

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: P399774

Luminaire Tested: **ARCH-L-PA3-190-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399774  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-190-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA 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: 16686 lumens  
Efficiency: N/A  
Efficacy: 88.3 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

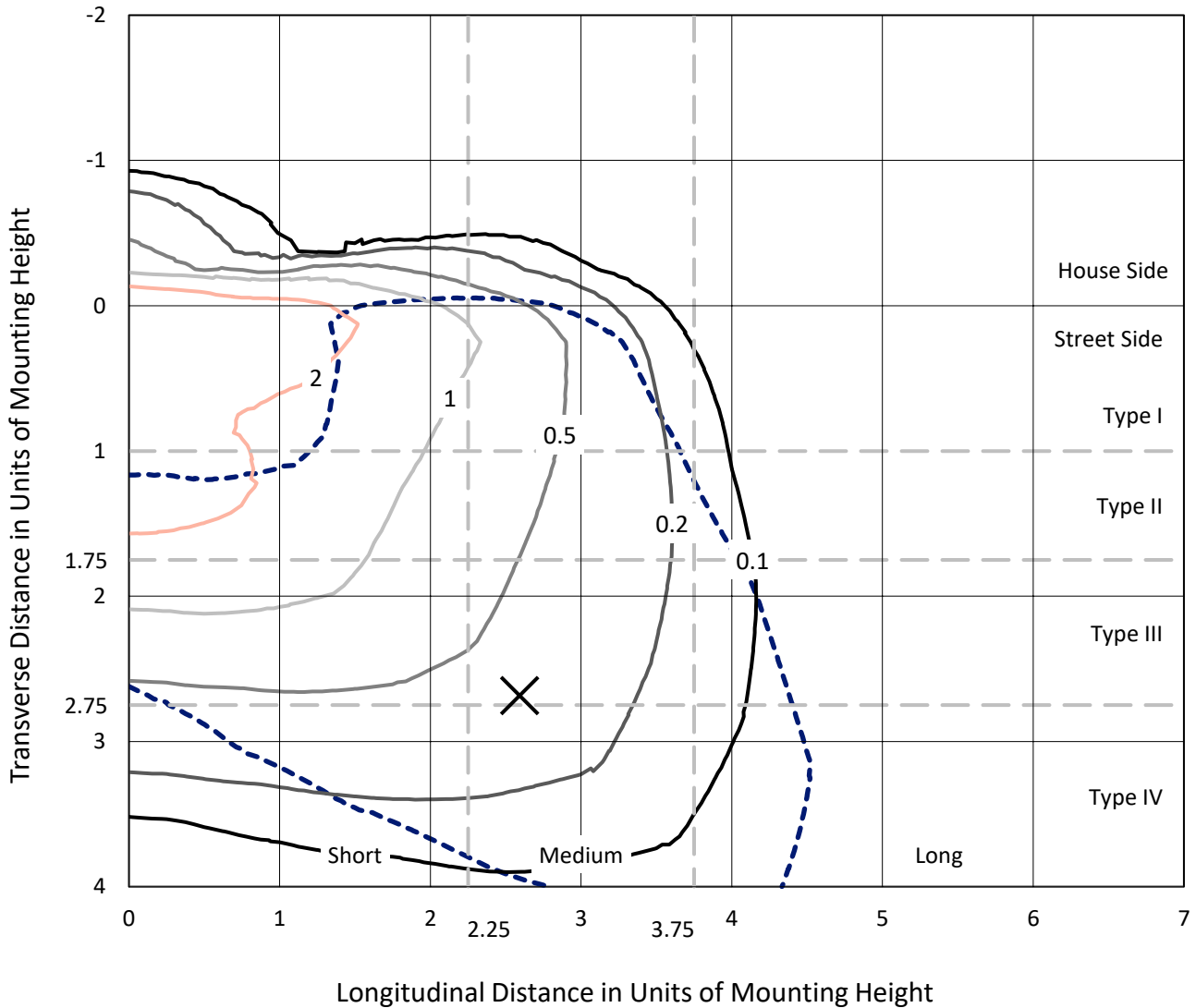
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399774  
 CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

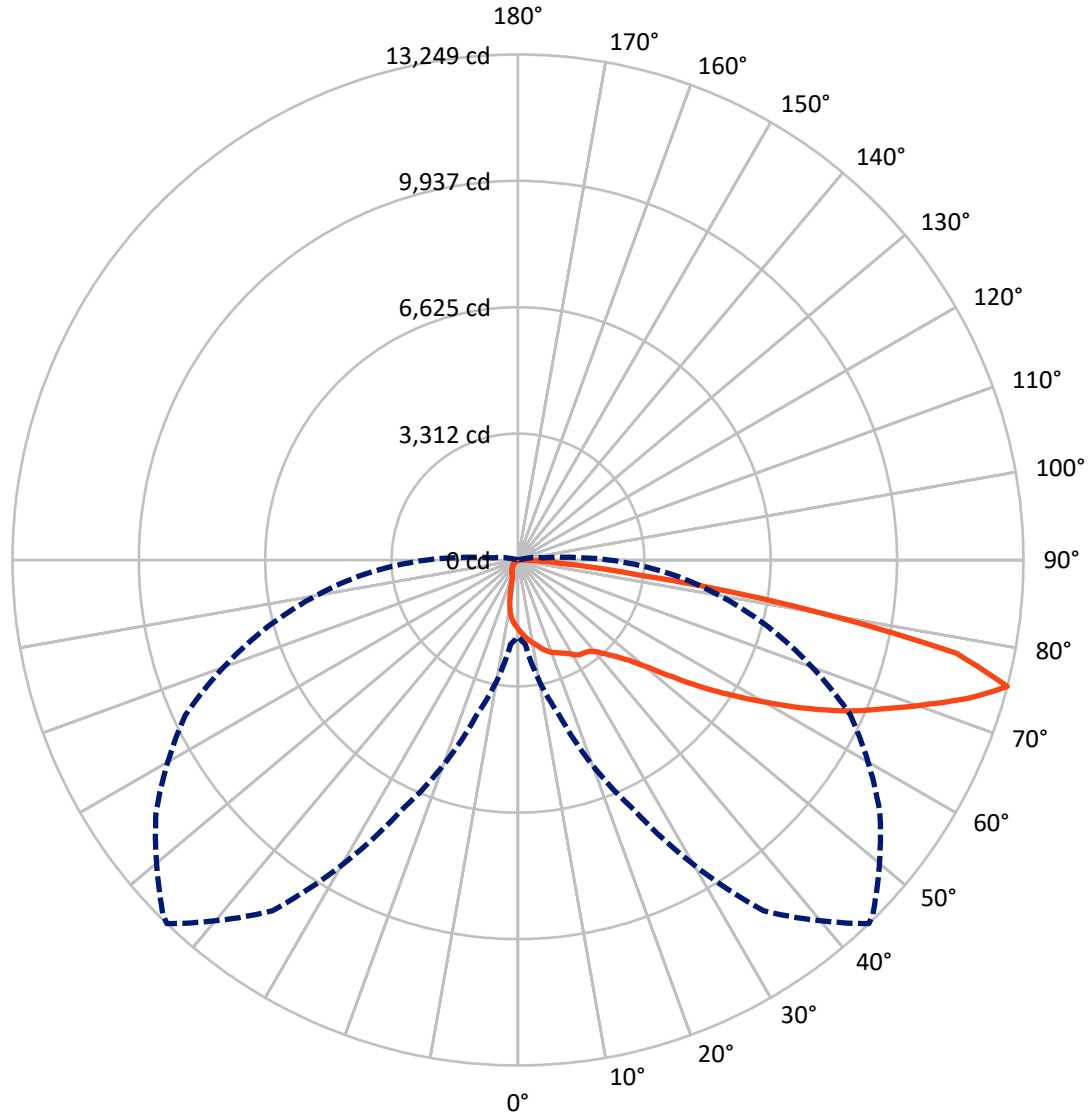
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399774  
CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399774

CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

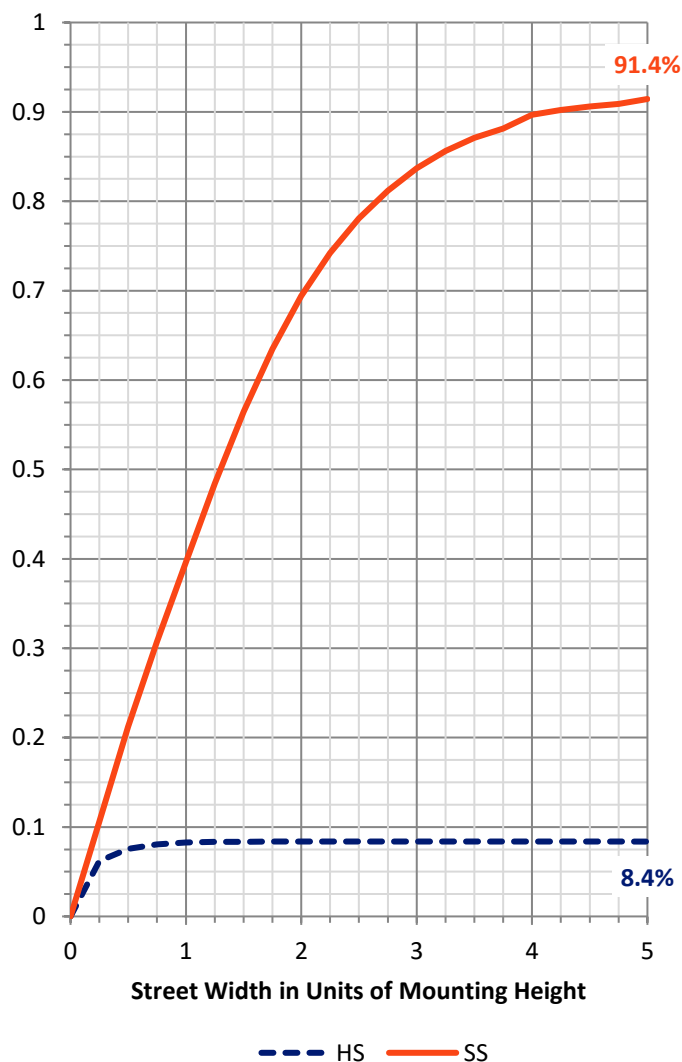
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1407.2	0.0	1407.2
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	15278.8	0.0	15278.8
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	16686.0	0.0	16686.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.3	1.0
10°-20°	480.0	2.9
20°-30°	792.1	4.7
30°-40°	1149.6	6.9
40°-50°	1868.7	11.2
50°-60°	3294.4	19.7
60°-70°	4734.7	28.4
70°-80°	3791.4	22.7
80°-90°	403.9	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°	16686.0	100.0
0°-180°	16686.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399774

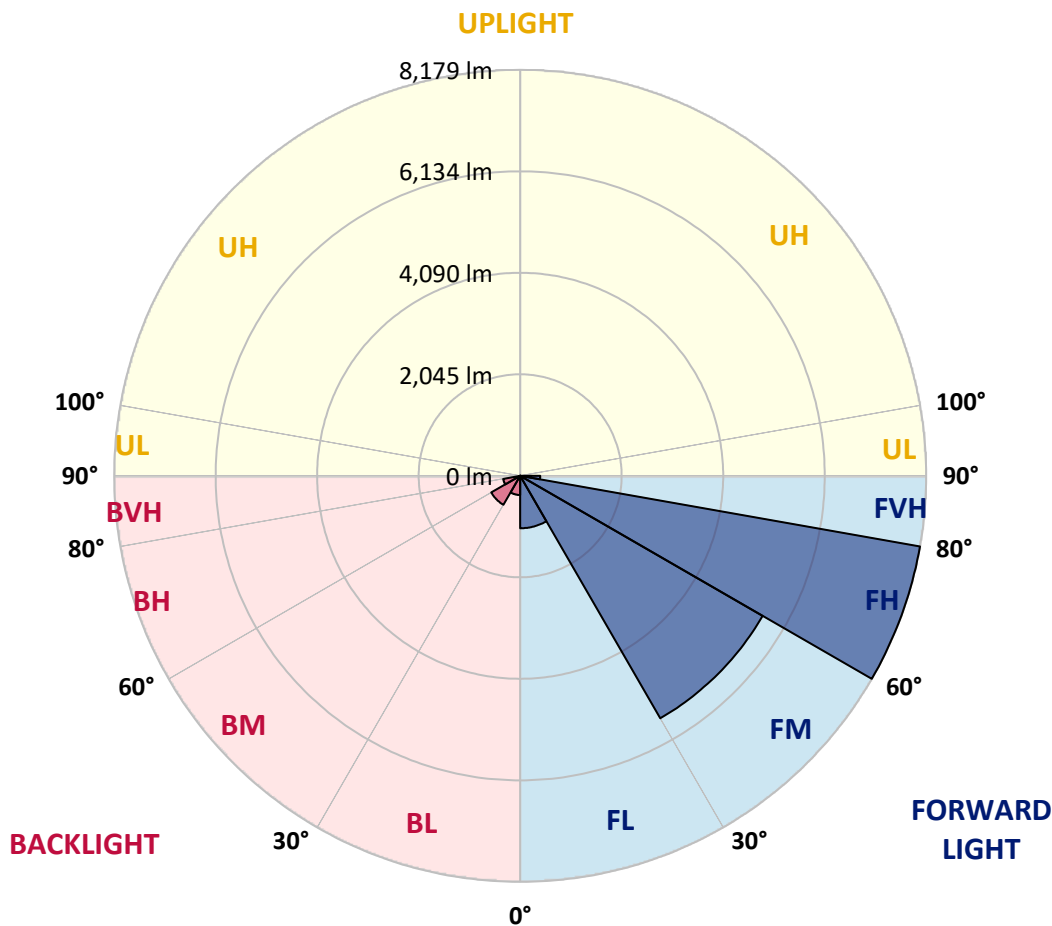
CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1056.7	6.3			
FM (30°-60°)	5640.0	33.8			
FH (60°-80°)	8179.2	49.0			G4/12000
FVH (80°-90°)	402.9	2.4			G3/500
BL (0°-30°)	386.6	2.3	B1/500		
BM (30°-60°)	672.7	4.0	B1/1000		
BH (60°-80°)	346.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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: P399774

CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2
2.5°	1979.4	1976.3	1967.0	1951.7	1936.3	1920.9	1917.8	1893.2	1865.5	1843.9	1825.4
5°	2154.8	2151.7	2136.4	2102.5	2068.6	2028.6	2025.5	1967.0	1914.7	1856.2	1807.0
7.5°	2336.4	2330.3	2302.6	2250.3	2191.8	2130.2	2124.0	2037.8	1960.9	1883.9	1813.1
10°	2478.0	2471.9	2431.9	2370.3	2290.3	2213.3	2204.1	2114.8	2037.8	1939.3	1843.9
12.5°	2616.6	2604.3	2551.9	2484.2	2385.7	2311.8	2302.6	2210.2	2117.9	2016.3	1899.3
15°	2745.9	2730.5	2681.2	2595.0	2490.4	2419.6	2413.4	2314.9	2219.5	2102.5	1973.2
17.5°	2835.1	2829.0	2770.5	2675.1	2573.5	2515.0	2508.8	2407.2	2311.8	2188.7	2050.2
20°	2881.3	2881.3	2825.9	2721.2	2628.9	2588.9	2579.6	2484.2	2391.9	2274.9	2130.2
22.5°	2890.5	2899.8	2856.7	2742.8	2675.1	2641.2	2635.0	2551.9	2462.7	2354.9	2219.5
25°	2909.0	2909.0	2887.5	2764.3	2715.1	2705.8	2702.8	2628.9	2548.8	2441.1	2308.7
27.5°	2930.6	2930.6	2915.2	2795.1	2776.6	2773.6	2770.5	2736.6	2672.0	2545.8	2413.4
30°	2986.0	2989.0	2976.7	2856.7	2844.4	2878.2	2884.4	2865.9	2785.9	2628.9	2521.1
32.5°	3124.5	3096.8	3062.9	2899.8	2921.3	2964.4	2967.5	2930.6	2844.4	2718.2	2650.4
35°	3472.3	3309.2	3155.3	2936.7	2946.0	2989.0	2995.2	2992.1	2939.8	2832.1	2798.2
37.5°	3795.6	3564.7	3346.1	3022.9	2992.1	3038.3	3050.6	3102.9	3062.9	2989.0	2998.3
40°	3983.3	3894.1	3740.2	3259.9	3084.5	3155.3	3167.6	3247.6	3232.2	3201.5	3259.9
42.5°	4562.1	4568.2	4402.0	3613.9	3253.8	3367.7	3383.1	3447.7	3469.3	3484.7	3626.3
45°	5233.1	5254.7	5214.7	4251.2	3573.9	3610.9	3632.4	3718.6	3798.6	3897.2	4155.7
47.5°	6039.7	6021.2	5873.4	5030.0	4131.1	3924.9	3940.2	4106.5	4245.0	4460.5	4829.9
50°	6753.8	6800.0	6519.9	5756.5	4916.1	4420.5	4405.1	4568.2	4817.6	5119.2	5584.1
52.5°	7474.2	7406.4	7027.8	6476.8	5845.7	5094.6	5048.4	5137.7	5488.6	5845.7	6322.9
55°	7665.0	7671.2	7541.9	7264.8	6621.5	5913.4	5836.5	5830.3	6267.5	6510.6	7098.6
57.5°	8040.6	8056.0	8086.7	8142.2	7837.4	6732.3	6652.2	6566.1	6990.9	7132.5	7877.4
60°	8422.3	8440.7	8628.5	8927.1	8724.0	7615.8	7529.6	7326.4	7563.4	7754.3	8696.2
62.5°	8373.0	8502.3	9047.2	9641.3	9616.7	8585.4	8477.7	7988.2	8139.1	8305.3	9447.4
65°	7560.3	7698.9	8924.0	9838.3	10512.5	9542.8	9367.3	8671.6	8680.9	8880.9	10170.8
67.5°	6833.9	6984.7	8154.5	9755.2	11103.5	10401.6	10220.0	9358.1	9213.4	9545.9	10558.6
70°	6415.2	6566.1	7541.9	9496.6	11269.7	11352.8	11195.8	10143.1	9847.5	10152.3	10124.6
72.5°	5020.7	5257.8	6760.0	9004.1	11448.3	12371.8	12248.6	11137.4	10386.2	9518.2	7708.1
75°	2000.9	2219.5	4220.4	7246.4	11223.5	13249.1	13153.7	11583.7	9613.6	6796.9	3946.4
77.5°	603.4	646.4	1172.8	3583.2	8228.3	11746.9	11716.1	9739.8	6803.1	3155.3	1077.4
80°	200.1	221.6	360.2	988.1	3755.5	7338.7	7477.2	6205.9	3090.6	723.4	218.6
82.5°	83.1	92.3	181.6	397.1	1329.8	3161.4	3115.3	2779.7	1077.4	449.4	80.0
85°	21.5	27.7	83.1	227.8	486.4	1089.7	1145.1	932.7	609.5	372.5	24.6
87.5°	0.0	0.0	40.0	92.3	218.6	329.4	344.8	283.2	344.8	280.1	12.3
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: P399774

CATALOG NUMBER: ARCH-L-PA3-190-727-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2	1816.2
2.5°	1810.1	1794.7	1767.0	1748.5	1723.9	1717.7	1705.4	1690.0	1686.9	1671.5	1674.6
5°	1779.3	1754.6	1705.4	1671.5	1631.5	1619.2	1597.6	1582.3	1569.9	1548.4	1551.5
7.5°	1773.1	1736.2	1668.4	1603.8	1539.2	1493.0	1428.3	1376.0	1332.9	1286.7	1296.0
10°	1794.7	1748.5	1653.1	1563.8	1446.8	1299.1	1129.7	1018.9	963.5	908.1	914.3
12.5°	1837.8	1782.3	1659.2	1523.8	1286.7	1034.3	800.4	649.5	609.5	584.9	588.0
15°	1902.4	1834.7	1677.7	1446.8	1071.3	748.0	532.5	467.9	483.3	492.5	492.5
17.5°	1970.1	1893.2	1693.1	1308.3	828.1	523.3	434.0	427.9	449.4	471.0	471.0
20°	2053.2	1954.7	1696.2	1132.8	597.2	424.8	409.4	409.4	424.8	449.4	449.4
22.5°	2133.3	2022.5	1668.4	932.7	455.6	394.0	394.0	394.0	403.3	427.9	431.0
25°	2228.7	2105.6	1610.0	720.3	390.9	375.6	375.6	378.6	384.8	406.3	409.4
27.5°	2330.3	2191.8	1511.5	526.4	357.1	354.0	357.1	360.2	363.2	384.8	390.9
30°	2447.3	2287.2	1385.2	394.0	326.3	326.3	335.5	341.7	341.7	360.2	366.3
32.5°	2582.7	2413.4	1234.4	326.3	295.5	292.4	307.8	317.1	317.1	332.5	338.6
35°	2752.0	2542.7	1052.8	289.4	270.9	264.7	270.9	286.3	292.4	304.8	307.8
37.5°	2976.7	2696.6	858.9	267.8	252.4	240.1	240.1	243.2	255.5	267.8	270.9
40°	3263.0	2865.9	668.0	252.4	234.0	221.6	212.4	209.3	206.2	215.5	221.6
42.5°	3623.2	3056.8	498.7	237.0	218.6	200.1	187.8	175.5	160.1	157.0	160.1
45°	4084.9	3290.7	369.4	224.7	209.3	181.6	160.1	138.5	110.8	101.6	104.7
47.5°	4629.8	3533.9	289.4	212.4	203.2	160.1	132.4	95.4	67.7	61.6	64.6
50°	5208.5	3767.9	246.3	197.0	190.9	138.5	95.4	58.5	40.0	40.0	43.1
52.5°	5701.0	3900.2	224.7	184.7	172.4	113.9	61.6	33.9	24.6	24.6	27.7
55°	6178.2	3971.0	209.3	172.4	147.8	80.0	33.9	21.5	15.4	15.4	15.4
57.5°	6670.7	4001.8	190.9	157.0	117.0	49.3	18.5	12.3	9.2	9.2	9.2
60°	7107.8	3943.3	163.2	129.3	77.0	24.6	9.2	9.2	6.2	3.1	3.1
62.5°	7474.2	3832.5	113.9	92.3	46.2	12.3	6.2	3.1	0.0	0.0	0.0
65°	7698.9	3654.0	73.9	61.6	27.7	9.2	3.1	0.0	0.0	0.0	0.0
67.5°	7634.2	3318.4	46.2	40.0	12.3	6.2	3.1	0.0	0.0	0.0	0.0
70°	6889.3	2721.2	33.9	24.6	9.2	3.1	0.0	0.0	0.0	0.0	0.0
72.5°	4965.3	1840.8	24.6	15.4	6.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	2388.8	655.7	15.4	12.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	584.9	144.7	9.2	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	129.3	27.7	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.1	12.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	3.1	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)