

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: P237468

Luminaire Tested: **ARCH-L-AF72-150-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237468  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T4W-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 665mA 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: 14446 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

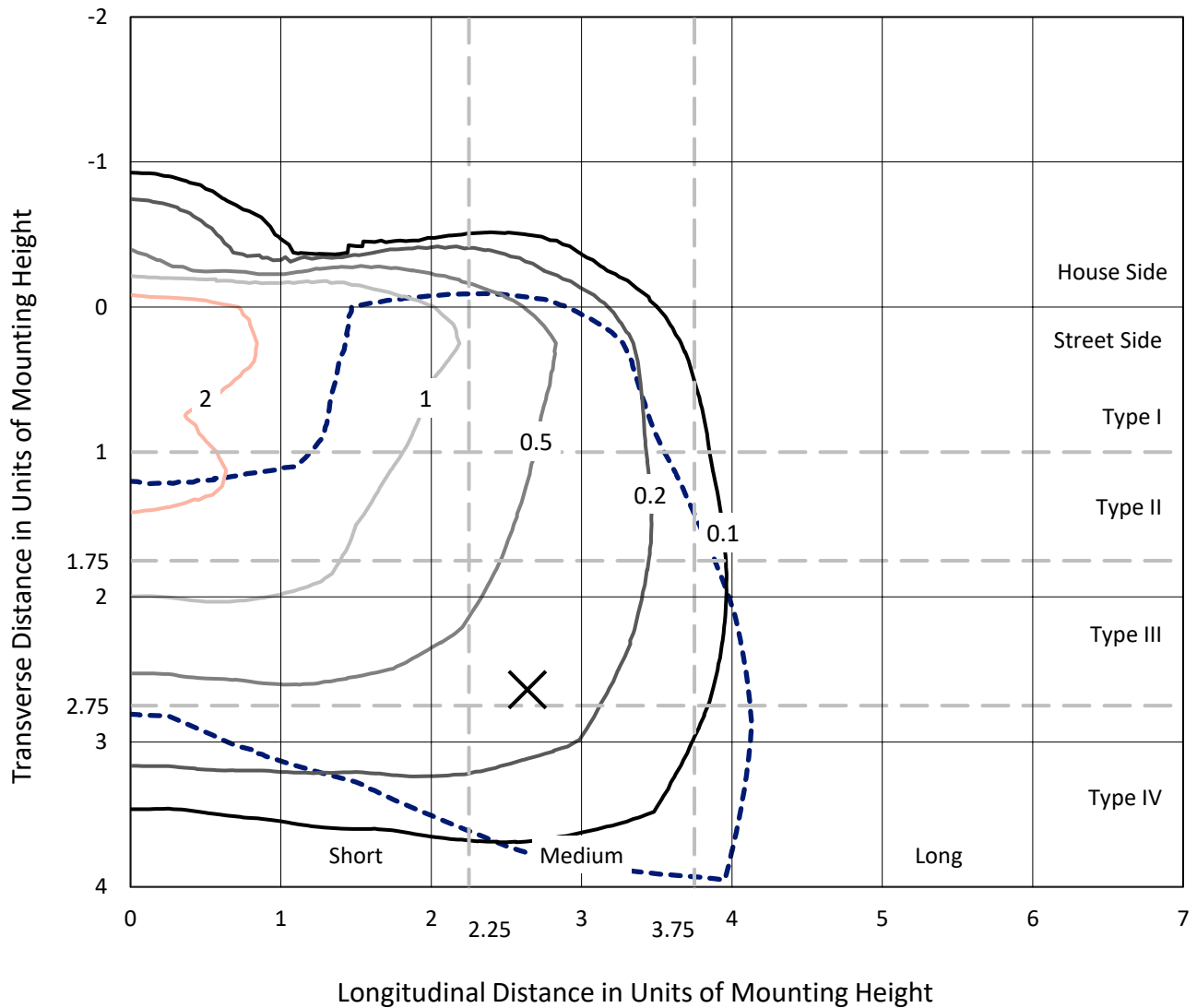
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P237468  
 CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

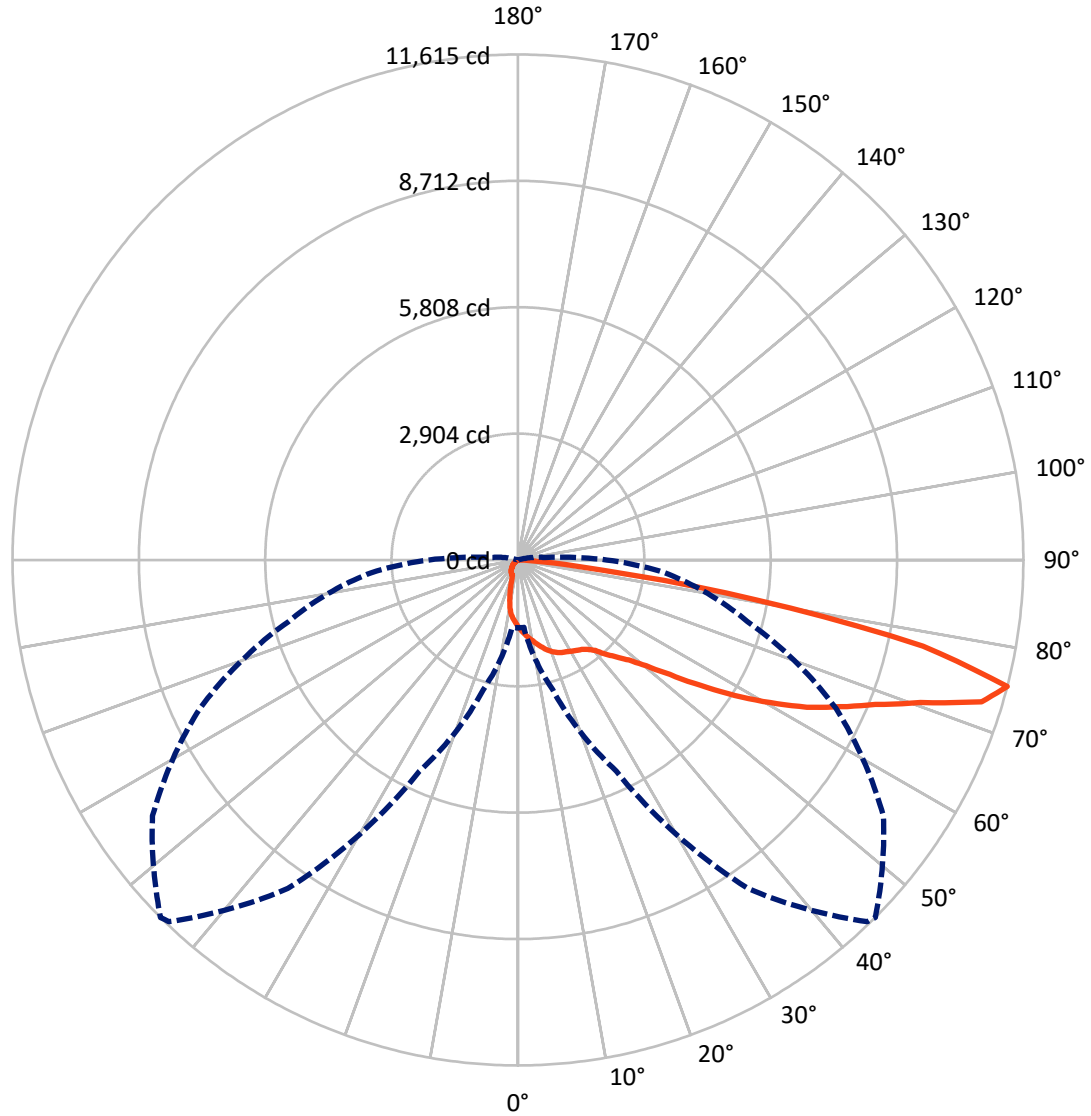
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P237468  
CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P237468

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

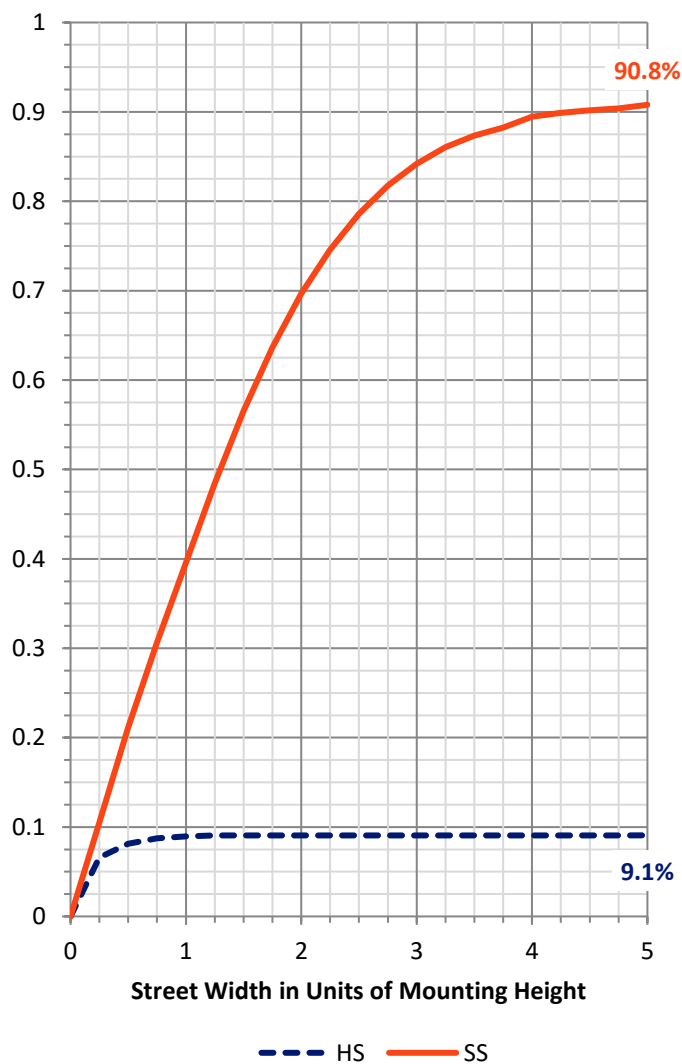
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1321.4	0.0	1321.4
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	13124.6	0.0	13124.6
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	14446.0	0.0	14446.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	1.0
10°-20°	413.1	2.9
20°-30°	684.2	4.7
30°-40°	990.2	6.9
40°-50°	1621.4	11.2
50°-60°	2888.9	20.0
60°-70°	4247.1	29.4
70°-80°	3204.0	22.2
80°-90°	251.4	1.7
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°	14446.0	100.0
0°-180°	14446.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237468

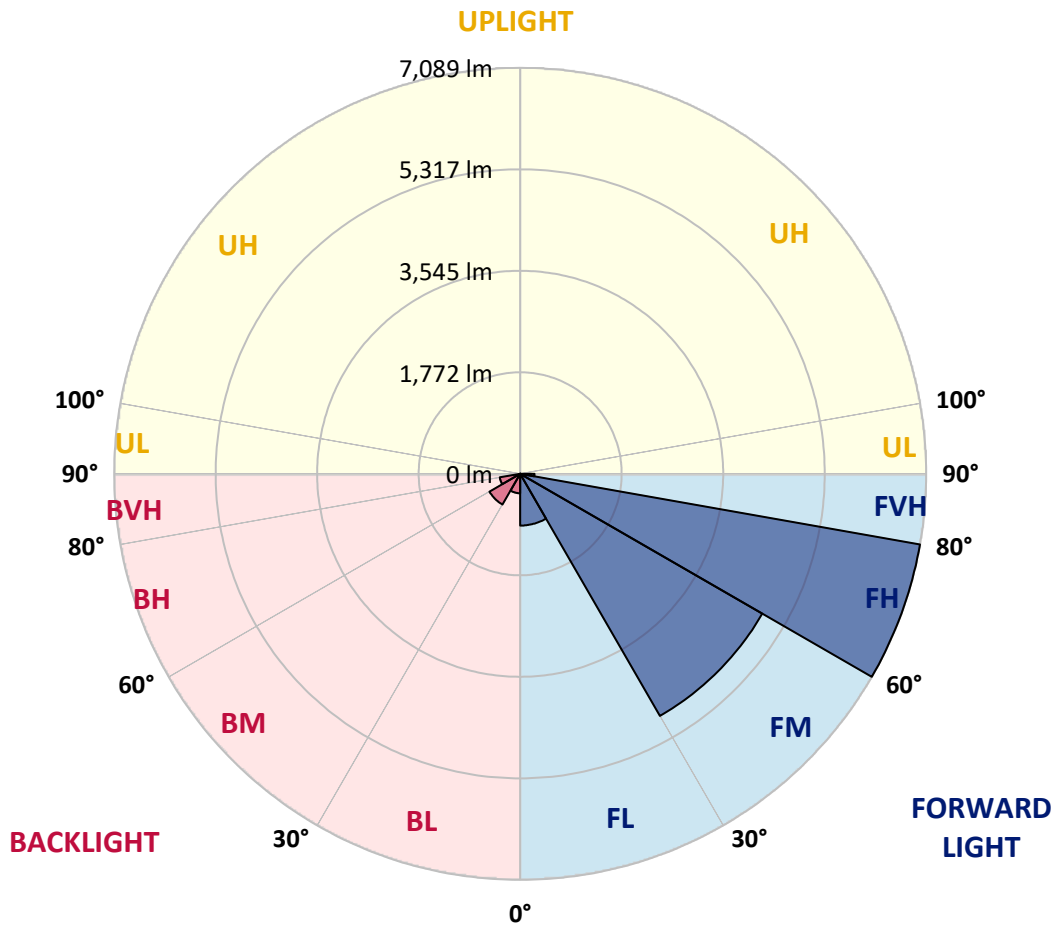
CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	903.6	6.3			
FM (30°-60°)	4881.2	33.8			
FH (60°-80°)	7089.2	49.1			G3/7500
FVH (80°-90°)	250.7	1.7			G3/500
BL (0°-30°)	339.5	2.4	B1/500		
BM (30°-60°)	619.2	4.3	B1/1000		
BH (60°-80°)	361.9	2.5	B1/500		G1/500
BVH (80°-90°)	0.7	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





REPORT NUMBER: P237468

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1
2.5°	1678.4	1678.4	1675.0	1671.6	1654.5	1637.4	1634.0	1623.7	1592.9	1572.4	1551.9
5°	1818.5	1822.0	1815.1	1798.0	1760.4	1722.8	1719.4	1692.1	1634.0	1592.9	1548.5
7.5°	1951.9	1958.7	1941.6	1910.8	1866.4	1811.7	1808.3	1757.0	1681.8	1623.7	1558.8
10°	2064.7	2064.7	2040.7	2003.1	1955.3	1897.2	1890.3	1832.2	1746.8	1675.0	1589.5
12.5°	2187.7	2184.3	2150.1	2098.8	2044.2	1989.5	1986.0	1914.3	1832.2	1739.9	1634.0
15°	2300.5	2293.7	2249.3	2201.4	2143.3	2085.2	2081.8	2010.0	1924.5	1815.1	1698.9
17.5°	2362.1	2358.6	2317.6	2269.8	2221.9	2177.5	2174.0	2098.8	2006.6	1893.7	1763.9
20°	2372.3	2375.7	2341.5	2300.5	2273.2	2249.3	2249.3	2180.9	2081.8	1962.1	1832.2
22.5°	2375.7	2386.0	2362.1	2307.4	2300.5	2303.9	2310.8	2256.1	2153.5	2040.7	1904.0
25°	2399.7	2413.3	2396.2	2331.3	2324.5	2348.4	2355.2	2331.3	2239.0	2126.2	1986.0
27.5°	2447.5	2461.2	2447.5	2365.5	2355.2	2379.1	2386.0	2399.7	2331.3	2208.2	2071.5
30°	2543.2	2546.6	2515.9	2413.3	2392.8	2423.6	2433.8	2471.4	2416.7	2286.9	2153.5
32.5°	2710.7	2676.5	2584.2	2447.5	2430.4	2464.6	2474.9	2515.9	2495.4	2362.1	2239.0
35°	3052.6	2874.8	2662.9	2495.4	2478.3	2512.5	2526.1	2584.2	2594.5	2468.0	2345.0
37.5°	3049.1	2888.5	2847.5	2587.7	2563.7	2587.7	2604.8	2676.5	2717.6	2608.2	2498.8
40°	3264.5	3196.1	3196.1	2762.0	2683.4	2717.6	2734.7	2806.4	2878.2	2792.8	2680.0
42.5°	3941.3	3896.9	3849.0	3097.0	2850.9	2946.6	2956.8	3001.3	3086.7	3059.4	2926.1
45°	4696.8	4655.7	4471.2	3664.4	3138.0	3155.1	3179.0	3250.8	3373.9	3425.2	3267.9
47.5°	5288.1	5247.1	5089.9	4348.1	3585.8	3435.4	3435.4	3575.6	3767.0	3896.9	3746.5
50°	5763.3	5715.4	5619.7	5076.2	4320.7	3838.8	3818.3	3982.3	4266.1	4467.7	4365.2
52.5°	6224.8	6084.6	6026.5	5828.2	5151.4	4423.3	4368.6	4484.8	4877.9	5127.5	5042.0
55°	6532.4	6511.9	6450.4	6518.7	6023.1	5134.3	5086.5	5110.4	5602.6	5770.1	5664.1
57.5°	6819.5	6816.1	6952.9	7270.8	6973.4	5947.9	5872.7	5835.1	6303.4	6262.4	6354.6
60°	7175.0	7113.5	7431.4	7886.1	7845.0	6740.9	6655.5	6580.3	6840.0	6723.8	7181.9
62.5°	7192.1	7175.0	7821.1	8474.0	8709.9	7547.6	7448.5	7178.5	7308.4	7175.0	7971.5
65°	6539.2	6624.7	7985.2	8785.1	9434.5	8255.2	8135.6	7715.1	7725.4	7636.5	8901.3
67.5°	6392.2	6436.7	7534.0	9120.1	9957.5	8969.7	8856.9	8333.8	8210.8	8217.6	9451.6
70°	6026.5	6094.9	6973.4	9096.1	10371.2	9923.4	9810.6	9243.1	8945.7	8614.2	9027.8
72.5°	4604.5	4720.7	5876.1	7974.9	10258.4	11171.1	11140.3	10395.1	9239.7	7910.0	6829.8
75°	1558.8	1555.3	3086.7	5356.5	9215.8	11553.9	11615.4	10251.5	8060.4	5455.6	3391.0
77.5°	335.0	338.4	635.8	2170.6	6122.2	9277.3	9513.2	7732.2	5199.3	2430.4	776.0
80°	164.1	167.5	263.2	574.3	2447.5	5202.7	5571.9	3975.5	1921.1	485.4	129.9
82.5°	82.0	85.5	136.7	304.2	905.9	1849.3	1975.8	1463.0	550.3	273.5	64.9
85°	30.8	30.8	68.4	181.2	413.6	434.1	533.3	423.9	331.6	222.2	17.1
87.5°	6.8	6.8	37.6	88.9	184.6	136.7	136.7	129.9	201.7	150.4	6.8
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: P237468

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T4W-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1	1545.1
2.5°	1541.7	1528.0	1504.1	1480.1	1463.0	1442.5	1432.3	1422.0	1418.6	1415.2	1422.0
5°	1524.6	1504.1	1459.6	1422.0	1387.8	1360.5	1340.0	1319.5	1309.2	1302.4	1305.8
7.5°	1524.6	1493.8	1428.9	1370.7	1316.1	1257.9	1199.8	1155.4	1121.2	1100.7	1104.1
10°	1541.7	1500.6	1415.2	1336.6	1234.0	1111.0	984.5	888.8	823.8	786.2	786.2
12.5°	1579.3	1524.6	1418.6	1295.5	1121.2	905.9	714.4	598.2	550.3	523.0	526.4
15°	1630.5	1565.6	1435.7	1240.8	964.0	673.4	499.1	423.9	423.9	430.7	434.1
17.5°	1688.6	1616.9	1449.4	1158.8	762.3	482.0	393.1	386.3	396.5	413.6	413.6
20°	1746.8	1668.1	1456.2	1028.9	570.9	382.9	372.6	372.6	379.4	396.5	399.9
22.5°	1818.5	1733.1	1449.4	868.3	427.3	362.3	358.9	358.9	358.9	379.4	379.4
25°	1893.7	1808.3	1422.0	697.3	362.3	348.7	345.2	341.8	341.8	358.9	362.3
27.5°	1979.2	1886.9	1357.1	533.3	341.8	335.0	331.6	324.7	324.7	338.4	338.4
30°	2064.7	1975.8	1257.9	403.4	324.7	321.3	314.5	307.6	300.8	314.5	314.5
32.5°	2157.0	2068.1	1128.0	321.3	300.8	300.8	297.4	287.1	280.3	287.1	290.6
35°	2280.0	2174.0	981.1	280.3	270.0	270.0	270.0	266.6	253.0	259.8	259.8
37.5°	2444.1	2321.0	810.1	259.8	246.1	239.3	239.3	239.3	229.0	232.4	232.4
40°	2652.6	2492.0	646.1	242.7	229.0	211.9	205.1	208.5	201.7	201.7	198.3
42.5°	2936.3	2676.5	485.4	229.0	215.4	191.4	177.8	174.3	167.5	164.1	164.1
45°	3343.1	2902.1	348.7	215.4	205.1	167.5	153.8	143.6	126.5	116.2	116.2
47.5°	3869.5	3158.5	259.8	201.7	194.8	147.0	129.9	109.4	85.5	78.6	78.6
50°	4512.2	3445.7	218.8	181.2	177.8	129.9	102.5	71.8	47.9	41.0	44.4
52.5°	5137.7	3715.7	194.8	160.7	157.2	112.8	75.2	37.6	20.5	20.5	20.5
55°	5664.1	3907.1	177.8	143.6	136.7	88.9	41.0	17.1	10.3	10.3	10.3
57.5°	6139.3	4016.5	160.7	126.5	109.4	61.5	17.1	6.8	6.8	3.4	3.4
60°	6573.4	4081.5	140.2	109.4	85.5	34.2	6.8	3.4	3.4	0.0	0.0
62.5°	7000.7	4129.3	119.6	88.9	64.9	13.7	3.4	3.4	0.0	0.0	0.0
65°	7325.4	4112.2	95.7	71.8	41.0	6.8	3.4	0.0	0.0	0.0	0.0
67.5°	7315.2	3879.8	71.8	54.7	20.5	3.4	0.0	0.0	0.0	0.0	0.0
70°	6542.7	3267.9	47.9	34.2	6.8	3.4	0.0	0.0	0.0	0.0	0.0
72.5°	4642.1	2095.4	30.8	20.5	3.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	2044.2	635.8	17.1	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	399.9	147.0	10.3	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	95.7	17.1	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.3	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.8	3.4	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)