

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: P842599

Luminaire Tested: **ARCH4-70-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12417 lumens
Efficiency: N/A
Efficacy: 168.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

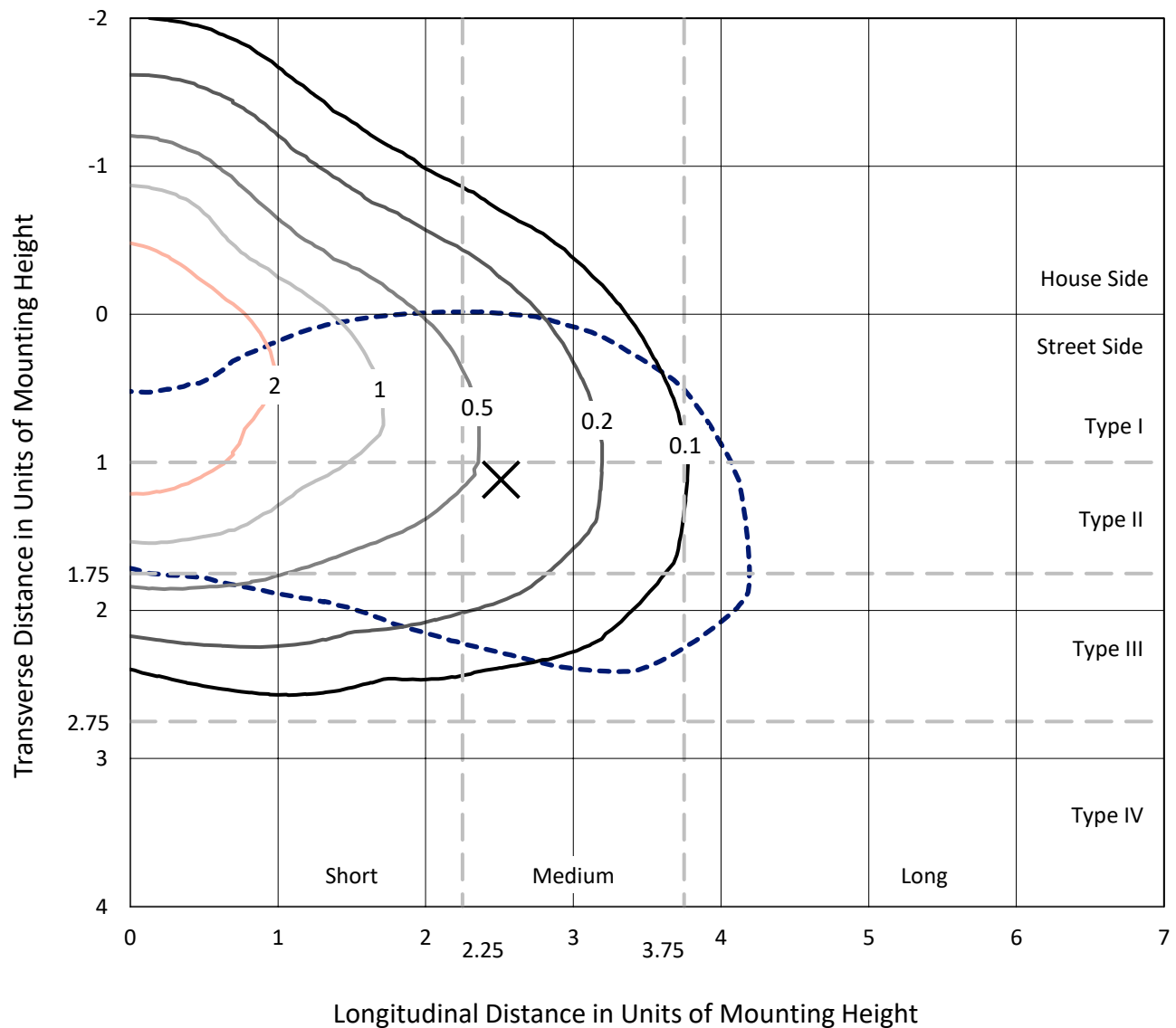
Input Watts (W): 73.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

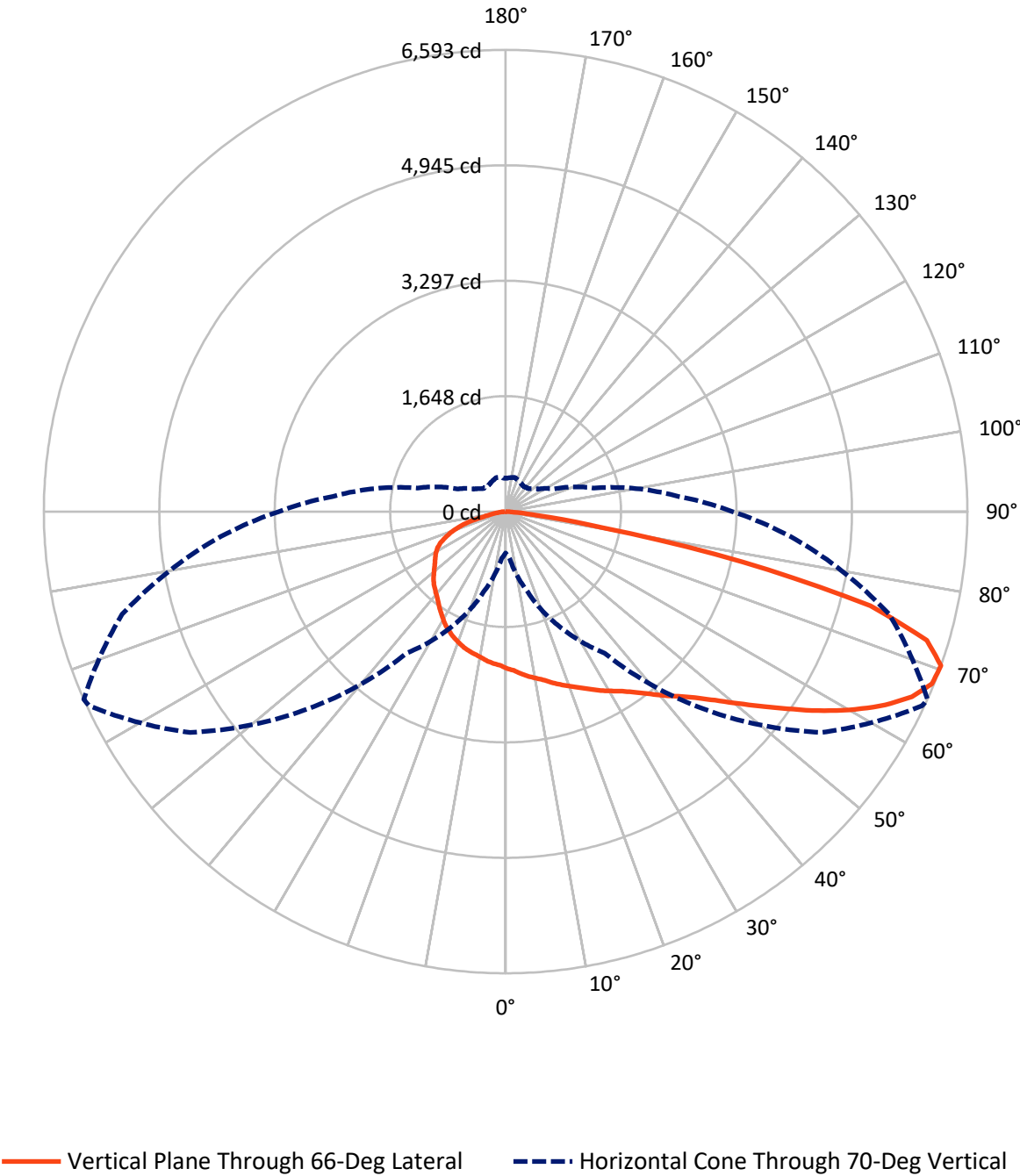
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3290.2	0.0	3290.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	9126.8	0.0	9126.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	12417.0	0.0	12417.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.3	1.7
10°-20°	645.9	5.2
20°-30°	1082.8	8.7
30°-40°	1621.3	13.1
40°-50°	2167.7	17.5
50°-60°	2530.8	20.4
60°-70°	2516.5	20.3
70°-80°	1489.8	12.0
80°-90°	146.8	1.2
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°	12417.0	100.0
0°-180°	12417.0	100.0

Coefficient of Utilization



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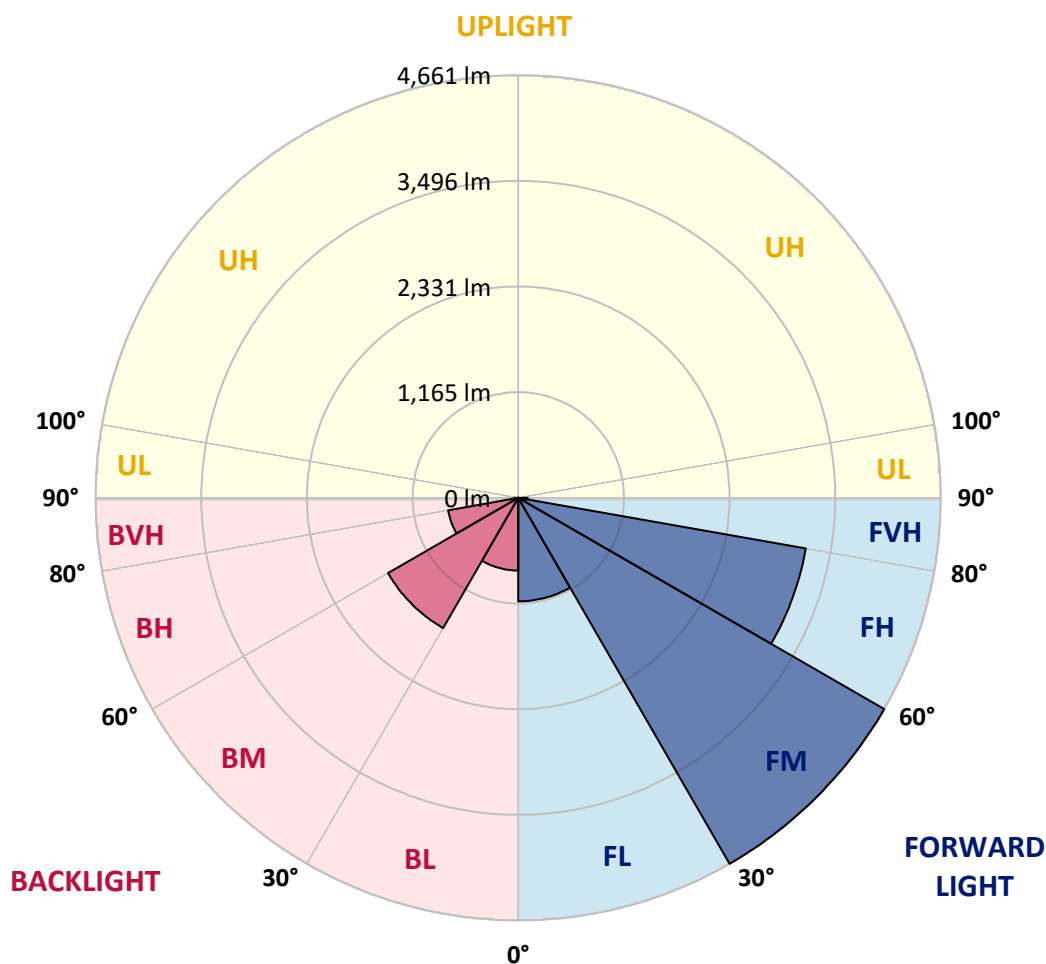
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1142.0	9.2			
FM	(30°-60°)	4661.2	37.5			
FH	(60°-80°)	3220.4	25.9			G2/5000
FVH	(80°-90°)	103.2	0.8			G2/225
BL	(0°-30°)	802.0	6.5	B2/1000		
BM	(30°-60°)	1658.6	13.4	B2/2500		
BH	(60°-80°)	786.0	6.3	B2/1000		G2/1000
BVH	(80°-90°)	43.6	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0
2.5°	2323.4	2319.7	2317.9	2310.6	2294.1	2301.4	2284.9	2273.9	2272.1	2246.5	2231.8
5°	2418.6	2416.7	2413.1	2402.1	2376.5	2380.1	2352.7	2332.5	2327.0	2286.8	2255.6
7.5°	2499.1	2495.5	2493.6	2479.0	2451.5	2449.7	2416.7	2387.5	2378.3	2323.4	2275.8
10°	2561.4	2555.9	2559.6	2544.9	2515.6	2510.1	2468.0	2429.6	2420.4	2350.8	2284.9
12.5°	2614.5	2610.8	2616.3	2603.5	2579.7	2574.2	2532.1	2482.7	2471.7	2391.1	2305.1
15°	2673.1	2660.3	2671.2	2665.7	2649.3	2647.4	2609.0	2554.1	2539.4	2442.4	2336.2
17.5°	2704.2	2696.9	2709.7	2711.5	2704.2	2717.0	2680.4	2614.5	2601.7	2490.0	2363.7
20°	2726.2	2715.2	2729.8	2740.8	2746.3	2771.9	2742.6	2678.6	2663.9	2535.8	2389.3
22.5°	2801.2	2777.4	2779.3	2786.6	2790.2	2826.9	2808.6	2746.3	2731.7	2592.5	2420.4
25°	2989.8	2942.2	2911.1	2889.1	2863.5	2894.6	2883.6	2823.2	2810.4	2660.3	2458.9
27.5°	3282.8	3222.3	3160.1	3096.0	2995.3	2982.5	2964.2	2909.3	2894.6	2728.0	2497.3
30°	3616.0	3555.6	3482.3	3379.8	3191.2	3092.3	3050.2	2989.8	2973.3	2788.4	2533.9
32.5°	3947.4	3894.3	3821.0	3696.5	3427.4	3226.0	3136.3	3074.0	3057.6	2854.3	2577.9
35°	4205.5	4172.6	4125.0	3969.3	3661.7	3383.4	3260.8	3185.7	3167.4	2958.7	2658.4
37.5°	4414.2	4390.4	4350.1	4187.2	3832.0	3540.9	3403.6	3317.5	3297.4	3072.2	2744.5
40°	4721.8	4659.6	4626.6	4390.4	3980.3	3683.7	3564.7	3475.0	3453.0	3193.0	2814.0
42.5°	4983.6	4937.9	4897.6	4571.7	4121.3	3806.4	3716.7	3634.3	3605.0	3312.0	2889.1
45°	5027.6	5045.9	5025.7	4661.4	4344.7	3927.2	3870.5	3817.4	3789.9	3473.2	3002.6
47.5°	5029.4	5029.4	4910.4	4712.7	4621.1	4062.7	4035.2	4053.5	4024.3	3678.2	3138.1
50°	4897.6	4921.4	4859.1	4725.5	4694.4	4198.2	4236.6	4335.5	4306.2	3896.1	3284.6
52.5°	4624.8	4703.5	4701.7	4705.3	4588.2	4313.5	4449.0	4674.2	4624.8	4141.4	3440.2
55°	4143.3	4300.7	4441.7	4562.5	4496.6	4383.1	4709.0	5034.9	4983.6	4416.1	3597.7
57.5°	3731.3	3832.0	4007.8	4350.1	4388.6	4443.5	4952.5	5412.1	5366.3	4720.0	3762.4
60°	3260.8	3399.9	3575.7	4062.7	4256.8	4522.3	5219.8	5780.1	5736.1	5027.6	3921.7
62.5°	2537.6	2717.0	3068.5	3621.5	4064.5	4571.7	5430.4	6104.1	6084.0	5318.7	4064.5
65°	1768.6	1927.9	2420.4	3079.5	3758.8	4549.7	5598.8	6393.4	6375.1	5556.7	4165.2
67.5°	1032.6	1217.5	1774.1	2479.0	3218.7	4397.8	5653.7	6563.7	6563.7	5701.3	4192.7
70°	589.5	675.6	1169.9	1807.1	2468.0	3978.5	5499.9	6561.8	6593.0	5668.4	4079.2
72.5°	411.9	450.4	787.3	1215.7	1673.4	3218.7	5097.1	6245.1	6287.2	5357.1	3691.0
75°	320.4	347.9	554.8	829.4	1054.6	2186.1	4216.5	5265.6	5377.3	4566.2	2984.3
77.5°	243.5	263.6	324.1	518.1	675.6	1256.0	2782.9	3453.0	3460.3	2795.7	1600.2
80°	177.6	197.7	216.0	316.7	358.9	587.7	1050.9	1442.7	1402.4	1353.0	866.0
82.5°	106.2	126.3	131.8	172.1	175.8	250.8	368.0	465.0	446.7	595.0	406.5
85°	45.8	64.1	67.7	78.7	75.1	102.5	146.5	122.7	109.9	126.3	87.9
87.5°	11.0	18.3	18.3	20.1	16.5	25.6	27.5	20.1	18.3	22.0	22.0
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°	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0	2241.0
2.5°	2228.2	2222.7	2224.5	2193.4	2184.2	2175.1	2169.6	2165.9	2162.3	2167.8	2173.2
5°	2244.6	2231.8	2217.2	2171.4	2153.1	2133.0	2118.3	2105.5	2100.0	2100.0	2105.5
7.5°	2257.5	2235.5	2204.4	2143.9	2111.0	2083.5	2059.7	2043.3	2034.1	2034.1	2039.6
10°	2259.3	2228.2	2178.7	2105.5	2061.6	2021.3	1993.8	1975.5	1962.7	1962.7	1966.4
12.5°	2270.3	2228.2	2164.1	2076.2	2021.3	1971.8	1938.9	1911.4	1905.9	1905.9	1909.6
15°	2288.6	2237.3	2154.9	2050.6	1984.7	1927.9	1891.3	1862.0	1851.0	1858.3	1860.2
17.5°	2305.1	2242.8	2138.5	2017.6	1938.9	1876.6	1836.4	1810.7	1796.1	1812.6	1812.6
20°	2316.1	2242.8	2114.7	1975.5	1889.5	1819.9	1781.4	1750.3	1739.3	1759.5	1761.3
22.5°	2332.5	2241.0	2089.0	1933.4	1836.4	1763.1	1724.7	1700.9	1695.4	1717.4	1724.7
25°	2350.8	2244.6	2061.6	1885.8	1777.8	1706.4	1677.1	1666.1	1669.8	1697.2	1706.4
27.5°	2371.0	2252.0	2034.1	1832.7	1713.7	1649.6	1633.1	1638.6	1653.3	1688.1	1699.0
30°	2389.3	2253.8	1995.6	1770.5	1640.5	1580.0	1587.4	1611.2	1633.1	1667.9	1680.7
32.5°	2413.1	2255.6	1955.4	1702.7	1561.7	1517.8	1550.7	1589.2	1611.2	1644.1	1658.8
35°	2471.7	2286.8	1924.2	1636.8	1488.5	1464.7	1519.6	1569.1	1581.9	1611.2	1624.0
37.5°	2539.4	2338.0	1907.8	1569.1	1417.1	1411.6	1481.2	1530.6	1534.3	1552.6	1565.4
40°	2581.5	2360.0	1889.5	1512.3	1353.0	1356.7	1428.1	1466.5	1459.2	1472.0	1481.2
42.5°	2623.6	2367.3	1851.0	1464.7	1292.6	1296.3	1351.2	1378.6	1382.3	1409.8	1422.6
45°	2695.0	2387.5	1808.9	1420.8	1237.7	1224.9	1257.8	1294.4	1342.0	1395.1	1409.8
47.5°	2790.2	2429.6	1765.0	1367.7	1184.6	1142.5	1155.3	1219.4	1268.8	1318.2	1327.4
50°	2887.3	2471.7	1724.7	1303.6	1131.5	1054.6	1060.1	1118.7	1158.9	1197.4	1202.9
52.5°	2982.5	2508.3	1689.9	1243.2	1071.1	950.2	972.2	1032.6	1060.1	1078.4	1083.9
55°	3077.7	2539.4	1658.8	1191.9	1001.5	867.8	888.0	944.7	972.2	981.3	985.0
57.5°	3176.6	2576.0	1635.0	1148.0	922.8	794.6	807.4	847.7	873.3	884.3	880.6
60°	3258.9	2607.2	1622.2	1102.2	844.0	726.9	723.2	759.8	796.4	807.4	803.8
62.5°	3323.0	2627.3	1602.0	1043.6	774.5	659.1	640.8	688.4	726.9	734.2	739.7
65°	3357.8	2629.1	1552.6	968.5	703.1	585.9	573.1	620.7	644.5	651.8	651.8
67.5°	3352.3	2599.8	1455.5	867.8	637.1	520.0	509.0	538.3	573.1	578.6	573.1
70°	3238.8	2479.0	1299.9	761.6	558.4	461.4	441.2	470.5	503.5	483.3	474.2
72.5°	2916.6	2165.9	1071.1	644.5	470.5	388.1	379.0	408.3	410.1	413.8	404.6
75°	2301.4	1613.0	801.9	501.7	380.8	325.9	324.1	318.6	325.9	340.5	329.6
77.5°	1208.4	805.6	433.9	307.6	276.5	261.8	249.0	247.2	269.1	278.3	267.3
80°	655.5	452.2	249.0	184.9	168.4	170.3	186.7	183.1	206.9	212.4	203.2
82.5°	285.6	214.2	122.7	111.7	111.7	109.9	115.3	128.2	153.8	153.8	122.7
85°	62.2	53.1	47.6	54.9	62.2	62.2	62.2	62.2	43.9	23.8	16.5
87.5°	20.1	20.1	20.1	22.0	23.8	23.8	20.1	14.6	9.2	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)