

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: P842745

Luminaire Tested: **ARCH4-90-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842745
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: ARCH4-90-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15097 lumens
Efficiency: N/A
Efficacy: 162.2 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): 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

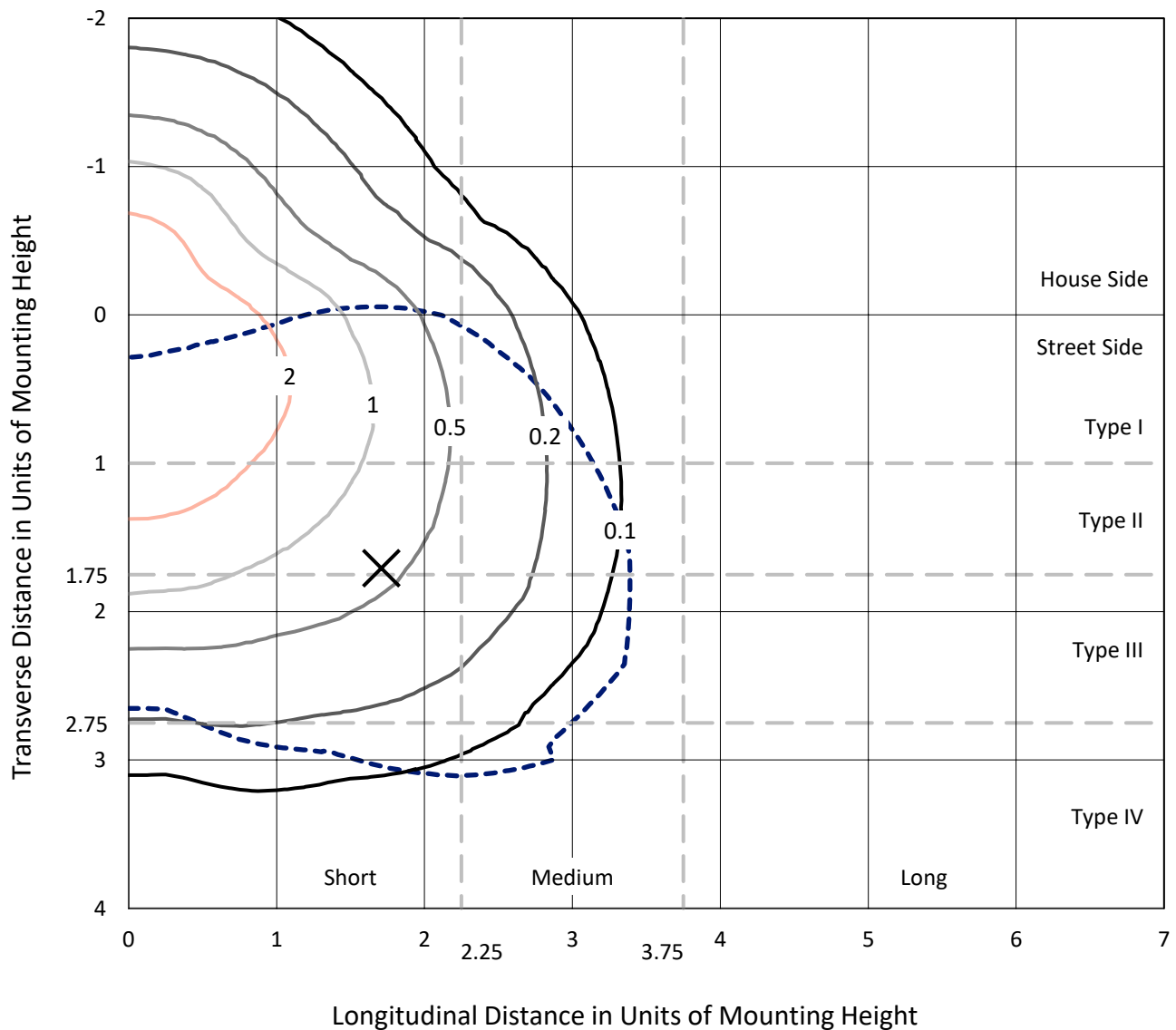


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Iso-Footcandle Lines of Horizontal Illumination

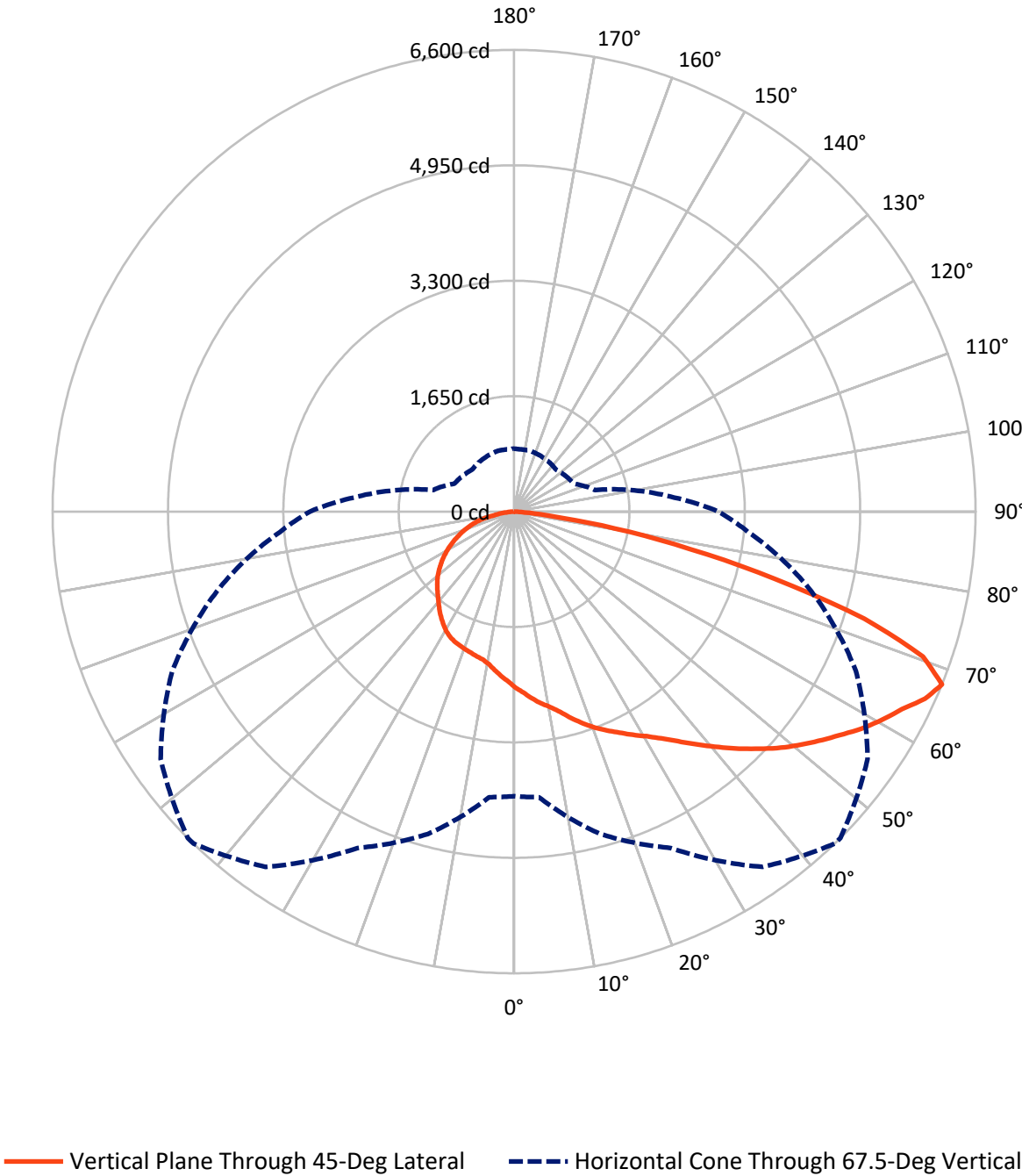
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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	4033.2	0.0	4033.2
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	11063.8	0.0	11063.8
	% Fixture	73.3	0.0	73.3
Total	Lumens	15097.0	0.0	15097.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.1	1.6
10°-20°	744.7	4.9
20°-30°	1285.5	8.5
30°-40°	1895.6	12.6
40°-50°	2568.2	17.0
50°-60°	3138.9	20.8
60°-70°	3237.3	21.4
70°-80°	1773.2	11.7
80°-90°	212.5	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°	15097.0	100.0
0°-180°	15097.0	100.0

Coefficient of Utilization



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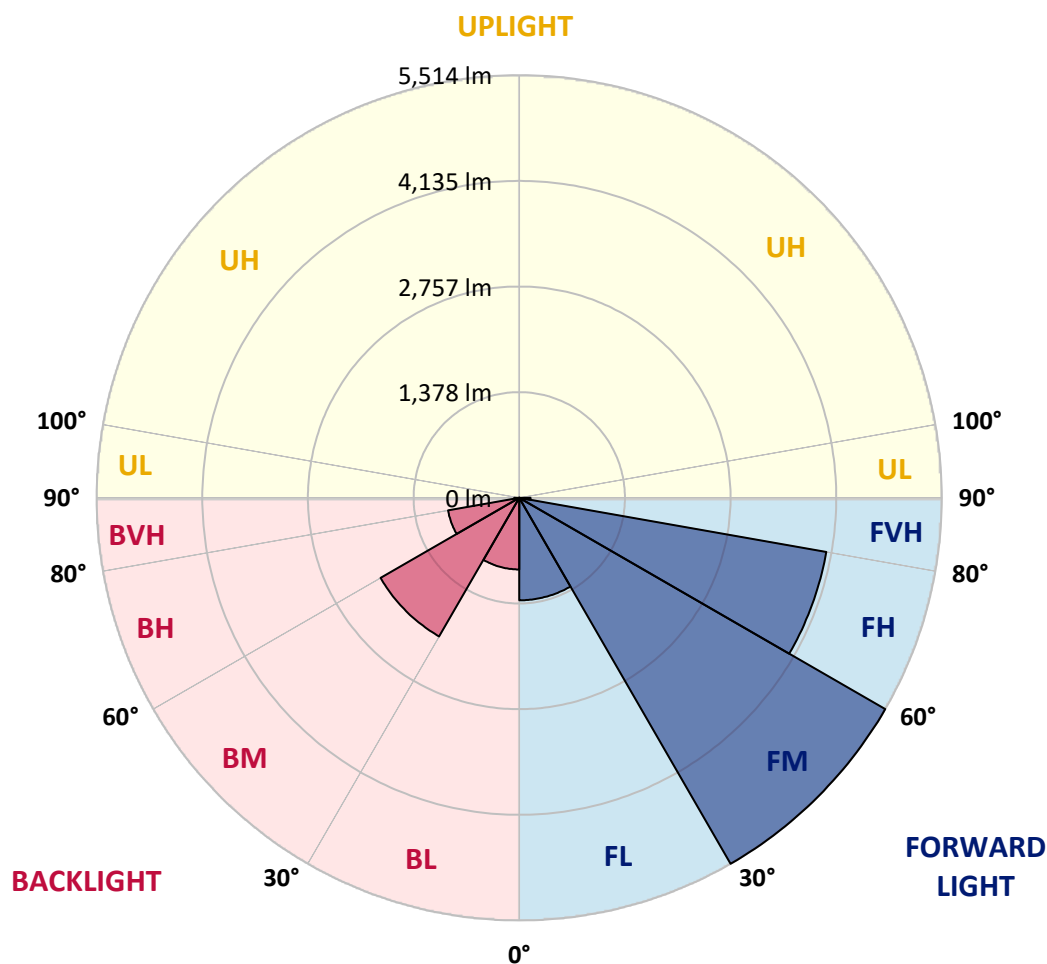
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1336.5	8.9			
FM	(30°-60°)	5513.6	36.5			
FH	(60°-80°)	4067.4	26.9			G2/5000
FVH	(80°-90°)	146.4	1.0			G2/225
BL	(0°-30°)	934.8	6.2	B2/1000		
BM	(30°-60°)	2089.1	13.8	B2/2500		
BH	(60°-80°)	943.2	6.2	B2/1000		G2/1000
BVH	(80°-90°)	66.1	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°	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9
2.5°	2628.2	2625.9	2630.5	2614.4	2593.7	2591.4	2591.4	2577.6	2561.5	2529.4	2504.1
5°	2752.2	2747.6	2749.9	2727.0	2699.4	2685.6	2683.3	2653.4	2616.7	2566.1	2520.2
7.5°	2867.1	2862.5	2860.2	2834.9	2793.6	2770.6	2768.3	2724.7	2681.0	2602.9	2536.3
10°	2975.1	2970.5	2965.9	2931.4	2880.9	2846.4	2841.8	2786.7	2731.5	2635.1	2550.1
12.5°	3112.9	3103.7	3099.1	3057.8	2984.3	2947.5	2940.6	2867.1	2798.2	2681.0	2577.6
15°	3257.6	3250.7	3243.9	3204.8	3122.1	3073.9	3062.4	2970.5	2876.3	2740.7	2619.0
17.5°	3365.6	3358.7	3358.7	3324.3	3248.4	3193.3	3184.1	3073.9	2956.7	2795.9	2651.1
20°	3432.2	3425.3	3432.2	3411.6	3354.1	3308.2	3299.0	3177.2	3037.1	2846.4	2678.7
22.5°	3480.5	3473.6	3485.1	3475.9	3434.5	3407.0	3400.1	3280.6	3119.8	2899.3	2706.3
25°	3565.5	3565.5	3565.5	3549.4	3510.3	3501.2	3501.2	3397.8	3225.5	2968.2	2747.6
27.5°	3735.5	3726.3	3714.8	3668.9	3602.2	3599.9	3613.7	3517.2	3347.2	3057.8	2798.2
30°	3985.9	3981.3	3937.7	3841.2	3728.6	3717.1	3726.3	3645.9	3478.2	3152.0	2855.6
32.5°	4309.8	4293.7	4204.1	4059.4	3898.6	3845.8	3864.1	3779.1	3616.0	3248.4	2910.7
35°	4539.6	4544.2	4479.8	4348.9	4158.2	4018.1	4031.8	3928.5	3765.4	3356.4	2979.7
37.5°	4803.8	4819.8	4723.3	4624.6	4447.7	4208.7	4222.5	4082.4	3914.7	3492.0	3053.2
40°	5169.0	5136.9	4973.8	4856.6	4661.3	4408.6	4420.1	4254.7	4087.0	3620.6	3138.2
42.5°	5474.6	5417.1	5219.6	5070.2	4835.9	4620.0	4631.5	4440.8	4261.6	3763.1	3232.4
45°	5913.4	5754.9	5470.0	5396.5	5015.1	4826.7	4838.2	4638.3	4445.4	3914.7	3333.5
47.5°	6168.4	5915.7	5734.2	5695.1	5212.7	5040.4	5054.2	4847.4	4642.9	4087.0	3439.1
50°	6152.3	5989.2	5936.3	5839.9	5387.3	5240.3	5254.0	5063.4	4842.8	4257.0	3540.2
52.5°	6046.6	6076.5	6048.9	5888.1	5561.9	5433.2	5449.3	5277.0	5047.3	4415.5	3634.4
55°	6209.7	6230.4	6177.6	5966.2	5754.9	5626.2	5644.6	5502.1	5249.4	4555.6	3714.8
57.5°	6405.0	6331.5	6278.7	6104.1	5954.7	5835.3	5855.9	5731.9	5424.0	4668.2	3776.8
60°	6395.8	6241.9	6294.7	6113.2	6090.3	6028.2	6046.6	5920.3	5557.3	4750.9	3802.1
62.5°	5924.9	5842.2	6108.6	6046.6	6200.5	6200.5	6223.5	6035.1	5637.7	4785.4	3788.3
65°	5107.0	5111.6	5580.3	5837.6	6331.5	6437.2	6455.5	6106.4	5591.7	4684.3	3659.7
67.5°	4068.6	4098.5	4771.6	5306.9	6200.5	6598.0	6600.3	6170.7	5394.2	4399.4	3361.0
70°	2977.4	3000.3	3795.2	4445.4	5582.6	6241.9	6205.1	5989.2	4964.6	3903.2	2894.7
72.5°	2012.5	2033.2	2851.0	3413.9	4580.9	5316.1	5235.7	5293.1	4231.7	3207.1	2327.2
75°	1353.1	1378.4	2028.6	2442.1	3370.2	4036.4	3857.2	4008.9	3273.7	2428.3	1697.7
77.5°	852.3	868.4	1288.8	1601.3	2301.9	2747.6	2568.4	2570.7	1886.1	1307.2	912.0
80°	542.2	546.8	781.1	923.5	1332.5	1651.8	1461.1	1187.7	850.0	693.8	544.5
82.5°	314.7	307.8	466.4	521.5	634.1	627.2	519.2	491.6	372.2	346.9	278.0
85°	126.4	117.2	204.5	190.7	193.0	204.5	151.6	151.6	121.8	94.2	68.9
87.5°	25.3	25.3	27.6	25.3	25.3	27.6	20.7	20.7	18.4	18.4	18.4
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°	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9
2.5°	2499.5	2494.9	2483.4	2453.6	2437.5	2428.3	2414.5	2409.9	2407.6	2409.9	2416.8
5°	2506.4	2490.3	2458.2	2409.9	2377.8	2357.1	2334.1	2324.9	2318.0	2318.0	2324.9
7.5°	2511.0	2485.7	2430.6	2359.4	2313.4	2281.3	2253.7	2242.2	2239.9	2246.8	2249.1
10°	2513.3	2476.5	2398.4	2308.8	2249.1	2207.8	2180.2	2173.3	2180.2	2194.0	2196.3
12.5°	2529.4	2478.8	2380.1	2274.4	2203.2	2161.8	2141.1	2141.1	2159.5	2184.8	2187.1
15°	2556.9	2494.9	2370.9	2246.8	2173.3	2136.5	2129.6	2141.1	2168.7	2207.8	2212.3
17.5°	2577.6	2504.1	2350.2	2210.0	2134.2	2111.3	2122.7	2150.3	2189.4	2242.2	2246.8
20°	2591.4	2504.1	2320.3	2166.4	2095.2	2090.6	2122.7	2166.4	2207.8	2269.8	2276.7
22.5°	2605.2	2499.5	2285.9	2113.6	2051.5	2065.3	2125.0	2180.2	2221.5	2288.2	2299.6
25°	2630.5	2506.4	2251.4	2060.7	2005.6	2044.6	2122.7	2189.4	2233.0	2301.9	2320.3
27.5°	2664.9	2522.5	2226.1	2012.5	1959.6	2012.5	2106.7	2187.1	2233.0	2299.6	2320.3
30°	2701.7	2540.9	2196.3	1959.6	1906.8	1966.5	2072.2	2161.8	2214.6	2276.7	2301.9
32.5°	2740.7	2561.5	2171.0	1902.2	1842.5	1904.5	2021.7	2122.7	2180.2	2237.6	2265.2
35°	2793.6	2598.3	2157.2	1856.3	1785.0	1840.2	1957.3	2072.2	2134.2	2187.1	2219.2
37.5°	2857.9	2644.2	2150.3	1810.3	1723.0	1769.0	1888.4	2010.2	2076.8	2120.5	2150.3
40°	2931.4	2701.7	2148.0	1766.7	1661.0	1695.4	1817.2	1939.0	2003.3	2037.7	2063.0
42.5°	3014.1	2766.0	2143.4	1723.0	1599.0	1626.5	1748.3	1867.7	1922.9	1952.7	1975.7
45°	3101.4	2830.3	2134.2	1670.2	1532.3	1564.5	1677.1	1782.7	1840.2	1865.4	1890.7
47.5°	3188.7	2894.7	2115.9	1610.4	1472.6	1502.5	1601.3	1693.1	1739.1	1762.1	1787.3
50°	3273.7	2952.1	2072.2	1541.5	1410.6	1438.1	1514.0	1576.0	1610.4	1628.8	1654.1
52.5°	3349.5	2991.1	2010.2	1461.1	1348.5	1362.3	1412.9	1465.7	1493.3	1495.6	1518.5
55°	3413.9	3011.8	1920.6	1378.4	1281.9	1284.2	1311.8	1353.1	1364.6	1355.4	1371.5
57.5°	3450.6	3000.3	1821.8	1293.4	1213.0	1203.8	1224.5	1245.2	1247.5	1224.5	1240.6
60°	3459.8	2947.5	1693.1	1208.4	1144.1	1118.8	1125.7	1121.1	1116.5	1107.3	1121.1
62.5°	3413.9	2834.9	1550.7	1125.7	1070.6	1031.5	1029.2	1026.9	1033.8	1036.1	1038.4
65°	3246.2	2623.6	1380.7	1040.7	992.5	939.6	937.3	964.9	974.1	960.3	964.9
67.5°	2922.2	2299.6	1194.6	941.9	893.7	847.7	866.1	882.2	898.3	893.7	898.3
70°	2462.8	1888.4	1024.6	831.6	785.7	760.4	781.1	794.9	797.2	792.6	797.2
72.5°	1936.7	1474.9	866.1	719.1	677.7	666.2	691.5	703.0	723.7	732.9	735.2
75°	1399.1	1088.9	709.9	597.3	562.9	562.9	585.8	606.5	624.9	613.4	606.5
77.5°	781.1	650.1	510.0	411.2	418.1	450.3	459.5	482.4	500.8	498.5	493.9
80°	473.3	406.6	344.6	266.5	264.2	289.5	349.2	388.3	397.4	376.8	374.5
82.5°	245.8	213.7	183.8	149.3	165.4	193.0	202.2	243.5	268.8	259.6	271.1
85°	62.0	59.7	66.6	68.9	85.0	94.2	103.4	121.8	80.4	39.1	39.1
87.5°	18.4	18.4	23.0	23.0	29.9	36.8	34.5	34.5	18.4	2.3	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)