

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: P397527

Luminaire Tested: **ARCH-S-PA1-100-722-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397527  
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-PA1-100-722-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2200K, 1200mA 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: 6714 lumens  
Efficiency: N/A  
Efficacy: 69.9 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): 96  
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

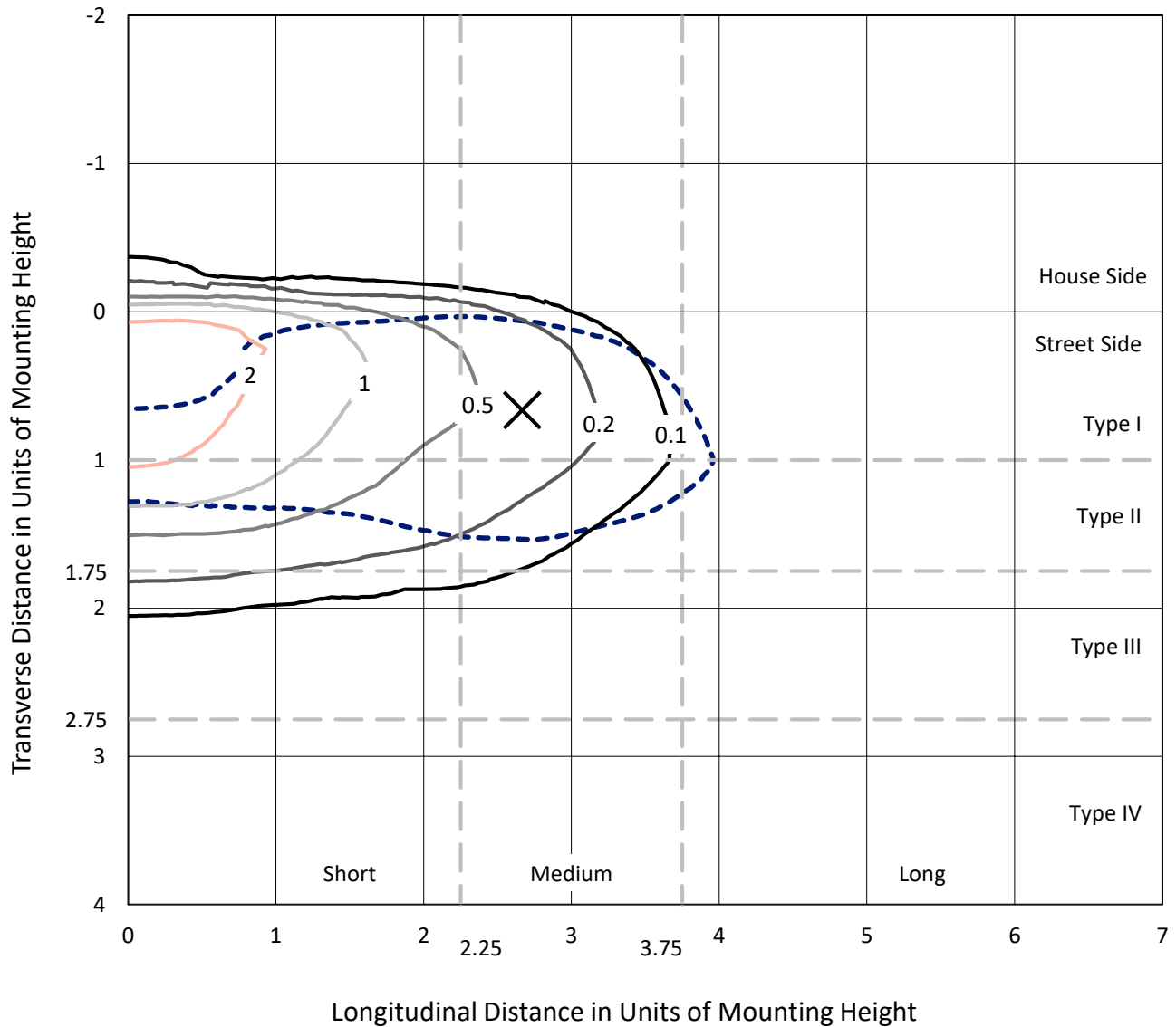


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

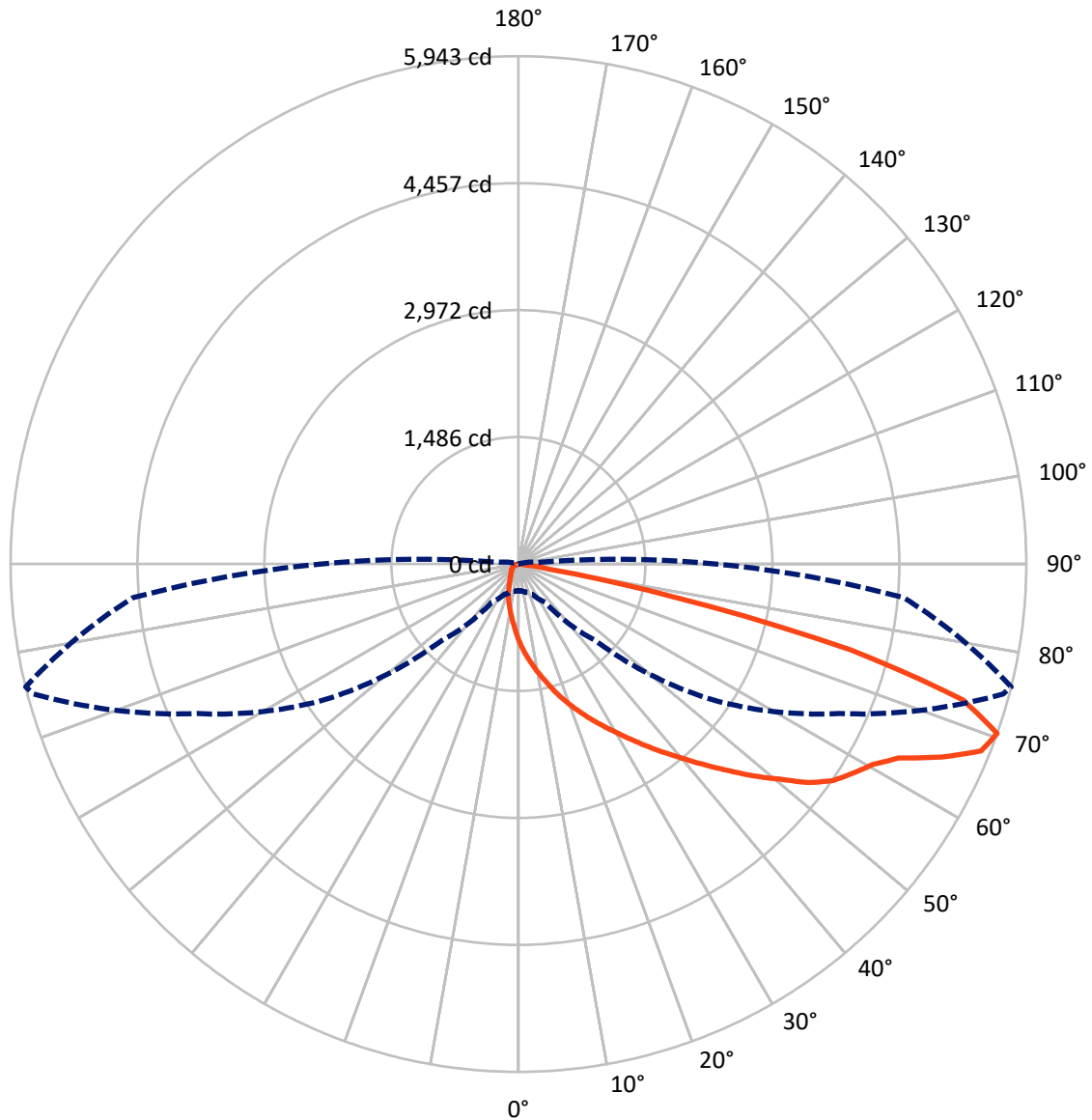


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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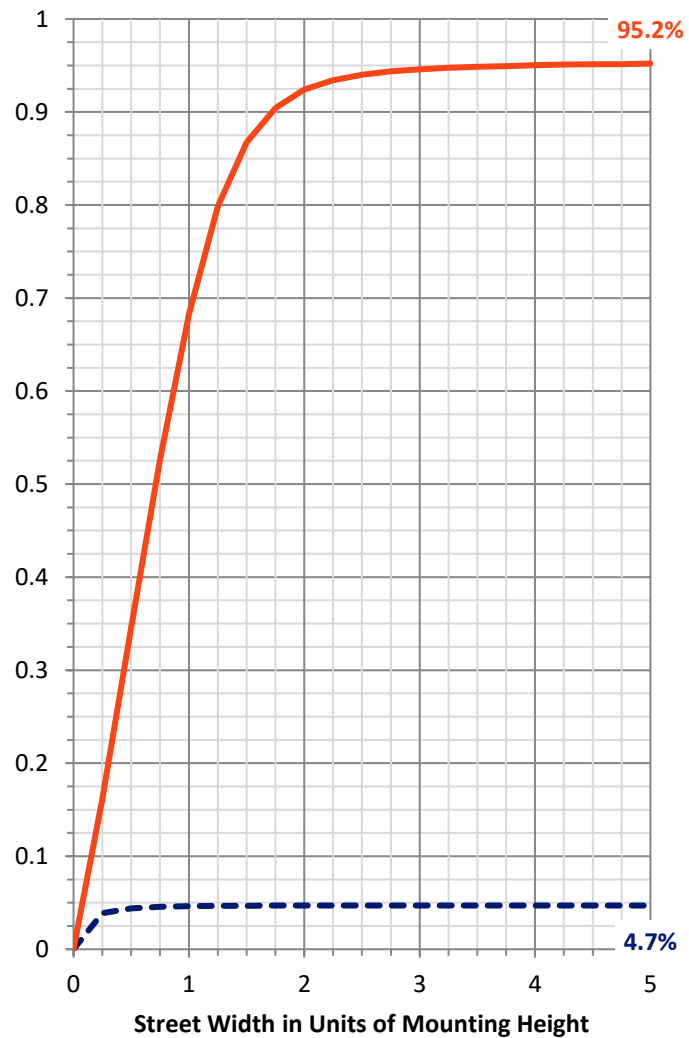
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	316.7	0.0	316.7
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	6397.4	0.0	6397.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	6714.0	0.0	6714.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.7	1.3
10°-20°	273.3	4.1
20°-30°	508.9	7.6
30°-40°	900.1	13.4
40°-50°	1376.5	20.5
50°-60°	1560.6	23.2
60°-70°	1337.9	19.9
70°-80°	648.0	9.7
80°-90°	24.0	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°	6714.0	100.0
0°-180°	6714.0	100.0



--- HS    — SS

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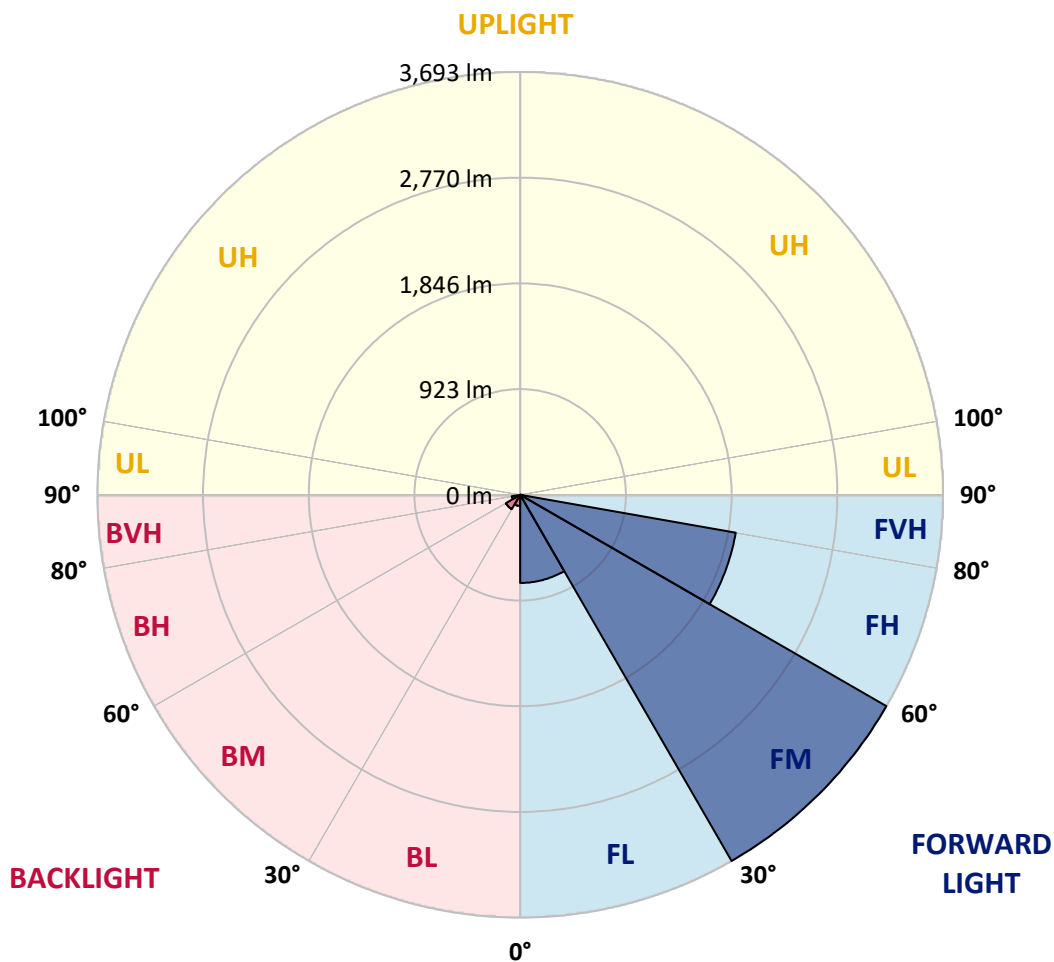
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	769.7	11.5			
FM	(30°-60°)	3692.8	55.0			
FH	(60°-80°)	1911.3	28.5			G2/5000
FVH	(80°-90°)	23.6	0.4			G1/100
BL	(0°-30°)	97.1	1.4	B0/110		
BM	(30°-60°)	144.5	2.2	B0/220		
BH	(60°-80°)	74.6	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°	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7
2.5°	1228.5	1221.8	1215.0	1189.3	1165.9	1144.6	1104.4	1051.9	1004.9	994.8	940.1
5°	1443.1	1435.3	1425.2	1399.5	1369.3	1333.5	1274.3	1193.8	1111.1	1093.2	991.5
7.5°	1588.4	1581.7	1567.2	1554.9	1524.7	1490.0	1424.1	1330.2	1216.2	1193.8	1050.7
10°	1687.9	1683.4	1681.2	1671.1	1648.8	1620.8	1554.9	1456.5	1322.4	1296.6	1113.3
12.5°	1723.6	1723.6	1734.8	1751.6	1754.9	1746.0	1685.6	1587.3	1434.1	1407.3	1187.1
15°	1675.6	1681.2	1705.8	1759.4	1815.3	1852.2	1814.2	1722.5	1557.1	1528.0	1274.3
17.5°	1662.2	1667.8	1684.5	1731.5	1806.4	1904.7	1923.7	1853.3	1673.3	1648.8	1363.7
20°	1700.2	1705.8	1720.3	1760.5	1817.5	1917.0	1996.4	1979.6	1796.3	1770.6	1454.3
22.5°	1790.7	1794.1	1794.1	1825.4	1875.7	1949.4	2042.2	2099.2	1922.6	1894.7	1543.7
25°	1985.2	1978.5	1951.7	1936.0	1968.4	2028.8	2100.3	2204.3	2063.5	2025.5	1639.8
27.5°	2240.1	2262.4	2197.6	2122.7	2098.1	2132.8	2181.9	2297.1	2199.8	2159.6	1727.0
30°	2585.5	2576.5	2491.6	2384.3	2278.1	2265.8	2282.5	2376.4	2336.2	2298.2	1824.3
32.5°	2869.4	2886.2	2796.7	2666.0	2507.2	2432.3	2414.5	2471.5	2481.5	2456.9	1939.4
35°	3161.1	3179.0	3091.8	2946.5	2757.6	2632.4	2581.0	2588.8	2661.5	2630.2	2060.1
37.5°	3422.7	3438.4	3352.3	3203.6	3014.7	2861.6	2787.8	2727.4	2835.9	2807.9	2187.5
40°	3621.7	3623.9	3565.8	3432.8	3253.9	3095.2	3011.4	2892.9	3020.3	3001.3	2320.6
42.5°	3762.5	3767.0	3724.5	3610.5	3445.1	3297.5	3229.3	3088.5	3232.7	3215.9	2474.8
45°	3828.5	3836.3	3831.8	3726.7	3589.3	3461.8	3439.5	3296.4	3465.2	3449.5	2652.5
47.5°	3765.9	3765.9	3822.9	3808.3	3682.0	3597.1	3622.8	3513.2	3717.8	3703.3	2833.6
50°	3505.4	3508.8	3625.0	3791.6	3717.8	3698.8	3779.3	3725.6	3947.0	3955.9	3050.5
52.5°	2821.3	2815.7	3208.1	3527.8	3693.2	3744.6	3923.5	3942.5	4221.9	4248.8	3266.2
55°	2108.2	2104.8	2480.4	3060.5	3521.1	3721.2	4004.0	4135.9	4456.7	4473.4	3427.2
57.5°	1668.9	1659.9	1866.7	2467.0	3132.1	3616.1	4007.3	4172.8	4587.5	4616.5	3583.7
60°	1283.2	1275.4	1429.7	1835.4	2581.0	3336.6	3911.2	4175.0	4713.8	4765.2	3793.8
62.5°	917.7	926.7	1045.1	1316.8	1985.2	2942.1	3786.0	4206.3	4938.4	4996.6	4092.3
65°	619.3	614.8	713.2	896.5	1411.8	2411.1	3593.7	4272.2	5343.1	5444.8	4450.0
67.5°	430.4	433.7	478.4	583.5	896.5	1851.1	3274.0	4309.1	5761.1	5840.5	4700.4
70°	310.7	315.2	339.8	392.3	547.7	1255.3	2767.7	4140.3	5874.0	5943.3	4526.0
72.5°	204.6	213.5	250.4	278.3	349.9	785.8	2038.9	3566.9	5387.8	5439.2	3797.2
75°	110.7	112.9	161.0	207.9	249.3	489.6	1216.2	2405.5	4030.8	4014.0	2503.9
77.5°	86.1	89.4	99.5	148.7	167.7	269.4	480.7	1086.5	1909.2	1857.8	854.0
80°	52.5	54.8	69.3	88.3	117.4	156.5	140.8	295.1	387.9	363.3	125.2
82.5°	31.3	33.5	41.4	73.8	92.8	73.8	49.2	71.5	72.7	71.5	31.3
85°	5.6	5.6	29.1	51.4	49.2	21.2	29.1	23.5	21.2	22.4	6.7
87.5°	0.0	0.0	11.2	15.6	22.4	7.8	11.2	5.6	5.6	5.6	3.4
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°	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7	898.7
2.5°	906.5	868.5	790.3	722.1	653.9	603.6	565.6	526.5	513.1	496.3	487.4
5°	922.2	847.3	691.9	567.8	462.8	382.3	330.9	299.6	279.5	264.9	261.6
7.5°	945.7	830.5	612.6	444.9	329.8	249.3	206.8	185.6	174.4	167.7	165.4
10°	973.6	816.0	534.3	346.5	232.5	175.5	152.0	143.1	138.6	136.4	135.3
12.5°	1012.7	810.4	468.4	267.2	175.5	144.2	131.9	126.3	123.0	119.6	118.5
15°	1064.1	812.6	408.0	206.8	145.3	128.5	118.5	112.9	108.4	105.1	105.1
17.5°	1117.8	816.0	348.8	167.7	131.9	117.4	106.2	98.4	95.0	91.7	90.5
20°	1168.1	814.9	291.7	143.1	119.6	105.1	93.9	86.1	80.5	77.1	77.1
22.5°	1216.2	808.2	238.1	128.5	109.5	92.8	80.5	72.7	68.2	64.8	64.8
25°	1267.6	794.8	194.5	117.4	97.2	81.6	69.3	61.5	58.1	54.8	54.8
27.5°	1307.8	772.4	158.7	107.3	86.1	70.4	59.2	52.5	49.2	46.9	46.9
30°	1351.4	740.0	131.9	96.1	74.9	60.4	50.3	44.7	41.4	40.2	40.2
32.5°	1399.5	704.2	112.9	85.0	63.7	51.4	42.5	39.1	35.8	34.7	34.7
35°	1455.4	672.9	101.7	73.8	55.9	43.6	36.9	33.5	31.3	31.3	31.3
37.5°	1519.1	640.5	91.7	64.8	48.1	36.9	31.3	30.2	29.1	27.9	27.9
40°	1588.4	605.8	82.7	57.0	41.4	31.3	26.8	26.8	25.7	25.7	25.7
42.5°	1666.6	575.7	74.9	50.3	35.8	26.8	23.5	23.5	22.4	22.4	22.4
45°	1751.6	547.7	68.2	44.7	31.3	23.5	21.2	20.1	19.0	19.0	19.0
47.5°	1852.2	532.1	62.6	39.1	26.8	20.1	17.9	16.8	15.6	14.5	14.5
50°	1980.7	538.8	57.0	32.4	23.5	16.8	14.5	13.4	12.3	11.2	11.2
52.5°	2082.5	535.4	49.2	27.9	19.0	13.4	11.2	10.1	8.9	7.8	7.8
55°	2156.2	522.0	42.5	23.5	14.5	11.2	8.9	6.7	5.6	5.6	5.6
57.5°	2228.9	508.6	35.8	19.0	11.2	7.8	5.6	4.5	4.5	4.5	4.5
60°	2341.8	489.6	31.3	15.6	8.9	5.6	3.4	3.4	2.2	2.2	2.2
62.5°	2479.3	466.1	25.7	13.4	6.7	4.5	2.2	2.2	0.0	0.0	0.0
65°	2630.2	424.8	21.2	10.1	5.6	3.4	2.2	0.0	0.0	0.0	0.0
67.5°	2595.5	340.9	17.9	6.7	4.5	2.2	1.1	0.0	0.0	0.0	0.0
70°	2296.0	230.3	14.5	5.6	3.4	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	1798.5	136.4	10.1	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1151.3	68.2	6.7	3.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	385.6	33.5	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.8	11.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.3	4.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	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)