

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: P348990

Luminaire Tested: **ARCH-N-PA1-20-740-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348990
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-PA1-20-740-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2442 lumens
Efficiency: N/A
Efficacy: 101.7 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 - G1

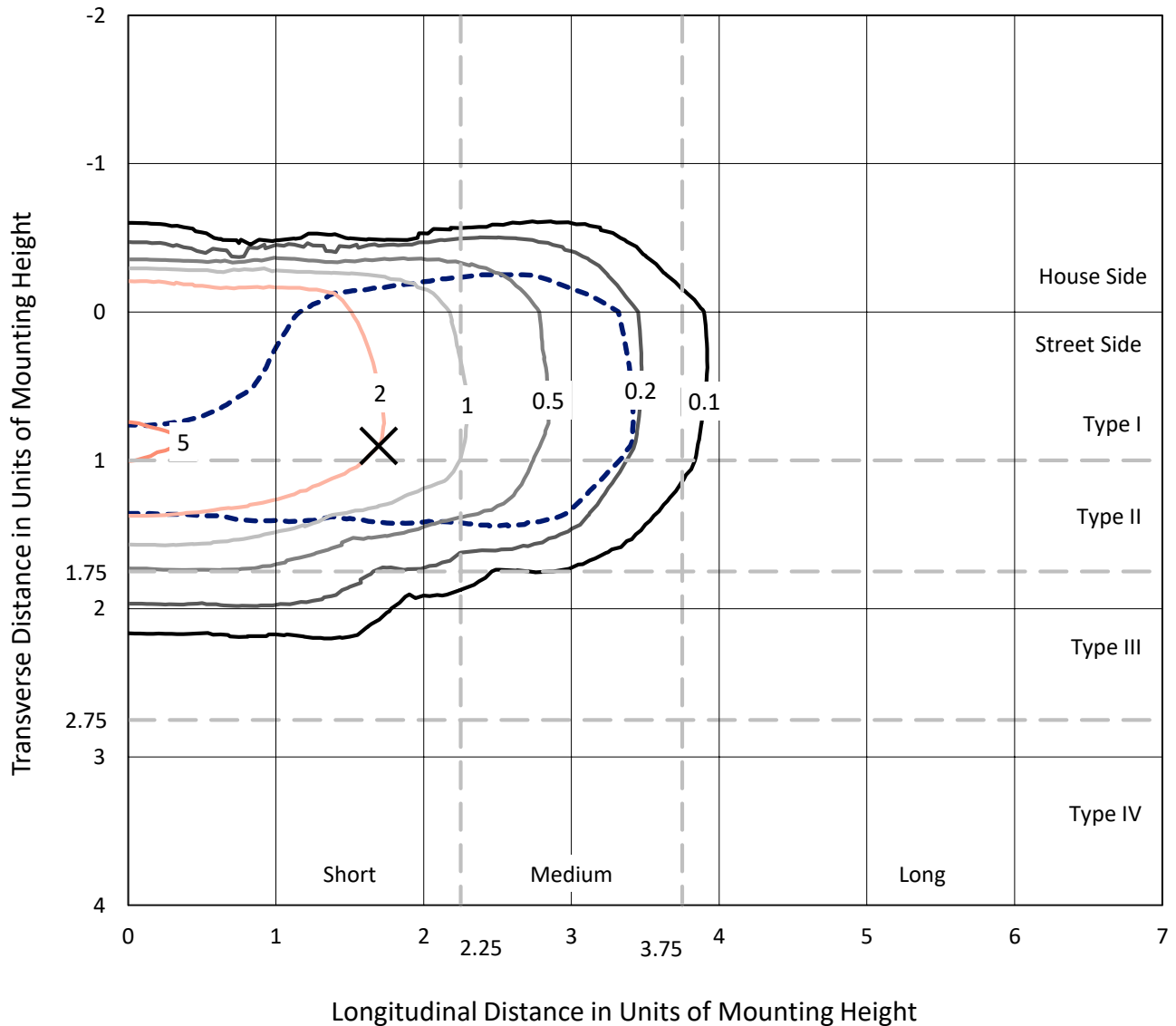
Input Watts (W): 24
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

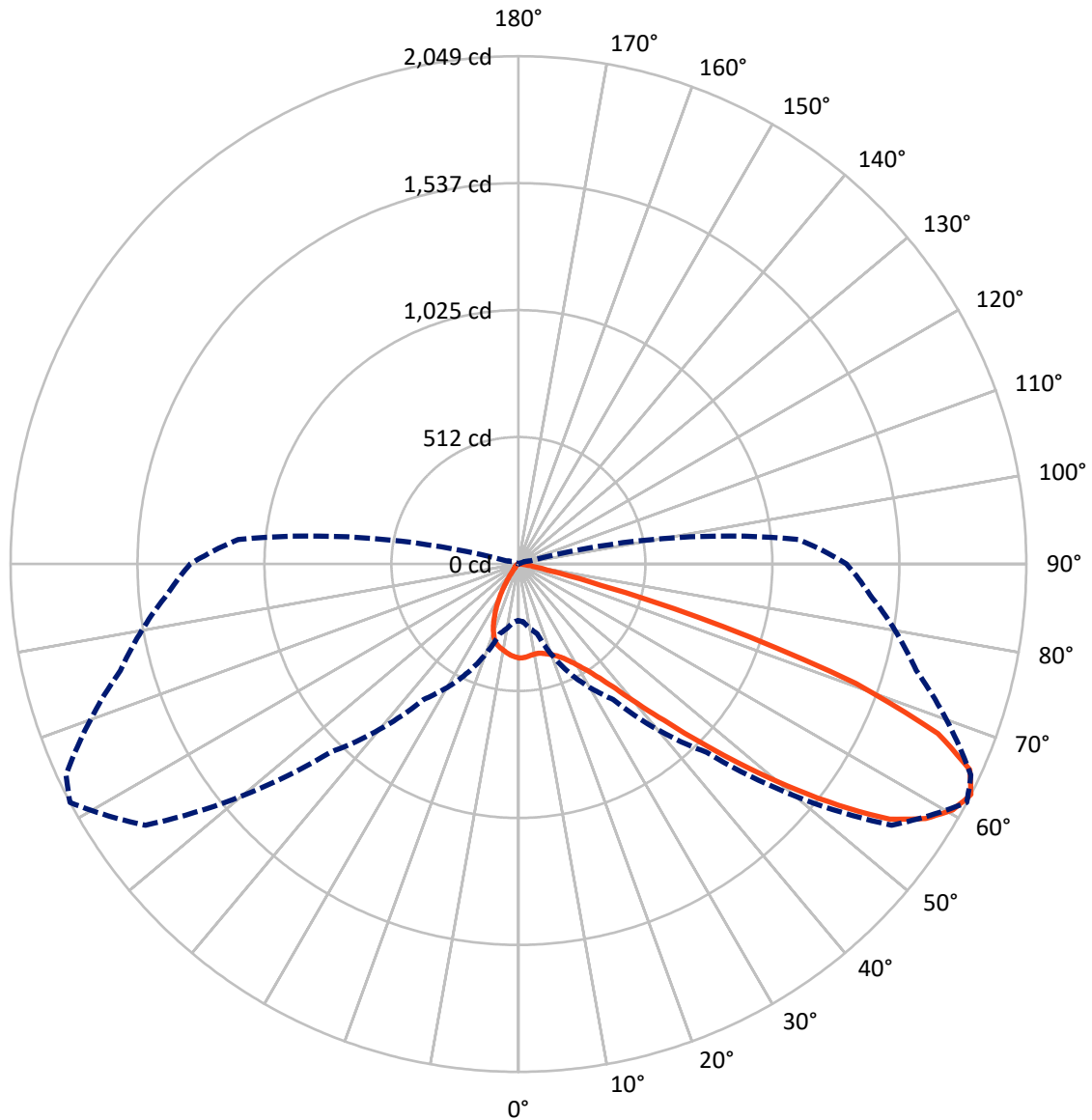
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 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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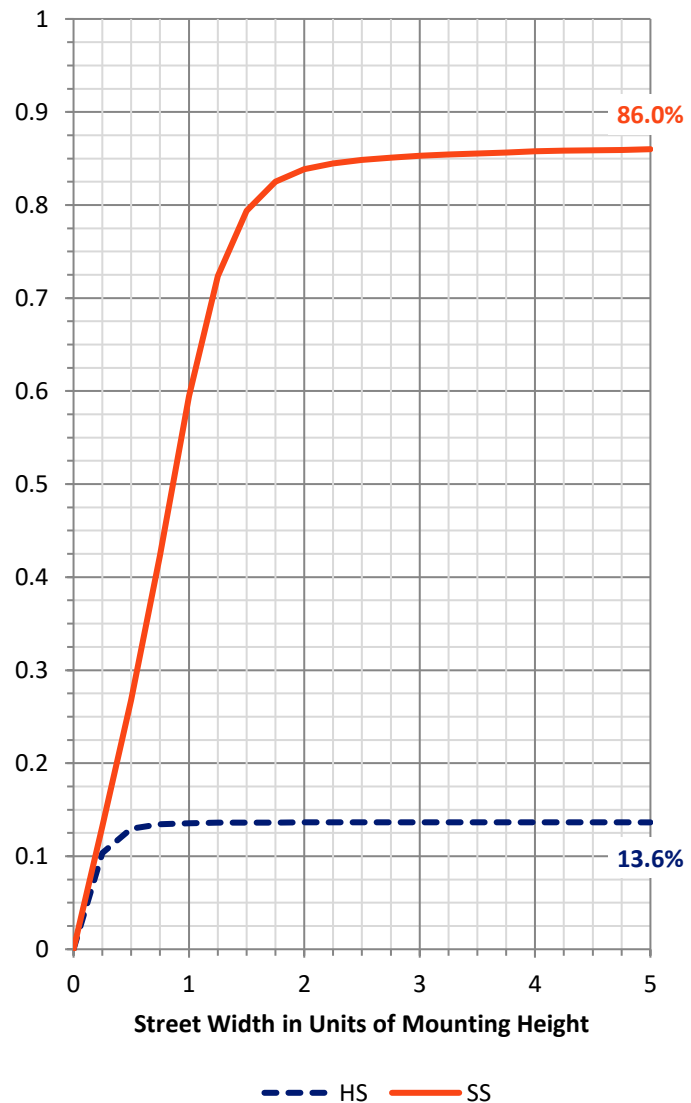
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	337.2	0.0	337.2
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	2104.8	0.0	2104.8
	% Fixture	86.2	0.0	86.2
Total	Lumens	2442.0	0.0	2442.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	1.4
10°-20°	86.7	3.6
20°-30°	129.5	5.3
30°-40°	246.7	10.1
40°-50°	514.5	21.1
50°-60°	683.6	28.0
60°-70°	532.9	21.8
70°-80°	201.4	8.2
80°-90°	12.1	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°	2442.0	100.0
0°-180°	2442.0	100.0



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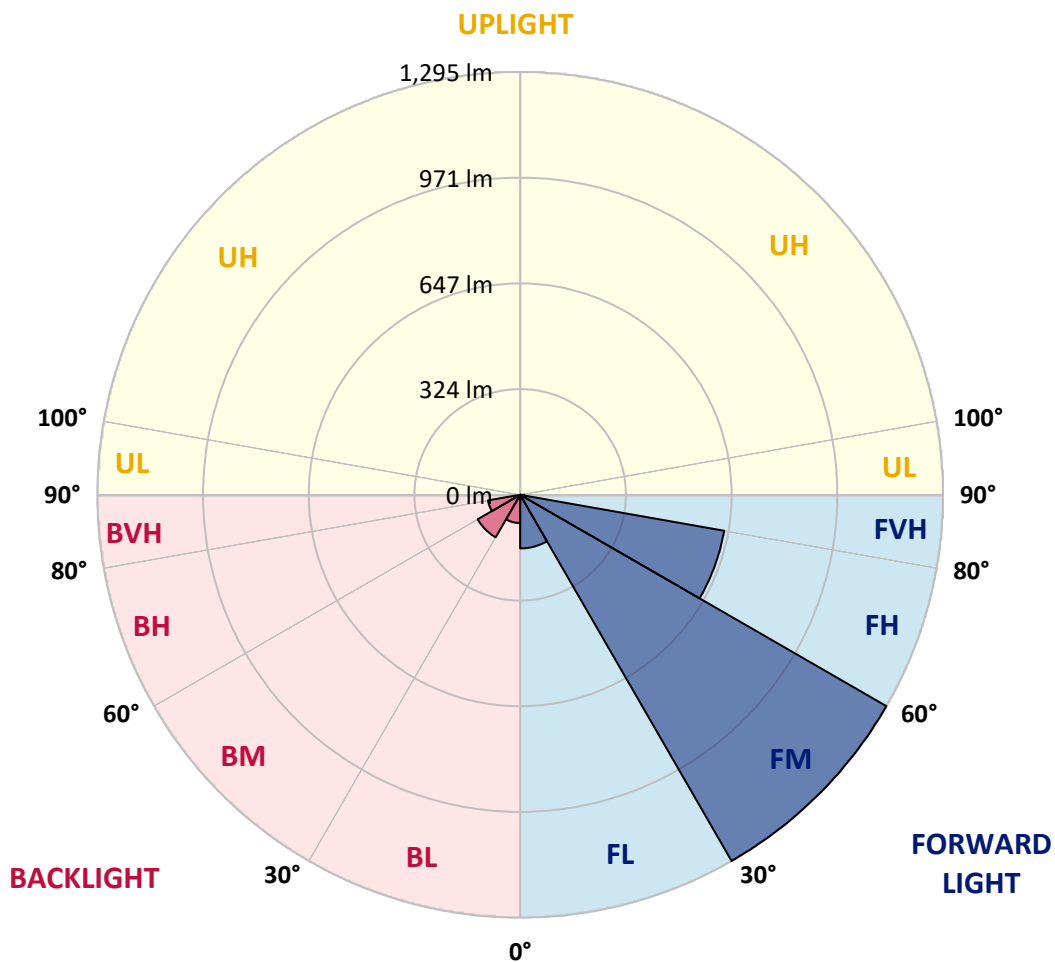
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	164.3	6.7			
FM	(30°-60°)	1294.7	53.0			
FH	(60°-80°)	634.3	26.0			G0/660
FVH	(80°-90°)	11.5	0.5			G1/100
BL	(0°-30°)	86.5	3.5	B0/110		
BM	(30°-60°)	150.1	6.1	B0/220		
BH	(60°-80°)	100.0	4.1	B0/110		G0/110
BVH	(80°-90°)	0.6	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4
2.5°	378.1	377.5	379.1	379.1	378.7	379.4	378.7	378.4	378.1	377.5	376.8
5°	368.2	368.2	370.5	371.4	372.4	374.3	374.9	375.6	375.2	375.9	376.2
7.5°	356.7	357.4	359.9	361.2	362.8	366.6	368.9	371.4	371.7	374.0	375.2
10°	347.2	347.8	350.3	351.9	354.2	359.3	364.1	368.5	369.2	373.3	374.3
12.5°	340.8	341.4	344.0	346.2	351.0	357.4	364.1	369.2	370.8	375.9	375.9
15°	338.2	338.9	342.1	345.9	352.3	360.6	368.9	374.3	377.5	381.6	379.7
17.5°	337.3	338.5	344.0	349.7	356.7	365.7	375.9	381.6	384.8	389.3	385.1
20°	340.1	341.7	348.8	356.7	364.1	373.3	384.5	390.9	394.1	396.9	389.0
22.5°	350.3	352.9	359.0	367.9	373.6	384.8	396.0	403.3	406.8	406.5	396.0
25°	374.9	378.1	381.0	385.8	388.3	401.7	413.5	420.9	423.4	422.5	410.3
27.5°	433.0	437.1	426.9	416.4	410.7	423.1	436.2	443.8	446.1	444.2	425.7
30°	530.9	531.3	508.0	474.8	450.2	448.9	464.9	475.1	475.1	471.3	447.3
32.5°	673.6	663.4	634.0	575.3	519.8	490.7	502.9	512.8	512.8	508.0	480.5
35°	852.9	845.2	796.7	726.2	627.3	557.7	555.2	564.8	565.1	563.8	532.5
37.5°	1035.4	1016.6	976.1	891.5	775.4	660.8	630.2	636.9	641.7	641.0	602.1
40°	1205.2	1186.3	1152.2	1070.8	957.2	812.7	739.3	739.3	739.6	736.4	689.5
42.5°	1338.5	1329.9	1304.4	1247.9	1160.2	1051.7	886.4	862.1	857.0	853.9	792.3
45°	1425.0	1416.1	1402.3	1390.5	1362.1	1323.2	1083.9	1020.4	1012.1	980.8	905.9
47.5°	1429.8	1416.1	1425.3	1470.0	1534.1	1554.2	1327.7	1204.8	1182.8	1126.3	1019.8
50°	1323.2	1324.5	1360.6	1469.0	1642.3	1756.8	1586.1	1407.8	1373.0	1260.0	1120.3
52.5°	1127.3	1140.1	1195.9	1362.8	1647.4	1886.4	1811.1	1617.1	1548.2	1380.0	1191.1
55°	882.6	894.1	985.3	1165.9	1523.3	1904.9	1974.8	1817.5	1726.2	1463.6	1254.6
57.5°	624.1	645.8	759.1	925.0	1286.5	1763.5	2019.4	1937.4	1849.1	1545.0	1314.3
60°	379.4	390.2	508.0	701.0	969.7	1467.8	1967.1	2014.0	1942.5	1615.5	1370.1
62.5°	228.1	234.5	291.0	482.8	667.2	1074.7	1837.6	2049.1	2014.0	1662.4	1423.7
65°	135.0	139.1	165.6	291.6	444.5	659.2	1557.7	2000.9	2029.3	1702.9	1455.0
67.5°	97.3	98.6	108.2	157.0	298.3	353.2	1083.3	1825.4	1931.7	1716.3	1436.5
70°	83.9	85.5	94.8	110.4	211.2	208.4	563.8	1444.8	1637.5	1646.4	1358.3
72.5°	63.5	66.4	81.7	103.7	151.6	148.1	212.5	861.5	1111.7	1351.6	1171.0
75°	43.1	44.7	60.6	88.1	118.4	110.4	111.4	345.9	543.7	847.5	804.7
77.5°	27.1	28.4	37.0	63.2	101.5	77.9	78.8	122.8	196.2	359.3	344.9
80°	18.5	19.1	22.3	40.8	68.6	67.6	50.7	64.1	73.1	110.7	74.3
82.5°	11.2	11.2	14.7	24.2	41.5	53.6	31.9	35.4	38.9	41.2	16.9
85°	3.8	4.1	8.9	15.0	25.5	26.8	18.2	21.1	22.0	23.9	8.0
87.5°	1.6	1.3	4.8	8.3	10.8	12.4	10.5	9.6	10.5	14.0	3.5
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°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4
2.5°	377.2	375.9	375.9	375.6	373.6	372.7	371.7	369.2	370.8	368.9	367.6
5°	375.2	374.3	372.7	371.1	366.6	362.8	361.2	358.0	357.7	355.1	353.9
7.5°	374.9	372.7	370.1	364.7	358.0	351.9	346.5	341.1	338.9	336.0	334.4
10°	373.3	370.5	365.7	357.0	347.2	337.6	325.5	310.5	299.3	292.9	292.0
12.5°	373.6	370.5	363.1	350.3	337.3	316.2	283.7	249.5	221.4	209.6	207.7
15°	376.2	372.7	361.5	344.3	322.0	275.7	216.0	163.7	127.3	114.2	111.4
17.5°	379.4	373.3	358.0	335.7	292.6	213.8	135.9	85.8	65.4	58.1	56.8
20°	381.3	373.0	352.3	322.6	247.9	142.9	74.0	50.4	44.4	42.8	42.1
22.5°	386.1	374.0	347.5	302.2	191.8	86.2	46.9	39.2	35.7	33.8	33.5
25°	396.0	380.3	347.8	275.7	134.3	52.0	38.0	31.9	28.7	26.8	26.2
27.5°	410.3	391.8	353.9	242.8	83.0	39.2	31.6	25.8	22.3	20.7	20.4
30°	428.5	405.9	360.9	200.1	51.7	32.9	25.5	20.1	17.5	16.6	16.3
32.5°	457.2	430.1	366.9	149.6	35.7	27.1	20.1	16.0	14.4	13.4	13.4
35°	504.8	471.9	376.8	100.2	28.4	21.7	16.3	13.1	11.8	11.2	11.2
37.5°	571.8	531.6	381.6	62.2	23.3	16.9	13.1	10.8	9.9	9.3	9.3
40°	653.5	604.0	374.9	38.6	19.5	13.7	10.8	9.3	8.3	8.0	8.0
42.5°	747.6	687.3	353.9	27.4	16.3	11.2	9.3	8.0	7.3	7.0	7.0
45°	852.9	778.6	315.9	23.0	13.7	9.6	8.0	6.7	6.4	6.1	6.1
47.5°	957.9	871.1	266.7	19.8	11.5	8.0	6.7	5.7	5.4	5.1	5.1
50°	1049.4	952.1	214.7	17.2	9.6	7.0	5.7	4.8	4.5	4.1	4.1
52.5°	1101.8	1000.3	166.2	14.4	8.3	6.1	4.5	3.8	3.5	3.2	3.2
55°	1158.3	1040.5	124.1	12.1	6.7	5.1	3.5	2.9	2.6	2.2	2.2
57.5°	1210.9	1076.6	92.2	9.9	5.7	3.8	2.9	2.2	1.9	1.6	1.6
60°	1262.0	1107.2	68.3	8.0	4.8	3.2	2.2	1.6	1.3	1.0	1.0
62.5°	1324.2	1135.3	50.1	6.4	4.1	2.2	1.6	1.0	0.6	0.3	0.3
65°	1370.4	1149.6	37.7	4.8	3.5	1.6	1.0	0.6	0.0	0.0	0.0
67.5°	1370.1	1121.9	27.4	3.5	2.6	1.3	0.6	0.0	0.0	0.0	0.0
70°	1306.0	1037.6	19.1	2.9	1.9	1.0	0.3	0.0	0.0	0.0	0.0
72.5°	1120.0	820.7	12.4	1.9	1.6	0.6	0.3	0.0	0.0	0.0	0.0
75°	755.9	416.7	7.3	1.6	1.3	0.6	0.3	0.0	0.0	0.0	0.0
77.5°	323.2	163.7	3.8	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0
80°	67.6	39.6	1.6	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	11.5	5.7	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.9	1.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	0.3	0.3	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)