

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: P348843

Luminaire Tested: **ARCH-N-PA1-20-827-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
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-T3-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: 1762 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 III - Short - Full 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

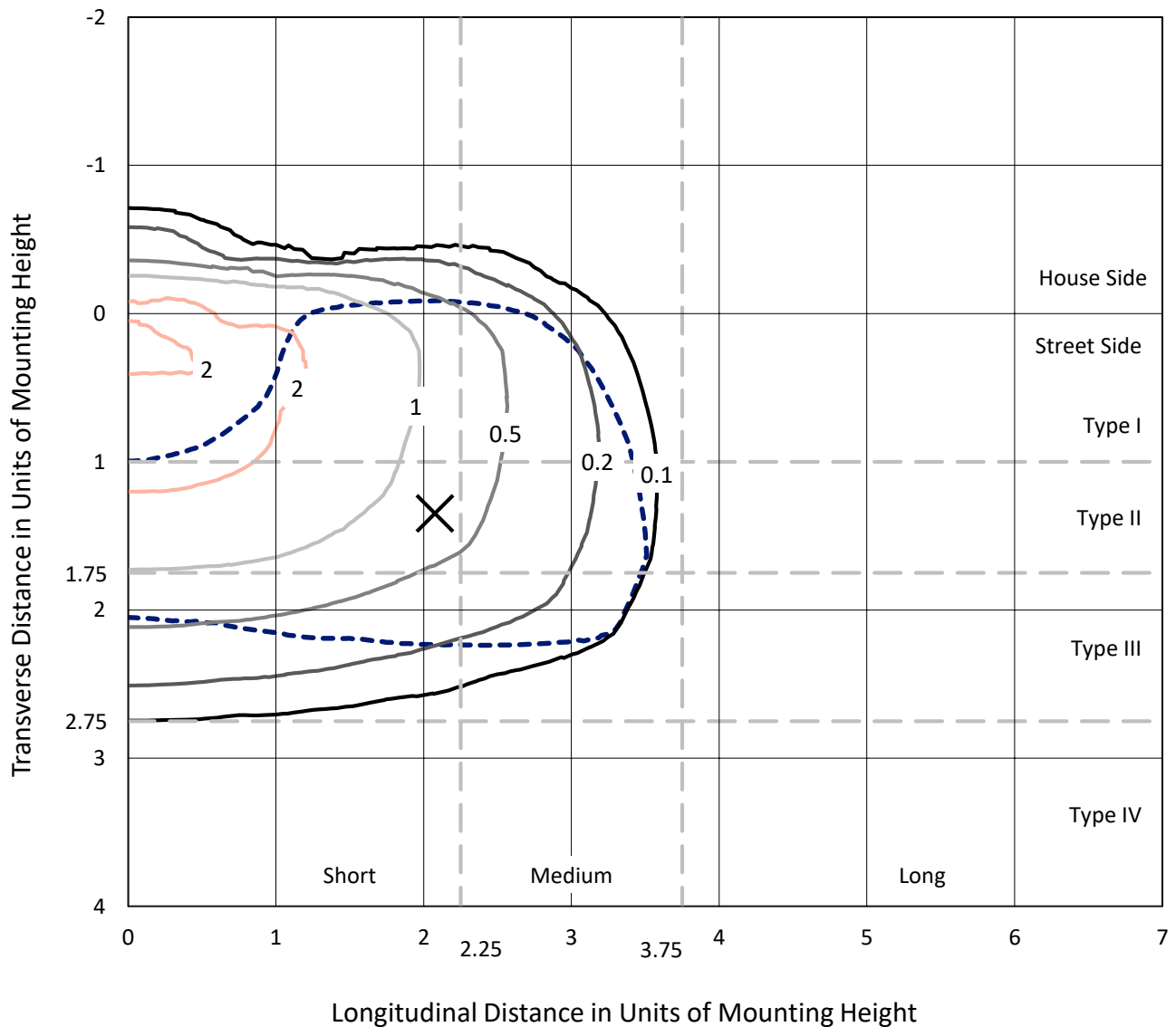


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

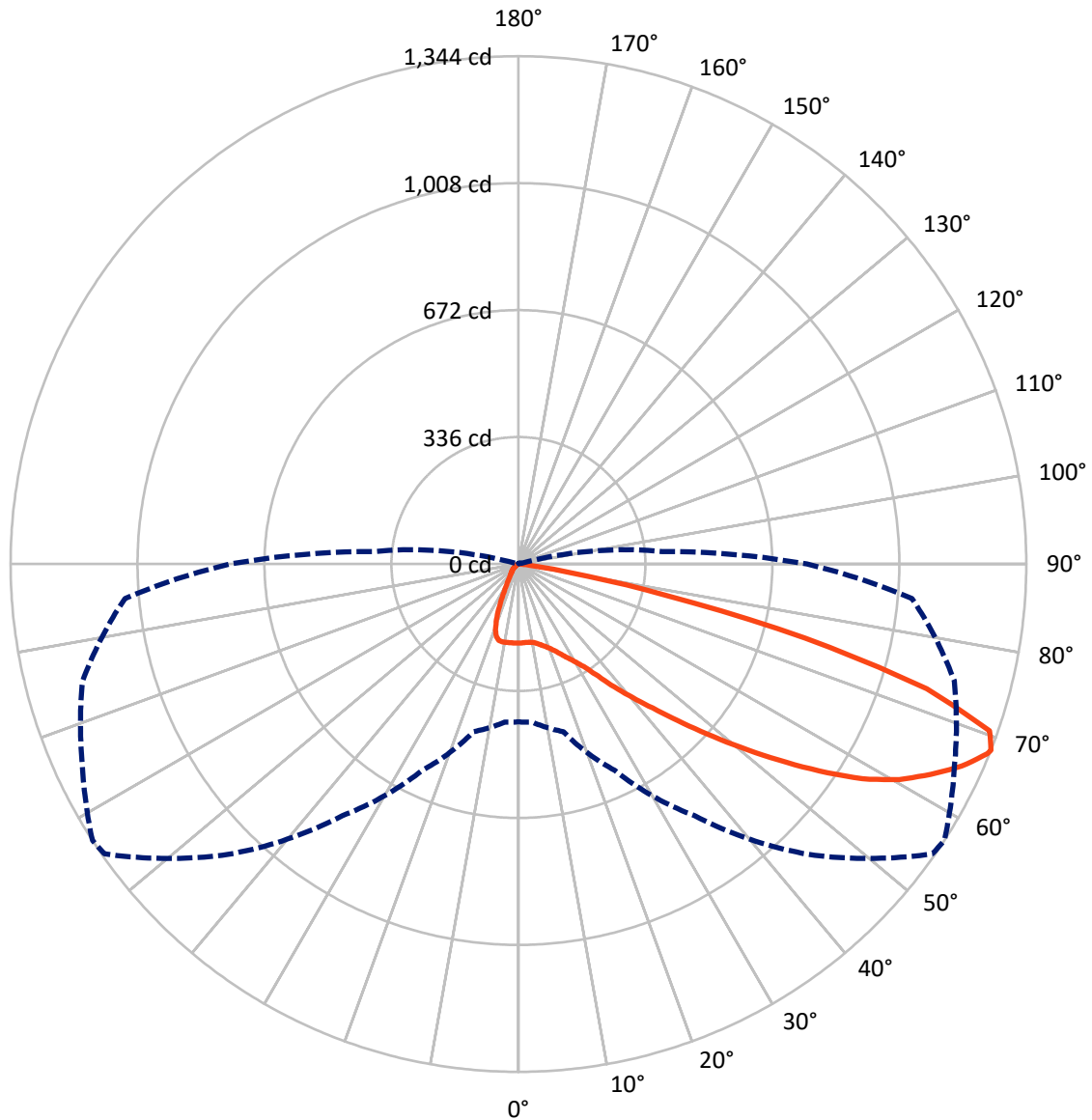


Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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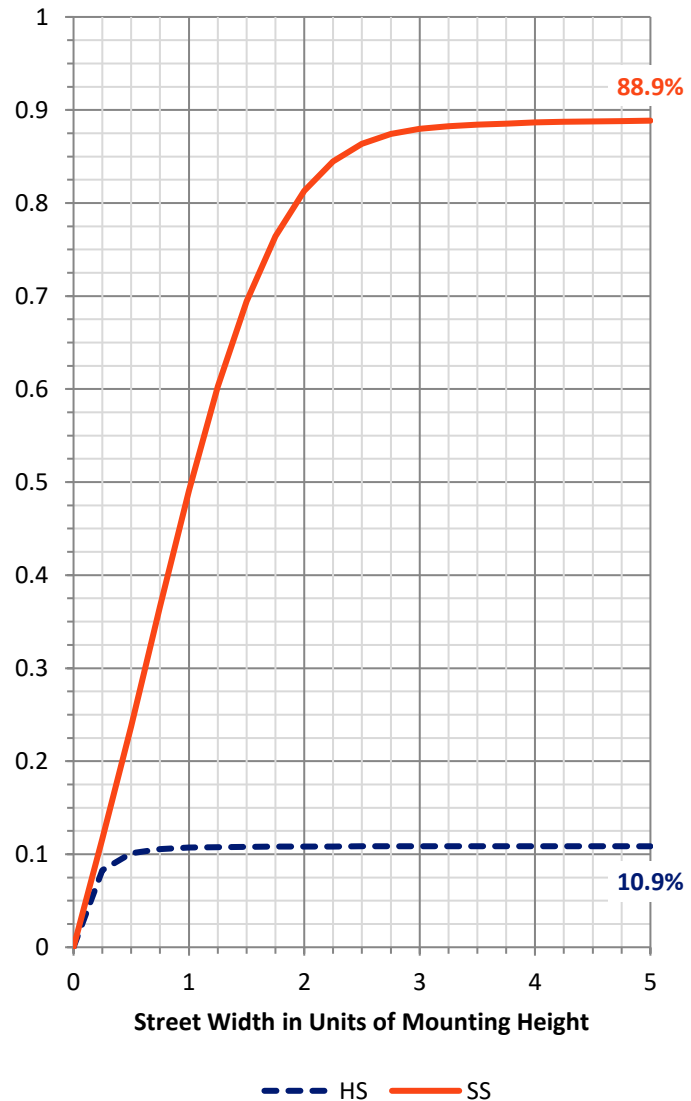
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	193.2	0.0	193.2
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	1568.8	0.0	1568.8
	% Fixture	89.0	0.0	89.0
Total	Lumens	1762.0	0.0	1762.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.6	1.1
10°-20°	54.3	3.1
20°-30°	93.7	5.3
30°-40°	161.7	9.2
40°-50°	276.5	15.7
50°-60°	442.4	25.1
60°-70°	511.2	29.0
70°-80°	195.3	11.1
80°-90°	7.3	0.4
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°	1762.0	100.0
0°-180°	1762.0	100.0



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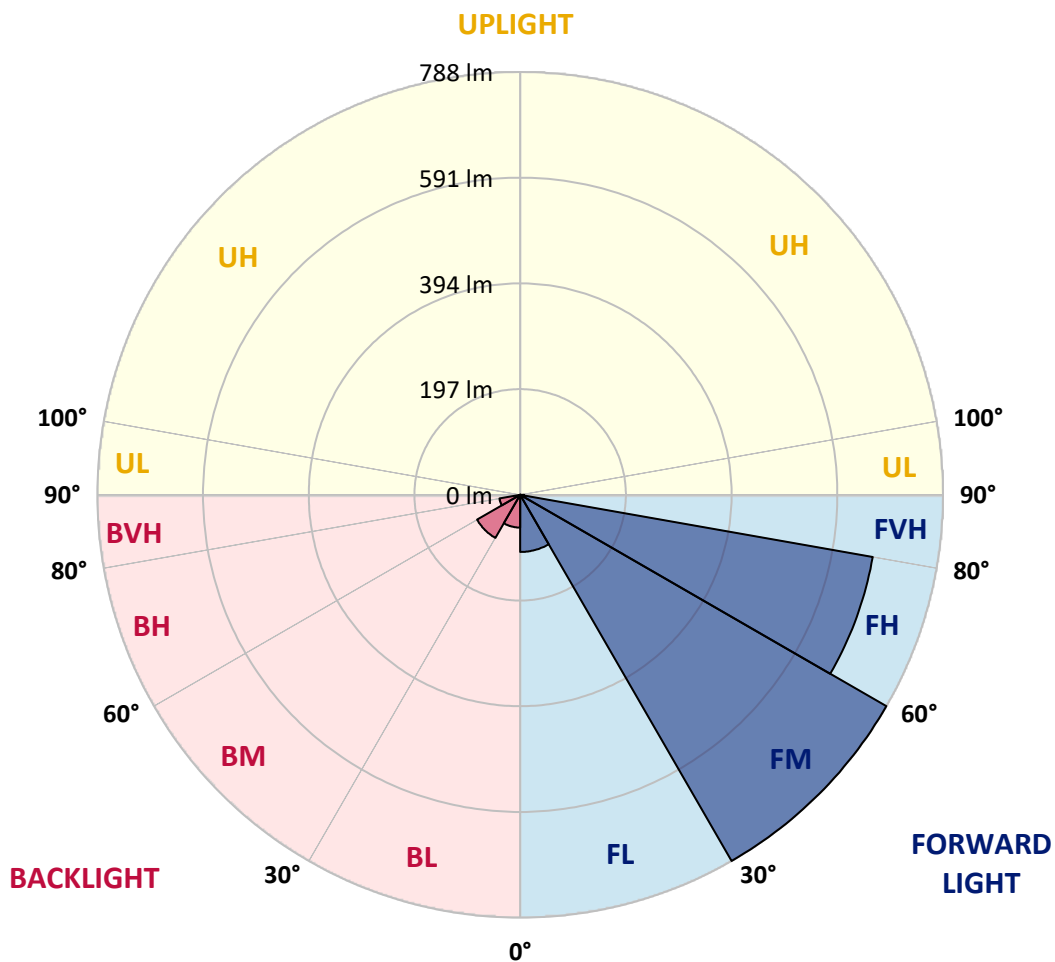
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	106.5	6.0			
FM	(30°-60°)	787.9	44.7			
FH	(60°-80°)	667.2	37.9			G1/1800
FVH	(80°-90°)	7.2	0.4			G0/10
BL	(0°-30°)	61.1	3.5	B0/110		
BM	(30°-60°)	92.7	5.3	B0/220		
BH	(60°-80°)	39.3	2.2	B0/110		G0/110
BVH	(80°-90°)	0.1	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4
2.5°	204.5	205.4	206.0	206.5	207.0	208.0	208.4	208.9	209.1	209.1	209.7
5°	196.4	197.4	198.8	200.0	202.3	205.3	207.5	208.3	209.8	211.1	211.9
7.5°	188.9	190.0	191.7	194.5	198.5	203.3	207.8	209.0	211.9	214.7	216.1
10°	184.0	185.0	187.1	191.0	196.3	203.0	209.4	210.8	215.8	220.5	223.2
12.5°	182.4	183.2	185.5	189.9	196.4	204.3	213.0	215.1	222.5	229.4	233.1
15°	184.8	185.0	187.4	191.5	198.0	207.4	219.1	221.6	230.9	239.9	244.5
17.5°	194.1	193.4	194.6	196.5	201.5	211.5	225.5	229.3	241.6	252.2	256.6
20°	217.5	217.5	214.6	209.6	209.7	217.8	234.2	238.4	253.5	265.8	269.8
22.5°	257.4	256.6	250.9	238.7	227.5	228.7	244.8	250.3	267.9	280.9	282.3
25°	305.4	304.4	295.7	278.4	258.9	246.4	259.1	265.4	284.9	296.5	293.8
27.5°	356.2	355.4	346.8	325.3	297.6	274.5	276.2	282.2	302.4	313.8	305.0
30°	405.4	405.7	397.1	375.1	343.7	310.4	297.9	301.4	319.3	330.8	318.3
32.5°	452.2	452.6	445.2	420.6	391.2	352.2	327.8	326.9	338.9	350.3	336.0
35°	494.0	494.8	489.7	470.6	439.6	398.7	366.8	364.6	366.8	379.8	363.1
37.5°	534.2	534.7	530.9	514.8	488.8	449.7	415.9	412.8	408.0	417.9	398.8
40°	578.3	577.0	572.6	558.0	535.7	506.1	468.7	463.4	455.0	463.8	445.8
42.5°	619.3	617.9	618.6	602.1	583.3	564.1	530.3	521.1	516.2	526.4	503.5
45°	670.5	669.8	672.3	657.9	642.7	628.8	600.9	590.9	588.7	600.6	573.2
47.5°	721.1	722.9	730.7	724.6	718.4	706.2	675.6	671.1	672.4	686.9	646.8
50°	763.3	765.4	786.7	793.7	802.6	795.4	764.8	762.0	767.3	780.3	725.9
52.5°	793.7	798.2	824.6	856.8	889.3	894.1	863.6	861.1	868.1	870.1	787.1
55°	814.9	818.8	848.7	907.7	973.9	994.7	975.7	966.0	964.7	945.0	851.4
57.5°	818.7	818.2	861.2	940.6	1040.2	1093.9	1081.9	1072.4	1045.1	1014.1	925.1
60°	797.5	799.9	849.8	952.0	1081.9	1169.0	1169.9	1157.6	1115.0	1081.4	996.6
62.5°	732.3	742.2	792.6	922.1	1081.4	1199.2	1234.4	1225.0	1174.1	1136.4	1069.1
65°	626.7	630.2	678.3	819.7	1008.3	1186.6	1292.5	1289.0	1227.3	1189.9	1106.3
67.5°	457.7	450.1	500.6	645.4	853.7	1112.8	1334.1	1338.5	1268.4	1200.9	1066.7
68°	417.7	419.9	459.2	602.4	813.2	1086.7	1336.9	1343.6	1272.5	1193.7	1045.0
70°	248.9	253.3	288.4	414.7	618.6	939.1	1307.2	1322.6	1248.2	1119.8	903.9
72.5°	63.6	68.7	101.9	185.6	353.3	661.7	1103.5	1129.6	1083.7	908.5	610.2
75°	26.2	27.5	36.4	61.2	131.6	298.1	727.3	783.2	751.3	543.9	275.8
77.5°	18.1	19.0	23.4	33.9	57.0	101.1	356.6	396.9	357.6	185.6	60.2
80°	13.0	13.7	16.7	22.6	32.7	36.1	116.2	134.4	106.7	40.7	14.9
82.5°	7.7	8.3	12.5	16.1	19.9	17.2	28.9	32.8	30.9	20.2	6.7
85°	3.8	4.5	8.4	11.5	10.7	7.2	8.8	9.8	12.2	12.3	3.6
87.5°	0.2	0.5	4.9	6.9	3.0	1.7	2.6	3.2	4.3	6.1	1.5
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°	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4
2.5°	210.0	210.0	209.5	209.2	209.4	208.4	208.0	208.1	208.1	208.4	208.0
5°	212.0	212.0	211.0	209.7	209.0	207.0	205.8	205.5	205.2	205.0	204.7
7.5°	216.5	216.0	214.3	211.4	208.9	204.7	201.5	199.9	199.0	198.7	198.5
10°	223.8	222.9	220.0	214.5	208.8	201.4	194.5	189.5	185.5	183.8	182.8
12.5°	233.5	232.2	227.3	218.3	208.2	194.5	179.5	165.1	151.7	146.2	143.5
15°	244.8	242.9	235.1	221.5	204.8	179.1	146.6	121.3	102.7	95.7	92.7
17.5°	256.2	253.7	241.9	223.5	194.5	147.2	102.8	77.7	65.2	61.9	60.7
20°	267.7	264.0	247.9	222.0	171.4	106.1	67.8	56.7	53.2	52.2	51.8
22.5°	278.6	272.9	253.2	216.1	135.7	71.2	53.7	50.2	49.0	48.4	48.2
25°	288.1	280.2	257.9	198.1	96.1	53.8	48.3	47.2	45.7	44.6	44.7
27.5°	297.0	287.4	260.7	168.5	64.1	46.0	44.7	43.2	40.4	38.8	38.8
30°	307.8	297.1	262.8	129.6	47.2	40.7	39.7	37.2	33.5	31.4	31.4
32.5°	323.9	311.8	261.4	91.0	39.1	35.7	33.4	30.1	26.0	24.0	23.9
35°	348.7	334.4	251.9	59.7	34.5	31.1	27.3	23.2	19.7	18.0	17.9
37.5°	382.0	364.8	230.6	42.7	30.9	26.7	22.2	17.7	15.1	14.0	13.9
40°	425.2	400.0	200.1	34.6	27.6	22.6	17.2	13.7	11.9	11.1	11.2
42.5°	477.1	437.7	163.5	29.8	24.3	18.6	13.4	10.8	9.7	9.1	8.9
45°	534.8	475.0	125.2	26.6	21.1	15.0	10.5	8.6	7.7	7.3	7.3
47.5°	598.2	511.2	91.6	23.7	17.6	11.6	8.4	7.0	6.2	6.0	5.9
50°	655.8	536.4	66.1	20.7	14.4	9.2	6.8	5.8	5.3	5.0	5.0
52.5°	703.8	544.3	48.7	17.5	11.7	7.3	5.7	5.0	4.5	4.2	4.2
55°	746.0	541.1	36.2	14.4	9.4	6.0	4.8	4.2	3.8	3.6	3.6
57.5°	786.5	530.6	27.0	11.7	7.6	4.8	4.1	3.6	3.2	3.0	3.0
60°	819.6	513.1	20.1	9.5	6.1	3.9	3.4	2.9	2.6	2.3	2.3
62.5°	846.4	493.7	14.7	7.8	4.8	3.1	2.7	2.4	1.9	1.7	1.7
65°	846.6	461.7	11.1	6.5	3.7	2.4	2.0	1.9	1.2	1.0	0.9
67.5°	785.3	398.0	8.5	5.6	2.9	1.8	1.5	1.6	0.7	0.4	0.3
68°	763.1	381.8	8.0	5.5	2.7	1.7	1.4	1.6	0.6	0.3	0.2
70°	643.4	303.8	6.4	5.3	2.4	1.3	1.2	1.6	0.5	0.2	0.2
72.5°	411.5	176.3	4.7	4.2	1.8	1.0	0.7	1.4	0.5	0.2	0.1
75°	175.1	54.7	3.2	3.0	1.1	0.7	0.5	0.9	0.3	0.1	0.0
77.5°	36.9	12.3	1.9	1.8	0.7	0.5	0.3	0.2	0.1	0.0	0.0
80°	9.5	3.6	1.0	0.9	0.4	0.2	0.2	0.0	0.0	0.0	0.0
82.5°	3.0	1.4	0.6	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.5	0.8	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.2	0.1	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)