

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: P348787

Luminaire Tested: **ARCH-N-PA1-20-827-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348787  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
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-T2R-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: 1988 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B0 - U0 - G0

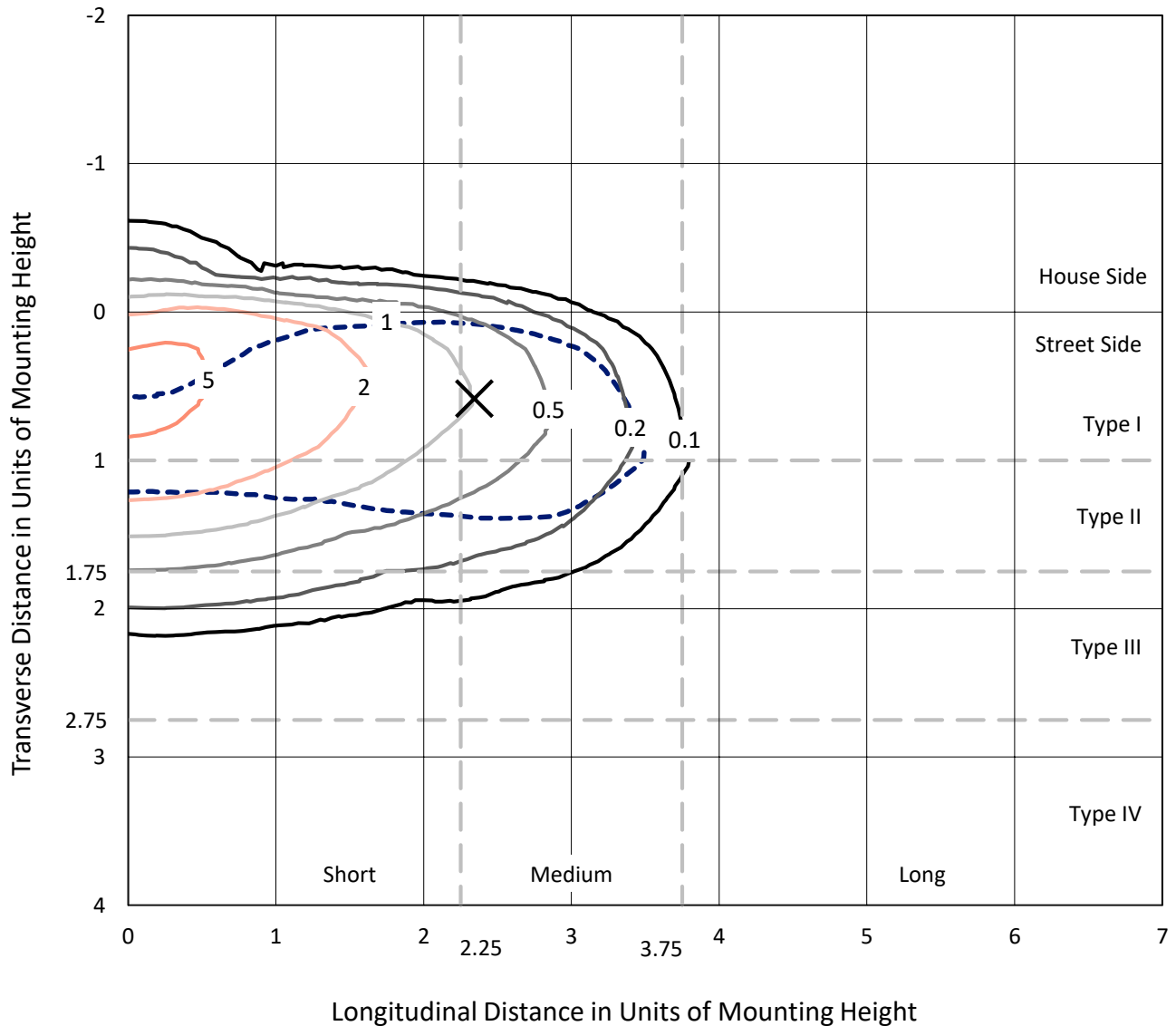
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

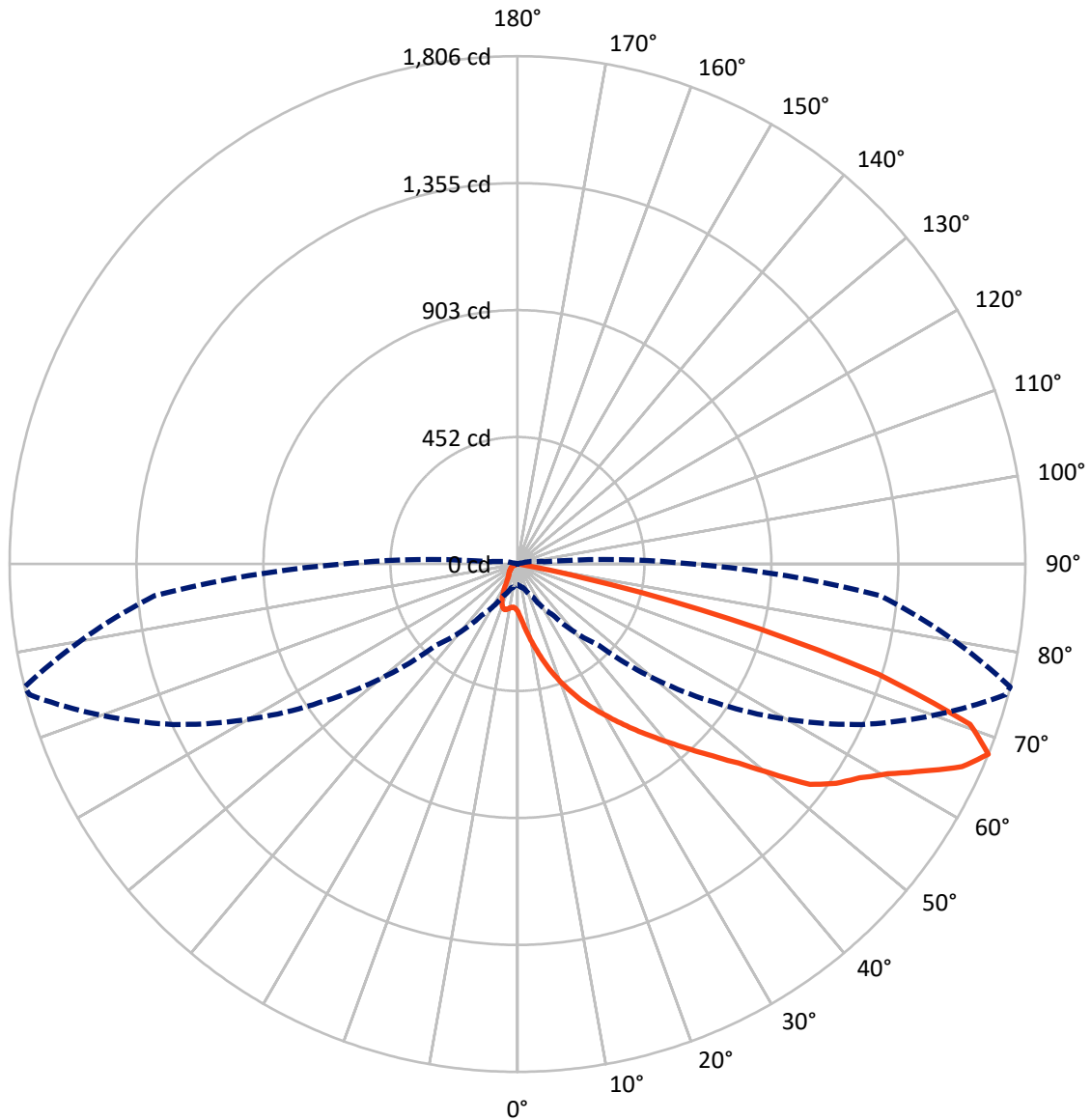
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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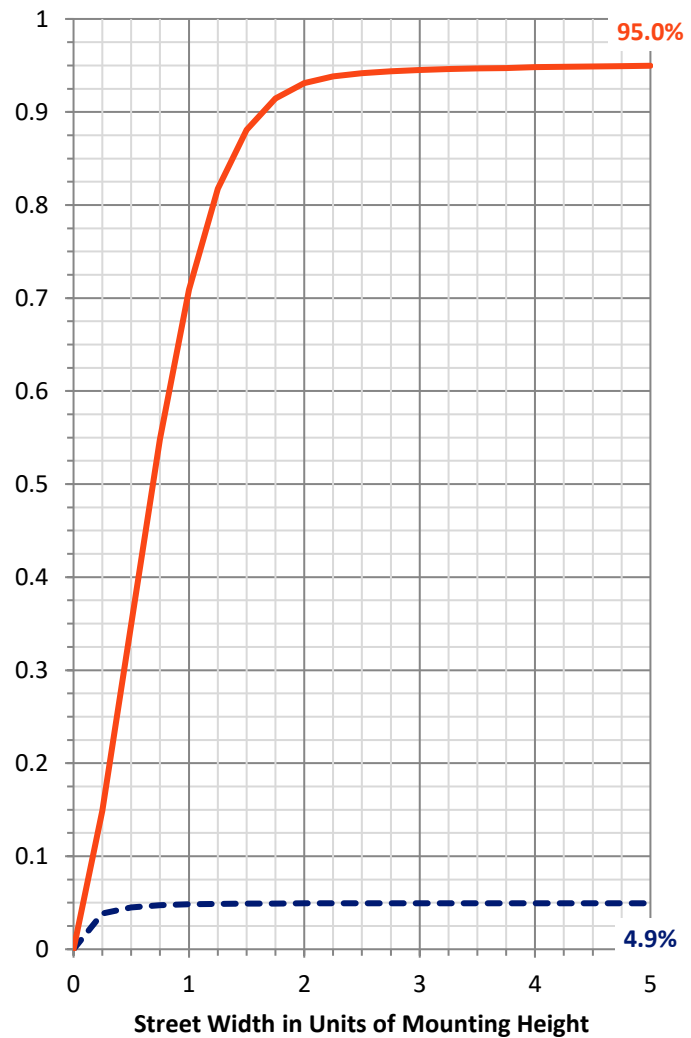
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	98.7	0.0	98.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	1889.3	0.0	1889.3
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	1988.0	0.0	1988.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.0	1.1
10°-20°	83.1	4.2
20°-30°	169.1	8.5
30°-40°	293.6	14.8
40°-50°	414.8	20.9
50°-60°	470.4	23.7
60°-70°	390.1	19.6
70°-80°	141.3	7.1
80°-90°	4.6	0.2
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°	1988.0	100.0
0°-180°	1988.0	100.0

**Coefficient of Utilization**



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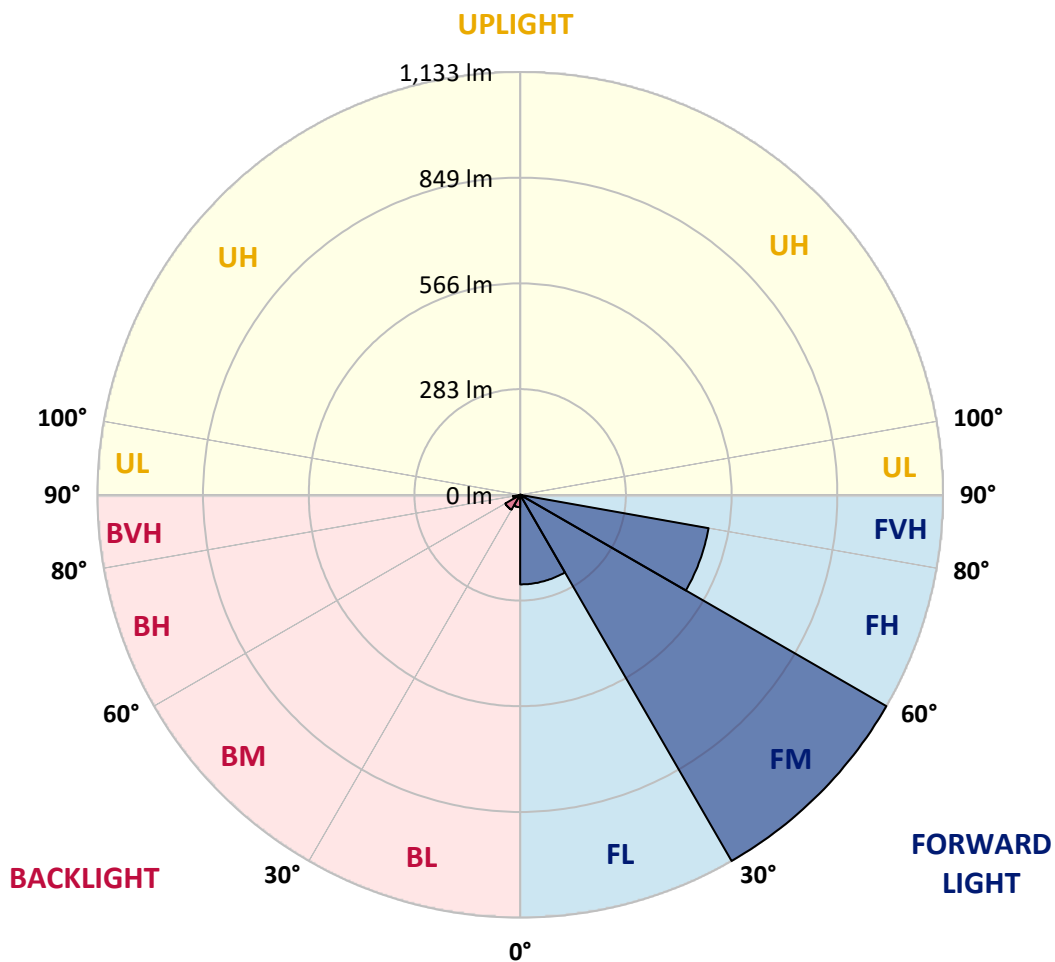
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	239.9	12.1			
FM	(30°-60°)	1132.5	57.0			
FH	(60°-80°)	512.4	25.8			G0/660
FVH	(80°-90°)	4.4	0.2			G0/10
BL	(0°-30°)	33.3	1.7	B0/110		
BM	(30°-60°)	46.2	2.3	B0/220		
BH	(60°-80°)	19.1	1.0	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-G0**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6
2.5°	251.7	246.1	247.4	243.7	237.1	223.5	211.9	201.0	188.2	187.7	177.2
5°	339.5	334.7	334.1	326.7	314.6	291.5	269.1	243.5	214.9	212.8	190.4
7.5°	419.1	415.2	413.8	405.0	382.7	360.2	330.9	293.3	248.6	244.8	208.3
10°	480.2	478.4	478.7	472.5	453.3	432.4	394.0	346.0	286.8	280.9	229.7
12.5°	526.6	527.0	530.1	526.3	515.6	500.1	459.1	402.2	329.2	321.1	254.2
15°	560.6	562.8	568.6	573.3	572.6	559.1	521.5	459.2	374.1	365.2	281.4
17.5°	582.7	585.1	593.5	604.1	613.8	610.7	581.8	514.3	419.6	409.2	310.6
20°	602.0	604.9	613.8	627.9	646.1	650.0	631.0	567.7	465.0	452.3	340.8
22.5°	643.9	643.8	649.3	657.5	674.8	684.9	672.9	617.2	509.8	496.7	371.5
25°	719.7	716.8	714.9	708.4	712.3	718.5	711.8	663.6	555.0	541.6	402.7
27.5°	809.8	811.5	796.0	778.7	765.2	758.8	747.8	706.5	598.3	583.7	433.2
30°	904.8	905.3	887.0	864.9	835.4	810.9	791.9	747.6	642.9	627.0	462.8
32.5°	990.5	987.1	969.0	938.8	901.6	874.0	834.6	793.4	690.2	674.7	495.7
35°	1058.4	1054.4	1032.4	1005.0	966.3	938.6	891.1	839.1	739.8	724.7	528.7
37.5°	1108.1	1103.4	1080.7	1052.5	1019.2	1003.0	956.7	888.8	794.0	777.8	563.5
40°	1125.3	1121.2	1107.0	1086.4	1059.6	1055.9	1026.3	946.1	853.0	835.7	602.9
42.5°	1115.1	1111.1	1106.0	1099.0	1087.9	1091.4	1092.0	1011.3	918.5	901.5	646.3
45°	1074.3	1070.7	1076.0	1086.1	1100.0	1117.2	1151.9	1081.4	991.6	973.5	696.6
47.5°	1014.3	1011.7	1026.1	1051.6	1092.1	1139.6	1206.7	1155.1	1073.8	1057.0	759.3
50°	928.9	928.5	957.4	1003.8	1066.1	1150.4	1263.3	1238.9	1187.9	1170.2	846.5
52.5°	796.0	796.9	853.7	928.0	1020.6	1143.1	1299.7	1346.6	1320.6	1302.3	922.0
55°	669.4	674.6	715.0	822.1	950.7	1115.9	1312.3	1396.9	1393.9	1376.5	964.0
57.5°	545.5	555.0	593.8	693.9	848.7	1053.3	1305.4	1418.6	1448.4	1435.1	1019.4
60°	411.1	415.5	460.3	553.8	717.8	939.0	1255.5	1430.5	1523.0	1513.8	1099.8
62.5°	261.6	272.5	312.2	402.4	558.9	780.3	1171.3	1430.3	1616.3	1621.3	1203.6
65°	137.8	150.5	171.6	249.4	384.1	603.0	1044.8	1416.9	1730.7	1737.8	1284.7
67.5°	74.3	78.0	89.1	129.4	222.7	408.5	858.8	1350.7	1797.0	1806.3	1296.0
70°	54.4	56.4	60.5	71.6	112.1	237.3	626.7	1200.6	1711.6	1708.1	1151.5
72.5°	41.7	44.9	48.0	52.4	64.5	126.7	390.2	940.2	1365.7	1342.7	860.7
75°	32.9	33.4	37.9	41.9	48.3	72.1	173.3	547.6	833.5	779.1	446.3
77.5°	26.3	26.7	29.3	32.8	38.8	47.4	53.7	215.4	266.1	237.5	96.9
80°	15.6	16.5	21.8	25.3	32.2	29.9	19.6	46.8	41.6	37.6	16.3
82.5°	8.7	9.4	12.3	19.9	22.5	14.3	9.8	12.6	9.8	9.5	4.6
85°	0.0	0.4	7.9	12.4	9.1	3.1	4.1	4.2	2.9	2.7	1.8
87.5°	0.0	0.0	2.4	2.4	0.3	0.5	1.0	1.4	1.1	1.1	1.0
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°	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6	168.6
2.5°	172.0	167.2	158.4	149.7	142.3	136.3	130.9	128.7	127.0	126.7	125.3
5°	179.6	170.1	153.1	139.2	129.9	123.3	117.6	114.1	111.4	110.4	109.4
7.5°	191.2	176.8	152.4	136.4	125.3	114.1	103.7	92.3	85.3	82.6	81.0
10°	205.3	185.7	155.1	135.6	116.1	92.6	75.3	60.9	55.1	53.1	52.6
12.5°	221.8	196.8	159.6	130.7	96.6	65.8	51.9	47.0	45.7	45.1	45.1
15°	240.7	208.9	162.8	116.6	71.4	49.7	44.9	42.7	41.3	40.5	40.6
17.5°	260.0	220.7	161.2	96.2	52.7	44.3	40.7	38.2	36.3	35.5	35.4
20°	279.5	231.7	152.5	71.6	44.6	40.2	36.1	33.4	31.5	30.7	30.6
22.5°	299.7	241.0	137.2	52.5	40.1	35.6	31.7	29.0	27.2	26.5	26.1
25°	319.4	248.6	115.8	42.5	35.8	31.4	27.6	25.1	23.4	22.7	22.6
27.5°	337.8	253.4	90.9	37.5	32.1	27.5	24.1	21.9	20.5	19.9	19.9
30°	354.4	253.8	67.2	33.9	28.7	24.2	21.1	19.1	17.9	17.3	17.2
32.5°	371.1	250.2	49.0	30.6	25.7	21.3	18.3	16.7	15.9	15.4	15.4
35°	386.8	241.7	38.2	27.7	22.7	18.6	16.1	15.0	14.5	14.0	14.0
37.5°	402.3	229.6	32.4	25.2	19.9	16.2	14.2	13.5	13.1	12.6	12.6
40°	417.9	214.4	29.4	22.8	17.7	14.4	12.6	12.0	11.6	11.2	11.1
42.5°	437.2	196.8	27.5	20.6	15.7	12.7	11.1	10.5	10.1	9.8	9.6
45°	459.5	181.6	26.0	18.5	14.0	11.3	9.7	9.0	8.4	8.0	7.9
47.5°	491.6	170.6	23.9	16.1	12.5	9.8	8.4	7.6	6.8	6.4	6.3
50°	532.7	161.6	21.2	14.0	10.9	8.4	7.0	6.0	5.3	4.9	4.9
52.5°	553.0	149.7	18.7	12.2	9.1	7.1	5.7	4.5	4.2	3.7	3.7
55°	561.2	140.7	16.3	10.4	7.6	5.8	4.4	3.5	3.2	3.0	2.9
57.5°	584.2	138.1	14.2	8.8	6.3	4.6	3.4	2.6	2.4	2.1	2.1
60°	621.3	139.4	12.3	7.5	5.1	3.6	2.5	2.0	1.8	1.5	1.5
62.5°	661.2	137.7	10.4	6.4	3.9	2.6	1.7	1.5	1.5	0.9	0.8
65°	668.9	122.6	8.9	5.3	3.0	1.9	1.1	1.0	1.3	0.2	0.0
67.5°	620.8	95.1	7.7	4.1	2.3	1.5	0.9	0.4	1.1	0.0	0.0
70°	496.4	60.5	6.2	3.0	1.7	1.2	0.7	0.2	0.9	0.0	0.0
72.5°	351.0	35.1	4.9	2.1	1.5	1.0	0.5	0.0	0.5	0.0	0.0
75°	177.5	18.7	3.0	1.6	1.1	0.7	0.3	0.0	0.1	0.0	0.0
77.5°	38.4	8.7	1.9	1.1	0.8	0.4	0.2	0.0	0.0	0.0	0.0
80°	8.4	3.8	1.2	0.7	0.4	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	3.0	2.0	0.6	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	1.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.3	0.1	0.1	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)