

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: P573352

Luminaire Tested: **ARCH-S-PA2-60-827-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573352  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-60-827-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 625mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5098 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

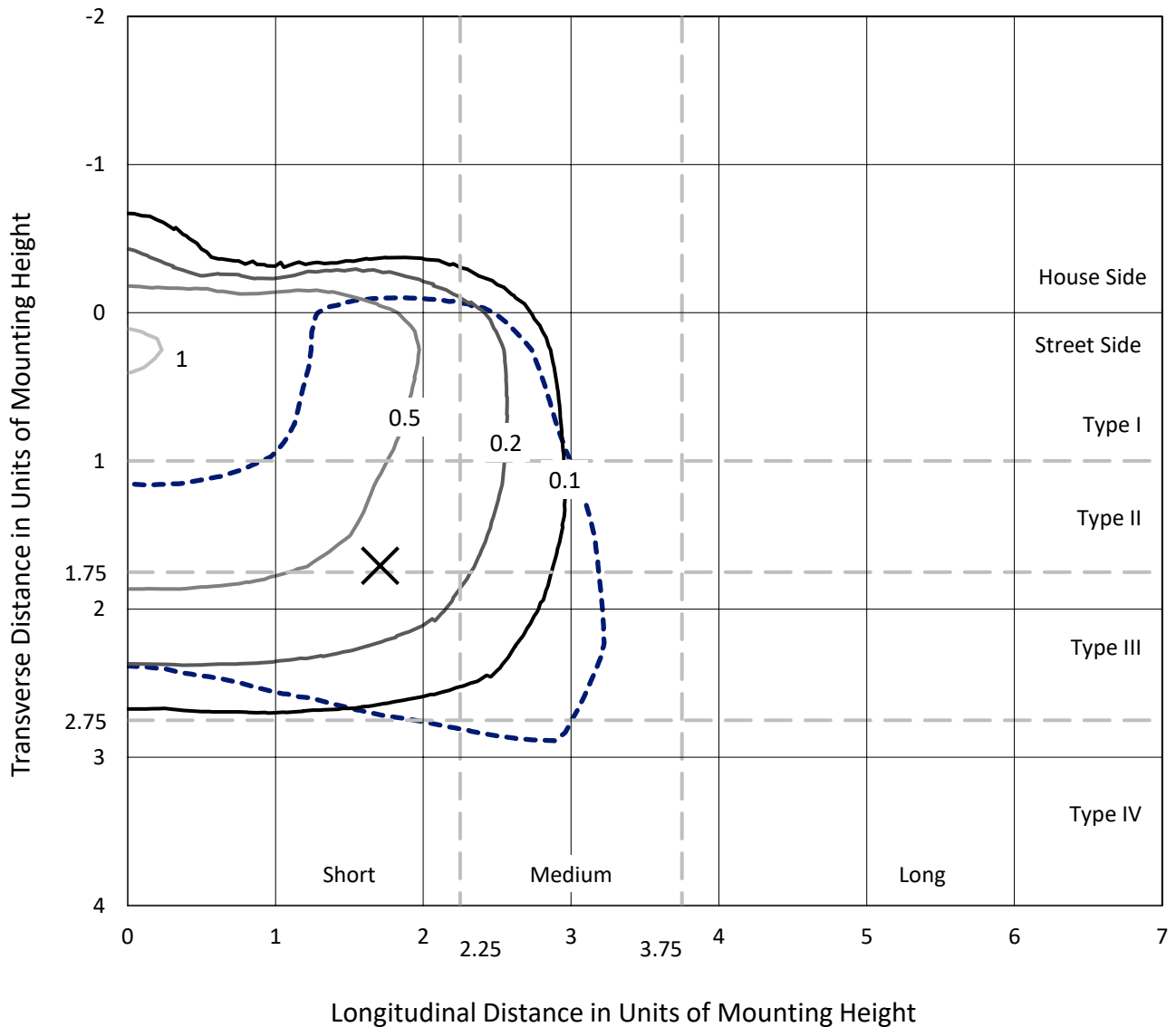
Input Watts (W): 63.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

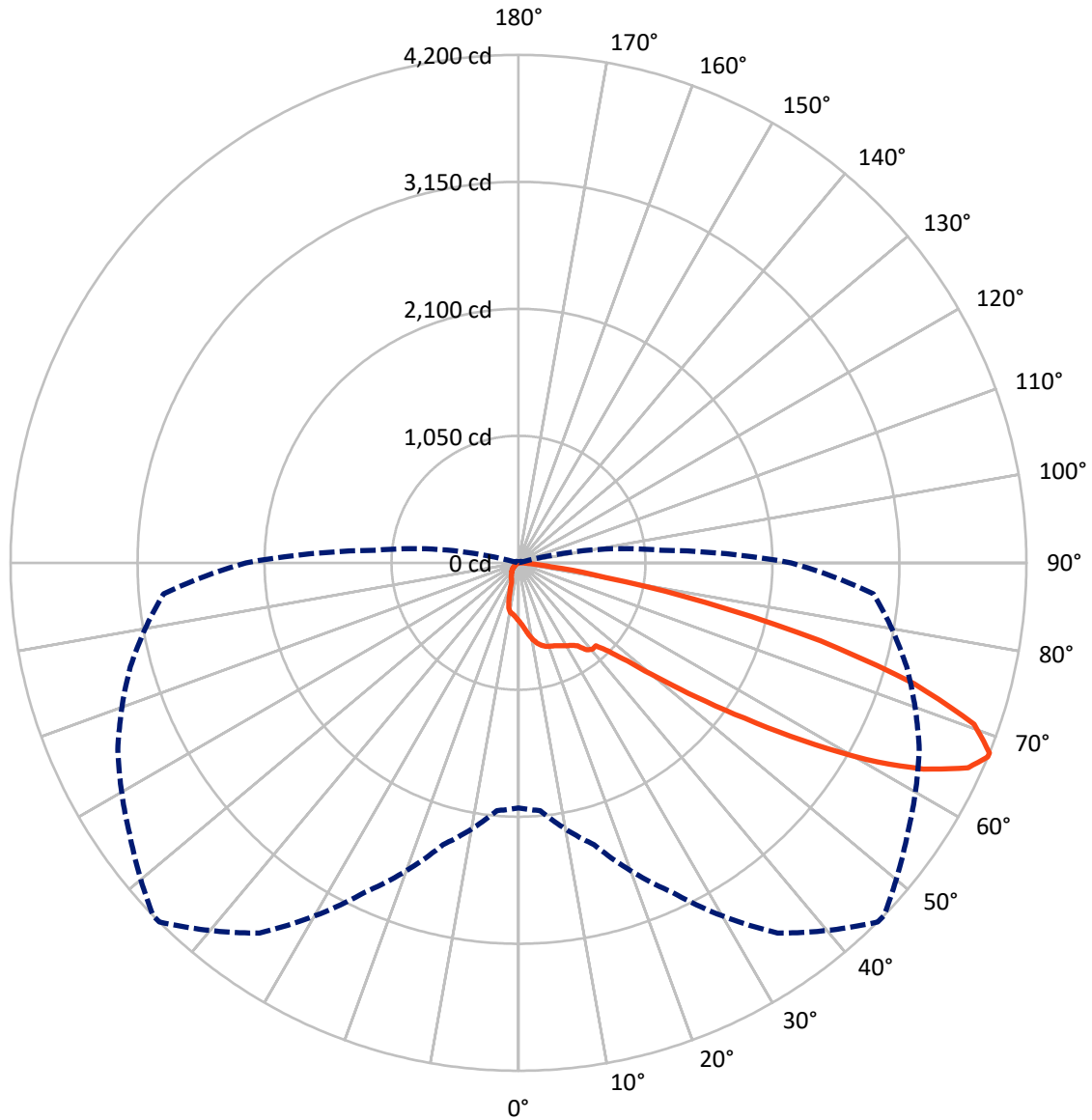
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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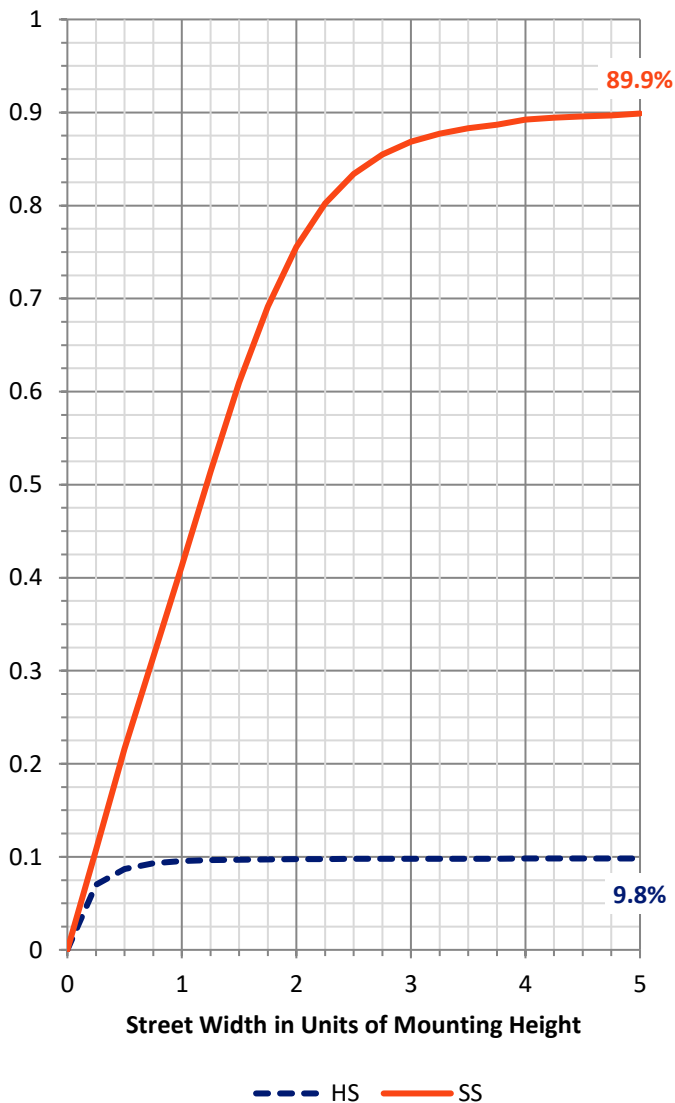
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	505.2	0.0	505.2
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	4592.9	0.0	4592.9
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	5098.0	0.0	5098.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	0.9
10°-20°	146.3	2.9
20°-30°	234.0	4.6
30°-40°	336.8	6.6
40°-50°	590.9	11.6
50°-60°	1244.9	24.4
60°-70°	1721.5	33.8
70°-80°	720.7	14.1
80°-90°	54.5	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°	5098.0	100.0
0°-180°	5098.0	100.0

**Coefficient of Utilization**



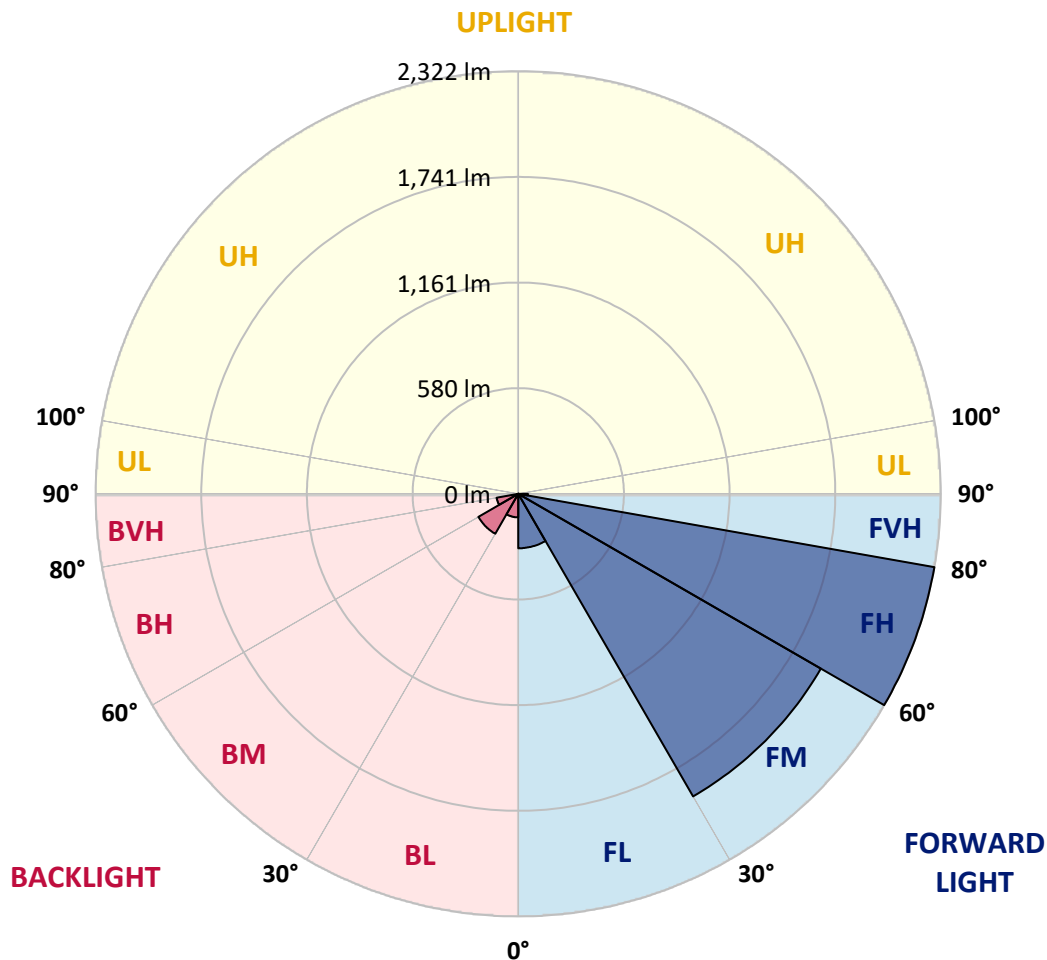
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	299.2	5.9			
FM (30°-60°)	1919.5	37.7			
FH (60°-80°)	2321.5	45.5			G2/5000
FVH (80°-90°)	52.7	1.0			G1/100
BL (0°-30°)	129.5	2.5	B1/500		
BM (30°-60°)	253.1	5.0	B1/1000		
BH (60°-80°)	120.7	2.4	B1/500		G1/500
BVH (80°-90°)	1.9	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°	46°	55°	65°	75°	85°
0°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	536.8	527.3	525.5	523.6	517.9	510.4	512.3	506.6	497.2	491.6	485.9
5°	602.7	593.3	589.5	578.2	566.9	549.9	549.9	534.9	517.9	502.9	487.8
7.5°	670.5	662.9	655.4	638.5	621.5	598.9	597.0	574.4	548.1	525.5	501.0
10°	727.0	721.3	711.9	691.2	668.6	644.1	638.5	617.7	583.8	553.7	521.7
12.5°	772.2	766.5	753.3	732.6	704.4	679.9	678.0	651.6	617.7	585.7	546.2
15°	806.1	796.7	781.6	759.0	730.7	708.1	704.4	681.8	649.8	614.0	566.9
17.5°	811.7	806.1	792.9	768.4	743.9	725.1	723.2	706.3	678.0	640.3	591.4
20°	796.7	794.8	783.5	764.6	745.8	736.4	734.5	723.2	700.6	666.7	617.7
22.5°	774.1	772.2	764.6	755.2	747.7	745.8	745.8	742.0	728.9	696.8	651.6
25°	759.0	757.1	753.3	747.7	747.7	759.0	760.9	764.6	753.3	728.9	679.9
27.5°	760.9	757.1	753.3	747.7	755.2	775.9	777.8	787.2	777.8	755.2	711.9
30°	787.2	781.6	770.3	757.1	766.5	794.8	796.7	808.0	800.4	789.1	747.7
32.5°	828.7	824.9	802.3	779.7	785.4	813.6	817.4	838.1	847.5	830.6	779.7
35°	888.9	875.8	847.5	824.9	821.1	841.9	847.5	881.4	905.9	864.5	798.5
37.5°	937.9	926.6	881.4	845.6	866.3	913.4	915.3	956.7	936.0	868.2	828.7
40°	1103.6	1101.8	1022.7	909.7	887.1	939.8	947.3	954.9	945.4	911.5	894.6
42.5°	1371.1	1348.5	1260.0	1086.7	932.3	937.9	941.7	981.2	1030.2	1015.1	1020.8
45°	1661.1	1642.3	1542.5	1324.0	1086.7	1039.6	1043.4	1107.4	1201.6	1220.4	1250.5
47.5°	1928.5	1898.4	1841.9	1621.6	1350.4	1212.9	1220.4	1297.6	1453.9	1495.4	1542.5
50°	2154.5	2133.8	2081.1	1936.1	1674.3	1486.0	1493.5	1557.5	1760.9	1826.8	1887.1
52.5°	2482.2	2454.0	2352.3	2284.5	2086.7	1841.9	1825.0	1892.8	2126.3	2169.6	2250.6
55°	2783.6	2725.2	2664.9	2636.7	2553.8	2267.5	2261.9	2275.1	2469.1	2491.7	2636.7
57.5°	2911.6	2900.3	2951.2	3045.4	3064.2	2768.5	2744.0	2693.2	2845.7	2843.8	3013.3
60°	2992.6	2992.6	3128.2	3361.8	3512.4	3303.4	3269.5	3111.3	3165.9	3167.8	3324.1
62.5°	2941.8	2955.0	3165.9	3518.1	3821.3	3757.3	3734.7	3469.1	3465.3	3422.0	3476.6
65°	2627.3	2649.9	2988.9	3431.4	3934.3	4085.0	4075.5	3774.2	3665.0	3506.8	3384.4
67°	2143.2	2184.7	2595.2	3118.8	3806.2	4198.0	4199.8	3906.0	3666.9	3365.5	3058.5
67.5°	2026.5	2056.6	2412.6	3005.8	3736.5	4199.8	4199.8	3923.0	3655.6	3322.2	2945.5
70°	1292.0	1299.5	1687.5	2325.9	3192.3	3996.4	4011.5	3794.9	3329.7	2689.4	2067.9
72.5°	638.5	621.5	890.8	1497.3	2395.6	3420.1	3459.7	3241.2	2634.8	1757.2	1092.3
75°	250.5	267.4	388.0	796.7	1501.0	2578.3	2608.4	2357.9	1695.0	905.9	431.3
77.5°	111.1	111.1	165.7	357.8	789.1	1582.0	1597.1	1438.9	894.6	372.9	131.8
80°	60.3	64.0	86.6	156.3	397.4	727.0	792.9	713.8	404.9	163.9	45.2
82.5°	30.1	32.0	52.7	88.5	199.6	275.0	290.0	303.2	186.5	101.7	18.8
85°	11.3	13.2	28.3	50.9	90.4	92.3	92.3	118.7	101.7	77.2	9.4
87.5°	1.9	3.8	13.2	20.7	35.8	32.0	28.3	37.7	56.5	49.0	5.7
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°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	482.1	478.4	470.8	465.2	461.4	457.7	453.9	453.9	452.0	452.0	453.9
5°	482.1	474.6	459.5	450.1	442.6	436.9	433.2	433.2	431.3	433.2	435.1
7.5°	491.6	480.3	459.5	442.6	433.2	423.8	420.0	418.1	418.1	420.0	418.1
10°	506.6	491.6	465.2	442.6	429.4	416.2	395.5	376.7	359.7	352.2	350.3
12.5°	525.5	506.6	474.6	448.2	427.5	382.3	325.8	290.0	267.4	256.1	252.4
15°	546.2	523.6	485.9	455.8	399.3	314.5	241.1	201.5	188.3	190.2	192.1
17.5°	568.8	544.3	502.9	452.0	342.8	233.5	177.0	167.6	173.3	178.9	178.9
20°	591.4	565.0	519.8	423.8	269.3	173.3	158.2	160.1	165.7	171.4	171.4
22.5°	621.5	593.3	536.8	374.8	199.6	150.7	150.7	154.4	158.2	163.9	163.9
25°	653.5	625.3	548.1	314.5	148.8	141.3	143.1	146.9	150.7	156.3	156.3
27.5°	687.4	659.2	546.2	243.0	130.0	130.0	131.8	137.5	141.3	146.9	146.9
30°	725.1	700.6	525.5	177.0	120.5	118.7	118.7	124.3	130.0	133.7	135.6
32.5°	757.1	736.4	489.7	133.7	113.0	109.2	107.4	109.2	114.9	118.7	120.5
35°	783.5	775.9	436.9	114.9	105.5	99.8	96.1	94.2	96.1	96.1	97.9
37.5°	832.4	834.3	374.8	107.4	99.8	92.3	84.8	79.1	75.3	73.5	71.6
40°	924.7	922.8	308.9	101.7	94.2	84.8	73.5	65.9	56.5	52.7	52.7
42.5°	1054.7	1026.4	235.4	96.1	88.5	77.2	62.2	50.9	41.4	39.6	39.6
45°	1288.2	1171.4	177.0	92.3	82.9	67.8	50.9	37.7	32.0	30.1	30.1
47.5°	1546.2	1339.1	141.3	86.6	77.2	60.3	39.6	30.1	24.5	24.5	24.5
50°	1830.6	1499.1	118.7	81.0	67.8	50.9	32.0	24.5	22.6	20.7	22.6
52.5°	2141.4	1625.3	103.6	73.5	58.4	41.4	26.4	22.6	18.8	18.8	18.8
55°	2420.1	1710.1	86.6	64.0	49.0	33.9	24.5	18.8	17.0	15.1	13.2
57.5°	2672.5	1755.3	69.7	54.6	37.7	28.3	20.7	15.1	13.2	9.4	9.4
60°	2802.4	1713.8	54.6	43.3	30.1	22.6	17.0	13.2	9.4	5.7	5.7
62.5°	2823.1	1606.5	43.3	33.9	26.4	18.8	13.2	9.4	5.7	3.8	3.8
65°	2642.3	1418.2	35.8	28.3	20.7	15.1	11.3	7.5	3.8	1.9	1.9
67°	2318.4	1220.4	32.0	24.5	18.8	13.2	9.4	5.7	3.8	1.9	0.0
67.5°	2254.4	1184.6	30.1	24.5	18.8	13.2	9.4	5.7	3.8	1.9	0.0
70°	1480.3	819.3	28.3	22.6	17.0	11.3	7.5	5.7	1.9	0.0	0.0
72.5°	808.0	412.5	26.4	20.7	15.1	11.3	7.5	3.8	1.9	0.0	0.0
75°	295.7	156.3	22.6	18.8	13.2	11.3	7.5	3.8	1.9	0.0	0.0
77.5°	99.8	54.6	20.7	18.8	15.1	11.3	7.5	3.8	1.9	0.0	0.0
80°	33.9	24.5	17.0	15.1	11.3	9.4	7.5	3.8	1.9	0.0	0.0
82.5°	13.2	7.5	5.7	5.7	5.7	7.5	7.5	5.7	1.9	0.0	0.0
85°	5.7	3.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0	0.0
87.5°	5.7	3.8	1.9	1.9	1.9	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)