

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: P348561

Luminaire Tested: **ARCH-N-PA1-10-827-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348561  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-10-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1667 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

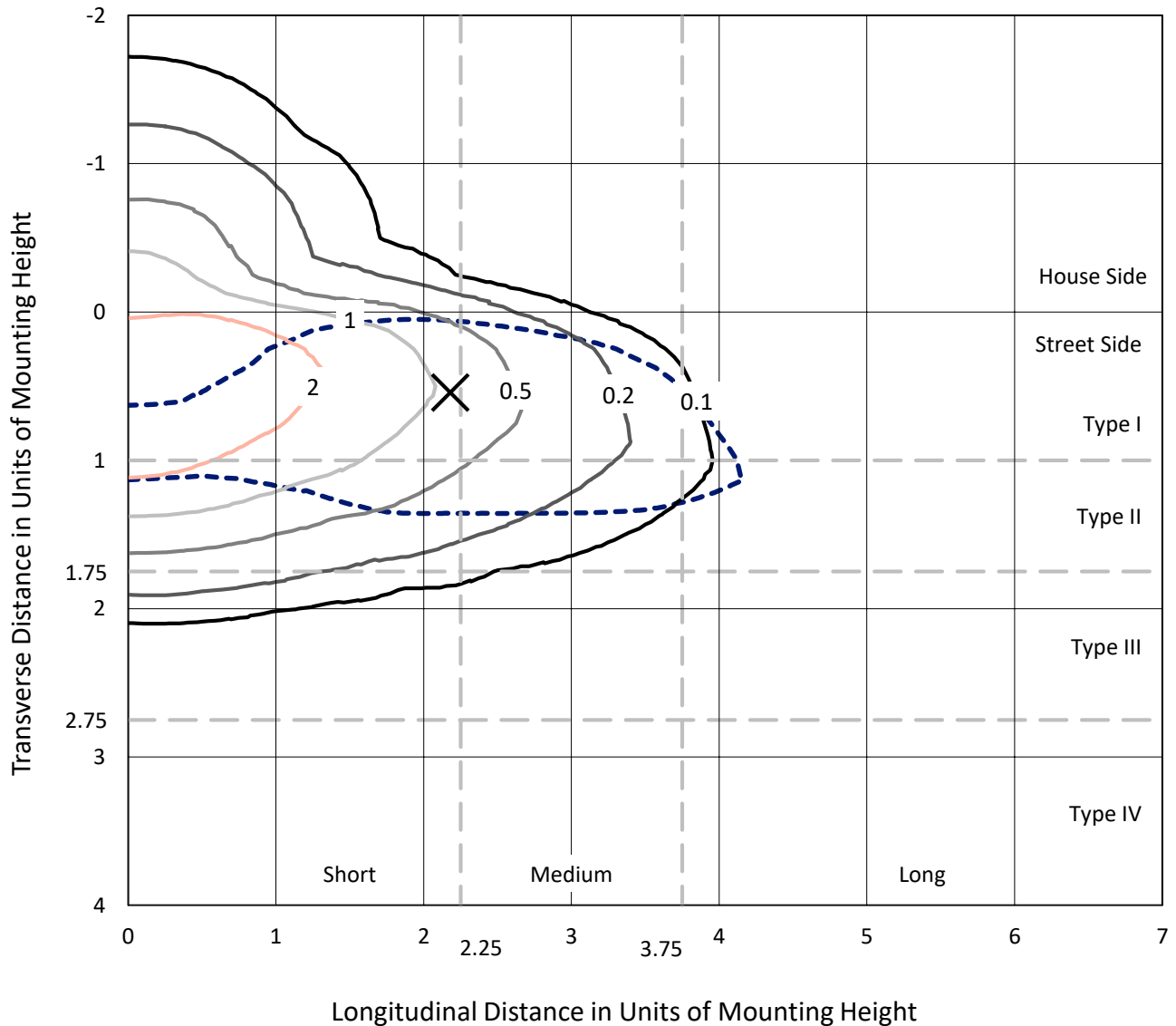
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

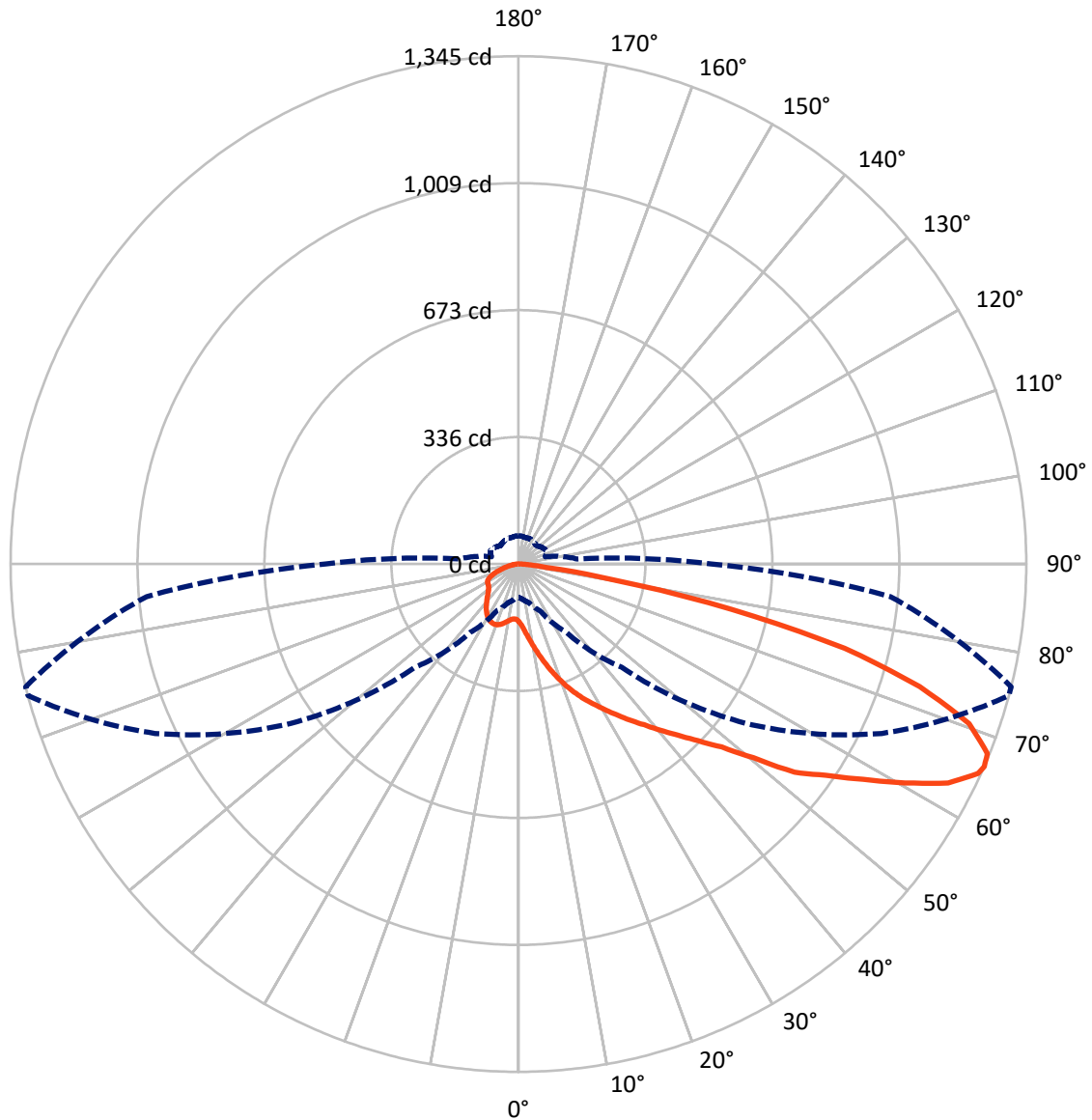
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical



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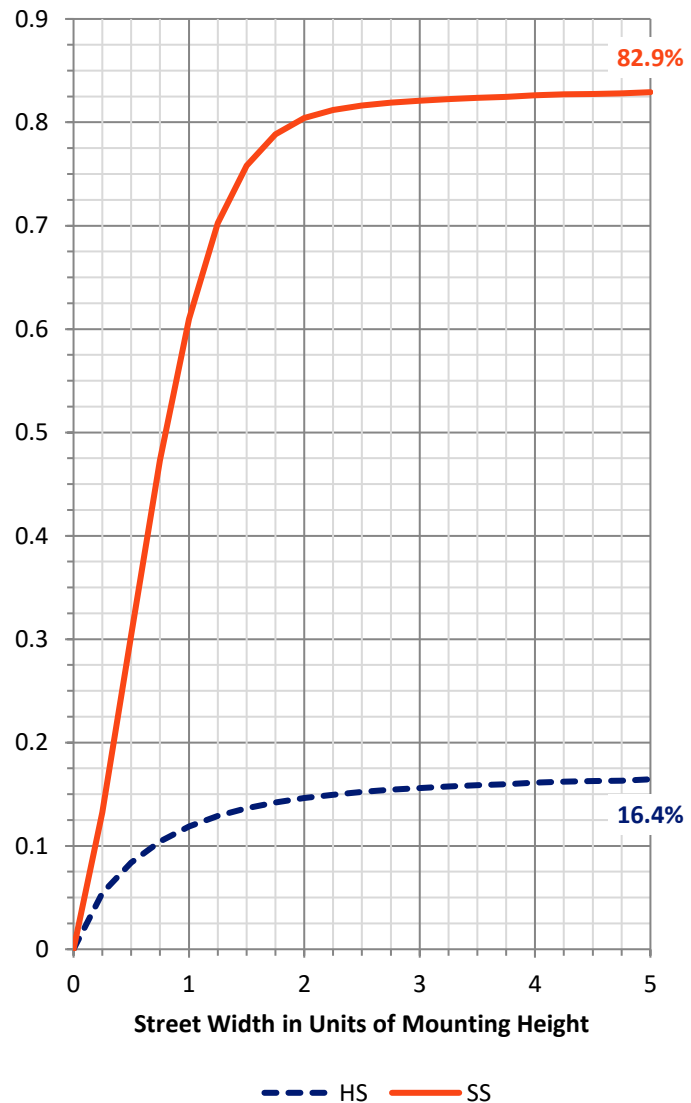
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	280.5	0.0	280.5
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	1386.5	0.0	1386.5
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	1667.0	0.0	1667.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.4	1.1
10°-20°	72.7	4.4
20°-30°	141.3	8.5
30°-40°	230.6	13.8
40°-50°	315.0	18.9
50°-60°	366.9	22.0
60°-70°	329.0	19.7
70°-80°	166.3	10.0
80°-90°	26.8	1.6
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°	1667.0	100.0
0°-180°	1667.0	100.0

**Coefficient of Utilization**



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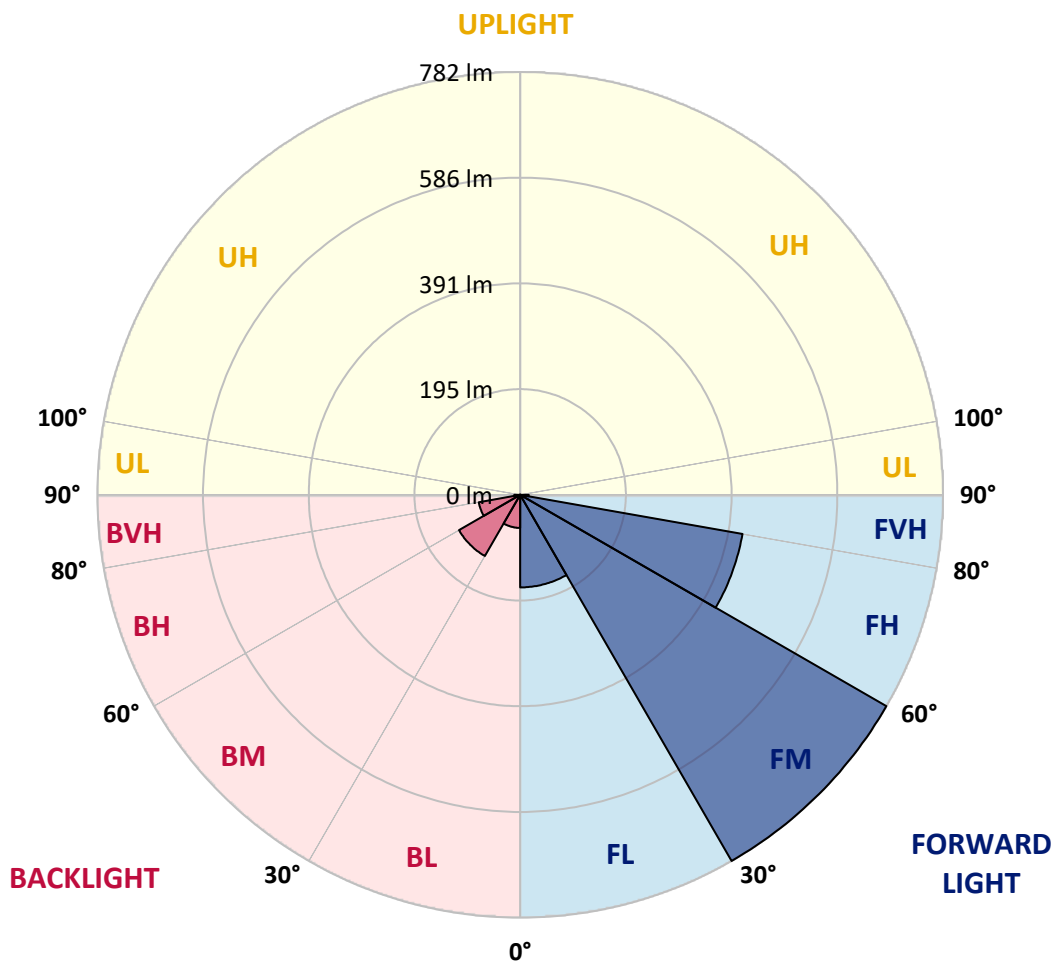
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	171.2	10.3			
FM (30°-60°)	781.9	46.9			
FH (60°-80°)	417.5	25.0			G0/660
FVH (80°-90°)	15.9	1.0			G1/100
BL (0°-30°)	61.2	3.7	B0/110		
BM (30°-60°)	130.6	7.8	B0/220		
BH (60°-80°)	77.7	4.7	B0/110		G0/110
BVH (80°-90°)	11.0	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
2.5°	202.1	199.0	198.8	194.3	193.3	184.7	178.4	171.9	164.4	162.9	157.0
5°	259.6	259.3	255.4	248.1	242.4	227.8	213.4	198.1	181.3	178.6	165.4
7.5°	311.3	310.9	307.9	300.0	291.7	273.8	253.2	229.8	202.6	198.6	176.6
10°	350.6	350.4	349.4	343.6	336.6	319.4	296.7	264.7	227.3	221.8	190.7
12.5°	380.9	381.3	381.9	379.9	376.6	361.9	338.6	301.7	253.7	248.3	206.4
15°	401.5	402.5	406.0	408.9	410.6	401.6	379.1	339.6	283.2	276.7	223.8
17.5°	411.8	413.0	419.0	427.7	435.8	434.9	416.9	375.7	311.6	305.3	242.4
20°	420.8	421.6	428.4	438.9	453.1	459.4	449.3	410.4	342.7	335.2	262.3
22.5°	446.7	447.8	449.8	455.7	468.3	479.9	475.0	443.3	371.1	364.2	281.0
25°	496.7	498.0	493.6	488.6	490.9	499.0	499.9	473.3	400.0	392.1	301.2
27.5°	557.0	558.9	551.3	538.4	527.0	523.9	522.9	497.8	427.6	418.4	321.2
30°	616.0	619.2	609.4	592.6	571.9	557.3	546.5	521.9	454.7	446.0	340.1
32.5°	673.7	672.4	658.2	641.8	617.4	599.1	573.0	547.7	485.3	475.3	358.8
35°	713.2	713.6	700.4	681.0	657.8	643.7	608.5	575.5	516.5	507.2	380.1
37.5°	746.8	744.7	729.8	711.6	691.6	685.6	650.1	606.2	550.3	540.2	402.7
40°	758.0	755.6	745.8	732.7	716.7	716.2	696.0	641.0	588.5	578.5	428.2
42.5°	751.2	748.1	744.1	740.5	735.6	737.9	739.2	681.7	630.4	619.3	457.8
45°	726.1	721.4	724.3	732.0	742.7	755.5	778.1	726.8	677.5	668.1	492.5
47.5°	687.6	683.4	692.2	708.8	737.9	770.2	814.9	776.6	733.6	724.3	541.9
50°	633.4	634.6	647.3	677.4	721.4	777.0	860.3	842.6	815.2	806.6	609.3
52.5°	544.4	544.6	580.2	629.7	692.2	773.5	885.5	926.8	926.7	916.2	673.5
55°	461.8	466.8	495.0	560.8	644.9	759.5	903.1	967.8	999.8	987.5	733.3
57.5°	381.1	384.0	410.7	476.8	577.4	722.1	921.2	1017.0	1084.1	1076.4	807.6
60°	289.3	293.8	321.4	382.5	491.0	655.7	922.9	1068.3	1184.9	1177.1	890.7
62.5°	187.8	195.6	221.4	278.6	386.5	560.2	883.5	1101.9	1280.5	1277.7	964.3
65°	107.9	113.8	131.7	175.9	266.7	440.3	789.8	1089.0	1339.3	1337.7	991.9
66°	88.2	91.9	105.6	137.5	220.0	386.7	735.4	1061.7	1345.1	1345.2	988.7
67.5°	70.5	72.2	78.3	98.4	162.4	306.5	638.1	1001.7	1337.9	1339.8	968.3
70°	58.3	59.2	61.1	66.0	88.6	184.8	452.9	845.7	1265.1	1266.7	888.6
72.5°	52.3	52.9	53.6	54.3	62.5	103.3	276.6	676.5	1109.2	1111.2	767.1
75°	47.4	47.7	47.6	47.7	52.5	65.8	143.0	505.1	896.9	892.9	587.6
77.5°	41.7	41.9	41.4	41.5	46.4	50.6	71.1	353.6	605.3	577.3	331.1
80°	35.2	35.4	35.2	35.6	40.4	38.2	41.4	198.9	267.6	253.1	117.7
82.5°	26.6	27.6	28.2	29.8	33.3	27.2	27.7	77.5	81.5	77.6	36.1
85°	11.7	14.2	21.3	22.8	25.0	16.3	18.2	31.6	33.2	32.1	13.1
87.5°	3.1	3.3	10.5	13.2	13.9	7.4	9.5	14.4	15.2	14.4	4.4
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°	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
2.5°	153.9	151.2	146.2	141.8	138.4	136.2	133.9	132.8	132.1	131.4	131.5
5°	158.9	153.3	144.7	138.7	135.3	133.1	132.0	131.5	131.2	130.6	130.6
7.5°	166.3	158.3	146.6	140.4	137.7	136.0	135.4	135.1	134.8	134.0	134.1
10°	175.6	164.5	150.5	144.4	142.0	140.2	139.2	138.9	138.3	137.4	137.5
12.5°	186.6	172.2	155.6	149.3	146.3	143.9	142.3	141.4	140.3	139.1	139.2
15°	198.6	180.5	161.2	153.6	149.6	146.2	143.7	142.0	140.4	138.9	138.8
17.5°	210.8	188.5	165.4	156.0	150.6	146.1	142.7	140.1	138.0	136.2	136.0
20°	223.9	195.8	167.8	155.8	148.8	143.5	138.9	135.7	133.4	131.6	131.3
22.5°	237.2	202.5	168.2	153.5	144.8	138.3	133.4	129.9	127.6	125.7	125.0
25°	249.5	207.8	166.6	149.0	139.2	132.1	127.4	123.9	122.0	119.8	119.1
27.5°	260.6	211.5	163.3	143.3	132.9	126.0	121.6	118.5	116.4	114.7	114.1
30°	270.6	213.5	157.9	136.5	126.4	120.1	116.4	114.3	112.5	110.4	110.0
32.5°	280.1	213.5	151.0	129.1	120.0	115.0	112.8	111.5	109.5	107.4	106.8
35°	289.6	212.2	142.8	121.3	114.1	111.3	111.2	109.7	106.6	103.7	103.0
37.5°	299.7	209.5	133.7	114.1	109.3	109.7	110.6	107.2	102.8	98.8	97.7
40°	311.0	205.8	124.2	107.8	105.3	108.9	109.1	103.7	95.1	91.5	90.5
42.5°	324.3	202.1	115.3	102.3	102.2	106.7	106.2	96.2	91.0	89.1	88.6
45°	341.8	200.1	107.0	97.0	99.7	103.2	101.3	92.0	89.8	88.7	88.3
47.5°	369.3	201.1	99.3	92.8	97.2	99.6	92.1	90.3	88.7	87.4	87.0
50°	403.8	200.5	93.0	89.9	94.3	95.9	88.0	88.1	87.3	85.8	85.1
52.5°	429.8	195.6	89.0	88.3	91.9	89.2	85.4	85.9	85.5	83.4	82.6
55°	454.9	191.5	87.0	87.7	90.0	81.0	82.3	83.6	83.2	81.1	80.8
57.5°	486.1	190.7	85.7	87.8	88.5	76.9	79.4	81.0	80.8	79.9	79.7
60°	524.3	190.9	84.6	88.1	86.8	73.8	76.6	78.7	78.9	78.7	78.6
62.5°	545.3	184.7	81.8	87.3	83.8	71.1	73.7	76.8	76.9	77.2	77.1
65°	527.4	166.3	76.5	84.5	78.8	68.9	71.3	74.6	73.7	75.3	75.3
66°	510.1	155.6	73.9	82.7	76.6	68.1	70.5	73.5	72.4	74.5	74.5
67.5°	474.8	137.7	69.2	78.9	73.6	66.9	69.6	71.6	70.1	73.2	73.0
70°	410.1	106.5	59.8	70.2	68.5	65.1	68.3	67.9	65.7	70.5	69.6
72.5°	345.8	80.9	48.0	58.7	60.9	62.9	66.6	63.1	60.4	63.7	61.7
75°	268.3	60.8	37.9	45.7	51.4	59.5	64.5	57.6	53.7	53.4	52.3
77.5°	145.0	41.8	30.1	34.9	40.9	55.2	63.0	51.7	45.8	44.5	43.6
80°	57.4	27.2	21.8	26.4	28.6	49.0	59.6	44.9	37.8	36.4	35.1
82.5°	23.7	16.1	14.1	17.7	18.6	41.9	53.5	36.8	29.2	40.4	42.9
85°	10.2	8.8	8.4	9.2	10.5	29.4	42.6	28.1	31.5	28.1	22.4
87.5°	3.1	3.7	3.6	3.5	3.8	7.0	22.7	15.6	23.1	8.8	6.6
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)