

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: P573265

Luminaire Tested: **ARCH-S-PA2-50-827-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573265  
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-PA2-50-827-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 520mA 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: 4533 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

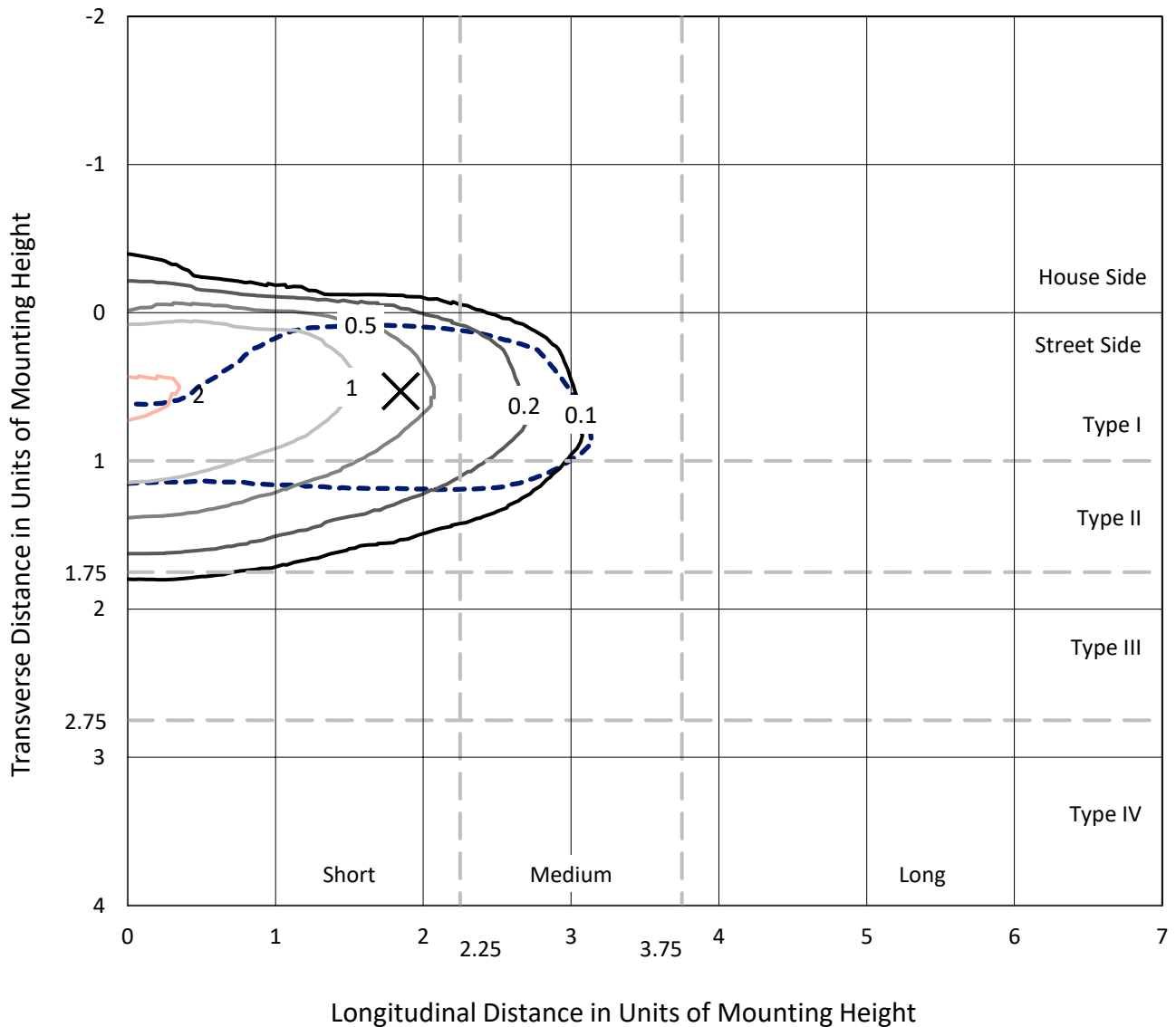
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

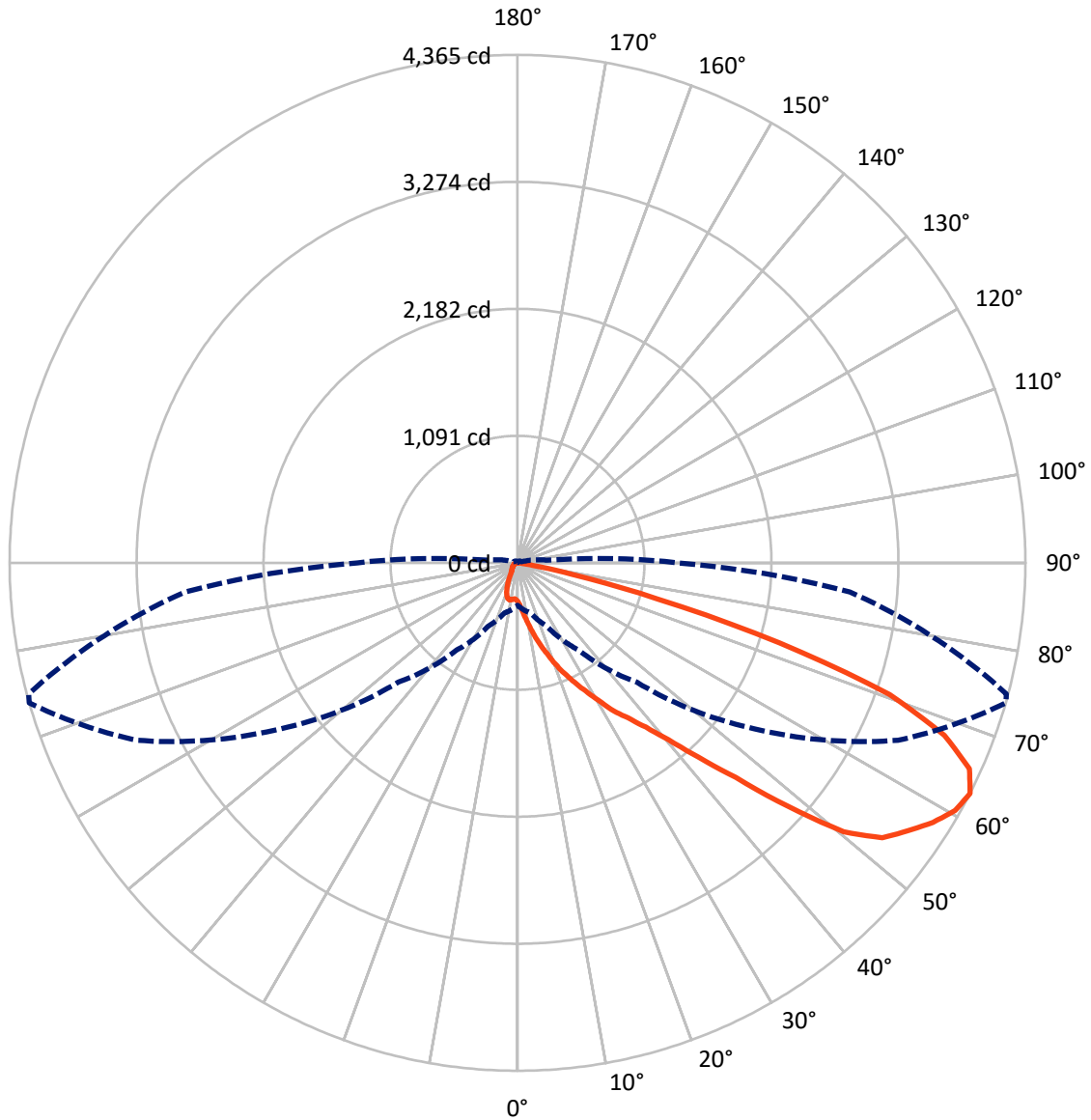
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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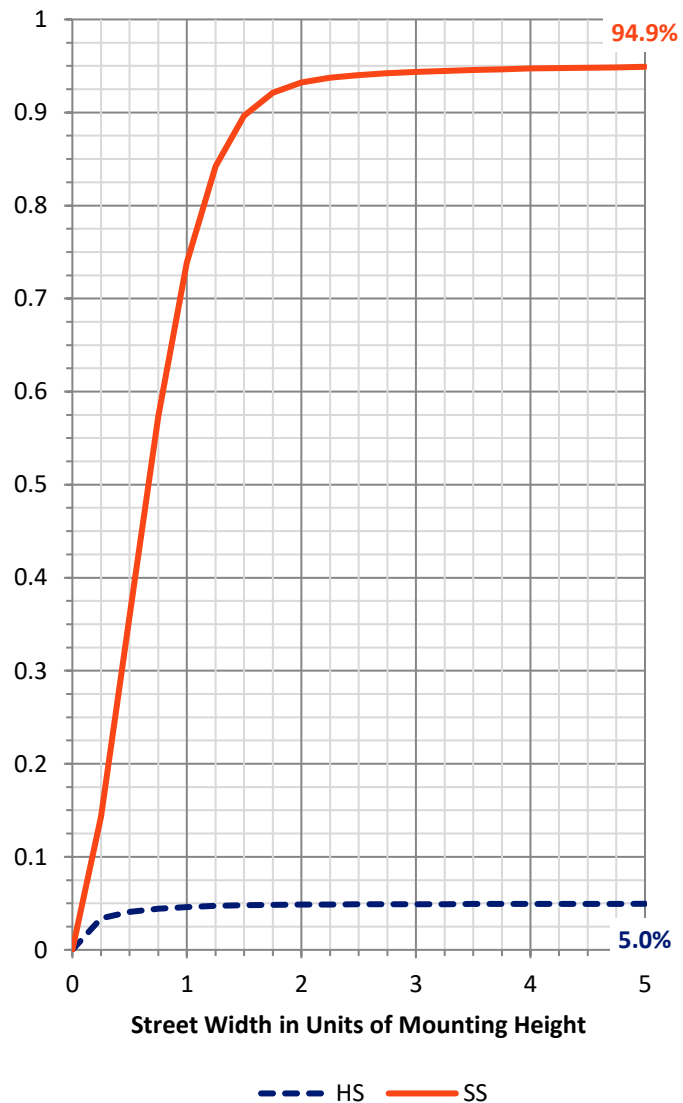
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	226.1	0.0	226.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4306.9	0.0	4306.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	4533.0	0.0	4533.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.5	0.9
10°-20°	174.3	3.8
20°-30°	374.1	8.3
30°-40°	656.1	14.5
40°-50°	1017.1	22.4
50°-60°	1172.6	25.9
60°-70°	823.8	18.2
70°-80°	256.6	5.7
80°-90°	17.0	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°	4533.0	100.0
0°-180°	4533.0	100.0

**Coefficient of Utilization**



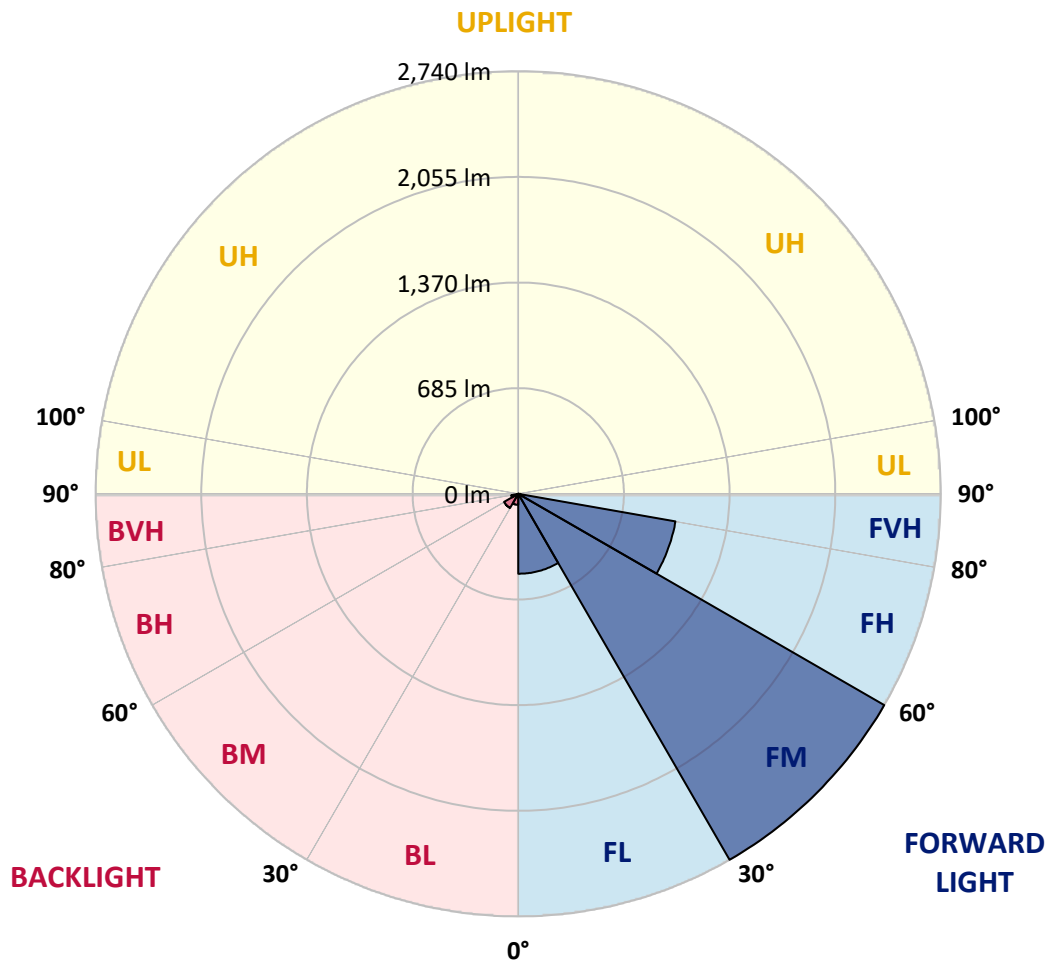
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	518.1	11.4			
FM (30°-60°)	2739.5	60.4			
FH (60°-80°)	1034.6	22.8			G1/1800
FVH (80°-90°)	14.6	0.3			G1/100
BL (0°-30°)	71.7	1.6	B0/110		
BM (30°-60°)	106.2	2.3	B0/220		
BH (60°-80°)	45.8	1.0	B0/110		G0/110
BVH (80°-90°)	2.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8
2.5°	461.1	453.1	443.5	435.5	419.6	408.4	394.0	378.1	360.5	359.0	344.6
5°	646.1	622.2	622.2	601.4	577.5	534.4	494.6	445.1	408.4	405.2	366.9
7.5°	836.0	816.8	805.6	773.7	735.4	687.6	623.8	540.8	473.8	462.6	400.4
10°	1013.0	998.7	977.9	952.4	918.9	840.7	761.0	652.5	545.6	537.6	440.3
12.5°	1150.2	1132.7	1123.1	1111.9	1068.9	1006.7	903.0	765.8	638.1	620.6	480.2
15°	1253.9	1246.0	1236.4	1236.4	1214.0	1153.4	1046.5	887.0	727.5	706.7	531.2
17.5°	1336.9	1327.3	1325.7	1335.3	1328.9	1285.8	1185.3	1003.5	820.0	804.0	583.9
20°	1429.4	1416.7	1416.7	1424.6	1423.0	1399.1	1311.4	1137.5	928.5	899.8	644.5
22.5°	1560.2	1552.3	1545.9	1533.1	1523.5	1501.2	1424.6	1268.3	1032.2	1005.1	706.7
25°	1735.7	1726.2	1697.4	1675.1	1633.6	1600.1	1534.7	1384.7	1137.5	1107.2	767.4
27.5°	1906.4	1887.3	1860.2	1831.4	1785.2	1727.7	1646.4	1494.8	1247.6	1215.6	829.6
30°	2086.7	2072.3	2038.8	1992.6	1935.1	1871.3	1774.0	1627.2	1373.6	1338.5	896.6
32.5°	2230.3	2207.9	2177.6	2133.0	2073.9	2029.3	1924.0	1772.4	1518.8	1472.5	966.8
35°	2345.1	2327.6	2287.7	2244.6	2200.0	2187.2	2072.3	1890.5	1635.2	1592.1	1041.8
37.5°	2418.5	2401.0	2367.5	2324.4	2306.9	2329.2	2254.2	2051.6	1791.6	1737.3	1127.9
40°	2476.0	2455.2	2428.1	2409.0	2402.6	2464.8	2456.8	2260.6	1997.4	1965.5	1246.0
42.5°	2517.4	2496.7	2479.1	2477.6	2519.0	2640.3	2729.6	2552.5	2284.5	2219.1	1397.5
45°	2464.8	2447.2	2456.8	2512.7	2613.2	2804.6	3059.9	2965.7	2630.7	2584.4	1640.0
47.5°	2318.0	2306.9	2349.9	2452.0	2638.7	2905.1	3378.9	3418.8	3125.3	3055.1	1954.3
50°	2088.3	2086.7	2155.3	2294.1	2558.9	2943.4	3540.0	3854.3	3632.6	3560.8	2209.5
52.5°	1777.2	1770.8	1871.3	2064.4	2370.7	2871.6	3570.4	4028.2	3926.1	3841.6	2370.7
55°	1424.6	1410.3	1529.9	1742.1	2093.1	2662.6	3489.0	4066.5	4066.5	3989.9	2490.3
57.5°	1001.9	1024.2	1123.1	1378.4	1750.1	2349.9	3288.0	4031.4	4208.5	4143.1	2651.4
60°	631.8	641.3	749.8	955.6	1327.3	1931.9	2929.0	3879.9	4321.8	4283.5	2780.7
62.5°	363.7	394.0	448.3	604.6	915.7	1451.8	2485.5	3607.1	4364.8	4348.9	2865.2
65°	221.8	224.9	250.5	341.4	563.2	990.7	1989.4	3227.4	4267.5	4281.9	2849.3
67.5°	165.9	165.9	173.9	215.4	320.7	630.2	1467.7	2766.3	3956.4	4002.7	2699.3
70°	143.6	143.6	145.2	157.9	197.8	373.3	970.0	2230.3	3391.7	3386.9	2230.3
72.5°	113.3	118.1	127.6	134.0	150.0	218.6	567.9	1558.6	2356.3	2412.1	1435.8
75°	90.9	92.5	105.3	116.5	126.0	148.4	268.0	866.3	1236.4	1236.4	631.8
77.5°	70.2	73.4	81.4	92.5	105.3	105.3	111.7	335.0	478.6	462.6	186.7
80°	44.7	46.3	59.0	73.4	87.7	75.0	60.6	111.7	130.8	126.0	51.1
82.5°	27.1	28.7	38.3	59.0	59.0	41.5	38.3	46.3	41.5	38.3	20.7
85°	8.0	9.6	27.1	38.3	33.5	16.0	19.1	20.7	19.1	17.5	11.2
87.5°	1.6	1.6	8.0	9.6	8.0	8.0	6.4	8.0	8.0	8.0	4.8
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°	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8
2.5°	336.6	330.2	317.5	307.9	299.9	291.9	285.6	284.0	280.8	280.8	279.2
5°	351.0	336.6	312.7	296.7	284.0	272.8	263.2	253.7	250.5	247.3	248.9
7.5°	373.3	351.0	317.5	293.5	271.2	245.7	224.9	207.4	194.6	191.4	186.7
10°	402.0	368.5	325.4	287.2	245.7	201.0	172.3	154.7	148.4	140.4	142.0
12.5°	430.7	389.3	331.8	269.6	202.6	157.9	134.0	122.8	118.1	116.5	118.1
15°	464.2	411.6	328.6	237.7	162.7	127.6	113.3	108.5	105.3	105.3	103.7
17.5°	497.7	430.7	317.5	196.2	130.8	108.5	102.1	97.3	94.1	92.5	92.5
20°	534.4	448.3	291.9	156.3	108.5	98.9	92.5	86.1	83.0	83.0	83.0
22.5°	572.7	461.1	258.4	124.4	97.3	87.7	81.4	76.6	73.4	73.4	73.4
25°	606.2	467.4	218.6	103.7	89.3	79.8	73.4	68.6	67.0	65.4	65.4
27.5°	638.1	465.8	177.1	90.9	79.8	71.8	65.4	62.2	59.0	59.0	59.0
30°	670.0	456.3	140.4	83.0	73.4	63.8	59.0	55.8	54.2	52.6	52.6
32.5°	697.2	440.3	110.1	76.6	67.0	57.4	52.6	49.5	49.5	47.9	47.9
35°	724.3	416.4	92.5	71.8	60.6	52.6	47.9	46.3	44.7	44.7	44.7
37.5°	753.0	386.1	81.4	65.4	54.2	47.9	44.7	43.1	41.5	39.9	39.9
40°	788.1	355.8	76.6	60.6	49.5	43.1	39.9	38.3	36.7	36.7	36.7
42.5°	843.9	330.2	71.8	54.2	44.7	39.9	36.7	33.5	33.5	31.9	31.9
45°	949.2	320.7	67.0	49.5	41.5	35.1	33.5	30.3	28.7	28.7	28.7
47.5°	1086.4	322.3	62.2	44.7	38.3	31.9	30.3	28.7	25.5	25.5	25.5
50°	1199.7	314.3	57.4	41.5	33.5	30.3	27.1	25.5	23.9	23.9	23.9
52.5°	1244.4	299.9	52.6	38.3	31.9	27.1	25.5	23.9	22.3	22.3	22.3
55°	1289.0	293.5	47.9	33.5	28.7	27.1	23.9	22.3	20.7	19.1	19.1
57.5°	1370.4	296.7	43.1	31.9	27.1	25.5	22.3	19.1	16.0	14.4	14.4
60°	1413.5	285.6	39.9	28.7	25.5	23.9	19.1	14.4	11.2	9.6	9.6
62.5°	1376.8	253.7	36.7	27.1	23.9	20.7	14.4	11.2	8.0	4.8	4.8
65°	1274.7	209.0	33.5	25.5	20.7	16.0	12.8	8.0	4.8	3.2	3.2
67.5°	1145.4	164.3	30.3	23.9	19.1	14.4	11.2	6.4	3.2	1.6	1.6
70°	925.3	118.1	28.7	22.3	17.5	12.8	9.6	6.4	3.2	1.6	1.6
72.5°	596.7	76.6	25.5	20.7	16.0	12.8	8.0	4.8	3.2	1.6	1.6
75°	276.0	51.1	23.9	19.1	16.0	11.2	8.0	6.4	3.2	1.6	1.6
77.5°	81.4	36.7	22.3	17.5	14.4	11.2	8.0	6.4	3.2	1.6	1.6
80°	33.5	25.5	17.5	16.0	14.4	11.2	8.0	6.4	3.2	1.6	1.6
82.5°	16.0	11.2	8.0	6.4	8.0	8.0	6.4	6.4	3.2	1.6	1.6
85°	8.0	4.8	3.2	3.2	3.2	1.6	1.6	3.2	3.2	1.6	1.6
87.5°	4.8	3.2	3.2	3.2	1.6	1.6	1.6	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)