

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: P398121

Luminaire Tested: **ARCH-S-PA1-90-730-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398121  
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-PA1-90-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA 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: 8233 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G2

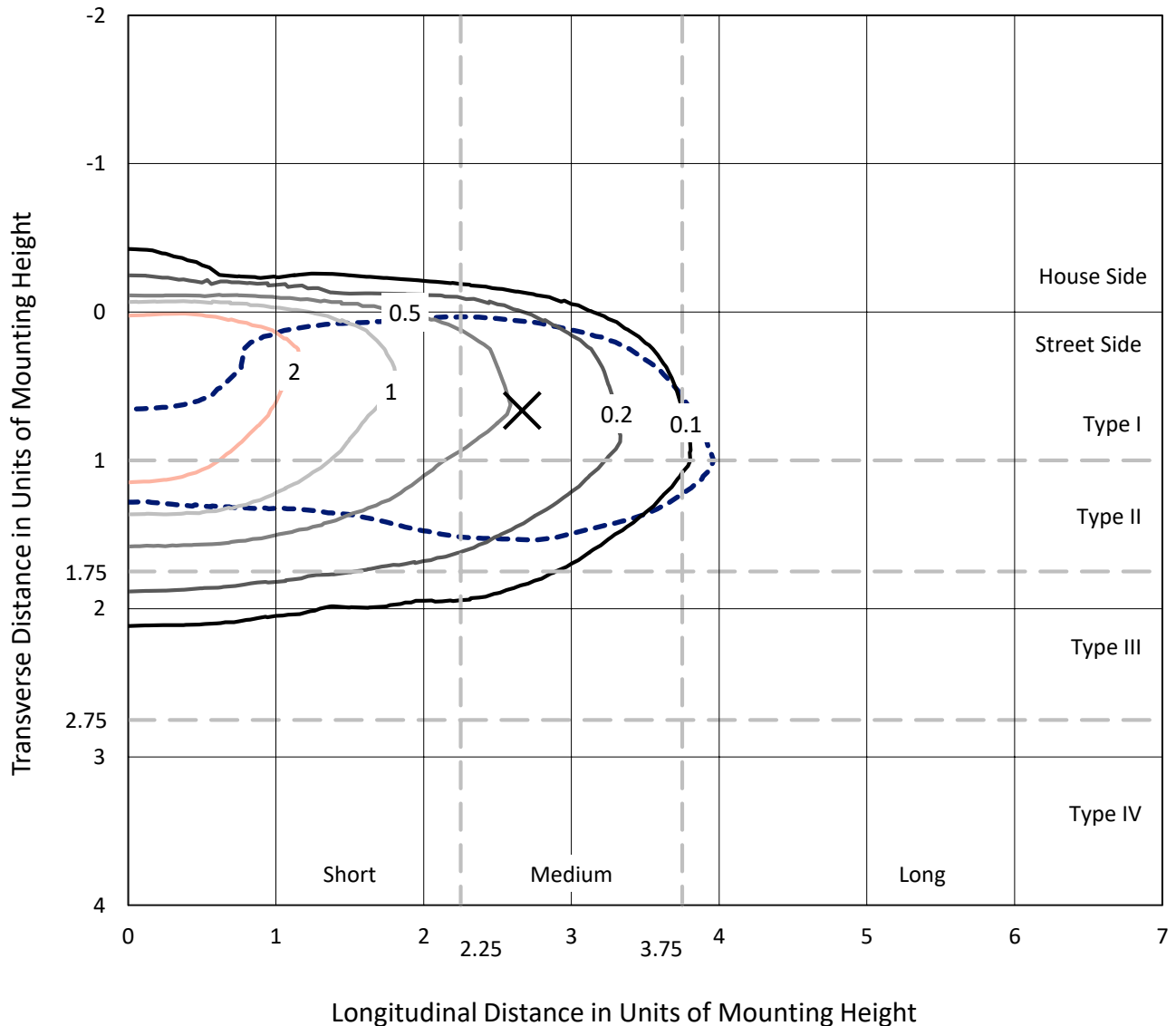
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

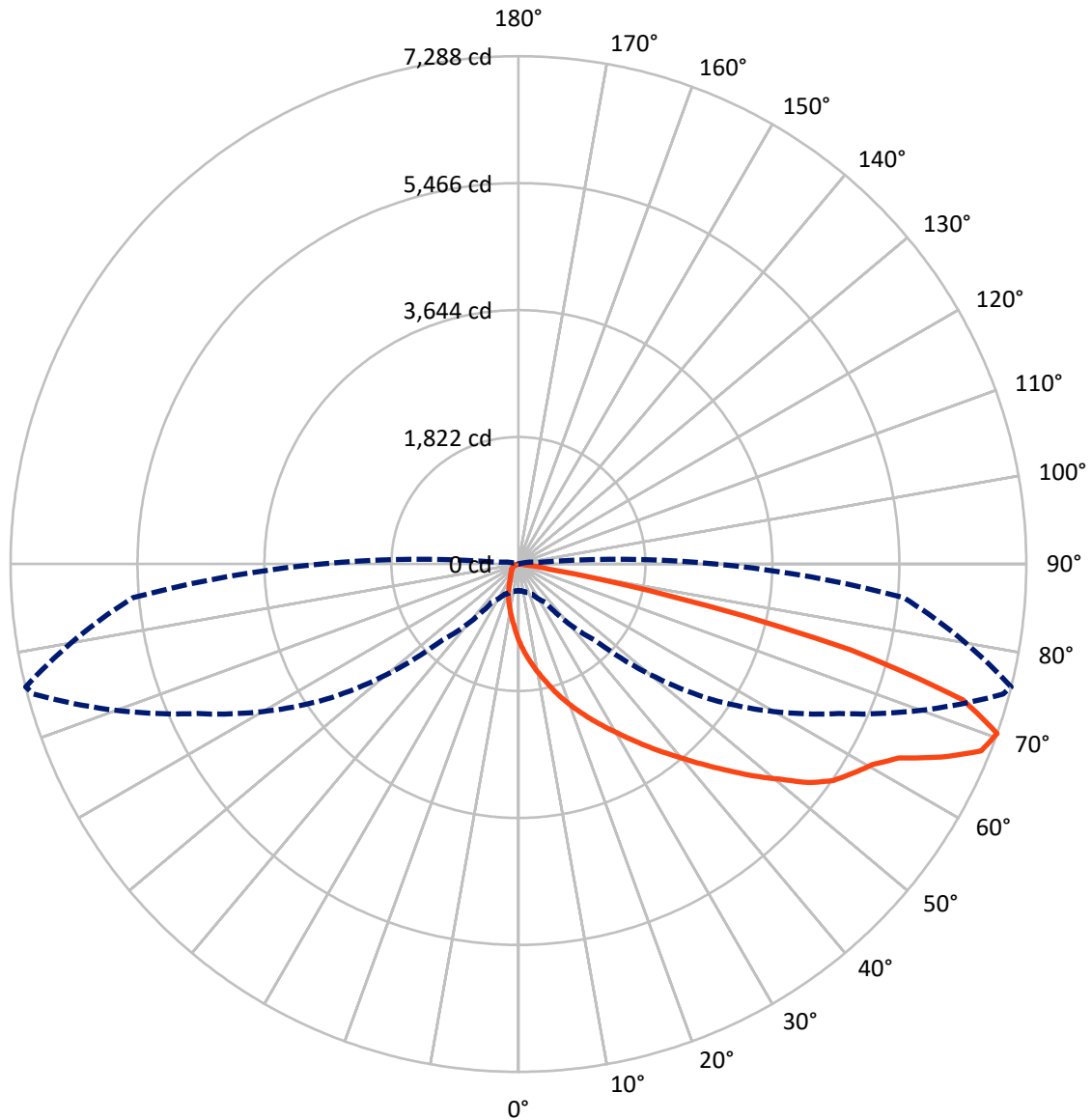
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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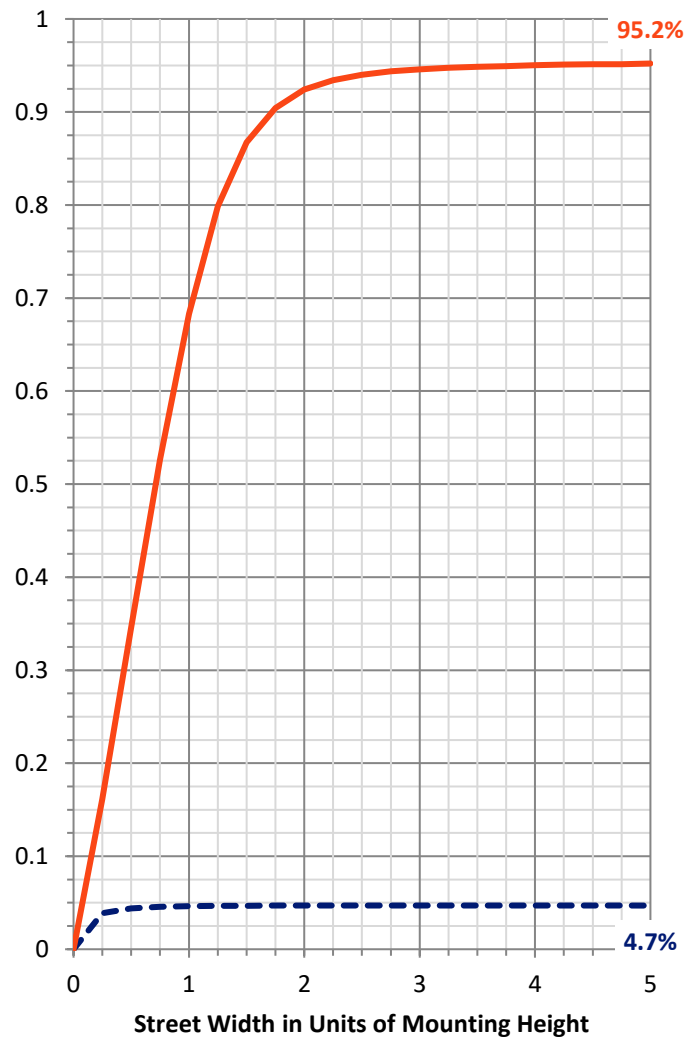
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	388.3	0.0	388.3
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	7844.7	0.0	7844.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	8233.0	0.0	8233.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.8	1.3
10°-20°	335.1	4.1
20°-30°	624.0	7.6
30°-40°	1103.8	13.4
40°-50°	1688.0	20.5
50°-60°	1913.7	23.2
60°-70°	1640.5	19.9
70°-80°	794.6	9.7
80°-90°	29.5	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°	8233.0	100.0
0°-180°	8233.0	100.0

**Coefficient of Utilization**



--- HS    — SS

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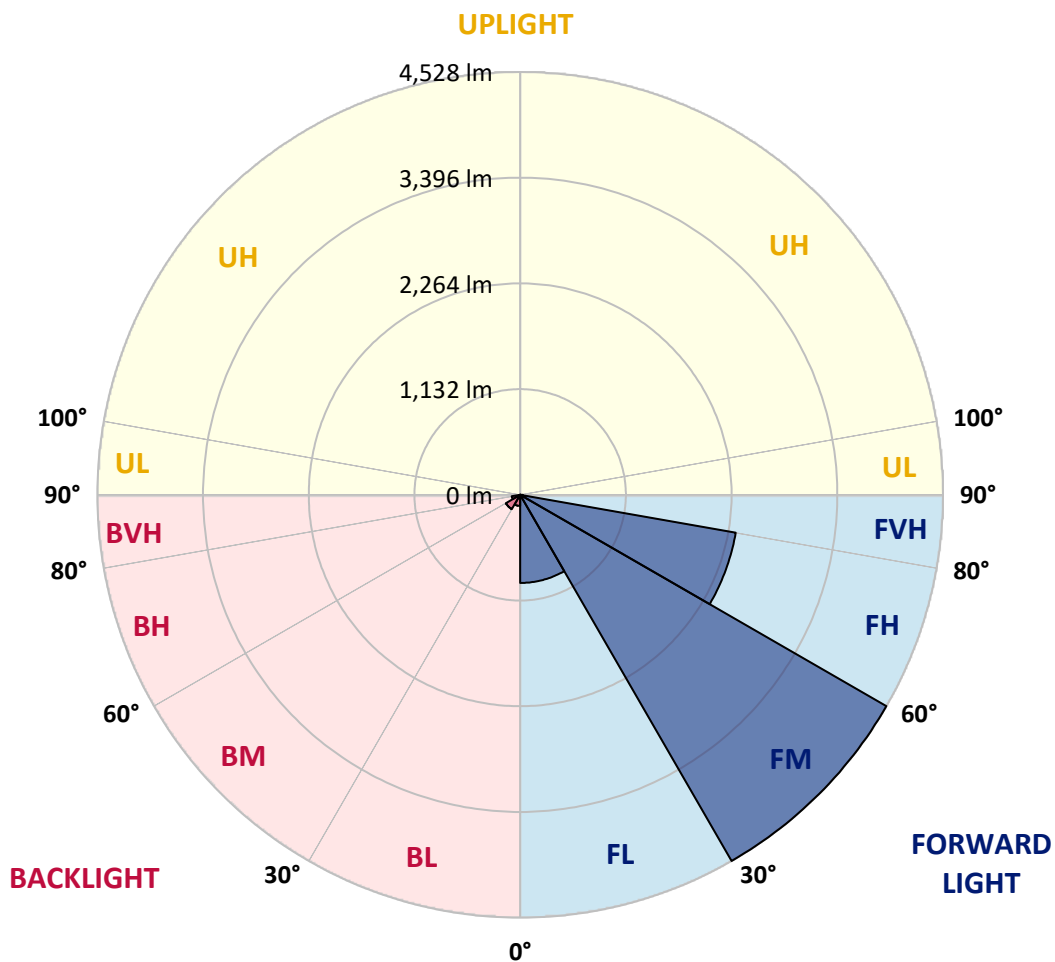
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	943.8	11.5			
FM	(30°-60°)	4528.2	55.0			
FH	(60°-80°)	2343.7	28.5			G2/5000
FVH	(80°-90°)	29.0	0.4			G1/100
BL	(0°-30°)	119.1	1.4	B1/500		
BM	(30°-60°)	177.3	2.2	B0/220		
BH	(60°-80°)	91.4	1.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0
2.5°	1506.4	1498.2	1489.9	1458.4	1429.6	1403.6	1354.2	1289.8	1232.3	1219.9	1152.8
5°	1769.6	1760.0	1747.6	1716.1	1679.1	1635.2	1562.6	1463.9	1362.5	1340.5	1215.8
7.5°	1947.8	1939.5	1921.7	1906.6	1869.6	1827.1	1746.3	1631.1	1491.3	1463.9	1288.5
10°	2069.8	2064.3	2061.5	2049.2	2021.8	1987.5	1906.6	1786.0	1621.5	1590.0	1365.2
12.5°	2113.6	2113.6	2127.3	2147.9	2152.0	2141.0	2067.0	1946.4	1758.6	1725.7	1455.7
15°	2054.7	2061.5	2091.7	2157.5	2226.0	2271.2	2224.6	2112.2	1909.4	1873.7	1562.6
17.5°	2038.2	2045.1	2065.6	2123.2	2215.0	2335.7	2359.0	2272.6	2051.9	2021.8	1672.2
20°	2084.8	2091.7	2109.5	2158.8	2228.8	2350.7	2448.1	2427.5	2202.7	2171.2	1783.3
22.5°	2195.9	2200.0	2200.0	2238.3	2300.0	2390.5	2504.3	2574.2	2357.6	2323.3	1892.9
25°	2434.4	2426.1	2393.2	2374.0	2413.8	2487.8	2575.5	2703.0	2530.3	2483.7	2010.8
27.5°	2746.9	2774.3	2694.8	2603.0	2572.8	2615.3	2675.6	2816.8	2697.5	2648.2	2117.7
30°	3170.4	3159.5	3055.3	2923.7	2793.5	2778.4	2799.0	2914.1	2864.8	2818.2	2237.0
32.5°	3518.6	3539.1	3429.5	3269.1	3074.5	2982.6	2960.7	3030.6	3042.9	3012.8	2378.2
35°	3876.3	3898.3	3791.3	3613.2	3381.5	3228.0	3164.9	3174.5	3263.6	3225.2	2526.2
37.5°	4197.1	4216.3	4110.7	3928.4	3696.8	3509.0	3418.5	3344.5	3477.5	3443.2	2682.5
40°	4441.1	4443.8	4372.5	4209.4	3990.1	3795.5	3692.7	3547.4	3703.6	3680.3	2845.6
42.5°	4613.8	4619.2	4567.2	4427.3	4224.5	4043.6	3959.9	3787.2	3964.1	3943.5	3034.7
45°	4694.6	4704.2	4698.7	4569.9	4401.3	4245.0	4217.6	4042.2	4249.2	4230.0	3252.7
47.5°	4617.9	4617.9	4687.8	4670.0	4515.1	4410.9	4442.4	4308.1	4558.9	4541.1	3474.7
50°	4298.5	4302.6	4445.2	4649.4	4558.9	4535.6	4634.3	4568.5	4839.9	4850.9	3740.6
52.5°	3459.6	3452.8	3933.9	4325.9	4528.8	4591.8	4811.1	4834.4	5177.1	5210.0	4005.2
55°	2585.1	2581.0	3041.6	3753.0	4317.7	4563.0	4909.8	5071.6	5465.0	5485.5	4202.6
57.5°	2046.4	2035.5	2289.1	3025.1	3840.7	4434.2	4913.9	5116.8	5625.3	5661.0	4394.5
60°	1573.6	1564.0	1753.1	2250.7	3164.9	4091.5	4796.1	5119.6	5780.2	5843.3	4652.1
62.5°	1125.3	1136.3	1281.6	1614.7	2434.4	3607.7	4642.5	5157.9	6055.7	6127.0	5018.1
65°	759.4	753.9	874.5	1099.3	1731.2	2956.6	4406.8	5238.8	6551.9	6676.7	5456.7
67.5°	527.7	531.8	586.7	715.5	1099.3	2269.9	4014.8	5284.0	7064.6	7161.9	5763.8
70°	381.1	386.5	416.7	481.1	671.6	1539.3	3393.8	5077.1	7203.0	7288.0	5549.9
72.5°	250.8	261.8	307.0	341.3	429.0	963.6	2500.2	4373.9	6606.8	6669.8	4656.3
75°	135.7	138.4	197.4	254.9	305.7	600.4	1491.3	2949.7	4942.7	4922.2	3070.4
77.5°	105.5	109.7	122.0	182.3	205.6	330.3	589.4	1332.3	2341.1	2278.1	1047.2
80°	64.4	67.2	85.0	108.3	143.9	191.9	172.7	361.9	475.6	445.5	153.5
82.5°	38.4	41.1	50.7	90.5	113.8	90.5	60.3	87.7	89.1	87.7	38.4
85°	6.9	6.9	35.6	63.1	60.3	26.0	35.6	28.8	26.0	27.4	8.2
87.5°	0.0	0.0	13.7	19.2	27.4	9.6	13.7	6.9	6.9	6.9	4.1
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°	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0	1102.0
2.5°	1111.6	1065.0	969.1	885.5	801.9	740.2	693.6	645.6	629.1	608.6	597.6
5°	1130.8	1039.0	848.5	696.3	567.5	468.8	405.7	367.3	342.7	324.9	320.7
7.5°	1159.6	1018.4	751.1	545.5	404.4	305.7	253.6	227.5	213.8	205.6	202.9
10°	1193.9	1000.6	655.2	424.9	285.1	215.2	186.4	175.4	170.0	167.2	165.9
12.5°	1241.9	993.8	574.3	327.6	215.2	176.8	161.7	154.9	150.8	146.7	145.3
15°	1304.9	996.5	500.3	253.6	178.2	157.6	145.3	138.4	133.0	128.8	128.8
17.5°	1370.7	1000.6	427.7	205.6	161.7	143.9	130.2	120.6	116.5	112.4	111.0
20°	1432.4	999.2	357.8	175.4	146.7	128.8	115.1	105.5	98.7	94.6	94.6
22.5°	1491.3	991.0	292.0	157.6	134.3	113.8	98.7	89.1	83.6	79.5	79.5
25°	1554.4	974.6	238.5	143.9	119.3	100.1	85.0	75.4	71.3	67.2	67.2
27.5°	1603.7	947.2	194.6	131.6	105.5	86.4	72.6	64.4	60.3	57.6	57.6
30°	1657.2	907.4	161.7	117.9	91.8	74.0	61.7	54.8	50.7	49.3	49.3
32.5°	1716.1	863.5	138.4	104.2	78.1	63.1	52.1	48.0	43.9	42.5	42.5
35°	1784.6	825.2	124.7	90.5	68.5	53.5	45.2	41.1	38.4	38.4	38.4
37.5°	1862.8	785.4	112.4	79.5	58.9	45.2	38.4	37.0	35.6	34.3	34.3
40°	1947.8	742.9	101.4	69.9	50.7	38.4	32.9	32.9	31.5	31.5	31.5
42.5°	2043.7	705.9	91.8	61.7	43.9	32.9	28.8	28.8	27.4	27.4	27.4
45°	2147.9	671.6	83.6	54.8	38.4	28.8	26.0	24.7	23.3	23.3	23.3
47.5°	2271.2	652.5	76.8	48.0	32.9	24.7	21.9	20.6	19.2	17.8	17.8
50°	2428.9	660.7	69.9	39.8	28.8	20.6	17.8	16.4	15.1	13.7	13.7
52.5°	2553.6	656.6	60.3	34.3	23.3	16.4	13.7	12.3	11.0	9.6	9.6
55°	2644.1	640.1	52.1	28.8	17.8	13.7	11.0	8.2	6.9	6.9	6.9
57.5°	2733.2	623.7	43.9	23.3	13.7	9.6	6.9	5.5	5.5	5.5	5.5
60°	2871.6	600.4	38.4	19.2	11.0	6.9	4.1	4.1	2.7	2.7	2.7
62.5°	3040.2	571.6	31.5	16.4	8.2	5.5	2.7	2.7	0.0	0.0	0.0
65°	3225.2	520.9	26.0	12.3	6.9	4.1	2.7	0.0	0.0	0.0	0.0
67.5°	3182.8	418.1	21.9	8.2	5.5	2.7	1.4	0.0	0.0	0.0	0.0
70°	2815.4	282.4	17.8	6.9	4.1	2.7	1.4	0.0	0.0	0.0	0.0
72.5°	2205.5	167.2	12.3	5.5	2.7	1.4	0.0	0.0	0.0	0.0	0.0
75°	1411.8	83.6	8.2	4.1	2.7	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	472.9	41.1	5.5	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	67.2	13.7	2.7	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.1	5.5	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.5	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	1.4	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)