

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: P399693

Luminaire Tested: **ARCH-L-PA3-180-722-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399693  
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-PA3-180-722-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 775mA 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: 14172 lumens  
Efficiency: N/A  
Efficacy: 78.3 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

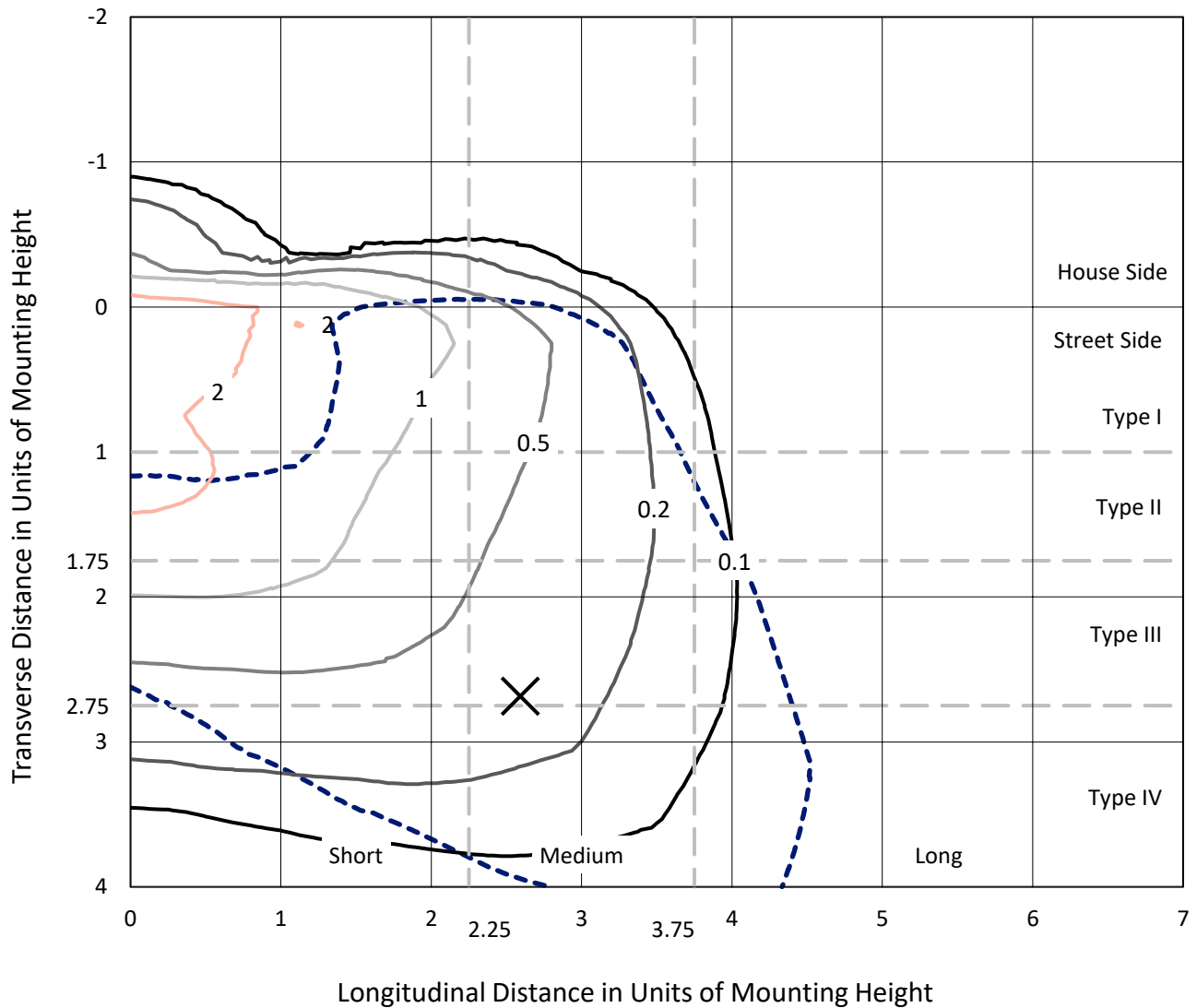
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399693  
 CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

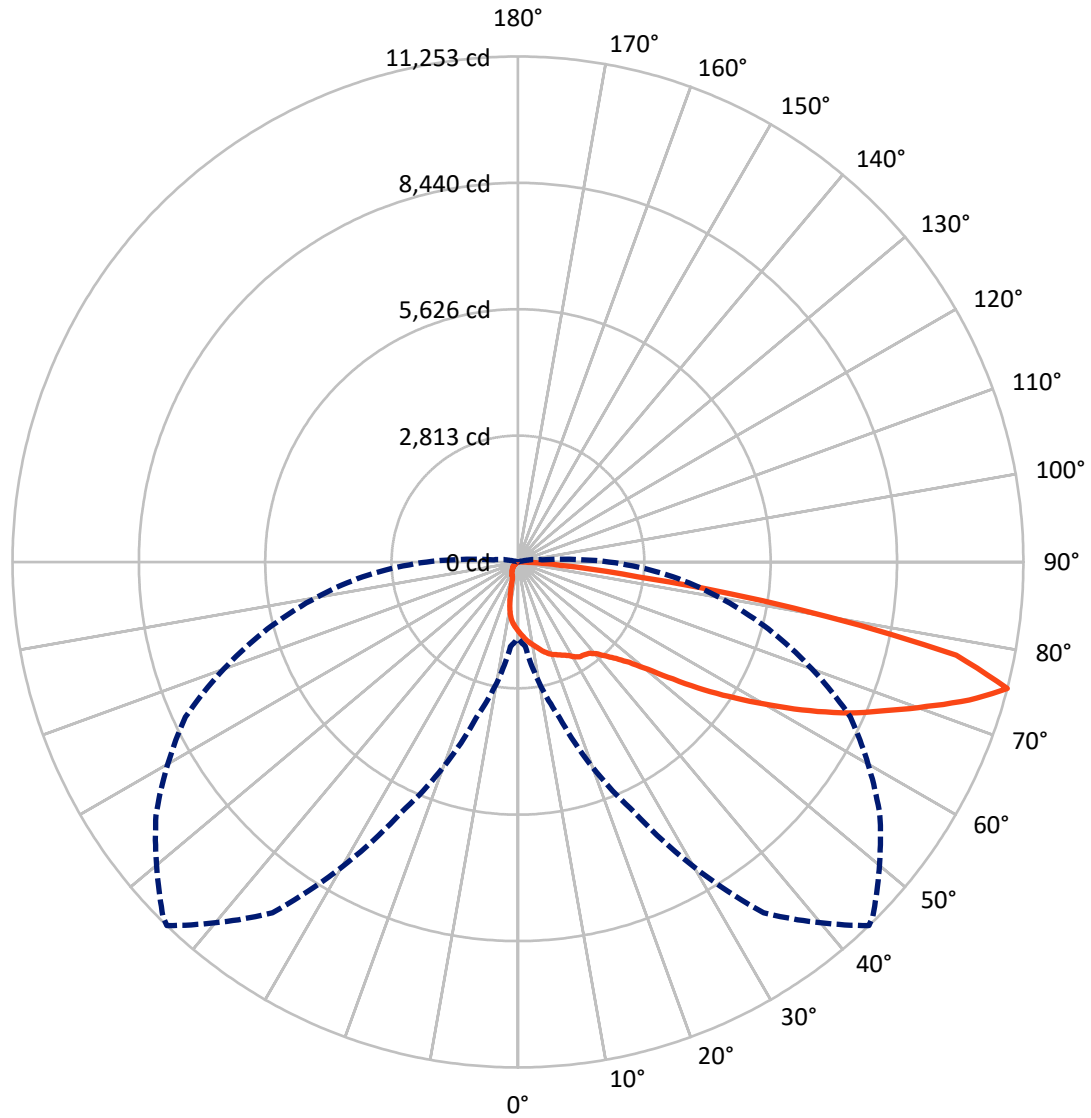
× Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P399693  
CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

### Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

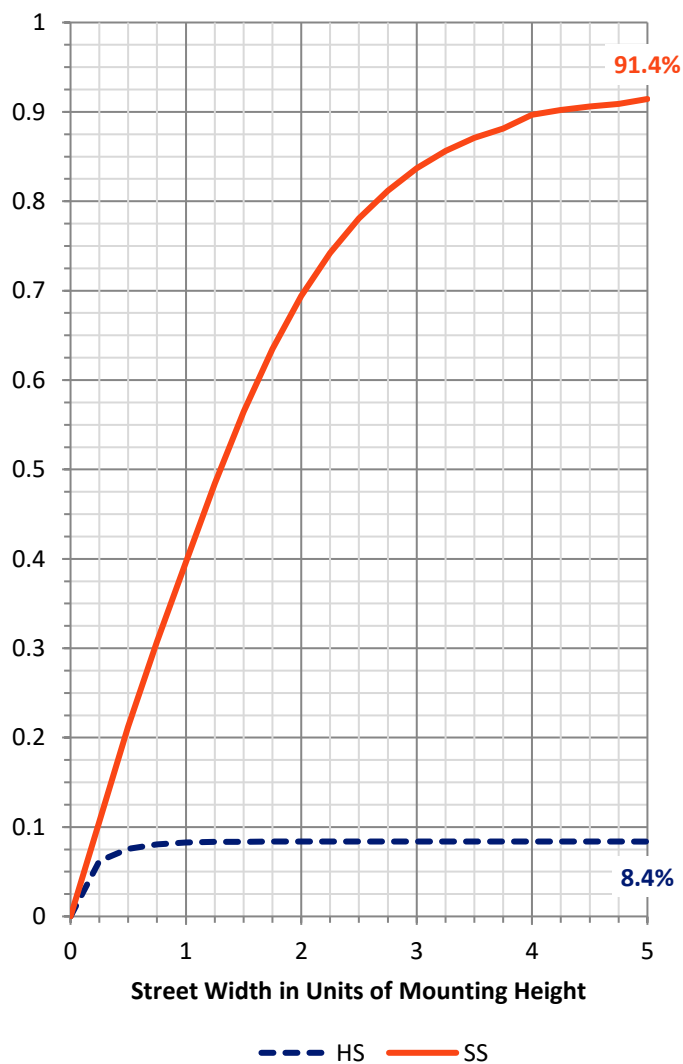
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1195.2	0.0	1195.2
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	12976.8	0.0	12976.8
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	14172.0	0.0	14172.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	1.0
10°-20°	407.6	2.9
20°-30°	672.7	4.7
30°-40°	976.4	6.9
40°-50°	1587.2	11.2
50°-60°	2798.0	19.7
60°-70°	4021.3	28.4
70°-80°	3220.2	22.7
80°-90°	343.1	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°	14172.0	100.0
0°-180°	14172.0	100.0

**Coefficient of Utilization**



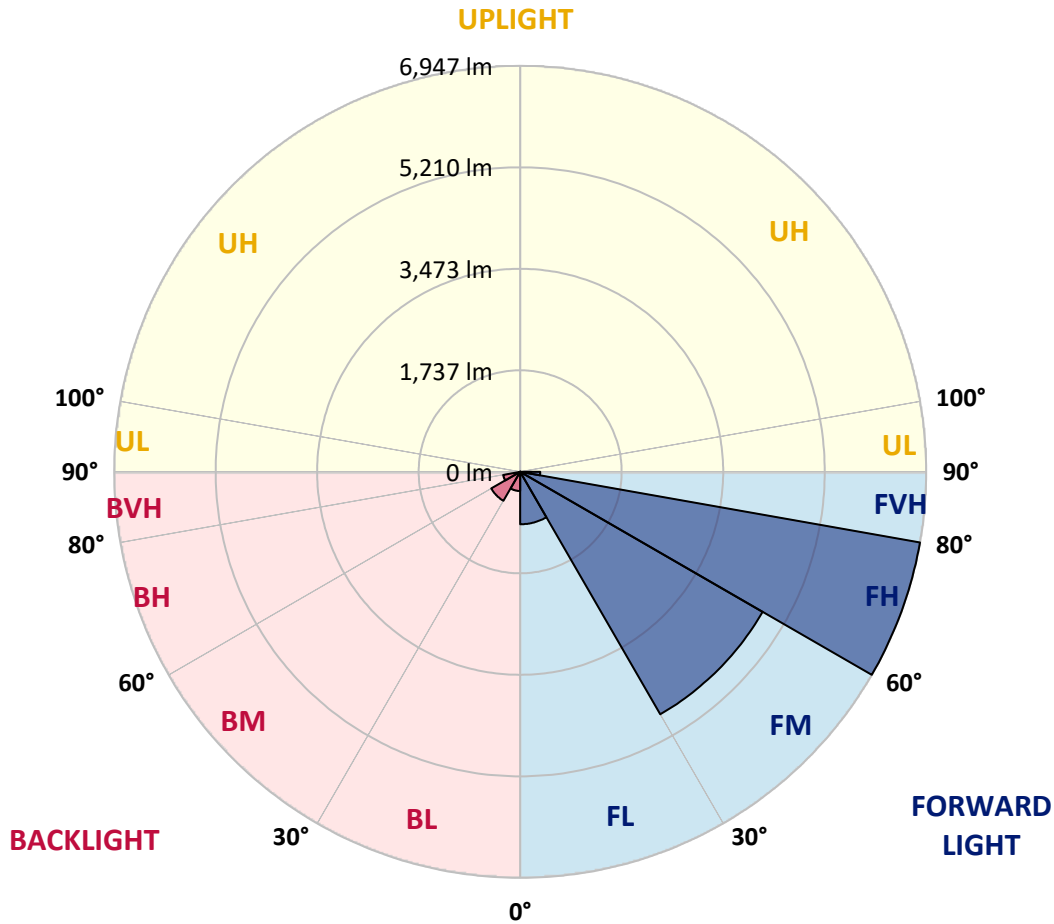
REPORT NUMBER: P399693  
 CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	897.5	6.3			
FM (30°-60°)	4790.3	33.8			
FH (60°-80°)	6946.9	49.0			G3/7500
FVH (80°-90°)	342.2	2.4			G3/500
BL (0°-30°)	328.4	2.3	B1/500		
BM (30°-60°)	571.3	4.0	B1/1000		
BH (60°-80°)	294.6	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





REPORT NUMBER: P399693

CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6
2.5°	1681.1	1678.5	1670.7	1657.6	1644.5	1631.5	1628.8	1607.9	1584.4	1566.1	1550.4
5°	1830.2	1827.6	1814.5	1785.7	1757.0	1723.0	1720.4	1670.7	1626.2	1576.6	1534.7
7.5°	1984.4	1979.2	1955.7	1911.2	1861.5	1809.2	1804.0	1730.8	1665.5	1600.1	1540.0
10°	2104.7	2099.5	2065.5	2013.2	1945.2	1879.8	1872.0	1796.2	1730.8	1647.1	1566.1
12.5°	2222.3	2211.9	2167.4	2109.9	2026.3	1963.5	1955.7	1877.2	1798.8	1712.5	1613.2
15°	2332.2	2319.1	2277.2	2204.0	2115.1	2055.0	2049.8	1966.1	1885.1	1785.7	1675.9
17.5°	2408.0	2402.7	2353.1	2272.0	2185.7	2136.1	2130.8	2044.6	1963.5	1858.9	1741.3
20°	2447.2	2447.2	2400.1	2311.2	2232.8	2198.8	2191.0	2109.9	2031.5	1932.1	1809.2
22.5°	2455.0	2462.9	2426.3	2329.5	2272.0	2243.3	2238.0	2167.4	2091.6	2000.1	1885.1
25°	2470.7	2470.7	2452.4	2347.8	2306.0	2298.2	2295.6	2232.8	2164.8	2073.3	1960.9
27.5°	2489.0	2489.0	2476.0	2374.0	2358.3	2355.7	2353.1	2324.3	2269.4	2162.2	2049.8
30°	2536.1	2538.7	2528.2	2426.3	2415.8	2444.6	2449.8	2434.1	2366.1	2232.8	2141.3
32.5°	2653.7	2630.2	2601.5	2462.9	2481.2	2517.8	2520.4	2489.0	2415.8	2308.6	2251.1
35°	2949.2	2810.6	2679.9	2494.3	2502.1	2538.7	2543.9	2541.3	2496.9	2405.4	2376.6
37.5°	3223.7	3027.6	2842.0	2567.5	2541.3	2580.5	2591.0	2635.4	2601.5	2538.7	2546.5
40°	3383.2	3307.4	3176.6	2768.8	2619.8	2679.9	2690.3	2758.3	2745.2	2719.1	2768.8
42.5°	3874.7	3880.0	3738.8	3069.4	2763.6	2860.3	2873.4	2928.3	2946.6	2959.6	3079.9
45°	4444.7	4463.0	4429.0	3610.7	3035.5	3066.8	3085.1	3158.3	3226.3	3310.0	3529.6
47.5°	5129.7	5114.0	4988.5	4272.1	3508.7	3333.5	3346.6	3487.8	3605.4	3788.4	4102.2
50°	5736.3	5775.5	5537.6	4889.2	4175.4	3754.5	3741.4	3880.0	4091.7	4348.0	4742.7
52.5°	6348.1	6290.5	5969.0	5501.0	4965.0	4327.0	4287.8	4363.6	4661.7	4965.0	5370.2
55°	6510.2	6515.4	6405.6	6170.3	5623.8	5022.5	4957.1	4951.9	5323.2	5529.7	6029.1
57.5°	6829.1	6842.2	6868.4	6915.4	6656.6	5718.0	5650.0	5576.8	5937.6	6057.8	6690.6
60°	7153.3	7169.0	7328.5	7582.1	7409.6	6468.3	6395.1	6222.6	6423.9	6586.0	7386.0
62.5°	7111.5	7221.3	7684.1	8188.7	8167.8	7291.9	7200.4	6784.7	6912.8	7054.0	8024.0
65°	6421.3	6538.9	7579.5	8356.0	8928.6	8105.0	7956.0	7365.1	7373.0	7542.9	8638.4
67.5°	5804.2	5932.4	6925.9	8285.4	9430.6	8834.5	8680.2	7948.1	7825.3	8107.6	8967.8
70°	5448.7	5576.8	6405.6	8065.8	9571.8	9642.4	9509.0	8614.9	8363.9	8622.7	8599.2
72.5°	4264.3	4465.6	5741.5	7647.5	9723.4	10507.8	10403.2	9459.3	8821.4	8084.1	6546.8
75°	1699.4	1885.1	3584.5	6154.6	9532.6	11252.9	11171.9	9838.4	8165.2	5772.9	3351.8
77.5°	512.4	549.0	996.1	3043.3	6988.6	9977.0	9950.9	8272.4	5778.1	2679.9	915.1
80°	169.9	188.2	305.9	839.3	3189.7	6233.0	6350.7	5270.9	2625.0	614.4	185.6
82.5°	70.6	78.4	154.3	337.3	1129.5	2685.1	2645.9	2360.9	915.1	381.7	68.0
85°	18.3	23.5	70.6	193.5	413.1	925.5	972.6	792.2	517.7	316.4	20.9
87.5°	0.0	0.0	34.0	78.4	185.6	279.8	292.8	240.5	292.8	237.9	10.5
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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CATALOG NUMBER: ARCH-L-PA3-180-722-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6	1542.6
2.5°	1537.3	1524.3	1500.7	1485.0	1464.1	1458.9	1448.4	1435.4	1432.8	1419.7	1422.3
5°	1511.2	1490.3	1448.4	1419.7	1385.7	1375.2	1356.9	1343.9	1333.4	1315.1	1317.7
7.5°	1506.0	1474.6	1417.1	1362.2	1307.3	1268.0	1213.1	1168.7	1132.1	1092.9	1100.7
10°	1524.3	1485.0	1404.0	1328.2	1228.8	1103.3	959.5	865.4	818.3	771.3	776.5
12.5°	1560.9	1513.8	1409.2	1294.2	1092.9	878.5	679.8	551.7	517.7	496.8	499.4
15°	1615.8	1558.3	1424.9	1228.8	909.9	635.3	452.3	397.4	410.5	418.3	418.3
17.5°	1673.3	1607.9	1438.0	1111.2	703.3	444.5	368.6	363.4	381.7	400.0	400.0
20°	1743.9	1660.2	1440.6	962.1	507.2	360.8	347.7	347.7	360.8	381.7	381.7
22.5°	1811.9	1717.7	1417.1	792.2	386.9	334.7	334.7	334.7	342.5	363.4	366.0
25°	1892.9	1788.3	1367.4	611.8	332.0	319.0	319.0	321.6	326.8	345.1	347.7
27.5°	1979.2	1861.5	1283.7	447.1	303.3	300.7	303.3	305.9	308.5	326.8	332.0
30°	2078.5	1942.6	1176.5	334.7	277.1	277.1	285.0	290.2	290.2	305.9	311.1
32.5°	2193.6	2049.8	1048.4	277.1	251.0	248.4	261.5	269.3	269.3	282.4	287.6
35°	2337.4	2159.6	894.2	245.8	230.1	224.8	230.1	243.2	248.4	258.8	261.5
37.5°	2528.2	2290.3	729.5	227.5	214.4	203.9	203.9	206.5	217.0	227.5	230.1
40°	2771.4	2434.1	567.4	214.4	198.7	188.2	180.4	177.8	175.2	183.0	188.2
42.5°	3077.3	2596.2	423.6	201.3	185.6	169.9	159.5	149.0	136.0	133.3	136.0
45°	3469.5	2794.9	313.7	190.9	177.8	154.3	136.0	117.7	94.1	86.3	88.9
47.5°	3932.2	3001.5	245.8	180.4	172.6	136.0	112.4	81.1	57.5	52.3	54.9
50°	4423.8	3200.2	209.2	167.3	162.1	117.7	81.1	49.7	34.0	34.0	36.6
52.5°	4842.1	3312.6	190.9	156.9	146.4	96.7	52.3	28.8	20.9	20.9	23.5
55°	5247.3	3372.7	177.8	146.4	125.5	68.0	28.8	18.3	13.1	13.1	13.1
57.5°	5665.7	3398.9	162.1	133.3	99.4	41.8	15.7	10.5	7.8	7.8	7.8
60°	6036.9	3349.2	138.6	109.8	65.4	20.9	7.8	7.8	5.2	2.6	2.6
62.5°	6348.1	3255.1	96.7	78.4	39.2	10.5	5.2	2.6	0.0	0.0	0.0
65°	6538.9	3103.4	62.7	52.3	23.5	7.8	2.6	0.0	0.0	0.0	0.0
67.5°	6484.0	2818.5	39.2	34.0	10.5	5.2	2.6	0.0	0.0	0.0	0.0
70°	5851.3	2311.2	28.8	20.9	7.8	2.6	0.0	0.0	0.0	0.0	0.0
72.5°	4217.2	1563.5	20.9	13.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	2028.9	556.9	13.1	10.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	496.8	122.9	7.8	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	109.8	23.5	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.6	10.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.8	2.6	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)