

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: P397950

Luminaire Tested: **ARCH-S-PA1-60-830-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397950  
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-PA1-60-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 800mA 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: 5563 lumens  
Efficiency: N/A  
Efficacy: 86.9 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 - G1

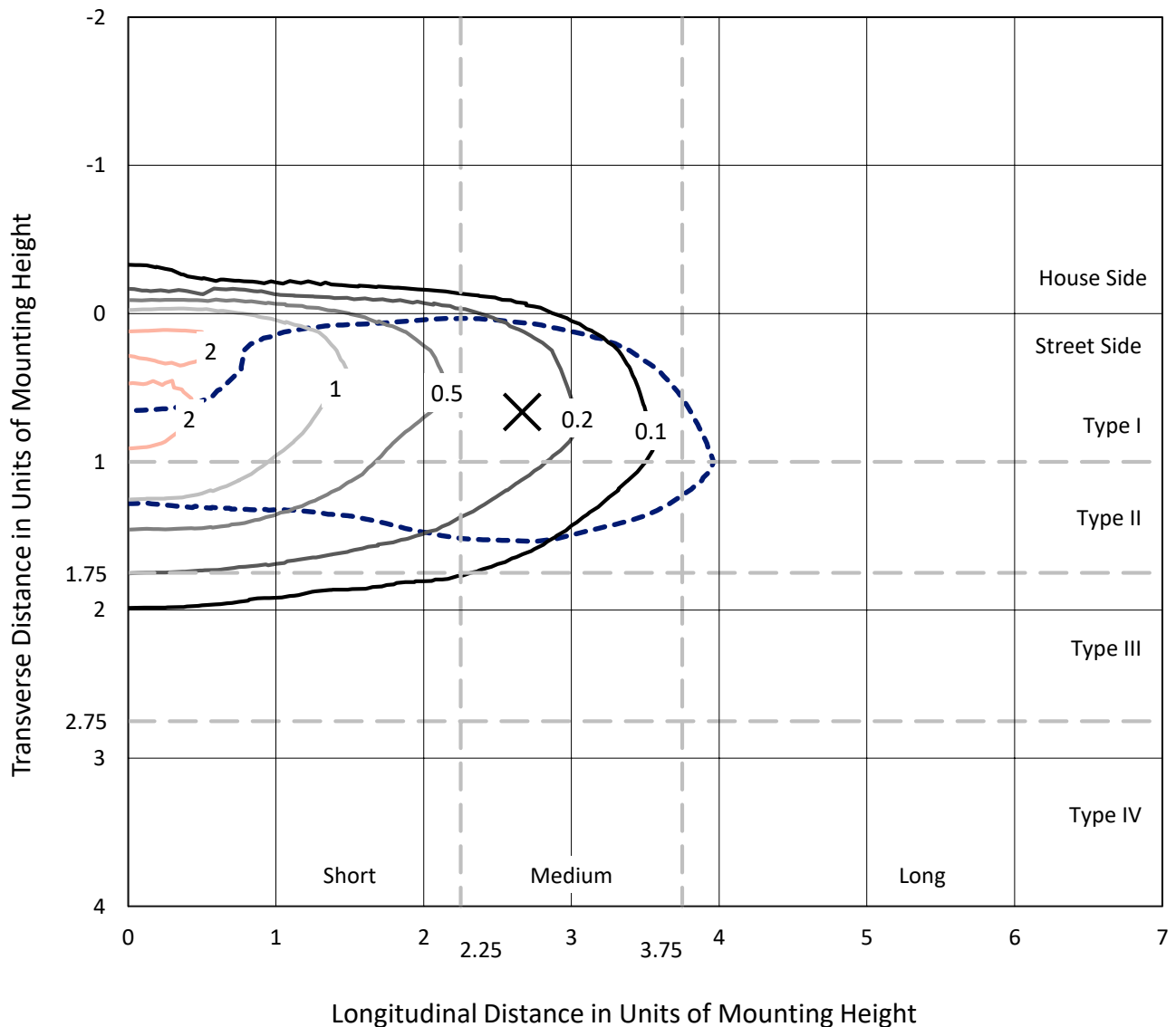
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

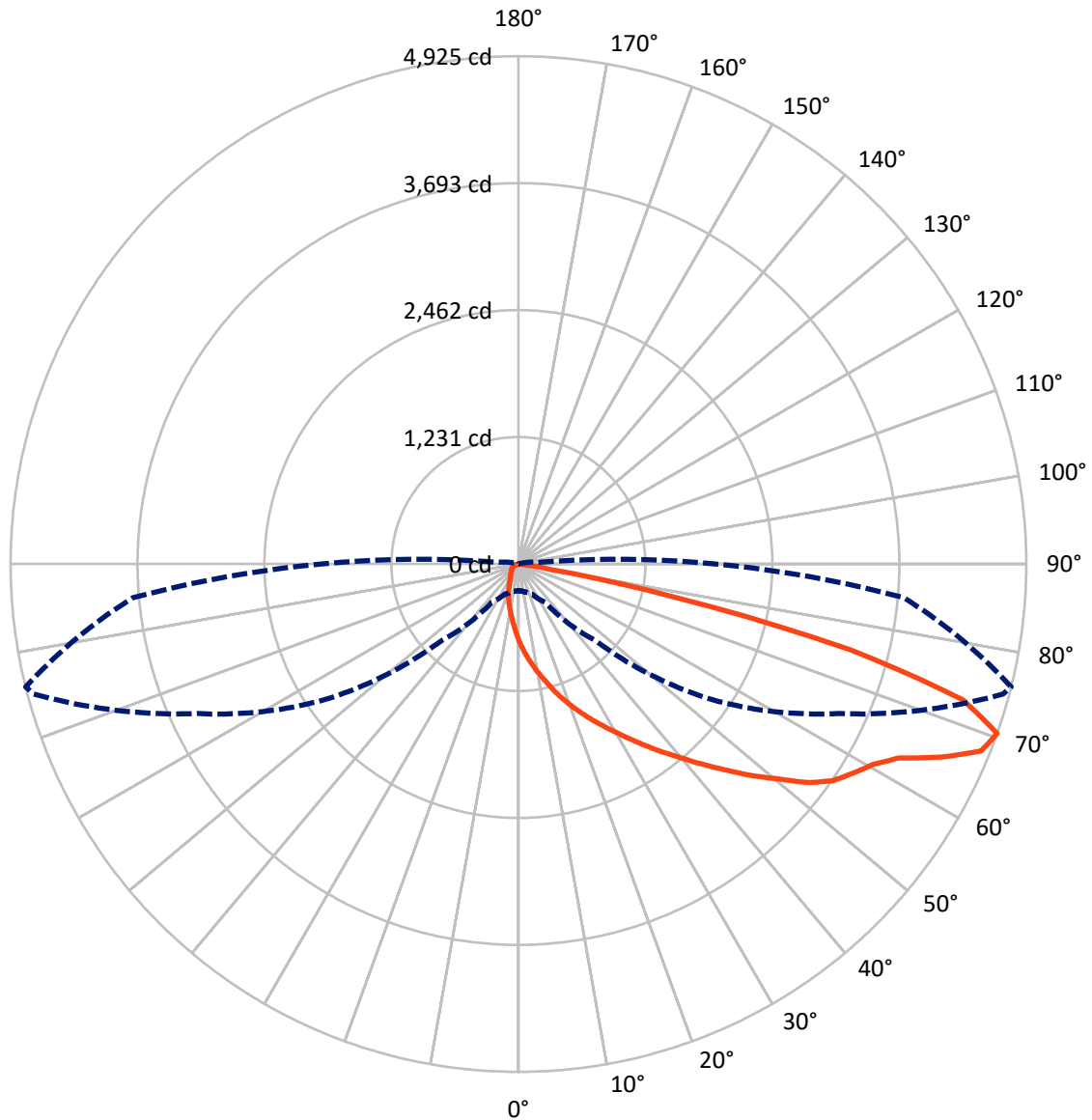
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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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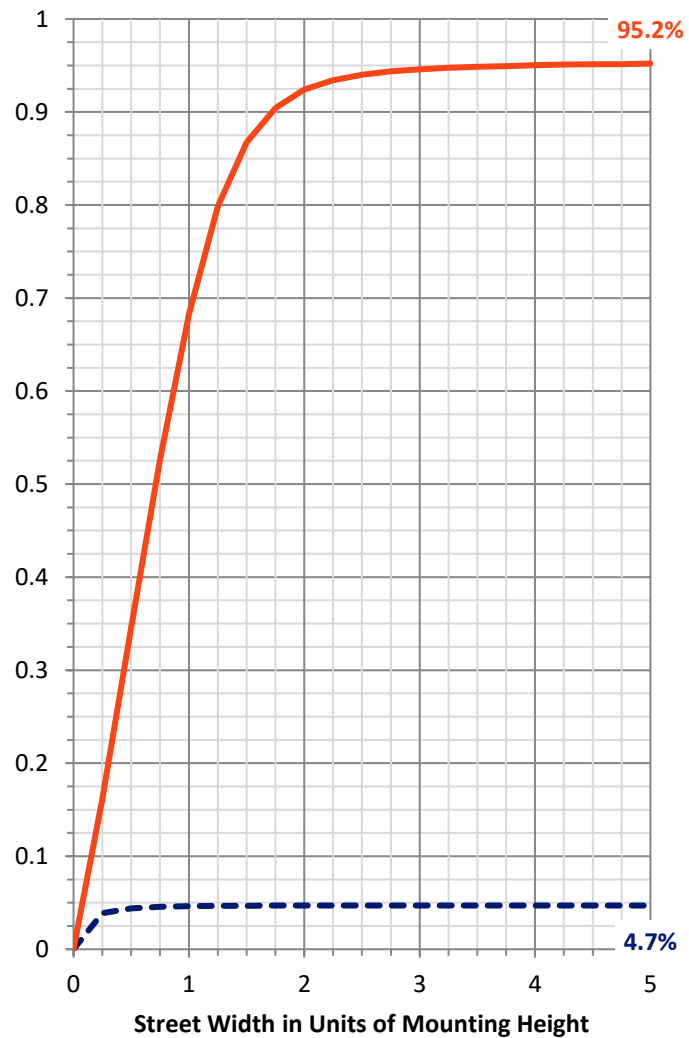
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	262.4	0.0	262.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	5300.6	0.0	5300.6
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	5563.0	0.0	5563.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	1.3
10°-20°	226.4	4.1
20°-30°	421.7	7.6
30°-40°	745.8	13.4
40°-50°	1140.5	20.5
50°-60°	1293.1	23.2
60°-70°	1108.5	19.9
70°-80°	536.9	9.7
80°-90°	19.9	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°	5563.0	100.0
0°-180°	5563.0	100.0

**Coefficient of Utilization**



--- HS    — SS

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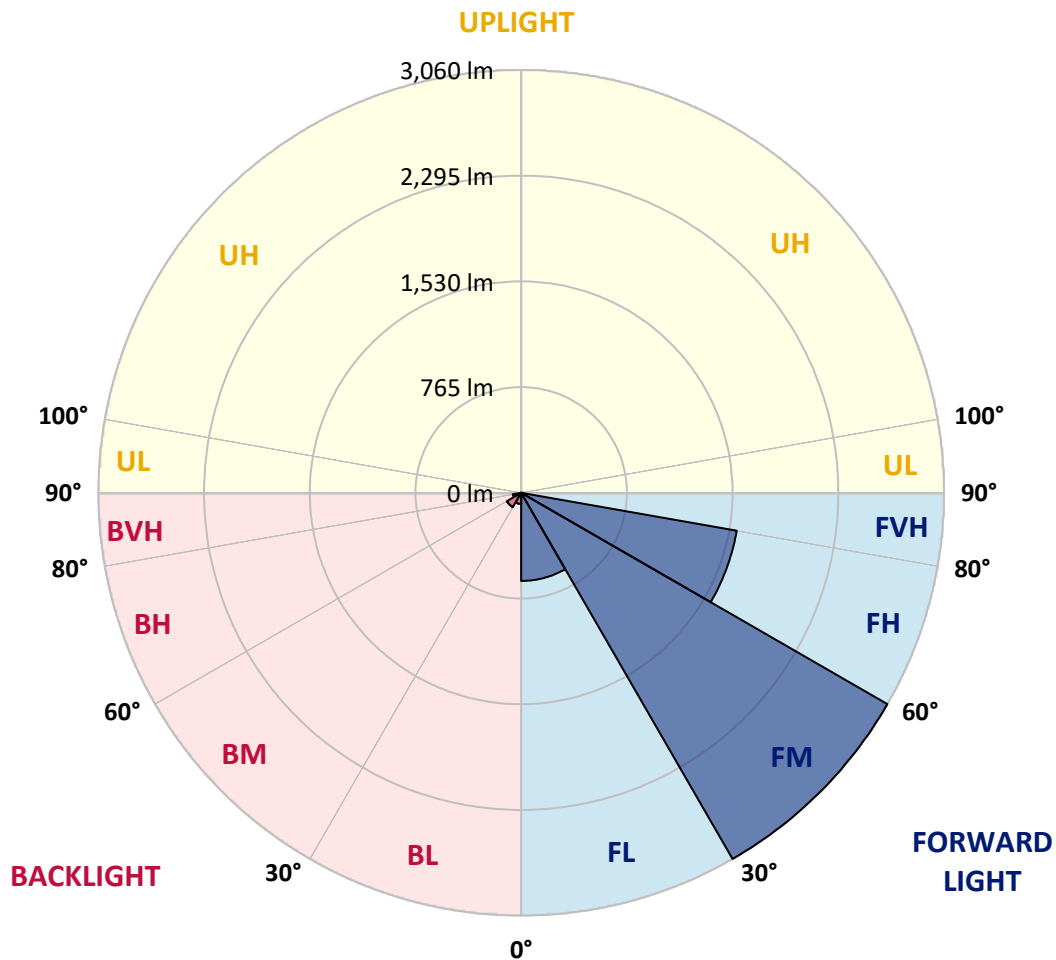
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	637.7	11.5			
FM	(30°-60°)	3059.7	55.0			
FH	(60°-80°)	1583.6	28.5			G1/1800
FVH	(80°-90°)	19.6	0.4			G1/100
BL	(0°-30°)	80.5	1.4	B0/110		
BM	(30°-60°)	119.8	2.2	B0/220		
BH	(60°-80°)	61.8	1.1	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6
2.5°	1017.9	1012.3	1006.8	985.4	966.0	948.4	915.1	871.5	832.6	824.3	778.9
5°	1195.7	1189.2	1180.9	1159.6	1134.6	1104.9	1055.8	989.2	920.6	905.8	821.5
7.5°	1316.1	1310.5	1298.5	1288.3	1263.3	1234.6	1179.9	1102.1	1007.7	989.2	870.6
10°	1398.5	1394.8	1393.0	1384.6	1366.1	1343.0	1288.3	1206.8	1095.7	1074.4	922.5
12.5°	1428.2	1428.2	1437.4	1451.3	1454.1	1446.7	1396.7	1315.2	1188.3	1166.1	983.6
15°	1388.3	1393.0	1413.3	1457.8	1504.1	1534.7	1503.2	1427.2	1290.2	1266.1	1055.8
17.5°	1377.2	1381.9	1395.7	1434.6	1496.7	1578.2	1593.9	1535.6	1386.5	1366.1	1129.9
20°	1408.7	1413.3	1425.4	1458.7	1506.0	1588.4	1654.1	1640.3	1488.4	1467.1	1205.0
22.5°	1483.7	1486.5	1486.5	1512.4	1554.1	1615.2	1692.1	1739.4	1593.0	1569.9	1279.0
25°	1644.9	1639.3	1617.1	1604.1	1631.0	1681.0	1740.3	1826.4	1709.7	1678.2	1358.7
27.5°	1856.1	1874.6	1820.9	1758.8	1738.4	1767.1	1807.9	1903.3	1822.7	1789.4	1430.9
30°	2142.2	2134.8	2064.4	1975.5	1887.5	1877.4	1891.2	1969.0	1935.7	1904.2	1511.5
32.5°	2377.5	2391.4	2317.3	2208.9	2077.4	2015.4	2000.5	2047.8	2056.1	2035.7	1606.9
35°	2619.2	2634.0	2561.8	2441.4	2284.9	2181.1	2138.5	2145.0	2205.2	2179.3	1706.9
37.5°	2835.9	2848.9	2777.6	2654.4	2497.9	2371.0	2309.9	2259.9	2349.7	2326.5	1812.5
40°	3000.8	3002.7	2954.5	2844.3	2696.1	2564.6	2495.1	2396.9	2502.5	2486.8	1922.7
42.5°	3117.5	3121.2	3086.0	2991.5	2854.5	2732.2	2675.7	2559.0	2678.5	2664.6	2050.5
45°	3172.1	3178.6	3174.9	3087.9	2973.9	2868.4	2849.8	2731.3	2871.1	2858.2	2197.8
47.5°	3120.3	3120.3	3167.5	3155.5	3050.8	2980.4	3001.7	2911.0	3080.5	3068.4	2347.8
50°	2904.5	2907.3	3003.6	3141.6	3080.5	3064.7	3131.4	3086.9	3270.3	3277.7	2527.5
52.5°	2337.7	2333.0	2658.1	2923.0	3060.1	3102.7	3250.9	3266.6	3498.2	3520.4	2706.3
55°	1746.8	1744.0	2055.2	2535.9	2917.4	3083.2	3317.6	3426.8	3692.7	3706.5	2839.6
57.5°	1382.8	1375.4	1546.7	2044.1	2595.1	2996.2	3320.3	3457.4	3801.0	3825.1	2969.3
60°	1063.2	1056.8	1184.6	1520.8	2138.5	2764.6	3240.7	3459.3	3905.7	3948.3	3143.4
62.5°	760.4	767.8	866.0	1091.0	1644.9	2437.7	3136.9	3485.2	4091.8	4140.0	3390.7
65°	513.1	509.4	590.9	742.8	1169.8	1997.8	2977.6	3539.8	4427.1	4511.4	3687.1
67.5°	356.6	359.4	396.4	483.5	742.8	1533.7	2712.8	3570.4	4773.5	4839.3	3894.6
70°	257.5	261.2	281.6	325.1	453.8	1040.1	2293.2	3430.5	4867.0	4924.5	3750.1
72.5°	169.5	176.9	207.5	230.6	289.9	651.1	1689.3	2955.4	4464.2	4506.8	3146.2
75°	91.7	93.5	133.4	172.3	206.5	405.7	1007.7	1993.1	3339.8	3325.9	2074.6
77.5°	71.3	74.1	82.4	123.2	138.9	223.2	398.3	900.2	1581.9	1539.3	707.6
80°	43.5	45.4	57.4	73.2	97.2	129.7	116.7	244.5	321.4	301.0	103.7
82.5°	25.9	27.8	34.3	61.1	76.9	61.1	40.8	59.3	60.2	59.3	25.9
85°	4.6	4.6	24.1	42.6	40.8	17.6	24.1	19.4	17.6	18.5	5.6
87.5°	0.0	0.0	9.3	13.0	18.5	6.5	9.3	4.6	4.6	4.6	2.8
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°	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6	744.6
2.5°	751.1	719.6	654.8	598.3	541.8	500.1	468.6	436.2	425.1	411.2	403.8
5°	764.1	702.0	573.3	470.5	383.4	316.8	274.1	248.2	231.5	219.5	216.7
7.5°	783.5	688.1	507.5	368.6	273.2	206.5	171.3	153.7	144.5	138.9	137.1
10°	806.7	676.1	442.7	287.1	192.6	145.4	126.0	118.6	114.8	113.0	112.1
12.5°	839.1	671.5	388.1	221.4	145.4	119.5	109.3	104.7	101.9	99.1	98.2
15°	881.7	673.3	338.1	171.3	120.4	106.5	98.2	93.5	89.8	87.1	87.1
17.5°	926.2	676.1	289.0	138.9	109.3	97.2	88.0	81.5	78.7	75.9	75.0
20°	967.9	675.2	241.7	118.6	99.1	87.1	77.8	71.3	66.7	63.9	63.9
22.5°	1007.7	669.6	197.3	106.5	90.8	76.9	66.7	60.2	56.5	53.7	53.7
25°	1050.3	658.5	161.2	97.2	80.6	67.6	57.4	50.9	48.2	45.4	45.4
27.5°	1083.6	640.0	131.5	88.9	71.3	58.3	49.1	43.5	40.8	38.9	38.9
30°	1119.7	613.1	109.3	79.7	62.1	50.0	41.7	37.0	34.3	33.3	33.3
32.5°	1159.6	583.5	93.5	70.4	52.8	42.6	35.2	32.4	29.6	28.7	28.7
35°	1205.9	557.6	84.3	61.1	46.3	36.1	30.6	27.8	25.9	25.9	25.9
37.5°	1258.7	530.7	75.9	53.7	39.8	30.6	25.9	25.0	24.1	23.2	23.2
40°	1316.1	502.0	68.5	47.2	34.3	25.9	22.2	22.2	21.3	21.3	21.3
42.5°	1380.9	477.0	62.1	41.7	29.6	22.2	19.4	19.4	18.5	18.5	18.5
45°	1451.3	453.8	56.5	37.0	25.9	19.4	17.6	16.7	15.7	15.7	15.7
47.5°	1534.7	440.9	51.9	32.4	22.2	16.7	14.8	13.9	13.0	12.0	12.0
50°	1641.2	446.4	47.2	26.9	19.4	13.9	12.0	11.1	10.2	9.3	9.3
52.5°	1725.5	443.6	40.8	23.2	15.7	11.1	9.3	8.3	7.4	6.5	6.5
55°	1786.6	432.5	35.2	19.4	12.0	9.3	7.4	5.6	4.6	4.6	4.6
57.5°	1846.8	421.4	29.6	15.7	9.3	6.5	4.6	3.7	3.7	3.7	3.7
60°	1940.3	405.7	25.9	13.0	7.4	4.6	2.8	2.8	1.9	1.9	1.9
62.5°	2054.3	386.2	21.3	11.1	5.6	3.7	1.9	1.9	0.0	0.0	0.0
65°	2179.3	351.9	17.6	8.3	4.6	2.8	1.9	0.0	0.0	0.0	0.0
67.5°	2150.6	282.5	14.8	5.6	3.7	1.9	0.9	0.0	0.0	0.0	0.0
70°	1902.4	190.8	12.0	4.6	2.8	1.9	0.9	0.0	0.0	0.0	0.0
72.5°	1490.2	113.0	8.3	3.7	1.9	0.9	0.0	0.0	0.0	0.0	0.0
75°	954.0	56.5	5.6	2.8	1.9	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	319.5	27.8	3.7	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	45.4	9.3	1.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.2	3.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.9	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)