

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: P836892

Luminaire Tested: **ARCH3-90-727-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836892
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14178 lumens
Efficiency: N/A
Efficacy: 152.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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



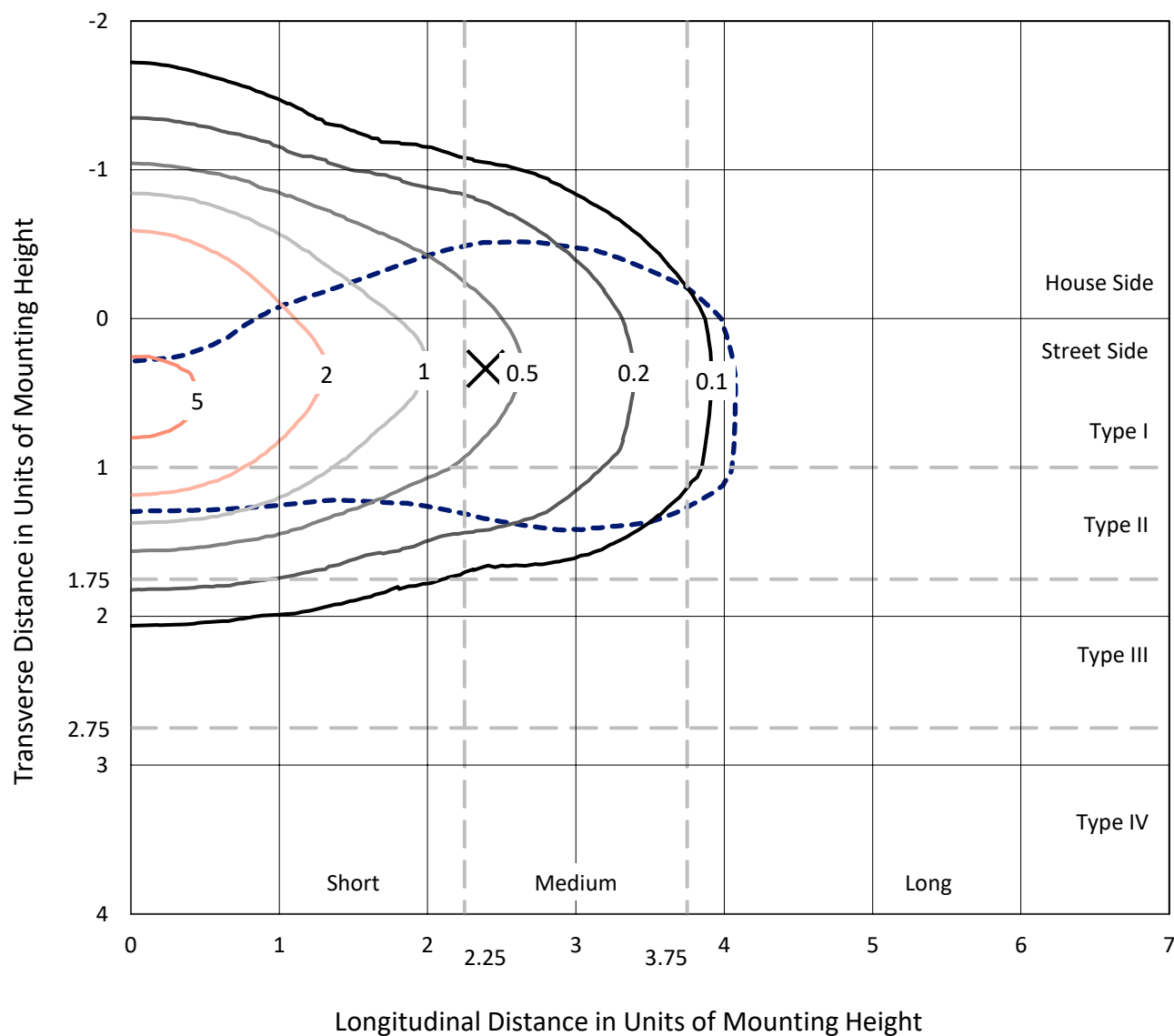
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

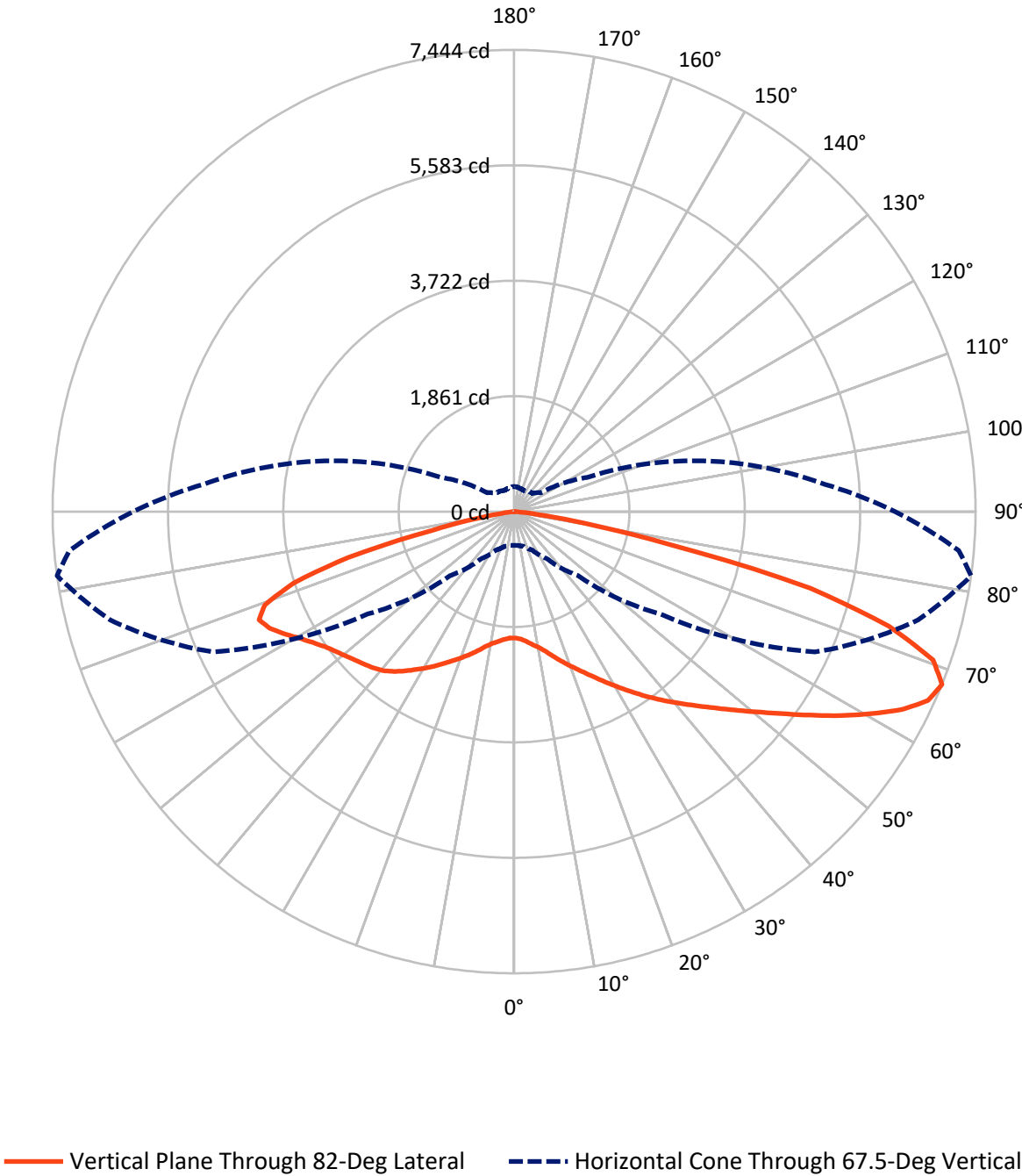
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	4317.8	0.0	4317.8
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	9860.2	0.0	9860.2
	% Fixture	69.5	0.0	69.5
Total	Lumens	14178.0	0.0	14178.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	1.5
10°-20°	758.7	5.4
20°-30°	1524.8	10.8
30°-40°	2395.2	16.9
40°-50°	2917.8	20.6
50°-60°	2757.0	19.4
60°-70°	2276.6	16.1
70°-80°	1239.7	8.7
80°-90°	97.5	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°	14178.0	100.0
0°-180°	14178.0	100.0

Coefficient of Utilization



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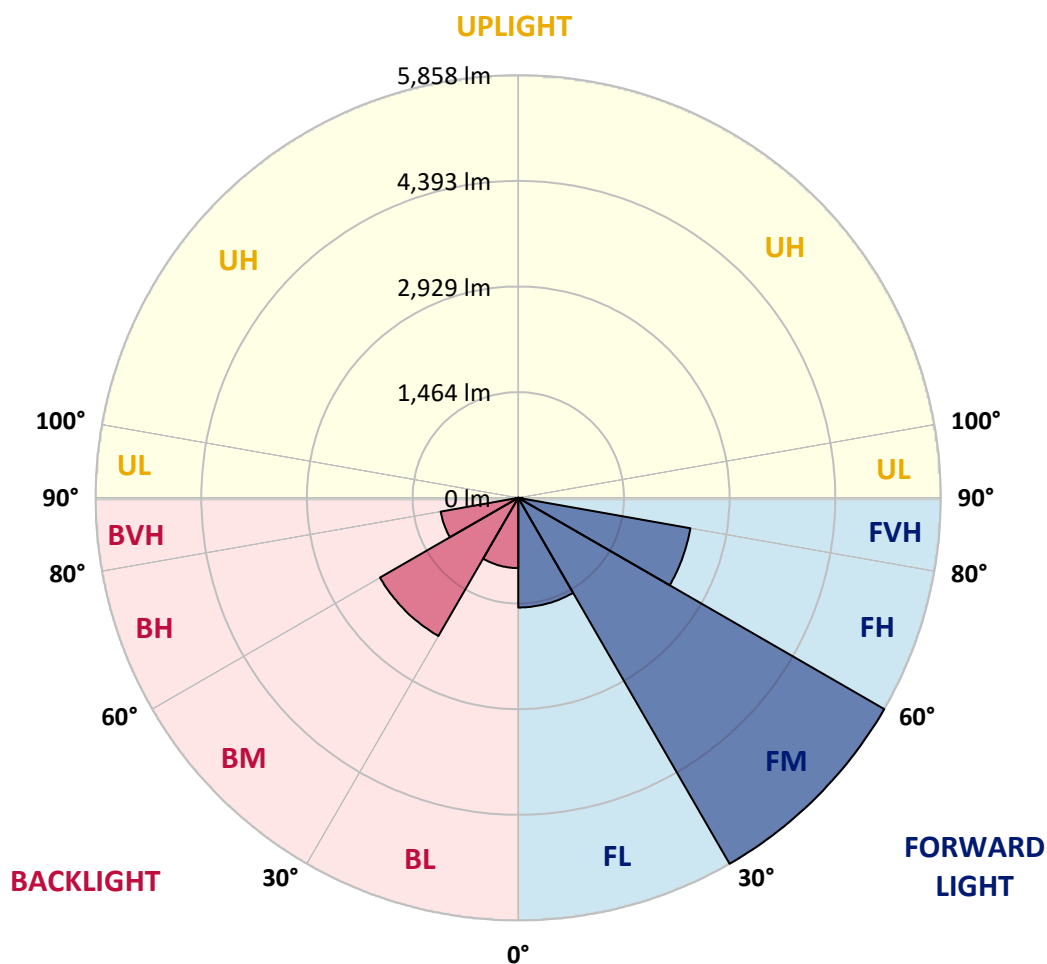
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1520.4	10.7			
FM	(30°-60°)	5857.5	41.3			
FH	(60°-80°)	2423.5	17.1			G2/5000
FVH	(80°-90°)	58.8	0.4			G1/100
BL	(0°-30°)	973.7	6.9	B2/1000		
BM	(30°-60°)	2212.5	15.6	B2/2500		
BH	(60°-80°)	1092.8	7.7	B3/2500		G3/2500
BVH	(80°-90°)	38.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1
2.5°	2130.7	2130.7	2147.2	2147.2	2132.8	2110.1	2104.0	2079.3	2056.6	2056.6	2058.7
5°	2334.5	2332.5	2344.8	2328.4	2293.4	2248.1	2217.2	2163.7	2118.4	2104.0	2101.9
7.5°	2583.6	2581.6	2587.7	2561.0	2495.1	2421.0	2359.2	2272.8	2198.7	2167.8	2159.5
10°	2861.5	2859.5	2853.3	2808.0	2719.5	2604.2	2511.6	2392.2	2281.0	2231.6	2221.3
12.5°	3180.6	3176.5	3162.1	3096.2	2974.8	2826.5	2692.7	2538.3	2390.1	2322.2	2299.5
15°	3536.8	3530.6	3503.9	3423.6	3260.9	3073.6	2900.7	2703.0	2521.9	2433.3	2402.5
17.5°	3911.5	3911.5	3870.3	3750.9	3569.7	3337.1	3123.0	2871.8	2659.8	2550.7	2513.6
20°	4292.3	4290.3	4238.8	4094.7	3880.6	3613.0	3341.2	3065.4	2801.8	2670.1	2624.8
22.5°	4693.8	4689.6	4625.8	4461.1	4205.9	3903.2	3586.2	3256.8	2958.3	2799.8	2742.1
25°	5154.9	5148.7	5070.5	4868.7	4566.1	4224.4	3862.1	3481.2	3137.4	2943.9	2876.0
27.5°	5644.9	5636.6	5544.0	5309.3	4977.9	4566.1	4166.7	3740.6	3335.0	3104.5	3028.3
30°	6081.3	6075.1	5974.3	5733.4	5352.5	4905.8	4457.0	4000.0	3543.0	3275.3	3180.6
32.5°	6410.7	6410.7	6320.1	6083.4	5688.1	5231.1	4749.3	4245.0	3759.1	3458.6	3347.4
35°	6610.4	6616.6	6538.3	6348.9	5976.3	5537.8	5052.0	4533.2	3989.7	3654.1	3534.7
37.5°	6639.2	6659.8	6614.5	6486.9	6176.0	5793.1	5348.4	4811.1	4228.5	3851.8	3718.0
40°	6505.4	6519.8	6521.9	6472.4	6258.3	5976.3	5609.9	5105.5	4481.7	4059.7	3905.3
42.5°	6237.8	6248.1	6266.6	6281.0	6198.6	6056.6	5809.6	5379.3	4751.4	4271.7	4090.6
45°	5891.9	5889.8	5920.7	5982.5	5978.4	6011.3	5920.7	5628.4	5031.4	4512.6	4296.4
47.5°	5375.2	5364.9	5474.0	5614.0	5684.0	5838.4	5922.8	5824.0	5336.1	4778.2	4531.1
50°	4566.1	4555.8	4794.6	5124.0	5329.9	5564.6	5809.6	5941.3	5655.2	5076.7	4786.4
52.5°	3582.1	3571.8	3874.4	4450.8	4899.6	5241.4	5581.0	5968.1	5957.8	5410.2	5074.6
55°	2663.9	2655.7	2950.1	3573.8	4300.6	4866.7	5301.1	5898.1	6241.9	5793.1	5424.6
57.5°	1877.5	1873.4	2128.7	2645.4	3530.6	4409.7	5031.4	5762.2	6503.3	6208.9	5819.9
60°	1317.5	1311.4	1496.7	1896.0	2670.1	3720.0	4763.8	5581.0	6698.9	6618.6	6239.8
62.5°	887.3	883.2	1014.9	1348.4	1896.0	2863.6	4358.2	5459.6	6810.1	7030.3	6663.9
65°	673.2	671.1	730.8	914.0	1342.3	2056.6	3713.8	5445.2	6824.5	7339.1	7024.2
67.5°	543.5	545.5	578.5	683.5	928.5	1461.7	2880.1	5354.6	6748.3	7444.1	7199.2
70°	444.7	444.7	459.1	529.1	685.5	986.1	2011.3	4942.9	6536.3	7170.3	6991.2
72.5°	339.7	341.7	387.0	428.2	516.7	691.7	1288.7	4090.6	6036.0	6322.2	6186.3
75°	269.7	267.6	294.4	352.0	401.4	494.1	790.5	2933.6	5136.4	4940.8	4854.3
77.5°	193.5	191.5	212.0	261.5	304.7	350.0	471.4	1480.2	2793.6	2567.2	2503.3
80°	131.8	127.6	146.2	181.2	201.7	205.9	230.6	568.2	1218.7	1148.7	1134.3
82.5°	67.9	67.9	78.2	102.9	105.0	107.1	102.9	183.2	403.5	376.7	360.3
85°	26.8	26.8	28.8	35.0	35.0	37.1	37.1	47.3	43.2	41.2	39.1
87.5°	2.1	2.1	4.1	4.1	6.2	6.2	6.2	8.2	10.3	10.3	10.3
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°	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1	2038.1
2.5°	2054.5	2046.3	2019.6	2013.4	2009.3	2003.1	2005.1	1990.7	1984.6	1986.6	1978.4
5°	2091.6	2077.2	2044.3	2029.8	2025.7	2019.6	2025.7	2015.4	2005.1	2009.3	2005.1
7.5°	2143.1	2122.5	2081.3	2066.9	2064.8	2058.7	2066.9	2058.7	2050.4	2054.5	2046.3
10°	2196.6	2169.8	2124.5	2110.1	2110.1	2108.1	2116.3	2104.0	2095.7	2097.8	2093.7
12.5°	2274.8	2239.8	2190.4	2178.1	2171.9	2178.1	2180.1	2163.7	2149.2	2151.3	2145.1
15°	2369.5	2330.4	2276.9	2258.4	2254.2	2252.2	2243.9	2223.4	2204.8	2202.8	2196.6
17.5°	2472.5	2423.1	2359.2	2340.7	2322.2	2316.0	2295.4	2268.7	2239.8	2239.8	2231.6
20°	2571.3	2515.7	2439.5	2412.8	2386.0	2361.3	2326.3	2283.1	2246.0	2239.8	2231.6
22.5°	2678.3	2612.4	2523.9	2484.8	2437.5	2388.1	2328.4	2270.7	2223.4	2213.1	2206.9
25°	2797.7	2715.4	2610.4	2552.7	2476.6	2400.4	2311.9	2237.8	2182.2	2165.7	2161.6
27.5°	2929.5	2830.7	2703.0	2618.6	2507.5	2388.1	2274.8	2186.3	2118.4	2097.8	2091.6
30°	3063.3	2946.0	2787.4	2663.9	2507.5	2348.9	2206.9	2104.0	2025.7	1996.9	1992.8
32.5°	3197.1	3065.4	2863.6	2688.6	2482.8	2283.1	2118.4	1996.9	1908.4	1873.4	1881.6
35°	3357.7	3197.1	2933.6	2698.9	2441.6	2202.8	2017.5	1875.4	1784.9	1754.0	1760.2
37.5°	3524.4	3328.9	2989.2	2690.7	2383.9	2112.2	1904.3	1766.3	1653.1	1599.6	1605.8
40°	3668.5	3448.3	3028.3	2661.9	2309.8	2009.3	1793.1	1611.9	1455.5	1404.0	1397.8
42.5°	3804.4	3536.8	3048.9	2618.6	2225.4	1889.9	1634.6	1402.0	1245.5	1181.7	1183.7
45°	3946.5	3623.3	3040.7	2561.0	2120.4	1749.9	1430.8	1196.1	1058.2	1000.5	1002.6
47.5°	4109.1	3715.9	3032.4	2499.2	1992.8	1568.7	1235.2	1014.9	895.5	854.3	850.2
50°	4282.0	3818.8	3022.1	2423.1	1850.7	1367.0	1041.7	846.1	745.2	718.5	712.3
52.5°	4477.6	3930.0	3015.9	2332.5	1679.9	1152.9	868.8	697.9	630.0	611.4	609.4
55°	4712.3	4059.7	3024.2	2223.4	1474.0	951.1	722.6	601.1	555.8	545.5	543.5
57.5°	4998.4	4226.4	3048.9	2095.7	1257.8	776.1	615.5	541.4	512.6	504.4	504.4
60°	5309.3	4415.8	3094.2	1951.6	1041.7	640.2	545.5	494.1	481.7	492.0	492.0
62.5°	5644.9	4638.2	3174.5	1776.6	839.9	541.4	490.0	455.0	446.7	467.3	469.4
65°	5955.7	4854.3	3225.9	1566.6	667.0	469.4	446.7	415.9	420.0	440.6	438.5
67.5°	6147.2	5033.4	3153.9	1303.1	529.1	415.9	401.4	374.7	385.0	401.4	403.5
70°	6029.8	4932.6	2797.7	984.0	413.8	362.3	352.0	335.6	343.8	364.4	372.6
72.5°	5455.5	4417.9	2176.0	664.9	333.5	304.7	308.8	300.6	310.9	329.4	347.9
75°	4428.2	3339.2	1459.6	426.1	263.5	259.4	265.6	259.4	263.5	282.0	292.3
77.5°	2311.9	1628.4	726.7	265.6	195.6	201.7	212.0	214.1	226.5	230.6	234.7
80°	1078.7	732.9	302.6	148.2	129.7	142.0	162.6	164.7	168.8	175.0	177.0
82.5°	352.0	220.3	140.0	80.3	74.1	80.3	105.0	125.6	127.6	140.0	140.0
85°	37.1	22.6	30.9	32.9	28.8	35.0	47.3	45.3	20.6	12.4	12.4
87.5°	10.3	8.2	10.3	10.3	8.2	8.2	6.2	2.1	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)