

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: P258094

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258094  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15552 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

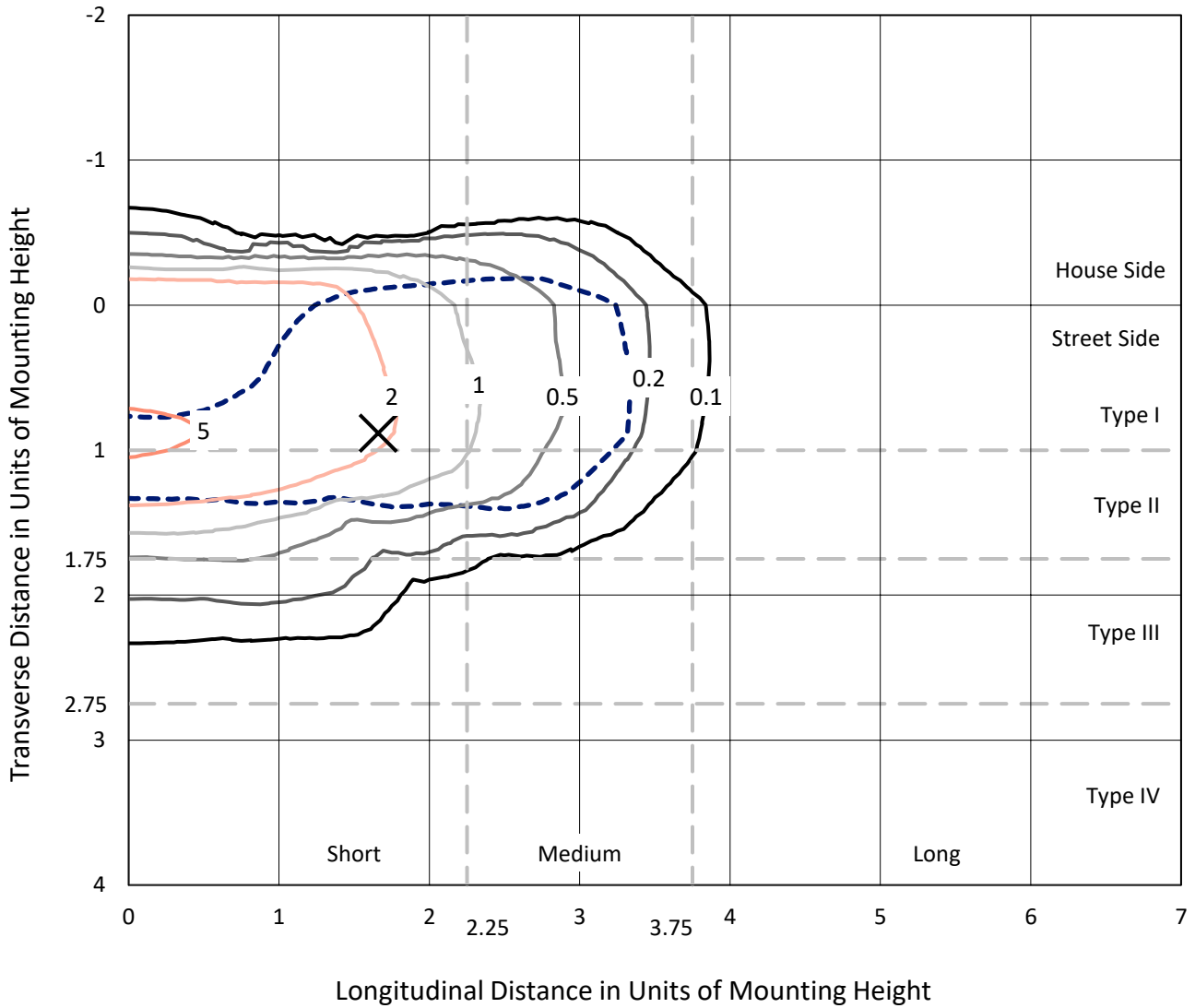
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

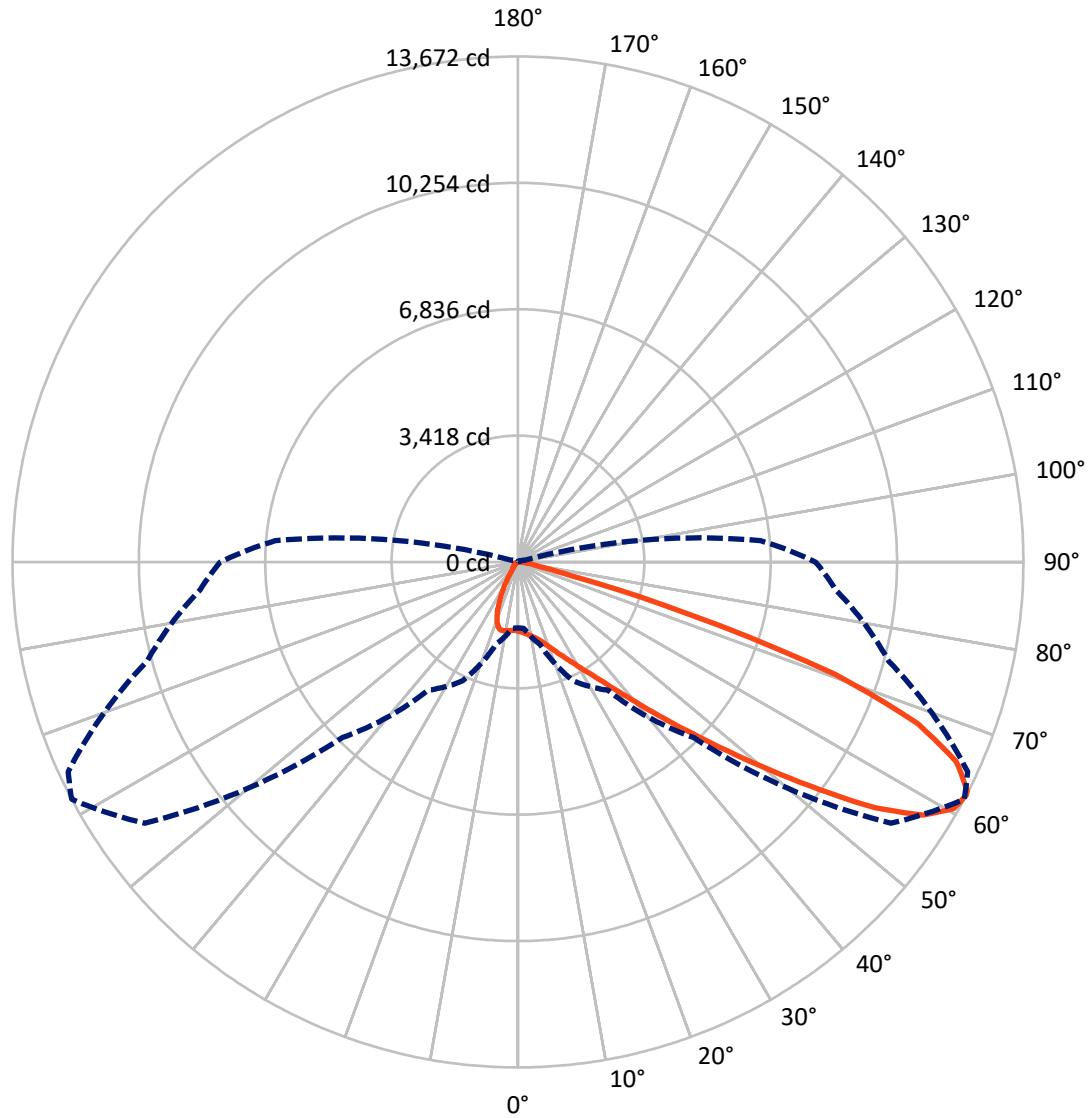
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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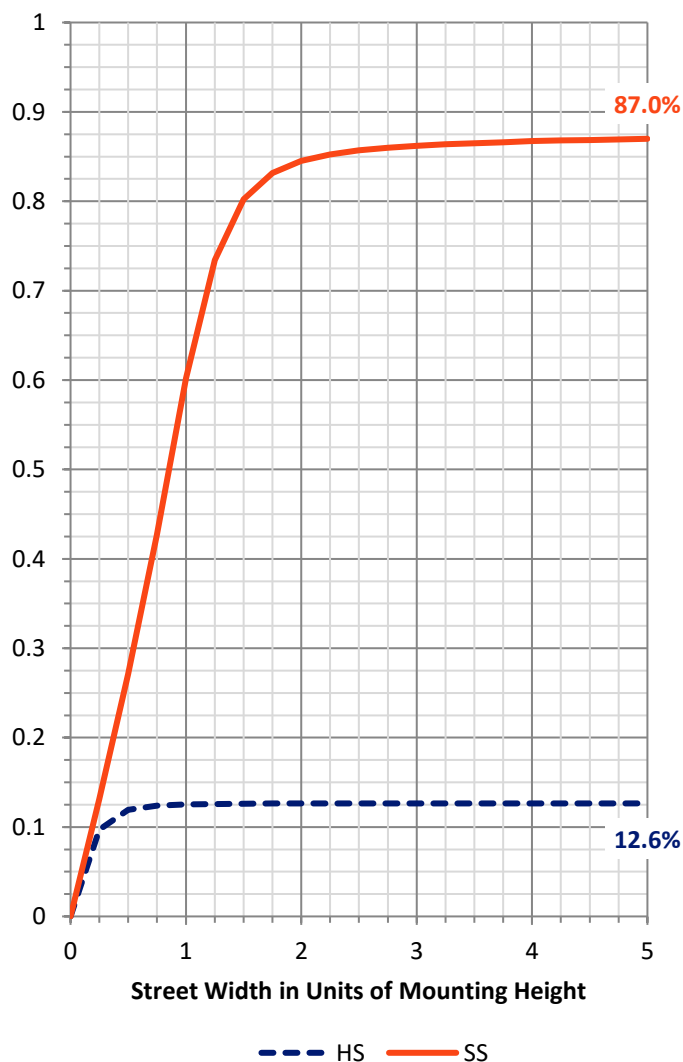
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1988.5	0.0	1988.5
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	13563.5	0.0	13563.5
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	15552.0	0.0	15552.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.3	1.2
10°-20°	503.5	3.2
20°-30°	845.6	5.4
30°-40°	1620.9	10.4
40°-50°	3310.6	21.3
50°-60°	4381.1	28.2
60°-70°	3403.4	21.9
70°-80°	1228.4	7.9
80°-90°	78.3	0.5
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°	15552.0	100.0
0°-180°	15552.0	100.0

**Coefficient of Utilization**



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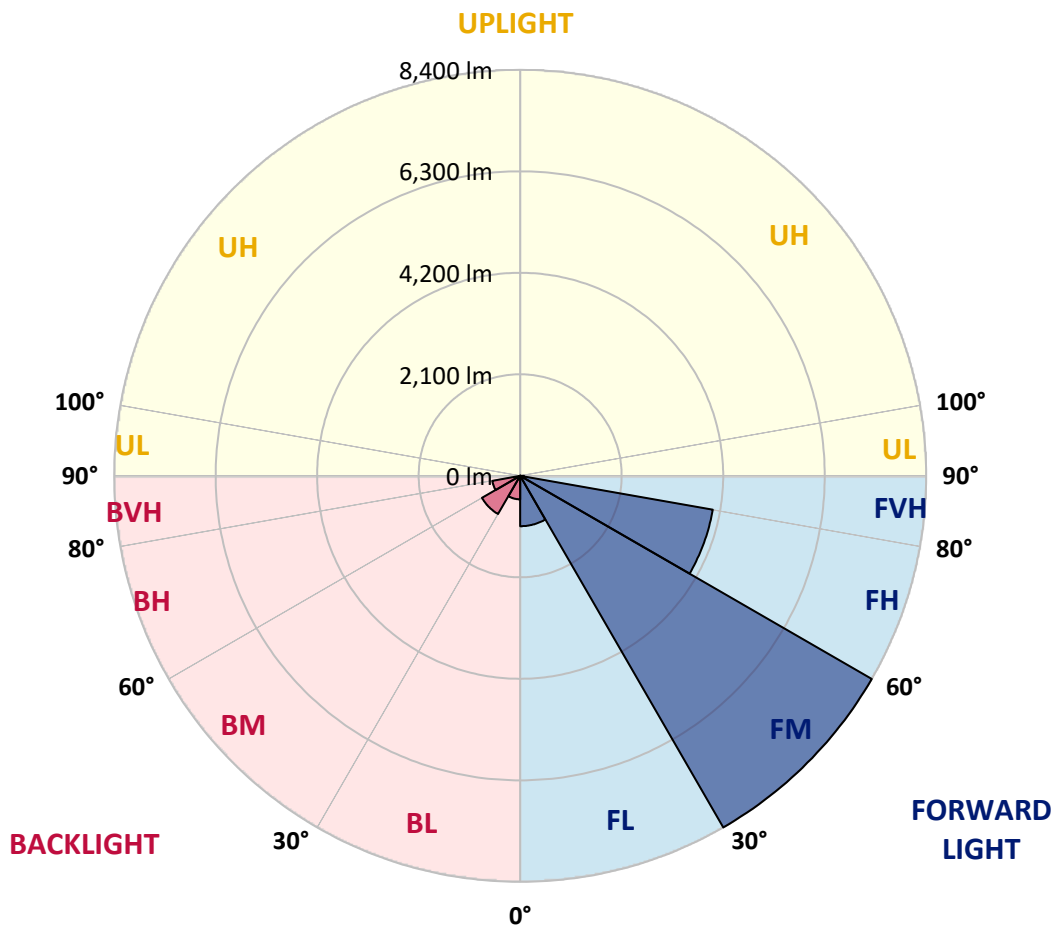
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1042.6	6.7			
FM (30°-60°)	8399.7	54.0			
FH (60°-80°)	4046.3	26.0			G2/5000
FVH (80°-90°)	74.9	0.5			G1/100
BL (0°-30°)	486.7	3.1	B1/500		
BM (30°-60°)	912.9	5.9	B1/1000		
BH (60°-80°)	585.5	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.4	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4
2.5°	1923.1	1919.3	1915.5	1911.7	1911.7	1907.9	1904.0	1896.4	1888.7	1881.1	1877.3
5°	1957.6	1953.7	1949.9	1953.7	1949.9	1949.9	1946.1	1938.4	1930.8	1919.3	1907.9
7.5°	1984.3	1980.5	1976.7	1980.5	1984.3	1988.1	1992.0	1984.3	1980.5	1965.2	1953.7
10°	2018.7	2014.9	2011.1	2018.7	2018.7	2037.8	2041.7	2037.8	2034.0	2022.6	2003.4
12.5°	2068.4	2072.3	2072.3	2079.9	2087.5	2110.5	2118.1	2106.7	2106.7	2091.4	2068.4
15°	2160.2	2160.2	2160.2	2167.8	2171.7	2202.2	2209.9	2198.4	2206.1	2179.3	2156.4
17.5°	2248.1	2252.0	2259.6	2274.9	2274.9	2301.7	2316.9	2316.9	2332.2	2297.8	2267.2
20°	2336.1	2339.9	2351.4	2385.8	2385.8	2420.2	2446.9	2458.4	2473.7	2439.3	2385.8
22.5°	2431.7	2431.7	2450.8	2504.3	2492.8	2561.6	2611.3	2630.5	2645.8	2599.9	2515.8
25°	2576.9	2561.6	2576.9	2626.6	2619.0	2714.6	2806.3	2825.5	2844.6	2791.0	2664.9
27.5°	2852.2	2829.3	2775.8	2779.6	2779.6	2890.5	3020.4	3047.2	3058.7	3012.8	2856.0
30°	3402.8	3402.8	3204.0	3070.1	2982.2	3081.6	3265.1	3311.0	3326.3	3257.5	3051.0
32.5°	4362.4	4362.4	3995.4	3655.1	3322.5	3322.5	3532.8	3616.9	3632.2	3551.9	3311.0
35°	5585.9	5578.3	5027.7	4561.3	3911.3	3666.6	3846.3	3987.8	4033.6	3926.6	3647.5
37.5°	6885.9	6836.1	6243.5	5708.3	4817.4	4217.2	4270.7	4458.0	4500.1	4412.1	4083.3
40°	7941.1	7883.7	7405.8	6958.5	5987.4	5096.5	4882.4	5054.5	5104.2	4981.8	4603.3
42.5°	8896.9	8755.5	8426.7	8105.5	7333.2	6618.2	5696.8	5765.6	5819.1	5689.1	5188.3
45°	9589.0	9371.0	9202.8	9103.4	8694.3	8289.0	6752.0	6614.4	6633.5	6472.9	5826.8
47.5°	9608.1	9455.1	9470.4	9730.4	9898.7	9883.4	8124.6	7635.2	7562.6	7295.0	6507.3
50°	8690.5	8778.4	9057.5	9799.2	10709.2	11259.8	9757.2	8843.4	8625.5	8143.7	7184.1
52.5°	7161.1	7298.8	7822.6	9072.8	10827.7	12165.9	11450.9	10223.6	9833.7	8984.9	7704.0
55°	5608.9	5616.5	6167.1	7440.2	10036.3	12330.3	12804.4	11741.5	11145.1	9623.4	8048.2
57.5°	3857.8	4068.0	4767.7	5624.1	8250.8	11512.1	13312.9	12919.1	12150.6	10017.2	8289.0
60°	2527.2	2538.7	3353.1	4343.3	5616.5	9367.2	13003.2	13542.3	12965.0	10250.4	8453.4
62°	1781.7	1800.8	2305.5	3548.1	4232.4	6713.8	12318.8	13672.3	13423.8	10388.0	8625.5
62.5°	1651.7	1667.0	2091.4	3349.3	3976.3	6021.8	12074.1	13641.7	13492.6	10433.9	8686.6
65°	1212.0	1212.0	1368.8	2301.7	2913.4	3253.7	10231.3	13033.8	13400.8	10801.0	8916.1
67.5°	936.7	944.4	997.9	1418.5	2198.4	1972.8	6530.3	11665.0	12445.0	11343.9	9046.0
70°	806.7	802.9	841.1	940.5	1586.7	1311.4	2875.2	9103.4	10422.5	11206.2	8927.5
72.5°	596.4	600.3	688.2	825.8	1104.9	852.6	1299.9	4832.7	6759.7	8770.8	7650.5
75°	382.3	386.2	485.6	650.0	795.3	558.2	749.4	1441.4	2768.1	4863.3	4679.8
77.5°	256.2	263.8	317.3	455.0	695.8	347.9	470.3	604.1	833.5	1823.7	1678.5
80°	172.1	172.1	202.6	305.9	439.7	290.6	252.3	401.5	432.0	565.9	282.9
82.5°	114.7	114.7	133.8	202.6	286.8	260.0	152.9	217.9	252.3	282.9	99.4
85°	68.8	68.8	91.8	126.2	187.3	145.3	99.4	122.3	130.0	179.7	53.5
87.5°	42.1	38.2	61.2	87.9	99.4	87.9	65.0	65.0	68.8	99.4	26.8
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°	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4	1873.4
2.5°	1869.6	1865.8	1862.0	1854.3	1842.9	1835.2	1827.6	1819.9	1812.3	1812.3	1823.7
5°	1904.0	1892.6	1877.3	1862.0	1839.0	1823.7	1812.3	1797.0	1789.3	1789.3	1793.2
7.5°	1946.1	1934.6	1907.9	1881.1	1846.7	1819.9	1793.2	1758.7	1732.0	1720.5	1732.0
10°	1992.0	1976.7	1938.4	1896.4	1858.1	1789.3	1701.4	1594.3	1502.6	1460.5	1479.6
12.5°	2049.3	2030.2	1984.3	1927.0	1839.0	1670.8	1452.9	1204.4	1047.6	975.0	990.2
15°	2133.4	2106.7	2041.7	1953.7	1758.7	1395.5	1040.0	753.2	607.9	546.7	554.4
17.5°	2232.8	2198.4	2110.5	1946.1	1552.3	1005.5	619.4	439.7	378.5	363.2	363.2
20°	2339.9	2294.0	2179.3	1888.7	1238.8	630.9	386.2	336.5	313.5	302.0	302.0
22.5°	2450.8	2389.6	2236.7	1754.9	883.2	393.8	317.3	282.9	256.2	244.7	244.7
25°	2584.6	2504.3	2294.0	1521.7	562.0	317.3	271.5	237.0	210.3	195.0	198.8
27.5°	2741.3	2638.1	2343.7	1231.1	363.2	275.3	225.6	191.2	168.2	160.6	160.6
30°	2905.7	2783.4	2355.2	921.4	294.4	237.0	187.3	156.8	141.5	133.8	133.8
32.5°	3131.3	2970.7	2320.8	611.7	248.5	198.8	156.8	130.0	118.5	114.7	114.7
35°	3429.5	3215.4	2240.5	378.5	210.3	164.4	130.0	114.7	103.2	99.4	99.4
37.5°	3808.1	3555.7	2099.0	260.0	179.7	133.8	110.9	99.4	91.8	87.9	87.9
40°	4312.7	3968.6	1915.5	225.6	152.9	114.7	95.6	87.9	80.3	80.3	80.3
42.5°	4848.0	4469.5	1678.5	198.8	130.0	99.4	84.1	76.5	72.6	68.8	68.8
45°	5433.0	4981.8	1384.1	175.9	110.9	87.9	76.5	65.0	61.2	61.2	61.2
47.5°	6014.1	5509.4	1062.9	152.9	95.6	76.5	65.0	57.4	53.5	49.7	49.7
50°	6610.6	5987.4	780.0	133.8	84.1	68.8	57.4	49.7	42.1	38.2	38.2
52.5°	7042.6	6274.1	569.7	114.7	72.6	57.4	45.9	38.2	30.6	26.8	26.8
55°	7359.9	6450.0	416.7	95.6	65.0	49.7	38.2	30.6	22.9	22.9	19.1
57.5°	7608.5	6534.1	313.5	84.1	57.4	42.1	30.6	22.9	19.1	15.3	15.3
60°	7799.6	6537.9	233.2	68.8	49.7	34.4	22.9	15.3	11.5	11.5	11.5
62°	8052.0	6587.6	191.2	57.4	45.9	30.6	19.1	11.5	7.6	3.8	3.8
62.5°	8124.6	6606.7	183.5	57.4	42.1	26.8	15.3	11.5	7.6	3.8	3.8
65°	8461.1	6641.2	141.5	45.9	34.4	22.9	11.5	7.6	0.0	0.0	0.0
67.5°	8766.9	6587.6	103.2	34.4	26.8	15.3	11.5	3.8	0.0	0.0	0.0
70°	8736.4	6220.6	72.6	22.9	19.1	11.5	7.6	0.0	0.0	0.0	0.0
72.5°	7199.4	4656.8	49.7	19.1	11.5	7.6	3.8	0.0	0.0	0.0	0.0
75°	4347.1	2037.8	34.4	11.5	11.5	7.6	3.8	0.0	0.0	0.0	0.0
77.5°	1426.1	737.9	22.9	7.6	7.6	3.8	3.8	0.0	0.0	0.0	0.0
80°	233.2	122.3	11.5	7.6	7.6	3.8	3.8	0.0	0.0	0.0	0.0
82.5°	72.6	30.6	7.6	7.6	3.8	3.8	0.0	0.0	0.0	0.0	0.0
85°	26.8	11.5	7.6	7.6	3.8	3.8	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	7.6	7.6	7.6	3.8	3.8	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)