

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: P265917

Luminaire Tested: **ARCH-AF24-20-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265917
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-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 1685.2 lumens
Efficiency: N/A
Efficacy: 80.2 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

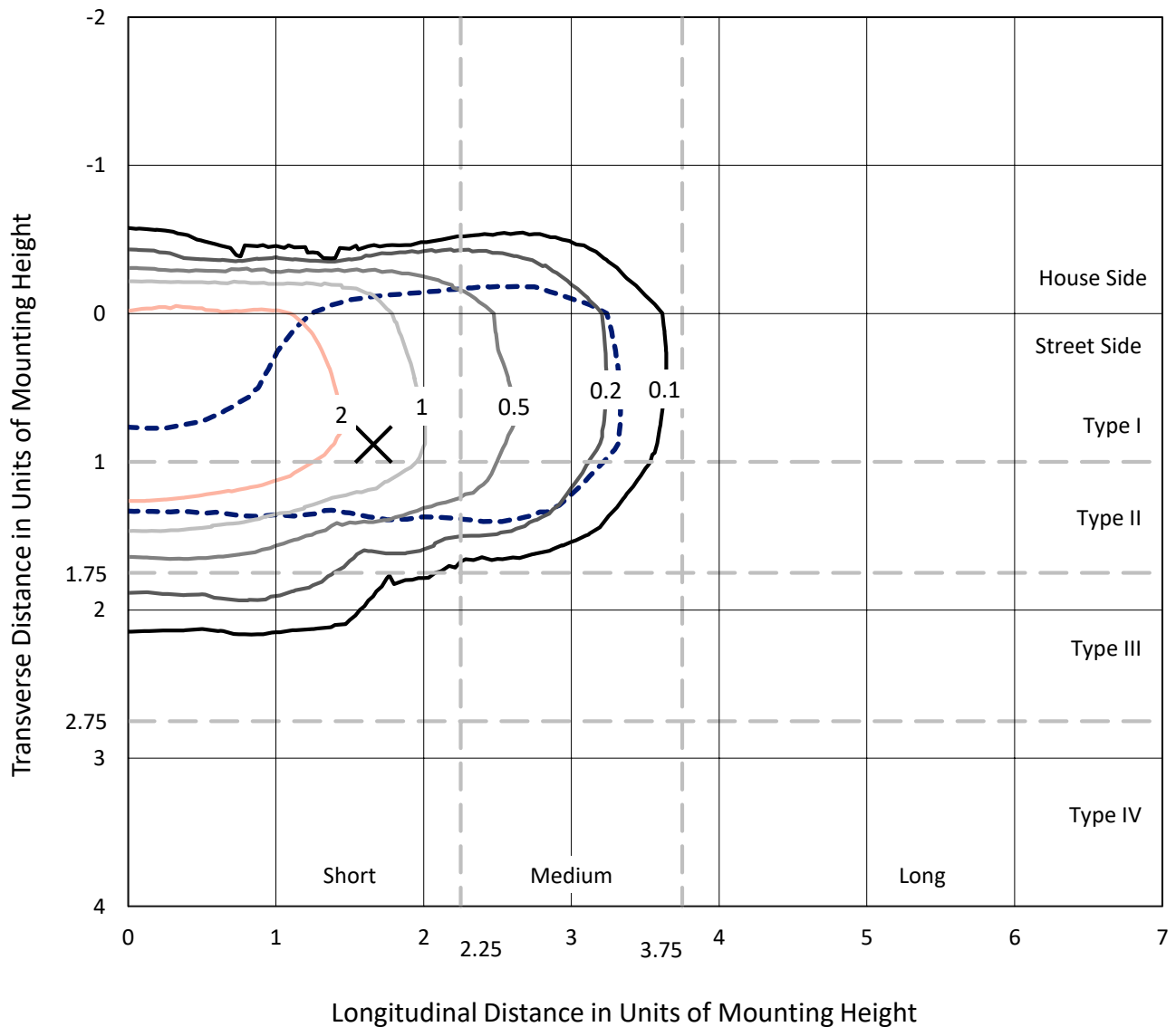


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

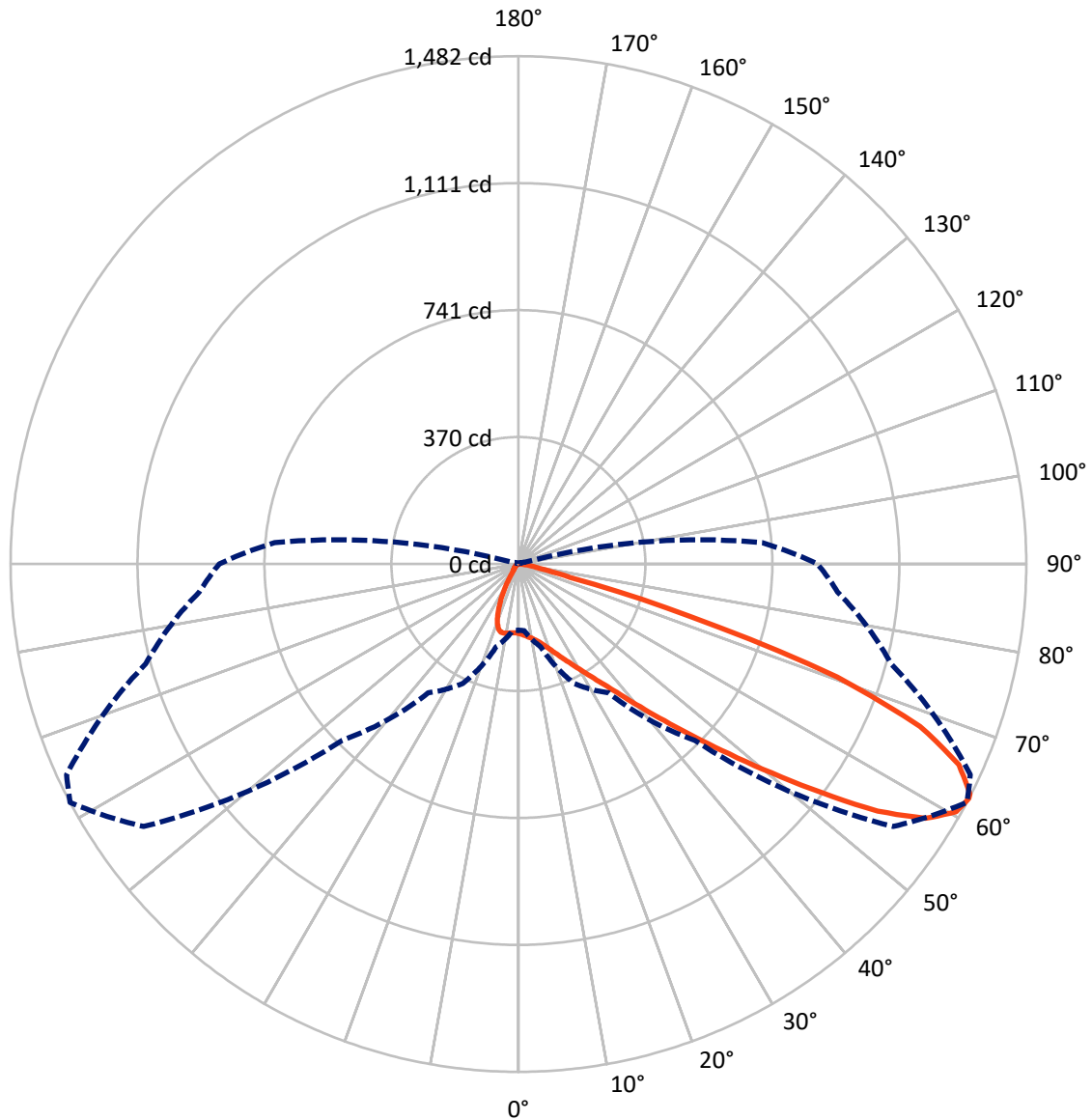


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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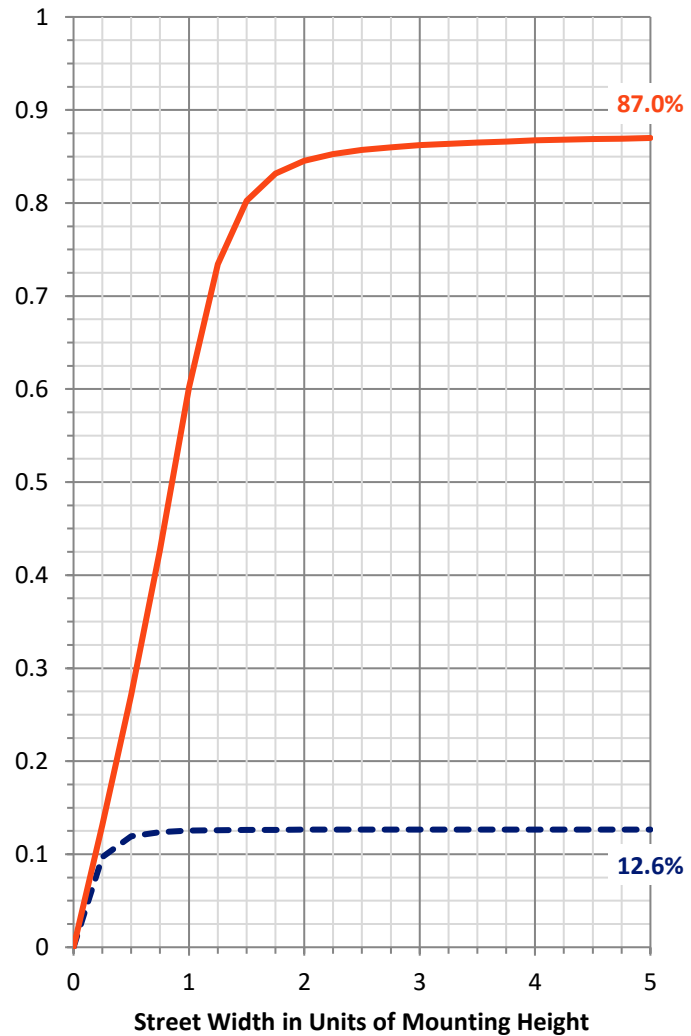
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	215.5	0.0	215.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1469.7	0.0	1469.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	1685.2	0.0	1685.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	1.2
10°-20°	54.6	3.2
20°-30°	91.6	5.4
30°-40°	175.6	10.4
40°-50°	358.7	21.3
50°-60°	474.7	28.2
60°-70°	368.8	21.9
70°-80°	133.1	7.9
80°-90°	8.5	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°	1685.2	100.0
0°-180°	1685.2	100.0



--- HS — SS

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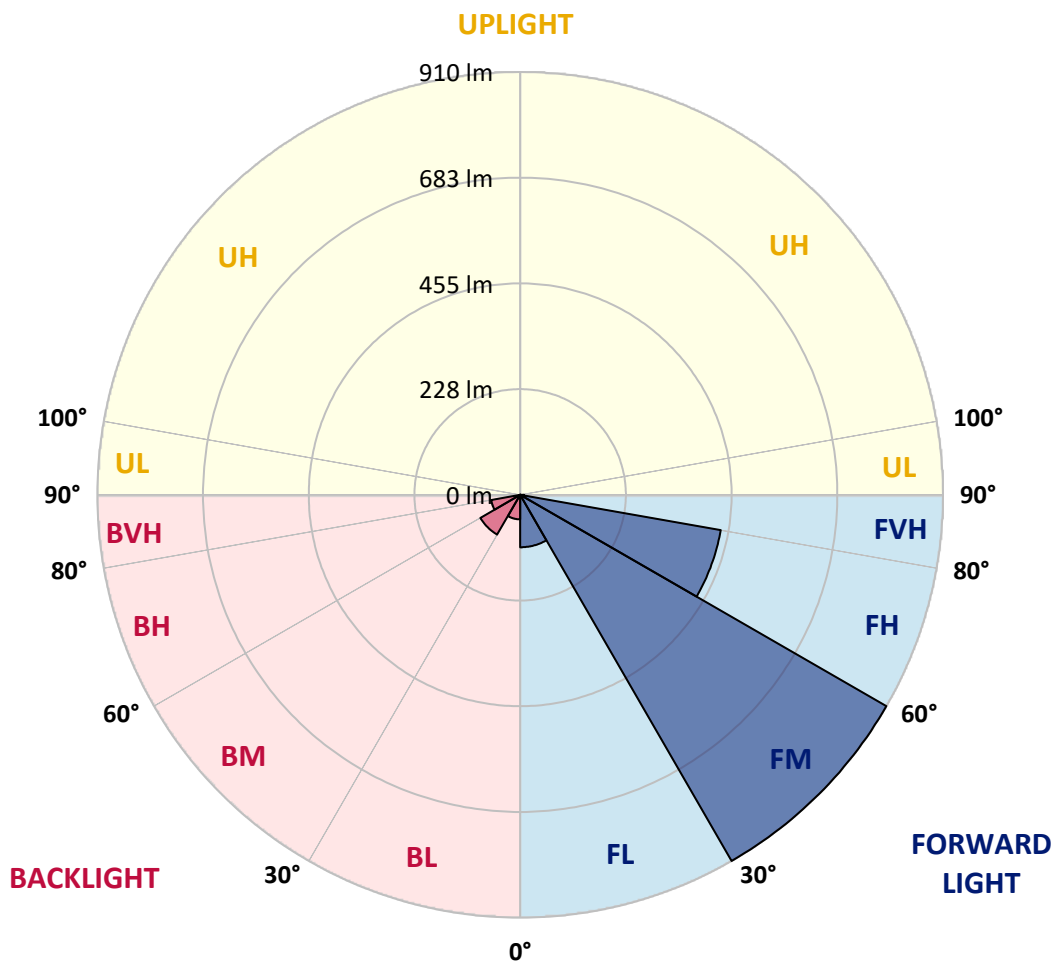
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	113.0	6.7			
FM (30°-60°)	910.2	54.0			
FH (60°-80°)	438.4	26.0			G0/660
FVH (80°-90°)	8.1	0.5			G0/10
BL (0°-30°)	52.7	3.1	B0/110		
BM (30°-60°)	98.9	5.9	B0/220		
BH (60°-80°)	63.5	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°	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9
2.5°	208.3	208.0	207.6	207.1	207.1	206.7	206.3	205.5	204.6	203.8	203.5
5°	212.1	211.7	211.3	211.7	211.3	211.3	210.9	210.1	209.2	208.0	206.7
7.5°	215.1	214.7	214.2	214.7	215.1	215.5	215.9	215.1	214.7	213.0	211.7
10°	218.7	218.4	217.8	218.7	218.7	220.9	221.3	220.9	220.4	219.1	217.1
12.5°	224.1	224.5	224.5	225.4	226.3	228.7	229.5	228.3	228.3	226.6	224.1
15°	234.1	234.1	234.1	234.8	235.4	238.6	239.5	238.2	239.0	236.2	233.6
17.5°	243.6	244.0	244.9	246.6	246.6	249.4	251.0	251.0	252.8	249.0	245.6
20°	253.1	253.5	254.8	258.5	258.5	262.2	265.2	266.3	268.1	264.3	258.5
22.5°	263.6	263.6	265.5	271.4	270.1	277.5	283.0	285.0	286.6	281.7	272.5
25°	279.3	277.5	279.3	284.7	283.8	294.1	304.0	306.1	308.3	302.4	288.7
27.5°	309.0	306.6	300.8	301.2	301.2	313.1	327.3	330.1	331.5	326.4	309.5
30°	368.8	368.8	347.1	332.7	323.1	333.9	353.8	358.8	360.4	352.9	330.5
32.5°	472.7	472.7	433.0	396.1	360.0	360.0	382.8	391.9	393.5	384.8	358.8
35°	605.3	604.5	544.8	494.2	423.8	397.3	416.8	432.2	437.0	425.4	395.3
37.5°	746.1	740.7	676.6	618.6	522.0	457.0	462.7	483.1	487.6	478.1	442.4
40°	860.4	854.3	802.5	753.9	648.8	552.3	529.0	547.6	553.0	539.8	498.7
42.5°	964.2	948.7	913.0	878.4	794.6	717.1	617.2	624.7	630.6	616.4	562.2
45°	1039.1	1015.4	997.2	986.3	942.1	898.1	731.7	716.8	718.9	701.3	631.4
47.5°	1041.1	1024.5	1026.3	1054.4	1072.5	1071.0	880.3	827.3	819.4	790.5	705.1
50°	941.8	951.2	981.5	1061.8	1160.4	1220.1	1057.2	958.2	934.6	882.5	778.4
52.5°	776.0	790.9	847.6	983.1	1173.2	1318.4	1240.7	1107.8	1065.6	973.7	834.9
55°	607.8	608.6	668.2	806.1	1087.5	1336.0	1387.5	1272.3	1207.7	1042.8	872.1
57.5°	418.0	440.8	516.6	609.4	894.1	1247.4	1442.6	1399.9	1316.6	1085.4	898.1
60°	273.9	275.2	363.4	470.6	608.6	1015.1	1409.0	1467.4	1404.9	1110.8	916.0
62°	193.0	195.1	249.8	384.5	458.7	727.4	1334.8	1481.6	1454.5	1125.7	934.6
62.5°	179.0	180.6	226.6	362.9	430.8	652.4	1308.3	1478.3	1462.0	1130.5	941.2
65°	131.3	131.3	148.3	249.4	315.7	352.6	1108.7	1412.3	1452.1	1170.4	966.1
67.5°	101.5	102.3	108.2	153.7	238.2	213.7	707.7	1264.0	1348.5	1229.2	980.2
70°	87.5	87.0	91.2	101.9	171.9	142.1	311.5	986.3	1129.3	1214.2	967.4
72.5°	64.6	65.0	74.6	89.6	119.7	92.3	140.9	523.6	732.5	950.3	829.0
75°	41.4	41.9	52.6	70.4	86.1	60.5	81.1	156.1	299.9	526.9	507.2
77.5°	27.8	28.6	34.3	49.2	75.4	37.6	50.9	65.4	90.3	197.5	181.8
80°	18.7	18.7	22.0	33.1	47.6	31.5	27.4	43.5	46.8	61.4	30.6
82.5°	12.4	12.4	14.6	22.0	31.1	28.1	16.6	23.6	27.4	30.6	10.8
85°	7.5	7.5	9.9	13.7	20.3	15.7	10.8	13.2	14.2	19.5	5.7
87.5°	4.5	4.1	6.6	9.5	10.8	9.5	7.0	7.0	7.5	10.8	3.0
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°	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9
2.5°	202.6	202.2	201.8	201.0	199.8	198.9	198.0	197.2	196.4	196.4	197.5
5°	206.3	205.1	203.5	201.8	199.2	197.5	196.4	194.8	193.9	193.9	194.4
7.5°	210.9	209.7	206.7	203.8	200.1	197.2	194.4	190.6	187.7	186.5	187.7
10°	215.9	214.2	210.1	205.5	201.3	193.9	184.3	172.7	162.9	158.2	160.3
12.5°	222.2	219.9	215.1	208.8	199.2	181.1	157.5	130.6	113.5	105.6	107.3
15°	231.1	228.3	221.3	211.7	190.6	151.3	112.6	81.7	65.8	59.3	60.0
17.5°	242.0	238.2	228.7	210.9	168.3	109.0	67.2	47.6	41.1	39.3	39.3
20°	253.5	248.7	236.2	204.6	134.2	68.4	41.9	36.4	34.0	32.7	32.7
22.5°	265.5	258.9	242.4	190.1	95.7	42.7	34.3	30.6	27.8	26.5	26.5
25°	280.0	271.4	248.7	164.8	60.9	34.3	29.5	25.7	22.7	21.1	21.5
27.5°	297.1	285.9	254.0	133.4	39.3	29.9	24.4	20.8	18.2	17.3	17.3
30°	314.9	301.7	255.2	99.8	31.9	25.7	20.3	17.0	15.4	14.6	14.6
32.5°	339.3	322.0	251.4	66.3	26.9	21.5	17.0	14.2	12.8	12.4	12.4
35°	371.5	348.5	242.8	41.1	22.7	17.8	14.2	12.4	11.1	10.8	10.8
37.5°	412.6	385.4	227.5	28.1	19.5	14.6	11.9	10.8	9.9	9.5	9.5
40°	467.3	430.1	207.6	24.4	16.6	12.4	10.4	9.5	8.8	8.8	8.8
42.5°	525.2	484.2	181.8	21.5	14.2	10.8	9.2	8.3	7.8	7.5	7.5
45°	588.7	539.8	149.9	19.0	11.9	9.5	8.3	7.0	6.6	6.6	6.6
47.5°	651.7	597.1	115.2	16.6	10.4	8.3	7.0	6.2	5.7	5.4	5.4
50°	716.3	648.8	84.5	14.6	9.2	7.5	6.2	5.4	4.5	4.1	4.1
52.5°	763.1	679.8	61.8	12.4	7.8	6.2	5.0	4.1	3.4	3.0	3.0
55°	797.5	698.9	45.2	10.4	7.0	5.4	4.1	3.4	2.4	2.4	2.1
57.5°	824.5	708.0	34.0	9.2	6.2	4.5	3.4	2.4	2.1	1.6	1.6
60°	845.1	708.5	25.2	7.5	5.4	3.8	2.4	1.6	1.3	1.3	1.3
62°	872.6	713.9	20.8	6.2	5.0	3.4	2.1	1.3	0.8	0.4	0.4
62.5°	880.3	715.9	19.9	6.2	4.5	3.0	1.6	1.3	0.8	0.4	0.4
65°	916.8	719.6	15.4	5.0	3.8	2.4	1.3	0.8	0.0	0.0	0.0
67.5°	950.0	713.9	11.1	3.8	3.0	1.6	1.3	0.4	0.0	0.0	0.0
70°	946.6	674.1	7.8	2.4	2.1	1.3	0.8	0.0	0.0	0.0	0.0
72.5°	780.1	504.6	5.4	2.1	1.3	0.8	0.4	0.0	0.0	0.0	0.0
75°	471.0	220.9	3.8	1.3	1.3	0.8	0.4	0.0	0.0	0.0	0.0
77.5°	154.5	79.9	2.4	0.8	0.8	0.4	0.4	0.0	0.0	0.0	0.0
80°	25.2	13.2	1.3	0.8	0.8	0.4	0.4	0.0	0.0	0.0	0.0
82.5°	7.8	3.4	0.8	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.3	0.8	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.8	0.8	0.8	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)