

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: P398044

Luminaire Tested: **ARCH-S-PA1-80-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398044  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-80-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6528 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 83  
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

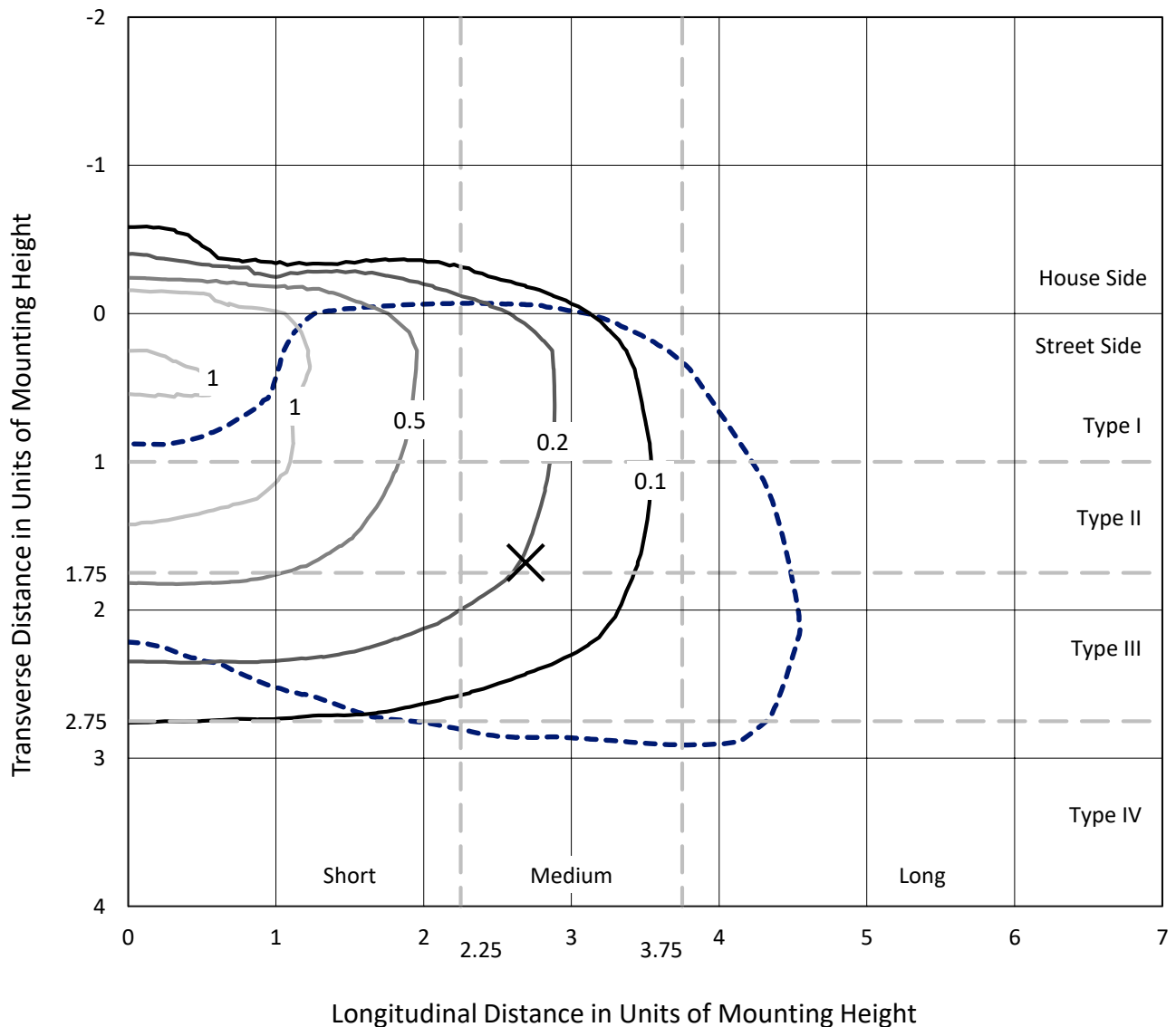


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

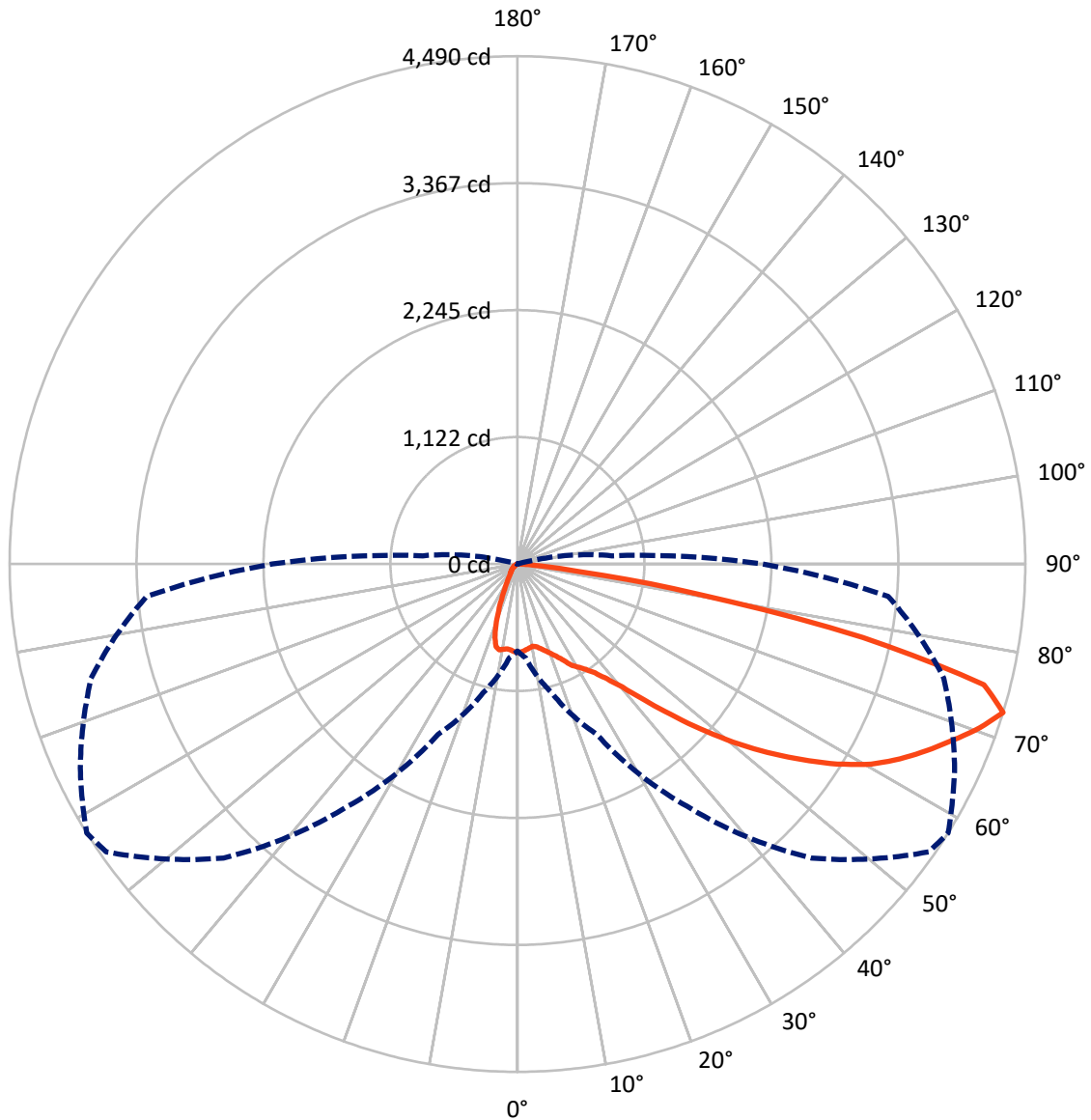


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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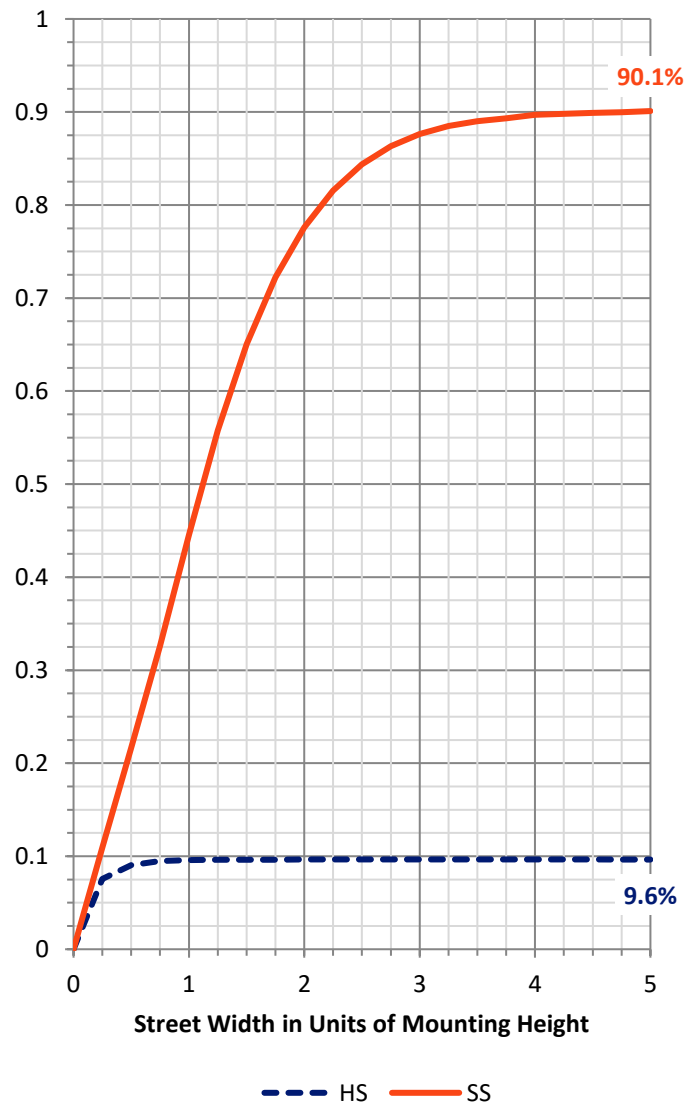
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	634.8	0.0	634.8
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	5893.2	0.0	5893.2
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6528.0	0.0	6528.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.9	1.1
10°-20°	187.2	2.9
20°-30°	294.1	4.5
30°-40°	507.3	7.8
40°-50°	965.1	14.8
50°-60°	1528.5	23.4
60°-70°	1783.5	27.3
70°-80°	1117.0	17.1
80°-90°	73.3	1.1
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°	6528.0	100.0
0°-180°	6528.0	100.0



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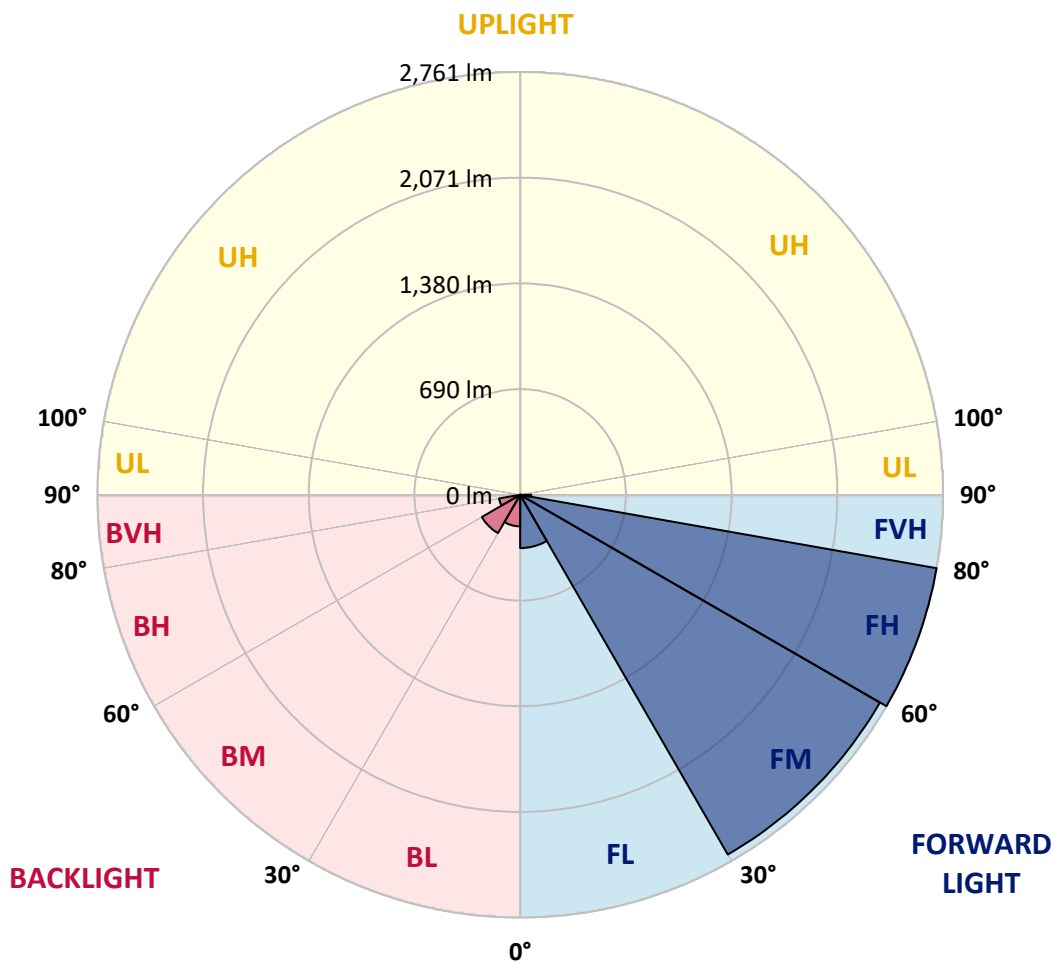
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	347.7	5.3			
FM	(30°-60°)	2712.0	41.5			
FH	(60°-80°)	2760.9	42.3			G2/5000
FVH	(80°-90°)	72.6	1.1			G1/100
BL	(0°-30°)	205.6	3.1	B1/500		
BM	(30°-60°)	288.8	4.4	B1/1000		
BH	(60°-80°)	139.7	2.1	B1/500		G1/500
BVH	(80°-90°)	0.7	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3
2.5°	779.8	776.3	775.1	774.0	775.1	776.3	772.8	776.3	774.0	775.1	777.5
5°	751.8	748.3	747.1	748.3	751.8	757.6	760.0	763.5	763.5	767.0	768.1
7.5°	720.3	717.9	716.8	719.1	726.1	739.0	746.0	750.6	755.3	762.3	769.3
10°	702.8	701.6	700.4	703.9	710.9	722.6	732.0	739.0	756.5	776.3	789.2
12.5°	691.1	691.1	693.4	700.4	709.8	719.1	741.3	750.6	777.5	807.8	825.3
15°	681.8	681.8	685.3	698.1	710.9	733.1	765.8	776.3	807.8	845.2	868.5
17.5°	674.8	677.1	679.4	692.3	716.8	754.1	792.7	807.8	846.4	887.2	912.9
20°	675.9	678.3	679.4	692.3	727.3	778.7	827.7	845.2	889.6	932.7	958.4
22.5°	682.9	686.4	687.6	705.1	746.0	804.3	867.4	887.2	935.1	980.6	1000.5
25°	712.1	714.4	707.4	722.6	772.8	844.0	918.7	939.8	987.6	1029.6	1046.0
27.5°	811.3	813.7	775.1	757.6	793.8	876.7	981.8	1011.0	1070.5	1098.5	1100.9
30°	1026.1	1028.5	952.6	869.7	844.0	904.7	1016.8	1057.7	1134.7	1166.2	1152.2
32.5°	1302.8	1300.5	1196.6	1074.0	963.1	953.8	1067.0	1110.2	1194.2	1224.6	1214.1
35°	1580.6	1584.2	1495.4	1311.0	1152.2	1046.0	1131.2	1181.4	1283.0	1326.2	1307.5
37.5°	1770.9	1794.3	1755.8	1556.1	1384.5	1216.4	1235.1	1288.8	1416.0	1474.4	1434.7
40°	2039.4	2033.6	1940.2	1793.1	1641.4	1468.6	1403.2	1428.9	1574.8	1653.0	1591.2
42.5°	2400.2	2388.5	2229.7	2086.1	1916.9	1775.6	1642.5	1637.9	1756.9	1848.0	1758.1
45°	2727.0	2709.5	2600.9	2462.0	2276.4	2114.1	1934.4	1893.5	1976.4	2053.4	1948.4
47.5°	2987.4	2958.2	2881.1	2807.6	2762.1	2509.9	2240.2	2178.4	2220.4	2277.6	2129.3
50°	3295.5	3215.0	3102.9	3058.6	3153.1	2958.2	2534.4	2474.9	2472.5	2505.2	2316.1
52.5°	3435.6	3289.7	3226.7	3264.0	3431.0	3374.9	2851.9	2766.7	2732.9	2736.4	2490.0
55°	3266.4	3250.0	3283.9	3400.6	3618.9	3586.2	3156.6	3051.6	3001.4	2938.3	2657.0
57.5°	3073.7	3123.9	3258.2	3481.2	3857.1	3806.9	3456.6	3337.6	3245.4	3100.6	2842.6
60°	2896.3	2947.7	3169.5	3499.8	3987.8	4019.3	3706.5	3593.2	3456.6	3266.4	3046.9
62.5°	2626.6	2666.3	2978.0	3473.0	3930.6	4143.1	3880.4	3795.2	3667.9	3424.0	3281.5
65°	2323.1	2348.8	2657.0	3258.2	3818.5	4129.1	4024.0	3976.1	3852.4	3588.6	3513.9
67.5°	1990.4	2020.8	2277.6	2871.8	3599.1	4063.7	4159.4	4154.7	4013.5	3770.7	3682.0
70°	1607.5	1609.8	1822.3	2381.5	3216.2	3932.9	4327.5	4338.0	4167.6	3907.3	3689.0
72.5°	769.3	832.4	1181.4	1662.4	2613.8	3676.1	4437.3	4489.8	4264.5	3902.6	3290.9
75°	176.3	182.1	344.4	790.3	1532.8	2821.6	4162.9	4261.0	4028.7	3374.9	2318.4
77.5°	64.2	67.7	96.9	231.1	589.5	1458.1	2979.2	3122.8	2978.0	2181.9	1096.2
80°	43.2	42.0	50.2	102.7	270.8	413.3	1523.4	1608.7	1468.6	744.8	262.7
82.5°	22.2	23.3	35.0	57.2	182.1	143.6	509.0	553.3	455.3	149.4	49.0
85°	10.5	10.5	19.8	36.2	77.0	50.2	113.2	136.6	122.6	65.4	16.3
87.5°	10.5	10.5	18.7	23.3	39.7	21.0	28.0	35.0	32.7	35.0	5.8
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°	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3
2.5°	777.5	776.3	775.1	777.5	776.3	778.7	778.7	781.0	781.0	778.7	777.5
5°	767.0	764.6	762.3	762.3	761.1	763.5	770.5	776.3	777.5	774.0	772.8
7.5°	768.1	768.1	765.8	761.1	753.0	753.0	753.0	760.0	763.5	761.1	760.0
10°	789.2	790.3	784.5	774.0	760.0	747.1	722.6	686.4	652.6	643.2	639.7
12.5°	825.3	826.5	814.8	796.2	767.0	691.1	597.7	511.3	444.8	426.1	422.6
15°	868.5	869.7	848.7	818.3	729.6	553.3	414.4	316.4	258.0	244.0	242.8
17.5°	912.9	910.6	879.0	820.7	618.7	392.2	252.2	202.0	186.8	183.3	184.4
20°	956.1	949.1	905.9	777.5	476.3	256.8	184.4	172.8	169.3	166.9	166.9
22.5°	995.8	981.8	928.1	692.3	333.9	184.4	164.6	162.3	157.6	154.1	152.9
25°	1035.5	1015.6	942.1	581.4	224.1	161.1	155.3	150.6	144.8	140.1	138.9
27.5°	1083.3	1055.3	935.1	441.3	168.1	149.4	144.8	137.8	129.6	122.6	120.2
30°	1128.9	1097.3	895.4	304.7	143.6	137.8	130.7	120.2	109.7	101.6	99.2
32.5°	1186.1	1149.9	824.2	199.6	124.9	120.2	113.2	100.4	86.4	77.0	74.7
35°	1267.8	1226.9	733.1	140.1	109.7	101.6	92.2	78.2	63.0	56.0	54.9
37.5°	1382.2	1327.3	618.7	113.2	96.9	85.2	71.2	57.2	46.7	40.9	39.7
40°	1522.3	1438.2	491.5	100.4	86.4	71.2	53.7	40.9	33.9	29.2	29.2
42.5°	1674.0	1542.1	361.9	92.2	75.9	58.4	39.7	29.2	24.5	22.2	21.0
45°	1830.5	1634.3	244.0	85.2	66.5	44.4	28.0	19.8	16.3	16.3	15.2
47.5°	1992.7	1696.2	157.6	77.0	56.0	32.7	18.7	14.0	11.7	11.7	11.7
50°	2153.8	1728.9	112.1	70.0	45.5	22.2	14.0	10.5	9.3	9.3	9.3
52.5°	2270.6	1707.9	89.9	60.7	35.0	16.3	10.5	8.2	7.0	7.0	7.0
55°	2372.1	1671.7	78.2	52.5	25.7	11.7	8.2	7.0	5.8	5.8	5.8
57.5°	2476.0	1625.0	70.0	44.4	18.7	8.2	5.8	4.7	4.7	4.7	4.7
60°	2570.6	1545.6	60.7	35.0	12.8	5.8	4.7	3.5	3.5	3.5	3.5
62.5°	2662.8	1477.9	52.5	26.9	9.3	4.7	2.3	2.3	1.2	1.2	1.2
65°	2715.4	1386.9	42.0	17.5	5.8	3.5	1.2	1.2	0.0	0.0	0.0
67.5°	2699.0	1278.3	29.2	10.5	3.5	2.3	1.2	0.0	0.0	0.0	0.0
70°	2585.8	1132.4	17.5	5.8	3.5	2.3	1.2	0.0	0.0	0.0	0.0
72.5°	2165.5	838.2	10.5	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0
75°	1446.4	385.2	5.8	3.5	1.2	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	661.9	115.6	3.5	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	133.1	30.4	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.0	5.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	1.2	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)