

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: P842601

Luminaire Tested: **ARCH4-70-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12105 lumens
Efficiency: N/A
Efficacy: 164.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.8
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

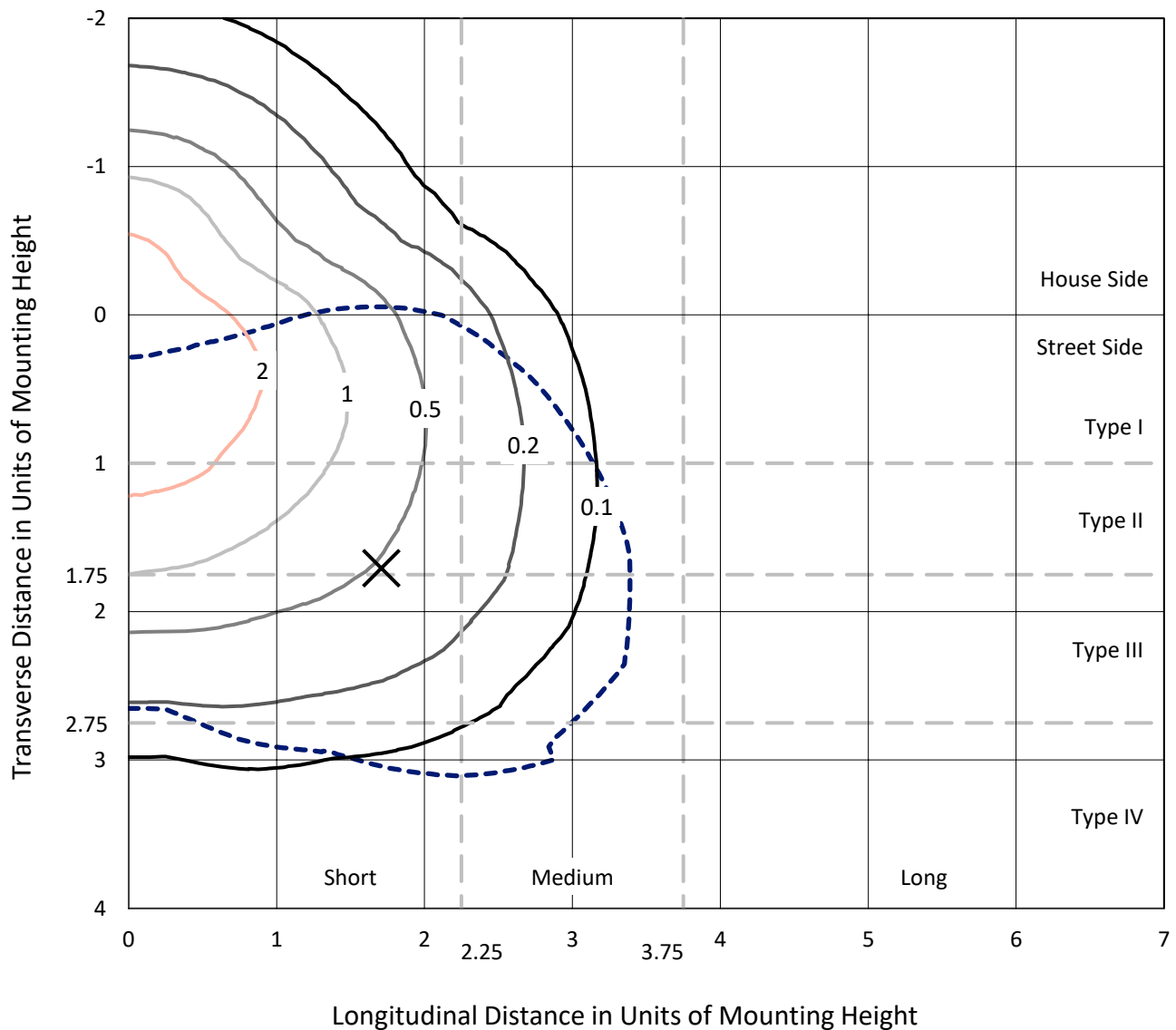


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

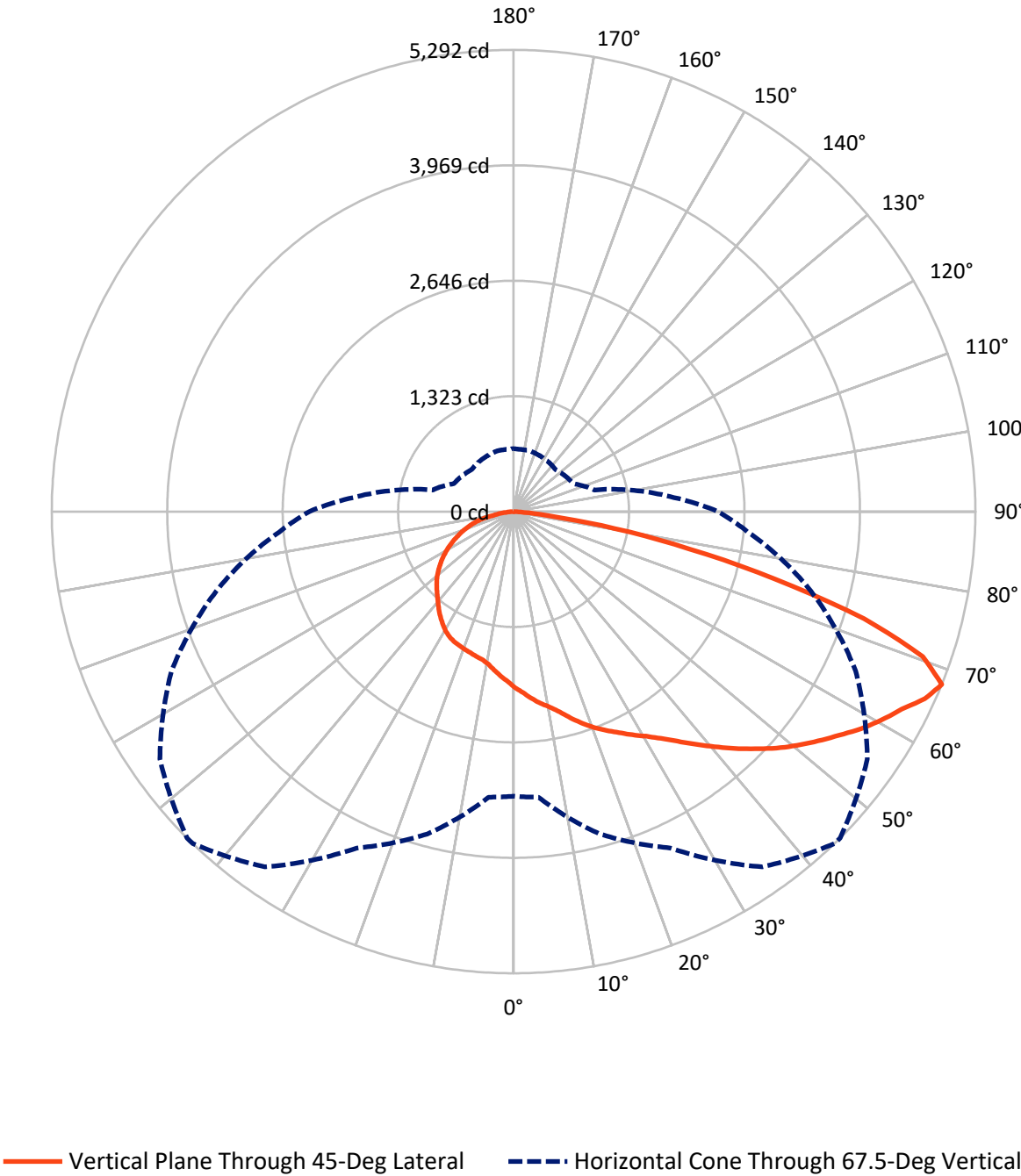


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc

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	3233.9	0.0	3233.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	8871.1	0.0	8871.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	12105.0	0.0	12105.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	1.6
10°-20°	597.1	4.9
20°-30°	1030.7	8.5
30°-40°	1519.9	12.6
40°-50°	2059.2	17.0
50°-60°	2516.8	20.8
60°-70°	2595.8	21.4
70°-80°	1421.8	11.7
80°-90°	170.4	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°	12105.0	100.0
0°-180°	12105.0	100.0

Coefficient of Utilization



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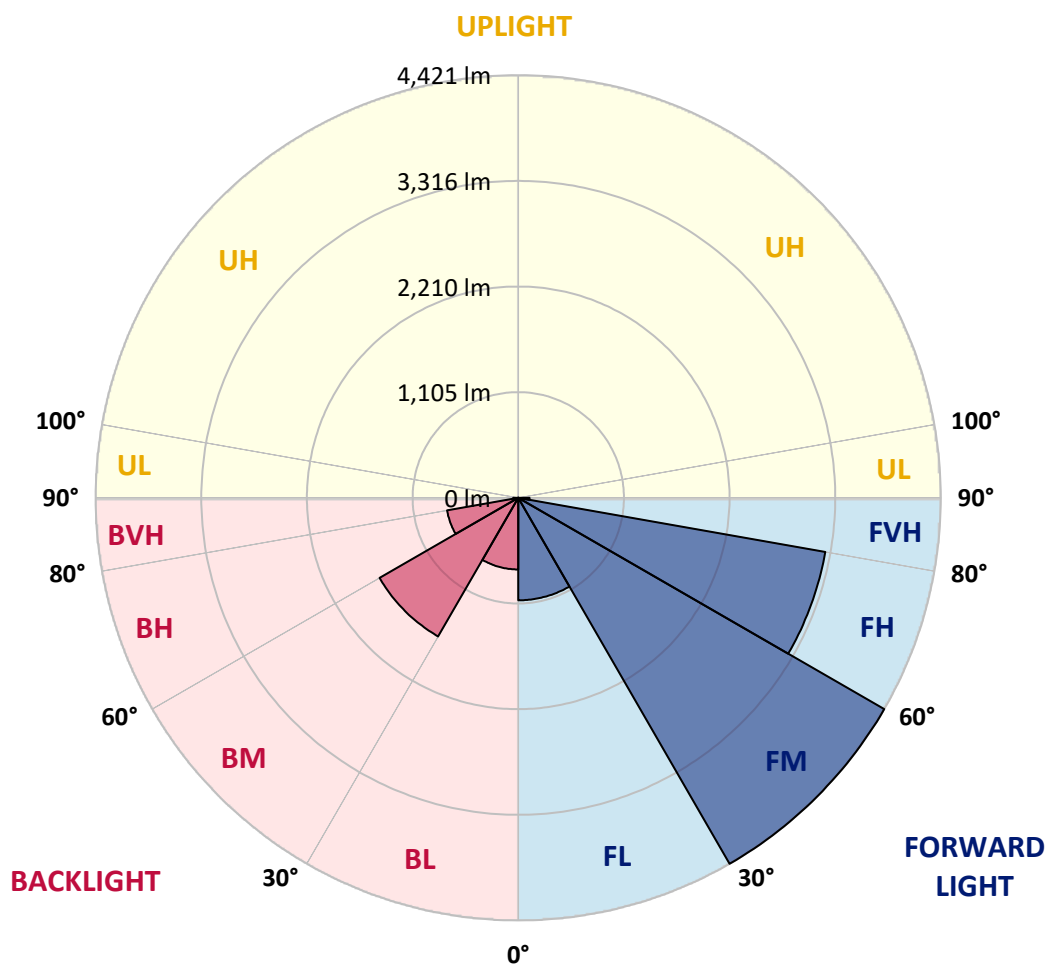
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1071.6	8.9			
FM	(30°-60°)	4420.9	36.5			
FH	(60°-80°)	3261.3	26.9			G2/5000
FVH	(80°-90°)	117.4	1.0			G2/225
BL	(0°-30°)	749.5	6.2	B2/1000		
BM	(30°-60°)	1675.1	13.8	B2/2500		
BH	(60°-80°)	756.3	6.2	B2/1000		G2/1000
BVH	(80°-90°)	53.0	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°	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9
2.5°	2107.3	2105.5	2109.1	2096.3	2079.7	2077.8	2077.8	2066.8	2053.9	2028.1	2007.8
5°	2206.8	2203.1	2204.9	2186.5	2164.4	2153.4	2151.5	2127.6	2098.1	2057.6	2020.7
7.5°	2298.9	2295.2	2293.3	2273.1	2239.9	2221.5	2219.7	2184.7	2149.7	2087.0	2033.6
10°	2385.5	2381.8	2378.1	2350.5	2309.9	2282.3	2278.6	2234.4	2190.2	2112.8	2044.7
12.5°	2496.0	2488.6	2484.9	2451.8	2392.8	2363.3	2357.8	2298.9	2243.6	2149.7	2066.8
15°	2612.0	2606.5	2601.0	2569.7	2503.3	2464.7	2455.4	2381.8	2306.2	2197.6	2099.9
17.5°	2698.6	2693.1	2693.1	2665.4	2604.7	2560.4	2553.1	2464.7	2370.7	2241.8	2125.7
20°	2752.0	2746.5	2752.0	2735.4	2689.4	2652.5	2645.2	2547.6	2435.2	2282.3	2147.8
22.5°	2790.7	2785.2	2794.4	2787.0	2753.9	2731.8	2726.2	2630.4	2501.5	2324.7	2169.9
25°	2858.9	2858.9	2858.9	2846.0	2814.6	2807.3	2807.3	2724.4	2586.2	2379.9	2203.1
27.5°	2995.2	2987.8	2978.6	2941.8	2888.3	2886.5	2897.5	2820.2	2683.9	2451.8	2243.6
30°	3196.0	3192.3	3157.3	3079.9	2989.6	2980.4	2987.8	2923.3	2788.9	2527.3	2289.7
32.5°	3455.7	3442.8	3370.9	3254.9	3126.0	3083.6	3098.3	3030.2	2899.4	2604.7	2333.9
35°	3639.9	3643.6	3592.0	3487.0	3334.1	3221.7	3232.8	3149.9	3019.1	2691.2	2389.1
37.5°	3851.7	3864.6	3787.3	3708.0	3566.2	3374.6	3385.7	3273.3	3138.8	2799.9	2448.1
40°	4144.6	4118.8	3988.0	3894.1	3737.5	3534.9	3544.1	3411.5	3277.0	2903.1	2516.2
42.5°	4389.6	4343.5	4185.1	4065.4	3877.5	3704.4	3713.6	3560.7	3417.0	3017.3	2591.8
45°	4741.4	4614.3	4385.9	4327.0	4021.2	3870.1	3879.4	3719.1	3564.4	3138.8	2672.8
47.5°	4945.9	4743.3	4597.8	4566.4	4179.6	4041.5	4052.5	3886.7	3722.8	3277.0	2757.5
50°	4933.0	4802.2	4759.9	4682.5	4319.6	4201.7	4212.8	4059.9	3883.0	3413.3	2838.6
52.5°	4848.3	4872.2	4850.1	4721.2	4459.6	4356.4	4369.3	4231.2	4047.0	3540.4	2914.1
55°	4979.1	4995.6	4953.3	4783.8	4614.3	4511.2	4525.9	4411.7	4209.1	3652.8	2978.6
57.5°	5135.6	5076.7	5034.3	4894.3	4774.6	4678.8	4695.4	4595.9	4349.1	3743.0	3028.3
60°	5128.3	5004.8	5047.2	4901.7	4883.3	4833.5	4848.3	4747.0	4455.9	3809.4	3048.6
62.5°	4750.6	4684.3	4898.0	4848.3	4971.7	4971.7	4990.1	4839.1	4520.4	3837.0	3037.5
65°	4094.9	4098.6	4474.3	4680.6	5076.7	5161.4	5176.2	4896.2	4483.5	3755.9	2934.4
67.5°	3262.3	3286.2	3825.9	4255.1	4971.7	5290.4	5292.2	4947.7	4325.1	3527.5	2694.9
70°	2387.3	2405.7	3043.1	3564.4	4476.2	5004.8	4975.4	4802.2	3980.7	3129.6	2321.0
72.5°	1613.6	1630.2	2286.0	2737.3	3673.0	4262.5	4198.0	4244.1	3393.1	2571.5	1866.0
75°	1085.0	1105.2	1626.5	1958.1	2702.3	3236.5	3092.8	3214.4	2624.9	1947.0	1361.3
77.5°	683.4	696.3	1033.4	1283.9	1845.7	2203.1	2059.4	2061.3	1512.3	1048.1	731.3
80°	434.7	438.4	626.3	740.5	1068.4	1324.4	1171.5	952.3	681.6	556.3	436.6
82.5°	252.4	246.8	373.9	418.1	508.4	502.9	416.3	394.2	298.4	278.1	222.9
85°	101.3	93.9	163.9	152.9	154.7	163.9	121.6	121.6	97.6	75.5	55.3
87.5°	20.3	20.3	22.1	20.3	20.3	22.1	16.6	16.6	14.7	14.7	14.7
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°	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9	2018.9
2.5°	2004.1	2000.5	1991.3	1967.3	1954.4	1947.0	1936.0	1932.3	1930.5	1932.3	1937.8
5°	2009.7	1996.8	1971.0	1932.3	1906.5	1889.9	1871.5	1864.2	1858.6	1858.6	1864.2
7.5°	2013.4	1993.1	1948.9	1891.8	1854.9	1829.2	1807.0	1797.8	1796.0	1801.5	1803.4
10°	2015.2	1985.7	1923.1	1851.3	1803.4	1770.2	1748.1	1742.6	1748.1	1759.2	1761.0
12.5°	2028.1	1987.6	1908.4	1823.6	1766.5	1733.4	1716.8	1716.8	1731.5	1751.8	1753.6
15°	2050.2	2000.5	1901.0	1801.5	1742.6	1713.1	1707.6	1716.8	1738.9	1770.2	1773.9
17.5°	2066.8	2007.8	1884.4	1772.1	1711.3	1692.8	1702.1	1724.2	1755.5	1797.8	1801.5
20°	2077.8	2007.8	1860.5	1737.1	1679.9	1676.3	1702.1	1737.1	1770.2	1819.9	1825.5
22.5°	2088.9	2004.1	1832.8	1694.7	1644.9	1656.0	1703.9	1748.1	1781.3	1834.7	1843.9
25°	2109.1	2009.7	1805.2	1652.3	1608.1	1639.4	1702.1	1755.5	1790.5	1845.7	1860.5
27.5°	2136.8	2022.6	1784.9	1613.6	1571.3	1613.6	1689.2	1753.6	1790.5	1843.9	1860.5
30°	2166.2	2037.3	1761.0	1571.3	1528.9	1576.8	1661.5	1733.4	1775.7	1825.5	1845.7
32.5°	2197.6	2053.9	1740.7	1525.2	1477.3	1527.1	1621.0	1702.1	1748.1	1794.2	1816.3
35°	2239.9	2083.4	1729.7	1488.4	1431.3	1475.5	1569.4	1661.5	1711.3	1753.6	1779.4
37.5°	2291.5	2120.2	1724.2	1451.5	1381.5	1418.4	1514.2	1611.8	1665.2	1700.2	1724.2
40°	2350.5	2166.2	1722.3	1416.5	1331.8	1359.4	1457.1	1554.7	1606.3	1633.9	1654.2
42.5°	2416.8	2217.8	1718.6	1381.5	1282.1	1304.2	1401.8	1497.6	1541.8	1565.7	1584.2
45°	2486.8	2269.4	1711.3	1339.2	1228.6	1254.4	1344.7	1429.4	1475.5	1495.7	1516.0
47.5°	2556.8	2321.0	1696.5	1291.3	1180.8	1204.7	1283.9	1357.6	1394.4	1412.9	1433.1
50°	2624.9	2367.0	1661.5	1236.0	1131.0	1153.1	1213.9	1263.6	1291.3	1306.0	1326.3
52.5°	2685.7	2398.3	1611.8	1171.5	1081.3	1092.3	1132.9	1175.2	1197.3	1199.2	1217.6
55°	2737.3	2414.9	1540.0	1105.2	1027.9	1029.7	1051.8	1085.0	1094.2	1086.8	1099.7
57.5°	2766.8	2405.7	1460.7	1037.1	972.6	965.2	981.8	998.4	1000.2	981.8	994.7
60°	2774.1	2363.3	1357.6	968.9	917.3	897.1	902.6	898.9	895.2	887.9	898.9
62.5°	2737.3	2273.1	1243.4	902.6	858.4	827.1	825.2	823.4	828.9	830.8	832.6
65°	2602.8	2103.6	1107.1	834.4	795.8	753.4	751.6	773.7	781.0	770.0	773.7
67.5°	2343.1	1843.9	957.9	755.2	716.6	679.7	694.5	707.3	720.2	716.6	720.2
70°	1974.7	1514.2	821.6	666.8	630.0	609.7	626.3	637.3	639.2	635.5	639.2
72.5°	1552.8	1182.6	694.5	576.6	543.4	534.2	554.5	563.7	580.2	587.6	589.5
75°	1121.8	873.1	569.2	478.9	451.3	451.3	469.7	486.3	501.0	491.8	486.3
77.5°	626.3	521.3	408.9	329.7	335.3	361.0	368.4	386.8	401.6	399.7	396.0
80°	379.5	326.0	276.3	213.7	211.8	232.1	280.0	311.3	318.7	302.1	300.3
82.5°	197.1	171.3	147.4	119.7	132.6	154.7	162.1	195.3	215.5	208.2	217.4
85°	49.7	47.9	53.4	55.3	68.2	75.5	82.9	97.6	64.5	31.3	31.3
87.5°	14.7	14.7	18.4	18.4	23.9	29.5	27.6	27.6	14.7	1.8	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)