

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: P349011

Luminaire Tested: **ARCH-N-PA1-20-827-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P349011  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)  
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-T2U-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: 1795 lumens  
Efficiency: N/A  
Efficacy: 74.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B0 - U0 - G0

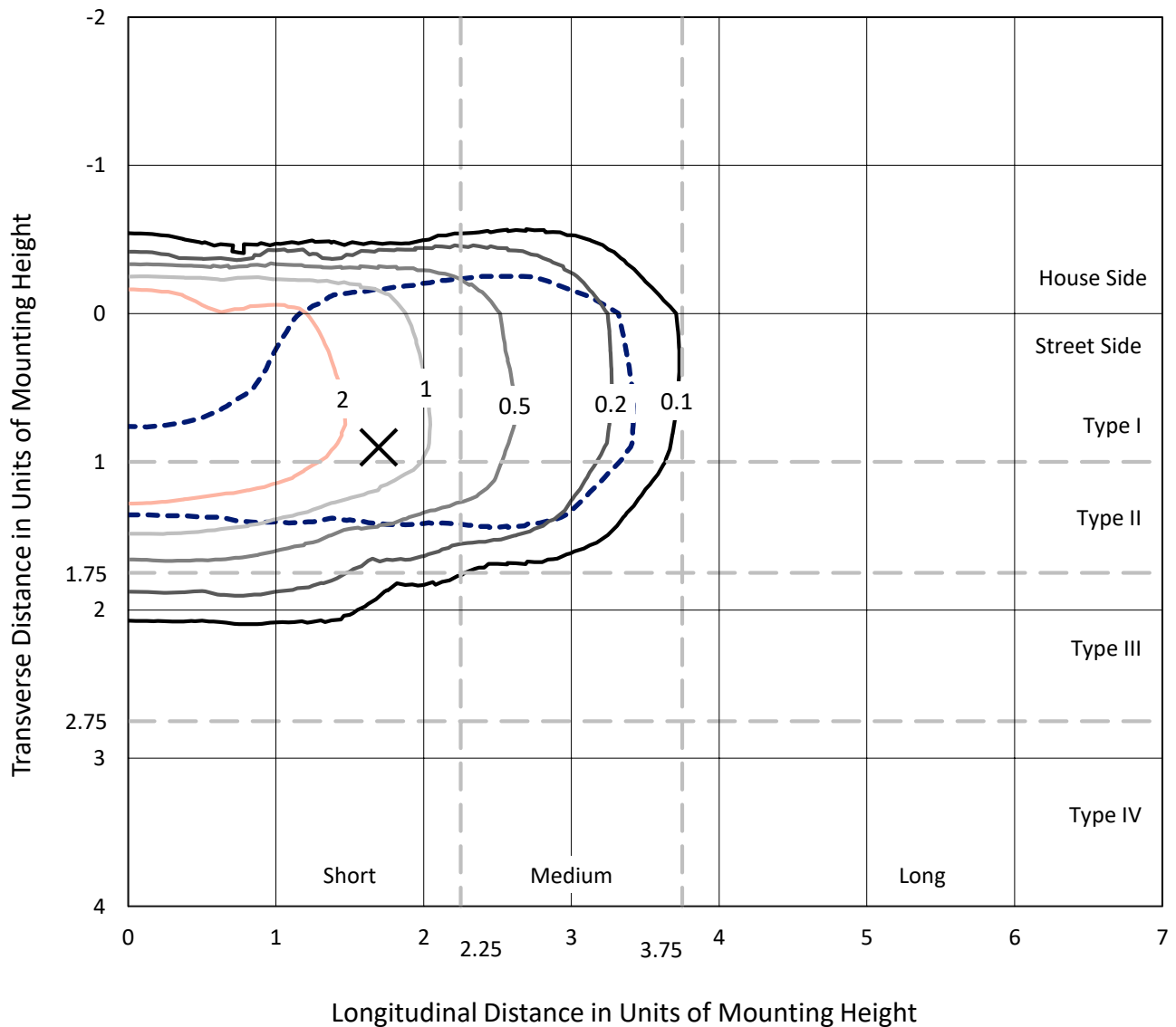
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P349011  
 CATALOG NUMBER: ARCH-N-PA1-20-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

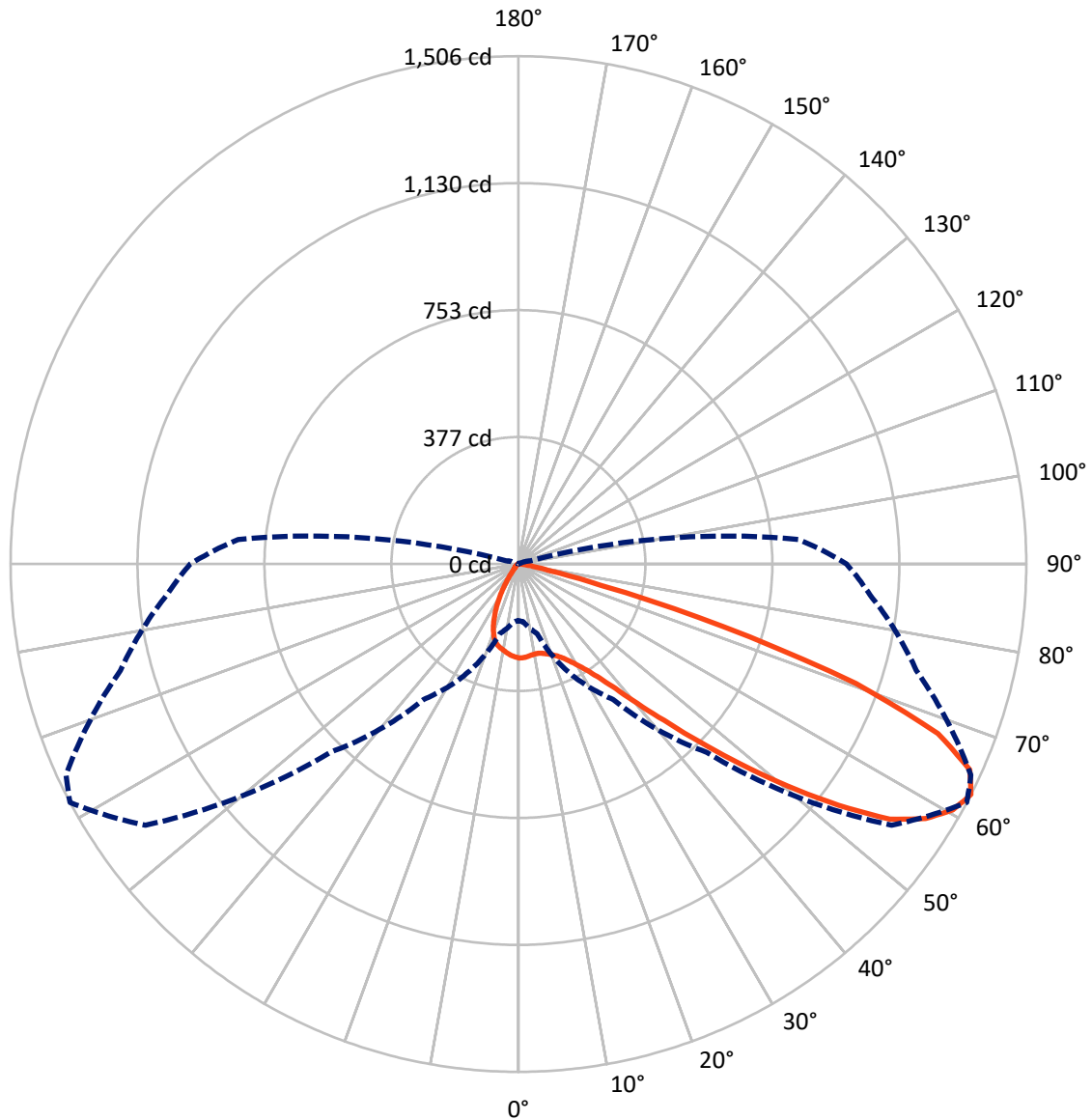
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P349011  
CATALOG NUMBER: ARCH-N-PA1-20-827-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P349011

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T2U-HSS

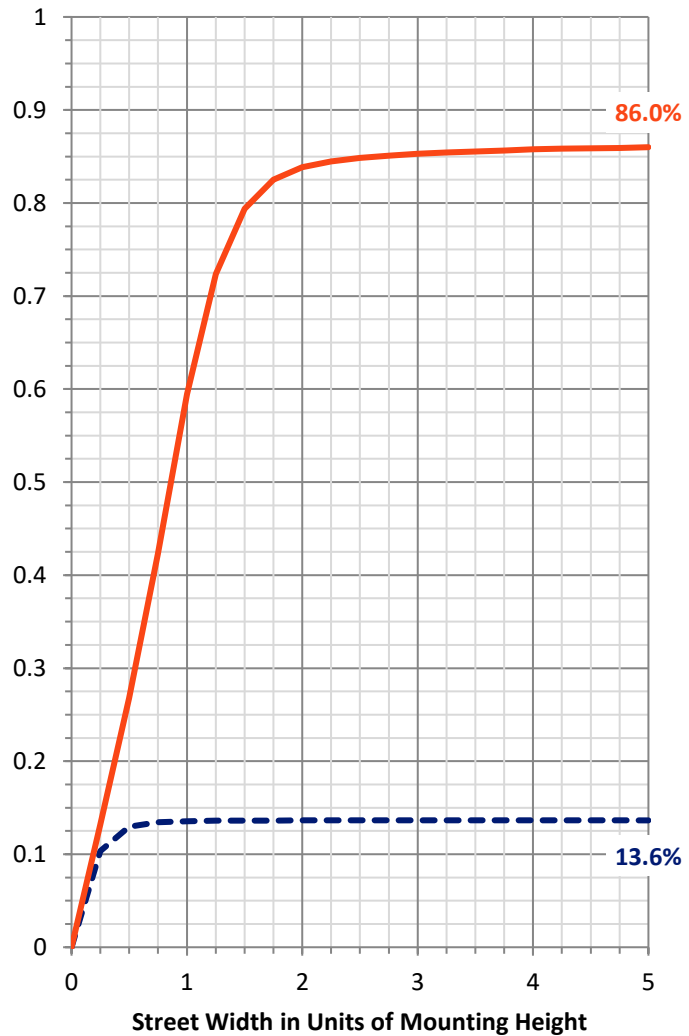
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	247.8	0.0	247.8
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	1547.2	0.0	1547.2
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	1795.0	0.0	1795.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.4	1.4
10°-20°	63.8	3.6
20°-30°	95.2	5.3
30°-40°	181.4	10.1
40°-50°	378.2	21.1
50°-60°	502.5	28.0
60°-70°	391.7	21.8
70°-80°	148.0	8.2
80°-90°	8.9	0.5
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°	1795.0	100.0
0°-180°	1795.0	100.0



--- HS    — SS

REPORT NUMBER: P349011

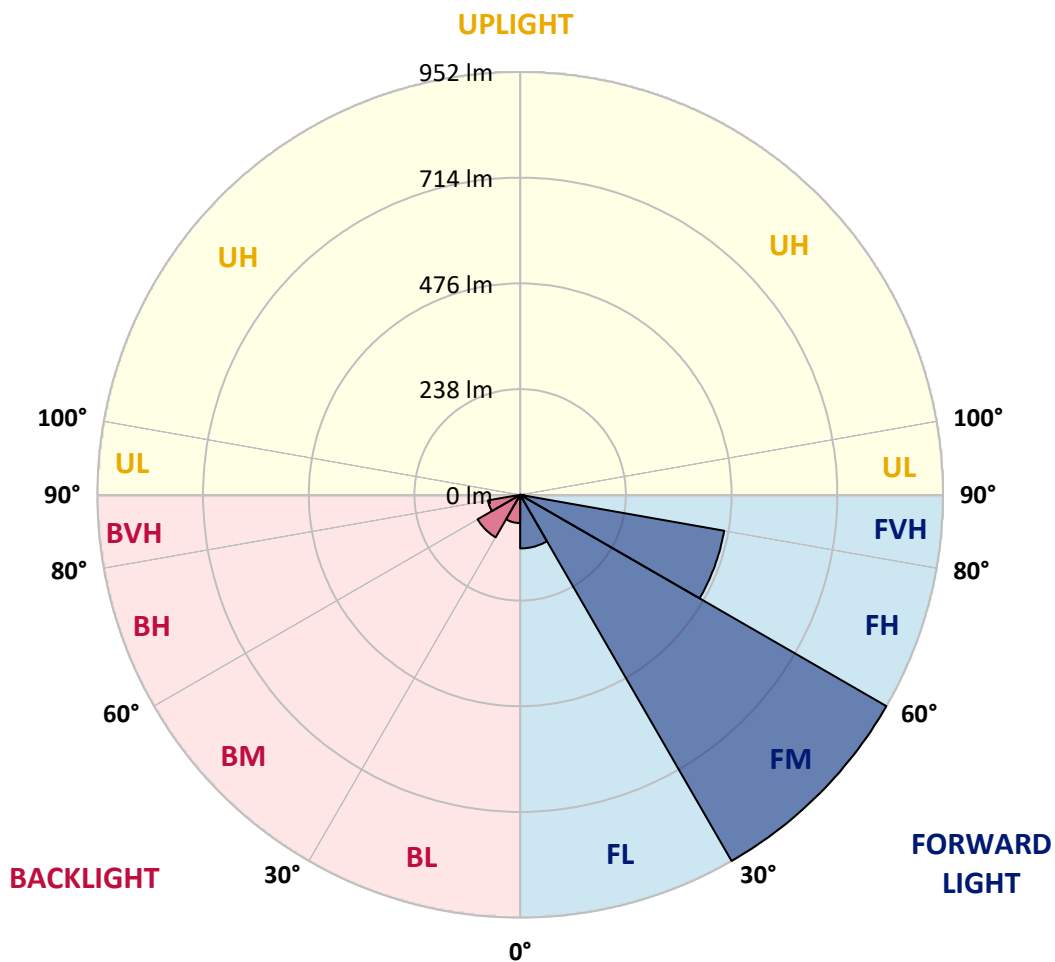
CATALOG NUMBER: ARCH-N-PA1-20-827-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	120.8	6.7			
FM (30°-60°)	951.7	53.0			
FH (60°-80°)	466.2	26.0			G0/660
FVH (80°-90°)	8.4	0.5			G0/10
BL (0°-30°)	63.6	3.5	B0/110		
BM (30°-60°)	110.3	6.1	B0/220		
BH (60°-80°)	73.5	4.1	B0/110		G0/110
BVH (80°-90°)	0.4	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-G0**

Type II Short





REPORT NUMBER: P349011

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9
2.5°	277.9	277.5	278.6	278.6	278.4	278.9	278.4	278.2	277.9	277.5	277.0
5°	270.7	270.7	272.3	273.0	273.7	275.1	275.6	276.1	275.8	276.3	276.5
7.5°	262.2	262.7	264.6	265.5	266.7	269.5	271.1	273.0	273.2	274.9	275.8
10°	255.2	255.6	257.5	258.7	260.3	264.1	267.6	270.9	271.4	274.4	275.1
12.5°	250.5	251.0	252.8	254.5	258.0	262.7	267.6	271.4	272.5	276.3	276.3
15°	248.6	249.1	251.4	254.2	258.9	265.0	271.1	275.1	277.5	280.5	279.1
17.5°	247.9	248.8	252.8	257.1	262.2	268.8	276.3	280.5	282.9	286.1	283.1
20°	250.0	251.2	256.4	262.2	267.6	274.4	282.6	287.3	289.7	291.8	285.9
22.5°	257.5	259.4	263.9	270.4	274.6	282.9	291.1	296.5	299.0	298.8	291.1
25°	275.6	277.9	280.0	283.6	285.4	295.3	304.0	309.4	311.2	310.5	301.6
27.5°	318.3	321.3	313.8	306.1	301.9	311.0	320.6	326.2	327.9	326.5	312.9
30°	390.3	390.5	373.4	349.0	330.9	330.0	341.7	349.2	349.2	346.4	328.8
32.5°	495.1	487.6	466.0	422.9	382.1	360.7	369.6	376.9	376.9	373.4	353.2
35°	626.9	621.3	585.6	533.8	461.1	410.0	408.1	415.1	415.4	414.4	391.4
37.5°	761.1	747.2	717.5	655.3	569.9	485.7	463.2	468.1	471.7	471.2	442.6
40°	885.9	872.0	846.9	787.1	703.6	597.4	543.4	543.4	543.7	541.3	506.8
42.5°	983.9	977.6	958.8	917.3	852.8	773.0	651.6	633.7	630.0	627.6	582.4
45°	1047.5	1040.9	1030.8	1022.1	1001.2	972.6	796.7	750.1	744.0	721.0	665.9
47.5°	1051.0	1040.9	1047.7	1080.5	1127.7	1142.4	975.9	885.6	869.4	827.9	749.6
50°	972.6	973.6	1000.1	1079.8	1207.2	1291.4	1165.9	1034.8	1009.2	926.2	823.5
52.5°	828.6	838.0	879.1	1001.7	1210.9	1386.6	1331.2	1188.6	1138.0	1014.4	875.5
55°	648.7	657.2	724.3	857.0	1119.7	1400.2	1451.6	1335.9	1268.9	1075.8	922.2
57.5°	458.8	474.7	558.0	679.9	945.7	1296.3	1484.4	1424.1	1359.2	1135.6	966.1
60°	278.9	286.8	373.4	515.3	712.8	1078.9	1445.9	1480.4	1427.9	1187.5	1007.1
62.5°	167.7	172.4	213.9	354.9	490.4	789.9	1350.7	1506.2	1480.4	1222.0	1046.5
65°	99.2	102.3	121.7	214.4	326.7	484.6	1145.0	1470.8	1491.7	1251.7	1069.5
67.5°	71.5	72.5	79.5	115.4	219.3	259.6	796.3	1341.8	1419.9	1261.6	1055.9
70°	61.7	62.9	69.7	81.2	155.3	153.2	414.4	1062.0	1203.7	1210.2	998.4
72.5°	46.7	48.8	60.0	76.2	111.4	108.8	156.2	633.3	817.1	993.5	860.8
75°	31.7	32.8	44.6	64.7	87.0	81.2	81.9	254.2	399.7	622.9	591.5
77.5°	19.9	20.9	27.2	46.4	74.6	57.2	57.9	90.3	144.2	264.1	253.5
80°	13.6	14.1	16.4	30.0	50.4	49.7	37.3	47.1	53.7	81.4	54.6
82.5°	8.2	8.2	10.8	17.8	30.5	39.4	23.5	26.0	28.6	30.3	12.4
85°	2.8	3.0	6.6	11.0	18.8	19.7	13.4	15.5	16.2	17.6	5.9
87.5°	1.2	0.9	3.5	6.1	8.0	9.1	7.7	7.0	7.7	10.3	2.6
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: P349011

CATALOG NUMBER: ARCH-N-PA1-20-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9	278.9
2.5°	277.2	276.3	276.3	276.1	274.6	273.9	273.2	271.4	272.5	271.1	270.2
5°	275.8	275.1	273.9	272.8	269.5	266.7	265.5	263.2	262.9	261.0	260.1
7.5°	275.6	273.9	272.1	268.1	263.2	258.7	254.7	250.7	249.1	247.0	245.8
10°	274.4	272.3	268.8	262.4	255.2	248.1	239.2	228.2	220.0	215.3	214.6
12.5°	274.6	272.3	266.9	257.5	247.9	232.4	208.5	183.4	162.8	154.1	152.7
15°	276.5	273.9	265.7	253.1	236.7	202.6	158.8	120.3	93.6	84.0	81.9
17.5°	278.9	274.4	263.2	246.7	215.1	157.1	99.9	63.1	48.1	42.7	41.7
20°	280.3	274.2	258.9	237.1	182.2	105.1	54.4	37.1	32.6	31.4	31.0
22.5°	283.8	274.9	255.4	222.1	141.0	63.3	34.5	28.8	26.3	24.9	24.6
25°	291.1	279.6	255.6	202.6	98.7	38.2	27.9	23.5	21.1	19.7	19.2
27.5°	301.6	288.0	260.1	178.5	61.0	28.8	23.2	19.0	16.4	15.2	15.0
30°	315.0	298.3	265.3	147.1	38.0	24.2	18.8	14.8	12.9	12.2	12.0
32.5°	336.1	316.2	269.7	110.0	26.3	19.9	14.8	11.7	10.6	9.9	9.9
35°	371.0	346.9	277.0	73.6	20.9	15.9	12.0	9.6	8.7	8.2	8.2
37.5°	420.3	390.7	280.5	45.7	17.1	12.4	9.6	8.0	7.3	6.8	6.8
40°	480.3	444.0	275.6	28.4	14.3	10.1	8.0	6.8	6.1	5.9	5.9
42.5°	549.5	505.2	260.1	20.2	12.0	8.2	6.8	5.9	5.4	5.2	5.2
45°	626.9	572.3	232.2	16.9	10.1	7.0	5.9	4.9	4.7	4.5	4.5
47.5°	704.1	640.3	196.1	14.5	8.4	5.9	4.9	4.2	4.0	3.8	3.8
50°	771.4	699.9	157.8	12.7	7.0	5.2	4.2	3.5	3.3	3.0	3.0
52.5°	809.9	735.3	122.2	10.6	6.1	4.5	3.3	2.8	2.6	2.3	2.3
55°	851.4	764.8	91.2	8.9	4.9	3.8	2.6	2.1	1.9	1.6	1.6
57.5°	890.1	791.3	67.8	7.3	4.2	2.8	2.1	1.6	1.4	1.2	1.2
60°	927.6	813.9	50.2	5.9	3.5	2.3	1.6	1.2	0.9	0.7	0.7
62.5°	973.3	834.5	36.8	4.7	3.0	1.6	1.2	0.7	0.5	0.2	0.2
65°	1007.3	845.0	27.7	3.5	2.6	1.2	0.7	0.5	0.0	0.0	0.0
67.5°	1007.1	824.6	20.2	2.6	1.9	0.9	0.5	0.0	0.0	0.0	0.0
70°	960.0	762.7	14.1	2.1	1.4	0.7	0.2	0.0	0.0	0.0	0.0
72.5°	823.2	603.2	9.1	1.4	1.2	0.5	0.2	0.0	0.0	0.0	0.0
75°	555.6	306.3	5.4	1.2	0.9	0.5	0.2	0.0	0.0	0.0	0.0
77.5°	237.6	120.3	2.8	0.7	0.7	0.2	0.0	0.0	0.0	0.0	0.0
80°	49.7	29.1	1.2	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0
82.5°	8.4	4.2	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.1	1.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.5	0.2	0.2	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)