

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: P237338

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237338
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28768.4 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 251
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: 28.75 FT

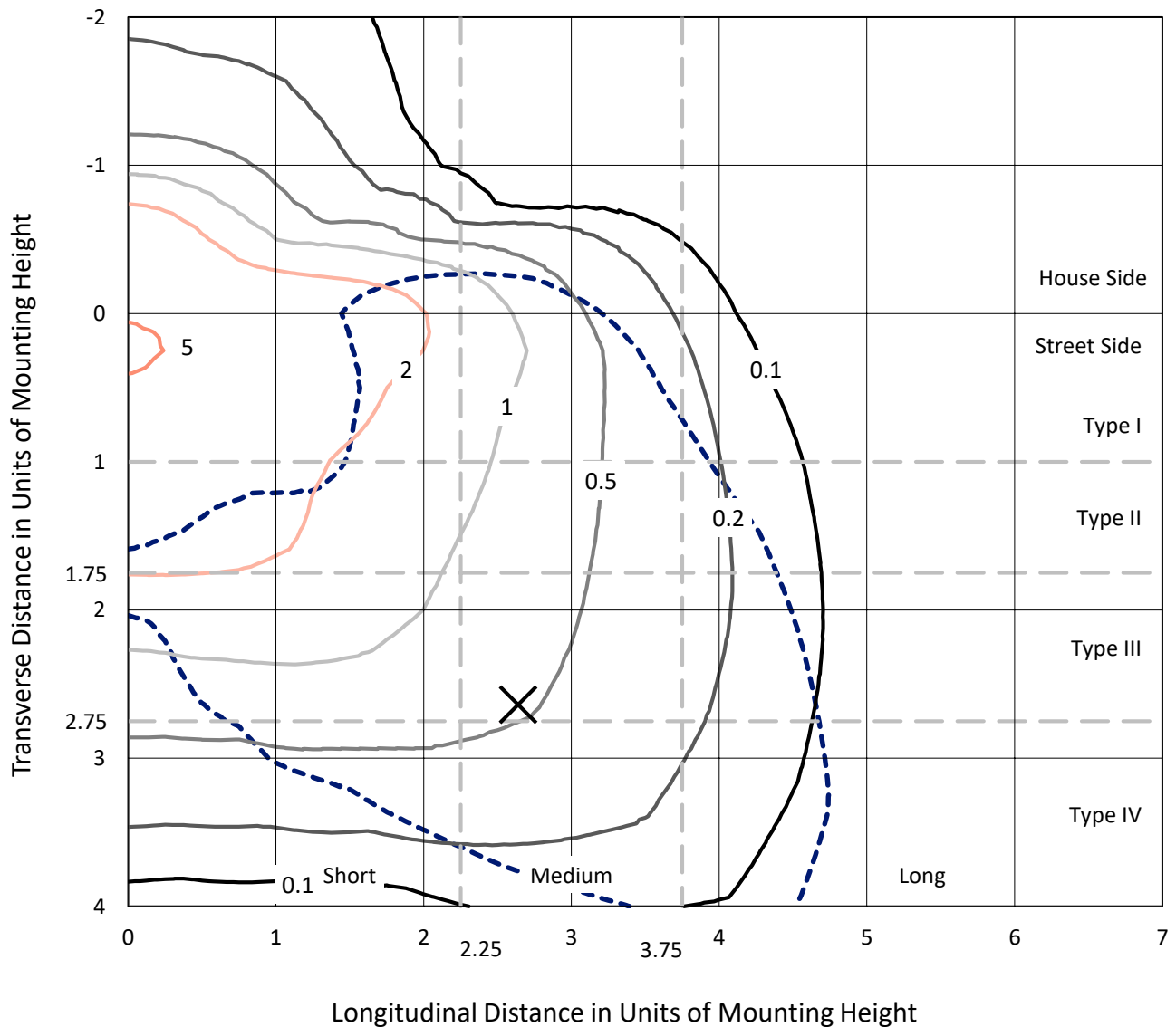


REPORT NUMBER: P237338

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

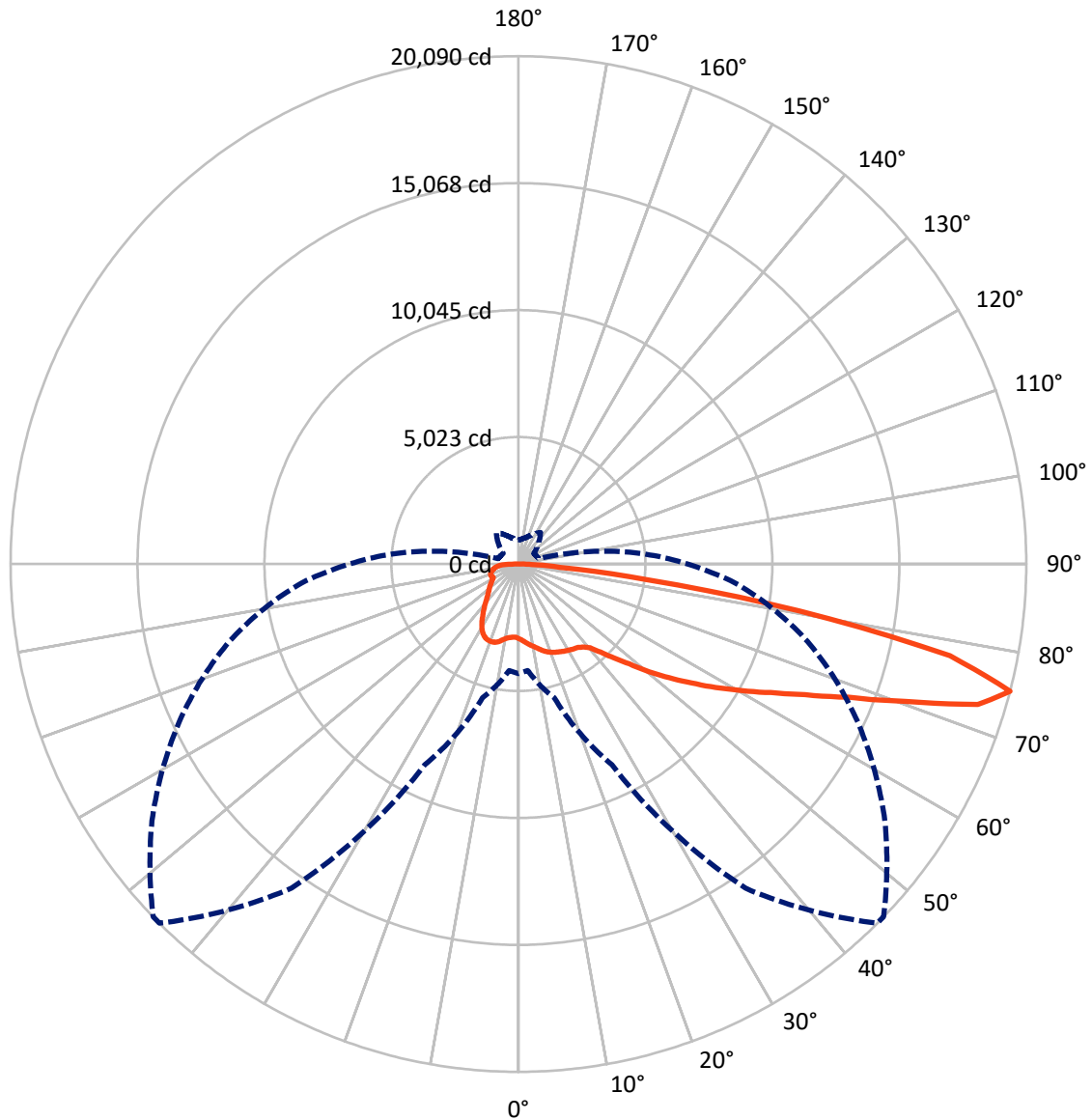


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P237338

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6664.5	0.0	6664.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	22104.0	0.0	22104.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	28768.4	0.0	28768.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.3	1.0
10°-20°	947.1	3.3
20°-30°	1625.2	5.6
30°-40°	2273.0	7.9
40°-50°	3334.4	11.6
50°-60°	5194.0	18.1
60°-70°	7473.8	26.0
70°-80°	6510.5	22.6
80°-90°	1118.1	3.9
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°	28768.4	100.0
0°-180°	28768.4	100.0



REPORT NUMBER: P237338

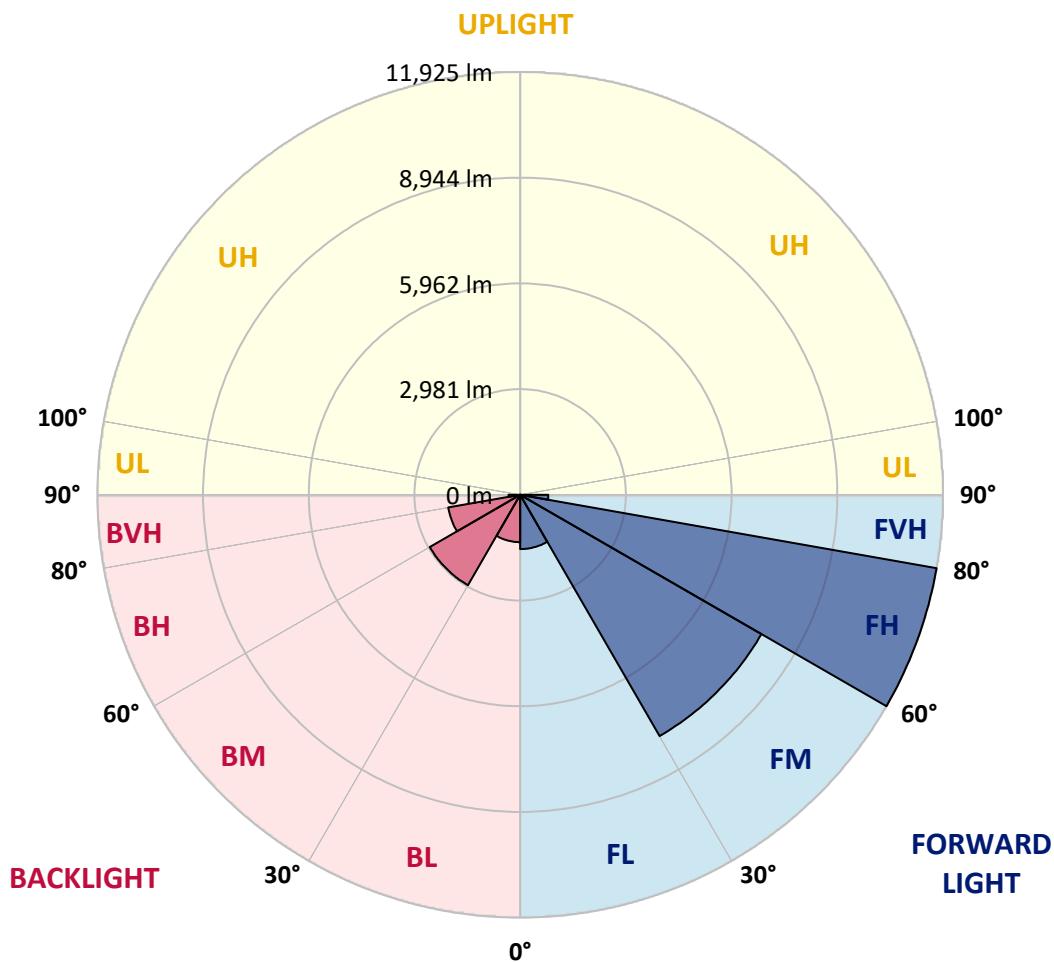
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1529.8	5.3			
FM	(30°-60°)	7856.1	27.3			
FH	(60°-80°)	11924.8	41.5			G4/12000
FVH	(80°-90°)	793.3	2.8			G5
BL	(0°-30°)	1334.8	4.6	B3/2500		
BM	(30°-60°)	2945.3	10.2	B3/5000		
BH	(60°-80°)	2059.5	7.2	B3/2500		G3/2500
BVH	(80°-90°)	324.8	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





REPORT NUMBER: P237338

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	3094.6	3072.3	3072.3	3055.5	3055.5	3027.5	3016.4	3010.7	2982.7	2965.9	2949.2
5°	3273.7	3245.7	3240.2	3201.0	3184.2	3122.7	3117.0	3077.9	3027.5	2977.2	2938.0
7.5°	3436.0	3419.2	3391.3	3352.1	3301.8	3223.4	3217.8	3156.2	3072.3	3005.1	2949.2
10°	3553.5	3542.4	3503.2	3452.9	3396.9	3318.6	3312.9	3245.7	3145.1	3066.7	2988.3
12.5°	3693.5	3676.7	3626.3	3559.2	3497.6	3424.8	3419.2	3363.3	3251.3	3150.6	3049.9
15°	3827.8	3805.4	3743.8	3676.7	3609.5	3548.0	3548.0	3486.4	3368.9	3251.3	3133.8
17.5°	3894.9	3883.7	3822.2	3749.4	3693.5	3648.7	3643.1	3587.2	3469.6	3346.5	3217.8
20°	3917.3	3922.9	3867.0	3788.6	3749.4	3727.0	3721.4	3682.3	3553.5	3436.0	3312.9
22.5°	3911.7	3928.5	3883.7	3799.8	3788.6	3788.6	3788.6	3743.8	3643.1	3525.6	3402.4
25°	3934.1	3956.5	3922.9	3822.2	3822.2	3844.6	3844.6	3822.2	3732.6	3631.9	3508.8
27.5°	4012.4	4029.2	4001.3	3861.3	3867.0	3900.5	3894.9	3900.5	3844.6	3749.4	3626.3
30°	4107.6	4130.0	4096.4	3922.9	3917.3	3950.8	3950.8	3978.9	3939.7	3838.9	3738.3
32.5°	4365.0	4359.4	4253.1	3990.0	3973.2	4006.9	4006.9	4034.8	4012.4	3934.1	3838.9
35°	5131.6	5047.8	4812.7	4208.3	4040.5	4057.2	4057.2	4107.6	4118.8	4057.2	3973.2
37.5°	5915.1	5887.2	5708.1	4790.3	4286.7	4163.5	4158.0	4230.7	4281.0	4230.7	4174.8
40°	6704.2	6681.8	6642.6	5568.1	4801.5	4353.8	4337.0	4398.6	4488.1	4454.5	4421.0
42.5°	7437.3	7426.1	7465.3	6334.8	5456.2	4762.3	4711.9	4639.2	4768.0	4756.7	4756.7
45°	8013.7	8041.7	8064.0	7051.2	6167.0	5288.3	5226.8	4980.5	5154.0	5198.8	5232.4
47.5°	8338.3	8360.7	8439.0	7750.7	6877.7	5898.3	5853.5	5450.7	5680.1	5814.5	5909.6
50°	8802.8	8741.2	8808.3	8433.4	7733.9	6693.0	6569.9	6083.0	6374.0	6609.1	6832.9
52.5°	9250.4	9149.7	9205.6	9222.4	8707.7	7470.9	7342.1	6827.3	7191.0	7560.4	7957.7
55°	9653.4	9647.8	9703.7	9989.1	9647.8	8304.7	8159.2	7649.9	8175.9	8573.4	9244.8
57.5°	9978.0	10033.9	10280.1	10878.9	10733.4	9211.3	9049.0	8606.9	9228.0	9625.4	10739.0
60°	10358.5	10448.0	10856.6	11634.4	11723.9	10162.6	9994.7	9675.8	10308.1	10711.0	12468.2
62.5°	10487.2	10615.9	11455.3	12429.1	12759.3	11203.5	11052.4	10839.8	11444.2	11807.9	14191.8
65°	9631.0	9877.2	11785.5	12837.6	13872.8	12457.1	12328.3	12143.7	12574.5	12815.2	15361.4
67.5°	9395.9	9507.9	11142.0	13425.2	14919.3	14068.7	13940.1	13621.0	13632.3	13531.5	15742.0
70°	9065.8	9188.9	10481.6	13867.2	16419.1	16273.6	16116.9	15176.8	14600.4	13990.4	14992.1
72.5°	7722.7	7683.5	9032.1	12675.3	17141.0	19004.6	18819.8	16850.0	15316.6	13593.1	12652.9
75°	4337.0	4225.1	5478.6	8769.1	15652.5	20090.2	20084.6	17695.0	14813.0	11841.5	8612.5
77.5°	1259.2	1225.6	1807.6	3676.7	10537.5	17454.4	17667.1	15960.3	12362.0	8506.1	4728.8
80°	593.2	604.4	777.9	1214.3	4499.3	11265.0	11875.0	10509.6	7386.9	3922.9	1953.0
82.5°	374.9	380.5	531.6	783.5	1902.7	5114.9	5618.6	4728.8	2926.8	1695.6	861.8
85°	235.1	235.1	352.5	514.9	1136.0	1634.1	1774.0	1611.7	1253.5	923.3	470.0
87.5°	128.7	128.7	212.7	296.6	621.1	526.0	542.8	643.5	783.5	565.2	235.1
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: P237338

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	2943.5	2932.4	2915.6	2910.0	2904.4	2898.8	2904.4	2915.6	2904.4	2904.4	2910.0
5°	2926.8	2915.6	2893.2	2893.2	2898.8	2904.4	2932.4	2949.2	2954.8	2954.8	2954.8
7.5°	2926.8	2910.0	2893.2	2898.8	2910.0	2932.4	2977.2	3005.1	3027.5	3033.2	3033.2
10°	2954.8	2932.4	2921.2	2932.4	2965.9	2982.7	3027.5	3072.3	3100.3	3111.5	3111.5
12.5°	3005.1	2982.7	2982.7	3005.1	3049.9	3072.3	3111.5	3145.1	3178.6	3195.4	3195.4
15°	3089.1	3061.1	3066.7	3105.9	3156.2	3178.6	3206.6	3217.8	3245.7	3268.1	3268.1
17.5°	3167.5	3139.4	3150.6	3195.4	3228.9	3240.2	3257.0	3251.3	3262.6	3279.4	3284.9
20°	3257.0	3228.9	3234.6	3262.6	3268.1	3257.0	3257.0	3240.2	3234.6	3262.6	3273.7
22.5°	3346.5	3318.6	3312.9	3296.2	3268.1	3240.2	3223.4	3206.6	3195.4	3223.4	3234.6
25°	3452.9	3413.7	3385.7	3312.9	3240.2	3189.8	3167.5	3156.2	3150.6	3178.6	3189.8
27.5°	3570.3	3531.1	3447.2	3290.5	3173.0	3089.1	3072.3	3072.3	3083.5	3100.3	3111.5
30°	3682.3	3643.1	3492.0	3240.2	3055.5	2932.4	2915.6	2932.4	2960.3	2977.2	2994.0
32.5°	3794.2	3755.0	3520.0	3161.8	2882.1	2725.3	2714.1	2742.1	2786.9	2798.1	2809.2
35°	3945.3	3906.1	3553.5	3049.9	2663.8	2495.9	2484.6	2501.5	2540.7	2557.5	2574.3
37.5°	4158.0	4135.6	3604.0	2926.8	2462.3	2277.6	2244.0	2232.9	2255.3	2249.7	2272.1
40°	4437.8	4454.5	3693.5	2764.5	2266.4	2076.2	2003.4	1969.9	1947.5	1902.7	1925.1
42.5°	4846.2	4857.5	3794.2	2579.8	2098.6	1885.9	1790.8	1729.2	1684.5	1611.7	1622.9
45°	5445.1	5349.9	3911.7	2384.0	1947.5	1734.8	1622.9	1550.2	1488.6	1427.0	1432.6
47.5°	6239.7	5948.7	4040.5	2221.6	1796.4	1611.7	1511.0	1427.0	1354.3	1303.9	1309.5
50°	7219.1	6693.0	4169.1	2070.6	1645.3	1516.5	1427.0	1337.5	1264.8	1214.3	1208.7
52.5°	8511.8	7588.4	4253.1	1902.7	1494.2	1432.6	1354.3	1270.3	1180.8	1119.2	1113.6
55°	9854.8	8629.3	4325.9	1701.3	1348.7	1337.5	1298.3	1203.2	1096.8	1018.4	1007.3
57.5°	11332.2	9742.9	4381.8	1505.4	1236.7	1259.2	1247.9	1136.0	1018.4	945.7	940.2
60°	12675.3	10895.8	4202.7	1331.9	1136.0	1180.8	1191.9	1096.8	1035.3	1052.1	1057.6
62.5°	14029.6	11785.5	3520.0	1203.2	1068.9	1130.5	1225.6	1220.0	1191.9	1220.0	1225.6
65°	14516.4	11970.2	2495.9	1096.8	1001.7	1152.8	1331.9	1320.7	1191.9	1141.6	1130.5
67.5°	14242.2	11421.8	1678.9	1012.9	951.3	1180.8	1443.8	1320.7	1147.2	1080.0	1057.6
70°	12938.3	10073.1	1231.1	928.9	906.5	1175.2	1505.4	1315.1	1124.8	1052.1	1024.1
72.5°	10319.3	7773.1	990.5	850.6	839.4	1147.2	1538.9	1303.9	1102.4	1024.1	990.5
75°	6681.8	4835.1	833.8	772.2	738.7	1102.4	1522.2	1270.3	1074.5	973.7	951.3
77.5°	3100.3	2081.8	710.7	682.7	643.5	1035.3	1471.8	1203.2	1012.9	917.8	889.8
80°	1443.8	984.9	598.8	593.2	576.4	979.4	1404.6	1124.8	940.2	861.8	817.0
82.5°	772.2	593.2	486.8	486.8	503.7	912.2	1320.7	1029.7	845.1	805.9	688.3
85°	408.6	341.4	352.5	380.5	430.9	805.9	1208.7	928.9	738.7	615.6	598.8
87.5°	207.0	218.3	218.3	257.4	330.2	654.8	996.1	766.7	626.8	503.7	492.4
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)