

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: P349021

Luminaire Tested: **ARCH-N-PA1-50-830-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P349021
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-PA1-50-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3860 lumens
Efficiency: N/A
Efficacy: 74.2 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

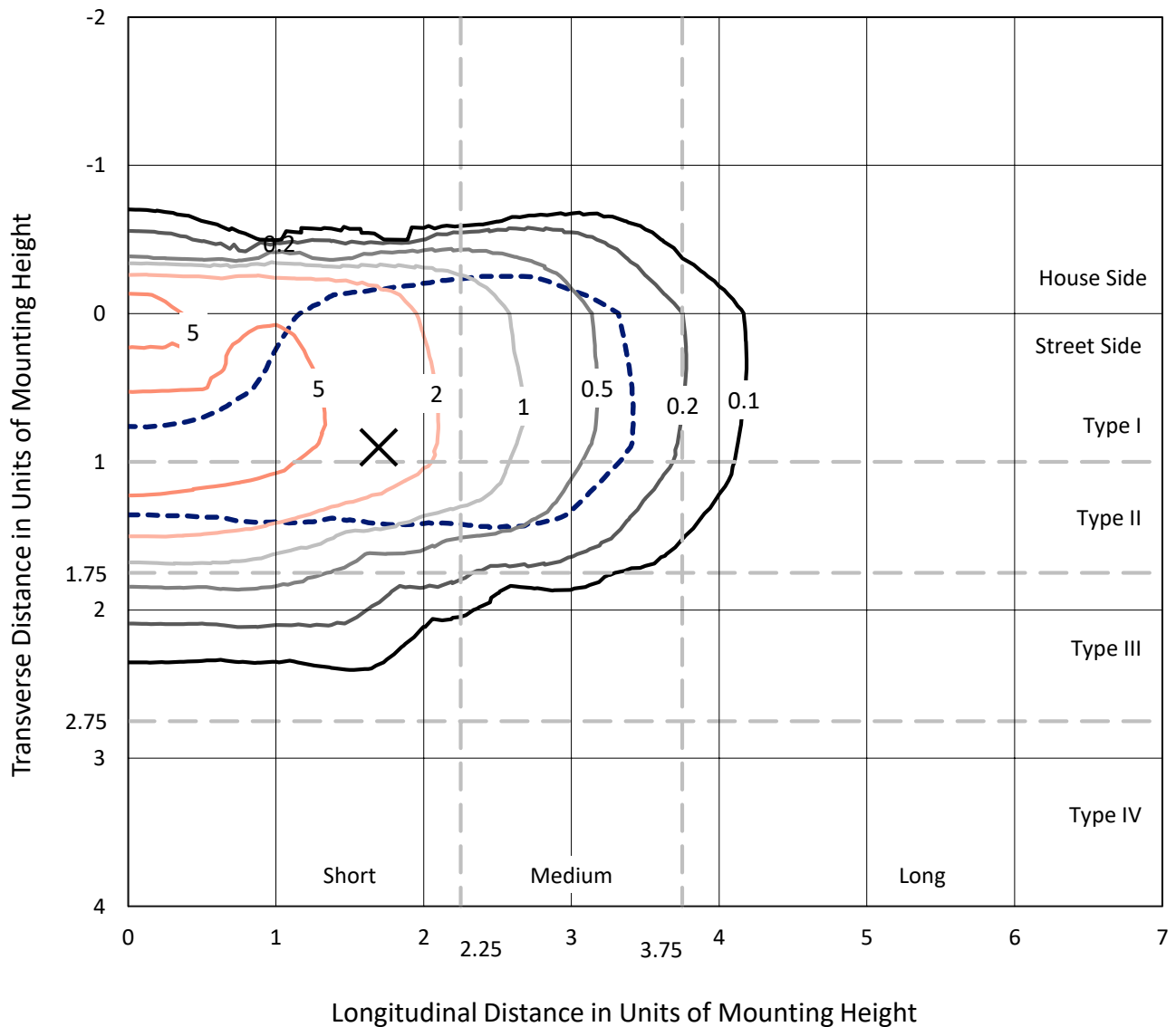
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

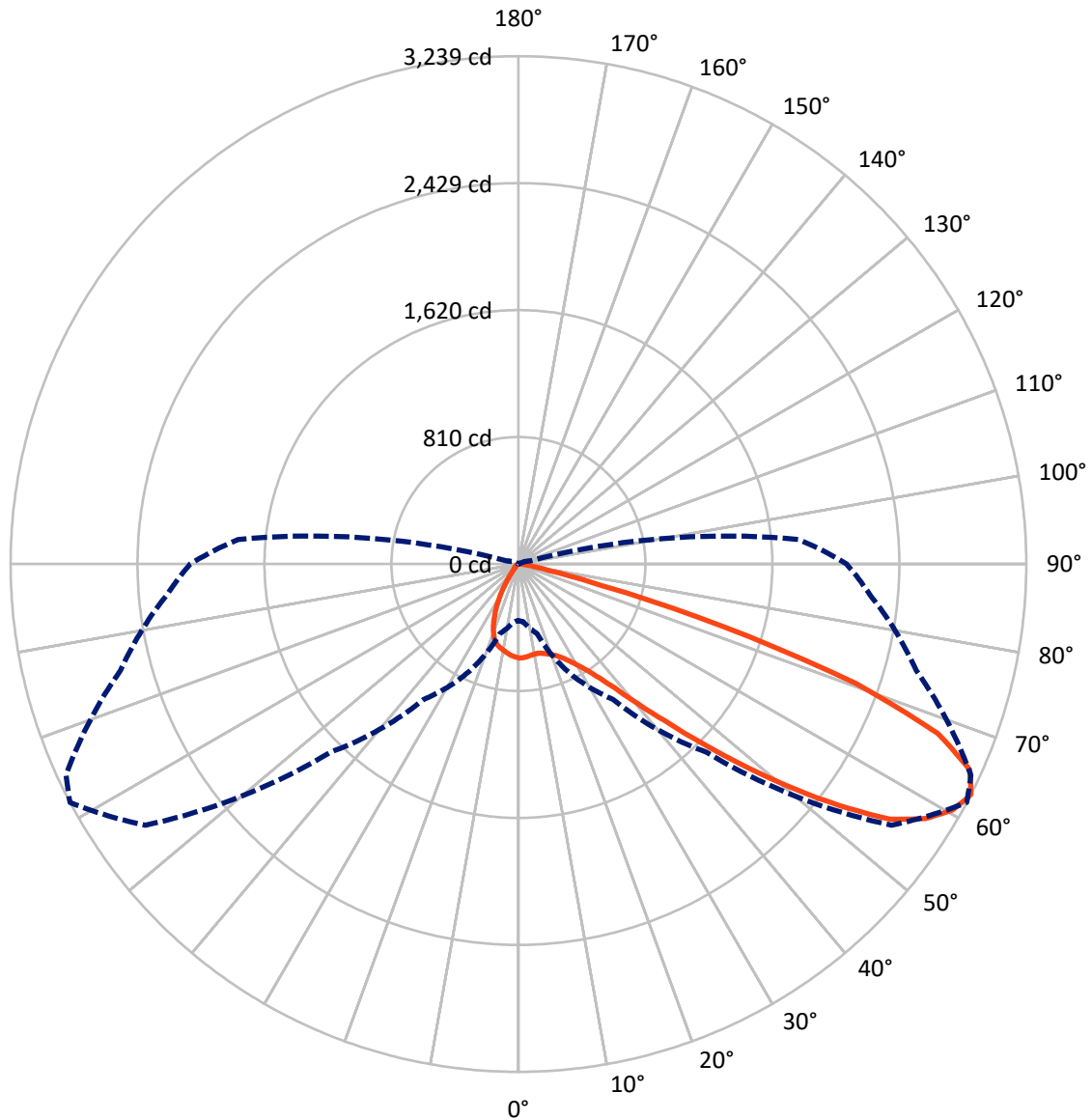


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - Full Cutoff

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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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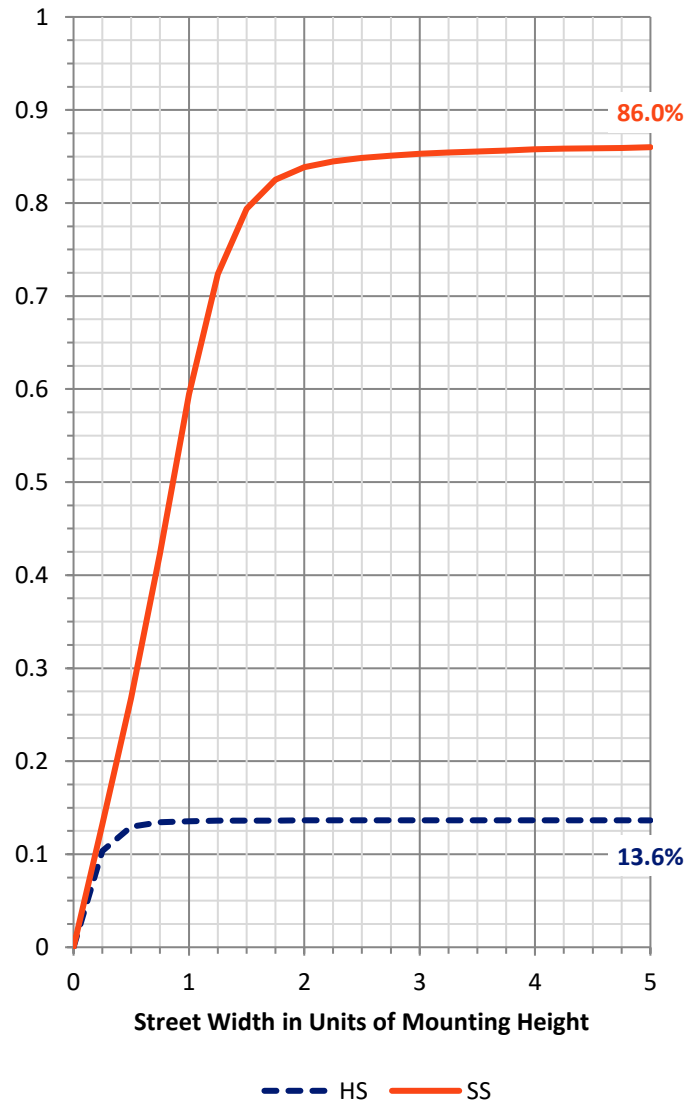
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	532.9	0.0	532.9
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	3327.0	0.0	3327.0
	% Fixture	86.2	0.0	86.2
Total	Lumens	3860.0	0.0	3860.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	1.4
10°-20°	137.1	3.6
20°-30°	204.7	5.3
30°-40°	390.0	10.1
40°-50°	813.3	21.1
50°-60°	1080.5	28.0
60°-70°	842.3	21.8
70°-80°	318.4	8.2
80°-90°	19.1	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°	3860.0	100.0
0°-180°	3860.0	100.0

Coefficient of Utilization



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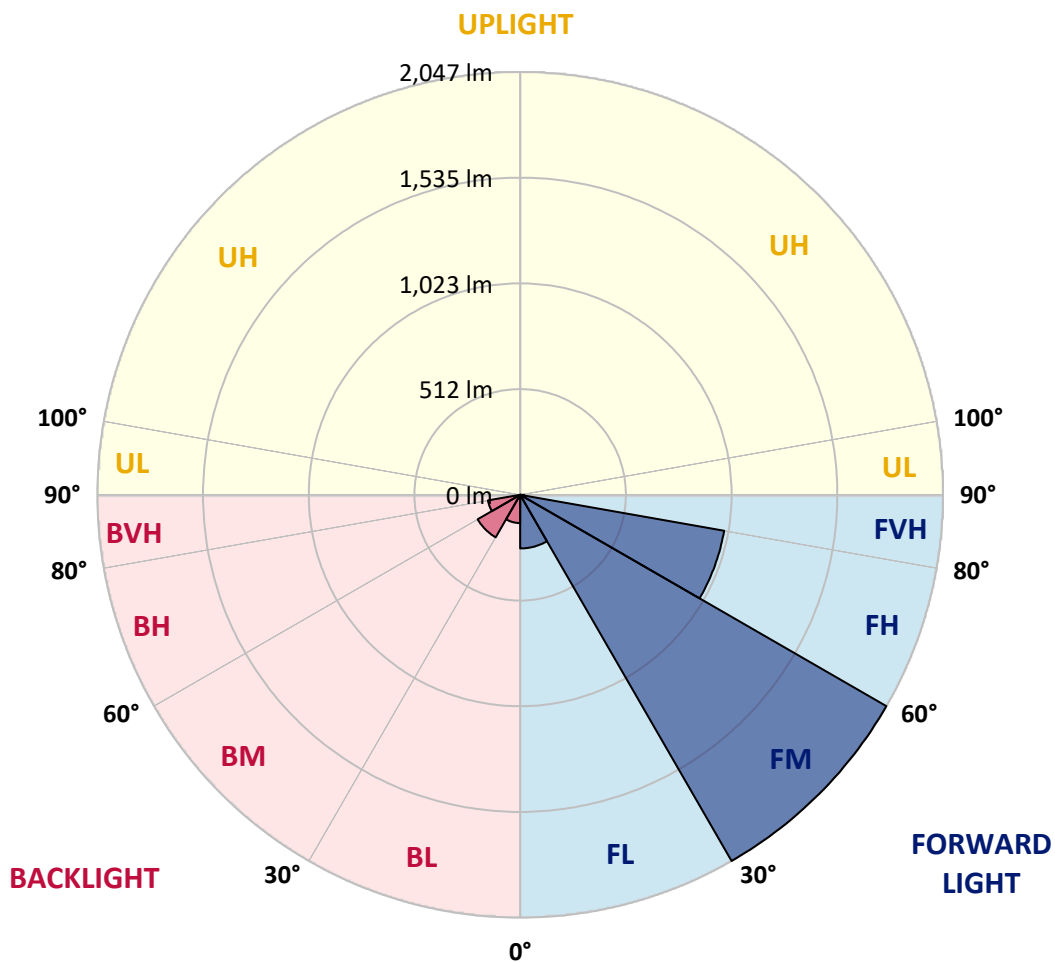
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	259.7	6.7			
FM	(30°-60°)	2046.6	53.0			
FH	(60°-80°)	1002.6	26.0			G1/1800
FVH	(80°-90°)	18.2	0.5			G1/100
BL	(0°-30°)	136.7	3.5	B1/500		
BM	(30°-60°)	237.3	6.1	B1/1000		
BH	(60°-80°)	158.1	4.1	B1/500		G1/500
BVH	(80°-90°)	0.9	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°	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7
2.5°	597.7	596.7	599.2	599.2	598.7	599.7	598.7	598.2	597.7	596.7	595.6
5°	582.0	582.0	585.6	587.1	588.6	591.6	592.6	593.6	593.1	594.1	594.6
7.5°	563.9	564.9	568.9	570.9	573.5	579.5	583.0	587.1	587.6	591.1	593.1
10°	548.7	549.8	553.8	556.3	559.8	567.9	575.5	582.5	583.5	590.1	591.6
12.5°	538.7	539.7	543.7	547.2	554.8	564.9	575.5	583.5	586.1	594.1	594.1
15°	534.6	535.6	540.7	546.7	556.8	569.9	583.0	591.6	596.7	603.2	600.2
17.5°	533.1	535.1	543.7	552.8	563.9	578.0	594.1	603.2	608.3	615.3	608.8
20°	537.6	540.2	551.3	563.9	575.5	590.1	607.8	617.8	622.9	627.4	614.8
22.5°	553.8	557.8	567.4	581.5	590.6	608.3	625.9	637.5	643.1	642.6	625.9
25°	592.6	597.7	602.2	609.8	613.8	635.0	653.6	665.2	669.3	667.8	648.6
27.5°	684.4	691.0	674.8	658.2	649.1	668.8	689.5	701.6	705.1	702.1	672.8
30°	839.3	839.8	802.9	750.5	711.6	709.6	734.8	751.0	751.0	744.9	707.1
32.5°	1064.7	1048.6	1002.2	909.4	821.6	775.7	794.9	810.5	810.5	802.9	759.6
35°	1348.1	1336.0	1259.4	1147.9	991.6	881.6	877.6	892.7	893.2	891.2	841.8
37.5°	1636.6	1606.9	1542.8	1409.2	1225.6	1044.5	996.1	1006.7	1014.3	1013.3	951.7
40°	1905.0	1875.2	1821.2	1692.6	1513.1	1284.6	1168.6	1168.6	1169.1	1164.1	1089.9
42.5°	2115.8	2102.2	2061.8	1972.5	1833.8	1662.4	1401.1	1362.8	1354.7	1349.7	1252.3
45°	2252.5	2238.3	2216.7	2198.0	2153.1	2091.6	1713.3	1612.9	1599.8	1550.4	1431.9
47.5°	2260.0	2238.3	2253.0	2323.6	2425.0	2456.7	2098.6	1904.5	1869.7	1780.4	1611.9
50°	2091.6	2093.6	2150.6	2322.1	2595.9	2777.0	2507.2	2225.2	2170.3	1991.7	1770.8
52.5°	1781.9	1802.1	1890.3	2154.1	2604.0	2981.8	2862.7	2556.1	2447.1	2181.3	1882.8
55°	1395.1	1413.2	1557.5	1842.9	2407.8	3011.0	3121.5	2872.8	2728.6	2313.5	1983.1
57.5°	986.5	1020.8	1199.9	1462.1	2033.6	2787.6	3192.1	3062.5	2922.8	2442.1	2077.5
60°	599.7	616.8	802.9	1108.1	1532.7	2320.0	3109.4	3183.5	3070.5	2553.6	2165.7
62.5°	360.6	370.7	460.0	763.1	1054.6	1698.7	2904.6	3239.0	3183.5	2627.7	2250.4
65°	213.3	219.9	261.8	461.0	702.6	1042.0	2462.3	3162.8	3207.7	2691.8	2299.9
67.5°	153.8	155.8	171.0	248.1	471.6	558.3	1712.3	2885.4	3053.4	2712.9	2270.6
70°	132.6	135.2	149.8	174.5	333.9	329.3	891.2	2283.7	2588.4	2602.5	2147.1
72.5°	100.4	104.9	129.1	163.9	239.6	234.0	335.9	1361.8	1757.2	2136.5	1851.0
75°	68.1	70.6	95.8	139.2	187.1	174.5	176.0	546.7	859.4	1339.6	1272.0
77.5°	42.9	44.9	58.5	99.9	160.4	123.1	124.6	194.2	310.2	567.9	545.2
80°	29.3	30.3	35.3	64.6	108.4	106.9	80.2	101.4	115.5	175.0	117.5
82.5°	17.7	17.7	23.2	38.3	65.6	84.7	50.4	56.0	61.5	65.1	26.7
85°	6.1	6.6	14.1	23.7	40.3	42.4	28.7	33.3	34.8	37.8	12.6
87.5°	2.5	2.0	7.6	13.1	17.1	19.7	16.6	15.1	16.6	22.2	5.5
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°	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7	599.7
2.5°	596.2	594.1	594.1	593.6	590.6	589.1	587.6	583.5	586.1	583.0	581.0
5°	593.1	591.6	589.1	586.6	579.5	573.5	570.9	565.9	565.4	561.4	559.3
7.5°	592.6	589.1	585.1	576.5	565.9	556.3	547.7	539.2	535.6	531.1	528.6
10°	590.1	585.6	578.0	564.4	548.7	533.6	514.4	490.7	473.1	463.0	461.5
12.5°	590.6	585.6	574.0	553.8	533.1	499.8	448.4	394.4	350.0	331.4	328.3
15°	594.6	589.1	571.4	544.2	508.9	435.8	341.5	258.7	201.2	180.6	176.0
17.5°	599.7	590.1	565.9	530.6	462.5	337.9	214.9	135.7	103.4	91.8	89.8
20°	602.7	589.6	556.8	509.9	391.9	226.0	117.0	79.7	70.1	67.6	66.6
22.5°	610.3	591.1	549.2	477.6	303.1	136.2	74.1	62.0	56.5	53.5	53.0
25°	625.9	601.2	549.8	435.8	212.3	82.2	60.0	50.4	45.4	42.4	41.4
27.5°	648.6	619.4	559.3	383.8	131.1	62.0	49.9	40.9	35.3	32.8	32.3
30°	677.4	641.5	570.4	316.2	81.7	51.9	40.3	31.8	27.7	26.2	25.7
32.5°	722.7	679.9	580.0	236.5	56.5	42.9	31.8	25.2	22.7	21.2	21.2
35°	797.9	745.9	595.6	158.4	44.9	34.3	25.7	20.7	18.7	17.7	17.7
37.5°	903.8	840.3	603.2	98.3	36.8	26.7	20.7	17.1	15.6	14.6	14.6
40°	1032.9	954.7	592.6	61.0	30.8	21.7	17.1	14.6	13.1	12.6	12.6
42.5°	1181.7	1086.4	559.3	43.4	25.7	17.7	14.6	12.6	11.6	11.1	11.1
45°	1348.1	1230.6	499.3	36.3	21.7	15.1	12.6	10.6	10.1	9.6	9.6
47.5°	1514.1	1376.9	421.6	31.3	18.2	12.6	10.6	9.1	8.6	8.1	8.1
50°	1658.8	1505.0	339.4	27.2	15.1	11.1	9.1	7.6	7.1	6.6	6.6
52.5°	1741.5	1581.2	262.8	22.7	13.1	9.6	7.1	6.1	5.5	5.0	5.0
55°	1830.8	1644.7	196.2	19.2	10.6	8.1	5.5	4.5	4.0	3.5	3.5
57.5°	1914.0	1701.7	145.8	15.6	9.1	6.1	4.5	3.5	3.0	2.5	2.5
60°	1994.7	1750.1	107.9	12.6	7.6	5.0	3.5	2.5	2.0	1.5	1.5
62.5°	2093.1	1794.5	79.2	10.1	6.6	3.5	2.5	1.5	1.0	0.5	0.5
65°	2166.2	1817.2	59.5	7.6	5.5	2.5	1.5	1.0	0.0	0.0	0.0
67.5°	2165.7	1773.3	43.4	5.5	4.0	2.0	1.0	0.0	0.0	0.0	0.0
70°	2064.3	1640.2	30.3	4.5	3.0	1.5	0.5	0.0	0.0	0.0	0.0
72.5°	1770.3	1297.2	19.7	3.0	2.5	1.0	0.5	0.0	0.0	0.0	0.0
75°	1194.8	658.7	11.6	2.5	2.0	1.0	0.5	0.0	0.0	0.0	0.0
77.5°	510.9	258.7	6.1	1.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0
80°	106.9	62.5	2.5	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	18.2	9.1	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.0	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)