

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: P348531

Luminaire Tested: **ARCH-N-PA1-50-727-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-727-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5729 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

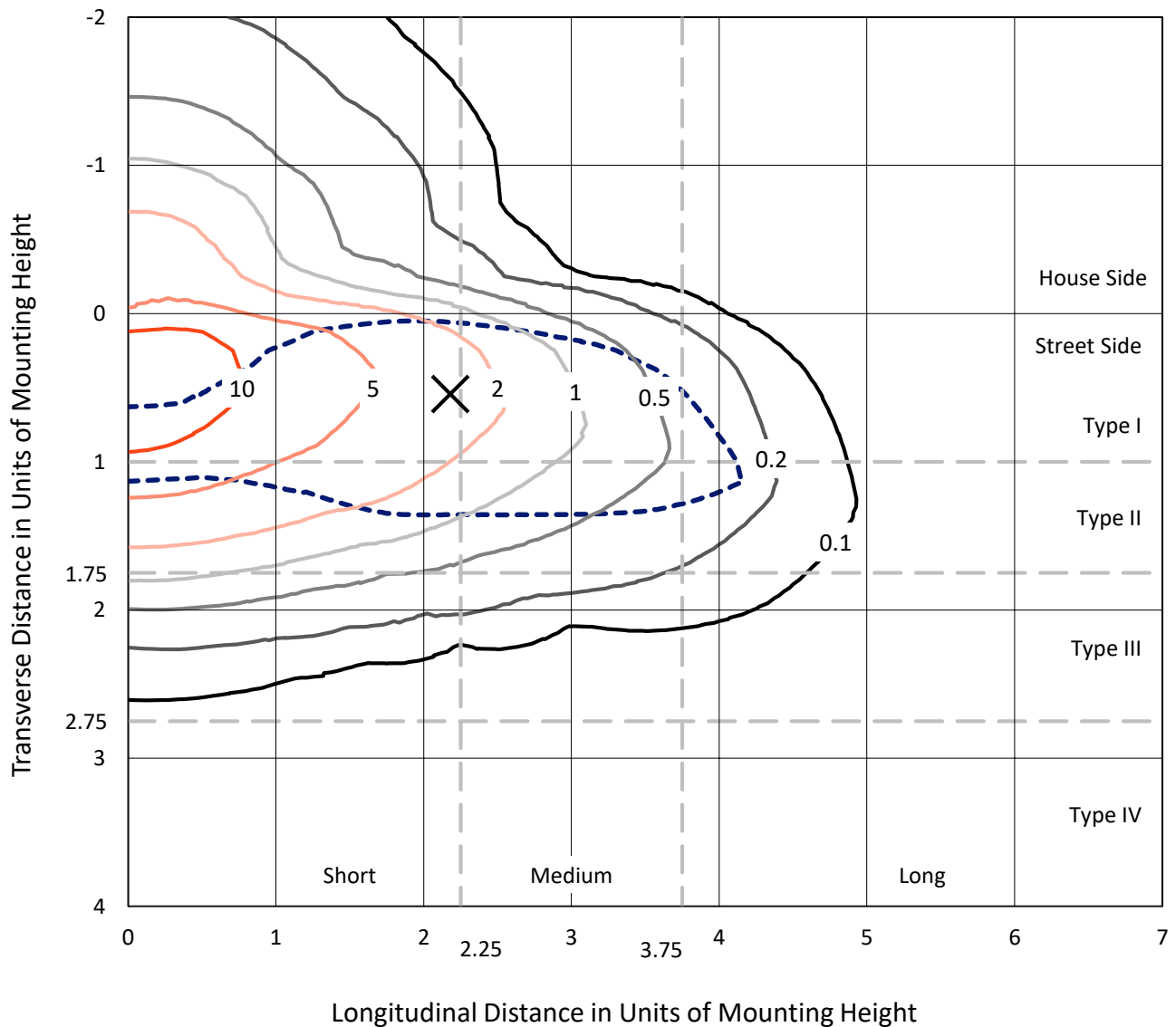
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

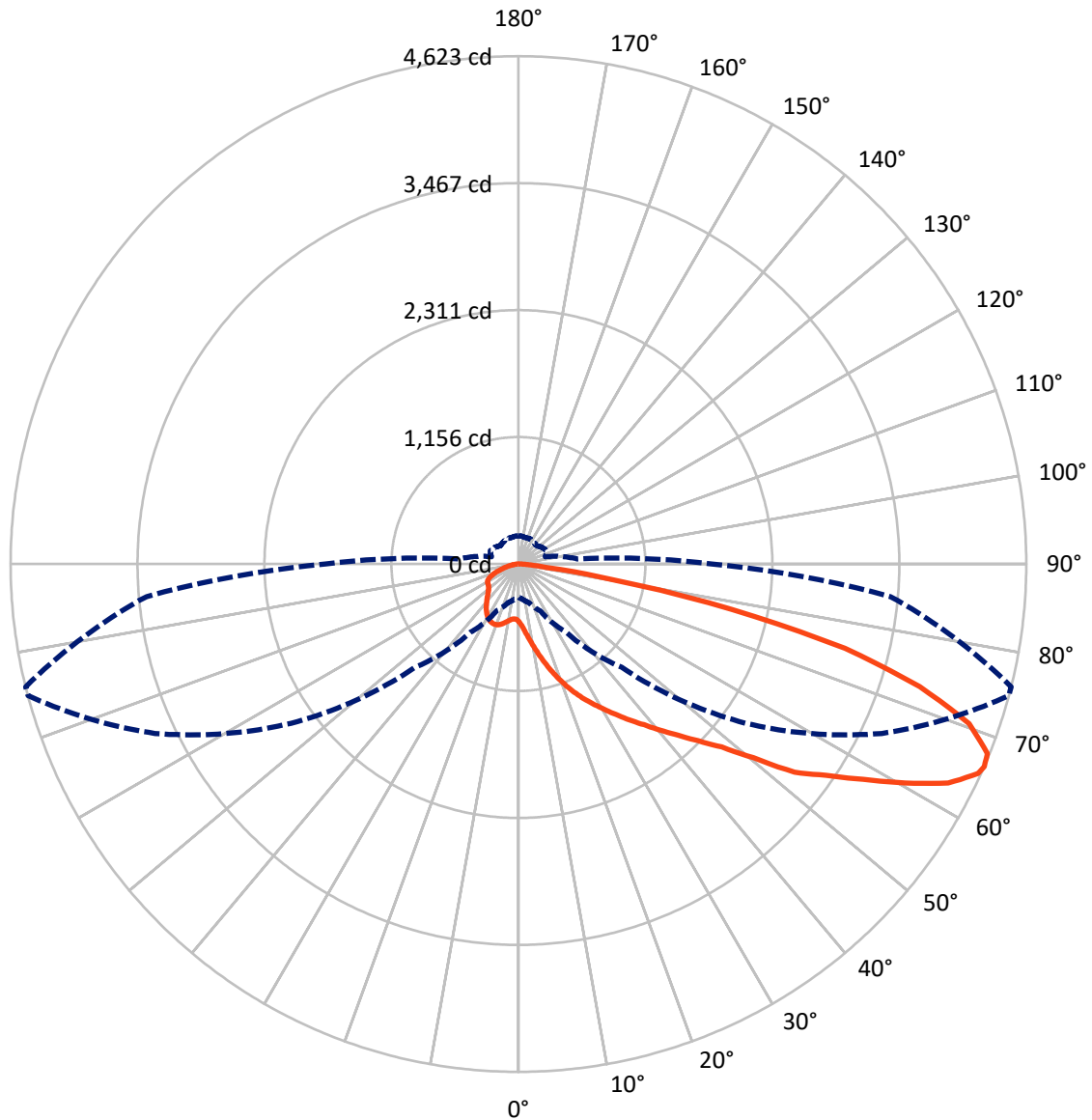
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical



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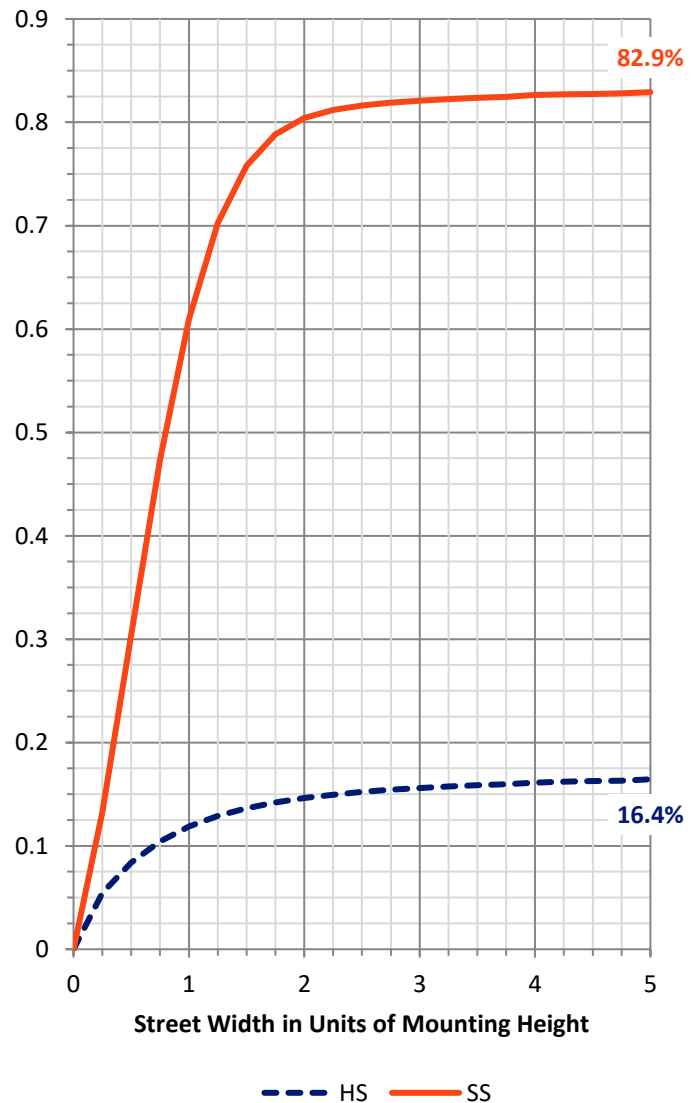
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	964.0	0.0	964.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	4765.0	0.0	4765.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	5729.0	0.0	5729.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	1.1
10°-20°	249.8	4.4
20°-30°	485.5	8.5
30°-40°	792.4	13.8
40°-50°	1082.7	18.9
50°-60°	1261.1	22.0
60°-70°	1130.6	19.7
70°-80°	571.4	10.0
80°-90°	92.3	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°	5729.0	100.0
0°-180°	5729.0	100.0

Coefficient of Utilization



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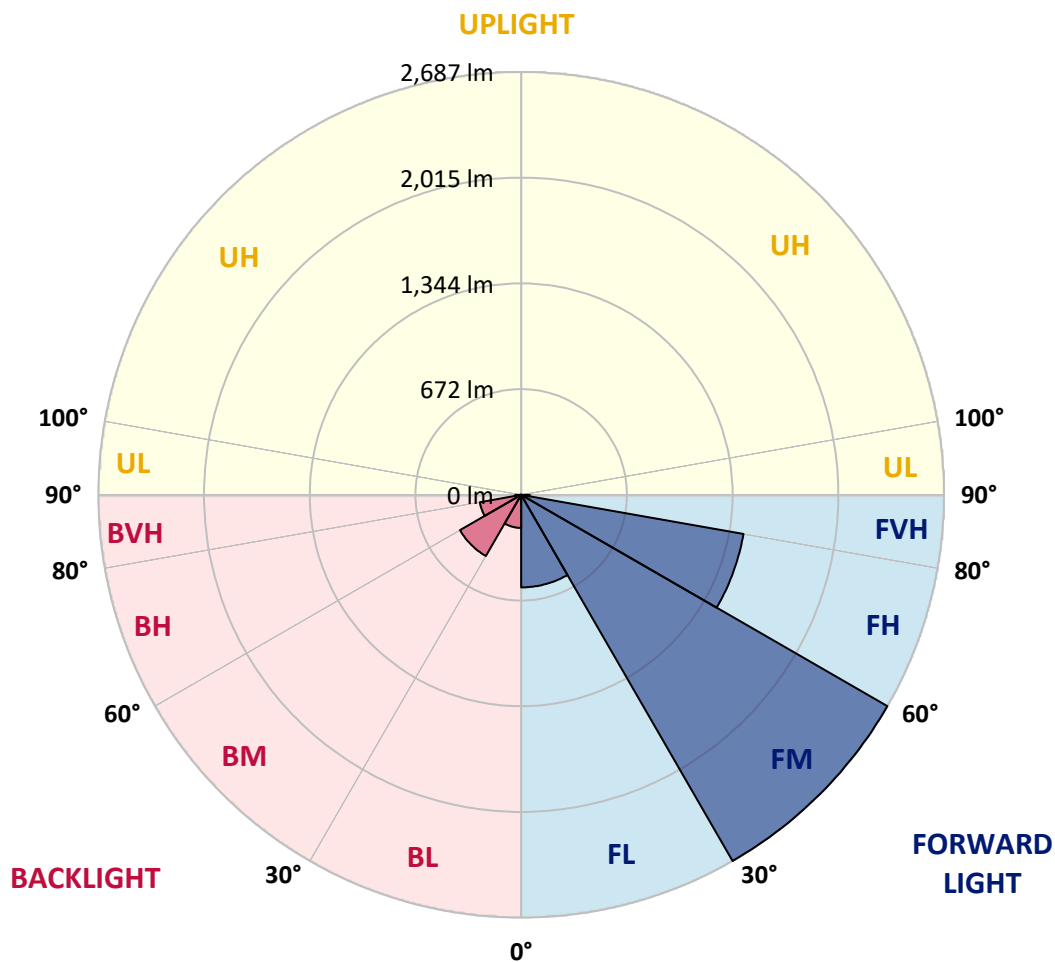
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	588.4	10.3			
FM (30°-60°)	2687.3	46.9			
FH (60°-80°)	1434.9	25.0			G1/1800
FVH (80°-90°)	54.5	1.0			G1/100
BL (0°-30°)	210.3	3.7	B1/500		
BM (30°-60°)	448.9	7.8	B1/1000		
BH (60°-80°)	267.1	4.7	B1/500		G1/500
BVH (80°-90°)	37.8	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°	76°	85°
0°	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2
2.5°	694.5	684.0	683.1	667.7	664.2	634.8	613.2	590.7	565.0	559.9	539.7
5°	892.1	891.2	877.7	852.7	833.0	782.8	733.2	680.7	623.2	613.8	568.3
7.5°	1069.9	1068.4	1058.0	1031.0	1002.6	941.0	870.2	789.6	696.3	682.5	607.0
10°	1204.9	1204.3	1200.8	1181.0	1156.8	1097.7	1019.5	909.6	781.3	762.4	655.4
12.5°	1309.1	1310.3	1312.6	1305.6	1294.2	1243.8	1163.7	1036.8	871.9	853.2	709.3
15°	1379.7	1383.2	1395.3	1405.2	1411.2	1380.3	1302.7	1167.0	973.4	951.1	769.0
17.5°	1415.3	1419.2	1440.0	1470.0	1497.6	1494.5	1432.8	1291.0	1070.9	1049.3	833.2
20°	1446.1	1449.0	1472.3	1508.3	1557.1	1578.7	1544.1	1410.5	1177.7	1152.0	901.3
22.5°	1535.1	1538.8	1545.8	1566.3	1609.4	1649.1	1632.4	1523.5	1275.5	1251.6	965.9
25°	1707.1	1711.5	1696.4	1679.1	1687.2	1714.8	1718.0	1626.5	1374.7	1347.6	1035.3
27.5°	1914.2	1920.6	1894.8	1850.2	1811.3	1800.6	1796.9	1711.0	1469.4	1438.1	1103.9
30°	2117.1	2128.1	2094.5	2036.7	1965.4	1915.2	1878.0	1793.6	1562.8	1532.8	1168.7
32.5°	2315.2	2310.8	2262.0	2205.6	2121.9	2059.1	1969.2	1882.3	1667.8	1633.4	1233.1
35°	2451.0	2452.6	2407.2	2340.3	2260.6	2212.4	2091.4	1978.0	1774.9	1743.2	1306.2
37.5°	2566.5	2559.3	2508.0	2445.6	2376.9	2356.3	2234.3	2083.4	1891.1	1856.4	1384.0
40°	2605.0	2596.7	2563.0	2518.1	2463.1	2461.3	2392.1	2202.8	2022.3	1988.1	1471.7
42.5°	2581.7	2571.0	2557.2	2544.9	2528.0	2535.8	2540.3	2342.9	2166.7	2128.3	1573.3
45°	2495.5	2479.4	2489.1	2515.8	2552.5	2596.5	2674.1	2497.9	2328.3	2296.2	1692.5
47.5°	2363.1	2348.5	2378.8	2435.8	2535.8	2647.1	2800.7	2669.0	2521.2	2489.3	1862.3
50°	2176.8	2181.0	2224.4	2328.1	2479.2	2670.4	2956.7	2895.6	2801.7	2771.9	2093.9
52.5°	1871.0	1871.8	1993.9	2164.1	2378.8	2658.3	3043.2	3185.2	3184.6	3148.7	2314.5
55°	1587.1	1604.4	1701.0	1927.2	2216.3	2610.1	3103.7	3326.0	3436.1	3393.9	2520.0
57.5°	1309.7	1319.8	1411.4	1638.6	1984.2	2481.5	3165.8	3495.0	3725.9	3699.3	2775.6
60°	994.2	1009.8	1104.5	1314.4	1687.4	2253.4	3171.6	3671.4	4072.3	4045.5	3060.9
62.5°	645.3	672.2	760.9	957.5	1328.4	1925.3	3036.2	3786.8	4400.6	4391.1	3314.2
65°	370.9	391.1	452.8	604.5	916.5	1513.4	2714.3	3742.4	4602.7	4597.2	3408.9
66°	303.0	315.7	362.9	472.4	756.2	1329.0	2527.2	3648.9	4622.7	4622.9	3398.0
67.5°	242.3	248.0	269.2	338.2	558.0	1053.4	2192.9	3442.5	4597.8	4604.6	3327.8
70°	200.5	203.4	210.1	226.8	304.6	635.2	1556.5	2906.3	4347.9	4353.1	3053.7
72.5°	179.9	181.7	184.2	186.5	214.9	355.0	950.7	2325.0	3812.1	3818.9	2636.2
75°	163.0	164.0	163.6	163.8	180.3	226.2	491.3	1735.9	3082.3	3068.7	2019.4
77.5°	143.1	144.1	142.2	142.6	159.5	173.9	244.5	1215.2	2080.1	1984.0	1137.8
80°	121.0	121.8	121.0	122.3	138.9	131.3	142.2	683.6	919.8	870.0	404.5
82.5°	91.4	94.7	97.1	102.5	114.4	93.4	95.1	266.3	280.1	266.7	124.1
85°	40.1	48.8	73.1	78.4	86.0	56.0	62.4	108.5	114.0	110.5	45.1
87.5°	10.5	11.5	36.2	45.5	47.7	25.3	32.5	49.4	52.1	49.4	15.0
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°	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2	523.2
2.5°	529.0	519.5	502.4	487.2	475.7	468.0	460.2	456.3	453.9	451.6	452.0
5°	545.9	526.7	497.3	476.5	464.8	457.4	453.6	452.0	451.0	448.7	448.7
7.5°	571.4	544.2	503.7	482.3	473.2	467.6	465.2	464.4	463.3	460.6	460.9
10°	603.5	565.4	517.2	496.3	488.0	481.8	478.5	477.3	475.1	472.0	472.4
12.5°	641.2	591.6	534.9	513.1	503.0	494.6	489.2	485.8	482.1	478.1	478.3
15°	682.5	620.2	553.9	528.0	514.2	502.6	493.8	488.2	482.3	477.3	477.1
17.5°	724.3	647.9	568.5	536.2	517.5	502.2	490.3	481.6	474.4	468.1	467.6
20°	769.4	672.8	576.7	535.4	511.3	493.0	477.3	466.4	458.4	452.2	451.2
22.5°	815.3	696.1	578.0	527.5	497.5	475.1	458.6	446.6	438.4	432.0	429.6
25°	857.3	714.2	572.4	512.1	478.3	454.1	438.0	425.7	419.1	411.5	409.2
27.5°	895.6	726.8	561.1	492.5	456.7	432.9	417.8	407.3	400.1	394.2	392.3
30°	930.1	733.6	542.6	469.1	434.5	412.9	400.1	392.9	386.7	379.3	377.9
32.5°	962.7	733.6	518.9	443.6	412.5	395.2	387.6	383.2	376.1	369.0	367.0
35°	995.4	729.2	490.9	417.0	392.3	382.6	382.2	376.9	366.2	356.5	354.0
37.5°	1029.8	720.0	459.4	392.1	375.8	376.9	380.2	368.6	353.4	339.6	335.9
40°	1068.7	707.4	426.7	370.5	362.0	374.4	375.0	356.5	326.9	314.3	311.0
42.5°	1114.4	694.7	396.4	351.4	351.1	366.8	365.1	330.4	312.7	306.3	304.6
45°	1174.5	687.5	367.6	333.4	342.5	354.6	348.1	316.1	308.7	305.0	303.4
47.5°	1269.3	691.2	341.1	319.0	333.9	342.3	316.6	310.2	305.0	300.5	298.9
50°	1387.9	689.1	319.7	309.0	324.2	329.5	302.4	302.6	299.9	294.9	292.5
52.5°	1477.2	672.4	305.9	303.4	315.7	306.7	293.5	295.2	293.9	286.5	284.0
55°	1563.3	658.0	298.9	301.3	309.4	278.3	283.0	287.3	285.9	278.7	277.5
57.5°	1670.5	655.2	294.7	301.9	304.2	264.1	272.9	278.5	277.5	274.4	273.8
60°	1801.8	656.0	290.8	302.8	298.4	253.6	263.3	270.5	271.1	270.5	270.2
62.5°	1873.9	634.8	281.0	300.1	288.0	244.5	253.4	263.9	264.1	265.3	265.1
65°	1812.7	571.4	263.0	290.6	270.7	236.9	244.9	256.3	253.4	258.7	258.7
66°	1753.2	534.9	254.0	284.3	263.3	234.0	242.1	252.5	248.8	256.0	256.0
67.5°	1631.6	473.2	237.9	271.1	252.8	229.9	239.0	246.0	241.0	251.7	250.9
70°	1409.5	366.0	205.4	241.2	235.5	223.9	234.8	233.2	225.8	242.1	239.0
72.5°	1188.4	278.1	164.9	201.9	209.3	216.3	228.7	216.9	207.5	219.0	212.2
75°	922.1	209.1	130.3	157.0	176.8	204.4	221.5	198.0	184.6	183.4	179.7
77.5°	498.5	143.5	103.3	119.8	140.4	189.6	216.7	177.8	157.5	152.9	150.0
80°	197.4	93.4	75.1	90.8	98.2	168.2	205.0	154.2	129.9	125.3	120.8
82.5°	81.5	55.2	48.4	60.9	64.0	143.9	184.0	126.4	100.4	138.9	147.4
85°	35.0	30.3	28.8	31.5	36.2	100.9	146.5	96.5	108.3	96.7	76.8
87.5°	10.5	12.8	12.3	12.1	13.2	24.1	78.0	53.7	79.5	30.1	22.6
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)