

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: P348978

Luminaire Tested: **ARCH-N-PA1-40-727-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348978  
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-PA1-40-727-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3317 lumens  
Efficiency: N/A  
Efficacy: 80.9 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

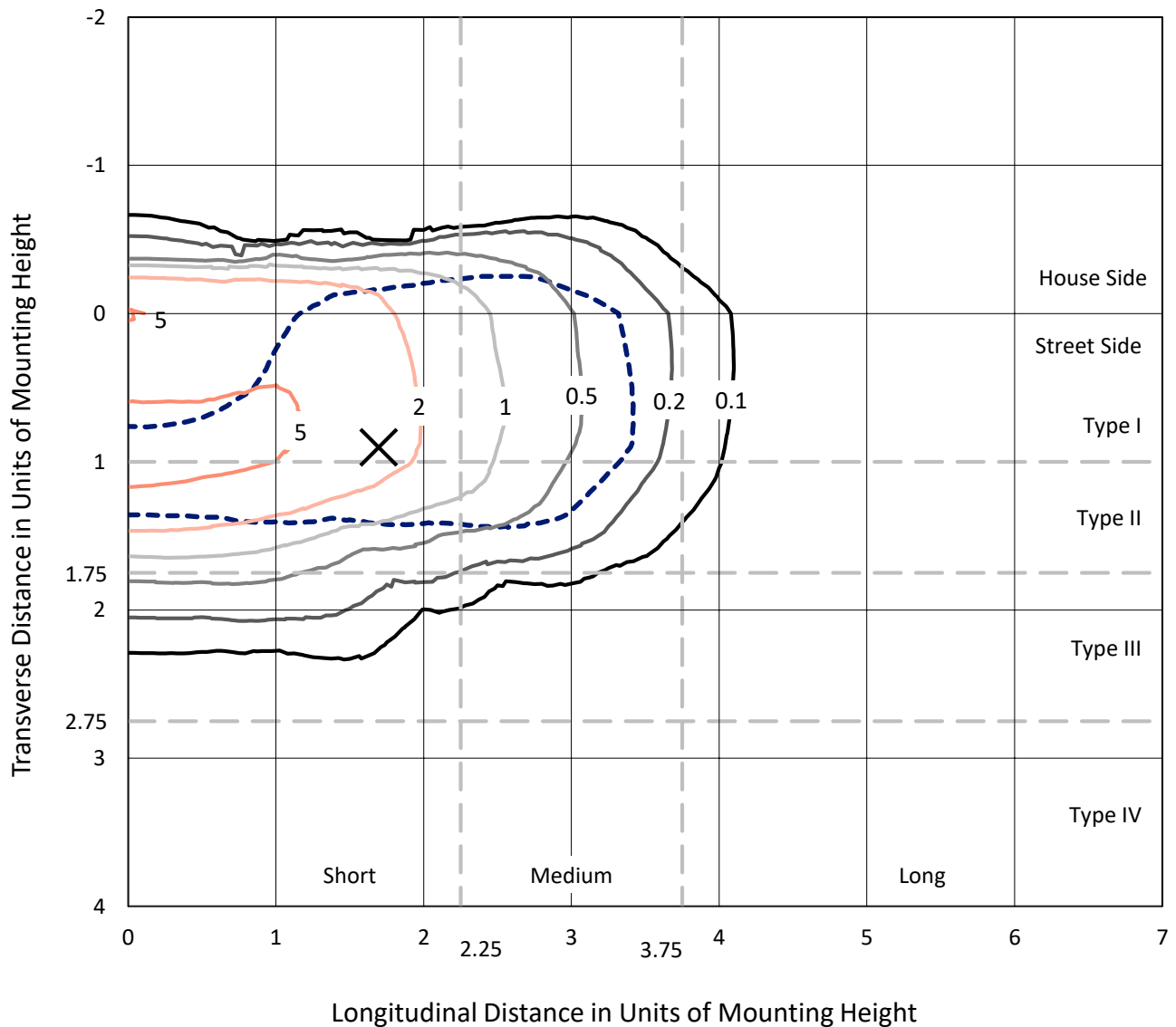
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

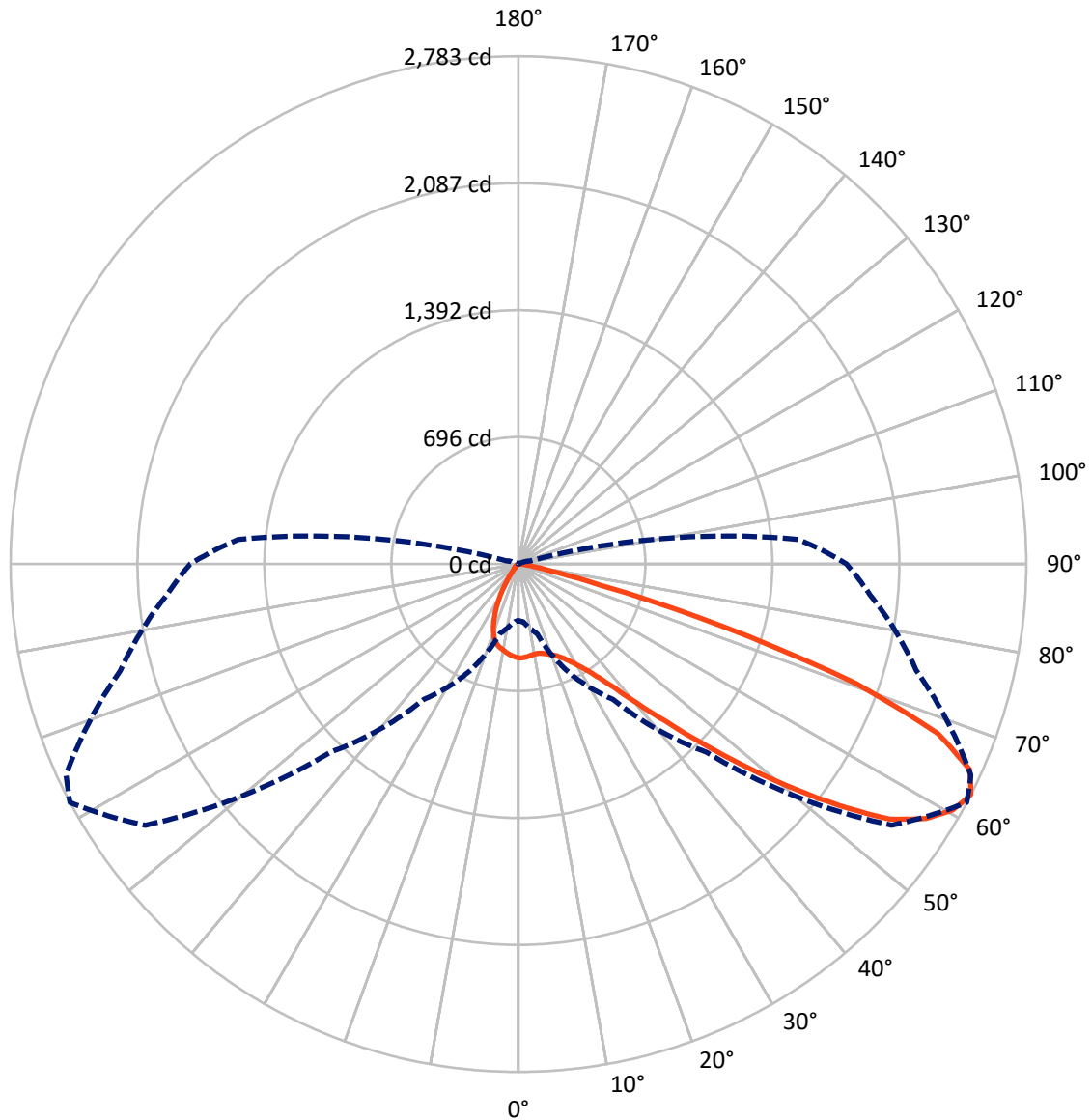
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 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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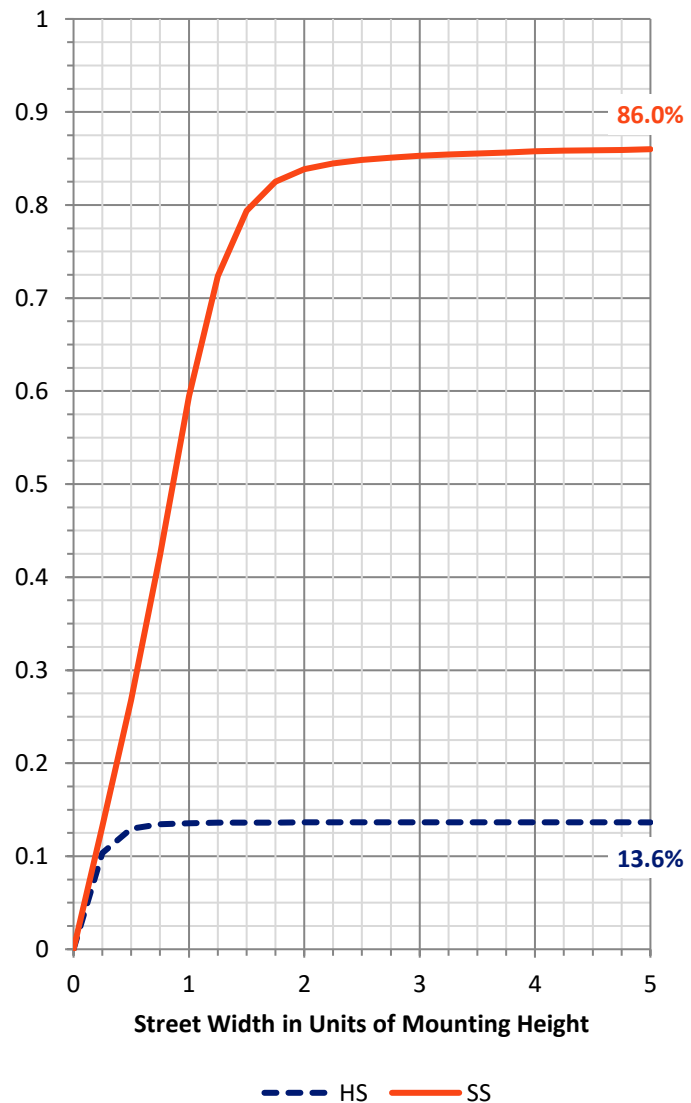
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	458.0	0.0	458.0
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	2859.0	0.0	2859.0
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	3317.0	0.0	3317.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	1.4
10°-20°	117.8	3.6
20°-30°	175.9	5.3
30°-40°	335.2	10.1
40°-50°	698.9	21.1
50°-60°	928.5	28.0
60°-70°	723.8	21.8
70°-80°	273.6	8.2
80°-90°	16.4	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°	3317.0	100.0
0°-180°	3317.0	100.0



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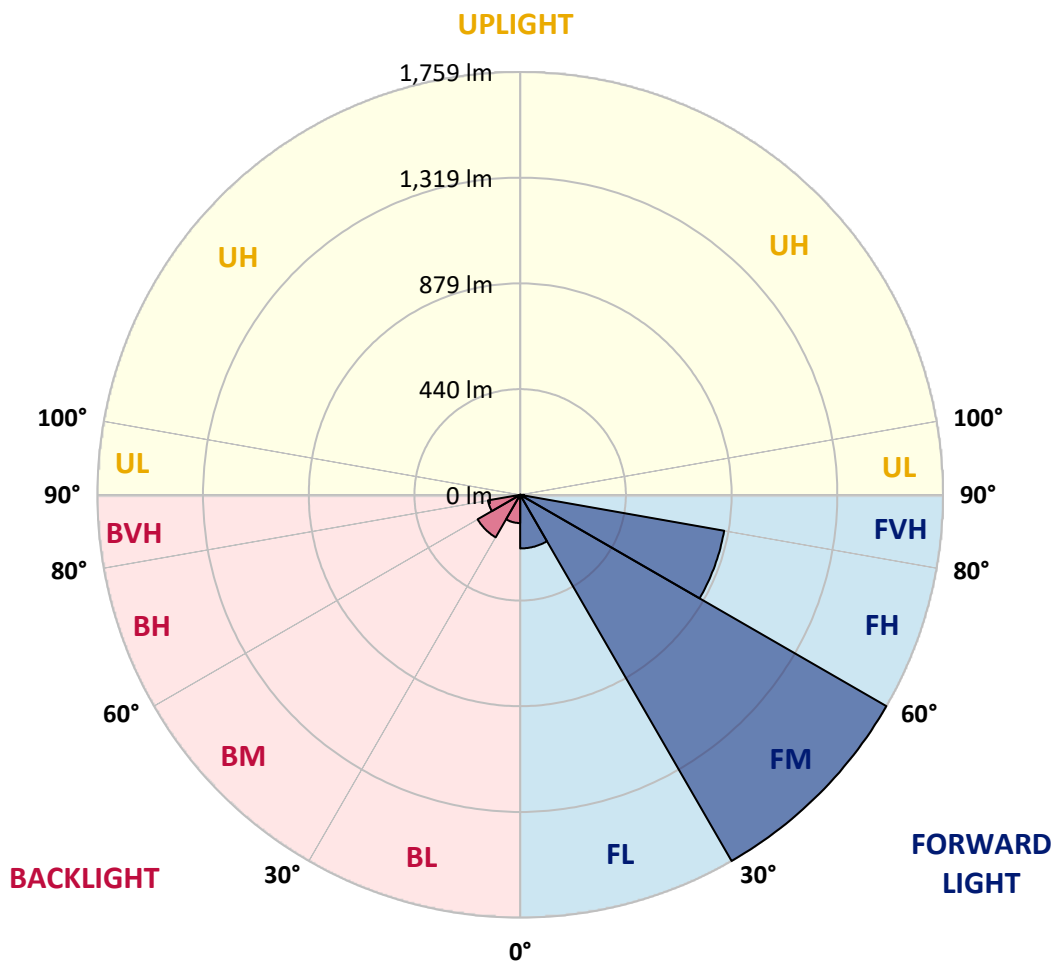
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	223.2	6.7			
FM	(30°-60°)	1758.7	53.0			
FH	(60°-80°)	861.5	26.0			G1/1800
FVH	(80°-90°)	15.6	0.5			G1/100
BL	(0°-30°)	117.5	3.5	B1/500		
BM	(30°-60°)	203.9	6.1	B0/220		
BH	(60°-80°)	135.9	4.1	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°	62°	65°	75°	85°
0°	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3
2.5°	513.6	512.7	514.9	514.9	514.5	515.3	514.5	514.0	513.6	512.7	511.9
5°	500.2	500.2	503.2	504.5	505.8	508.4	509.3	510.1	509.7	510.6	511.0
7.5°	484.6	485.4	488.9	490.6	492.8	498.0	501.0	504.5	504.9	508.0	509.7
10°	471.5	472.4	475.9	478.0	481.1	488.0	494.5	500.6	501.5	507.1	508.4
12.5°	462.9	463.7	467.2	470.2	476.7	485.4	494.5	501.5	503.6	510.6	510.6
15°	459.4	460.3	464.6	469.8	478.5	489.8	501.0	508.4	512.7	518.4	515.8
17.5°	458.1	459.8	467.2	475.0	484.6	496.7	510.6	518.4	522.7	528.8	523.1
20°	462.0	464.2	473.7	484.6	494.5	507.1	522.3	530.9	535.3	539.2	528.3
22.5°	475.9	479.3	487.6	499.7	507.5	522.7	537.9	547.8	552.6	552.2	537.9
25°	509.3	513.6	517.5	524.0	527.5	545.7	561.7	571.7	575.1	573.8	557.4
27.5°	588.1	593.8	579.9	565.6	557.8	574.7	592.5	602.9	605.9	603.3	578.2
30°	721.2	721.6	690.0	644.9	611.5	609.8	631.5	645.3	645.3	640.1	607.6
32.5°	914.9	901.1	861.2	781.4	706.0	666.6	683.1	696.5	696.5	690.0	652.7
35°	1158.5	1148.1	1082.2	986.4	852.1	757.6	754.1	767.1	767.6	765.8	723.4
37.5°	1406.4	1380.8	1325.8	1210.9	1053.2	897.6	856.0	865.1	871.6	870.7	817.8
40°	1637.0	1611.4	1565.0	1454.5	1300.2	1103.9	1004.2	1004.2	1004.6	1000.3	936.6
42.5°	1818.1	1806.4	1771.8	1695.1	1575.9	1428.5	1204.0	1171.1	1164.1	1159.8	1076.2
45°	1935.6	1923.5	1904.8	1888.8	1850.2	1797.3	1472.3	1386.0	1374.8	1332.3	1230.4
47.5°	1942.1	1923.5	1936.0	1996.7	2083.8	2111.1	1803.4	1636.5	1606.6	1529.9	1385.2
50°	1797.3	1799.1	1848.1	1995.4	2230.8	2386.3	2154.5	1912.2	1865.0	1711.5	1521.7
52.5°	1531.2	1548.6	1624.4	1851.1	2237.7	2562.3	2460.0	2196.5	2102.9	1874.5	1617.9
55°	1198.8	1214.4	1338.4	1583.7	2069.1	2587.4	2682.4	2468.7	2344.7	1988.0	1704.2
57.5°	847.7	877.2	1031.1	1256.5	1747.5	2395.4	2743.0	2631.7	2511.6	2098.6	1785.2
60°	515.3	530.1	690.0	952.2	1317.1	1993.7	2672.0	2735.7	2638.6	2194.3	1861.1
62.5°	309.9	318.6	395.3	655.7	906.3	1459.7	2496.0	2783.3	2735.7	2258.1	1933.9
65°	183.3	189.0	224.9	396.1	603.7	895.4	2115.9	2717.9	2756.5	2313.1	1976.3
67.5°	132.2	133.9	146.9	213.2	405.2	479.8	1471.4	2479.5	2623.9	2331.3	1951.2
70°	114.0	116.2	128.7	150.0	286.9	283.0	765.8	1962.5	2224.3	2236.4	1845.0
72.5°	86.2	90.1	111.0	140.9	205.9	201.1	288.6	1170.2	1510.0	1835.9	1590.6
75°	58.5	60.7	82.3	119.6	160.8	150.0	151.3	469.8	738.5	1151.1	1093.1
77.5°	36.8	38.6	50.3	85.8	137.8	105.8	107.1	166.9	266.5	488.0	468.5
80°	25.1	26.0	30.3	55.5	93.2	91.9	68.9	87.1	99.3	150.4	101.0
82.5°	15.2	15.2	19.9	32.9	56.3	72.8	43.3	48.1	52.9	55.9	23.0
85°	5.2	5.6	12.1	20.4	34.7	36.4	24.7	28.6	29.9	32.5	10.8
87.5°	2.2	1.7	6.5	11.3	14.7	16.9	14.3	13.0	14.3	19.1	4.8
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°	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3	515.3
2.5°	512.3	510.6	510.6	510.1	507.5	506.2	504.9	501.5	503.6	501.0	499.3
5°	509.7	508.4	506.2	504.1	498.0	492.8	490.6	486.3	485.9	482.4	480.6
7.5°	509.3	506.2	502.8	495.4	486.3	478.0	470.7	463.3	460.3	456.4	454.2
10°	507.1	503.2	496.7	485.0	471.5	458.5	442.1	421.7	406.5	397.9	396.6
12.5°	507.5	503.2	493.2	475.9	458.1	429.5	385.3	338.9	300.8	284.7	282.1
15°	511.0	506.2	491.1	467.6	437.3	374.5	293.4	222.3	172.9	155.2	151.3
17.5°	515.3	507.1	486.3	455.9	397.4	290.4	184.6	116.6	88.8	78.9	77.1
20°	517.9	506.7	478.5	438.2	336.8	194.2	100.6	68.5	60.2	58.1	57.2
22.5°	524.4	508.0	472.0	410.4	260.5	117.0	63.7	53.3	48.5	45.9	45.5
25°	537.9	516.6	472.4	374.5	182.5	70.6	51.6	43.3	39.0	36.4	35.5
27.5°	557.4	532.2	480.6	329.8	112.7	53.3	42.9	35.1	30.3	28.2	27.7
30°	582.1	551.3	490.2	271.7	70.2	44.6	34.7	27.3	23.8	22.5	22.1
32.5°	621.1	584.2	498.4	203.3	48.5	36.8	27.3	21.7	19.5	18.2	18.2
35°	685.7	641.0	511.9	136.1	38.6	29.5	22.1	17.8	16.0	15.2	15.2
37.5°	776.7	722.1	518.4	84.5	31.6	23.0	17.8	14.7	13.4	12.6	12.6
40°	887.6	820.4	509.3	52.4	26.4	18.6	14.7	12.6	11.3	10.8	10.8
42.5°	1015.5	933.6	480.6	37.3	22.1	15.2	12.6	10.8	10.0	9.5	9.5
45°	1158.5	1057.5	429.1	31.2	18.6	13.0	10.8	9.1	8.7	8.2	8.2
47.5°	1301.1	1183.2	362.3	26.9	15.6	10.8	9.1	7.8	7.4	6.9	6.9
50°	1425.5	1293.3	291.7	23.4	13.0	9.5	7.8	6.5	6.1	5.6	5.6
52.5°	1496.6	1358.7	225.8	19.5	11.3	8.2	6.1	5.2	4.8	4.3	4.3
55°	1573.3	1413.3	168.6	16.5	9.1	6.9	4.8	3.9	3.5	3.0	3.0
57.5°	1644.8	1462.3	125.3	13.4	7.8	5.2	3.9	3.0	2.6	2.2	2.2
60°	1714.1	1503.9	92.7	10.8	6.5	4.3	3.0	2.2	1.7	1.3	1.3
62.5°	1798.6	1542.1	68.0	8.7	5.6	3.0	2.2	1.3	0.9	0.4	0.4
65°	1861.5	1561.6	51.1	6.5	4.8	2.2	1.3	0.9	0.0	0.0	0.0
67.5°	1861.1	1523.9	37.3	4.8	3.5	1.7	0.9	0.0	0.0	0.0	0.0
70°	1773.9	1409.4	26.0	3.9	2.6	1.3	0.4	0.0	0.0	0.0	0.0
72.5°	1521.3	1114.7	16.9	2.6	2.2	0.9	0.4	0.0	0.0	0.0	0.0
75°	1026.7	566.0	10.0	2.2	1.7	0.9	0.4	0.0	0.0	0.0	0.0
77.5°	439.0	222.3	5.2	1.3	1.3	0.4	0.0	0.0	0.0	0.0	0.0
80°	91.9	53.7	2.2	0.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0
82.5°	15.6	7.8	0.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.9	2.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)