

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: P348906

Luminaire Tested: **ARCH-N-PA1-20-830-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348906
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-PA1-20-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1922 lumens
Efficiency: N/A
Efficacy: 80.1 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

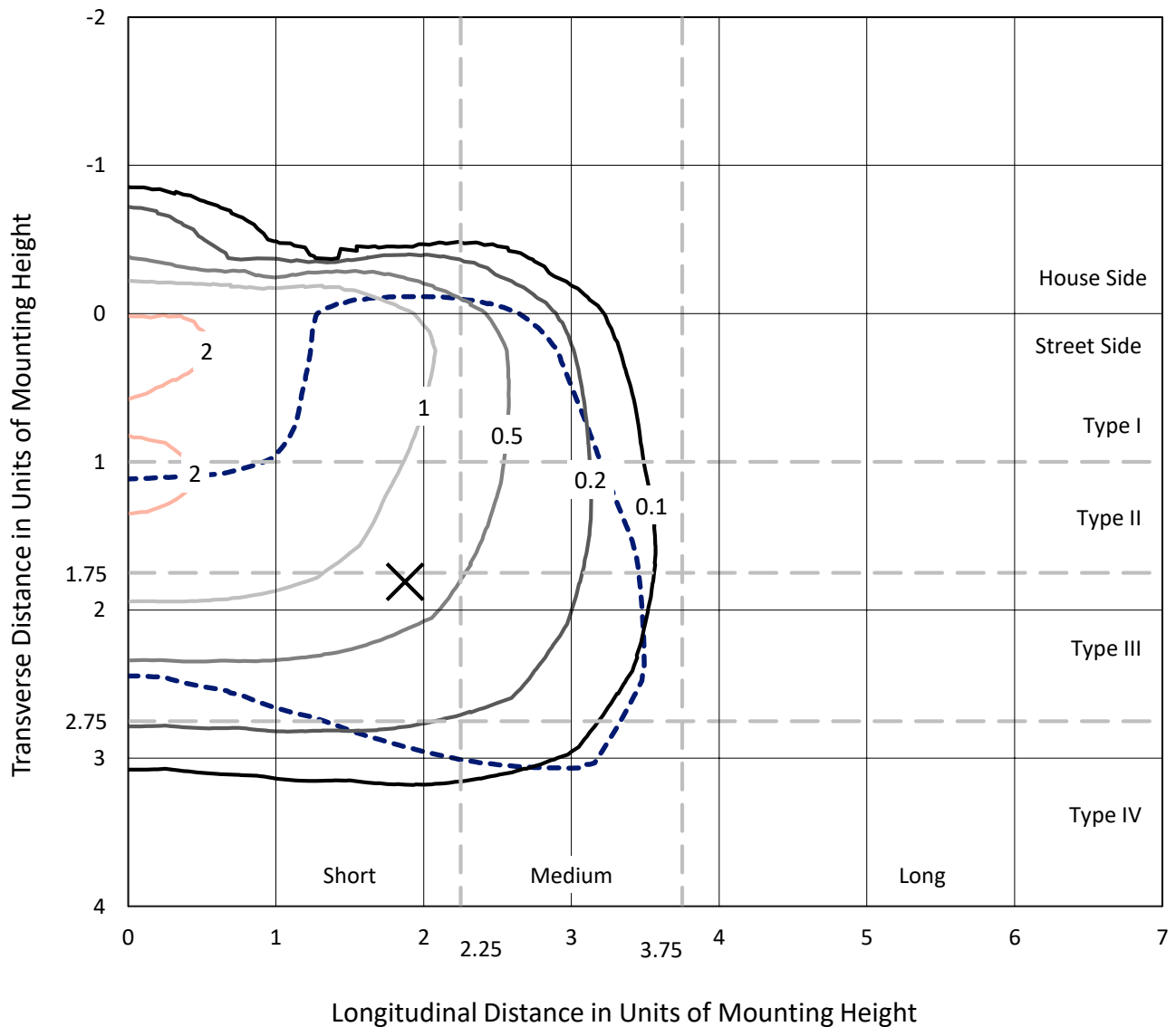


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

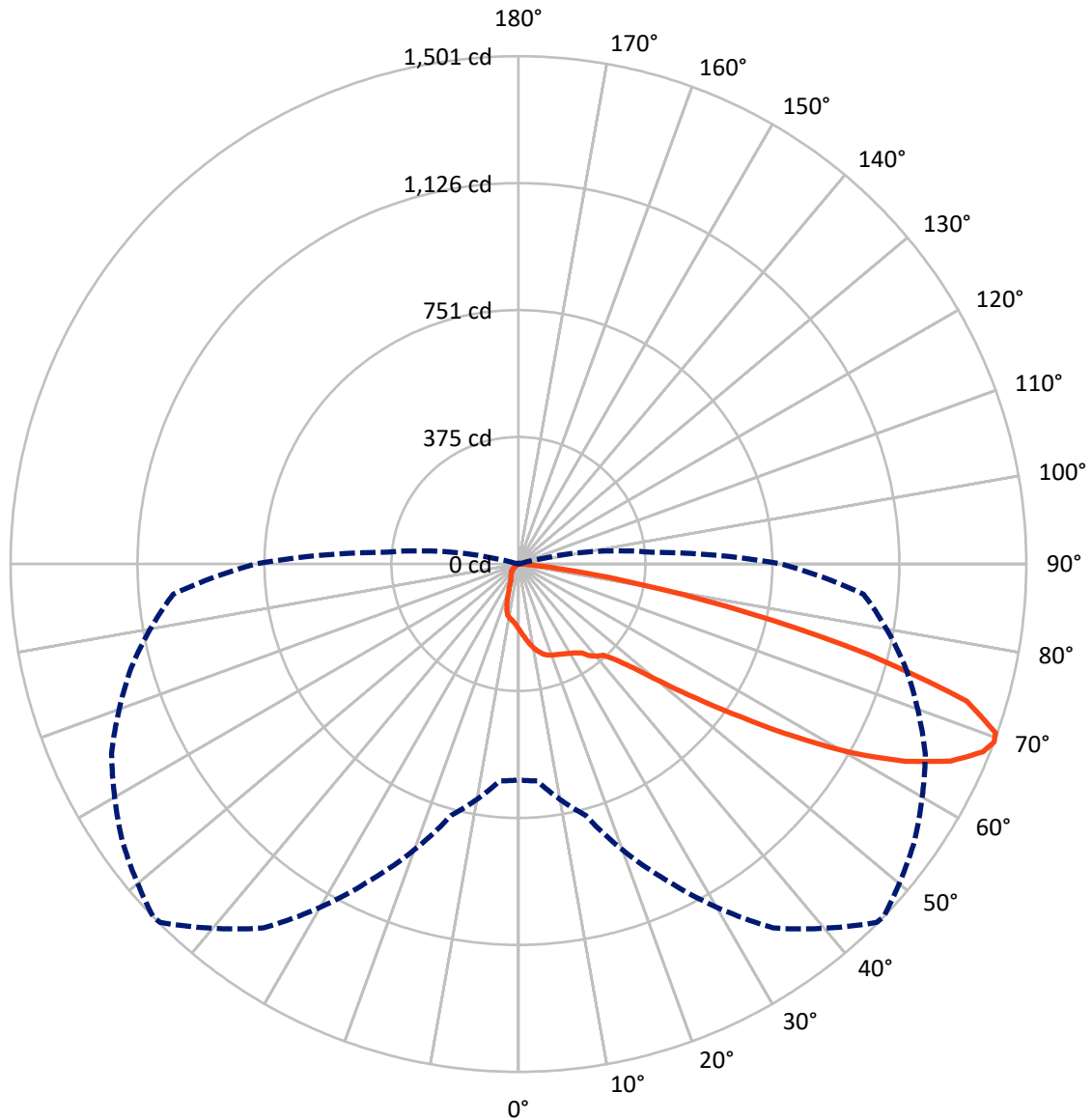


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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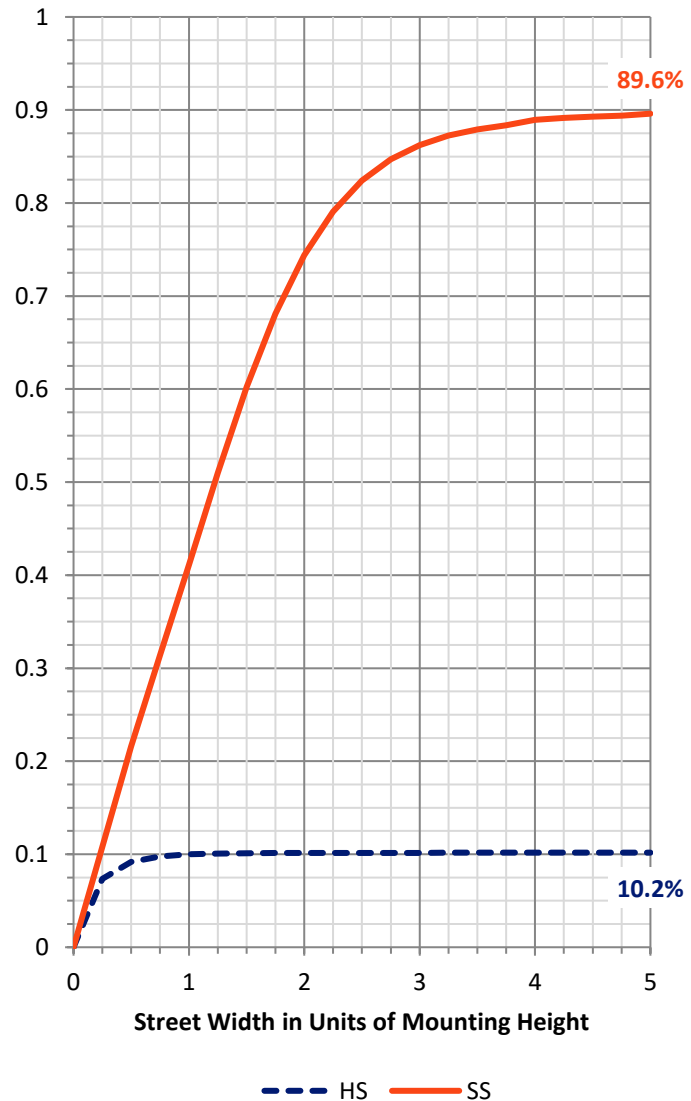
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	197.3	0.0	197.3
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	1724.8	0.0	1724.8
	% Fixture	89.7	0.0	89.7
Total	Lumens	1922.0	0.0	1922.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.2	1.0
10°-20°	58.2	3.0
20°-30°	91.5	4.8
30°-40°	131.1	6.8
40°-50°	226.7	11.8
50°-60°	447.8	23.3
60°-70°	625.8	32.6
70°-80°	302.4	15.7
80°-90°	19.4	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°	1922.0	100.0
0°-180°	1922.0	100.0



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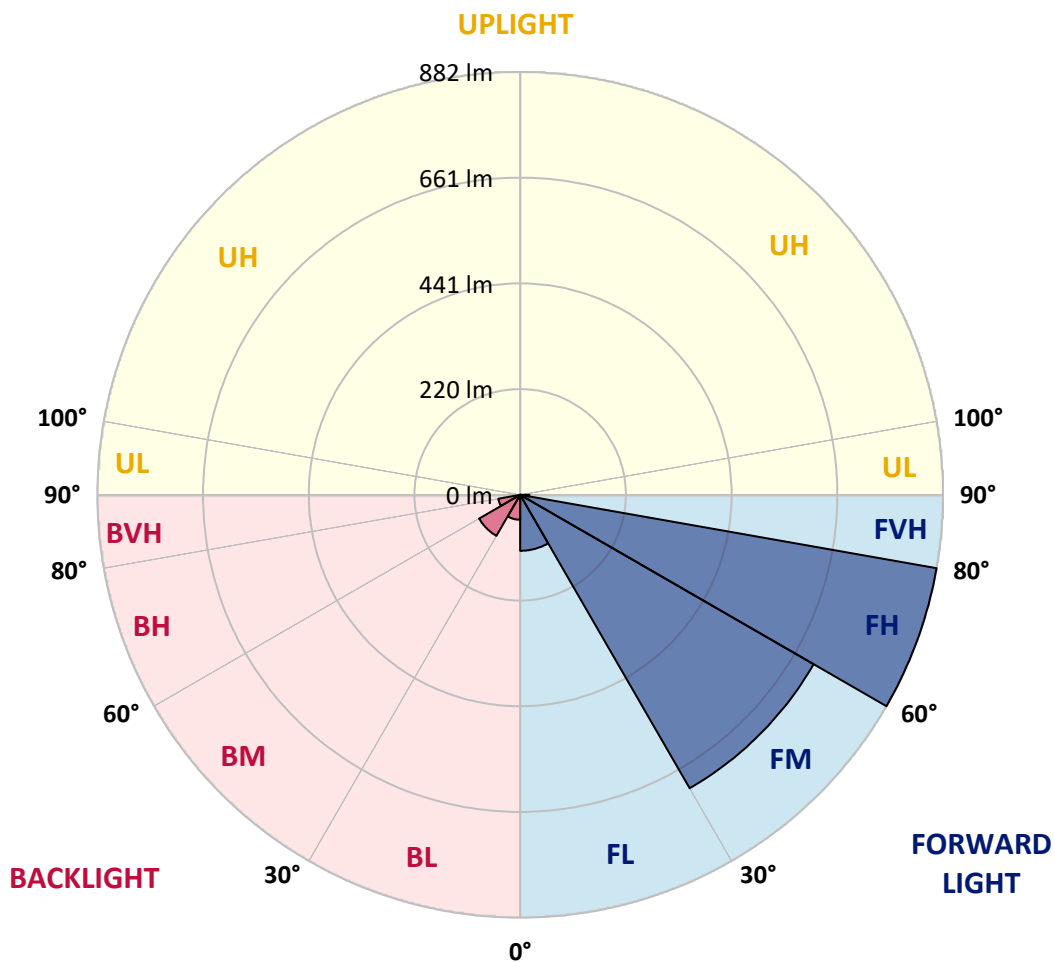
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	116.8	6.1			
FM	(30°-60°)	706.8	36.8			
FH	(60°-80°)	881.9	45.9			G1/1800
FVH	(80°-90°)	19.3	1.0			G1/100
BL	(0°-30°)	52.0	2.7	B0/110		
BM	(30°-60°)	98.8	5.1	B0/220		
BH	(60°-80°)	46.3	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°	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6
2.5°	213.9	213.7	212.4	211.9	208.8	207.0	206.3	204.0	200.8	197.5	193.9
5°	238.3	238.2	235.8	233.6	227.8	222.4	221.4	216.2	208.9	202.0	195.2
7.5°	263.1	262.0	259.6	255.3	246.9	238.3	237.5	230.1	219.7	209.8	200.0
10°	284.2	283.5	280.4	273.9	264.0	254.2	253.2	244.1	232.4	220.2	207.7
12.5°	300.6	300.1	296.0	287.8	277.4	267.2	265.8	257.7	245.2	231.6	216.8
15°	310.6	310.4	305.4	296.7	286.4	277.6	276.4	269.3	257.6	243.4	226.7
17.5°	313.0	313.1	307.9	299.1	290.6	284.3	283.4	278.0	268.3	254.1	236.6
20°	307.7	308.8	304.2	296.6	291.3	288.0	287.3	284.0	275.8	262.5	244.6
22.5°	300.4	300.9	297.7	292.6	290.4	291.1	290.7	288.9	282.0	269.7	252.4
25°	295.8	295.8	294.0	289.6	291.1	294.9	295.0	294.7	289.2	278.5	262.0
27.5°	295.7	295.1	293.0	289.7	293.7	299.6	300.0	302.4	299.0	289.3	273.9
30°	302.9	302.2	297.7	293.4	298.5	304.9	305.8	311.1	309.4	300.9	287.1
32.5°	319.7	317.5	307.3	300.4	304.1	311.8	313.0	321.4	324.1	315.2	299.9
35°	342.8	335.7	321.0	313.5	313.9	321.9	323.0	335.4	343.4	328.4	309.8
37.5°	374.6	371.1	347.2	327.2	328.8	341.0	344.2	357.7	355.4	335.6	321.1
40°	444.4	438.9	413.5	365.6	343.2	356.5	357.5	364.7	364.9	351.9	344.5
42.5°	539.3	537.1	510.3	435.3	371.4	366.9	368.7	380.8	394.4	386.3	386.0
45°	644.5	643.3	614.9	527.7	428.4	400.8	403.1	419.4	445.4	447.2	458.7
47.5°	729.1	728.6	712.3	630.9	515.7	458.4	459.1	476.4	522.2	544.8	563.1
50°	806.3	808.9	796.0	742.6	634.7	548.6	546.9	558.4	632.0	669.0	691.7
52.5°	913.5	917.2	881.1	846.7	759.5	660.5	659.2	671.3	763.9	791.7	795.7
55°	1008.2	1001.9	973.3	963.4	911.7	798.8	798.4	809.1	891.5	903.3	910.8
57.5°	1050.0	1047.6	1061.4	1084.1	1071.1	962.2	961.4	953.2	1005.7	1007.0	1029.9
60°	1076.4	1079.4	1121.7	1191.7	1224.0	1138.0	1132.8	1083.3	1114.7	1111.9	1136.5
62.5°	1056.6	1062.5	1138.5	1255.2	1338.5	1291.4	1284.1	1202.4	1207.9	1198.3	1221.2
65°	951.4	960.5	1085.1	1243.2	1395.3	1411.4	1403.9	1307.6	1281.9	1266.0	1253.3
67.5°	772.5	777.9	908.0	1139.0	1369.7	1482.9	1481.4	1399.8	1337.8	1254.6	1156.0
69°	638.4	643.7	769.0	1029.2	1313.3	1498.3	1501.2	1429.3	1327.1	1185.0	1024.3
70°	540.7	546.4	663.1	935.1	1248.0	1491.1	1496.5	1426.5	1296.7	1104.5	908.6
72.5°	283.6	288.5	408.2	644.2	1017.4	1369.2	1385.3	1306.0	1099.1	802.1	537.3
75°	89.1	91.9	159.4	336.8	696.6	1064.6	1068.3	1024.4	780.5	441.2	223.8
77.5°	34.0	33.2	53.1	124.1	352.2	670.4	693.0	640.2	409.6	156.0	51.6
80°	18.3	18.4	27.6	51.4	150.7	344.5	363.6	310.3	145.5	48.7	11.9
82.5°	7.9	8.3	15.5	27.2	69.2	127.1	136.6	113.7	55.6	32.7	4.4
85°	1.7	1.9	7.5	14.8	28.2	35.7	37.4	36.9	35.4	25.4	1.7
87.5°	0.0	0.0	3.3	5.3	7.1	8.1	7.1	9.3	19.6	17.1	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°	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6	192.6
2.5°	192.8	191.1	188.3	185.3	183.1	180.9	179.1	178.2	177.3	176.7	177.5
5°	192.4	189.2	183.8	178.6	174.8	171.8	169.2	168.2	167.3	166.5	166.4
7.5°	195.6	191.1	182.8	175.2	169.3	165.2	161.8	160.3	159.1	158.6	158.2
10°	201.6	195.9	184.8	174.8	167.3	160.2	152.8	147.2	143.5	141.8	141.1
12.5°	209.4	202.3	188.6	176.7	165.7	152.2	136.5	123.0	114.3	111.4	109.7
15°	218.6	209.8	193.6	179.1	160.1	135.4	108.9	91.2	83.1	81.5	79.7
17.5°	227.5	217.7	199.5	179.6	147.9	108.2	79.8	67.8	64.6	65.7	66.0
20°	235.2	225.6	205.4	175.6	125.6	81.2	61.7	58.8	59.9	62.0	62.4
22.5°	243.0	233.1	210.8	165.2	97.1	61.6	55.6	56.3	57.5	59.6	59.9
25°	252.6	242.3	215.8	146.0	72.9	52.4	52.8	53.9	55.1	57.0	57.1
27.5°	263.6	253.9	219.2	121.0	54.1	48.2	49.4	51.0	52.2	54.0	54.3
30°	278.2	269.3	220.2	95.2	45.3	44.4	45.0	47.0	48.7	50.3	50.6
32.5°	291.9	284.4	216.6	71.8	42.0	40.9	40.9	42.1	44.1	45.6	46.0
35°	304.5	299.6	205.1	52.5	39.5	37.7	36.8	36.8	38.0	39.3	39.7
37.5°	321.2	321.0	186.4	41.9	37.0	35.0	33.1	31.6	31.2	31.5	31.6
40°	349.7	350.0	162.1	37.6	35.0	32.2	29.3	26.7	24.2	23.4	23.3
42.5°	394.3	390.3	136.6	35.5	33.2	29.3	25.0	21.4	17.7	16.5	16.4
45°	465.2	441.1	109.6	33.6	31.3	26.0	20.6	15.9	12.8	11.9	11.9
47.5°	568.4	507.9	84.9	31.5	28.7	22.3	15.6	11.4	9.4	8.9	9.0
50°	675.1	573.3	65.1	28.9	25.7	18.5	11.5	8.3	7.1	7.1	7.2
52.5°	769.7	621.3	50.7	26.1	21.9	14.5	8.7	6.5	5.9	5.9	5.9
55°	858.3	652.2	38.8	22.9	17.4	10.8	6.7	5.3	5.0	4.8	4.7
57.5°	943.7	667.5	29.1	18.5	12.6	7.8	5.3	4.5	4.1	3.9	3.8
60°	1000.6	655.1	20.0	13.6	8.7	5.7	4.4	3.9	3.4	3.2	3.1
62.5°	1032.6	621.1	12.9	9.8	6.2	4.2	3.5	3.2	2.6	2.3	2.3
65°	1019.7	565.0	9.0	7.0	4.5	3.2	2.6	2.6	1.9	1.5	1.4
67.5°	903.6	477.3	6.8	5.2	3.2	2.3	2.0	2.3	1.2	0.7	0.7
69°	777.4	395.6	5.9	4.3	2.7	1.9	1.7	2.1	0.8	0.5	0.5
70°	675.7	341.3	5.3	3.8	2.3	1.6	1.5	2.0	0.8	0.5	0.4
72.5°	404.3	190.3	4.1	2.7	1.4	1.3	1.3	2.3	0.8	0.5	0.4
75°	163.4	67.0	3.0	1.9	1.1	1.1	1.5	2.9	0.7	0.4	0.3
77.5°	37.0	14.7	1.7	1.2	0.7	1.1	1.8	2.3	0.5	0.2	0.0
80°	9.0	3.6	1.1	0.7	0.5	0.8	1.4	1.3	0.1	0.0	0.0
82.5°	3.0	1.3	0.5	0.4	0.1	0.3	0.6	0.4	0.0	0.0	0.0
85°	1.3	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)