

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: P836104

Luminaire Tested: **ARCH3-140-727-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19759 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 142.5
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

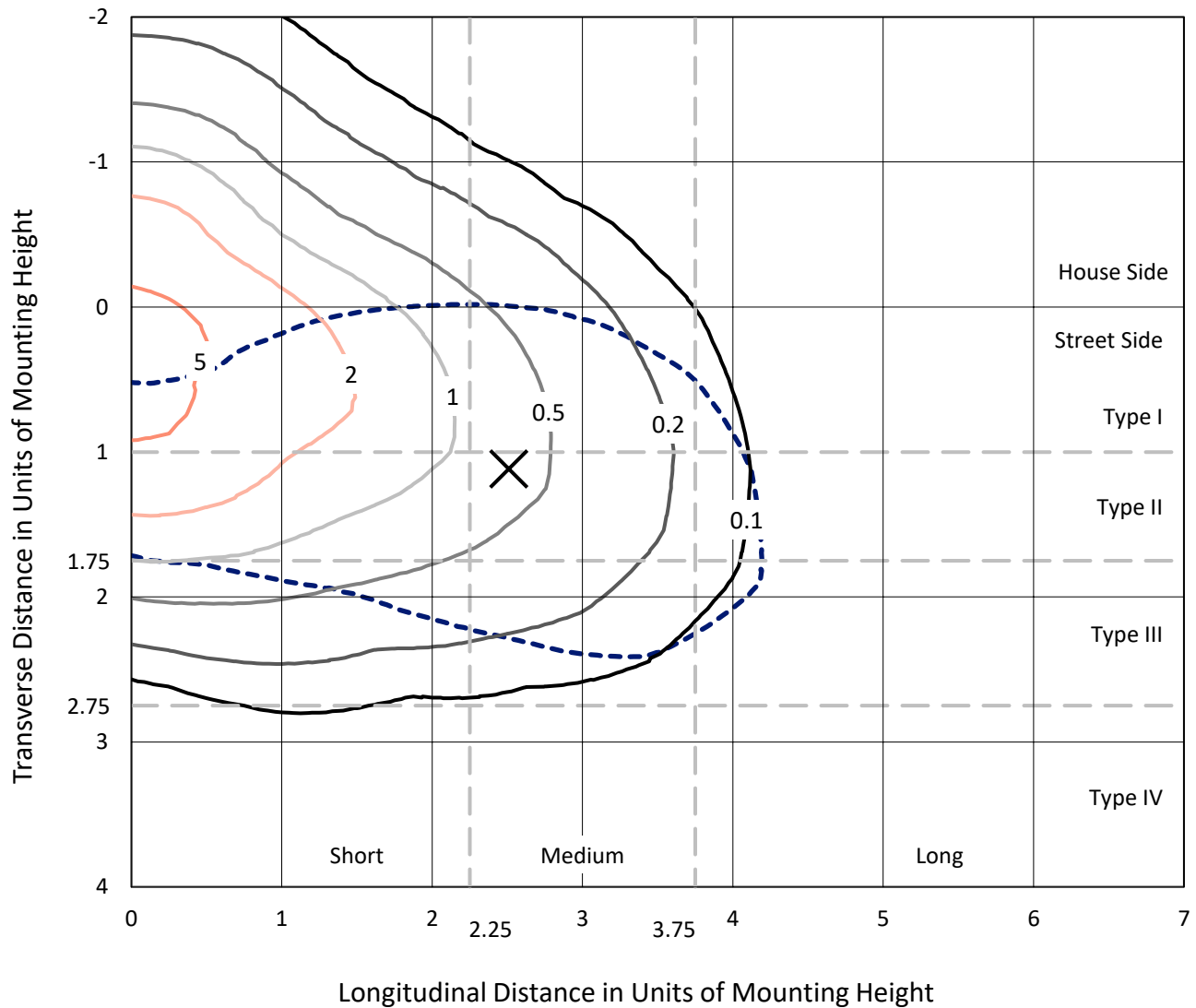


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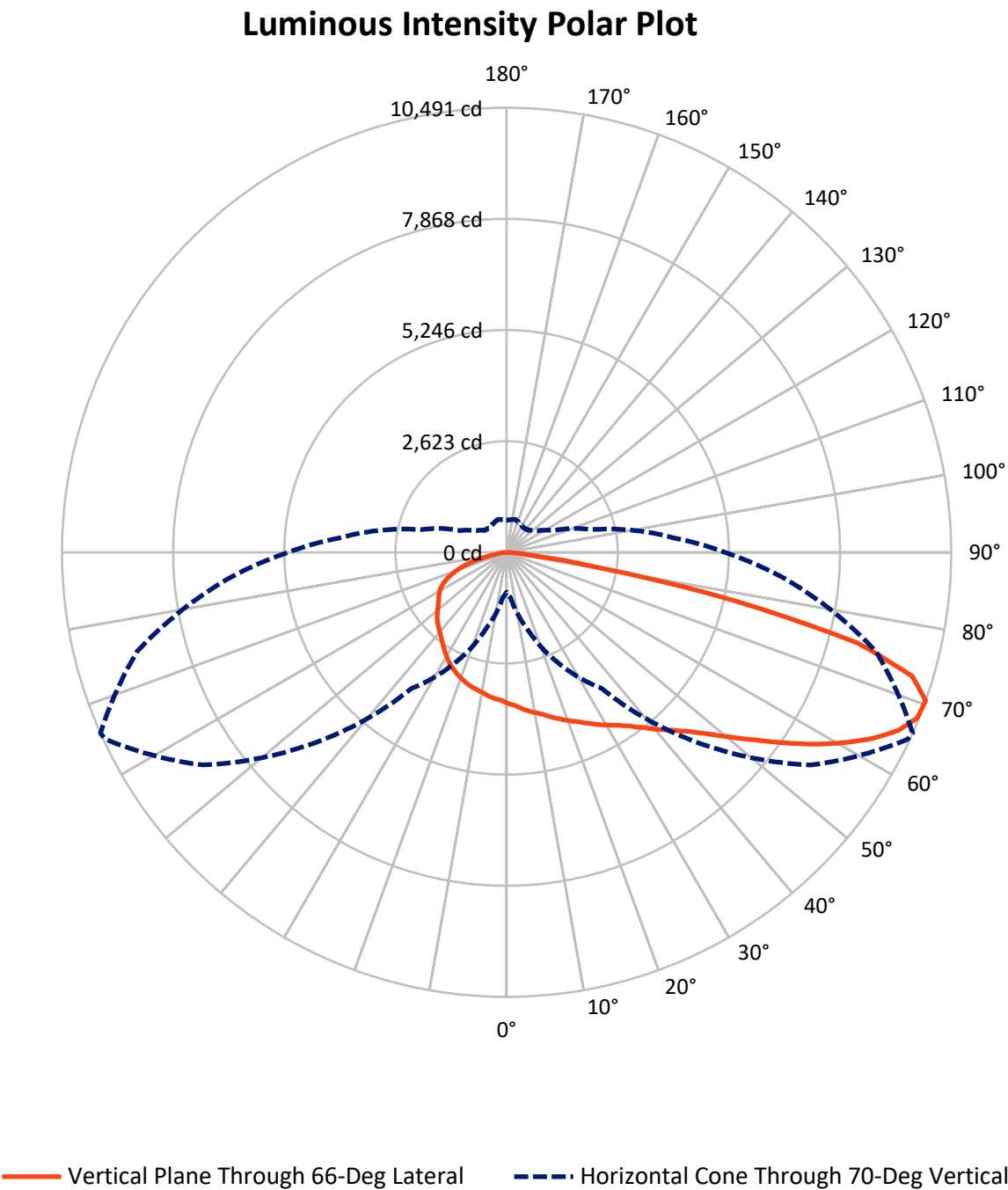
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type III - Medium - N/A

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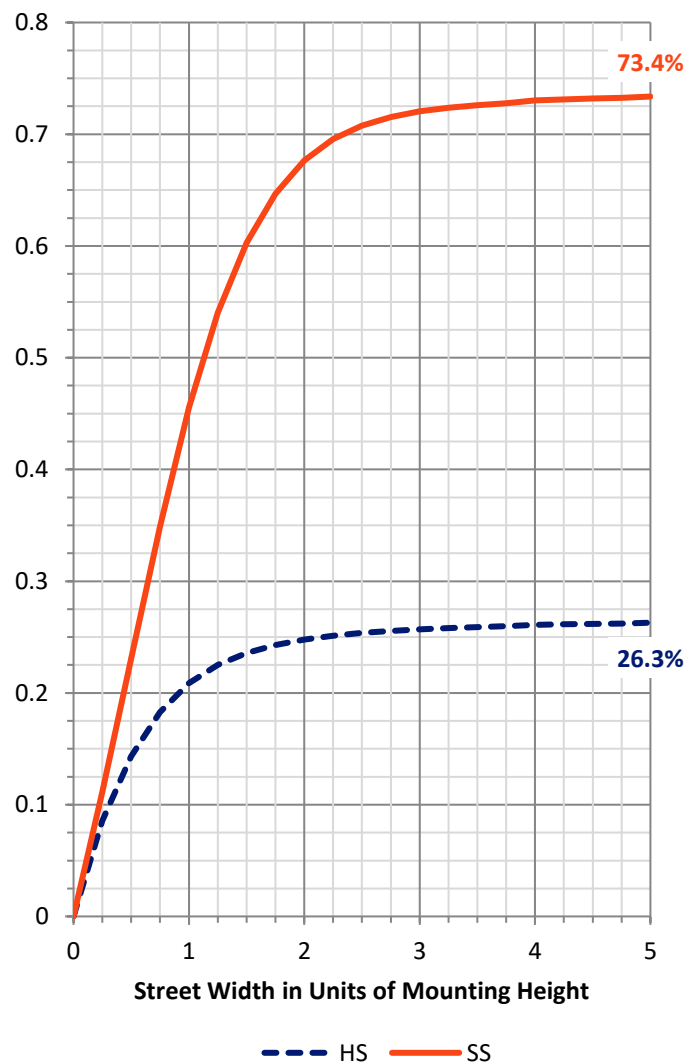
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5235.7	0.0	5235.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	14523.3	0.0	14523.3
	% Fixture	73.5	0.0	73.5
Total	Lumens	19759.0	0.0	19759.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.7	1.7
10°-20°	1027.9	5.2
20°-30°	1723.0	8.7
30°-40°	2579.9	13.1
40°-50°	3449.4	17.5
50°-60°	4027.3	20.4
60°-70°	4004.5	20.3
70°-80°	2370.7	12.0
80°-90°	233.7	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°	19759.0	100.0
0°-180°	19759.0	100.0

Coefficient of Utilization



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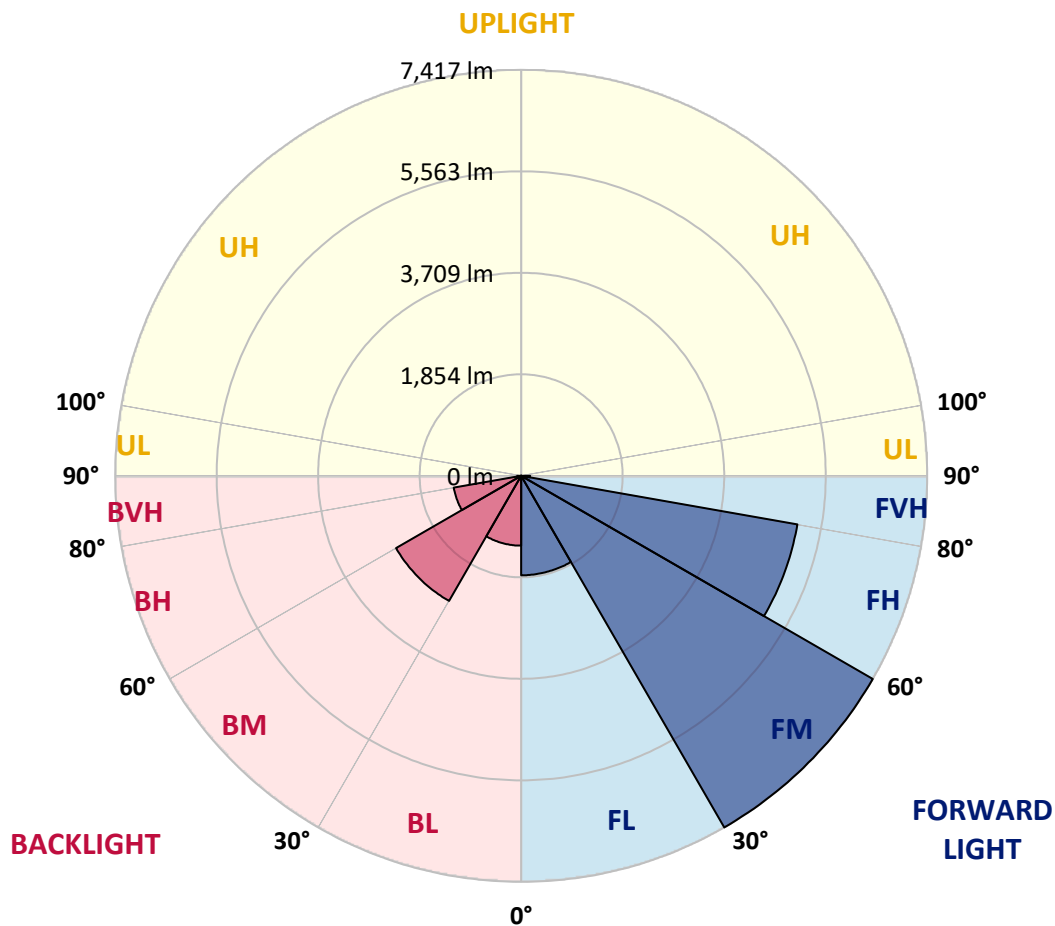
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1817.3	9.2			
FM	(30°-60°)	7417.3	37.5			
FH	(60°-80°)	5124.5	25.9			G3/7500
FVH	(80°-90°)	164.2	0.8			G2/225
BL	(0°-30°)	1276.2	6.5	B3/2500		
BM	(30°-60°)	2639.3	13.4	B3/5000		
BH	(60°-80°)	1250.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	69.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0
2.5°	3697.2	3691.3	3688.4	3676.8	3650.5	3662.2	3636.0	3618.5	3615.6	3574.8	3551.5
5°	3848.7	3845.7	3839.9	3822.4	3781.6	3787.5	3743.8	3711.7	3703.0	3638.9	3589.4
7.5°	3976.8	3971.0	3968.1	3944.8	3901.1	3898.2	3845.7	3799.1	3784.6	3697.2	3621.4
10°	4075.9	4067.2	4073.0	4049.7	4003.1	3994.3	3927.3	3866.1	3851.6	3740.9	3636.0
12.5°	4160.4	4154.6	4163.3	4142.9	4105.0	4096.3	4029.3	3950.6	3933.1	3805.0	3668.0
15°	4253.6	4233.2	4250.7	4242.0	4215.7	4212.8	4151.7	4064.2	4040.9	3886.5	3717.5
17.5°	4303.1	4291.5	4311.9	4314.8	4303.1	4323.5	4265.3	4160.4	4140.0	3962.3	3761.2
20°	4338.1	4320.6	4343.9	4361.4	4370.2	4410.9	4364.3	4262.4	4239.1	4035.1	3802.0
22.5°	4457.6	4419.7	4422.6	4434.3	4440.1	4498.4	4469.2	4370.2	4346.9	4125.4	3851.6
25°	4757.6	4681.9	4632.4	4597.4	4556.6	4606.1	4588.7	4492.5	4472.1	4233.2	3912.7
27.5°	5223.8	5127.7	5028.6	4926.6	4766.4	4746.0	4716.9	4629.5	4606.1	4341.0	3973.9
30°	5754.0	5657.9	5541.4	5378.2	5078.1	4920.8	4853.8	4757.6	4731.4	4437.2	4032.2
32.5°	6281.4	6196.9	6080.3	5882.2	5454.0	5133.5	4990.7	4891.7	4865.4	4542.1	4102.1
35°	6692.2	6639.7	6564.0	6316.3	5826.9	5384.0	5188.8	5069.4	5040.2	4708.1	4230.3
37.5°	7024.3	6986.4	6922.3	6663.0	6097.8	5634.6	5416.1	5279.2	5247.1	4888.8	4367.2
40°	7513.8	7414.7	7362.3	6986.4	6333.8	5861.8	5672.5	5529.7	5494.7	5081.0	4478.0
42.5°	7930.4	7857.5	7793.4	7274.9	6558.2	6057.0	5914.3	5783.2	5736.6	5270.4	4597.4
45°	8000.3	8029.4	7997.4	7417.6	6913.6	6249.3	6159.0	6074.5	6030.8	5526.8	4778.0
47.5°	8003.2	8003.2	7813.8	7499.2	7353.5	6464.9	6421.2	6450.4	6403.7	5853.1	4993.6
50°	7793.4	7831.3	7732.3	7519.6	7470.1	6680.5	6741.7	6899.0	6852.4	6199.8	5226.7
52.5°	7359.3	7484.6	7481.7	7487.5	7301.1	6864.1	7079.7	7438.0	7359.3	6590.2	5474.4
55°	6593.1	6843.7	7068.0	7260.3	7155.4	6974.8	7493.4	8012.0	7930.4	7027.2	5724.9
57.5°	5937.6	6097.8	6377.5	6922.3	6983.5	7070.9	7880.9	8612.1	8539.3	7510.8	5987.1
60°	5188.8	5410.3	5689.9	6464.9	6773.7	7196.2	8306.2	9197.7	9127.8	8000.3	6240.6
62.5°	4038.0	4323.5	4882.9	5762.8	6467.8	7274.9	8641.3	9713.4	9681.4	8463.5	6467.8
65°	2814.4	3067.9	3851.6	4900.4	5981.3	7239.9	8909.3	10173.7	10144.6	8842.3	6628.1
67.5°	1643.2	1937.4	2823.1	3944.8	5121.8	6998.1	8996.7	10444.7	10444.7	9072.4	6671.8
70°	938.1	1075.1	1861.7	2875.6	3927.3	6330.9	8752.0	10441.8	10491.3	9020.0	6491.1
72.5°	655.5	716.7	1252.8	1934.5	2662.9	5121.8	8111.0	9937.7	10004.8	8524.7	5873.5
75°	509.9	553.6	882.8	1319.8	1678.1	3478.6	6709.7	8379.1	8556.8	7266.1	4748.9
77.5°	387.5	419.5	515.7	824.5	1075.1	1998.6	4428.4	5494.7	5506.4	4448.8	2546.3
80°	282.6	314.7	343.8	504.0	571.0	935.2	1672.3	2295.8	2231.7	2153.0	1378.1
82.5°	169.0	201.0	209.8	273.9	279.7	399.1	585.6	740.0	710.9	946.9	646.8
85°	72.8	102.0	107.8	125.3	119.5	163.2	233.1	195.2	174.8	201.0	139.8
87.5°	17.5	29.1	29.1	32.0	26.2	40.8	43.7	32.0	29.1	35.0	35.0
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°	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0	3566.0
2.5°	3545.7	3536.9	3539.8	3490.3	3475.7	3461.2	3452.4	3446.6	3440.8	3449.5	3458.3
5°	3571.9	3551.5	3528.2	3455.3	3426.2	3394.2	3370.8	3350.5	3341.7	3341.7	3350.5
7.5°	3592.3	3557.3	3507.8	3411.6	3359.2	3315.5	3277.6	3251.4	3236.8	3236.8	3245.6
10°	3595.2	3545.7	3467.0	3350.5	3280.5	3216.4	3172.7	3143.6	3123.2	3123.2	3129.0
12.5°	3612.7	3545.7	3443.7	3303.8	3216.4	3137.8	3085.3	3041.6	3032.9	3032.9	3038.7
15°	3641.8	3560.2	3429.1	3263.1	3158.2	3067.9	3009.6	2963.0	2945.5	2957.1	2960.1
17.5°	3668.0	3569.0	3402.9	3210.6	3085.3	2986.3	2922.2	2881.4	2858.1	2884.3	2884.3
20°	3685.5	3569.0	3365.0	3143.6	3006.7	2896.0	2834.8	2785.2	2767.8	2799.8	2802.7
22.5°	3711.7	3566.0	3324.2	3076.6	2922.2	2805.6	2744.5	2706.6	2697.8	2732.8	2744.5
25°	3740.9	3571.9	3280.5	3000.8	2828.9	2715.3	2668.7	2651.2	2657.1	2700.8	2715.3
27.5°	3772.9	3583.5	3236.8	2916.4	2727.0	2625.0	2598.8	2607.5	2630.8	2686.2	2703.7
30°	3802.0	3586.4	3175.6	2817.3	2610.4	2514.3	2526.0	2563.8	2598.8	2654.1	2674.5
32.5°	3839.9	3589.4	3111.6	2709.5	2485.2	2415.2	2467.7	2528.9	2563.8	2616.3	2639.6
35°	3933.1	3638.9	3062.0	2604.6	2368.6	2330.8	2418.2	2496.8	2517.2	2563.8	2584.2
37.5°	4040.9	3720.5	3035.8	2496.8	2255.0	2246.3	2357.0	2435.6	2441.5	2470.6	2491.0
40°	4107.9	3755.4	3006.7	2406.5	2153.0	2158.9	2272.5	2333.7	2322.0	2342.4	2357.0
42.5°	4175.0	3767.1	2945.5	2330.8	2056.9	2062.7	2150.1	2193.8	2199.6	2243.3	2263.7
45°	4288.6	3799.1	2878.5	2260.8	1969.5	1949.1	2001.5	2059.8	2135.6	2220.0	2243.3
47.5°	4440.1	3866.1	2808.6	2176.3	1885.0	1818.0	1838.4	1940.4	2019.0	2097.7	2112.2
50°	4594.5	3933.1	2744.5	2074.4	1800.5	1678.1	1686.9	1780.1	1844.2	1905.4	1914.1
52.5°	4746.0	3991.4	2689.1	1978.2	1704.4	1512.1	1547.0	1643.2	1686.9	1716.0	1724.8
55°	4897.5	4040.9	2639.6	1896.6	1593.7	1381.0	1413.0	1503.3	1547.0	1561.6	1567.4
57.5°	5054.8	4099.2	2601.7	1826.7	1468.4	1264.4	1284.8	1348.9	1389.7	1407.2	1401.4
60°	5185.9	4148.7	2581.3	1753.9	1343.1	1156.6	1150.8	1209.1	1267.3	1284.8	1279.0
62.5°	5287.9	4180.8	2549.3	1660.7	1232.4	1048.8	1019.7	1095.5	1156.6	1168.3	1177.0
65°	5343.2	4183.7	2470.6	1541.2	1118.8	932.3	911.9	987.7	1025.5	1037.2	1037.2
67.5°	5334.5	4137.1	2316.2	1381.0	1013.9	827.4	809.9	856.6	911.9	920.6	911.9
70°	5153.9	3944.8	2068.5	1212.0	888.6	734.2	702.1	748.8	801.2	769.1	754.6
72.5°	4641.1	3446.6	1704.4	1025.5	748.8	617.6	603.1	649.7	652.6	658.4	643.9
75°	3662.2	2566.7	1276.1	798.3	606.0	518.6	515.7	506.9	518.6	541.9	524.4
77.5°	1922.9	1281.9	690.5	489.5	439.9	416.6	396.2	393.3	428.3	442.8	425.4
80°	1043.0	719.6	396.2	294.3	268.0	270.9	297.2	291.3	329.2	338.0	323.4
82.5°	454.5	340.9	195.2	177.7	177.7	174.8	183.5	203.9	244.7	244.7	195.2
85°	99.1	84.5	75.7	87.4	99.1	99.1	99.1	99.1	69.9	37.9	26.2
87.5°	32.0	32.0	32.0	35.0	37.9	37.9	32.0	23.3	14.6	2.9	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)