

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: P397763

Luminaire Tested: **ARCH-S-PA1-40-730-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397763
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-PA1-40-730-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 3792 lumens
Efficiency: N/A
Efficacy: 94.8 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

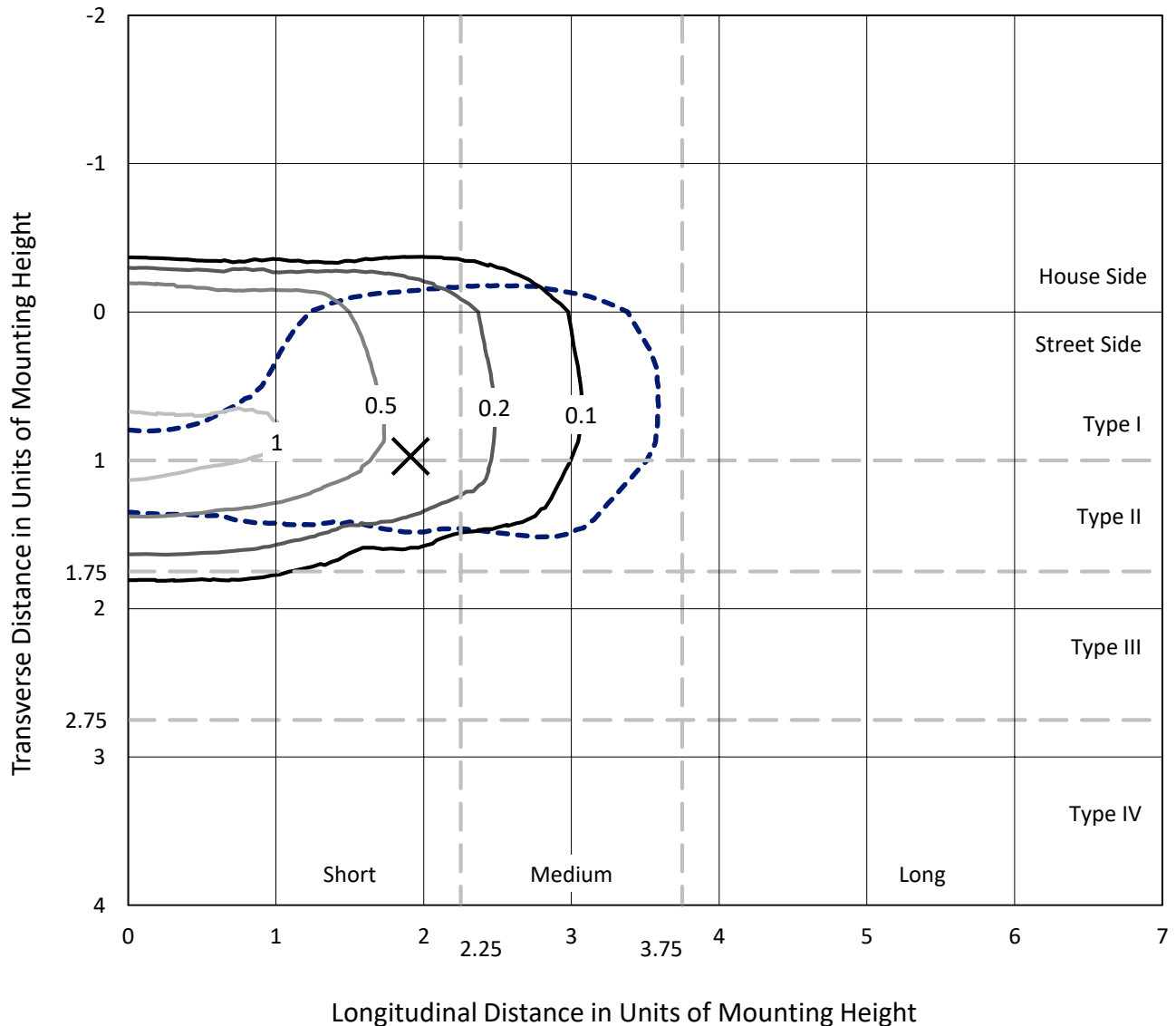
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

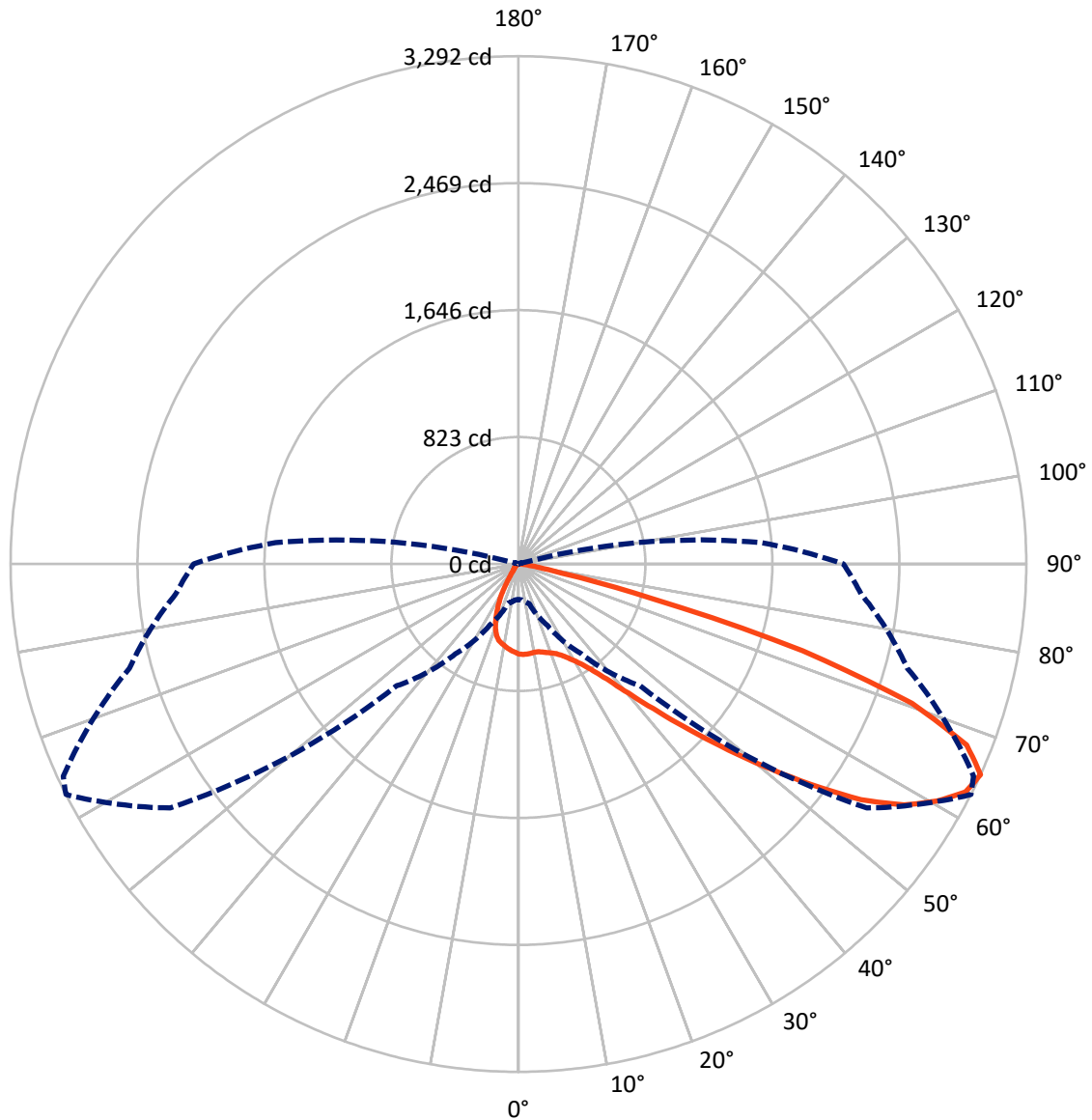
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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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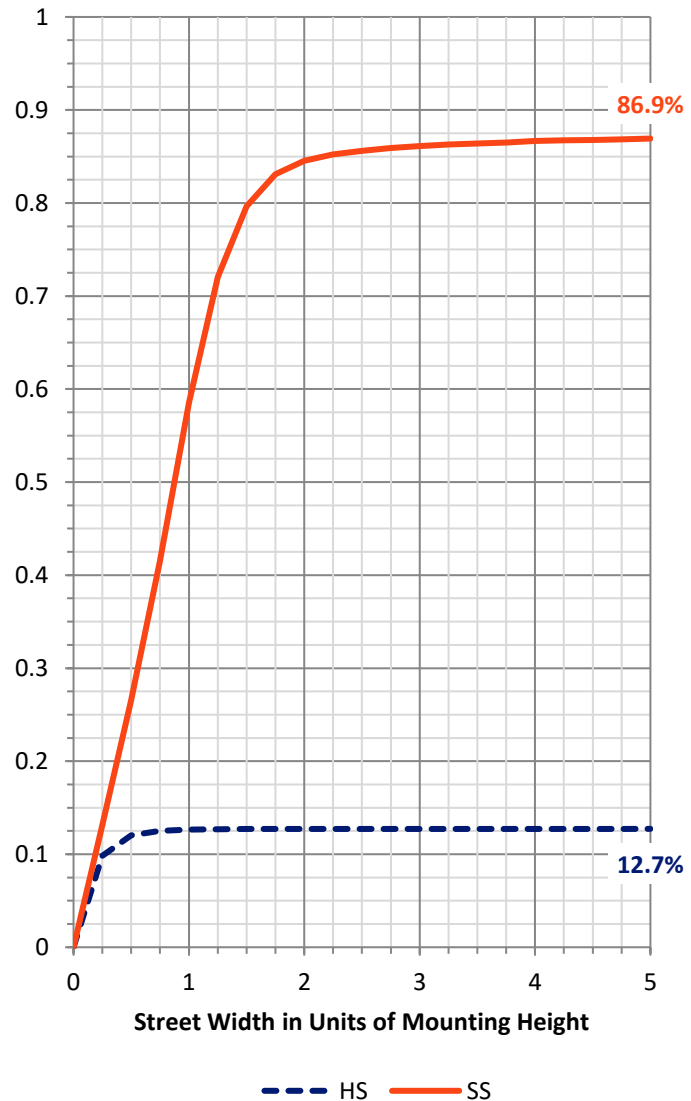
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	488.0	0.0	488.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3304.0	0.0	3304.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	3792.0	0.0	3792.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	1.4
10°-20°	131.5	3.5
20°-30°	194.9	5.1
30°-40°	361.9	9.5
40°-50°	766.6	20.2
50°-60°	1060.0	28.0
60°-70°	848.6	22.4
70°-80°	352.6	9.3
80°-90°	22.6	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°	3792.0	100.0
0°-180°	3792.0	100.0



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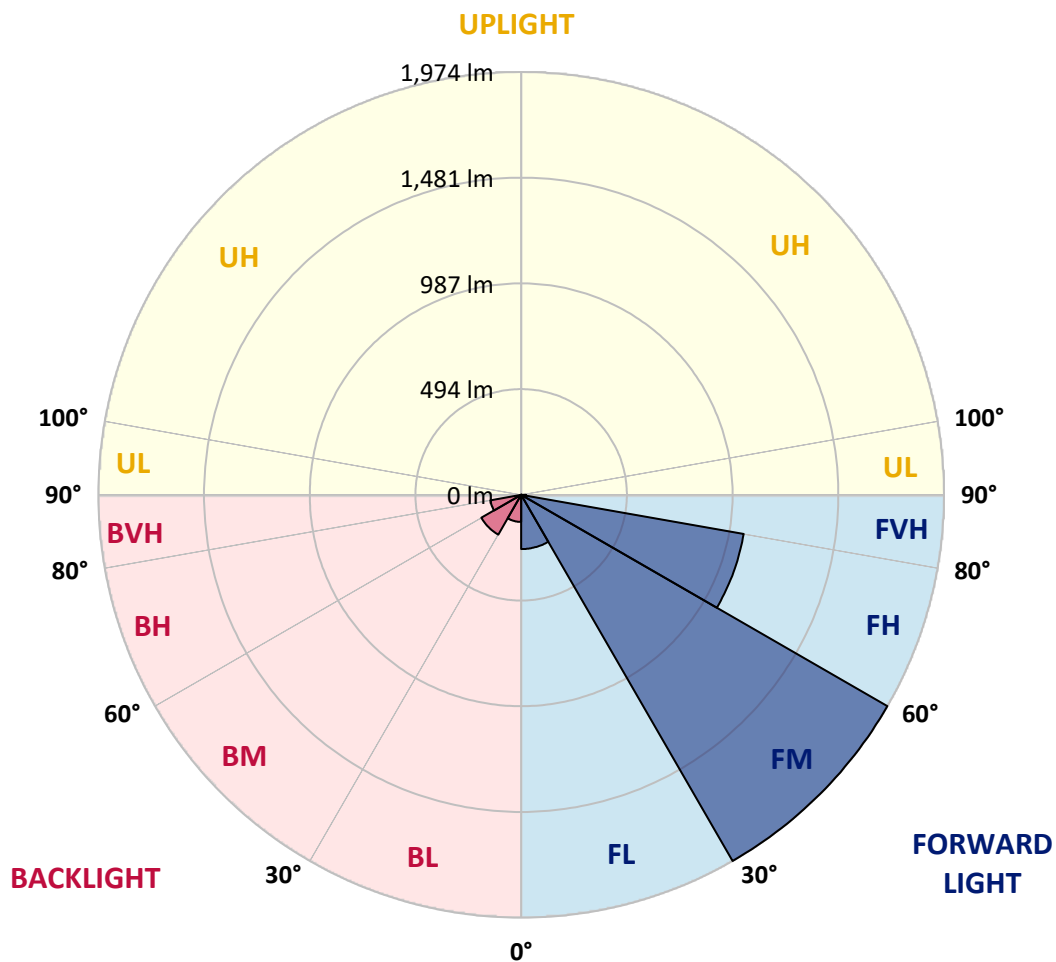
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.2	6.7			
FM	(30°-60°)	1974.1	52.1			
FH	(60°-80°)	1055.0	27.8			G1/1800
FVH	(80°-90°)	21.6	0.6			G1/100
BL	(0°-30°)	126.5	3.3	B1/500		
BM	(30°-60°)	214.4	5.7	B0/220		
BH	(60°-80°)	146.1	3.9	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	594.2	592.8	591.3	590.6	590.6	589.9	587.0	586.3	584.9	583.4	582.0
5°	588.5	586.3	585.6	586.3	587.0	588.5	587.0	587.0	585.6	584.2	581.3
7.5°	574.1	572.7	573.4	575.6	576.3	581.3	582.0	584.2	584.2	582.7	580.6
10°	557.0	556.2	556.2	559.8	563.4	570.6	575.6	581.3	582.0	582.0	578.4
12.5°	544.1	543.4	545.5	549.8	557.0	566.3	574.9	583.4	584.9	585.6	579.9
15°	536.2	536.2	539.1	547.6	557.7	570.6	580.6	592.0	593.5	592.8	584.9
17.5°	529.0	529.8	535.5	549.8	561.3	578.4	590.6	603.5	604.2	603.5	590.6
20°	526.2	527.6	536.2	554.8	567.7	587.0	602.8	615.7	616.4	613.5	596.3
22.5°	534.0	534.8	545.5	565.5	577.7	599.2	619.2	631.4	632.1	627.8	604.9
25°	561.3	561.3	570.6	587.7	598.5	620.0	641.4	655.7	655.7	650.7	624.2
27.5°	625.0	619.2	617.1	622.1	625.7	648.6	671.5	689.4	688.7	681.5	649.3
30°	748.1	733.8	710.9	685.1	672.2	688.0	709.4	732.3	731.6	720.2	680.1
32.5°	955.0	934.2	879.8	811.8	756.7	738.8	758.8	783.9	784.6	771.0	729.5
35°	1244.9	1212.0	1114.6	1020.1	894.1	826.1	831.9	859.1	867.6	860.5	812.5
37.5°	1524.1	1494.0	1401.0	1270.0	1098.9	960.0	935.7	959.3	969.3	969.3	918.5
40°	1805.5	1770.4	1688.0	1556.3	1375.9	1169.0	1081.7	1101.0	1111.8	1113.9	1047.3
42.5°	2031.0	2008.0	1945.1	1842.7	1673.7	1535.6	1292.2	1281.4	1291.5	1283.6	1197.0
45°	2187.0	2169.1	2125.5	2086.8	2004.5	1935.0	1573.5	1501.2	1507.6	1480.4	1365.2
47.5°	2219.2	2199.2	2189.9	2243.6	2302.3	2319.5	1919.3	1762.5	1756.1	1695.9	1539.9
50°	2078.9	2081.1	2115.4	2268.6	2513.5	2668.1	2320.2	2057.4	2033.8	1900.0	1702.4
52.5°	1776.1	1810.5	1897.1	2145.5	2577.9	2921.5	2721.1	2370.3	2333.8	2098.2	1824.1
55°	1389.5	1433.9	1576.4	1862.0	2443.3	3034.6	3059.0	2695.3	2612.3	2247.2	1918.6
57.5°	1033.0	1046.6	1212.7	1473.3	2124.7	2923.7	3232.2	2945.9	2839.2	2366.0	2012.3
60°	643.6	652.2	827.6	1121.8	1609.3	2513.5	3232.2	3118.4	3016.7	2472.7	2098.2
62.5°	400.2	403.0	468.9	768.9	1093.9	1864.2	3098.3	3252.3	3170.6	2549.3	2172.0
65°	230.5	233.4	264.2	434.5	711.6	1116.1	2756.1	3291.6	3255.1	2610.1	2229.3
67.5°	168.2	169.7	181.8	244.1	465.3	573.4	2070.3	3133.4	3179.2	2640.2	2227.8
70°	146.0	148.2	163.9	190.4	335.7	352.2	1053.8	2706.0	2834.2	2597.2	2161.2
72.5°	112.4	115.3	138.9	179.0	246.3	253.4	381.6	1925.7	2119.7	2328.8	1978.7
75°	77.3	80.2	103.8	147.5	203.3	189.7	209.8	886.3	1118.2	1562.1	1506.2
77.5°	49.4	50.1	65.1	107.4	175.4	134.6	143.9	289.2	405.9	706.6	710.9
80°	32.9	33.6	40.1	69.4	120.3	124.6	88.8	133.9	146.8	206.2	143.2
82.5°	20.0	20.0	27.2	43.7	73.0	103.1	58.0	70.2	75.2	79.5	37.2
85°	7.9	7.9	16.5	28.6	45.8	48.0	36.5	40.8	43.0	46.5	17.2
87.5°	2.1	2.1	9.3	15.7	20.0	22.2	22.2	20.0	21.5	26.5	8.6
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°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	581.3	579.1	576.3	573.4	570.6	568.4	566.3	566.3	564.8	562.7	561.3
5°	579.9	576.3	569.8	564.8	557.0	551.2	546.9	543.4	541.2	536.2	535.5
7.5°	577.7	573.4	564.1	554.1	541.2	531.2	521.2	514.0	506.8	501.1	499.7
10°	574.1	569.1	555.5	541.2	523.3	504.7	481.1	453.9	428.8	414.5	410.2
12.5°	574.1	567.7	549.8	530.5	504.7	458.9	398.7	338.6	292.1	271.3	265.6
15°	577.7	569.1	545.5	519.0	471.1	378.0	280.6	201.2	150.3	134.6	131.0
17.5°	581.3	569.1	539.1	503.3	409.5	274.2	159.6	106.0	89.5	85.9	85.9
20°	582.7	567.7	530.5	473.9	327.2	170.4	95.2	79.5	73.0	70.9	70.9
22.5°	588.5	568.4	524.0	431.7	237.7	100.2	75.2	66.6	60.1	58.0	58.0
25°	602.8	577.0	525.5	378.0	152.5	75.9	63.7	55.1	48.7	45.8	45.8
27.5°	625.7	596.3	533.3	315.7	95.9	65.1	53.7	44.4	39.4	36.5	36.5
30°	651.5	617.8	536.9	244.1	71.6	55.1	43.7	35.1	31.5	29.4	28.6
32.5°	696.6	655.0	534.0	167.5	58.7	46.5	35.1	27.9	25.1	24.3	24.3
35°	768.9	720.2	528.3	105.2	48.7	37.2	27.9	22.9	20.8	20.0	19.3
37.5°	866.9	815.4	511.1	69.4	40.1	29.4	22.9	19.3	17.2	16.5	16.5
40°	986.5	924.2	478.2	53.0	34.4	23.6	19.3	16.5	15.0	14.3	14.3
42.5°	1123.2	1045.2	425.9	45.8	28.6	20.0	16.5	13.6	12.9	12.2	12.2
45°	1272.8	1171.9	353.6	40.8	24.3	16.5	13.6	12.2	10.7	10.7	10.0
47.5°	1431.8	1299.3	272.0	35.8	20.8	14.3	12.2	10.0	9.3	8.6	8.6
50°	1585.0	1413.2	191.1	30.8	17.2	12.2	10.0	8.6	7.9	7.2	7.2
52.5°	1693.1	1481.9	135.3	26.5	14.3	10.7	7.9	6.4	5.7	5.7	5.7
55°	1779.7	1524.8	94.5	22.2	12.2	9.3	6.4	5.0	5.0	4.3	4.3
57.5°	1861.3	1552.7	69.4	18.6	10.0	7.2	5.0	3.6	3.6	2.9	2.9
60°	1945.8	1567.8	53.0	15.0	8.6	5.7	3.6	2.9	2.1	2.1	2.1
62.5°	2031.0	1577.1	40.8	12.2	7.2	4.3	2.9	2.1	1.4	0.7	0.7
65°	2105.4	1580.0	31.5	9.3	5.7	2.9	2.1	0.7	0.0	0.0	0.0
67.5°	2127.6	1547.0	24.3	7.2	4.3	2.1	1.4	0.0	0.0	0.0	0.0
70°	2067.5	1459.7	18.6	5.7	3.6	1.4	0.7	0.0	0.0	0.0	0.0
72.5°	1834.8	1224.2	14.3	3.6	2.9	1.4	0.7	0.0	0.0	0.0	0.0
75°	1312.9	652.9	10.0	2.9	2.1	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	604.2	252.7	7.2	2.1	1.4	0.7	0.0	0.0	0.0	0.0	0.0
80°	118.1	63.0	2.9	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.2	10.7	1.4	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	3.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.4	0.7	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)