

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: P234730

Luminaire Tested: **ARCH-AF24-30-D-U-T3-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234730
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-AF24-30-D-U-T3-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 375mA 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: 2218 lumens
Efficiency: N/A
Efficacy: 71.5 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): 31
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

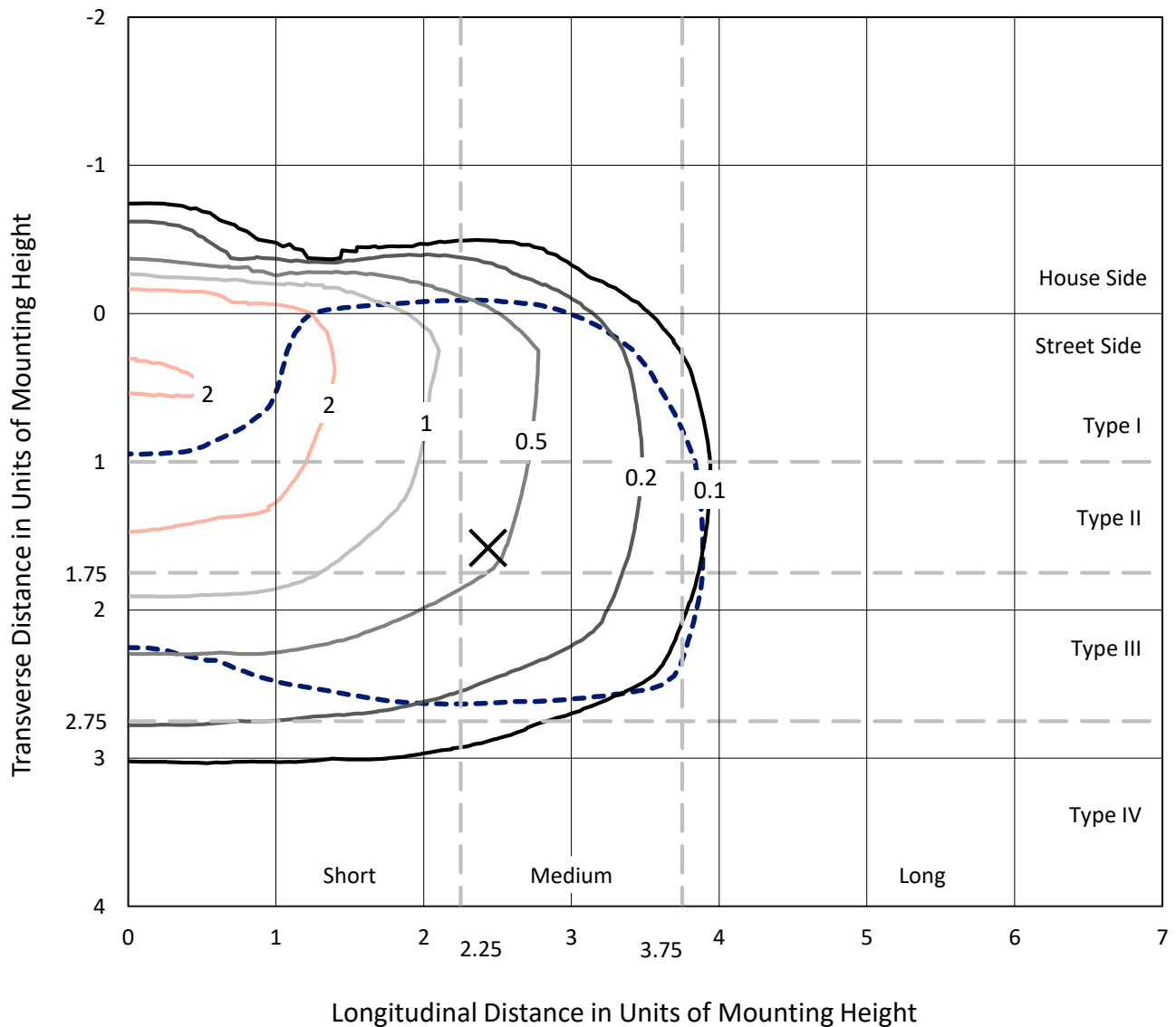


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

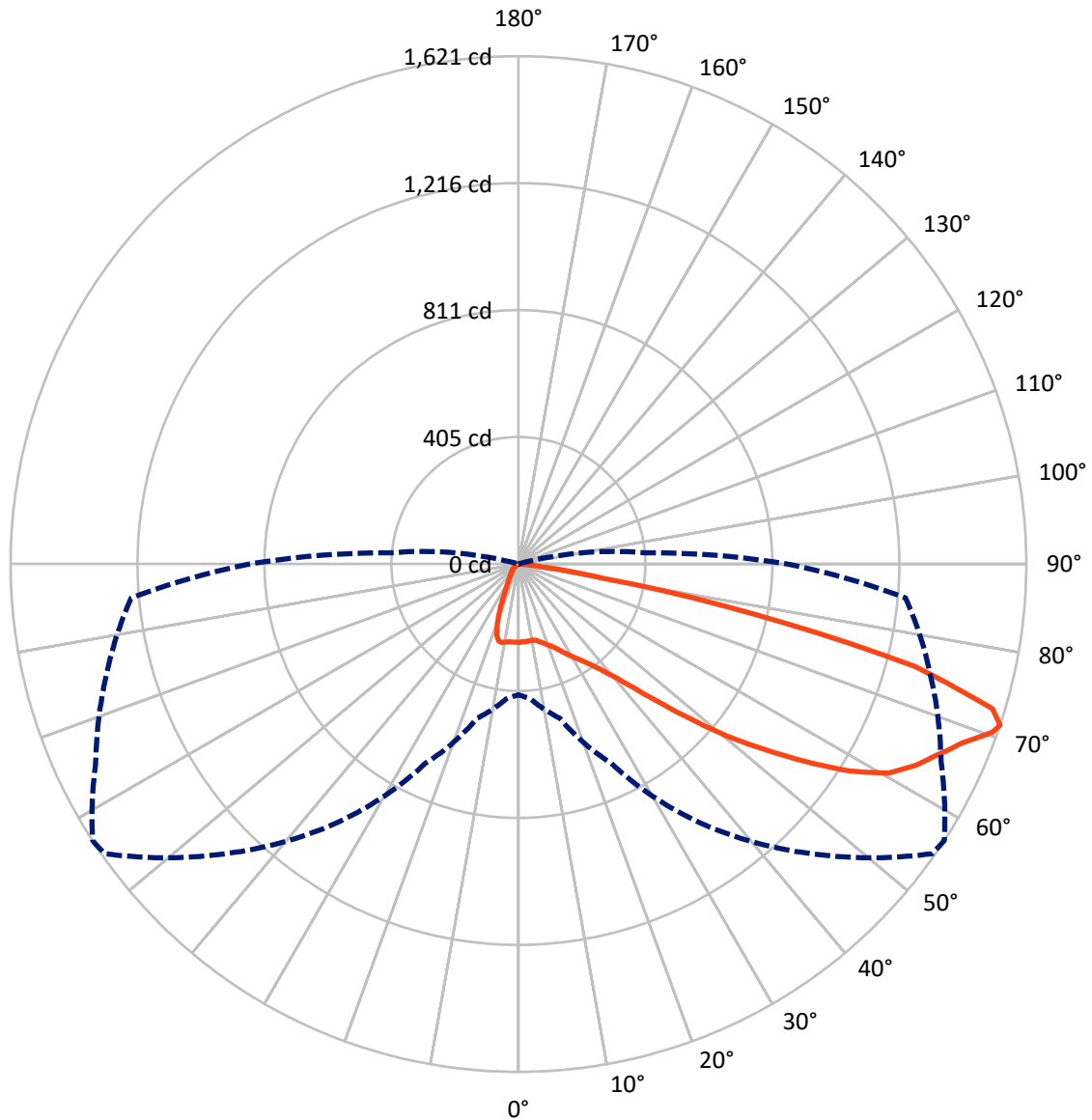


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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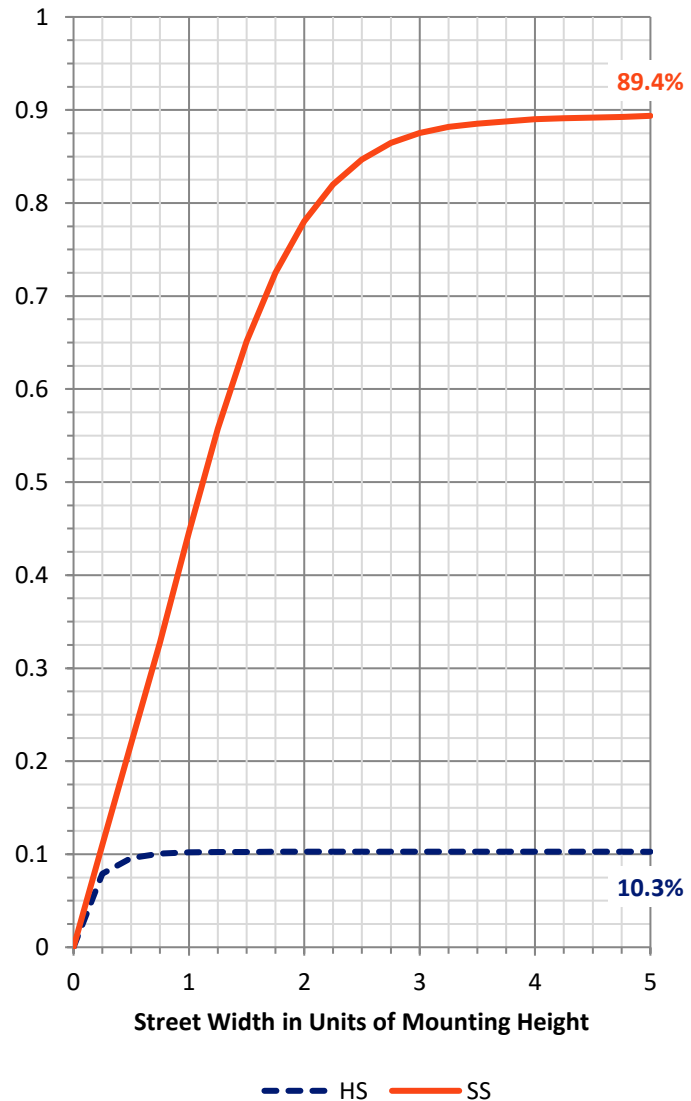
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	229.9	0.0	229.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	1988.1	0.0	1988.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	2218.0	0.0	2218.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	1.1
10°-20°	62.9	2.8
20°-30°	98.2	4.4
30°-40°	166.0	7.5
40°-50°	322.3	14.5
50°-60°	541.3	24.4
60°-70°	646.0	29.1
70°-80°	340.4	15.3
80°-90°	17.3	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°	2218.0	100.0
0°-180°	2218.0	100.0



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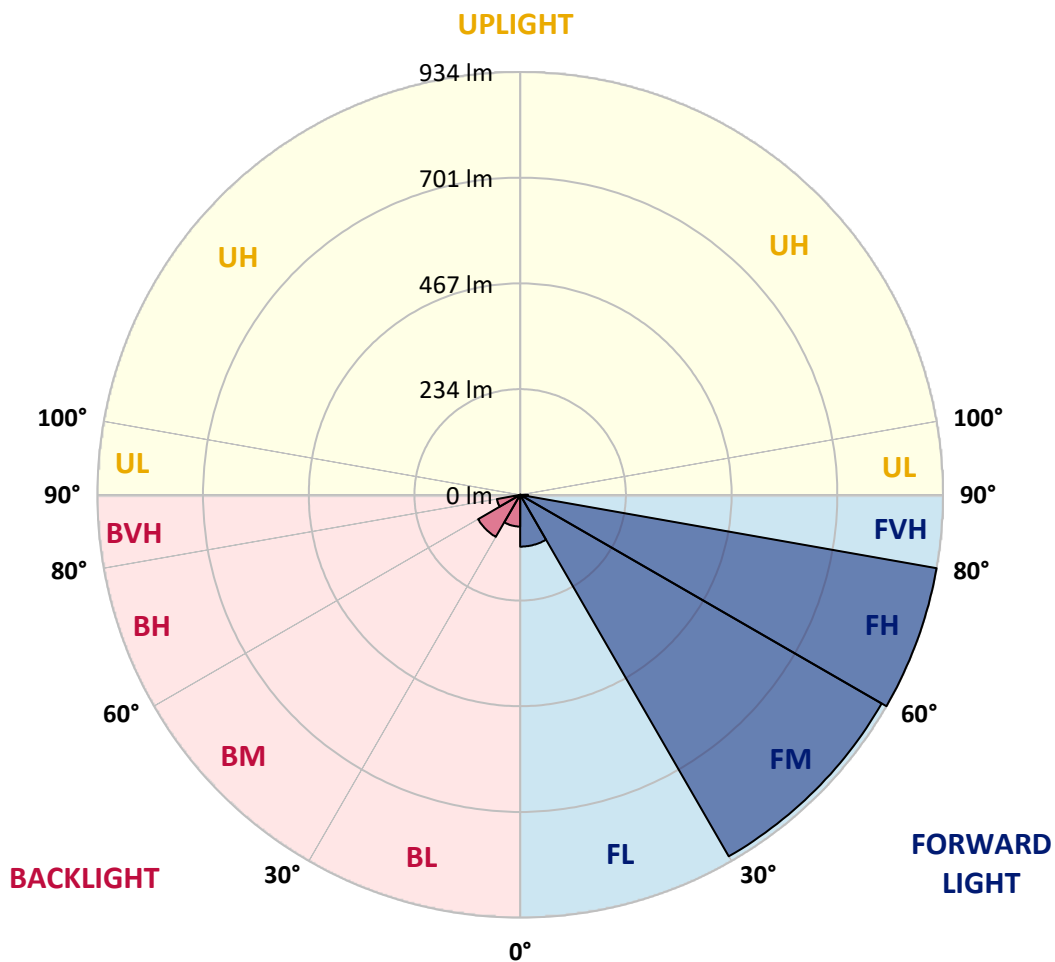
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	114.5	5.2			
FM	(30°-60°)	922.3	41.6			
FH	(60°-80°)	934.2	42.1			G1/1800
FVH	(80°-90°)	17.1	0.8			G1/100
BL	(0°-30°)	70.2	3.2	B0/110		
BM	(30°-60°)	107.3	4.8	B0/220		
BH	(60°-80°)	52.2	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°	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
2.5°	247.0	247.0	247.0	247.6	248.1	248.1	249.1	248.6	248.6	248.6	249.6
5°	240.3	240.8	241.4	242.4	244.5	246.0	248.6	248.6	249.1	250.2	250.7
7.5°	231.0	231.5	233.1	235.2	239.3	242.9	247.0	248.1	249.6	252.2	253.3
10°	225.3	226.4	228.4	231.0	235.7	240.3	245.5	247.0	251.7	256.4	258.9
12.5°	223.8	224.3	226.4	230.5	236.2	241.9	248.6	250.2	256.9	264.1	268.2
15°	226.4	226.9	227.9	232.6	239.3	246.5	255.3	257.4	265.7	273.9	279.1
17.5°	231.0	231.0	232.1	236.2	243.4	251.7	263.1	266.2	275.5	284.8	290.5
20°	234.1	234.1	235.7	239.8	248.1	258.9	272.4	276.5	286.8	297.2	302.4
22.5°	237.2	237.7	239.3	243.9	253.3	268.2	283.7	287.9	299.8	310.6	315.8
25°	246.0	245.5	246.0	250.2	261.0	279.6	299.3	304.4	316.8	328.7	331.3
27.5°	270.3	269.3	262.6	260.0	268.2	291.5	318.9	324.1	338.5	350.4	350.4
30°	326.1	324.1	307.5	286.3	279.6	302.4	337.5	344.7	363.3	373.7	370.6
32.5°	396.9	392.3	371.1	334.9	308.0	316.8	357.1	365.4	389.2	398.0	391.2
35°	474.5	473.9	447.6	401.1	362.8	346.8	382.5	392.3	422.3	430.0	419.2
37.5°	556.6	558.7	541.1	477.0	432.1	395.9	416.1	427.4	464.1	473.4	463.1
40°	648.1	647.6	640.9	564.9	515.3	465.7	464.6	475.0	519.4	533.9	519.4
42.5°	763.9	762.9	738.6	670.3	616.1	556.6	535.4	539.1	588.7	612.5	591.3
45°	881.7	874.5	846.6	787.7	739.6	669.3	629.0	629.0	671.4	703.9	670.9
47.5°	947.4	940.1	928.8	896.2	881.7	803.2	743.7	736.5	769.6	802.7	756.1
50°	1033.7	1033.7	1005.3	992.9	1017.7	962.4	870.4	863.1	879.1	905.5	844.5
52.5°	1101.9	1089.5	1069.3	1080.2	1151.0	1125.7	997.0	983.0	995.4	1002.2	921.5
55°	1130.3	1118.4	1116.9	1156.7	1266.3	1231.1	1126.7	1114.3	1113.3	1080.2	988.7
57.5°	1136.0	1125.7	1145.3	1215.1	1378.4	1317.4	1255.9	1246.6	1217.7	1135.0	1057.5
60°	1087.9	1093.1	1140.7	1247.1	1444.6	1392.4	1365.0	1355.2	1288.5	1181.5	1133.9
62.5°	989.2	1001.6	1090.5	1250.2	1420.3	1422.9	1425.4	1418.7	1343.3	1223.9	1211.0
65°	872.4	876.0	983.0	1207.3	1377.9	1413.6	1469.9	1469.4	1385.1	1271.4	1297.8
67.5°	718.9	725.1	817.6	1062.6	1293.1	1409.4	1528.3	1526.7	1432.7	1325.7	1349.5
70°	534.9	542.7	617.6	826.4	1104.0	1357.7	1604.8	1605.8	1482.8	1367.0	1313.8
71°	417.1	431.0	509.6	701.9	1007.3	1305.5	1612.0	1621.3	1488.5	1361.4	1240.4
72.5°	204.7	221.2	319.9	494.1	829.0	1188.7	1564.5	1582.6	1452.8	1290.6	1060.6
75°	53.2	56.3	95.6	202.1	444.5	787.7	1261.6	1307.6	1187.7	982.5	648.1
77.5°	33.6	34.6	45.0	78.6	166.4	299.3	741.1	763.9	678.6	497.7	228.4
80°	23.8	24.3	28.4	50.7	97.2	87.3	266.7	276.5	245.5	131.8	40.8
82.5°	14.5	14.5	20.7	32.6	60.0	47.5	70.3	74.9	66.2	36.7	13.4
85°	8.3	8.8	12.9	22.2	28.4	23.3	26.4	27.9	28.4	24.3	5.7
87.5°	6.7	7.2	11.4	18.6	15.5	11.4	11.4	11.9	12.4	14.5	2.6
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°	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
2.5°	249.6	249.6	250.2	249.6	249.6	249.6	250.2	250.2	250.2	251.2	251.7
5°	250.7	250.7	250.7	250.2	249.6	249.6	250.7	251.2	251.2	252.7	252.7
7.5°	253.3	253.3	252.2	251.2	250.2	248.6	249.1	249.6	249.1	249.6	249.6
10°	258.9	258.9	257.4	255.3	252.2	247.6	241.4	233.6	226.4	223.8	222.8
12.5°	268.2	267.7	264.6	261.0	254.3	238.3	215.0	187.6	164.9	158.7	156.6
15°	278.6	277.5	273.9	267.7	249.6	207.3	158.7	123.5	101.8	96.6	95.6
17.5°	289.4	287.9	282.7	270.3	228.4	154.0	102.3	77.5	65.6	64.6	65.1
20°	300.8	298.7	291.5	265.1	184.5	102.9	66.2	60.0	58.9	58.9	59.4
22.5°	313.7	311.1	301.3	246.5	134.4	68.2	56.9	56.3	55.8	55.3	55.3
25°	328.7	325.6	310.6	212.9	92.5	55.8	54.3	52.7	51.7	50.7	50.1
27.5°	346.8	342.7	317.9	171.6	63.6	52.2	51.2	48.6	46.5	44.4	44.4
30°	364.9	359.7	315.8	129.2	51.7	48.6	46.5	43.4	40.3	38.2	37.7
32.5°	384.0	378.8	302.4	86.8	47.0	44.4	41.9	37.2	33.6	31.0	30.5
35°	412.4	408.3	276.0	57.4	42.4	39.3	35.7	31.0	26.4	23.8	23.3
37.5°	454.8	449.7	243.4	43.9	37.2	32.6	29.5	24.3	19.6	17.1	16.5
40°	511.7	496.2	204.7	38.8	32.6	26.9	22.7	17.6	14.0	12.4	12.4
42.5°	577.8	541.1	162.8	35.1	28.9	22.2	16.5	11.9	9.8	9.3	9.3
45°	648.1	583.0	120.9	32.6	25.3	17.6	11.9	8.3	7.2	6.7	6.7
47.5°	720.5	617.1	84.2	29.5	21.2	13.4	8.3	6.2	5.2	4.7	4.7
50°	788.2	639.3	59.4	26.4	18.1	9.8	6.2	4.7	3.6	3.6	3.6
52.5°	835.2	637.3	42.9	22.7	14.0	6.7	4.1	3.1	3.1	3.1	3.1
55°	876.6	629.5	33.6	19.6	10.9	4.7	3.1	2.6	2.6	2.1	2.1
57.5°	911.7	617.1	28.4	16.0	7.8	3.6	2.1	2.1	1.6	1.6	1.6
60°	941.7	601.6	23.8	13.4	5.2	2.6	1.6	1.0	1.0	0.5	1.0
62.5°	982.5	591.8	20.7	10.3	3.6	1.6	1.0	0.5	0.5	0.0	0.0
65°	1012.5	573.2	17.6	7.2	2.1	1.0	0.5	0.5	0.0	0.0	0.0
67.5°	1013.5	539.6	12.9	4.1	1.6	1.0	0.5	0.0	0.0	0.0	0.0
70°	931.9	460.0	8.3	2.1	1.0	0.5	0.5	0.0	0.0	0.0	0.0
71°	856.9	407.3	6.7	1.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	706.0	299.3	5.2	1.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	389.2	108.5	2.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	124.6	33.1	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.2	5.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.2	2.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)