

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: P397942

Luminaire Tested: **ARCH-S-PA1-60-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397942  
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-PA1-60-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6677 lumens  
Efficiency: N/A  
Efficacy: 104.3 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): 64  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

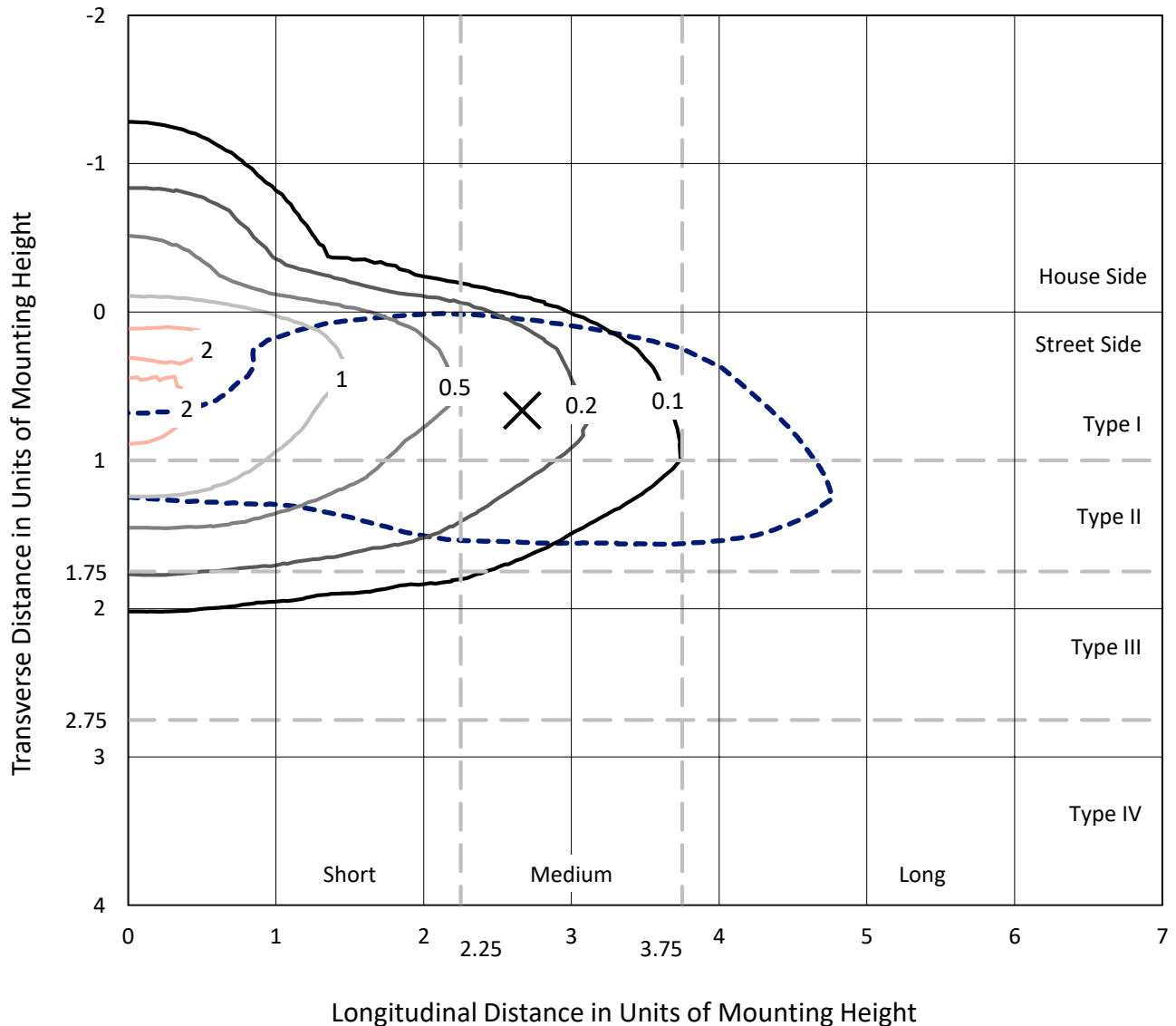


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

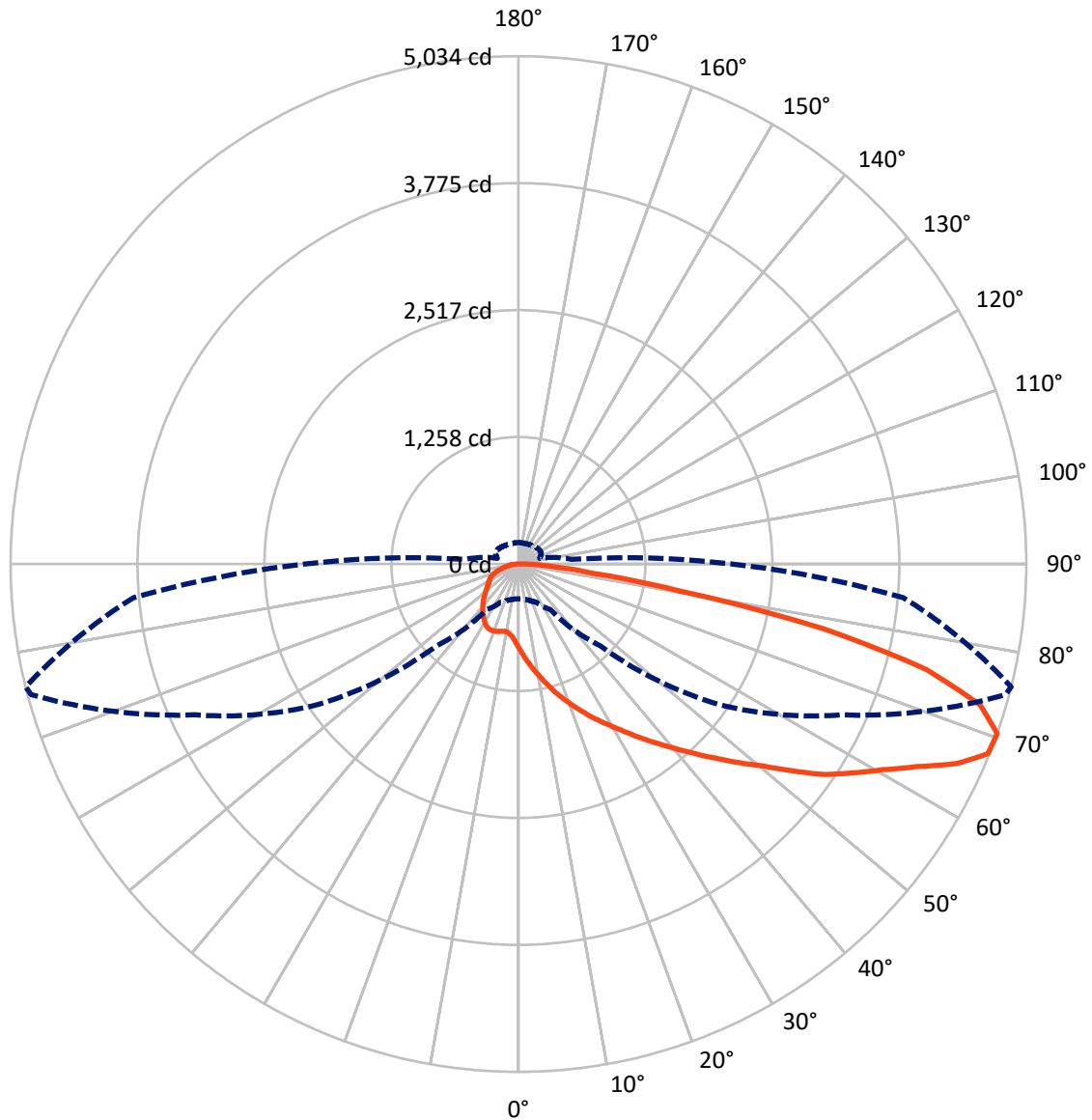


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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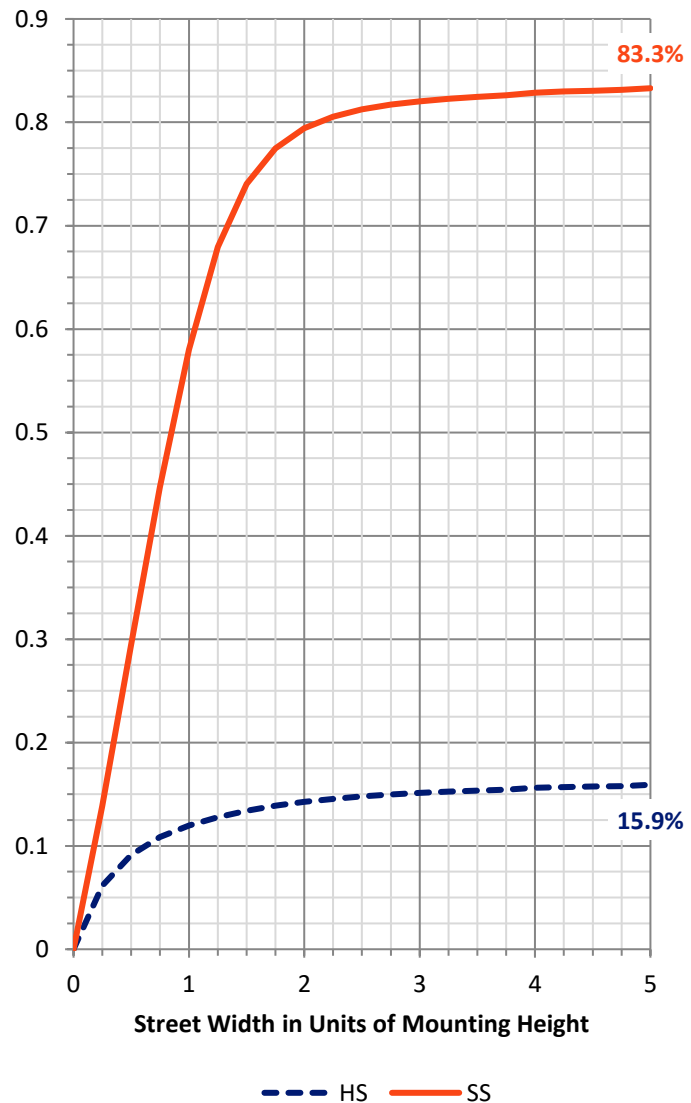
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1090.1	0.0	1090.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	5586.9	0.0	5586.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	6677.0	0.0	6677.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.8	1.3
10°-20°	294.9	4.4
20°-30°	527.6	7.9
30°-40°	853.4	12.8
40°-50°	1234.6	18.5
50°-60°	1413.0	21.2
60°-70°	1299.8	19.5
70°-80°	803.8	12.0
80°-90°	163.2	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°	6677.0	100.0
0°-180°	6677.0	100.0

**Coefficient of Utilization**



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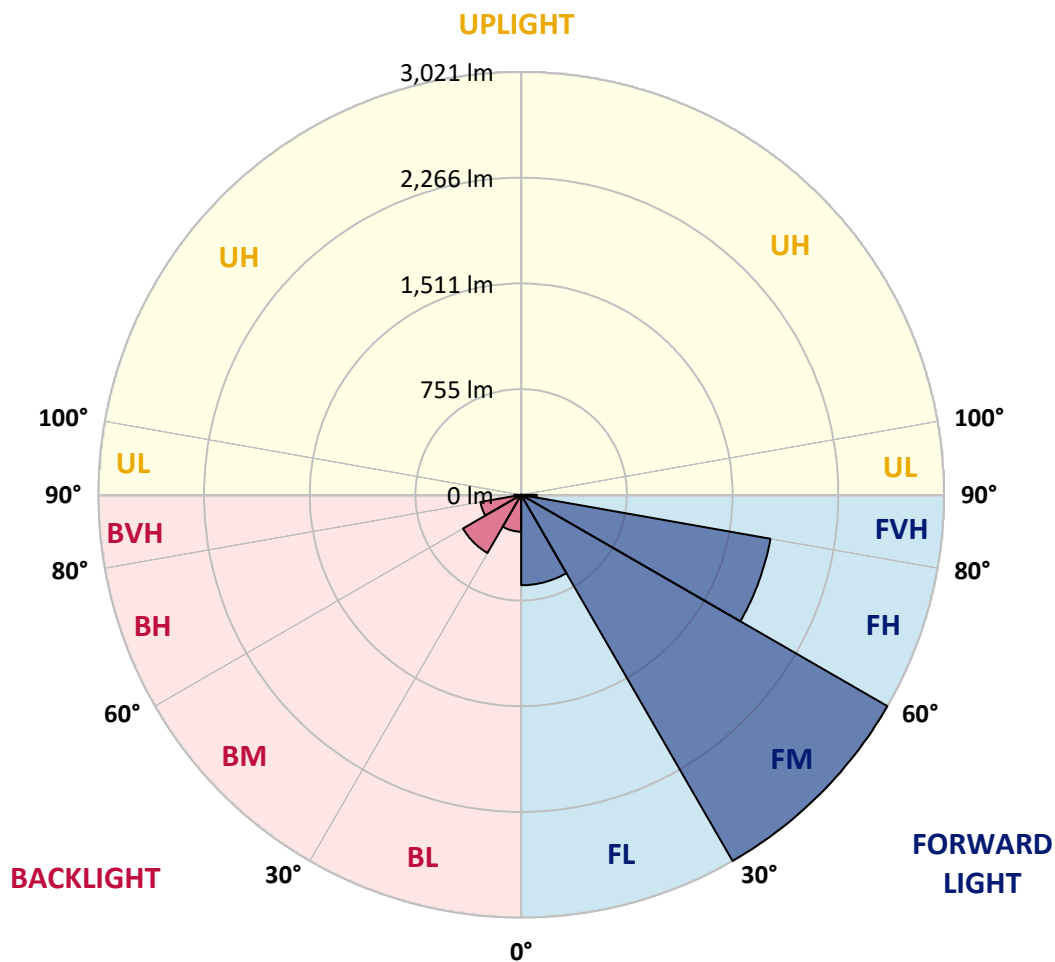
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	645.9	9.7			
FM (30°-60°)	3021.0	45.2			
FH (60°-80°)	1807.9	27.1			G2/5000
FVH (80°-90°)	112.1	1.7			G2/225
BL (0°-30°)	263.3	3.9	B1/500		
BM (30°-60°)	480.0	7.2	B1/1000		
BH (60°-80°)	295.7	4.4	B1/500		G1/500
BVH (80°-90°)	51.2	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°	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0
2.5°	1064.1	1056.2	1055.4	1043.1	1031.7	1000.9	979.0	940.3	901.7	900.8	862.2
5°	1230.1	1222.2	1217.8	1202.9	1183.6	1143.2	1103.7	1044.0	978.1	973.7	900.8
7.5°	1342.5	1335.5	1326.7	1320.5	1302.1	1266.1	1217.8	1146.7	1056.2	1047.5	945.6
10°	1418.0	1413.6	1411.8	1407.4	1396.0	1367.1	1320.5	1245.0	1134.4	1124.7	993.0
12.5°	1450.5	1448.7	1456.6	1468.9	1473.3	1461.9	1417.1	1346.0	1220.4	1209.9	1050.1
15°	1412.7	1414.5	1434.7	1476.8	1521.6	1546.2	1519.8	1450.5	1317.9	1303.0	1116.8
17.5°	1395.2	1397.8	1411.8	1452.2	1515.4	1591.8	1604.1	1549.7	1411.8	1390.8	1187.1
20°	1425.9	1429.4	1439.9	1471.5	1515.4	1597.1	1661.2	1644.5	1504.0	1482.1	1254.7
22.5°	1504.0	1508.4	1507.5	1527.7	1557.6	1613.8	1692.8	1734.1	1600.6	1576.0	1324.9
25°	1670.9	1667.3	1637.5	1627.8	1635.7	1671.7	1734.9	1820.1	1701.6	1677.0	1398.7
27.5°	1897.4	1893.0	1838.6	1789.4	1745.5	1761.3	1794.7	1889.5	1804.3	1776.2	1468.9
30°	2139.7	2134.4	2071.2	1991.3	1893.9	1871.0	1866.6	1950.1	1907.9	1878.1	1543.5
32.5°	2375.9	2371.5	2303.9	2210.8	2076.5	2008.0	1965.9	2017.7	2025.6	1996.6	1625.2
35°	2591.0	2591.0	2533.1	2422.4	2270.5	2166.9	2097.6	2101.1	2160.8	2127.4	1718.3
37.5°	2782.4	2781.5	2718.3	2609.4	2463.7	2345.2	2259.1	2202.0	2289.8	2260.9	1815.7
40°	2934.3	2928.2	2881.6	2786.8	2640.2	2522.5	2435.6	2320.6	2433.8	2407.5	1919.3
42.5°	3044.9	3041.4	3009.8	2927.3	2787.7	2677.1	2617.3	2469.8	2597.2	2570.8	2040.5
45°	3088.0	3095.0	3095.0	3016.8	2906.2	2805.2	2778.9	2634.0	2773.6	2747.3	2170.4
47.5°	3018.6	3037.0	3074.8	3080.1	2982.6	2914.1	2922.9	2799.1	2955.4	2941.3	2312.7
50°	2801.7	2836.0	2918.5	3067.8	3013.3	2997.5	3045.8	2967.7	3150.3	3145.9	2485.6
52.5°	2242.4	2325.8	2583.1	2850.9	2992.3	3036.2	3167.9	3157.3	3401.4	3408.4	2711.3
55°	1720.0	1751.6	2049.3	2505.0	2863.2	3023.9	3249.5	3342.6	3673.6	3682.4	2918.5
57.5°	1390.8	1411.8	1574.3	2049.3	2569.1	2957.1	3313.6	3450.6	3882.6	3905.4	3102.9
60°	1101.9	1132.6	1241.5	1568.1	2157.3	2796.5	3358.4	3570.9	4107.3	4141.6	3323.3
62.5°	819.2	834.1	936.8	1161.6	1707.7	2507.6	3334.7	3701.7	4383.0	4424.3	3588.4
65°	583.0	596.2	669.0	826.2	1262.6	2116.9	3196.8	3799.1	4729.0	4771.1	3855.3
67.5°	436.4	441.6	482.9	577.7	850.8	1644.5	2917.6	3782.5	4981.8	5019.6	3962.5
70°	345.1	346.8	367.0	417.9	553.1	1144.9	2428.6	3537.5	5000.3	5033.6	3827.2
72.5°	286.2	285.4	296.8	321.4	385.4	724.4	1799.0	3082.7	4763.2	4786.0	3449.7
75°	236.2	237.9	245.8	259.9	294.1	477.6	1166.0	2459.3	4202.2	4177.6	2894.8
77.5°	198.4	197.6	201.1	213.4	237.9	343.3	683.1	1777.1	3114.3	3102.0	1900.0
80°	159.8	161.6	166.8	177.4	200.2	261.6	403.9	1108.9	1670.9	1626.1	907.9
82.5°	107.1	123.8	134.3	146.6	173.0	193.2	256.4	563.7	747.2	735.8	411.8
85°	50.9	67.6	100.1	114.1	140.5	121.2	173.8	268.7	374.0	369.6	148.4
87.5°	10.5	10.5	53.6	64.1	86.9	51.8	96.6	116.8	180.9	169.5	60.6
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°	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0
2.5°	839.4	815.7	768.3	730.5	691.9	669.9	642.7	629.5	626.9	619.9	625.1
5°	854.3	807.8	718.2	659.4	619.9	600.6	590.9	587.4	586.5	584.8	584.8
7.5°	874.5	803.4	686.6	626.9	601.4	595.3	597.9	603.2	604.1	605.8	604.9
10°	899.1	804.3	669.0	619.0	606.7	607.6	616.4	623.4	626.9	629.5	628.7
12.5°	933.3	814.8	666.4	624.3	619.0	622.5	631.3	638.3	641.8	642.7	642.7
15°	978.1	836.7	672.6	635.7	631.3	633.9	639.2	641.8	642.7	641.8	641.8
17.5°	1027.3	863.1	681.3	642.7	635.7	633.0	631.3	628.7	623.4	619.9	619.9
20°	1074.7	886.8	685.7	641.8	629.5	619.0	608.5	595.3	586.5	579.5	579.5
22.5°	1122.1	908.7	685.7	632.2	612.9	592.7	570.7	549.6	536.5	527.7	527.7
25°	1172.1	929.8	680.5	615.5	586.5	557.5	527.7	501.3	488.2	479.4	477.6
27.5°	1214.3	942.1	666.4	591.8	554.0	517.1	482.9	455.7	446.0	438.1	438.1
30°	1259.1	950.0	640.1	561.0	517.1	475.0	439.9	417.9	407.4	396.0	395.1
32.5°	1309.1	955.3	610.2	528.6	479.4	434.6	404.8	387.2	364.4	352.1	350.3
35°	1367.1	962.3	578.6	491.7	441.6	401.3	383.7	354.7	332.8	322.2	321.4
37.5°	1428.5	967.6	544.4	459.2	407.4	379.3	361.7	327.5	308.2	292.4	290.6
40°	1493.5	967.6	509.2	427.6	380.2	369.6	336.3	305.5	273.1	265.2	263.4
42.5°	1565.5	965.8	474.1	396.9	354.7	347.7	321.4	288.9	272.2	265.2	263.4
45°	1641.9	959.7	440.8	361.7	328.4	314.3	294.1	285.4	278.3	278.3	278.3
47.5°	1728.8	954.4	403.0	330.1	309.1	293.3	278.3	273.1	272.2	274.8	277.5
50°	1840.3	952.6	371.4	307.3	294.1	275.7	273.9	269.5	270.4	270.4	270.4
52.5°	1975.5	936.8	341.5	290.6	279.2	257.3	262.5	266.9	268.7	267.8	266.9
55°	2074.7	908.7	316.1	279.2	268.7	250.2	257.3	264.3	266.0	263.4	263.4
57.5°	2164.3	869.2	295.9	270.4	261.6	245.8	253.7	260.8	259.0	258.1	257.3
60°	2267.0	831.5	280.1	266.0	254.6	244.1	251.1	255.5	252.9	251.1	250.2
62.5°	2378.5	794.6	268.7	266.0	249.4	243.2	248.5	250.2	245.0	243.2	243.2
65°	2430.3	736.7	256.4	266.0	246.7	241.5	243.2	241.5	236.2	236.2	235.3
67.5°	2345.2	640.9	240.6	262.5	250.2	238.8	235.3	232.7	226.5	226.5	224.8
70°	2109.9	526.8	217.7	251.1	251.1	237.9	224.8	218.6	211.6	214.2	210.7
72.5°	1802.6	417.9	189.7	231.8	245.8	237.1	213.4	203.7	197.6	200.2	194.9
75°	1460.1	324.0	156.3	201.1	232.7	232.7	201.9	188.8	181.7	181.7	175.6
77.5°	930.7	239.7	127.3	166.8	209.0	226.5	192.3	172.1	161.6	158.9	154.5
80°	461.0	168.6	104.5	132.6	178.2	212.5	185.3	152.8	137.8	132.6	124.7
82.5°	245.0	116.8	83.4	103.6	142.2	191.4	176.5	131.7	113.3	105.4	96.6
85°	109.8	72.0	66.7	79.0	108.0	157.2	158.9	108.0	86.9	103.6	76.4
87.5°	40.4	32.5	32.5	40.4	62.3	65.9	112.4	69.4	55.3	37.8	29.9
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)