

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: P800312

Luminaire Tested: **ARCH2-90-740-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800312
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8623 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.7
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

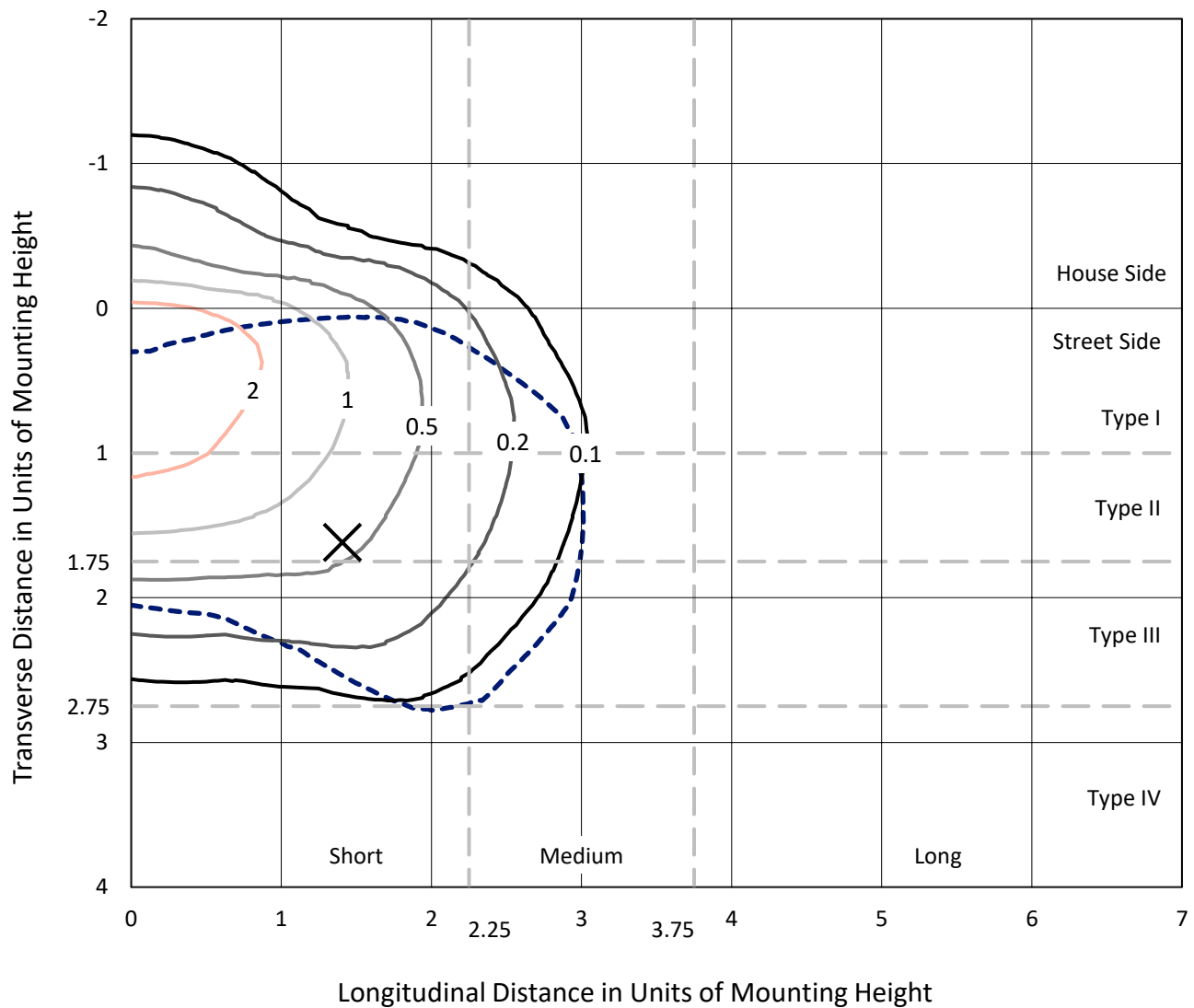


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Iso-Footcandle Lines of Horizontal Illumination

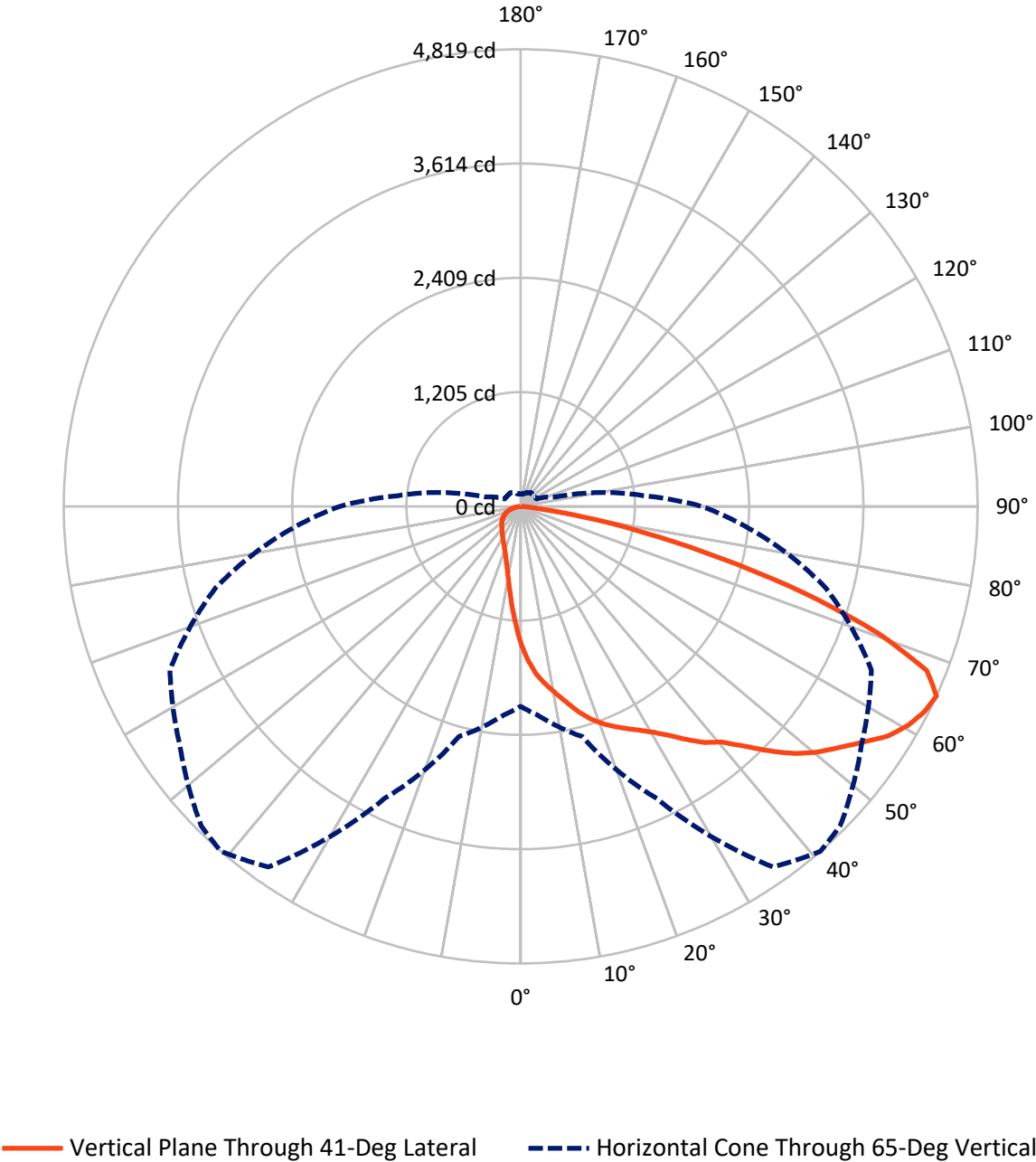
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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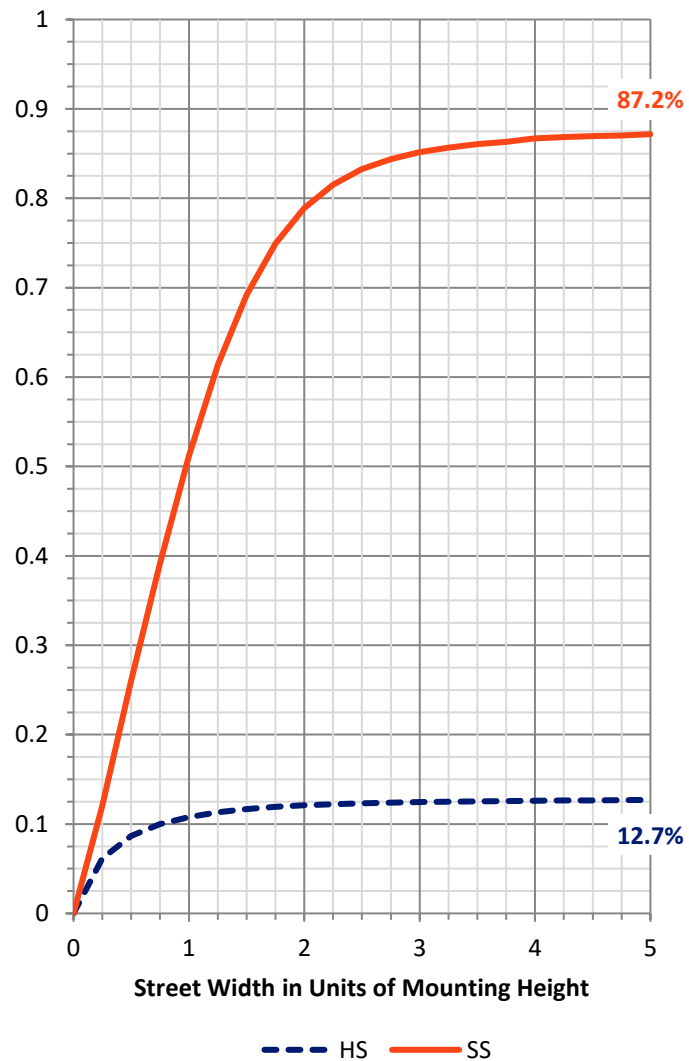
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1107.1	0.0	1107.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7515.9	0.0	7515.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	8623.0	0.0	8623.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	1.6
10°-20°	410.5	4.8
20°-30°	706.2	8.2
30°-40°	1071.1	12.4
40°-50°	1569.2	18.2
50°-60°	1981.5	23.0
60°-70°	1858.1	21.5
70°-80°	828.1	9.6
80°-90°	61.4	0.7
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°	8623.0	100.0
0°-180°	8623.0	100.0

Coefficient of Utilization



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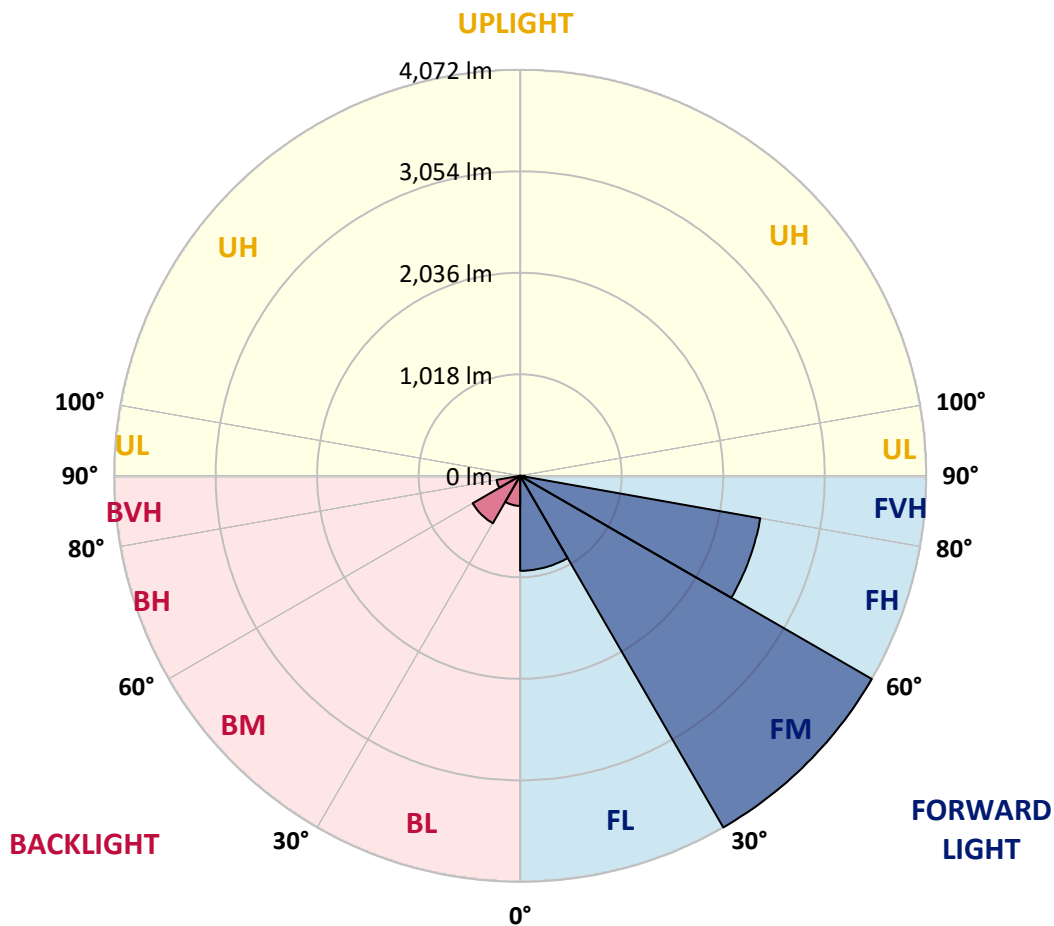
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	952.3	11.0			
FM	(30°-60°)	4072.1	47.2			
FH	(60°-80°)	2445.7	28.4			G2/5000
FVH	(80°-90°)	45.8	0.5			G1/100
BL	(0°-30°)	301.3	3.5	B1/500		
BM	(30°-60°)	549.7	6.4	B1/1000		
BH	(60°-80°)	240.5	2.8	B1/500		G1/500
BVH	(80°-90°)	15.5	0.2			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3
2.5°	1694.8	1689.3	1685.7	1665.7	1665.7	1638.4	1640.2	1614.8	1583.9	1534.8	1482.0
5°	1854.8	1847.6	1838.5	1818.5	1811.2	1783.9	1780.3	1743.9	1691.2	1605.7	1511.1
7.5°	1994.8	1987.6	1974.8	1945.8	1925.7	1893.0	1883.9	1836.6	1778.5	1673.0	1540.2
10°	2122.1	2116.7	2100.3	2063.9	2036.7	1996.7	1980.3	1916.7	1843.9	1727.5	1563.9
12.5°	2251.3	2244.0	2222.2	2191.2	2158.5	2111.2	2091.2	2009.4	1916.7	1787.5	1598.4
15°	2371.3	2360.4	2344.0	2311.3	2282.2	2236.7	2214.9	2118.5	2005.8	1854.8	1643.9
17.5°	2449.5	2440.4	2425.8	2407.6	2384.0	2349.4	2327.6	2233.1	2094.9	1920.3	1691.2
20°	2496.7	2493.1	2487.7	2476.7	2465.8	2442.2	2425.8	2336.7	2191.2	1983.9	1736.6
22.5°	2533.1	2529.5	2527.7	2527.7	2529.5	2520.4	2509.5	2433.1	2284.0	2051.2	1778.5
25°	2589.5	2587.7	2584.0	2580.4	2593.1	2594.9	2591.3	2538.6	2400.4	2140.3	1831.2
27.5°	2667.7	2662.2	2654.9	2651.3	2664.0	2673.1	2680.4	2644.0	2524.0	2231.2	1891.2
30°	2787.7	2771.3	2753.1	2740.4	2749.5	2764.1	2780.4	2758.6	2651.3	2344.0	1953.0
32.5°	2929.5	2909.5	2867.7	2844.1	2867.7	2878.6	2891.3	2880.4	2784.1	2465.8	2014.9
35°	3102.3	3078.6	3035.0	3000.5	3042.3	3018.6	3013.2	3002.3	2909.5	2585.8	2084.0
37.5°	3389.6	3355.1	3286.0	3209.6	3209.6	3158.7	3138.7	3105.9	3022.3	2693.1	2151.2
40°	3722.4	3676.9	3587.8	3475.1	3371.4	3266.0	3253.2	3229.6	3155.0	2816.8	2227.6
42.5°	4087.9	4000.6	3877.0	3740.6	3573.3	3453.3	3424.2	3356.9	3284.1	2942.3	2304.0
45°	4493.4	4311.6	4131.5	4062.4	3786.0	3676.9	3622.4	3500.5	3418.7	3073.2	2384.0
47.5°	4558.9	4417.0	4297.0	4286.1	3984.2	3893.3	3831.5	3656.9	3564.2	3213.2	2467.6
50°	4522.5	4437.0	4449.8	4406.1	4129.7	4069.7	4022.4	3824.2	3707.8	3347.8	2544.0
52.5°	4369.8	4417.0	4489.8	4409.8	4267.9	4218.8	4195.2	4004.2	3842.4	3471.4	2613.1
55°	4187.9	4220.6	4377.0	4475.2	4427.9	4384.3	4362.5	4213.4	3975.1	3575.1	2676.8
57.5°	3922.4	3907.9	4080.6	4464.3	4595.2	4569.8	4546.1	4418.9	4098.8	3649.6	2716.8
60°	3524.2	3493.3	3711.5	4246.1	4649.8	4689.8	4678.9	4555.2	4193.4	3647.8	2700.4
62.5°	2835.0	2911.4	3213.2	3889.7	4673.4	4775.3	4755.3	4566.1	4224.3	3542.4	2596.8
65°	2107.6	2216.7	2513.1	3398.7	4640.7	4818.9	4764.4	4387.9	4080.6	3333.2	2369.5
67.5°	1518.4	1614.8	1831.2	2796.8	4326.1	4618.9	4555.2	4097.0	3749.7	3036.8	2054.9
70°	1038.3	1107.4	1254.7	2036.7	3693.3	3993.3	3953.3	3662.4	3227.8	2684.0	1669.3
72.5°	732.8	761.9	856.5	1343.8	2805.9	3133.2	3085.9	3013.2	2593.1	2231.2	1298.4
75°	549.2	567.4	618.3	869.2	1893.0	2171.2	2127.6	2169.4	1936.7	1689.3	945.6
77.5°	207.3	225.5	351.0	554.6	1120.2	1332.9	1289.3	1314.7	1076.5	852.9	471.0
80°	56.4	60.0	116.4	263.7	509.2	663.7	603.7	518.3	400.1	392.8	249.1
82.5°	23.6	27.3	52.7	141.8	181.8	181.8	152.8	189.1	152.8	183.7	120.0
85°	9.1	10.9	12.7	36.4	23.6	25.5	27.3	36.4	30.9	38.2	27.3
87.5°	0.0	0.0	0.0	1.8	1.8	3.6	1.8	3.6	5.5	5.5	5.5
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°	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3	1469.3
2.5°	1460.2	1440.2	1411.1	1363.8	1314.7	1287.5	1252.9	1247.5	1211.1	1207.5	1192.9
5°	1469.3	1427.5	1352.9	1262.0	1172.9	1103.8	1052.9	1025.6	972.9	972.9	958.3
7.5°	1476.6	1411.1	1291.1	1156.5	1034.7	942.0	872.9	843.8	796.5	792.8	781.9
10°	1478.4	1391.1	1223.8	1049.3	900.1	805.6	738.3	705.6	663.7	660.1	652.8
12.5°	1493.0	1380.2	1163.8	956.5	803.8	701.9	636.5	609.2	576.5	572.8	565.5
15°	1516.6	1380.2	1112.9	878.3	718.3	623.7	567.4	541.9	518.3	514.6	511.0
17.5°	1540.2	1376.6	1062.0	805.6	647.4	561.9	512.8	492.8	474.6	472.8	469.2
20°	1562.1	1374.8	1011.1	743.7	592.8	511.0	472.8	454.6	440.1	440.1	438.2
22.5°	1583.9	1371.1	962.0	685.6	545.5	472.8	440.1	420.1	409.2	409.2	407.3
25°	1616.6	1371.1	916.5	636.5	507.3	443.7	411.0	396.4	387.3	385.5	385.5
27.5°	1654.8	1382.0	876.5	592.8	474.6	414.6	389.2	374.6	363.7	360.1	361.9
30°	1696.6	1391.1	840.1	554.6	443.7	392.8	365.5	351.0	340.1	336.4	338.2
32.5°	1738.4	1402.0	807.4	520.1	412.8	372.8	345.5	329.1	318.2	316.4	316.4
35°	1783.9	1412.9	774.7	491.0	387.3	352.8	327.3	309.1	301.9	298.2	300.0
37.5°	1829.4	1431.1	743.7	463.7	369.1	334.6	311.0	292.8	287.3	285.5	285.5
40°	1883.9	1458.4	731.0	445.5	352.8	318.2	298.2	280.0	274.6	274.6	274.6
42.5°	1929.4	1480.2	720.1	425.5	340.1	303.7	285.5	271.0	267.3	265.5	267.3
45°	1974.8	1500.2	705.6	407.3	323.7	289.1	274.6	260.0	256.4	256.4	256.4
47.5°	2020.3	1511.1	685.6	389.2	309.1	276.4	263.7	250.9	247.3	247.3	247.3
50°	2056.7	1520.2	656.5	369.1	292.8	265.5	252.8	240.0	236.4	236.4	236.4
52.5°	2093.0	1522.0	625.5	345.5	276.4	252.8	241.9	229.1	225.5	223.7	223.7
55°	2125.8	1520.2	589.2	318.2	258.2	238.2	229.1	218.2	210.9	203.7	207.3
57.5°	2149.4	1518.4	547.4	291.0	240.0	223.7	220.0	205.5	190.9	172.8	176.4
60°	2140.3	1498.4	501.9	256.4	220.0	209.1	209.1	189.1	163.7	154.6	156.4
62.5°	2082.1	1442.0	454.6	220.0	200.0	194.6	192.8	170.9	150.9	141.8	143.7
65°	1907.6	1300.2	385.5	187.3	180.0	178.2	178.2	158.2	140.0	129.1	130.9
67.5°	1642.1	1091.1	314.6	158.2	160.0	163.7	163.7	145.5	127.3	116.4	118.2
70°	1316.6	852.9	250.9	136.4	138.2	143.7	147.3	130.9	114.6	103.7	103.7
72.5°	991.1	647.4	201.8	114.6	123.7	123.7	129.1	116.4	100.0	89.1	90.9
75°	718.3	463.7	160.0	96.4	107.3	105.5	105.5	98.2	85.5	78.2	78.2
77.5°	340.1	243.7	127.3	69.1	83.6	81.8	83.6	78.2	72.7	65.5	67.3
80°	167.3	120.0	81.8	49.1	58.2	60.0	65.5	61.8	60.0	54.6	54.6
82.5°	80.0	47.3	38.2	34.6	40.0	41.8	45.5	45.5	47.3	43.6	43.6
85°	21.8	12.7	16.4	21.8	25.5	27.3	30.9	32.7	32.7	30.9	32.7
87.5°	5.5	5.5	7.3	10.9	12.7	14.5	16.4	16.4	7.3	0.0	0.0
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)