

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: P800003

Luminaire Tested: **ARCH2-70-727-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-70-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 555mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9661 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

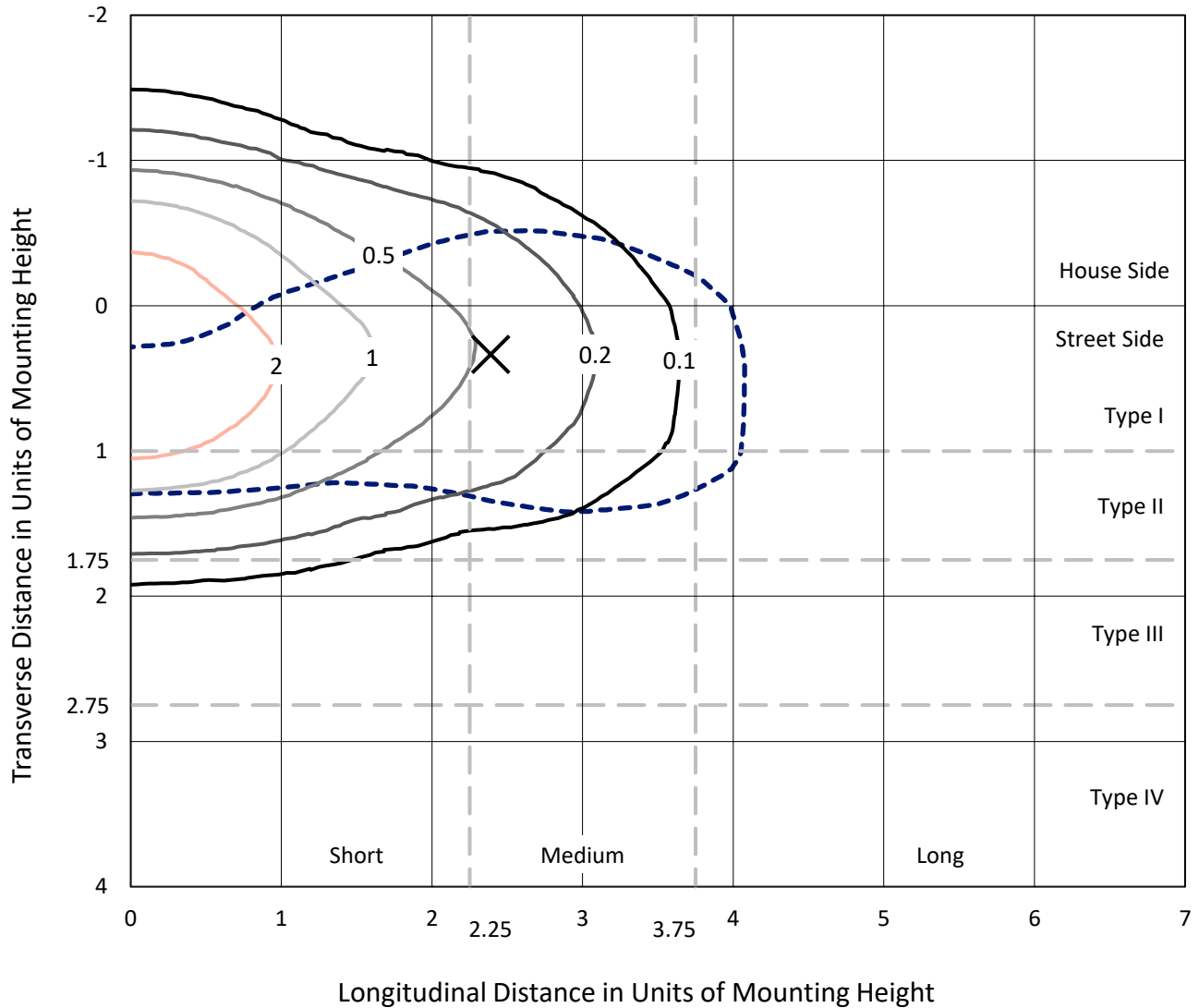
Input Watts (W): 73.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

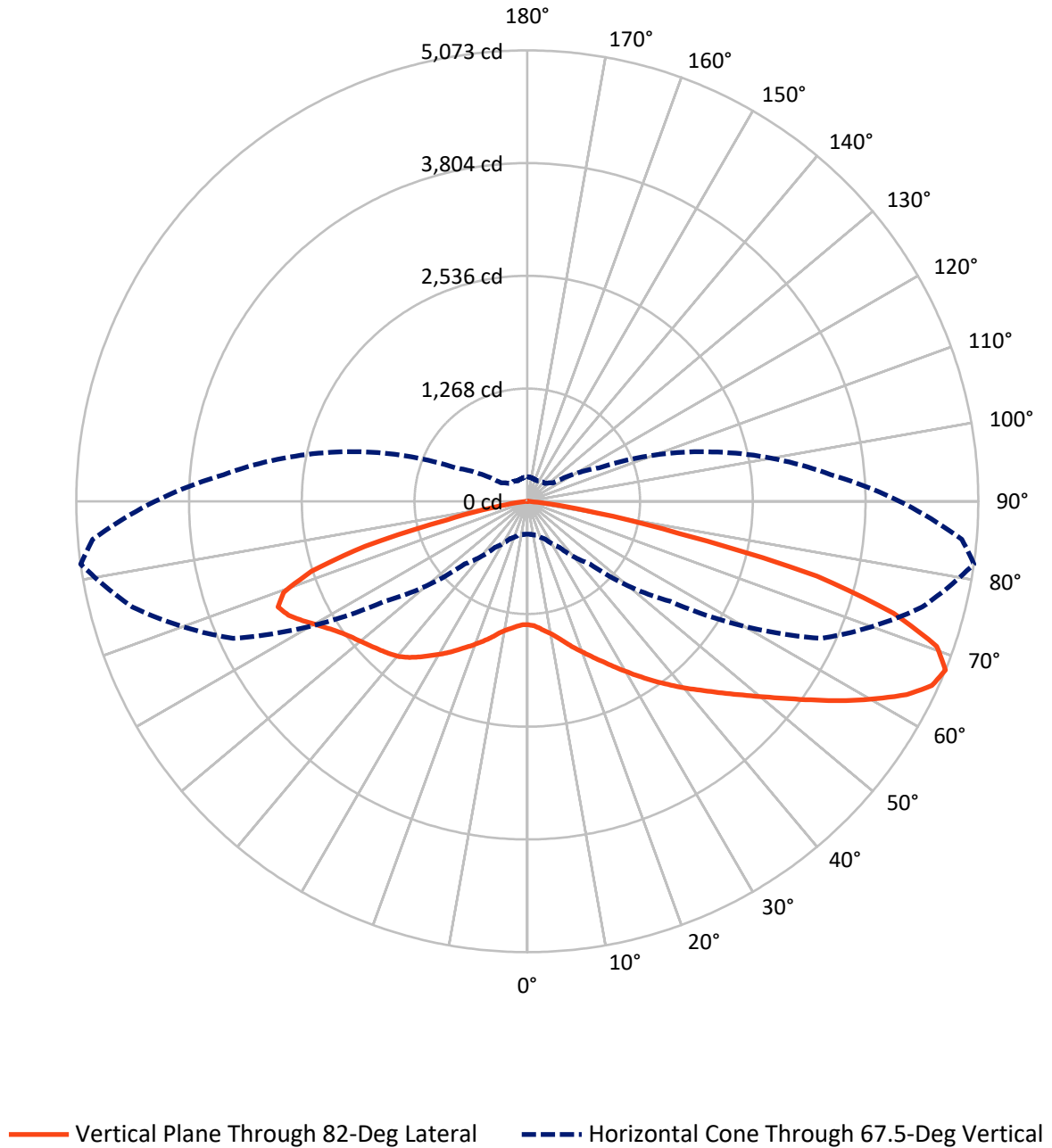
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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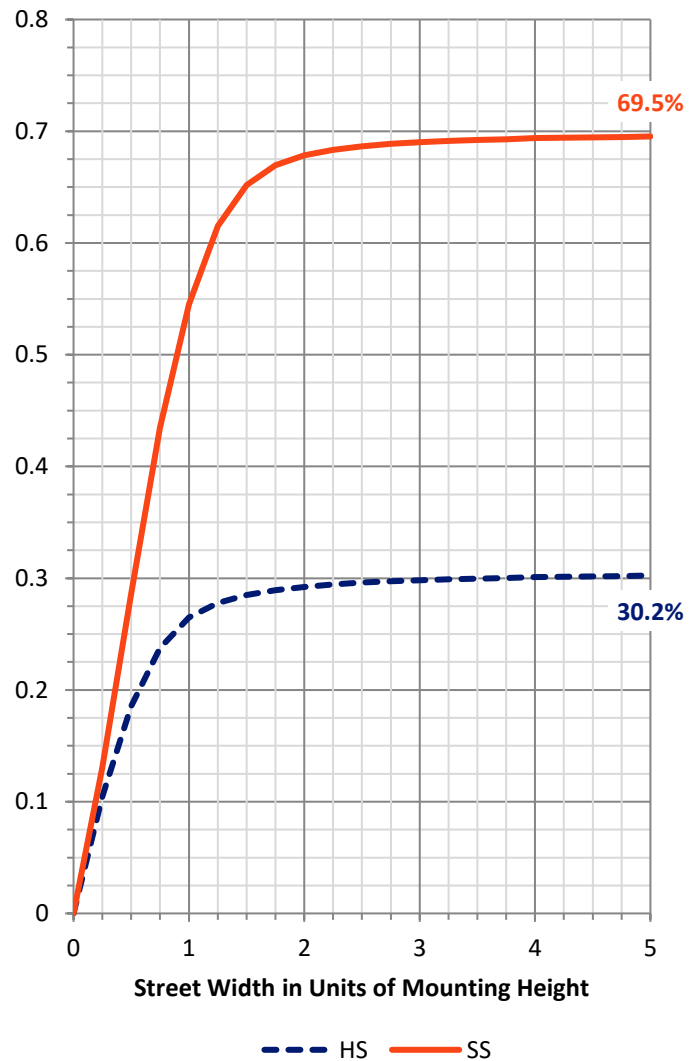
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2942.2	0.0	2942.2
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	6718.8	0.0	6718.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	9661.0	0.0	9661.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.5	1.5
10°-20°	517.0	5.4
20°-30°	1039.0	10.8
30°-40°	1632.1	16.9
40°-50°	1988.2	20.6
50°-60°	1878.6	19.4
60°-70°	1551.3	16.1
70°-80°	844.8	8.7
80°-90°	66.4	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°	9661.0	100.0
0°-180°	9661.0	100.0

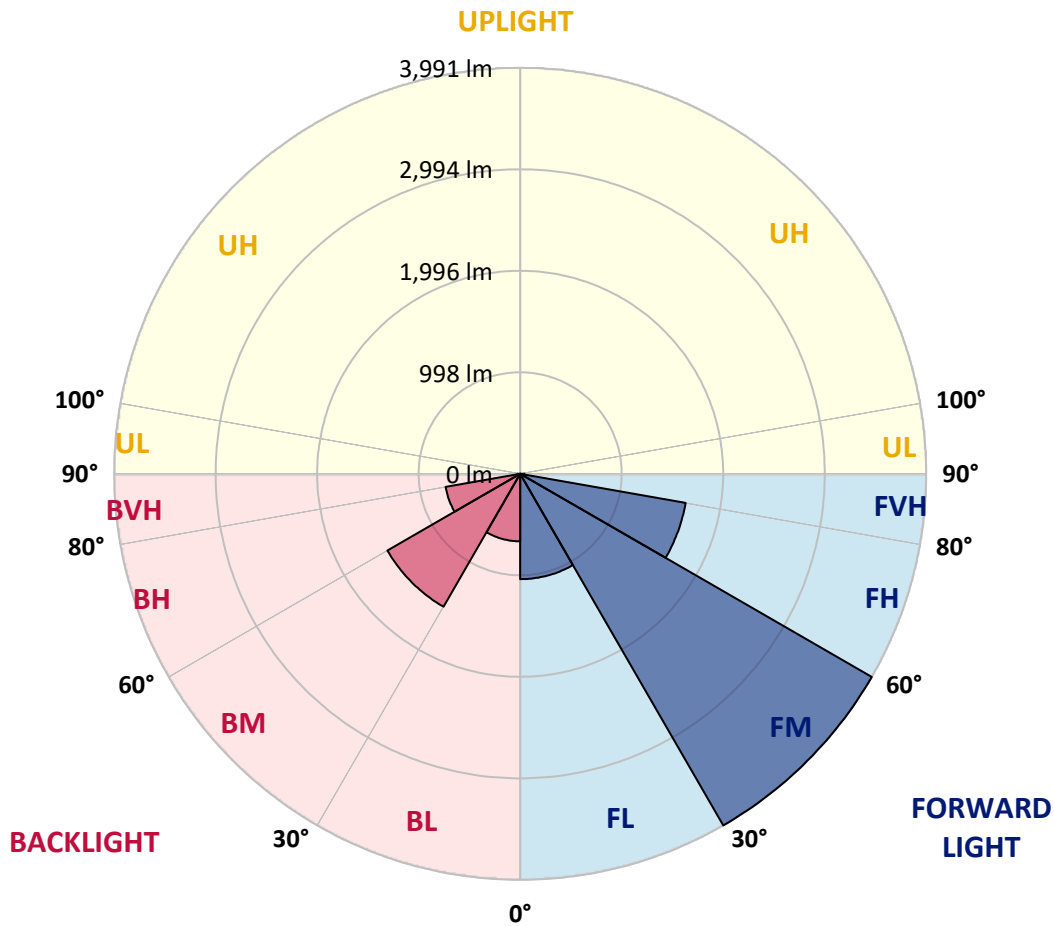


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1036.0	10.7			
FM (30°-60°)	3991.4	41.3			
FH (60°-80°)	1651.4	17.1			G1/1800
FVH (80°-90°)	40.0	0.4			G1/100
BL (0°-30°)	663.5	6.9	B2/1000		
BM (30°-60°)	1507.6	15.6	B2/2500		
BH (60°-80°)	744.7	7.7	B2/1000		G2/1000
BVH (80°-90°)	26.4	0.3			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8
2.5°	1451.9	1451.9	1463.1	1463.1	1453.3	1437.9	1433.7	1416.8	1401.4	1401.4	1402.8
5°	1590.8	1589.4	1597.8	1586.6	1562.7	1531.8	1510.8	1474.3	1443.5	1433.7	1432.3
7.5°	1760.5	1759.1	1763.3	1745.1	1700.2	1649.7	1607.6	1548.7	1498.2	1477.1	1471.5
10°	1949.9	1948.5	1944.3	1913.4	1853.1	1774.5	1711.4	1630.0	1554.3	1520.6	1513.6
12.5°	2167.3	2164.5	2154.7	2109.8	2027.0	1926.0	1834.9	1729.6	1628.6	1582.3	1566.9
15°	2410.0	2405.8	2387.6	2332.8	2222.0	2094.4	1976.5	1841.9	1718.4	1658.1	1637.1
17.5°	2665.3	2665.3	2637.2	2555.9	2432.4	2273.9	2128.0	1956.9	1812.4	1738.1	1712.8
20°	2924.8	2923.4	2888.3	2790.2	2644.3	2461.9	2276.7	2088.8	1909.2	1819.4	1788.6
22.5°	3198.4	3195.6	3152.1	3039.8	2865.9	2659.7	2443.7	2219.2	2015.8	1907.8	1868.5
25°	3512.6	3508.4	3455.1	3317.6	3111.4	2878.5	2631.6	2372.1	2137.9	2006.0	1959.7
27.5°	3846.5	3840.8	3777.7	3617.8	3392.0	3111.4	2839.3	2548.9	2272.5	2115.4	2063.5
30°	4143.8	4139.6	4070.9	3906.8	3647.3	3342.9	3037.0	2725.6	2414.2	2231.8	2167.3
32.5°	4368.3	4368.3	4306.6	4145.2	3875.9	3564.5	3236.2	2892.6	2561.5	2356.7	2280.9
35°	4504.4	4508.6	4455.3	4326.2	4072.3	3773.5	3442.5	3088.9	2718.6	2490.0	2408.6
37.5°	4524.0	4538.0	4507.2	4420.2	4208.4	3947.5	3644.5	3278.3	2881.3	2624.6	2533.4
40°	4432.8	4442.6	4444.0	4410.4	4264.5	4072.3	3822.6	3478.9	3053.9	2766.3	2661.1
42.5°	4250.5	4257.5	4270.1	4279.9	4223.8	4127.0	3958.7	3665.5	3237.6	2910.8	2787.3
45°	4014.8	4013.4	4034.4	4076.5	4073.7	4096.2	4034.4	3835.2	3428.4	3074.9	2927.6
47.5°	3662.7	3655.7	3730.0	3825.4	3873.1	3978.3	4035.8	3968.5	3636.0	3255.9	3087.5
50°	3111.4	3104.4	3267.1	3491.5	3631.8	3791.7	3958.7	4048.5	3853.5	3459.3	3261.5
52.5°	2440.9	2433.8	2640.1	3032.8	3338.6	3571.5	3803.0	4066.7	4059.7	3686.5	3457.9
55°	1815.2	1809.6	2010.2	2435.2	2930.4	3316.2	3612.2	4019.0	4253.3	3947.5	3696.4
57.5°	1279.3	1276.5	1450.5	1802.6	2405.8	3004.8	3428.4	3926.4	4431.4	4230.8	3965.7
60°	897.8	893.6	1019.8	1292.0	1819.4	2534.8	3246.1	3803.0	4564.7	4510.0	4251.9
62.5°	604.6	601.8	691.6	918.8	1292.0	1951.3	2969.7	3720.2	4640.4	4790.5	4540.8
65°	458.7	457.3	498.0	622.8	914.6	1401.4	2530.6	3710.4	4650.3	5001.0	4786.3
67.5°	370.3	371.7	394.2	465.7	632.7	996.0	1962.5	3648.7	4598.4	5072.5	4905.6
70°	303.0	303.0	312.8	360.5	467.1	671.9	1370.5	3368.1	4453.9	4885.9	4763.9
72.5°	231.5	232.9	263.7	291.8	352.1	471.3	878.1	2787.3	4113.0	4308.0	4215.4
75°	183.8	182.4	200.6	239.9	273.5	336.7	538.7	1999.0	3500.0	3366.7	3307.8
77.5°	131.9	130.5	144.5	178.2	207.6	238.5	321.2	1008.6	1903.6	1749.3	1705.8
80°	89.8	87.0	99.6	123.4	137.5	140.3	157.1	387.2	830.5	782.8	772.9
82.5°	46.3	46.3	53.3	70.1	71.5	72.9	70.1	124.8	274.9	256.7	245.5
85°	18.2	18.2	19.6	23.8	23.8	25.3	25.3	32.3	29.5	28.1	26.7
87.5°	1.4	1.4	2.8	2.8	4.2	4.2	4.2	5.6	7.0	7.0	7.0
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°	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8	1388.8
2.5°	1400.0	1394.4	1376.1	1371.9	1369.1	1364.9	1366.3	1356.5	1352.3	1353.7	1348.1
5°	1425.2	1415.4	1393.0	1383.2	1380.3	1376.1	1380.3	1373.3	1366.3	1369.1	1366.3
7.5°	1460.3	1446.3	1418.2	1408.4	1407.0	1402.8	1408.4	1402.8	1397.2	1400.0	1394.4
10°	1496.8	1478.5	1447.7	1437.9	1437.9	1436.5	1442.1	1433.7	1428.0	1429.4	1426.6
12.5°	1550.1	1526.2	1492.6	1484.2	1479.9	1484.2	1485.6	1474.3	1464.5	1465.9	1461.7
15°	1614.6	1588.0	1551.5	1538.9	1536.1	1534.7	1529.0	1515.0	1502.4	1501.0	1496.8
17.5°	1684.8	1651.1	1607.6	1595.0	1582.3	1578.1	1564.1	1545.9	1526.2	1526.2	1520.6
20°	1752.1	1714.2	1662.3	1644.1	1625.8	1609.0	1585.2	1555.7	1530.4	1526.2	1520.6
22.5°	1825.0	1780.1	1719.8	1693.2	1660.9	1627.2	1586.6	1547.3	1515.0	1508.0	1503.8
25°	1906.4	1850.3	1778.7	1739.5	1687.6	1635.7	1575.3	1524.8	1487.0	1475.7	1472.9
27.5°	1996.2	1928.8	1841.9	1784.4	1708.6	1627.2	1550.1	1489.8	1443.5	1429.4	1425.2
30°	2087.4	2007.4	1899.4	1815.2	1708.6	1600.6	1503.8	1433.7	1380.3	1360.7	1357.9
32.5°	2178.5	2088.8	1951.3	1832.0	1691.8	1555.7	1443.5	1360.7	1300.4	1276.5	1282.2
35°	2288.0	2178.5	1999.0	1839.1	1663.7	1501.0	1374.7	1277.9	1216.2	1195.2	1199.4
37.5°	2401.6	2268.3	2036.9	1833.4	1624.4	1439.3	1297.6	1203.6	1126.4	1090.0	1094.2
40°	2499.8	2349.7	2063.5	1813.8	1573.9	1369.1	1221.8	1098.4	991.8	956.7	952.5
42.5°	2592.4	2410.0	2077.5	1784.4	1516.4	1287.8	1113.8	955.3	848.7	805.2	806.6
45°	2689.2	2468.9	2071.9	1745.1	1444.9	1192.4	974.9	815.0	721.0	681.8	683.2
47.5°	2800.0	2532.0	2066.3	1703.0	1357.9	1068.9	841.7	691.6	610.2	582.2	579.4
50°	2917.8	2602.2	2059.3	1651.1	1261.1	931.5	709.8	576.5	507.8	489.6	485.4
52.5°	3051.1	2677.9	2055.1	1589.4	1144.7	785.6	592.0	475.5	429.3	416.6	415.2
55°	3211.0	2766.3	2060.7	1515.0	1004.4	648.1	492.4	409.6	378.8	371.7	370.3
57.5°	3406.0	2879.9	2077.5	1428.0	857.1	528.9	419.4	368.9	349.3	343.7	343.7
60°	3617.8	3009.0	2108.4	1329.8	709.8	436.3	371.7	336.7	328.3	335.3	335.3
62.5°	3846.5	3160.5	2163.1	1210.6	572.3	368.9	333.9	310.0	304.4	318.4	319.8
65°	4058.3	3307.8	2198.2	1067.5	454.5	319.8	304.4	283.4	286.2	300.2	298.8
67.5°	4188.7	3429.8	2149.1	888.0	360.5	283.4	273.5	255.3	262.3	273.5	274.9
70°	4108.8	3361.1	1906.4	670.5	282.0	246.9	239.9	228.7	234.3	248.3	253.9
72.5°	3717.4	3010.4	1482.8	453.1	227.3	207.6	210.4	204.8	211.8	224.4	237.1
75°	3017.4	2275.3	994.6	290.4	179.6	176.8	181.0	176.8	179.6	192.2	199.2
77.5°	1575.3	1109.6	495.2	181.0	133.3	137.5	144.5	145.9	154.3	157.1	159.9
80°	735.1	499.4	206.2	101.0	88.4	96.8	110.8	112.2	115.0	119.2	120.6
82.5°	239.9	150.1	95.4	54.7	50.5	54.7	71.5	85.6	87.0	95.4	95.4
85°	25.3	15.4	21.0	22.4	19.6	23.8	32.3	30.9	14.0	8.4	8.4
87.5°	7.0	5.6	7.0	7.0	5.6	5.6	4.2	1.4	0.0	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)