

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: P257695

Luminaire Tested: **ARCH-AF24-50-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-50-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4621.7 lumens
Efficiency: N/A
Efficacy: 85.6 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

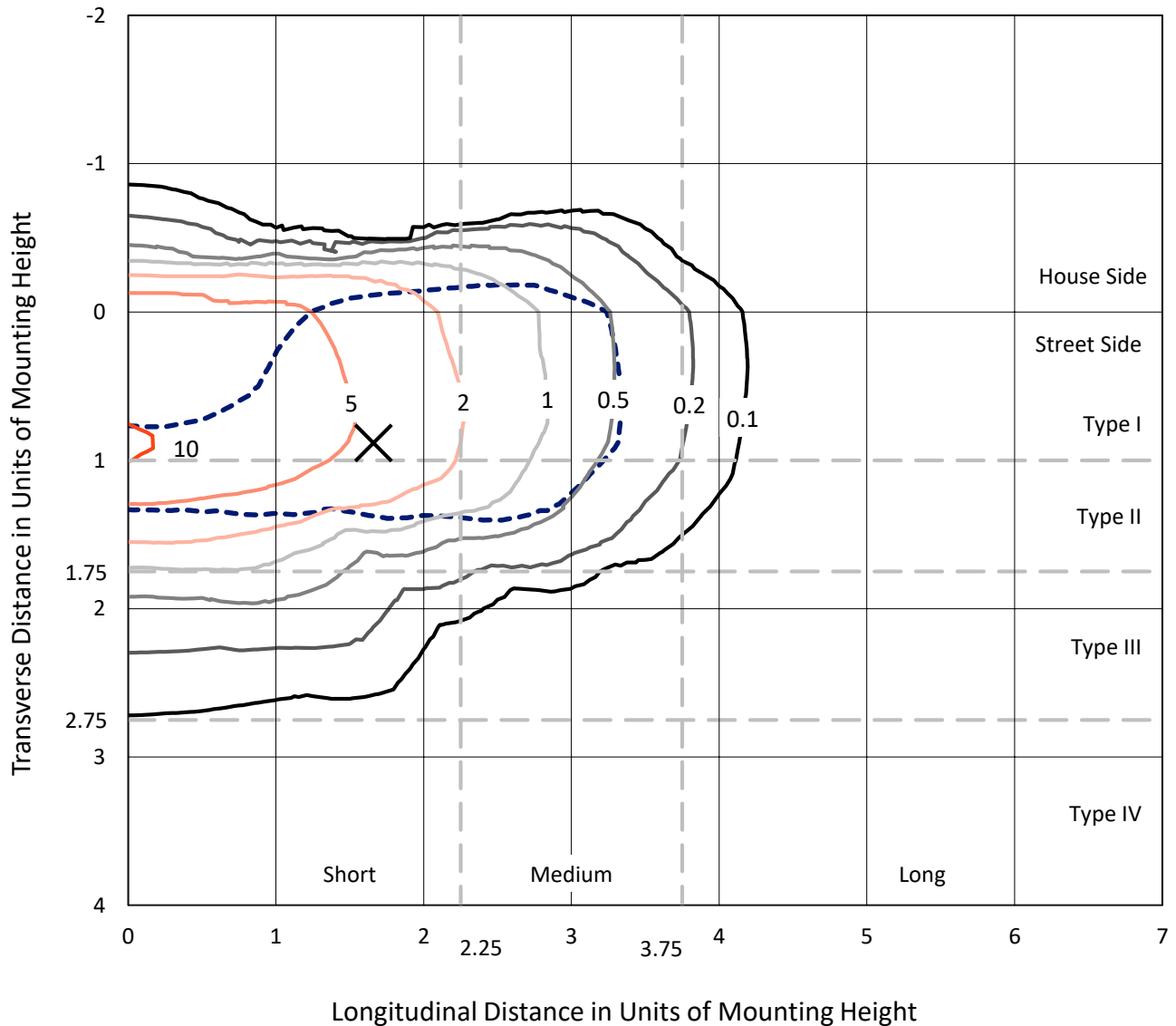
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

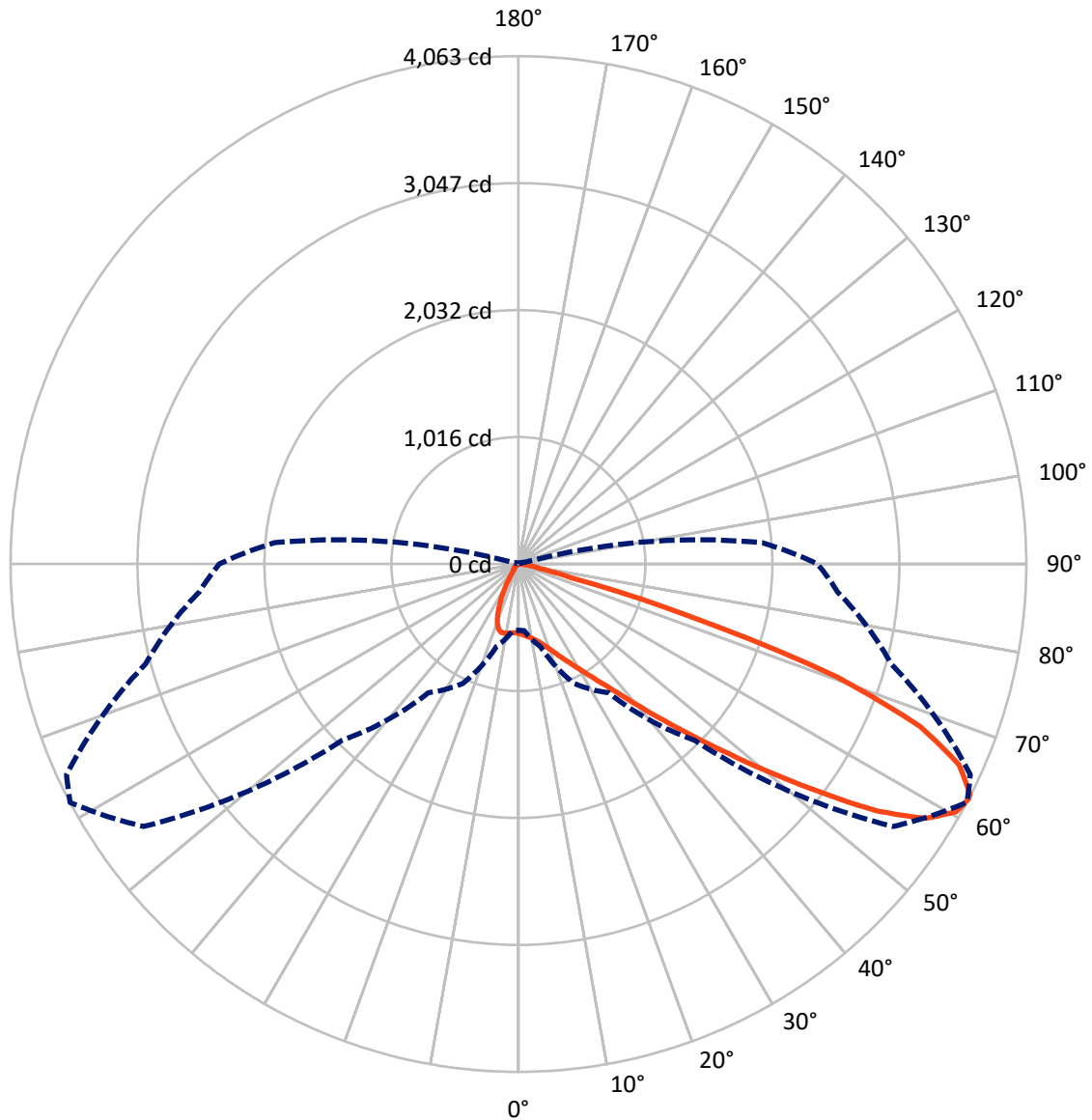
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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



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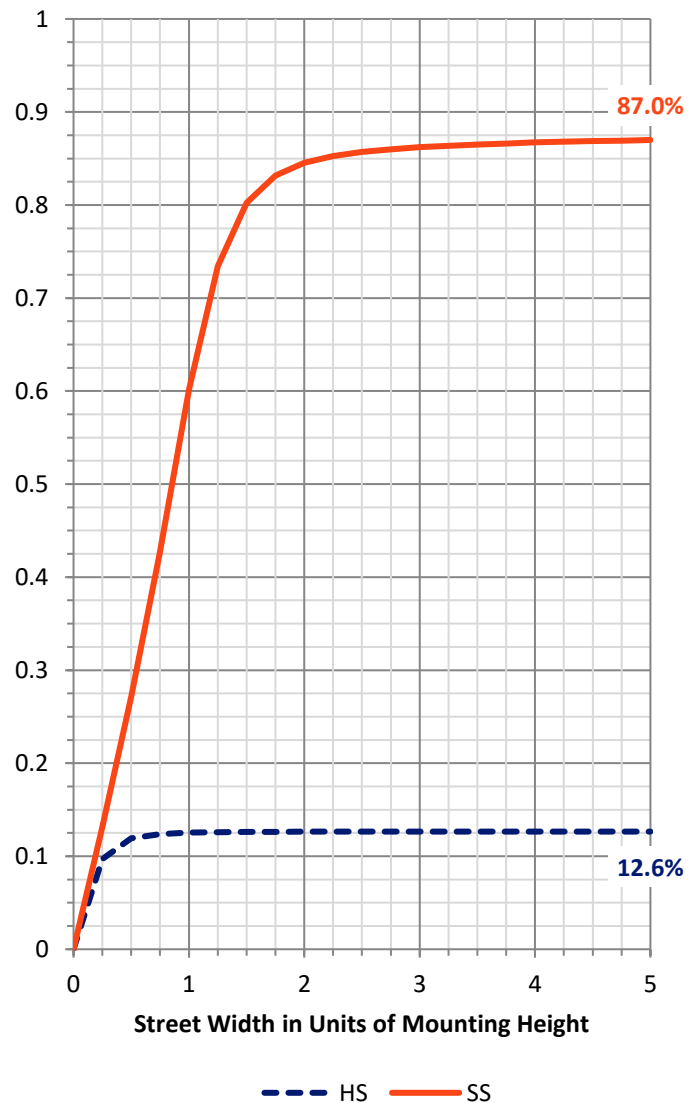
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	591.0	0.0	591.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4030.8	0.0	4030.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	4621.7	0.0	4621.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	1.2
10°-20°	149.6	3.2
20°-30°	251.3	5.4
30°-40°	481.7	10.4
40°-50°	983.8	21.3
50°-60°	1302.0	28.2
60°-70°	1011.4	21.9
70°-80°	365.1	7.9
80°-90°	23.3	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°	4621.7	100.0
0°-180°	4621.7	100.0

Coefficient of Utilization



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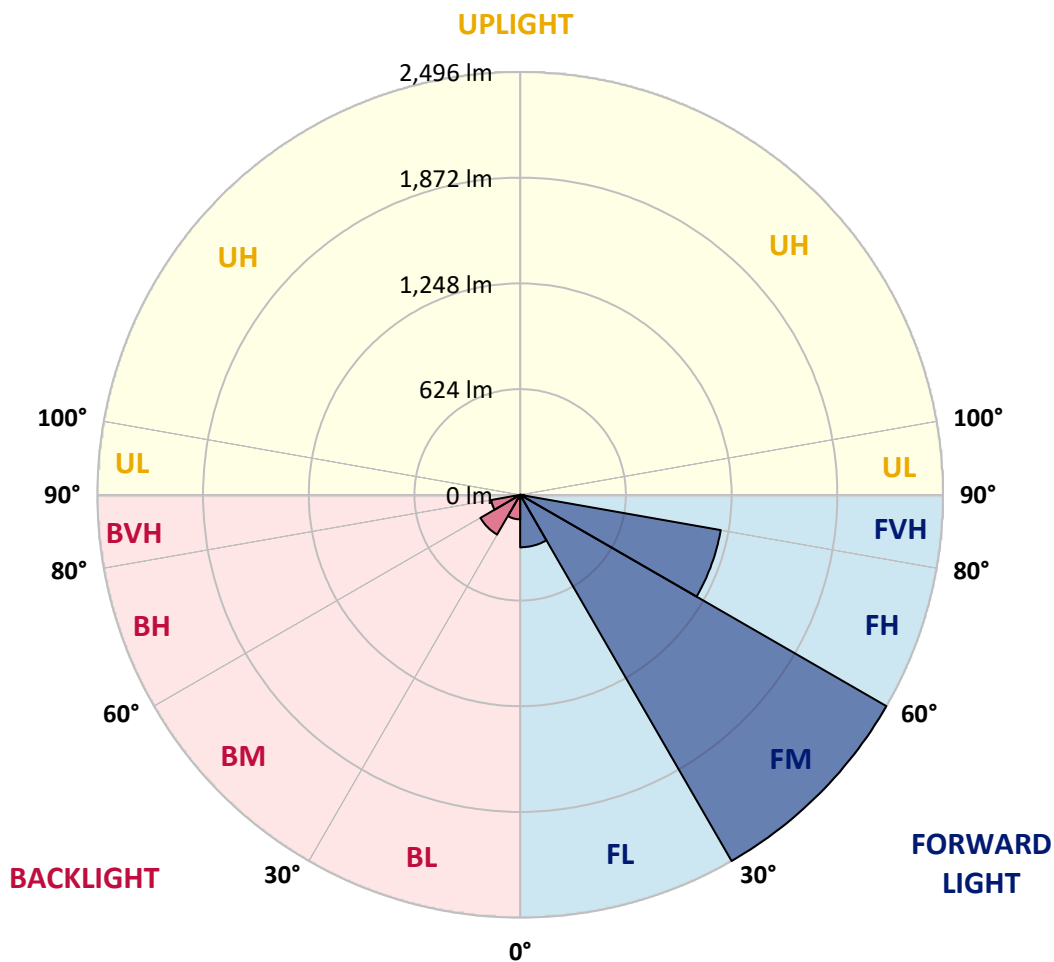
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	309.8	6.7			
FM	(30°-60°)	2496.2	54.0			
FH	(60°-80°)	1202.5	26.0			G1/1800
FVH	(80°-90°)	22.3	0.5			G1/100
BL	(0°-30°)	144.6	3.1	B1/500		
BM	(30°-60°)	271.3	5.9	B1/1000		
BH	(60°-80°)	174.0	3.8	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8
2.5°	571.5	570.4	569.3	568.1	568.1	566.9	565.8	563.5	561.3	559.0	557.9
5°	581.8	580.6	579.5	580.6	579.5	579.5	578.4	576.0	573.8	570.4	566.9
7.5°	589.7	588.6	587.4	588.6	589.7	590.9	592.0	589.7	588.6	584.0	580.6
10°	600.0	598.7	597.6	600.0	600.0	605.6	606.7	605.6	604.5	601.1	595.4
12.5°	614.7	615.8	615.8	618.1	620.4	627.2	629.4	626.0	626.0	621.5	614.7
15°	642.0	642.0	642.0	644.3	645.4	654.5	656.7	653.4	655.6	647.6	640.8
17.5°	668.1	669.2	671.5	676.1	676.1	684.0	688.5	688.5	693.0	682.8	673.8
20°	694.2	695.4	698.8	709.0	709.0	719.2	727.2	730.6	735.1	724.9	709.0
22.5°	722.6	722.6	728.3	744.2	740.8	761.3	776.0	781.7	786.2	772.6	747.7
25°	765.8	761.3	765.8	780.6	778.3	806.7	834.0	839.6	845.4	829.4	792.0
27.5°	847.6	840.8	824.9	826.0	826.0	859.0	897.6	905.5	909.0	895.3	848.7
30°	1011.2	1011.2	952.2	912.4	886.3	915.7	970.4	984.0	988.5	968.0	906.7
32.5°	1296.4	1296.4	1187.3	1086.2	987.4	987.4	1049.9	1074.8	1079.4	1055.6	984.0
35°	1660.0	1657.7	1494.1	1355.5	1162.4	1089.6	1143.0	1185.1	1198.7	1166.9	1083.9
37.5°	2046.3	2031.6	1855.4	1696.4	1431.6	1253.2	1269.2	1324.8	1337.3	1311.2	1213.4
40°	2359.9	2342.9	2200.9	2067.9	1779.3	1514.6	1451.0	1502.1	1516.8	1480.5	1368.0
42.5°	2643.9	2601.9	2504.2	2408.7	2179.3	1966.8	1693.0	1713.4	1729.3	1690.6	1541.8
45°	2849.6	2784.9	2734.9	2705.3	2583.8	2463.3	2006.5	1965.6	1971.3	1923.6	1731.5
47.5°	2855.3	2809.8	2814.3	2891.7	2941.6	2937.1	2414.5	2269.0	2247.4	2167.9	1933.8
50°	2582.6	2608.7	2691.7	2912.1	3182.5	3346.2	2899.7	2628.1	2563.3	2420.1	2134.9
52.5°	2128.1	2169.1	2324.7	2696.2	3217.8	3615.4	3402.9	3038.3	2922.4	2670.1	2289.5
55°	1666.8	1669.0	1832.7	2211.1	2982.5	3664.3	3805.2	3489.3	3312.0	2859.9	2391.8
57.5°	1146.4	1208.9	1416.9	1671.4	2451.9	3421.2	3956.3	3839.2	3610.9	2976.9	2463.3
60°	751.1	754.4	996.5	1290.8	1669.0	2783.8	3864.3	4024.5	3852.8	3046.1	2512.2
62°	529.5	535.1	685.2	1054.4	1257.8	1995.2	3660.8	4063.1	3989.2	3087.1	2563.3
62.5°	490.8	495.4	621.5	995.3	1181.6	1789.6	3588.1	4054.0	4009.7	3100.8	2581.5
65°	360.2	360.2	406.7	684.0	865.8	966.9	3040.5	3873.3	3982.4	3209.8	2649.6
67.5°	278.3	280.6	296.6	421.6	653.4	586.3	1940.6	3466.6	3698.4	3371.1	2688.3
70°	239.8	238.7	250.0	279.5	471.5	389.7	854.5	2705.3	3097.3	3330.2	2653.0
72.5°	177.3	178.4	204.5	245.4	328.4	253.4	386.3	1436.1	2008.9	2606.5	2273.5
75°	113.6	114.8	144.3	193.1	236.3	165.9	222.7	428.3	822.7	1445.2	1390.7
77.5°	76.1	78.4	94.3	135.2	206.8	103.4	139.7	179.5	247.7	542.0	498.8
80°	51.1	51.1	60.3	90.9	130.6	86.3	75.0	119.3	128.4	168.2	84.1
82.5°	34.1	34.1	39.8	60.3	85.2	77.2	45.4	64.8	75.0	84.1	29.6
85°	20.5	20.5	27.3	37.5	55.6	43.2	29.6	36.3	38.7	53.4	16.0
87.5°	12.5	11.4	18.2	26.1	29.6	26.1	19.3	19.3	20.5	29.6	8.0
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°	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8	556.8
2.5°	555.6	554.4	553.3	551.1	547.7	545.3	543.1	540.8	538.6	538.6	542.0
5°	565.8	562.4	557.9	553.3	546.6	542.0	538.6	534.0	531.7	531.7	532.9
7.5°	578.4	574.9	566.9	559.0	548.8	540.8	532.9	522.6	514.7	511.3	514.7
10°	592.0	587.4	576.0	563.5	552.2	531.7	505.6	473.8	446.5	434.0	439.7
12.5°	609.0	603.3	589.7	572.6	546.6	496.5	431.8	357.9	311.3	289.7	294.3
15°	634.0	626.0	606.7	580.6	522.6	414.7	309.0	223.8	180.7	162.4	164.8
17.5°	663.6	653.4	627.2	578.4	461.4	298.8	184.0	130.6	112.5	107.9	107.9
20°	695.4	681.7	647.6	561.3	368.2	187.5	114.8	99.9	93.2	89.7	89.7
22.5°	728.3	710.1	664.7	521.5	262.5	117.0	94.3	84.1	76.1	72.7	72.7
25°	768.0	744.2	681.7	452.2	167.0	94.3	80.7	70.5	62.5	57.9	59.1
27.5°	814.7	784.0	696.5	365.9	107.9	81.8	67.0	56.8	50.0	47.8	47.8
30°	863.5	827.2	699.9	273.8	87.5	70.5	55.6	46.5	42.0	39.8	39.8
32.5°	930.6	882.8	689.7	181.8	73.9	59.1	46.5	38.7	35.2	34.1	34.1
35°	1019.2	955.5	665.8	112.5	62.5	48.9	38.7	34.1	30.7	29.6	29.6
37.5°	1131.7	1056.7	623.8	77.2	53.4	39.8	32.9	29.6	27.3	26.1	26.1
40°	1281.7	1179.4	569.3	67.0	45.4	34.1	28.4	26.1	23.8	23.8	23.8
42.5°	1440.7	1328.2	498.8	59.1	38.7	29.6	25.0	22.7	21.6	20.5	20.5
45°	1614.5	1480.5	411.3	52.3	32.9	26.1	22.7	19.3	18.2	18.2	18.2
47.5°	1787.3	1637.2	315.9	45.4	28.4	22.7	19.3	17.1	16.0	14.7	14.7
50°	1964.5	1779.3	231.8	39.8	25.0	20.5	17.1	14.7	12.5	11.4	11.4
52.5°	2092.9	1864.5	169.3	34.1	21.6	17.1	13.6	11.4	9.1	8.0	8.0
55°	2187.2	1916.8	123.9	28.4	19.3	14.7	11.4	9.1	6.9	6.9	5.7
57.5°	2261.0	1941.8	93.2	25.0	17.1	12.5	9.1	6.9	5.7	4.5	4.5
60°	2317.9	1942.9	69.4	20.5	14.7	10.2	6.9	4.5	3.4	3.4	3.4
62°	2392.9	1957.7	56.8	17.1	13.6	9.1	5.7	3.4	2.3	1.1	1.1
62.5°	2414.5	1963.3	54.5	17.1	12.5	8.0	4.5	3.4	2.3	1.1	1.1
65°	2514.4	1973.6	42.0	13.6	10.2	6.9	3.4	2.3	0.0	0.0	0.0
67.5°	2605.4	1957.7	30.7	10.2	8.0	4.5	3.4	1.1	0.0	0.0	0.0
70°	2596.2	1848.6	21.6	6.9	5.7	3.4	2.3	0.0	0.0	0.0	0.0
72.5°	2139.5	1384.0	14.7	5.7	3.4	2.3	1.1	0.0	0.0	0.0	0.0
75°	1291.9	605.6	10.2	3.4	3.4	2.3	1.1	0.0	0.0	0.0	0.0
77.5°	423.8	219.3	6.9	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0
80°	69.4	36.3	3.4	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0
82.5°	21.6	9.1	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
85°	8.0	3.4	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	2.3	2.3	2.3	1.1	1.1	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)