

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: P836246

Luminaire Tested: **ARCH3-160-727-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21646 lumens
Efficiency: N/A
Efficacy: 134.4 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): 161
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



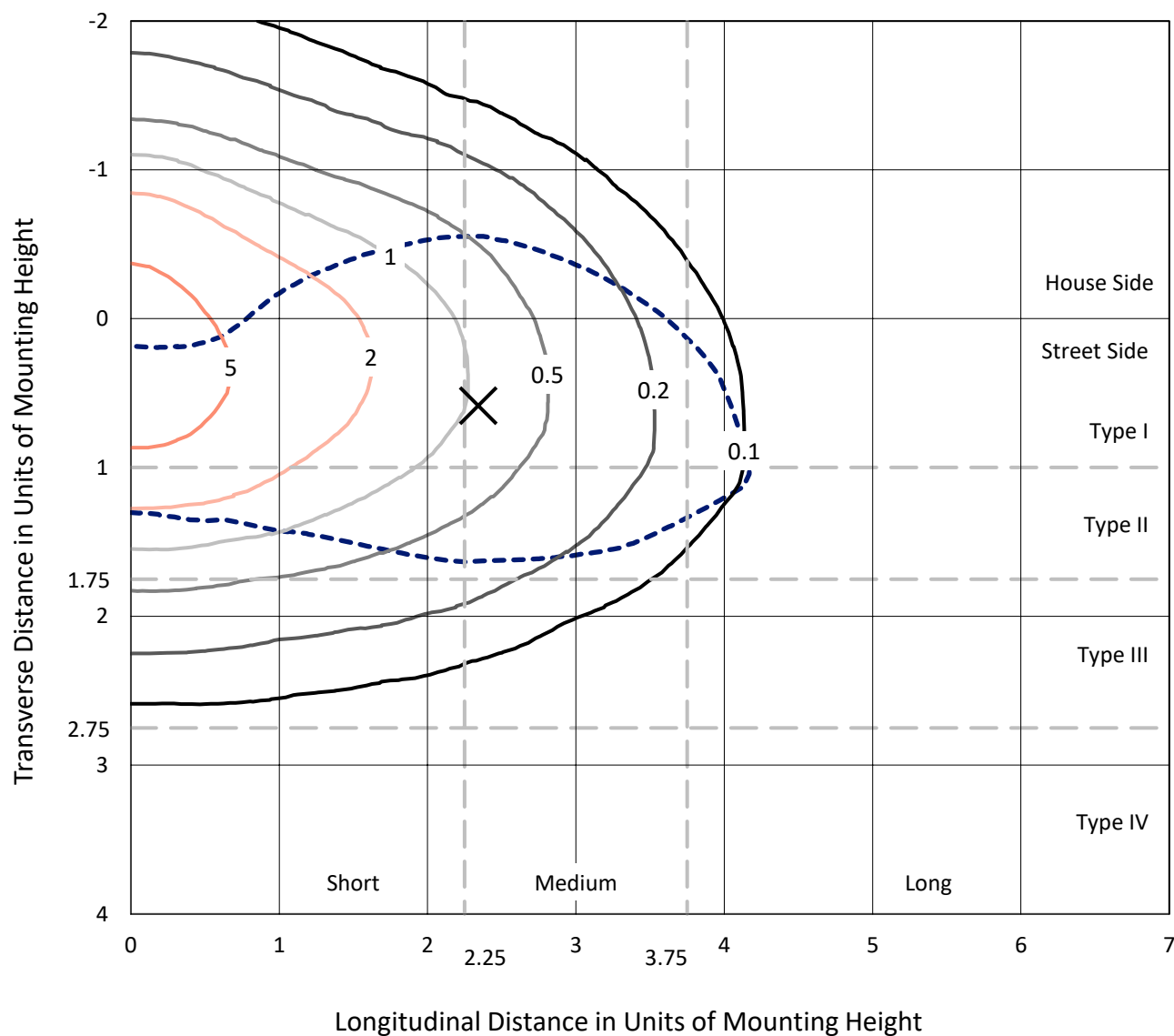
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

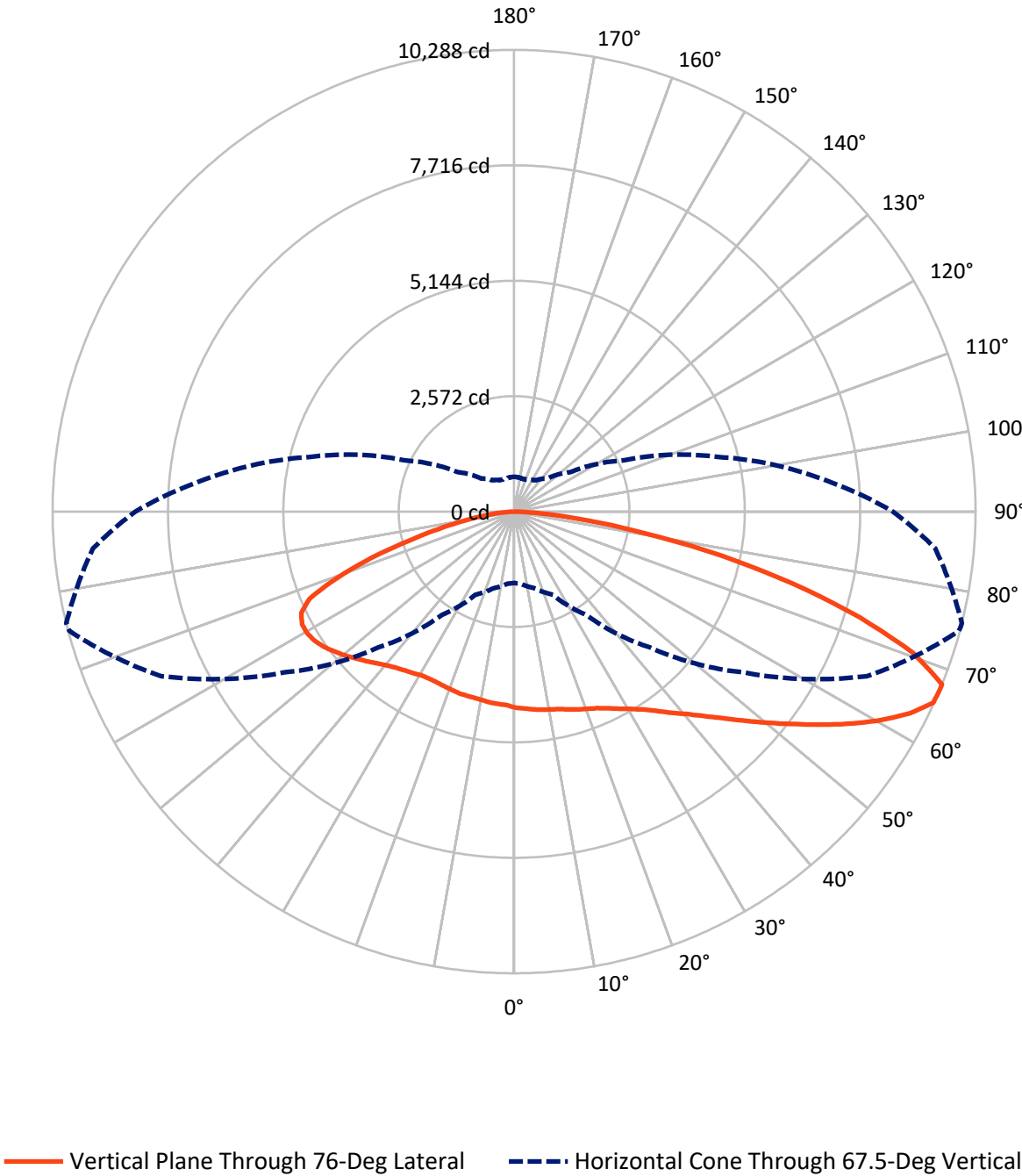
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 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	7314.3	0.0	7314.3
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	14331.7	0.0	14331.7
	% Fixture	66.2	0.0	66.2
Total	Lumens	21646.0	0.0	21646.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.6	1.9
10°-20°	1289.0	6.0
20°-30°	2190.0	10.1
30°-40°	3116.1	14.4
40°-50°	3935.5	18.2
50°-60°	4260.9	19.7
60°-70°	3963.2	18.3
70°-80°	2128.6	9.8
80°-90°	341.1	1.6
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°	21646.0	100.0
0°-180°	21646.0	100.0

Coefficient of Utilization



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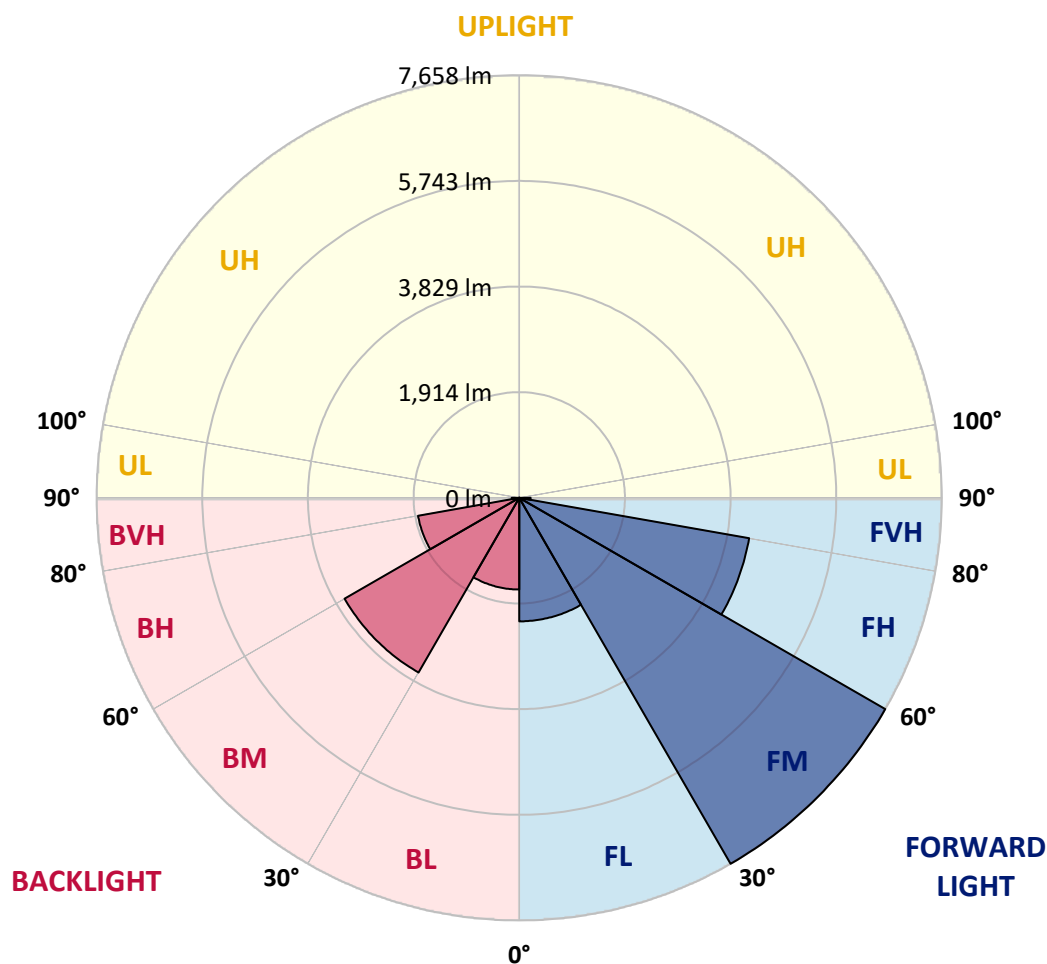
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2238.4	10.3			
FM	(30°-60°)	7657.5	35.4			
FH	(60°-80°)	4229.4	19.5			G2/5000
FVH	(80°-90°)	206.3	1.0			G2/225
BL	(0°-30°)	1662.2	7.7	B3/2500		
BM	(30°-60°)	3655.1	16.9	B3/5000		
BH	(60°-80°)	1862.3	8.6	B3/2500		G3/2500
BVH	(80°-90°)	134.8	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4
2.5°	4505.1	4497.0	4464.9	4468.9	4468.9	4464.9	4416.7	4396.6	4396.6	4392.5	4348.3
5°	4665.8	4653.8	4617.6	4609.6	4593.5	4573.4	4497.0	4452.8	4432.7	4428.7	4368.4
7.5°	4854.7	4838.6	4794.4	4770.3	4730.1	4677.9	4581.4	4513.1	4464.9	4460.9	4376.5
10°	5043.6	5027.5	4975.3	4931.1	4874.8	4790.4	4665.8	4565.3	4489.0	4481.0	4380.5
12.5°	5268.6	5252.6	5188.3	5132.0	5047.6	4935.1	4770.3	4633.7	4529.2	4517.1	4392.5
15°	5505.7	5481.6	5417.3	5353.0	5248.5	5103.9	4906.9	4726.1	4593.5	4573.4	4428.7
17.5°	5702.7	5670.5	5618.3	5554.0	5437.4	5268.6	5043.6	4818.5	4653.8	4637.7	4464.9
20°	5871.5	5847.3	5791.1	5730.8	5606.2	5421.3	5172.2	4911.0	4710.0	4689.9	4493.0
22.5°	6032.2	6000.1	5967.9	5923.7	5787.1	5582.1	5320.9	5023.5	4782.4	4758.2	4529.2
25°	6217.1	6180.9	6168.8	6144.7	5984.0	5775.0	5501.7	5164.1	4882.8	4854.7	4593.5
27.5°	6446.1	6406.0	6381.8	6381.8	6188.9	5971.9	5694.6	5328.9	4999.4	4975.3	4673.9
30°	6687.3	6639.0	6602.9	6602.9	6385.9	6168.8	5883.5	5493.7	5132.0	5103.9	4778.3
32.5°	6900.3	6852.0	6811.9	6807.8	6582.8	6365.8	6080.4	5674.5	5292.7	5256.6	4906.9
35°	7065.0	7020.8	6984.7	6992.7	6779.7	6566.7	6301.5	5915.7	5493.7	5453.5	5075.7
37.5°	7165.5	7149.4	7129.3	7157.5	6960.5	6759.6	6530.5	6148.7	5722.8	5686.6	5284.7
40°	7217.7	7205.7	7286.1	7322.2	7113.3	6932.4	6759.6	6389.9	5971.9	5931.7	5525.8
42.5°	7294.1	7394.6	7426.7	7418.7	7225.8	7065.0	6968.6	6651.1	6265.3	6229.1	5815.2
45°	7020.8	6996.7	7173.5	7270.0	7233.8	7149.4	7165.5	6964.6	6606.9	6570.7	6148.7
47.5°	6655.1	6623.0	6723.4	6960.5	7101.2	7181.6	7342.3	7290.1	7000.7	6968.6	6538.6
50°	5883.5	5927.7	6301.5	6618.9	6896.2	7173.5	7491.0	7639.7	7434.8	7402.6	6956.5
52.5°	5027.5	5071.7	5461.5	6193.0	6647.1	7113.3	7599.5	7989.4	7905.0	7868.8	7402.6
55°	4404.6	4501.0	4943.1	5473.6	6293.4	6924.4	7663.8	8347.0	8411.3	8379.2	7888.9
57.5°	3785.7	3858.0	4191.6	4661.8	5811.2	6594.8	7659.8	8680.6	8941.8	8909.7	8383.2
60°	3058.3	3150.7	3416.0	3922.3	5168.2	6201.0	7547.3	8941.8	9452.2	9428.1	8861.4
62.5°	2560.0	2588.1	2777.0	3215.0	4340.3	5702.7	7294.1	9082.5	9914.4	9898.3	9291.4
65°	2061.6	2065.7	2238.5	2604.2	3540.6	5083.8	6864.1	9030.2	10264.0	10272.0	9600.9
67.5°	1591.4	1611.5	1768.3	2045.6	2813.2	4280.0	6249.2	8676.6	10268.0	10288.1	9424.1
70°	1101.1	1117.2	1354.3	1623.6	2174.2	3412.0	5417.3	7740.2	9424.1	9440.1	8447.5
72.5°	775.6	783.7	1036.8	1298.1	1699.9	2572.0	4087.1	6401.9	8033.6	8045.6	7105.2
75°	578.7	586.7	731.4	984.6	1302.1	1780.3	2793.1	4902.9	6418.0	6418.0	5610.2
77.5°	409.9	413.9	474.2	679.2	868.1	1201.6	1679.9	3211.0	4710.0	4718.1	4087.1
80°	277.3	281.3	309.4	458.1	542.5	651.0	912.3	1683.9	2969.9	2981.9	2596.1
82.5°	144.7	152.7	172.8	233.1	273.3	361.7	470.2	856.0	1643.7	1675.8	1559.3
85°	56.3	56.3	64.3	76.4	100.5	140.7	217.0	325.5	743.5	767.6	687.2
87.5°	20.1	20.1	24.1	24.1	28.1	32.2	36.2	48.2	84.4	84.4	80.4
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°	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4	4372.4
2.5°	4332.3	4332.3	4312.2	4320.2	4316.2	4308.1	4300.1	4312.2	4300.1	4272.0	4268.0
5°	4340.3	4332.3	4300.1	4296.1	4284.0	4268.0	4247.9	4255.9	4235.8	4211.7	4207.7
7.5°	4344.3	4328.2	4284.0	4268.0	4243.8	4211.7	4179.5	4179.5	4151.4	4127.3	4123.3
10°	4336.3	4316.2	4255.9	4223.7	4179.5	4131.3	4087.1	4075.1	4042.9	4014.8	4014.8
12.5°	4340.3	4312.2	4235.8	4183.6	4123.3	4063.0	4006.7	3990.7	3962.5	3934.4	3930.4
15°	4364.4	4324.2	4227.8	4159.4	4071.0	4002.7	3942.4	3930.4	3906.3	3886.2	3886.2
17.5°	4388.5	4336.3	4215.7	4119.3	4010.8	3934.4	3878.1	3878.1	3862.1	3850.0	3850.0
20°	4400.6	4340.3	4191.6	4063.0	3938.4	3858.0	3805.8	3813.8	3809.8	3805.8	3805.8
22.5°	4428.7	4348.3	4171.5	4010.8	3862.1	3777.7	3729.4	3741.5	3737.5	3737.5	3741.5
25°	4472.9	4368.4	4155.4	3962.5	3789.7	3697.3	3645.0	3653.1	3653.1	3653.1	3653.1
27.5°	4533.2	4408.6	4151.4	3918.3	3717.4	3612.9	3548.6	3548.6	3532.5	3536.5	3540.6
30°	4625.6	4485.0	4159.4	3878.1	3641.0	3508.4	3432.0	3420.0	3416.0	3424.0	3428.0
32.5°	4738.2	4589.5	4207.7	3850.0	3560.6	3391.9	3295.4	3291.4	3279.3	3279.3	3279.3
35°	4878.8	4689.9	4251.9	3846.0	3480.3	3267.3	3162.8	3150.7	3122.6	3110.5	3110.5
37.5°	5059.7	4846.7	4304.1	3817.9	3412.0	3146.7	3022.1	2981.9	2949.8	2945.8	2945.8
40°	5280.7	5023.5	4380.5	3785.7	3339.6	3022.1	2857.4	2789.0	2793.1	2809.1	2809.1
42.5°	5541.9	5240.5	4476.9	3769.6	3235.1	2893.5	2664.5	2584.1	2612.2	2628.3	2632.3
45°	5847.3	5497.7	4585.4	3749.5	3138.7	2748.9	2459.5	2359.0	2371.1	2375.1	2379.1
47.5°	6201.0	5783.0	4698.0	3733.5	3030.2	2568.0	2234.4	2101.8	2097.8	2073.7	2081.7
50°	6570.7	6084.4	4814.5	3705.3	2897.5	2355.0	1997.3	1840.6	1808.5	1772.3	1776.3
52.5°	6964.6	6393.9	4923.0	3661.1	2732.8	2138.0	1772.3	1603.5	1539.2	1499.0	1507.0
55°	7398.6	6711.4	5027.5	3592.8	2560.0	1921.0	1571.3	1398.5	1318.2	1286.0	1290.0
57.5°	7796.5	7016.8	5103.9	3508.4	2371.1	1724.1	1394.5	1225.7	1173.5	1169.5	1173.5
60°	8182.3	7274.0	5136.0	3391.9	2178.2	1543.2	1229.7	1101.1	1065.0	1085.1	1089.1
62.5°	8507.8	7438.8	5119.9	3235.1	1981.3	1370.4	1097.1	1004.7	980.6	1020.8	1024.8
65°	8696.7	7491.0	5007.4	3010.1	1768.3	1201.6	972.5	872.1	860.0	884.1	896.2
67.5°	8447.5	7165.5	4702.0	2700.6	1531.2	1044.9	852.0	771.6	751.5	771.6	771.6
70°	7487.0	6209.0	3978.6	2210.3	1269.9	892.2	739.5	683.2	667.1	683.2	679.2
72.5°	6237.2	5164.1	3134.7	1724.1	1000.7	751.5	643.0	590.8	574.7	558.6	550.6
75°	4838.6	3922.3	2274.6	1265.9	755.5	602.8	538.5	490.3	450.1	466.2	458.1
77.5°	3544.6	2752.9	1611.5	876.1	542.5	466.2	422.0	385.8	357.7	389.8	385.8
80°	2282.7	1780.3	1077.0	586.7	373.7	325.5	309.4	289.4	317.5	413.9	422.0
82.5°	1394.5	1129.3	643.0	381.8	245.1	217.0	200.9	200.9	325.5	357.7	361.7
85°	622.9	598.8	349.6	196.9	136.6	124.6	112.5	144.7	132.6	96.5	100.5
87.5°	100.5	104.5	76.4	68.3	52.2	52.2	40.2	28.1	20.1	12.1	12.1
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)