

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: P399684

Luminaire Tested: **ARCH-L-PA3-170-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399684
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-PA3-170-830-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 750mA 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: 14963 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

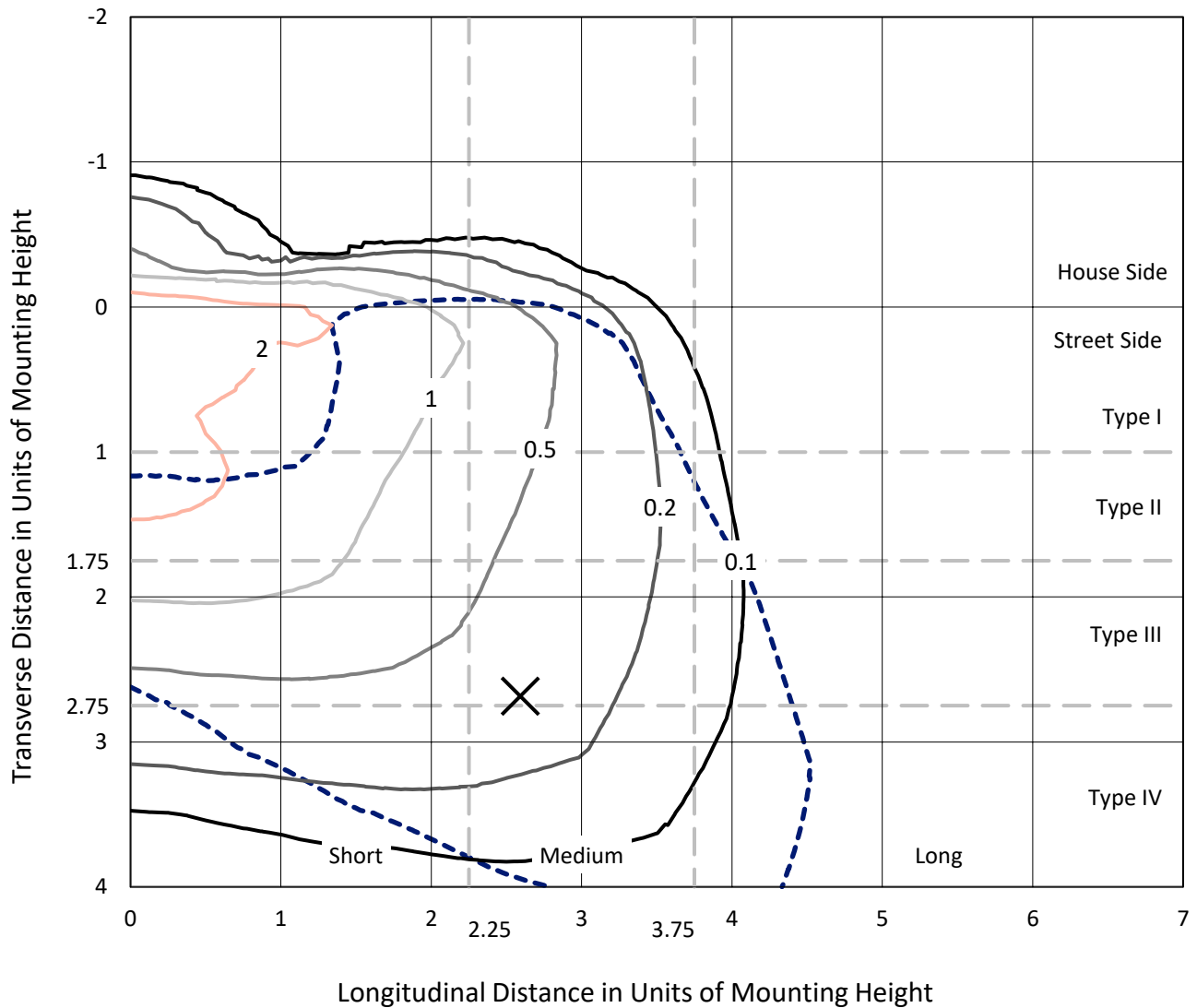
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

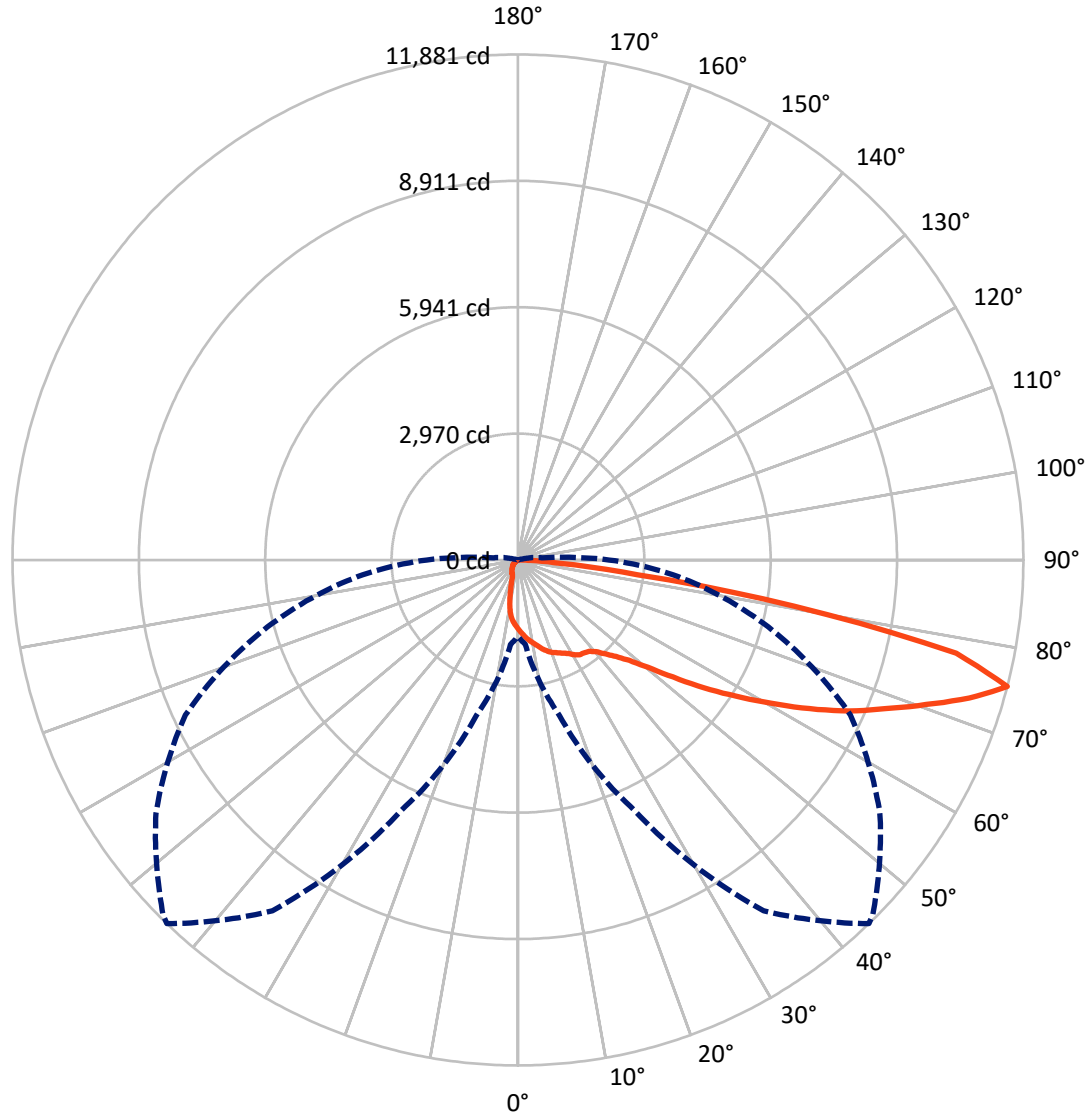
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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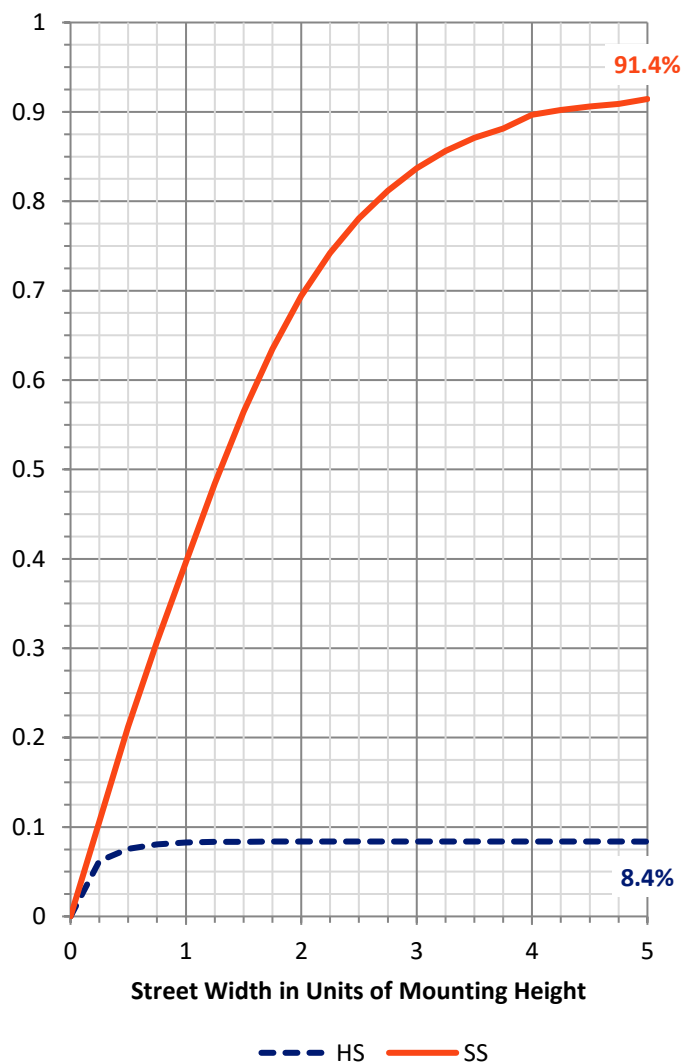
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1261.9	0.0	1261.9
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	13701.1	0.0	13701.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	14963.0	0.0	14963.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	1.0
10°-20°	430.4	2.9
20°-30°	710.3	4.7
30°-40°	1030.9	6.9
40°-50°	1675.8	11.2
50°-60°	2954.2	19.7
60°-70°	4245.8	28.4
70°-80°	3399.9	22.7
80°-90°	362.2	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°	14963.0	100.0
0°-180°	14963.0	100.0

Coefficient of Utilization



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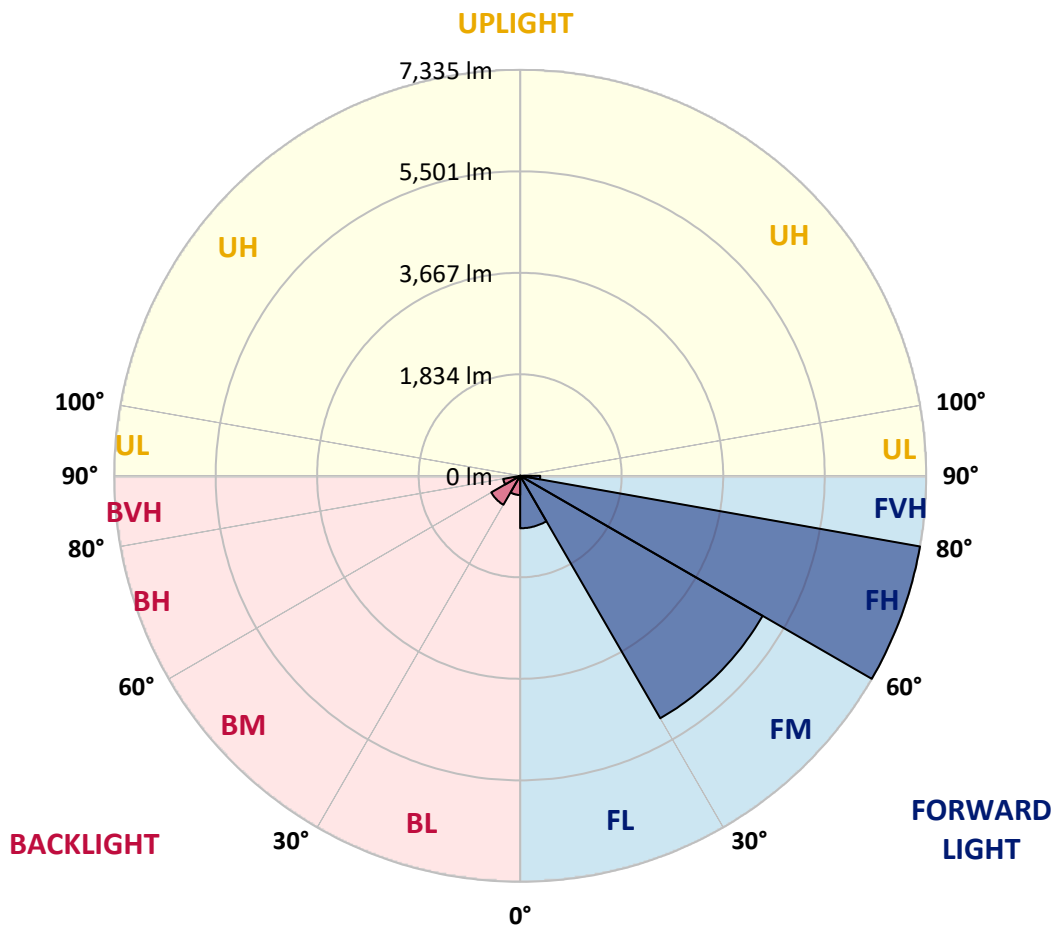
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	947.6	6.3			
FM (30°-60°)	5057.6	33.8			
FH (60°-80°)	7334.6	49.0			G3/7500
FVH (80°-90°)	361.3	2.4			G3/500
BL (0°-30°)	346.7	2.3	B1/500		
BM (30°-60°)	603.2	4.0	B1/1000		
BH (60°-80°)	311.1	2.1	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7
2.5°	1775.0	1772.2	1763.9	1750.1	1736.3	1722.5	1719.8	1697.7	1672.8	1653.5	1636.9
5°	1932.3	1929.6	1915.8	1885.4	1855.0	1819.1	1816.4	1763.9	1717.0	1664.6	1620.4
7.5°	2095.2	2089.7	2064.8	2017.9	1965.4	1910.2	1904.7	1827.4	1758.4	1689.4	1625.9
10°	2222.2	2216.6	2180.8	2125.5	2053.8	1984.8	1976.5	1896.4	1827.4	1739.1	1653.5
12.5°	2346.4	2335.3	2288.4	2227.7	2139.3	2073.1	2064.8	1982.0	1899.2	1808.1	1703.2
15°	2462.3	2448.5	2404.4	2327.1	2233.2	2169.7	2164.2	2075.9	1990.3	1885.4	1769.4
17.5°	2542.4	2536.9	2484.4	2398.8	2307.7	2255.3	2249.8	2158.7	2073.1	1962.7	1838.5
20°	2583.8	2583.8	2534.1	2440.2	2357.4	2321.5	2313.3	2227.7	2144.9	2040.0	1910.2
22.5°	2592.1	2600.3	2561.7	2459.6	2398.8	2368.5	2362.9	2288.4	2208.4	2111.7	1990.3
25°	2608.6	2608.6	2589.3	2478.9	2434.7	2426.4	2423.7	2357.4	2285.7	2189.0	2070.3
27.5°	2627.9	2627.9	2614.1	2506.5	2489.9	2487.2	2484.4	2454.0	2396.1	2282.9	2164.2
30°	2677.6	2680.4	2669.4	2561.7	2550.7	2581.0	2586.5	2570.0	2498.2	2357.4	2260.8
32.5°	2801.9	2777.0	2746.6	2600.3	2619.7	2658.3	2661.1	2627.9	2550.7	2437.5	2376.7
35°	3113.8	2967.5	2829.5	2633.5	2641.8	2680.4	2685.9	2683.2	2636.2	2539.6	2509.2
37.5°	3403.6	3196.6	3000.6	2710.8	2683.2	2724.6	2735.6	2782.5	2746.6	2680.4	2688.7
40°	3572.0	3492.0	3353.9	2923.3	2766.0	2829.5	2840.5	2912.3	2898.5	2870.9	2923.3
42.5°	4091.0	4096.5	3947.4	3240.8	2917.8	3019.9	3033.7	3091.7	3111.0	3124.8	3251.8
45°	4692.8	4712.1	4676.2	3812.2	3204.9	3238.0	3257.3	3334.6	3406.4	3494.7	3726.6
47.5°	5416.0	5399.4	5266.9	4510.6	3704.5	3519.6	3533.4	3682.4	3806.7	3999.9	4331.1
50°	6056.4	6097.8	5846.6	5162.0	4408.4	3964.0	3950.2	4096.5	4320.1	4590.6	5007.5
52.5°	6702.4	6641.6	6302.1	5808.0	5242.1	4568.5	4527.1	4607.2	4921.9	5242.1	5670.0
55°	6873.5	6879.0	6763.1	6514.7	5937.7	5302.8	5233.8	5228.3	5620.3	5838.4	6365.6
57.5°	7210.3	7224.1	7251.7	7301.4	7028.1	6037.1	5965.3	5888.0	6269.0	6396.0	7064.0
60°	7552.6	7569.2	7737.5	8005.3	7823.1	6829.4	6752.1	6569.9	6782.4	6953.6	7798.3
62.5°	7508.4	7624.4	8113.0	8645.7	8623.6	7698.9	7602.3	7163.4	7298.6	7447.7	8471.8
65°	6779.7	6903.9	8002.5	8822.4	9426.9	8557.4	8400.1	7776.2	7784.5	7963.9	9120.5
67.5°	6128.2	6263.5	7312.4	8747.9	9956.9	9327.6	9164.7	8391.8	8262.0	8560.2	9468.3
70°	5752.8	5888.0	6763.1	8516.0	10106.0	10180.5	10039.8	9095.7	8830.7	9104.0	9079.1
72.5°	4502.3	4714.8	6061.9	8074.3	10266.1	11094.3	10983.8	9987.3	9313.8	8535.3	6912.2
75°	1794.3	1990.3	3784.6	6498.1	10064.6	11881.0	11795.4	10387.6	8620.9	6095.1	3538.9
77.5°	541.0	579.7	1051.7	3213.2	7378.7	10533.9	10506.3	8734.1	6100.6	2829.5	966.2
80°	179.4	198.8	323.0	886.1	3367.7	6580.9	6705.1	5565.1	2771.5	648.7	196.0
82.5°	74.5	82.8	162.9	356.1	1192.5	2835.0	2793.6	2492.7	966.2	403.0	71.8
85°	19.3	24.8	74.5	204.3	436.2	977.2	1026.9	836.4	546.6	334.0	22.1
87.5°	0.0	0.0	35.9	82.8	196.0	295.4	309.2	254.0	309.2	251.2	11.0
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°	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7	1628.7
2.5°	1623.1	1609.3	1584.5	1567.9	1545.9	1540.3	1529.3	1515.5	1512.7	1498.9	1501.7
5°	1595.5	1573.5	1529.3	1498.9	1463.0	1452.0	1432.7	1418.9	1407.8	1388.5	1391.3
7.5°	1590.0	1556.9	1496.2	1438.2	1380.2	1338.8	1280.8	1233.9	1195.3	1153.9	1162.1
10°	1609.3	1567.9	1482.4	1402.3	1297.4	1164.9	1013.1	913.7	864.0	814.3	819.9
12.5°	1648.0	1598.3	1487.9	1366.4	1153.9	927.5	717.7	582.5	546.6	524.5	527.2
15°	1706.0	1645.2	1504.4	1297.4	960.6	670.8	477.6	419.6	433.4	441.7	441.7
17.5°	1766.7	1697.7	1518.2	1173.2	742.6	469.3	389.2	383.7	403.0	422.3	422.3
20°	1841.2	1752.9	1521.0	1015.8	535.5	380.9	367.1	367.1	380.9	403.0	403.0
22.5°	1913.0	1813.6	1496.2	836.4	408.5	353.3	353.3	353.3	361.6	383.7	386.5
25°	1998.6	1888.1	1443.7	645.9	350.6	336.8	336.8	339.5	345.1	364.4	367.1
27.5°	2089.7	1965.4	1355.4	472.0	320.2	317.5	320.2	323.0	325.7	345.1	350.6
30°	2194.6	2051.0	1242.2	353.3	292.6	292.6	300.9	306.4	306.4	323.0	328.5
32.5°	2316.0	2164.2	1106.9	292.6	265.0	262.2	276.0	284.3	284.3	298.1	303.6
35°	2467.8	2280.1	944.1	259.5	242.9	237.4	242.9	256.7	262.2	273.3	276.0
37.5°	2669.4	2418.2	770.2	240.2	226.4	215.3	215.3	218.1	229.1	240.2	242.9
40°	2926.1	2570.0	599.0	226.4	209.8	198.8	190.5	187.7	185.0	193.2	198.8
42.5°	3249.1	2741.1	447.2	212.6	196.0	179.4	168.4	157.3	143.5	140.8	143.5
45°	3663.1	2950.9	331.3	201.5	187.7	162.9	143.5	124.2	99.4	91.1	93.9
47.5°	4151.7	3169.0	259.5	190.5	182.2	143.5	118.7	85.6	60.7	55.2	58.0
50°	4670.7	3378.8	220.8	176.7	171.1	124.2	85.6	52.4	35.9	35.9	38.6
52.5°	5112.4	3497.5	201.5	165.6	154.6	102.1	55.2	30.4	22.1	22.1	24.8
55°	5540.2	3561.0	187.7	154.6	132.5	71.8	30.4	19.3	13.8	13.8	13.8
57.5°	5981.9	3588.6	171.1	140.8	104.9	44.2	16.6	11.0	8.3	8.3	8.3
60°	6373.9	3536.1	146.3	115.9	69.0	22.1	8.3	8.3	5.5	2.8	2.8
62.5°	6702.4	3436.8	102.1	82.8	41.4	11.0	5.5	2.8	0.0	0.0	0.0
65°	6903.9	3276.7	66.3	55.2	24.8	8.3	2.8	0.0	0.0	0.0	0.0
67.5°	6845.9	2975.8	41.4	35.9	11.0	5.5	2.8	0.0	0.0	0.0	0.0
70°	6177.9	2440.2	30.4	22.1	8.3	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	4452.6	1650.7	22.1	13.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2142.1	588.0	13.8	11.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	524.5	129.7	8.3	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.9	24.8	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.6	11.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	2.8	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)