

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: P836102

Luminaire Tested: **ARCH3-140-727-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836102
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: ARCH3-140-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19880 lumens
Efficiency: N/A
Efficacy: 139.5 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): 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

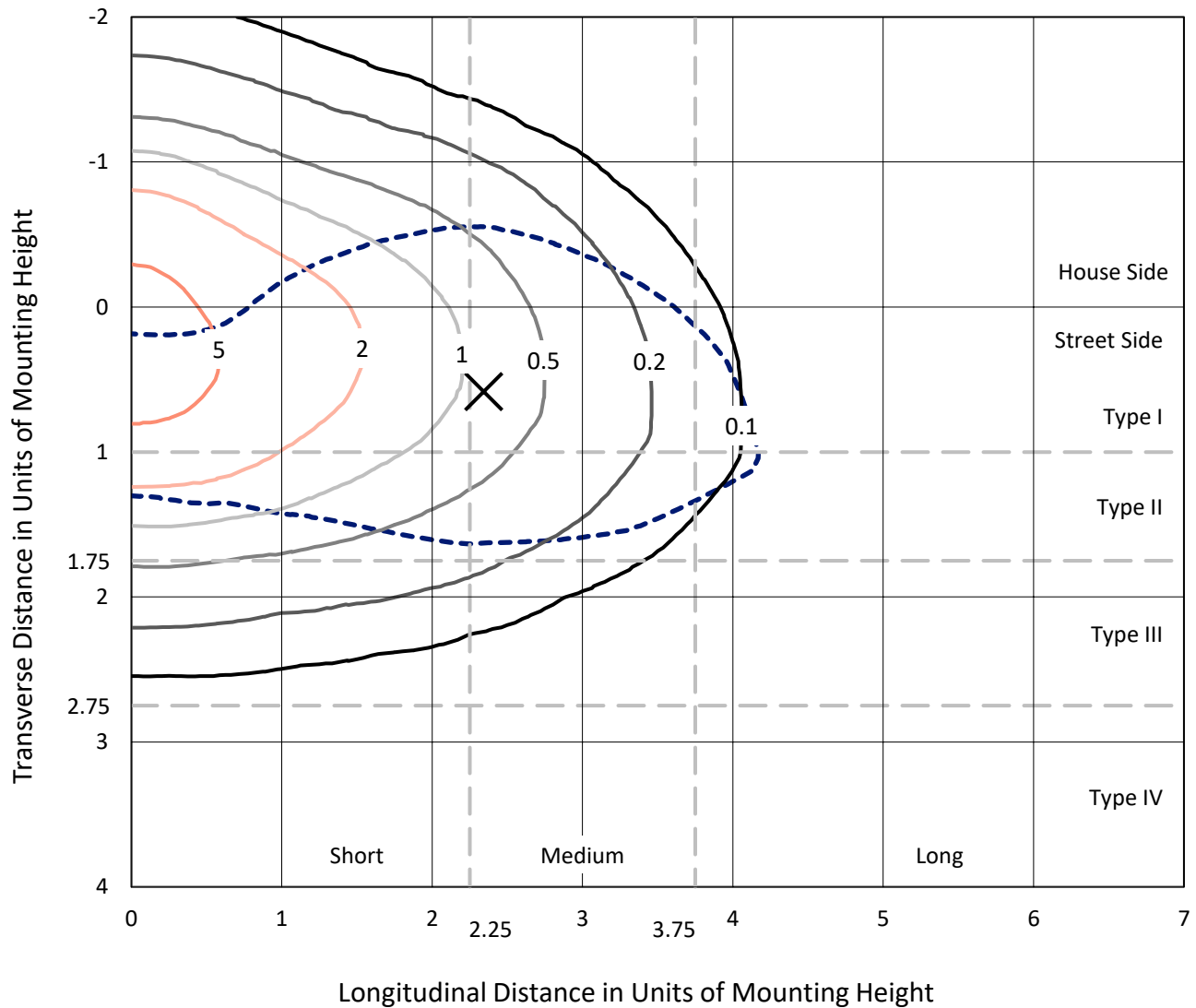


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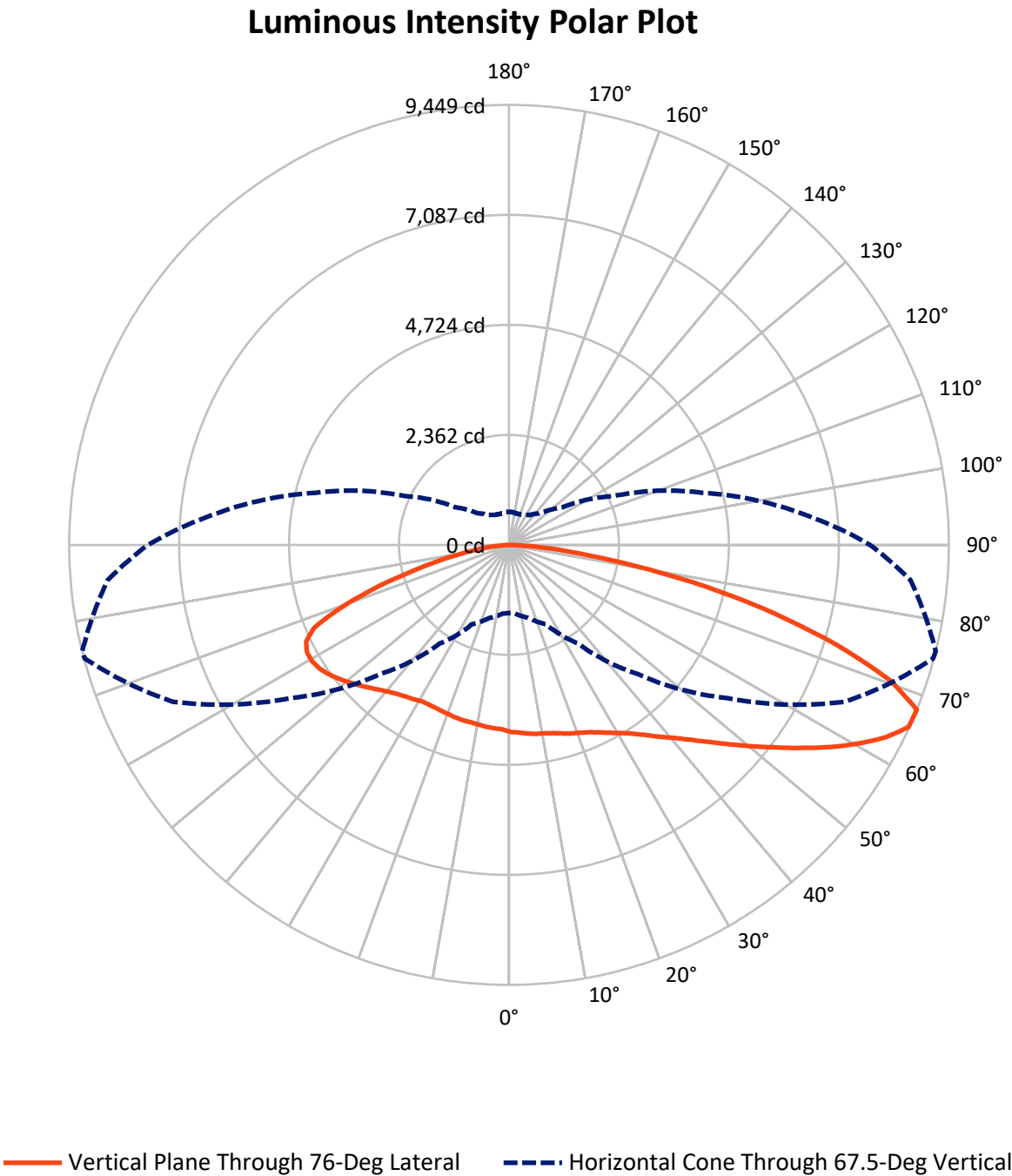
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
Type II - Medium - N/A

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6717.6	0.0	6717.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	13162.5	0.0	13162.5
	% Fixture	66.2	0.0	66.2
Total	Lumens	19880.0	0.0	19880.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.2	1.9
10°-20°	1183.8	6.0
20°-30°	2011.3	10.1
30°-40°	2861.9	14.4
40°-50°	3614.4	18.2
50°-60°	3913.3	19.7
60°-70°	3639.8	18.3
70°-80°	1954.9	9.8
80°-90°	313.3	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°	19880.0	100.0
0°-180°	19880.0	100.0

Coefficient of Utilization



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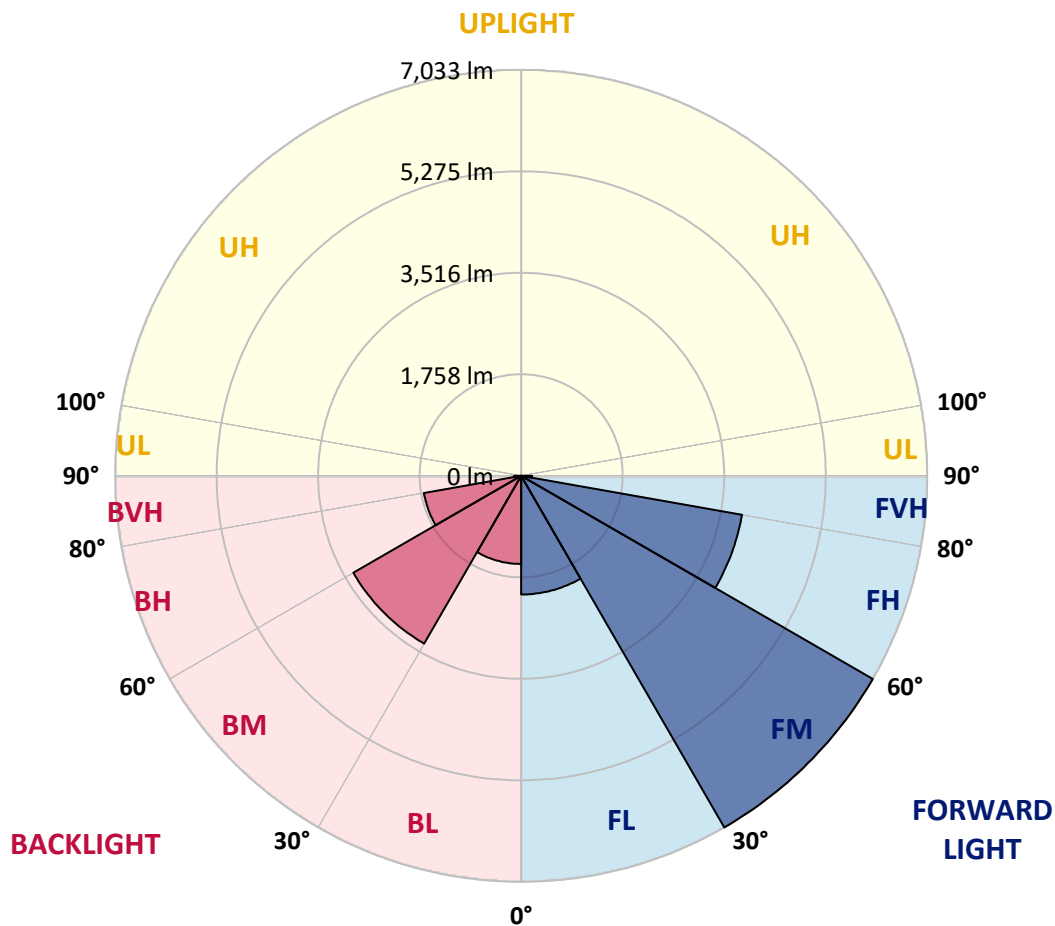
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2055.8	10.3			
FM	(30°-60°)	7032.8	35.4			
FH	(60°-80°)	3884.4	19.5			G2/5000
FVH	(80°-90°)	189.5	1.0			G2/225
BL	(0°-30°)	1526.6	7.7	B3/2500		
BM	(30°-60°)	3356.9	16.9	B3/5000		
BH	(60°-80°)	1710.4	8.6	B3/2500		G3/2500
BVH	(80°-90°)	123.8	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°	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7
2.5°	4137.5	4130.1	4100.6	4104.3	4104.3	4100.6	4056.3	4037.9	4037.9	4034.2	3993.6
5°	4285.2	4274.1	4240.9	4233.5	4218.7	4200.3	4130.1	4089.5	4071.1	4067.4	4012.0
7.5°	4458.6	4443.9	4403.3	4381.1	4344.2	4296.2	4207.6	4144.9	4100.6	4096.9	4019.4
10°	4632.1	4617.3	4569.4	4528.8	4477.1	4399.6	4285.2	4192.9	4122.8	4115.4	4023.1
12.5°	4838.8	4824.0	4765.0	4713.3	4635.8	4532.4	4381.1	4255.6	4159.7	4148.6	4034.2
15°	5056.6	5034.4	4975.4	4916.3	4820.3	4687.5	4506.6	4340.5	4218.7	4200.3	4067.4
17.5°	5237.4	5207.9	5159.9	5100.8	4993.8	4838.8	4632.1	4425.4	4274.1	4259.3	4100.6
20°	5392.4	5370.3	5318.6	5263.2	5148.8	4979.0	4750.2	4510.3	4325.8	4307.3	4126.4
22.5°	5540.1	5510.5	5481.0	5440.4	5314.9	5126.7	4886.8	4613.6	4392.2	4370.0	4159.7
25°	5709.8	5676.6	5665.6	5643.4	5495.8	5303.8	5052.9	4742.8	4484.5	4458.6	4218.7
27.5°	5920.2	5883.3	5861.2	5861.2	5684.0	5484.7	5230.0	4894.2	4591.5	4569.4	4292.5
30°	6141.7	6097.4	6064.2	6064.2	5864.9	5665.6	5403.5	5045.5	4713.3	4687.5	4388.5
32.5°	6337.3	6293.0	6256.1	6252.4	6045.7	5846.4	5584.4	5211.6	4860.9	4827.7	4506.6
35°	6488.6	6448.0	6414.8	6422.2	6226.6	6031.0	5787.4	5433.0	5045.5	5008.6	4661.6
37.5°	6580.9	6566.1	6547.7	6573.5	6392.7	6208.1	5997.7	5647.1	5255.9	5222.6	4853.6
40°	6628.9	6617.8	6691.6	6724.8	6532.9	6366.8	6208.1	5868.6	5484.7	5447.8	5075.0
42.5°	6699.0	6791.3	6820.8	6813.4	6636.3	6488.6	6400.0	6108.5	5754.1	5720.9	5340.8
45°	6448.0	6425.9	6588.3	6676.9	6643.6	6566.1	6580.9	6396.4	6067.9	6034.6	5647.1
47.5°	6112.2	6082.6	6174.9	6392.7	6521.8	6595.7	6743.3	6695.3	6429.6	6400.0	6005.1
50°	5403.5	5444.1	5787.4	6078.9	6333.6	6588.3	6879.9	7016.4	6828.2	6798.7	6389.0
52.5°	4617.3	4657.9	5016.0	5687.7	6104.8	6532.9	6979.5	7337.5	7260.0	7226.8	6798.7
55°	4045.2	4133.8	4539.8	5027.0	5780.0	6359.4	7038.6	7666.0	7725.1	7695.6	7245.3
57.5°	3476.8	3543.3	3849.6	4281.5	5337.1	6056.8	7034.9	7972.4	8212.3	8182.8	7699.2
60°	2808.8	2893.7	3137.3	3602.3	4746.5	5695.1	6931.5	8212.3	8681.0	8658.9	8138.5
62.5°	2351.1	2376.9	2550.4	2952.7	3986.2	5237.4	6699.0	8341.5	9105.5	9090.7	8533.4
65°	1893.4	1897.1	2055.8	2391.7	3251.7	4669.0	6304.1	8293.5	9426.6	9434.0	8817.6
67.5°	1461.6	1480.1	1624.0	1878.7	2583.6	3930.8	5739.4	7968.7	9430.3	9448.7	8655.2
70°	1011.3	1026.1	1243.8	1491.1	1996.8	3133.6	4975.4	7108.7	8655.2	8670.0	7758.3
72.5°	712.3	719.7	952.3	1192.2	1561.3	2362.2	3753.7	5879.6	7378.1	7389.2	6525.5
75°	531.5	538.9	671.7	904.3	1195.9	1635.1	2565.2	4502.9	5894.4	5894.4	5152.5
77.5°	376.5	380.2	435.5	623.8	797.2	1103.6	1542.8	2949.0	4325.8	4333.1	3753.7
80°	254.7	258.4	284.2	420.8	498.3	597.9	837.8	1546.5	2727.6	2738.7	2384.3
82.5°	132.9	140.3	158.7	214.1	251.0	332.2	431.8	786.2	1509.6	1539.1	1432.1
85°	51.7	51.7	59.1	70.1	92.3	129.2	199.3	299.0	682.8	705.0	631.1
87.5°	18.5	18.5	22.1	22.1	25.8	29.5	33.2	44.3	77.5	77.5	73.8
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°	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7	4015.7
2.5°	3978.8	3978.8	3960.4	3967.7	3964.0	3956.7	3949.3	3960.4	3949.3	3923.4	3919.8
5°	3986.2	3978.8	3949.3	3945.6	3934.5	3919.8	3901.3	3908.7	3890.2	3868.1	3864.4
7.5°	3989.9	3975.1	3934.5	3919.8	3897.6	3868.1	3838.6	3838.6	3812.7	3790.6	3786.9
10°	3982.5	3964.0	3908.7	3879.2	3838.6	3794.3	3753.7	3742.6	3713.1	3687.2	3687.2
12.5°	3986.2	3960.4	3890.2	3842.2	3786.9	3731.5	3679.8	3665.1	3639.2	3613.4	3609.7
15°	4008.3	3971.4	3882.8	3820.1	3738.9	3676.2	3620.8	3609.7	3587.6	3569.1	3569.1
17.5°	4030.5	3982.5	3871.8	3783.2	3683.5	3613.4	3561.7	3561.7	3547.0	3535.9	3535.9
20°	4041.6	3986.2	3849.6	3731.5	3617.1	3543.3	3495.3	3502.7	3499.0	3495.3	3495.3
22.5°	4067.4	3993.6	3831.2	3683.5	3547.0	3469.5	3425.2	3436.2	3432.6	3432.6	3436.2
25°	4108.0	4012.0	3816.4	3639.2	3480.5	3395.6	3347.7	3355.0	3355.0	3355.0	3355.0
27.5°	4163.4	4048.9	3812.7	3598.6	3414.1	3318.1	3259.1	3259.1	3244.3	3248.0	3251.7
30°	4248.2	4119.1	3820.1	3561.7	3344.0	3222.2	3152.0	3141.0	3137.3	3144.7	3148.4
32.5°	4351.6	4215.0	3864.4	3535.9	3270.2	3115.1	3026.6	3022.9	3011.8	3011.8	3011.8
35°	4480.8	4307.3	3905.0	3532.2	3196.3	3000.7	2904.8	2893.7	2867.8	2856.8	2856.8
37.5°	4646.9	4451.2	3953.0	3506.4	3133.6	2890.0	2775.6	2738.7	2709.1	2705.4	2705.4
40°	4849.9	4613.6	4023.1	3476.8	3067.2	2775.6	2624.2	2561.5	2565.2	2579.9	2579.9
42.5°	5089.8	4813.0	4111.7	3462.1	2971.2	2657.5	2447.1	2373.3	2399.1	2413.9	2417.5
45°	5370.3	5049.2	4211.3	3443.6	2882.6	2524.6	2258.8	2166.6	2177.6	2181.3	2185.0
47.5°	5695.1	5311.2	4314.7	3428.9	2783.0	2358.5	2052.1	1930.3	1926.7	1904.5	1911.9
50°	6034.6	5588.0	4421.7	3403.0	2661.2	2162.9	1834.4	1690.4	1660.9	1627.7	1631.4
52.5°	6396.4	5872.2	4521.4	3362.4	2509.8	1963.6	1627.7	1472.7	1413.6	1376.7	1384.1
55°	6795.0	6163.8	4617.3	3299.7	2351.1	1764.3	1443.1	1284.4	1210.6	1181.1	1184.8
57.5°	7160.4	6444.3	4687.5	3222.2	2177.6	1583.4	1280.7	1125.7	1077.7	1074.1	1077.7
60°	7514.7	6680.6	4717.0	3115.1	2000.5	1417.3	1129.4	1011.3	978.1	996.5	1000.2
62.5°	7813.7	6831.9	4702.2	2971.2	1819.6	1258.6	1007.6	922.7	900.6	937.5	941.2
65°	7987.1	6879.9	4598.9	2764.5	1624.0	1103.6	893.2	800.9	789.9	812.0	823.1
67.5°	7758.3	6580.9	4318.4	2480.3	1406.2	959.6	782.5	708.7	690.2	708.7	708.7
70°	6876.2	5702.5	3654.0	2030.0	1166.3	819.4	679.1	627.5	612.7	627.5	623.8
72.5°	5728.3	4742.8	2878.9	1583.4	919.0	690.2	590.5	542.6	527.8	513.0	505.7
75°	4443.9	3602.3	2089.1	1162.6	693.9	553.6	494.6	450.3	413.4	428.1	420.8
77.5°	3255.4	2528.3	1480.1	804.6	498.3	428.1	387.5	354.3	328.5	358.0	354.3
80°	2096.4	1635.1	989.2	538.9	343.3	299.0	284.2	265.7	291.6	380.2	387.5
82.5°	1280.7	1037.1	590.5	350.6	225.1	199.3	184.5	184.5	299.0	328.5	332.2
85°	572.1	549.9	321.1	180.9	125.5	114.4	103.3	132.9	121.8	88.6	92.3
87.5°	92.3	96.0	70.1	62.7	48.0	48.0	36.9	25.8	18.5	11.1	11.1
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)