

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: P237436

Luminaire Tested: **ARCH-L-AF72-230-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18617.8 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

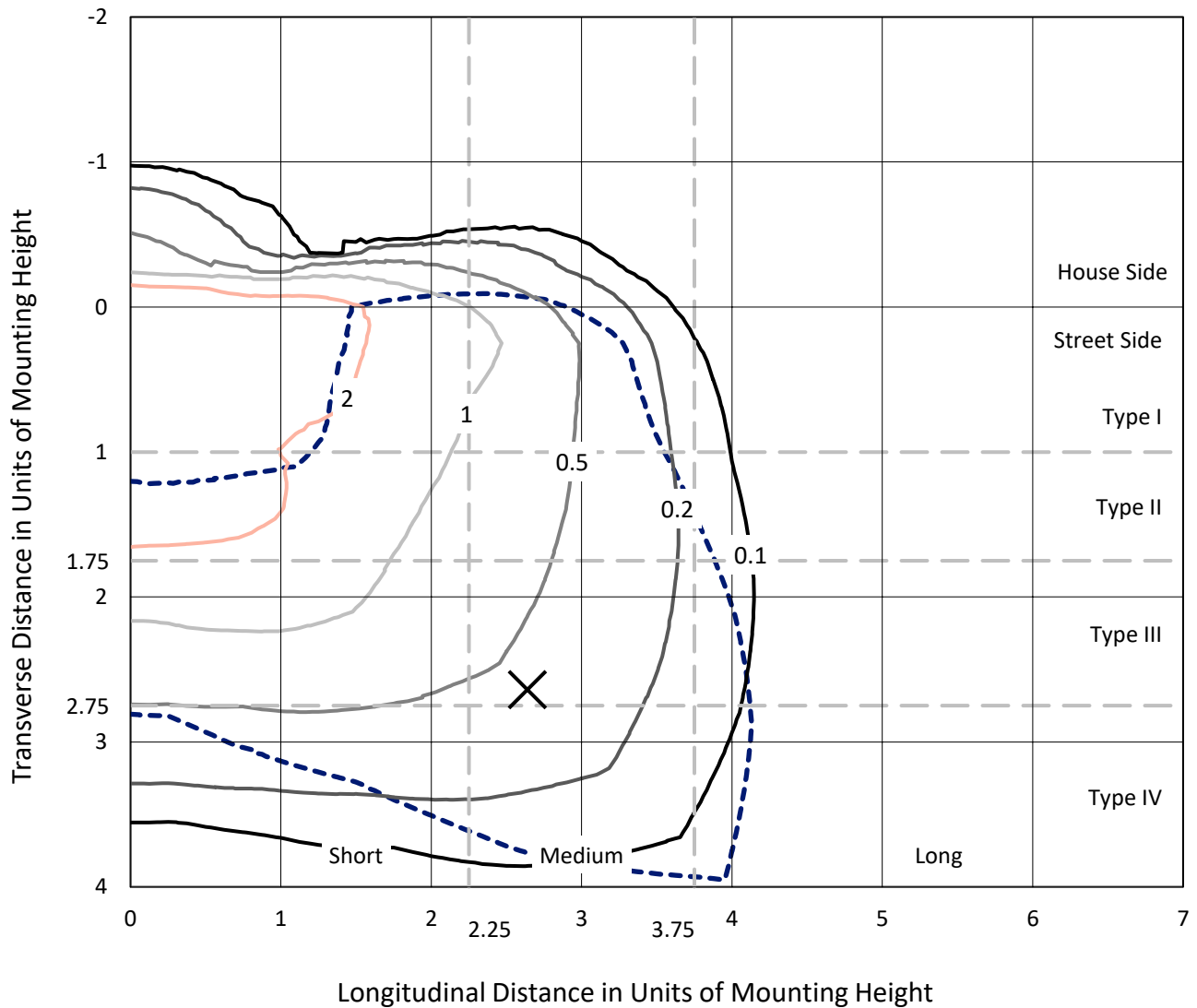
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237436
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

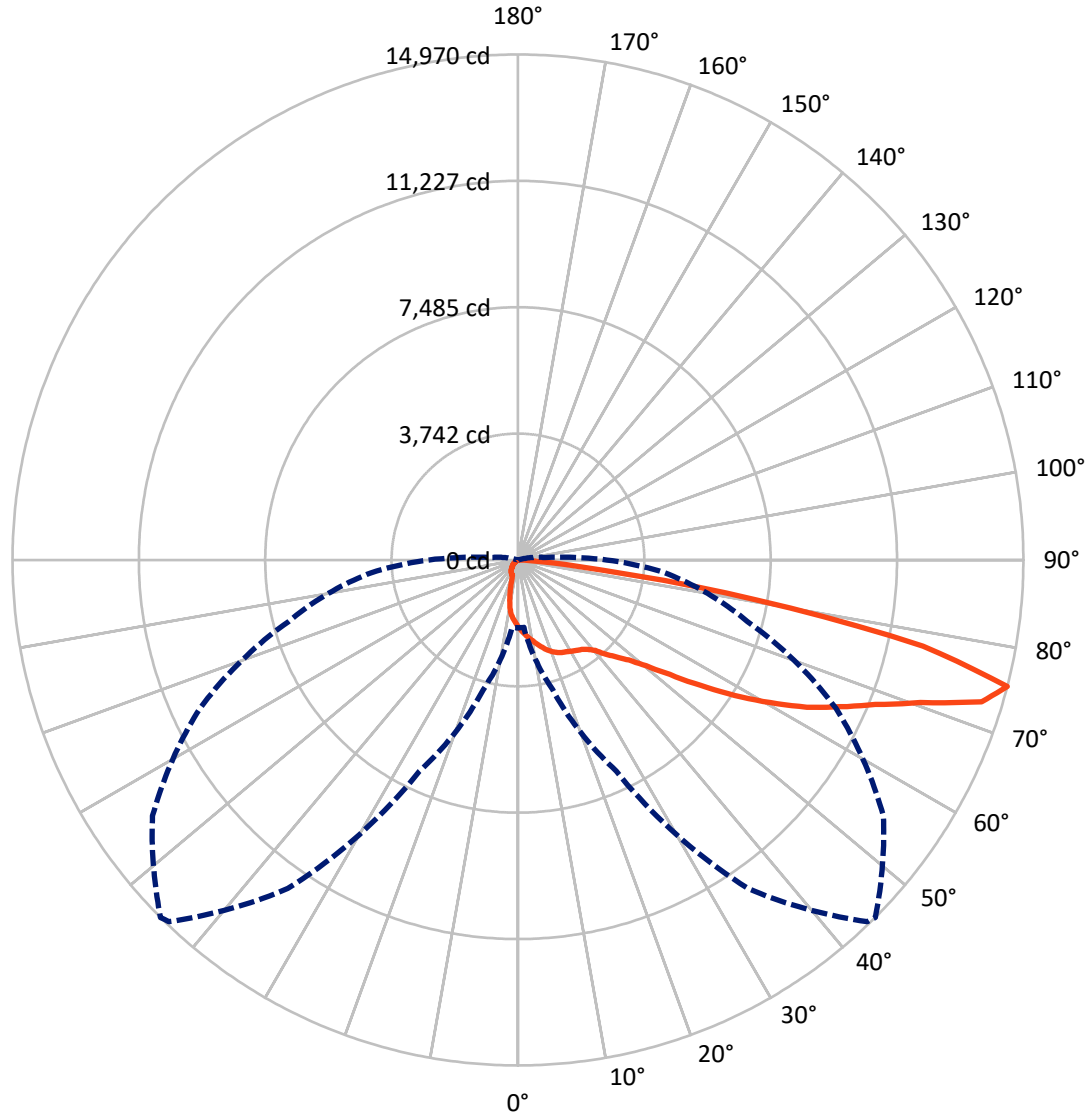
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237436
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237436

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7030-HSS

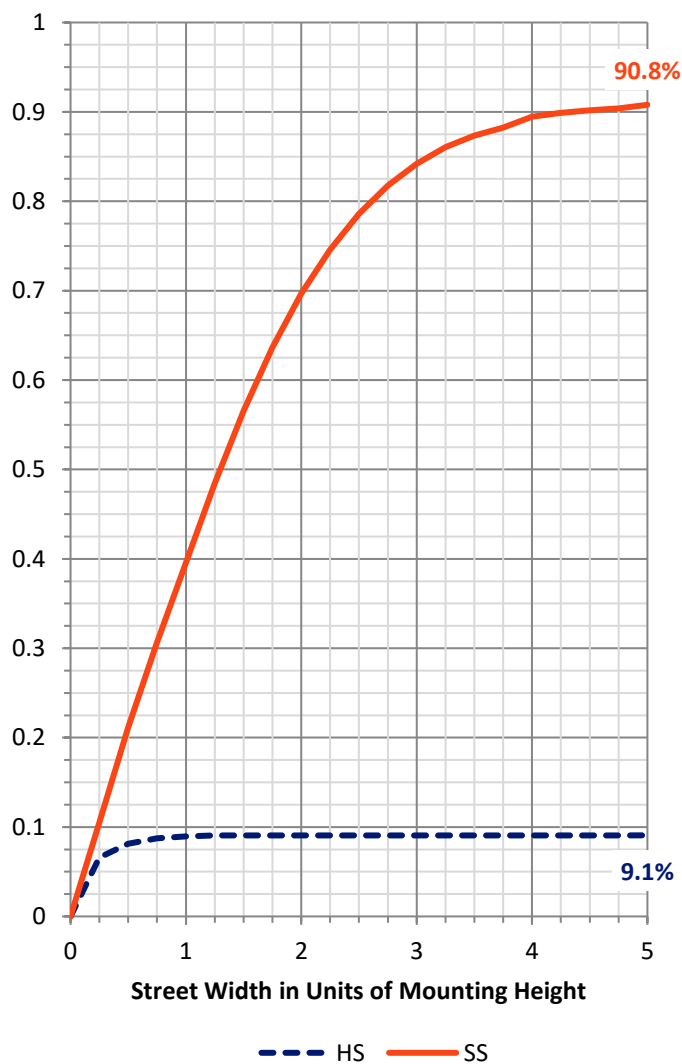
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1703.0	0.0	1703.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16914.8	0.0	16914.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	18617.8	0.0	18617.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.9	1.0
10°-20°	532.4	2.9
20°-30°	881.8	4.7
30°-40°	1276.1	6.9
40°-50°	2089.6	11.2
50°-60°	3723.2	20.0
60°-70°	5473.6	29.4
70°-80°	4129.3	22.2
80°-90°	324.0	1.7
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°	18617.8	100.0
0°-180°	18617.8	100.0

Coefficient of Utilization



REPORT NUMBER: P237436

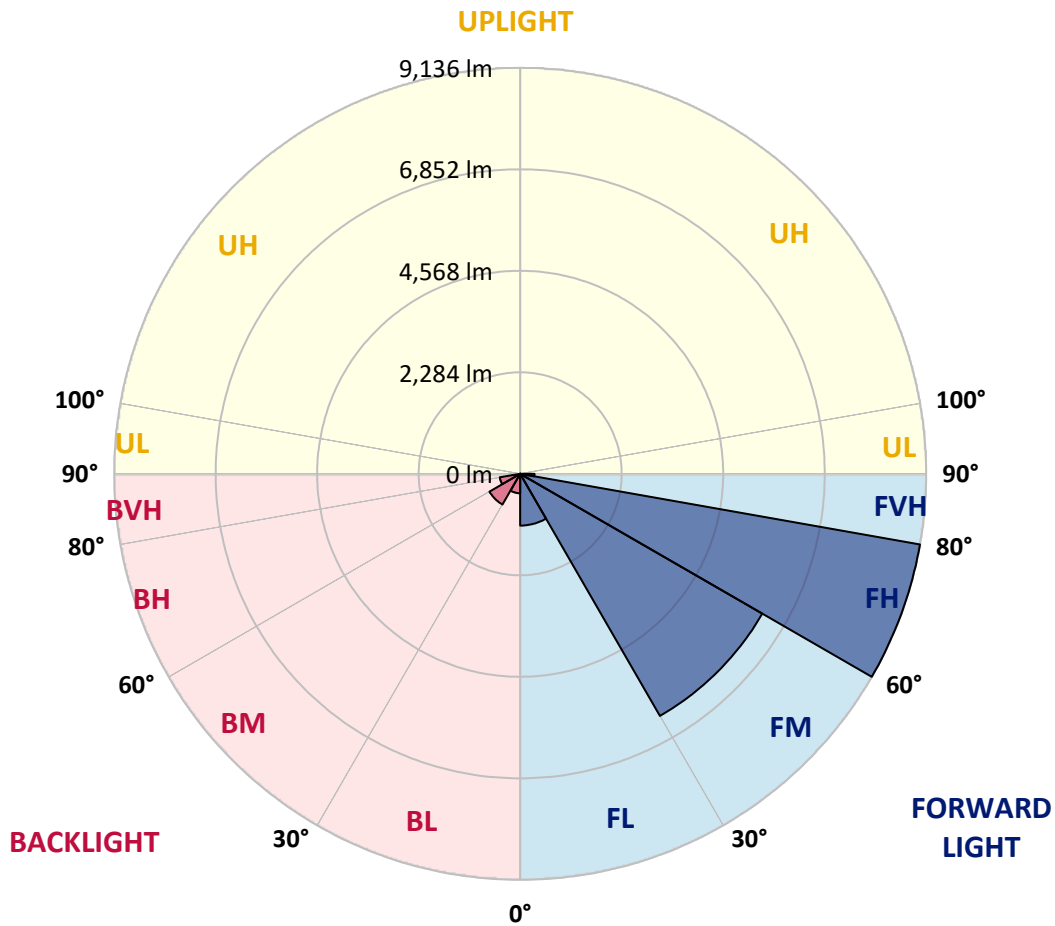
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1164.5	6.3			
FM (30°-60°)	6290.8	33.8			
FH (60°-80°)	9136.4	49.1			G4/12000
FVH (80°-90°)	323.1	1.7			G3/500
BL (0°-30°)	437.6	2.4	B1/500		
BM (30°-60°)	798.0	4.3	B1/1000		
BH (60°-80°)	466.4	2.5	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Medium





REPORT NUMBER: P237436

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2
2.5°	2163.2	2163.2	2158.6	2154.3	2132.2	2110.3	2105.9	2092.7	2053.0	2026.5	2000.1
5°	2343.7	2348.1	2339.3	2317.3	2268.8	2220.3	2216.0	2180.7	2105.9	2053.0	1995.7
7.5°	2515.4	2524.3	2502.2	2462.7	2405.4	2334.9	2330.5	2264.4	2167.4	2092.7	2008.8
10°	2660.9	2660.9	2630.1	2581.6	2519.9	2445.0	2436.3	2361.3	2251.2	2158.6	2048.5
12.5°	2819.6	2815.1	2771.1	2704.9	2634.5	2564.0	2559.6	2467.1	2361.3	2242.4	2105.9
15°	2964.9	2956.1	2898.7	2837.1	2762.2	2687.3	2683.0	2590.4	2480.3	2339.3	2189.5
17.5°	3044.2	3039.8	2986.9	2925.2	2863.5	2806.4	2801.9	2704.9	2586.0	2440.7	2273.2
20°	3057.4	3061.8	3017.7	2964.9	2929.7	2898.7	2898.7	2810.7	2683.0	2528.7	2361.3
22.5°	3061.8	3075.0	3044.2	2973.7	2964.9	2969.3	2978.1	2907.6	2775.4	2630.1	2453.9
25°	3092.7	3110.3	3088.2	3004.5	2995.7	3026.6	3035.3	3004.5	2885.5	2740.2	2559.6
27.5°	3154.4	3171.9	3154.4	3048.6	3035.3	3066.3	3075.0	3092.7	3004.5	2845.9	2669.8
30°	3277.7	3282.0	3242.4	3110.3	3083.9	3123.5	3136.8	3185.1	3114.7	2947.3	2775.4
32.5°	3493.6	3449.6	3330.6	3154.4	3132.3	3176.3	3189.6	3242.4	3216.0	3044.2	2885.5
35°	3934.1	3705.0	3431.9	3216.0	3193.9	3238.0	3255.6	3330.6	3343.8	3180.7	3022.1
37.5°	3929.7	3722.6	3669.8	3334.9	3304.1	3334.9	3357.0	3449.6	3502.3	3361.4	3220.4
40°	4207.2	4119.1	4119.1	3559.6	3458.3	3502.3	3524.3	3616.9	3709.4	3599.2	3453.9
42.5°	5079.5	5022.2	4960.6	3991.3	3674.2	3797.6	3810.8	3868.0	3978.1	3942.9	3771.1
45°	6053.1	6000.3	5762.4	4722.6	4044.2	4066.3	4097.1	4189.6	4348.2	4414.3	4211.6
47.5°	6815.3	6762.4	6559.7	5603.8	4621.3	4427.5	4427.5	4608.1	4854.8	5022.2	4828.3
50°	7427.7	7365.9	7242.6	6542.1	5568.5	4947.4	4920.9	5132.4	5498.0	5758.0	5625.8
52.5°	8022.4	7841.7	7766.8	7511.3	6639.0	5700.7	5630.2	5780.0	6286.6	6608.2	6498.0
55°	8418.9	8392.4	8313.1	8401.3	7762.5	6617.1	6555.3	6586.1	7220.6	7436.4	7299.8
57.5°	8789.0	8784.6	8960.7	9370.4	8987.1	7665.5	7568.6	7520.1	8123.7	8070.9	8189.7
60°	9247.0	9167.8	9577.4	10163.4	10110.6	8687.5	8577.4	8480.4	8815.4	8665.6	9255.9
62.5°	9269.1	9247.0	10079.7	10921.1	11225.2	9727.3	9599.5	9251.5	9418.9	9247.0	10273.5
65°	8427.7	8537.8	10291.1	11322.1	12159.1	10639.2	10485.1	9943.1	9956.4	9841.8	11471.9
67.5°	8238.2	8295.5	9709.7	11753.8	12833.1	11559.9	11414.6	10740.5	10582.0	10590.7	12181.1
70°	7766.8	7854.9	8987.1	11723.0	13366.2	12789.2	12643.7	11912.4	11529.1	11101.9	11634.8
72.5°	5934.2	6084.0	7573.0	10277.9	13220.8	14397.1	14357.4	13397.1	11907.9	10194.2	8802.2
75°	2008.8	2004.5	3978.1	6903.3	11877.1	14890.5	14969.8	13211.9	10388.1	7031.2	4370.3
77.5°	431.7	436.2	819.5	2797.5	7890.1	11956.5	12260.4	9965.2	6700.8	3132.3	1000.0
80°	211.4	215.9	339.2	740.1	3154.4	6705.1	7180.9	5123.6	2476.0	625.6	167.3
82.5°	105.8	110.2	176.2	392.1	1167.4	2383.4	2546.4	1885.5	709.3	352.5	83.7
85°	39.7	39.7	88.1	233.5	533.0	559.5	687.2	546.3	427.3	286.4	22.1
87.5°	8.8	8.8	48.5	114.5	237.8	176.2	176.2	167.3	259.9	193.8	8.8
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: P237436

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2	1991.2
2.5°	1986.9	1969.3	1938.4	1907.5	1885.5	1859.1	1845.9	1832.8	1828.2	1823.9	1832.8
5°	1964.8	1938.4	1881.1	1832.8	1788.6	1753.4	1727.0	1700.5	1687.3	1678.4	1682.9
7.5°	1964.8	1925.1	1841.4	1766.6	1696.1	1621.2	1546.3	1489.1	1445.0	1418.5	1423.0
10°	1986.9	1934.0	1823.9	1722.6	1590.4	1431.8	1268.8	1145.5	1061.7	1013.3	1013.3
12.5°	2035.3	1964.8	1828.2	1669.7	1445.0	1167.4	920.7	771.0	709.3	674.0	678.4
15°	2101.4	2017.7	1850.3	1599.2	1242.4	867.8	643.2	546.3	546.3	555.0	559.5
17.5°	2176.3	2083.8	1867.9	1493.5	982.5	621.1	506.6	497.7	511.0	533.0	533.0
20°	2251.2	2149.9	1876.7	1326.1	735.8	493.5	480.2	480.2	489.1	511.0	515.4
22.5°	2343.7	2233.6	1867.9	1119.1	550.6	467.0	462.6	462.6	462.6	489.1	489.1
25°	2440.7	2330.5	1832.8	898.7	467.0	449.4	444.9	440.6	440.6	462.6	467.0
27.5°	2550.7	2431.8	1749.0	687.2	440.6	431.7	427.3	418.6	418.6	436.2	436.2
30°	2660.9	2546.4	1621.2	519.8	418.6	414.1	405.4	396.5	387.7	405.4	405.4
32.5°	2779.9	2665.3	1453.8	414.1	387.7	387.7	383.3	370.1	361.2	370.1	374.4
35°	2938.4	2801.9	1264.3	361.2	348.0	348.0	348.0	343.6	326.0	334.8	334.8
37.5°	3150.0	2991.3	1044.1	334.8	317.2	308.3	308.3	308.3	295.2	299.6	299.6
40°	3418.6	3211.5	832.7	312.8	295.2	273.1	264.3	268.8	259.9	259.9	255.5
42.5°	3784.3	3449.6	625.6	295.2	277.5	246.7	229.1	224.6	215.9	211.4	211.4
45°	4308.5	3740.3	449.4	277.5	264.3	215.9	198.2	184.9	163.1	149.8	149.8
47.5°	4987.0	4070.7	334.8	259.9	251.1	189.4	167.3	141.0	110.2	101.3	101.3
50°	5815.3	4440.8	282.0	233.5	229.1	167.3	132.2	92.6	61.6	52.9	57.3
52.5°	6621.4	4788.8	251.1	207.0	202.6	145.5	96.9	48.5	26.4	26.4	26.4
55°	7299.8	5035.4	229.1	184.9	176.2	114.5	52.9	22.1	13.2	13.2	13.2
57.5°	7912.2	5176.3	207.0	163.1	141.0	79.3	22.1	8.8	8.8	4.4	4.4
60°	8471.8	5260.2	180.6	141.0	110.2	44.0	8.8	4.4	4.4	0.0	0.0
62.5°	9022.4	5321.8	154.2	114.5	83.7	17.6	4.4	4.4	0.0	0.0	0.0
65°	9440.9	5299.7	123.4	92.6	52.9	8.8	4.4	0.0	0.0	0.0	0.0
67.5°	9427.7	5000.2	92.6	70.5	26.4	4.4	0.0	0.0	0.0	0.0	0.0
70°	8432.1	4211.6	61.6	44.0	8.8	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	5982.6	2700.6	39.7	26.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	2634.5	819.5	22.1	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	515.4	189.4	13.2	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	123.4	22.1	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.9	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)