

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: P573185

Luminaire Tested: **ARCH-S-PA2-40-827-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573185  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-40-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4942 lumens  
Efficiency: N/A  
Efficacy: 113.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

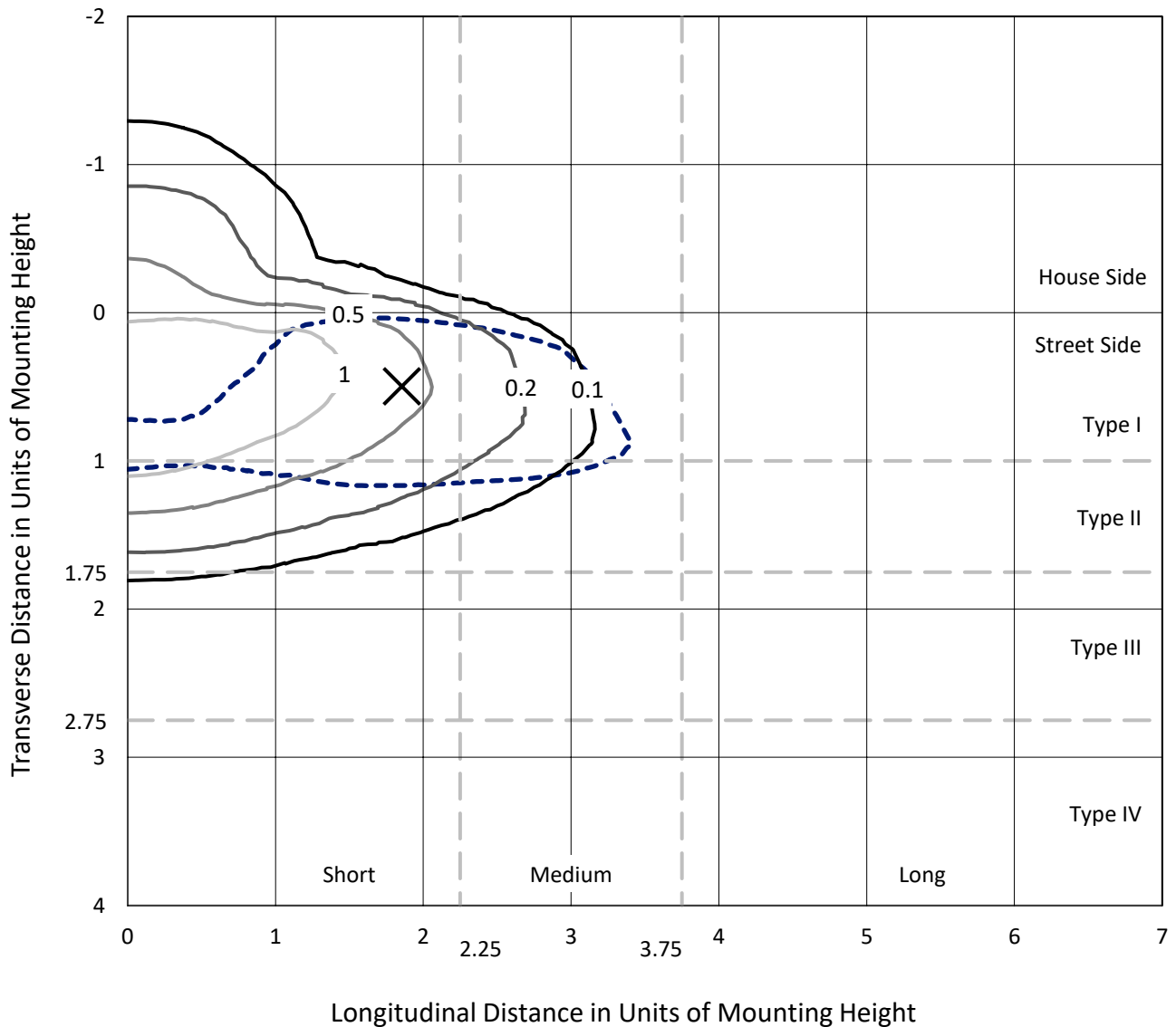
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

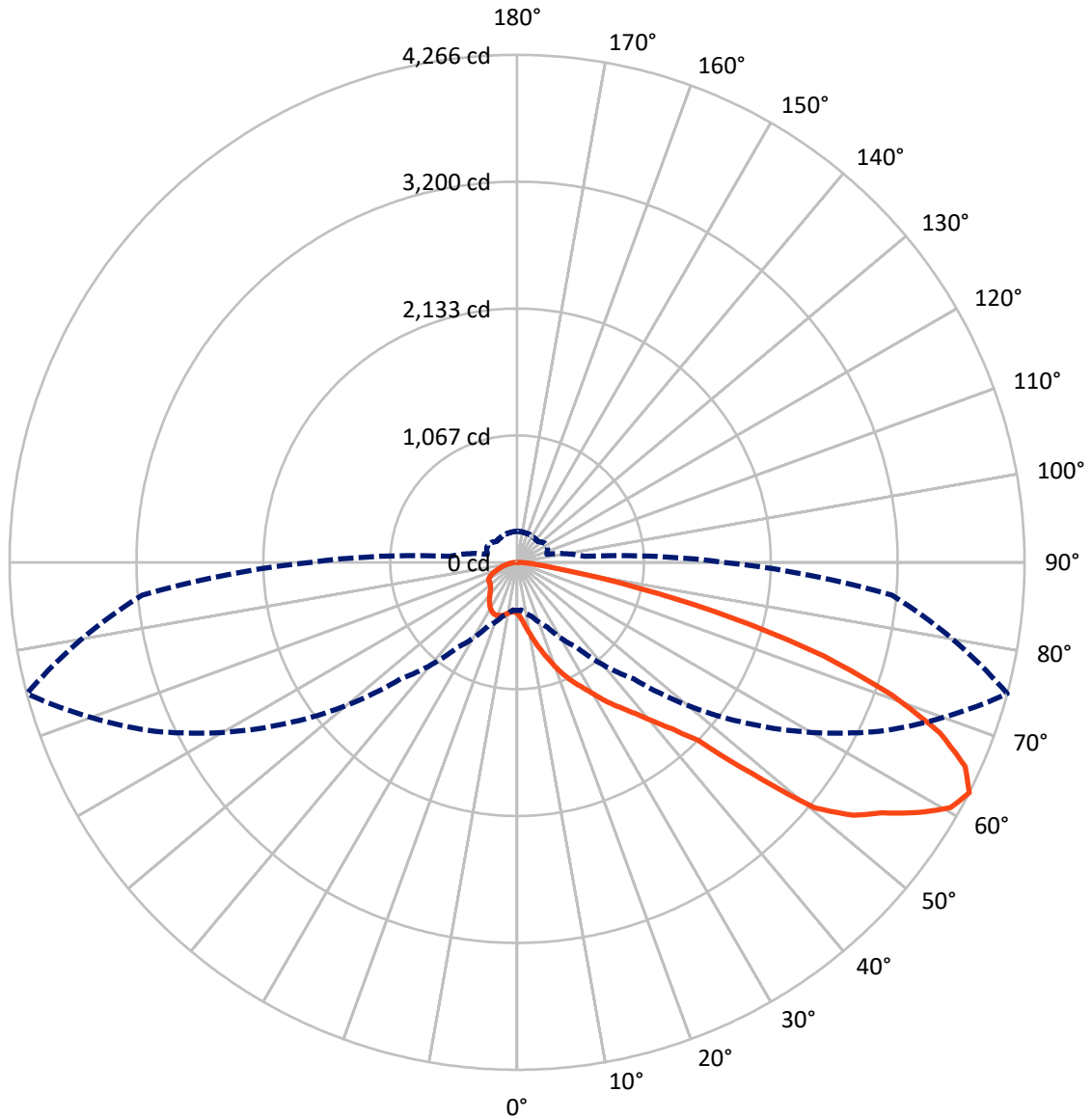
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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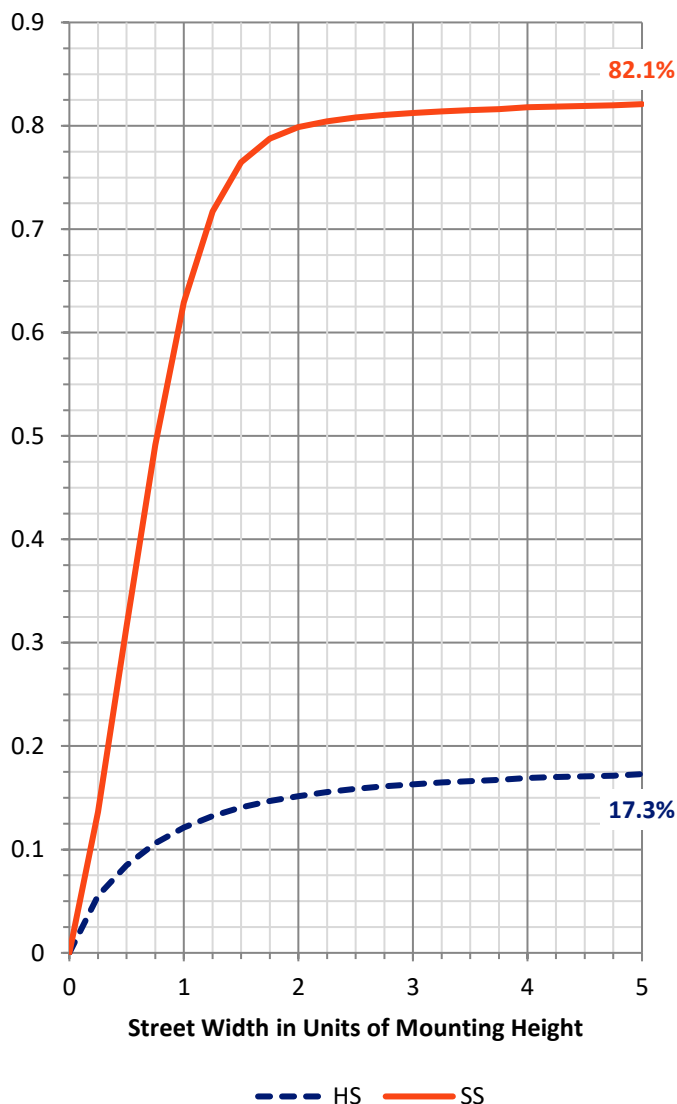
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	871.6	0.0	871.6
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	4070.4	0.0	4070.4
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	4942.0	0.0	4942.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.8	1.0
10°-20°	204.5	4.1
20°-30°	404.6	8.2
30°-40°	674.4	13.6
40°-50°	995.1	20.1
50°-60°	1196.2	24.2
60°-70°	929.7	18.8
70°-80°	411.3	8.3
80°-90°	74.5	1.5
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°	4942.0	100.0
0°-180°	4942.0	100.0

**Coefficient of Utilization**



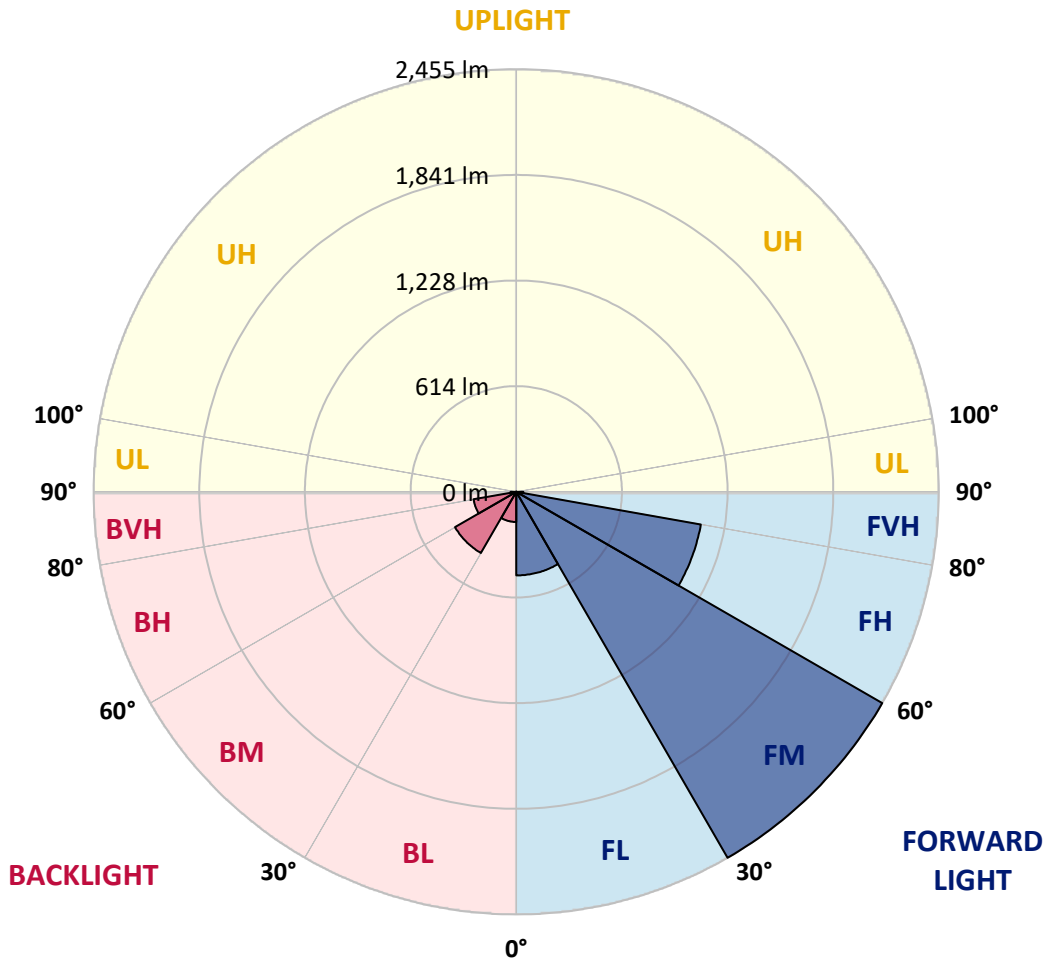
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	485.4	9.8			
FM (30°-60°)	2455.2	49.7			
FH (60°-80°)	1088.8	22.0			G1/1800
FVH (80°-90°)	40.9	0.8			G1/100
BL (0°-30°)	175.4	3.5	B1/500		
BM (30°-60°)	410.5	8.3	B1/1000		
BH (60°-80°)	252.2	5.1	B1/500		G1/500
BVH (80°-90°)	33.5	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8
2.5°	550.8	534.8	534.8	517.5	518.8	504.1	488.1	472.1	454.8	441.4	434.8
5°	720.2	708.2	704.2	684.2	652.2	616.2	577.5	537.5	496.1	464.1	448.1
7.5°	878.9	869.6	864.2	841.6	797.5	758.9	697.5	624.2	553.5	493.5	469.5
10°	996.3	989.6	978.9	968.3	936.2	902.9	826.9	722.9	618.8	529.5	493.5
12.5°	1081.6	1072.3	1072.3	1070.9	1049.6	1018.9	948.2	836.2	694.8	569.5	520.1
15°	1139.0	1137.6	1141.6	1149.6	1144.3	1124.3	1053.6	940.2	772.2	614.8	550.8
17.5°	1181.6	1176.3	1184.3	1205.6	1221.6	1213.6	1155.0	1040.3	857.6	664.2	584.2
20°	1228.3	1217.6	1228.3	1255.0	1275.0	1287.0	1259.0	1136.3	949.6	717.5	616.2
22.5°	1317.7	1316.3	1311.0	1319.0	1332.3	1353.7	1337.7	1233.7	1038.9	770.9	653.5
25°	1477.7	1463.0	1448.4	1431.0	1416.4	1423.0	1409.7	1324.3	1120.3	829.5	685.5
27.5°	1656.4	1640.4	1613.8	1571.1	1531.1	1507.1	1479.0	1403.0	1199.0	882.9	716.2
30°	1820.5	1815.1	1775.1	1728.4	1659.1	1615.1	1561.7	1493.7	1293.7	941.6	748.2
32.5°	1973.8	1963.2	1923.2	1873.8	1792.5	1743.1	1669.8	1592.4	1401.7	1013.6	781.5
35°	2105.9	2095.2	2048.5	1985.8	1915.2	1872.5	1788.5	1680.4	1500.4	1076.3	809.5
37.5°	2205.9	2193.9	2149.9	2088.5	2025.9	2005.9	1933.8	1792.5	1612.4	1155.0	844.2
40°	2261.9	2247.2	2217.9	2175.2	2123.2	2113.9	2083.2	1931.2	1753.8	1251.0	894.9
42.5°	2268.6	2255.2	2239.2	2235.2	2231.2	2239.2	2253.9	2088.5	1915.2	1379.0	969.6
45°	2209.9	2201.9	2203.2	2248.6	2311.3	2384.6	2472.6	2320.6	2132.6	1623.1	1137.6
47.5°	2084.5	2080.5	2109.9	2185.9	2325.9	2492.6	2742.0	2718.0	2647.4	2016.5	1353.7
50°	1881.8	1875.2	1937.8	2057.9	2257.9	2528.7	2923.4	3186.2	3244.8	2321.9	1495.1
52.5°	1591.1	1599.1	1696.4	1860.5	2101.9	2490.0	2998.1	3378.2	3532.9	2547.3	1603.1
55°	1293.7	1281.7	1369.7	1572.4	1871.2	2348.6	3012.8	3488.9	3719.6	2755.4	1708.4
57.5°	942.9	972.3	1065.6	1249.7	1573.7	2092.5	2927.4	3564.9	3970.4	2963.4	1805.8
60°	638.8	638.8	721.5	905.6	1216.3	1781.8	2699.4	3536.9	4189.1	3126.1	1827.1
62.5°	406.8	402.8	469.5	600.2	870.9	1384.4	2357.9	3360.9	4266.4	3164.8	1737.8
65°	257.4	262.7	286.7	366.8	557.5	982.9	1892.5	3010.1	4139.7	3075.5	1581.7
67.5°	206.7	208.1	220.1	253.4	342.8	630.8	1403.0	2526.0	3837.0	2850.1	1399.0
70°	182.7	185.4	188.0	200.1	234.7	398.8	921.6	2033.9	3340.9	2458.0	1203.0
72.5°	166.7	169.4	172.0	174.7	193.4	260.1	544.1	1541.7	2695.4	1888.5	917.6
75°	153.4	156.0	156.0	157.4	168.0	193.4	298.7	1062.9	1876.5	1175.0	572.1
77.5°	137.4	138.7	138.7	141.4	152.0	152.0	185.4	657.5	1041.6	532.1	289.4
80°	116.0	118.7	118.7	122.7	133.4	117.4	124.0	336.1	432.1	218.7	129.4
82.5°	85.4	90.7	93.4	100.0	106.7	89.4	89.4	169.4	182.7	97.4	69.4
85°	46.7	48.0	69.4	74.7	78.7	53.3	60.0	84.0	90.7	42.7	34.7
87.5°	13.3	14.7	33.3	41.3	37.3	22.7	25.3	32.0	32.0	12.0	9.3
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8
2.5°	429.4	418.8	409.4	402.8	396.1	392.1	390.8	388.1	388.1	389.4
5°	434.8	416.1	401.4	393.4	388.1	385.4	384.1	384.1	385.4	385.4
7.5°	448.1	420.1	406.8	400.1	394.8	392.1	392.1	390.8	392.1	392.1
10°	466.8	432.1	417.4	409.4	405.4	401.4	400.1	398.8	398.8	398.8
12.5°	486.8	445.4	429.4	420.1	413.4	408.1	405.4	402.8	401.4	401.4
15°	505.5	458.8	437.4	426.8	417.4	409.4	404.1	400.1	398.8	398.8
17.5°	525.5	468.1	442.8	428.1	416.1	405.4	398.8	393.4	390.8	390.8
20°	546.8	474.8	442.8	424.1	408.1	397.4	389.4	384.1	378.8	378.8
22.5°	564.1	477.5	437.4	414.8	398.8	385.4	377.4	370.8	366.8	366.8
25°	578.8	474.8	425.4	400.1	381.4	369.4	361.4	356.1	352.1	352.1
27.5°	588.2	464.1	410.8	384.1	366.8	354.8	349.4	344.1	341.4	341.4
30°	593.5	450.8	392.1	366.8	349.4	342.8	340.1	334.8	330.8	329.4
32.5°	596.2	430.8	373.4	349.4	337.4	334.8	334.8	328.1	322.8	321.4
35°	593.5	409.4	354.8	334.8	330.8	332.1	329.4	321.4	314.7	312.1
37.5°	589.5	384.1	334.8	324.1	328.1	330.8	322.8	312.1	301.4	298.7
40°	586.8	361.4	318.7	313.4	325.4	326.8	312.1	292.1	284.1	281.4
42.5°	600.2	338.8	304.1	305.4	318.7	320.1	293.4	284.1	278.7	277.4
45°	645.5	318.7	292.1	300.1	310.7	305.4	284.1	282.7	278.7	277.4
47.5°	680.2	304.1	286.7	296.1	304.1	285.4	282.7	281.4	277.4	276.1
50°	692.2	294.7	285.4	293.4	294.7	276.1	280.1	280.1	276.1	274.7
52.5°	693.5	289.4	288.1	292.1	280.1	272.1	277.4	277.4	273.4	272.1
55°	698.8	286.7	289.4	292.1	264.1	266.7	272.1	273.4	269.4	268.1
57.5°	688.2	282.7	292.1	293.4	257.4	261.4	266.7	266.7	266.7	266.7
60°	646.8	274.7	290.7	290.7	252.1	254.7	260.1	262.7	264.1	264.1
62.5°	570.8	258.7	282.7	282.7	246.7	249.4	256.1	256.1	260.1	260.1
65°	474.8	236.1	266.7	265.4	241.4	244.1	252.1	249.4	256.1	257.4
67.5°	396.1	208.1	242.7	245.4	236.1	242.7	248.1	238.7	252.1	252.1
70°	316.1	174.7	210.7	222.7	226.7	244.1	240.1	225.4	242.7	238.7
72.5°	245.4	148.0	173.4	194.7	216.1	242.7	222.7	206.7	217.4	210.7
75°	178.7	122.7	142.7	161.4	201.4	238.7	205.4	181.4	181.4	178.7
77.5°	125.4	100.0	114.7	128.0	186.7	228.1	184.0	156.0	149.4	148.0
80°	85.4	78.7	90.7	98.7	165.4	206.7	158.7	129.4	117.4	114.7
82.5°	56.0	56.0	61.3	66.7	128.0	172.0	124.0	96.0	124.0	118.7
85°	32.0	33.3	33.3	38.7	70.7	121.4	88.0	96.0	57.3	53.3
87.5°	10.7	10.7	10.7	10.7	14.7	49.3	37.3	34.7	13.3	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)