

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: P349014

Luminaire Tested: **ARCH-N-PA1-50-827-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P349014
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-PA1-50-827-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3571 lumens
Efficiency: N/A
Efficacy: 68.7 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

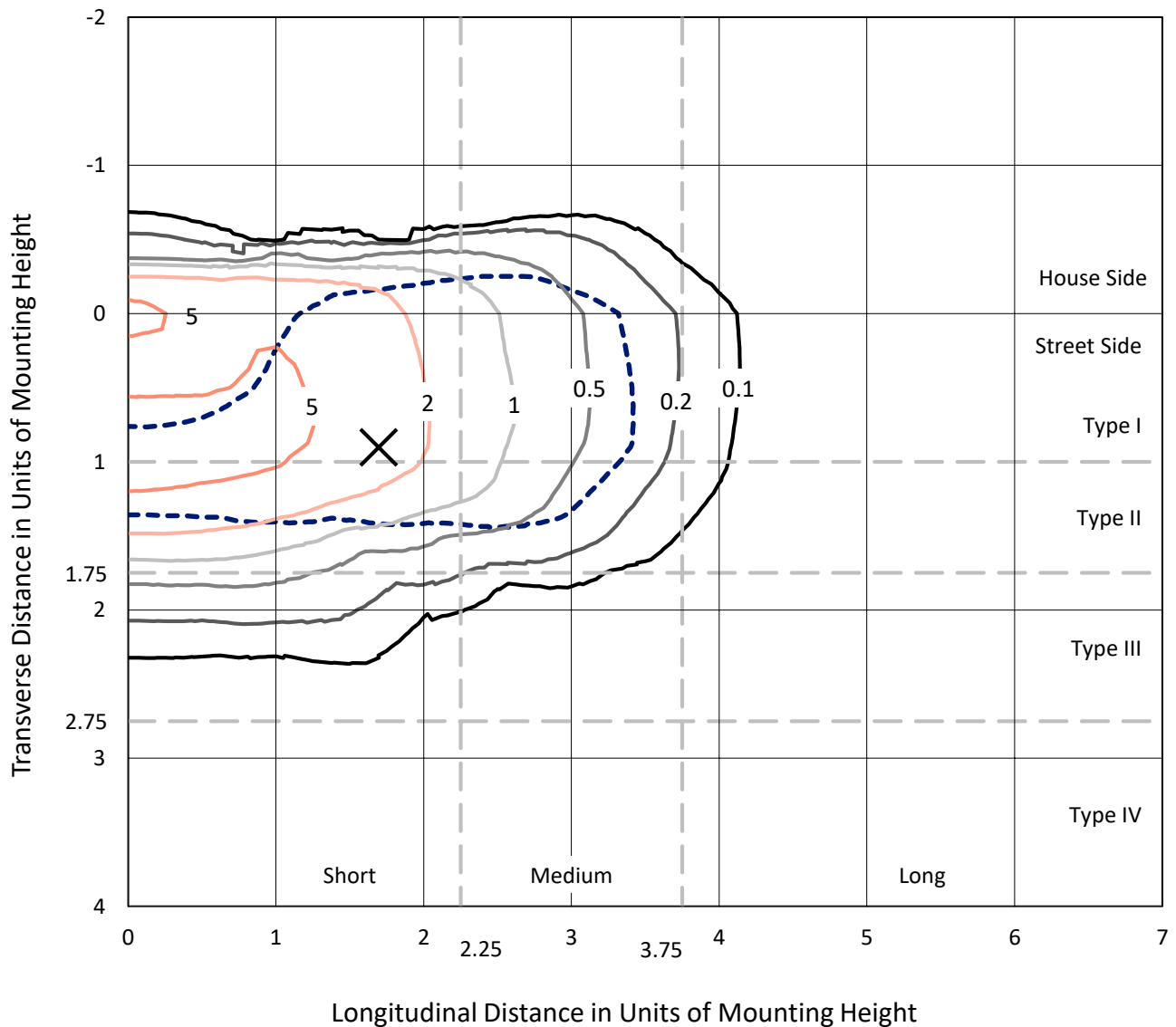
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

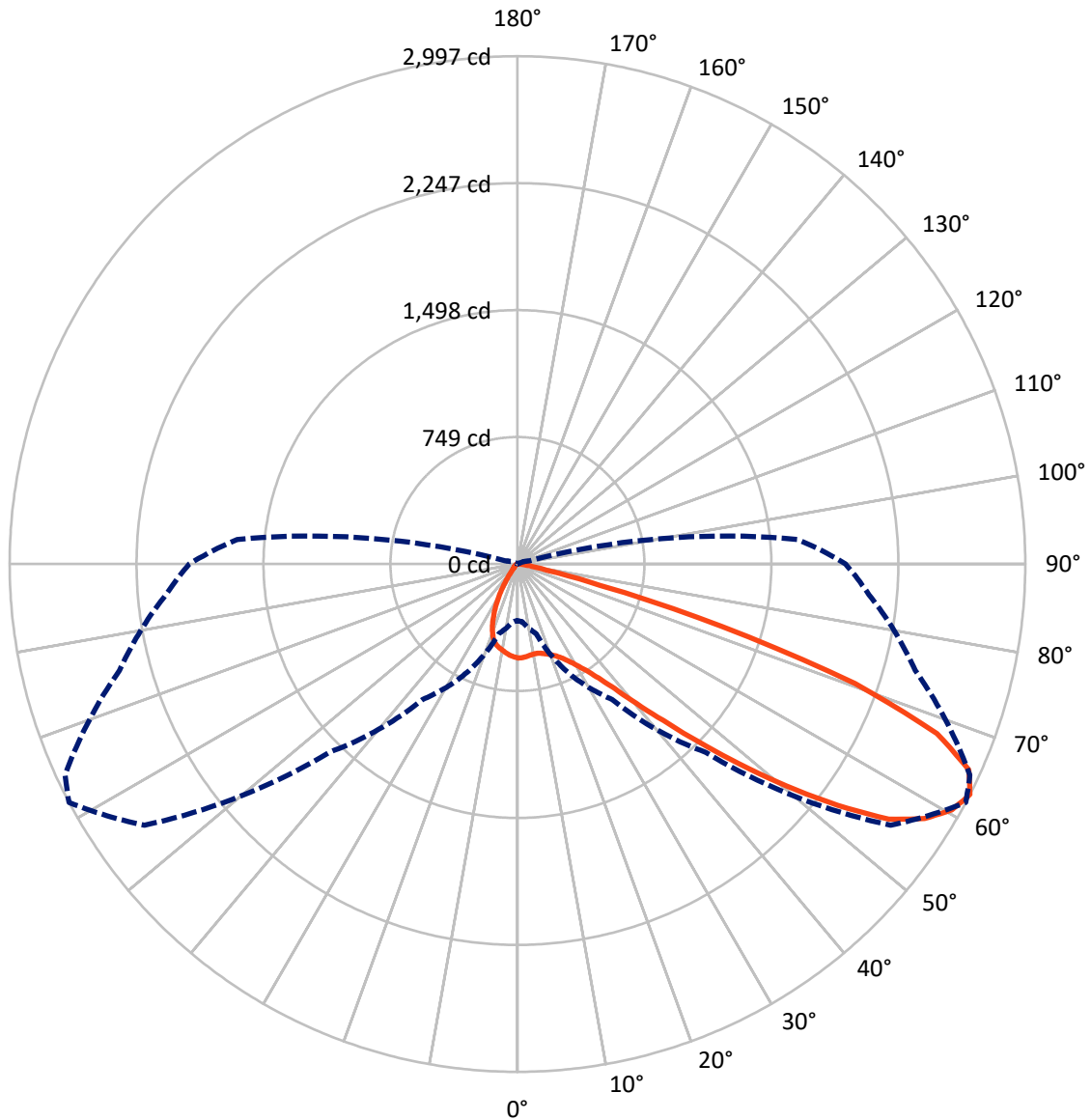
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.9 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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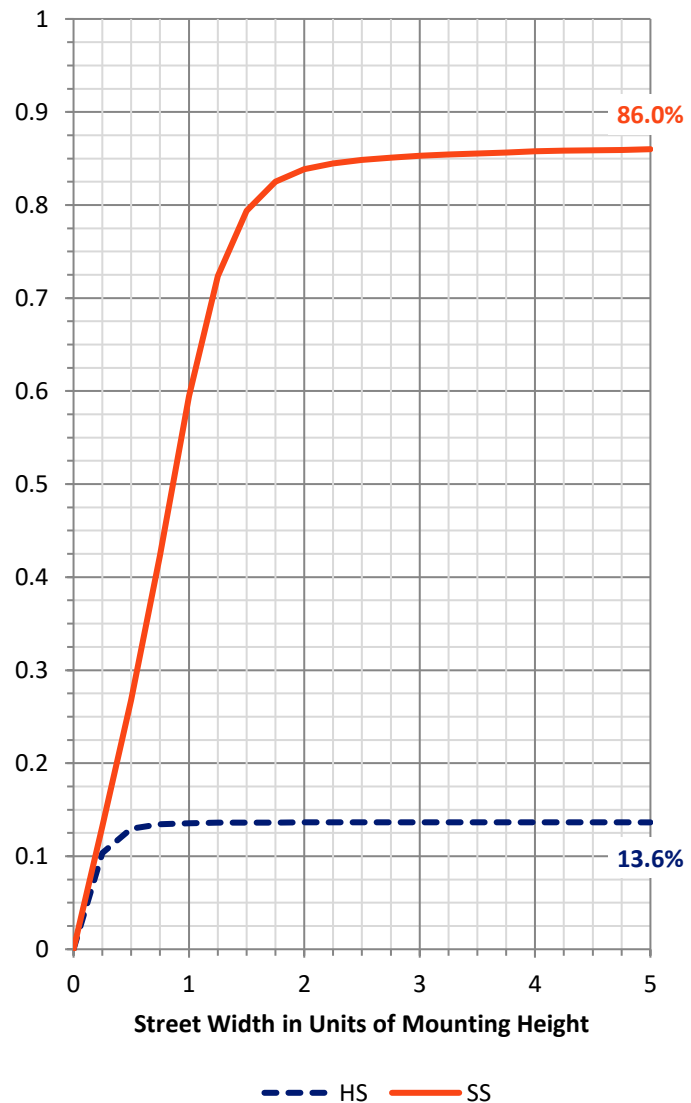
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	493.1	0.0	493.1
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	3077.9	0.0	3077.9
	% Fixture	86.2	0.0	86.2
Total	Lumens	3571.0	0.0	3571.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	1.4
10°-20°	126.9	3.6
20°-30°	189.4	5.3
30°-40°	360.8	10.1
40°-50°	752.4	21.1
50°-60°	999.6	28.0
60°-70°	779.3	21.8
70°-80°	294.5	8.2
80°-90°	17.6	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°	3571.0	100.0
0°-180°	3571.0	100.0

Coefficient of Utilization



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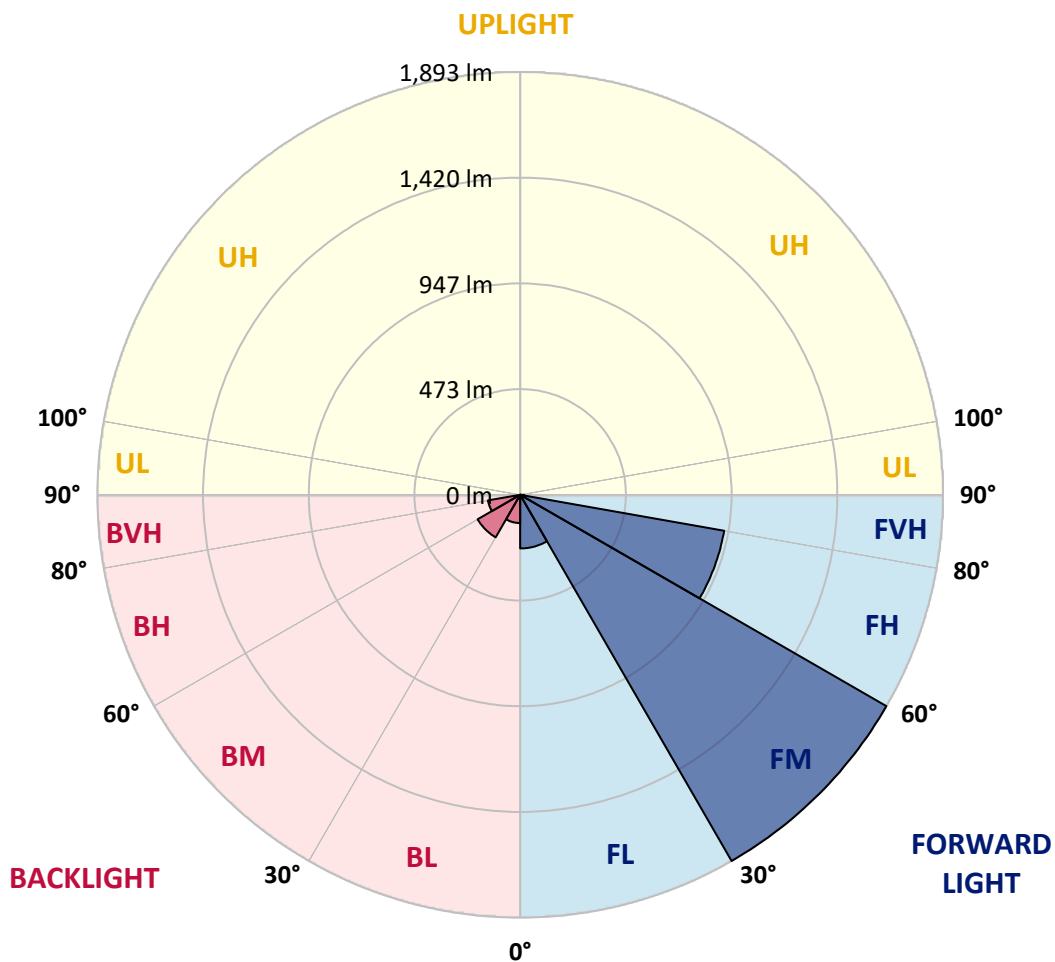
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.3	6.7			
FM	(30°-60°)	1893.3	53.0			
FH	(60°-80°)	927.5	26.0			G1/1800
FVH	(80°-90°)	16.8	0.5			G1/100
BL	(0°-30°)	126.5	3.5	B1/500		
BM	(30°-60°)	219.5	6.1	B0/220		
BH	(60°-80°)	146.3	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°	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8
2.5°	552.9	552.0	554.3	554.3	553.9	554.8	553.9	553.4	552.9	552.0	551.1
5°	538.5	538.5	541.7	543.1	544.5	547.3	548.3	549.2	548.7	549.7	550.1
7.5°	521.7	522.6	526.3	528.2	530.5	536.1	539.4	543.1	543.6	546.9	548.7
10°	507.7	508.6	512.3	514.7	517.9	525.4	532.4	538.9	539.9	545.9	547.3
12.5°	498.3	499.3	503.0	506.3	513.3	522.6	532.4	539.9	542.2	549.7	549.7
15°	494.6	495.5	500.2	505.8	515.1	527.3	539.4	547.3	552.0	558.0	555.2
17.5°	493.2	495.1	503.0	511.4	521.7	534.7	549.7	558.0	562.7	569.2	563.2
20°	497.4	499.7	510.0	521.7	532.4	545.9	562.2	571.6	576.2	580.4	568.8
22.5°	512.3	516.1	524.9	538.0	546.4	562.7	579.0	589.8	594.9	594.4	579.0
25°	548.3	552.9	557.1	564.1	567.8	587.4	604.7	615.4	619.2	617.8	600.0
27.5°	633.2	639.2	624.3	608.9	600.5	618.7	637.8	649.0	652.3	649.5	622.4
30°	776.4	776.9	742.8	694.3	658.4	656.5	679.8	694.8	694.8	689.2	654.2
32.5°	985.0	970.1	927.1	841.3	760.1	717.6	735.4	749.8	749.8	742.8	702.7
35°	1247.2	1236.0	1165.1	1062.0	917.3	815.6	811.9	825.9	826.3	824.5	778.7
37.5°	1514.1	1486.6	1427.3	1303.7	1133.8	966.3	921.5	931.3	938.3	937.4	880.5
40°	1762.3	1734.8	1684.9	1565.9	1399.8	1188.4	1081.1	1081.1	1081.6	1076.9	1008.3
42.5°	1957.4	1944.8	1907.4	1824.9	1696.5	1537.9	1296.2	1260.7	1253.3	1248.6	1158.6
45°	2083.8	2070.8	2050.7	2033.4	1991.9	1935.0	1585.0	1492.2	1480.0	1434.3	1324.7
47.5°	2090.8	2070.8	2084.3	2149.6	2243.4	2272.8	1941.5	1761.9	1729.7	1647.1	1491.2
50°	1935.0	1936.8	1989.6	2148.2	2401.6	2569.1	2319.5	2058.6	2007.8	1842.6	1638.2
52.5°	1648.5	1667.1	1748.8	1992.8	2409.0	2758.5	2648.4	2364.7	2263.9	2018.0	1741.8
55°	1290.6	1307.4	1440.9	1704.9	2227.5	2785.6	2887.8	2657.7	2524.3	2140.3	1834.7
57.5°	912.7	944.4	1110.0	1352.7	1881.3	2578.9	2953.1	2833.2	2703.9	2259.3	1921.9
60°	554.8	570.6	742.8	1025.1	1418.0	2146.3	2876.6	2945.2	2840.6	2362.4	2003.6
62.5°	333.6	342.9	425.5	706.0	975.7	1571.5	2687.1	2996.5	2945.2	2431.0	2082.0
65°	197.4	203.4	242.2	426.5	650.0	964.0	2277.9	2926.0	2967.6	2490.2	2127.7
67.5°	142.3	144.2	158.2	229.6	436.3	516.5	1584.1	2669.4	2824.8	2509.8	2100.6
70°	122.7	125.0	138.6	161.4	308.9	304.7	824.5	2112.7	2394.6	2407.6	1986.3
72.5°	92.9	97.1	119.4	151.6	221.6	216.5	310.8	1259.8	1625.6	1976.5	1712.4
75°	63.0	65.3	88.7	128.8	173.1	161.4	162.8	505.8	795.1	1239.3	1176.8
77.5°	39.7	41.5	54.1	92.4	148.4	113.8	115.2	179.6	287.0	525.4	504.4
80°	27.1	28.0	32.7	59.7	100.3	98.9	74.2	93.8	106.9	161.9	108.7
82.5°	16.3	16.3	21.5	35.5	60.7	78.4	46.7	51.8	56.9	60.2	24.7
85°	5.6	6.1	13.1	21.9	37.3	39.2	26.6	30.8	32.2	35.0	11.7
87.5°	2.3	1.9	7.0	12.1	15.9	18.2	15.4	14.0	15.4	20.5	5.1
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°	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8	554.8
2.5°	551.5	549.7	549.7	549.2	546.4	545.0	543.6	539.9	542.2	539.4	537.5
5°	548.7	547.3	545.0	542.7	536.1	530.5	528.2	523.5	523.1	519.3	517.5
7.5°	548.3	545.0	541.3	533.3	523.5	514.7	506.7	498.8	495.5	491.3	489.0
10°	545.9	541.7	534.7	522.1	507.7	493.7	475.9	454.0	437.7	428.3	426.9
12.5°	546.4	541.7	531.0	512.3	493.2	462.4	414.8	364.9	323.8	306.6	303.8
15°	550.1	545.0	528.7	503.5	470.8	403.1	315.9	239.4	186.2	167.0	162.8
17.5°	554.8	545.9	523.5	490.9	427.9	312.6	198.8	125.5	95.7	84.9	83.1
20°	557.6	545.5	515.1	471.7	362.5	209.0	108.3	73.7	64.9	62.5	61.6
22.5°	564.6	546.9	508.1	441.9	280.4	126.0	68.6	57.4	52.3	49.5	49.0
25°	579.0	556.2	508.6	403.1	196.4	76.1	55.5	46.7	42.0	39.2	38.3
27.5°	600.0	573.0	517.5	355.1	121.3	57.4	46.2	37.8	32.7	30.3	29.9
30°	626.6	593.5	527.7	292.6	75.6	48.1	37.3	29.4	25.7	24.3	23.8
32.5°	668.6	629.0	536.6	218.8	52.3	39.7	29.4	23.3	21.0	19.6	19.6
35°	738.2	690.1	551.1	146.5	41.5	31.7	23.8	19.1	17.3	16.3	16.3
37.5°	836.1	777.3	558.0	91.0	34.1	24.7	19.1	15.9	14.5	13.5	13.5
40°	955.6	883.3	548.3	56.5	28.5	20.1	15.9	13.5	12.1	11.7	11.7
42.5°	1093.2	1005.0	517.5	40.1	23.8	16.3	13.5	11.7	10.7	10.3	10.3
45°	1247.2	1138.5	461.9	33.6	20.1	14.0	11.7	9.8	9.3	8.9	8.9
47.5°	1400.7	1273.8	390.1	28.9	16.8	11.7	9.8	8.4	7.9	7.5	7.5
50°	1534.6	1392.3	314.0	25.2	14.0	10.3	8.4	7.0	6.5	6.1	6.1
52.5°	1611.2	1462.8	243.1	21.0	12.1	8.9	6.5	5.6	5.1	4.7	4.7
55°	1693.7	1521.6	181.5	17.7	9.8	7.5	5.1	4.2	3.7	3.3	3.3
57.5°	1770.7	1574.3	134.8	14.5	8.4	5.6	4.2	3.3	2.8	2.3	2.3
60°	1845.4	1619.1	99.9	11.7	7.0	4.7	3.3	2.3	1.9	1.4	1.4
62.5°	1936.4	1660.2	73.3	9.3	6.1	3.3	2.3	1.4	0.9	0.5	0.5
65°	2004.0	1681.1	55.1	7.0	5.1	2.3	1.4	0.9	0.0	0.0	0.0
67.5°	2003.6	1640.6	40.1	5.1	3.7	1.9	0.9	0.0	0.0	0.0	0.0
70°	1909.8	1517.4	28.0	4.2	2.8	1.4	0.5	0.0	0.0	0.0	0.0
72.5°	1637.8	1200.1	18.2	2.8	2.3	0.9	0.5	0.0	0.0	0.0	0.0
75°	1105.4	609.4	10.7	2.3	1.9	0.9	0.5	0.0	0.0	0.0	0.0
77.5°	472.7	239.4	5.6	1.4	1.4	0.5	0.0	0.0	0.0	0.0	0.0
80°	98.9	57.9	2.3	0.9	0.9	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	16.8	8.4	0.9	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.2	2.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.9	0.5	0.5	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)