

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: P400042

Luminaire Tested: **ARCH-L-PA3-220-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-830-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17961 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

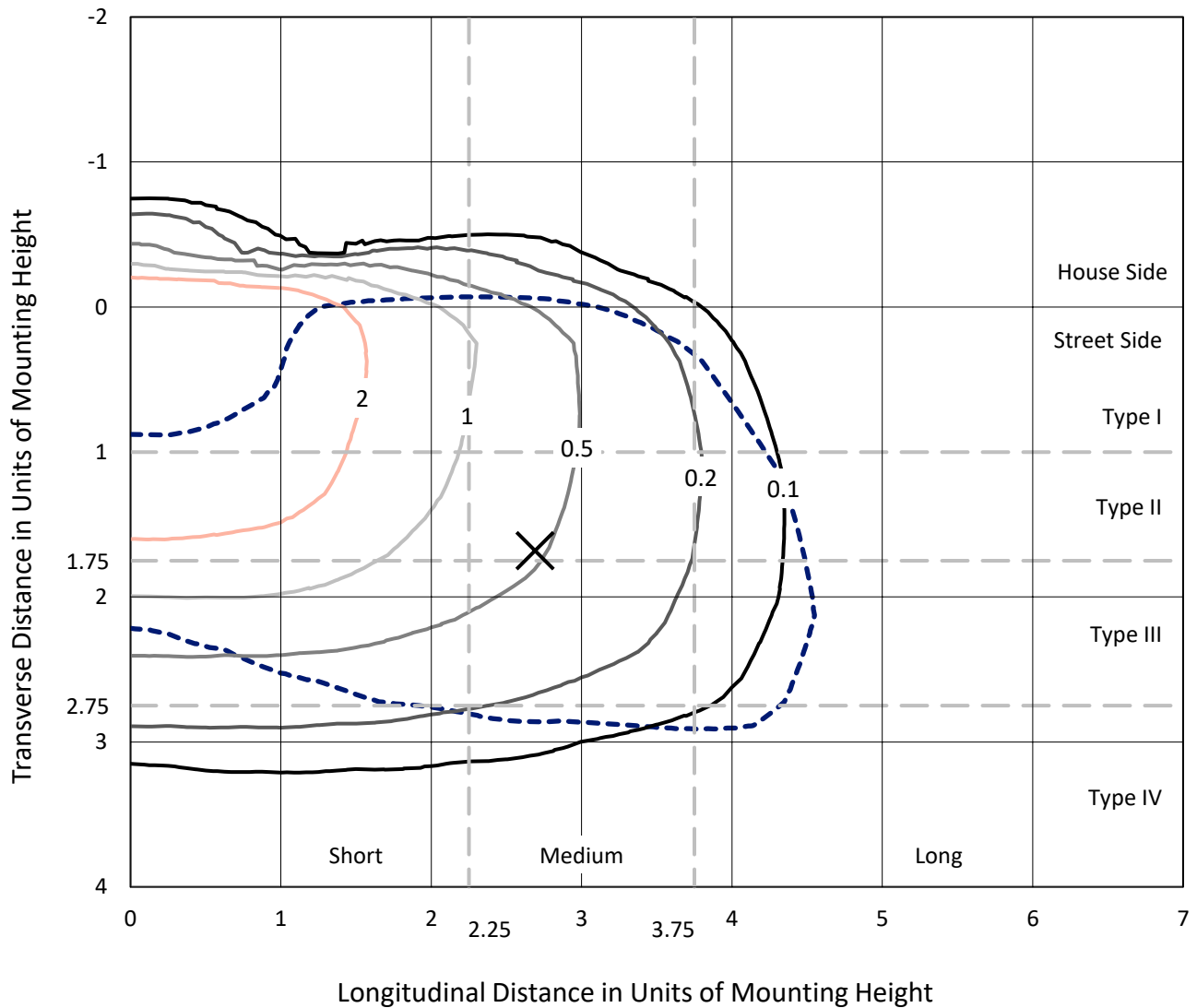
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

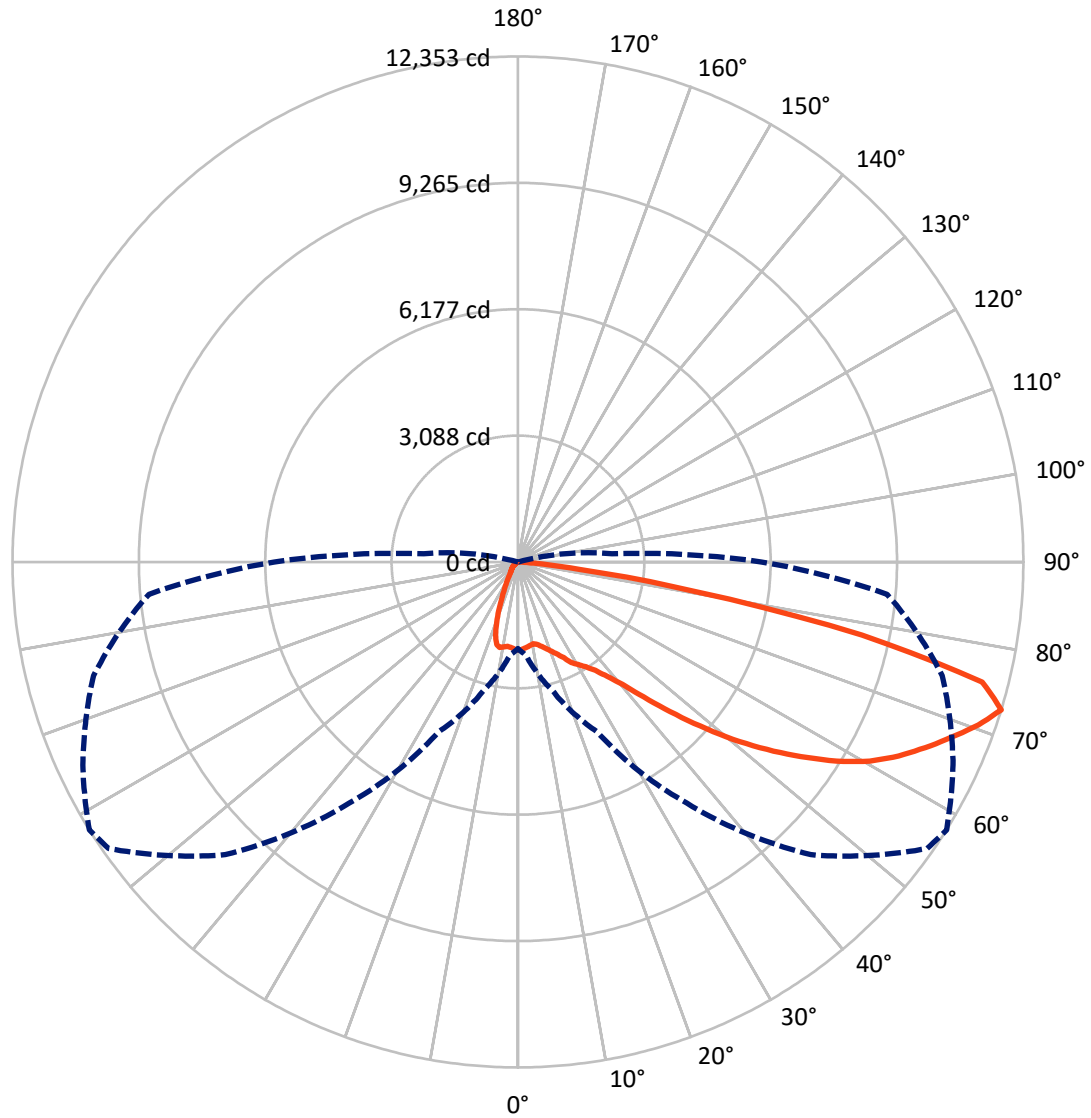
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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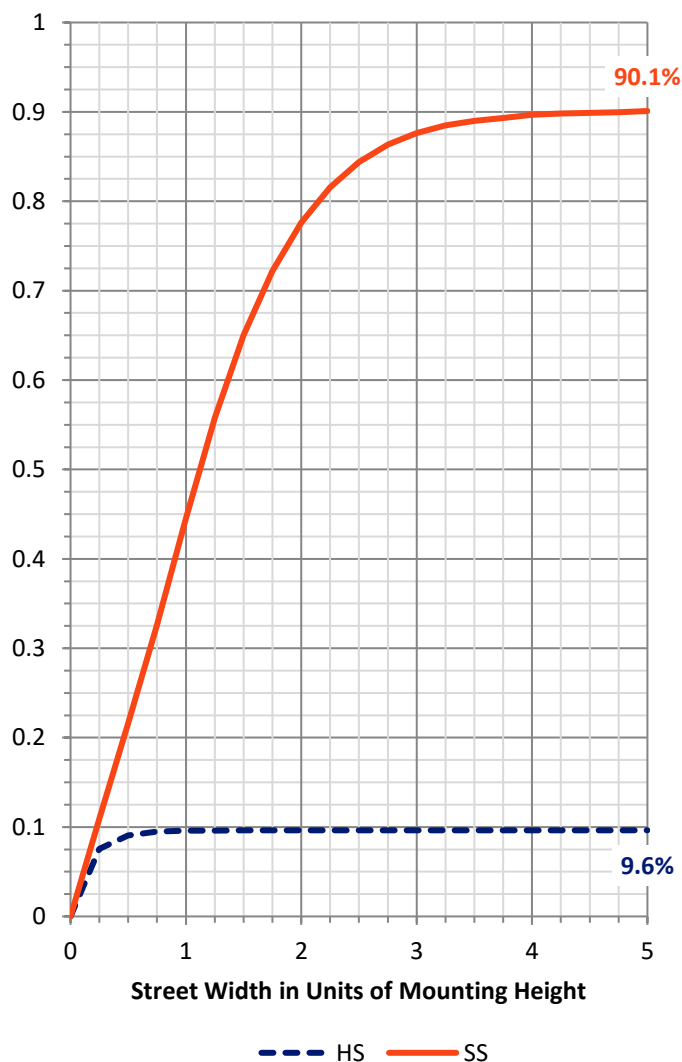
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1746.6	0.0	1746.6
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	16214.4	0.0	16214.4
	% Fixture	90.3	0.0	90.3
Total	Lumens	17961.0	0.0	17961.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.8	1.1
10°-20°	515.2	2.9
20°-30°	809.3	4.5
30°-40°	1395.7	7.8
40°-50°	2655.4	14.8
50°-60°	4205.3	23.4
60°-70°	4907.2	27.3
70°-80°	3073.4	17.1
80°-90°	201.7	1.1
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°	17961.0	100.0
0°-180°	17961.0	100.0

Coefficient of Utilization



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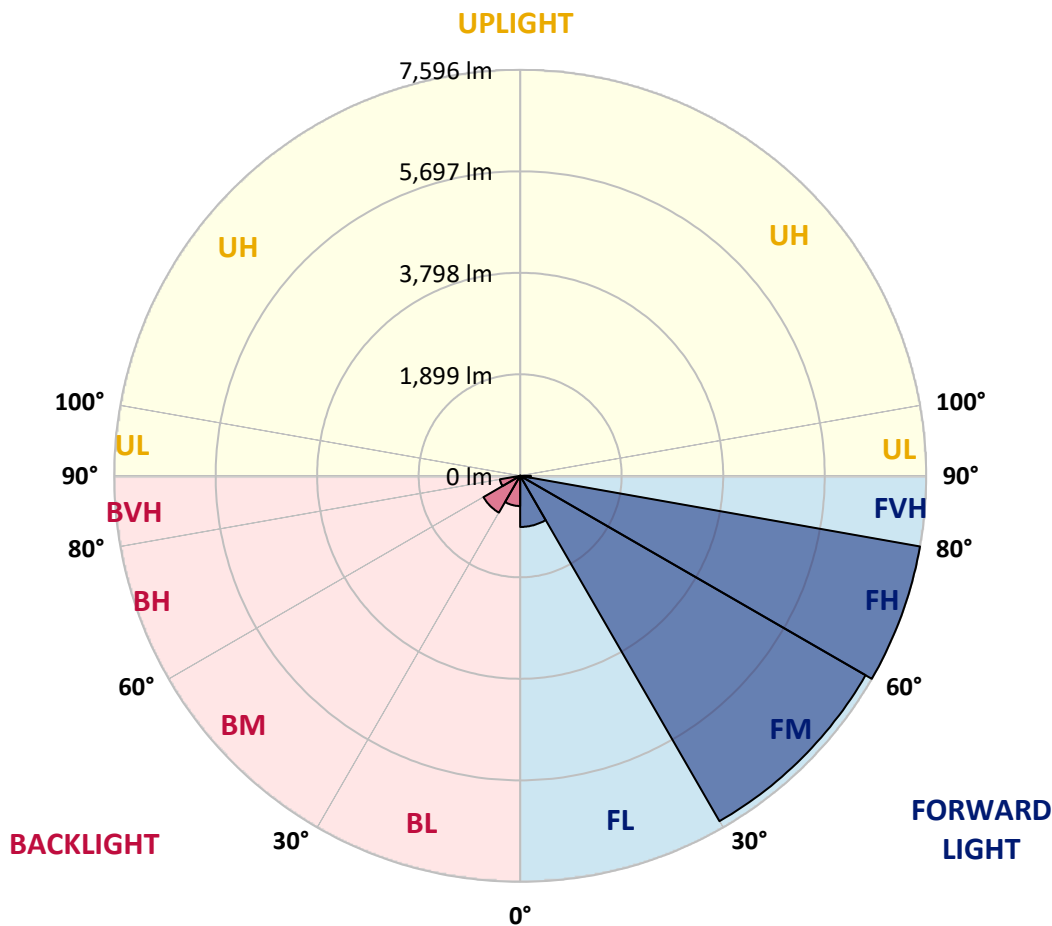
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	956.7	5.3			
FM (30°-60°)	7461.8	41.5			
FH (60°-80°)	7596.2	42.3			G4/12000
FVH (80°-90°)	199.8	1.1			G2/225
BL (0°-30°)	565.6	3.1	B2/1000		
BM (30°-60°)	794.7	4.4	B1/1000		
BH (60°-80°)	384.3	2.1	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2
2.5°	2145.6	2135.9	2132.7	2129.5	2132.7	2135.9	2126.3	2135.9	2129.5	2132.7	2139.2
5°	2068.5	2058.9	2055.6	2058.9	2068.5	2084.5	2091.0	2100.6	2100.6	2110.2	2113.5
7.5°	1981.8	1975.3	1972.1	1978.6	1997.8	2033.2	2052.4	2065.3	2078.1	2097.4	2116.7
10°	1933.6	1930.4	1927.2	1936.8	1956.1	1988.2	2013.9	2033.2	2081.3	2135.9	2171.3
12.5°	1901.5	1901.5	1907.9	1927.2	1952.9	1978.6	2039.6	2065.3	2139.2	2222.7	2270.8
15°	1875.8	1875.8	1885.4	1920.7	1956.1	2017.1	2107.0	2135.9	2222.7	2325.4	2389.7
17.5°	1856.5	1862.9	1869.3	1904.7	1972.1	2074.9	2180.9	2222.7	2328.7	2441.1	2511.7
20°	1859.7	1866.1	1869.3	1904.7	2001.0	2142.4	2277.3	2325.4	2447.5	2566.3	2637.0
22.5°	1879.0	1888.6	1891.8	1940.0	2052.4	2213.0	2386.5	2441.1	2572.8	2698.0	2752.6
25°	1959.3	1965.7	1946.4	1988.2	2126.3	2322.2	2527.8	2585.6	2717.3	2832.9	2877.9
27.5°	2232.3	2238.7	2132.7	2084.5	2184.1	2412.2	2701.2	2781.5	2945.3	3022.4	3028.9
30°	2823.3	2829.7	2620.9	2392.9	2322.2	2489.3	2797.6	2910.0	3122.0	3208.7	3170.2
32.5°	3584.5	3578.1	3292.2	2955.0	2649.8	2624.2	2935.7	3054.6	3285.8	3369.3	3340.4
35°	4349.0	4358.6	4114.5	3607.0	3170.2	2877.9	3112.4	3250.5	3529.9	3648.8	3597.4
37.5°	4872.5	4936.7	4830.8	4281.5	3809.4	3346.8	3398.2	3546.0	3896.1	4056.7	3947.5
40°	5611.3	5595.2	5338.2	4933.5	4516.0	4040.6	3860.7	3931.4	4332.9	4548.1	4377.9
42.5°	6603.7	6571.6	6134.8	5739.7	5274.0	4885.4	4519.2	4506.3	4834.0	5084.5	4837.2
45°	7503.1	7454.9	7156.2	6774.0	6263.3	5816.8	5322.2	5209.8	5437.8	5649.8	5360.7
47.5°	8219.3	8139.1	7927.1	7724.7	7599.4	6905.7	6163.7	5993.5	6109.1	6266.5	5858.6
50°	9067.3	8845.7	8537.3	8415.3	8675.4	8139.1	6973.1	6809.3	6802.9	6892.8	6372.5
52.5°	9452.7	9051.2	8877.8	8980.6	9439.9	9285.7	7846.8	7612.3	7519.1	7528.8	6851.1
55°	8987.0	8942.0	9035.2	9356.4	9957.0	9867.1	8685.1	8396.0	8257.9	8084.4	7310.4
57.5°	8457.0	8595.1	8964.5	9578.0	10612.2	10474.1	9510.5	9182.9	8929.2	8530.9	7821.1
60°	7968.8	8110.1	8720.4	9629.4	10972.0	11058.7	10197.9	9886.3	9510.5	8987.0	8383.2
62.5°	7226.9	7336.1	8193.7	9555.5	10814.6	11399.2	10676.5	10442.0	10091.9	9420.6	9028.8
65°	6391.8	6462.4	7310.4	8964.5	10506.2	11360.6	11071.6	10939.9	10599.4	9873.5	9667.9
67.5°	5476.4	5559.9	6266.5	7901.4	9902.4	11180.8	11444.1	11431.3	11042.6	10374.6	10130.5
70°	4422.8	4429.3	5013.8	6552.4	8848.9	10821.0	11906.7	11935.6	11466.6	10750.4	10149.7
72.5°	2116.7	2290.1	3250.5	4573.8	7191.5	10114.4	12208.6	12353.1	11733.2	10737.5	9054.5
75°	485.0	501.1	947.5	2174.5	4217.3	7763.3	11453.8	11723.6	11084.4	9285.7	6378.9
77.5°	176.7	186.3	266.6	636.0	1622.0	4011.7	8196.9	8591.9	8193.7	6003.1	3016.0
80°	118.8	115.6	138.1	282.7	745.2	1137.0	4191.6	4426.1	4040.6	2049.2	722.7
82.5°	61.0	64.2	96.4	157.4	501.1	395.1	1400.4	1522.5	1252.7	411.1	134.9
85°	28.9	28.9	54.6	99.6	212.0	138.1	311.6	375.8	337.3	179.9	45.0
87.5°	28.9	28.9	51.4	64.2	109.2	57.8	77.1	96.4	89.9	96.4	16.1
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°	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2	2155.2
2.5°	2139.2	2135.9	2132.7	2139.2	2135.9	2142.4	2142.4	2148.8	2148.8	2142.4	2139.2
5°	2110.2	2103.8	2097.4	2097.4	2094.2	2100.6	2119.9	2135.9	2139.2	2129.5	2126.3
7.5°	2113.5	2113.5	2107.0	2094.2	2071.7	2071.7	2071.7	2091.0	2100.6	2094.2	2091.0
10°	2171.3	2174.5	2158.4	2129.5	2091.0	2055.6	1988.2	1888.6	1795.5	1769.8	1760.1
12.5°	2270.8	2274.1	2241.9	2190.5	2110.2	1901.5	1644.5	1406.8	1223.7	1172.4	1162.7
15°	2389.7	2392.9	2335.1	2251.6	2007.5	1522.5	1140.2	870.4	709.8	671.3	668.1
17.5°	2511.7	2505.3	2418.6	2258.0	1702.3	1079.2	693.8	555.7	513.9	504.3	507.5
20°	2630.6	2611.3	2492.5	2139.2	1310.5	706.6	507.5	475.4	465.7	459.3	459.3
22.5°	2739.8	2701.2	2553.5	1904.7	918.6	507.5	452.9	446.5	433.6	424.0	420.8
25°	2849.0	2794.4	2592.0	1599.5	616.7	443.2	427.2	414.3	398.3	385.4	382.2
27.5°	2980.7	2903.6	2572.8	1214.1	462.5	411.1	398.3	379.0	356.5	337.3	330.8
30°	3105.9	3019.2	2463.6	838.3	395.1	379.0	359.7	330.8	301.9	279.4	273.0
32.5°	3263.3	3163.8	2267.6	549.2	343.7	330.8	311.6	276.2	237.7	212.0	205.6
35°	3488.2	3375.7	2017.1	385.4	301.9	279.4	253.7	215.2	173.4	154.2	151.0
37.5°	3802.9	3652.0	1702.3	311.6	266.6	234.5	195.9	157.4	128.5	112.4	109.2
40°	4188.4	3957.1	1352.2	276.2	237.7	195.9	147.7	112.4	93.1	80.3	80.3
42.5°	4605.9	4243.0	995.7	253.7	208.8	160.6	109.2	80.3	67.5	61.0	57.8
45°	5036.3	4496.7	671.3	234.5	183.1	122.1	77.1	54.6	45.0	45.0	41.8
47.5°	5482.8	4666.9	433.6	212.0	154.2	89.9	51.4	38.5	32.1	32.1	32.1
50°	5926.0	4756.9	308.3	192.7	125.3	61.0	38.5	28.9	25.7	25.7	25.7
52.5°	6247.2	4699.1	247.3	167.0	96.4	45.0	28.9	22.5	19.3	19.3	19.3
55°	6526.7	4599.5	215.2	144.5	70.7	32.1	22.5	19.3	16.1	16.1	16.1
57.5°	6812.5	4471.0	192.7	122.1	51.4	22.5	16.1	12.8	12.8	12.8	12.8
60°	7072.7	4252.6	167.0	96.4	35.3	16.1	12.8	9.6	9.6	9.6	9.6
62.5°	7326.4	4066.3	144.5	73.9	25.7	12.8	6.4	6.4	3.2	3.2	3.2
65°	7471.0	3815.8	115.6	48.2	16.1	9.6	3.2	3.2	0.0	0.0	0.0
67.5°	7426.0	3517.1	80.3	28.9	9.6	6.4	3.2	0.0	0.0	0.0	0.0
70°	7114.4	3115.6	48.2	16.1	9.6	6.4	3.2	0.0	0.0	0.0	0.0
72.5°	5958.1	2306.2	28.9	12.8	6.4	3.2	0.0	0.0	0.0	0.0	0.0
75°	3979.6	1059.9	16.1	9.6	3.2	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	1821.2	318.0	9.6	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	366.2	83.5	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	77.1	16.1	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.1	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	3.2	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)