

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: P398022

Luminaire Tested: **ARCH-S-PA1-70-830-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398022  
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-PA1-70-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 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: 6202 lumens  
Efficiency: N/A  
Efficacy: 83.8 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 - G1

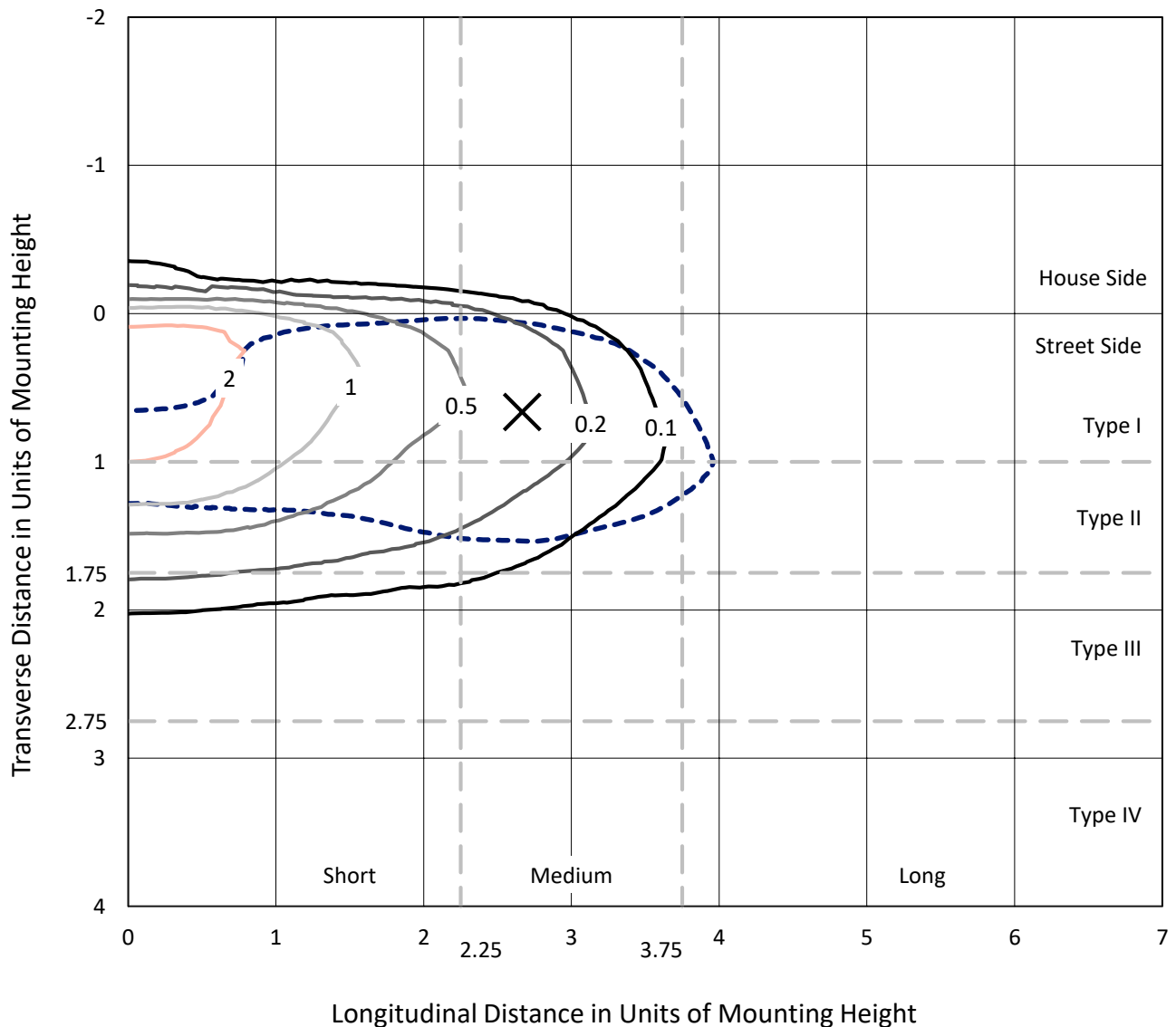
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

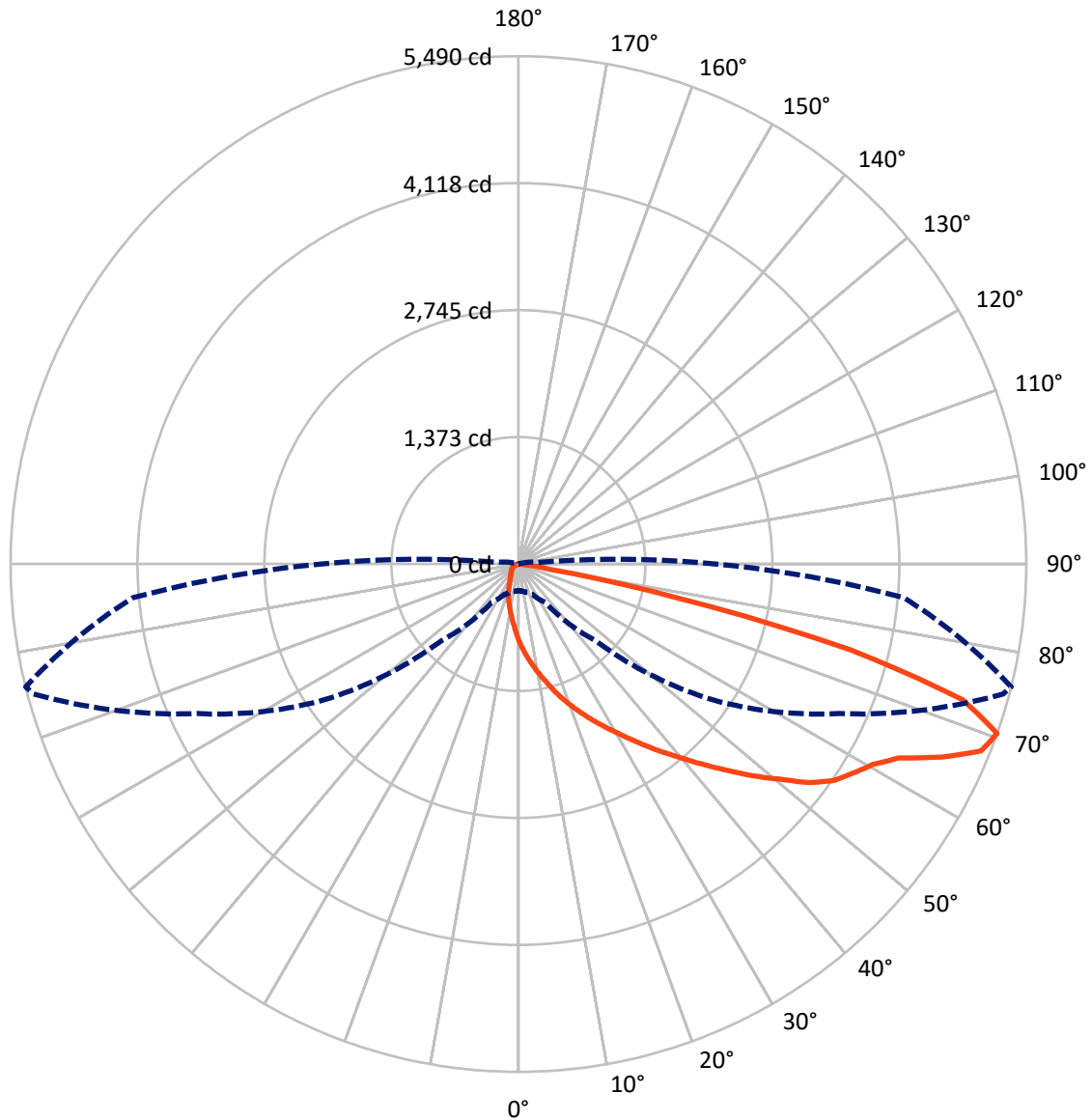
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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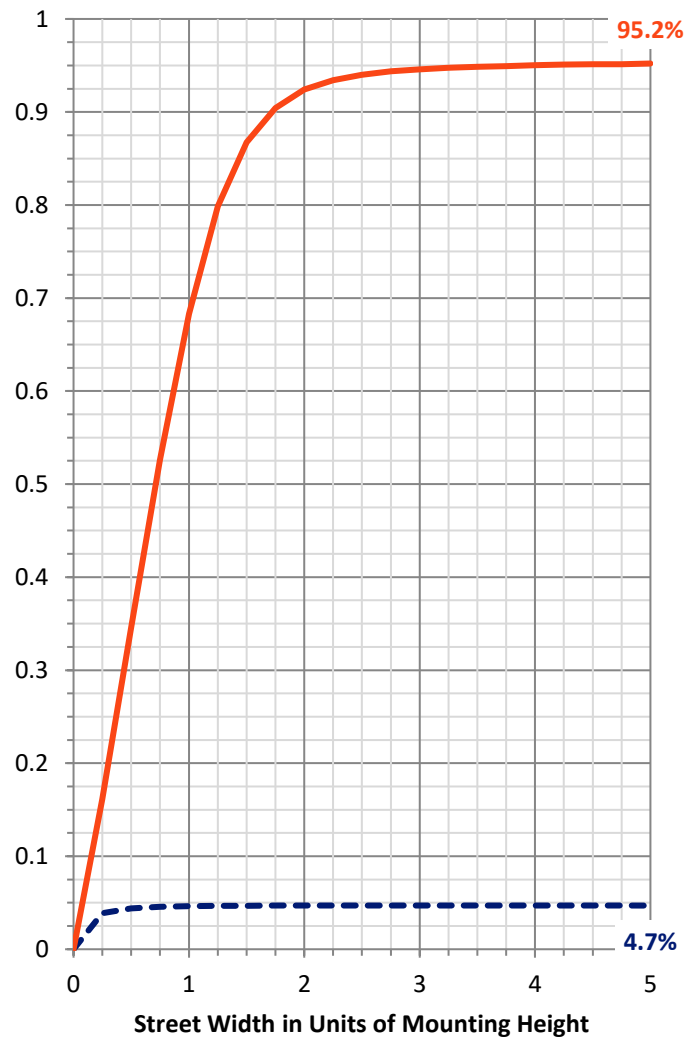
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	292.5	0.0	292.5
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	5909.5	0.0	5909.5
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	6202.0	0.0	6202.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.2	1.3
10°-20°	252.4	4.1
20°-30°	470.1	7.6
30°-40°	831.5	13.4
40°-50°	1271.6	20.5
50°-60°	1441.6	23.2
60°-70°	1235.8	19.9
70°-80°	598.6	9.7
80°-90°	22.2	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°	6202.0	100.0
0°-180°	6202.0	100.0



--- HS    — SS

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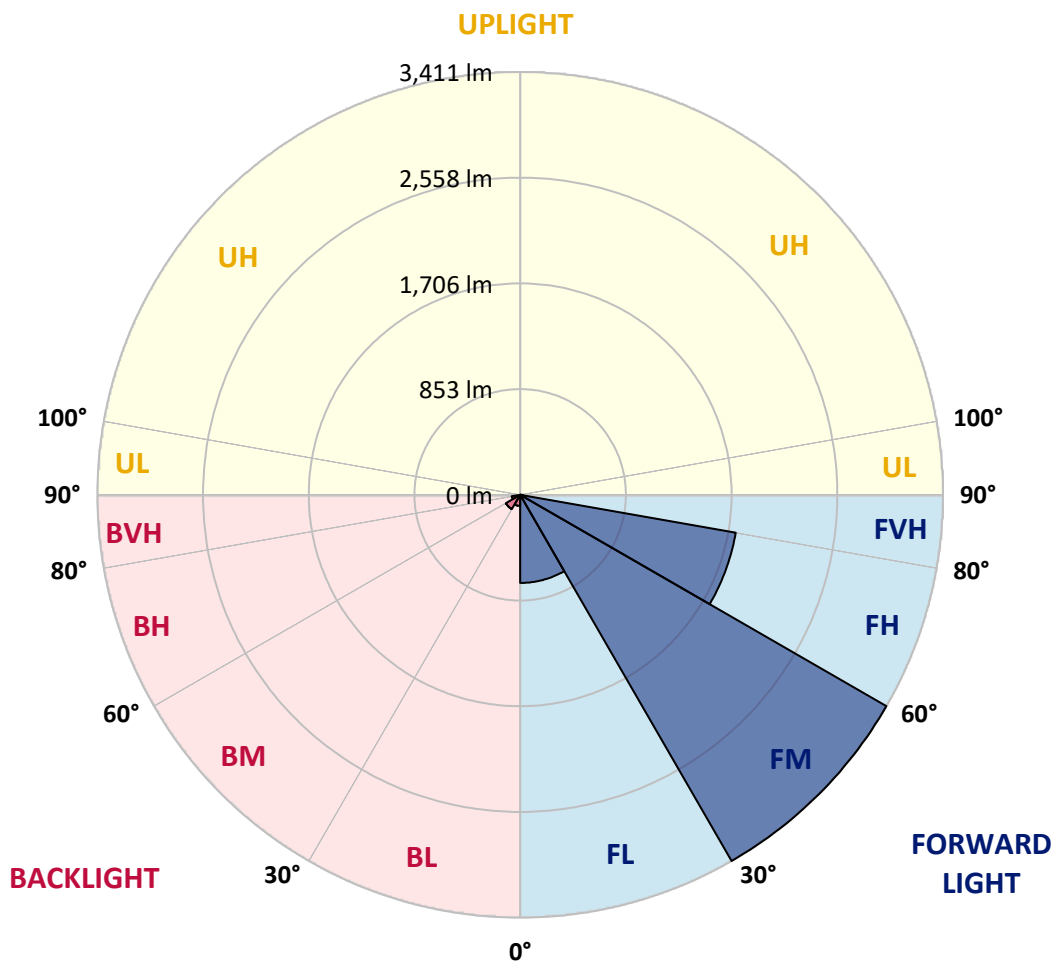
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	711.0	11.5			
FM	(30°-60°)	3411.2	55.0			
FH	(60°-80°)	1765.5	28.5			G1/1800
FVH	(80°-90°)	21.8	0.4			G1/100
BL	(0°-30°)	89.7	1.4	B0/110		
BM	(30°-60°)	133.5	2.2	B0/220		
BH	(60°-80°)	68.9	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-G1**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2
2.5°	1134.8	1128.6	1122.4	1098.6	1077.0	1057.3	1020.2	971.6	928.3	919.0	868.4
5°	1333.0	1325.8	1316.5	1292.8	1264.9	1231.8	1177.1	1102.8	1026.4	1009.8	915.9
7.5°	1467.3	1461.1	1447.6	1436.3	1408.4	1376.4	1315.5	1228.7	1123.4	1102.8	970.6
10°	1559.2	1555.0	1553.0	1543.7	1523.0	1497.2	1436.3	1345.4	1221.5	1197.8	1028.4
12.5°	1592.2	1592.2	1602.5	1618.0	1621.1	1612.9	1557.1	1466.2	1324.8	1300.0	1096.6
15°	1547.8	1553.0	1575.7	1625.2	1676.9	1711.0	1675.8	1591.2	1438.4	1411.5	1177.1
17.5°	1535.4	1540.6	1556.1	1599.4	1668.6	1759.5	1777.0	1712.0	1545.7	1523.0	1259.7
20°	1570.5	1575.7	1589.1	1626.3	1678.9	1770.8	1844.2	1828.7	1659.3	1635.6	1343.4
22.5°	1654.2	1657.3	1657.3	1686.2	1732.6	1800.8	1886.5	1939.1	1776.0	1750.2	1426.0
25°	1833.8	1827.6	1802.8	1788.4	1818.3	1874.1	1940.2	2036.2	1906.1	1871.0	1514.8
27.5°	2069.2	2089.9	2030.0	1960.8	1938.1	1970.1	2015.6	2121.9	2032.1	1994.9	1595.3
30°	2388.3	2380.0	2301.6	2202.4	2104.4	2093.0	2108.5	2195.2	2158.0	2122.9	1685.1
32.5°	2650.6	2666.1	2583.5	2462.7	2316.0	2246.8	2230.3	2283.0	2292.3	2269.6	1791.5
35°	2920.1	2936.6	2856.1	2721.8	2547.3	2431.7	2384.2	2391.4	2458.5	2429.6	1903.0
37.5°	3161.7	3176.2	3096.6	2959.3	2784.8	2643.4	2575.2	2519.4	2619.6	2593.8	2020.7
40°	3345.5	3347.6	3293.9	3171.0	3005.8	2859.2	2781.7	2672.3	2790.0	2772.4	2143.6
42.5°	3475.6	3479.7	3440.5	3335.2	3182.3	3046.0	2983.1	2853.0	2986.2	2970.7	2286.1
45°	3536.5	3543.7	3539.6	3442.6	3315.5	3197.8	3177.2	3045.0	3200.9	3186.5	2450.3
47.5°	3478.7	3478.7	3531.4	3517.9	3401.2	3322.8	3346.5	3245.3	3434.3	3420.9	2617.5
50°	3238.1	3241.2	3348.6	3502.4	3434.3	3416.7	3491.1	3441.5	3646.0	3654.2	2817.9
52.5°	2606.2	2601.0	2963.4	3258.8	3411.6	3459.1	3624.3	3641.8	3900.0	3924.8	3017.1
55°	1947.4	1944.3	2291.2	2827.1	3252.6	3437.4	3698.6	3820.5	4116.8	4132.3	3165.8
57.5°	1541.6	1533.4	1724.4	2278.9	2893.2	3340.3	3701.7	3854.5	4237.6	4264.5	3310.4
60°	1185.4	1178.1	1320.6	1695.5	2384.2	3082.2	3612.9	3856.6	4354.3	4401.8	3504.5
62.5°	847.7	856.0	965.4	1216.4	1833.8	2717.7	3497.3	3885.5	4561.8	4615.5	3780.2
65°	572.0	567.9	658.8	828.1	1304.1	2227.2	3319.7	3946.4	4935.6	5029.6	4110.6
67.5°	397.5	400.6	441.9	539.0	828.1	1709.9	3024.4	3980.5	5321.8	5395.1	4341.9
70°	287.1	291.2	313.9	362.4	506.0	1159.6	2556.6	3824.6	5426.1	5490.1	4180.8
72.5°	189.0	197.2	231.3	257.1	323.2	725.9	1883.4	3294.9	4976.9	5024.4	3507.6
75°	102.2	104.3	148.7	192.1	230.3	452.3	1123.4	2222.1	3723.4	3707.9	2312.9
77.5°	79.5	82.6	91.9	137.3	154.9	248.8	444.0	1003.6	1763.6	1716.1	788.9
80°	48.5	50.6	64.0	81.6	108.4	144.6	130.1	272.6	358.3	335.6	115.6
82.5°	28.9	31.0	38.2	68.1	85.7	68.1	45.4	66.1	67.1	66.1	28.9
85°	5.2	5.2	26.8	47.5	45.4	19.6	26.8	21.7	19.6	20.7	6.2
87.5°	0.0	0.0	10.3	14.5	20.7	7.2	10.3	5.2	5.2	5.2	3.1
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°	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2	830.2
2.5°	837.4	802.3	730.0	667.0	604.0	557.6	522.5	486.3	473.9	458.5	450.2
5°	851.9	782.7	639.2	524.5	427.5	353.1	305.6	276.7	258.1	244.7	241.6
7.5°	873.5	767.2	565.8	411.0	304.6	230.3	191.0	171.4	161.1	154.9	152.8
10°	899.4	753.8	493.6	320.1	214.8	162.1	140.4	132.2	128.0	126.0	124.9
12.5°	935.5	748.6	432.6	246.8	162.1	133.2	121.8	116.7	113.6	110.5	109.5
15°	983.0	750.7	376.9	191.0	134.2	118.7	109.5	104.3	100.2	97.1	97.1
17.5°	1032.6	753.8	322.2	154.9	121.8	108.4	98.1	90.9	87.8	84.7	83.6
20°	1079.0	752.7	269.5	132.2	110.5	97.1	86.7	79.5	74.3	71.2	71.2
22.5°	1123.4	746.5	219.9	118.7	101.2	85.7	74.3	67.1	63.0	59.9	59.9
25°	1170.9	734.1	179.7	108.4	89.8	75.4	64.0	56.8	53.7	50.6	50.6
27.5°	1208.1	713.5	146.6	99.1	79.5	65.1	54.7	48.5	45.4	43.4	43.4
30°	1248.4	683.6	121.8	88.8	69.2	55.8	46.5	41.3	38.2	37.2	37.2
32.5°	1292.8	650.5	104.3	78.5	58.9	47.5	39.2	36.1	33.0	32.0	32.0
35°	1344.4	621.6	94.0	68.1	51.6	40.3	34.1	31.0	28.9	28.9	28.9
37.5°	1403.2	591.7	84.7	59.9	44.4	34.1	28.9	27.9	26.8	25.8	25.8
40°	1467.3	559.6	76.4	52.7	38.2	28.9	24.8	24.8	23.7	23.7	23.7
42.5°	1539.5	531.8	69.2	46.5	33.0	24.8	21.7	21.7	20.7	20.7	20.7
45°	1618.0	506.0	63.0	41.3	28.9	21.7	19.6	18.6	17.6	17.6	17.6
47.5°	1711.0	491.5	57.8	36.1	24.8	18.6	16.5	15.5	14.5	13.4	13.4
50°	1829.7	497.7	52.7	29.9	21.7	15.5	13.4	12.4	11.4	10.3	10.3
52.5°	1923.7	494.6	45.4	25.8	17.6	12.4	10.3	9.3	8.3	7.2	7.2
55°	1991.8	482.2	39.2	21.7	13.4	10.3	8.3	6.2	5.2	5.2	5.2
57.5°	2058.9	469.8	33.0	17.6	10.3	7.2	5.2	4.1	4.1	4.1	4.1
60°	2163.2	452.3	28.9	14.5	8.3	5.2	3.1	3.1	2.1	2.1	2.1
62.5°	2290.2	430.6	23.7	12.4	6.2	4.1	2.1	2.1	0.0	0.0	0.0
65°	2429.6	392.4	19.6	9.3	5.2	3.1	2.1	0.0	0.0	0.0	0.0
67.5°	2397.6	314.9	16.5	6.2	4.1	2.1	1.0	0.0	0.0	0.0	0.0
70°	2120.9	212.7	13.4	5.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
72.5°	1661.4	126.0	9.3	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
75°	1063.5	63.0	6.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	356.2	31.0	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	50.6	10.3	2.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.4	4.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.0	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)