

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: P397968

Luminaire Tested: **ARCH-S-PA1-70-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6526 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B0 - U0 - G2

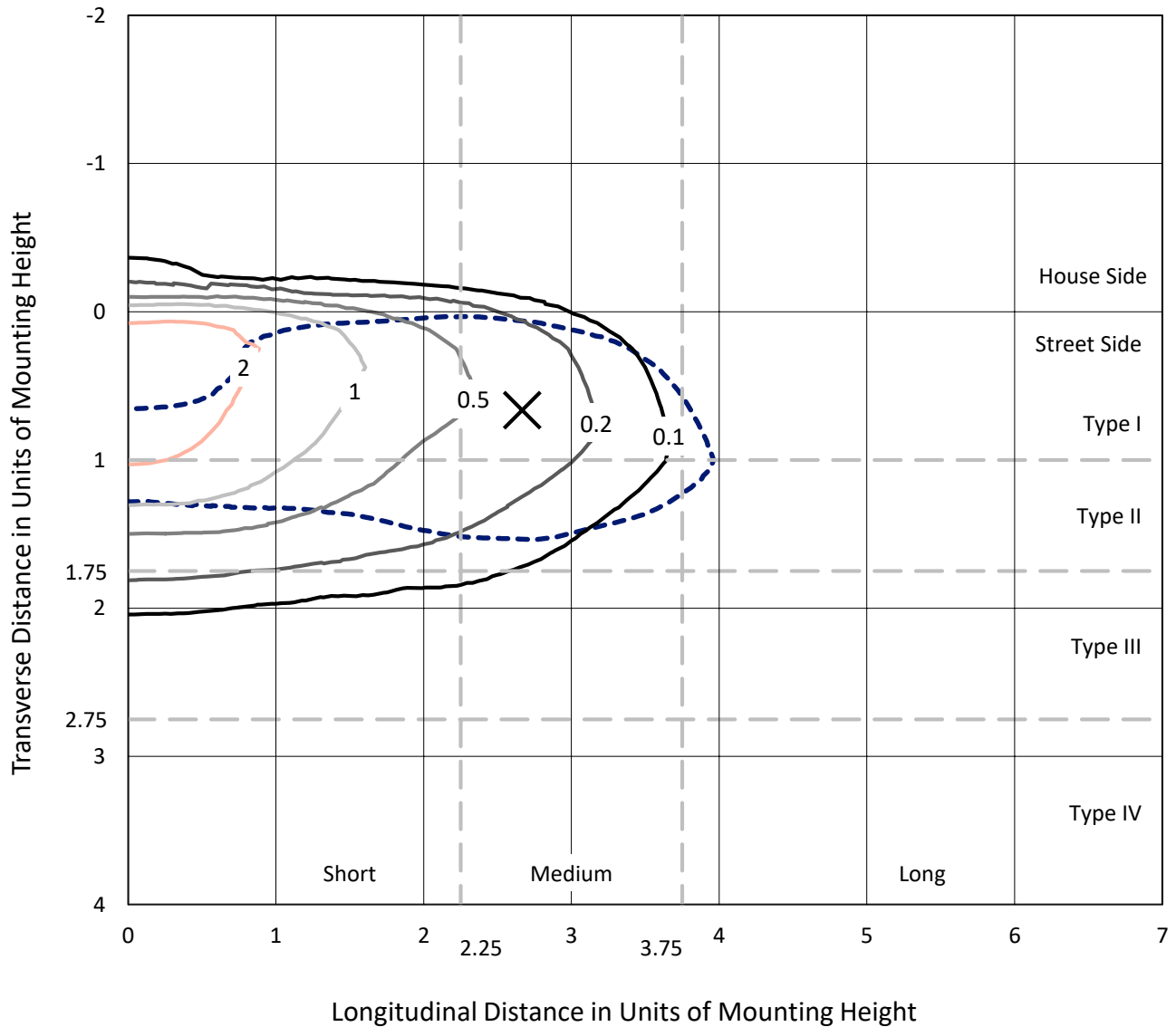
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

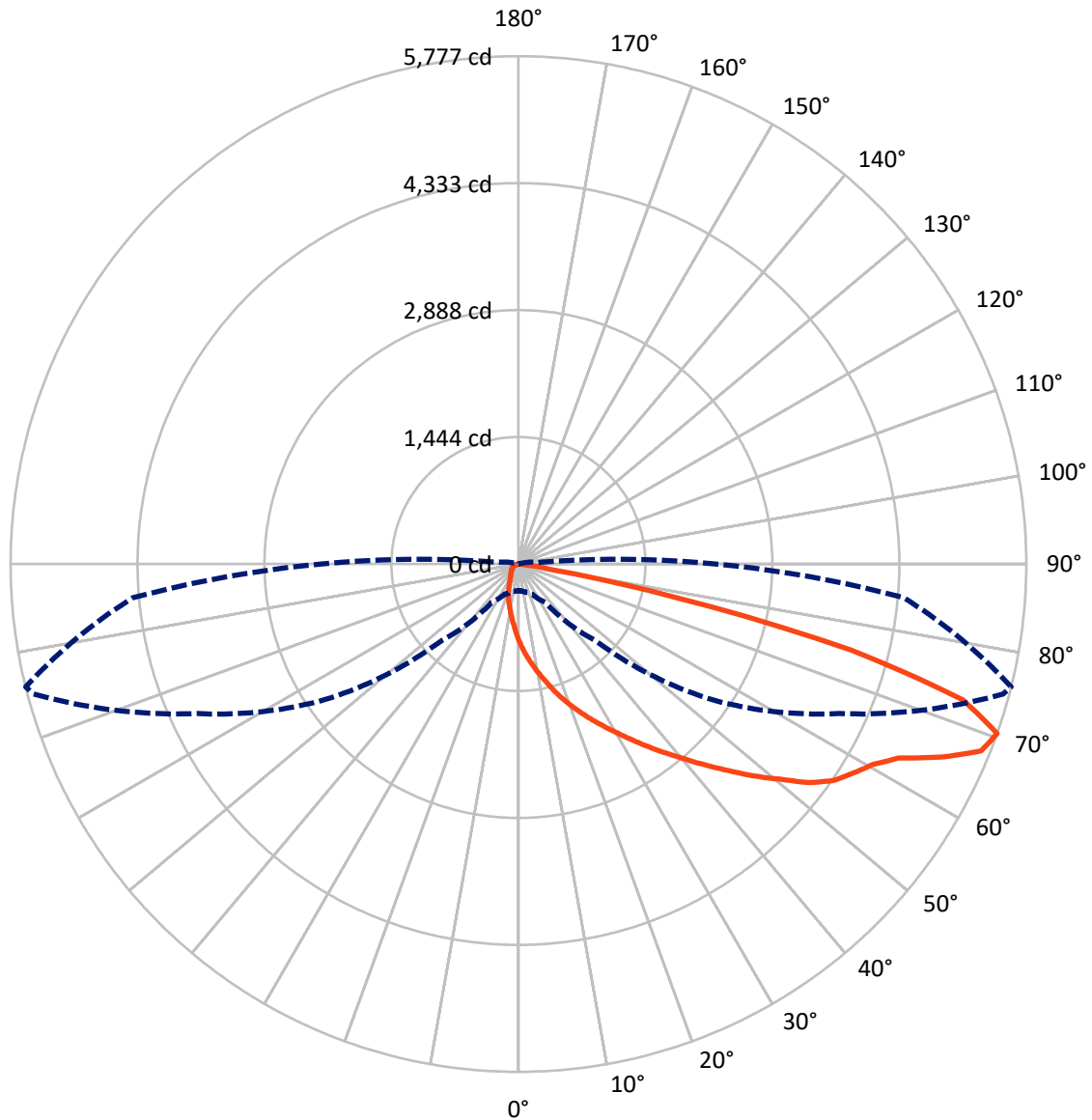
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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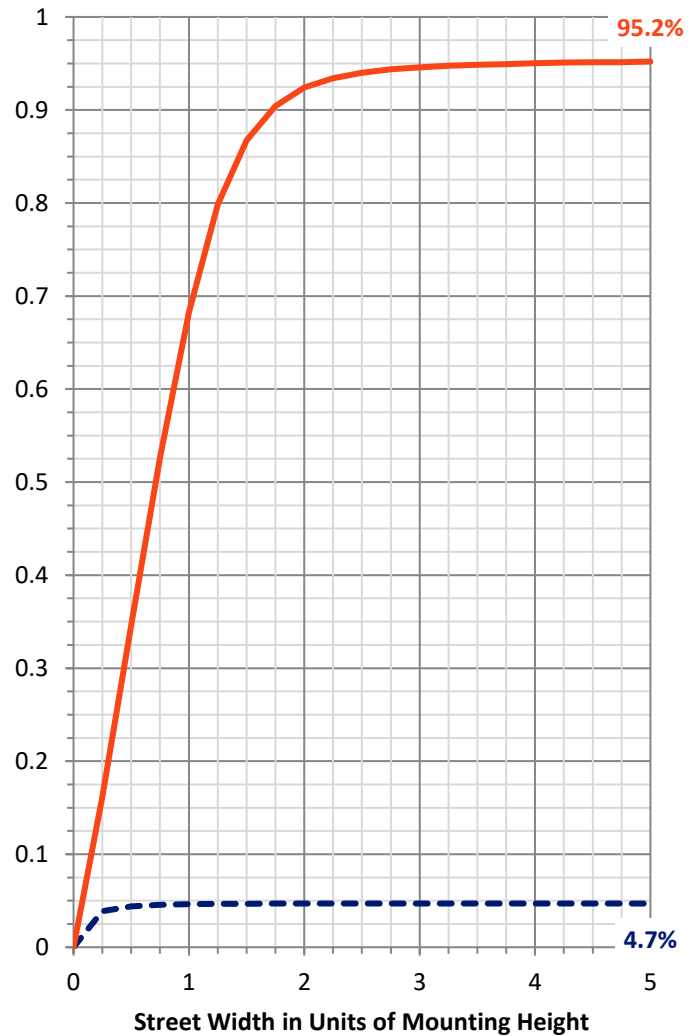
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	307.8	0.0	307.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	6218.2	0.0	6218.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	6526.0	0.0	6526.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.3	1.3
10°-20°	265.6	4.1
20°-30°	494.7	7.6
30°-40°	874.9	13.4
40°-50°	1338.0	20.5
50°-60°	1516.9	23.2
60°-70°	1300.4	19.9
70°-80°	629.8	9.7
80°-90°	23.4	0.4
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°	6526.0	100.0
0°-180°	6526.0	100.0

**Coefficient of Utilization**



--- HS    — SS

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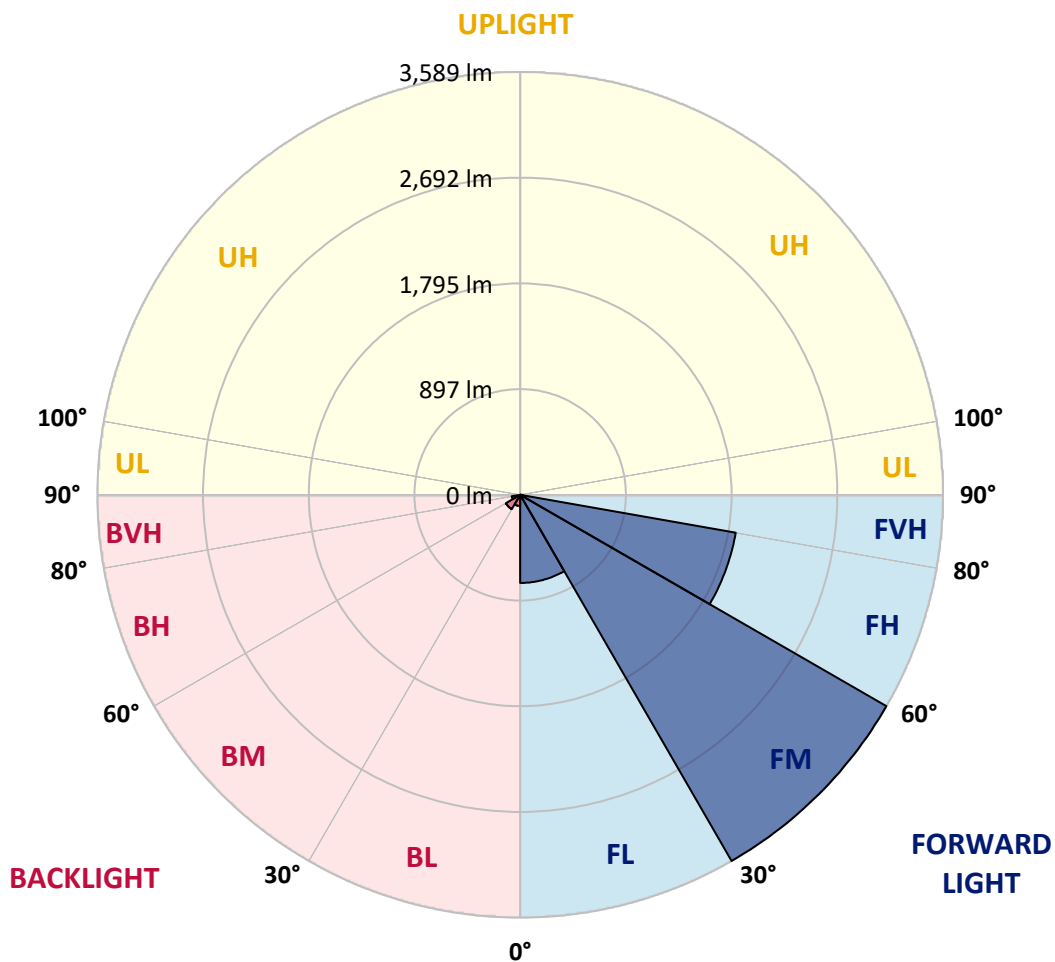
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	748.1	11.5			
FM	(30°-60°)	3589.4	55.0			
FH	(60°-80°)	1857.8	28.5			G2/5000
FVH	(80°-90°)	23.0	0.4			G1/100
BL	(0°-30°)	94.4	1.4	B0/110		
BM	(30°-60°)	140.5	2.2	B0/220		
BH	(60°-80°)	72.5	1.1	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5
2.5°	1194.1	1187.5	1181.0	1156.0	1133.2	1112.6	1073.5	1022.4	976.8	967.0	913.7
5°	1402.7	1395.1	1385.3	1360.3	1331.0	1296.2	1238.6	1160.4	1080.0	1062.6	963.7
7.5°	1543.9	1537.4	1523.3	1511.3	1482.0	1448.3	1384.2	1292.9	1182.1	1160.4	1021.3
10°	1640.6	1636.3	1634.1	1624.3	1602.6	1575.4	1511.3	1415.7	1285.3	1260.3	1082.2
12.5°	1675.4	1675.4	1686.2	1702.5	1705.8	1697.1	1638.4	1542.8	1394.0	1367.9	1153.9
15°	1628.7	1634.1	1658.0	1710.2	1764.5	1800.3	1763.4	1674.3	1513.5	1485.2	1238.6
17.5°	1615.6	1621.1	1637.4	1683.0	1755.8	1851.4	1869.9	1801.4	1626.5	1602.6	1325.5
20°	1652.6	1658.0	1672.1	1711.2	1766.7	1863.3	1940.5	1924.2	1746.0	1721.0	1413.5
22.5°	1740.6	1743.8	1743.8	1774.3	1823.1	1894.9	1985.0	2040.4	1868.8	1841.6	1500.5
25°	1929.6	1923.1	1897.0	1881.8	1913.3	1972.0	2041.5	2142.6	2005.7	1968.7	1593.9
27.5°	2177.3	2199.1	2136.1	2063.3	2039.4	2073.0	2120.9	2232.8	2138.2	2099.1	1678.6
30°	2513.1	2504.4	2421.8	2317.5	2214.3	2202.3	2218.6	2309.9	2270.8	2233.8	1773.2
32.5°	2789.0	2805.3	2718.4	2591.3	2437.0	2364.2	2346.8	2402.3	2412.0	2388.1	1885.1
35°	3072.6	3090.0	3005.3	2864.0	2680.4	2558.7	2508.7	2516.3	2587.0	2556.5	2002.4
37.5°	3326.9	3342.1	3258.4	3113.9	2930.3	2781.4	2709.7	2651.1	2756.5	2729.3	2126.3
40°	3520.3	3522.4	3465.9	3336.6	3162.8	3008.5	2927.0	2811.9	2935.7	2917.3	2255.6
42.5°	3657.2	3661.5	3620.2	3509.4	3348.6	3205.2	3138.9	3002.0	3142.2	3125.9	2405.5
45°	3721.3	3728.9	3724.5	3622.4	3488.8	3364.9	3343.2	3204.1	3368.2	3352.9	2578.3
47.5°	3660.4	3660.4	3715.8	3701.7	3578.9	3496.4	3521.4	3414.9	3613.7	3599.6	2754.3
50°	3407.3	3410.5	3523.5	3685.4	3613.7	3595.2	3673.5	3621.3	3836.4	3845.1	2965.1
52.5°	2742.3	2736.9	3118.3	3429.0	3589.8	3639.8	3813.6	3832.1	4103.7	4129.8	3174.8
55°	2049.1	2045.9	2410.9	2974.8	3422.5	3617.0	3891.8	4020.1	4331.9	4348.2	3331.2
57.5°	1622.1	1613.5	1814.5	2397.9	3044.4	3514.8	3895.1	4055.9	4459.0	4487.3	3483.3
60°	1247.3	1239.7	1389.6	1784.0	2508.7	3243.2	3801.7	4058.1	4581.8	4631.8	3687.6
62.5°	892.0	900.7	1015.9	1279.9	1929.6	2859.7	3680.0	4088.5	4800.2	4856.7	3977.7
65°	601.9	597.6	693.2	871.4	1372.3	2343.6	3493.1	4152.6	5193.5	5292.3	4325.4
67.5°	418.3	421.6	465.0	567.2	871.4	1799.2	3182.4	4188.5	5599.8	5677.0	4568.7
70°	302.0	306.4	330.3	381.4	532.4	1220.1	2690.2	4024.4	5709.6	5776.9	4399.2
72.5°	198.8	207.5	243.4	270.5	340.1	763.8	1981.8	3467.0	5236.9	5286.9	3690.8
75°	107.6	109.7	156.5	202.1	242.3	475.9	1182.1	2338.2	3917.9	3901.6	2433.8
77.5°	83.7	86.9	96.7	144.5	163.0	261.8	467.2	1056.1	1855.7	1805.8	830.1
80°	51.1	53.2	67.4	85.8	114.1	152.1	136.9	286.8	377.0	353.1	121.7
82.5°	30.4	32.6	40.2	71.7	90.2	71.7	47.8	69.5	70.6	69.5	30.4
85°	5.4	5.4	28.2	50.0	47.8	20.6	28.2	22.8	20.6	21.7	6.5
87.5°	0.0	0.0	10.9	15.2	21.7	7.6	10.9	5.4	5.4	5.4	3.3
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°	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5	873.5
2.5°	881.2	844.2	768.2	701.9	635.6	586.7	549.8	511.7	498.7	482.4	473.7
5°	896.4	823.6	672.5	551.9	449.8	371.6	321.6	291.2	271.6	257.5	254.2
7.5°	919.2	807.3	595.4	432.4	320.5	242.3	201.0	180.4	169.5	163.0	160.8
10°	946.3	793.1	519.3	336.8	226.0	170.6	147.8	139.1	134.7	132.6	131.5
12.5°	984.4	787.7	455.2	259.7	170.6	140.2	128.2	122.8	119.5	116.3	115.2
15°	1034.3	789.9	396.6	201.0	141.2	124.9	115.2	109.7	105.4	102.1	102.1
17.5°	1086.5	793.1	339.0	163.0	128.2	114.1	103.2	95.6	92.4	89.1	88.0
20°	1135.4	792.1	283.6	139.1	116.3	102.1	91.3	83.7	78.2	75.0	75.0
22.5°	1182.1	785.5	231.4	124.9	106.5	90.2	78.2	70.6	66.3	63.0	63.0
25°	1232.1	772.5	189.1	114.1	94.5	79.3	67.4	59.8	56.5	53.2	53.2
27.5°	1271.2	750.8	154.3	104.3	83.7	68.4	57.6	51.1	47.8	45.6	45.6
30°	1313.6	719.3	128.2	93.4	72.8	58.7	48.9	43.5	40.2	39.1	39.1
32.5°	1360.3	684.5	109.7	82.6	61.9	50.0	41.3	38.0	34.8	33.7	33.7
35°	1414.6	654.1	98.9	71.7	54.3	42.4	35.9	32.6	30.4	30.4	30.4
37.5°	1476.6	622.6	89.1	63.0	46.7	35.9	30.4	29.3	28.2	27.2	27.2
40°	1543.9	588.9	80.4	55.4	40.2	30.4	26.1	26.1	25.0	25.0	25.0
42.5°	1620.0	559.5	72.8	48.9	34.8	26.1	22.8	22.8	21.7	21.7	21.7
45°	1702.5	532.4	66.3	43.5	30.4	22.8	20.6	19.6	18.5	18.5	18.5
47.5°	1800.3	517.2	60.8	38.0	26.1	19.6	17.4	16.3	15.2	14.1	14.1
50°	1925.3	523.7	55.4	31.5	22.8	16.3	14.1	13.0	12.0	10.9	10.9
52.5°	2024.2	520.4	47.8	27.2	18.5	13.0	10.9	9.8	8.7	7.6	7.6
55°	2095.9	507.4	41.3	22.8	14.1	10.9	8.7	6.5	5.4	5.4	5.4
57.5°	2166.5	494.4	34.8	18.5	10.9	7.6	5.4	4.3	4.3	4.3	4.3
60°	2276.2	475.9	30.4	15.2	8.7	5.4	3.3	3.3	2.2	2.2	2.2
62.5°	2409.9	453.1	25.0	13.0	6.5	4.3	2.2	2.2	0.0	0.0	0.0
65°	2556.5	412.9	20.6	9.8	5.4	3.3	2.2	0.0	0.0	0.0	0.0
67.5°	2522.9	331.4	17.4	6.5	4.3	2.2	1.1	0.0	0.0	0.0	0.0
70°	2231.7	223.8	14.1	5.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	1748.2	132.6	9.8	4.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1119.1	66.3	6.5	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	374.8	32.6	4.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	53.2	10.9	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.0	4.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	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)