

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: P348988

Luminaire Tested: **ARCH-N-PA1-10-740-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348988  
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-PA1-10-740-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1608 lumens  
Efficiency: N/A  
Efficacy: 114.9 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

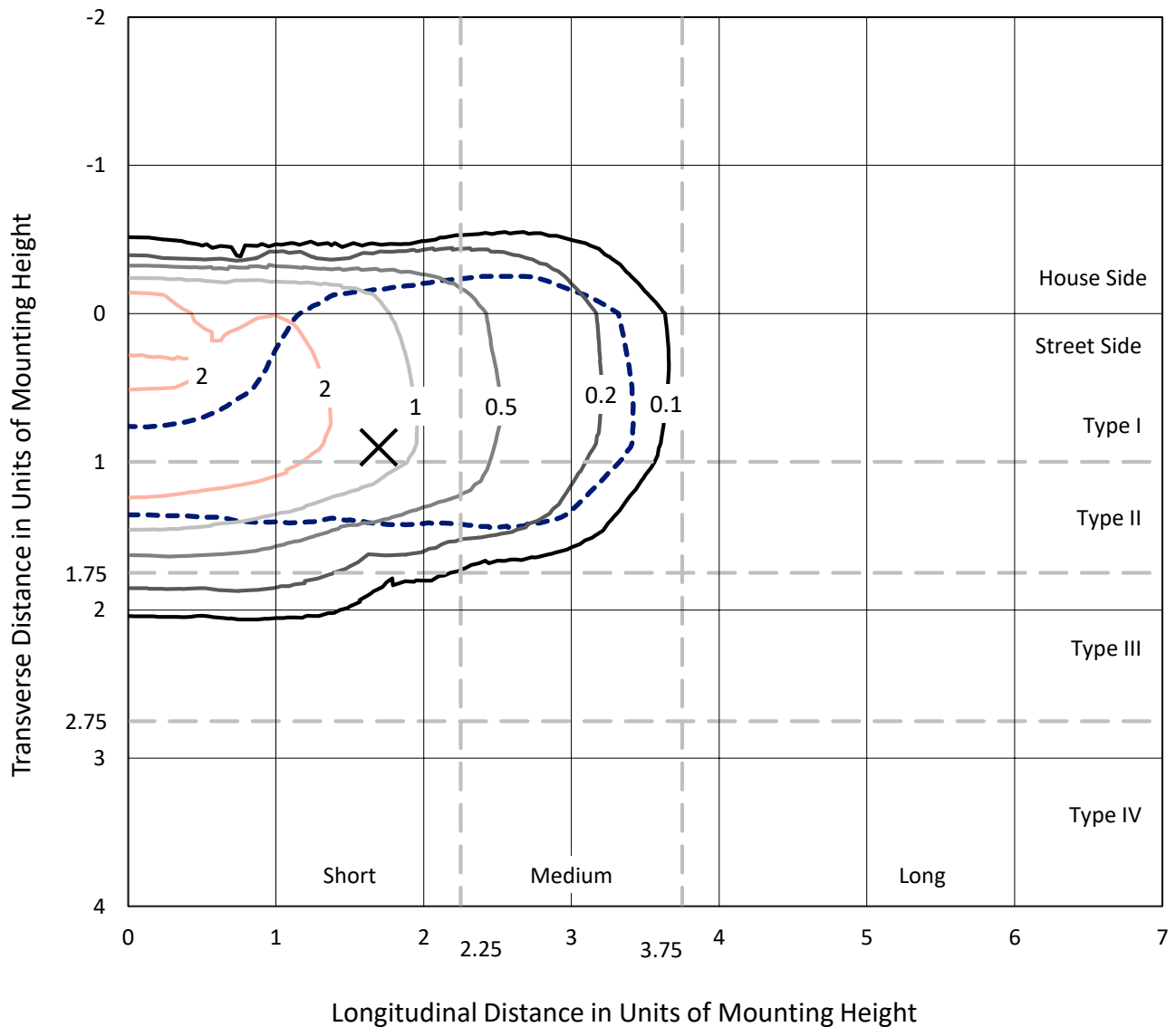
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

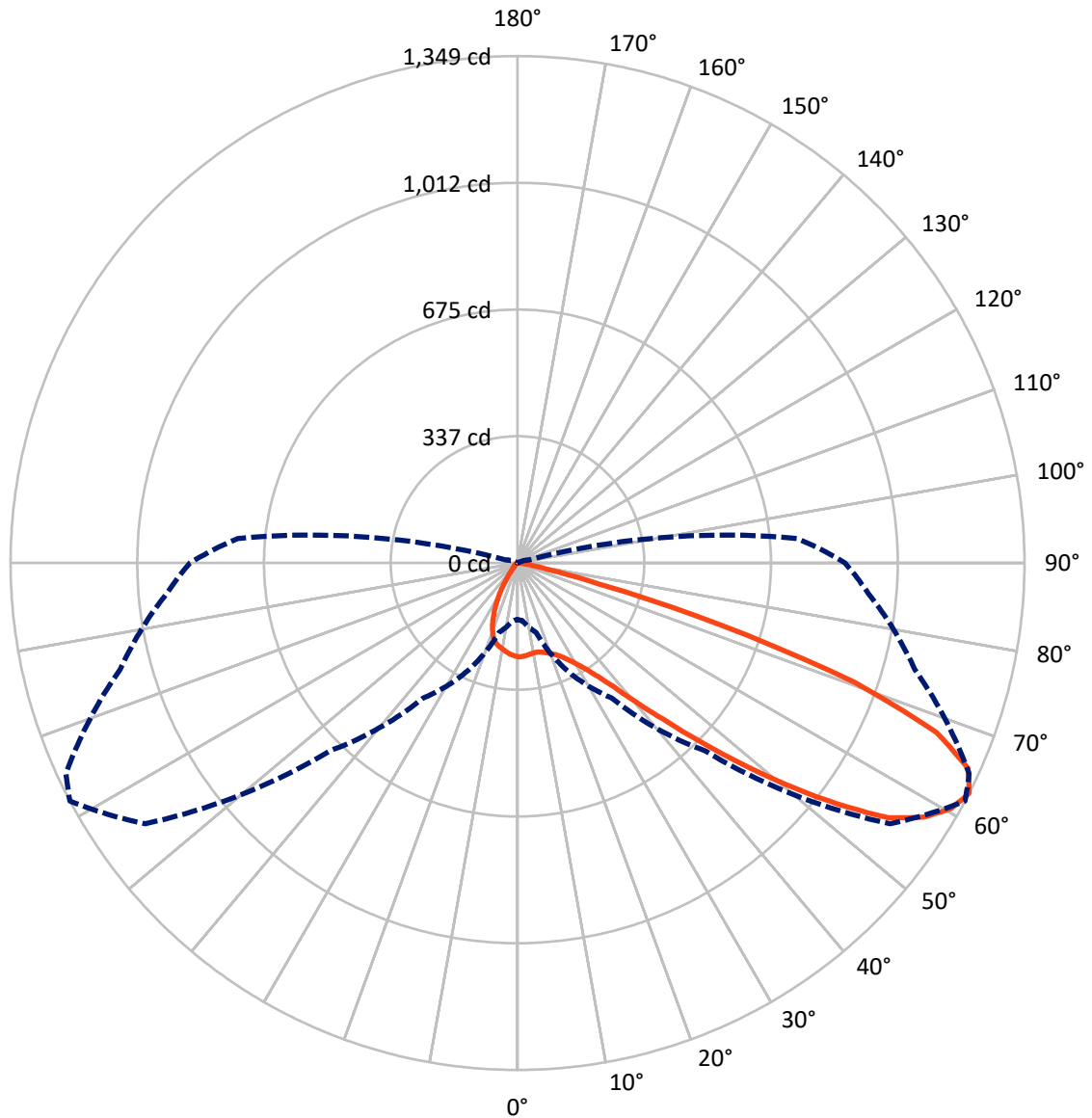
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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



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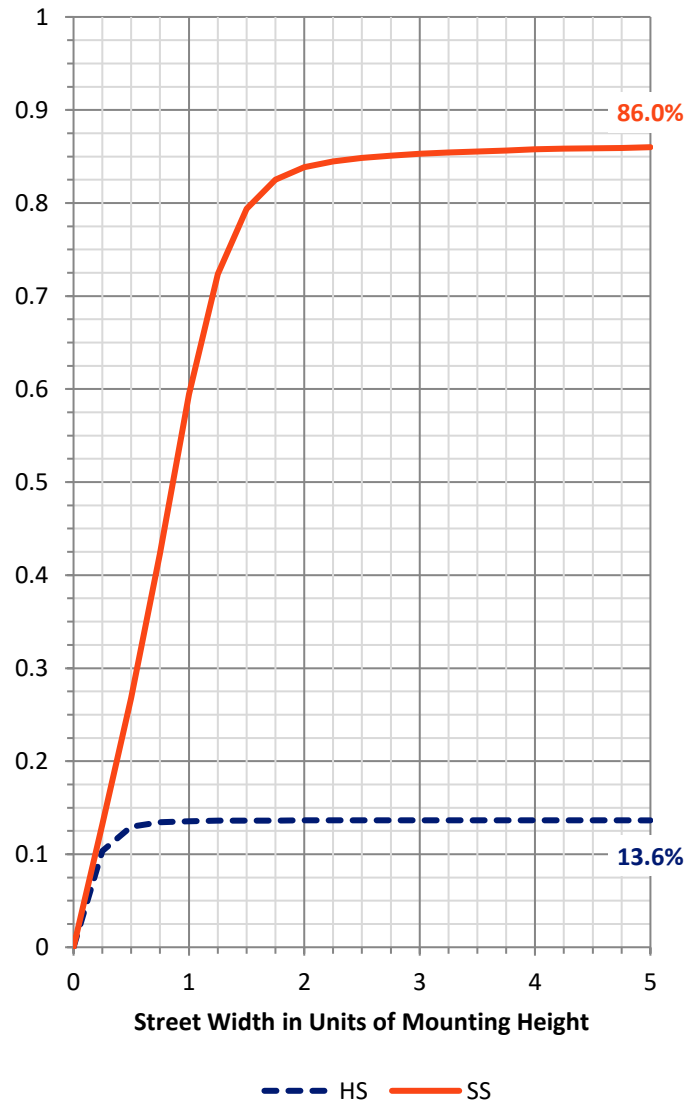
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	222.0	0.0	222.0
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	1386.0	0.0	1386.0
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	1608.0	0.0	1608.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.7	1.4
10°-20°	57.1	3.6
20°-30°	85.3	5.3
30°-40°	162.5	10.1
40°-50°	338.8	21.1
50°-60°	450.1	28.0
60°-70°	350.9	21.8
70°-80°	132.6	8.2
80°-90°	7.9	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°	1608.0	100.0
0°-180°	1608.0	100.0



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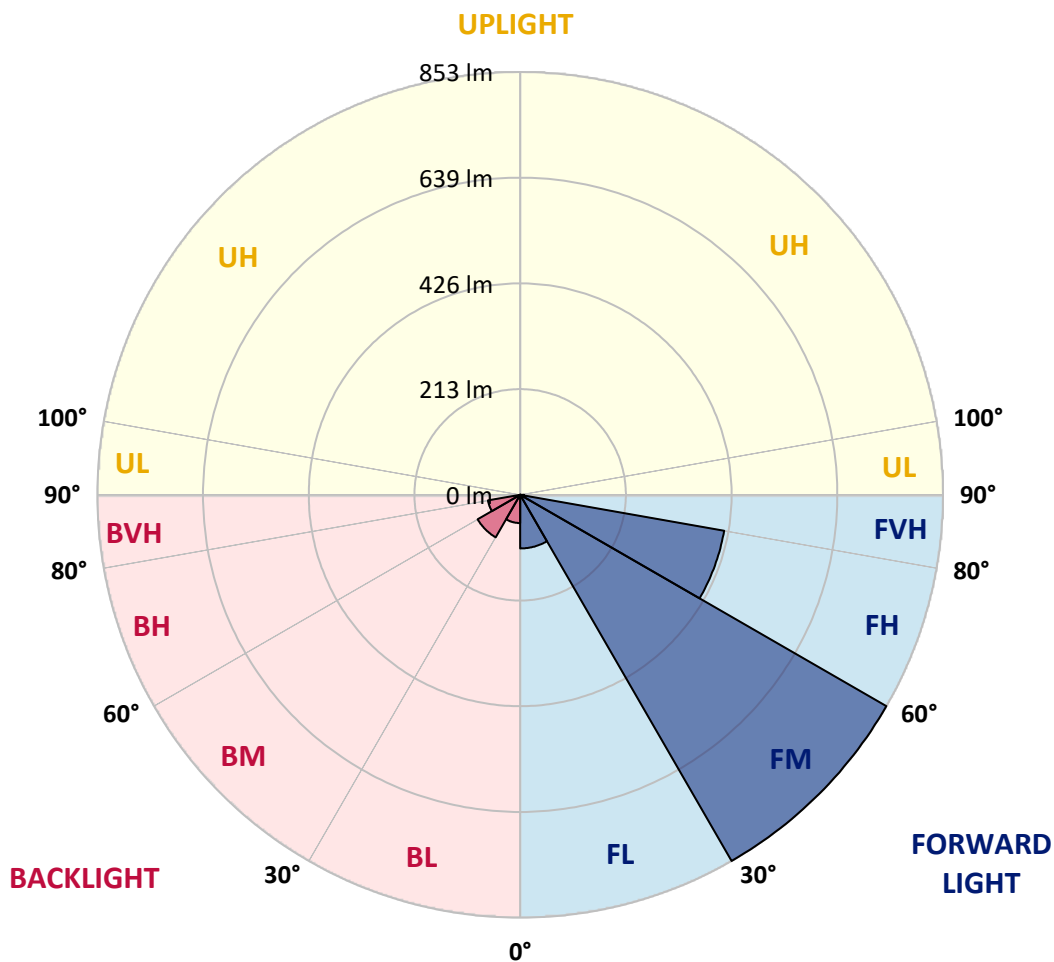
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.2	6.7			
FM	(30°-60°)	852.6	53.0			
FH	(60°-80°)	417.7	26.0			G0/660
FVH	(80°-90°)	7.6	0.5			G0/10
BL	(0°-30°)	56.9	3.5	B0/110		
BM	(30°-60°)	98.8	6.1	B0/220		
BH	(60°-80°)	65.9	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8
2.5°	249.0	248.6	249.6	249.6	249.4	249.8	249.4	249.2	249.0	248.6	248.1
5°	242.5	242.5	243.9	244.6	245.2	246.5	246.9	247.3	247.1	247.5	247.7
7.5°	234.9	235.3	237.0	237.8	238.9	241.4	242.9	244.6	244.8	246.2	247.1
10°	228.6	229.0	230.7	231.7	233.2	236.6	239.7	242.7	243.1	245.8	246.5
12.5°	224.4	224.8	226.5	228.0	231.1	235.3	239.7	243.1	244.1	247.5	247.5
15°	222.7	223.1	225.2	227.8	232.0	237.4	242.9	246.5	248.6	251.3	250.0
17.5°	222.1	222.9	226.5	230.3	234.9	240.8	247.5	251.3	253.4	256.3	253.6
20°	224.0	225.0	229.6	234.9	239.7	245.8	253.2	257.4	259.5	261.4	256.1
22.5°	230.7	232.4	236.4	242.3	246.0	253.4	260.7	265.6	267.9	267.7	260.7
25°	246.9	249.0	250.9	254.0	255.7	264.5	272.3	277.1	278.8	278.2	270.2
27.5°	285.1	287.8	281.1	274.2	270.4	278.6	287.2	292.3	293.7	292.5	280.3
30°	349.6	349.8	334.5	312.6	296.5	295.6	306.1	312.8	312.8	310.3	294.6
32.5°	443.5	436.8	417.5	378.8	342.3	323.1	331.1	337.6	337.6	334.5	316.4
35°	561.6	556.6	524.6	478.2	413.1	367.3	365.6	371.9	372.1	371.3	350.7
37.5°	681.8	669.4	642.7	587.0	510.6	435.1	415.0	419.4	422.5	422.1	396.5
40°	793.6	781.2	758.7	705.1	630.3	535.1	486.8	486.8	487.0	484.9	454.0
42.5°	881.4	875.7	858.9	821.7	763.9	692.5	583.7	567.7	564.3	562.2	521.7
45°	938.3	932.4	923.4	915.6	896.9	871.3	713.7	671.9	666.5	645.9	596.5
47.5°	941.5	932.4	938.5	968.0	1010.2	1023.4	874.2	793.4	778.9	741.7	671.5
50°	871.3	872.1	895.9	967.3	1081.4	1156.8	1044.4	927.0	904.1	829.7	737.7
52.5°	742.3	750.7	787.5	897.4	1084.8	1242.1	1192.6	1064.8	1019.4	908.7	784.3
55°	581.2	588.7	648.8	767.7	1003.0	1254.3	1300.3	1196.8	1136.7	963.8	826.1
57.5°	411.0	425.3	499.8	609.1	847.1	1161.3	1329.8	1275.8	1217.6	1017.3	865.4
60°	249.8	257.0	334.5	461.6	638.5	966.5	1295.3	1326.2	1279.1	1063.8	902.2
62.5°	150.2	154.4	191.6	317.9	439.3	707.6	1210.0	1349.3	1326.2	1094.7	937.5
65°	88.9	91.6	109.0	192.0	292.7	434.1	1025.7	1317.6	1336.3	1121.3	958.1
67.5°	64.1	64.9	71.2	103.4	196.4	232.6	713.3	1202.0	1272.0	1130.2	945.9
70°	55.3	56.3	62.4	72.7	139.1	137.2	371.3	951.4	1078.3	1084.1	894.4
72.5°	41.8	43.7	53.8	68.3	99.8	97.5	139.9	567.3	732.0	890.0	771.1
75°	28.4	29.4	39.9	58.0	77.9	72.7	73.3	227.8	358.0	558.0	529.9
77.5°	17.9	18.7	24.4	41.6	66.8	51.3	51.9	80.9	129.2	236.6	227.1
80°	12.2	12.6	14.7	26.9	45.2	44.5	33.4	42.2	48.1	72.9	49.0
82.5°	7.4	7.4	9.7	16.0	27.3	35.3	21.0	23.3	25.6	27.1	11.1
85°	2.5	2.7	5.9	9.9	16.8	17.6	12.0	13.9	14.5	15.8	5.3
87.5°	1.1	0.8	3.2	5.5	7.1	8.2	6.9	6.3	6.9	9.2	2.3
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°	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8	249.8
2.5°	248.3	247.5	247.5	247.3	246.0	245.4	244.8	243.1	244.1	242.9	242.0
5°	247.1	246.5	245.4	244.4	241.4	238.9	237.8	235.7	235.5	233.8	233.0
7.5°	246.9	245.4	243.7	240.2	235.7	231.7	228.2	224.6	223.1	221.2	220.2
10°	245.8	243.9	240.8	235.1	228.6	222.3	214.3	204.4	197.1	192.9	192.2
12.5°	246.0	243.9	239.1	230.7	222.1	208.2	186.8	164.3	145.8	138.0	136.8
15°	247.7	245.4	238.0	226.7	212.0	181.5	142.2	107.8	83.8	75.2	73.3
17.5°	249.8	245.8	235.7	221.0	192.7	140.8	89.5	56.5	43.1	38.2	37.4
20°	251.1	245.6	232.0	212.4	163.3	94.1	48.7	33.2	29.2	28.2	27.7
22.5°	254.2	246.2	228.8	199.0	126.3	56.7	30.9	25.8	23.5	22.3	22.1
25°	260.7	250.4	229.0	181.5	88.5	34.2	25.0	21.0	18.9	17.6	17.2
27.5°	270.2	258.0	233.0	159.9	54.6	25.8	20.8	17.0	14.7	13.7	13.4
30°	282.2	267.3	237.6	131.7	34.0	21.6	16.8	13.2	11.6	10.9	10.7
32.5°	301.1	283.2	241.6	98.5	23.5	17.9	13.2	10.5	9.5	8.8	8.8
35°	332.4	310.7	248.1	66.0	18.7	14.3	10.7	8.6	7.8	7.4	7.4
37.5°	376.5	350.0	251.3	41.0	15.3	11.1	8.6	7.1	6.5	6.1	6.1
40°	430.3	397.7	246.9	25.4	12.8	9.0	7.1	6.1	5.5	5.3	5.3
42.5°	492.3	452.6	233.0	18.1	10.7	7.4	6.1	5.3	4.8	4.6	4.6
45°	561.6	512.7	208.0	15.1	9.0	6.3	5.3	4.4	4.2	4.0	4.0
47.5°	630.7	573.6	175.6	13.0	7.6	5.3	4.4	3.8	3.6	3.4	3.4
50°	691.0	627.0	141.4	11.3	6.3	4.6	3.8	3.2	2.9	2.7	2.7
52.5°	725.5	658.7	109.5	9.5	5.5	4.0	2.9	2.5	2.3	2.1	2.1
55°	762.7	685.2	81.7	8.0	4.4	3.4	2.3	1.9	1.7	1.5	1.5
57.5°	797.4	708.9	60.7	6.5	3.8	2.5	1.9	1.5	1.3	1.1	1.1
60°	831.0	729.1	45.0	5.3	3.2	2.1	1.5	1.1	0.8	0.6	0.6
62.5°	871.9	747.6	33.0	4.2	2.7	1.5	1.1	0.6	0.4	0.2	0.2
65°	902.4	757.0	24.8	3.2	2.3	1.1	0.6	0.4	0.0	0.0	0.0
67.5°	902.2	738.7	18.1	2.3	1.7	0.8	0.4	0.0	0.0	0.0	0.0
70°	860.0	683.3	12.6	1.9	1.3	0.6	0.2	0.0	0.0	0.0	0.0
72.5°	737.5	540.4	8.2	1.3	1.1	0.4	0.2	0.0	0.0	0.0	0.0
75°	497.7	274.4	4.8	1.1	0.8	0.4	0.2	0.0	0.0	0.0	0.0
77.5°	212.8	107.8	2.5	0.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0
80°	44.5	26.1	1.1	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0
82.5°	7.6	3.8	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	1.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	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)