

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: P399987

Luminaire Tested: **ARCH-L-PA3-220-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-727-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25807 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

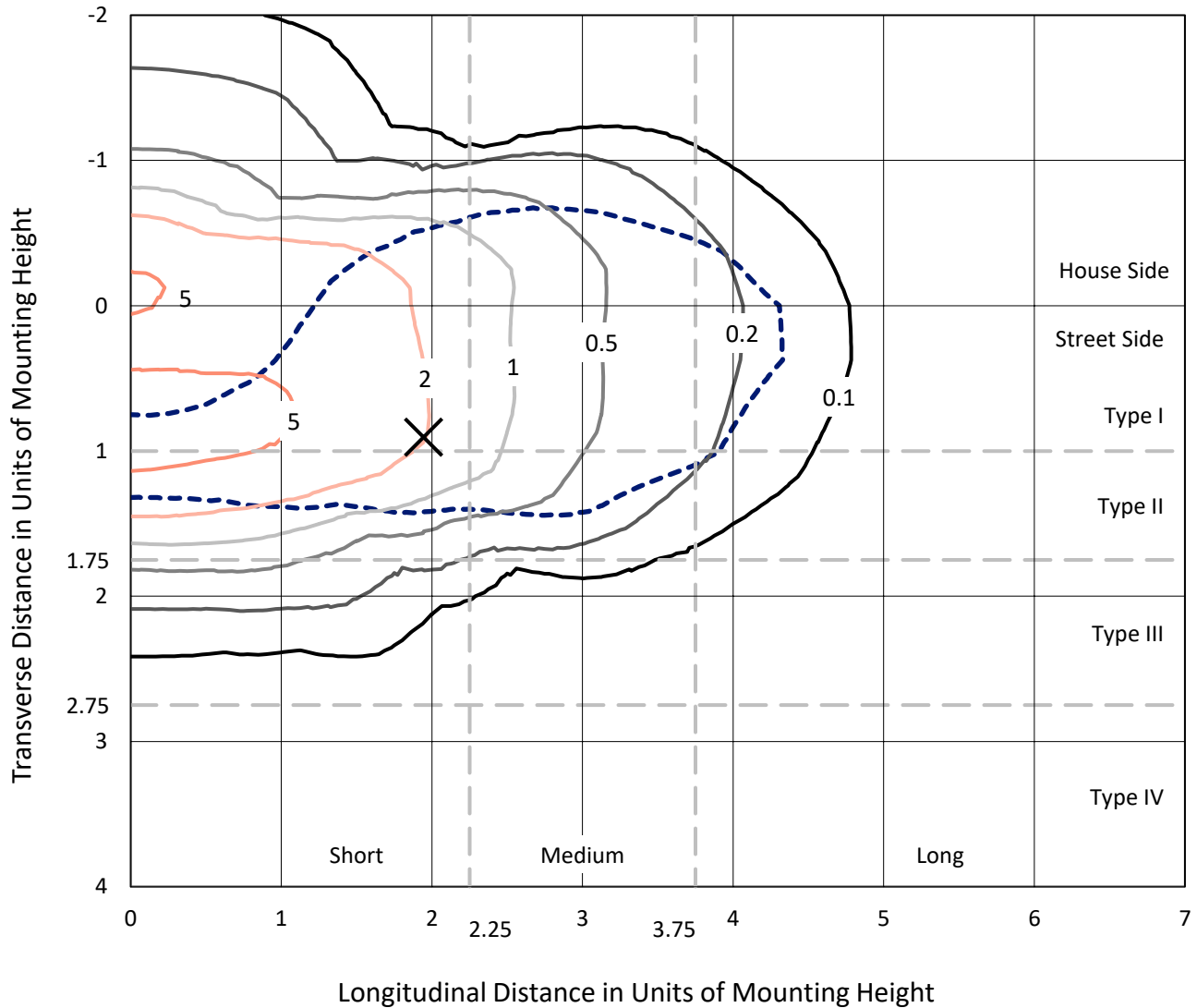
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

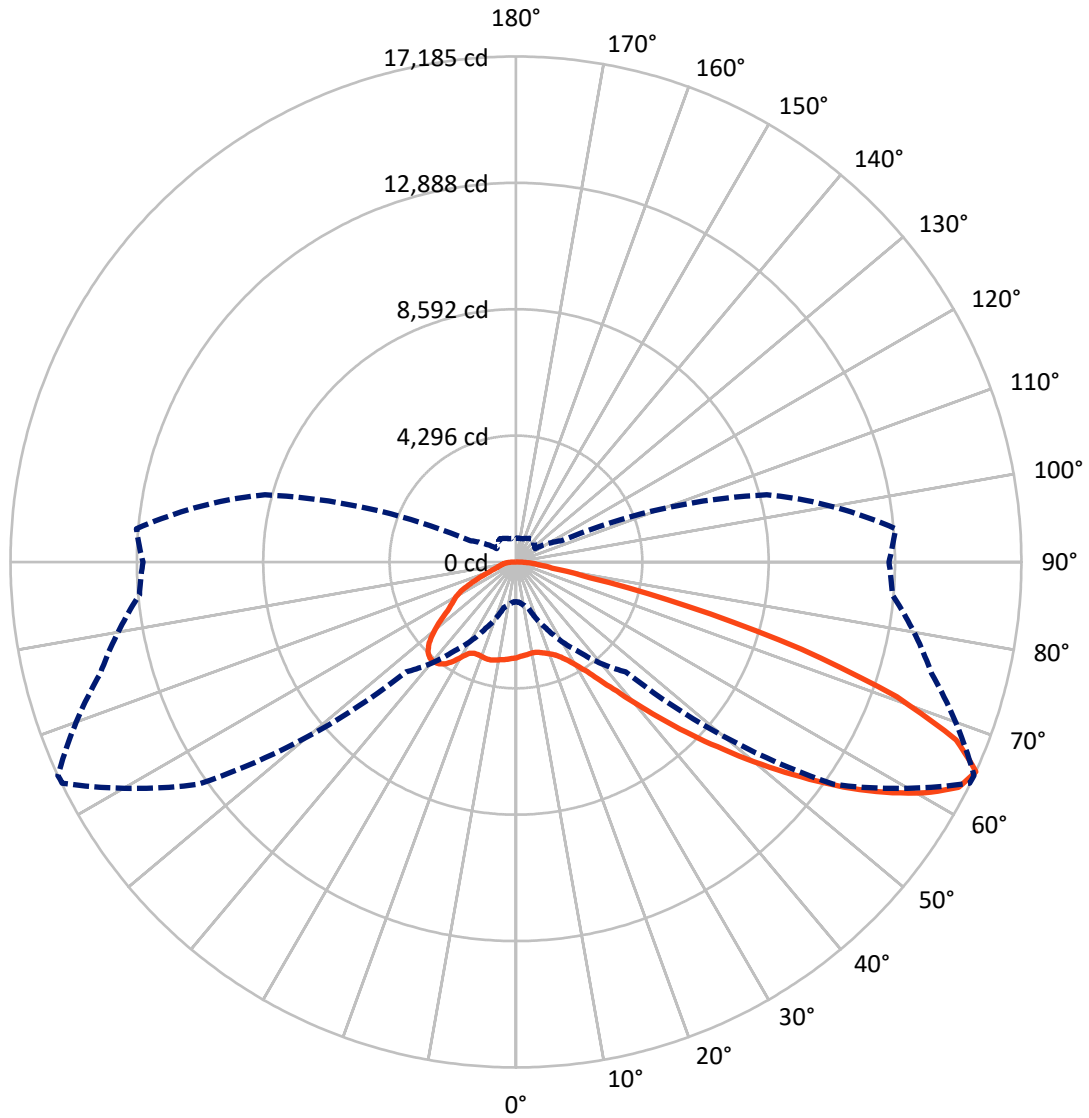
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Short - N/A

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CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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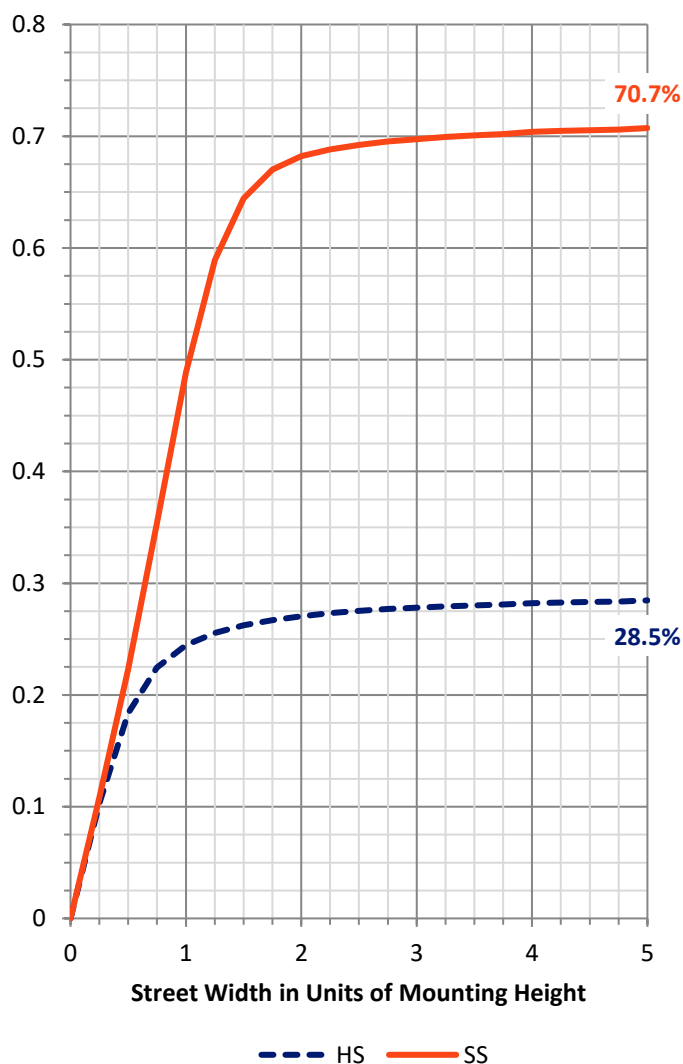
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7461.2	0.0	7461.2
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	18345.8	0.0	18345.8
	% Fixture	71.1	0.0	71.1
Total	Lumens	25807.0	0.0	25807.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.7	1.2
10°-20°	927.5	3.6
20°-30°	1647.6	6.4
30°-40°	2787.3	10.8
40°-50°	4852.2	18.8
50°-60°	6270.6	24.3
60°-70°	5487.1	21.3
70°-80°	2984.6	11.6
80°-90°	539.3	2.1
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°	25807.0	100.0
0°-180°	25807.0	100.0

Coefficient of Utilization



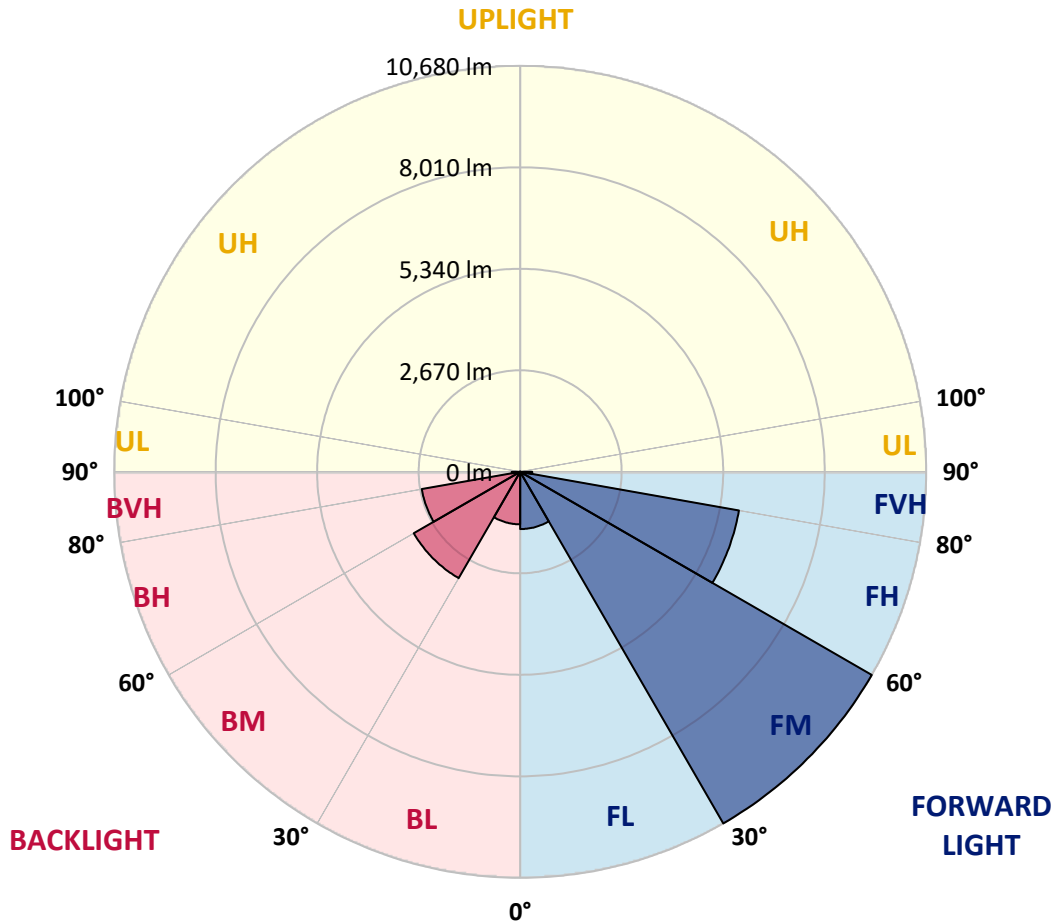
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1505.8	5.8			
FM (30°-60°)	10679.6	41.4			
FH (60°-80°)	5843.1	22.6			G3/7500
FVH (80°-90°)	317.3	1.2			G3/500
BL (0°-30°)	1380.1	5.3	B3/2500		
BM (30°-60°)	3230.5	12.5	B3/5000		
BH (60°-80°)	2628.7	10.2	B4/5000		G4/5000
BVH (80°-90°)	221.9	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0
2.5°	3203.2	3199.8	3193.0	3199.8	3203.2	3210.0	3206.6	3213.4	3210.0	3220.2	3237.2
5°	3121.7	3114.9	3111.5	3128.5	3138.7	3155.7	3162.5	3186.2	3182.8	3199.8	3227.0
7.5°	3030.0	3030.0	3026.6	3047.0	3060.5	3091.1	3114.9	3155.7	3159.1	3189.6	3220.2
10°	2958.6	2962.0	2958.6	2975.6	2996.0	3033.4	3074.1	3131.9	3135.3	3179.4	3210.0
12.5°	2931.5	2931.5	2931.5	2955.2	2982.4	3033.4	3080.9	3142.1	3148.9	3196.4	3223.6
15°	2968.8	2972.2	2965.4	2989.2	3019.8	3080.9	3125.1	3189.6	3196.4	3240.6	3257.6
17.5°	3101.3	3114.9	3097.9	3111.5	3104.7	3152.3	3193.0	3257.6	3261.0	3298.3	3305.1
20°	3362.9	3376.5	3349.3	3332.3	3271.2	3267.8	3284.7	3335.7	3335.7	3359.5	3342.5
22.5°	3767.1	3780.7	3733.1	3668.6	3522.5	3451.2	3413.8	3437.6	3434.2	3444.4	3400.2
25°	4303.8	4300.4	4242.6	4123.8	3889.4	3716.1	3624.4	3587.1	3587.1	3566.7	3512.3
27.5°	4969.6	4918.6	4816.7	4674.0	4348.0	4106.8	3909.8	3814.6	3797.7	3736.5	3634.6
30°	5679.5	5642.1	5496.1	5288.9	4911.8	4602.7	4276.6	4086.4	4076.2	3943.7	3790.9
32.5°	6515.1	6454.0	6290.9	6043.0	5591.2	5156.4	4748.8	4460.0	4443.1	4232.5	4021.9
35°	7588.5	7537.6	7221.7	6973.7	6392.8	5822.2	5339.8	4956.0	4942.4	4684.2	4415.9
37.5°	8875.9	8743.5	8437.7	7972.4	7360.9	6685.0	6073.5	5591.2	5574.2	5288.9	4949.2
40°	10024.1	9905.2	9633.4	9205.4	8549.8	7799.1	6970.3	6386.1	6369.1	6022.6	5594.6
42.5°	10873.3	10791.7	10615.1	10367.1	9898.4	9443.2	8115.0	7347.4	7316.8	6868.4	6335.1
45°	11365.8	11301.3	11199.4	11260.5	11253.7	11168.8	9480.6	8492.1	8393.6	7812.7	7160.5
47.5°	11246.9	11189.2	11229.9	11705.5	12361.1	12853.6	11070.3	9664.0	9531.5	8774.0	8040.3
50°	10387.5	10411.3	10625.3	11535.7	13006.5	14100.3	12833.2	10999.0	10822.3	9742.1	8875.9
52.5°	8821.6	8879.3	9399.0	10672.9	12935.2	14908.7	14426.4	12378.1	12143.7	10686.4	9636.8
55°	7007.7	7153.7	7826.3	9164.7	12004.4	14966.5	15628.8	13764.0	13505.8	11573.0	10299.2
57.5°	5183.6	5401.0	6178.8	7408.5	10221.1	14052.7	16230.1	15088.7	14776.2	12452.8	10999.0
60°	3288.1	3420.6	4317.4	5767.8	7822.9	11817.6	16152.0	16216.5	15944.8	13329.2	11729.3
62.5°	2099.2	2163.8	2615.6	4113.6	5468.9	8750.3	15299.4	17069.1	16885.7	14127.4	12422.2
65°	1348.5	1375.7	1606.7	2530.6	3722.9	5282.1	13176.3	17160.8	17184.6	14626.8	12850.2
67.5°	1097.2	1110.8	1195.7	1562.5	2632.5	2917.9	9178.3	15856.4	16145.2	14497.7	12704.2
70°	998.7	1015.7	1104.0	1246.6	2038.1	2014.3	4443.1	13268.0	13740.2	13753.8	12055.4
72.5°	842.4	866.2	985.1	1178.7	1576.1	1589.7	1881.8	9450.0	10146.4	12293.2	11080.5
75°	703.1	716.7	818.6	1039.4	1335.0	1270.4	1321.4	5010.3	6015.8	9857.6	10044.4
77.5°	570.7	584.3	659.0	828.8	1185.5	988.5	1039.4	2075.5	2564.6	6691.8	8210.2
80°	407.6	421.2	506.1	645.4	896.8	890.0	771.1	1144.7	1243.2	3617.6	5333.0
82.5°	292.1	302.3	383.8	462.0	621.6	893.4	580.9	777.9	815.2	1603.3	2150.2
85°	197.0	197.0	265.0	305.7	400.8	563.9	468.8	526.5	550.3	760.9	580.9
87.5°	84.9	84.9	142.7	156.3	210.6	261.6	349.9	265.0	271.7	411.0	237.8
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°	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0	3261.0
2.5°	3247.4	3250.8	3257.6	3277.9	3291.5	3311.9	3322.1	3335.7	3335.7	3328.9	3332.3
5°	3240.6	3250.8	3274.6	3311.9	3335.7	3373.1	3400.2	3420.6	3427.4	3420.6	3424.0
7.5°	3237.2	3254.2	3294.9	3349.3	3383.2	3430.8	3468.2	3491.9	3508.9	3502.1	3505.5
10°	3227.0	3254.2	3305.1	3373.1	3424.0	3471.6	3505.5	3515.7	3525.9	3519.1	3515.7
12.5°	3240.6	3271.2	3325.5	3407.0	3464.8	3502.1	3512.3	3495.3	3471.6	3458.0	3454.6
15°	3267.8	3298.3	3352.7	3437.6	3488.6	3502.1	3478.4	3424.0	3369.7	3339.1	3335.7
17.5°	3305.1	3325.5	3369.7	3444.4	3485.2	3468.2	3420.6	3356.1	3315.3	3291.5	3294.9
20°	3328.9	3328.9	3362.9	3420.6	3454.6	3441.0	3383.2	3311.9	3247.4	3216.8	3206.6
22.5°	3362.9	3345.9	3349.3	3400.2	3447.8	3427.4	3305.1	3179.4	3087.7	3053.8	3050.4
25°	3454.6	3407.0	3376.5	3407.0	3519.1	3352.7	3108.1	2962.0	2877.1	2846.5	2849.9
27.5°	3566.7	3502.1	3437.6	3488.6	3576.9	3182.8	2856.7	2690.3	2639.3	2615.6	2625.8
30°	3678.8	3593.9	3508.9	3692.4	3536.1	2917.9	2534.0	2371.0	2326.8	2309.8	2323.4
32.5°	3886.0	3746.7	3644.8	3964.1	3410.4	2615.6	2184.2	2034.7	1993.9	1973.6	1966.8
35°	4232.5	4055.8	3953.9	4201.9	3233.8	2279.3	1864.9	1759.6	1715.4	1671.2	1664.4
37.5°	4731.8	4517.8	4426.1	4337.8	2985.8	1946.4	1620.3	1549.0	1484.4	1416.5	1413.1
40°	5329.6	5051.1	4983.2	4398.9	2642.7	1633.9	1450.4	1382.5	1301.0	1236.4	1239.8
42.5°	6019.2	5662.5	5516.5	4381.9	2218.1	1467.4	1328.2	1253.4	1182.1	1124.4	1121.0
45°	6756.3	6352.1	6015.8	4263.0	1796.9	1351.9	1253.4	1165.1	1093.8	1029.2	1022.4
47.5°	7571.5	7119.8	6477.8	4032.0	1484.4	1270.4	1209.3	1083.6	1019.1	978.3	978.3
50°	8393.6	7853.5	6902.4	3682.2	1301.0	1209.3	1144.7	1039.4	988.5	954.5	954.5
52.5°	9096.7	8617.8	7252.2	3264.4	1185.5	1158.3	1100.6	1019.1	964.7	934.1	930.7
55°	9779.5	9327.7	7564.8	2849.9	1090.4	1090.4	1090.4	1002.1	940.9	913.7	910.4
57.5°	10458.9	10075.0	7890.9	2578.2	1005.5	1032.6	1070.0	981.7	920.5	896.8	893.4
60°	11226.5	10971.8	8267.9	2388.0	930.7	971.5	1042.8	957.9	886.6	866.2	862.8
62.5°	12041.8	12041.8	8611.0	2119.6	862.8	920.5	1002.1	927.3	856.0	839.0	835.6
65°	12680.4	12955.5	8831.8	1718.8	794.9	869.6	954.5	886.6	815.2	811.8	805.1
67.5°	12755.1	13186.5	8692.5	1297.6	733.7	815.2	907.0	842.4	774.5	774.5	764.3
70°	12218.4	12656.6	8257.7	971.5	689.6	760.9	845.8	788.1	723.5	730.3	713.3
72.5°	11321.7	11430.4	7177.5	767.7	638.6	703.1	771.1	726.9	669.2	669.2	645.4
75°	10139.6	9534.9	5214.1	642.0	577.5	635.2	696.4	659.0	608.0	591.0	577.5
77.5°	8070.9	6909.2	3030.0	553.7	526.5	570.7	611.4	584.3	540.1	502.7	502.7
80°	4918.6	4049.0	1338.4	479.0	465.4	499.3	526.5	495.9	458.6	421.2	411.0
82.5°	1871.7	1562.5	648.8	411.0	407.6	428.0	448.4	417.8	390.6	373.7	322.7
85°	512.9	472.2	445.0	343.1	336.3	332.9	356.7	343.1	305.7	251.4	224.2
87.5°	193.6	220.8	241.2	210.6	224.2	207.2	237.8	217.4	193.6	125.7	112.1
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)