

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: P842698

Luminaire Tested: **ARCH4-80-740-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842698
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: ARCH4-80-740-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15189 lumens
Efficiency: N/A
Efficacy: 182.1 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

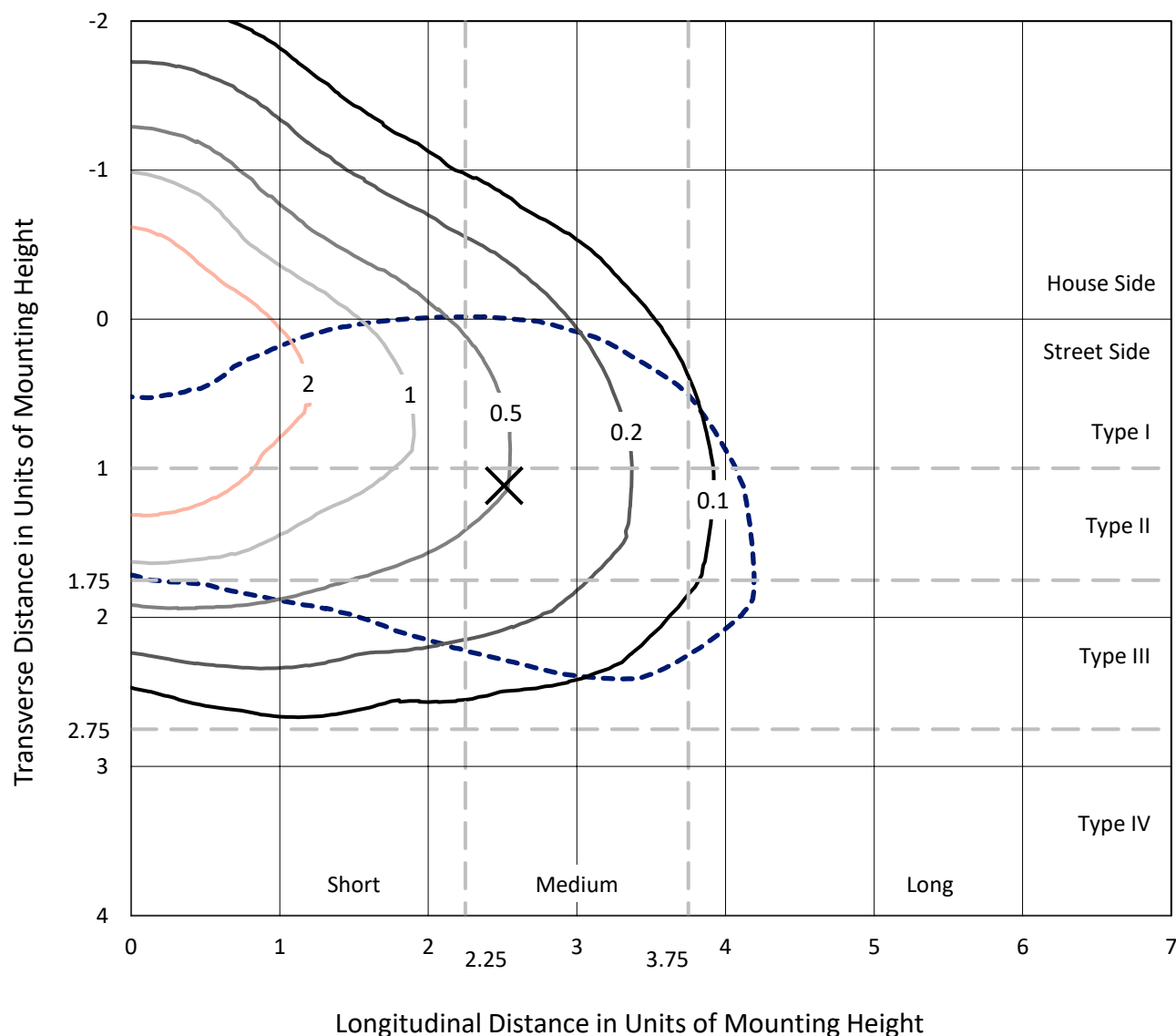
Input Watts (W): 83.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

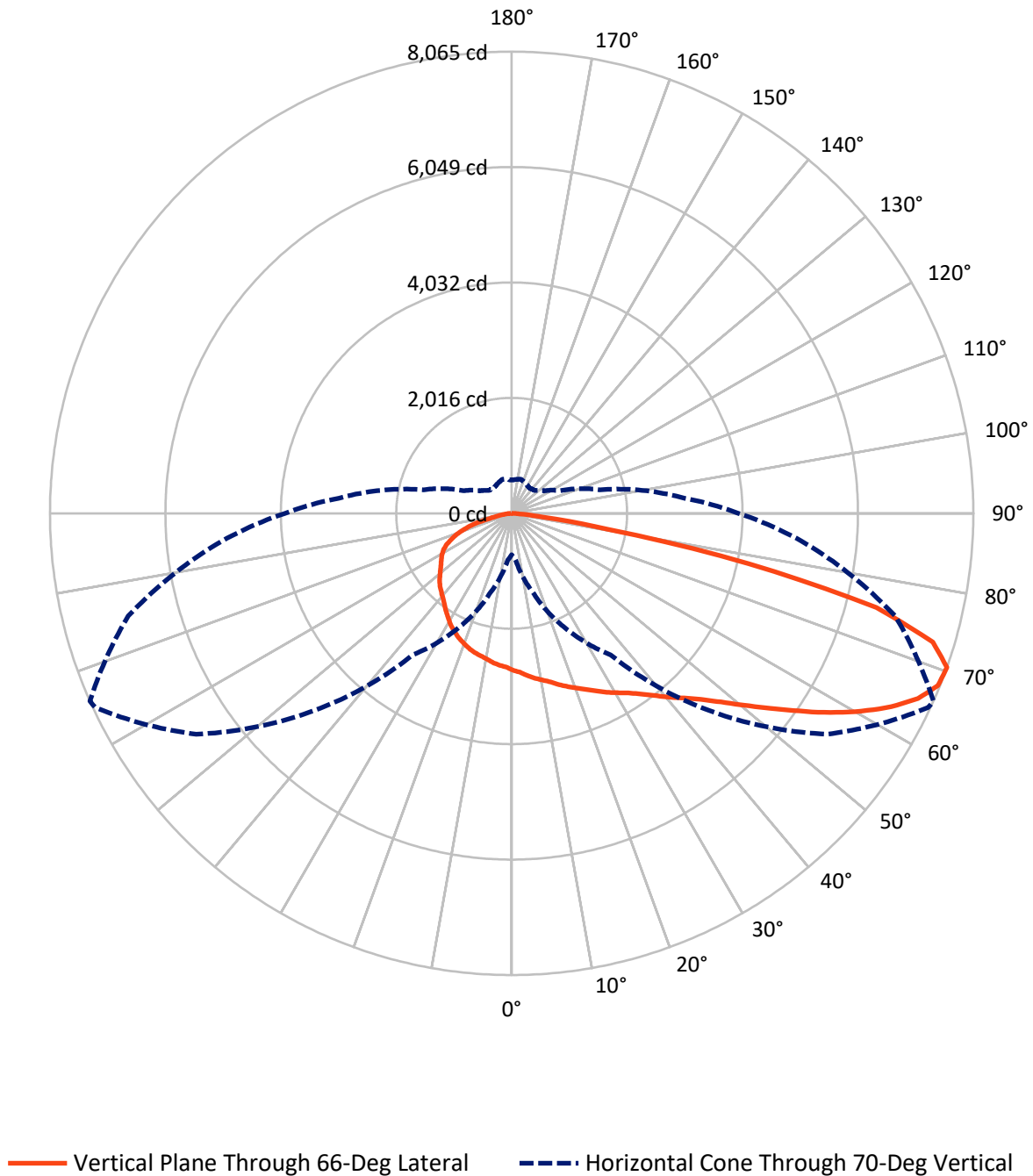
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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	4024.7	0.0	4024.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	11164.3	0.0	11164.3
	% Fixture	73.5	0.0	73.5
Total	Lumens	15189.0	0.0	15189.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.4	1.7
10°-20°	790.1	5.2
20°-30°	1324.5	8.7
30°-40°	1983.2	13.1
40°-50°	2651.6	17.5
50°-60°	3095.8	20.4
60°-70°	3078.3	20.3
70°-80°	1822.4	12.0
80°-90°	179.6	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°	15189.0	100.0
0°-180°	15189.0	100.0

Coefficient of Utilization



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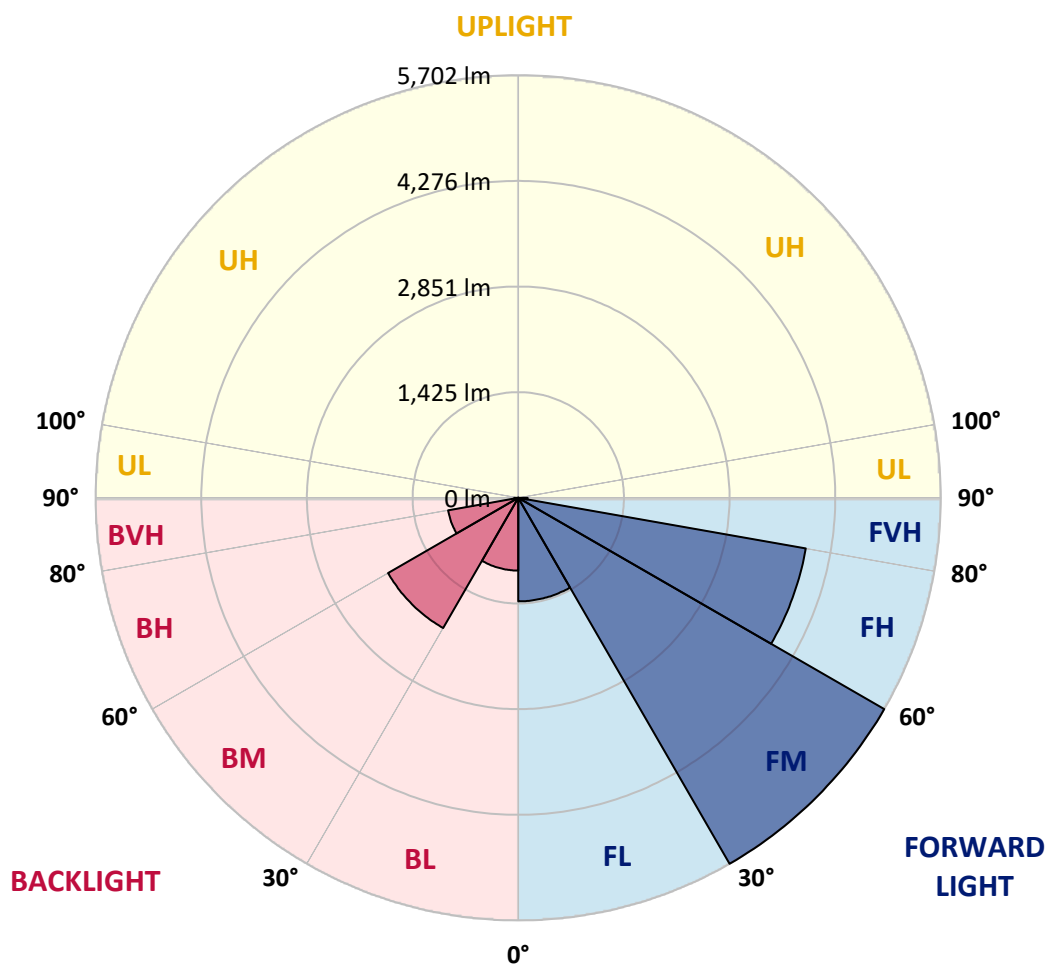
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1397.0	9.2			
FM	(30°-60°)	5701.7	37.5			
FH	(60°-80°)	3939.3	25.9			G2/5000
FVH	(80°-90°)	126.2	0.8			G2/225
BL	(0°-30°)	981.1	6.5	B2/1000		
BM	(30°-60°)	2028.9	13.4	B2/2500		
BH	(60°-80°)	961.4	6.3	B2/1000		G2/1000
BVH	(80°-90°)	53.4	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°	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3
2.5°	2842.1	2837.6	2835.3	2826.4	2806.2	2815.2	2795.0	2781.6	2779.3	2748.0	2730.1
5°	2958.5	2956.3	2951.8	2938.4	2907.0	2911.5	2877.9	2853.2	2846.5	2797.3	2759.2
7.5°	3057.1	3052.6	3050.3	3032.4	2998.8	2996.6	2956.3	2920.4	2909.2	2842.1	2783.8
10°	3133.2	3126.5	3131.0	3113.0	3077.2	3070.5	3019.0	2971.9	2960.7	2875.6	2795.0
12.5°	3198.1	3193.7	3200.4	3184.7	3155.6	3148.9	3097.4	3036.9	3023.5	2924.9	2819.7
15°	3269.8	3254.1	3267.6	3260.9	3240.7	3238.5	3191.4	3124.2	3106.3	2987.6	2857.7
17.5°	3307.9	3298.9	3314.6	3316.8	3307.9	3323.6	3278.8	3198.1	3182.5	3045.9	2891.3
20°	3334.8	3321.3	3339.2	3352.7	3359.4	3390.8	3354.9	3276.5	3258.6	3101.8	2922.7
22.5°	3426.6	3397.5	3399.7	3408.7	3413.1	3457.9	3435.5	3359.4	3341.5	3171.3	2960.7
25°	3657.3	3599.0	3561.0	3534.1	3502.7	3540.8	3527.4	3453.5	3437.8	3254.1	3007.8
27.5°	4015.6	3941.7	3865.5	3787.2	3664.0	3648.3	3625.9	3558.7	3540.8	3337.0	3054.8
30°	4423.2	4349.3	4259.7	4134.3	3903.6	3782.7	3731.2	3657.3	3637.1	3410.9	3099.6
32.5°	4828.6	4763.6	4674.0	4521.7	4192.5	3946.2	3836.4	3760.3	3740.1	3491.5	3153.4
35°	5144.4	5104.0	5045.8	4855.4	4479.2	4138.8	3988.7	3896.9	3874.5	3619.2	3251.9
37.5°	5399.7	5370.6	5321.3	5122.0	4687.5	4331.4	4163.4	4058.2	4033.5	3758.0	3357.2
40°	5775.9	5699.8	5659.5	5370.6	4868.9	4506.1	4360.5	4250.8	4223.9	3905.9	3442.3
42.5°	6096.2	6040.2	5990.9	5592.3	5041.3	4656.1	4546.4	4445.6	4409.8	4051.4	3534.1
45°	6149.9	6172.3	6147.7	5702.0	5314.6	4803.9	4734.5	4669.6	4636.0	4248.5	3672.9
47.5°	6152.2	6152.2	6006.6	5764.7	5652.7	4969.7	4936.1	4958.5	4922.6	4499.4	3838.7
50°	5990.9	6020.0	5943.9	5780.4	5742.3	5135.4	5182.4	5303.4	5267.5	4765.9	4017.8
52.5°	5657.2	5753.5	5751.3	5755.8	5612.4	5276.5	5442.2	5717.7	5657.2	5066.0	4208.2
55°	5068.2	5260.8	5433.3	5581.1	5500.5	5361.6	5760.2	6158.9	6096.2	5401.9	4400.8
57.5°	4564.3	4687.5	4902.5	5321.3	5368.3	5435.5	6058.1	6620.3	6564.3	5773.7	4602.4
60°	3988.7	4158.9	4373.9	4969.7	5207.1	5531.8	6385.1	7070.4	7016.7	6149.9	4797.2
62.5°	3104.1	3323.6	3753.6	4429.9	4971.9	5592.3	6642.6	7466.8	7442.2	6506.0	4971.9
65°	2163.5	2358.3	2960.7	3767.0	4597.9	5565.4	6848.7	7820.7	7798.3	6797.2	5095.1
67.5°	1263.1	1489.3	2170.2	3032.4	3937.2	5379.5	6915.9	8029.0	8029.0	6974.1	5128.7
70°	721.2	826.4	1431.1	2210.5	3019.0	4866.6	6727.8	8026.7	8064.8	6933.8	4989.8
72.5°	503.9	550.9	963.0	1487.1	2047.0	3937.2	6235.0	7639.3	7690.8	6553.1	4515.0
75°	391.9	425.5	678.6	1014.5	1290.0	2674.1	5157.8	6441.1	6577.7	5585.6	3650.5
77.5°	297.9	322.5	396.4	633.8	826.4	1536.4	3404.2	4223.9	4232.8	3419.9	1957.4
80°	217.2	241.9	264.3	387.5	439.0	718.9	1285.5	1764.8	1715.5	1655.1	1059.3
82.5°	129.9	154.5	161.3	210.5	215.0	306.8	450.2	568.9	546.5	727.9	497.2
85°	56.0	78.4	82.9	96.3	91.8	125.4	179.2	150.1	134.4	154.5	107.5
87.5°	13.4	22.4	22.4	24.6	20.2	31.4	33.6	24.6	22.4	26.9	26.9
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°	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3	2741.3
2.5°	2725.6	2718.9	2721.1	2683.0	2671.8	2660.6	2653.9	2649.4	2645.0	2651.7	2658.4
5°	2745.7	2730.1	2712.2	2656.2	2633.8	2609.1	2591.2	2575.5	2568.8	2568.8	2575.5
7.5°	2761.4	2734.5	2696.5	2622.6	2582.3	2548.7	2519.5	2499.4	2488.2	2488.2	2494.9
10°	2763.7	2725.6	2665.1	2575.5	2521.8	2472.5	2438.9	2416.5	2400.8	2400.8	2405.3
12.5°	2777.1	2725.6	2647.2	2539.7	2472.5	2412.0	2371.7	2338.1	2331.4	2331.4	2335.9
15°	2799.5	2736.8	2636.0	2508.4	2427.7	2358.3	2313.5	2277.7	2264.2	2273.2	2275.4
17.5°	2819.7	2743.5	2615.9	2468.0	2371.7	2295.6	2246.3	2215.0	2197.0	2217.2	2217.2
20°	2833.1	2743.5	2586.7	2416.5	2311.3	2226.2	2179.1	2141.1	2127.6	2152.3	2154.5
22.5°	2853.2	2741.3	2555.4	2365.0	2246.3	2156.7	2109.7	2080.6	2073.9	2100.7	2109.7
25°	2875.6	2745.7	2521.8	2306.8	2174.7	2087.3	2051.5	2038.0	2042.5	2076.1	2087.3
27.5°	2900.3	2754.7	2488.2	2241.8	2096.3	2017.9	1997.7	2004.4	2022.4	2064.9	2078.3
30°	2922.7	2756.9	2441.2	2165.7	2006.7	1932.8	1941.7	1970.8	1997.7	2040.3	2056.0
32.5°	2951.8	2759.2	2391.9	2082.8	1910.4	1856.6	1896.9	1944.0	1970.8	2011.2	2029.1
35°	3023.5	2797.3	2353.8	2002.2	1820.8	1791.7	1858.9	1919.3	1935.0	1970.8	1986.5
37.5°	3106.3	2860.0	2333.7	1919.3	1733.4	1726.7	1811.8	1872.3	1876.8	1899.2	1914.9
40°	3157.8	2886.8	2311.3	1849.9	1655.1	1659.5	1746.9	1793.9	1785.0	1800.6	1811.8
42.5°	3209.3	2895.8	2264.2	1791.7	1581.2	1585.6	1652.8	1686.4	1690.9	1724.5	1740.2
45°	3296.7	2920.4	2212.7	1737.9	1514.0	1498.3	1538.6	1583.4	1641.6	1706.6	1724.5
47.5°	3413.1	2971.9	2159.0	1673.0	1449.0	1397.5	1413.2	1491.6	1552.0	1612.5	1623.7
50°	3531.8	3023.5	2109.7	1594.6	1384.1	1290.0	1296.7	1368.4	1417.7	1464.7	1471.4
52.5°	3648.3	3068.2	2067.1	1520.7	1310.2	1162.4	1189.2	1263.1	1296.7	1319.1	1325.8
55°	3764.8	3106.3	2029.1	1458.0	1225.1	1061.6	1086.2	1155.6	1189.2	1200.4	1204.9
57.5°	3885.7	3151.1	2000.0	1404.2	1128.8	972.0	987.7	1036.9	1068.3	1081.7	1077.2
60°	3986.5	3189.2	1984.3	1348.2	1032.5	889.1	884.6	929.4	974.2	987.7	983.2
62.5°	4064.9	3213.8	1959.6	1276.6	947.4	806.3	783.9	842.1	889.1	898.1	904.8
65°	4107.4	3216.1	1899.2	1184.7	860.0	716.7	701.0	759.2	788.3	797.3	797.3
67.5°	4100.7	3180.2	1780.5	1061.6	779.4	636.0	622.6	658.4	701.0	707.7	701.0
70°	3961.8	3032.4	1590.1	931.7	683.1	564.4	539.7	575.6	615.9	591.3	580.1
72.5°	3567.7	2649.4	1310.2	788.3	575.6	474.8	463.6	499.4	501.7	506.1	495.0
75°	2815.2	1973.1	980.9	613.6	465.8	398.6	396.4	389.7	398.6	416.6	403.1
77.5°	1478.1	985.4	530.8	376.3	338.2	320.3	304.6	302.3	329.2	340.4	327.0
80°	801.8	553.2	304.6	226.2	206.0	208.3	228.4	224.0	253.1	259.8	248.6
82.5°	349.4	262.0	150.1	136.6	136.6	134.4	141.1	156.8	188.1	188.1	150.1
85°	76.1	64.9	58.2	67.2	76.1	76.1	76.1	76.1	53.8	29.1	20.2
87.5°	24.6	24.6	24.6	26.9	29.1	29.1	24.6	17.9	11.2	2.2	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)