

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: P398116

Luminaire Tested: **ARCH-S-PA1-90-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398116  
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-PA1-90-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1180mA 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: 6997 lumens  
Efficiency: N/A  
Efficacy: 74.4 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

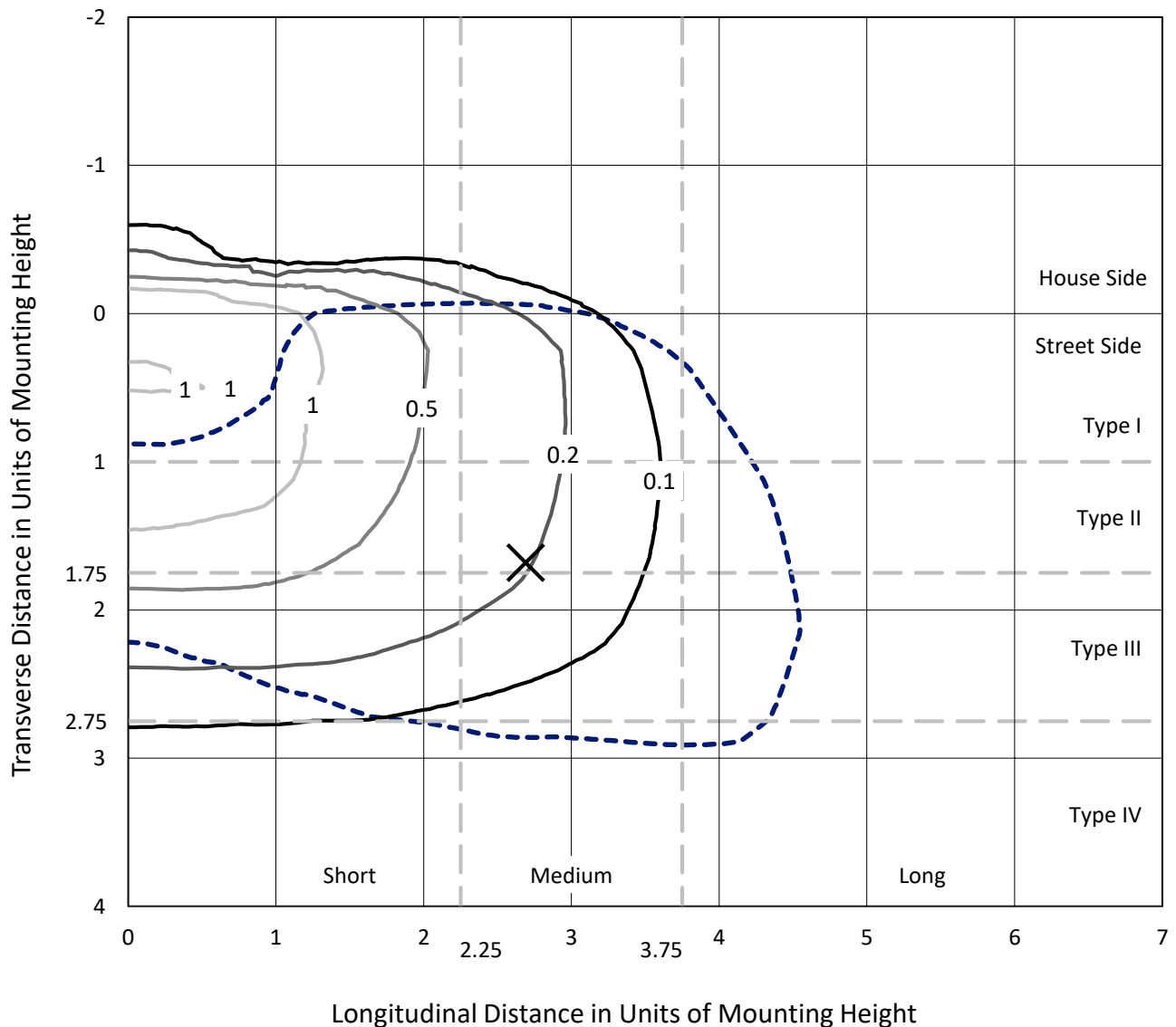
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

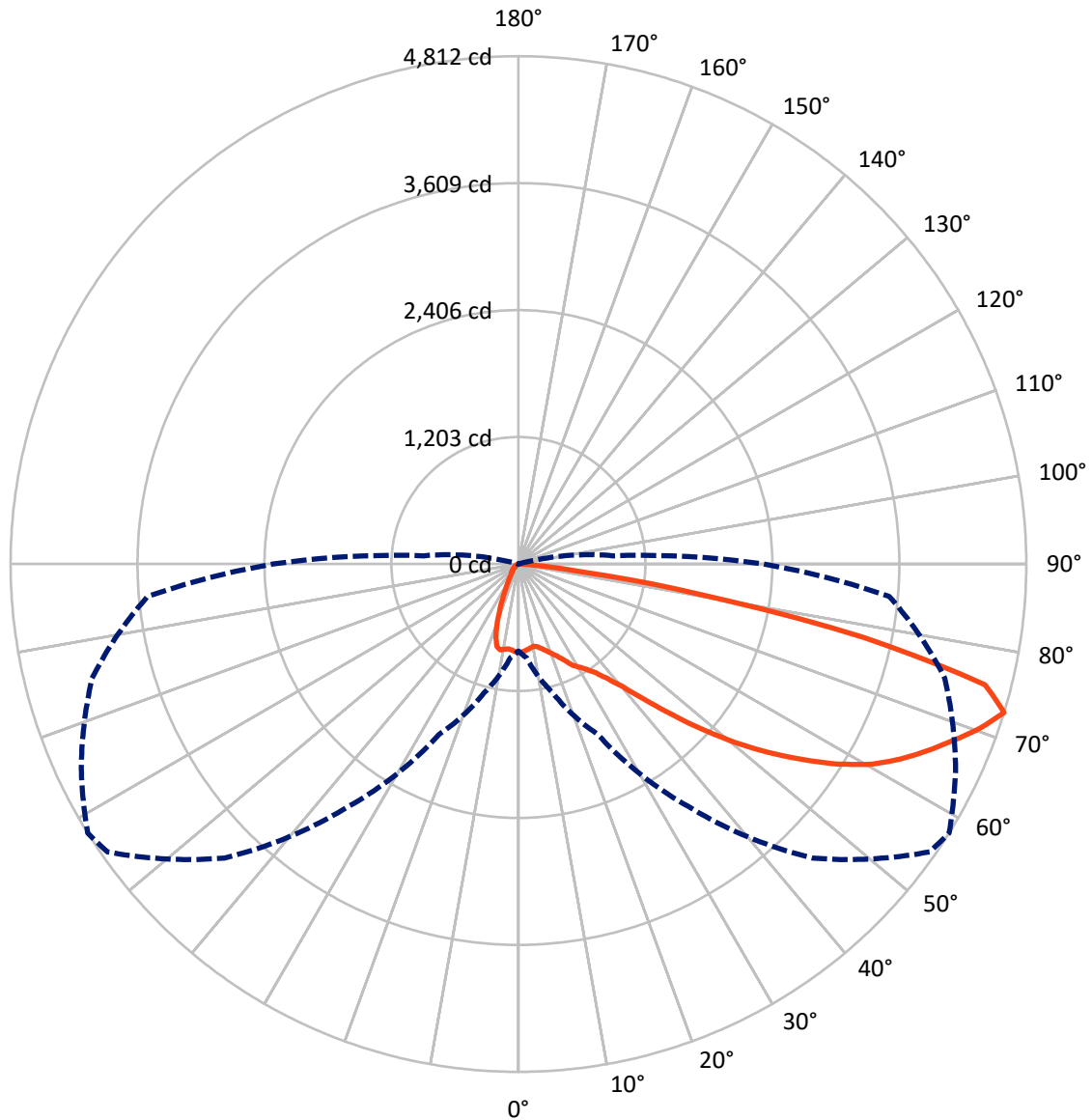


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Medium - Non-Cutoff

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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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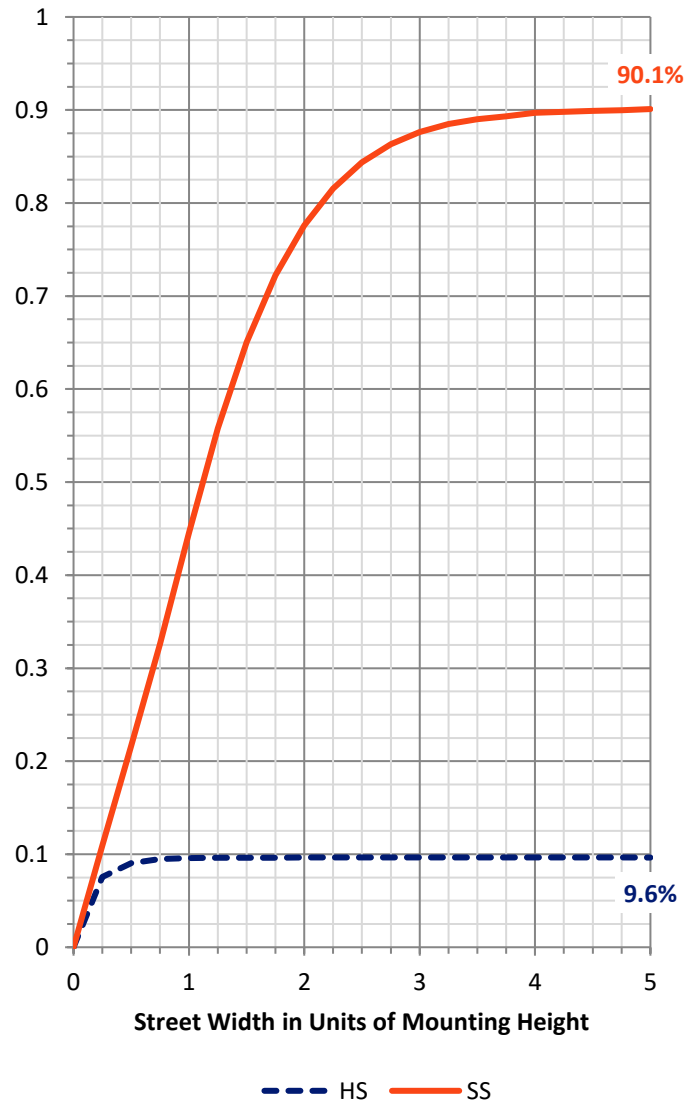
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	680.4	0.0	680.4
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	6316.6	0.0	6316.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6997.0	0.0	6997.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	1.1
10°-20°	200.7	2.9
20°-30°	315.3	4.5
30°-40°	543.7	7.8
40°-50°	1034.5	14.8
50°-60°	1638.3	23.4
60°-70°	1911.7	27.3
70°-80°	1197.3	17.1
80°-90°	78.6	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°	6997.0	100.0
0°-180°	6997.0	100.0



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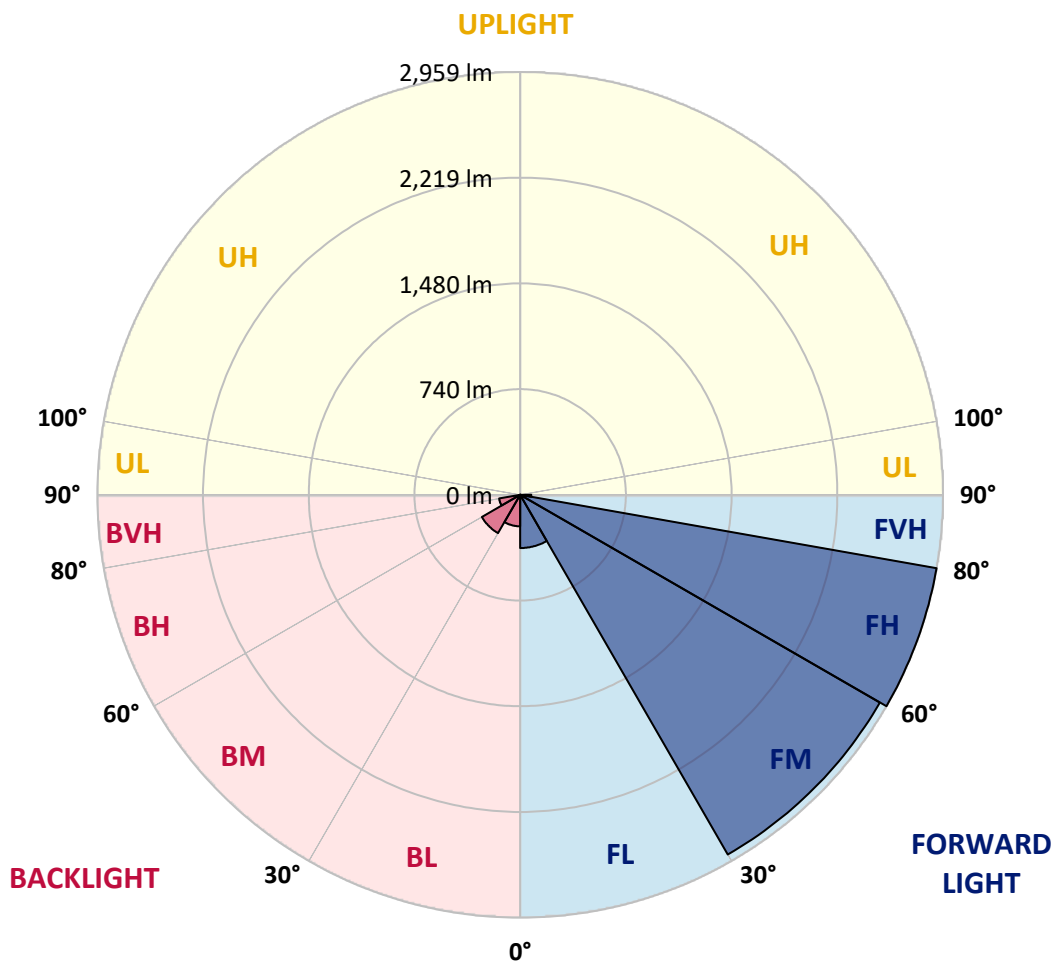
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	372.7	5.3			
FM	(30°-60°)	2906.9	41.5			
FH	(60°-80°)	2959.2	42.3			G2/5000
FVH	(80°-90°)	77.8	1.1			G1/100
BL	(0°-30°)	220.3	3.1	B1/500		
BM	(30°-60°)	309.6	4.4	B1/1000		
BH	(60°-80°)	149.7	2.1	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6
2.5°	835.8	832.1	830.8	829.6	830.8	832.1	828.3	832.1	829.6	830.8	833.3
5°	805.8	802.1	800.8	802.1	805.8	812.1	814.6	818.3	818.3	822.1	823.3
7.5°	772.0	769.5	768.3	770.8	778.3	792.0	799.6	804.6	809.6	817.1	824.6
10°	753.3	752.0	750.8	754.5	762.0	774.5	784.5	792.0	810.8	832.1	845.9
12.5°	740.7	740.7	743.3	750.8	760.8	770.8	794.6	804.6	833.3	865.9	884.6
15°	730.7	730.7	734.5	748.3	762.0	785.8	820.8	832.1	865.9	905.9	930.9
17.5°	723.2	725.7	728.2	742.0	768.3	808.3	849.6	865.9	907.2	951.0	978.5
20°	724.5	727.0	728.2	742.0	779.5	834.6	887.1	905.9	953.5	999.8	1027.3
22.5°	732.0	735.7	737.0	755.8	799.6	862.1	929.7	951.0	1002.3	1051.1	1072.3
25°	763.3	765.8	758.3	774.5	828.3	904.7	984.7	1007.3	1058.6	1103.6	1121.1
27.5°	869.6	872.1	830.8	812.1	850.9	939.7	1052.3	1083.6	1147.4	1177.4	1179.9
30°	1099.9	1102.4	1021.0	932.2	904.7	969.7	1089.8	1133.6	1216.2	1250.0	1235.0
32.5°	1396.4	1393.9	1282.5	1151.2	1032.3	1022.3	1143.7	1190.0	1280.0	1312.6	1301.3
35°	1694.2	1698.0	1602.9	1405.2	1235.0	1121.1	1212.5	1266.3	1375.1	1421.4	1401.4
37.5°	1898.2	1923.2	1881.9	1667.9	1484.0	1303.8	1323.8	1381.4	1517.8	1580.3	1537.8
40°	2186.0	2179.7	2079.6	1921.9	1759.3	1574.1	1504.0	1531.5	1688.0	1771.8	1705.5
42.5°	2572.6	2560.1	2389.9	2236.0	2054.6	1903.2	1760.5	1755.5	1883.2	1980.7	1884.4
45°	2922.9	2904.2	2787.8	2638.9	2440.0	2266.0	2073.3	2029.5	2118.4	2201.0	2088.4
47.5°	3202.0	3170.7	3088.1	3009.3	2960.5	2690.2	2401.2	2334.9	2379.9	2441.2	2282.3
50°	3532.3	3446.0	3325.9	3278.3	3379.7	3170.7	2716.5	2652.7	2650.2	2685.2	2482.5
52.5°	3682.5	3526.1	3458.5	3498.5	3677.5	3617.4	3056.8	2965.5	2929.2	2933.0	2668.9
55°	3501.0	3483.5	3519.8	3644.9	3878.9	3843.9	3383.4	3270.8	3217.0	3149.4	2847.9
57.5°	3294.6	3348.4	3492.3	3731.3	4134.2	4080.4	3705.0	3577.4	3478.5	3323.4	3046.8
60°	3104.4	3159.4	3397.2	3751.3	4274.3	4308.1	3972.8	3851.4	3705.0	3501.0	3265.8
62.5°	2815.3	2857.9	3192.0	3722.5	4213.0	4440.7	4159.2	4067.9	3931.5	3670.0	3517.3
65°	2490.0	2517.5	2847.9	3492.3	4092.9	4425.7	4313.1	4261.8	4129.2	3846.4	3766.3
67.5°	2133.4	2165.9	2441.2	3078.1	3857.6	4355.6	4458.2	4453.2	4301.8	4041.6	3946.5
70°	1723.0	1725.5	1953.2	2552.6	3447.2	4215.5	4638.4	4649.7	4467.0	4188.0	3954.0
72.5°	824.6	892.2	1266.3	1781.8	2801.6	3940.2	4756.0	4812.4	4570.9	4183.0	3527.3
75°	188.9	195.2	369.1	847.1	1642.9	3024.3	4462.0	4567.1	4318.1	3617.4	2485.0
77.5°	68.8	72.6	103.9	247.8	631.9	1562.8	3193.2	3347.1	3192.0	2338.6	1174.9
80°	46.3	45.0	53.8	110.1	290.3	442.9	1632.9	1724.2	1574.1	798.3	281.5
82.5°	23.8	25.0	37.5	61.3	195.2	153.9	545.6	593.1	488.0	160.2	52.6
85°	11.3	11.3	21.3	38.8	82.6	53.8	121.4	146.4	131.4	70.1	17.5
87.5°	11.3	11.3	20.0	25.0	42.5	22.5	30.0	37.5	35.0	37.5	6.3
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°	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6	839.6
2.5°	833.3	832.1	830.8	833.3	832.1	834.6	834.6	837.1	837.1	834.6	833.3
5°	822.1	819.6	817.1	817.1	815.8	818.3	825.8	832.1	833.3	829.6	828.3
7.5°	823.3	823.3	820.8	815.8	807.1	807.1	807.1	814.6	818.3	815.8	814.6
10°	845.9	847.1	840.8	829.6	814.6	800.8	774.5	735.7	699.5	689.4	685.7
12.5°	884.6	885.9	873.4	853.4	822.1	740.7	640.6	548.1	476.7	456.7	453.0
15°	930.9	932.2	909.7	877.1	782.0	593.1	444.2	339.1	276.5	261.5	260.3
17.5°	978.5	976.0	942.2	879.6	663.2	420.4	270.3	216.5	200.2	196.4	197.7
20°	1024.8	1017.3	971.0	833.3	510.5	275.3	197.7	185.2	181.4	178.9	178.9
22.5°	1067.3	1052.3	994.8	742.0	357.9	197.7	176.4	173.9	168.9	165.2	163.9
25°	1109.9	1088.6	1009.8	623.1	240.2	172.7	166.4	161.4	155.2	150.2	148.9
27.5°	1161.2	1131.1	1002.3	473.0	180.2	160.2	155.2	147.6	138.9	131.4	128.9
30°	1210.0	1176.2	959.7	326.6	153.9	147.6	140.1	128.9	117.6	108.9	106.4
32.5°	1271.3	1232.5	883.4	214.0	133.9	128.9	121.4	107.6	92.6	82.6	80.1
35°	1358.9	1315.1	785.8	150.2	117.6	108.9	98.8	83.8	67.6	60.1	58.8
37.5°	1481.5	1422.7	663.2	121.4	103.9	91.3	76.3	61.3	50.1	43.8	42.5
40°	1631.6	1541.6	526.8	107.6	92.6	76.3	57.6	43.8	36.3	31.3	31.3
42.5°	1794.3	1652.9	387.9	98.8	81.3	62.6	42.5	31.3	26.3	23.8	22.5
45°	1962.0	1751.8	261.5	91.3	71.3	47.5	30.0	21.3	17.5	17.5	16.3
47.5°	2135.9	1818.1	168.9	82.6	60.1	35.0	20.0	15.0	12.5	12.5	12.5
50°	2308.6	1853.1	120.1	75.1	48.8	23.8	15.0	11.3	10.0	10.0	10.0
52.5°	2433.7	1830.6	96.3	65.1	37.5	17.5	11.3	8.8	7.5	7.5	7.5
55°	2542.6	1791.8	83.8	56.3	27.5	12.5	8.8	7.5	6.3	6.3	6.3
57.5°	2653.9	1741.8	75.1	47.5	20.0	8.8	6.3	5.0	5.0	5.0	5.0
60°	2755.3	1656.7	65.1	37.5	13.8	6.3	5.0	3.8	3.8	3.8	3.8
62.5°	2854.1	1584.1	56.3	28.8	10.0	5.0	2.5	2.5	1.3	1.3	1.3
65°	2910.4	1486.5	45.0	18.8	6.3	3.8	1.3	1.3	0.0	0.0	0.0
67.5°	2892.9	1370.1	31.3	11.3	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2771.5	1213.7	18.8	6.3	3.8	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	2321.1	898.4	11.3	5.0	2.5	1.3	0.0	0.0	0.0	0.0	0.0
75°	1550.3	412.9	6.3	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	709.5	123.9	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	142.6	32.5	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.0	6.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	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)