

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: P836898

Luminaire Tested: **ARCH3-90-727-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13753 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.1
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

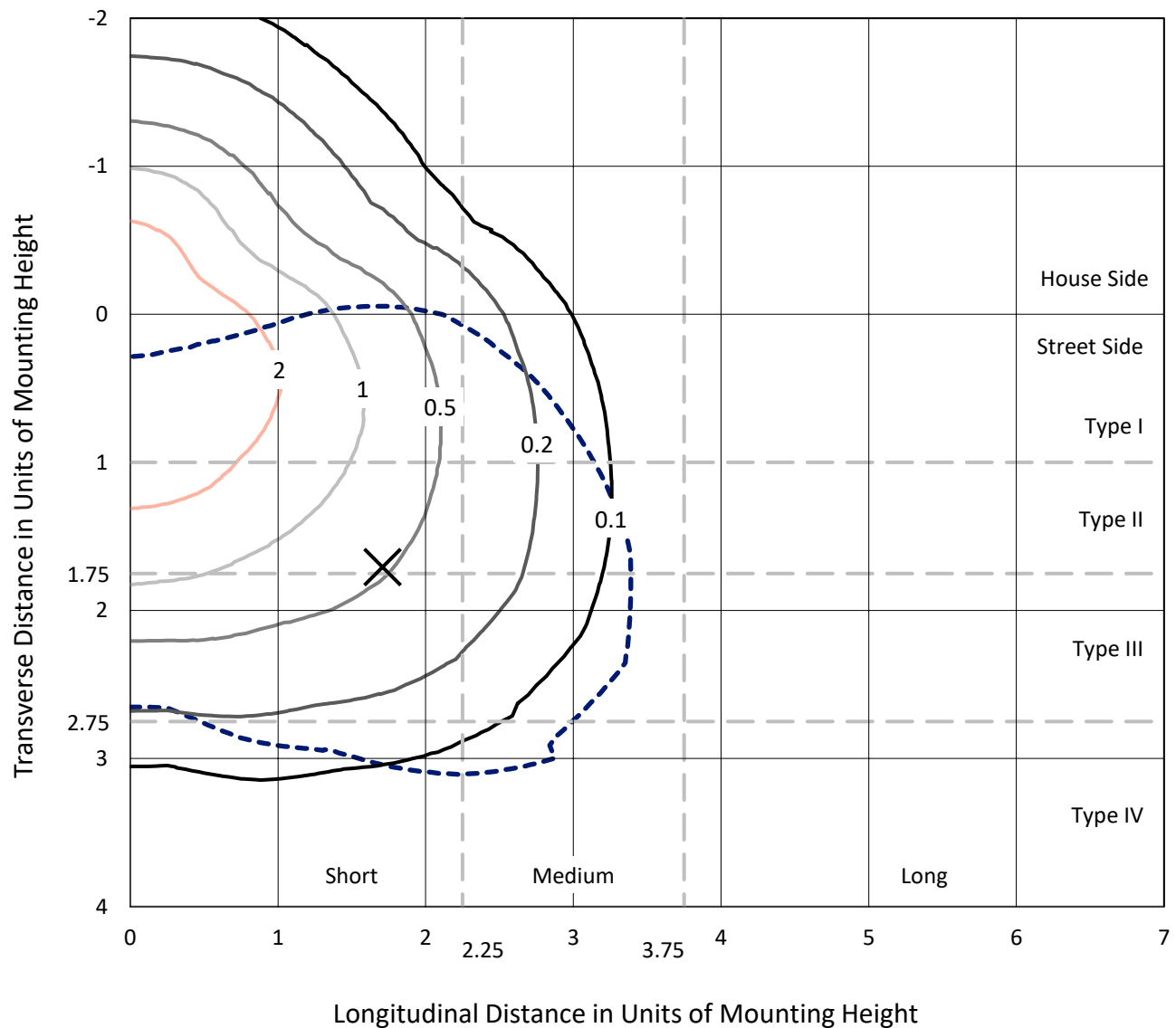


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Iso-Footcandle Lines of Horizontal Illumination

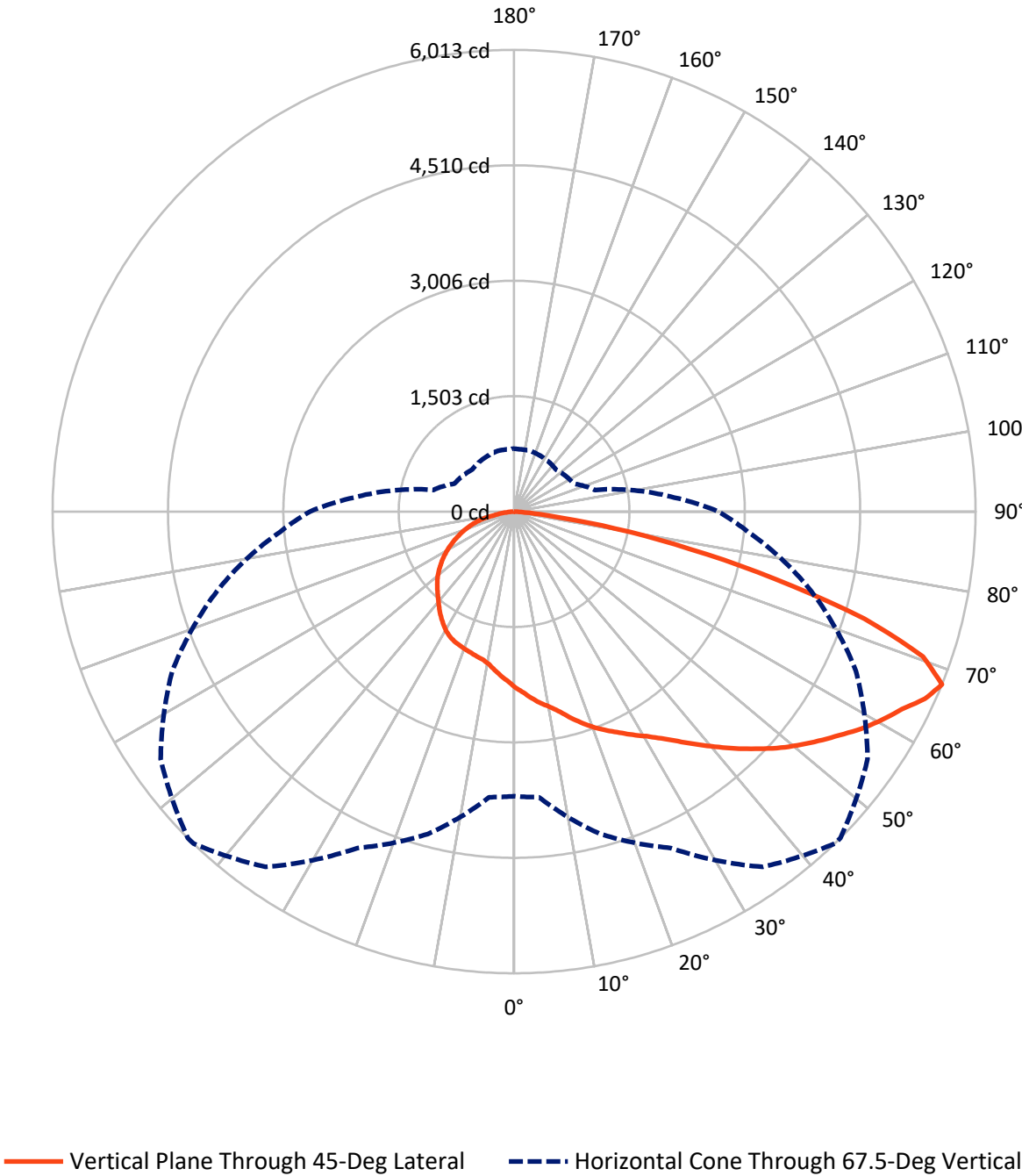
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3674.1	0.0	3674.1
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	10078.9	0.0	10078.9
	% Fixture	73.3	0.0	73.3
Total	Lumens	13753.0	0.0	13753.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.6	1.6
10°-20°	678.4	4.9
20°-30°	1171.0	8.5
30°-40°	1726.8	12.6
40°-50°	2339.5	17.0
50°-60°	2859.5	20.8
60°-70°	2949.1	21.4
70°-80°	1615.3	11.7
80°-90°	193.6	1.4
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°	13753.0	100.0
0°-180°	13753.0	100.0

Coefficient of Utilization



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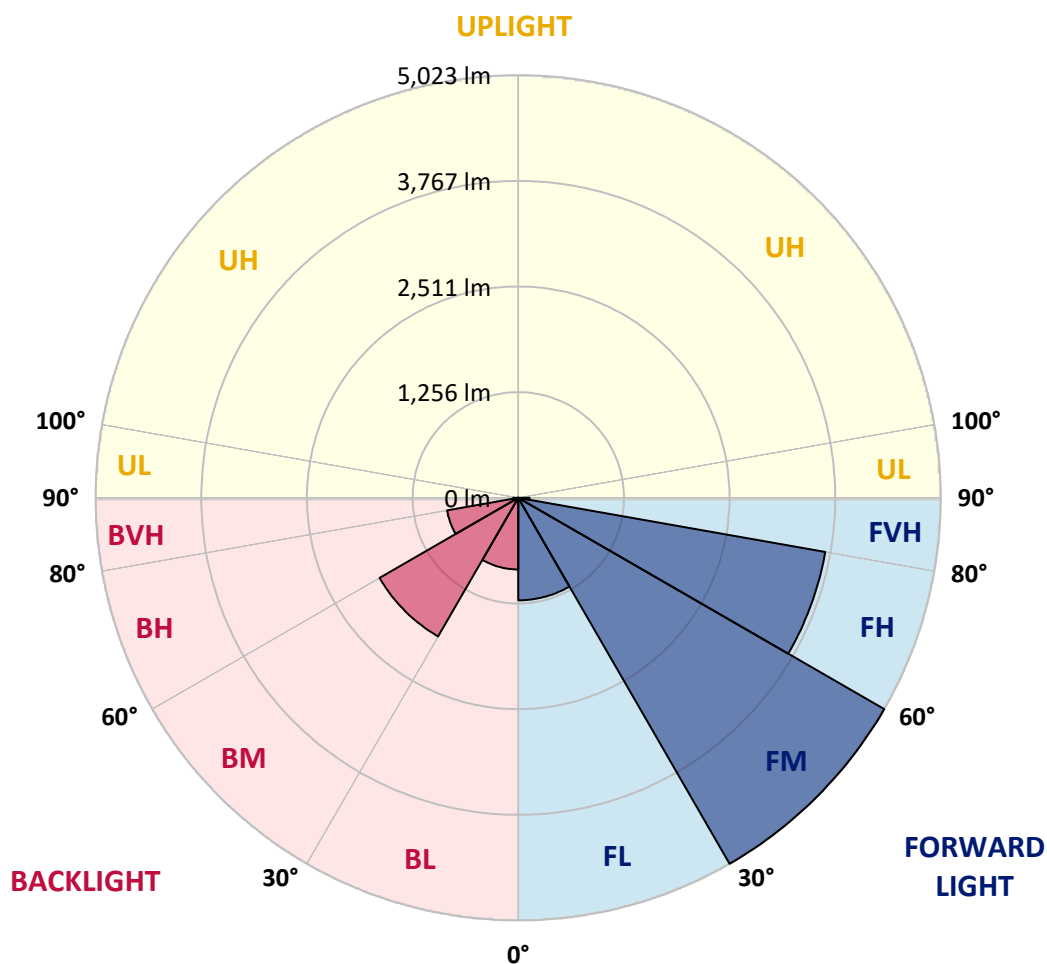
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1217.5	8.9			
FM	(30°-60°)	5022.7	36.5			
FH	(60°-80°)	3705.3	26.9			G2/5000
FVH	(80°-90°)	133.4	1.0			G2/225
BL	(0°-30°)	851.5	6.2	B2/1000		
BM	(30°-60°)	1903.1	13.8	B2/2500		
BH	(60°-80°)	859.2	6.2	B2/1000		G2/1000
BVH	(80°-90°)	60.2	0.4			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7
2.5°	2394.2	2392.1	2396.3	2381.6	2362.8	2360.7	2360.7	2348.2	2333.5	2304.2	2281.2
5°	2507.2	2503.0	2505.1	2484.2	2459.1	2446.5	2444.4	2417.2	2383.7	2337.7	2295.8
7.5°	2611.8	2607.7	2605.6	2582.5	2544.9	2524.0	2521.9	2482.1	2442.3	2371.2	2310.5
10°	2710.2	2706.0	2701.8	2670.4	2624.4	2593.0	2588.8	2538.6	2488.4	2400.5	2323.0
12.5°	2835.8	2827.4	2823.2	2785.6	2718.6	2685.1	2678.8	2611.8	2549.1	2442.3	2348.2
15°	2967.6	2961.4	2955.1	2919.5	2844.2	2800.2	2789.7	2706.0	2620.2	2496.7	2385.8
17.5°	3066.0	3059.7	3059.7	3028.3	2959.3	2909.0	2900.7	2800.2	2693.5	2547.0	2415.1
20°	3126.7	3120.4	3126.7	3107.8	3055.5	3013.7	3005.3	2894.4	2766.7	2593.0	2440.2
22.5°	3170.6	3164.4	3174.8	3166.4	3128.8	3103.7	3097.4	2988.6	2842.1	2641.1	2465.4
25°	3248.1	3248.1	3248.1	3233.4	3197.8	3189.5	3189.5	3095.3	2938.3	2703.9	2503.0
27.5°	3402.9	3394.6	3384.1	3342.2	3281.6	3279.5	3292.0	3204.1	3049.3	2785.6	2549.1
30°	3631.1	3626.9	3587.1	3499.2	3396.7	3386.2	3394.6	3321.3	3168.5	2871.4	2601.4
32.5°	3926.1	3911.5	3829.9	3698.0	3551.5	3503.4	3520.1	3442.7	3294.1	2959.3	2651.6
35°	4135.4	4139.6	4081.0	3961.7	3788.0	3660.4	3672.9	3578.7	3430.1	3057.6	2714.4
37.5°	4376.1	4390.8	4302.9	4212.9	4051.7	3834.1	3846.6	3719.0	3566.2	3181.1	2781.4
40°	4708.9	4679.6	4531.0	4424.2	4246.3	4016.1	4026.6	3875.9	3723.1	3298.3	2858.8
42.5°	4987.2	4934.9	4754.9	4618.9	4405.4	4208.7	4219.1	4045.4	3882.2	3428.1	2944.6
45°	5386.9	5242.5	4983.0	4916.1	4568.6	4397.0	4407.5	4225.4	4049.6	3566.2	3036.7
47.5°	5619.2	5389.0	5223.7	5188.1	4748.6	4591.7	4604.2	4415.9	4229.6	3723.1	3133.0
50°	5604.6	5456.0	5407.9	5320.0	4907.7	4773.7	4786.3	4612.6	4411.7	3878.0	3225.0
52.5°	5508.3	5535.5	5510.4	5363.9	5066.7	4949.5	4964.2	4807.2	4597.9	4022.4	3310.9
55°	5656.9	5675.7	5627.6	5435.1	5242.5	5125.3	5142.1	5012.3	4782.1	4150.1	3384.1
57.5°	5834.8	5767.8	5719.7	5560.6	5424.6	5315.8	5334.6	5221.6	4941.2	4252.6	3440.6
60°	5826.4	5686.2	5734.3	5569.0	5548.1	5491.6	5508.3	5393.2	5062.6	4328.0	3463.6
62.5°	5397.4	5322.1	5564.8	5508.3	5648.5	5648.5	5669.5	5497.9	5135.8	4359.4	3451.1
65°	4652.4	4656.5	5083.5	5317.9	5767.8	5864.1	5880.8	5562.7	5093.9	4267.3	3333.9
67.5°	3706.4	3733.6	4346.8	4834.4	5648.5	6010.6	6012.7	5621.3	4914.0	4007.8	3061.8
70°	2712.3	2733.2	3457.4	4049.6	5085.6	5686.2	5652.7	5456.0	4522.6	3555.7	2637.0
72.5°	1833.3	1852.2	2597.2	3109.9	4173.1	4842.8	4769.6	4821.9	3855.0	2921.6	2120.0
75°	1232.7	1255.7	1848.0	2224.7	3070.2	3677.1	3513.9	3652.0	2982.3	2212.1	1546.6
77.5°	776.4	791.1	1174.1	1458.7	2097.0	2503.0	2339.8	2341.9	1718.2	1190.8	830.9
80°	493.9	498.1	711.6	841.3	1213.8	1504.7	1331.0	1082.0	774.3	632.0	496.0
82.5°	286.7	280.4	424.8	475.1	577.6	571.3	473.0	447.9	339.0	316.0	253.2
85°	115.1	106.7	186.3	173.7	175.8	186.3	138.1	138.1	110.9	85.8	62.8
87.5°	23.0	23.0	25.1	23.0	23.0	25.1	18.8	18.8	16.7	16.7	16.7
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°	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7	2293.7
2.5°	2277.0	2272.8	2262.3	2235.1	2220.5	2212.1	2199.6	2195.4	2193.3	2195.4	2201.7
5°	2283.3	2268.6	2239.3	2195.4	2166.1	2147.2	2126.3	2117.9	2111.7	2111.7	2117.9
7.5°	2287.5	2264.4	2214.2	2149.3	2107.5	2078.2	2053.1	2042.6	2040.5	2046.8	2048.9
10°	2289.6	2256.1	2184.9	2103.3	2048.9	2011.2	1986.1	1979.8	1986.1	1998.7	2000.7
12.5°	2304.2	2258.2	2168.2	2071.9	2007.0	1969.4	1950.5	1950.5	1967.3	1990.3	1992.4
15°	2329.3	2272.8	2159.8	2046.8	1979.8	1946.3	1940.1	1950.5	1975.6	2011.2	2015.4
17.5°	2348.2	2281.2	2141.0	2013.3	1944.2	1923.3	1933.8	1958.9	1994.5	2042.6	2046.8
20°	2360.7	2281.2	2113.8	1973.5	1908.7	1904.5	1933.8	1973.5	2011.2	2067.7	2074.0
22.5°	2373.3	2277.0	2082.4	1925.4	1868.9	1881.5	1935.9	1986.1	2023.8	2084.5	2094.9
25°	2396.3	2283.3	2051.0	1877.3	1827.0	1862.6	1933.8	1994.5	2034.2	2097.0	2113.8
27.5°	2427.7	2297.9	2028.0	1833.3	1785.2	1833.3	1919.1	1992.4	2034.2	2094.9	2113.8
30°	2461.2	2314.7	2000.7	1785.2	1737.0	1791.5	1887.7	1969.4	2017.5	2074.0	2097.0
32.5°	2496.7	2333.5	1977.7	1732.9	1678.4	1735.0	1841.7	1933.8	1986.1	2038.4	2063.5
35°	2544.9	2367.0	1965.2	1691.0	1626.1	1676.4	1783.1	1887.7	1944.2	1992.4	2021.7
37.5°	2603.5	2408.8	1958.9	1649.1	1569.6	1611.5	1720.3	1831.2	1891.9	1931.7	1958.9
40°	2670.4	2461.2	1956.8	1609.4	1513.1	1544.5	1655.4	1766.3	1824.9	1856.3	1879.4
42.5°	2745.8	2519.8	1952.6	1569.6	1456.6	1481.7	1592.6	1701.5	1751.7	1778.9	1799.8
45°	2825.3	2578.4	1944.2	1521.5	1395.9	1425.2	1527.8	1624.0	1676.4	1699.4	1722.4
47.5°	2904.8	2637.0	1927.5	1467.1	1341.5	1368.7	1458.7	1542.4	1584.3	1605.2	1628.2
50°	2982.3	2689.3	1887.7	1404.3	1285.0	1310.1	1379.2	1435.7	1467.1	1483.8	1506.8
52.5°	3051.3	2724.9	1831.2	1331.0	1228.5	1241.0	1287.1	1335.2	1360.3	1362.4	1383.4
55°	3109.9	2743.7	1749.6	1255.7	1167.8	1169.9	1195.0	1232.7	1243.1	1234.8	1249.4
57.5°	3143.4	2733.2	1659.6	1178.3	1105.0	1096.6	1115.5	1134.3	1136.4	1115.5	1130.1
60°	3151.8	2685.1	1542.4	1100.8	1042.2	1019.2	1025.5	1021.3	1017.1	1008.7	1021.3
62.5°	3109.9	2582.5	1412.7	1025.5	975.3	939.7	937.6	935.5	941.8	943.9	946.0
65°	2957.2	2390.0	1257.8	948.1	904.1	856.0	853.9	879.0	887.4	874.8	879.0
67.5°	2662.1	2094.9	1088.3	858.1	814.1	772.3	789.0	803.6	818.3	814.1	818.3
70°	2243.5	1720.3	933.4	757.6	715.7	692.7	711.6	724.1	726.2	722.0	726.2
72.5°	1764.3	1343.6	789.0	655.1	617.4	606.9	629.9	640.4	659.2	667.6	669.7
75°	1274.5	992.0	646.7	544.1	512.7	512.7	533.7	552.5	569.2	558.8	552.5
77.5°	711.6	592.3	464.6	374.6	380.9	410.2	418.6	439.5	456.2	454.1	450.0
80°	431.1	370.4	313.9	242.8	240.7	263.7	318.1	353.7	362.1	343.2	341.1
82.5°	223.9	194.6	167.4	136.0	150.7	175.8	184.2	221.8	244.9	236.5	247.0
85°	56.5	54.4	60.7	62.8	77.4	85.8	94.2	110.9	73.2	35.6	35.6
87.5°	16.7	16.7	20.9	20.9	27.2	33.5	31.4	31.4	16.7	2.1	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)