

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: P257693

Luminaire Tested: **ARCH-AF24-30-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2778.3 lumens
Efficiency: N/A
Efficacy: 89.6 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

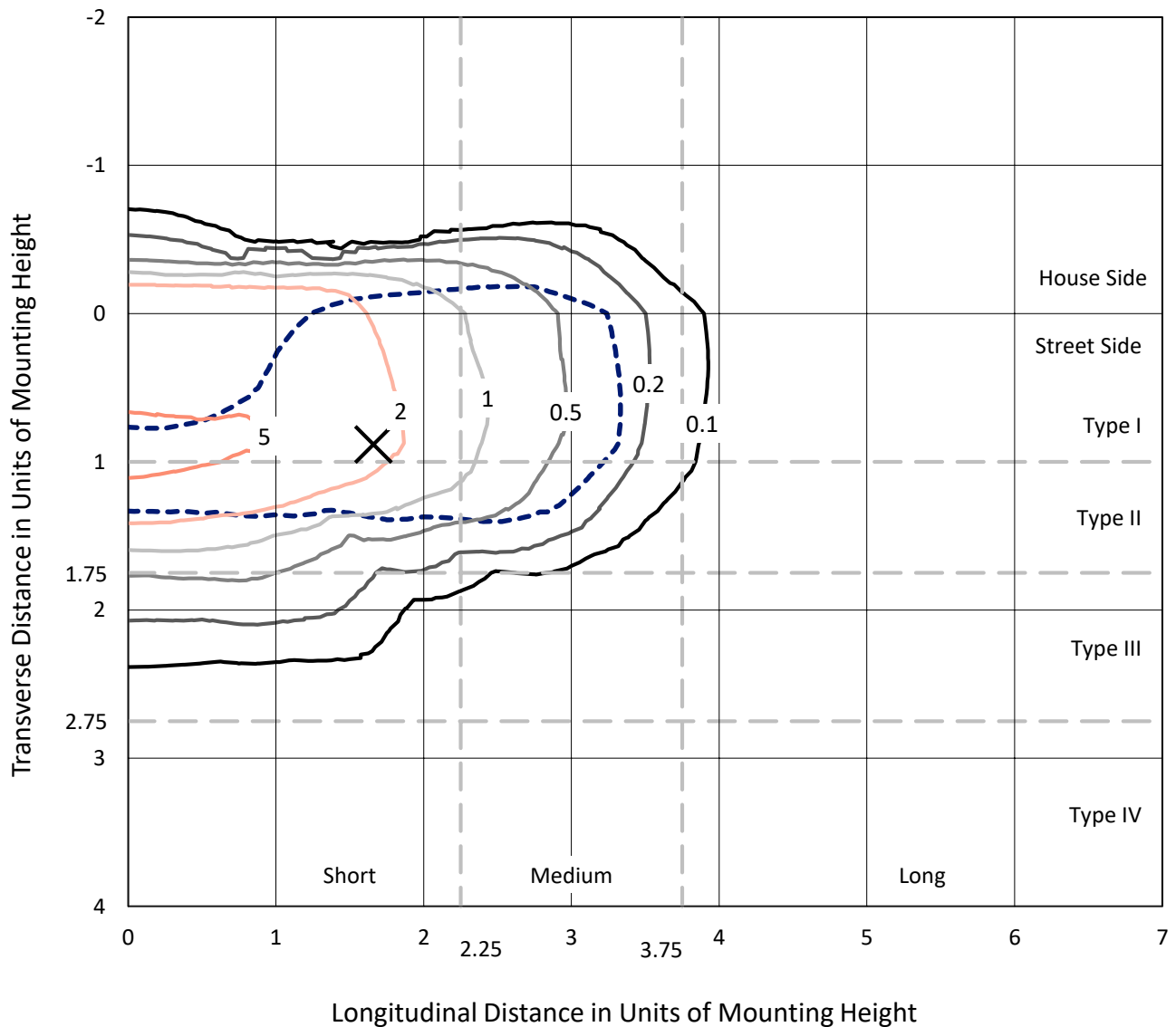
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

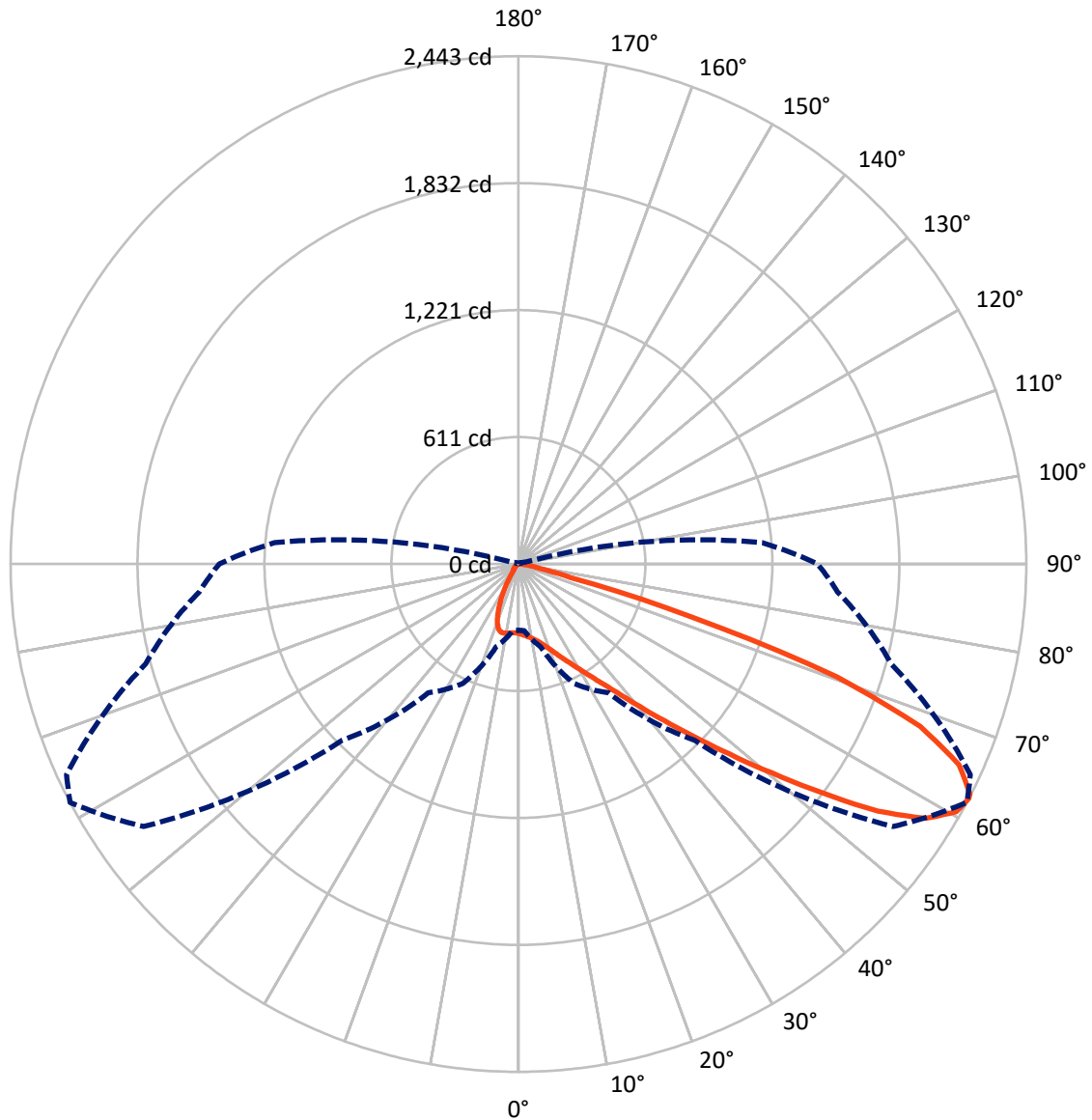
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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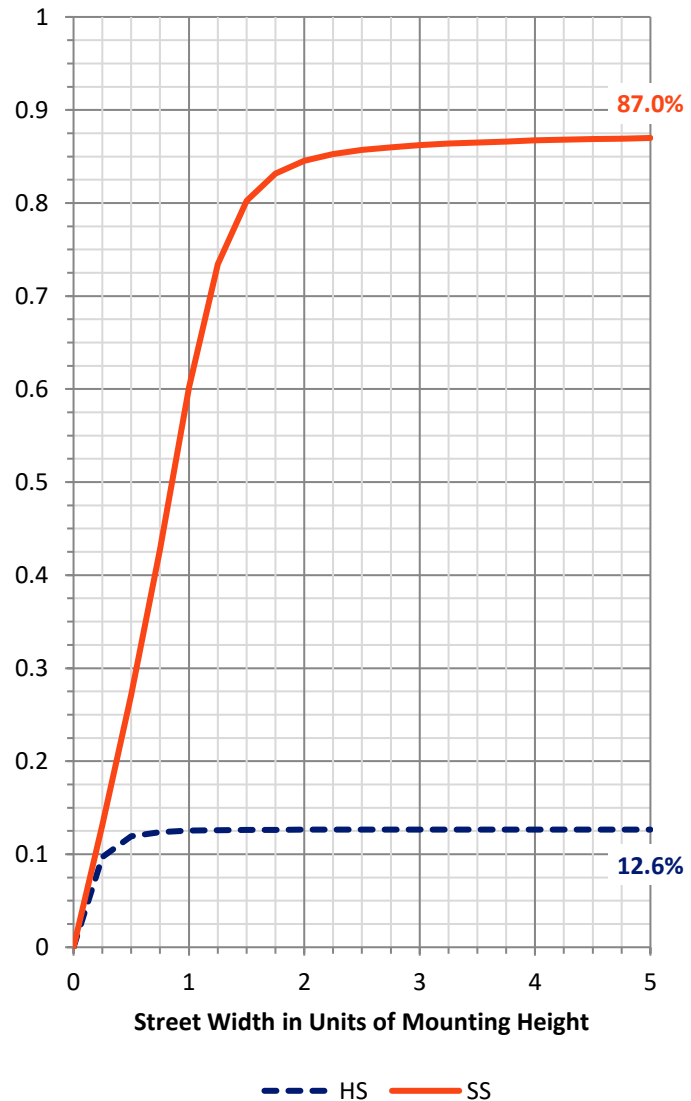
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	355.2	0.0	355.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	2423.1	0.0	2423.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	2778.3	0.0	2778.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	1.2
10°-20°	89.9	3.2
20°-30°	151.1	5.4
30°-40°	289.6	10.4
40°-50°	591.4	21.3
50°-60°	782.7	28.2
60°-70°	608.0	21.9
70°-80°	219.5	7.9
80°-90°	14.0	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°	2778.3	100.0
0°-180°	2778.3	100.0



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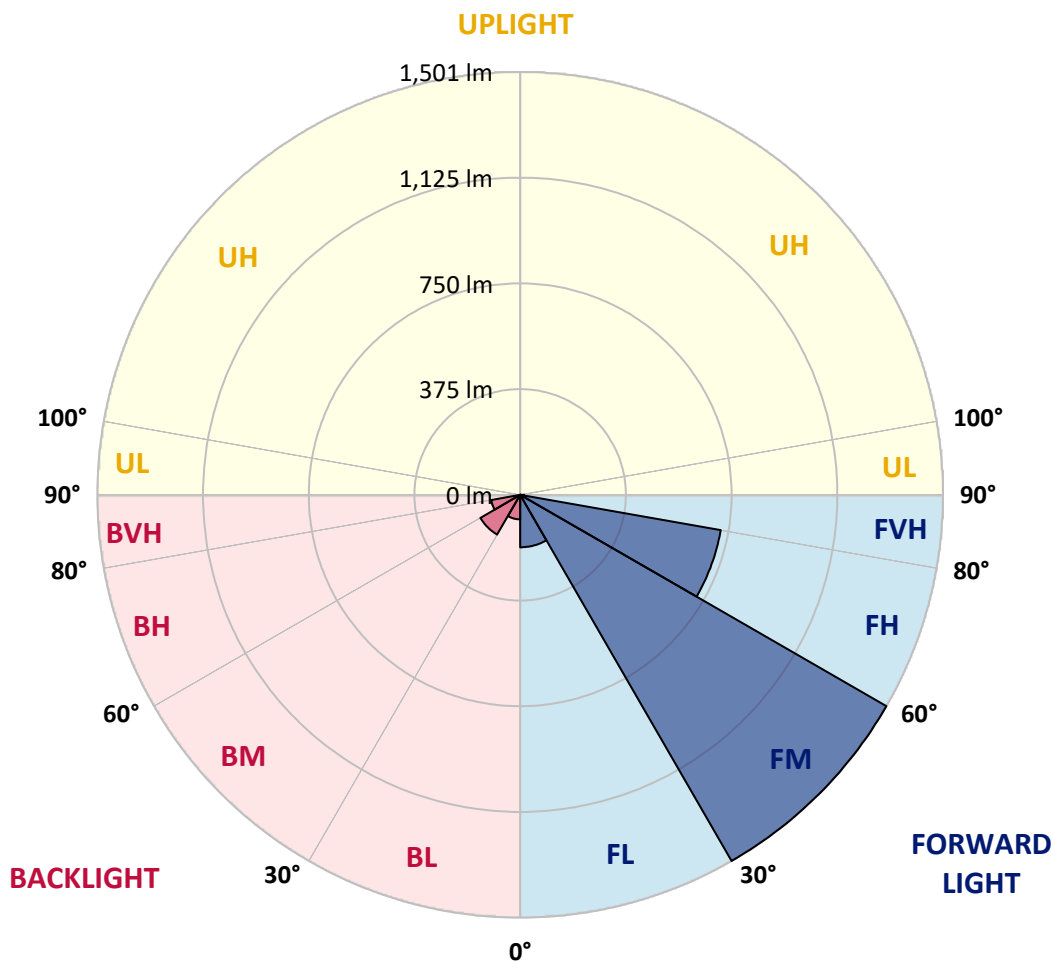
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	186.3	6.7			
FM (30°-60°)	1500.6	54.0			
FH (60°-80°)	722.9	26.0			G1/1800
FVH (80°-90°)	13.4	0.5			G1/100
BL (0°-30°)	86.9	3.1	B0/110		
BM (30°-60°)	163.1	5.9	B0/220		
BH (60°-80°)	104.6	3.8	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°	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7
2.5°	343.6	342.9	342.2	341.6	341.6	340.8	340.1	338.8	337.4	336.0	335.3
5°	349.7	349.0	348.3	349.0	348.3	348.3	347.7	346.3	344.9	342.9	340.8
7.5°	354.5	353.8	353.1	353.8	354.5	355.2	355.9	354.5	353.8	351.1	349.0
10°	360.7	360.0	359.3	360.7	360.7	364.1	364.8	364.1	363.4	361.3	357.9
12.5°	369.5	370.2	370.2	371.5	373.0	377.1	378.4	376.3	376.3	373.6	369.5
15°	386.0	386.0	386.0	387.3	388.0	393.4	394.8	392.7	394.1	389.3	385.2
17.5°	401.6	402.3	403.7	406.4	406.4	411.2	413.9	413.9	416.6	410.5	405.1
20°	417.4	418.0	420.0	426.3	426.3	432.4	437.1	439.2	441.9	435.8	426.3
22.5°	434.4	434.4	437.8	447.3	445.3	457.7	466.5	469.9	472.7	464.4	449.5
25°	460.3	457.7	460.3	469.2	467.9	485.0	501.3	504.7	508.2	498.6	476.1
27.5°	509.5	505.4	495.9	496.5	496.5	516.4	539.6	544.4	546.5	538.3	510.2
30°	607.9	607.9	572.3	548.5	532.8	550.6	583.3	591.5	594.2	582.0	545.0
32.5°	779.4	779.4	713.8	652.9	593.5	593.5	631.2	646.2	648.9	634.5	591.5
35°	997.9	996.6	898.2	814.9	698.8	655.0	687.1	712.4	720.6	701.4	651.6
37.5°	1230.1	1221.3	1115.4	1019.8	860.6	753.4	762.9	796.4	803.9	788.2	729.5
40°	1418.6	1408.4	1323.1	1243.1	1069.6	910.5	872.3	903.0	911.9	890.0	822.4
42.5°	1589.5	1564.2	1505.4	1448.0	1310.1	1182.3	1017.7	1030.0	1039.6	1016.4	926.9
45°	1713.0	1674.2	1644.1	1626.3	1553.2	1480.8	1206.3	1181.6	1185.1	1156.3	1041.0
47.5°	1716.5	1689.1	1691.9	1738.3	1768.4	1765.6	1451.5	1364.0	1351.0	1303.2	1162.5
50°	1552.5	1568.3	1618.1	1750.6	1913.2	2011.5	1743.1	1579.8	1541.0	1454.8	1283.4
52.5°	1279.3	1304.0	1397.5	1620.9	1934.4	2173.5	2045.7	1826.5	1756.7	1605.1	1376.3
55°	1002.0	1003.4	1101.7	1329.2	1792.9	2202.8	2287.5	2097.6	1991.1	1719.2	1437.8
57.5°	689.2	726.7	851.7	1004.7	1474.0	2056.6	2378.4	2308.0	2170.7	1789.6	1480.8
60°	451.5	453.6	599.0	775.9	1003.4	1673.4	2323.0	2419.3	2316.2	1831.2	1510.2
62°	318.3	321.7	411.8	633.8	756.2	1199.4	2200.8	2442.5	2398.1	1855.8	1541.0
62.5°	295.1	297.8	373.6	598.3	710.3	1075.7	2157.0	2437.1	2410.4	1864.0	1551.8
65°	216.6	216.6	244.5	411.2	520.5	581.2	1827.8	2328.4	2394.0	1929.6	1592.8
67.5°	167.4	168.7	178.3	253.4	392.7	352.4	1166.6	2084.0	2223.3	2026.6	1616.1
70°	144.1	143.4	150.3	168.1	283.5	234.3	513.6	1626.3	1862.0	2002.0	1594.9
72.5°	106.6	107.2	123.0	147.5	197.4	152.3	232.2	863.4	1207.6	1566.9	1366.8
75°	68.3	68.9	86.7	116.1	142.1	99.7	133.9	257.5	494.5	868.8	836.1
77.5°	45.7	47.2	56.7	81.3	124.3	62.2	84.0	107.9	148.9	325.8	299.8
80°	30.7	30.7	36.2	54.6	78.6	51.9	45.1	71.7	77.2	101.1	50.5
82.5°	20.5	20.5	23.9	36.2	51.2	46.4	27.3	39.0	45.1	50.5	17.8
85°	12.3	12.3	16.4	22.5	33.5	26.0	17.8	21.9	23.2	32.1	9.5
87.5°	7.5	6.9	10.9	15.8	17.8	15.8	11.7	11.7	12.3	17.8	4.8
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°	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7	334.7
2.5°	334.0	333.3	332.7	331.2	329.2	327.9	326.5	325.1	323.8	323.8	325.8
5°	340.1	338.1	335.3	332.7	328.6	325.8	323.8	321.0	319.7	319.7	320.4
7.5°	347.7	345.7	340.8	336.0	329.9	325.1	320.4	314.1	309.4	307.4	309.4
10°	355.9	353.1	346.3	338.8	331.9	319.7	303.9	284.8	268.4	261.0	264.3
12.5°	366.1	362.7	354.5	344.2	328.6	298.5	259.5	215.1	187.2	174.2	176.9
15°	381.2	376.3	364.8	349.0	314.1	249.3	185.8	134.5	108.6	97.7	99.0
17.5°	398.8	392.7	377.1	347.7	277.3	179.6	110.7	78.6	67.6	64.9	64.9
20°	418.0	409.8	389.3	337.4	221.3	112.7	68.9	60.1	56.1	53.9	53.9
22.5°	437.8	426.9	399.6	313.5	157.7	70.4	56.7	50.5	45.7	43.7	43.7
25°	461.8	447.3	409.8	271.8	100.5	56.7	48.5	42.4	37.5	34.9	35.5
27.5°	489.7	471.3	418.7	219.9	64.9	49.2	40.3	34.2	30.1	28.6	28.6
30°	519.1	497.3	420.7	164.6	52.6	42.4	33.5	28.0	25.3	23.9	23.9
32.5°	559.5	530.7	414.6	109.3	44.4	35.5	28.0	23.2	21.2	20.5	20.5
35°	612.6	574.4	400.3	67.6	37.5	29.4	23.2	20.5	18.4	17.8	17.8
37.5°	680.3	635.3	375.0	46.4	32.1	23.9	19.8	17.8	16.4	15.8	15.8
40°	770.5	709.0	342.2	40.3	27.3	20.5	17.1	15.8	14.3	14.3	14.3
42.5°	866.1	798.5	299.8	35.5	23.2	17.8	15.0	13.7	13.0	12.3	12.3
45°	970.6	890.0	247.2	31.4	19.8	15.8	13.7	11.7	10.9	10.9	10.9
47.5°	1074.4	984.3	189.9	27.3	17.1	13.7	11.7	10.2	9.5	8.9	8.9
50°	1181.0	1069.6	139.3	23.9	15.0	12.3	10.2	8.9	7.5	6.9	6.9
52.5°	1258.1	1120.8	101.8	20.5	13.0	10.2	8.2	6.9	5.4	4.8	4.8
55°	1314.8	1152.3	74.5	17.1	11.7	8.9	6.9	5.4	4.1	4.1	3.4
57.5°	1359.2	1167.3	56.1	15.0	10.2	7.5	5.4	4.1	3.4	2.8	2.8
60°	1393.4	1168.0	41.6	12.3	8.9	6.1	4.1	2.8	2.0	2.0	2.0
62°	1438.5	1176.9	34.2	10.2	8.2	5.4	3.4	2.0	1.3	0.7	0.7
62.5°	1451.5	1180.3	32.8	10.2	7.5	4.8	2.8	2.0	1.3	0.7	0.7
65°	1511.5	1186.4	25.3	8.2	6.1	4.1	2.0	1.3	0.0	0.0	0.0
67.5°	1566.2	1176.9	18.4	6.1	4.8	2.8	2.0	0.7	0.0	0.0	0.0
70°	1560.7	1111.3	13.0	4.1	3.4	2.0	1.3	0.0	0.0	0.0	0.0
72.5°	1286.2	832.0	8.9	3.4	2.0	1.3	0.7	0.0	0.0	0.0	0.0
75°	776.6	364.1	6.1	2.0	2.0	1.3	0.7	0.0	0.0	0.0	0.0
77.5°	254.8	131.9	4.1	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0
80°	41.6	21.9	2.0	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0
82.5°	13.0	5.4	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0
85°	4.8	2.0	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.3	1.3	1.3	0.7	0.7	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)