

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: P841404

Luminaire Tested: **ARCH4-170-740-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27970 lumens
Efficiency: N/A
Efficacy: 164.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 169.8
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

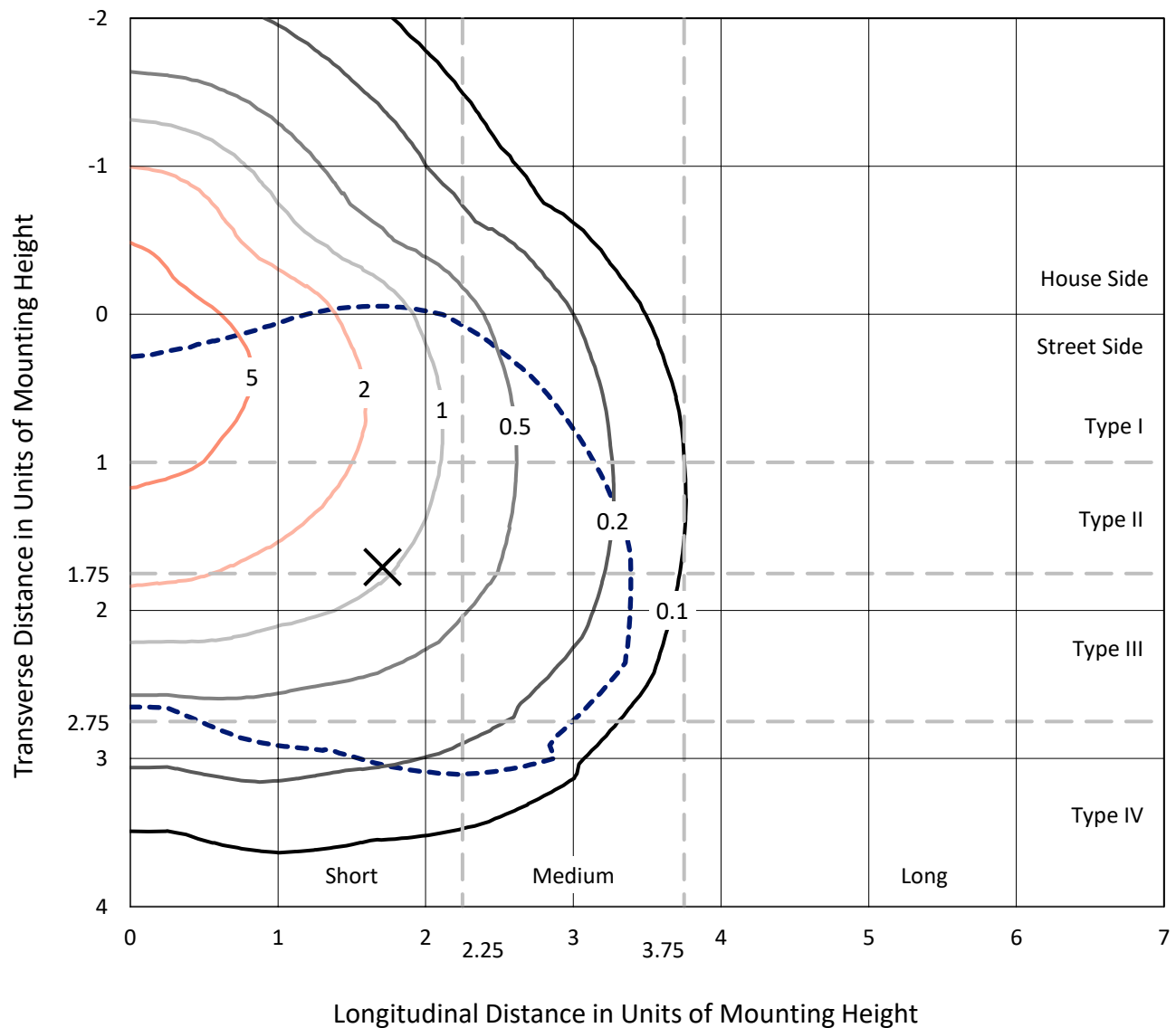


REPORT NUMBER: P841404

CATALOG NUMBER: ARCH4-170-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

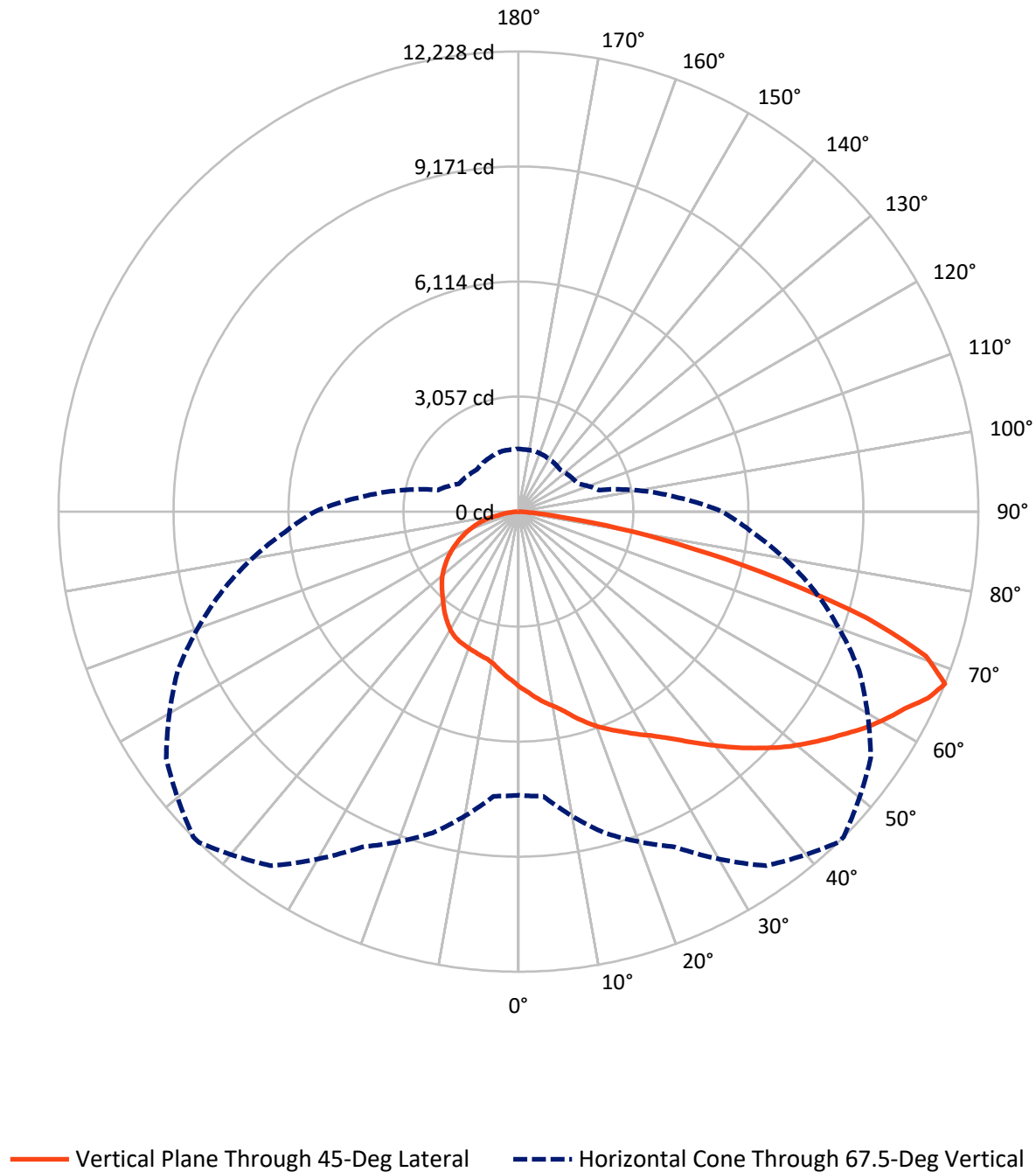
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
Type IV - Short - N/A

REPORT NUMBER: P841404
CATALOG NUMBER: ARCH4-170-740-U-T4W

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7472.2	0.0	7472.2
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	20497.8	0.0	20497.8
	% Fixture	73.3	0.0	73.3
Total	Lumens	27970.0	0.0	27970.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.6	1.6
10°-20°	1379.7	4.9
20°-30°	2381.5	8.5
30°-40°	3512.0	12.6
40°-50°	4758.0	17.0
50°-60°	5815.4	20.8
60°-70°	5997.8	21.4
70°-80°	3285.2	11.7
80°-90°	393.8	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°	27970.0	100.0
0°-180°	27970.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841404

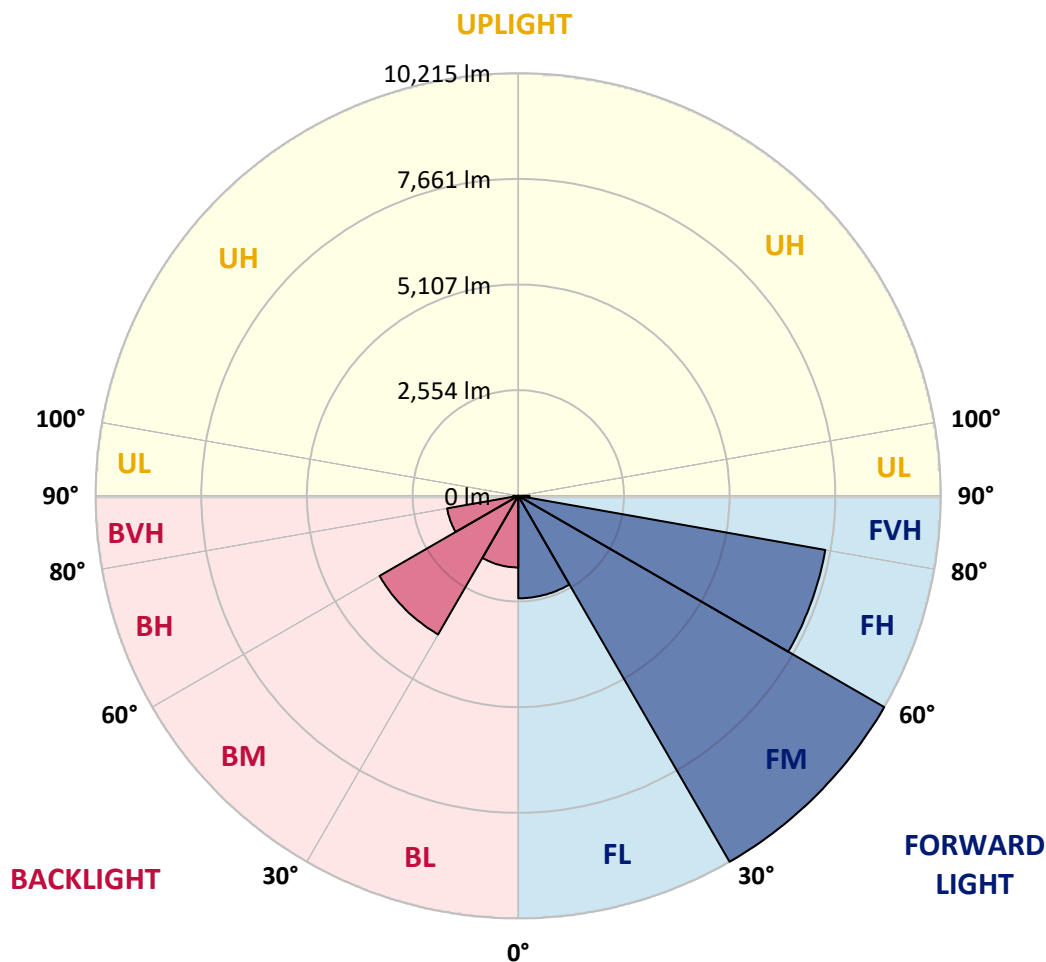
CATALOG NUMBER: ARCH4-170-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2476.1	8.9			
FM	(30°-60°)	10214.9	36.5			
FH	(60°-80°)	7535.5	26.9			G4/12000
FVH	(80°-90°)	271.3	1.0			G3/500
BL	(0°-30°)	1731.8	6.2	B3/2500		
BM	(30°-60°)	3870.5	13.8	B3/5000		
BH	(60°-80°)	1747.4	6.2	B3/2500		G3/2500
BVH	(80°-90°)	122.5	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-G4

Type IV Short



REPORT NUMBER: P841404

CATALOG NUMBER: ARCH4-170-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9
2.5°	4869.2	4864.9	4873.4	4843.6	4805.3	4801.1	4801.1	4775.5	4745.7	4686.1	4639.3
5°	5099.0	5090.5	5094.7	5052.2	5001.1	4975.6	4971.3	4916.0	4847.9	4754.2	4669.1
7.5°	5311.8	5303.3	5299.0	5252.2	5175.6	5133.1	5128.8	5047.9	4967.1	4822.3	4698.9
10°	5511.9	5503.3	5494.8	5431.0	5337.4	5273.5	5265.0	5162.8	5060.7	4881.9	4724.5
12.5°	5767.2	5750.2	5741.7	5665.1	5528.9	5460.8	5448.0	5311.8	5184.1	4967.1	4775.5
15°	6035.4	6022.6	6009.8	5937.5	5784.3	5694.9	5673.6	5503.3	5328.8	5077.7	4852.1
17.5°	6235.4	6222.7	6222.7	6158.8	6018.4	5916.2	5899.2	5694.9	5477.8	5179.9	4911.7
20°	6358.9	6346.1	6358.9	6320.6	6214.1	6129.0	6112.0	5886.4	5626.8	5273.5	4962.8
22.5°	6448.2	6435.5	6456.8	6439.7	6363.1	6312.0	6299.3	6077.9	5780.0	5371.4	5013.9
25°	6605.7	6605.7	6605.7	6575.9	6503.6	6486.5	6486.5	6295.0	5975.8	5499.1	5090.5
27.5°	6920.7	6903.7	6882.4	6797.3	6673.8	6669.6	6695.1	6516.3	6201.4	5665.1	5184.1
30°	7384.6	7376.1	7295.2	7116.5	6907.9	6886.6	6903.7	6754.7	6444.0	5839.6	5290.5
32.5°	7984.8	7955.0	7789.0	7520.8	7222.9	7125.0	7159.0	7001.6	6699.4	6018.4	5392.7
35°	8410.4	8418.9	8299.7	8057.1	7703.8	7444.2	7469.7	7278.2	6976.0	6218.4	5520.4
37.5°	8899.8	8929.6	8750.9	8567.9	8240.1	7797.5	7823.0	7563.4	7252.7	6469.5	5656.6
40°	9576.6	9517.0	9214.8	8997.7	8636.0	8167.8	8189.1	7882.6	7571.9	6707.9	5814.1
42.5°	10142.7	10036.3	9670.2	9393.6	8959.4	8559.3	8580.6	8227.4	7895.4	6971.8	5988.6
45°	10955.6	10661.9	10134.2	9998.0	9291.4	8942.4	8963.7	8593.4	8235.9	7252.7	6175.8
47.5°	11428.1	10959.9	10623.6	10551.3	9657.5	9338.2	9363.8	8980.7	8601.9	7571.9	6371.6
50°	11398.3	11096.1	10998.2	10819.4	9980.9	9708.5	9734.1	9380.8	8972.2	7886.9	6558.9
52.5°	11202.5	11257.8	11206.7	10908.8	10304.4	10066.1	10095.9	9776.6	9351.0	8180.5	6733.4
55°	11504.7	11543.0	11445.1	11053.5	10661.9	10423.6	10457.6	10193.8	9725.6	8440.2	6882.4
57.5°	11866.5	11730.3	11632.4	11308.9	11032.2	10810.9	10849.2	10619.4	10049.0	8648.7	6997.3
60°	11849.4	11564.3	11662.2	11325.9	11283.4	11168.4	11202.5	10968.4	10295.9	8802.0	7044.1
62.5°	10976.9	10823.7	11317.4	11202.5	11487.7	11487.7	11530.2	11181.2	10444.9	8865.8	7018.6
65°	9461.7	9470.2	10338.5	10815.2	11730.3	11926.1	11960.1	11313.2	10359.7	8678.5	6780.2
67.5°	7537.8	7593.2	8840.3	9832.0	11487.7	12224.0	12228.2	11432.3	9993.7	8150.7	6226.9
70°	5516.1	5558.7	7031.3	8235.9	10342.7	11564.3	11496.2	11096.1	9197.8	7231.4	5362.9
72.5°	3728.5	3766.8	5282.0	6324.8	8487.0	9849.0	9700.0	9806.4	7840.0	5941.7	4311.6
75°	2506.9	2553.8	3758.3	4524.4	6243.9	7478.3	7146.3	7427.2	6065.2	4498.9	3145.4
77.5°	1579.1	1608.9	2387.8	2966.6	4264.8	5090.5	4758.5	4762.8	3494.4	2421.8	1689.7
80°	1004.5	1013.0	1447.1	1711.0	2468.6	3060.3	2707.0	2200.5	1574.8	1285.4	1008.7
82.5°	583.1	570.3	864.0	966.2	1174.7	1162.0	961.9	910.8	689.5	642.7	515.0
85°	234.1	217.1	378.8	353.3	357.5	378.8	280.9	280.9	225.6	174.5	127.7
87.5°	46.8	46.8	51.1	46.8	46.8	51.1	38.3	38.3	34.1	34.1	34.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P841404

CATALOG NUMBER: ARCH4-170-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9	4664.9
2.5°	4630.8	4622.3	4601.0	4545.7	4515.9	4498.9	4473.3	4464.8	4460.6	4464.8	4477.6
5°	4643.6	4613.8	4554.2	4464.8	4405.2	4366.9	4324.4	4307.3	4294.6	4294.6	4307.3
7.5°	4652.1	4605.3	4503.1	4371.2	4286.1	4226.5	4175.4	4154.1	4149.9	4162.6	4166.9
10°	4656.4	4588.3	4443.5	4277.5	4166.9	4090.3	4039.2	4026.4	4039.2	4064.7	4069.0
12.5°	4686.1	4592.5	4409.5	4213.7	4081.8	4005.1	3966.8	3966.8	4000.9	4047.7	4052.0
15°	4737.2	4622.3	4392.5	4162.6	4026.4	3958.3	3945.6	3966.8	4017.9	4090.3	4098.8
17.5°	4775.5	4639.3	4354.2	4094.5	3954.1	3911.5	3932.8	3983.9	4056.2	4154.1	4162.6
20°	4801.1	4639.3	4298.8	4013.7	3881.7	3873.2	3932.8	4013.7	4090.3	4205.2	4218.0
22.5°	4826.6	4630.8	4235.0	3915.8	3800.8	3826.4	3937.0	4039.2	4115.8	4239.2	4260.5
25°	4873.4	4643.6	4171.1	3817.9	3715.7	3788.1	3932.8	4056.2	4137.1	4264.8	4298.8
27.5°	4937.3	4673.4	4124.3	3728.5	3630.6	3728.5	3903.0	4052.0	4137.1	4260.5	4298.8
30°	5005.4	4707.4	4069.0	3630.6	3532.7	3643.4	3839.2	4005.1	4103.0	4218.0	4264.8
32.5°	5077.7	4745.7	4022.2	3524.2	3413.5	3528.4	3745.5	3932.8	4039.2	4145.6	4196.7
35°	5175.6	4813.8	3996.6	3439.1	3307.1	3409.3	3626.3	3839.2	3954.1	4052.0	4111.6
37.5°	5294.8	4899.0	3983.9	3353.9	3192.2	3277.3	3498.6	3724.2	3847.7	3928.5	3983.9
40°	5431.0	5005.4	3979.6	3273.1	3077.3	3141.1	3366.7	3592.3	3711.5	3775.3	3822.1
42.5°	5584.2	5124.5	3971.1	3192.2	2962.4	3013.4	3239.0	3460.3	3562.5	3617.8	3660.4
45°	5746.0	5243.7	3954.1	3094.3	2838.9	2898.5	3107.1	3302.9	3409.3	3456.1	3502.9
47.5°	5907.7	5362.9	3920.0	2983.6	2728.3	2783.6	2966.6	3136.9	3222.0	3264.6	3311.4
50°	6065.2	5469.3	3839.2	2856.0	2613.3	2664.4	2804.9	2919.8	2983.6	3017.7	3064.5
52.5°	6205.6	5541.7	3724.2	2707.0	2498.4	2524.0	2617.6	2715.5	2766.6	2770.8	2813.4
55°	6324.8	5580.0	3558.2	2553.8	2375.0	2379.3	2430.3	2506.9	2528.2	2511.2	2541.0
57.5°	6392.9	5558.7	3375.2	2396.3	2247.3	2230.3	2268.6	2306.9	2311.2	2268.6	2298.4
60°	6409.9	5460.8	3136.9	2238.8	2119.6	2072.8	2085.6	2077.1	2068.5	2051.5	2077.1
62.5°	6324.8	5252.2	2873.0	2085.6	1983.4	1911.1	1906.8	1902.6	1915.3	1919.6	1923.8
65°	6014.1	4860.7	2558.0	1928.1	1838.7	1740.8	1736.6	1787.6	1804.7	1779.1	1787.6
67.5°	5414.0	4260.5	2213.3	1745.1	1655.7	1570.6	1604.6	1634.4	1664.2	1655.7	1664.2
70°	4562.7	3498.6	1898.3	1540.8	1455.6	1408.8	1447.1	1472.7	1476.9	1468.4	1476.9
72.5°	3588.0	2732.5	1604.6	1332.2	1255.6	1234.3	1281.1	1302.4	1340.7	1357.7	1362.0
75°	2592.1	2017.5	1315.2	1106.6	1042.8	1042.8	1085.3	1123.7	1157.7	1136.4	1123.7
77.5°	1447.1	1204.5	944.9	761.9	774.6	834.2	851.3	893.8	927.9	923.6	915.1
80°	876.8	753.4	638.4	493.7	489.5	536.3	647.0	719.3	736.3	698.0	693.8
82.5°	455.4	395.8	340.5	276.7	306.5	357.5	374.6	451.2	498.0	481.0	502.2
85°	114.9	110.7	123.4	127.7	157.5	174.5	191.5	225.6	149.0	72.4	72.4
87.5°	34.1	34.1	42.6	42.6	55.3	68.1	63.8	63.8	34.1	4.3	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)