

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: P397834

Luminaire Tested: **ARCH-S-PA1-50-730-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397834  
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-PA1-50-730-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7206 lumens  
Efficiency: N/A  
Efficacy: 133.4 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): 54  
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

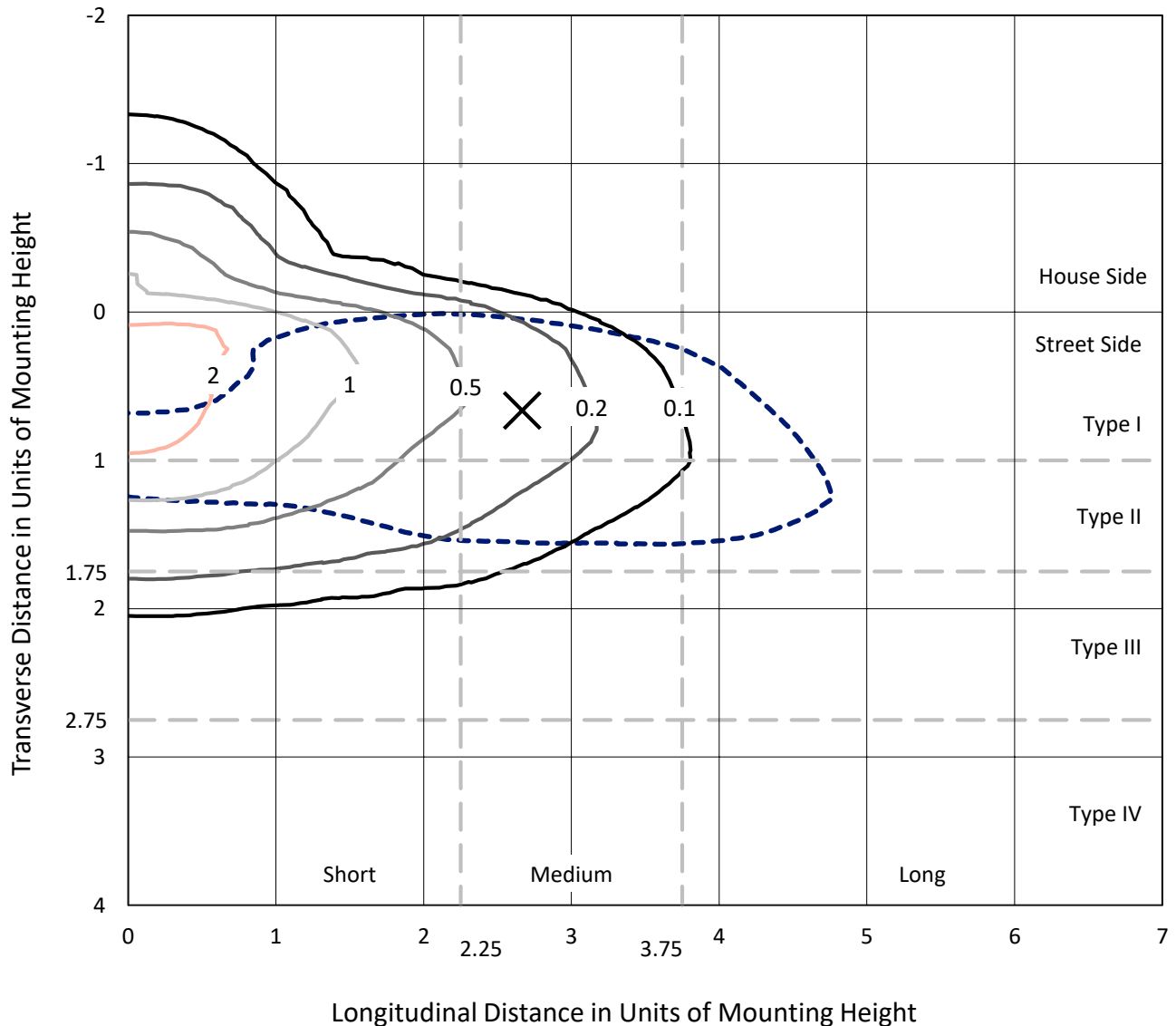


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

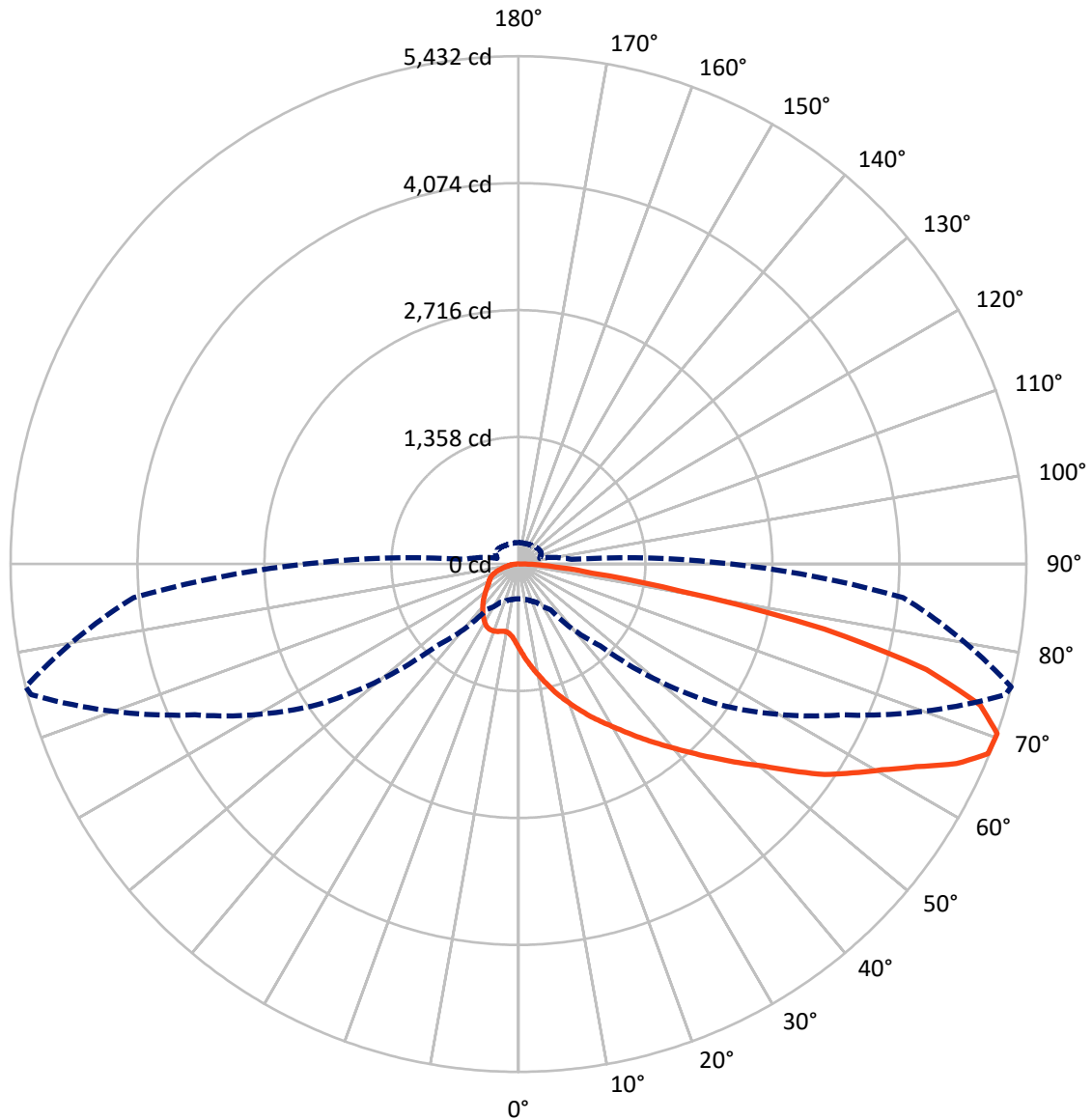


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type II - Medium - Non-Cutoff

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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	1176.5	0.0	1176.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	6029.6	0.0	6029.6
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	7206.0	0.0	7206.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.6	1.3
10°-20°	318.2	4.4
20°-30°	569.4	7.9
30°-40°	921.0	12.8
40°-50°	1332.4	18.5
50°-60°	1525.0	21.2
60°-70°	1402.8	19.5
70°-80°	867.5	12.0
80°-90°	176.2	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°	7206.0	100.0
0°-180°	7206.0	100.0



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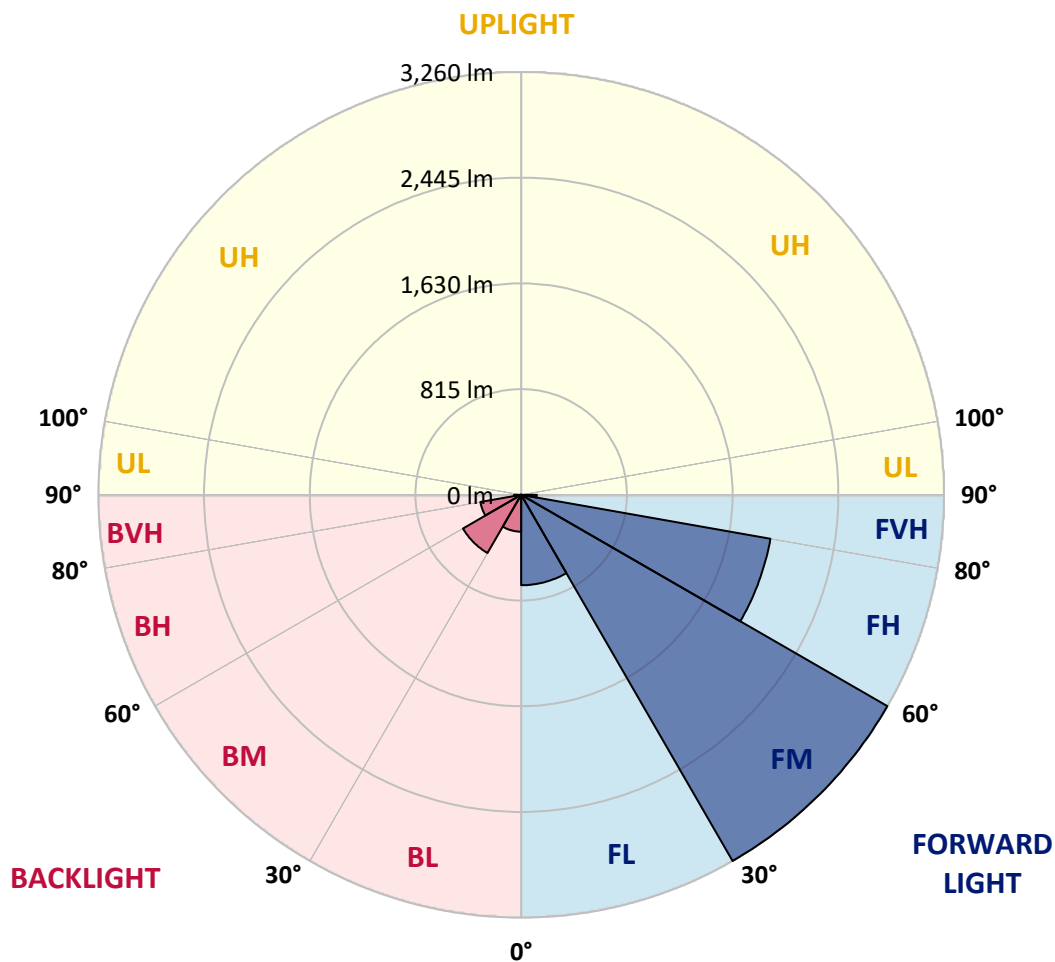
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	697.1	9.7			
FM (30°-60°)	3260.4	45.2			
FH (60°-80°)	1951.2	27.1			G2/5000
FVH (80°-90°)	120.9	1.7			G2/225
BL (0°-30°)	284.2	3.9	B1/500		
BM (30°-60°)	518.0	7.2	B1/1000		
BH (60°-80°)	319.1	4.4	B1/500		G1/500
BVH (80°-90°)	55.2	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°	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1
2.5°	1148.5	1139.9	1139.0	1125.7	1113.4	1080.2	1056.5	1014.8	973.2	972.2	930.5
5°	1327.5	1319.0	1314.3	1298.2	1277.3	1233.7	1191.1	1126.7	1055.6	1050.9	972.2
7.5°	1448.8	1441.3	1431.8	1425.1	1405.2	1366.4	1314.3	1237.5	1139.9	1130.5	1020.5
10°	1530.3	1525.6	1523.7	1519.0	1506.6	1475.4	1425.1	1343.7	1224.3	1213.8	1071.7
12.5°	1565.4	1563.5	1572.0	1585.3	1590.0	1577.7	1529.4	1452.6	1317.1	1305.8	1133.3
15°	1524.6	1526.5	1548.3	1593.8	1642.1	1668.7	1640.2	1565.4	1422.3	1406.2	1205.3
17.5°	1505.7	1508.5	1523.7	1567.3	1635.5	1717.9	1731.2	1672.5	1523.7	1501.0	1281.1
20°	1538.9	1542.6	1554.0	1588.1	1635.5	1723.6	1792.8	1774.8	1623.2	1599.5	1354.1
22.5°	1623.2	1627.9	1627.0	1648.8	1681.0	1741.6	1826.9	1871.5	1727.4	1700.9	1429.9
25°	1803.2	1799.4	1767.2	1756.8	1765.3	1804.2	1872.4	1964.3	1836.4	1809.9	1509.5
27.5°	2047.7	2043.0	1984.2	1931.2	1883.8	1900.8	1936.8	2039.2	1947.3	1916.9	1585.3
30°	2309.2	2303.5	2235.3	2149.1	2043.9	2019.3	2014.5	2104.6	2059.1	2026.9	1665.8
32.5°	2564.1	2559.4	2486.4	2386.0	2241.0	2167.1	2121.6	2177.5	2186.0	2154.8	1754.0
35°	2796.3	2796.3	2733.7	2614.4	2450.4	2338.6	2263.7	2267.5	2332.0	2296.0	1854.4
37.5°	3002.9	3001.9	2933.7	2816.2	2658.9	2531.0	2438.1	2376.5	2471.3	2440.0	1959.6
40°	3166.8	3160.2	3109.9	3007.6	2849.3	2722.4	2628.6	2504.4	2626.7	2598.2	2071.4
42.5°	3286.2	3282.4	3248.3	3159.2	3008.5	2889.1	2824.7	2665.5	2802.9	2774.5	2202.2
45°	3332.6	3340.2	3340.2	3255.9	3136.5	3027.5	2999.1	2842.7	2993.4	2965.0	2342.4
47.5°	3257.8	3277.7	3318.4	3324.1	3218.9	3145.0	3154.5	3020.9	3189.5	3174.4	2495.9
50°	3023.7	3060.7	3149.7	3310.8	3252.1	3235.0	3287.1	3202.8	3399.9	3395.2	2682.6
52.5°	2420.1	2510.1	2787.8	3076.8	3229.3	3276.7	3418.8	3407.5	3670.9	3678.5	2926.1
55°	1856.3	1890.4	2211.6	2703.4	3090.0	3263.4	3507.0	3607.4	3964.6	3974.1	3149.7
57.5°	1501.0	1523.7	1699.0	2211.6	2772.6	3191.4	3576.1	3724.0	4190.2	4214.8	3348.7
60°	1189.2	1222.4	1339.9	1692.4	2328.2	3018.0	3624.5	3853.8	4432.7	4469.7	3586.6
62.5°	884.1	900.2	1011.1	1253.6	1843.0	2706.3	3598.9	3995.0	4730.3	4774.8	3872.7
65°	629.2	643.4	722.0	891.7	1362.6	2284.6	3450.1	4100.1	5103.6	5149.1	4160.8
67.5°	470.9	476.6	521.2	623.5	918.2	1774.8	3148.8	4082.1	5376.5	5417.3	4276.4
70°	372.4	374.3	396.1	451.0	597.0	1235.6	2621.0	3817.8	5396.4	5432.4	4130.5
72.5°	308.9	308.0	320.3	346.8	416.0	781.7	1941.6	3326.9	5140.6	5165.2	3723.0
75°	254.9	256.8	265.3	280.5	317.4	515.5	1258.4	2654.1	4535.1	4508.5	3124.1
77.5°	214.2	213.2	217.0	230.3	256.8	370.5	737.2	1917.9	3361.0	3347.8	2050.5
80°	172.5	174.4	180.0	191.4	216.0	282.4	435.9	1196.8	1803.2	1754.9	979.8
82.5°	115.6	133.6	145.0	158.2	186.7	208.5	276.7	608.3	806.4	794.1	444.4
85°	55.0	73.0	108.0	123.2	151.6	130.8	187.6	290.0	403.7	398.9	160.1
87.5°	11.4	11.4	57.8	69.2	93.8	55.9	104.2	126.0	195.2	182.9	65.4
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°	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1	901.1
2.5°	905.9	880.3	829.1	788.4	746.7	723.0	693.6	679.4	676.6	669.0	674.7
5°	922.0	871.8	775.1	711.6	669.0	648.1	637.7	633.9	633.0	631.1	631.1
7.5°	943.8	867.0	741.0	676.6	649.1	642.5	645.3	651.0	651.9	653.8	652.9
10°	970.3	868.0	722.0	668.0	654.8	655.7	665.2	672.8	676.6	679.4	678.5
12.5°	1007.3	879.3	719.2	673.7	668.0	671.8	681.3	688.9	692.7	693.6	693.6
15°	1055.6	903.0	725.8	686.0	681.3	684.1	689.8	692.7	693.6	692.7	692.7
17.5°	1108.7	931.5	735.3	693.6	686.0	683.2	681.3	678.5	672.8	669.0	669.0
20°	1159.8	957.0	740.1	692.7	679.4	668.0	656.7	642.5	633.0	625.4	625.4
22.5°	1211.0	980.7	740.1	682.3	661.4	639.6	615.9	593.2	579.0	569.5	569.5
25°	1265.0	1003.5	734.4	664.2	633.0	601.7	569.5	541.1	526.9	517.4	515.5
27.5°	1310.5	1016.7	719.2	638.7	597.9	558.1	521.2	491.8	481.4	472.8	472.8
30°	1358.8	1025.3	690.8	605.5	558.1	512.6	474.7	451.0	439.7	427.4	426.4
32.5°	1412.8	1031.0	658.6	570.4	517.4	469.0	436.8	417.9	393.2	380.0	378.1
35°	1475.4	1038.5	624.5	530.6	476.6	433.0	414.1	382.8	359.1	347.8	346.8
37.5°	1541.7	1044.2	587.5	495.6	439.7	409.4	390.4	353.4	332.6	315.5	313.6
40°	1611.8	1044.2	549.6	461.5	410.3	398.9	362.9	329.8	294.7	286.2	284.3
42.5°	1689.5	1042.3	511.7	428.3	382.8	375.2	346.8	311.8	293.7	286.2	284.3
45°	1772.0	1035.7	475.7	390.4	354.4	339.2	317.4	308.0	300.4	300.4	300.4
47.5°	1865.8	1030.0	434.9	356.3	333.5	316.5	300.4	294.7	293.7	296.6	299.4
50°	1986.1	1028.1	400.8	331.7	317.4	297.5	295.6	290.9	291.9	291.9	291.9
52.5°	2132.0	1011.1	368.6	313.6	301.3	277.6	283.3	288.1	290.0	289.0	288.1
55°	2239.1	980.7	341.1	301.3	290.0	270.1	277.6	285.2	287.1	284.3	284.3
57.5°	2335.8	938.1	319.3	291.9	282.4	265.3	273.8	281.4	279.5	278.6	277.6
60°	2446.6	897.4	302.3	287.1	274.8	263.4	271.0	275.7	272.9	271.0	270.1
62.5°	2567.0	857.6	290.0	287.1	269.1	262.5	268.2	270.1	264.4	262.5	262.5
65°	2622.9	795.0	276.7	287.1	266.3	260.6	262.5	260.6	254.9	254.9	253.9
67.5°	2531.0	691.7	259.6	283.3	270.1	257.7	253.9	251.1	244.5	244.5	242.6
70°	2277.0	568.5	235.0	271.0	271.0	256.8	242.6	235.9	228.4	231.2	227.4
72.5°	1945.4	451.0	204.7	250.2	265.3	255.8	230.3	219.8	213.2	216.0	210.4
75°	1575.8	349.7	168.7	217.0	251.1	251.1	217.9	203.7	196.1	196.1	189.5
77.5°	1004.4	258.7	137.4	180.0	225.5	244.5	207.5	185.7	174.4	171.5	166.8
80°	497.5	181.9	112.8	143.1	192.4	229.3	199.9	164.9	148.8	143.1	134.6
82.5°	264.4	126.0	90.0	111.8	153.5	206.6	190.5	142.1	122.2	113.7	104.2
85°	118.4	77.7	72.0	85.3	116.6	169.6	171.5	116.6	93.8	111.8	82.4
87.5°	43.6	35.1	35.1	43.6	67.3	71.1	121.3	74.9	59.7	40.7	32.2
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)