

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: P237097

Luminaire Tested: **ARCH-L-AF72-240-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28239.6 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 242
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

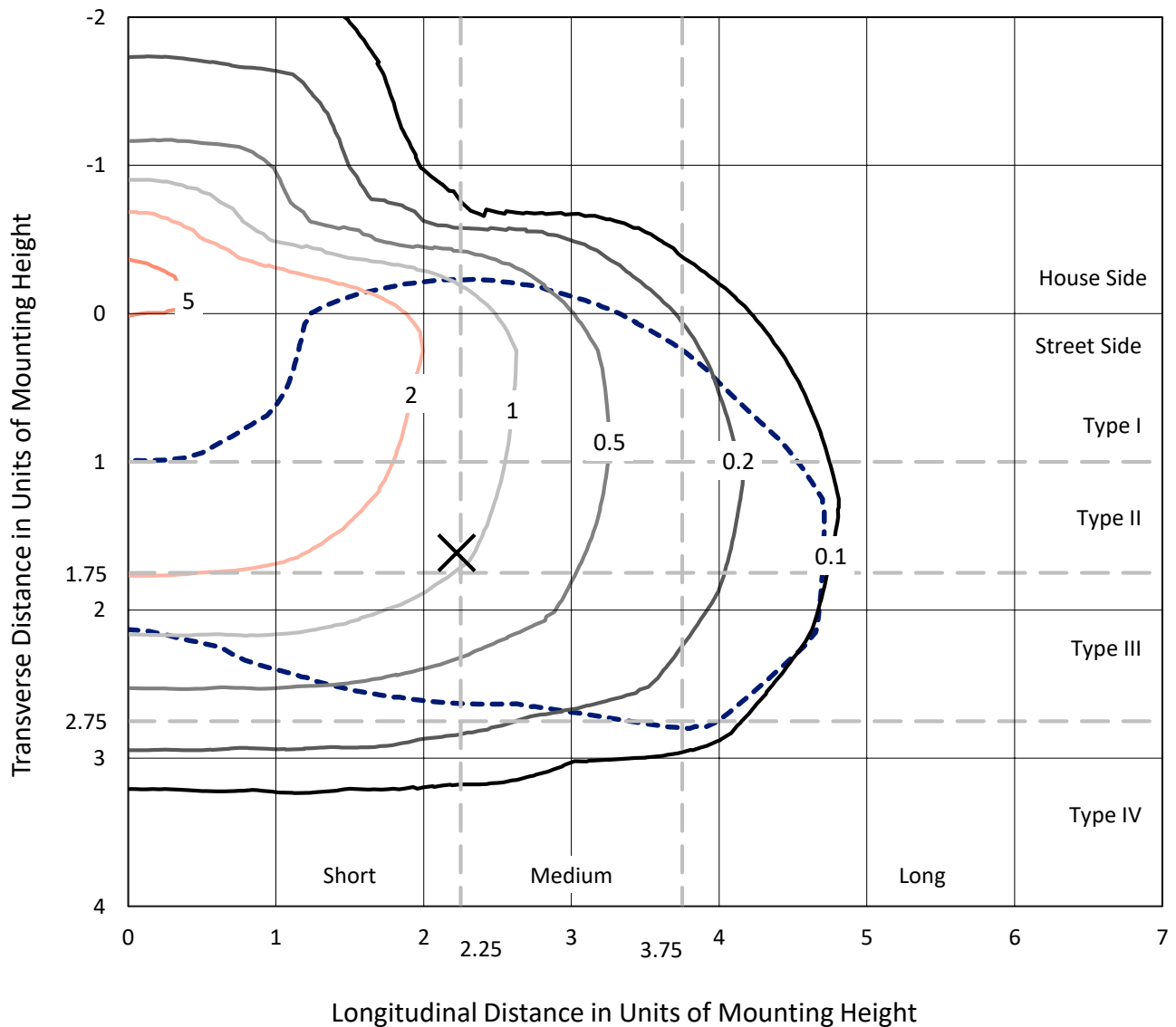


REPORT NUMBER: P237097

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

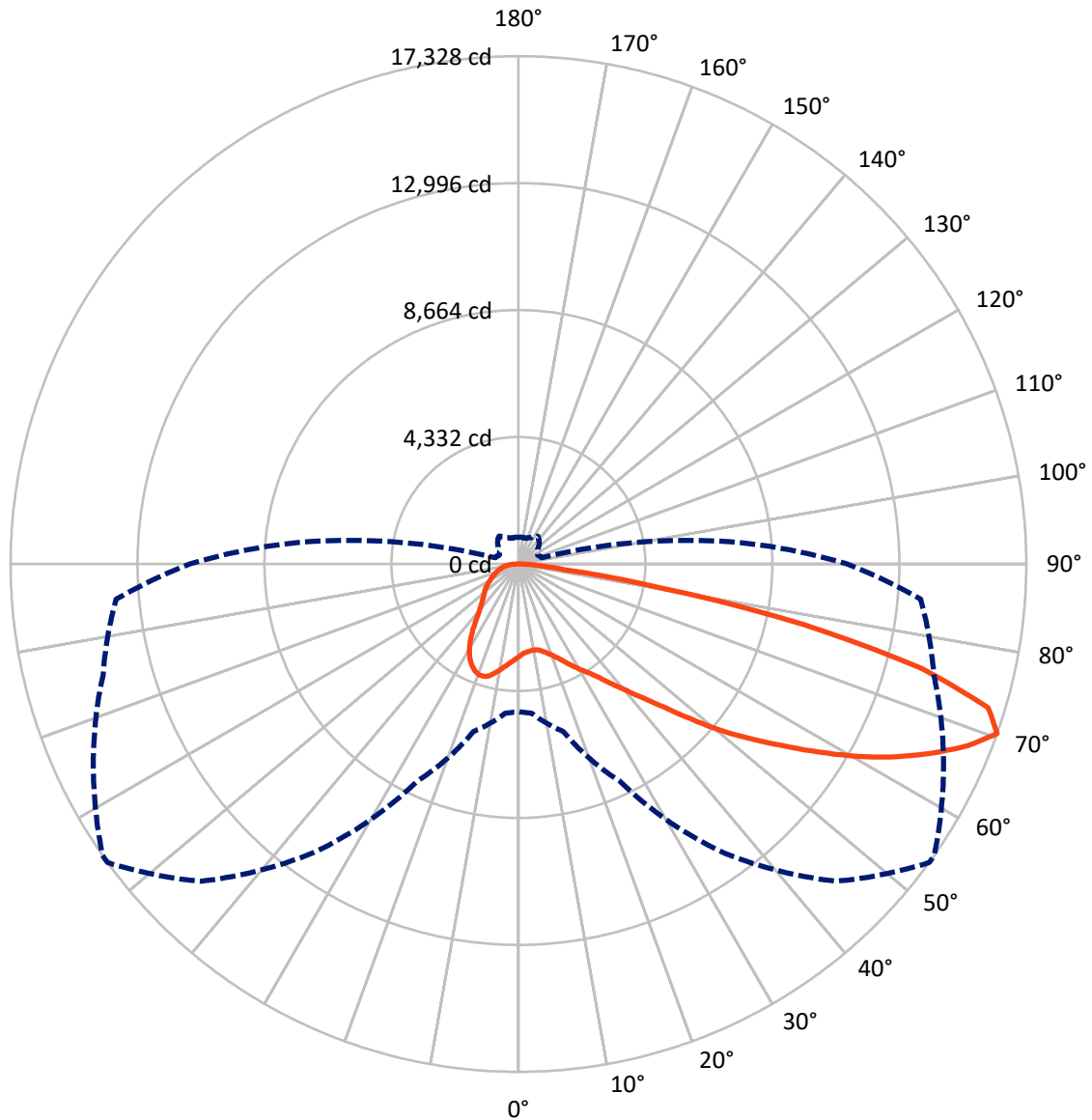


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P237097

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P237097

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6404.6	0.0	6404.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	21834.9	0.0	21834.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	28239.6	0.0	28239.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.1	1.1
10°-20°	990.7	3.5
20°-30°	1721.2	6.1
30°-40°	2515.4	8.9
40°-50°	3947.8	14.0
50°-60°	6070.8	21.5
60°-70°	7417.0	26.3
70°-80°	4598.6	16.3
80°-90°	668.0	2.4
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°	28239.6	100.0
0°-180°	28239.6	100.0

Coefficient of Utilization



REPORT NUMBER: P237097

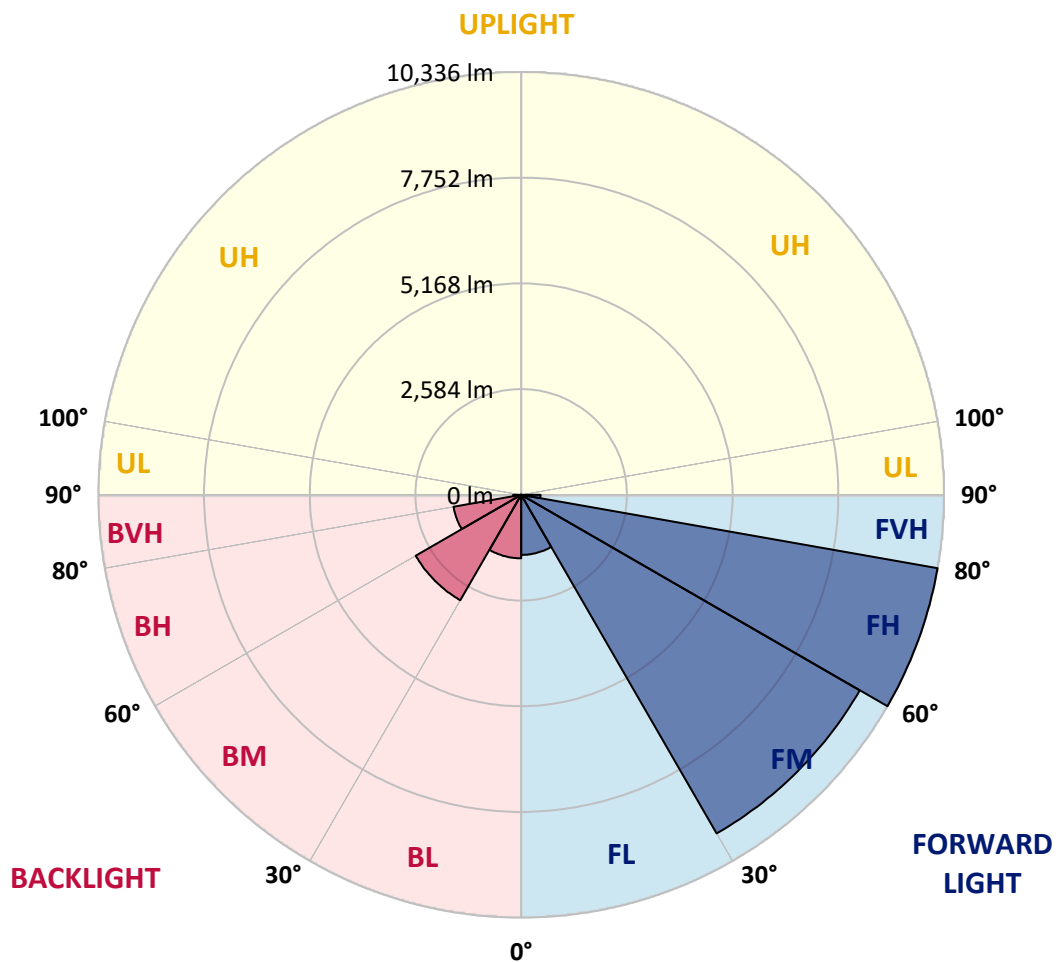
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1469.3	5.2			
FM	(30°-60°)	9557.8	33.8			
FH	(60°-80°)	10336.1	36.6			G4/12000
FVH	(80°-90°)	471.7	1.7			G3/500
BL	(0°-30°)	1552.7	5.5	B3/2500		
BM	(30°-60°)	2976.1	10.5	B3/5000		
BH	(60°-80°)	1679.5	5.9	B3/2500		G3/2500
BVH	(80°-90°)	196.3	0.7			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 III Short





REPORT NUMBER: P237097

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5
2.5°	3035.3	3025.0	3025.0	3040.5	3045.6	3061.2	3061.2	3066.4	3081.8	3107.7	3138.7
5°	2942.2	2937.1	2942.2	2963.0	2973.3	3004.3	3014.6	3019.9	3050.8	3092.2	3138.7
7.5°	2849.2	2844.0	2854.3	2885.3	2916.4	2963.0	2988.8	2994.0	3040.5	3097.4	3159.5
10°	2818.1	2813.0	2828.5	2854.3	2885.3	2937.1	2978.4	2983.6	3050.8	3118.1	3205.9
12.5°	2859.6	2854.3	2869.9	2895.8	2926.8	2963.0	3009.5	3014.6	3102.5	3190.5	3283.6
15°	2963.0	2963.0	2968.1	2983.6	3014.6	3045.6	3087.1	3092.2	3185.3	3288.7	3381.8
17.5°	3123.3	3112.9	3112.9	3107.7	3128.4	3143.9	3195.6	3200.8	3299.0	3392.1	3485.2
20°	3319.8	3314.6	3293.9	3268.0	3262.9	3273.2	3324.9	3330.1	3428.3	3505.9	3593.8
22.5°	3557.6	3562.7	3516.2	3459.3	3433.5	3449.0	3495.5	3500.7	3573.1	3640.4	3717.9
25°	3873.0	3857.5	3790.3	3707.6	3655.8	3655.8	3702.4	3702.4	3769.6	3811.0	3862.7
27.5°	4172.9	4141.9	4079.8	3961.0	3878.2	3893.8	3940.2	3940.2	4002.3	4017.8	4043.6
30°	4498.7	4467.6	4390.1	4240.1	4131.6	4121.3	4178.1	4172.9	4255.7	4250.5	4229.8
32.5°	4896.9	4881.3	4752.1	4560.7	4416.0	4379.8	4431.5	4436.6	4488.4	4472.9	4405.6
35°	5455.3	5450.2	5331.2	4995.1	4803.8	4736.6	4767.6	4767.6	4803.8	4762.4	4648.7
37.5°	6158.6	6168.9	6065.5	5569.0	5300.2	5186.5	5191.6	5186.5	5196.8	5150.3	5031.3
40°	6861.9	6887.6	6882.5	6282.7	5941.4	5744.9	5672.5	5662.1	5688.0	5667.4	5553.6
42.5°	7787.4	7849.5	7704.7	7161.8	6779.1	6448.2	6251.7	6225.8	6282.7	6308.5	6199.9
45°	8749.2	8728.5	8501.0	8108.0	7761.5	7337.5	6965.3	6923.8	6965.3	7042.8	6929.1
47.5°	9250.7	9235.3	9178.4	8981.9	8930.2	8444.2	7880.5	7844.3	7766.8	7875.3	7740.9
50°	10078.1	10093.7	9860.9	9840.3	10057.4	9788.6	8914.7	8832.0	8692.3	8780.2	8666.4
52.5°	10678.0	10610.8	10466.0	10647.0	11324.4	11179.5	9886.8	9850.6	9721.3	9700.6	9649.0
55°	10921.0	10921.0	10946.9	11365.7	12332.7	12141.3	10941.7	10977.9	10802.1	10657.3	10724.5
57.5°	10993.4	11024.4	11246.7	11939.7	13516.9	12891.1	12105.2	12156.8	11903.5	11613.9	11825.9
60°	10636.6	10729.7	11262.3	12265.5	14183.8	13687.5	13330.7	13346.1	12979.0	12555.0	12927.3
62.5°	9721.3	9835.2	10786.6	12399.9	14075.3	14504.4	14489.0	14525.2	14023.5	13496.1	13961.5
65°	8599.2	8713.0	9726.5	12022.4	13992.5	15088.7	15549.0	15647.3	15000.9	14292.5	14607.8
67.5°	6949.7	7099.7	8061.5	10750.4	13589.2	15569.7	16541.8	16645.3	15755.8	14706.1	14551.0
70°	5036.5	5108.9	5915.5	8170.1	11944.9	15306.0	17327.8	17322.6	16004.1	14675.2	13775.4
72.5°	2425.2	2482.1	3180.1	5072.7	8542.4	12989.3	16759.0	16857.2	15662.7	14225.3	12001.8
75°	998.0	1054.9	1287.6	2140.7	4483.2	8583.8	14204.6	14437.2	14225.3	12767.0	9390.4
77.5°	620.5	641.2	754.9	1106.6	2047.6	4007.5	9943.7	10259.2	11272.6	10228.1	6199.9
80°	465.3	480.9	563.6	775.6	1292.7	1478.9	4938.2	5336.4	6830.8	5869.0	2807.8
82.5°	387.8	393.0	449.9	563.6	879.0	848.0	1582.3	1763.3	3185.3	2239.0	967.0
85°	361.9	372.4	403.3	403.3	558.4	532.7	656.7	687.7	925.6	765.3	336.1
87.5°	186.2	175.8	356.8	315.4	289.6	258.5	279.3	299.9	346.5	367.1	150.0
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°	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5	3159.5
2.5°	3149.1	3164.6	3190.5	3216.4	3247.4	3283.6	3304.2	3330.1	3350.8	3340.4	3335.2
5°	3164.6	3190.5	3247.4	3299.0	3361.1	3433.5	3480.1	3531.7	3573.1	3583.5	3568.0
7.5°	3190.5	3237.0	3314.6	3407.7	3490.4	3583.5	3655.8	3728.2	3779.9	3790.3	3790.3
10°	3252.5	3304.2	3407.7	3531.7	3630.0	3728.2	3811.0	3867.9	3914.4	3935.1	3935.1
12.5°	3340.4	3402.4	3526.6	3676.5	3785.1	3878.2	3924.8	3950.6	3971.3	3992.0	3997.2
15°	3443.9	3511.1	3661.0	3821.3	3935.1	3981.6	3981.6	3976.4	3976.4	3986.7	3997.2
17.5°	3547.3	3619.6	3774.8	3945.4	4017.8	3992.0	3955.8	3940.2	3929.9	3924.8	3940.2
20°	3655.8	3728.2	3883.3	4043.6	4023.0	3914.4	3862.7	3826.4	3795.5	3779.9	3800.7
22.5°	3774.8	3842.0	4002.3	4110.9	3955.8	3790.3	3692.0	3635.2	3583.5	3552.4	3573.1
25°	3914.4	3981.6	4136.7	4131.6	3836.8	3604.2	3449.0	3355.9	3299.0	3268.0	3268.0
27.5°	4079.8	4136.7	4286.7	4079.8	3671.4	3355.9	3128.4	3040.5	3025.0	2999.2	2999.2
30°	4250.5	4297.0	4426.3	3961.0	3443.9	3030.2	2781.9	2740.6	2745.8	2719.9	2725.0
32.5°	4426.3	4472.9	4509.1	3785.1	3149.1	2663.0	2497.5	2466.5	2461.3	2440.7	2420.0
35°	4674.5	4741.8	4519.4	3547.3	2792.3	2357.9	2239.0	2207.9	2176.9	2104.6	2104.6
37.5°	5052.0	5124.4	4493.5	3252.5	2425.2	2120.1	2011.5	1970.1	1918.4	1846.0	1820.1
40°	5569.0	5569.0	4436.6	2921.5	2130.4	1928.8	1825.4	1773.6	1716.7	1644.4	1628.8
42.5°	6179.2	6034.5	4348.8	2585.5	1913.2	1799.5	1706.4	1649.5	1582.3	1499.5	1489.2
45°	6892.8	6499.8	4224.7	2285.6	1752.9	1721.9	1665.1	1566.8	1453.0	1365.1	1349.6
47.5°	7585.8	6918.7	4105.7	2073.5	1618.5	1690.9	1644.4	1478.9	1323.8	1199.6	1184.2
50°	8345.8	7291.0	3966.1	1897.8	1515.1	1670.2	1618.5	1349.6	1179.0	1091.1	1080.7
52.5°	9106.0	7668.4	3816.1	1711.6	1427.2	1628.8	1556.4	1256.5	1173.8	1054.9	1039.3
55°	9907.5	8108.0	3640.4	1504.8	1323.8	1546.1	1473.8	1251.4	1210.0	1054.9	1018.7
57.5°	10688.3	8594.1	3355.9	1303.0	1210.0	1422.0	1442.7	1220.4	1132.4	1044.5	1003.2
60°	11551.9	9111.2	2885.3	1132.4	1111.7	1318.6	1401.3	1153.1	1044.5	1013.5	992.8
62.5°	12244.7	9576.6	2254.5	1013.5	1029.0	1235.8	1349.6	1111.7	1008.3	982.4	977.3
65°	12544.7	9586.9	1618.5	910.1	946.2	1158.3	1297.9	1075.5	977.3	967.0	961.8
67.5°	12229.3	9059.5	1137.6	811.8	858.4	1085.9	1230.7	1039.3	946.2	951.4	941.1
70°	11210.6	7947.7	832.5	718.7	775.6	1008.3	1158.3	992.8	910.1	920.5	904.9
72.5°	9380.0	6194.8	667.1	641.2	708.4	925.6	1085.9	941.1	853.2	858.4	827.4
75°	6929.1	4105.7	558.4	574.0	630.9	848.0	992.8	873.9	791.2	770.5	749.8
77.5°	4121.3	2109.7	460.2	501.6	563.6	754.9	889.4	791.2	723.9	687.7	672.2
80°	1701.3	853.2	377.5	424.0	491.2	672.2	785.9	692.9	646.4	610.2	589.5
82.5°	677.4	418.8	299.9	346.5	413.7	584.3	687.7	610.2	563.6	537.8	480.9
85°	258.5	206.8	201.6	243.1	310.3	449.9	568.8	511.9	475.8	408.5	393.0
87.5°	103.4	93.1	93.1	119.0	175.8	284.4	408.5	356.8	372.4	294.7	299.9
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)