

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: P265872

Luminaire Tested: **ARCH-AF16-20-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265872
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-AF16-20-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1761.8 lumens
Efficiency: N/A
Efficacy: 73.4 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): 24
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

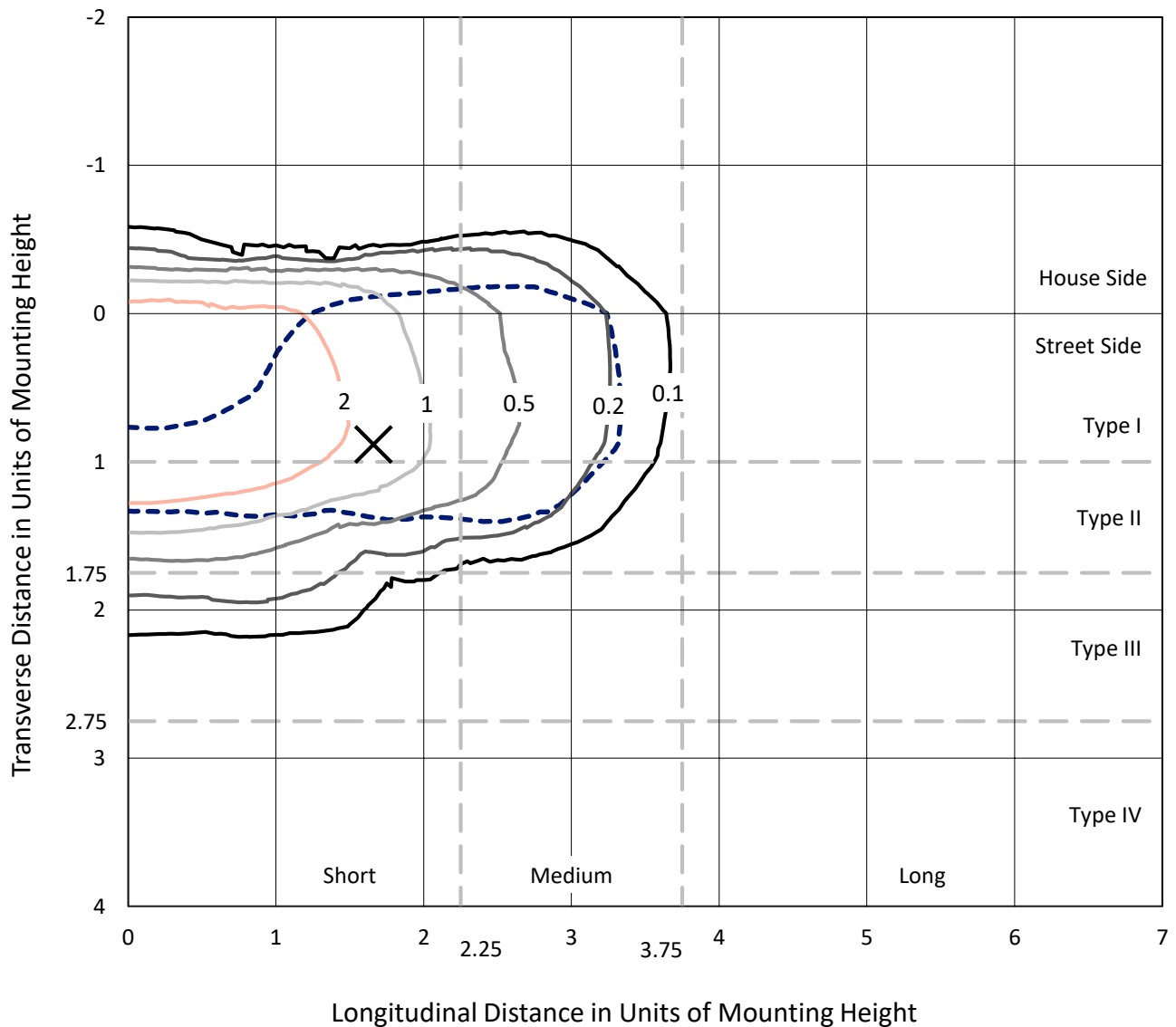


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

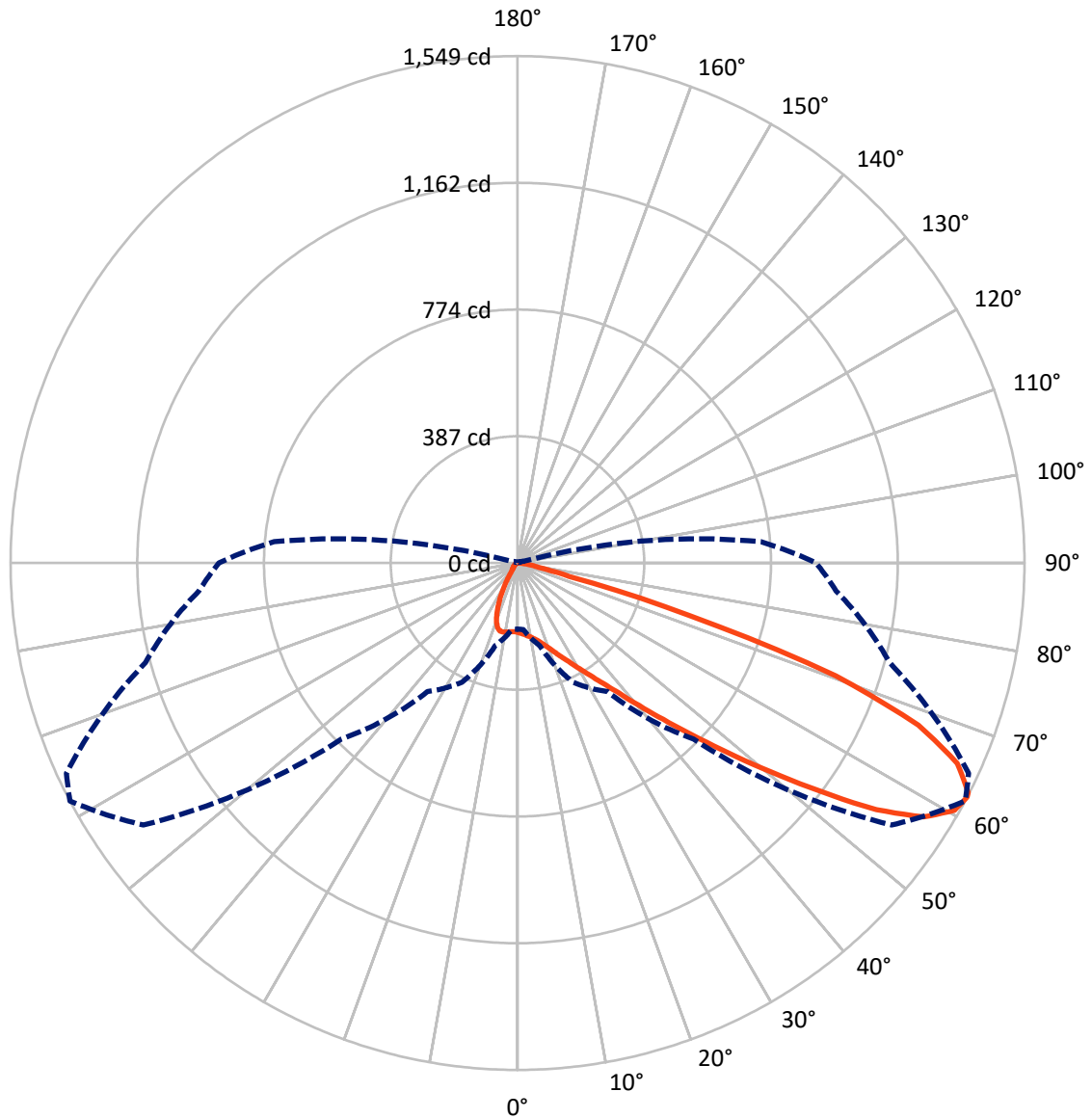


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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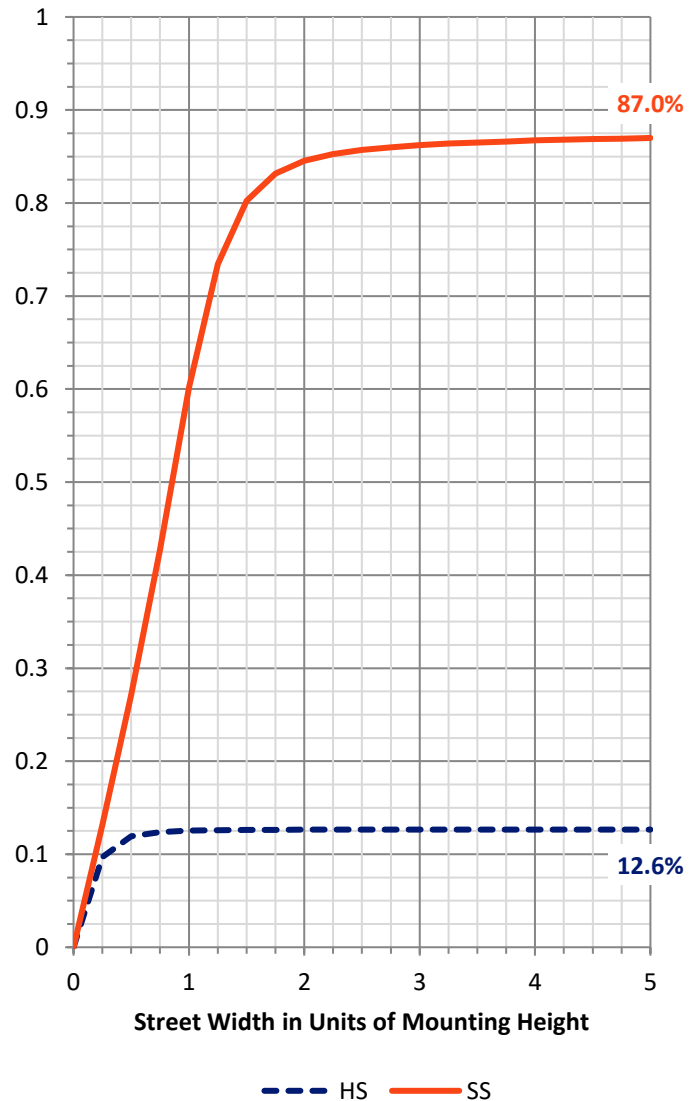
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	225.3	0.0	225.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1536.5	0.0	1536.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	1761.8	0.0	1761.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.4	1.2
10°-20°	57.0	3.2
20°-30°	95.8	5.4
30°-40°	183.6	10.4
40°-50°	375.0	21.3
50°-60°	496.3	28.2
60°-70°	385.5	21.9
70°-80°	139.2	7.9
80°-90°	8.9	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°	1761.8	100.0
0°-180°	1761.8	100.0



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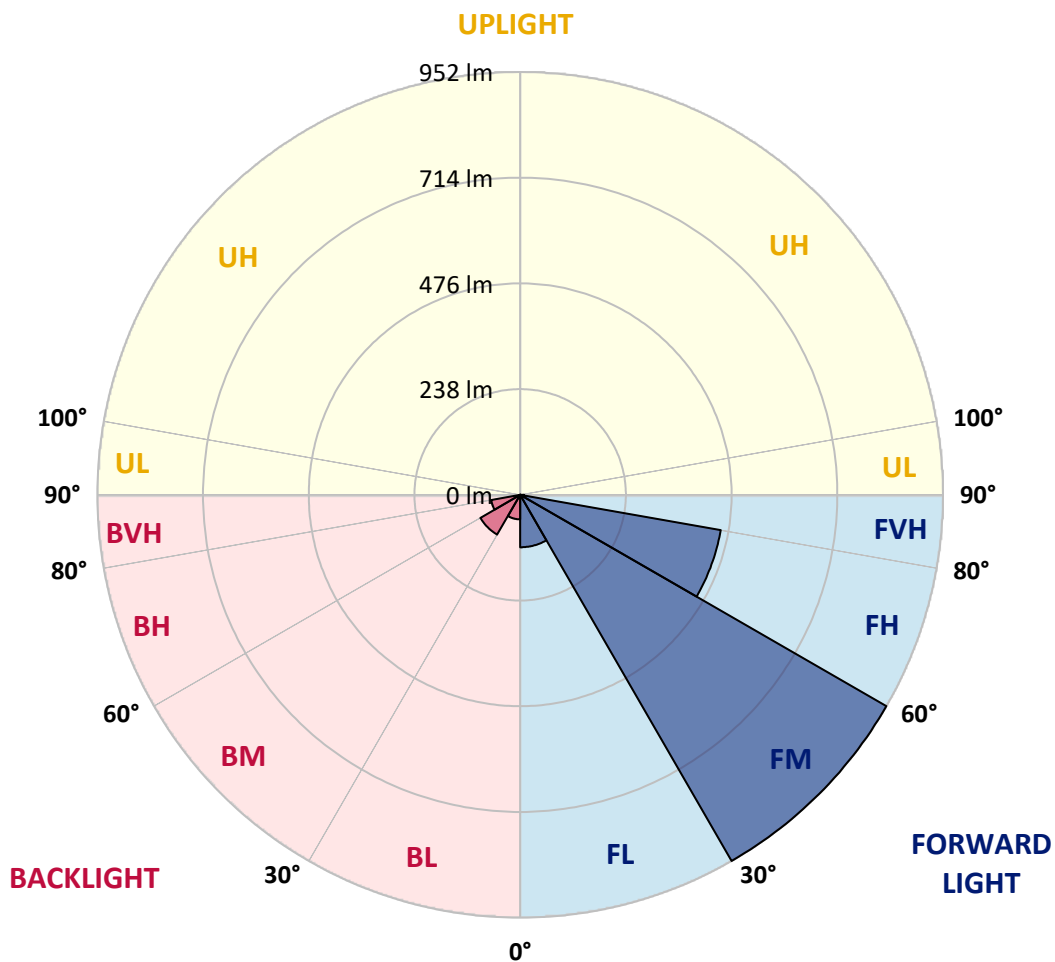
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	118.1	6.7			
FM	(30°-60°)	951.5	54.0			
FH	(60°-80°)	458.4	26.0			G0/660
FVH	(80°-90°)	8.5	0.5			G0/10
BL	(0°-30°)	55.1	3.1	B0/110		
BM	(30°-60°)	103.4	5.9	B0/220		
BH	(60°-80°)	66.3	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°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
2.5°	217.8	217.4	217.0	216.5	216.5	216.1	215.8	214.9	213.9	213.1	212.7
5°	221.7	221.3	221.0	221.3	221.0	221.0	220.4	219.5	218.7	217.4	216.1
7.5°	224.8	224.3	223.9	224.3	224.8	225.2	225.7	224.8	224.3	222.6	221.3
10°	228.7	228.3	227.8	228.7	228.7	230.9	231.3	230.9	230.4	229.1	226.9
12.5°	234.3	234.7	234.7	235.6	236.4	239.0	239.9	238.6	238.6	237.0	234.3
15°	244.7	244.7	244.7	245.5	246.0	249.5	250.4	249.0	249.9	246.9	244.2
17.5°	254.7	255.1	255.9	257.8	257.8	260.8	262.5	262.5	264.2	260.2	256.8
20°	264.6	265.1	266.3	270.3	270.3	274.2	277.1	278.5	280.2	276.3	270.3
22.5°	275.5	275.5	277.7	283.7	282.3	290.2	295.8	298.0	299.8	294.6	285.0
25°	291.9	290.2	291.9	297.6	296.7	307.5	317.9	320.1	322.2	316.2	301.9
27.5°	323.1	320.5	314.4	314.9	314.9	327.4	342.2	345.2	346.4	341.3	323.5
30°	385.5	385.5	362.9	347.9	337.9	349.1	369.9	375.1	376.7	369.1	345.6
32.5°	494.2	494.2	452.6	414.1	376.4	376.4	400.3	409.7	411.5	402.4	375.1
35°	632.8	631.9	569.5	516.7	443.0	415.3	435.7	451.8	457.0	444.8	413.2
37.5°	780.1	774.3	707.2	646.6	545.7	477.7	483.7	504.9	509.8	499.7	462.5
40°	899.7	893.0	838.9	788.3	678.3	577.3	553.0	572.6	578.1	564.3	521.5
42.5°	1007.9	991.8	954.5	918.2	830.8	749.7	645.3	653.2	659.1	644.4	587.8
45°	1086.3	1061.5	1042.6	1031.3	984.9	939.0	764.8	749.2	751.4	733.2	660.1
47.5°	1088.4	1071.0	1072.8	1102.3	1121.4	1119.6	920.4	865.0	856.8	826.4	737.1
50°	984.5	994.5	1026.0	1110.0	1213.2	1275.6	1105.4	1001.8	977.0	922.5	813.9
52.5°	811.2	826.8	886.2	1027.8	1226.5	1378.2	1297.2	1158.2	1114.0	1017.8	872.8
55°	635.5	636.3	698.6	842.8	1137.0	1396.9	1450.6	1330.1	1262.6	1090.2	911.7
57.5°	437.0	460.8	540.2	637.1	934.6	1304.1	1508.2	1463.5	1376.5	1134.7	939.0
60°	286.3	287.5	379.9	492.0	636.3	1061.2	1473.0	1534.0	1468.6	1161.1	957.7
62°	201.8	203.9	261.1	401.9	479.4	760.5	1395.4	1548.8	1520.7	1176.8	977.0
62.5°	187.0	188.9	237.0	379.4	450.4	682.2	1367.8	1545.4	1528.5	1182.0	984.1
65°	137.4	137.4	155.0	260.8	330.0	368.6	1159.1	1476.5	1518.0	1223.5	1010.1
67.5°	106.1	107.0	113.0	160.6	249.0	223.5	739.8	1321.4	1409.8	1285.0	1024.7
70°	91.4	91.0	95.3	106.5	179.8	148.6	325.6	1031.3	1180.7	1269.5	1011.3
72.5°	67.6	68.0	78.0	93.6	125.1	96.6	147.2	547.4	765.7	993.5	866.7
75°	43.3	43.7	54.9	73.7	90.1	63.2	84.9	163.3	313.6	550.9	530.1
77.5°	29.0	29.9	35.9	51.6	78.8	39.4	53.3	68.5	94.4	206.6	190.1
80°	19.6	19.6	22.9	34.7	49.8	32.9	28.6	45.5	49.0	64.0	32.1
82.5°	12.9	12.9	15.1	22.9	32.5	29.5	17.3	24.8	28.6	32.1	11.3
85°	7.7	7.7	10.4	14.4	21.2	16.4	11.3	13.8	14.7	20.3	6.1
87.5°	4.9	4.3	6.9	9.9	11.3	9.9	7.4	7.4	7.7	11.3	3.1
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°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
2.5°	211.8	211.3	210.9	210.1	208.8	207.9	207.0	206.3	205.4	205.4	206.6
5°	215.8	214.3	212.7	210.9	208.3	206.6	205.4	203.6	202.7	202.7	203.1
7.5°	220.4	219.1	216.1	213.1	209.1	206.3	203.1	199.2	196.2	194.9	196.2
10°	225.7	223.9	219.5	214.9	210.6	202.7	192.7	180.6	170.1	165.5	167.7
12.5°	232.1	230.0	224.8	218.3	208.3	189.3	164.6	136.5	118.7	110.4	112.2
15°	241.6	238.6	231.3	221.3	199.2	158.1	117.8	85.2	68.9	62.0	62.8
17.5°	253.0	249.0	239.0	220.4	175.9	113.9	70.2	49.8	42.8	41.1	41.1
20°	265.1	259.9	246.9	213.9	140.3	71.4	43.7	38.1	35.6	34.2	34.2
22.5°	277.7	270.7	253.4	198.9	100.0	44.6	35.9	32.1	29.0	27.7	27.7
25°	292.8	283.7	259.9	172.4	63.7	35.9	30.7	26.9	23.9	22.1	22.5
27.5°	310.5	298.9	265.4	139.4	41.1	31.3	25.5	21.6	19.0	18.1	18.1
30°	329.1	315.3	266.7	104.5	33.3	26.9	21.2	17.7	16.0	15.1	15.1
32.5°	354.7	336.5	262.9	69.3	28.1	22.5	17.7	14.7	13.5	12.9	12.9
35°	388.4	364.3	253.9	42.8	23.9	18.7	14.7	12.9	11.7	11.3	11.3
37.5°	431.4	402.8	237.8	29.5	20.3	15.1	12.5	11.3	10.4	9.9	9.9
40°	488.6	449.6	217.0	25.5	17.3	12.9	10.8	9.9	9.2	9.2	9.2
42.5°	549.3	506.4	190.1	22.5	14.7	11.3	9.5	8.7	8.3	7.7	7.7
45°	615.5	564.3	156.8	19.9	12.5	9.9	8.7	7.4	6.9	6.9	6.9
47.5°	681.3	624.1	120.5	17.3	10.8	8.7	7.4	6.5	6.1	5.6	5.6
50°	748.8	678.3	88.4	15.1	9.5	7.7	6.5	5.6	4.9	4.3	4.3
52.5°	797.9	710.7	64.6	12.9	8.3	6.5	5.2	4.3	3.5	3.1	3.1
55°	833.7	730.7	47.3	10.8	7.4	5.6	4.3	3.5	2.5	2.5	2.2
57.5°	862.0	740.3	35.6	9.5	6.5	4.9	3.5	2.5	2.2	1.7	1.7
60°	883.6	740.7	26.4	7.7	5.6	4.0	2.5	1.7	1.3	1.3	1.3
62°	912.1	746.2	21.6	6.5	5.2	3.5	2.2	1.3	0.9	0.4	0.4
62.5°	920.4	748.4	20.8	6.5	4.9	3.1	1.7	1.3	0.9	0.4	0.4
65°	958.5	752.3	16.0	5.2	4.0	2.5	1.3	0.9	0.0	0.0	0.0
67.5°	993.2	746.2	11.7	4.0	3.1	1.7	1.3	0.4	0.0	0.0	0.0
70°	989.7	704.7	8.3	2.5	2.2	1.3	0.9	0.0	0.0	0.0	0.0
72.5°	815.5	527.6	5.6	2.2	1.3	0.9	0.4	0.0	0.0	0.0	0.0
75°	492.5	230.9	4.0	1.3	1.3	0.9	0.4	0.0	0.0	0.0	0.0
77.5°	161.5	83.6	2.5	0.9	0.9	0.4	0.4	0.0	0.0	0.0	0.0
80°	26.4	13.8	1.3	0.9	0.9	0.4	0.4	0.0	0.0	0.0	0.0
82.5°	8.3	3.5	0.9	0.9	0.4	0.4	0.0	0.0	0.0	0.0	0.0
85°	3.1	1.3	0.9	0.9	0.4	0.4	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.9	0.9	0.9	0.4	0.4	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)