

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: P257692

Luminaire Tested: **ARCH-AF24-20-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257692
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-AF24-20-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 260mA 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: 1984.5 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G0

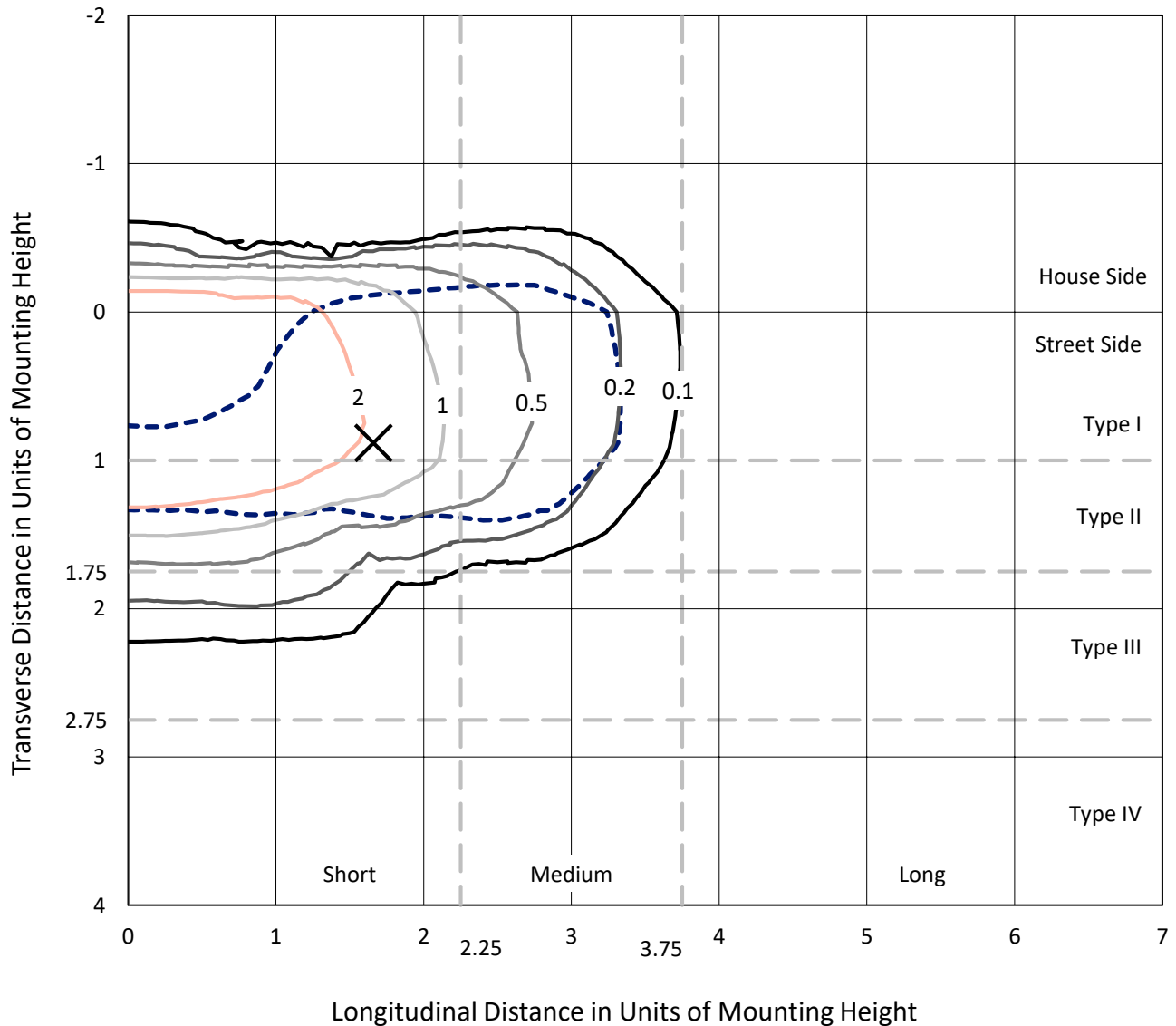
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

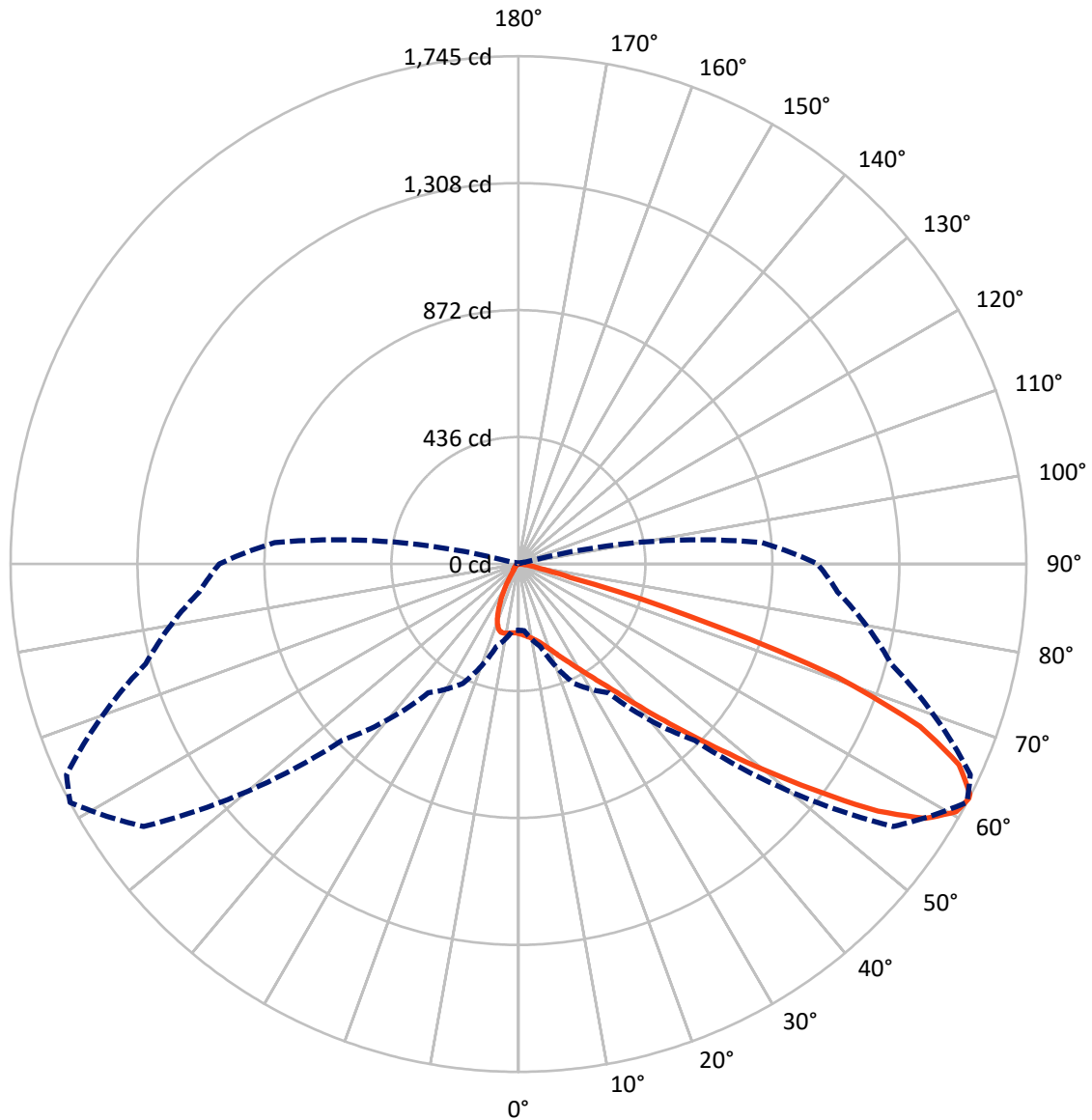
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 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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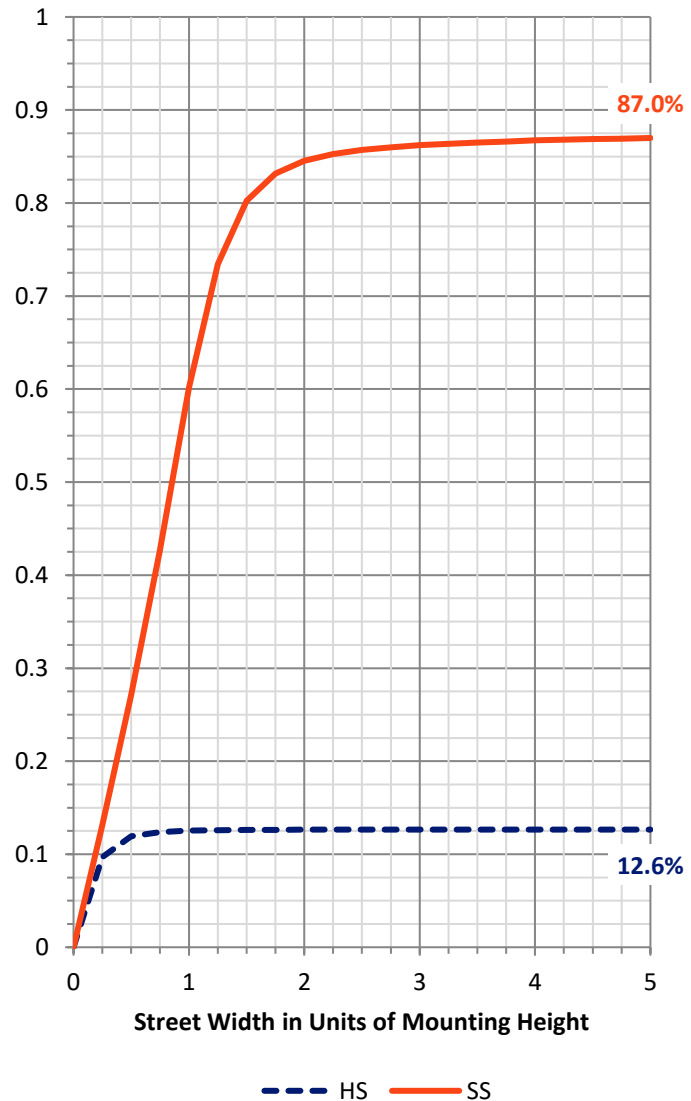
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	253.7	0.0	253.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1730.8	0.0	1730.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	1984.5	0.0	1984.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	1.2
10°-20°	64.2	3.2
20°-30°	107.9	5.4
30°-40°	206.8	10.4
40°-50°	422.5	21.3
50°-60°	559.1	28.2
60°-70°	434.3	21.9
70°-80°	156.8	7.9
80°-90°	10.0	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°	1984.5	100.0
0°-180°	1984.5	100.0



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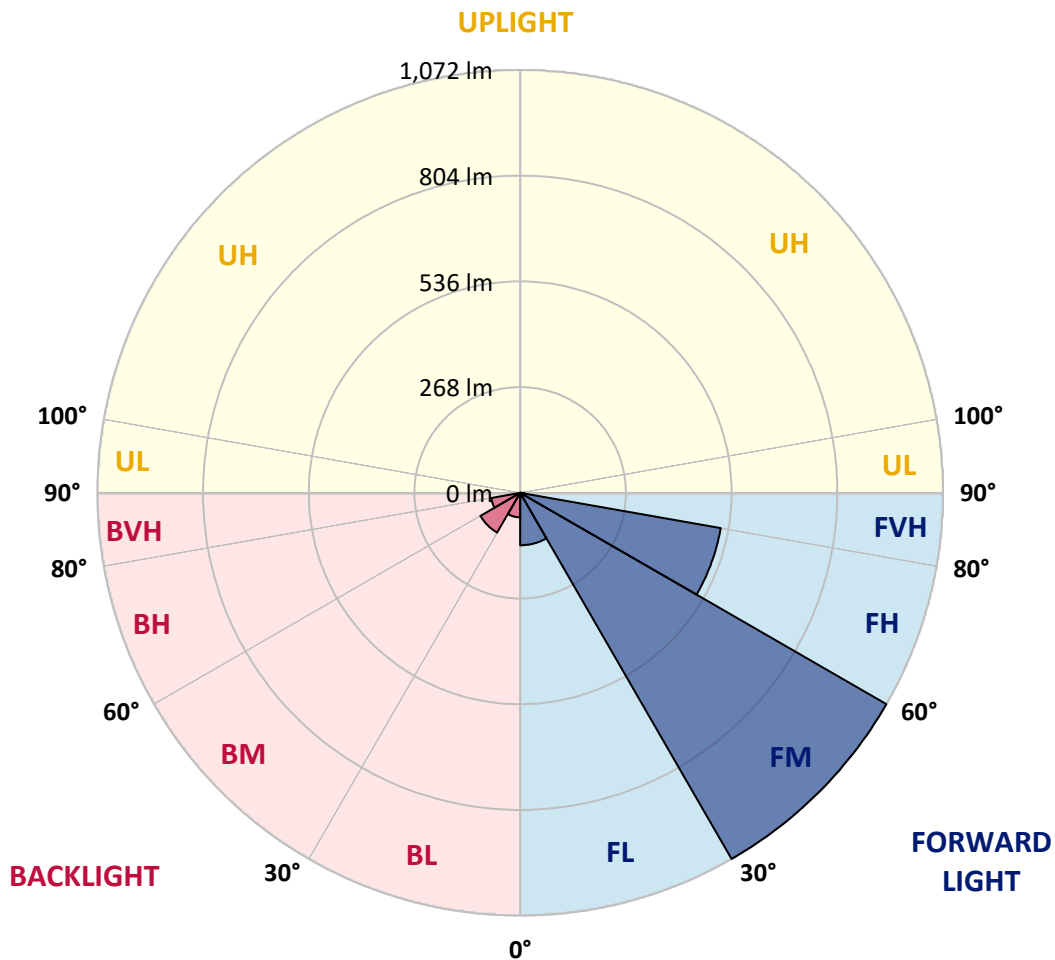
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	133.0	6.7			
FM	(30°-60°)	1071.9	54.0			
FH	(60°-80°)	516.3	26.0			G0/660
FVH	(80°-90°)	9.6	0.5			G0/10
BL	(0°-30°)	62.1	3.1	B0/110		
BM	(30°-60°)	116.5	5.9	B0/220		
BH	(60°-80°)	74.7	3.8	B0/110		G0/110
BVH	(80°-90°)	0.4	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-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	245.4	244.9	244.4	244.0	244.0	243.5	243.0	242.0	241.0	240.1	239.6
5°	249.8	249.3	248.8	249.3	248.8	248.8	248.4	247.3	246.4	244.9	243.5
7.5°	253.2	252.8	252.3	252.8	253.2	253.7	254.2	253.2	252.8	250.7	249.3
10°	257.6	257.1	256.7	257.6	257.6	260.0	260.5	260.0	259.5	258.1	255.6
12.5°	263.9	264.4	264.4	265.5	266.4	269.3	270.3	268.8	268.8	266.9	263.9
15°	275.7	275.7	275.7	276.6	277.1	281.0	282.0	280.5	281.5	278.1	275.2
17.5°	286.8	287.3	288.4	290.3	290.3	293.7	295.6	295.6	297.6	293.2	289.3
20°	298.1	298.6	300.0	304.4	304.4	308.8	312.2	313.7	315.7	311.3	304.4
22.5°	310.3	310.3	312.7	319.6	318.1	326.8	333.2	335.6	337.6	331.7	321.0
25°	328.9	326.8	328.9	335.2	334.2	346.4	358.1	360.6	362.9	356.2	340.0
27.5°	364.0	361.0	354.2	354.7	354.7	368.9	385.4	388.8	390.3	384.4	364.5
30°	434.2	434.2	408.9	391.8	380.5	393.2	416.6	422.5	424.4	415.6	389.3
32.5°	556.7	556.7	509.8	466.5	424.0	424.0	450.8	461.6	463.5	453.3	422.5
35°	712.8	711.8	641.6	582.1	499.1	467.9	490.8	508.8	514.7	501.0	465.4
37.5°	878.7	872.4	796.7	728.4	614.7	538.2	544.9	568.9	574.3	563.0	521.1
40°	1013.3	1006.0	945.0	887.9	764.0	650.4	623.0	645.0	651.3	635.7	587.4
42.5°	1135.3	1117.3	1075.3	1034.3	935.8	844.5	726.9	735.7	742.6	726.0	662.1
45°	1223.7	1195.8	1174.3	1161.7	1109.5	1057.7	861.6	844.0	846.5	826.0	743.5
47.5°	1226.0	1206.6	1208.5	1241.7	1263.1	1261.2	1036.8	974.3	965.1	930.9	830.3
50°	1109.0	1120.1	1155.8	1250.5	1366.6	1436.8	1245.0	1128.5	1100.7	1039.2	916.8
52.5°	913.8	931.4	998.2	1157.8	1381.7	1552.4	1461.2	1304.6	1254.9	1146.5	983.1
55°	715.8	716.7	787.0	949.4	1280.7	1573.4	1634.0	1498.3	1422.2	1228.0	1026.9
57.5°	492.2	519.1	608.3	717.7	1052.8	1469.1	1698.8	1648.6	1550.5	1278.3	1057.7
60°	322.5	324.0	427.9	554.2	716.7	1195.3	1659.3	1728.1	1654.4	1308.0	1078.7
62°	227.4	229.8	294.2	452.8	540.1	856.7	1572.0	1744.6	1712.9	1325.5	1100.7
62.5°	210.7	212.7	266.9	427.4	507.4	768.4	1540.8	1740.8	1721.7	1331.5	1108.5
65°	154.7	154.7	174.6	293.7	371.7	415.2	1305.6	1663.2	1710.1	1378.2	1137.7
67.5°	119.5	120.5	127.4	181.0	280.5	251.7	833.3	1488.5	1588.0	1447.6	1154.3
70°	102.9	102.5	107.3	120.0	202.4	167.4	366.9	1161.7	1329.9	1430.0	1139.2
72.5°	76.1	76.6	87.8	105.4	141.0	108.8	165.9	616.6	862.6	1119.2	976.2
75°	48.8	49.3	62.0	83.0	101.5	71.2	95.6	183.9	353.2	620.6	597.2
77.5°	32.7	33.7	40.5	58.1	88.8	44.4	60.0	77.1	106.4	232.7	214.2
80°	22.0	22.0	25.9	39.1	56.1	37.0	32.2	51.2	55.1	72.2	36.1
82.5°	14.6	14.6	17.1	25.9	36.6	33.1	19.5	27.8	32.2	36.1	12.7
85°	8.8	8.8	11.7	16.1	23.9	18.5	12.7	15.7	16.6	22.9	6.9
87.5°	5.3	4.9	7.8	11.3	12.7	11.3	8.3	8.3	8.8	12.7	3.4
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°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	238.6	238.0	237.6	236.6	235.2	234.2	233.2	232.2	231.3	231.3	232.7
5°	243.0	241.5	239.6	237.6	234.7	232.7	231.3	229.3	228.3	228.3	228.8
7.5°	248.4	246.8	243.5	240.1	235.7	232.2	228.8	224.4	221.1	219.5	221.1
10°	254.2	252.3	247.3	242.0	237.1	228.3	217.1	203.5	191.7	186.4	188.8
12.5°	261.5	259.1	253.2	245.9	234.7	213.2	185.4	153.6	133.7	124.4	126.3
15°	272.2	268.8	260.5	249.3	224.4	178.1	132.7	96.2	77.5	69.8	70.8
17.5°	284.9	280.5	269.3	248.4	198.0	128.3	79.1	56.1	48.3	46.3	46.3
20°	298.6	292.8	278.1	241.0	158.0	80.5	49.3	43.0	40.0	38.6	38.6
22.5°	312.7	304.9	285.4	223.9	112.7	50.2	40.5	36.1	32.7	31.2	31.2
25°	329.8	319.6	292.8	194.2	71.7	40.5	34.7	30.3	26.8	24.9	25.4
27.5°	349.8	336.7	299.1	157.1	46.3	35.1	28.7	24.3	21.5	20.5	20.5
30°	370.8	355.2	300.5	117.5	37.5	30.3	23.9	20.0	18.0	17.1	17.1
32.5°	399.6	379.1	296.1	78.1	31.7	25.4	20.0	16.6	15.1	14.6	14.6
35°	437.6	410.3	285.9	48.3	26.8	21.0	16.6	14.6	13.2	12.7	12.7
37.5°	485.9	453.7	267.8	33.1	22.9	17.1	14.1	12.7	11.7	11.3	11.3
40°	550.3	506.5	244.4	28.7	19.5	14.6	12.2	11.3	10.2	10.2	10.2
42.5°	618.7	570.3	214.2	25.4	16.6	12.7	10.7	9.7	9.3	8.8	8.8
45°	693.3	635.7	176.7	22.4	14.1	11.3	9.7	8.3	7.8	7.8	7.8
47.5°	767.4	703.1	135.6	19.5	12.2	9.7	8.3	7.4	6.9	6.3	6.3
50°	843.5	764.0	99.5	17.1	10.7	8.8	7.4	6.3	5.3	4.9	4.9
52.5°	898.7	800.7	72.7	14.6	9.3	7.4	5.8	4.9	3.9	3.4	3.4
55°	939.2	823.1	53.2	12.2	8.3	6.3	4.9	3.9	3.0	3.0	2.5
57.5°	970.9	833.8	40.0	10.7	7.4	5.3	3.9	3.0	2.5	1.9	1.9
60°	995.2	834.3	29.8	8.8	6.3	4.4	3.0	1.9	1.4	1.4	1.4
62°	1027.5	840.7	24.3	7.4	5.8	3.9	2.5	1.4	1.0	0.5	0.5
62.5°	1036.8	843.0	23.4	7.4	5.3	3.4	1.9	1.4	1.0	0.5	0.5
65°	1079.7	847.4	18.0	5.8	4.4	3.0	1.4	1.0	0.0	0.0	0.0
67.5°	1118.7	840.7	13.2	4.4	3.4	1.9	1.4	0.5	0.0	0.0	0.0
70°	1114.8	793.8	9.3	3.0	2.5	1.4	1.0	0.0	0.0	0.0	0.0
72.5°	918.7	594.2	6.3	2.5	1.4	1.0	0.5	0.0	0.0	0.0	0.0
75°	554.7	260.0	4.4	1.4	1.4	1.0	0.5	0.0	0.0	0.0	0.0
77.5°	182.0	94.1	3.0	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
80°	29.8	15.7	1.4	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
82.5°	9.3	3.9	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.4	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.0	1.0	1.0	0.5	0.5	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)