

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: P348985

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348985
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-PA1-40-730-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3613 lumens
Efficiency: N/A
Efficacy: 88.1 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

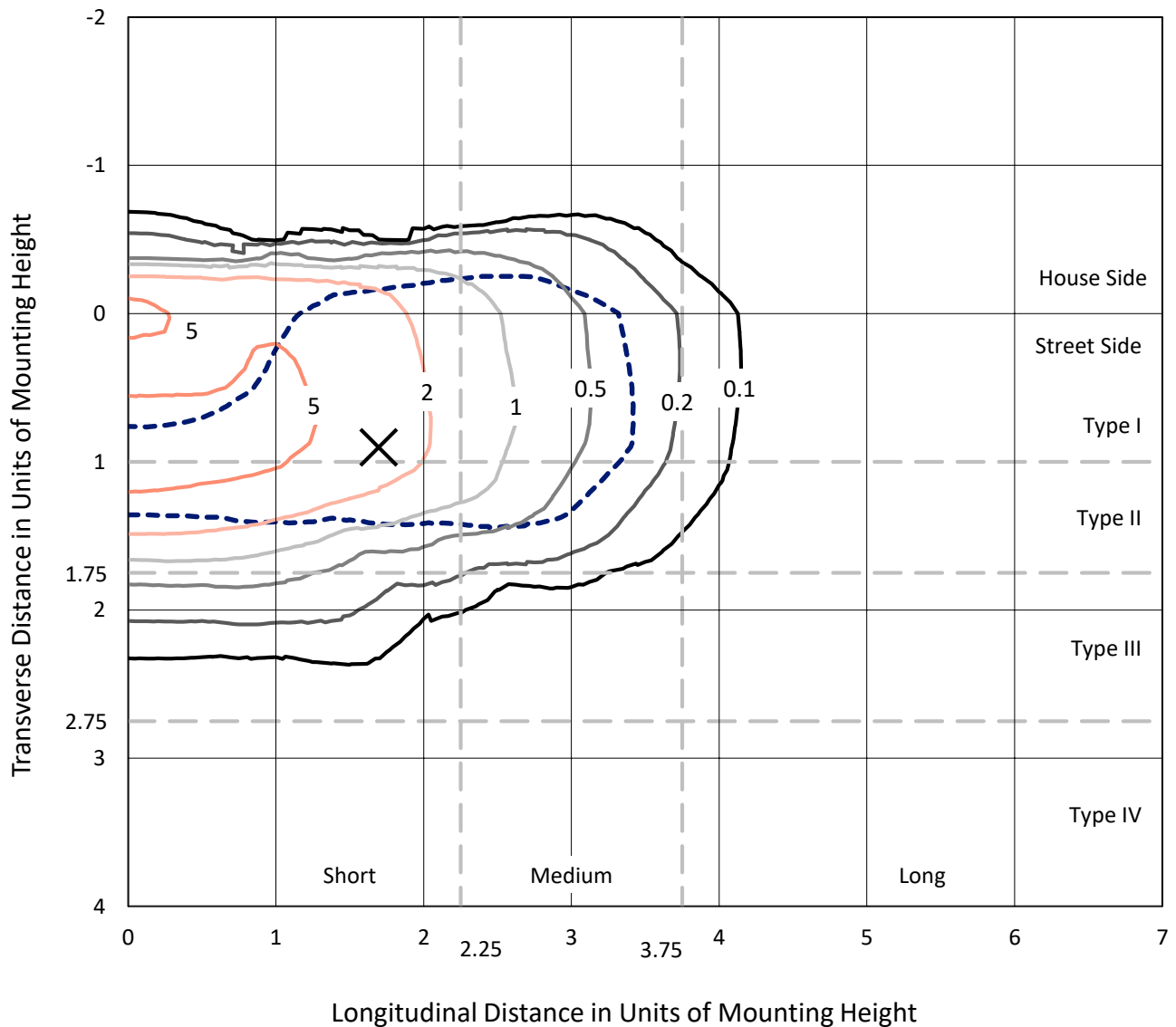
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

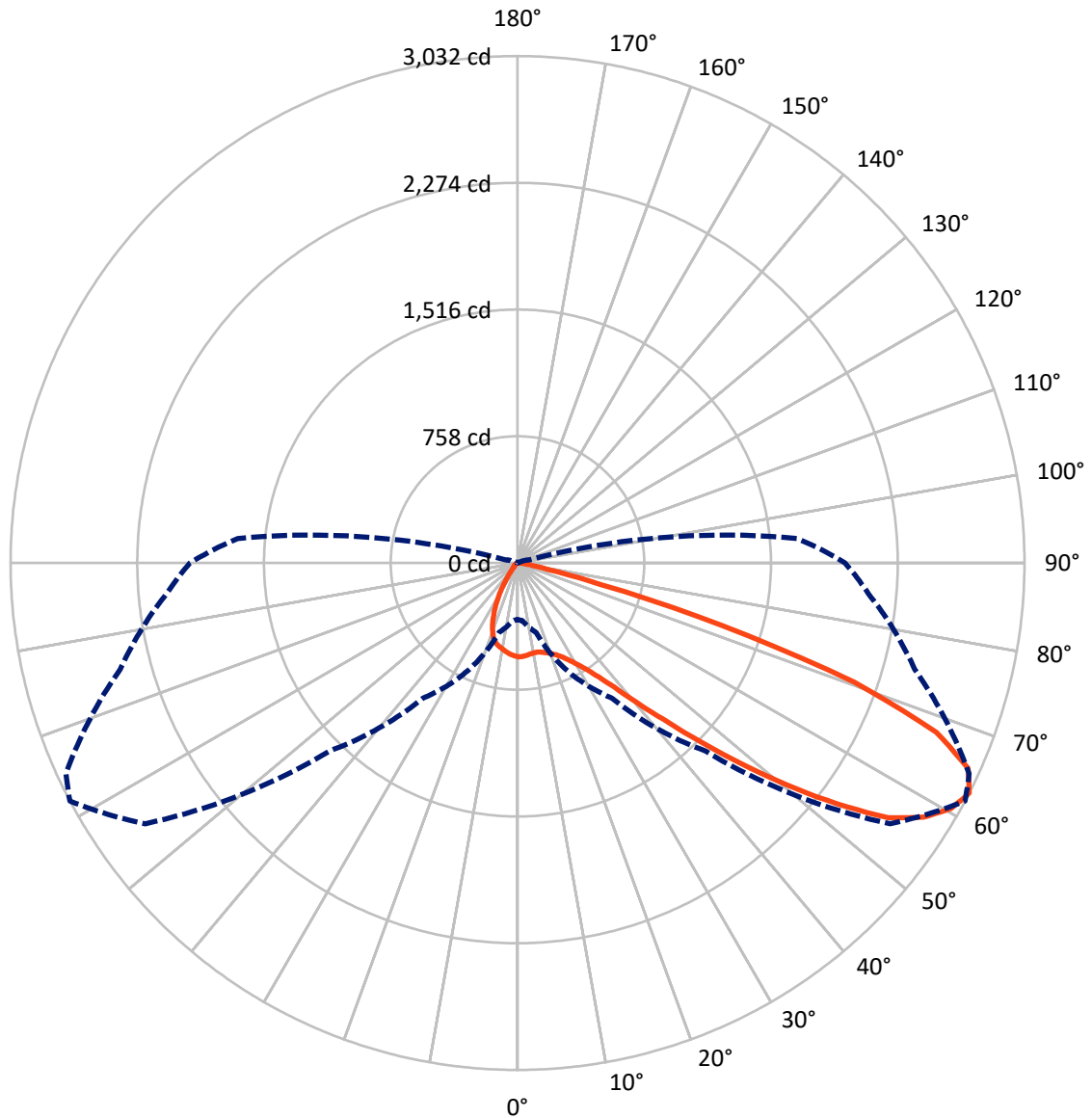
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 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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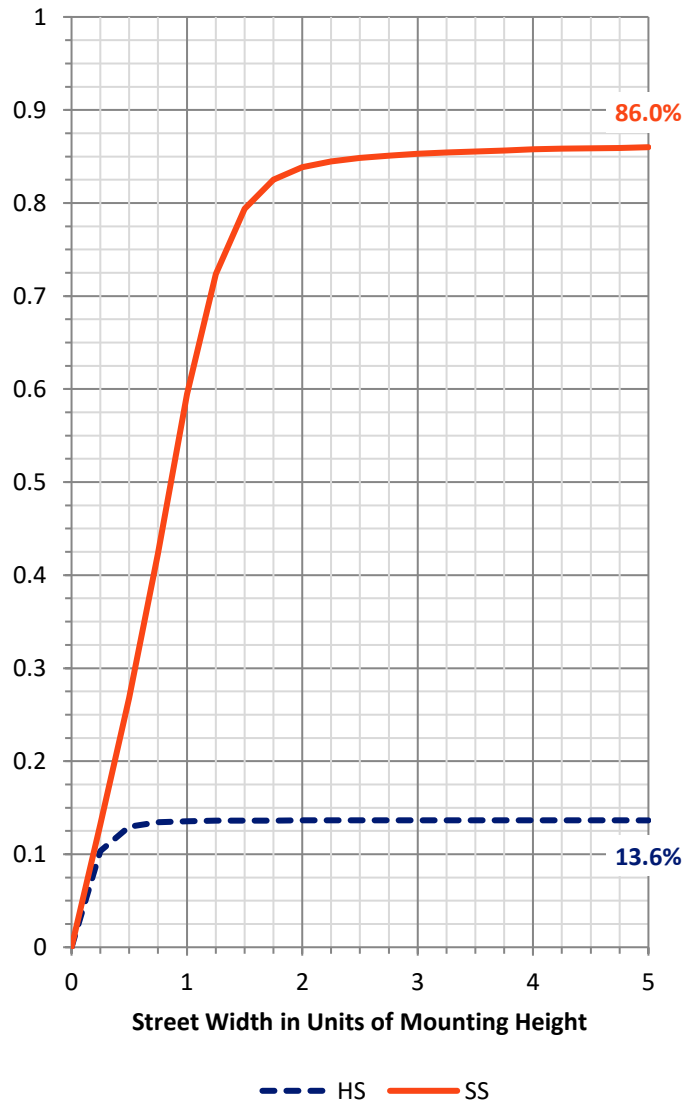
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	498.9	0.0	498.9
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	3114.1	0.0	3114.1
	% Fixture	86.2	0.0	86.2
Total	Lumens	3613.0	0.0	3613.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	1.4
10°-20°	128.3	3.6
20°-30°	191.6	5.3
30°-40°	365.1	10.1
40°-50°	761.3	21.1
50°-60°	1011.4	28.0
60°-70°	788.4	21.8
70°-80°	298.0	8.2
80°-90°	17.8	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°	3613.0	100.0
0°-180°	3613.0	100.0

Coefficient of Utilization



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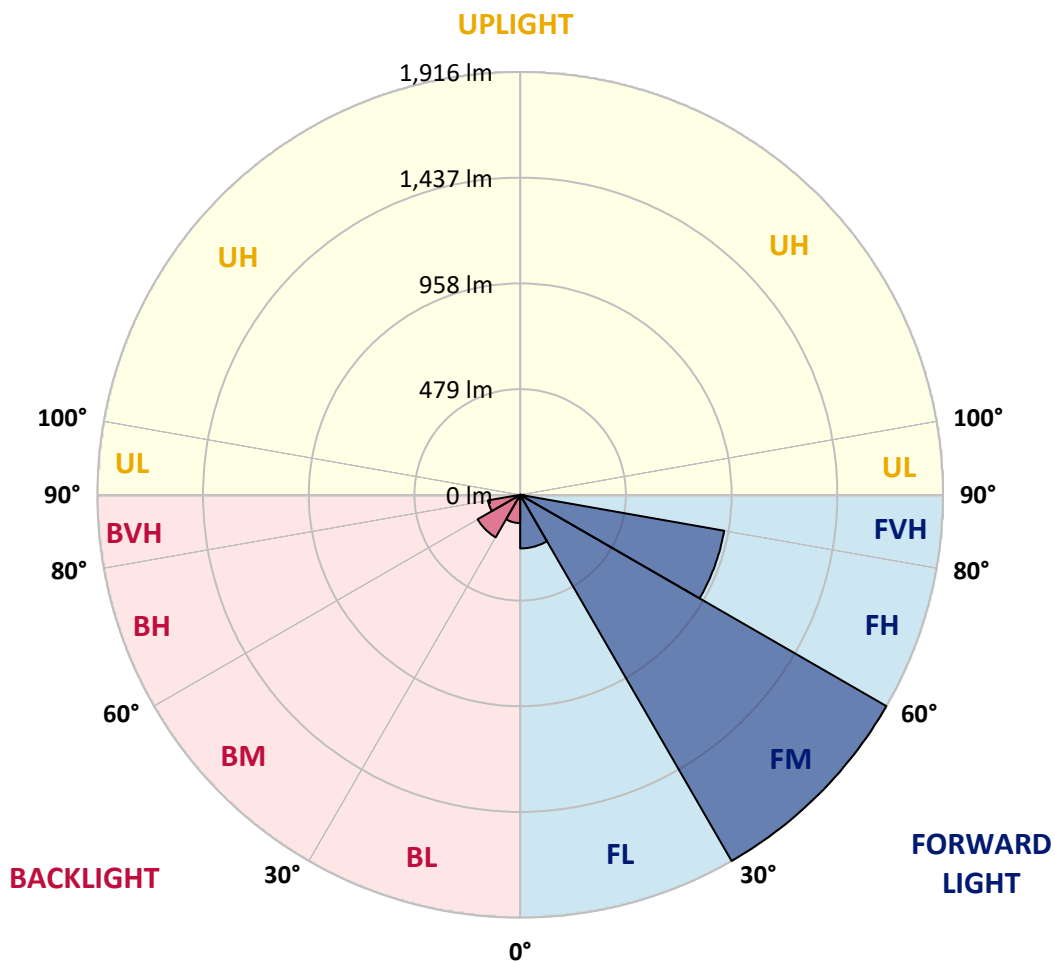
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	243.1	6.7			
FM	(30°-60°)	1915.6	53.0			
FH	(60°-80°)	938.4	26.0			G1/1800
FVH	(80°-90°)	17.0	0.5			G1/100
BL	(0°-30°)	127.9	3.5	B1/500		
BM	(30°-60°)	222.1	6.1	B1/1000		
BH	(60°-80°)	148.0	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°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	559.4	558.5	560.8	560.8	560.4	561.3	560.4	559.9	559.4	558.5	557.5
5°	544.8	544.8	548.1	549.5	550.9	553.8	554.7	555.6	555.2	556.1	556.6
7.5°	527.8	528.7	532.5	534.4	536.8	542.4	545.7	549.5	550.0	553.3	555.2
10°	513.6	514.6	518.3	520.7	524.0	531.6	538.6	545.3	546.2	552.3	553.8
12.5°	504.2	505.1	508.9	512.2	519.3	528.7	538.6	546.2	548.6	556.1	556.1
15°	500.4	501.4	506.1	511.7	521.2	533.5	545.7	553.8	558.5	564.6	561.8
17.5°	499.0	500.9	508.9	517.4	527.8	541.0	556.1	564.6	569.3	575.9	569.8
20°	503.2	505.6	516.0	527.8	538.6	552.3	568.9	578.3	583.0	587.3	575.5
22.5°	518.3	522.1	531.1	544.3	552.8	569.3	585.9	596.7	601.9	601.4	585.9
25°	554.7	559.4	563.7	570.8	574.5	594.4	611.8	622.7	626.5	625.0	607.1
27.5°	640.6	646.8	631.6	616.1	607.6	626.0	645.3	656.7	660.0	657.1	629.8
30°	785.5	786.0	751.6	702.5	666.1	664.2	687.8	702.9	702.9	697.3	661.9
32.5°	996.6	981.5	938.0	851.2	769.0	726.1	744.0	758.6	758.6	751.6	711.0
35°	1261.9	1250.6	1178.8	1074.5	928.1	825.2	821.4	835.6	836.1	834.2	787.9
37.5°	1531.9	1504.1	1444.1	1319.0	1147.2	977.7	932.4	942.3	949.4	948.4	890.8
40°	1783.1	1755.2	1704.7	1584.3	1416.3	1202.4	1093.8	1093.8	1094.3	1089.6	1020.2
42.5°	1980.4	1967.6	1929.9	1846.3	1716.5	1556.0	1311.5	1275.6	1268.0	1263.3	1172.2
45°	2108.3	2095.1	2074.8	2057.3	2015.3	1957.7	1603.7	1509.7	1497.5	1451.2	1340.2
47.5°	2115.4	2095.1	2108.8	2174.9	2269.8	2299.5	1964.3	1782.6	1750.0	1666.5	1508.8
50°	1957.7	1959.6	2013.0	2173.5	2429.8	2599.3	2346.7	2082.8	2031.4	1864.3	1657.5
52.5°	1667.9	1686.8	1769.4	2016.3	2437.4	2791.0	2679.6	2392.5	2290.6	2041.8	1762.3
55°	1305.8	1322.8	1457.8	1725.0	2253.7	2818.3	2921.7	2689.0	2554.0	2165.5	1856.2
57.5°	923.4	955.5	1123.1	1368.6	1903.4	2609.2	2987.8	2866.5	2735.7	2285.8	1944.5
60°	561.3	577.4	751.6	1037.2	1434.7	2171.6	2910.4	2979.8	2874.1	2390.2	2027.1
62.5°	337.5	347.0	430.5	714.3	987.1	1590.0	2718.7	3031.7	2979.8	2459.6	2106.4
65°	199.7	205.8	245.0	431.5	657.6	975.3	2304.7	2960.4	3002.5	2519.5	2152.7
67.5°	144.0	145.9	160.0	232.3	441.4	522.6	1602.7	2700.8	2858.0	2539.3	2125.3
70°	124.2	126.5	140.2	163.3	312.5	308.3	834.2	2137.6	2422.7	2436.0	2009.7
72.5°	93.9	98.2	120.9	153.4	224.2	219.0	314.4	1274.6	1644.7	1999.7	1732.5
75°	63.7	66.1	89.7	130.3	175.1	163.3	164.8	511.7	804.4	1253.9	1190.6
77.5°	40.1	42.0	54.8	93.5	150.1	115.2	116.6	181.8	290.3	531.6	510.3
80°	27.4	28.3	33.0	60.4	101.5	100.1	75.1	94.9	108.1	163.8	110.0
82.5°	16.5	16.5	21.7	35.9	61.4	79.3	47.2	52.4	57.6	60.9	25.0
85°	5.7	6.1	13.2	22.2	37.8	39.7	26.9	31.2	32.6	35.4	11.8
87.5°	2.4	1.9	7.1	12.3	16.1	18.4	15.6	14.2	15.6	20.8	5.2
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°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	558.0	556.1	556.1	555.6	552.8	551.4	550.0	546.2	548.6	545.7	543.8
5°	555.2	553.8	551.4	549.0	542.4	536.8	534.4	529.7	529.2	525.4	523.5
7.5°	554.7	551.4	547.6	539.6	529.7	520.7	512.7	504.7	501.4	497.1	494.7
10°	552.3	548.1	541.0	528.3	513.6	499.5	481.5	459.3	442.8	433.4	432.0
12.5°	552.8	548.1	537.2	518.3	499.0	467.8	419.7	369.2	327.6	310.2	307.3
15°	556.6	551.4	534.9	509.4	476.3	407.9	319.6	242.2	188.4	169.0	164.8
17.5°	561.3	552.3	529.7	496.6	432.9	316.3	201.1	127.0	96.8	85.9	84.0
20°	564.1	551.9	521.2	477.3	366.8	211.5	109.5	74.6	65.6	63.3	62.3
22.5°	571.2	553.3	514.1	447.1	283.7	127.5	69.4	58.1	52.9	50.0	49.6
25°	585.9	562.7	514.6	407.9	198.7	76.9	56.2	47.2	42.5	39.7	38.7
27.5°	607.1	579.7	523.5	359.3	122.7	58.1	46.7	38.2	33.0	30.7	30.2
30°	634.0	600.5	533.9	296.0	76.5	48.6	37.8	29.7	26.0	24.5	24.1
32.5°	676.5	636.4	542.9	221.4	52.9	40.1	29.7	23.6	21.2	19.8	19.8
35°	746.8	698.2	557.5	148.2	42.0	32.1	24.1	19.4	17.5	16.5	16.5
37.5°	846.0	786.5	564.6	92.1	34.5	25.0	19.4	16.1	14.6	13.7	13.7
40°	966.8	893.7	554.7	57.1	28.8	20.3	16.1	13.7	12.3	11.8	11.8
42.5°	1106.1	1016.9	523.5	40.6	24.1	16.5	13.7	11.8	10.9	10.4	10.4
45°	1261.9	1151.9	467.4	34.0	20.3	14.2	11.8	9.9	9.4	9.0	9.0
47.5°	1417.2	1288.8	394.7	29.3	17.0	11.8	9.9	8.5	8.0	7.6	7.6
50°	1552.7	1408.7	317.7	25.5	14.2	10.4	8.5	7.1	6.6	6.1	6.1
52.5°	1630.1	1480.0	246.0	21.2	12.3	9.0	6.6	5.7	5.2	4.7	4.7
55°	1713.7	1539.5	183.6	17.9	9.9	7.6	5.2	4.2	3.8	3.3	3.3
57.5°	1791.6	1592.8	136.4	14.6	8.5	5.7	4.2	3.3	2.8	2.4	2.4
60°	1867.1	1638.1	101.0	11.8	7.1	4.7	3.3	2.4	1.9	1.4	1.4
62.5°	1959.2	1679.7	74.1	9.4	6.1	3.3	2.4	1.4	0.9	0.5	0.5
65°	2027.6	1700.9	55.7	7.1	5.2	2.4	1.4	0.9	0.0	0.0	0.0
67.5°	2027.1	1659.8	40.6	5.2	3.8	1.9	0.9	0.0	0.0	0.0	0.0
70°	1932.2	1535.2	28.3	4.2	2.8	1.4	0.5	0.0	0.0	0.0	0.0
72.5°	1657.0	1214.2	18.4	2.8	2.4	0.9	0.5	0.0	0.0	0.0	0.0
75°	1118.4	616.5	10.9	2.4	1.9	0.9	0.5	0.0	0.0	0.0	0.0
77.5°	478.2	242.2	5.7	1.4	1.4	0.5	0.0	0.0	0.0	0.0	0.0
80°	100.1	58.5	2.4	0.9	0.9	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	17.0	8.5	0.9	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.2	2.4	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)