

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: P237230

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237230
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA 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: 16051 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

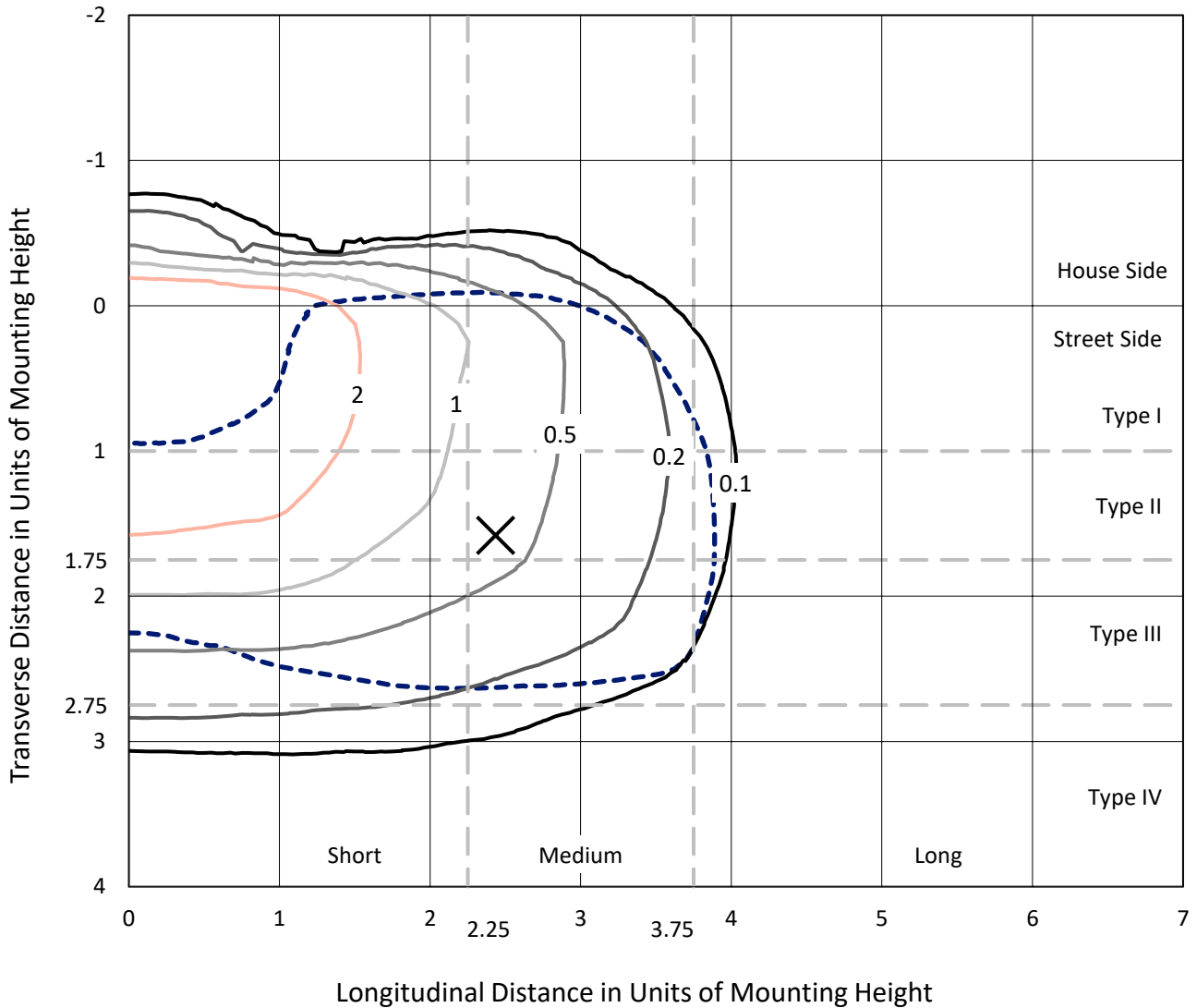
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

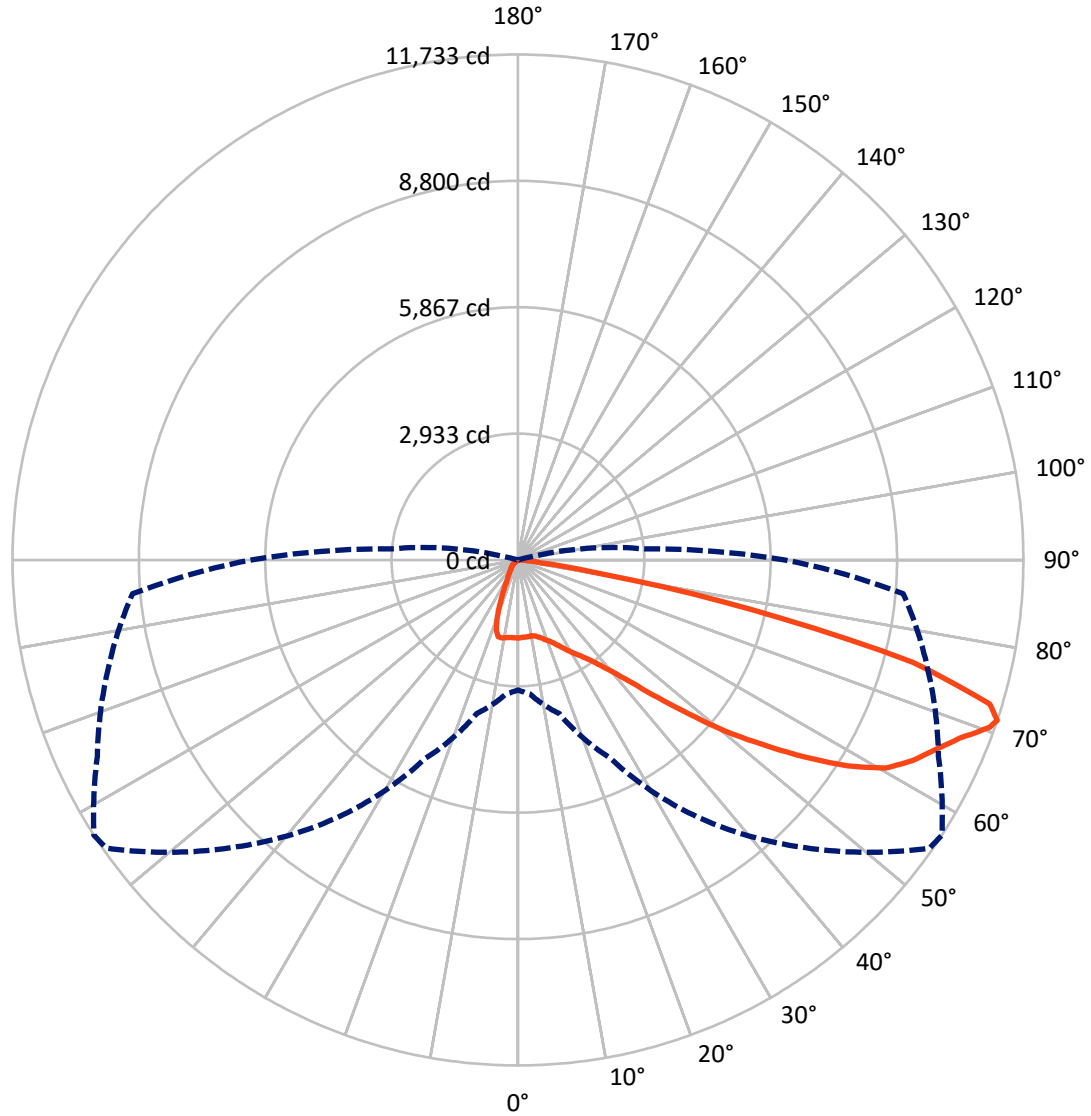
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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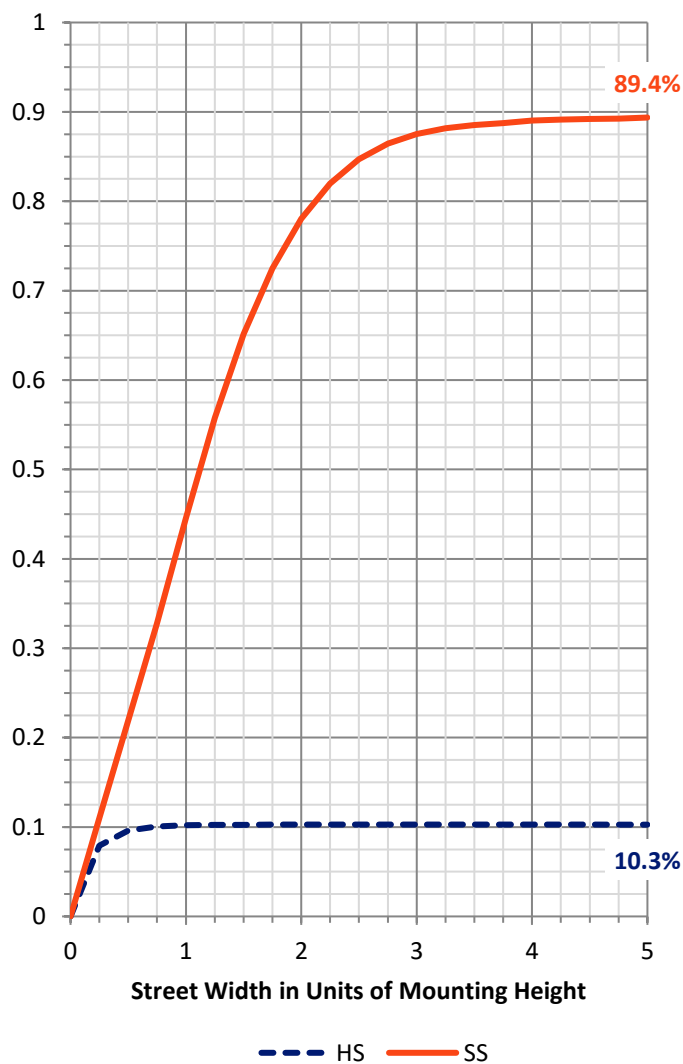
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1663.4	0.0	1663.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	14387.6	0.0	14387.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	16051.0	0.0	16051.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	1.1
10°-20°	455.5	2.8
20°-30°	710.6	4.4
30°-40°	1201.0	7.5
40°-50°	2332.6	14.5
50°-60°	3917.2	24.4
60°-70°	4674.8	29.1
70°-80°	2463.7	15.3
80°-90°	125.2	0.8
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°	16051.0	100.0
0°-180°	16051.0	100.0

Coefficient of Utilization



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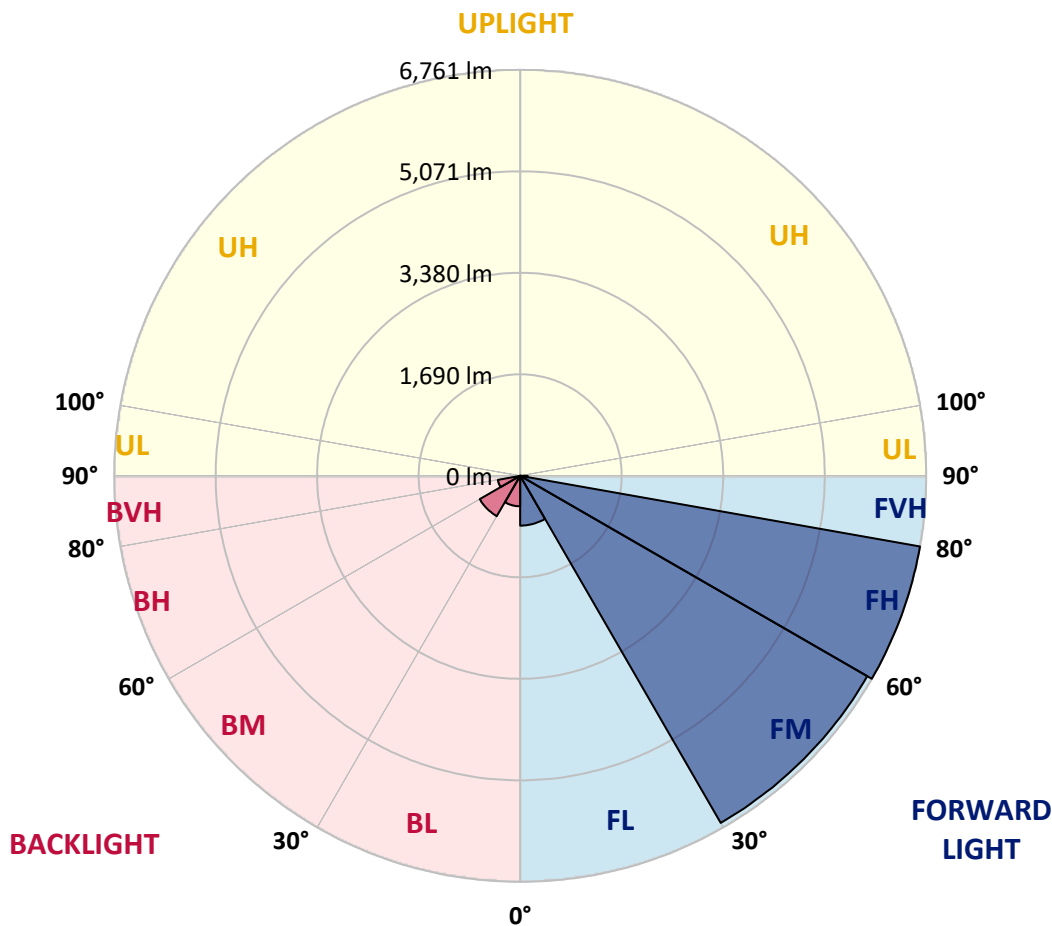
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	828.7	5.2			
FM (30°-60°)	6674.2	41.6			
FH (60°-80°)	6760.8	42.1			G3/7500
FVH (80°-90°)	124.0	0.8			G2/225
BL (0°-30°)	507.7	3.2	B2/1000		
BM (30°-60°)	776.7	4.8	B1/1000		
BH (60°-80°)	377.7	2.4	B1/500		G1/500
BVH (80°-90°)	1.2	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0
2.5°	1787.8	1787.8	1787.8	1791.6	1795.3	1795.3	1802.8	1799.0	1799.0	1799.0	1806.5
5°	1739.2	1742.9	1746.7	1754.2	1769.1	1780.3	1799.0	1799.0	1802.8	1810.3	1814.0
7.5°	1671.9	1675.6	1686.8	1701.8	1731.7	1757.9	1787.8	1795.3	1806.5	1825.2	1832.7
10°	1630.7	1638.2	1653.2	1671.9	1705.5	1739.2	1776.6	1787.8	1821.5	1855.1	1873.8
12.5°	1619.5	1623.3	1638.2	1668.1	1709.3	1750.4	1799.0	1810.3	1858.9	1911.3	1941.2
15°	1638.2	1642.0	1649.4	1683.1	1731.7	1784.1	1847.7	1862.6	1922.5	1982.3	2019.7
17.5°	1671.9	1671.9	1679.4	1709.3	1761.6	1821.5	1903.8	1926.2	1993.5	2060.9	2102.0
20°	1694.3	1694.3	1705.5	1735.5	1795.3	1873.8	1971.1	2001.0	2075.8	2150.6	2188.0
22.5°	1716.8	1720.5	1731.7	1765.4	1832.7	1941.2	2053.4	2083.3	2169.3	2247.9	2285.3
25°	1780.3	1776.6	1780.3	1810.3	1888.8	2023.5	2165.6	2203.0	2292.8	2378.8	2397.5
27.5°	1956.1	1948.7	1900.0	1881.3	1941.2	2109.5	2307.7	2345.1	2449.8	2535.9	2535.9
30°	2360.1	2345.1	2225.4	2072.1	2023.5	2188.0	2442.4	2494.7	2629.4	2704.2	2681.7
32.5°	2872.5	2838.8	2685.5	2423.7	2229.2	2292.8	2584.5	2644.3	2816.4	2880.0	2831.3
35°	3433.5	3429.8	3239.0	2902.4	2625.6	2509.7	2767.8	2838.8	3055.8	3111.9	3033.3
37.5°	4028.2	4043.2	3916.0	3452.2	3126.8	2865.0	3010.9	3093.2	3358.7	3426.0	3351.2
40°	4690.2	4686.5	4637.9	4088.1	3729.0	3369.9	3362.5	3437.3	3758.9	3863.6	3758.9
42.5°	5528.0	5520.6	5344.8	4851.1	4458.3	4028.2	3874.9	3901.0	4260.1	4432.2	4278.8
45°	6380.8	6328.5	6126.5	5700.1	5352.3	4843.6	4551.8	4551.8	4858.5	5094.2	4854.8
47.5°	6855.8	6803.5	6721.2	6485.5	6380.8	5812.3	5382.2	5329.8	5569.2	5808.6	5471.9
50°	7480.4	7480.4	7274.7	7185.0	7364.5	6964.3	6298.5	6246.2	6362.1	6552.9	6111.5
52.5°	7974.1	7884.4	7738.5	7817.1	8329.5	8146.2	7214.9	7113.9	7203.7	7252.3	6668.8
55°	8179.9	8093.8	8082.6	8370.6	9163.5	8909.2	8153.7	8063.9	8056.4	7817.1	7155.0
57.5°	8221.0	8146.2	8288.3	8793.3	9975.2	9533.8	9088.7	9021.4	8812.0	8213.5	7652.5
60°	7873.2	7910.6	8254.7	9025.1	10453.9	10076.2	9877.9	9806.9	9324.4	8550.1	8206.0
62.5°	7158.8	7248.5	7891.9	9047.6	10278.1	10296.8	10315.5	10266.9	9720.8	8856.8	8763.3
65°	6313.5	6339.7	7113.9	8737.2	9971.4	10229.5	10637.2	10633.4	10023.8	9200.9	9391.7
67.5°	5202.6	5247.5	5917.0	7689.9	9358.0	10199.6	11059.8	11048.6	10367.9	9593.7	9765.7
70°	3871.1	3927.2	4469.6	5980.6	7989.1	9825.6	11613.4	11620.9	10730.7	9892.9	9507.6
71°	3018.4	3119.3	3687.9	5079.2	7289.7	9447.8	11665.7	11733.1	10771.8	9851.7	8976.5
72.5°	1481.1	1600.8	2315.2	3575.6	5999.3	8602.5	11321.6	11452.6	10513.8	9339.3	7674.9
75°	385.2	407.7	691.9	1462.4	3216.6	5700.1	9129.9	9462.8	8595.0	7110.2	4690.2
77.5°	243.1	250.6	325.4	568.5	1204.4	2165.6	5363.5	5528.0	4910.9	3601.8	1653.2
80°	172.1	175.8	205.7	366.5	703.2	632.1	1930.0	2001.0	1776.6	953.8	295.5
82.5°	104.7	104.7	149.6	235.6	433.9	344.1	508.7	542.3	478.7	265.6	97.2
85°	59.8	63.6	93.5	160.8	205.7	168.3	190.8	202.0	205.7	175.8	41.1
87.5°	48.6	52.4	82.3	134.6	112.2	82.3	82.3	86.0	89.8	104.7	18.7
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°	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0	1814.0
2.5°	1806.5	1806.5	1810.3	1806.5	1806.5	1806.5	1810.3	1810.3	1810.3	1817.7	1821.5
5°	1814.0	1814.0	1814.0	1810.3	1806.5	1806.5	1814.0	1817.7	1817.7	1829.0	1829.0
7.5°	1832.7	1832.7	1825.2	1817.7	1810.3	1799.0	1802.8	1806.5	1802.8	1806.5	1806.5
10°	1873.8	1873.8	1862.6	1847.7	1825.2	1791.6	1746.7	1690.6	1638.2	1619.5	1612.0
12.5°	1941.2	1937.4	1915.0	1888.8	1840.2	1724.2	1555.9	1357.7	1193.1	1148.2	1133.3
15°	2016.0	2008.5	1982.3	1937.4	1806.5	1499.8	1148.2	893.9	736.8	699.4	691.9
17.5°	2094.5	2083.3	2045.9	1956.1	1653.2	1114.6	740.6	561.0	475.0	467.5	471.3
20°	2176.8	2161.8	2109.5	1918.7	1335.3	744.3	478.7	433.9	426.4	426.4	430.1
22.5°	2270.3	2251.6	2180.5	1784.1	972.5	493.7	411.4	407.7	403.9	400.2	400.2
25°	2378.8	2356.3	2247.9	1541.0	669.5	403.9	392.7	381.5	374.0	366.5	362.8
27.5°	2509.7	2479.8	2300.2	1241.8	460.0	377.8	370.3	351.6	336.6	321.7	321.7
30°	2640.6	2603.2	2285.3	935.1	374.0	351.6	336.6	314.2	291.7	276.8	273.0
32.5°	2779.0	2741.6	2188.0	628.4	340.4	321.7	303.0	269.3	243.1	224.4	220.7
35°	2984.7	2954.8	1997.3	415.2	306.7	284.3	258.1	224.4	190.8	172.1	168.3
37.5°	3291.4	3254.0	1761.6	317.9	269.3	235.6	213.2	175.8	142.1	123.4	119.7
40°	3702.8	3590.6	1481.1	280.5	235.6	194.5	164.6	127.2	101.0	89.8	89.8
42.5°	4181.6	3916.0	1178.2	254.3	209.5	160.8	119.7	86.0	71.1	67.3	67.3
45°	4690.2	4219.0	875.2	235.6	183.3	127.2	86.0	59.8	52.4	48.6	48.6
47.5°	5213.9	4465.8	609.7	213.2	153.3	97.2	59.8	44.9	37.4	33.7	33.7
50°	5703.8	4626.7	430.1	190.8	130.9	71.1	44.9	33.7	26.2	26.2	26.2
52.5°	6044.2	4611.7	310.4	164.6	101.0	48.6	29.9	22.4	22.4	22.4	22.4
55°	6343.4	4555.6	243.1	142.1	78.5	33.7	22.4	18.7	18.7	15.0	15.0
57.5°	6597.7	4465.8	205.7	115.9	56.1	26.2	15.0	15.0	11.2	11.2	11.2
60°	6814.7	4353.6	172.1	97.2	37.4	18.7	11.2	7.5	7.5	3.7	7.5
62.5°	7110.2	4282.6	149.6	74.8	26.2	11.2	7.5	3.7	3.7	0.0	0.0
65°	7327.1	4147.9	127.2	52.4	15.0	7.5	3.7	3.7	0.0	0.0	0.0
67.5°	7334.6	3904.8	93.5	29.9	11.2	7.5	3.7	0.0	0.0	0.0	0.0
70°	6743.6	3328.8	59.8	15.0	7.5	3.7	3.7	0.0	0.0	0.0	0.0
71°	6201.3	2947.3	48.6	11.2	7.5	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	5109.1	2165.6	37.4	11.2	3.7	3.7	0.0	0.0	0.0	0.0	0.0
75°	2816.4	785.4	18.7	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	901.4	239.4	11.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	153.3	37.4	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.4	15.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.7	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)