

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: P573409

Luminaire Tested: **ARCH-S-PA2-70-750-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573409  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8237 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

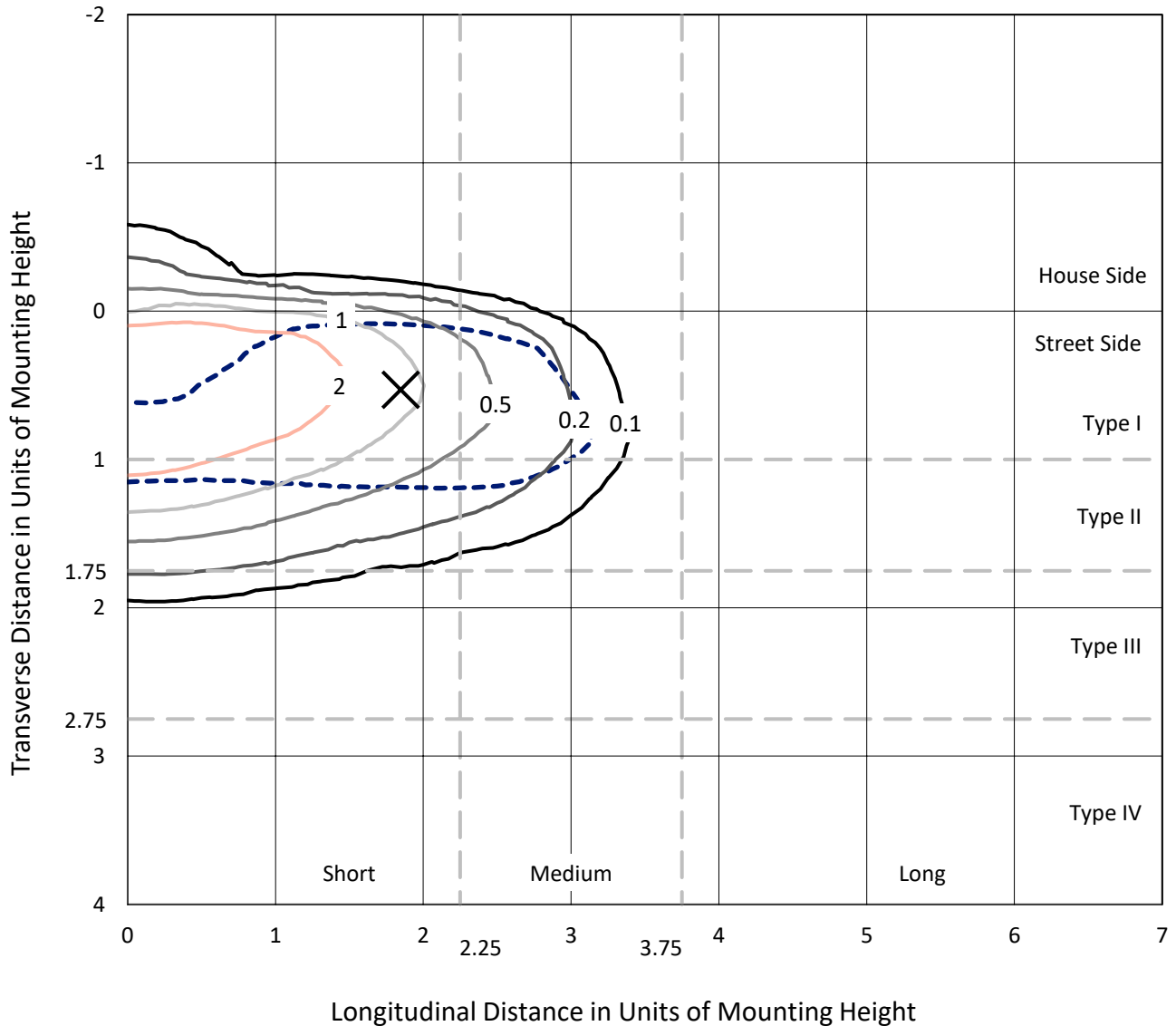
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

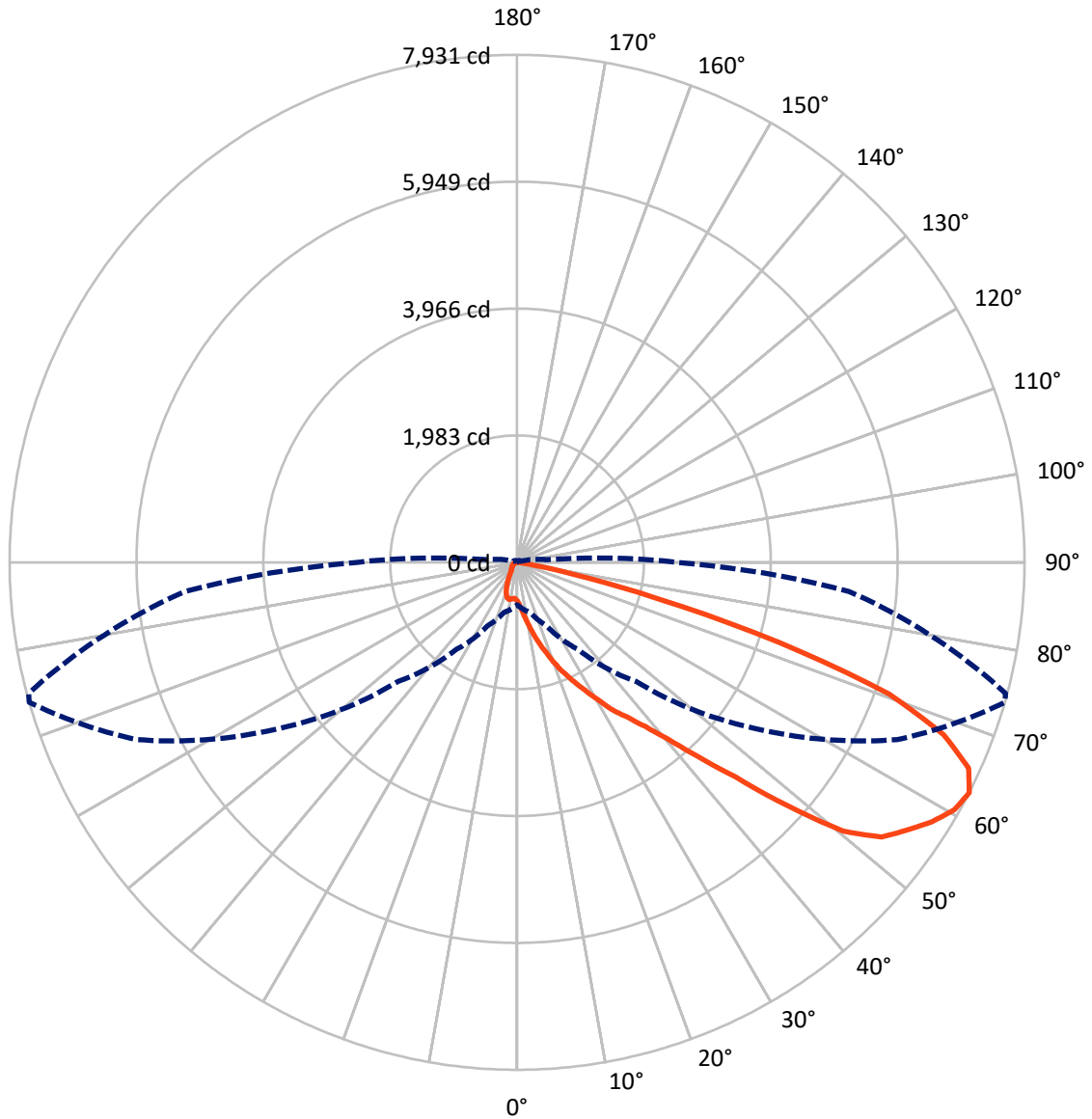
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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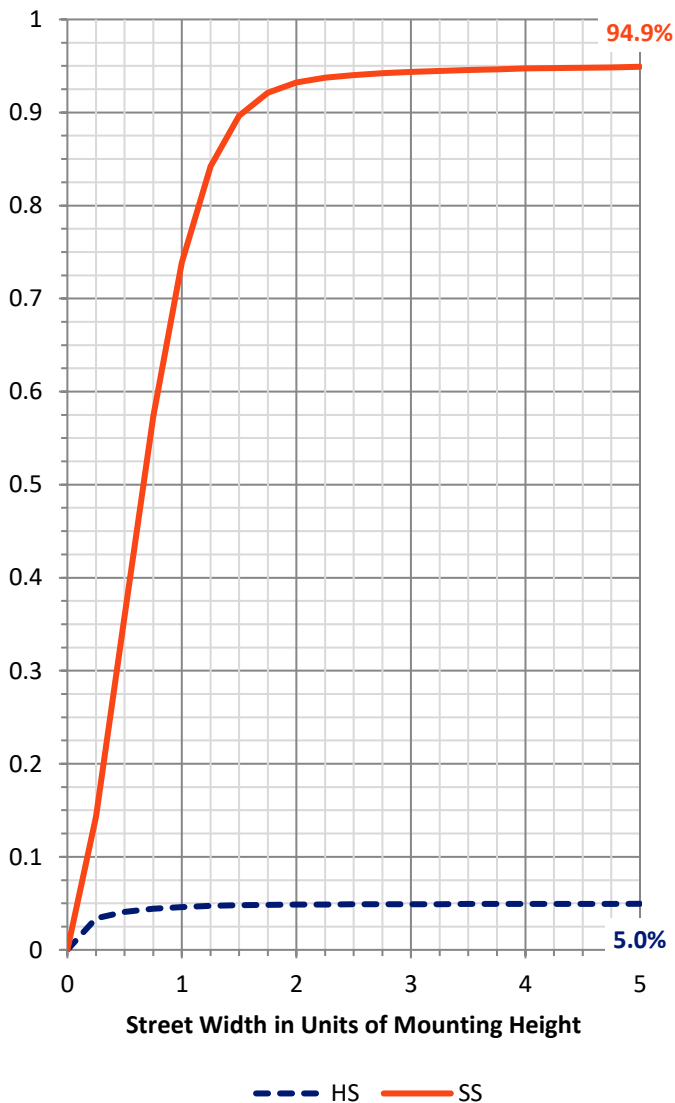
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	410.9	0.0	410.9
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	7826.2	0.0	7826.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	8237.0	0.0	8237.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	0.9
10°-20°	316.7	3.8
20°-30°	679.8	8.3
30°-40°	1192.2	14.5
40°-50°	1848.2	22.4
50°-60°	2130.7	25.9
60°-70°	1496.9	18.2
70°-80°	466.3	5.7
80°-90°	30.8	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°	8237.0	100.0
0°-180°	8237.0	100.0

**Coefficient of Utilization**

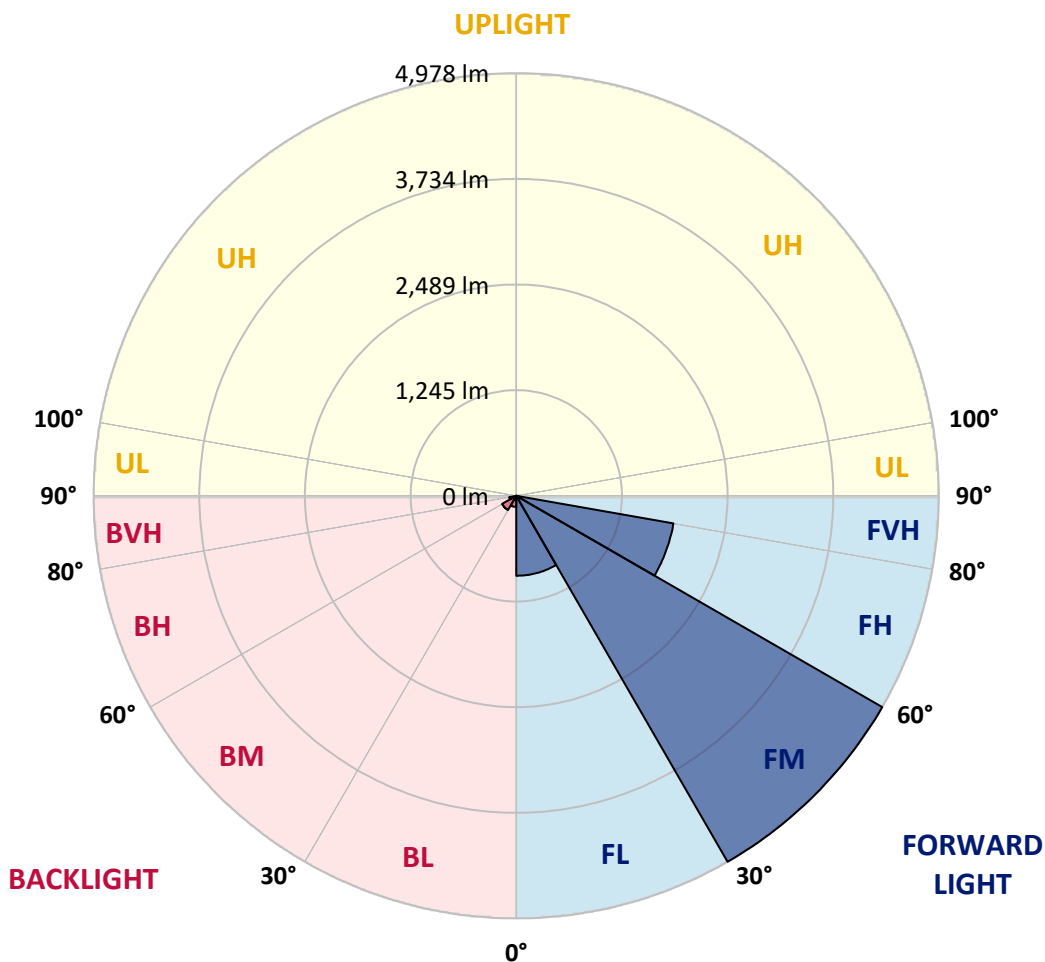


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	941.5	11.4			
FM (30°-60°)	4978.0	60.4			
FH (60°-80°)	1880.1	22.8			G2/5000
FVH (80°-90°)	26.6	0.3			G1/100
BL (0°-30°)	130.4	1.6	B1/500		
BM (30°-60°)	193.1	2.3	B0/220		
BH (60°-80°)	83.2	1.0	B0/110		G0/110
BVH (80°-90°)	4.2	0.1			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0
2.5°	837.8	823.3	805.9	791.4	762.4	742.1	716.0	687.0	655.2	652.3	626.2
5°	1174.1	1130.6	1130.6	1092.9	1049.4	971.1	898.7	808.8	742.1	736.3	666.7
7.5°	1519.0	1484.2	1464.0	1406.0	1336.4	1249.4	1133.5	982.7	861.0	840.7	727.6
10°	1840.8	1814.7	1777.0	1730.7	1669.8	1527.7	1382.8	1185.7	991.4	976.9	800.1
12.5°	2090.1	2058.2	2040.8	2020.5	1942.3	1829.2	1640.8	1391.5	1159.6	1127.7	872.6
15°	2278.5	2264.1	2246.7	2246.7	2206.1	2095.9	1901.7	1611.8	1321.9	1284.2	965.3
17.5°	2429.3	2411.9	2409.0	2426.4	2414.8	2336.5	2153.9	1823.4	1490.0	1461.1	1061.0
20°	2597.4	2574.2	2574.2	2588.7	2585.8	2542.3	2382.9	2066.9	1687.2	1635.0	1171.2
22.5°	2835.1	2820.6	2809.0	2785.9	2768.5	2727.9	2588.7	2304.6	1875.6	1826.3	1284.2
25°	3154.0	3136.6	3084.4	3043.9	2968.5	2907.6	2788.8	2516.3	2066.9	2011.8	1394.4
27.5°	3464.2	3429.4	3380.1	3328.0	3243.9	3139.5	2991.7	2716.3	2266.9	2209.0	1507.4
30°	3791.8	3765.7	3704.8	3620.7	3516.4	3400.4	3223.6	2956.9	2496.0	2432.2	1629.2
32.5°	4052.7	4012.1	3957.0	3875.8	3768.6	3687.4	3496.1	3220.7	2759.8	2675.7	1756.7
35°	4261.4	4229.5	4157.0	4078.8	3997.6	3974.4	3765.7	3435.2	2971.4	2893.1	1893.0
37.5°	4394.8	4362.9	4302.0	4223.7	4191.8	4232.4	4096.2	3728.0	3255.5	3156.9	2049.5
40°	4499.1	4461.4	4412.1	4377.4	4365.8	4478.8	4464.3	4107.8	3629.4	3571.5	2264.1
42.5°	4574.5	4536.8	4504.9	4502.0	4577.4	4797.7	4960.0	4638.3	4151.2	4032.4	2539.4
45°	4478.8	4446.9	4464.3	4565.8	4748.4	5096.3	5560.1	5389.1	4780.3	4696.2	2980.1
47.5°	4212.1	4191.8	4270.1	4455.6	4794.8	5278.9	6139.9	6212.4	5679.0	5551.4	3551.2
50°	3794.7	3791.8	3916.4	4168.6	4649.9	5348.5	6432.7	7003.8	6600.8	6470.4	4015.0
52.5°	3229.4	3217.8	3400.4	3751.2	4307.8	5218.0	6487.8	7319.8	7134.2	6980.6	4307.8
55°	2588.7	2562.6	2780.1	3165.6	3803.4	4838.3	6339.9	7389.3	7389.3	7250.2	4525.2
57.5°	1820.5	1861.1	2040.8	2504.7	3180.1	4270.1	5974.7	7325.5	7647.3	7528.5	4818.0
60°	1148.0	1165.4	1362.5	1736.4	2411.9	3510.6	5322.4	7050.2	7853.2	7783.6	5052.8
62.5°	661.0	716.0	814.6	1098.7	1664.0	2638.0	4516.5	6554.4	7931.4	7902.4	5206.4
65°	402.9	408.7	455.1	620.4	1023.3	1800.2	3614.9	5864.5	7754.6	7780.7	5177.5
67.5°	301.5	301.5	316.0	391.4	582.7	1145.1	2667.0	5026.7	7189.3	7273.4	4905.0
70°	260.9	260.9	263.8	287.0	359.5	678.3	1762.5	4052.7	6163.1	6154.4	4052.7
72.5°	205.8	214.5	231.9	243.5	272.5	397.2	1032.0	2832.2	4281.7	4383.2	2609.0
75°	165.2	168.1	191.3	211.6	229.0	269.6	487.0	1574.1	2246.7	2246.7	1148.0
77.5°	127.6	133.3	147.8	168.1	191.3	191.3	202.9	608.8	869.7	840.7	339.2
80°	81.2	84.1	107.3	133.3	159.4	136.2	110.2	202.9	237.7	229.0	92.8
82.5°	49.3	52.2	69.6	107.3	107.3	75.4	69.6	84.1	75.4	69.6	37.7
85°	14.5	17.4	49.3	69.6	60.9	29.0	34.8	37.7	34.8	31.9	20.3
87.5°	2.9	2.9	14.5	17.4	14.5	14.5	11.6	14.5	14.5	14.5	8.7
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°	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0	603.0
2.5°	611.7	600.1	576.9	559.5	545.0	530.5	518.9	516.0	510.2	510.2	507.3
5°	637.8	611.7	568.2	539.2	516.0	495.7	478.3	460.9	455.1	449.3	452.2
7.5°	678.3	637.8	576.9	533.4	492.8	446.4	408.7	376.9	353.7	347.9	339.2
10°	730.5	669.6	591.4	521.8	446.4	365.3	313.1	281.2	269.6	255.1	258.0
12.5°	782.7	707.3	603.0	489.9	368.2	287.0	243.5	223.2	214.5	211.6	214.5
15°	843.6	747.9	597.2	431.9	295.7	231.9	205.8	197.1	191.3	191.3	188.4
17.5°	904.5	782.7	576.9	356.6	237.7	197.1	185.5	176.8	171.0	168.1	168.1
20°	971.1	814.6	530.5	284.1	197.1	179.7	168.1	156.5	150.7	150.7	150.7
22.5°	1040.7	837.8	469.6	226.1	176.8	159.4	147.8	139.1	133.3	133.3	133.3
25°	1101.6	849.4	397.2	188.4	162.3	144.9	133.3	124.7	121.8	118.9	118.9
27.5°	1159.6	846.5	321.8	165.2	144.9	130.5	118.9	113.1	107.3	107.3	107.3
30°	1217.5	829.1	255.1	150.7	133.3	116.0	107.3	101.5	98.6	95.7	95.7
32.5°	1266.8	800.1	200.0	139.1	121.8	104.4	95.7	89.9	89.9	87.0	87.0
35°	1316.1	756.6	168.1	130.5	110.2	95.7	87.0	84.1	81.2	81.2	81.2
37.5°	1368.3	701.5	147.8	118.9	98.6	87.0	81.2	78.3	75.4	72.5	72.5
40°	1432.1	646.5	139.1	110.2	89.9	78.3	72.5	69.6	66.7	66.7	66.7
42.5°	1533.5	600.1	130.5	98.6	81.2	72.5	66.7	60.9	60.9	58.0	58.0
45°	1724.9	582.7	121.8	89.9	75.4	63.8	60.9	55.1	52.2	52.2	52.2
47.5°	1974.2	585.6	113.1	81.2	69.6	58.0	55.1	52.2	46.4	46.4	46.4
50°	2180.0	571.1	104.4	75.4	60.9	55.1	49.3	46.4	43.5	43.5	43.5
52.5°	2261.2	545.0	95.7	69.6	58.0	49.3	46.4	43.5	40.6	40.6	40.6
55°	2342.3	533.4	87.0	60.9	52.2	49.3	43.5	40.6	37.7	34.8	34.8
57.5°	2490.2	539.2	78.3	58.0	49.3	46.4	40.6	34.8	29.0	26.1	26.1
60°	2568.4	518.9	72.5	52.2	46.4	43.5	34.8	26.1	20.3	17.4	17.4
62.5°	2501.8	460.9	66.7	49.3	43.5	37.7	26.1	20.3	14.5	8.7	8.7
65°	2316.2	379.8	60.9	46.4	37.7	29.0	23.2	14.5	8.7	5.8	5.8
67.5°	2081.4	298.6	55.1	43.5	34.8	26.1	20.3	11.6	5.8	2.9	2.9
70°	1681.4	214.5	52.2	40.6	31.9	23.2	17.4	11.6	5.8	2.9	2.9
72.5°	1084.2	139.1	46.4	37.7	29.0	23.2	14.5	8.7	5.8	2.9	2.9
75°	501.5	92.8	43.5	34.8	29.0	20.3	14.5	11.6	5.8	2.9	2.9
77.5°	147.8	66.7	40.6	31.9	26.1	20.3	14.5	11.6	5.8	2.9	2.9
80°	60.9	46.4	31.9	29.0	26.1	20.3	14.5	11.6	5.8	2.9	2.9
82.5°	29.0	20.3	14.5	11.6	14.5	14.5	11.6	11.6	5.8	2.9	2.9
85°	14.5	8.7	5.8	5.8	5.8	2.9	2.9	5.8	5.8	2.9	2.9
87.5°	8.7	5.8	5.8	5.8	2.9	2.9	2.9	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)