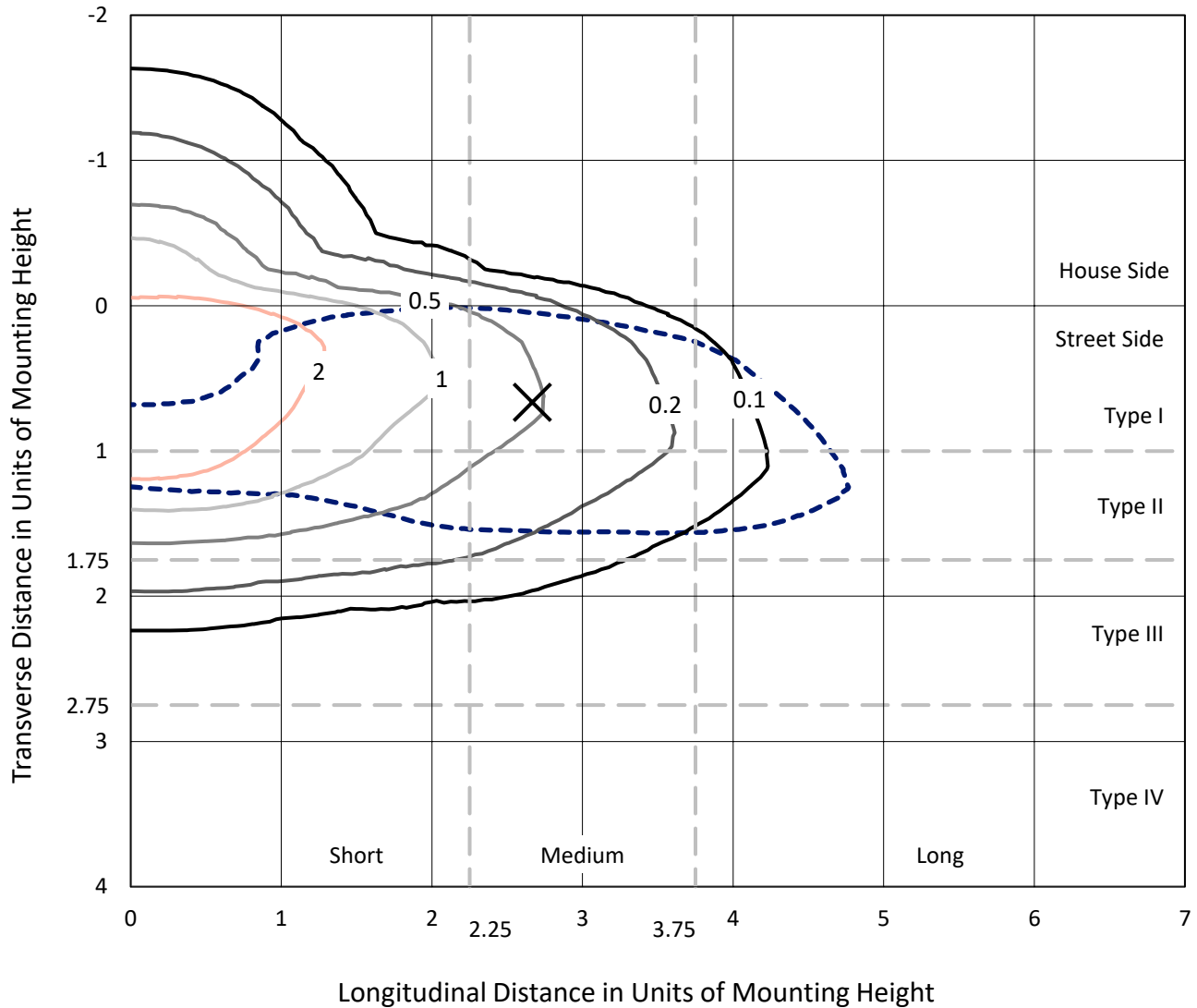
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

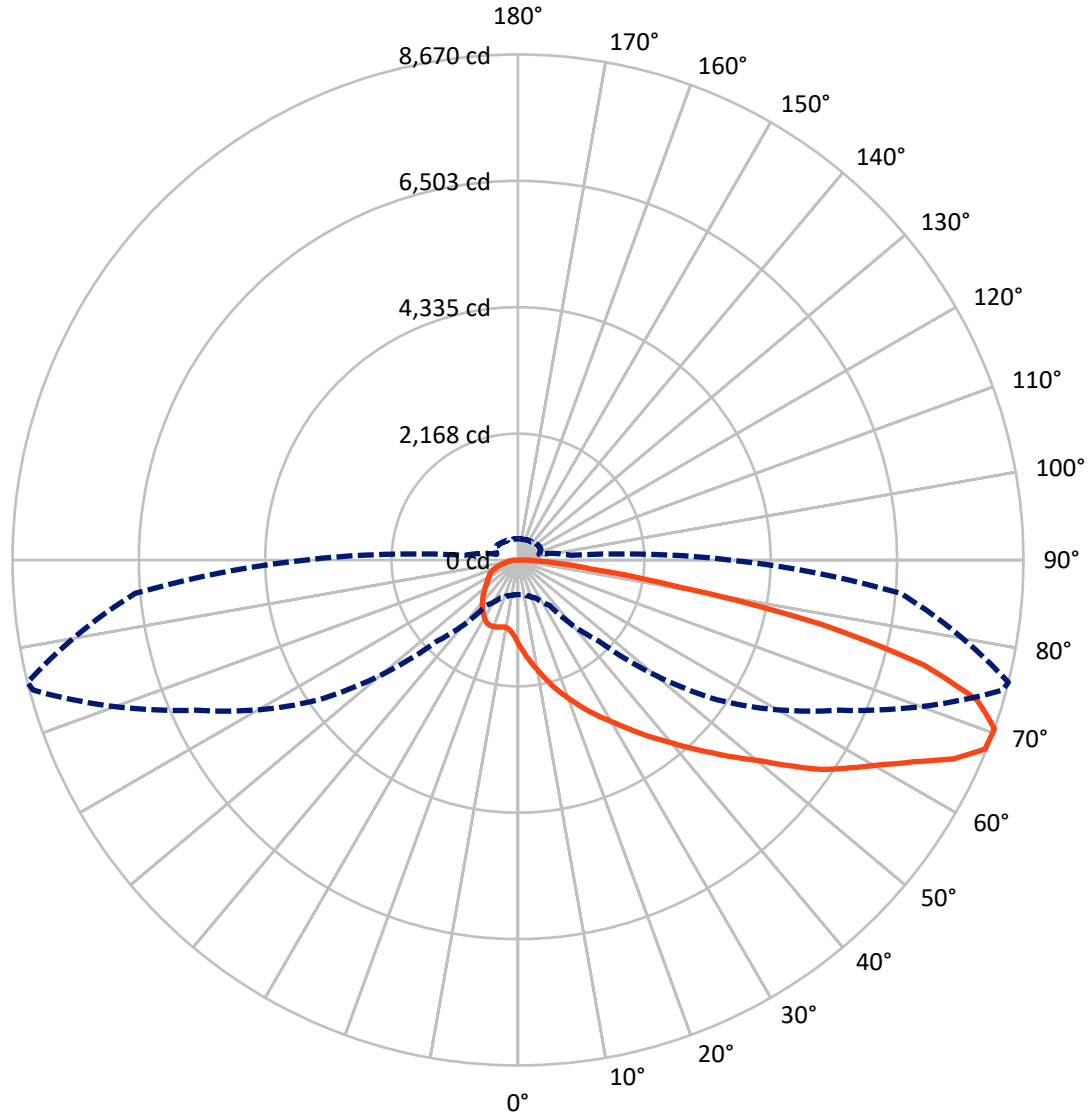
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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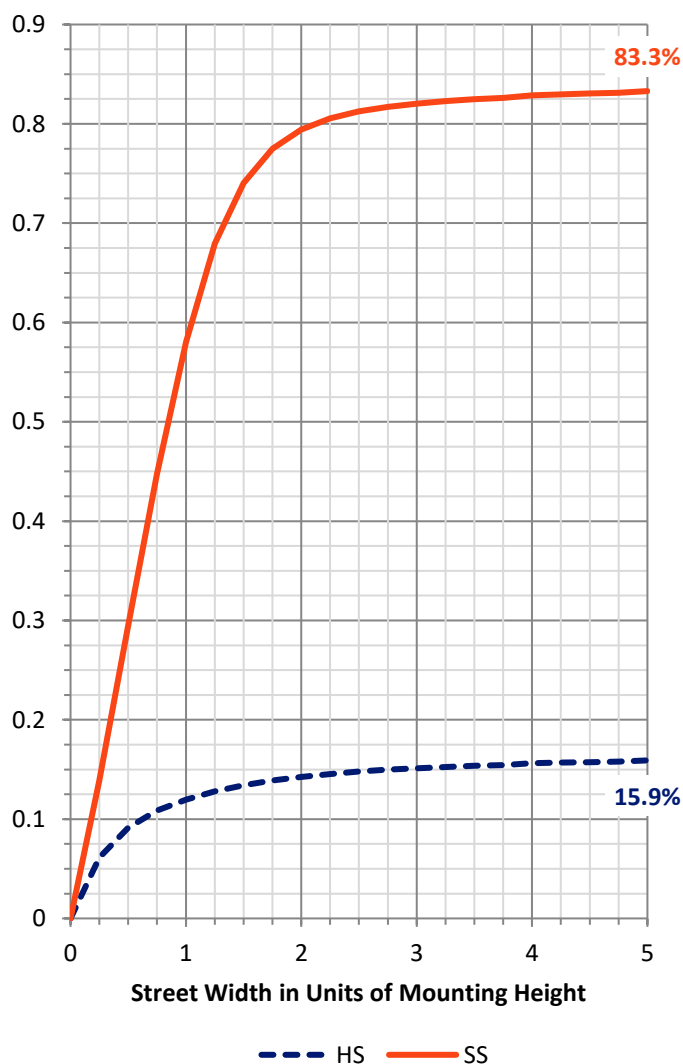
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1877.6	0.0	1877.6
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	9623.3	0.0	9623.3
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	11501.0	0.0	11501.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.4	1.3
10°-20°	507.9	4.4
20°-30°	908.7	7.9
30°-40°	1469.9	12.8
40°-50°	2126.5	18.5
50°-60°	2433.9	21.2
60°-70°	2238.9	19.5
70°-80°	1384.5	12.0
80°-90°	281.1	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°	11501.0	100.0
0°-180°	11501.0	100.0

**Coefficient of Utilization**



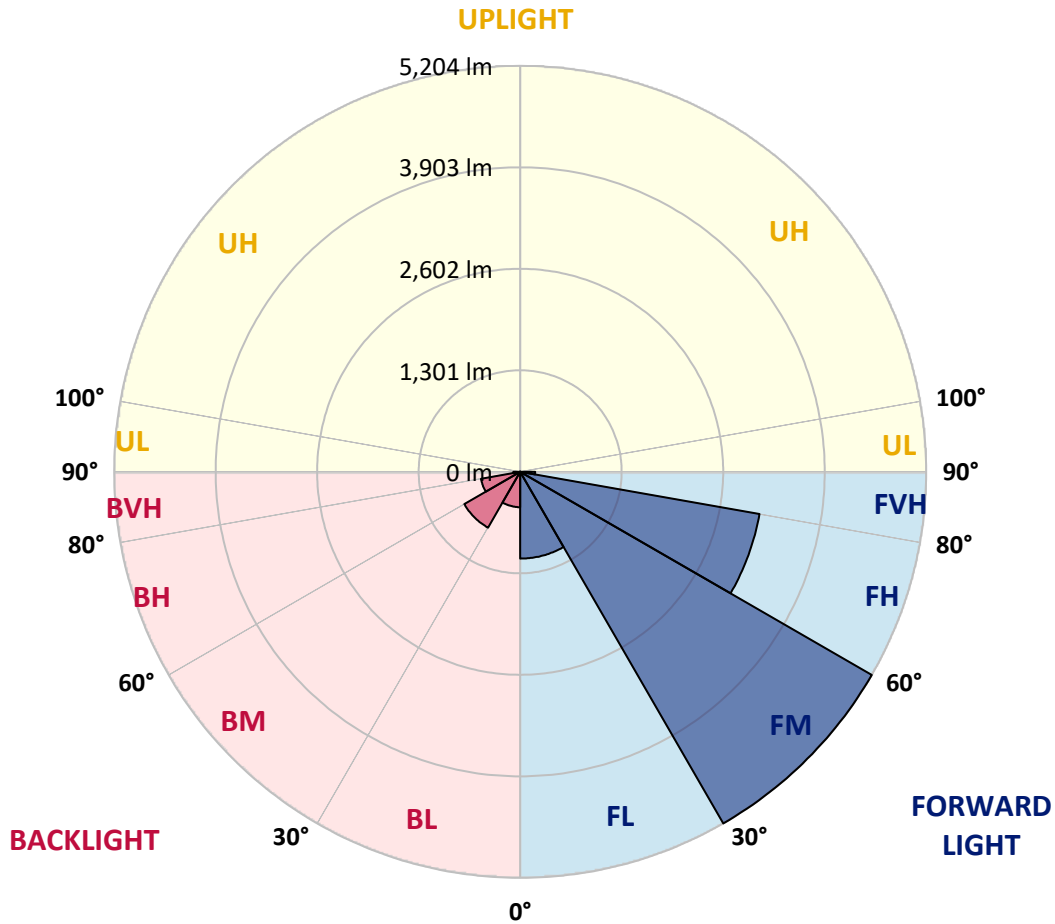
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 CATALOG NUMBER: ARCH-L-PA3-90-827-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1112.5	9.7			
FM (30°-60°)	5203.7	45.2			
FH (60°-80°)	3114.2	27.1			G2/5000
FVH (80°-90°)	193.0	1.7			G2/225
BL (0°-30°)	453.5	3.9	B1/500		
BM (30°-60°)	826.7	7.2	B1/1000		
BH (60°-80°)	509.3	4.4	B2/1000		G2/1000
BVH (80°-90°)	88.1	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2
2.5°	1833.0	1819.4	1817.9	1796.7	1777.0	1724.1	1686.3	1619.7	1553.2	1551.7	1485.1
5°	2118.8	2105.2	2097.6	2071.9	2038.7	1969.1	1901.0	1798.2	1684.8	1677.2	1551.7
7.5°	2312.4	2300.3	2285.2	2274.6	2242.8	2180.8	2097.6	1975.1	1819.4	1804.2	1628.8
10°	2442.5	2434.9	2431.9	2424.3	2404.6	2354.7	2274.6	2144.5	1954.0	1937.3	1710.5
12.5°	2498.4	2495.4	2509.0	2530.2	2537.7	2518.1	2440.9	2318.4	2102.2	2084.0	1808.8
15°	2433.4	2436.4	2471.2	2543.8	2620.9	2663.3	2617.9	2498.4	2270.0	2244.3	1923.7
17.5°	2403.1	2407.7	2431.9	2501.4	2610.3	2741.9	2763.1	2669.3	2431.9	2395.6	2044.7
20°	2456.1	2462.1	2480.3	2534.7	2610.3	2751.0	2861.4	2832.6	2590.7	2552.9	2161.2
22.5°	2590.7	2598.2	2596.7	2631.5	2682.9	2779.7	2915.8	2986.9	2757.0	2714.7	2282.1
25°	2878.0	2872.0	2820.5	2803.9	2817.5	2879.5	2988.4	3135.1	2930.9	2888.6	2409.2
27.5°	3268.2	3260.6	3166.9	3082.2	3006.6	3033.8	3091.3	3254.6	3107.9	3059.5	2530.2
30°	3685.6	3676.5	3567.6	3430.0	3262.1	3222.8	3215.3	3358.9	3286.3	3234.9	2658.7
32.5°	4092.4	4084.9	3968.4	3808.1	3576.7	3458.8	3386.2	3475.4	3489.0	3439.1	2799.4
35°	4463.0	4463.0	4363.1	4172.6	3910.9	3732.5	3613.0	3619.1	3721.9	3664.4	2959.7
37.5°	4792.7	4791.1	4682.2	4494.7	4243.7	4039.5	3891.3	3793.0	3944.2	3894.3	3127.5
40°	5054.3	5043.7	4963.5	4800.2	4547.7	4345.0	4195.3	3997.2	4192.2	4146.9	3306.0
42.5°	5244.8	5238.8	5184.4	5042.2	4801.7	4611.2	4508.3	4254.3	4473.5	4428.2	3514.7
45°	5319.0	5331.1	5331.1	5196.5	5005.9	4832.0	4786.6	4537.1	4777.5	4732.2	3738.5
47.5°	5199.5	5231.2	5296.3	5305.3	5137.5	5019.5	5034.6	4821.4	5090.6	5066.4	3983.5
50°	4825.9	4884.9	5027.1	5284.2	5190.4	5163.2	5246.4	5111.8	5426.3	5418.8	4281.5
52.5°	3862.6	4006.2	4449.3	4910.6	5154.1	5229.7	5456.6	5438.4	5858.9	5871.0	4670.2
55°	2962.7	3017.1	3529.8	4314.7	4931.8	5208.5	5597.2	5757.5	6327.7	6342.8	5027.1
57.5°	2395.6	2431.9	2711.7	3529.8	4425.1	5093.6	5707.6	5943.6	6687.6	6727.0	5344.7
60°	1898.0	1950.9	2138.5	2701.1	3715.9	4816.8	5784.8	6150.7	7074.8	7133.8	5724.3
62.5°	1411.0	1436.7	1613.7	2000.8	2941.5	4319.3	5743.9	6376.1	7549.7	7620.8	6181.0
65°	1004.2	1026.9	1152.4	1423.1	2174.8	3646.3	5506.5	6544.0	8145.5	8218.1	6640.7
67.5°	751.6	760.7	831.8	995.1	1465.5	2832.6	5025.6	6515.2	8581.1	8646.1	6825.3
70°	594.4	597.4	632.2	719.9	952.8	1972.1	4183.2	6093.3	8612.9	8670.3	6592.4
72.5°	493.0	491.5	511.2	553.5	663.9	1247.7	3098.8	5309.9	8204.5	8243.8	5942.0
75°	406.8	409.8	423.5	447.7	506.6	822.7	2008.4	4236.1	7238.1	7195.8	4986.2
77.5°	341.8	340.3	346.3	367.5	409.8	591.3	1176.6	3061.0	5364.3	5343.1	3272.7
80°	275.2	278.3	287.3	305.5	344.8	450.7	695.7	1910.1	2878.0	2800.9	1563.8
82.5°	184.5	213.2	231.4	252.6	297.9	332.7	441.6	970.9	1287.0	1267.4	709.3
85°	87.7	116.5	172.4	196.6	242.0	208.7	299.4	462.8	644.3	636.7	255.6
87.5°	18.1	18.1	92.3	110.4	149.7	89.2	166.4	201.1	311.5	291.9	104.4
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°	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2	1438.2
2.5°	1445.8	1405.0	1323.3	1258.3	1191.7	1153.9	1107.0	1084.4	1079.8	1067.7	1076.8
5°	1471.5	1391.4	1237.1	1135.8	1067.7	1034.5	1017.8	1011.8	1010.3	1007.2	1007.2
7.5°	1506.3	1383.8	1182.7	1079.8	1036.0	1025.4	1029.9	1039.0	1040.5	1043.5	1042.0
10°	1548.7	1385.3	1152.4	1066.2	1045.0	1046.5	1061.7	1073.8	1079.8	1084.4	1082.8
12.5°	1607.6	1403.5	1147.9	1075.3	1066.2	1072.3	1087.4	1099.5	1105.5	1107.0	1107.0
15°	1684.8	1441.3	1158.5	1094.9	1087.4	1091.9	1101.0	1105.5	1107.0	1105.5	1105.5
17.5°	1769.5	1486.6	1173.6	1107.0	1094.9	1090.4	1087.4	1082.8	1073.8	1067.7	1067.7
20°	1851.1	1527.5	1181.1	1105.5	1084.4	1066.2	1048.1	1025.4	1010.3	998.2	998.2
22.5°	1932.8	1565.3	1181.1	1088.9	1055.6	1020.8	983.0	946.7	924.0	908.9	908.9
25°	2019.0	1601.6	1172.1	1060.2	1010.3	960.3	908.9	863.6	840.9	825.7	822.7
27.5°	2091.6	1622.8	1147.9	1019.3	954.3	890.8	831.8	784.9	768.3	754.7	754.7
30°	2168.7	1636.4	1102.5	966.4	890.8	818.2	757.7	719.9	701.7	682.1	680.6
32.5°	2254.9	1645.4	1051.1	910.4	825.7	748.6	697.2	666.9	627.6	606.5	603.4
35°	2354.7	1657.5	996.6	846.9	760.7	691.1	660.9	611.0	573.2	555.0	553.5
37.5°	2460.6	1666.6	937.7	791.0	701.7	653.3	623.1	564.1	530.8	503.6	500.6
40°	2572.5	1666.6	877.2	736.5	654.8	636.7	579.2	526.3	470.3	456.7	453.7
42.5°	2696.5	1663.6	816.7	683.6	611.0	598.9	553.5	497.6	468.8	456.7	453.7
45°	2828.1	1653.0	759.2	623.1	565.6	541.4	506.6	491.5	479.4	479.4	479.4
47.5°	2977.8	1643.9	694.2	568.6	532.3	505.1	479.4	470.3	468.8	473.4	477.9
50°	3169.9	1640.9	639.7	529.3	506.6	474.9	471.9	464.3	465.8	465.8	465.8
52.5°	3402.8	1613.7	588.3	500.6	480.9	443.1	452.2	459.8	462.8	461.3	459.8
55°	3573.7	1565.3	544.4	480.9	462.8	431.0	443.1	455.2	458.2	453.7	453.7
57.5°	3728.0	1497.2	509.7	465.8	450.7	423.5	437.1	449.2	446.1	444.6	443.1
60°	3904.9	1432.2	482.4	458.2	438.6	420.4	432.5	440.1	435.6	432.5	431.0
62.5°	4097.0	1368.7	462.8	458.2	429.5	418.9	428.0	431.0	421.9	418.9	418.9
65°	4186.2	1268.9	441.6	458.2	425.0	415.9	418.9	415.9	406.8	406.8	405.3
67.5°	4039.5	1104.0	414.4	452.2	431.0	411.4	405.3	400.8	390.2	390.2	387.2
70°	3634.2	907.4	375.1	432.5	432.5	409.8	387.2	376.6	364.5	369.0	363.0
72.5°	3104.9	719.9	326.7	399.3	423.5	408.3	367.5	350.9	340.3	344.8	335.7
75°	2515.0	558.1	269.2	346.3	400.8	400.8	347.8	325.2	313.1	313.1	302.5
77.5°	1603.1	412.9	219.3	287.3	359.9	390.2	331.2	296.4	278.3	273.7	266.2
80°	794.0	290.4	180.0	228.4	307.0	366.0	319.1	263.1	237.4	228.4	214.8
82.5°	421.9	201.1	143.7	178.5	245.0	329.7	304.0	226.9	195.1	181.5	166.4
85°	189.0	124.0	114.9	136.1	186.0	270.7	273.7	186.0	149.7	178.5	131.6
87.5°	69.6	56.0	56.0	69.6	107.4	113.4	193.6	119.5	95.3	65.0	51.4
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)