

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: P397808

Luminaire Tested: **ARCH-S-PA1-40-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397808
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-PA1-40-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 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: 3308 lumens
Efficiency: N/A
Efficacy: 82.7 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

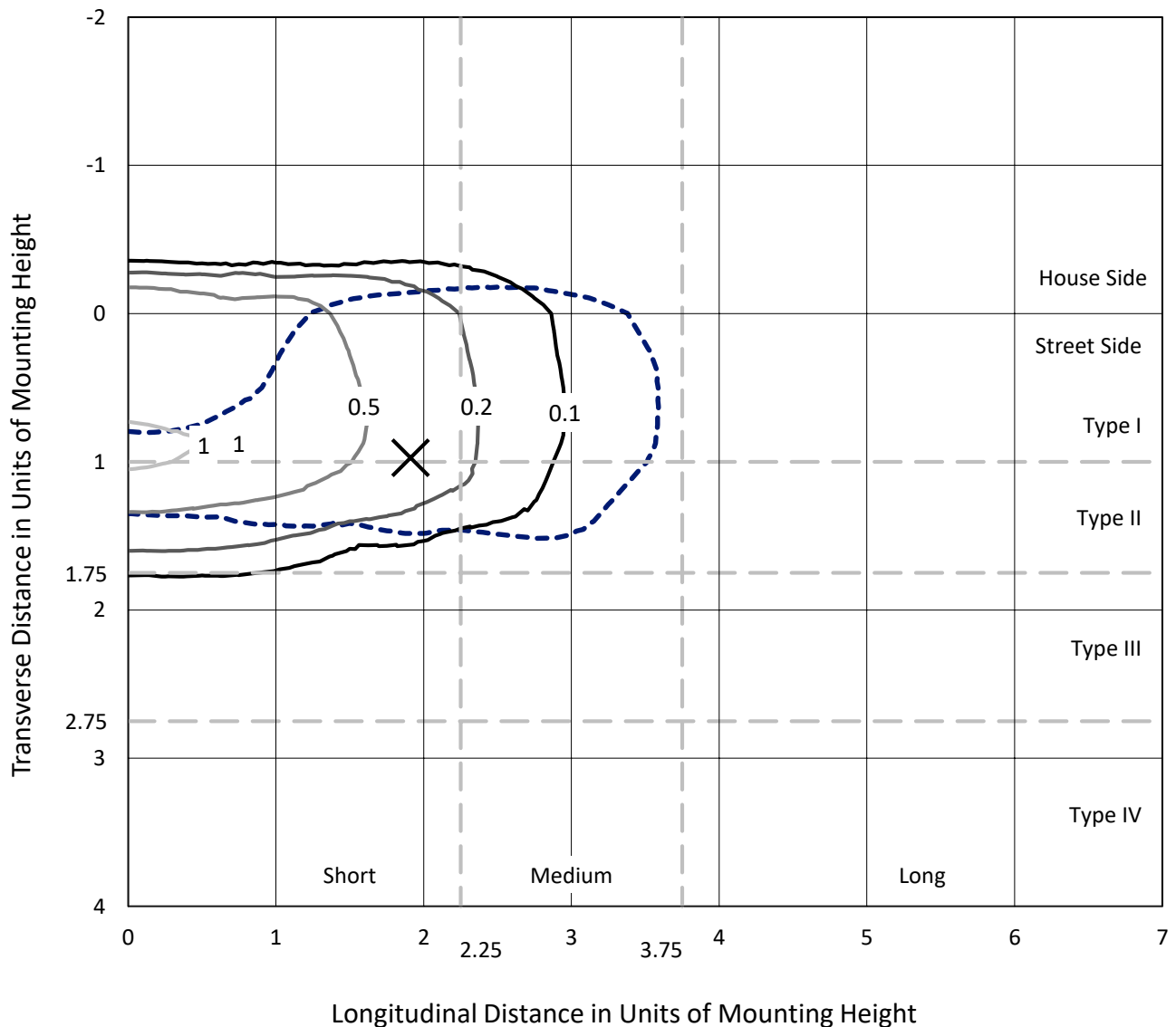
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

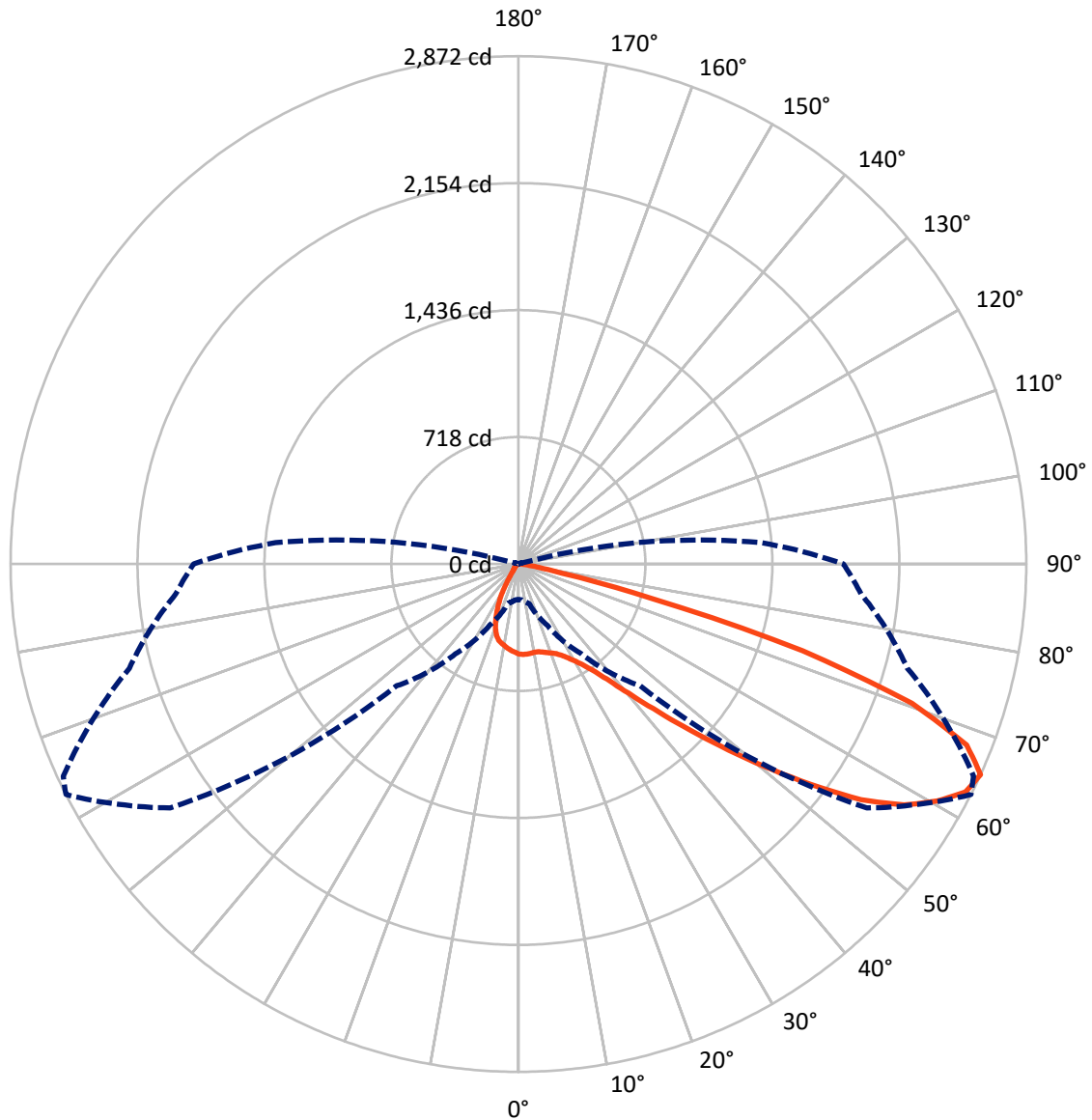
× Max cd
 - - - 1/2 Max cd



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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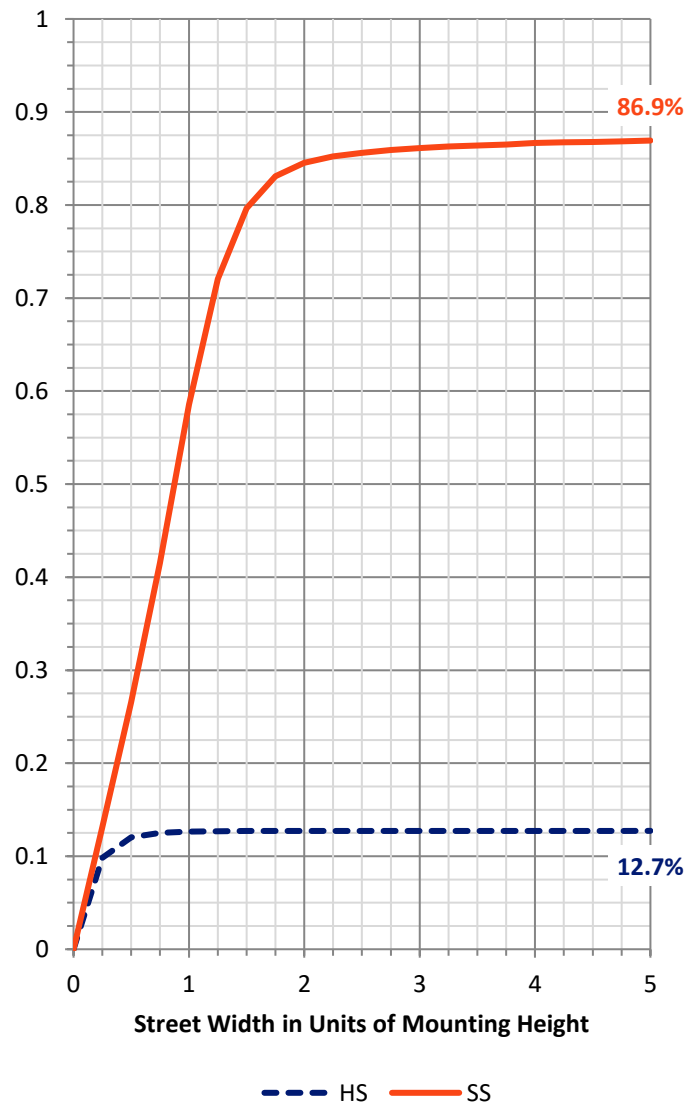
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	425.7	0.0	425.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2882.3	0.0	2882.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	3308.0	0.0	3308.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.5	1.4
10°-20°	114.7	3.5
20°-30°	170.0	5.1
30°-40°	315.7	9.5
40°-50°	668.8	20.2
50°-60°	924.7	28.0
60°-70°	740.3	22.4
70°-80°	307.6	9.3
80°-90°	19.7	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°	3308.0	100.0
0°-180°	3308.0	100.0



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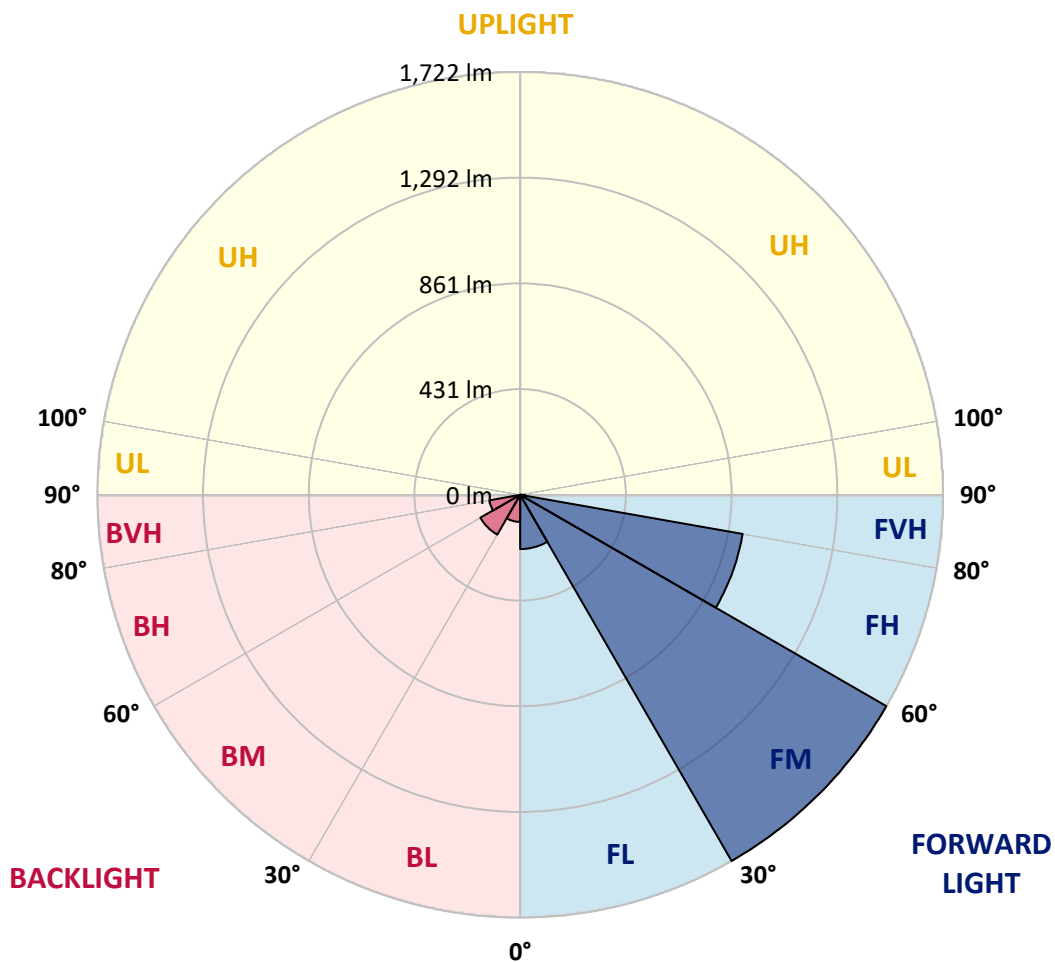
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	220.9	6.7			
FM	(30°-60°)	1722.2	52.1			
FH	(60°-80°)	920.4	27.8			G1/1800
FVH	(80°-90°)	18.9	0.6			G1/100
BL	(0°-30°)	110.3	3.3	B1/500		
BM	(30°-60°)	187.0	5.7	B0/220		
BH	(60°-80°)	127.5	3.9	B1/500		G1/500
BVH	(80°-90°)	0.9	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6
2.5°	518.3	517.1	515.8	515.2	515.2	514.6	512.1	511.5	510.2	509.0	507.7
5°	513.3	511.5	510.8	511.5	512.1	513.3	512.1	512.1	510.8	509.6	507.1
7.5°	500.9	499.6	500.2	502.1	502.7	507.1	507.7	509.6	509.6	508.4	506.5
10°	485.9	485.2	485.2	488.4	491.5	497.7	502.1	507.1	507.7	507.7	504.6
12.5°	474.6	474.0	475.9	479.6	485.9	494.0	501.5	509.0	510.2	510.8	505.9
15°	467.8	467.8	470.3	477.7	486.5	497.7	506.5	516.5	517.7	517.1	510.2
17.5°	461.5	462.1	467.1	479.6	489.6	504.6	515.2	526.5	527.1	526.5	515.2
20°	459.0	460.3	467.8	484.0	495.2	512.1	525.8	537.1	537.7	535.2	520.2
22.5°	465.9	466.5	475.9	493.4	504.0	522.7	540.2	550.8	551.4	547.7	527.7
25°	489.6	489.6	497.7	512.7	522.1	540.8	559.6	572.1	572.1	567.7	544.6
27.5°	545.2	540.2	538.3	542.7	545.8	565.8	585.8	601.4	600.8	594.5	566.4
30°	652.6	640.1	620.1	597.7	586.4	600.2	618.9	638.9	638.2	628.3	593.3
32.5°	833.1	815.0	767.5	708.2	660.1	644.5	662.0	683.8	684.5	672.6	636.4
35°	1086.0	1057.3	972.4	889.9	780.0	720.7	725.7	749.4	756.9	750.7	708.8
37.5°	1329.6	1303.3	1222.2	1107.9	958.6	837.5	816.2	836.8	845.6	845.6	801.2
40°	1575.0	1544.4	1472.6	1357.7	1200.3	1019.8	943.6	960.5	969.9	971.7	913.7
42.5°	1771.7	1751.7	1696.8	1607.5	1460.1	1339.6	1127.2	1117.9	1126.6	1119.7	1044.2
45°	1907.9	1892.3	1854.2	1820.4	1748.6	1688.0	1372.7	1309.6	1315.2	1291.5	1190.9
47.5°	1936.0	1918.5	1910.4	1957.2	2008.4	2023.4	1674.3	1537.5	1531.9	1479.5	1343.3
50°	1813.6	1815.4	1845.4	1979.1	2192.7	2327.5	2024.0	1794.8	1774.2	1657.4	1485.1
52.5°	1549.4	1579.4	1654.9	1871.7	2248.9	2548.6	2373.8	2067.7	2035.9	1830.4	1591.2
55°	1212.2	1250.9	1375.2	1624.3	2131.4	2647.3	2668.5	2351.3	2278.8	1960.3	1673.7
57.5°	901.2	913.0	1057.9	1285.2	1853.5	2550.5	2819.7	2569.9	2476.8	2064.0	1755.5
60°	561.4	568.9	721.9	978.6	1403.9	2192.7	2819.7	2720.4	2631.7	2157.1	1830.4
62.5°	349.1	351.6	409.1	670.7	954.2	1626.2	2702.9	2837.1	2765.9	2223.9	1894.8
65°	201.1	203.6	230.4	379.1	620.8	973.6	2404.4	2871.5	2839.6	2277.0	1944.7
67.5°	146.8	148.0	158.6	213.0	405.9	500.2	1806.1	2733.5	2773.4	2303.2	1943.5
70°	127.4	129.3	143.0	166.1	292.9	307.3	919.3	2360.6	2472.4	2265.7	1885.4
72.5°	98.0	100.5	121.2	156.1	214.8	221.1	332.9	1679.9	1849.2	2031.5	1726.1
75°	67.4	69.9	90.6	128.6	177.4	165.5	183.0	773.1	975.5	1362.7	1314.0
77.5°	43.1	43.7	56.8	93.7	153.0	117.4	125.5	252.3	354.1	616.4	620.1
80°	28.7	29.4	35.0	60.6	104.9	108.7	77.4	116.8	128.0	179.9	124.9
82.5°	17.5	17.5	23.7	38.1	63.7	89.9	50.6	61.2	65.6	69.3	32.5
85°	6.9	6.9	14.4	25.0	40.0	41.8	31.8	35.6	37.5	40.6	15.0
87.5°	1.9	1.9	8.1	13.7	17.5	19.4	19.4	17.5	18.7	23.1	7.5
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°	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6	509.6
2.5°	507.1	505.2	502.7	500.2	497.7	495.9	494.0	494.0	492.7	490.9	489.6
5°	505.9	502.7	497.1	492.7	485.9	480.9	477.1	474.0	472.1	467.8	467.1
7.5°	504.0	500.2	492.1	483.4	472.1	463.4	454.6	448.4	442.2	437.2	435.9
10°	500.9	496.5	484.6	472.1	456.5	440.3	419.7	395.9	374.1	361.6	357.8
12.5°	500.9	495.2	479.6	462.8	440.3	400.3	347.9	295.4	254.8	236.7	231.7
15°	504.0	496.5	475.9	452.8	410.9	329.7	244.8	175.5	131.1	117.4	114.3
17.5°	507.1	496.5	470.3	439.0	357.2	239.2	139.3	92.4	78.1	74.9	74.9
20°	508.4	495.2	462.8	413.4	285.4	148.6	83.1	69.3	63.7	61.8	61.8
22.5°	513.3	495.9	457.1	376.6	207.3	87.4	65.6	58.1	52.5	50.6	50.6
25°	525.8	503.4	458.4	329.7	133.0	66.2	55.6	48.1	42.5	40.0	40.0
27.5°	545.8	520.2	465.3	275.4	83.7	56.8	46.8	38.7	34.3	31.8	31.8
30°	568.3	539.0	468.4	213.0	62.5	48.1	38.1	30.6	27.5	25.6	25.0
32.5°	607.6	571.4	465.9	146.1	51.2	40.6	30.6	24.4	21.9	21.2	21.2
35°	670.7	628.3	460.9	91.8	42.5	32.5	24.4	20.0	18.1	17.5	16.9
37.5°	756.3	711.3	445.9	60.6	35.0	25.6	20.0	16.9	15.0	14.4	14.4
40°	860.6	806.2	417.2	46.2	30.0	20.6	16.9	14.4	13.1	12.5	12.5
42.5°	979.9	911.8	371.6	40.0	25.0	17.5	14.4	11.9	11.2	10.6	10.6
45°	1110.4	1022.3	308.5	35.6	21.2	14.4	11.9	10.6	9.4	9.4	8.7
47.5°	1249.0	1133.5	237.3	31.2	18.1	12.5	10.6	8.7	8.1	7.5	7.5
50°	1382.7	1232.8	166.7	26.9	15.0	10.6	8.7	7.5	6.9	6.2	6.2
52.5°	1477.0	1292.7	118.0	23.1	12.5	9.4	6.9	5.6	5.0	5.0	5.0
55°	1552.5	1330.2	82.4	19.4	10.6	8.1	5.6	4.4	4.4	3.7	3.7
57.5°	1623.7	1354.6	60.6	16.2	8.7	6.2	4.4	3.1	3.1	2.5	2.5
60°	1697.4	1367.7	46.2	13.1	7.5	5.0	3.1	2.5	1.9	1.9	1.9
62.5°	1771.7	1375.8	35.6	10.6	6.2	3.7	2.5	1.9	1.2	0.6	0.6
65°	1836.7	1378.3	27.5	8.1	5.0	2.5	1.9	0.6	0.0	0.0	0.0
67.5°	1856.0	1349.6	21.2	6.2	3.7	1.9	1.2	0.0	0.0	0.0	0.0
70°	1803.6	1273.4	16.2	5.0	3.1	1.2	0.6	0.0	0.0	0.0	0.0
72.5°	1600.6	1067.9	12.5	3.1	2.5	1.2	0.6	0.0	0.0	0.0	0.0
75°	1145.3	569.6	8.7	2.5	1.9	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	527.1	220.5	6.2	1.9	1.2	0.6	0.0	0.0	0.0	0.0	0.0
80°	103.0	55.0	2.5	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.7	9.4	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.1	3.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	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)