

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: P573161

Luminaire Tested: **ARCH-S-PA2-40-740-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573161  
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-PA2-40-740-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 420mA 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: 4985 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

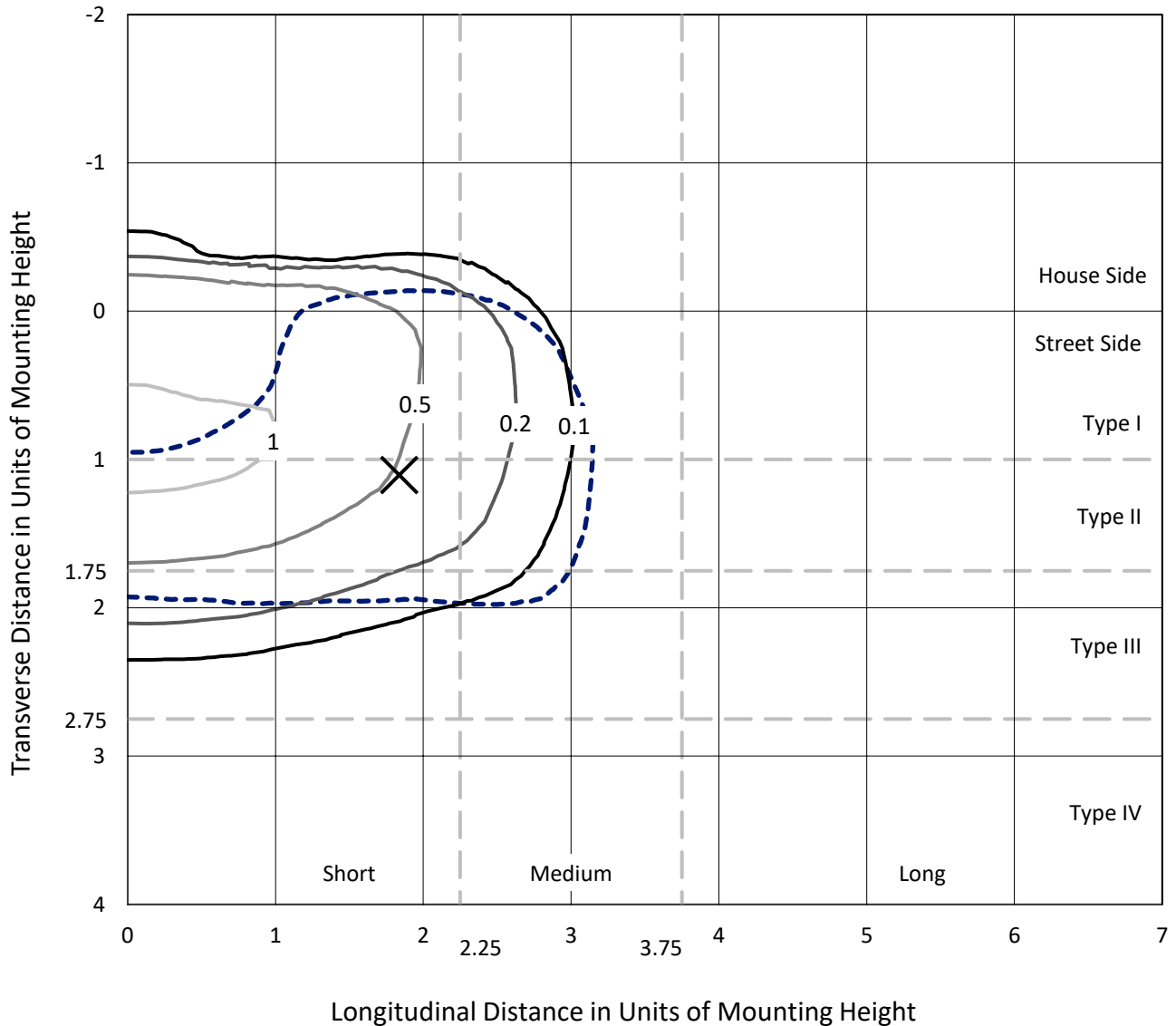
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

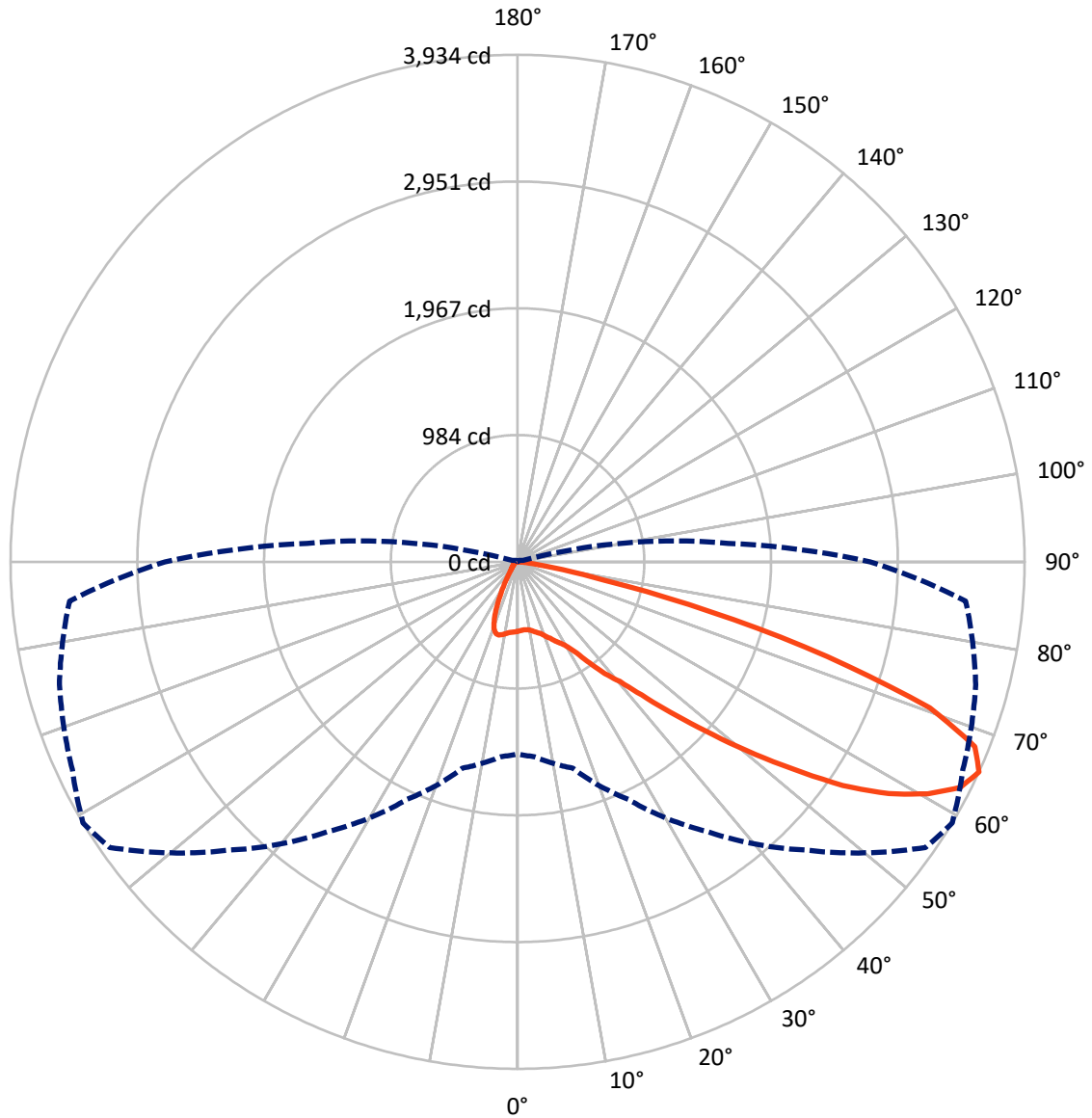
× Max cd  
 - - - 1/2 Max cd



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

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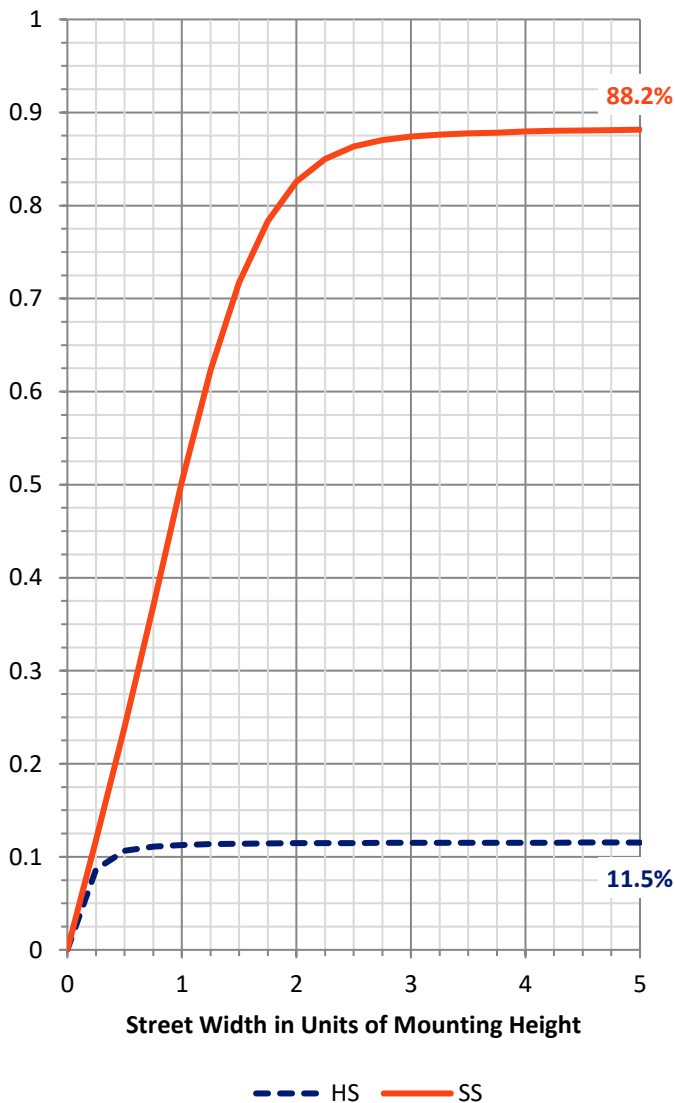
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	581.5	0.0	581.5
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	4403.5	0.0	4403.5
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	4985.0	0.0	4985.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.9	1.0
10°-20°	144.6	2.9
20°-30°	245.6	4.9
30°-40°	435.1	8.7
40°-50°	820.7	16.5
50°-60°	1388.6	27.9
60°-70°	1443.8	29.0
70°-80°	432.9	8.7
80°-90°	22.7	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°	4985.0	100.0
0°-180°	4985.0	100.0

**Coefficient of Utilization**



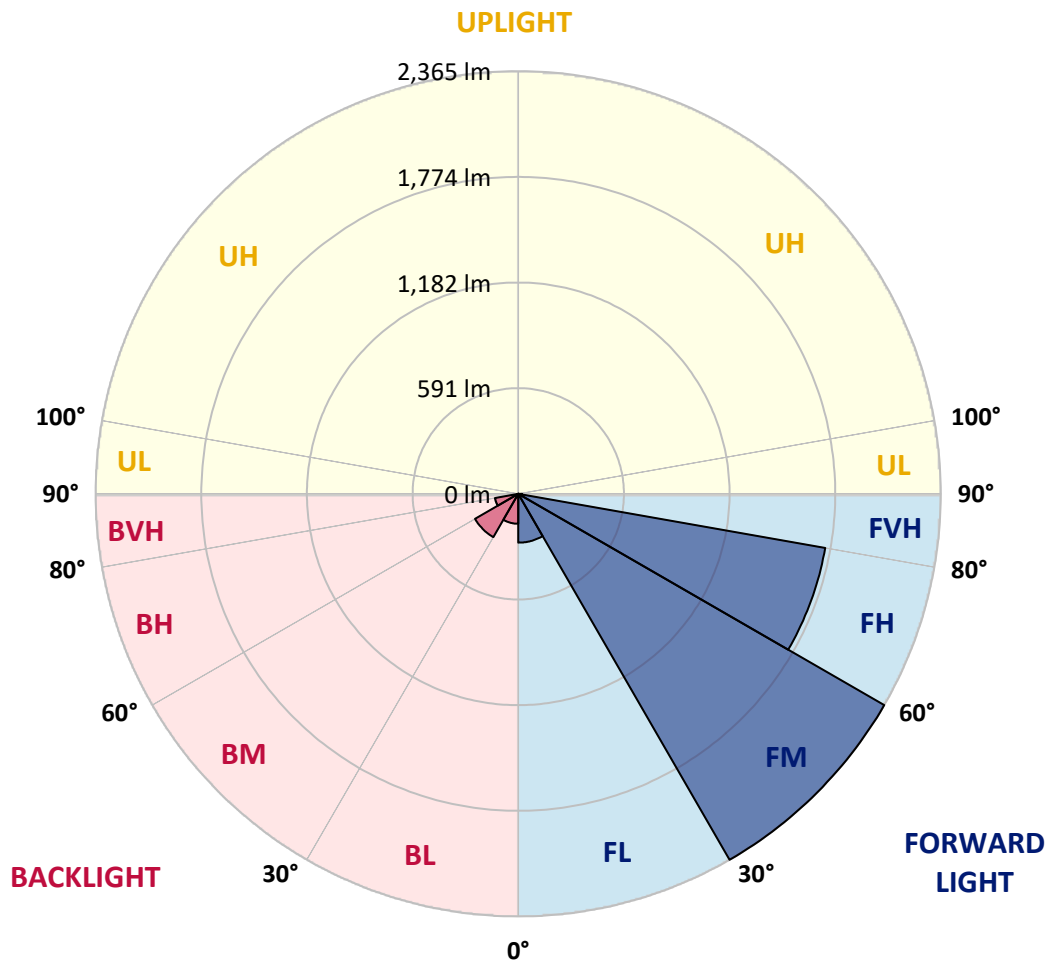
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	273.4	5.5			
FM (30°-60°)	2364.9	47.4			
FH (60°-80°)	1744.4	35.0			G1/1800
FVH (80°-90°)	20.8	0.4			G1/100
BL (0°-30°)	167.8	3.4	B1/500		
BM (30°-60°)	279.6	5.6	B1/1000		
BH (60°-80°)	132.3	2.7	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7
2.5°	524.2	522.4	522.4	526.0	527.8	529.6	533.2	533.2	533.2	536.9	538.7
5°	498.8	498.8	500.6	504.2	511.5	516.9	527.8	529.6	531.4	540.5	544.1
7.5°	482.5	482.5	484.3	491.5	500.6	513.3	527.8	531.4	536.9	549.6	558.6
10°	480.6	478.8	482.5	489.7	500.6	516.9	533.2	538.7	549.6	565.9	578.6
12.5°	486.1	484.3	487.9	495.1	506.0	522.4	544.1	553.2	565.9	587.6	605.8
15°	489.7	487.9	491.5	500.6	513.3	533.2	558.6	569.5	585.8	616.7	634.8
17.5°	500.6	498.8	500.6	507.8	520.5	542.3	575.0	585.8	613.0	647.5	667.5
20°	549.6	547.7	536.9	533.2	535.1	555.0	596.7	614.9	647.5	691.0	705.5
22.5°	651.1	643.9	623.9	591.3	569.5	576.8	623.9	643.9	687.4	736.4	747.3
25°	787.2	781.7	752.7	696.5	634.8	616.7	654.8	682.0	734.6	789.0	785.3
27.5°	941.3	930.4	903.2	825.2	741.8	682.0	692.8	716.4	774.5	832.5	814.4
30°	1075.5	1071.9	1041.1	975.8	877.8	789.0	750.9	763.6	816.2	877.8	856.1
32.5°	1198.9	1188.0	1162.6	1100.9	1010.2	919.6	843.4	843.4	886.9	959.5	926.8
35°	1334.9	1327.7	1296.8	1235.2	1148.1	1041.1	972.2	964.9	1001.2	1082.8	1012.1
37.5°	1474.6	1456.4	1441.9	1378.4	1291.4	1198.9	1115.4	1099.1	1117.3	1177.1	1090.1
40°	1648.7	1648.7	1616.0	1558.0	1476.4	1378.4	1262.4	1220.6	1215.2	1293.2	1226.1
42.5°	1851.8	1846.4	1819.2	1764.8	1686.8	1596.1	1449.2	1411.1	1407.5	1501.8	1422.0
45°	2085.8	2082.2	2049.5	2004.2	1949.8	1850.0	1704.9	1666.8	1645.1	1753.9	1659.6
47.5°	2299.8	2287.1	2276.2	2281.7	2250.8	2138.4	2002.4	1957.0	1955.2	2040.4	1918.9
50°	2446.7	2439.5	2477.6	2513.8	2571.9	2501.1	2339.7	2299.8	2269.0	2381.4	2189.2
52.5°	2542.9	2539.2	2615.4	2718.8	2838.5	2833.1	2689.8	2666.2	2640.8	2671.6	2430.4
55°	2580.9	2580.9	2671.6	2862.1	3072.5	3163.2	3096.0	3063.4	2974.5	2911.0	2695.2
57.5°	2535.6	2530.2	2648.1	2896.5	3217.6	3404.4	3433.4	3395.3	3255.7	3184.9	2989.0
60°	2343.3	2347.0	2486.6	2800.4	3206.7	3502.3	3689.1	3654.7	3515.0	3409.8	3235.7
62.5°	1984.2	2015.1	2162.0	2503.0	2974.5	3424.3	3836.0	3854.2	3703.6	3573.1	3455.2
65°	1490.9	1518.1	1657.8	2035.0	2551.9	3163.2	3863.3	3934.0	3812.5	3680.1	3489.6
67.5°	906.9	915.9	1086.4	1371.2	1879.0	2635.4	3672.8	3827.0	3739.9	3522.3	3148.6
70°	422.6	446.2	529.6	749.1	1189.8	1940.7	3174.0	3391.7	3293.7	3023.5	2394.1
72.5°	165.0	172.3	224.9	346.4	631.2	1220.6	2368.7	2513.8	2446.7	2147.5	1427.4
75°	81.6	87.1	108.8	165.0	288.4	504.2	1447.4	1541.7	1431.0	1079.2	604.0
77.5°	59.9	59.9	72.5	101.6	157.8	186.8	609.4	683.8	645.7	417.2	165.0
80°	39.9	43.5	50.8	68.9	99.8	90.7	230.3	273.9	228.5	128.8	58.0
82.5°	23.6	25.4	38.1	49.0	67.1	52.6	78.0	87.1	94.3	63.5	27.2
85°	12.7	12.7	25.4	36.3	36.3	23.6	27.2	30.8	36.3	38.1	14.5
87.5°	3.6	3.6	16.3	21.8	14.5	12.7	14.5	14.5	16.3	20.0	7.3
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°	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7
2.5°	540.5	540.5	542.3	542.3	544.1	544.1	544.1	544.1	545.9	547.7	547.7
5°	545.9	547.7	547.7	547.7	547.7	544.1	542.3	540.5	540.5	542.3	542.3
7.5°	560.4	562.3	560.4	556.8	551.4	544.1	536.9	536.9	535.1	536.9	535.1
10°	582.2	582.2	580.4	571.3	562.3	547.7	533.2	522.4	515.1	513.3	509.7
12.5°	609.4	609.4	604.0	587.6	571.3	544.1	506.0	469.8	440.7	428.0	424.4
15°	636.6	636.6	629.4	605.8	573.1	507.8	428.0	351.9	308.3	290.2	279.3
17.5°	669.3	665.6	652.9	620.3	553.2	435.3	306.5	228.5	194.1	177.7	177.7
20°	703.7	700.1	676.5	622.1	502.4	312.0	199.5	157.8	148.7	145.1	145.1
22.5°	741.8	732.7	696.5	607.6	395.4	212.2	150.5	139.7	136.0	134.2	134.2
25°	772.7	758.1	711.0	567.7	282.9	148.7	132.4	128.8	121.5	119.7	116.1
27.5°	796.2	774.5	716.4	482.5	186.8	123.3	117.9	110.6	103.4	96.1	96.1
30°	827.1	799.9	720.1	375.4	127.0	107.0	101.6	92.5	83.4	76.2	76.2
32.5°	888.7	848.8	721.9	263.0	105.2	94.3	83.4	72.5	63.5	59.9	58.0
35°	955.8	901.4	701.9	170.5	92.5	79.8	67.1	58.0	49.0	47.2	47.2
37.5°	1030.2	979.4	658.4	116.1	81.6	67.1	54.4	45.3	39.9	38.1	38.1
40°	1155.3	1095.5	585.8	92.5	70.7	56.2	45.3	38.1	34.5	32.6	32.6
42.5°	1334.9	1231.5	495.1	79.8	61.7	47.2	36.3	30.8	29.0	27.2	27.2
45°	1541.7	1383.9	390.0	72.5	54.4	39.9	30.8	27.2	25.4	23.6	23.6
47.5°	1779.3	1541.7	308.3	63.5	47.2	34.5	27.2	23.6	21.8	20.0	20.0
50°	2004.2	1665.0	232.2	56.2	41.7	29.0	23.6	21.8	20.0	18.1	18.1
52.5°	2189.2	1748.4	175.9	49.0	36.3	25.4	21.8	20.0	16.3	16.3	16.3
55°	2412.3	1813.7	134.2	43.5	32.6	23.6	20.0	16.3	14.5	12.7	12.7
57.5°	2606.3	1837.3	97.9	38.1	29.0	21.8	18.1	14.5	10.9	9.1	9.1
60°	2736.9	1817.4	70.7	32.6	25.4	18.1	14.5	10.9	7.3	5.4	5.4
62.5°	2829.4	1773.8	54.4	29.0	21.8	16.3	12.7	9.1	5.4	3.6	3.6
65°	2736.9	1639.6	43.5	25.4	18.1	14.5	9.1	7.3	3.6	1.8	1.8
67.5°	2366.9	1374.8	34.5	21.8	16.3	12.7	9.1	5.4	1.8	0.0	0.0
70°	1701.3	981.2	29.0	20.0	14.5	10.9	7.3	3.6	1.8	0.0	0.0
72.5°	948.6	506.0	27.2	18.1	14.5	10.9	7.3	3.6	1.8	0.0	0.0
75°	384.5	174.1	25.4	18.1	14.5	9.1	7.3	3.6	1.8	0.0	0.0
77.5°	112.5	59.9	21.8	16.3	14.5	10.9	7.3	3.6	1.8	0.0	0.0
80°	39.9	27.2	16.3	14.5	10.9	9.1	7.3	5.4	1.8	0.0	0.0
82.5°	18.1	10.9	7.3	5.4	5.4	5.4	5.4	3.6	1.8	0.0	0.0
85°	7.3	5.4	3.6	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0
87.5°	5.4	3.6	1.8	1.8	1.8	1.8	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)