

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: P573440

Luminaire Tested: **ARCH-S-PA2-70-830-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573440  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6331 lumens  
Efficiency: N/A  
Efficacy: 86.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

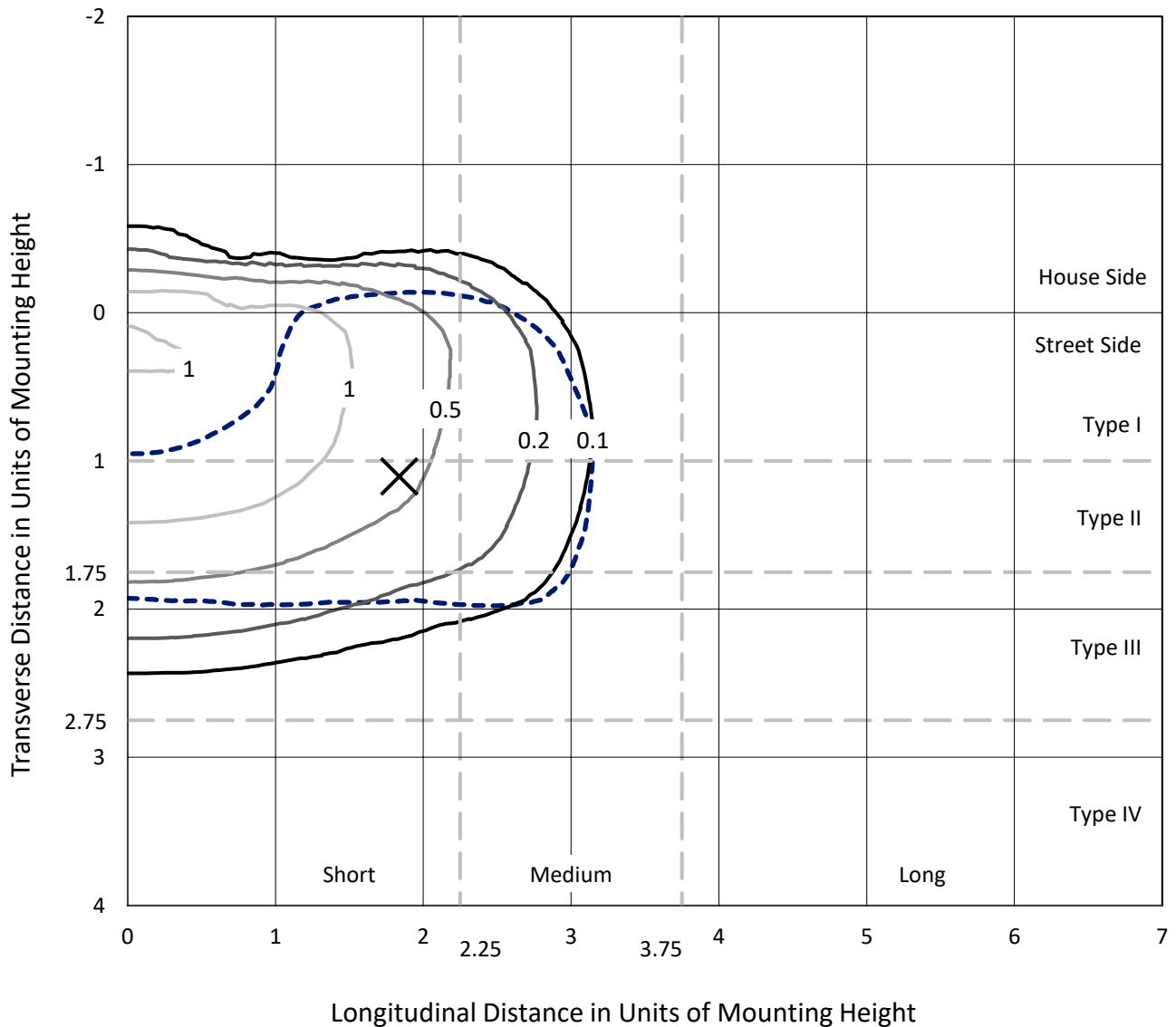
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

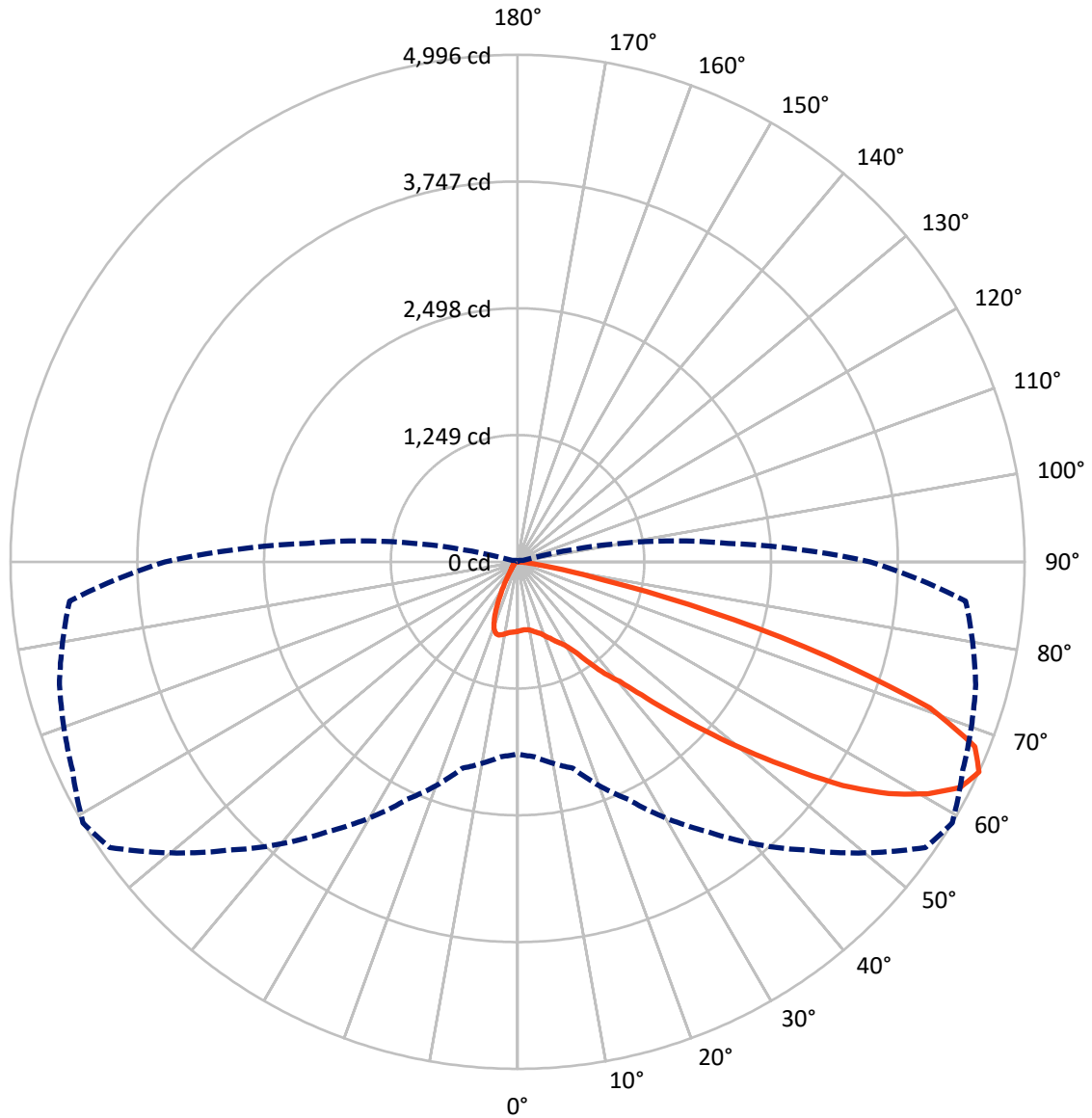
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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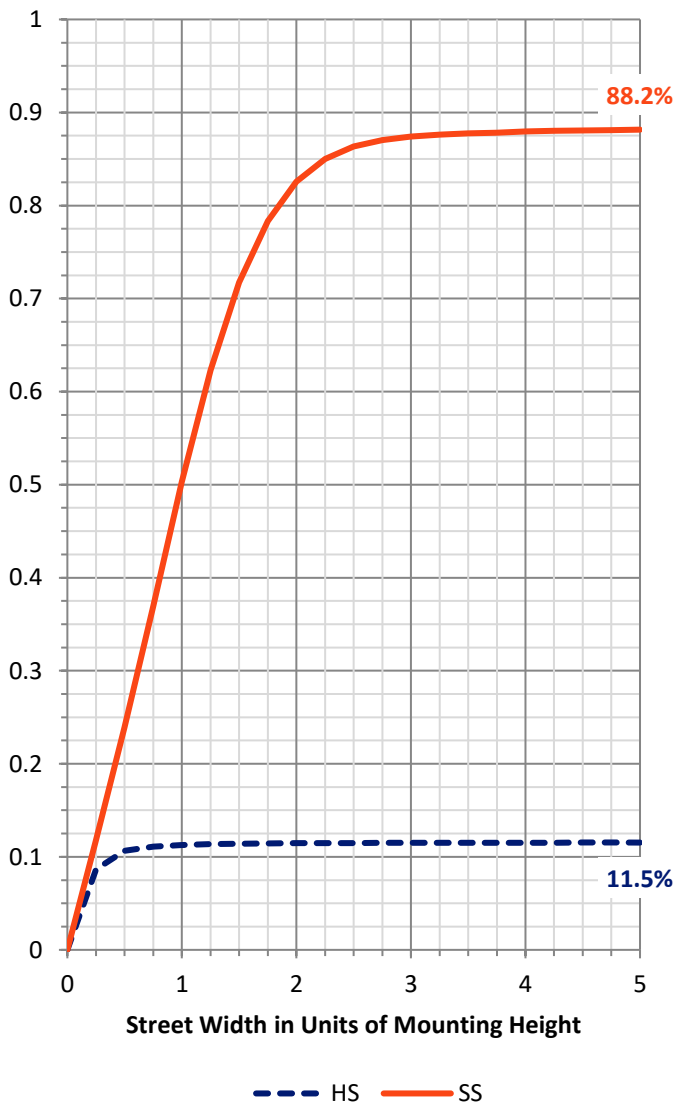
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	738.6	0.0	738.6
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	5592.4	0.0	5592.4
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	6331.0	0.0	6331.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.6	1.0
10°-20°	183.7	2.9
20°-30°	311.9	4.9
30°-40°	552.6	8.7
40°-50°	1042.3	16.5
50°-60°	1763.6	27.9
60°-70°	1833.6	29.0
70°-80°	549.8	8.7
80°-90°	28.8	0.5
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°	6331.0	100.0
0°-180°	6331.0	100.0

**Coefficient of Utilization**



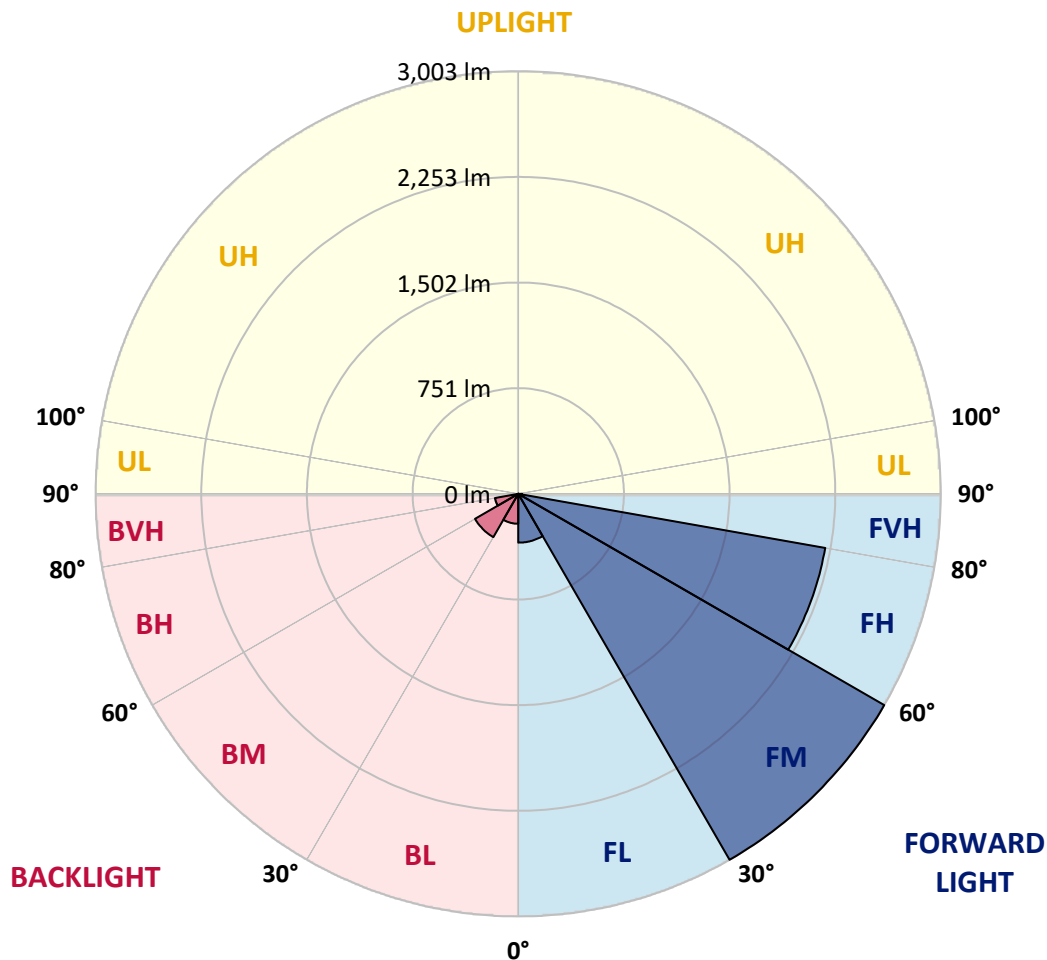
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	347.2	5.5			
FM	(30°-60°)	3003.4	47.4			
FH	(60°-80°)	2215.4	35.0			G2/5000
FVH	(80°-90°)	26.4	0.4			G1/100
BL	(0°-30°)	213.1	3.4	B1/500		
BM	(30°-60°)	355.0	5.6	B1/1000		
BH	(60°-80°)	168.0	2.7	B1/500		G1/500
BVH	(80°-90°)	2.4	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1
2.5°	665.7	663.4	663.4	668.0	670.3	672.6	677.2	677.2	677.2	681.8	684.1
5°	633.5	633.5	635.8	640.4	649.6	656.5	670.3	672.6	674.9	686.4	691.0
7.5°	612.7	612.7	615.0	624.2	635.8	651.9	670.3	674.9	681.8	697.9	709.5
10°	610.4	608.1	612.7	621.9	635.8	656.5	677.2	684.1	697.9	718.7	734.8
12.5°	617.3	615.0	619.6	628.8	642.7	663.4	691.0	702.6	718.7	746.3	769.4
15°	621.9	619.6	624.2	635.8	651.9	677.2	709.5	723.3	744.0	783.2	806.2
17.5°	635.8	633.5	635.8	645.0	661.1	688.7	730.2	744.0	778.6	822.3	847.7
20°	697.9	695.6	681.8	677.2	679.5	704.9	757.8	780.9	822.3	877.6	896.0
22.5°	826.9	817.7	792.4	750.9	723.3	732.5	792.4	817.7	873.0	935.2	949.0
25°	999.7	992.8	955.9	884.5	806.2	783.2	831.5	866.1	932.9	1002.0	997.4
27.5°	1195.5	1181.7	1147.1	1048.1	942.1	866.1	879.9	909.9	983.6	1057.3	1034.3
30°	1366.0	1361.3	1322.2	1239.3	1114.9	1002.0	953.6	969.8	1036.6	1114.9	1087.2
32.5°	1522.6	1508.8	1476.5	1398.2	1283.0	1167.9	1071.1	1071.1	1126.4	1218.5	1177.1
35°	1695.3	1686.1	1647.0	1568.7	1458.1	1322.2	1234.7	1225.4	1271.5	1375.2	1285.3
37.5°	1872.7	1849.7	1831.3	1750.6	1640.1	1522.6	1416.6	1395.9	1418.9	1494.9	1384.4
40°	2093.8	2093.8	2052.4	1978.7	1875.0	1750.6	1603.2	1550.2	1543.3	1642.4	1557.1
42.5°	2351.8	2344.9	2310.4	2241.3	2142.2	2027.0	1840.5	1792.1	1787.5	1907.3	1805.9
45°	2649.0	2644.4	2602.9	2545.3	2476.2	2349.5	2165.3	2116.9	2089.2	2227.4	2107.7
47.5°	2920.8	2904.7	2890.8	2897.8	2858.6	2715.8	2543.0	2485.4	2483.1	2591.4	2437.1
50°	3107.4	3098.2	3146.5	3192.6	3266.3	3176.5	2971.5	2920.8	2881.6	3024.4	2780.3
52.5°	3229.5	3224.8	3321.6	3452.9	3604.9	3598.0	3416.0	3386.1	3353.8	3393.0	3086.6
55°	3277.8	3277.8	3393.0	3634.9	3902.1	4017.2	3932.0	3890.5	3777.7	3697.1	3422.9
57.5°	3220.2	3213.3	3363.1	3678.6	4086.3	4323.6	4360.4	4312.1	4134.7	4044.9	3796.1
60°	2976.1	2980.7	3158.0	3556.5	4072.5	4448.0	4685.2	4641.5	4464.1	4330.5	4109.4
62.5°	2520.0	2559.1	2745.7	3178.8	3777.7	4348.9	4871.8	4894.9	4703.7	4537.8	4388.1
65°	1893.4	1928.0	2105.4	2584.5	3241.0	4017.2	4906.4	4996.2	4841.9	4673.7	4431.9
67.5°	1151.7	1163.2	1379.8	1741.4	2386.4	3346.9	4664.5	4860.3	4749.7	4473.3	3998.8
70°	536.7	566.7	672.6	951.3	1511.1	2464.7	4031.1	4307.5	4183.1	3839.9	3040.6
72.5°	209.6	218.8	285.6	440.0	801.6	1550.2	3008.3	3192.6	3107.4	2727.3	1812.8
75°	103.7	110.6	138.2	209.6	366.3	640.4	1838.2	1957.9	1817.4	1370.6	767.1
77.5°	76.0	76.0	92.1	129.0	200.4	237.3	774.0	868.4	820.0	529.8	209.6
80°	50.7	55.3	64.5	87.5	126.7	115.2	292.5	347.8	290.2	163.5	73.7
82.5°	29.9	32.2	48.4	62.2	85.2	66.8	99.0	110.6	119.8	80.6	34.6
85°	16.1	16.1	32.2	46.1	46.1	29.9	34.6	39.2	46.1	48.4	18.4
87.5°	4.6	4.6	20.7	27.6	18.4	16.1	18.4	18.4	20.7	25.3	9.2
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°	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1	684.1
2.5°	686.4	686.4	688.7	688.7	691.0	691.0	691.0	691.0	693.3	695.6	695.6
5°	693.3	695.6	695.6	695.6	695.6	691.0	688.7	686.4	686.4	688.7	688.7
7.5°	711.8	714.1	711.8	707.2	700.3	691.0	681.8	681.8	679.5	681.8	679.5
10°	739.4	739.4	737.1	725.6	714.1	695.6	677.2	663.4	654.2	651.9	647.3
12.5°	774.0	774.0	767.1	746.3	725.6	691.0	642.7	596.6	559.7	543.6	539.0
15°	808.5	808.5	799.3	769.4	727.9	645.0	543.6	446.9	391.6	368.6	354.7
17.5°	850.0	845.4	829.2	787.8	702.6	552.8	389.3	290.2	246.5	225.7	225.7
20°	893.7	889.1	859.2	790.1	638.1	396.2	253.4	200.4	188.9	184.3	184.3
22.5°	942.1	930.6	884.5	771.7	502.2	269.5	191.2	177.4	172.8	170.5	170.5
25°	981.3	962.8	903.0	721.0	359.3	188.9	168.2	163.5	154.3	152.0	147.4
27.5°	1011.2	983.6	909.9	612.7	237.3	156.6	149.7	140.5	131.3	122.1	122.1
30°	1050.4	1015.8	914.5	476.8	161.2	135.9	129.0	117.5	106.0	96.7	96.7
32.5°	1128.7	1078.0	916.8	334.0	133.6	119.8	106.0	92.1	80.6	76.0	73.7
35°	1213.9	1144.8	891.4	216.5	117.5	101.4	85.2	73.7	62.2	59.9	59.9
37.5°	1308.4	1243.9	836.2	147.4	103.7	85.2	69.1	57.6	50.7	48.4	48.4
40°	1467.3	1391.3	744.0	117.5	89.8	71.4	57.6	48.4	43.8	41.5	41.5
42.5°	1695.3	1564.0	628.8	101.4	78.3	59.9	46.1	39.2	36.9	34.6	34.6
45°	1957.9	1757.5	495.2	92.1	69.1	50.7	39.2	34.6	32.2	29.9	29.9
47.5°	2259.7	1957.9	391.6	80.6	59.9	43.8	34.6	29.9	27.6	25.3	25.3
50°	2545.3	2114.6	294.8	71.4	53.0	36.9	29.9	27.6	25.3	23.0	23.0
52.5°	2780.3	2220.5	223.4	62.2	46.1	32.2	27.6	25.3	20.7	20.7	20.7
55°	3063.6	2303.5	170.5	55.3	41.5	29.9	25.3	20.7	18.4	16.1	16.1
57.5°	3310.1	2333.4	124.4	48.4	36.9	27.6	23.0	18.4	13.8	11.5	11.5
60°	3475.9	2308.1	89.8	41.5	32.2	23.0	18.4	13.8	9.2	6.9	6.9
62.5°	3593.4	2252.8	69.1	36.9	27.6	20.7	16.1	11.5	6.9	4.6	4.6
65°	3475.9	2082.3	55.3	32.2	23.0	18.4	11.5	9.2	4.6	2.3	2.3
67.5°	3006.0	1746.0	43.8	27.6	20.7	16.1	11.5	6.9	2.3	0.0	0.0
70°	2160.6	1246.2	36.9	25.3	18.4	13.8	9.2	4.6	2.3	0.0	0.0
72.5°	1204.7	642.7	34.6	23.0	18.4	13.8	9.2	4.6	2.3	0.0	0.0
75°	488.3	221.1	32.2	23.0	18.4	11.5	9.2	4.6	2.3	0.0	0.0
77.5°	142.8	76.0	27.6	20.7	18.4	13.8	9.2	4.6	2.3	0.0	0.0
80°	50.7	34.6	20.7	18.4	13.8	11.5	9.2	6.9	2.3	0.0	0.0
82.5°	23.0	13.8	9.2	6.9	6.9	6.9	6.9	4.6	2.3	0.0	0.0
85°	9.2	6.9	4.6	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0
87.5°	6.9	4.6	2.3	2.3	2.3	2.3	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)