

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: P397821

Luminaire Tested: **ARCH-S-PA1-50-722-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397821  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-722-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2200K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4074 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G2

Input Watts (W): 54  
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: 28.75 FT

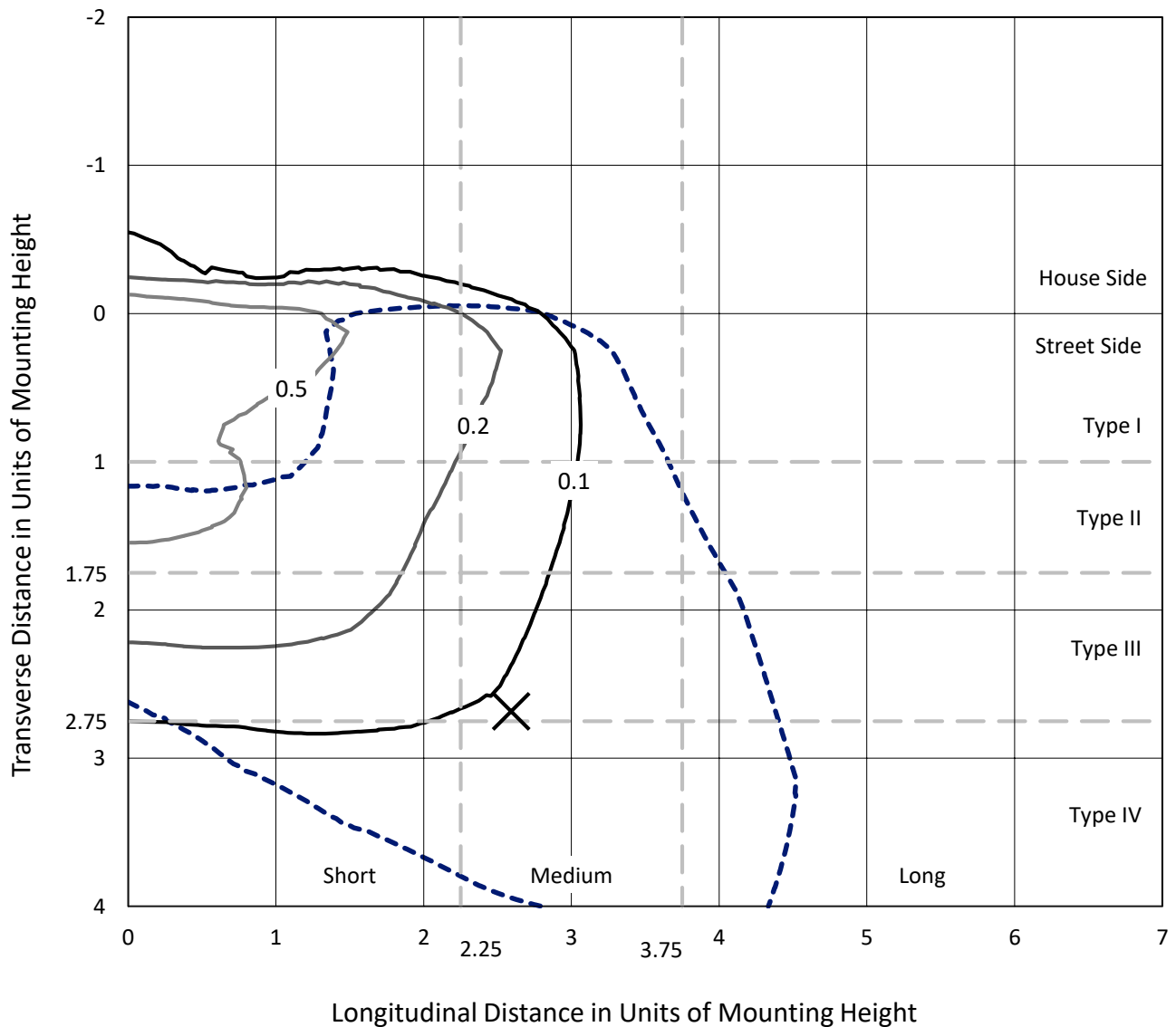


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

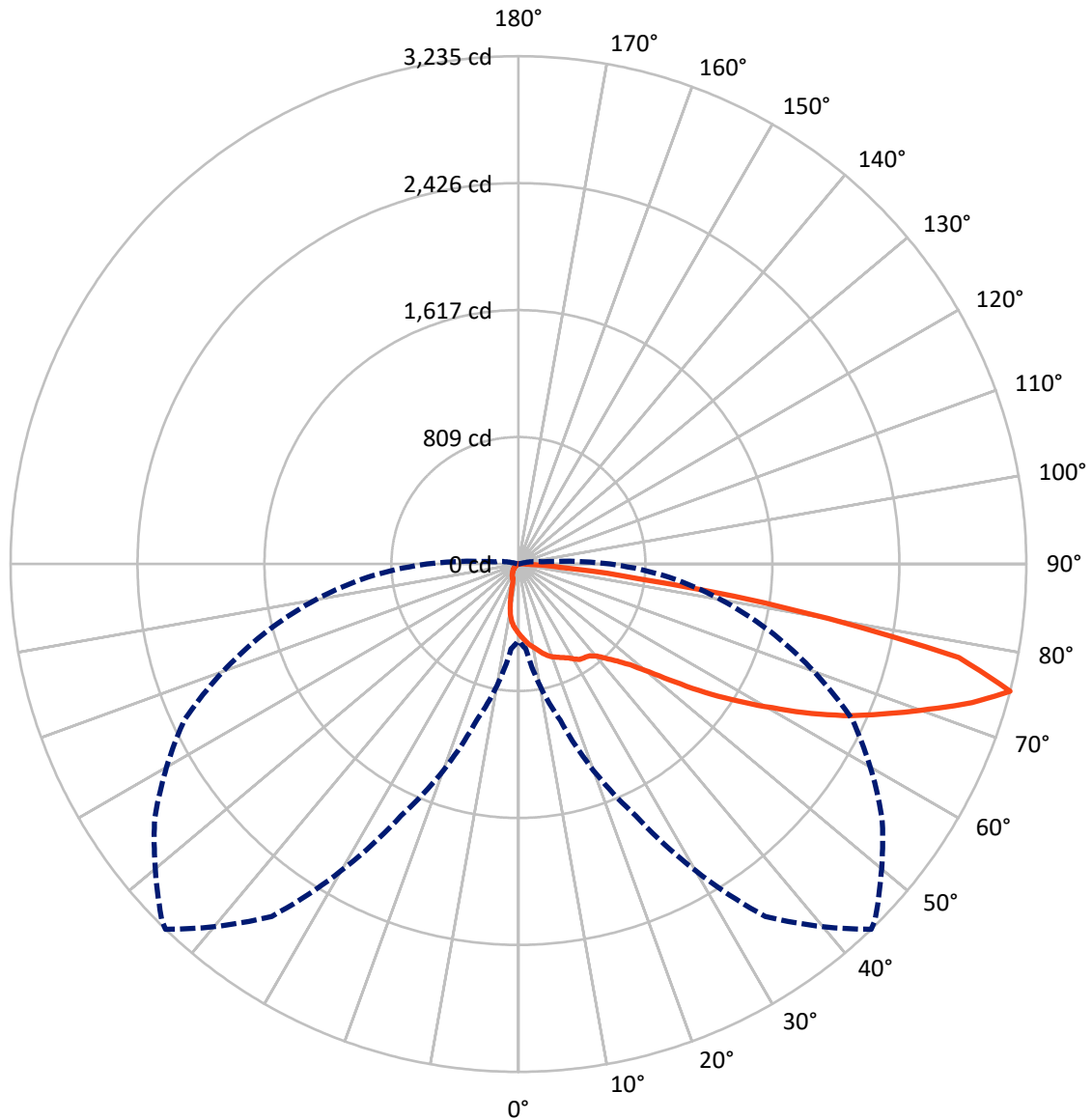


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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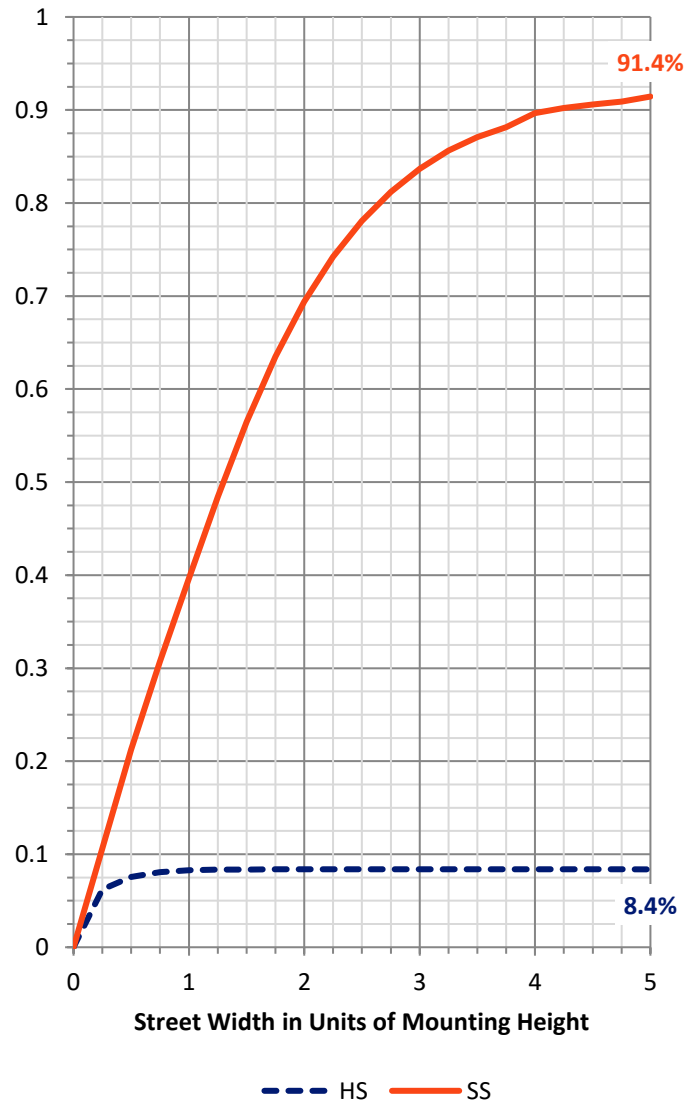
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	343.6	0.0	343.6
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	3730.4	0.0	3730.4
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	4074.0	0.0	4074.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	1.0
10°-20°	117.2	2.9
20°-30°	193.4	4.7
30°-40°	280.7	6.9
40°-50°	456.3	11.2
50°-60°	804.3	19.7
60°-70°	1156.0	28.4
70°-80°	925.7	22.7
80°-90°	98.6	2.4
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°	4074.0	100.0
0°-180°	4074.0	100.0



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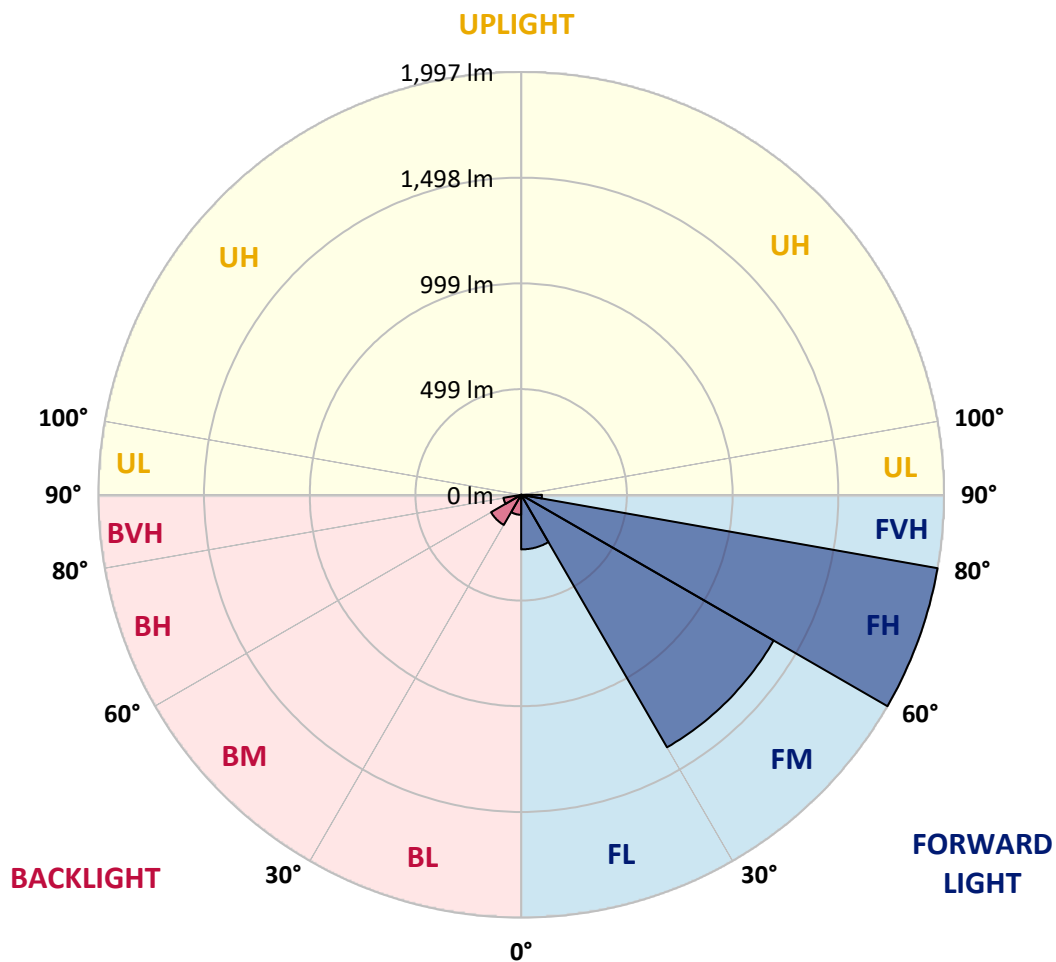
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	258.0	6.3			
FM	(30°-60°)	1377.0	33.8			
FH	(60°-80°)	1997.0	49.0			G2/5000
FVH	(80°-90°)	98.4	2.4			G1/100
BL	(0°-30°)	94.4	2.3	B0/110		
BM	(30°-60°)	164.2	4.0	B0/220		
BH	(60°-80°)	84.7	2.1	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	483.3	482.5	480.3	476.5	472.8	469.0	468.2	462.2	455.5	450.2	445.7
5°	526.1	525.4	521.6	513.3	505.1	495.3	494.5	480.3	467.5	453.2	441.2
7.5°	570.5	569.0	562.2	549.4	535.1	520.1	518.6	497.6	478.8	460.0	442.7
10°	605.0	603.5	593.8	578.7	559.2	540.4	538.1	516.3	497.6	473.5	450.2
12.5°	638.9	635.8	623.1	606.5	582.5	564.4	562.2	539.6	517.1	492.3	463.7
15°	670.4	666.7	654.6	633.6	608.0	590.8	589.2	565.2	541.9	513.3	481.8
17.5°	692.2	690.7	676.4	653.1	628.3	614.1	612.5	587.7	564.4	534.4	500.6
20°	703.5	703.5	690.0	664.4	641.9	632.1	629.8	606.5	584.0	555.4	520.1
22.5°	705.7	708.0	697.5	669.7	653.1	644.9	643.4	623.1	601.3	575.0	541.9
25°	710.3	710.3	705.0	674.9	662.9	660.6	659.9	641.9	622.3	596.0	563.7
27.5°	715.5	715.5	711.8	682.4	677.9	677.2	676.4	668.2	652.4	621.6	589.2
30°	729.0	729.8	726.8	697.5	694.5	702.7	704.2	699.7	680.2	641.9	615.6
32.5°	762.9	756.1	747.8	708.0	713.3	723.8	724.5	715.5	694.5	663.7	647.1
35°	847.8	808.0	770.4	717.0	719.3	729.8	731.3	730.5	717.8	691.5	683.2
37.5°	926.7	870.3	817.0	738.1	730.5	741.8	744.8	757.6	747.8	729.8	732.1
40°	972.6	950.8	913.2	795.9	753.1	770.4	773.4	792.9	789.2	781.7	795.9
42.5°	1113.9	1115.4	1074.8	882.4	794.4	822.2	826.0	841.8	847.0	850.8	885.4
45°	1277.7	1283.0	1273.2	1037.9	872.6	881.6	886.9	907.9	927.5	951.5	1014.6
47.5°	1474.6	1470.1	1434.0	1228.1	1008.6	958.3	962.0	1002.6	1036.4	1089.1	1179.2
50°	1649.0	1660.3	1591.9	1405.5	1200.3	1079.3	1075.5	1115.4	1176.2	1249.9	1363.4
52.5°	1824.9	1808.3	1715.9	1581.4	1427.3	1243.9	1232.6	1254.4	1340.1	1427.3	1543.8
55°	1871.5	1873.0	1841.4	1773.8	1616.7	1443.8	1425.0	1423.5	1530.2	1589.6	1733.2
57.5°	1963.2	1966.9	1974.4	1988.0	1913.6	1643.7	1624.2	1603.1	1706.9	1741.4	1923.3
60°	2056.4	2060.9	2106.7	2179.6	2130.0	1859.4	1838.4	1788.8	1846.7	1893.3	2123.2
62.5°	2044.3	2075.9	2208.9	2354.0	2348.0	2096.2	2069.9	1950.4	1987.2	2027.8	2306.6
65°	1845.9	1879.7	2178.9	2402.1	2566.7	2329.9	2287.1	2117.2	2119.5	2168.3	2483.3
67.5°	1668.5	1705.4	1991.0	2381.8	2711.0	2539.6	2495.3	2284.8	2249.5	2330.7	2578.0
70°	1566.3	1603.1	1841.4	2318.7	2751.6	2771.9	2733.5	2476.5	2404.3	2478.8	2472.0
72.5°	1225.8	1283.7	1650.5	2198.4	2795.2	3020.6	2990.6	2719.3	2535.9	2323.9	1882.0
75°	488.5	541.9	1030.4	1769.2	2740.3	3234.9	3211.6	2828.2	2347.2	1659.5	963.5
77.5°	147.3	157.8	286.4	874.9	2009.0	2868.1	2860.6	2378.0	1661.0	770.4	263.1
80°	48.9	54.1	87.9	241.3	916.9	1791.8	1825.6	1515.2	754.6	176.6	53.4
82.5°	20.3	22.5	44.3	97.0	324.7	771.9	760.6	678.7	263.1	109.7	19.5
85°	5.3	6.8	20.3	55.6	118.8	266.1	279.6	227.7	148.8	90.9	6.0
87.5°	0.0	0.0	9.8	22.5	53.4	80.4	84.2	69.1	84.2	68.4	3.0
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°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	441.9	438.2	431.4	426.9	420.9	419.4	416.4	412.6	411.9	408.1	408.9
5°	434.4	428.4	416.4	408.1	398.3	395.3	390.1	386.3	383.3	378.1	378.8
7.5°	432.9	423.9	407.4	391.6	375.8	364.5	348.7	336.0	325.4	314.2	316.4
10°	438.2	426.9	403.6	381.8	353.2	317.2	275.8	248.8	235.2	221.7	223.2
12.5°	448.7	435.2	405.1	372.0	314.2	252.5	195.4	158.6	148.8	142.8	143.6
15°	464.5	447.9	409.6	353.2	261.6	182.6	130.0	114.2	118.0	120.3	120.3
17.5°	481.0	462.2	413.4	319.4	202.2	127.8	106.0	104.5	109.7	115.0	115.0
20°	501.3	477.3	414.1	276.6	145.8	103.7	100.0	100.0	103.7	109.7	109.7
22.5°	520.9	493.8	407.4	227.7	111.2	96.2	96.2	96.2	98.5	104.5	105.2
25°	544.2	514.1	393.1	175.9	95.5	91.7	91.7	92.4	93.9	99.2	100.0
27.5°	569.0	535.1	369.0	128.5	87.2	86.4	87.2	87.9	88.7	93.9	95.5
30°	597.5	558.4	338.2	96.2	79.7	79.7	81.9	83.4	83.4	87.9	89.4
32.5°	630.6	589.2	301.4	79.7	72.2	71.4	75.2	77.4	77.4	81.2	82.7
35°	671.9	620.8	257.0	70.6	66.1	64.6	66.1	69.9	71.4	74.4	75.2
37.5°	726.8	658.4	209.7	65.4	61.6	58.6	58.6	59.4	62.4	65.4	66.1
40°	796.7	699.7	163.1	61.6	57.1	54.1	51.9	51.1	50.4	52.6	54.1
42.5°	884.6	746.3	121.8	57.9	53.4	48.9	45.8	42.8	39.1	38.3	39.1
45°	997.4	803.5	90.2	54.9	51.1	44.3	39.1	33.8	27.1	24.8	25.6
47.5°	1130.4	862.8	70.6	51.9	49.6	39.1	32.3	23.3	16.5	15.0	15.8
50°	1271.7	919.9	60.1	48.1	46.6	33.8	23.3	14.3	9.8	9.8	10.5
52.5°	1391.9	952.3	54.9	45.1	42.1	27.8	15.0	8.3	6.0	6.0	6.8
55°	1508.4	969.6	51.1	42.1	36.1	19.5	8.3	5.3	3.8	3.8	3.8
57.5°	1628.7	977.1	46.6	38.3	28.6	12.0	4.5	3.0	2.3	2.3	2.3
60°	1735.4	962.8	39.8	31.6	18.8	6.0	2.3	2.3	1.5	0.8	0.8
62.5°	1824.9	935.7	27.8	22.5	11.3	3.0	1.5	0.8	0.0	0.0	0.0
65°	1879.7	892.1	18.0	15.0	6.8	2.3	0.8	0.0	0.0	0.0	0.0
67.5°	1863.9	810.2	11.3	9.8	3.0	1.5	0.8	0.0	0.0	0.0	0.0
70°	1682.1	664.4	8.3	6.0	2.3	0.8	0.0	0.0	0.0	0.0	0.0
72.5°	1212.3	449.5	6.0	3.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	583.2	160.1	3.8	3.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	142.8	35.3	2.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.6	6.8	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.5	3.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.8	0.0	0.0	0.0	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)