

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: P398014

Luminaire Tested: **ARCH-S-PA1-70-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398014  
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-S-PA1-70-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7445 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

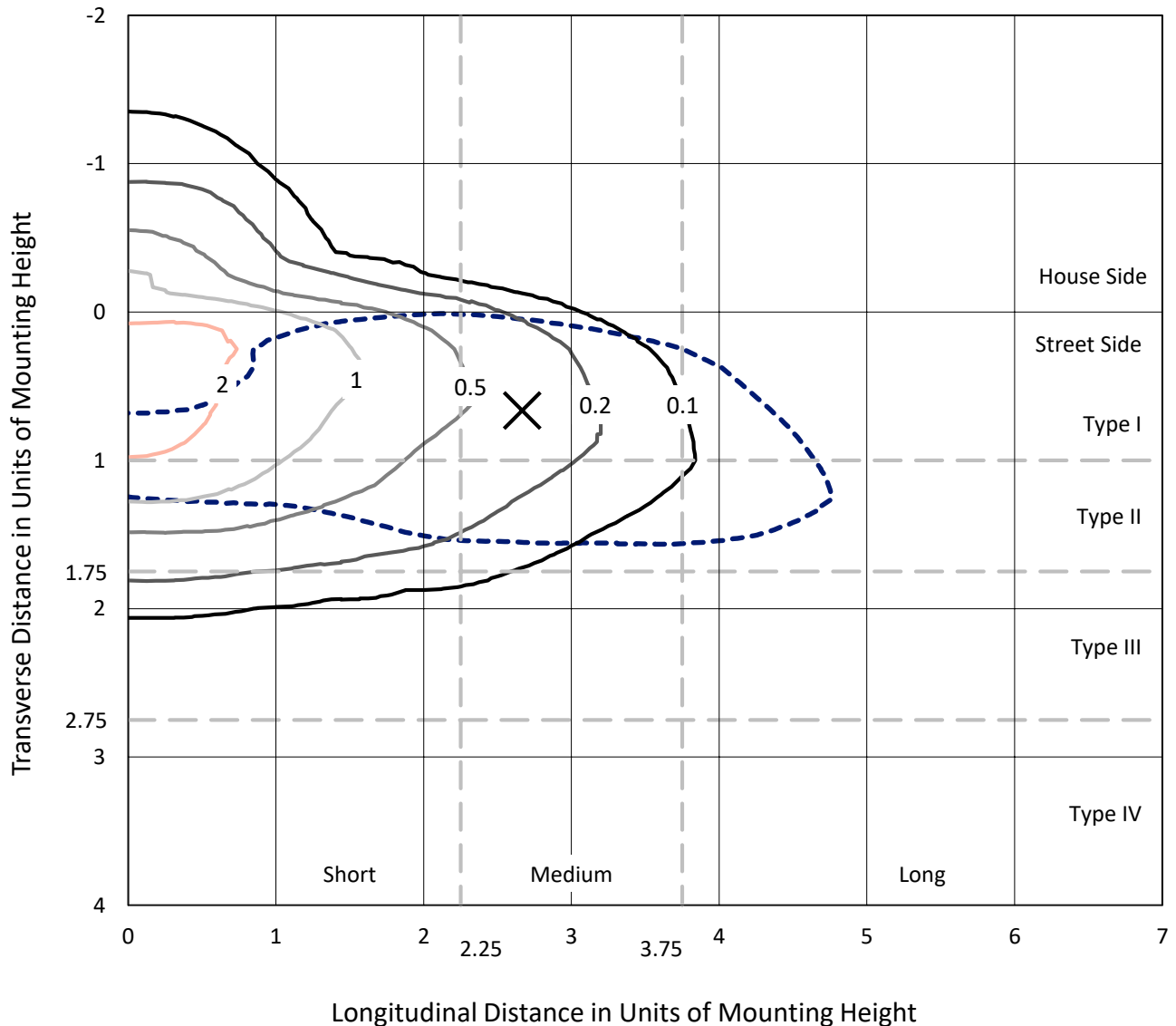
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

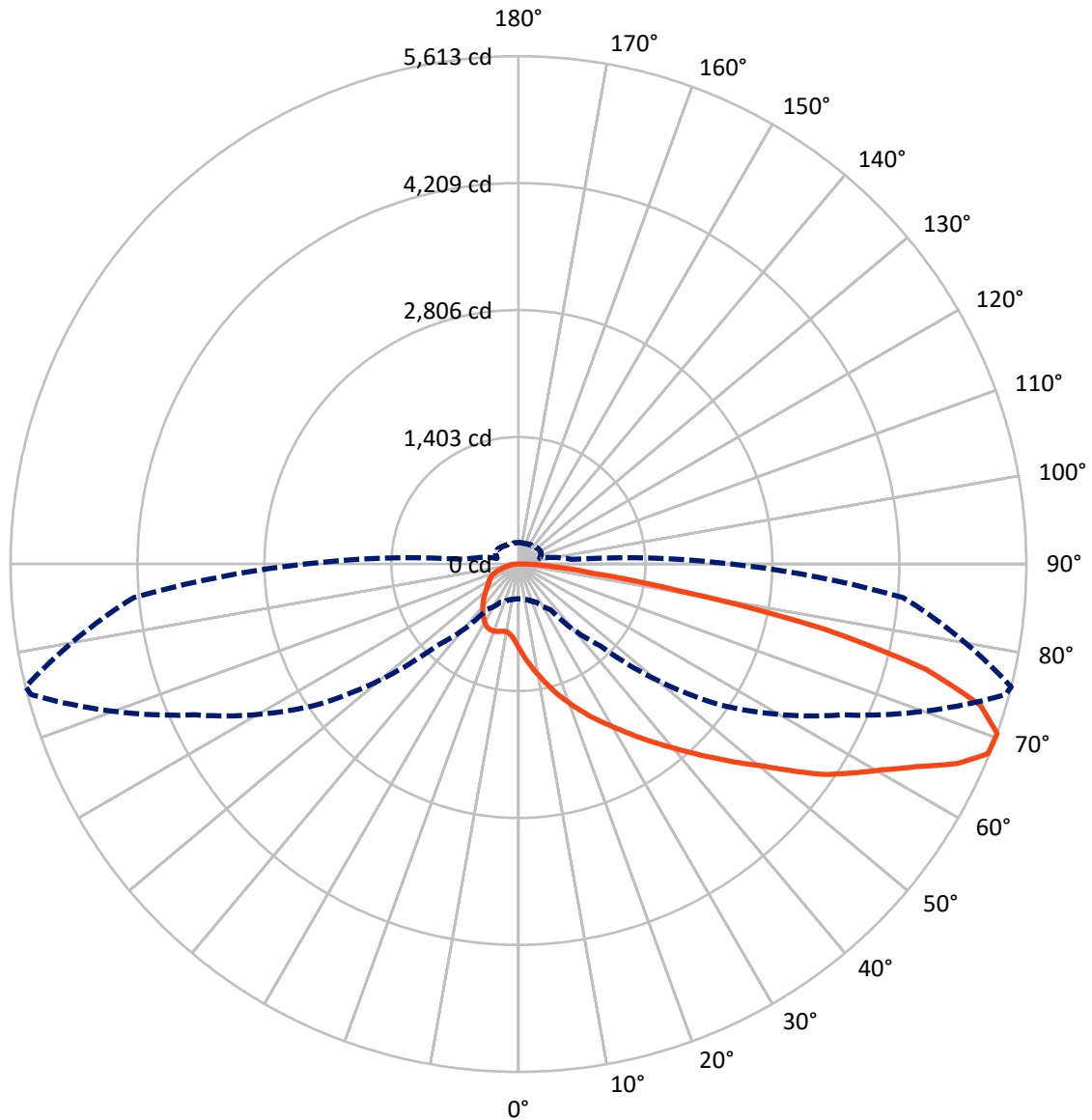


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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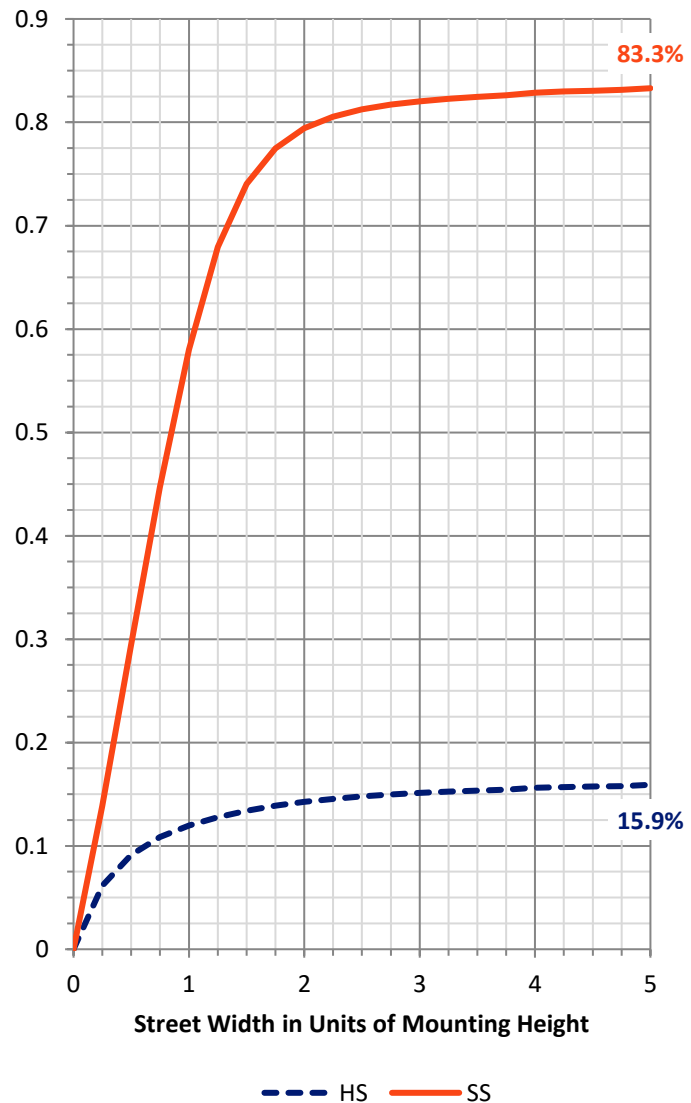
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1215.5	0.0	1215.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	6229.5	0.0	6229.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	7445.0	0.0	7445.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	1.3
10°-20°	328.8	4.4
20°-30°	588.2	7.9
30°-40°	951.6	12.8
40°-50°	1376.6	18.5
50°-60°	1575.6	21.2
60°-70°	1449.3	19.5
70°-80°	896.3	12.0
80°-90°	182.0	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°	7445.0	100.0
0°-180°	7445.0	100.0



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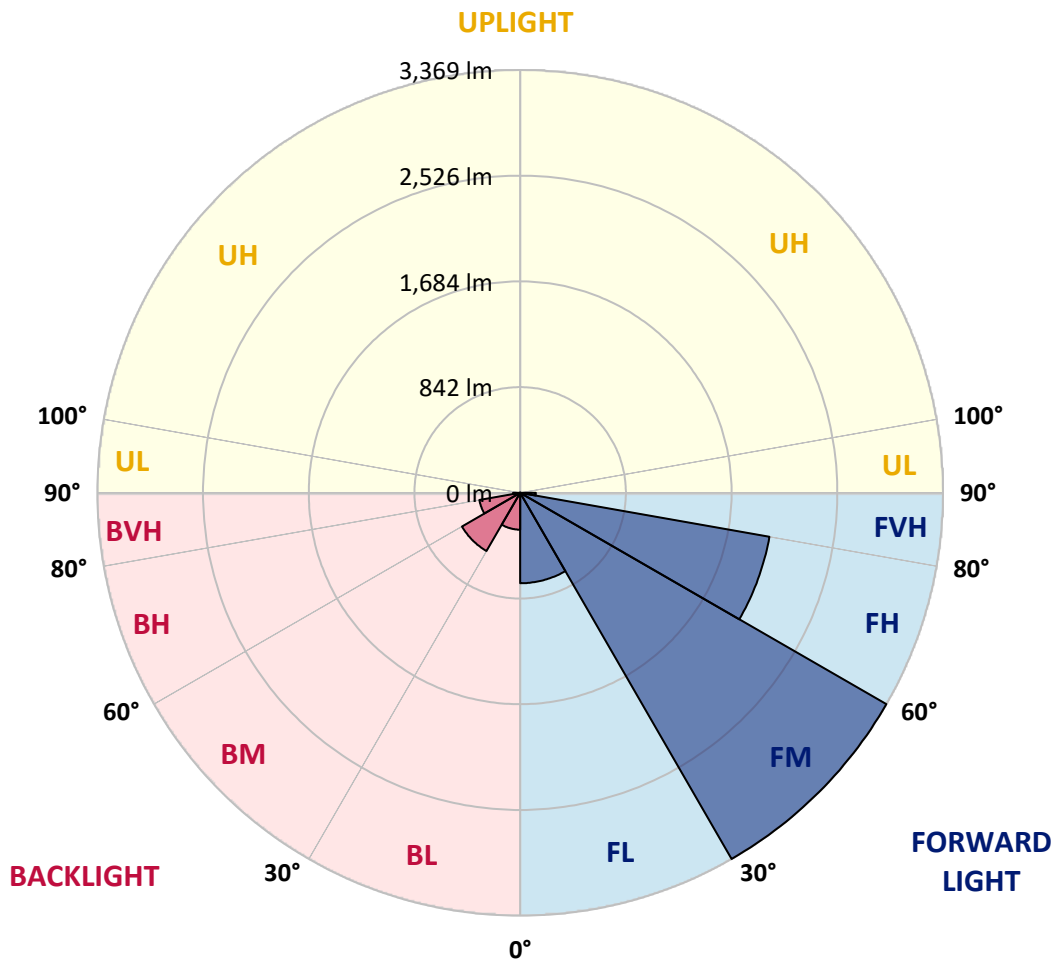
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	720.2	9.7			
FM	(30°-60°)	3368.5	45.2			
FH	(60°-80°)	2015.9	27.1			G2/5000
FVH	(80°-90°)	124.9	1.7			G2/225
BL	(0°-30°)	293.6	3.9	B1/500		
BM	(30°-60°)	535.2	7.2	B1/1000		
BH	(60°-80°)	329.7	4.4	B1/500		G1/500
BVH	(80°-90°)	57.1	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0
2.5°	1186.5	1177.7	1176.8	1163.1	1150.3	1116.1	1091.6	1048.5	1005.4	1004.5	961.4
5°	1371.6	1362.8	1357.9	1341.2	1319.7	1274.7	1230.6	1164.0	1090.6	1085.7	1004.5
7.5°	1496.9	1489.1	1479.3	1472.4	1451.9	1411.7	1357.9	1278.6	1177.7	1167.9	1054.4
10°	1581.1	1576.2	1574.2	1569.3	1556.6	1524.3	1472.4	1388.2	1264.9	1254.1	1107.2
12.5°	1617.3	1615.4	1624.2	1637.9	1642.8	1630.0	1580.1	1500.8	1360.8	1349.1	1170.9
15°	1575.2	1577.2	1599.7	1646.7	1696.6	1724.0	1694.6	1617.3	1469.5	1452.8	1245.3
17.5°	1555.6	1558.6	1574.2	1619.3	1689.8	1774.9	1788.6	1727.9	1574.2	1550.7	1323.6
20°	1589.9	1593.8	1605.6	1640.8	1689.8	1780.8	1852.3	1833.7	1677.0	1652.6	1399.0
22.5°	1677.0	1681.9	1680.9	1703.5	1736.7	1799.4	1887.5	1933.5	1784.7	1757.3	1477.3
25°	1863.0	1859.1	1825.8	1815.1	1823.9	1864.0	1934.5	2029.5	1897.3	1869.9	1559.5
27.5°	2115.6	2110.7	2050.0	1995.2	1946.3	1963.9	2001.1	2106.8	2011.8	1980.5	1637.9
30°	2385.8	2379.9	2309.5	2220.4	2111.7	2086.2	2081.4	2174.4	2127.4	2094.1	1721.1
32.5°	2649.2	2644.3	2568.9	2465.1	2315.3	2239.0	2192.0	2249.7	2258.6	2226.2	1812.1
35°	2889.0	2889.0	2824.4	2701.1	2531.7	2416.2	2338.8	2342.7	2409.3	2372.1	1915.9
37.5°	3102.5	3101.5	3031.0	2909.6	2747.1	2614.9	2519.0	2455.3	2553.2	2520.9	2024.6
40°	3271.8	3265.0	3213.1	3107.3	2943.9	2812.7	2715.7	2587.5	2713.8	2684.4	2140.1
42.5°	3395.2	3391.3	3356.0	3264.0	3108.3	2985.0	2918.4	2753.9	2895.9	2866.5	2275.2
45°	3443.1	3451.0	3451.0	3363.8	3240.5	3127.9	3098.5	2937.0	3092.7	3063.3	2420.1
47.5°	3365.8	3386.4	3428.5	3434.3	3325.7	3249.3	3259.1	3121.1	3295.3	3279.7	2578.7
50°	3124.0	3162.2	3254.2	3420.6	3359.9	3342.3	3396.2	3309.0	3512.7	3507.8	2771.5
52.5°	2500.4	2593.4	2880.2	3178.8	3336.4	3385.4	3532.2	3520.5	3792.6	3800.5	3023.2
55°	1917.9	1953.1	2285.0	2793.1	3192.5	3371.7	3623.3	3727.1	4096.1	4105.9	3254.2
57.5°	1550.7	1574.2	1755.3	2285.0	2864.6	3297.3	3694.7	3847.5	4329.1	4354.6	3459.8
60°	1228.6	1262.9	1384.3	1748.5	2405.4	3118.1	3744.7	3981.6	4579.8	4617.9	3705.5
62.5°	913.4	930.1	1044.6	1295.2	1904.2	2796.0	3718.2	4127.5	4887.2	4933.2	4001.2
65°	650.1	664.7	746.0	921.2	1407.8	2360.4	3564.5	4236.1	5272.9	5319.9	4298.8
67.5°	486.6	492.4	538.5	644.2	948.7	1833.7	3253.2	4217.5	5554.8	5596.9	4418.2
70°	384.7	386.7	409.2	466.0	616.8	1276.6	2707.9	3944.4	5575.4	5612.6	4267.5
72.5°	319.2	318.2	330.9	358.3	429.8	807.7	2006.0	3437.3	5311.1	5336.5	3846.5
75°	263.4	265.3	274.1	289.8	328.0	532.6	1300.1	2742.2	4685.5	4658.1	3227.8
77.5°	221.3	220.3	224.2	237.9	265.3	382.8	761.7	1981.5	3472.5	3458.8	2118.6
80°	178.2	180.1	186.0	197.8	223.2	291.7	450.3	1236.5	1863.0	1813.1	1012.3
82.5°	119.4	138.0	149.8	163.5	192.9	215.4	285.9	628.5	833.1	820.4	459.2
85°	56.8	75.4	111.6	127.3	156.6	135.1	193.8	299.6	417.1	412.2	165.5
87.5°	11.7	11.7	59.7	71.5	96.9	57.8	107.7	130.2	201.7	188.9	67.6
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°	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0	931.0
2.5°	935.9	909.5	856.6	814.5	771.5	747.0	716.6	701.9	699.0	691.2	697.0
5°	952.6	900.7	800.8	735.2	691.2	669.6	658.9	655.0	654.0	652.0	652.0
7.5°	975.1	895.8	765.6	699.0	670.6	663.8	666.7	672.6	673.6	675.5	674.5
10°	1002.5	896.8	746.0	690.2	676.5	677.5	687.3	695.1	699.0	701.9	701.0
12.5°	1040.7	908.5	743.1	696.1	690.2	694.1	703.9	711.7	715.6	716.6	716.6
15°	1090.6	933.0	749.9	708.8	703.9	706.8	712.7	715.6	716.6	715.6	715.6
17.5°	1145.4	962.4	759.7	716.6	708.8	705.9	703.9	701.0	695.1	691.2	691.2
20°	1198.3	988.8	764.6	715.6	701.9	690.2	678.4	663.8	654.0	646.1	646.1
22.5°	1251.2	1013.3	764.6	704.9	683.3	660.8	636.4	612.9	598.2	588.4	588.4
25°	1307.0	1036.8	758.7	686.3	654.0	621.7	588.4	559.0	544.3	534.5	532.6
27.5°	1354.0	1050.5	743.1	659.8	617.7	576.6	538.5	508.1	497.3	488.5	488.5
30°	1403.9	1059.3	713.7	625.6	576.6	529.6	490.5	466.0	454.3	441.5	440.6
32.5°	1459.7	1065.2	680.4	589.4	534.5	484.6	451.3	431.7	406.3	392.6	390.6
35°	1524.3	1073.0	645.2	548.2	492.4	447.4	427.8	395.5	371.0	359.3	358.3
37.5°	1592.8	1078.9	607.0	512.0	454.3	422.9	403.3	365.2	343.6	326.0	324.0
40°	1665.3	1078.9	567.8	476.8	423.9	412.2	375.0	340.7	304.5	295.7	293.7
42.5°	1745.6	1076.9	528.7	442.5	395.5	387.7	358.3	322.1	303.5	295.7	293.7
45°	1830.7	1070.0	491.5	403.3	366.1	350.5	328.0	318.2	310.3	310.3	310.3
47.5°	1927.7	1064.2	449.4	368.1	344.6	327.0	310.3	304.5	303.5	306.4	309.4
50°	2052.0	1062.2	414.1	342.7	328.0	307.4	305.4	300.6	301.5	301.5	301.5
52.5°	2202.8	1044.6	380.8	324.0	311.3	286.8	292.7	297.6	299.6	298.6	297.6
55°	2313.4	1013.3	352.4	311.3	299.6	279.0	286.8	294.7	296.6	293.7	293.7
57.5°	2413.2	969.2	329.9	301.5	291.7	274.1	282.9	290.8	288.8	287.8	286.8
60°	2527.8	927.1	312.3	296.6	283.9	272.2	280.0	284.9	282.0	280.0	279.0
62.5°	2652.1	886.0	299.6	296.6	278.0	271.2	277.1	279.0	273.1	271.2	271.2
65°	2709.9	821.4	285.9	296.6	275.1	269.2	271.2	269.2	263.4	263.4	262.4
67.5°	2614.9	714.7	268.2	292.7	279.0	266.3	262.4	259.4	252.6	252.6	250.6
70°	2352.5	587.4	242.8	280.0	280.0	265.3	250.6	243.8	235.9	238.9	235.0
72.5°	2009.9	466.0	211.5	258.5	274.1	264.3	237.9	227.1	220.3	223.2	217.3
75°	1628.1	361.3	174.3	224.2	259.4	259.4	225.2	210.5	202.7	202.7	195.8
77.5°	1037.7	267.3	142.0	186.0	233.0	252.6	214.4	191.9	180.1	177.2	172.3
80°	514.0	188.0	116.5	147.8	198.7	236.9	206.6	170.3	153.7	147.8	139.0
82.5°	273.1	130.2	93.0	115.5	158.6	213.4	196.8	146.9	126.3	117.5	107.7
85°	122.4	80.3	74.4	88.1	120.4	175.2	177.2	120.4	96.9	115.5	85.2
87.5°	45.0	36.2	36.2	45.0	69.5	73.4	125.3	77.3	61.7	42.1	33.3
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)