

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: P840896

Luminaire Tested: **ARCH4-100-740-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-740-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18510 lumens
Efficiency: N/A
Efficacy: 179.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

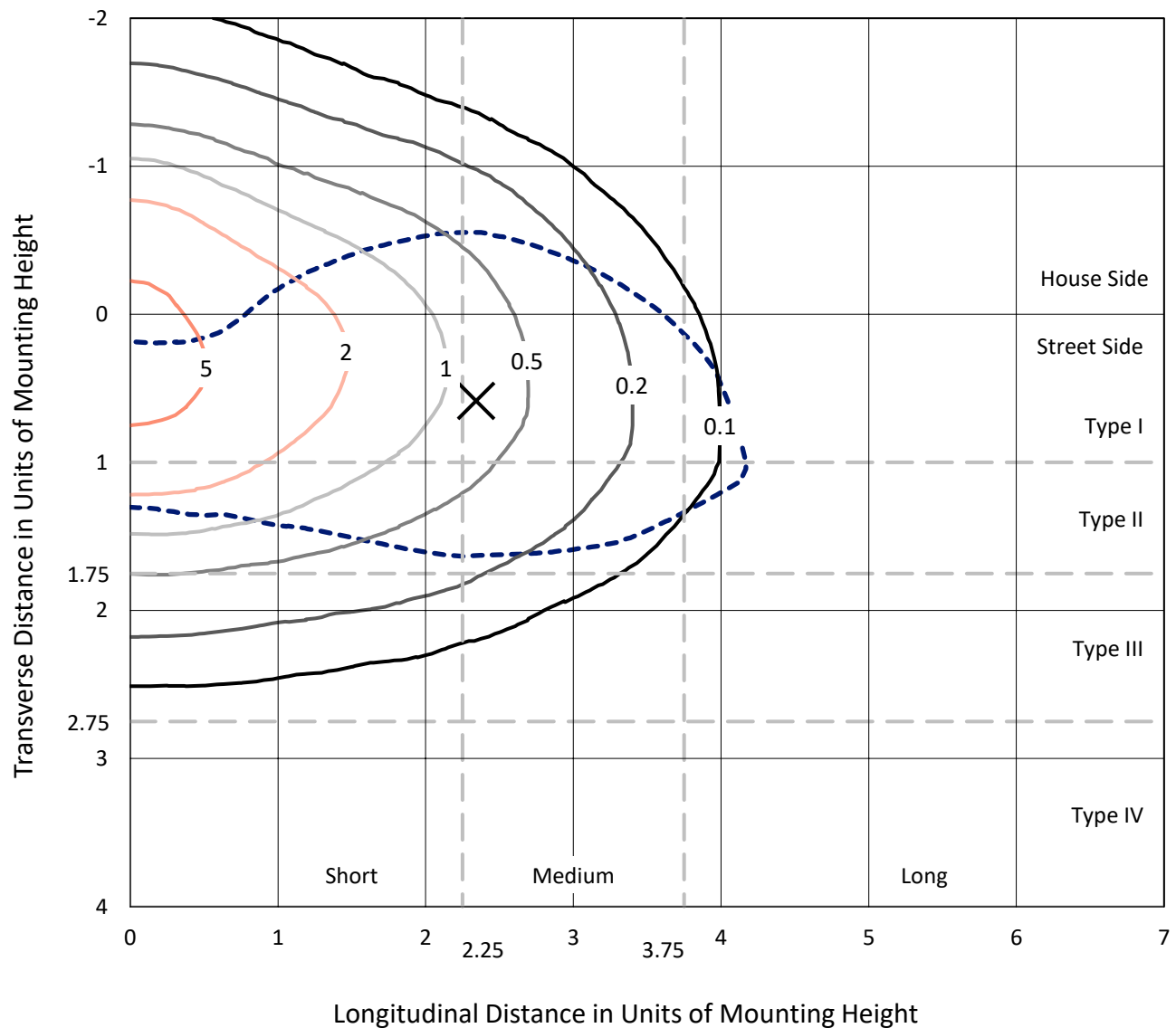
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

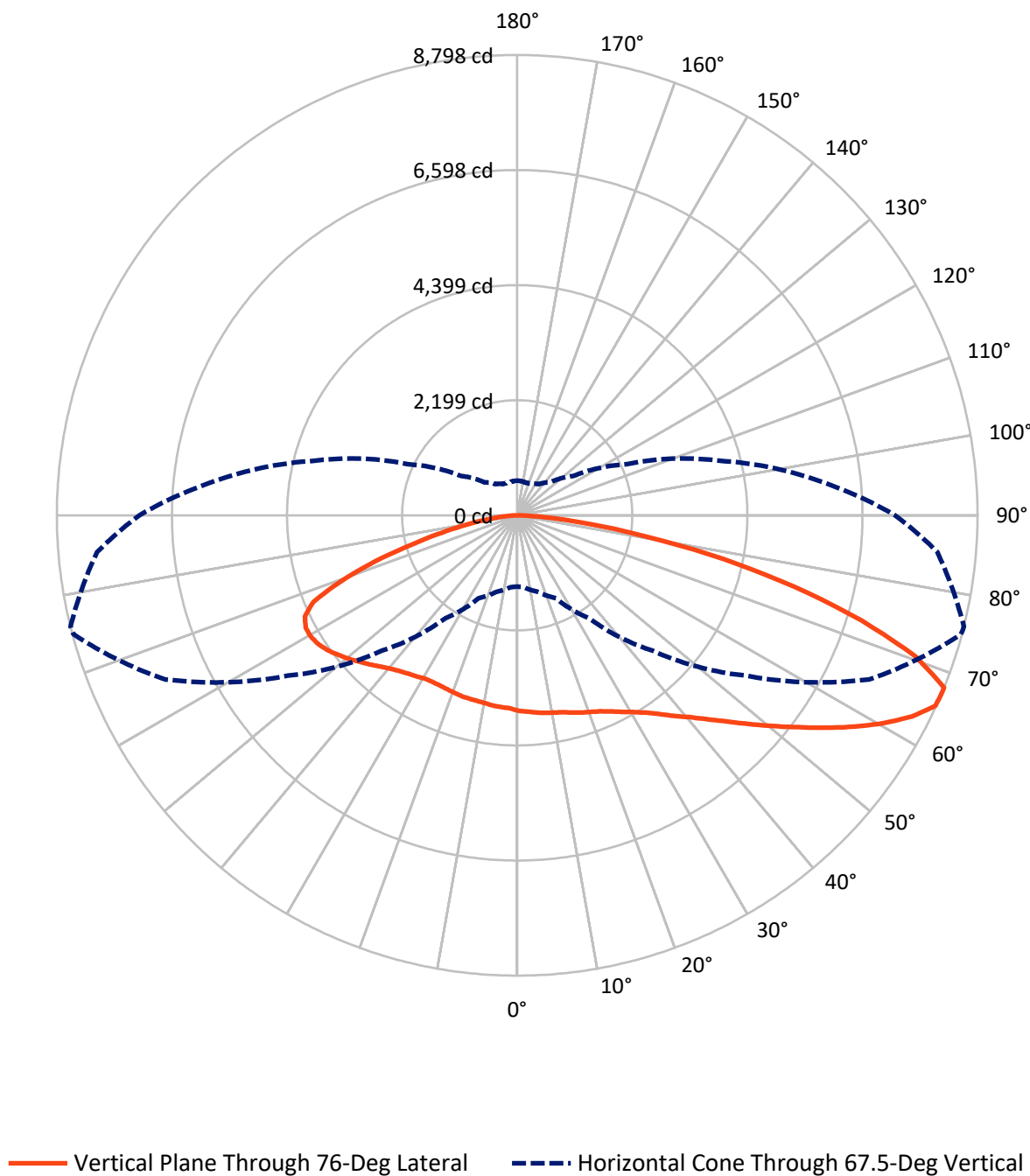
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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	6254.6	0.0	6254.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	12255.4	0.0	12255.4
	% Fixture	66.2	0.0	66.2
Total	Lumens	18510.0	0.0	18510.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.5	1.9
10°-20°	1102.2	6.0
20°-30°	1872.7	10.1
30°-40°	2664.7	14.4
40°-50°	3365.4	18.2
50°-60°	3643.6	19.7
60°-70°	3389.0	18.3
70°-80°	1820.2	9.8
80°-90°	291.7	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°	18510.0	100.0
0°-180°	18510.0	100.0

Coefficient of Utilization



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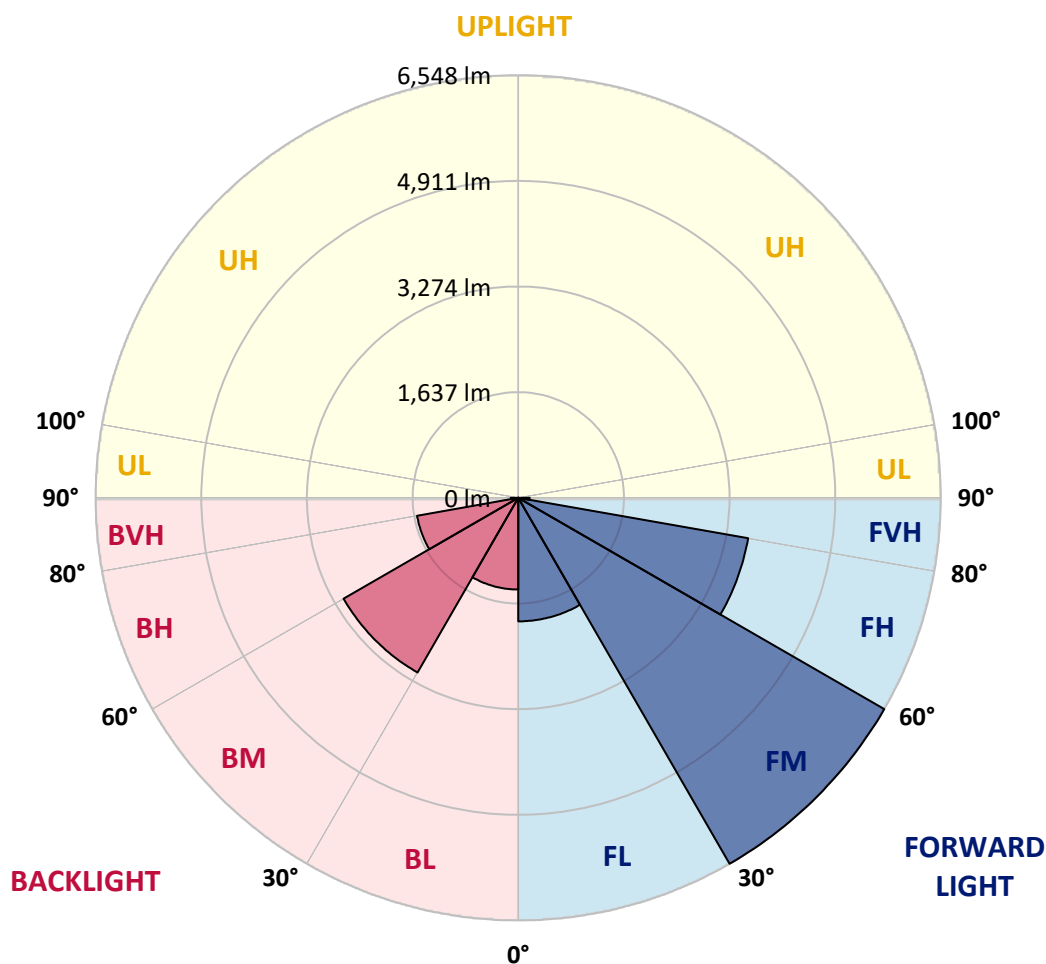
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1914.1	10.3			
FM	(30°-60°)	6548.1	35.4			
FH	(60°-80°)	3616.7	19.5			G2/5000
FVH	(80°-90°)	176.4	1.0			G2/225
BL	(0°-30°)	1421.4	7.7	B3/2500		
BM	(30°-60°)	3125.5	16.9	B3/5000		
BH	(60°-80°)	1592.5	8.6	B3/2500		G3/2500
BVH	(80°-90°)	115.2	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°	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0
2.5°	3852.4	3845.5	3818.0	3821.5	3821.5	3818.0	3776.8	3759.6	3759.6	3756.2	3718.4
5°	3989.8	3979.5	3948.6	3941.7	3928.0	3910.8	3845.5	3807.7	3790.5	3787.1	3735.5
7.5°	4151.4	4137.6	4099.8	4079.2	4044.8	4000.2	3917.7	3859.3	3818.0	3814.6	3742.4
10°	4312.9	4299.1	4254.5	4216.7	4168.5	4096.4	3989.8	3903.9	3838.6	3831.8	3745.9
12.5°	4505.3	4491.6	4436.6	4388.5	4316.3	4220.1	4079.2	3962.4	3873.0	3862.7	3756.2
15°	4708.1	4687.5	4632.5	4577.5	4488.1	4364.4	4196.0	4041.4	3928.0	3910.8	3787.1
17.5°	4876.5	4849.0	4804.3	4749.3	4649.7	4505.3	4312.9	4120.4	3979.5	3965.8	3818.0
20°	5020.8	5000.2	4952.1	4900.5	4794.0	4635.9	4422.9	4199.5	4027.7	4010.5	3842.1
22.5°	5158.3	5130.8	5103.3	5065.5	4948.6	4773.4	4550.0	4295.7	4089.5	4068.9	3873.0
25°	5316.4	5285.4	5275.1	5254.5	5117.0	4938.3	4704.7	4416.0	4175.4	4151.4	3928.0
27.5°	5512.2	5477.9	5457.3	5457.3	5292.3	5106.7	4869.6	4556.9	4275.1	4254.5	3996.7
30°	5718.4	5677.2	5646.3	5646.3	5460.7	5275.1	5031.1	4697.8	4388.5	4364.4	4086.1
32.5°	5900.6	5859.3	5825.0	5821.5	5629.1	5443.5	5199.5	4852.4	4526.0	4495.0	4196.0
35°	6041.5	6003.7	5972.7	5979.6	5797.5	5615.3	5388.5	5058.6	4697.8	4663.4	4340.4
37.5°	6127.4	6113.6	6096.5	6120.5	5952.1	5780.3	5584.4	5257.9	4893.7	4862.7	4519.1
40°	6172.1	6161.8	6230.5	6261.4	6082.7	5928.1	5780.3	5464.1	5106.7	5072.4	4725.3
42.5°	6237.4	6323.3	6350.8	6343.9	6178.9	6041.5	5959.0	5687.5	5357.6	5326.7	4972.7
45°	6003.7	5983.1	6134.3	6216.7	6185.8	6113.6	6127.4	5955.6	5649.7	5618.8	5257.9
47.5°	5690.9	5663.5	5749.4	5952.1	6072.4	6141.1	6278.6	6233.9	5986.5	5959.0	5591.3
50°	5031.1	5068.9	5388.5	5660.0	5897.1	6134.3	6405.8	6532.9	6357.6	6330.1	5948.7
52.5°	4299.1	4336.9	4670.3	5295.7	5684.1	6082.7	6498.5	6831.9	6759.7	6728.8	6330.1
55°	3766.5	3848.9	4227.0	4680.6	5381.7	5921.2	6553.5	7137.7	7192.7	7165.2	6746.0
57.5°	3237.2	3299.1	3584.3	3986.4	4969.3	5639.4	6550.1	7423.0	7646.3	7618.9	7168.7
60°	2615.2	2694.3	2921.1	3354.1	4419.4	5302.6	6453.9	7646.3	8082.8	8062.2	7577.6
62.5°	2189.1	2213.1	2374.7	2749.2	3711.5	4876.5	6237.4	7766.6	8478.0	8464.3	7945.3
65°	1763.0	1766.4	1914.2	2226.9	3027.6	4347.3	5869.6	7722.0	8777.0	8783.9	8209.9
67.5°	1360.9	1378.1	1512.1	1749.2	2405.6	3659.9	5343.9	7419.5	8780.4	8797.6	8058.7
70°	941.6	955.4	1158.1	1388.4	1859.2	2917.6	4632.5	6618.8	8058.7	8072.5	7223.7
72.5°	663.3	670.1	886.6	1110.0	1453.7	2199.4	3495.0	5474.4	6869.7	6880.0	6075.8
75°	494.9	501.7	625.5	842.0	1113.4	1522.4	2388.4	4192.6	5488.2	5488.2	4797.4
77.5°	350.5	354.0	405.5	580.8	742.3	1027.5	1436.5	2745.8	4027.7	4034.5	3495.0
80°	237.1	240.6	264.6	391.8	463.9	556.7	780.1	1439.9	2539.6	2549.9	2220.0
82.5°	123.7	130.6	147.8	199.3	233.7	309.3	402.1	732.0	1405.6	1433.0	1333.4
85°	48.1	48.1	55.0	65.3	85.9	120.3	185.6	278.4	635.8	656.4	587.7
87.5°	17.2	17.2	20.6	20.6	24.1	27.5	30.9	41.2	72.2	72.2	68.7
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°	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0	3739.0
2.5°	3704.6	3704.6	3687.4	3694.3	3690.9	3684.0	3677.1	3687.4	3677.1	3653.1	3649.6
5°	3711.5	3704.6	3677.1	3673.7	3663.4	3649.6	3632.4	3639.3	3622.1	3601.5	3598.1
7.5°	3714.9	3701.2	3663.4	3649.6	3629.0	3601.5	3574.0	3574.0	3550.0	3529.3	3525.9
10°	3708.1	3690.9	3639.3	3611.8	3574.0	3532.8	3495.0	3484.7	3457.2	3433.1	3433.1
12.5°	3711.5	3687.4	3622.1	3577.5	3525.9	3474.4	3426.3	3412.5	3388.4	3364.4	3361.0
15°	3732.1	3697.7	3615.3	3556.8	3481.2	3422.8	3371.3	3361.0	3340.3	3323.2	3323.2
17.5°	3752.7	3708.1	3605.0	3522.5	3429.7	3364.4	3316.3	3316.3	3302.5	3292.2	3292.2
20°	3763.0	3711.5	3584.3	3474.4	3367.8	3299.1	3254.4	3261.3	3257.9	3254.4	3254.4
22.5°	3787.1	3718.4	3567.2	3429.7	3302.5	3230.4	3189.1	3199.4	3196.0	3196.0	3199.4
25°	3824.9	3735.5	3553.4	3388.4	3240.7	3161.6	3117.0	3123.8	3123.8	3123.8	3123.8
27.5°	3876.4	3769.9	3550.0	3350.6	3178.8	3089.5	3034.5	3034.5	3020.7	3024.2	3027.6
30°	3955.5	3835.2	3556.8	3316.3	3113.5	3000.1	2934.8	2924.5	2921.1	2928.0	2931.4
32.5°	4051.7	3924.6	3598.1	3292.2	3044.8	2900.5	2818.0	2814.5	2804.2	2804.2	2804.2
35°	4172.0	4010.5	3635.9	3288.8	2976.1	2793.9	2704.6	2694.3	2670.2	2659.9	2659.9
37.5°	4326.6	4144.5	3680.6	3264.7	2917.6	2690.8	2584.3	2549.9	2522.4	2519.0	2519.0
40°	4515.6	4295.7	3745.9	3237.2	2855.8	2584.3	2443.4	2385.0	2388.4	2402.2	2402.2
42.5°	4739.0	4481.3	3828.3	3223.5	2766.4	2474.3	2278.4	2209.7	2233.8	2247.5	2250.9
45°	5000.2	4701.2	3921.1	3206.3	2684.0	2350.6	2103.2	2017.3	2027.6	2031.0	2034.4
47.5°	5302.6	4945.2	4017.3	3192.6	2591.2	2196.0	1910.7	1797.3	1793.9	1773.3	1780.1
50°	5618.8	5203.0	4117.0	3168.5	2477.8	2013.8	1708.0	1573.9	1546.5	1515.5	1519.0
52.5°	5955.6	5467.6	4209.8	3130.7	2336.9	1828.3	1515.5	1371.2	1316.2	1281.8	1288.7
55°	6326.7	5739.1	4299.1	3072.3	2189.1	1642.7	1343.7	1195.9	1127.2	1099.7	1103.1
57.5°	6666.9	6000.2	4364.4	3000.1	2027.6	1474.3	1192.5	1048.2	1003.5	1000.0	1003.5
60°	6996.8	6220.2	4391.9	2900.5	1862.6	1319.6	1051.6	941.6	910.7	927.9	931.3
62.5°	7275.2	6361.1	4378.2	2766.4	1694.2	1171.9	938.2	859.1	838.5	872.9	876.3
65°	7436.7	6405.8	4282.0	2574.0	1512.1	1027.5	831.6	745.7	735.4	756.0	766.4
67.5°	7223.7	6127.4	4020.8	2309.4	1309.3	893.5	728.6	659.8	642.6	659.8	659.8
70°	6402.3	5309.5	3402.2	1890.1	1086.0	762.9	632.3	584.2	570.5	584.2	580.8
72.5°	5333.5	4416.0	2680.5	1474.3	855.7	642.6	549.8	505.2	491.4	477.7	470.8
75°	4137.6	3354.1	1945.1	1082.5	646.1	515.5	460.5	419.3	384.9	398.6	391.8
77.5°	3031.0	2354.0	1378.1	749.2	463.9	398.6	360.8	329.9	305.9	333.3	329.9
80°	1952.0	1522.4	921.0	501.7	319.6	278.4	264.6	247.4	271.5	354.0	360.8
82.5°	1192.5	965.7	549.8	326.5	209.6	185.6	171.8	171.8	278.4	305.9	309.3
85°	532.7	512.0	299.0	168.4	116.8	106.5	96.2	123.7	113.4	82.5	85.9
87.5°	85.9	89.4	65.3	58.4	44.7	44.7	34.4	24.1	17.2	10.3	10.3
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)