

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: P798601

Luminaire Tested: **ARCH1-20-727-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-20-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 700mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3196 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

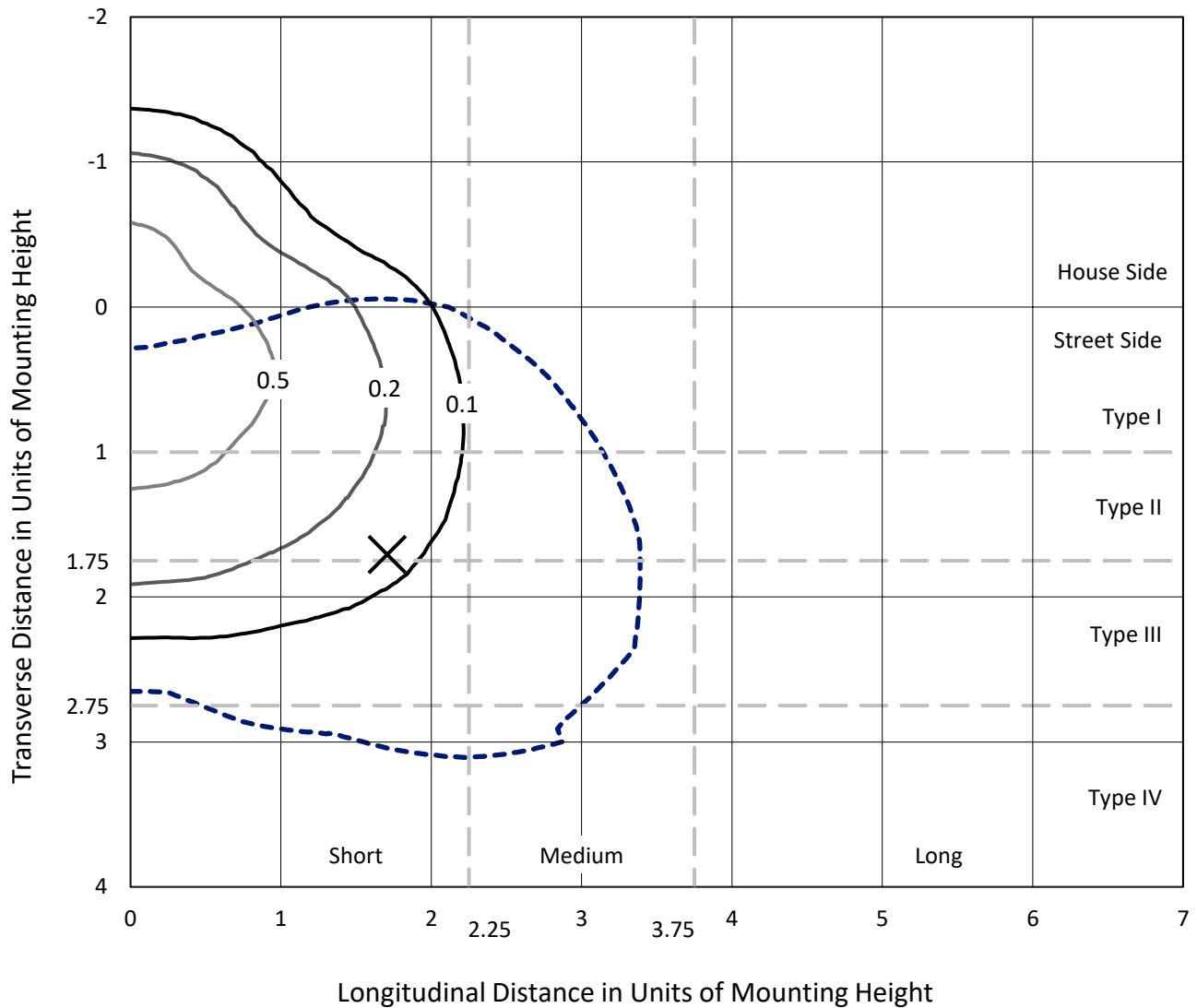
Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

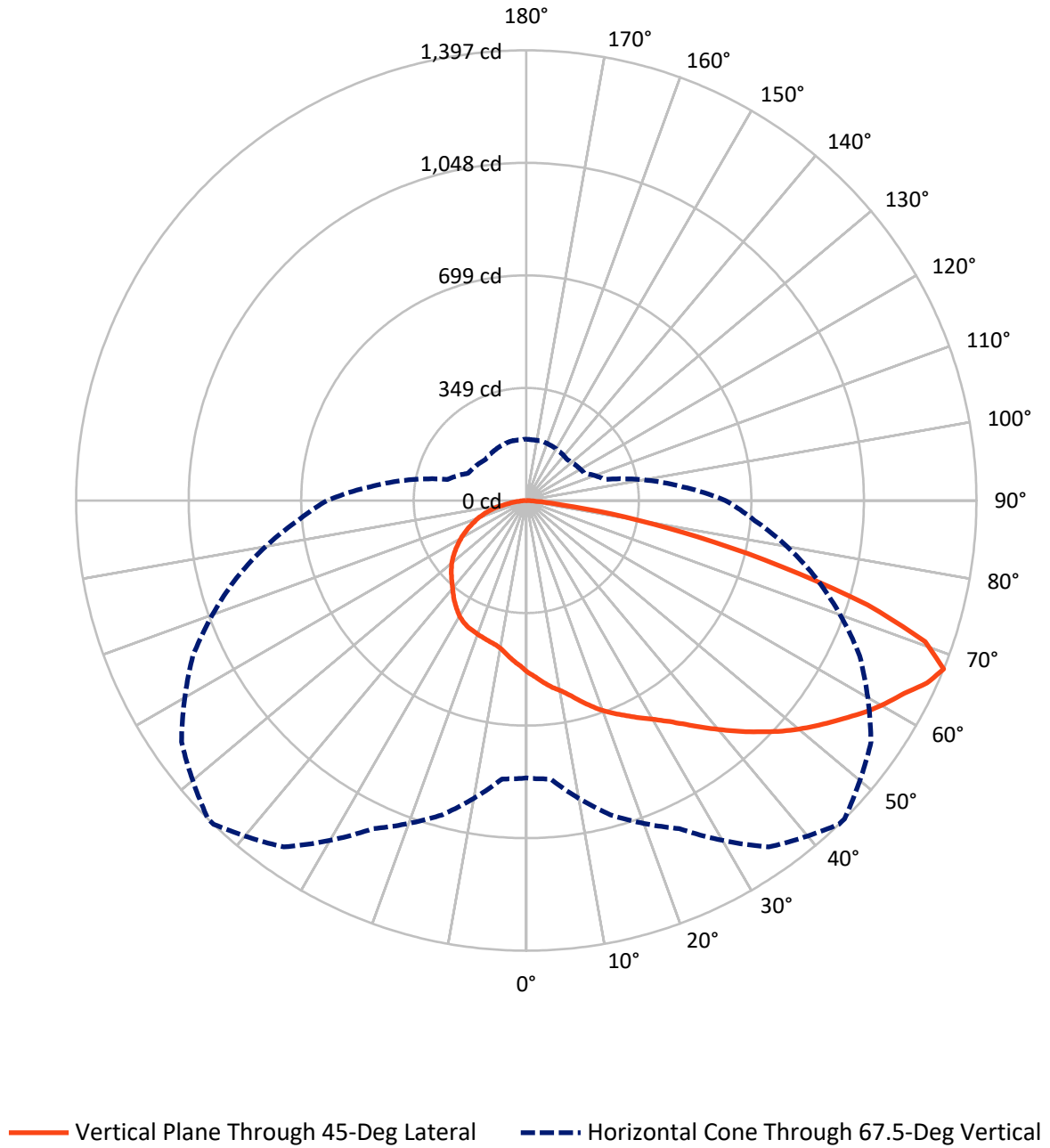
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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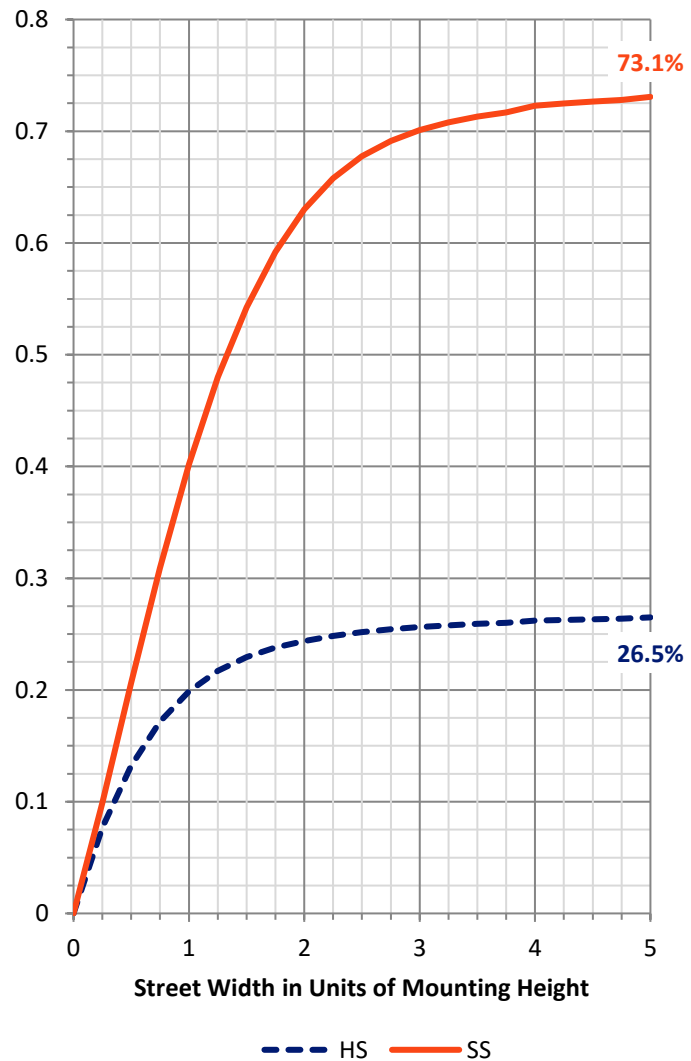
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	853.8	0.0	853.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	2342.2	0.0	2342.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	3196.0	0.0	3196.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	1.6
10°-20°	157.7	4.9
20°-30°	272.1	8.5
30°-40°	401.3	12.6
40°-50°	543.7	17.0
50°-60°	664.5	20.8
60°-70°	685.3	21.4
70°-80°	375.4	11.7
80°-90°	45.0	1.4
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°	3196.0	100.0
0°-180°	3196.0	100.0



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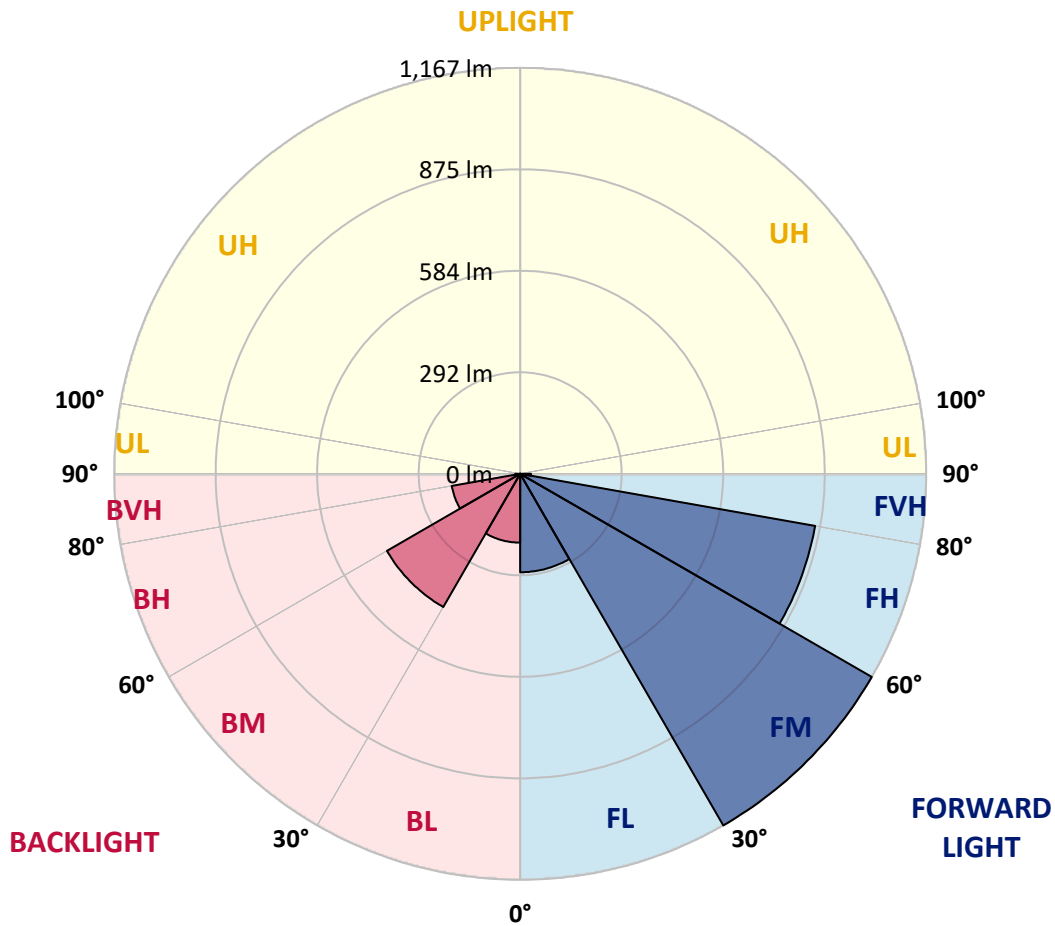
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	282.9	8.9			
FM (30°-60°)	1167.2	36.5			
FH (60°-80°)	861.0	26.9			G1/1800
FVH (80°-90°)	31.0	1.0			G1/100
BL (0°-30°)	197.9	6.2	B1/500		
BM (30°-60°)	442.3	13.8	B1/1000		
BH (60°-80°)	199.7	6.2	B1/500		G1/500
BVH (80°-90°)	14.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	556.4	555.9	556.9	553.5	549.1	548.6	548.6	545.7	542.3	535.5	530.1
5°	582.6	581.7	582.2	577.3	571.5	568.5	568.0	561.7	553.9	543.2	533.5
7.5°	607.0	606.0	605.5	600.1	591.4	586.5	586.0	576.8	567.6	551.0	536.9
10°	629.8	628.8	627.9	620.6	609.9	602.6	601.6	589.9	578.3	557.8	539.8
12.5°	659.0	657.0	656.1	647.3	631.8	624.0	622.5	607.0	592.4	567.6	545.7
15°	689.6	688.2	686.7	678.4	660.9	650.7	648.3	628.8	608.9	580.2	554.4
17.5°	712.5	711.0	711.0	703.7	687.7	676.0	674.1	650.7	625.9	591.9	561.2
20°	726.6	725.1	726.6	722.2	710.1	700.3	698.4	672.6	642.9	602.6	567.1
22.5°	736.8	735.4	737.8	735.8	727.1	721.2	719.8	694.5	660.5	613.8	572.9
25°	754.8	754.8	754.8	751.4	743.1	741.2	741.2	719.3	682.8	628.4	581.7
27.5°	790.8	788.8	786.4	776.7	762.6	762.1	765.0	744.6	708.6	647.3	592.4
30°	843.8	842.8	833.6	813.2	789.3	786.9	788.8	771.8	736.3	667.3	604.5
32.5°	912.4	909.0	890.0	859.4	825.3	814.1	818.0	800.0	765.5	687.7	616.2
35°	961.0	962.0	948.4	920.6	880.3	850.6	853.5	831.6	797.1	710.5	630.8
37.5°	1016.9	1020.3	999.9	979.0	941.6	891.0	893.9	864.2	828.7	739.2	646.4
40°	1094.3	1087.5	1052.9	1028.1	986.8	933.3	935.7	900.7	865.2	766.5	664.3
42.5°	1159.0	1146.8	1105.0	1073.4	1023.8	978.0	980.5	940.1	902.2	796.6	684.3
45°	1251.8	1218.3	1158.0	1142.4	1061.7	1021.8	1024.2	981.9	941.1	828.7	705.7
47.5°	1305.8	1252.3	1213.9	1205.6	1103.5	1067.0	1070.0	1026.2	982.9	865.2	728.1
50°	1302.4	1267.9	1256.7	1236.3	1140.5	1109.3	1112.3	1071.9	1025.2	901.2	749.5
52.5°	1280.1	1286.4	1280.5	1246.5	1177.4	1150.2	1153.6	1117.1	1068.5	934.8	769.4
55°	1314.6	1319.0	1307.8	1263.0	1218.3	1191.1	1194.9	1164.8	1111.3	964.4	786.4
57.5°	1355.9	1340.4	1329.2	1292.2	1260.6	1235.3	1239.7	1213.4	1148.3	988.2	799.5
60°	1354.0	1321.4	1332.6	1294.2	1289.3	1276.2	1280.1	1253.3	1176.5	1005.8	804.9
62.5°	1254.3	1236.8	1293.2	1280.1	1312.6	1312.6	1317.5	1277.6	1193.5	1013.1	802.0
65°	1081.1	1082.1	1181.3	1235.8	1340.4	1362.7	1366.6	1292.7	1183.8	991.7	774.7
67.5°	861.3	867.6	1010.1	1123.5	1312.6	1396.8	1397.3	1306.3	1141.9	931.3	711.5
70°	630.3	635.2	803.4	941.1	1181.8	1321.4	1313.6	1267.9	1051.0	826.3	612.8
72.5°	426.0	430.4	603.6	722.7	969.8	1125.4	1108.4	1120.5	895.8	678.9	492.7
75°	286.5	291.8	429.4	517.0	713.5	854.5	816.6	848.7	693.0	514.1	359.4
77.5°	180.4	183.8	272.8	339.0	487.3	581.7	543.7	544.2	399.3	276.7	193.1
80°	114.8	115.7	165.4	195.5	282.1	349.7	309.3	251.4	179.9	146.9	115.3
82.5°	66.6	65.2	98.7	110.4	134.2	132.8	109.9	104.1	78.8	73.4	58.8
85°	26.7	24.8	43.3	40.4	40.9	43.3	32.1	32.1	25.8	19.9	14.6
87.5°	5.3	5.3	5.8	5.3	5.3	5.8	4.4	4.4	3.9	3.9	3.9
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°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	529.1	528.2	525.7	519.4	516.0	514.1	511.1	510.2	509.7	510.2	511.6
5°	530.6	527.2	520.4	510.2	503.4	499.0	494.1	492.2	490.7	490.7	492.2
7.5°	531.6	526.2	514.6	499.5	489.7	482.9	477.1	474.7	474.2	475.6	476.1
10°	532.1	524.3	507.7	488.8	476.1	467.4	461.5	460.1	461.5	464.5	464.9
12.5°	535.5	524.8	503.9	481.5	466.4	457.6	453.3	453.3	457.2	462.5	463.0
15°	541.3	528.2	501.9	475.6	460.1	452.3	450.8	453.3	459.1	467.4	468.3
17.5°	545.7	530.1	497.5	467.9	451.8	446.9	449.4	455.2	463.5	474.7	475.6
20°	548.6	530.1	491.2	458.6	443.5	442.6	449.4	458.6	467.4	480.5	482.0
22.5°	551.5	529.1	483.9	447.4	434.3	437.2	449.9	461.5	470.3	484.4	486.8
25°	556.9	530.6	476.6	436.2	424.6	432.8	449.4	463.5	472.7	487.3	491.2
27.5°	564.2	534.0	471.3	426.0	414.9	426.0	446.0	463.0	472.7	486.8	491.2
30°	571.9	537.9	464.9	414.9	403.7	416.3	438.7	457.6	468.8	482.0	487.3
32.5°	580.2	542.3	459.6	402.7	390.0	403.2	428.0	449.4	461.5	473.7	479.5
35°	591.4	550.1	456.7	393.0	377.9	389.6	414.4	438.7	451.8	463.0	469.8
37.5°	605.0	559.8	455.2	383.2	364.8	374.5	399.8	425.6	439.7	448.9	455.2
40°	620.6	571.9	454.7	374.0	351.6	358.9	384.7	410.5	424.1	431.4	436.7
42.5°	638.1	585.6	453.8	364.8	338.5	344.3	370.1	395.4	407.1	413.4	418.3
45°	656.6	599.2	451.8	353.6	324.4	331.2	355.0	377.4	389.6	394.9	400.3
47.5°	675.0	612.8	447.9	340.9	311.7	318.1	339.0	358.4	368.2	373.0	378.4
50°	693.0	625.0	438.7	326.3	298.6	304.5	320.5	333.6	340.9	344.8	350.2
52.5°	709.1	633.2	425.6	309.3	285.5	288.4	299.1	310.3	316.1	316.6	321.5
55°	722.7	637.6	406.6	291.8	271.4	271.9	277.7	286.5	288.9	286.9	290.3
57.5°	730.5	635.2	385.7	273.8	256.8	254.8	259.2	263.6	264.1	259.2	262.6
60°	732.4	624.0	358.4	255.8	242.2	236.8	238.3	237.3	236.4	234.4	237.3
62.5°	722.7	600.1	328.3	238.3	226.6	218.4	217.9	217.4	218.9	219.3	219.8
65°	687.2	555.4	292.3	220.3	210.1	198.9	198.4	204.3	206.2	203.3	204.3
67.5°	618.6	486.8	252.9	199.4	189.2	179.5	183.4	186.8	190.2	189.2	190.2
70°	521.4	399.8	216.9	176.1	166.3	161.0	165.4	168.3	168.8	167.8	168.8
72.5°	410.0	312.2	183.4	152.2	143.5	141.0	146.4	148.8	153.2	155.1	155.6
75°	296.2	230.5	150.3	126.4	119.2	119.2	124.0	128.4	132.3	129.9	128.4
77.5°	165.4	137.6	108.0	87.1	88.5	95.3	97.3	102.1	106.0	105.5	104.6
80°	100.2	86.1	73.0	56.4	55.9	61.3	73.9	82.2	84.1	79.8	79.3
82.5°	52.0	45.2	38.9	31.6	35.0	40.9	42.8	51.6	56.9	55.0	57.4
85°	13.1	12.6	14.1	14.6	18.0	19.9	21.9	25.8	17.0	8.3	8.3
87.5°	3.9	3.9	4.9	4.9	6.3	7.8	7.3	7.3	3.9	0.5	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)