

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: P573540

Luminaire Tested: **ARCH-S-PA2-90-727-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-90-727-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10737 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

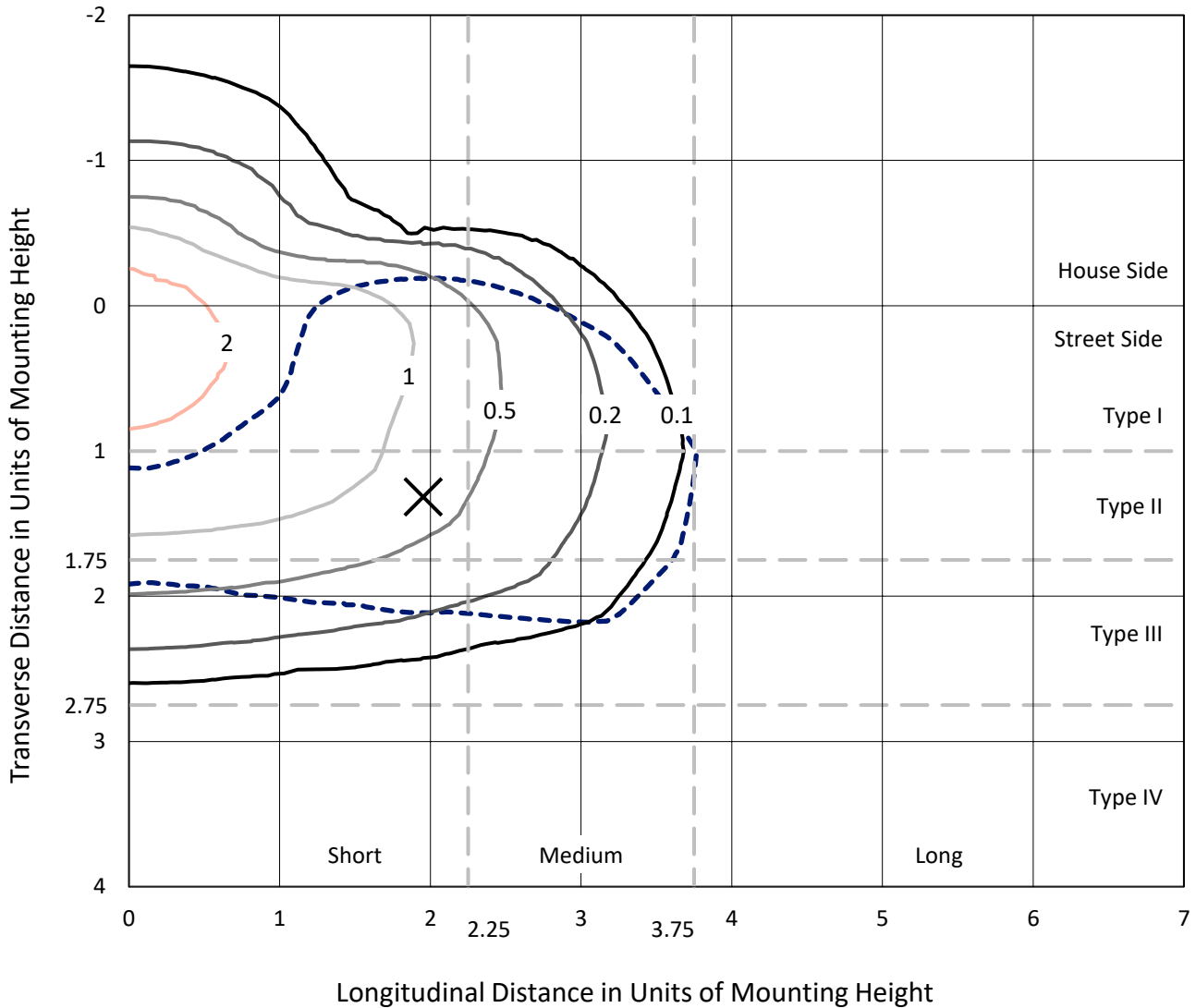
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

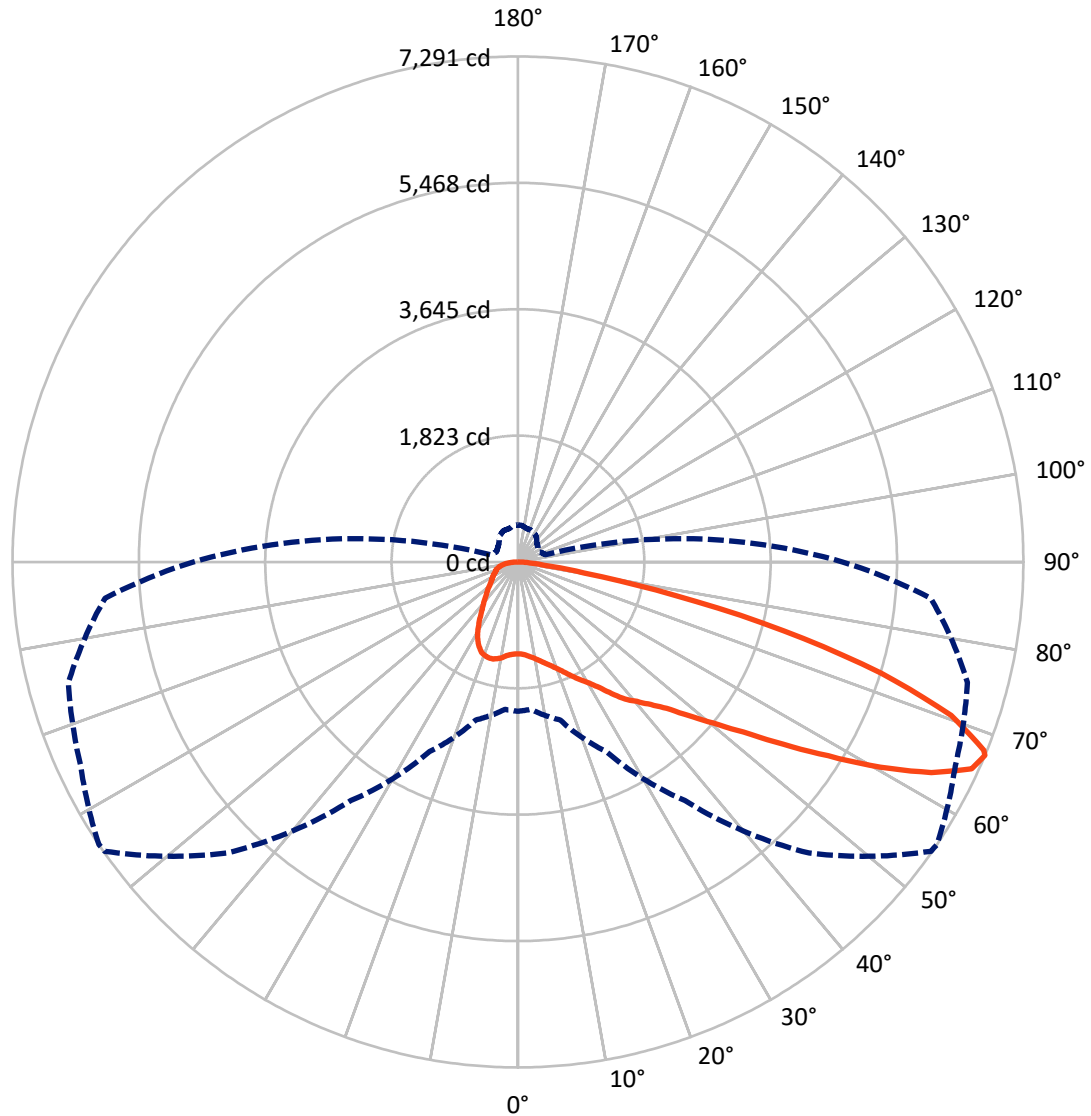
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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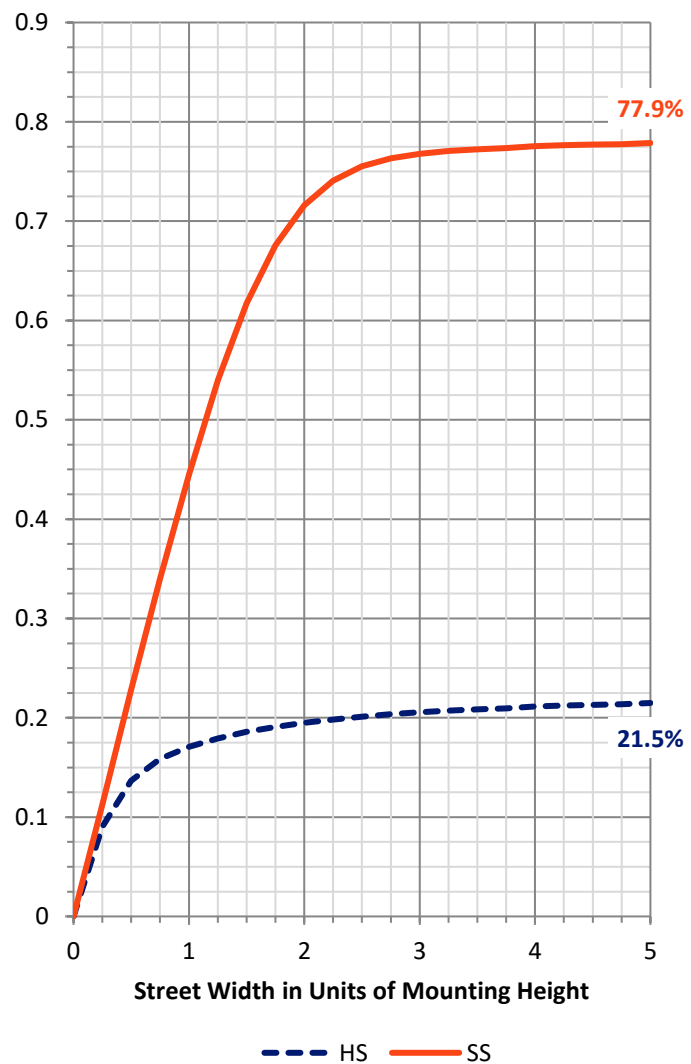
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2349.0	0.0	2349.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	8388.0	0.0	8388.0
	% Fixture	78.1	0.0	78.1
Total	Lumens	10737.0	0.0	10737.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	1.2
10°-20°	418.2	3.9
20°-30°	727.9	6.8
30°-40°	1067.3	9.9
40°-50°	1561.6	14.5
50°-60°	2440.5	22.7
60°-70°	2900.7	27.0
70°-80°	1321.1	12.3
80°-90°	169.4	1.6
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°	10737.0	100.0
0°-180°	10737.0	100.0



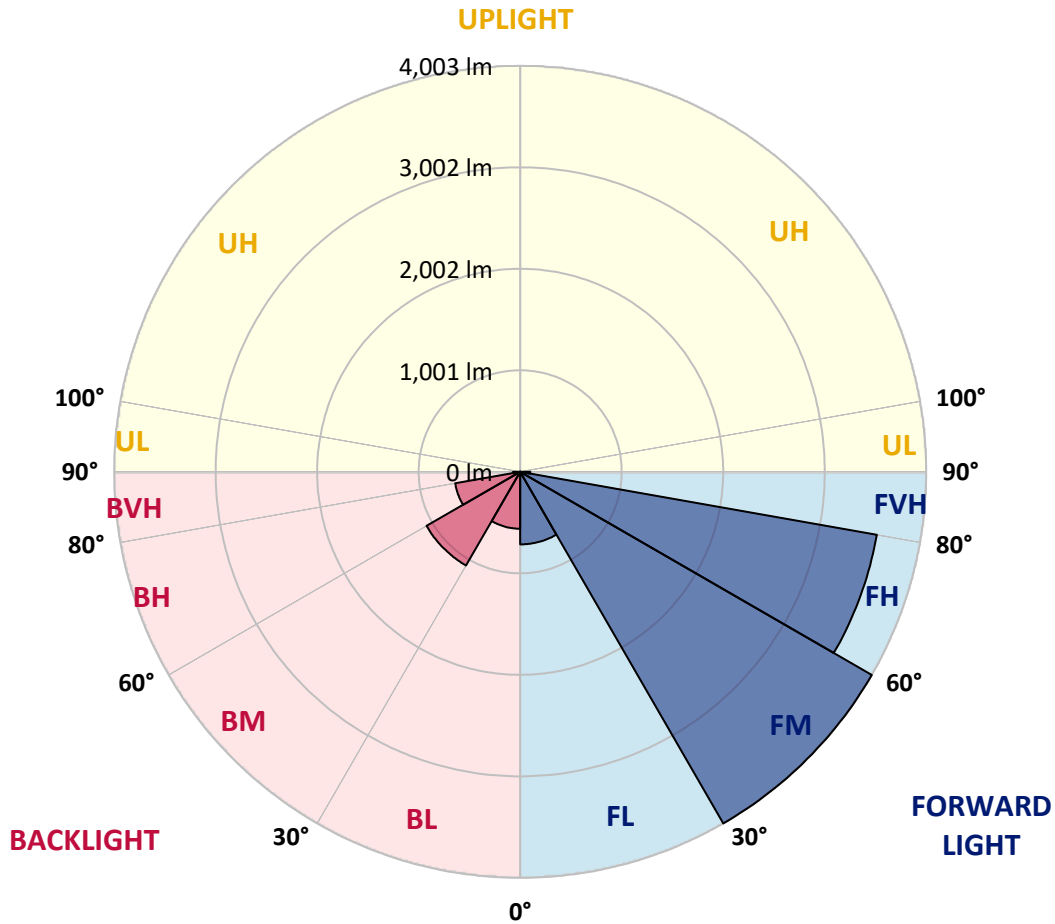
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	715.2	6.7			
FM (30°-60°)	4003.0	37.3			
FH (60°-80°)	3571.0	33.3			G2/5000
FVH (80°-90°)	98.8	0.9			G1/100
BL (0°-30°)	561.4	5.2	B2/1000		
BM (30°-60°)	1066.3	9.9	B2/2500		
BH (60°-80°)	650.8	6.1	B2/1000		G2/1000
BVH (80°-90°)	70.6	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6
2.5°	1345.9	1340.1	1337.2	1340.1	1337.2	1331.4	1334.3	1331.4	1328.5	1325.6	1325.6
5°	1363.4	1357.6	1354.7	1357.6	1360.5	1354.7	1354.7	1354.7	1345.9	1343.0	1337.2
7.5°	1375.0	1366.3	1366.3	1372.1	1377.9	1380.8	1386.6	1383.7	1375.0	1369.2	1357.6
10°	1412.8	1401.2	1401.2	1401.2	1407.0	1412.8	1418.6	1421.5	1418.6	1415.7	1407.0
12.5°	1470.9	1459.3	1459.3	1459.3	1459.3	1456.4	1465.1	1468.0	1473.9	1473.9	1459.3
15°	1549.4	1534.9	1529.1	1517.5	1514.6	1508.7	1520.4	1520.4	1529.1	1532.0	1517.5
17.5°	1625.0	1607.6	1601.8	1590.1	1578.5	1564.0	1575.6	1578.5	1596.0	1598.9	1575.6
20°	1703.5	1697.7	1689.0	1671.5	1651.2	1636.6	1648.3	1645.4	1659.9	1665.7	1636.6
22.5°	1805.3	1790.7	1784.9	1761.7	1738.4	1723.9	1723.9	1729.7	1744.2	1744.2	1700.6
25°	1927.4	1907.0	1892.5	1866.3	1837.2	1819.8	1822.7	1828.5	1848.9	1834.3	1767.5
27.5°	2078.5	2058.2	2037.8	1985.5	1956.4	1921.5	1918.6	1924.4	1956.4	1918.6	1831.4
30°	2221.0	2212.2	2194.8	2154.1	2107.6	2049.4	2023.3	2026.2	2049.4	1997.1	1886.7
32.5°	2343.1	2331.4	2322.7	2293.6	2261.7	2191.9	2157.0	2159.9	2157.0	2093.1	1953.5
35°	2488.4	2471.0	2465.1	2439.0	2398.3	2351.8	2337.2	2331.4	2314.0	2226.8	2040.7
37.5°	2627.9	2610.5	2601.8	2587.2	2555.3	2514.6	2514.6	2511.7	2476.8	2354.7	2127.9
40°	2793.6	2773.3	2747.1	2738.4	2712.2	2683.2	2659.9	2645.4	2584.3	2473.9	2296.5
42.5°	2994.2	2982.6	2968.1	2930.3	2889.6	2883.8	2816.9	2811.1	2767.5	2703.5	2534.9
45°	3282.0	3258.8	3238.4	3226.8	3177.4	3125.0	3032.0	3008.8	3008.8	2994.2	2814.0
47.5°	3572.7	3532.0	3561.1	3552.4	3540.7	3482.6	3302.4	3305.3	3299.5	3337.3	3223.9
50°	3767.5	3744.2	3825.6	3863.4	3944.8	3944.8	3686.1	3654.1	3677.4	3787.8	3642.5
52.5°	3918.7	3904.1	3997.1	4145.4	4386.7	4409.9	4142.5	4075.6	4107.6	4264.6	4206.5
55°	4040.8	4026.2	4133.8	4392.5	4779.1	4921.6	4668.7	4639.6	4575.6	4744.2	4761.7
57.5°	4113.4	4081.4	4244.2	4590.2	5098.9	5427.4	5285.0	5276.2	5128.0	5285.0	5363.4
60°	4003.0	3982.6	4206.5	4671.6	5357.6	5904.1	6008.8	6008.8	5744.3	5828.6	5924.5
62.5°	3645.4	3619.2	3854.7	4482.6	5389.6	6293.7	6726.8	6691.9	6337.3	6334.4	6250.1
65°	2965.2	2933.2	3197.7	3860.5	4985.5	6340.2	7212.3	7192.0	6782.1	6665.8	6270.4
67°	2154.1	2133.7	2360.5	3017.5	4200.6	5936.1	7273.4	7290.8	6959.4	6712.3	5976.8
67.5°	1933.2	1930.3	2119.2	2770.4	3971.0	5787.9	7232.7	7250.1	6956.5	6674.5	5860.5
70°	901.2	941.9	1119.2	1587.2	2677.4	4558.2	6564.0	6630.9	6584.4	6238.5	4936.1
72.5°	418.6	436.1	514.5	767.5	1439.0	2939.0	5319.8	5479.7	5683.2	5351.8	3909.9
75°	258.7	264.5	308.1	398.3	677.3	1412.8	3787.8	3962.3	4270.4	4026.2	2500.0
77.5°	203.5	206.4	235.5	284.9	395.4	607.6	2078.5	2296.5	2697.7	2380.8	1258.7
80°	151.2	157.0	180.2	220.9	279.1	311.1	883.7	965.1	1302.3	997.1	523.3
82.5°	110.5	116.3	139.5	159.9	194.8	197.7	360.5	380.8	558.1	404.1	226.7
85°	93.0	93.0	107.6	119.2	130.8	110.5	177.3	174.4	215.1	183.1	90.1
87.5°	43.6	46.5	101.7	75.6	64.0	46.5	52.3	55.2	66.9	72.7	34.9
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°	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6
2.5°	1322.7	1322.7	1322.7	1325.6	1328.5	1328.5	1331.4	1331.4	1334.3	1337.2	1343.0
5°	1334.3	1334.3	1331.4	1334.3	1340.1	1343.0	1348.9	1354.7	1360.5	1366.3	1369.2
7.5°	1357.6	1354.7	1354.7	1354.7	1360.5	1366.3	1375.0	1380.8	1389.6	1392.5	1398.3
10°	1401.2	1395.4	1395.4	1398.3	1401.2	1392.5	1389.6	1386.6	1395.4	1401.2	1407.0
12.5°	1453.5	1447.7	1444.8	1436.1	1424.4	1407.0	1392.5	1380.8	1383.7	1389.6	1398.3
15°	1508.7	1497.1	1491.3	1470.9	1441.9	1404.1	1380.8	1366.3	1366.3	1366.3	1375.0
17.5°	1566.9	1555.3	1532.0	1494.2	1439.0	1386.6	1357.6	1331.4	1319.8	1316.9	1322.7
20°	1622.1	1604.7	1566.9	1508.7	1421.5	1351.8	1314.0	1270.4	1252.9	1241.3	1247.1
22.5°	1674.4	1651.2	1598.9	1508.7	1392.5	1299.4	1232.6	1174.4	1145.4	1139.5	1142.5
25°	1729.7	1700.6	1630.8	1491.3	1328.5	1220.9	1127.9	1066.9	1029.1	1023.3	1032.0
27.5°	1784.9	1741.3	1657.0	1444.8	1255.8	1113.4	1014.5	956.4	936.1	924.4	927.3
30°	1831.4	1790.7	1683.2	1380.8	1157.0	988.4	898.3	872.1	857.6	851.8	851.8
32.5°	1892.5	1854.7	1700.6	1305.2	1040.7	875.0	816.9	796.5	784.9	770.4	773.3
35°	1968.0	1933.2	1691.9	1209.3	930.2	799.4	752.9	723.8	697.7	677.3	674.4
37.5°	2069.8	2043.6	1648.3	1093.0	828.5	744.2	697.7	659.9	622.1	590.1	584.3
40°	2238.4	2177.4	1584.3	965.1	758.7	700.6	645.4	598.8	552.3	517.4	508.7
42.5°	2453.5	2325.6	1497.1	834.3	700.6	654.1	598.8	537.8	494.2	462.2	462.2
45°	2703.5	2485.5	1392.5	735.5	639.5	607.6	540.7	488.4	462.2	441.9	439.0
47.5°	3000.0	2645.4	1258.7	657.0	590.1	566.9	500.0	468.0	450.6	433.1	430.2
50°	3398.3	2860.5	1159.9	590.1	540.7	520.4	488.4	462.2	444.8	433.1	430.2
52.5°	3854.7	3136.7	1090.1	537.8	500.0	491.3	485.5	465.1	447.7	439.0	436.1
55°	4348.9	3476.8	1023.3	494.2	468.0	479.7	491.3	470.9	459.3	447.7	441.9
57.5°	4814.0	3764.6	915.7	456.4	444.8	465.1	488.4	473.8	459.3	450.6	447.7
60°	5130.9	3909.9	767.5	421.5	421.5	444.8	479.7	459.3	444.8	447.7	447.7
62.5°	5232.6	3854.7	607.6	389.5	398.3	421.5	453.5	441.9	436.1	450.6	450.6
65°	5081.5	3630.9	485.5	363.4	375.0	392.4	439.0	450.6	468.0	500.0	502.9
67°	4686.1	3270.4	409.9	343.0	354.7	383.7	456.4	497.1	497.1	532.0	532.0
67.5°	4569.8	3148.3	398.3	337.2	351.7	383.7	465.1	508.7	497.1	537.8	537.8
70°	3715.2	2476.8	337.2	319.8	340.1	404.1	502.9	511.6	485.5	523.3	520.4
72.5°	2755.9	1790.7	308.1	302.3	316.9	380.8	500.0	491.3	453.5	465.1	456.4
75°	1703.5	1037.8	284.9	279.1	287.8	337.2	462.2	447.7	404.1	395.4	386.6
77.5°	822.7	526.2	244.2	252.9	261.6	293.6	407.0	392.4	354.7	334.3	331.4
80°	357.6	270.4	209.3	223.8	226.7	250.0	337.2	319.8	284.9	252.9	252.9
82.5°	177.3	151.2	165.7	186.0	180.2	200.6	264.5	235.5	209.3	174.4	168.6
85°	81.4	87.2	122.1	139.5	122.1	125.0	180.2	165.7	130.8	98.8	101.7
87.5°	29.1	40.7	69.8	84.3	61.0	58.1	95.9	69.8	40.7	11.6	14.5
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)