

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: P397799

Luminaire Tested: **ARCH-S-PA1-40-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-827-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3060 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

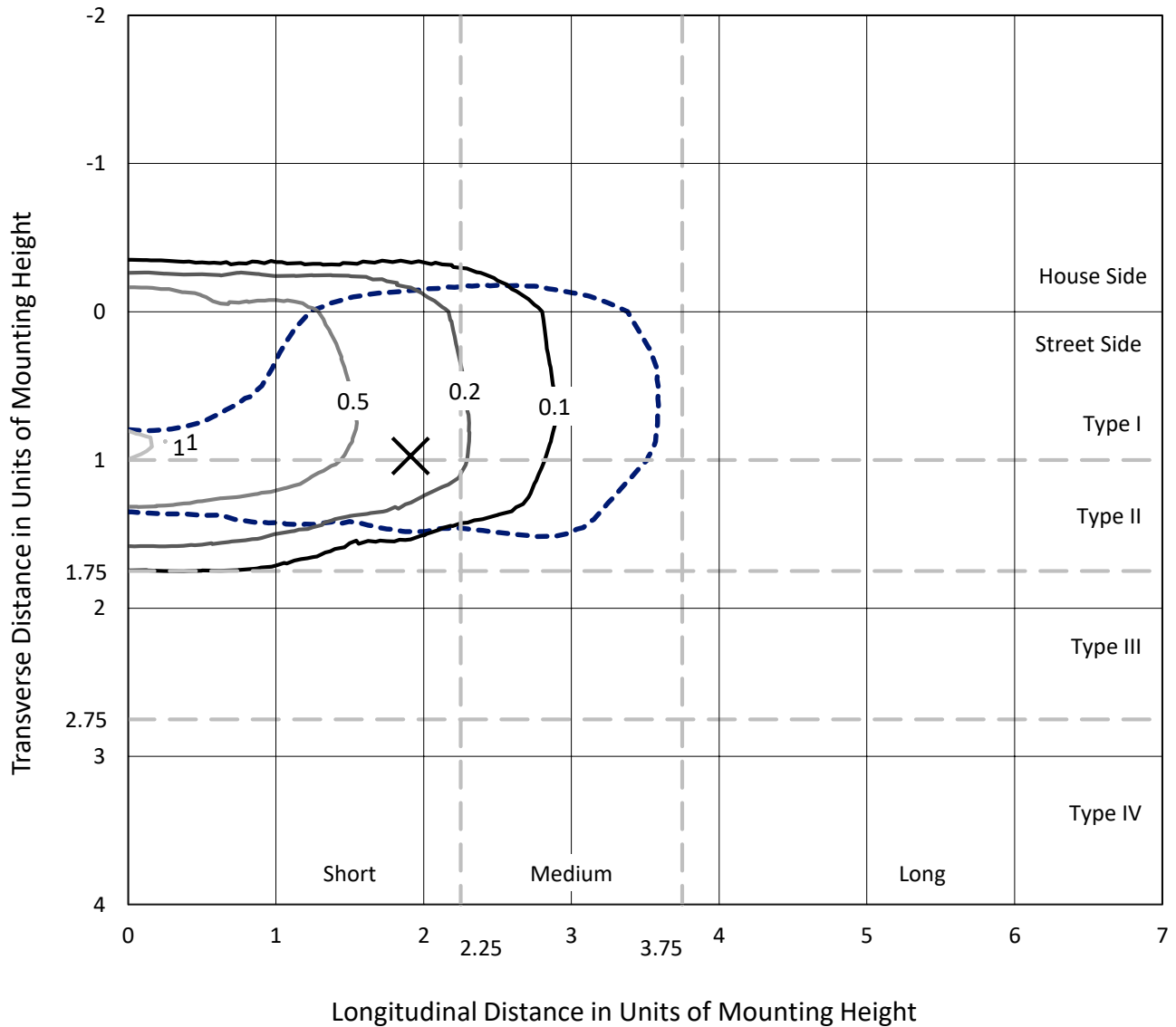
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

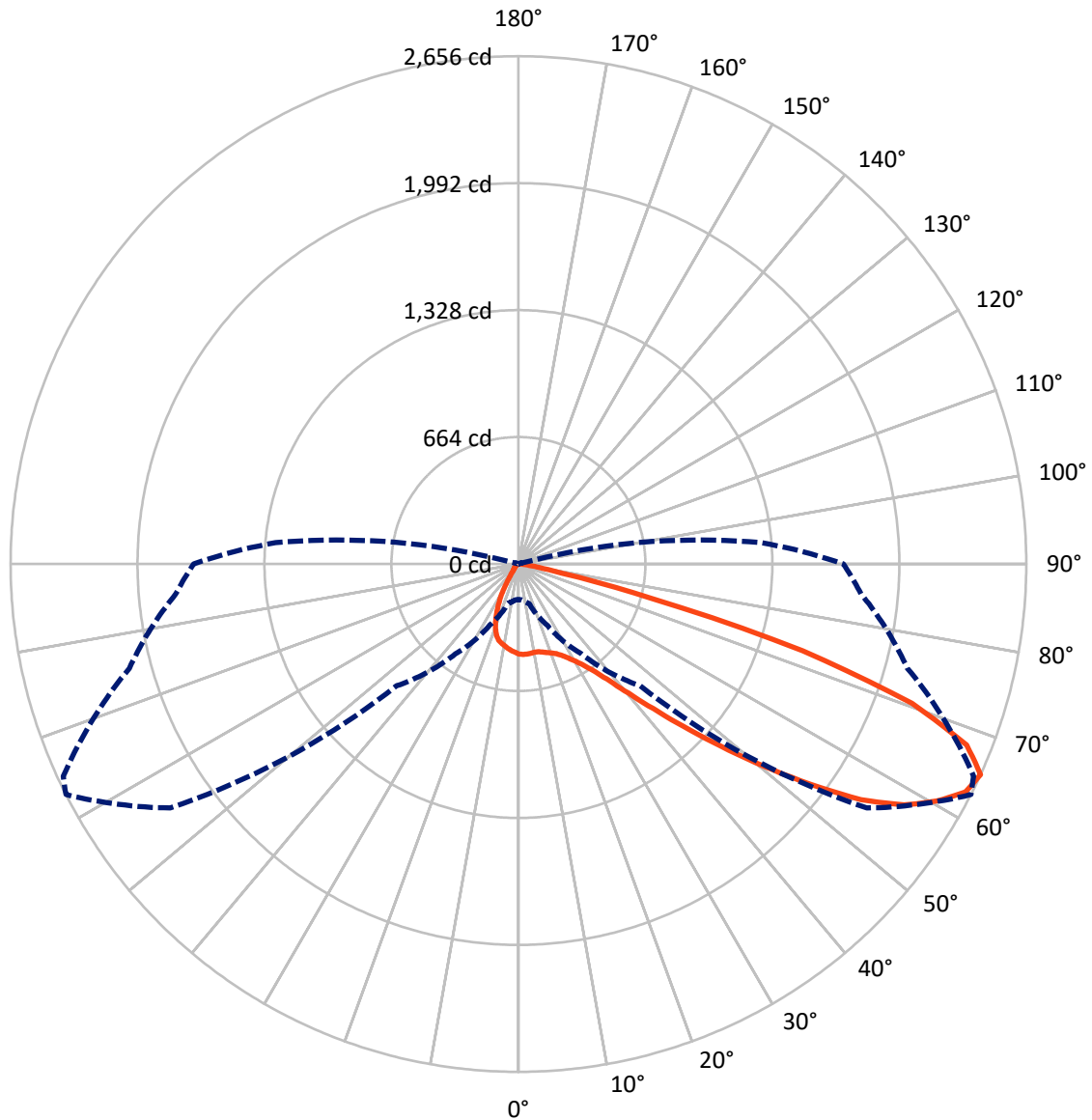
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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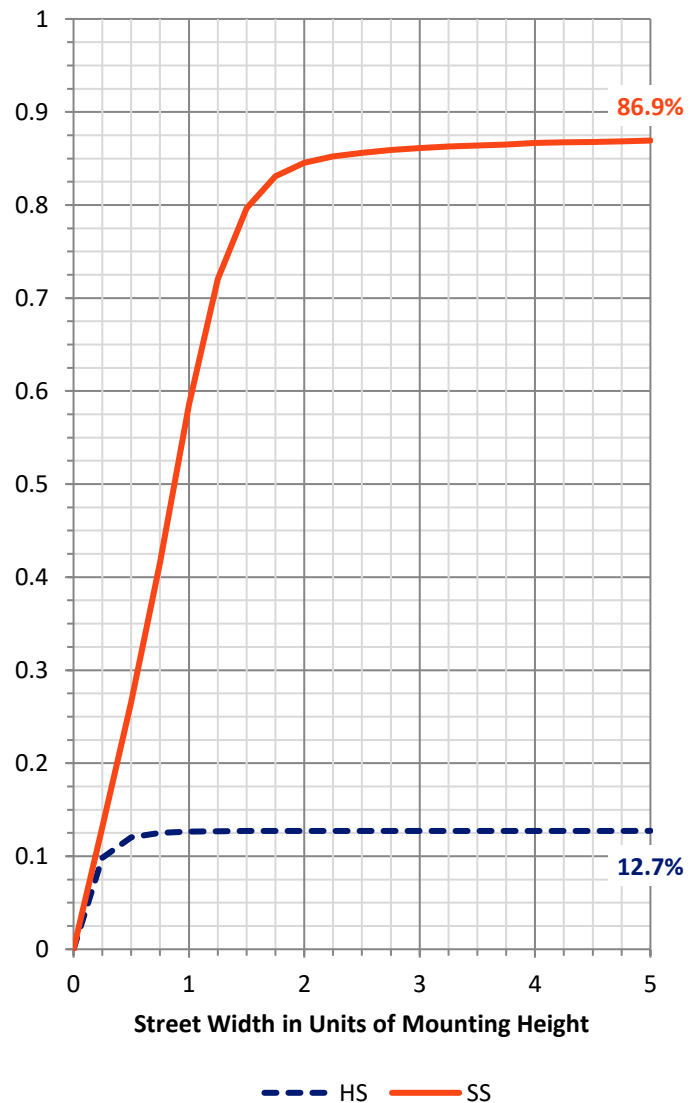
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	393.8	0.0	393.8
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2666.2	0.0	2666.2
	% Fixture	87.1	0.0	87.1
Total	Lumens	3060.0	0.0	3060.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	1.4
10°-20°	106.1	3.5
20°-30°	157.3	5.1
30°-40°	292.0	9.5
40°-50°	618.6	20.2
50°-60°	855.4	28.0
60°-70°	684.8	22.4
70°-80°	284.5	9.3
80°-90°	18.3	0.6
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°	3060.0	100.0
0°-180°	3060.0	100.0



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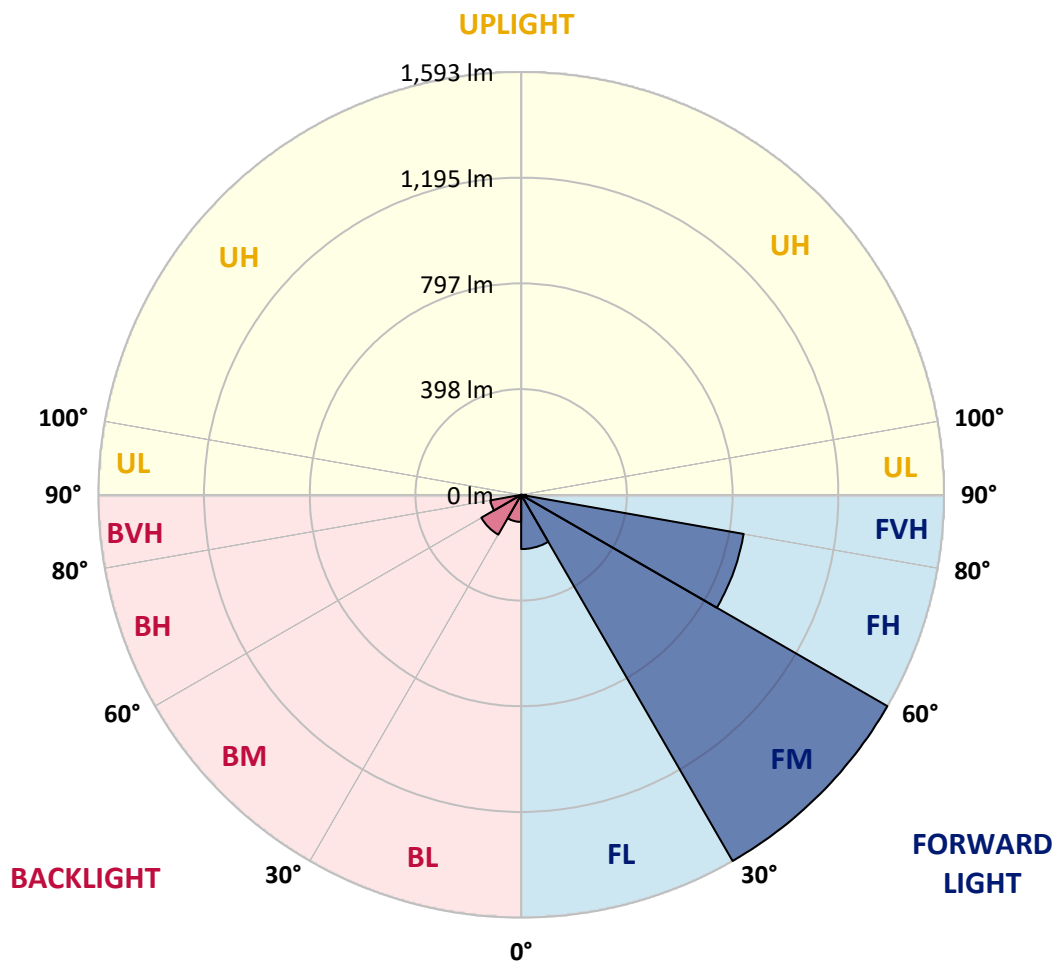
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	204.3	6.7			
FM	(30°-60°)	1593.1	52.1			
FH	(60°-80°)	851.4	27.8			G1/1800
FVH	(80°-90°)	17.4	0.6			G1/100
BL	(0°-30°)	102.1	3.3	B0/110		
BM	(30°-60°)	173.0	5.7	B0/220		
BH	(60°-80°)	117.9	3.9	B1/500		G1/500
BVH	(80°-90°)	0.8	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	479.5	478.3	477.2	476.6	476.6	476.0	473.7	473.1	472.0	470.8	469.7
5°	474.9	473.1	472.6	473.1	473.7	474.9	473.7	473.7	472.6	471.4	469.1
7.5°	463.3	462.2	462.7	464.5	465.0	469.1	469.7	471.4	471.4	470.2	468.5
10°	449.4	448.9	448.9	451.8	454.6	460.4	464.5	469.1	469.7	469.7	466.8
12.5°	439.0	438.5	440.2	443.7	449.4	457.0	463.9	470.8	472.0	472.6	467.9
15°	432.7	432.7	435.0	441.9	450.0	460.4	468.5	477.7	478.9	478.3	472.0
17.5°	426.9	427.5	432.1	443.7	452.9	466.8	476.6	487.0	487.6	487.0	476.6
20°	424.6	425.8	432.7	447.7	458.1	473.7	486.4	496.8	497.4	495.1	481.2
22.5°	431.0	431.5	440.2	456.4	466.2	483.5	499.7	509.5	510.1	506.6	488.1
25°	452.9	452.9	460.4	474.3	482.9	500.3	517.6	529.2	529.2	525.1	503.7
27.5°	504.3	499.7	498.0	502.0	504.9	523.4	541.9	556.3	555.7	550.0	524.0
30°	603.7	592.1	573.6	552.8	542.5	555.2	572.5	591.0	590.4	581.2	548.8
32.5°	770.6	753.9	710.0	655.1	610.6	596.2	612.4	632.6	633.1	622.2	588.7
35°	1004.6	978.0	899.5	823.2	721.5	666.7	671.3	693.2	700.2	694.4	655.7
37.5°	1229.9	1205.6	1130.5	1024.8	886.8	774.7	755.0	774.1	782.2	782.2	741.2
40°	1456.9	1428.6	1362.2	1255.9	1110.3	943.4	872.9	888.5	897.2	898.9	845.2
42.5°	1638.9	1620.4	1569.6	1487.0	1350.6	1239.1	1042.7	1034.1	1042.2	1035.8	965.9
45°	1764.8	1750.4	1715.2	1684.0	1617.5	1561.5	1269.8	1211.4	1216.6	1194.7	1101.7
47.5°	1790.8	1774.7	1767.2	1810.5	1857.8	1871.7	1548.8	1422.3	1417.1	1368.5	1242.6
50°	1677.6	1679.3	1707.1	1830.7	2028.3	2153.0	1872.3	1660.3	1641.2	1533.2	1373.7
52.5°	1433.2	1461.0	1530.9	1731.3	2080.3	2357.6	2195.8	1912.7	1883.3	1693.2	1472.0
55°	1121.3	1157.1	1272.1	1502.6	1971.7	2448.8	2468.5	2175.0	2108.0	1813.4	1548.2
57.5°	833.6	844.6	978.6	1188.9	1714.6	2359.3	2608.3	2377.2	2291.1	1909.3	1623.9
60°	519.3	526.3	667.8	905.2	1298.6	2028.3	2608.3	2516.4	2434.4	1995.3	1693.2
62.5°	322.9	325.2	378.4	620.4	882.7	1504.3	2500.2	2624.4	2558.6	2057.2	1752.7
65°	186.0	188.3	213.2	350.7	574.2	900.6	2224.1	2656.2	2626.8	2106.3	1798.9
67.5°	135.8	136.9	146.7	197.0	375.5	462.7	1670.7	2528.5	2565.5	2130.5	1797.8
70°	117.8	119.6	132.3	153.7	270.9	284.2	850.4	2183.7	2287.1	2095.9	1744.0
72.5°	90.7	93.0	112.1	144.4	198.7	204.5	307.9	1554.0	1710.5	1879.2	1596.7
75°	62.4	64.7	83.8	119.0	164.1	153.1	169.3	715.2	902.4	1260.5	1215.5
77.5°	39.9	40.4	52.6	86.7	141.5	108.6	116.1	233.4	327.5	570.2	573.6
80°	26.6	27.2	32.4	56.0	97.1	100.5	71.6	108.0	118.4	166.4	115.5
82.5°	16.2	16.2	22.0	35.2	58.9	83.2	46.8	56.6	60.7	64.1	30.0
85°	6.4	6.4	13.3	23.1	37.0	38.7	29.5	32.9	34.7	37.5	13.9
87.5°	1.7	1.7	7.5	12.7	16.2	17.9	17.9	16.2	17.3	21.4	6.9
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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	469.1	467.4	465.0	462.7	460.4	458.7	457.0	457.0	455.8	454.1	452.9
5°	467.9	465.0	459.8	455.8	449.4	444.8	441.4	438.5	436.7	432.7	432.1
7.5°	466.2	462.7	455.2	447.1	436.7	428.6	420.6	414.8	409.0	404.4	403.2
10°	463.3	459.3	448.3	436.7	422.3	407.3	388.2	366.3	346.0	334.5	331.0
12.5°	463.3	458.1	443.7	428.1	407.3	370.3	321.8	273.2	235.7	218.9	214.3
15°	466.2	459.3	440.2	418.8	380.1	305.0	226.5	162.3	121.3	108.6	105.7
17.5°	469.1	459.3	435.0	406.1	330.4	221.3	128.8	85.5	72.2	69.3	69.3
20°	470.2	458.1	428.1	382.4	264.0	137.5	76.8	64.1	58.9	57.2	57.2
22.5°	474.9	458.7	422.9	348.3	191.8	80.9	60.7	53.7	48.5	46.8	46.8
25°	486.4	465.6	424.0	305.0	123.0	61.2	51.4	44.5	39.3	37.0	37.0
27.5°	504.9	481.2	430.4	254.8	77.4	52.6	43.3	35.8	31.8	29.5	29.5
30°	525.7	498.5	433.3	197.0	57.8	44.5	35.2	28.3	25.4	23.7	23.1
32.5°	562.1	528.6	431.0	135.2	47.4	37.5	28.3	22.5	20.2	19.6	19.6
35°	620.4	581.2	426.3	84.9	39.3	30.0	22.5	18.5	16.8	16.2	15.6
37.5°	699.6	658.0	412.5	56.0	32.4	23.7	18.5	15.6	13.9	13.3	13.3
40°	796.1	745.8	385.9	42.7	27.7	19.1	15.6	13.3	12.1	11.6	11.6
42.5°	906.4	843.4	343.7	37.0	23.1	16.2	13.3	11.0	10.4	9.8	9.8
45°	1027.1	945.7	285.4	32.9	19.6	13.3	11.0	9.8	8.7	8.7	8.1
47.5°	1155.4	1048.5	219.5	28.9	16.8	11.6	9.8	8.1	7.5	6.9	6.9
50°	1279.0	1140.4	154.2	24.8	13.9	9.8	8.1	6.9	6.4	5.8	5.8
52.5°	1366.2	1195.8	109.2	21.4	11.6	8.7	6.4	5.2	4.6	4.6	4.6
55°	1436.1	1230.5	76.3	17.9	9.8	7.5	5.2	4.0	4.0	3.5	3.5
57.5°	1502.0	1253.0	56.0	15.0	8.1	5.8	4.0	2.9	2.9	2.3	2.3
60°	1570.2	1265.1	42.7	12.1	6.9	4.6	2.9	2.3	1.7	1.7	1.7
62.5°	1638.9	1272.7	32.9	9.8	5.8	3.5	2.3	1.7	1.2	0.6	0.6
65°	1699.0	1275.0	25.4	7.5	4.6	2.3	1.7	0.6	0.0	0.0	0.0
67.5°	1716.9	1248.4	19.6	5.8	3.5	1.7	1.2	0.0	0.0	0.0	0.0
70°	1668.4	1177.9	15.0	4.6	2.9	1.2	0.6	0.0	0.0	0.0	0.0
72.5°	1480.6	987.8	11.6	2.9	2.3	1.2	0.6	0.0	0.0	0.0	0.0
75°	1059.5	526.9	8.1	2.3	1.7	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	487.6	203.9	5.8	1.7	1.2	0.6	0.0	0.0	0.0	0.0	0.0
80°	95.3	50.8	2.3	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	22.0	8.7	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	2.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.2	0.6	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)