

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: P265937

Luminaire Tested: **ARCH-AF24-40-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3200.6 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 40
Input Voltage (V): NR
Input Current (A_{in}): 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

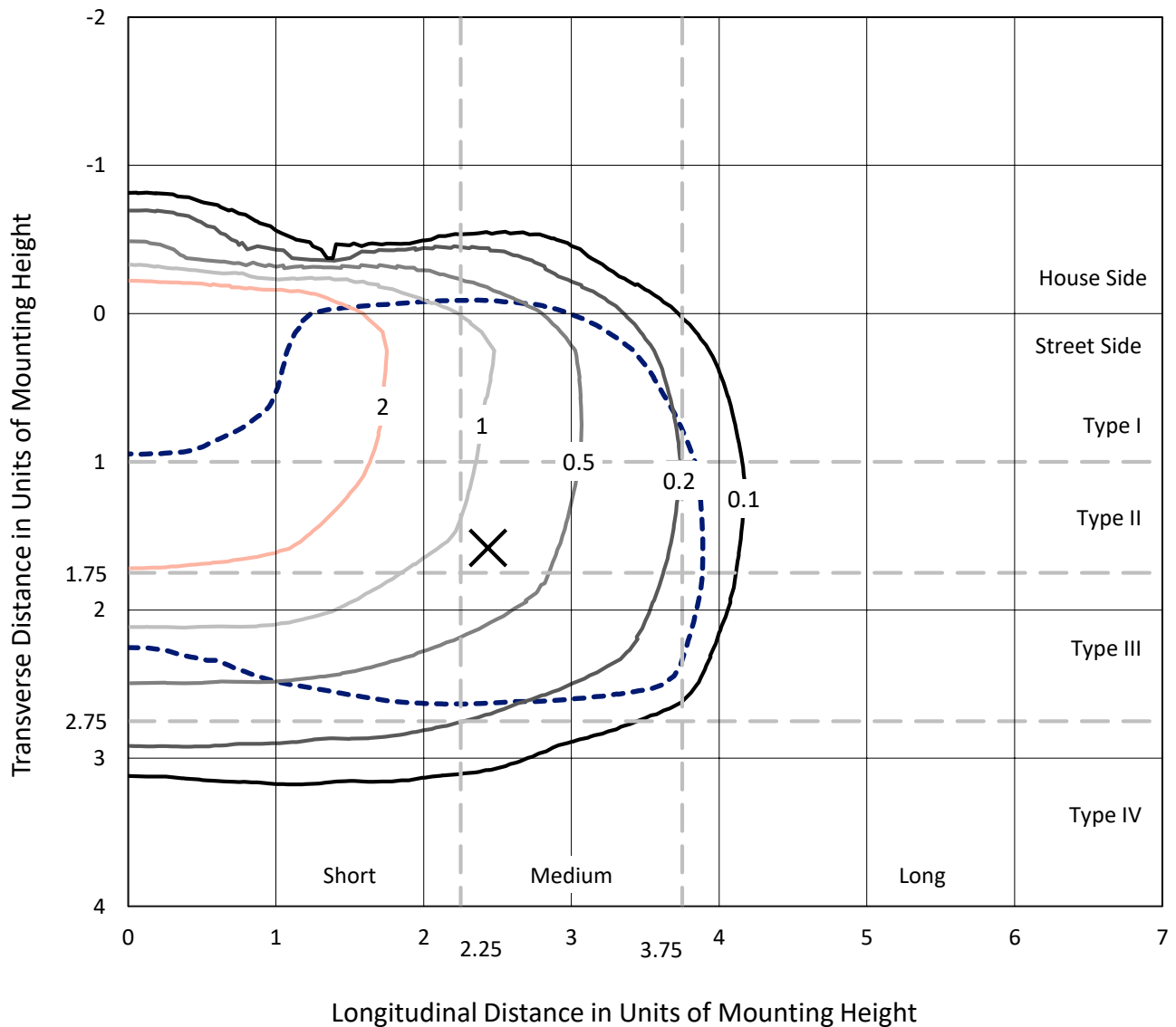


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

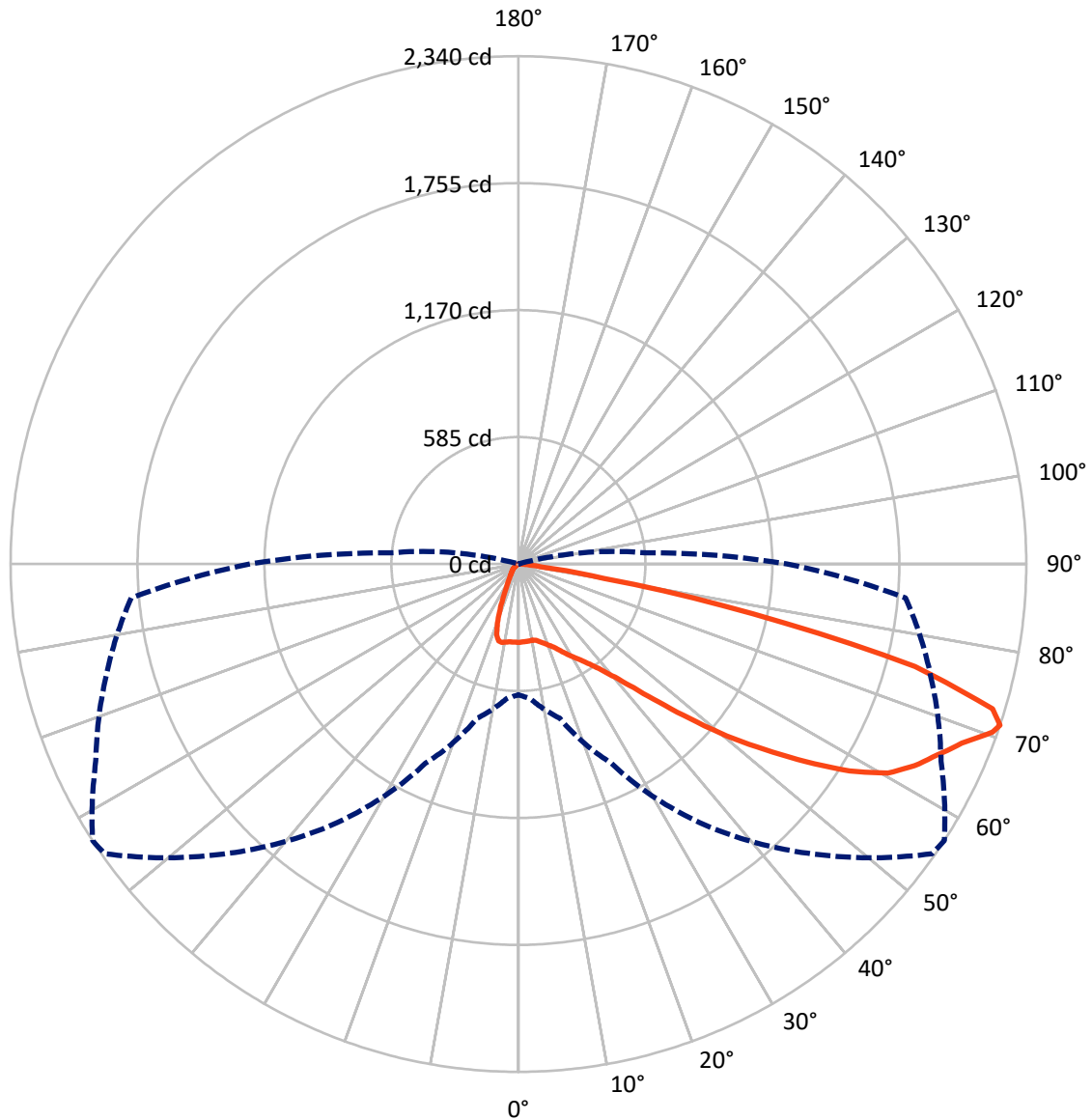


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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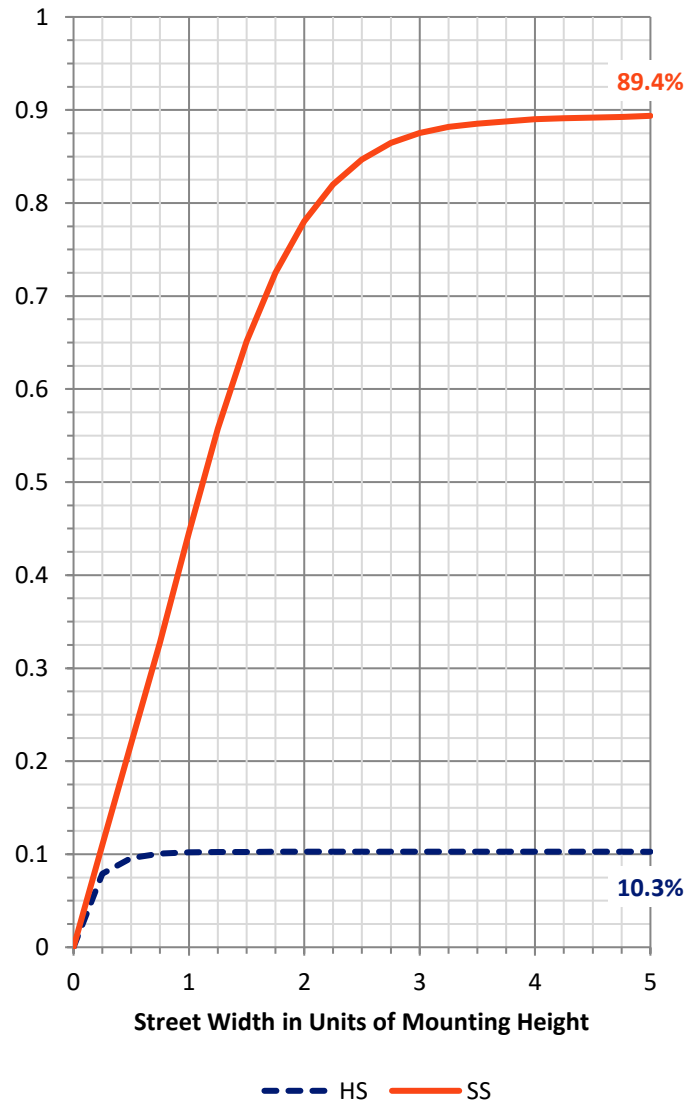
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	331.7	0.0	331.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	2868.9	0.0	2868.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	3200.6	0.0	3200.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.0	1.1
10°-20°	90.8	2.8
20°-30°	141.7	4.4
30°-40°	239.5	7.5
40°-50°	465.1	14.5
50°-60°	781.1	24.4
60°-70°	932.2	29.1
70°-80°	491.3	15.3
80°-90°	25.0	0.8
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°	3200.6	100.0
0°-180°	3200.6	100.0



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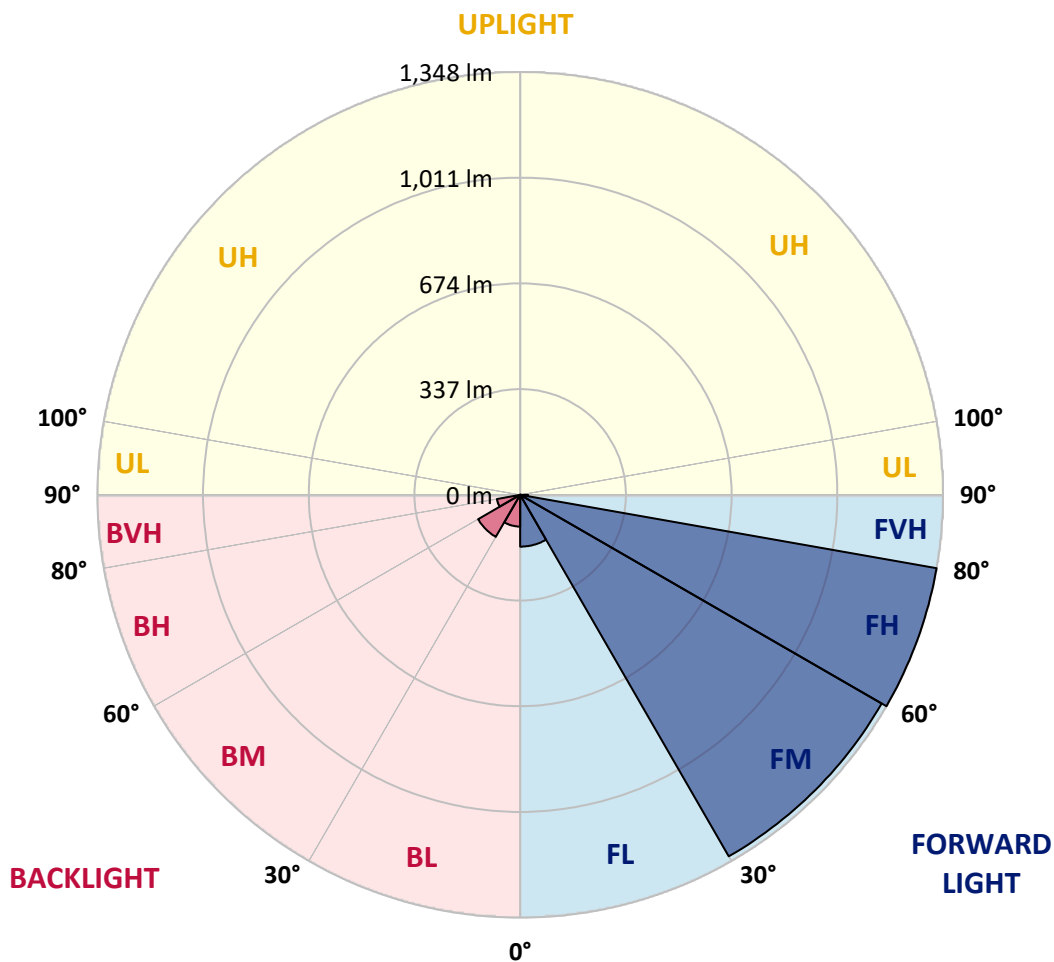
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	165.2	5.2			
FM	(30°-60°)	1330.8	41.6			
FH	(60°-80°)	1348.1	42.1			G1/1800
FVH	(80°-90°)	24.7	0.8			G1/100
BL	(0°-30°)	101.2	3.2	B0/110		
BM	(30°-60°)	154.9	4.8	B0/220		
BH	(60°-80°)	75.3	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	356.4	356.4	356.4	357.3	358.0	358.0	359.5	358.8	358.8	358.8	360.2
5°	346.7	347.6	348.4	349.8	352.8	355.0	358.8	358.8	359.5	360.9	361.7
7.5°	333.5	334.1	336.3	339.3	345.3	350.5	356.4	358.0	360.2	364.0	365.4
10°	325.1	326.7	329.7	333.5	340.1	346.7	354.2	356.4	363.3	369.9	373.6
12.5°	322.9	323.7	326.7	332.6	340.8	349.0	358.8	360.9	370.7	381.2	387.1
15°	326.7	327.4	328.9	335.5	345.3	355.8	368.5	371.4	383.3	395.3	402.7
17.5°	333.5	333.5	334.9	340.8	351.2	363.3	379.7	384.0	397.5	411.0	419.1
20°	337.9	337.9	340.1	346.0	358.0	373.6	393.1	398.9	413.8	428.9	436.2
22.5°	342.3	343.1	345.3	352.0	365.4	387.1	409.4	415.5	432.5	448.3	455.7
25°	355.0	354.2	355.0	360.9	376.6	403.5	431.8	439.4	457.1	474.3	478.1
27.5°	390.0	388.5	378.8	375.1	387.1	420.6	460.1	467.6	488.5	505.7	505.7
30°	470.6	467.6	443.8	413.2	403.5	436.2	487.1	497.4	524.3	539.3	534.8
32.5°	572.8	566.0	535.5	483.3	444.5	457.1	515.4	527.2	561.6	574.2	564.6
35°	684.7	683.9	645.9	578.8	523.5	500.4	551.9	566.0	609.3	620.5	604.9
37.5°	803.3	806.1	780.8	688.5	623.6	571.3	600.3	616.7	669.7	683.3	668.2
40°	935.2	934.4	924.9	815.2	743.5	672.0	670.5	685.3	749.5	770.4	749.5
42.5°	1102.3	1100.9	1065.7	967.4	889.1	803.3	772.6	777.9	849.4	883.8	853.2
45°	1272.4	1261.8	1221.7	1136.6	1067.2	965.8	907.6	907.6	968.8	1015.9	968.1
47.5°	1367.1	1356.6	1340.2	1293.2	1272.4	1159.1	1073.3	1062.8	1110.6	1158.3	1091.1
50°	1491.6	1491.6	1450.7	1432.6	1468.5	1388.7	1255.9	1245.5	1268.6	1306.7	1218.6
52.5°	1590.1	1572.2	1543.1	1558.7	1661.0	1624.3	1438.6	1418.6	1436.4	1446.1	1329.9
55°	1631.1	1614.0	1611.6	1669.1	1827.2	1776.5	1625.8	1608.0	1606.4	1558.7	1426.8
57.5°	1639.2	1624.3	1652.7	1753.4	1989.0	1901.1	1812.3	1798.9	1757.2	1637.8	1526.0
60°	1570.0	1577.3	1646.1	1799.7	2084.5	2009.1	1969.7	1955.5	1859.3	1705.0	1636.4
62.5°	1427.4	1445.5	1573.7	1804.2	2049.6	2053.3	2056.9	2047.2	1938.4	1766.1	1747.5
65°	1259.0	1264.2	1418.6	1742.3	1988.3	2039.8	2121.1	2120.3	1998.8	1834.7	1872.7
67.5°	1037.5	1046.3	1179.8	1533.3	1866.0	2033.9	2205.3	2203.2	2067.4	1913.0	1947.3
70°	772.0	783.1	891.3	1192.6	1593.1	1959.3	2315.7	2317.3	2139.8	1972.7	1895.9
71°	601.9	621.9	735.4	1012.7	1453.5	1883.9	2326.3	2339.5	2147.9	1964.5	1790.0
72.5°	295.4	319.2	461.6	713.0	1196.3	1715.4	2257.6	2283.8	2096.5	1862.2	1530.4
75°	76.8	81.2	138.0	291.6	641.4	1136.6	1820.5	1886.9	1713.8	1417.7	935.2
77.5°	48.5	49.9	64.9	113.4	240.1	431.8	1069.5	1102.3	979.2	718.3	329.7
80°	34.3	35.0	41.1	73.1	140.2	126.0	384.8	398.9	354.2	190.3	58.8
82.5°	20.9	20.9	29.9	47.0	86.4	68.6	101.4	108.2	95.5	53.0	19.5
85°	11.9	12.7	18.7	32.1	41.1	33.5	38.1	40.2	41.1	35.0	8.3
87.5°	9.7	10.4	16.3	26.9	22.4	16.3	16.3	17.2	17.8	20.9	3.8
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°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	360.2	360.2	360.9	360.2	360.2	360.2	360.9	360.9	360.9	362.5	363.3
5°	361.7	361.7	361.7	360.9	360.2	360.2	361.7	362.5	362.5	364.7	364.7
7.5°	365.4	365.4	364.0	362.5	360.9	358.8	359.5	360.2	359.5	360.2	360.2
10°	373.6	373.6	371.4	368.5	364.0	357.3	348.4	337.1	326.7	322.9	321.5
12.5°	387.1	386.4	381.9	376.6	367.0	343.8	310.3	270.7	238.0	229.0	226.0
15°	402.0	400.6	395.3	386.4	360.2	299.0	229.0	178.3	147.0	139.4	138.0
17.5°	417.6	415.5	408.0	390.0	329.7	222.2	147.7	111.8	94.7	93.2	94.0
20°	434.2	431.0	420.6	382.6	266.3	148.4	95.5	86.4	85.0	85.0	85.8
22.5°	452.7	449.0	434.8	355.8	193.9	98.5	82.0	81.2	80.6	79.8	79.8
25°	474.3	469.9	448.3	307.3	133.5	80.6	78.3	76.0	74.6	73.1	72.4
27.5°	500.4	494.4	458.7	247.7	91.7	75.3	73.8	70.1	67.2	64.0	64.0
30°	526.5	519.1	455.7	186.5	74.6	70.1	67.2	62.6	58.2	55.2	54.4
32.5°	554.2	546.7	436.2	125.4	67.8	64.0	60.5	53.7	48.5	44.7	43.9
35°	595.1	589.2	398.3	82.7	61.2	56.8	51.5	44.7	38.1	34.3	33.5
37.5°	656.3	648.8	351.2	63.4	53.7	47.0	42.5	35.0	28.3	24.7	23.9
40°	738.3	715.9	295.4	56.0	47.0	38.7	32.8	25.3	20.1	17.8	17.8
42.5°	833.7	780.8	234.9	50.8	41.9	32.1	23.9	17.2	14.2	13.5	13.5
45°	935.2	841.3	174.5	47.0	36.6	25.3	17.2	11.9	10.4	9.7	9.7
47.5°	1039.7	890.5	121.6	42.5	30.6	19.5	11.9	9.0	7.5	6.6	6.6
50°	1137.3	922.6	85.8	38.1	26.1	14.2	9.0	6.6	5.2	5.2	5.2
52.5°	1205.3	919.5	62.0	32.8	20.1	9.7	6.0	4.5	4.5	4.5	4.5
55°	1265.0	908.4	48.5	28.3	15.7	6.6	4.5	3.8	3.8	3.0	3.0
57.5°	1315.6	890.5	41.1	23.1	11.1	5.2	3.0	3.0	2.2	2.2	2.2
60°	1358.9	868.1	34.3	19.5	7.5	3.8	2.2	1.4	1.4	0.8	1.4
62.5°	1417.7	854.0	29.9	14.9	5.2	2.2	1.4	0.8	0.8	0.0	0.0
65°	1461.1	827.1	25.3	10.4	3.0	1.4	0.8	0.8	0.0	0.0	0.0
67.5°	1462.5	778.7	18.7	6.0	2.2	1.4	0.8	0.0	0.0	0.0	0.0
70°	1344.8	663.8	11.9	3.0	1.4	0.8	0.8	0.0	0.0	0.0	0.0
71°	1236.5	587.8	9.7	2.2	1.4	0.8	0.0	0.0	0.0	0.0	0.0
72.5°	1018.8	431.8	7.5	2.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0
75°	561.6	156.7	3.8	1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	179.8	47.7	2.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	30.6	7.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.4	3.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.8	0.0	0.0	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)