

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: P573211

Luminaire Tested: **ARCH-S-PA2-50-727-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573211  
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-PA2-50-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

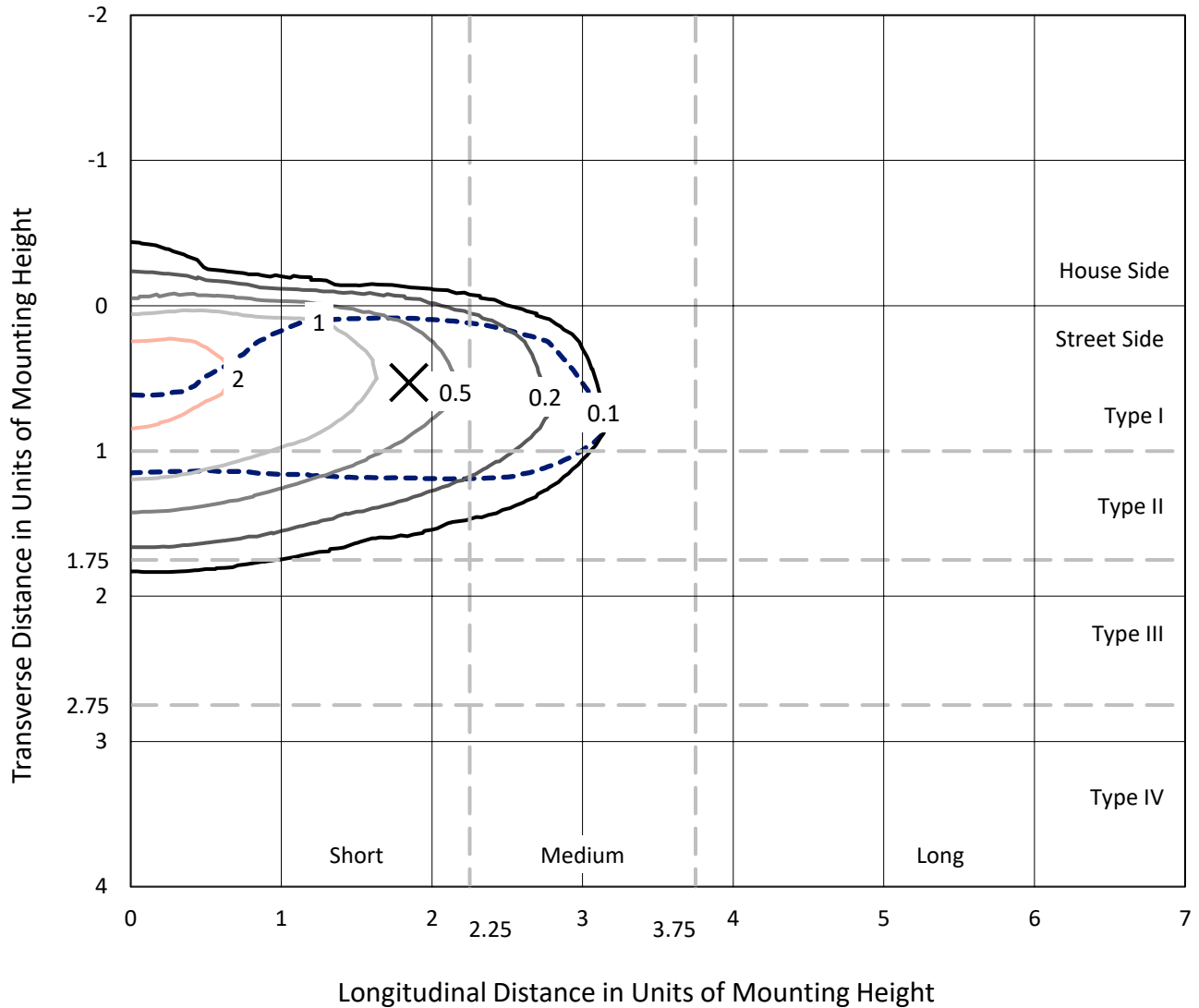
Lumens per Lamp: N/A  
Luminaire Lumens: 5157 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

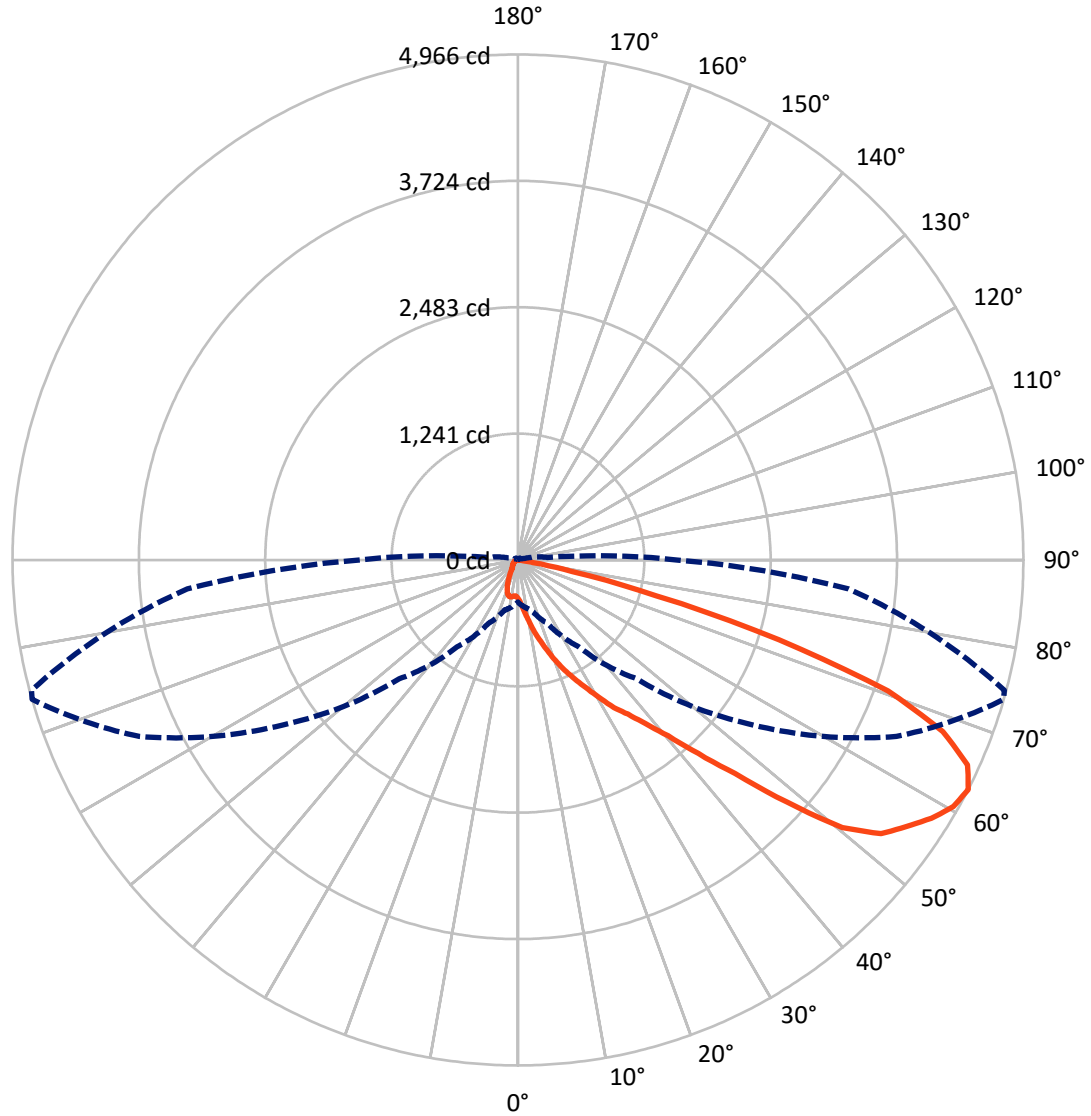
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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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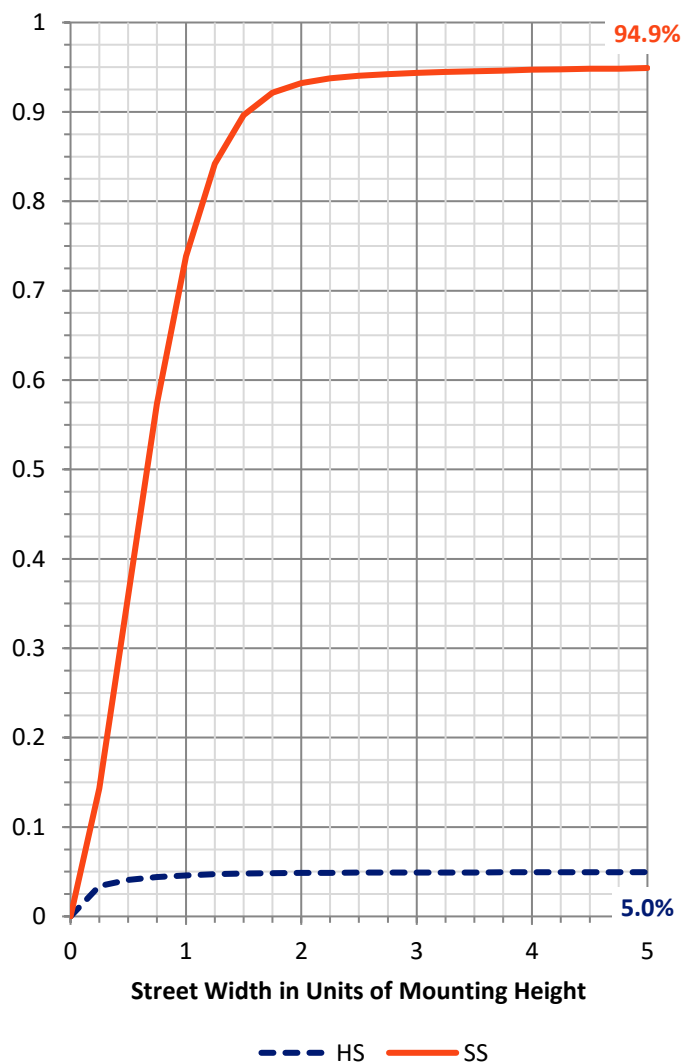
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	257.2	0.0	257.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4899.8	0.0	4899.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	5157.0	0.0	5157.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.2	0.9
10°-20°	198.3	3.8
20°-30°	425.6	8.3
30°-40°	746.4	14.5
40°-50°	1157.1	22.4
50°-60°	1334.0	25.9
60°-70°	937.1	18.2
70°-80°	292.0	5.7
80°-90°	19.3	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°	5157.0	100.0
0°-180°	5157.0	100.0

**Coefficient of Utilization**

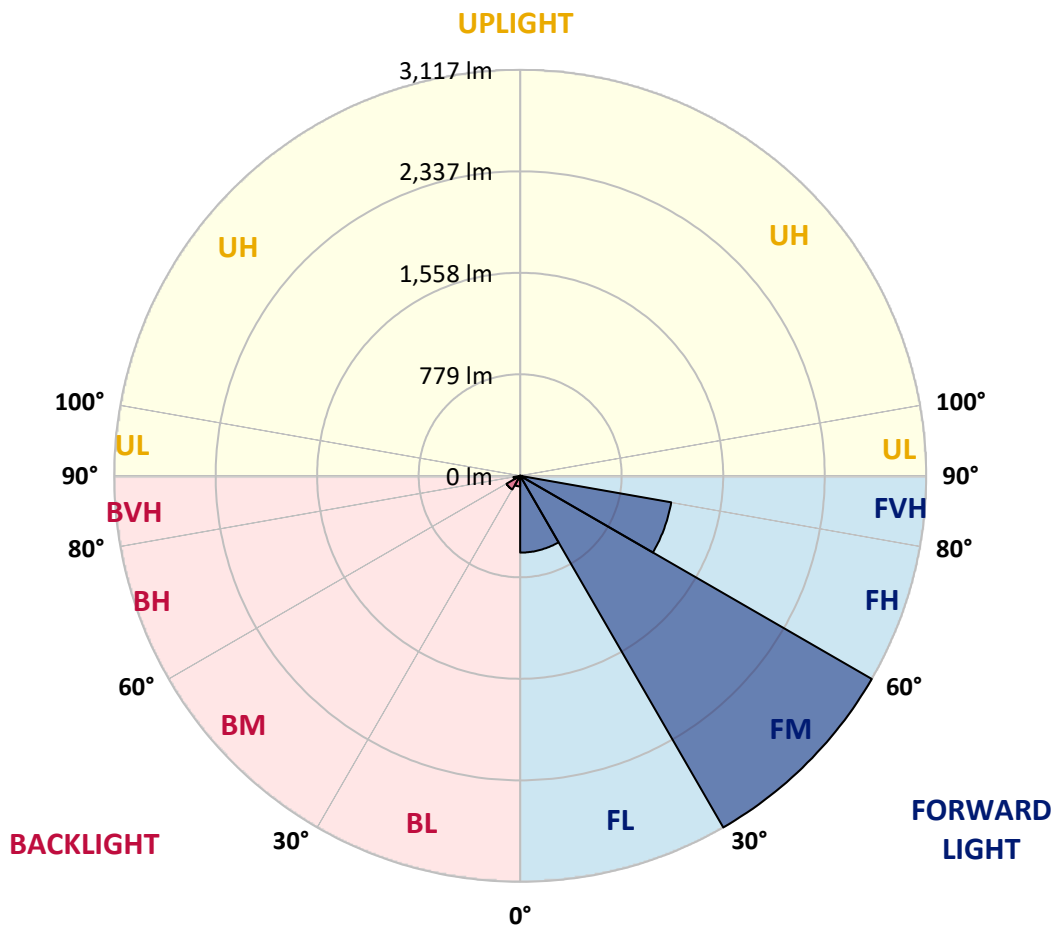


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	589.5	11.4			
FM (30°-60°)	3116.6	60.4			
FH (60°-80°)	1177.1	22.8			G1/1800
FVH (80°-90°)	16.7	0.3			G1/100
BL (0°-30°)	81.6	1.6	B0/110		
BM (30°-60°)	120.9	2.3	B0/220		
BH (60°-80°)	52.1	1.0	B0/110		G0/110
BVH (80°-90°)	2.6	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°	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5
2.5°	524.5	515.4	504.6	495.5	477.3	464.6	448.3	430.1	410.2	408.4	392.0
5°	735.1	707.8	707.8	684.2	657.0	608.0	562.6	506.4	464.6	461.0	417.4
7.5°	951.0	929.3	916.5	880.2	836.7	782.2	709.6	615.3	539.0	526.3	455.6
10°	1152.5	1136.2	1112.6	1083.5	1045.4	956.5	865.7	742.3	620.7	611.6	500.9
12.5°	1308.6	1288.6	1277.7	1265.0	1216.0	1145.2	1027.3	871.2	726.0	706.0	546.3
15°	1426.5	1417.5	1406.6	1406.6	1381.2	1312.2	1190.6	1009.1	827.6	804.0	604.4
17.5°	1520.9	1510.0	1508.2	1519.1	1511.8	1462.8	1348.5	1141.6	932.9	914.7	664.3
20°	1626.2	1611.7	1611.7	1620.7	1618.9	1591.7	1491.9	1294.1	1056.3	1023.6	733.2
22.5°	1775.0	1765.9	1758.7	1744.2	1733.3	1707.9	1620.7	1442.9	1174.3	1143.4	804.0
25°	1974.7	1963.8	1931.1	1905.7	1858.5	1820.4	1746.0	1575.4	1294.1	1259.6	873.0
27.5°	2168.9	2147.1	2116.2	2083.6	2030.9	1965.6	1873.0	1700.6	1419.3	1383.0	943.8
30°	2373.9	2357.6	2319.5	2266.9	2201.5	2128.9	2018.2	1851.2	1562.7	1522.7	1020.0
32.5°	2537.3	2511.9	2477.4	2426.6	2359.4	2308.6	2188.8	2016.4	1727.8	1675.2	1099.9
35°	2668.0	2648.0	2602.6	2553.6	2502.8	2488.3	2357.6	2150.7	1860.3	1811.3	1185.2
37.5°	2751.5	2731.5	2693.4	2644.4	2624.4	2649.8	2564.5	2334.0	2038.2	1976.5	1283.2
40°	2816.8	2793.2	2762.3	2740.6	2733.3	2804.1	2795.0	2571.8	2272.3	2236.0	1417.5
42.5°	2864.0	2840.4	2820.4	2818.6	2865.8	3003.7	3105.4	2903.9	2599.0	2524.6	1589.9
45°	2804.1	2784.1	2795.0	2858.5	2972.9	3190.7	3481.1	3374.0	2992.8	2940.2	1865.8
47.5°	2637.1	2624.4	2673.4	2789.6	3001.9	3305.0	3844.0	3889.4	3555.5	3475.6	2223.3
50°	2375.8	2373.9	2452.0	2609.9	2911.2	3348.6	4027.4	4384.9	4132.6	4051.0	2513.7
52.5°	2021.8	2014.6	2128.9	2348.5	2697.0	3266.9	4061.8	4582.7	4466.6	4370.4	2697.0
55°	1620.7	1604.4	1740.5	1981.9	2381.2	3029.1	3969.3	4626.3	4626.3	4539.2	2833.1
57.5°	1139.8	1165.2	1277.7	1568.1	1991.0	2673.4	3740.6	4586.4	4787.8	4713.4	3016.4
60°	718.7	729.6	853.0	1087.2	1510.0	2197.9	3332.2	4413.9	4916.7	4873.1	3163.4
62.5°	413.8	448.3	510.0	687.9	1041.8	1651.6	2827.7	4103.6	4965.7	4947.5	3259.6
65°	252.3	255.9	284.9	388.4	640.7	1127.1	2263.2	3671.6	4855.0	4871.3	3241.5
67.5°	188.8	188.8	197.8	245.0	364.8	716.9	1669.7	3147.1	4501.1	4553.7	3070.9
70°	163.3	163.3	165.2	179.7	225.1	424.7	1103.5	2537.3	3858.6	3853.1	2537.3
72.5°	128.9	134.3	145.2	152.5	170.6	248.6	646.1	1773.2	2680.7	2744.2	1633.4
75°	103.5	105.3	119.8	132.5	143.4	168.8	304.9	985.5	1406.6	1406.6	718.7
77.5°	79.9	83.5	92.6	105.3	119.8	119.8	127.0	381.1	544.5	526.3	212.3
80°	50.8	52.6	67.2	83.5	99.8	85.3	69.0	127.0	148.8	143.4	58.1
82.5°	30.9	32.7	43.6	67.2	67.2	47.2	43.6	52.6	47.2	43.6	23.6
85°	9.1	10.9	30.9	43.6	38.1	18.1	21.8	23.6	21.8	20.0	12.7
87.5°	1.8	1.8	9.1	10.9	9.1	9.1	7.3	9.1	9.1	9.1	5.4
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°	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5
2.5°	383.0	375.7	361.2	350.3	341.2	332.1	324.9	323.1	319.4	319.4	317.6
5°	399.3	383.0	355.7	337.6	323.1	310.4	299.5	288.6	284.9	281.3	283.1
7.5°	424.7	399.3	361.2	333.9	308.5	279.5	255.9	235.9	221.4	217.8	212.3
10°	457.4	419.3	370.2	326.7	279.5	228.7	196.0	176.0	168.8	159.7	161.5
12.5°	490.0	442.8	377.5	306.7	230.5	179.7	152.5	139.8	134.3	132.5	134.3
15°	528.1	468.3	373.9	270.4	185.1	145.2	128.9	123.4	119.8	119.8	118.0
17.5°	566.3	490.0	361.2	223.2	148.8	123.4	116.2	110.7	107.1	105.3	105.3
20°	608.0	510.0	332.1	177.9	123.4	112.5	105.3	98.0	94.4	94.4	94.4
22.5°	651.6	524.5	294.0	141.6	110.7	99.8	92.6	87.1	83.5	83.5	83.5
25°	689.7	531.8	248.6	118.0	101.6	90.7	83.5	78.0	76.2	74.4	74.4
27.5°	726.0	530.0	201.5	103.5	90.7	81.7	74.4	70.8	67.2	67.2	67.2
30°	762.3	519.1	159.7	94.4	83.5	72.6	67.2	63.5	61.7	59.9	59.9
32.5°	793.1	500.9	125.2	87.1	76.2	65.3	59.9	56.3	56.3	54.4	54.4
35°	824.0	473.7	105.3	81.7	69.0	59.9	54.4	52.6	50.8	50.8	50.8
37.5°	856.7	439.2	92.6	74.4	61.7	54.4	50.8	49.0	47.2	45.4	45.4
40°	896.6	404.7	87.1	69.0	56.3	49.0	45.4	43.6	41.7	41.7	41.7
42.5°	960.1	375.7	81.7	61.7	50.8	45.4	41.7	38.1	38.1	36.3	36.3
45°	1079.9	364.8	76.2	56.3	47.2	39.9	38.1	34.5	32.7	32.7	32.7
47.5°	1236.0	366.6	70.8	50.8	43.6	36.3	34.5	32.7	29.0	29.0	29.0
50°	1364.8	357.5	65.3	47.2	38.1	34.5	30.9	29.0	27.2	27.2	27.2
52.5°	1415.7	341.2	59.9	43.6	36.3	30.9	29.0	27.2	25.4	25.4	25.4
55°	1466.5	333.9	54.4	38.1	32.7	30.9	27.2	25.4	23.6	21.8	21.8
57.5°	1559.0	337.6	49.0	36.3	30.9	29.0	25.4	21.8	18.1	16.3	16.3
60°	1608.0	324.9	45.4	32.7	29.0	27.2	21.8	16.3	12.7	10.9	10.9
62.5°	1566.3	288.6	41.7	30.9	27.2	23.6	16.3	12.7	9.1	5.4	5.4
65°	1450.1	237.8	38.1	29.0	23.6	18.1	14.5	9.1	5.4	3.6	3.6
67.5°	1303.1	186.9	34.5	27.2	21.8	16.3	12.7	7.3	3.6	1.8	1.8
70°	1052.7	134.3	32.7	25.4	20.0	14.5	10.9	7.3	3.6	1.8	1.8
72.5°	678.8	87.1	29.0	23.6	18.1	14.5	9.1	5.4	3.6	1.8	1.8
75°	314.0	58.1	27.2	21.8	18.1	12.7	9.1	7.3	3.6	1.8	1.8
77.5°	92.6	41.7	25.4	20.0	16.3	12.7	9.1	7.3	3.6	1.8	1.8
80°	38.1	29.0	20.0	18.1	16.3	12.7	9.1	7.3	3.6	1.8	1.8
82.5°	18.1	12.7	9.1	7.3	9.1	9.1	7.3	7.3	3.6	1.8	1.8
85°	9.1	5.4	3.6	3.6	3.6	1.8	1.8	3.6	3.6	1.8	1.8
87.5°	5.4	3.6	3.6	3.6	1.8	1.8	1.8	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)