

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: P836358

Luminaire Tested: **ARCH3-170-750-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23667 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 IV - Short
BUG Rating: B3 - U0 - G3

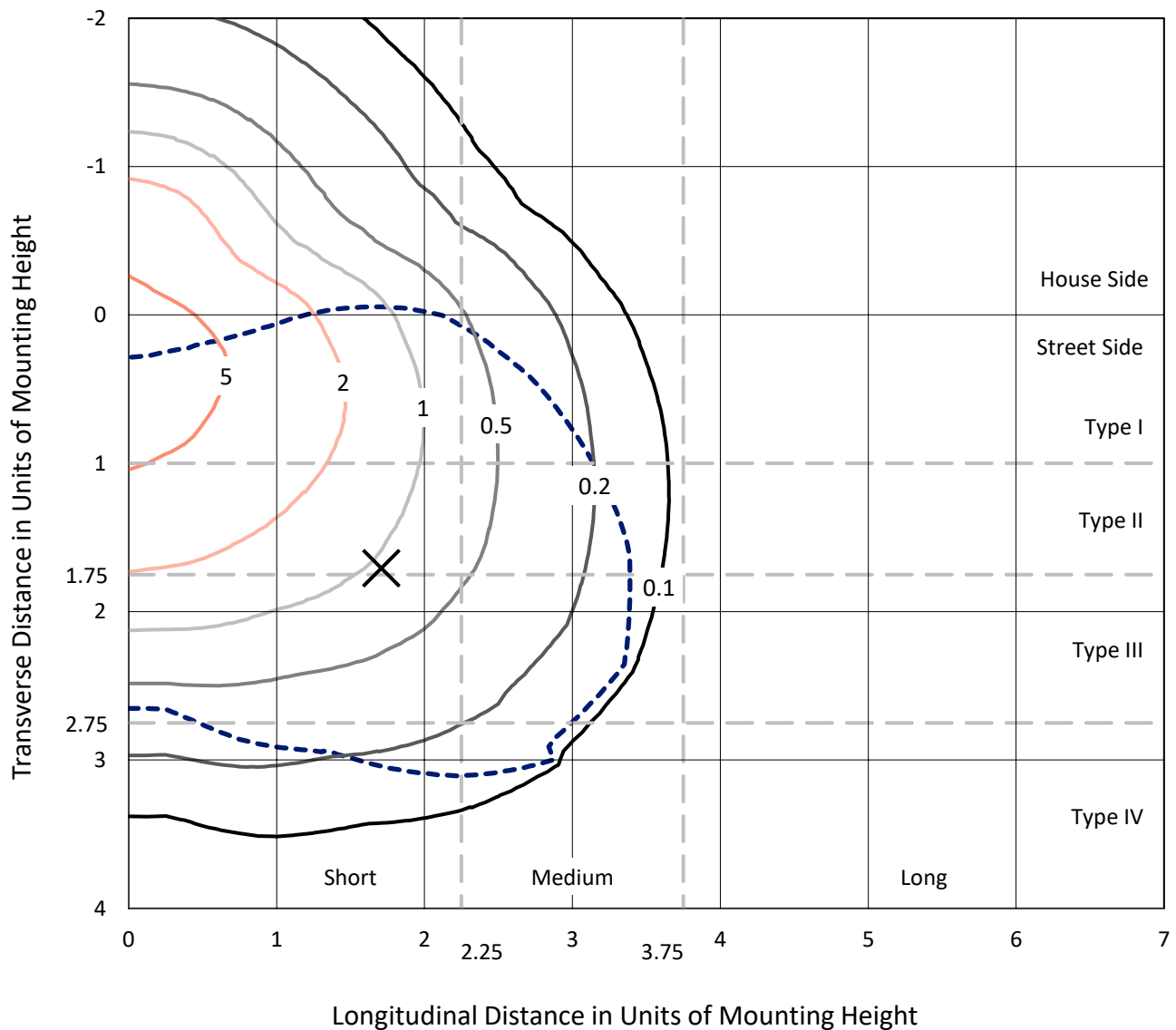
Input Watts (W): 170.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

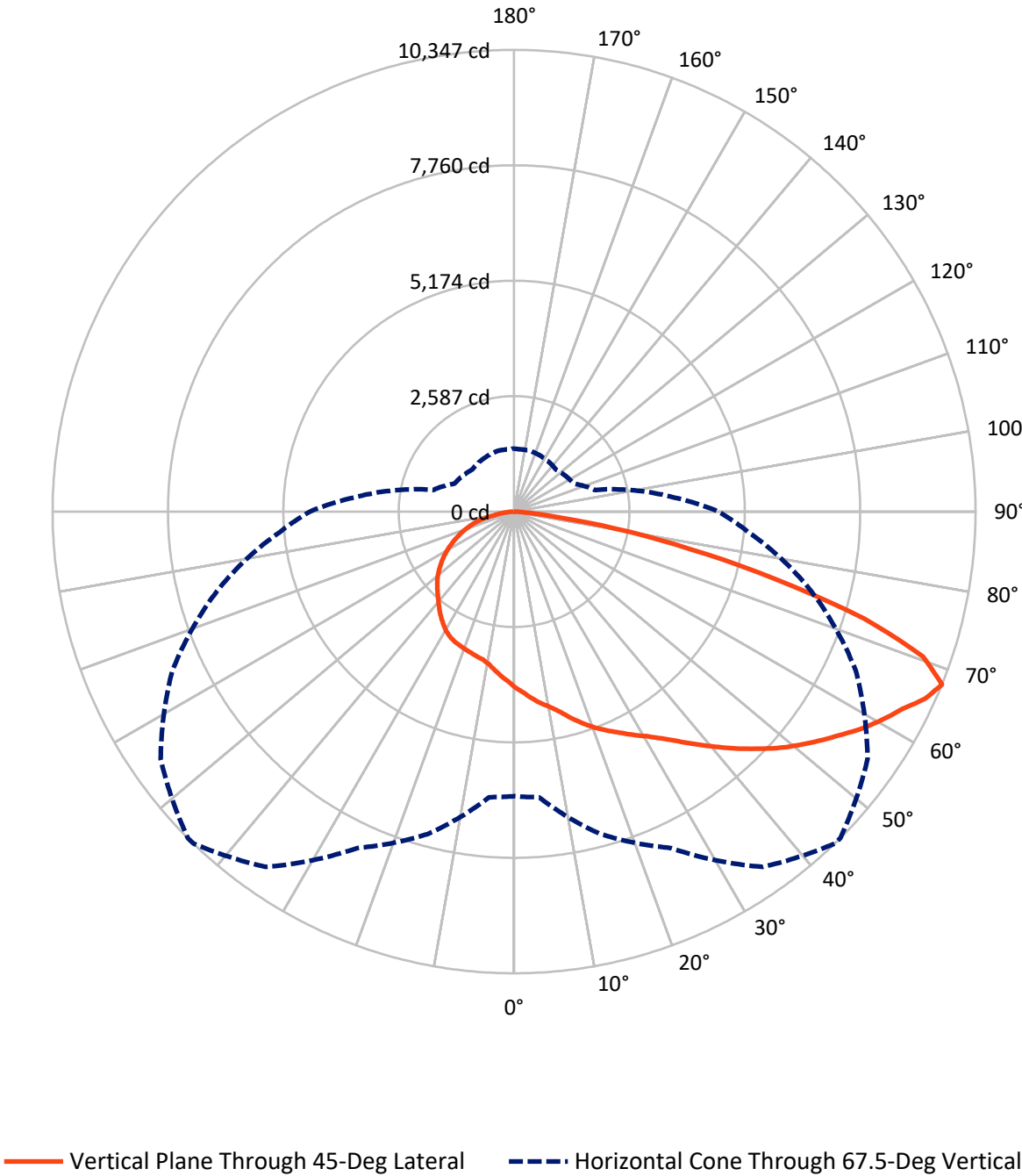
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	6322.7	0.0	6322.7
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	17344.3	0.0	17344.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	23667.0	0.0	23667.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.9	1.6
10°-20°	1167.5	4.9
20°-30°	2015.2	8.5
30°-40°	2971.7	12.6
40°-50°	4026.0	17.0
50°-60°	4920.8	20.8
60°-70°	5075.1	21.4
70°-80°	2779.8	11.7
80°-90°	333.2	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°	23667.0	100.0
0°-180°	23667.0	100.0

Coefficient of Utilization



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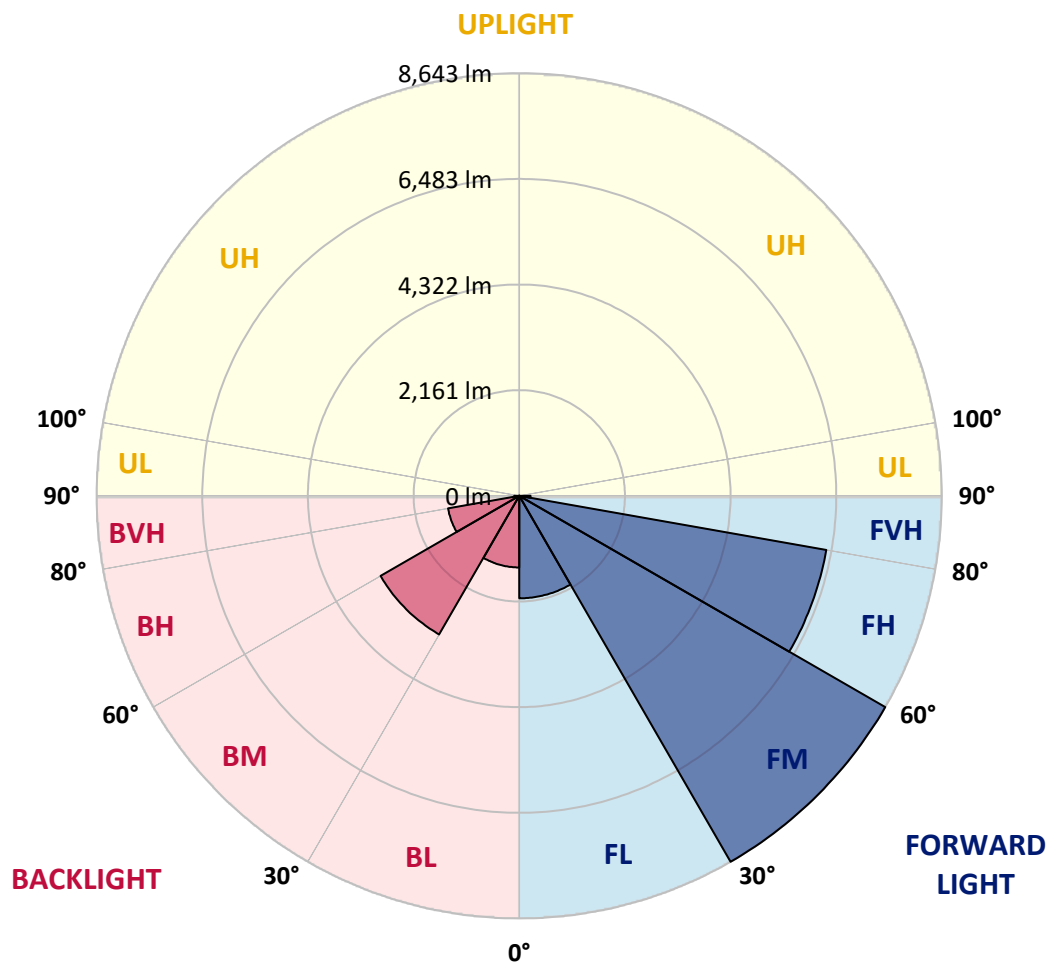
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2095.2	8.9			
FM	(30°-60°)	8643.4	36.5			
FH	(60°-80°)	6376.2	26.9			G3/7500
FVH	(80°-90°)	229.5	1.0			G3/500
BL	(0°-30°)	1465.4	6.2	B3/2500		
BM	(30°-60°)	3275.0	13.8	B3/5000		
BH	(60°-80°)	1478.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	103.7	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2
2.5°	4120.1	4116.5	4123.7	4098.5	4066.1	4062.5	4062.5	4040.8	4015.6	3965.2	3925.6
5°	4314.6	4307.4	4311.0	4274.9	4231.7	4210.1	4206.5	4159.7	4102.1	4022.8	3950.8
7.5°	4494.6	4487.4	4483.8	4444.2	4379.4	4343.4	4339.8	4271.3	4202.9	4080.5	3976.0
10°	4663.9	4656.7	4649.5	4595.5	4516.2	4462.2	4455.0	4368.6	4282.1	4130.9	3997.6
12.5°	4880.0	4865.6	4858.4	4793.6	4678.3	4620.7	4609.9	4494.6	4386.6	4202.9	4040.8
15°	5106.9	5096.1	5085.3	5024.0	4894.4	4818.8	4800.8	4656.7	4509.0	4296.5	4105.7
17.5°	5276.1	5265.3	5265.3	5211.3	5092.5	5006.0	4991.6	4818.8	4635.1	4383.0	4156.1
20°	5380.6	5369.8	5380.6	5348.2	5258.1	5186.1	5171.7	4980.8	4761.1	4462.2	4199.3
22.5°	5456.2	5445.4	5463.4	5449.0	5384.2	5341.0	5330.2	5142.9	4890.8	4545.1	4242.5
25°	5589.5	5589.5	5589.5	5564.3	5503.0	5488.6	5488.6	5326.6	5056.5	4653.1	4307.4
27.5°	5856.0	5841.6	5823.6	5751.5	5647.1	5643.5	5665.1	5513.8	5247.3	4793.6	4386.6
30°	6248.5	6241.3	6172.9	6021.7	5845.2	5827.2	5841.6	5715.5	5452.6	4941.2	4476.6
32.5°	6756.4	6731.1	6590.7	6363.8	6111.7	6028.9	6057.7	5924.4	5668.7	5092.5	4563.1
35°	7116.5	7123.7	7022.9	6817.6	6518.7	6299.0	6320.6	6158.5	5902.8	5261.7	4671.1
37.5°	7530.7	7555.9	7404.6	7249.8	6972.4	6597.9	6619.5	6399.8	6136.9	5474.2	4786.3
40°	8103.3	8052.9	7797.2	7613.5	7307.4	6911.2	6929.2	6669.9	6407.0	5675.9	4919.6
42.5°	8582.3	8492.3	8182.5	7948.4	7581.1	7242.5	7260.6	6961.6	6680.7	5899.2	5067.3
45°	9270.2	9021.7	8575.1	8459.8	7862.0	7566.7	7584.7	7271.4	6968.8	6136.9	5225.7
47.5°	9669.9	9273.8	8989.3	8928.0	8171.7	7901.6	7923.2	7599.1	7278.6	6407.0	5391.4
50°	9644.7	9389.0	9306.2	9154.9	8445.4	8214.9	8236.6	7937.6	7591.9	6673.5	5549.9
52.5°	9479.1	9525.9	9482.7	9230.6	8719.1	8517.5	8542.7	8272.6	7912.4	6922.0	5697.5
55°	9734.8	9767.2	9684.3	9353.0	9021.7	8820.0	8848.8	8625.5	8229.3	7141.7	5823.6
57.5°	10040.9	9925.6	9842.8	9569.1	9335.0	9147.7	9180.1	8985.7	8503.1	7318.2	5920.8
60°	10026.5	9785.2	9868.0	9583.5	9547.5	9450.2	9479.1	9281.0	8711.9	7447.8	5960.4
62.5°	9288.2	9158.5	9576.3	9479.1	9720.4	9720.4	9756.4	9461.1	8838.0	7501.9	5938.8
65°	8006.1	8013.3	8748.0	9151.3	9925.6	10091.3	10120.1	9572.7	8766.0	7343.4	5737.1
67.5°	6378.2	6425.0	7480.2	8319.4	9720.4	10343.4	10347.0	9673.5	8456.2	6896.8	5268.9
70°	4667.5	4703.5	5949.6	6968.8	8751.6	9785.2	9727.6	9389.0	7782.8	6118.9	4537.8
72.5°	3154.9	3187.3	4469.4	5351.8	7181.3	8333.8	8207.7	8297.8	6633.9	5027.6	3648.3
75°	2121.3	2160.9	3180.1	3828.4	5283.4	6327.8	6046.9	6284.6	5132.1	3806.7	2661.5
77.5°	1336.1	1361.4	2020.4	2510.2	3608.7	4307.4	4026.4	4030.0	2956.8	2049.2	1429.8
80°	849.9	857.1	1224.5	1447.8	2088.9	2589.5	2290.5	1862.0	1332.5	1087.6	853.5
82.5°	493.4	482.6	731.1	817.5	994.0	983.2	813.9	770.7	583.4	543.8	435.8
85°	198.1	183.7	320.5	298.9	302.5	320.5	237.7	237.7	190.9	147.7	108.0
87.5°	39.6	39.6	43.2	39.6	39.6	43.2	32.4	32.4	28.8	28.8	28.8
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°	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2	3947.2
2.5°	3918.4	3911.2	3893.2	3846.4	3821.2	3806.7	3785.1	3777.9	3774.3	3777.9	3788.7
5°	3929.2	3904.0	3853.6	3777.9	3727.5	3695.1	3659.1	3644.7	3633.9	3633.9	3644.7
7.5°	3936.4	3896.8	3810.4	3698.7	3626.7	3576.3	3533.0	3515.0	3511.4	3522.2	3525.8
10°	3940.0	3882.4	3759.9	3619.5	3525.8	3461.0	3417.8	3407.0	3417.8	3439.4	3443.0
12.5°	3965.2	3886.0	3731.1	3565.5	3453.8	3389.0	3356.6	3356.6	3385.4	3425.0	3428.6
15°	4008.4	3911.2	3716.7	3522.2	3407.0	3349.4	3338.6	3356.6	3399.8	3461.0	3468.2
17.5°	4040.8	3925.6	3684.3	3464.6	3345.8	3309.7	3327.8	3371.0	3432.2	3515.0	3522.2
20°	4062.5	3925.6	3637.5	3396.2	3284.5	3277.3	3327.8	3396.2	3461.0	3558.2	3569.1
22.5°	4084.1	3918.4	3583.5	3313.3	3216.1	3237.7	3331.4	3417.8	3482.6	3587.1	3605.1
25°	4123.7	3929.2	3529.4	3230.5	3144.1	3205.3	3327.8	3432.2	3500.6	3608.7	3637.5
27.5°	4177.7	3954.4	3489.8	3154.9	3072.1	3154.9	3302.5	3428.6	3500.6	3605.1	3637.5
30°	4235.3	3983.2	3443.0	3072.1	2989.2	3082.9	3248.5	3389.0	3471.8	3569.1	3608.7
32.5°	4296.5	4015.6	3403.4	2982.0	2888.4	2985.6	3169.3	3327.8	3417.8	3507.8	3551.0
35°	4379.4	4073.3	3381.8	2910.0	2798.3	2884.8	3068.4	3248.5	3345.8	3428.6	3479.0
37.5°	4480.2	4145.3	3371.0	2838.0	2701.1	2773.1	2960.4	3151.3	3255.7	3324.2	3371.0
40°	4595.5	4235.3	3367.4	2769.5	2603.9	2657.9	2848.8	3039.6	3140.5	3194.5	3234.1
42.5°	4725.1	4336.2	3360.2	2701.1	2506.6	2549.8	2740.7	2928.0	3014.4	3061.2	3097.3
45°	4862.0	4437.0	3345.8	2618.3	2402.2	2452.6	2629.1	2794.7	2884.8	2924.4	2964.0
47.5°	4998.8	4537.8	3317.0	2524.6	2308.5	2355.4	2510.2	2654.3	2726.3	2762.3	2801.9
50°	5132.1	4627.9	3248.5	2416.6	2211.3	2254.5	2373.4	2470.6	2524.6	2553.4	2593.1
52.5°	5250.9	4689.1	3151.3	2290.5	2114.1	2135.7	2214.9	2297.7	2341.0	2344.6	2380.6
55°	5351.8	4721.5	3010.8	2160.9	2009.6	2013.2	2056.4	2121.3	2139.3	2124.9	2150.1
57.5°	5409.4	4703.5	2856.0	2027.6	1901.6	1887.2	1919.6	1952.0	1955.6	1919.6	1944.8
60°	5423.8	4620.7	2654.3	1894.4	1793.5	1753.9	1764.7	1757.5	1750.3	1735.9	1757.5
62.5°	5351.8	4444.2	2431.0	1764.7	1678.3	1617.1	1613.5	1609.9	1620.7	1624.3	1627.9
65°	5088.9	4112.9	2164.5	1631.5	1555.8	1473.0	1469.4	1512.6	1527.0	1505.4	1512.6
67.5°	4581.1	3605.1	1872.8	1476.6	1401.0	1328.9	1357.8	1383.0	1408.2	1401.0	1408.2
70°	3860.8	2960.4	1606.3	1303.7	1231.7	1192.1	1224.5	1246.1	1249.7	1242.5	1249.7
72.5°	3036.0	2312.1	1357.8	1127.3	1062.4	1044.4	1084.0	1102.0	1134.5	1148.9	1152.5
75°	2193.3	1707.1	1112.9	936.4	882.4	882.4	918.4	950.8	979.6	961.6	950.8
77.5°	1224.5	1019.2	799.5	644.7	655.5	705.9	720.3	756.3	785.1	781.5	774.3
80°	741.9	637.5	540.2	417.8	414.2	453.8	547.4	608.6	623.1	590.6	587.0
82.5°	385.4	334.9	288.1	234.1	259.3	302.5	316.9	381.8	421.4	407.0	425.0
85°	97.2	93.6	104.4	108.0	133.3	147.7	162.1	190.9	126.1	61.2	61.2
87.5°	28.8	28.8	36.0	36.0	46.8	57.6	54.0	54.0	28.8	3.6	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)