

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: P348864

Luminaire Tested: **ARCH-N-PA1-20-727-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348864
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-PA1-20-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2023 lumens
Efficiency: N/A
Efficacy: 84.3 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

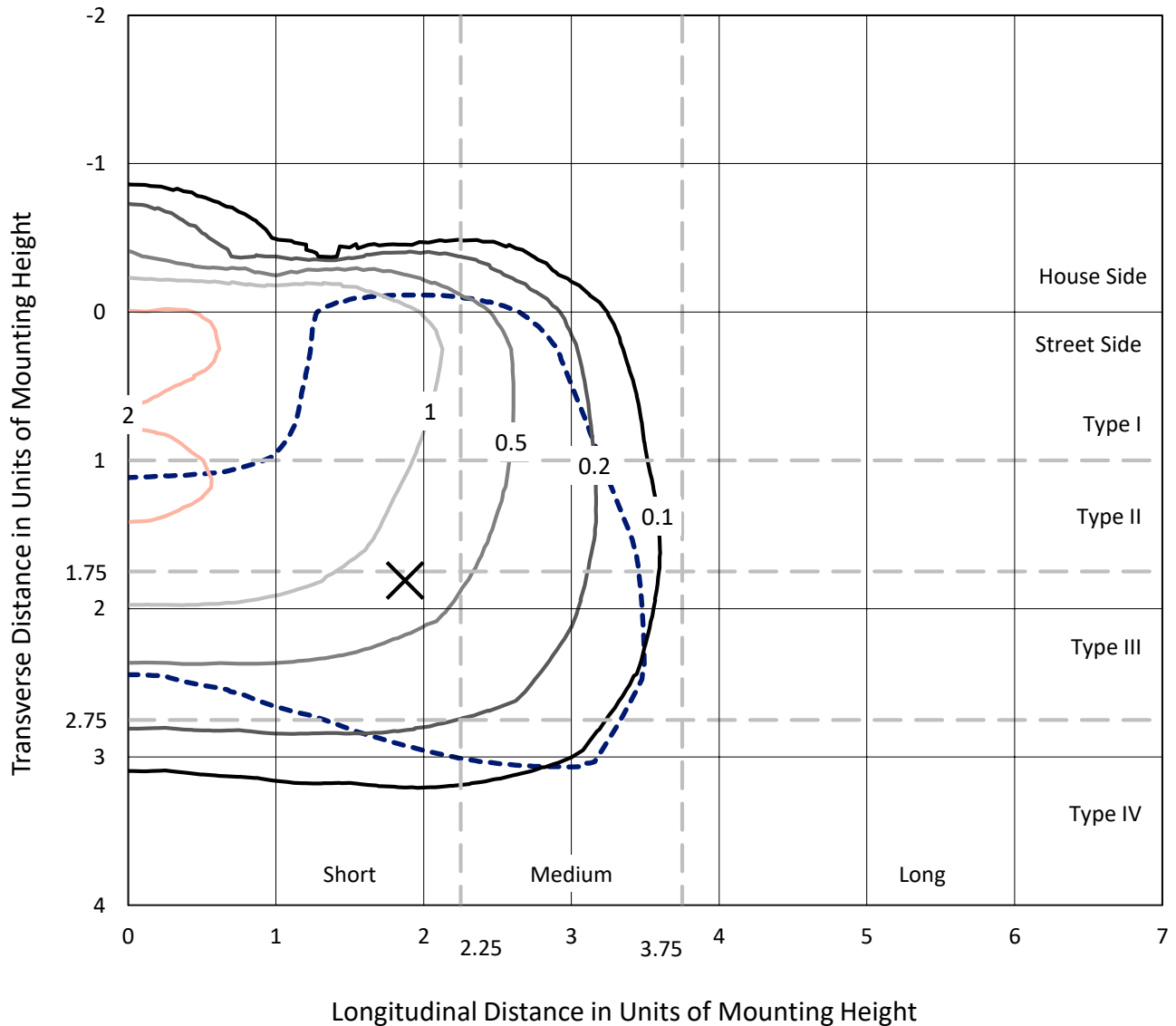


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

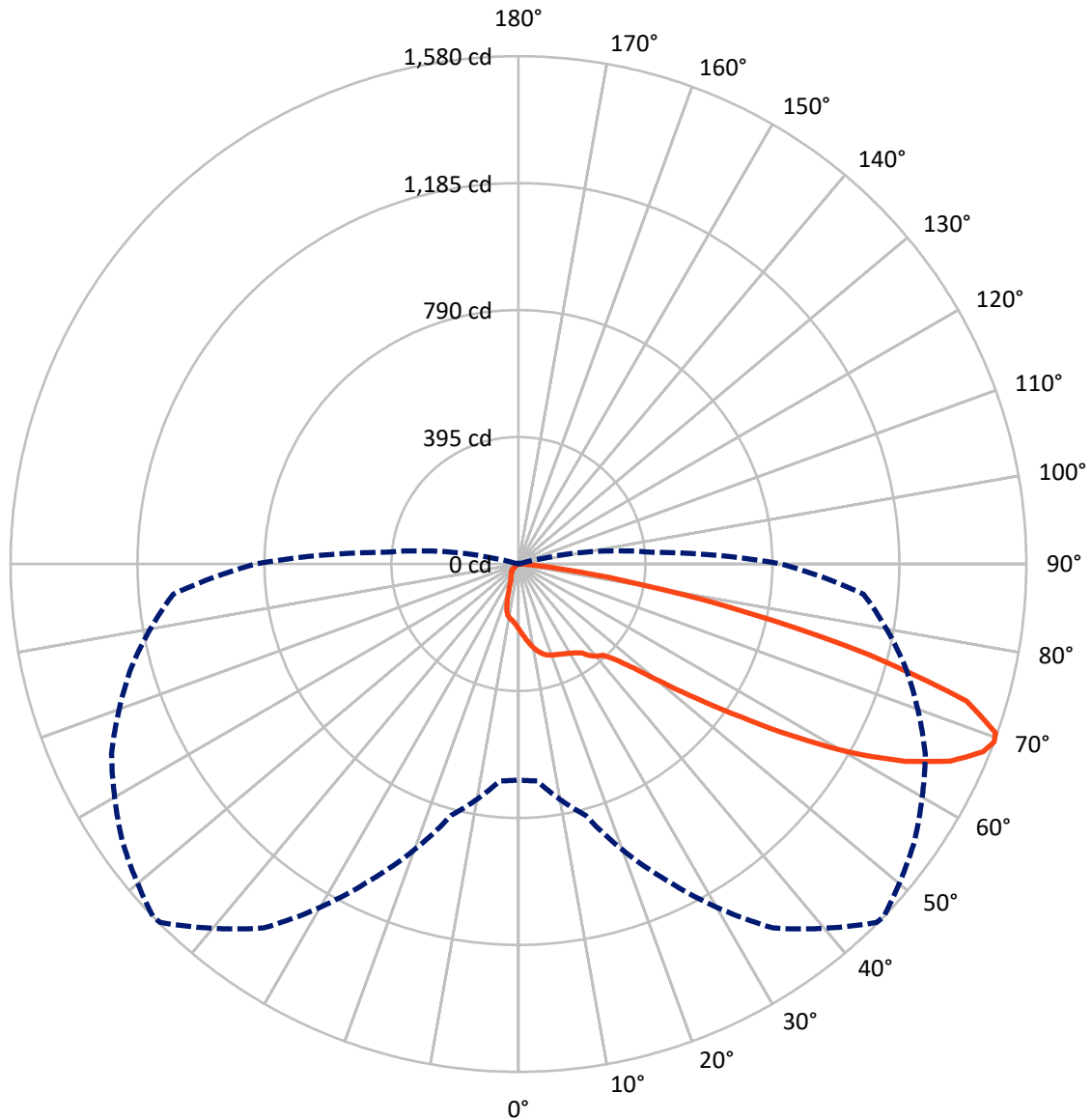


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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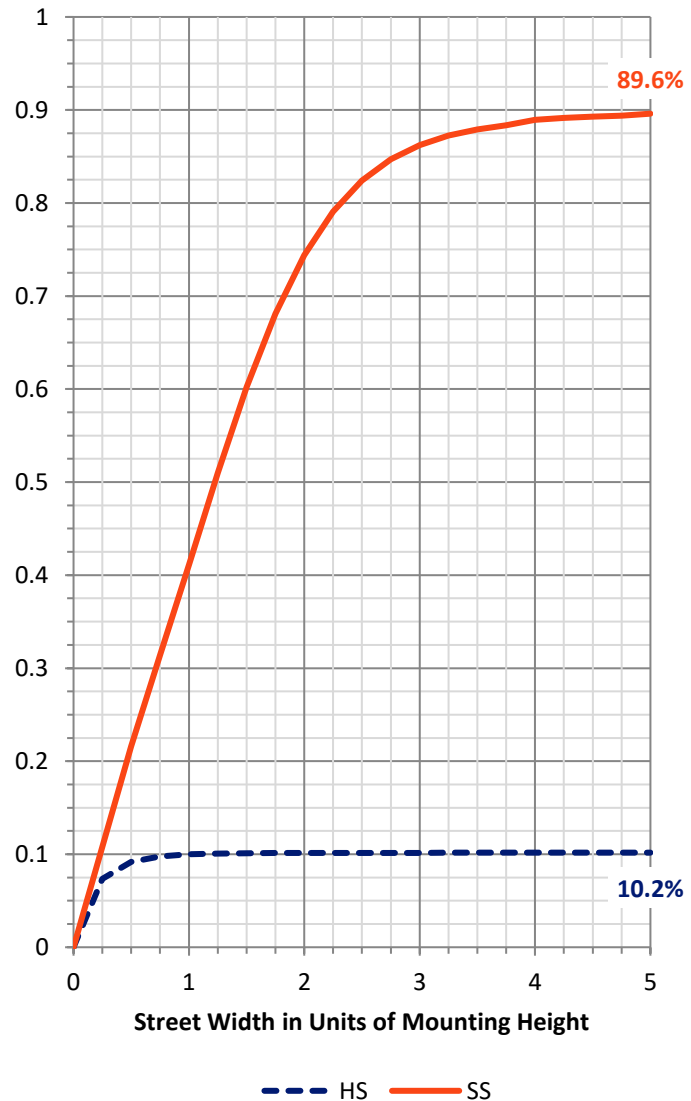
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	207.6	0.0	207.6
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	1815.4	0.0	1815.4
	% Fixture	89.7	0.0	89.7
Total	Lumens	2023.0	0.0	2023.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	1.0
10°-20°	61.2	3.0
20°-30°	96.3	4.8
30°-40°	138.0	6.8
40°-50°	238.6	11.8
50°-60°	471.3	23.3
60°-70°	658.7	32.6
70°-80°	318.2	15.7
80°-90°	20.5	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°	2023.0	100.0
0°-180°	2023.0	100.0



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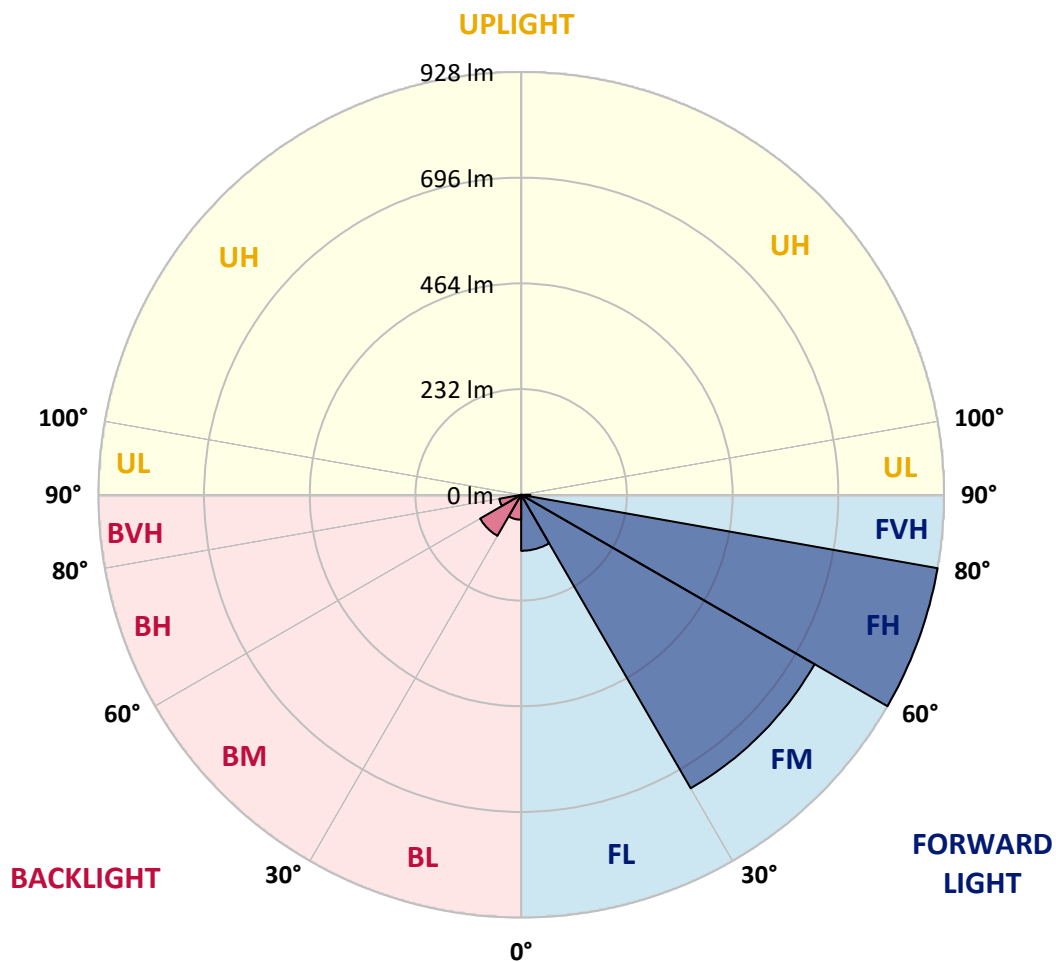
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	122.9	6.1			
FM	(30°-60°)	743.9	36.8			
FH	(60°-80°)	928.3	45.9			G1/1800
FVH	(80°-90°)	20.3	1.0			G1/100
BL	(0°-30°)	54.7	2.7	B0/110		
BM	(30°-60°)	104.0	5.1	B0/220		
BH	(60°-80°)	48.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7
2.5°	225.2	224.9	223.6	223.0	219.8	217.9	217.1	214.7	211.3	207.9	204.1
5°	250.8	250.7	248.2	245.9	239.8	234.1	233.0	227.5	219.9	212.7	205.4
7.5°	277.0	275.7	273.3	268.7	259.9	250.8	249.9	242.2	231.2	220.8	210.5
10°	299.2	298.4	295.2	288.3	277.9	267.6	266.5	257.0	244.6	231.8	218.6
12.5°	316.4	315.9	311.6	303.0	292.0	281.2	279.8	271.3	258.1	243.8	228.2
15°	327.0	326.7	321.5	312.3	301.4	292.1	290.9	283.4	271.2	256.2	238.6
17.5°	329.4	329.5	324.1	314.8	305.9	299.3	298.3	292.6	282.4	267.5	249.1
20°	323.9	325.1	320.2	312.2	306.7	303.1	302.4	299.0	290.3	276.3	257.4
22.5°	316.1	316.7	313.4	308.0	305.7	306.4	306.0	304.1	296.8	283.9	265.7
25°	311.4	311.4	309.4	304.9	306.4	310.4	310.5	310.2	304.4	293.2	275.7
27.5°	311.2	310.6	308.4	304.9	309.1	315.4	315.8	318.3	314.7	304.5	288.3
30°	318.8	318.1	313.3	308.8	314.1	320.9	321.8	327.4	325.6	316.7	302.2
32.5°	336.5	334.2	323.4	316.1	320.1	328.2	329.4	338.3	341.2	331.8	315.7
35°	360.8	353.3	337.9	330.0	330.4	338.8	339.9	353.0	361.5	345.6	326.1
37.5°	394.3	390.6	365.5	344.4	346.1	358.9	362.2	376.5	374.1	353.2	338.0
40°	467.7	461.9	435.2	384.8	361.2	375.2	376.3	383.9	384.1	370.4	362.6
42.5°	567.7	565.3	537.1	458.1	390.9	386.1	388.0	400.8	415.2	406.6	406.2
45°	678.4	677.1	647.3	555.4	450.9	421.9	424.3	441.4	468.8	470.7	482.8
47.5°	767.4	766.9	749.7	664.1	542.8	482.5	483.3	501.5	549.7	573.5	592.7
50°	848.6	851.4	837.8	781.6	668.0	577.5	575.7	587.8	665.2	704.2	728.1
52.5°	961.5	965.4	927.4	891.2	799.4	695.3	693.8	706.5	804.1	833.3	837.5
55°	1061.2	1054.6	1024.5	1014.1	959.6	840.8	840.4	851.6	938.4	950.8	958.7
57.5°	1105.2	1102.6	1117.2	1141.1	1127.4	1012.7	1011.9	1003.3	1058.5	1059.9	1084.1
60°	1133.0	1136.1	1180.6	1254.3	1288.4	1197.8	1192.3	1140.2	1173.3	1170.4	1196.3
62.5°	1112.1	1118.3	1198.4	1321.2	1408.8	1359.3	1351.5	1265.6	1271.4	1261.2	1285.3
65°	1001.3	1010.9	1142.1	1308.6	1468.6	1485.6	1477.7	1376.3	1349.3	1332.6	1319.2
67.5°	813.1	818.8	955.7	1198.8	1441.6	1560.9	1559.3	1473.3	1408.1	1320.5	1216.8
69°	671.9	677.5	809.4	1083.3	1382.4	1577.0	1580.1	1504.4	1396.9	1247.3	1078.1
70°	569.1	575.1	697.9	984.3	1313.6	1569.5	1575.1	1501.5	1364.8	1162.5	956.4
72.5°	298.5	303.6	429.7	678.1	1070.9	1441.2	1458.1	1374.6	1156.9	844.3	565.5
75°	93.8	96.7	167.8	354.5	733.2	1120.6	1124.5	1078.3	821.5	464.4	235.5
77.5°	35.8	34.9	55.9	130.6	370.7	705.6	729.4	673.8	431.1	164.2	54.3
80°	19.3	19.3	29.0	54.1	158.6	362.6	382.7	326.6	153.2	51.2	12.5
82.5°	8.3	8.7	16.3	28.6	72.8	133.7	143.8	119.7	58.5	34.4	4.6
85°	1.8	2.0	7.9	15.6	29.7	37.6	39.4	38.8	37.3	26.7	1.8
87.5°	0.0	0.0	3.5	5.6	7.5	8.5	7.5	9.8	20.6	18.0	0.9
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°	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7
2.5°	202.9	201.2	198.2	195.0	192.7	190.4	188.5	187.6	186.7	186.0	186.9
5°	202.5	199.2	193.5	188.0	184.0	180.8	178.1	177.1	176.0	175.3	175.2
7.5°	205.8	201.2	192.5	184.4	178.2	173.9	170.3	168.7	167.5	166.9	166.5
10°	212.2	206.2	194.5	184.0	176.0	168.6	160.9	154.9	151.0	149.2	148.5
12.5°	220.4	212.9	198.5	186.0	174.4	160.2	143.7	129.5	120.3	117.2	115.4
15°	230.1	220.8	203.7	188.6	168.6	142.6	114.6	96.0	87.5	85.7	83.8
17.5°	239.4	229.2	210.0	189.0	155.7	113.9	83.9	71.3	68.0	69.1	69.4
20°	247.6	237.4	216.2	184.9	132.2	85.5	65.0	61.8	63.1	65.3	65.6
22.5°	255.8	245.4	221.9	173.9	102.2	64.9	58.5	59.3	60.5	62.7	63.1
25°	265.9	255.1	227.2	153.7	76.7	55.2	55.6	56.7	58.0	59.9	60.1
27.5°	277.4	267.3	230.7	127.4	56.9	50.7	52.0	53.7	54.9	56.8	57.2
30°	292.8	283.4	231.8	100.2	47.7	46.8	47.3	49.4	51.2	52.9	53.2
32.5°	307.2	299.4	228.0	75.6	44.2	43.1	43.1	44.3	46.4	48.0	48.4
35°	320.5	315.4	215.9	55.3	41.5	39.6	38.7	38.7	40.0	41.4	41.7
37.5°	338.0	337.9	196.2	44.1	39.0	36.8	34.8	33.3	32.8	33.1	33.3
40°	368.1	368.4	170.6	39.6	36.8	33.9	30.8	28.1	25.5	24.7	24.6
42.5°	415.1	410.8	143.8	37.4	34.9	30.8	26.3	22.6	18.6	17.4	17.3
45°	489.6	464.3	115.3	35.4	32.9	27.4	21.7	16.7	13.5	12.5	12.5
47.5°	598.2	534.6	89.3	33.2	30.3	23.5	16.4	12.0	9.9	9.4	9.5
50°	710.5	603.4	68.5	30.4	27.0	19.4	12.1	8.7	7.5	7.5	7.6
52.5°	810.1	653.9	53.4	27.5	23.0	15.3	9.2	6.8	6.3	6.2	6.3
55°	903.4	686.4	40.9	24.1	18.3	11.4	7.0	5.6	5.2	5.0	4.9
57.5°	993.3	702.6	30.6	19.4	13.3	8.3	5.6	4.7	4.4	4.1	4.0
60°	1053.1	689.5	21.1	14.3	9.2	6.0	4.6	4.1	3.6	3.3	3.2
62.5°	1086.9	653.7	13.6	10.3	6.5	4.5	3.7	3.4	2.8	2.5	2.5
65°	1073.2	594.7	9.5	7.4	4.7	3.3	2.8	2.8	2.0	1.6	1.5
67.5°	951.1	502.4	7.2	5.5	3.4	2.5	2.1	2.4	1.2	0.8	0.8
69°	818.3	416.4	6.2	4.6	2.8	2.0	1.8	2.2	0.9	0.6	0.5
70°	711.2	359.2	5.6	4.0	2.4	1.7	1.6	2.1	0.9	0.5	0.4
72.5°	425.5	200.3	4.3	2.8	1.5	1.3	1.3	2.4	0.9	0.5	0.4
75°	172.0	70.6	3.1	2.0	1.1	1.1	1.6	3.0	0.8	0.4	0.3
77.5°	39.0	15.5	1.8	1.2	0.8	1.1	1.9	2.4	0.5	0.2	0.0
80°	9.5	3.8	1.1	0.8	0.5	0.9	1.4	1.3	0.1	0.0	0.0
82.5°	3.1	1.3	0.5	0.4	0.1	0.3	0.7	0.4	0.0	0.0	0.0
85°	1.3	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.9	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)