

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: P798599

Luminaire Tested: **ARCH1-20-727-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-20-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 700mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3298 lumens
Efficiency: N/A
Efficacy: 140.3 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

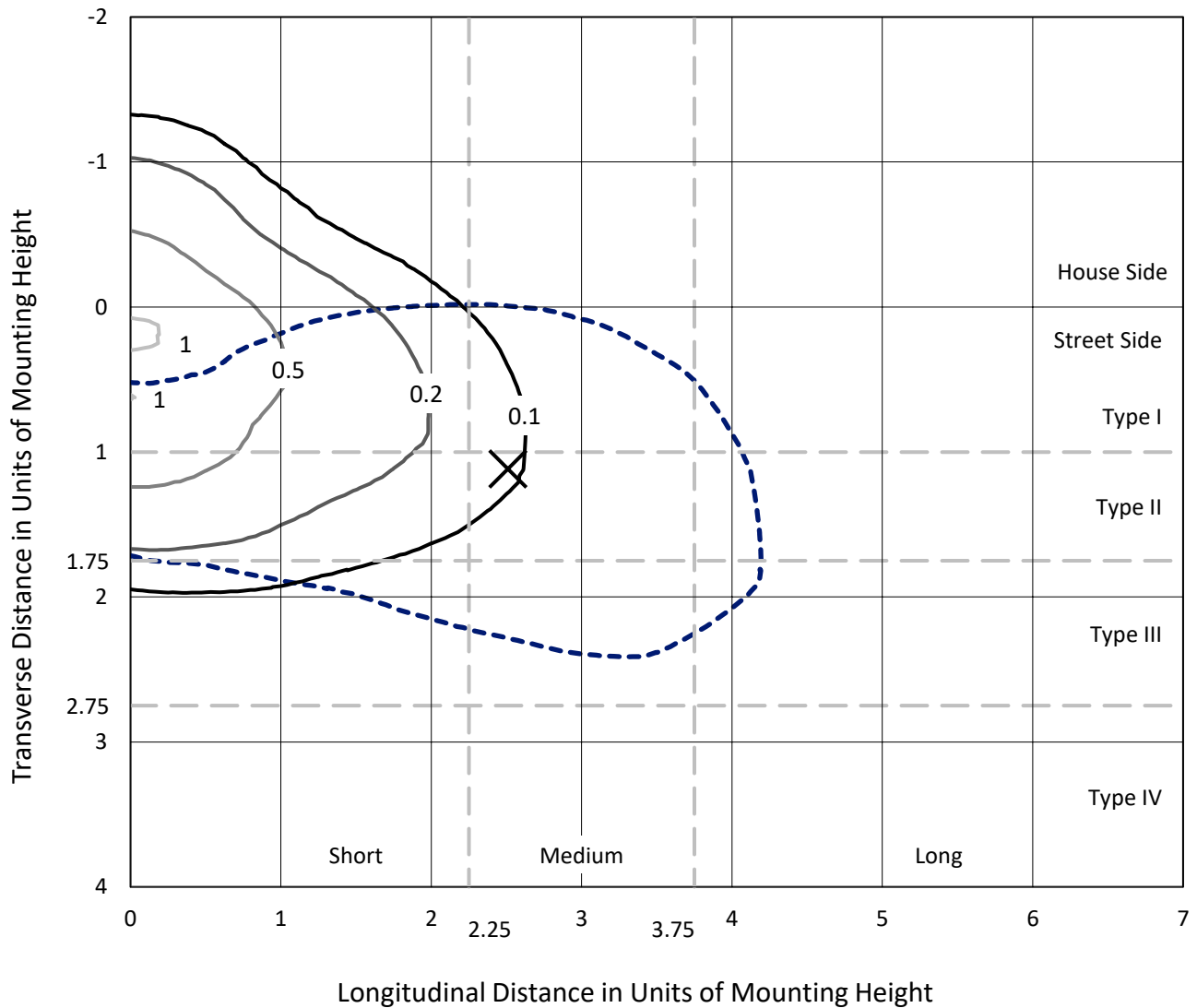
Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P798599
 CATALOG NUMBER: ARCH1-20-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

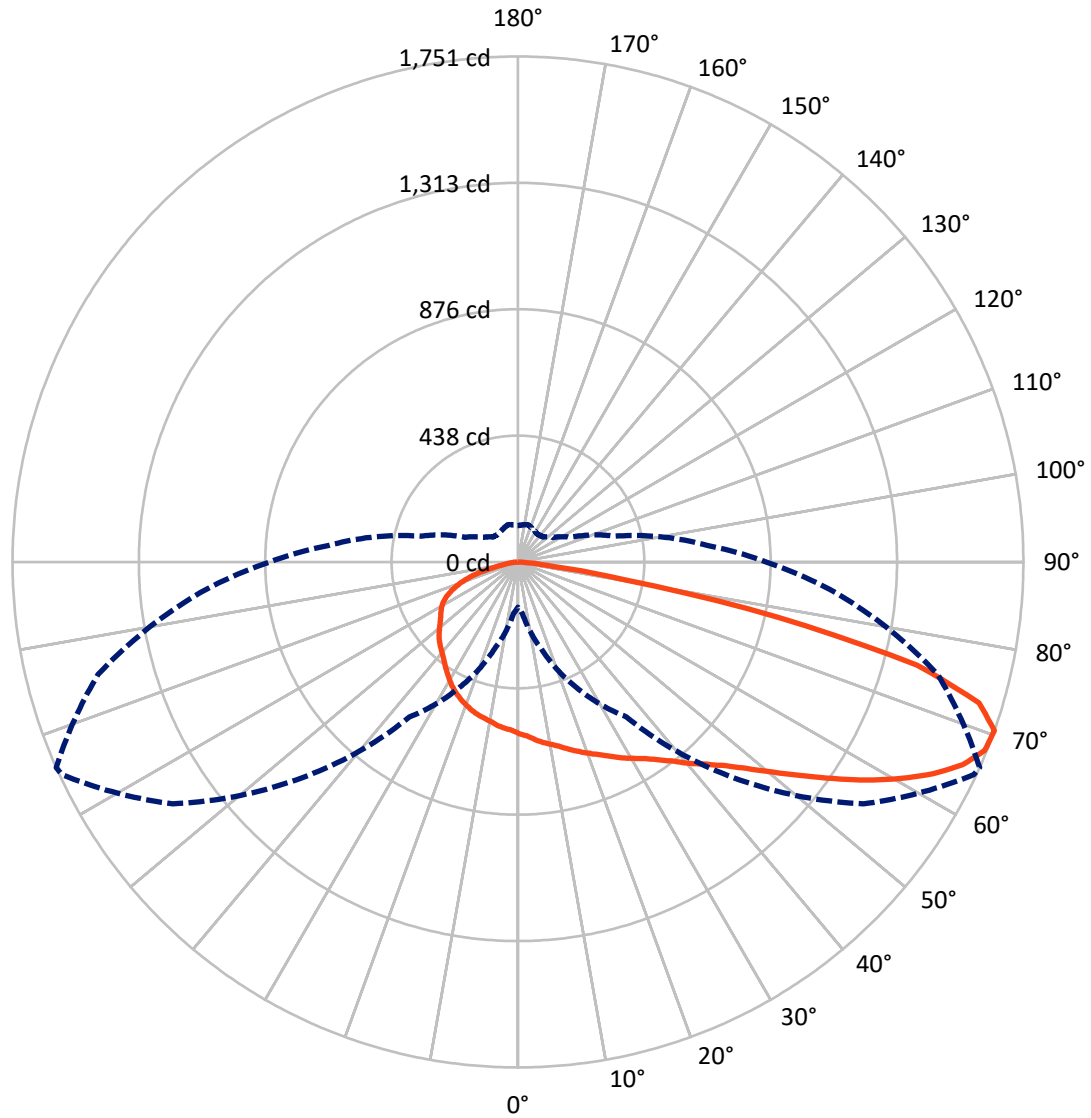
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P798599
CATALOG NUMBER: ARCH1-20-727-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P798599
 CATALOG NUMBER: ARCH1-20-727-U-T3

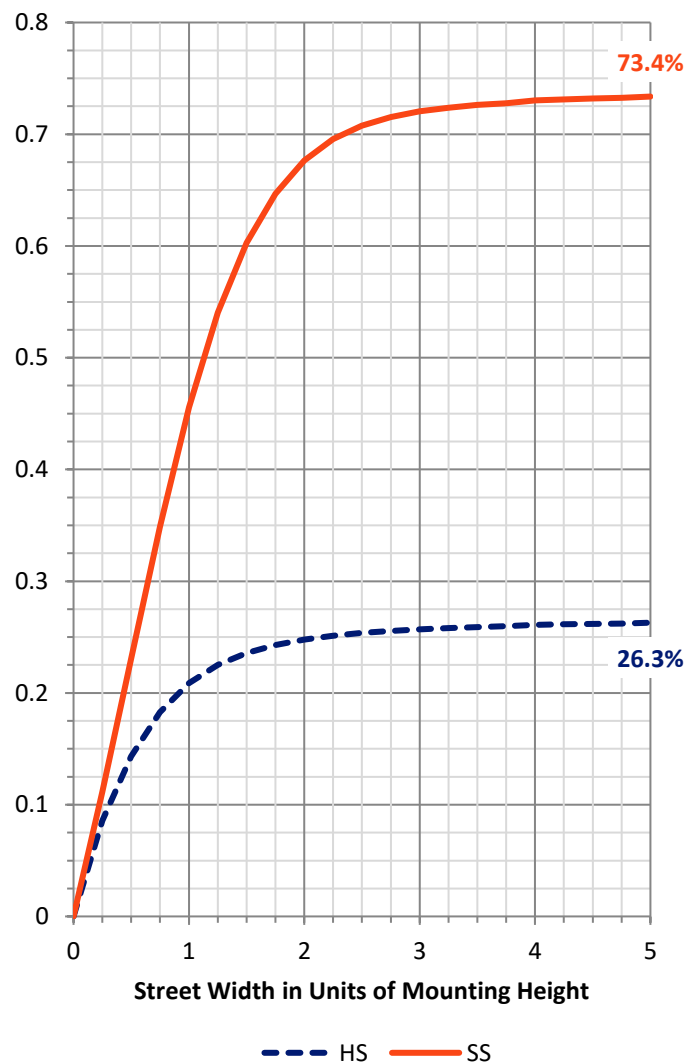
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	873.9	0.0	873.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	2424.1	0.0	2424.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	3298.0	0.0	3298.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	1.7
10°-20°	171.6	5.2
20°-30°	287.6	8.7
30°-40°	430.6	13.1
40°-50°	575.7	17.5
50°-60°	672.2	20.4
60°-70°	668.4	20.3
70°-80°	395.7	12.0
80°-90°	39.0	1.2
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°	3298.0	100.0
0°-180°	3298.0	100.0

Coefficient of Utilization

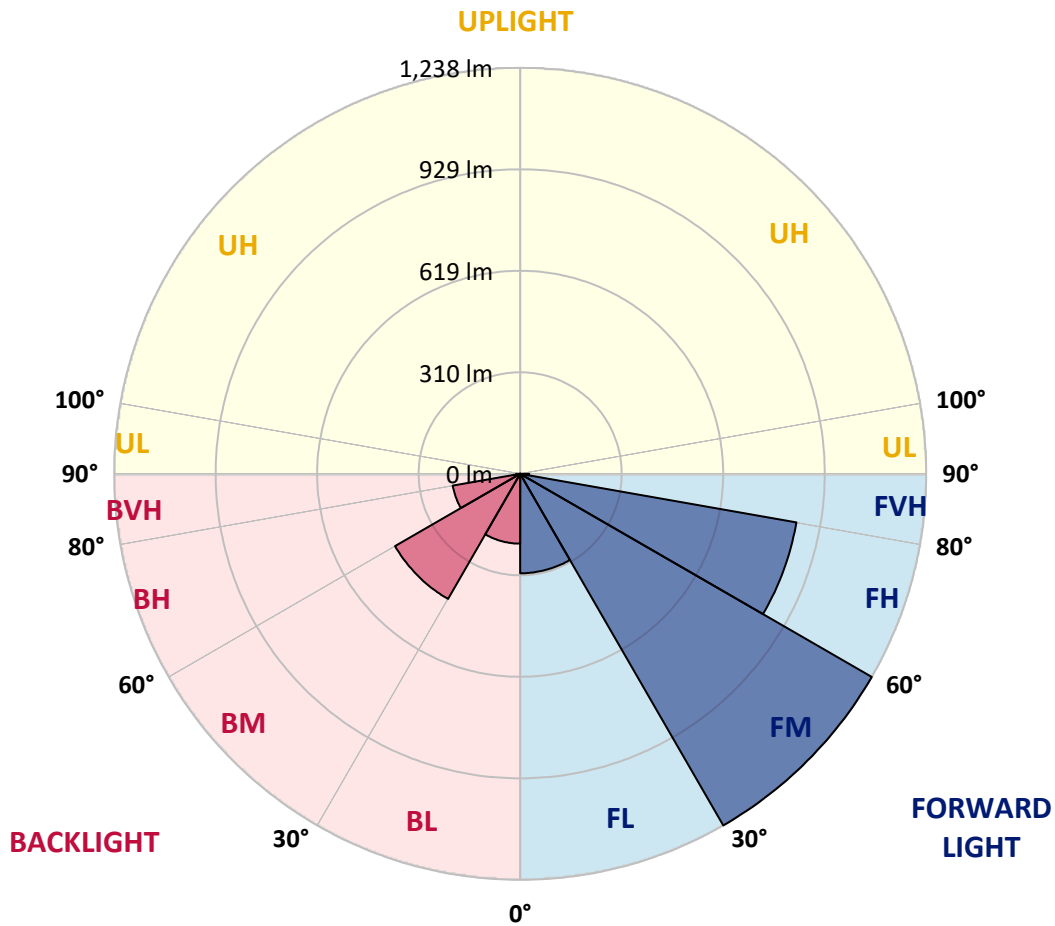


REPORT NUMBER: P798599
 CATALOG NUMBER: ARCH1-20-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	303.3	9.2			
FM (30°-60°)	1238.0	37.5			
FH (60°-80°)	855.3	25.9			G1/1800
FVH (80°-90°)	27.4	0.8			G1/100
BL (0°-30°)	213.0	6.5	B1/500		
BM (30°-60°)	440.5	13.4	B1/1000		
BH (60°-80°)	208.7	6.3	B1/500		G1/500
BVH (80°-90°)	11.6	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 III Medium



REPORT NUMBER: P798599
 CATALOG NUMBER: ARCH1-20-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2
2.5°	617.1	616.1	615.6	613.7	609.3	611.3	606.9	604.0	603.5	596.7	592.8
5°	642.4	641.9	640.9	638.0	631.2	632.2	624.9	619.5	618.1	607.4	599.1
7.5°	663.8	662.8	662.3	658.4	651.1	650.7	641.9	634.1	631.7	617.1	604.5
10°	680.3	678.9	679.8	675.9	668.2	666.7	655.5	645.3	642.9	624.4	606.9
12.5°	694.4	693.4	694.9	691.5	685.2	683.7	672.5	659.4	656.5	635.1	612.2
15°	710.0	706.6	709.5	708.0	703.7	703.2	693.0	678.4	674.5	648.7	620.5
17.5°	718.2	716.3	719.7	720.2	718.2	721.6	711.9	694.4	691.0	661.3	627.8
20°	724.1	721.2	725.1	728.0	729.4	736.2	728.5	711.4	707.5	673.5	634.6
22.5°	744.0	737.7	738.2	740.1	741.1	750.8	746.0	729.4	725.5	688.6	642.9
25°	794.1	781.5	773.2	767.4	760.6	768.8	765.9	749.9	746.4	706.6	653.1
27.5°	871.9	855.9	839.3	822.3	795.6	792.2	787.3	772.7	768.8	724.6	663.3
30°	960.4	944.4	924.9	897.7	847.6	821.3	810.2	794.1	789.7	740.6	673.0
32.5°	1048.4	1034.3	1014.9	981.8	910.3	856.8	833.0	816.5	812.1	758.1	684.7
35°	1117.0	1108.2	1095.6	1054.3	972.6	898.7	866.1	846.1	841.3	785.8	706.1
37.5°	1172.4	1166.1	1155.4	1112.1	1017.8	940.5	904.0	881.1	875.8	816.0	728.9
40°	1254.1	1237.6	1228.8	1166.1	1057.2	978.4	946.8	923.0	917.1	848.1	747.4
42.5°	1323.7	1311.5	1300.8	1214.3	1094.6	1011.0	987.2	965.3	957.5	879.7	767.4
45°	1335.3	1340.2	1334.9	1238.1	1154.0	1043.1	1028.0	1013.9	1006.6	922.5	797.5
47.5°	1335.8	1335.8	1304.2	1251.7	1227.4	1079.1	1071.8	1076.6	1068.9	976.9	833.5
50°	1300.8	1307.1	1290.6	1255.1	1246.8	1115.1	1125.3	1151.5	1143.7	1034.8	872.4
52.5°	1228.4	1249.3	1248.8	1249.8	1218.6	1145.7	1181.7	1241.5	1228.4	1100.0	913.7
55°	1100.5	1142.3	1179.7	1211.8	1194.3	1164.2	1250.7	1337.3	1323.7	1172.9	955.6
57.5°	991.1	1017.8	1064.5	1155.4	1165.6	1180.2	1315.4	1437.5	1425.3	1253.6	999.3
60°	866.1	903.0	949.7	1079.1	1130.6	1201.1	1386.4	1535.2	1523.5	1335.3	1041.6
62.5°	674.0	721.6	815.0	961.9	1079.6	1214.3	1442.3	1621.3	1615.9	1412.7	1079.6
65°	469.8	512.1	642.9	817.9	998.3	1208.4	1487.1	1698.1	1693.2	1475.9	1106.3
67.5°	274.3	323.4	471.2	658.4	854.9	1168.1	1501.7	1743.3	1743.3	1514.3	1113.6
70°	156.6	179.4	310.7	480.0	655.5	1056.7	1460.8	1742.8	1751.1	1505.5	1083.4
72.5°	109.4	119.6	209.1	322.9	444.5	854.9	1353.8	1658.7	1669.9	1422.9	980.4
75°	85.1	92.4	147.3	220.3	280.1	580.6	1119.9	1398.6	1428.2	1212.8	792.6
77.5°	64.7	70.0	86.1	137.6	179.4	333.6	739.2	917.1	919.1	742.6	425.0
80°	47.2	52.5	57.4	84.1	95.3	156.1	279.1	383.2	372.5	359.4	230.0
82.5°	28.2	33.6	35.0	45.7	46.7	66.6	97.7	123.5	118.7	158.0	108.0
85°	12.2	17.0	18.0	20.9	19.9	27.2	38.9	32.6	29.2	33.6	23.3
87.5°	2.9	4.9	4.9	5.3	4.4	6.8	7.3	5.3	4.9	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P798599
 CATALOG NUMBER: ARCH1-20-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2
2.5°	591.8	590.4	590.8	582.6	580.1	577.7	576.2	575.3	574.3	575.8	577.2
5°	596.2	592.8	588.9	576.7	571.9	566.5	562.6	559.2	557.8	557.8	559.2
7.5°	599.6	593.8	585.5	569.4	560.7	553.4	547.1	542.7	540.3	540.3	541.7
10°	600.1	591.8	578.7	559.2	547.6	536.9	529.6	524.7	521.3	521.3	522.3
12.5°	603.0	591.8	574.8	551.4	536.9	523.7	515.0	507.7	506.2	506.2	507.2
15°	607.9	594.2	572.4	544.6	527.1	512.1	502.3	494.6	491.6	493.6	494.1
17.5°	612.2	595.7	568.0	535.9	515.0	498.4	487.7	480.9	477.0	481.4	481.4
20°	615.2	595.7	561.7	524.7	501.8	483.4	473.2	464.9	462.0	467.3	467.8
22.5°	619.5	595.2	554.9	513.5	487.7	468.3	458.1	451.8	450.3	456.1	458.1
25°	624.4	596.2	547.6	500.9	472.2	453.2	445.4	442.5	443.5	450.8	453.2
27.5°	629.7	598.1	540.3	486.8	455.2	438.1	433.8	435.2	439.1	448.4	451.3
30°	634.6	598.6	530.1	470.2	435.7	419.7	421.6	427.9	433.8	443.0	446.4
32.5°	640.9	599.1	519.4	452.2	414.8	403.1	411.9	422.1	427.9	436.7	440.6
35°	656.5	607.4	511.1	434.7	395.4	389.0	403.6	416.7	420.2	427.9	431.3
37.5°	674.5	621.0	506.7	416.7	376.4	374.9	393.4	406.5	407.5	412.4	415.8
40°	685.7	626.8	501.8	401.7	359.4	360.3	379.3	389.5	387.6	391.0	393.4
42.5°	696.8	628.8	491.6	389.0	343.3	344.3	358.9	366.2	367.1	374.4	377.8
45°	715.8	634.1	480.5	377.4	328.7	325.3	334.1	343.8	356.4	370.5	374.4
47.5°	741.1	645.3	468.8	363.3	314.6	303.4	306.8	323.9	337.0	350.1	352.6
50°	766.9	656.5	458.1	346.2	300.5	280.1	281.6	297.1	307.8	318.0	319.5
52.5°	792.2	666.2	448.8	330.2	284.5	252.4	258.2	274.3	281.6	286.4	287.9
55°	817.4	674.5	440.6	316.6	266.0	230.5	235.8	250.9	258.2	260.6	261.6
57.5°	843.7	684.2	434.3	304.9	245.1	211.0	214.5	225.2	232.0	234.9	233.9
60°	865.6	692.5	430.8	292.7	224.2	193.1	192.1	201.8	211.5	214.5	213.5
62.5°	882.6	697.8	425.5	277.2	205.7	175.1	170.2	182.8	193.1	195.0	196.5
65°	891.8	698.3	412.4	257.2	186.7	155.6	152.2	164.9	171.2	173.1	173.1
67.5°	890.4	690.5	386.6	230.5	169.2	138.1	135.2	143.0	152.2	153.7	152.2
70°	860.2	658.4	345.3	202.3	148.3	122.5	117.2	125.0	133.7	128.4	125.9
72.5°	774.7	575.3	284.5	171.2	125.0	103.1	100.7	108.4	108.9	109.9	107.5
75°	611.3	428.4	213.0	133.2	101.1	86.6	86.1	84.6	86.6	90.4	87.5
77.5°	320.9	214.0	115.2	81.7	73.4	69.5	66.1	65.6	71.5	73.9	71.0
80°	174.1	120.1	66.1	49.1	44.7	45.2	49.6	48.6	55.0	56.4	54.0
82.5°	75.9	56.9	32.6	29.7	29.7	29.2	30.6	34.0	40.8	40.8	32.6
85°	16.5	14.1	12.6	14.6	16.5	16.5	16.5	16.5	11.7	6.3	4.4
87.5°	5.3	5.3	5.3	5.8	6.3	6.3	5.3	3.9	2.4	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)