

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: P348899

Luminaire Tested: **ARCH-N-PA1-20-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348899
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1778 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

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

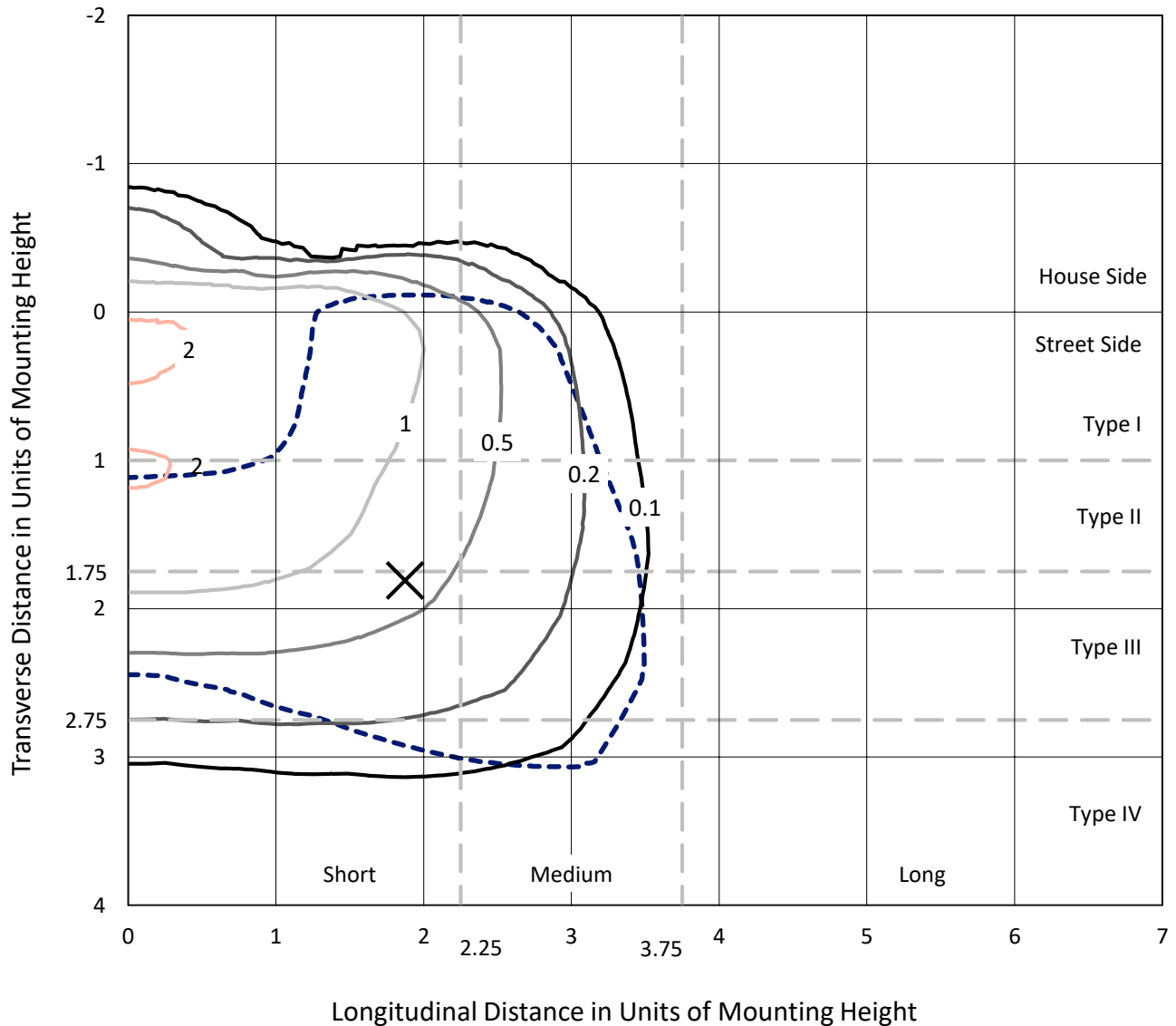


REPORT NUMBER: P348899

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

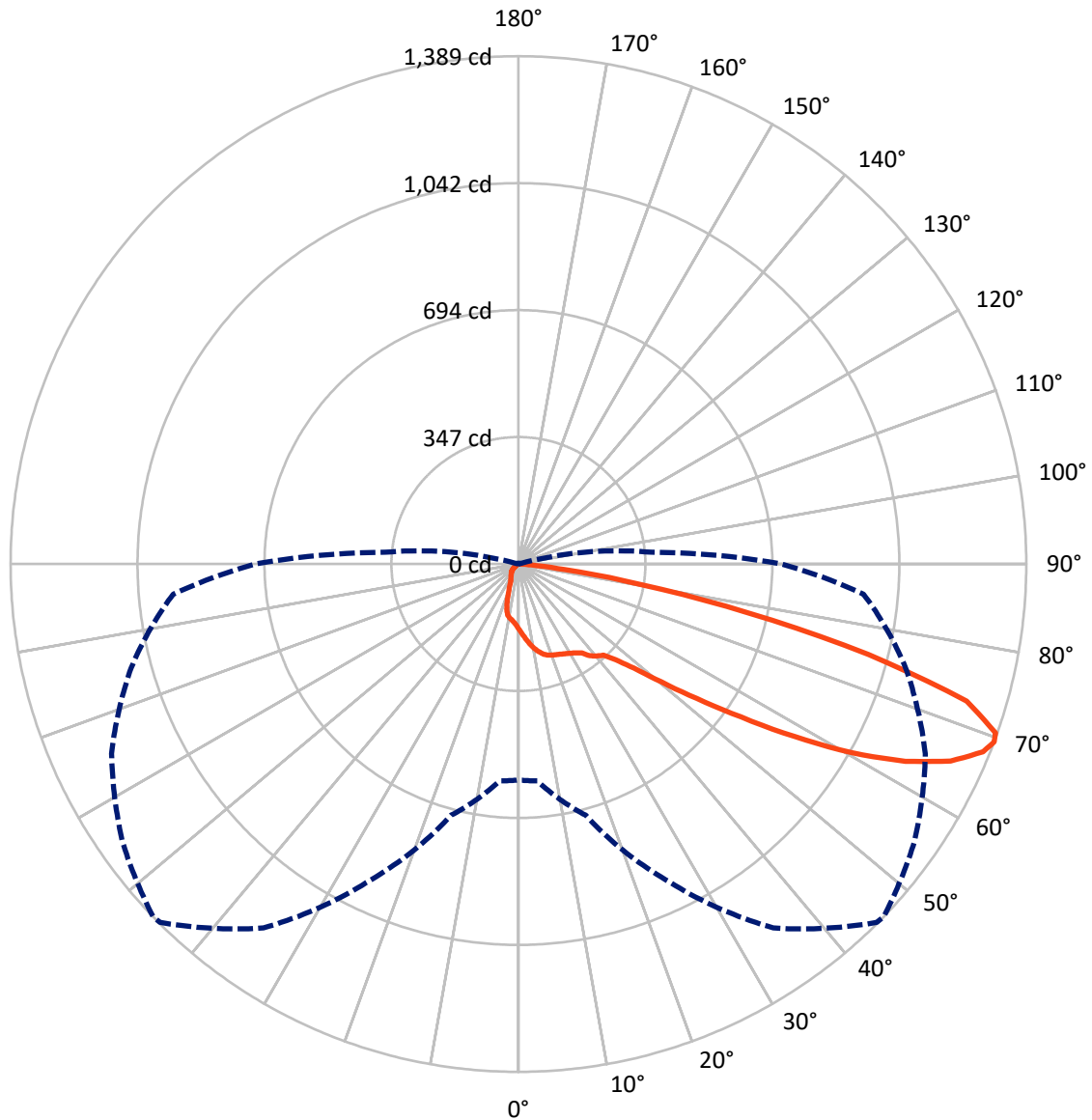


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P348899

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P348899

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

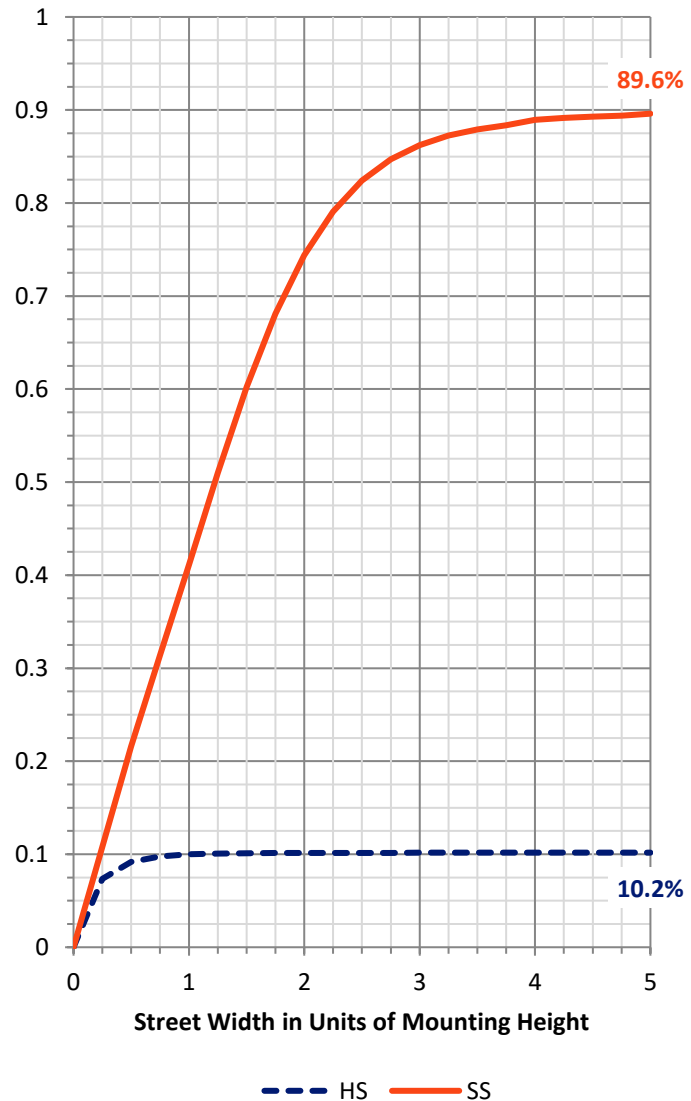
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	182.5	0.0	182.5
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	1595.5	0.0	1595.5
	% Fixture	89.7	0.0	89.7
Total	Lumens	1778.0	0.0	1778.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	1.0
10°-20°	53.8	3.0
20°-30°	84.6	4.8
30°-40°	121.3	6.8
40°-50°	209.7	11.8
50°-60°	414.3	23.3
60°-70°	579.0	32.6
70°-80°	279.7	15.7
80°-90°	18.0	1.0
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°	1778.0	100.0
0°-180°	1778.0	100.0



REPORT NUMBER: P348899

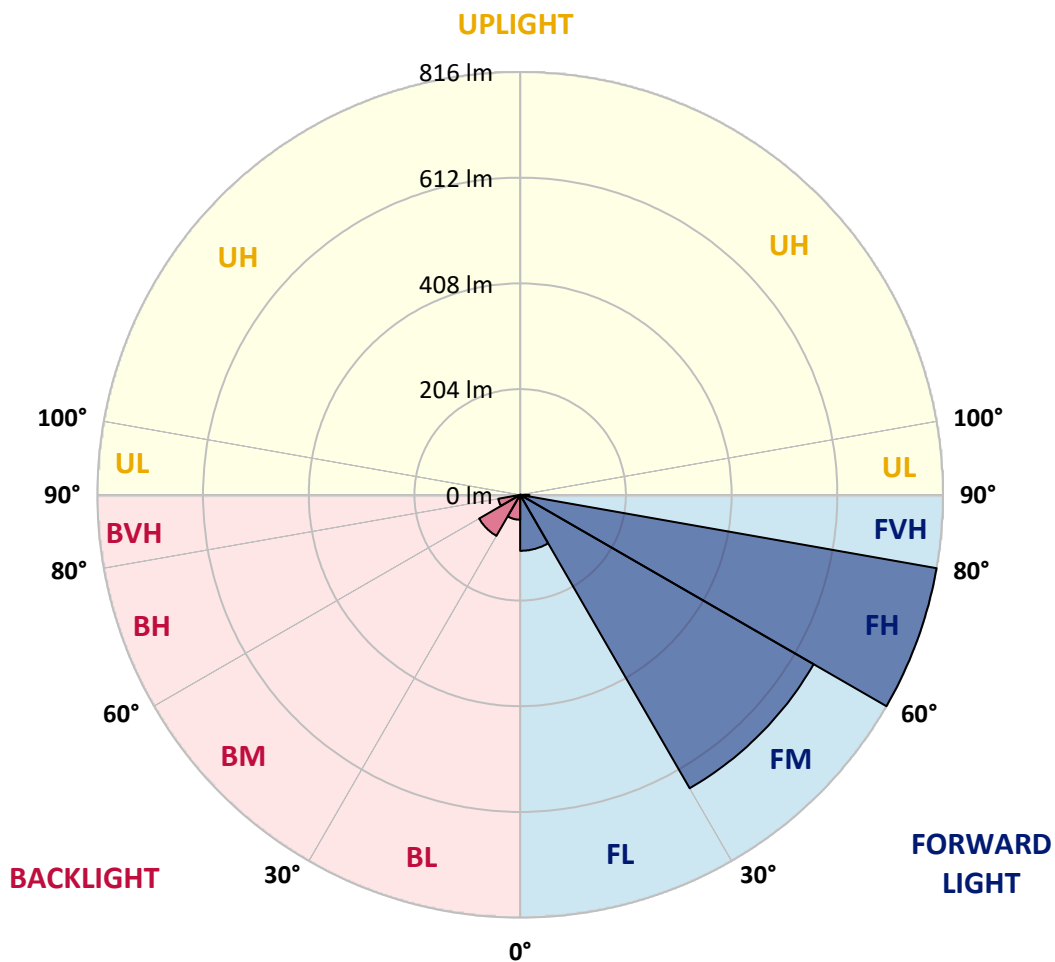
CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.0	6.1			
FM	(30°-60°)	653.8	36.8			
FH	(60°-80°)	815.9	45.9			G1/1800
FVH	(80°-90°)	17.8	1.0			G1/100
BL	(0°-30°)	48.1	2.7	B0/110		
BM	(30°-60°)	91.4	5.1	B0/220		
BH	(60°-80°)	42.8	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 IV Short





REPORT NUMBER: P348899

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1
2.5°	197.9	197.7	196.5	196.0	193.2	191.5	190.8	188.7	185.7	182.7	179.4
5°	220.4	220.3	218.2	216.1	210.7	205.7	204.8	200.0	193.2	186.9	180.6
7.5°	243.4	242.3	240.2	236.2	228.4	220.4	219.7	212.8	203.2	194.1	185.0
10°	262.9	262.3	259.4	253.3	244.3	235.2	234.3	225.8	215.0	203.7	192.2
12.5°	278.1	277.6	273.9	266.3	256.6	247.2	245.9	238.4	226.8	214.2	200.6
15°	287.4	287.1	282.5	274.4	264.9	256.8	255.7	249.1	238.3	225.2	209.7
17.5°	289.5	289.6	284.9	276.7	268.8	263.0	262.2	257.2	248.2	235.1	218.9
20°	284.7	285.7	281.4	274.4	269.5	266.4	265.8	262.8	255.2	242.8	226.3
22.5°	277.9	278.4	275.4	270.7	268.7	269.3	268.9	267.3	260.8	249.5	233.5
25°	273.7	273.7	271.9	267.9	269.3	272.9	272.9	272.6	267.5	257.7	242.3
27.5°	273.5	273.0	271.0	268.0	271.7	277.2	277.5	279.8	276.6	267.6	253.3
30°	280.2	279.6	275.4	271.4	276.1	282.0	282.9	287.8	286.2	278.4	265.6
32.5°	295.8	293.7	284.3	277.9	281.4	288.4	289.5	297.4	299.9	291.6	277.4
35°	317.1	310.5	296.9	290.0	290.4	297.8	298.8	310.3	317.7	303.8	286.6
37.5°	346.5	343.3	321.2	302.7	304.2	315.4	318.4	330.9	328.8	310.4	297.0
40°	411.1	406.0	382.5	338.2	317.5	329.8	330.7	337.4	337.5	325.5	318.7
42.5°	498.9	496.8	472.1	402.6	343.5	339.4	341.0	352.3	364.9	357.4	357.0
45°	596.2	595.1	568.9	488.2	396.3	370.8	372.9	388.0	412.1	413.7	424.3
47.5°	674.5	674.0	658.9	583.6	477.1	424.1	424.7	440.7	483.1	504.0	520.9
50°	745.9	748.3	736.4	686.9	587.1	507.5	505.9	516.6	584.6	618.9	639.9
52.5°	845.1	848.5	815.1	783.3	702.6	611.1	609.8	621.0	706.7	732.4	736.1
55°	932.7	926.8	900.4	891.2	843.4	738.9	738.6	748.4	824.7	835.6	842.6
57.5°	971.4	969.1	981.9	1002.9	990.9	890.1	889.3	881.8	930.3	931.5	952.8
60°	995.8	998.5	1037.6	1102.4	1132.3	1052.7	1047.9	1002.1	1031.2	1028.6	1051.4
62.5°	977.4	982.9	1053.2	1161.2	1238.2	1194.7	1187.9	1112.3	1117.4	1108.5	1129.7
65°	880.1	888.5	1003.8	1150.1	1290.7	1305.6	1298.7	1209.6	1185.9	1171.2	1159.4
67.5°	714.6	719.6	840.0	1053.6	1267.1	1371.8	1370.4	1294.9	1237.5	1160.6	1069.4
69°	590.6	595.5	711.3	952.1	1214.9	1386.0	1388.8	1322.2	1227.7	1096.2	947.5
70°	500.2	505.4	613.4	865.1	1154.5	1379.4	1384.3	1319.7	1199.5	1021.7	840.6
72.5°	262.3	266.8	377.6	596.0	941.2	1266.6	1281.6	1208.1	1016.8	742.0	497.0
75°	82.4	85.0	147.5	311.5	644.4	984.9	988.3	947.7	722.0	408.2	207.0
77.5°	31.4	30.7	49.1	114.8	325.8	620.1	641.1	592.2	378.9	144.3	47.8
80°	16.9	17.0	25.5	47.5	139.4	318.7	336.4	287.0	134.6	45.0	11.0
82.5°	7.3	7.7	14.3	25.2	64.0	117.5	126.4	105.2	51.4	30.3	4.1
85°	1.6	1.8	6.9	13.7	26.1	33.0	34.6	34.1	32.8	23.5	1.6
87.5°	0.0	0.0	3.1	4.9	6.6	7.5	6.6	8.6	18.1	15.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348899

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1	178.1
2.5°	178.3	176.8	174.2	171.4	169.4	167.3	165.6	164.9	164.1	163.5	164.2
5°	178.0	175.1	170.1	165.2	161.7	158.9	156.6	155.6	154.7	154.1	154.0
7.5°	180.9	176.8	169.1	162.1	156.6	152.8	149.6	148.3	147.2	146.7	146.3
10°	186.5	181.2	171.0	161.7	154.7	148.2	141.4	136.1	132.7	131.1	130.5
12.5°	193.7	187.2	174.5	163.5	153.3	140.8	126.3	113.8	105.7	103.0	101.5
15°	202.2	194.1	179.1	165.7	148.1	125.3	100.7	84.4	76.9	75.4	73.7
17.5°	210.4	201.4	184.6	166.1	136.8	100.1	73.8	62.7	59.8	60.8	61.0
20°	217.6	208.7	190.0	162.5	116.2	75.1	57.1	54.4	55.4	57.4	57.7
22.5°	224.8	215.7	195.0	152.8	89.9	57.0	51.4	52.1	53.2	55.1	55.4
25°	233.7	224.2	199.7	135.0	67.4	48.5	48.9	49.9	50.9	52.7	52.9
27.5°	243.8	234.9	202.7	112.0	50.0	44.6	45.7	47.2	48.3	49.9	50.3
30°	257.3	249.1	203.7	88.0	41.9	41.1	41.6	43.4	45.0	46.5	46.8
32.5°	270.0	263.1	200.4	66.4	38.8	37.8	37.8	38.9	40.8	42.2	42.5
35°	281.7	277.2	189.7	48.6	36.5	34.8	34.0	34.0	35.2	36.3	36.7
37.5°	297.1	296.9	172.5	38.8	34.3	32.3	30.6	29.3	28.8	29.1	29.3
40°	323.5	323.8	150.0	34.8	32.3	29.8	27.1	24.7	22.4	21.7	21.6
42.5°	364.8	361.0	126.4	32.8	30.7	27.1	23.1	19.8	16.3	15.3	15.2
45°	430.3	408.1	101.4	31.1	28.9	24.1	19.1	14.7	11.8	11.0	11.0
47.5°	525.8	469.8	78.5	29.2	26.6	20.7	14.4	10.6	8.7	8.3	8.3
50°	624.5	530.4	60.2	26.8	23.8	17.1	10.7	7.7	6.6	6.6	6.7
52.5°	712.0	574.7	46.9	24.2	20.3	13.4	8.1	6.0	5.5	5.4	5.5
55°	794.0	603.3	35.9	21.2	16.1	10.0	6.2	4.9	4.6	4.4	4.3
57.5°	873.0	617.5	26.9	17.1	11.7	7.3	4.9	4.2	3.8	3.6	3.5
60°	925.6	606.0	18.5	12.6	8.1	5.3	4.1	3.6	3.2	2.9	2.8
62.5°	955.3	574.5	11.9	9.1	5.8	3.9	3.3	3.0	2.4	2.2	2.2
65°	943.3	522.7	8.3	6.5	4.2	2.9	2.4	2.4	1.8	1.4	1.3
67.5°	835.9	441.6	6.3	4.8	3.0	2.2	1.8	2.1	1.1	0.7	0.7
69°	719.2	366.0	5.4	4.0	2.5	1.8	1.6	1.9	0.8	0.5	0.4
70°	625.1	315.7	4.9	3.5	2.1	1.5	1.4	1.8	0.8	0.4	0.3
72.5°	374.0	176.1	3.8	2.5	1.3	1.2	1.2	2.1	0.8	0.4	0.3
75°	151.1	62.0	2.8	1.8	1.0	1.0	1.4	2.7	0.7	0.3	0.3
77.5°	34.3	13.6	1.6	1.1	0.7	1.0	1.7	2.1	0.4	0.2	0.0
80°	8.3	3.3	1.0	0.7	0.4	0.8	1.3	1.2	0.1	0.0	0.0
82.5°	2.8	1.2	0.4	0.3	0.1	0.3	0.6	0.3	0.0	0.0	0.0
85°	1.2	0.7	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.8	0.3	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)