

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: P349020

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P349020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3152 lumens
Efficiency: N/A
Efficacy: 76.9 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

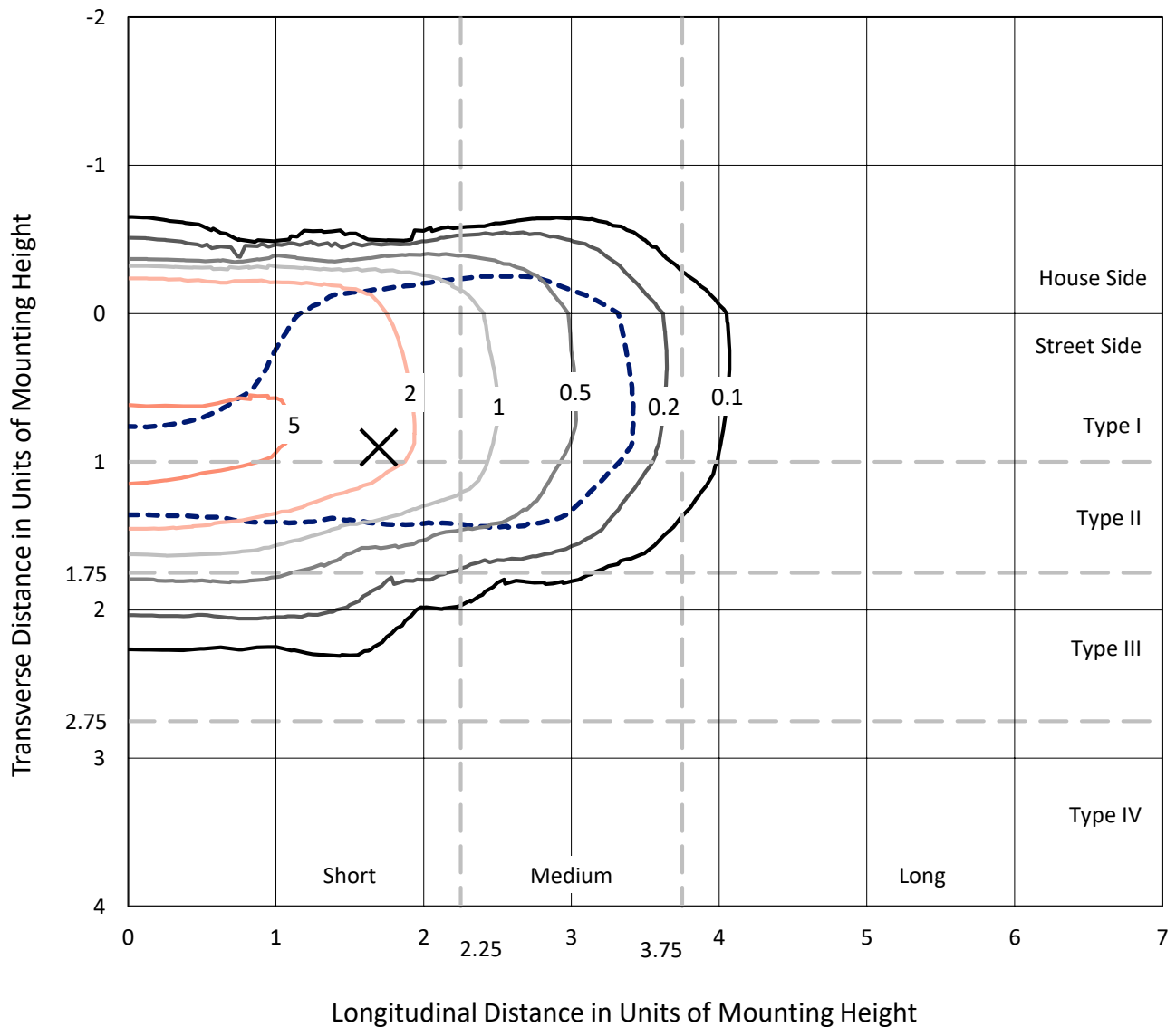
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

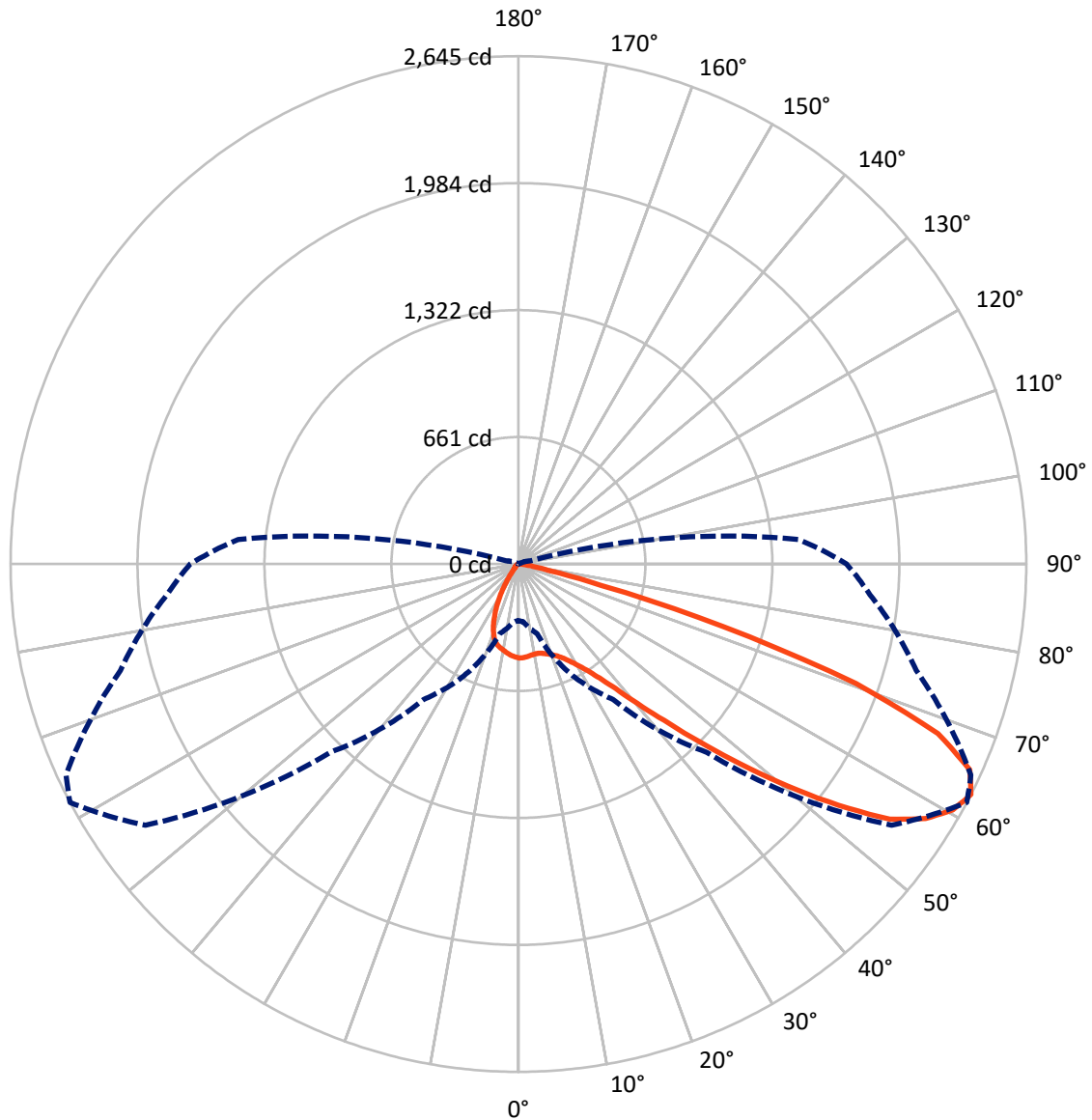
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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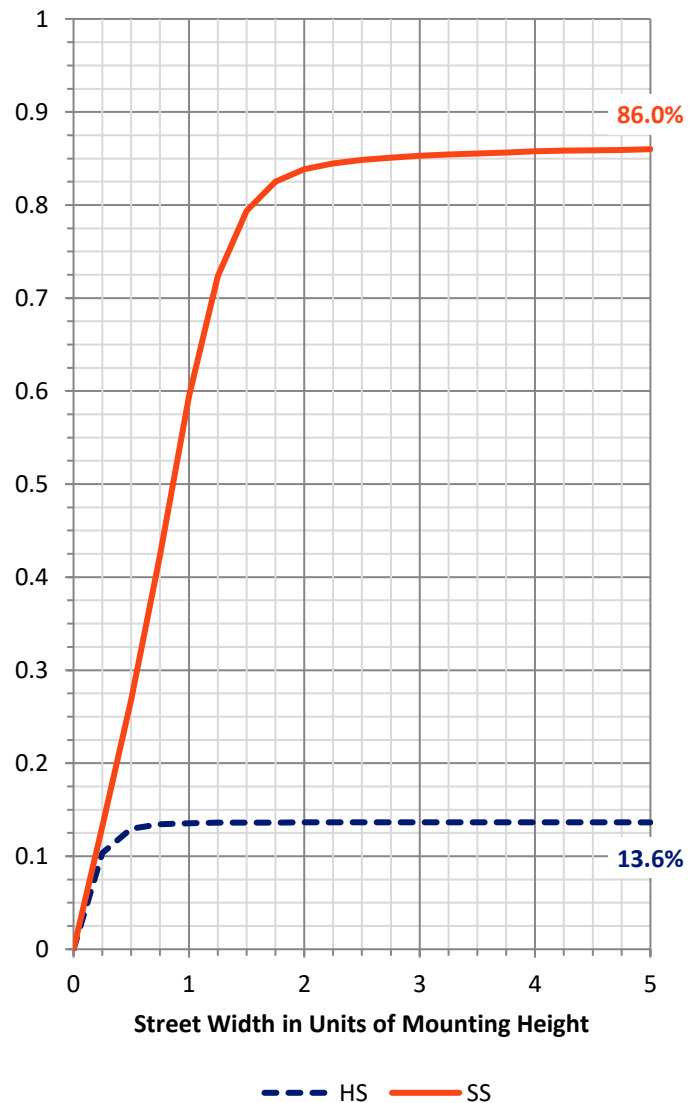
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	435.2	0.0	435.2
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	2716.8	0.0	2716.8
	% Fixture	86.2	0.0	86.2
Total	Lumens	3152.0	0.0	3152.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	1.4
10°-20°	112.0	3.6
20°-30°	167.2	5.3
30°-40°	318.5	10.1
40°-50°	664.1	21.1
50°-60°	882.3	28.0
60°-70°	687.8	21.8
70°-80°	260.0	8.2
80°-90°	15.6	0.5
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°	3152.0	100.0
0°-180°	3152.0	100.0



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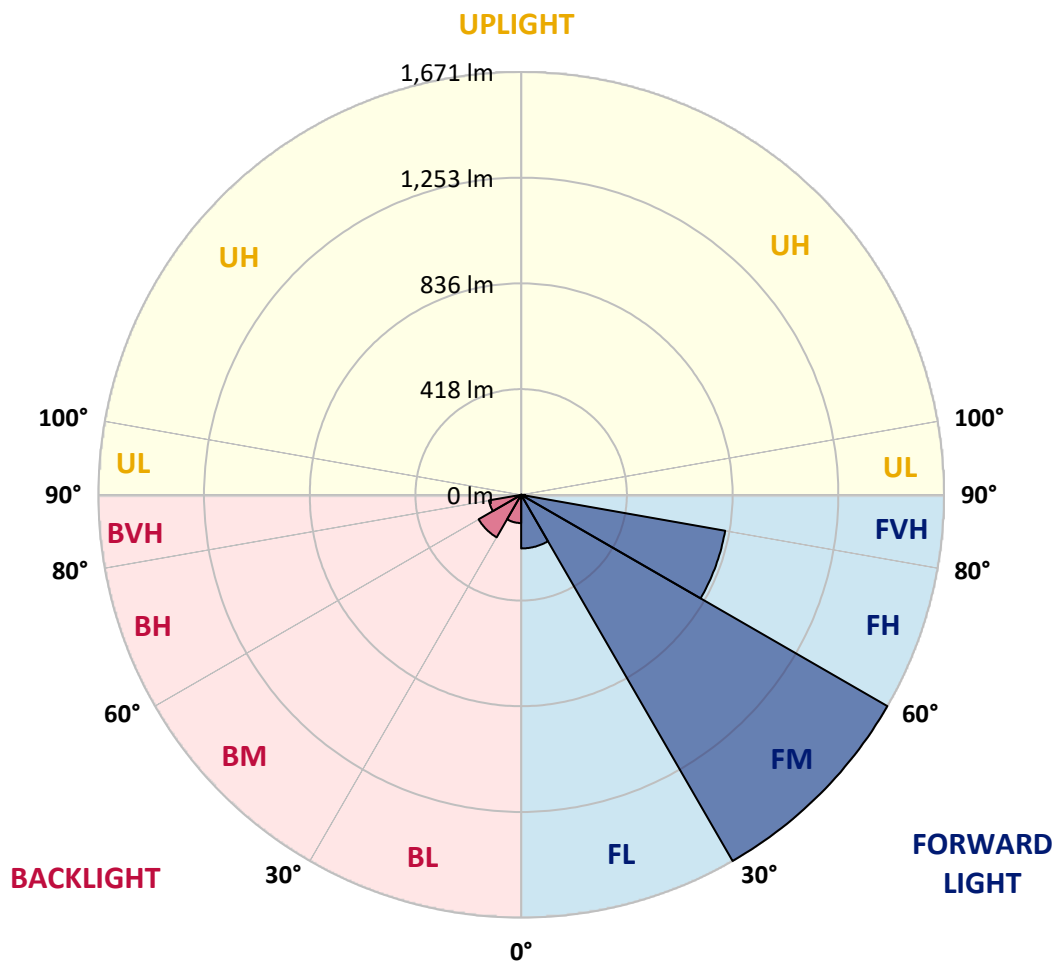
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	212.1	6.7			
FM	(30°-60°)	1671.2	53.0			
FH	(60°-80°)	818.7	26.0			G1/1800
FVH	(80°-90°)	14.8	0.5			G1/100
BL	(0°-30°)	111.6	3.5	B1/500		
BM	(30°-60°)	193.7	6.1	B0/220		
BH	(60°-80°)	129.1	4.1	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	62°	65°	75°	85°
0°	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7
2.5°	488.0	487.2	489.3	489.3	488.9	489.7	488.9	488.5	488.0	487.2	486.4
5°	475.3	475.3	478.2	479.4	480.6	483.1	483.9	484.7	484.3	485.2	485.6
7.5°	460.4	461.3	464.6	466.2	468.3	473.2	476.1	479.4	479.8	482.7	484.3
10°	448.1	448.9	452.2	454.3	457.2	463.7	469.9	475.7	476.5	481.9	483.1
12.5°	439.9	440.7	444.0	446.9	453.0	461.3	469.9	476.5	478.6	485.2	485.2
15°	436.6	437.4	441.5	446.4	454.7	465.4	476.1	483.1	487.2	492.6	490.1
17.5°	435.3	437.0	444.0	451.4	460.4	472.0	485.2	492.6	496.7	502.5	497.1
20°	439.0	441.1	450.2	460.4	469.9	481.9	496.3	504.5	508.6	512.3	502.0
22.5°	452.2	455.5	463.3	474.9	482.3	496.7	511.1	520.6	525.1	524.7	511.1
25°	483.9	488.0	491.7	497.9	501.2	518.5	533.8	543.2	546.5	545.3	529.6
27.5°	558.9	564.2	551.1	537.5	530.0	546.1	563.0	572.9	575.8	573.3	549.4
30°	685.3	685.7	655.7	612.8	581.1	579.5	600.1	613.2	613.2	608.3	577.4
32.5°	869.4	856.2	818.3	742.6	670.9	633.4	649.1	661.8	661.8	655.7	620.2
35°	1100.9	1091.0	1028.4	937.4	809.7	719.9	716.6	729.0	729.4	727.7	687.4
37.5°	1336.4	1312.2	1259.8	1150.7	1000.8	852.9	813.4	822.1	828.2	827.4	777.2
40°	1555.6	1531.3	1487.2	1382.2	1235.5	1049.0	954.3	954.3	954.7	950.5	890.0
42.5°	1727.7	1716.6	1683.6	1610.7	1497.5	1357.5	1144.1	1112.8	1106.2	1102.1	1022.6
45°	1839.3	1827.8	1810.1	1794.8	1758.2	1707.9	1399.1	1317.1	1306.4	1266.0	1169.2
47.5°	1845.5	1827.8	1839.7	1897.4	1980.2	2006.1	1713.7	1555.1	1526.7	1453.8	1316.3
50°	1707.9	1709.6	1756.1	1896.2	2119.8	2267.6	2047.3	1817.1	1772.2	1626.4	1446.0
52.5°	1455.1	1471.5	1543.6	1759.0	2126.4	2434.9	2337.7	2087.3	1998.3	1781.2	1537.4
55°	1139.2	1154.0	1271.8	1504.9	1966.2	2458.7	2548.9	2345.9	2228.1	1889.2	1619.4
57.5°	805.6	833.6	979.8	1194.0	1660.6	2276.3	2606.6	2500.7	2386.7	1994.2	1696.4
60°	489.7	503.7	655.7	904.8	1251.6	1894.5	2539.0	2599.6	2507.3	2085.2	1768.5
62.5°	294.5	302.7	375.6	623.1	861.2	1387.1	2371.8	2644.9	2599.6	2145.7	1837.7
65°	174.2	179.6	213.7	376.4	573.7	850.9	2010.6	2582.7	2619.4	2198.0	1878.0
67.5°	125.6	127.3	139.6	202.6	385.1	455.9	1398.2	2356.2	2493.3	2215.3	1854.1
70°	108.3	110.4	122.3	142.5	272.6	268.9	727.7	1864.9	2113.6	2125.1	1753.2
72.5°	82.0	85.7	105.4	133.9	195.6	191.1	274.3	1112.0	1434.9	1744.6	1511.5
75°	55.6	57.7	78.3	113.7	152.8	142.5	143.7	446.4	701.8	1093.9	1038.7
77.5°	35.0	36.7	47.8	81.5	131.0	100.5	101.7	158.6	253.3	463.7	445.2
80°	23.9	24.7	28.8	52.7	88.5	87.3	65.5	82.8	94.3	142.9	96.0
82.5°	14.4	14.4	18.9	31.3	53.5	69.2	41.2	45.7	50.2	53.1	21.8
85°	4.9	5.4	11.5	19.4	32.9	34.6	23.5	27.2	28.4	30.9	10.3
87.5°	2.1	1.6	6.2	10.7	14.0	16.1	13.6	12.4	13.6	18.1	4.5
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°	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7	489.7
2.5°	486.8	485.2	485.2	484.7	482.3	481.0	479.8	476.5	478.6	476.1	474.4
5°	484.3	483.1	481.0	479.0	473.2	468.3	466.2	462.1	461.7	458.4	456.7
7.5°	483.9	481.0	477.7	470.7	462.1	454.3	447.3	440.3	437.4	433.7	431.6
10°	481.9	478.2	472.0	460.9	448.1	435.7	420.1	400.7	386.3	378.1	376.8
12.5°	482.3	478.2	468.7	452.2	435.3	408.1	366.1	322.1	285.8	270.6	268.1
15°	485.6	481.0	466.6	444.4	415.6	355.8	278.8	211.3	164.3	147.4	143.7
17.5°	489.7	481.9	462.1	433.3	377.7	275.9	175.4	110.8	84.4	75.0	73.3
20°	492.2	481.5	454.7	416.4	320.0	184.5	95.5	65.1	57.2	55.2	54.4
22.5°	498.3	482.7	448.5	390.0	247.5	111.2	60.5	50.7	46.1	43.7	43.2
25°	511.1	490.9	448.9	355.8	173.4	67.1	49.0	41.2	37.1	34.6	33.8
27.5°	529.6	505.8	456.7	313.4	107.1	50.7	40.8	33.4	28.8	26.8	26.4
30°	553.1	523.9	465.8	258.2	66.7	42.4	32.9	25.9	22.7	21.4	21.0
32.5°	590.2	555.2	473.6	193.2	46.1	35.0	25.9	20.6	18.5	17.3	17.3
35°	651.5	609.1	486.4	129.3	36.7	28.0	21.0	16.9	15.2	14.4	14.4
37.5°	738.0	686.1	492.6	80.3	30.1	21.8	16.9	14.0	12.8	11.9	11.9
40°	843.5	779.6	483.9	49.8	25.1	17.7	14.0	11.9	10.7	10.3	10.3
42.5°	965.0	887.1	456.7	35.4	21.0	14.4	11.9	10.3	9.5	9.1	9.1
45°	1100.9	1004.9	407.7	29.7	17.7	12.4	10.3	8.6	8.2	7.8	7.8
47.5°	1236.4	1124.3	344.3	25.5	14.8	10.3	8.6	7.4	7.0	6.6	6.6
50°	1354.6	1229.0	277.2	22.2	12.4	9.1	7.4	6.2	5.8	5.4	5.4
52.5°	1422.1	1291.1	214.6	18.5	10.7	7.8	5.8	4.9	4.5	4.1	4.1
55°	1495.0	1343.0	160.2	15.7	8.6	6.6	4.5	3.7	3.3	2.9	2.9
57.5°	1563.0	1389.6	119.0	12.8	7.4	4.9	3.7	2.9	2.5	2.1	2.1
60°	1628.9	1429.1	88.1	10.3	6.2	4.1	2.9	2.1	1.6	1.2	1.2
62.5°	1709.2	1465.4	64.7	8.2	5.4	2.9	2.1	1.2	0.8	0.4	0.4
65°	1768.9	1483.9	48.6	6.2	4.5	2.1	1.2	0.8	0.0	0.0	0.0
67.5°	1768.5	1448.1	35.4	4.5	3.3	1.6	0.8	0.0	0.0	0.0	0.0
70°	1685.7	1339.3	24.7	3.7	2.5	1.2	0.4	0.0	0.0	0.0	0.0
72.5°	1445.6	1059.3	16.1	2.5	2.1	0.8	0.4	0.0	0.0	0.0	0.0
75°	975.7	537.9	9.5	2.1	1.6	0.8	0.4	0.0	0.0	0.0	0.0
77.5°	417.2	211.3	4.9	1.2	1.2	0.4	0.0	0.0	0.0	0.0	0.0
80°	87.3	51.1	2.1	0.8	0.8	0.4	0.0	0.0	0.0	0.0	0.0
82.5°	14.8	7.4	0.8	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	2.1	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	0.4	0.4	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)