

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: P265704

Luminaire Tested: **ARCH-L-AF72-230-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265704
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-AF72-230-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23103.1 lumens
Efficiency: N/A
Efficacy: 100.9 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 - G4

Input Watts (W): 229
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

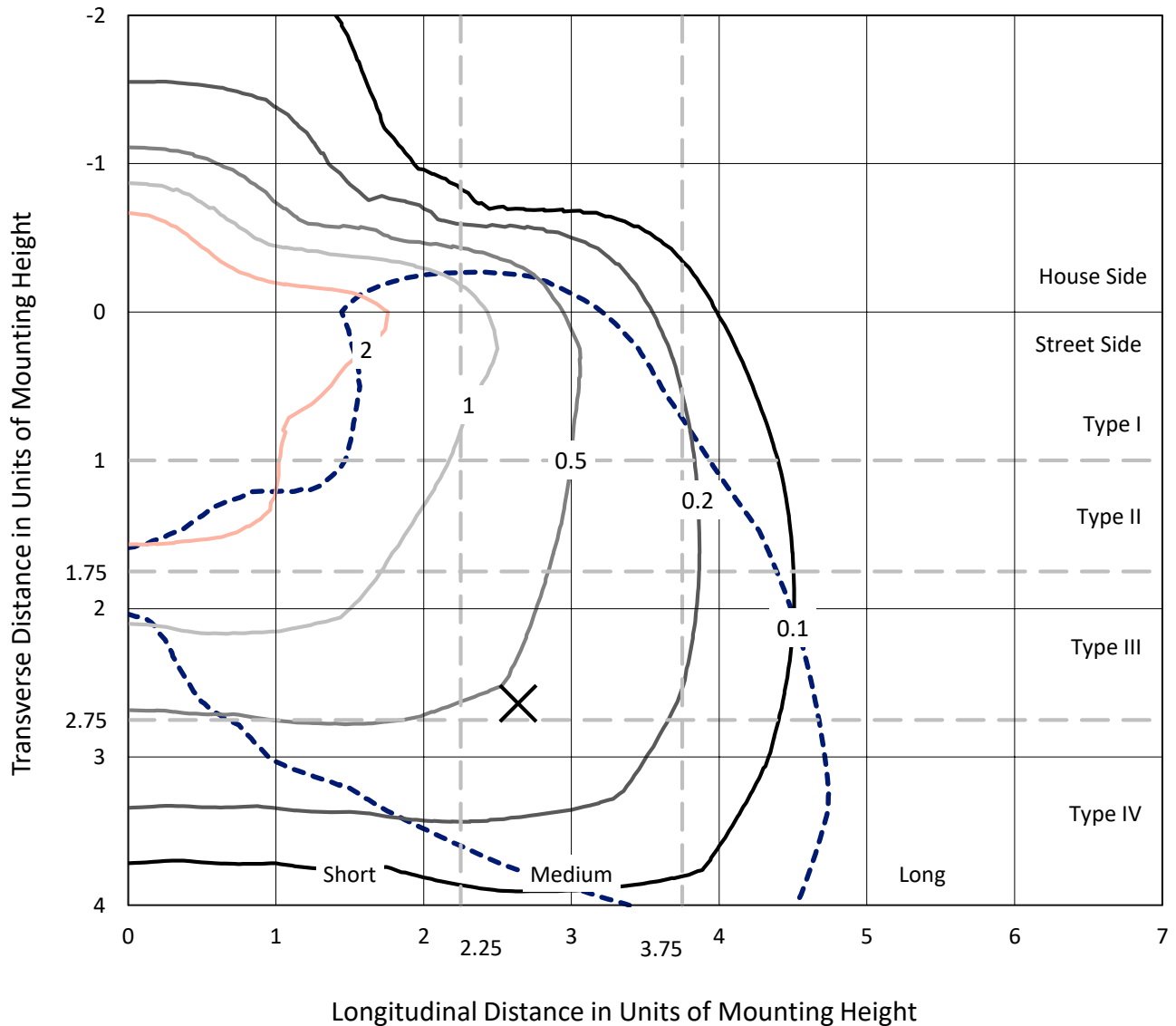


REPORT NUMBER: P265704

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

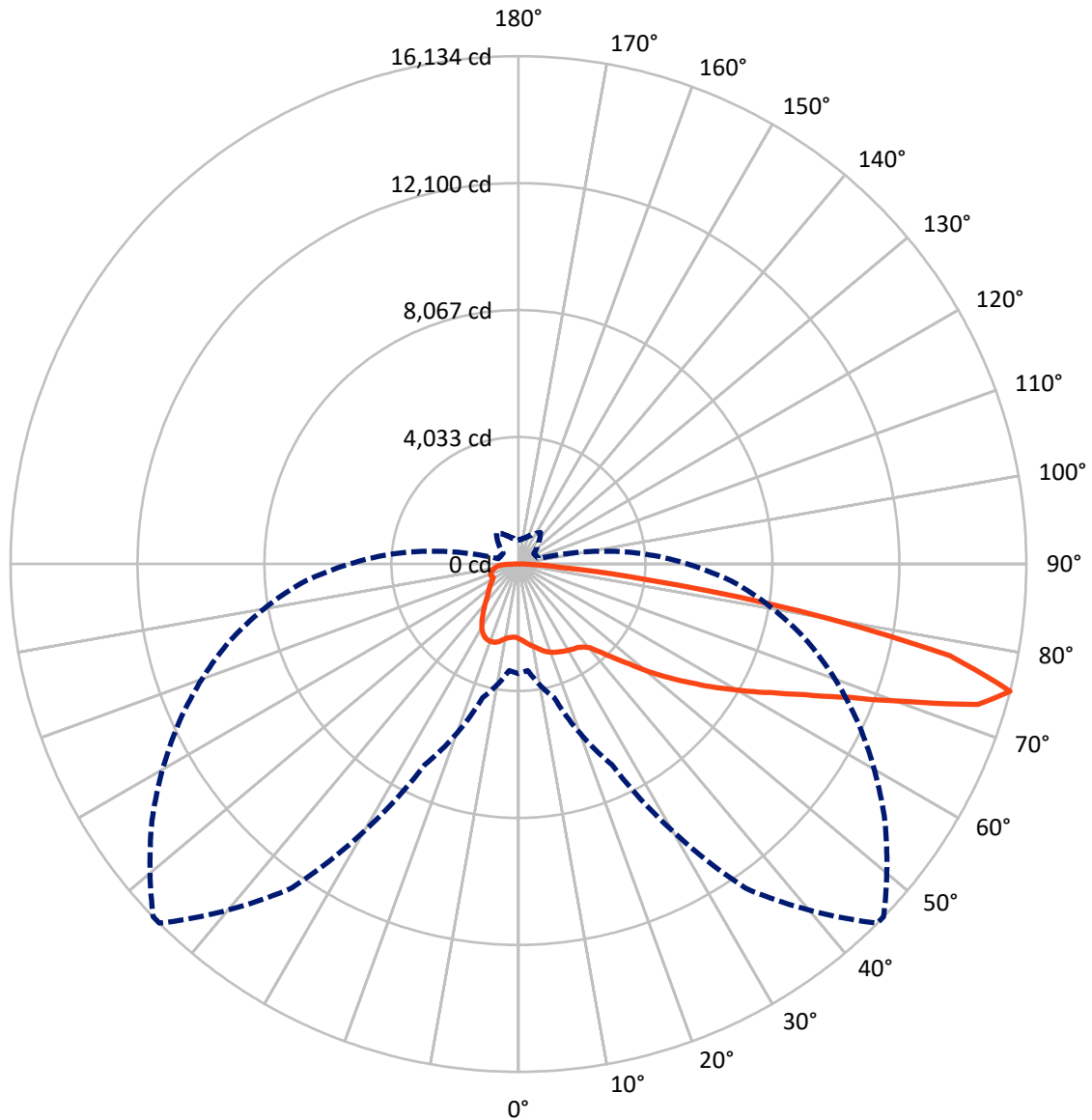


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265704

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265704

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5352.0	0.0	5352.0
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	17751.1	0.0	17751.1
	% Fixture	76.8	0.0	76.8
Total	Lumens	23103.1	0.0	23103.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.7	1.0
10°-20°	760.6	3.3
20°-30°	1305.2	5.6
30°-40°	1825.4	7.9
40°-50°	2677.7	11.6
50°-60°	4171.2	18.1
60°-70°	6002.0	26.0
70°-80°	5228.4	22.6
80°-90°	897.9	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°	23103.1	100.0
0°-180°	23103.1	100.0

Coefficient of Utilization



REPORT NUMBER: P265704

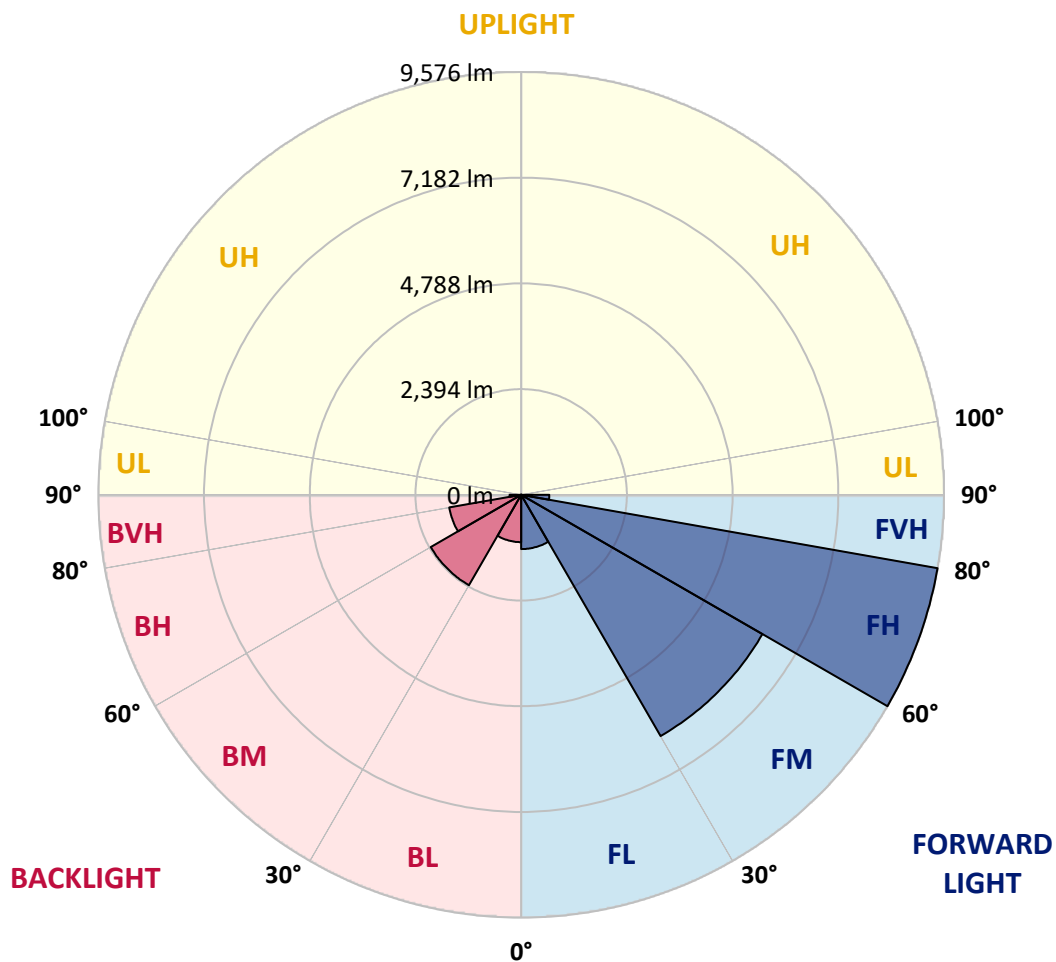
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1228.5	5.3			
FM	(30°-60°)	6309.0	27.3			
FH	(60°-80°)	9576.5	41.5			G4/12000
FVH	(80°-90°)	637.1	2.8			G4/750
BL	(0°-30°)	1071.9	4.6	B3/2500		
BM	(30°-60°)	2365.3	10.2	B2/2500		
BH	(60°-80°)	1653.9	7.2	B3/2500		G3/2500
BVH	(80°-90°)	260.8	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-G4

Type IV Medium





REPORT NUMBER: P265704

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4
2.5°	2485.3	2467.3	2467.3	2453.8	2453.8	2431.4	2422.3	2417.8	2395.4	2381.9	2368.4
5°	2629.1	2606.6	2602.1	2570.6	2557.1	2507.7	2503.1	2471.7	2431.4	2390.8	2359.4
7.5°	2759.4	2745.8	2723.4	2692.0	2651.5	2588.6	2584.2	2534.7	2467.3	2413.3	2368.4
10°	2853.7	2844.8	2813.3	2772.9	2728.0	2665.0	2660.5	2606.6	2525.7	2462.8	2399.8
12.5°	2966.2	2952.5	2912.1	2858.2	2808.8	2750.4	2745.8	2700.9	2611.1	2530.2	2449.3
15°	3074.0	3056.0	3006.5	2952.5	2898.7	2849.2	2849.2	2799.8	2705.4	2611.1	2516.7
17.5°	3127.9	3118.9	3069.5	3011.1	2966.2	2930.1	2925.7	2880.8	2786.4	2687.5	2584.2
20°	3145.9	3150.4	3105.4	3042.5	3011.1	2993.1	2988.7	2957.1	2853.7	2759.4	2660.5
22.5°	3141.5	3154.8	3118.9	3051.5	3042.5	3042.5	3042.5	3006.5	2925.7	2831.3	2732.5
25°	3159.3	3177.3	3150.4	3069.5	3069.5	3087.5	3087.5	3069.5	2997.6	2916.6	2817.9
27.5°	3222.3	3235.8	3213.2	3100.9	3105.4	3132.4	3127.9	3132.4	3087.5	3011.1	2912.1
30°	3298.7	3316.6	3289.8	3150.4	3145.9	3172.9	3172.9	3195.4	3163.8	3083.0	3002.0
32.5°	3505.4	3501.0	3415.5	3204.3	3190.8	3217.8	3217.8	3240.2	3222.3	3159.3	3083.0
35°	4121.2	4053.7	3865.0	3379.6	3244.8	3258.2	3258.2	3298.7	3307.6	3258.2	3190.8
37.5°	4750.2	4727.8	4584.1	3846.9	3442.5	3343.6	3339.1	3397.6	3438.1	3397.6	3352.7
40°	5383.9	5365.9	5334.6	4471.7	3856.0	3496.5	3482.9	3532.3	3604.3	3577.3	3550.3
42.5°	5972.7	5963.7	5995.2	5087.3	4381.8	3824.4	3784.0	3725.6	3828.9	3820.0	3820.0
45°	6435.5	6458.1	6476.1	5662.6	4952.5	4246.9	4197.5	3999.8	4139.1	4175.1	4202.0
47.5°	6696.2	6714.2	6777.2	6224.4	5523.3	4736.9	4700.8	4377.4	4561.6	4669.4	4745.7
50°	7069.2	7019.7	7073.8	6772.6	6210.8	5375.0	5276.0	4885.2	5118.8	5307.5	5487.2
52.5°	7428.8	7347.9	7392.8	7406.3	6992.9	5999.6	5896.2	5482.9	5774.9	6071.6	6390.6
55°	7752.4	7747.8	7792.7	8022.0	7747.8	6669.2	6552.3	6143.5	6565.9	6885.0	7424.2
57.5°	8013.1	8057.9	8255.7	8736.6	8619.6	7397.4	7267.0	6912.0	7410.7	7729.8	8624.2
60°	8318.6	8390.4	8718.6	9343.2	9415.1	8161.3	8026.4	7770.2	8278.2	8601.7	10012.9
62.5°	8422.0	8525.4	9199.5	9981.3	10246.5	8997.2	8875.9	8705.0	9190.5	9482.6	11397.1
65°	7734.3	7932.2	9464.6	10309.5	11140.9	10003.9	9900.5	9752.2	10098.2	10291.5	12336.3
67.5°	7545.7	7635.6	8947.7	10781.4	11981.4	11298.3	11194.8	10938.7	10947.6	10866.7	12641.9
70°	7280.5	7379.3	8417.5	11136.4	13185.7	13068.8	12943.0	12188.1	11725.1	11235.3	12039.8
72.5°	6201.9	6170.4	7253.5	10179.1	13765.4	15262.1	15113.7	13531.8	12300.4	10916.3	10161.2
75°	3482.9	3393.1	4399.7	7042.3	12570.1	16133.9	16129.3	14210.4	11896.0	9509.5	6916.4
77.5°	1011.2	984.3	1451.7	2952.5	8462.5	14017.2	14187.9	12817.1	9927.4	6831.0	3797.6
80°	476.5	485.4	624.7	975.2	3613.3	9046.7	9536.4	8439.9	5932.2	3150.4	1568.4
82.5°	301.1	305.7	427.0	629.2	1527.9	4107.6	4512.0	3797.6	2350.4	1361.7	692.1
85°	188.7	188.7	283.1	413.5	912.3	1312.2	1424.6	1294.3	1006.7	741.6	377.5
87.5°	103.3	103.3	170.8	238.2	498.9	422.5	435.9	516.9	629.2	454.0	188.7
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: P265704

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4	2368.4
2.5°	2363.9	2354.8	2341.4	2336.9	2332.4	2328.0	2332.4	2341.4	2332.4	2332.4	2336.9
5°	2350.4	2341.4	2323.5	2323.5	2328.0	2332.4	2354.8	2368.4	2373.0	2373.0	2373.0
7.5°	2350.4	2336.9	2323.5	2328.0	2336.9	2354.8	2390.8	2413.3	2431.4	2435.8	2435.8
10°	2373.0	2354.8	2346.0	2354.8	2381.9	2395.4	2431.4	2467.3	2489.7	2498.7	2498.7
12.5°	2413.3	2395.4	2395.4	2413.3	2449.3	2467.3	2498.7	2525.7	2552.7	2566.2	2566.2
15°	2480.8	2458.3	2462.8	2494.2	2534.7	2552.7	2575.1	2584.2	2606.6	2624.6	2624.6
17.5°	2543.7	2521.3	2530.2	2566.2	2593.0	2602.1	2615.5	2611.1	2620.0	2633.6	2638.1
20°	2615.5	2593.0	2597.5	2620.0	2624.6	2615.5	2615.5	2602.1	2597.5	2620.0	2629.1
22.5°	2687.5	2665.0	2660.5	2647.0	2624.6	2602.1	2588.6	2575.1	2566.2	2588.6	2597.5
25°	2772.9	2741.4	2718.9	2660.5	2602.1	2561.6	2543.7	2534.7	2530.2	2552.7	2561.6
27.5°	2867.2	2835.8	2768.3	2642.5	2548.1	2480.8	2467.3	2467.3	2476.3	2489.7	2498.7
30°	2957.1	2925.7	2804.2	2602.1	2453.8	2354.8	2341.4	2354.8	2377.4	2390.8	2404.4
32.5°	3047.1	3015.5	2826.7	2539.1	2314.5	2188.6	2179.6	2202.1	2238.0	2247.1	2256.1
35°	3168.3	3136.9	2853.7	2449.3	2139.3	2004.4	1995.3	2008.9	2040.3	2053.9	2067.3
37.5°	3339.1	3321.2	2894.2	2350.4	1977.3	1829.0	1802.1	1793.1	1811.2	1806.6	1824.5
40°	3563.8	3577.3	2966.2	2220.2	1820.1	1667.3	1608.9	1581.9	1563.9	1527.9	1546.0
42.5°	3891.8	3900.9	3047.1	2071.9	1685.3	1514.5	1438.0	1388.7	1352.7	1294.3	1303.4
45°	4372.8	4296.4	3141.5	1914.5	1563.9	1393.2	1303.4	1245.0	1195.5	1146.0	1150.5
47.5°	5010.9	4777.2	3244.8	1784.2	1442.6	1294.3	1213.4	1146.0	1087.6	1047.2	1051.6
50°	5797.4	5375.0	3348.2	1662.9	1321.2	1217.9	1146.0	1074.2	1015.7	975.2	970.7
52.5°	6835.6	6094.0	3415.5	1527.9	1200.0	1150.5	1087.6	1020.1	948.3	898.8	894.4
55°	7914.1	6930.0	3473.9	1366.2	1083.0	1074.2	1042.7	966.2	880.9	817.9	809.0
57.5°	9100.5	7824.2	3518.9	1208.8	993.2	1011.2	1002.1	912.3	817.9	759.4	755.0
60°	10179.1	8750.0	3375.1	1069.6	912.3	948.3	957.2	880.9	831.4	844.9	849.3
62.5°	11266.7	9464.6	2826.7	966.2	858.4	907.7	984.3	979.7	957.2	979.7	984.3
65°	11657.8	9612.9	2004.4	880.9	804.4	925.9	1069.6	1060.5	957.2	916.8	907.7
67.5°	11437.5	9172.5	1348.3	813.4	764.0	948.3	1159.5	1060.5	921.3	867.4	849.3
70°	10390.3	8089.3	988.8	746.0	728.0	943.8	1208.8	1056.0	903.3	844.9	822.4
72.5°	8287.1	6242.3	795.4	683.2	674.1	921.3	1235.9	1047.2	885.3	822.4	795.4
75°	5365.9	3883.0	669.6	620.2	593.2	885.3	1222.5	1020.1	862.8	782.0	764.0
77.5°	2489.7	1671.8	570.8	548.2	516.9	831.4	1182.0	966.2	813.4	737.0	714.5
80°	1159.5	791.0	480.9	476.5	462.8	786.5	1128.0	903.3	755.0	692.1	656.1
82.5°	620.2	476.5	391.0	391.0	404.4	732.6	1060.5	826.9	678.6	647.1	552.7
85°	328.2	274.2	283.1	305.7	346.0	647.1	970.7	746.0	593.2	494.3	480.9
87.5°	166.2	175.3	175.3	206.7	265.2	525.8	799.9	615.7	503.3	404.4	395.4
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)