

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: P265912

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265912
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-60-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4121.2 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G2

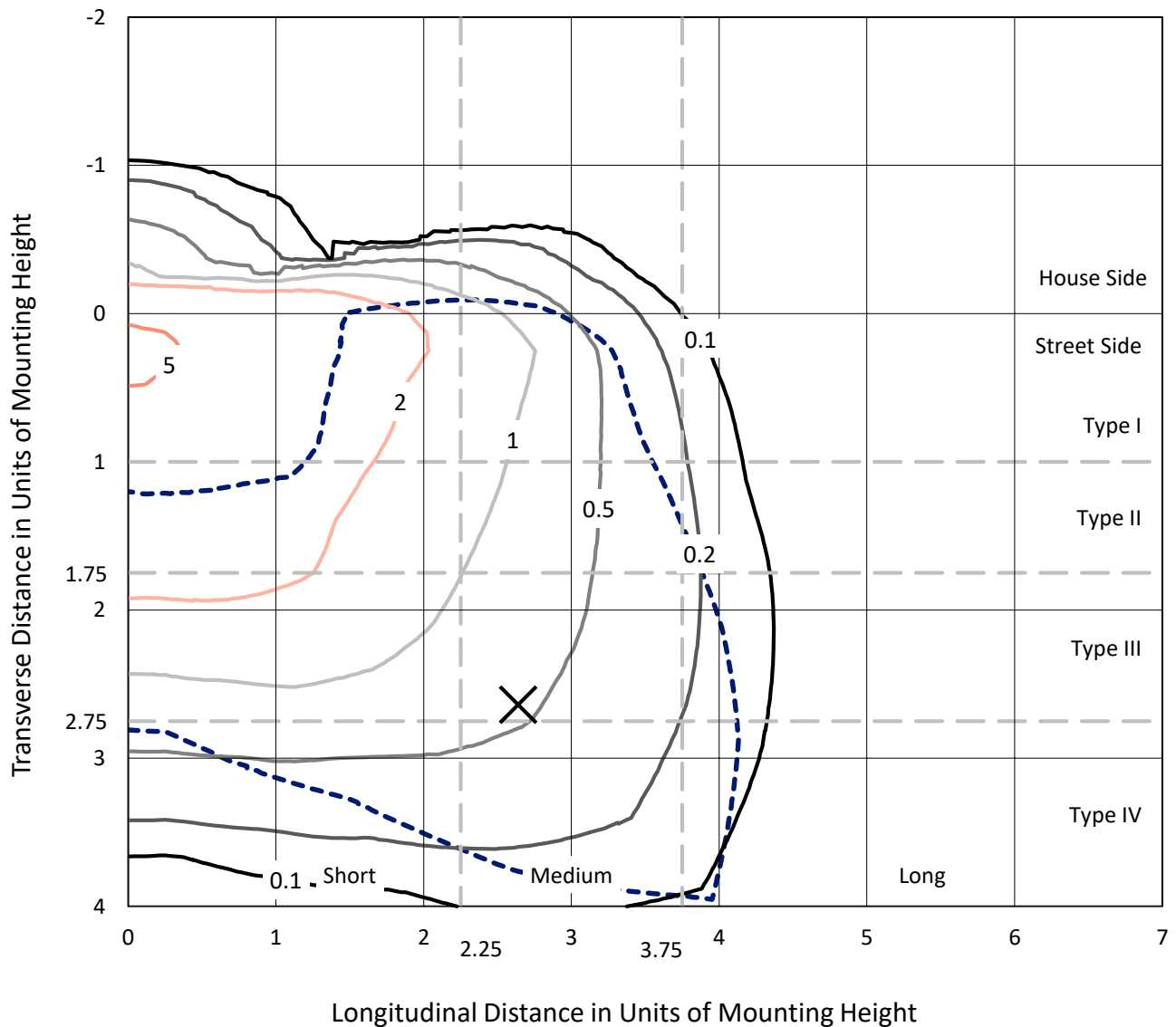
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

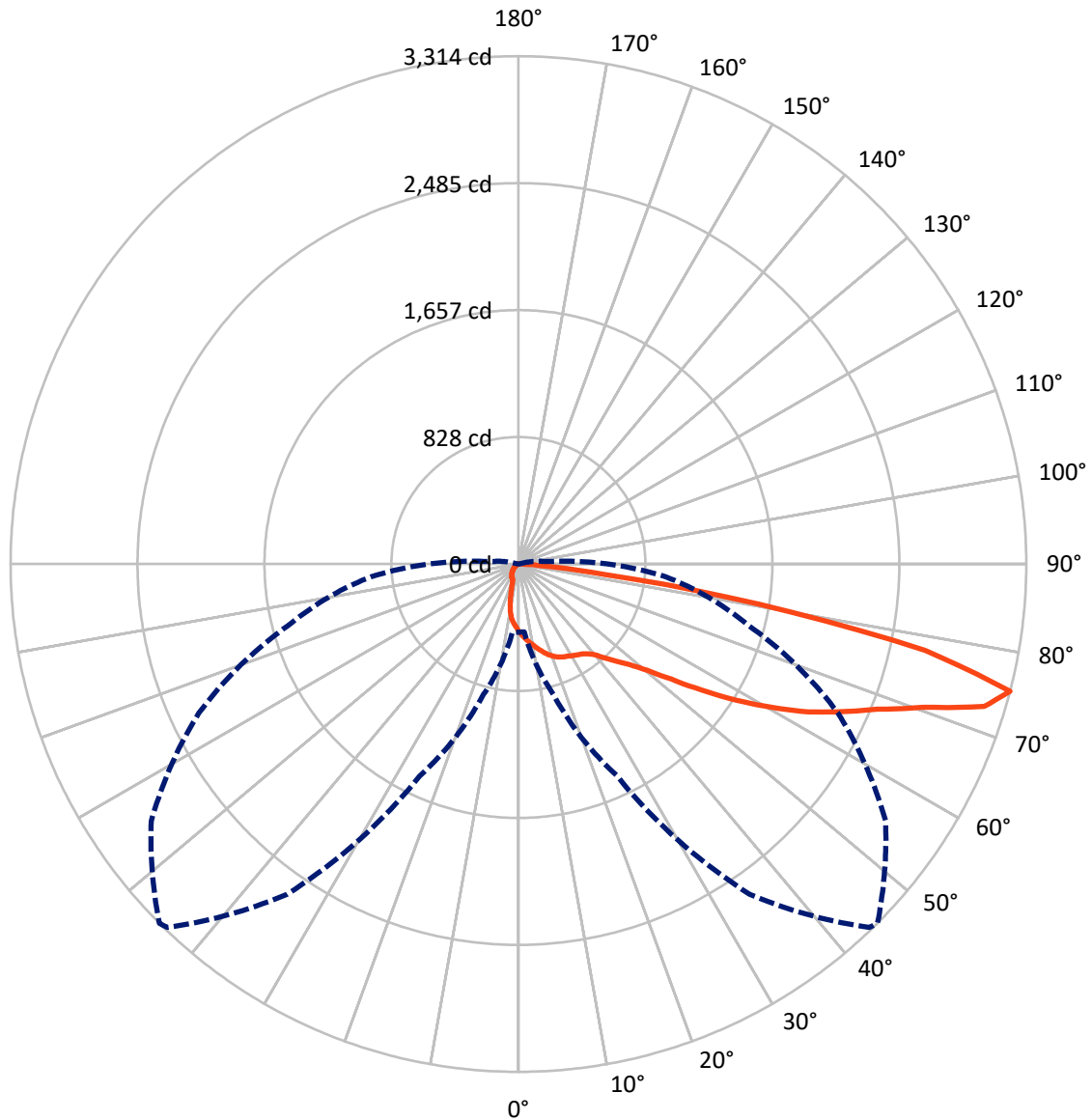


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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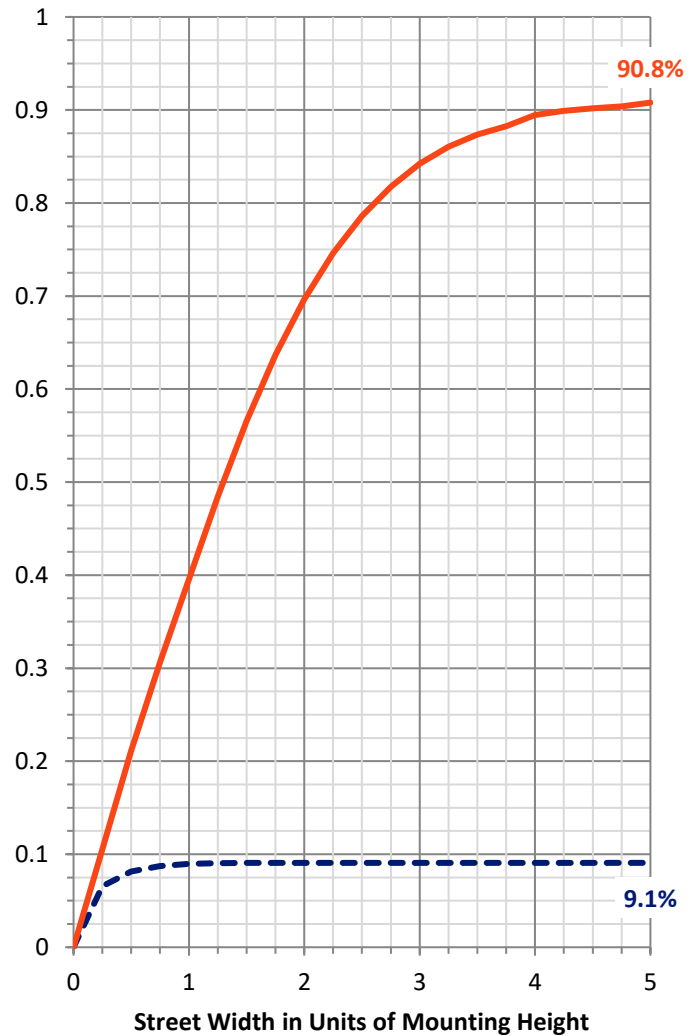
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	377.0	0.0	377.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	3744.3	0.0	3744.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	4121.2	0.0	4121.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	1.0
10°-20°	117.9	2.9
20°-30°	195.2	4.7
30°-40°	282.5	6.9
40°-50°	462.6	11.2
50°-60°	824.2	20.0
60°-70°	1211.6	29.4
70°-80°	914.1	22.2
80°-90°	71.7	1.7
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°	4121.2	100.0
0°-180°	4121.2	100.0



--- HS — SS

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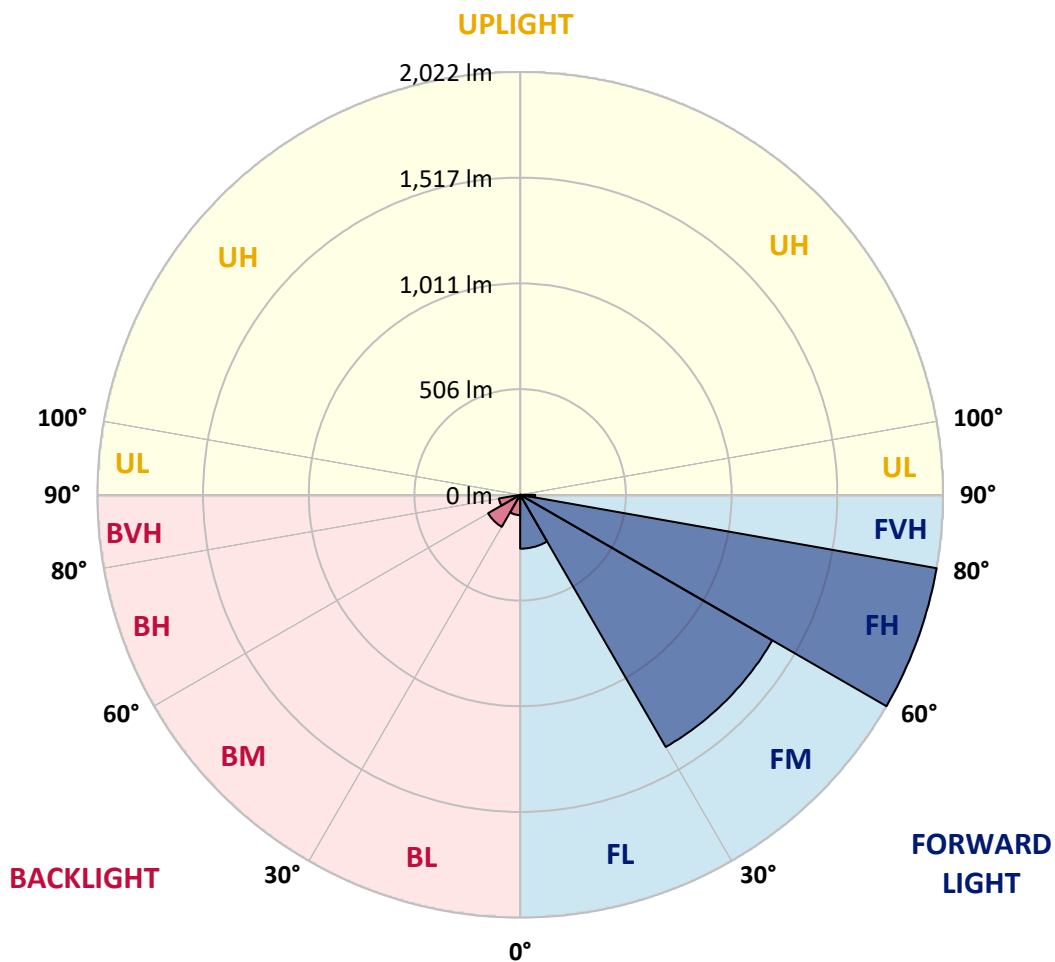
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	257.8	6.3			
FM	(30°-60°)	1392.5	33.8			
FH	(60°-80°)	2022.4	49.1			G2/5000
FVH	(80°-90°)	71.5	1.7			G1/100
BL	(0°-30°)	96.9	2.4	B0/110		
BM	(30°-60°)	176.7	4.3	B0/220		
BH	(60°-80°)	103.3	2.5	B0/110		G0/110
BVH	(80°-90°)	0.2	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8
2.5°	478.8	478.8	477.9	476.9	472.0	467.1	466.1	463.3	454.5	448.7	442.8
5°	518.9	519.8	517.9	512.9	502.2	491.6	490.6	482.7	466.1	454.5	441.7
7.5°	556.8	558.7	554.0	545.1	532.4	516.9	515.8	501.3	479.8	463.3	444.8
10°	589.0	589.0	582.2	571.4	557.8	541.1	539.3	522.8	498.3	477.9	453.5
12.5°	624.1	623.2	613.5	598.8	583.2	567.5	566.7	546.1	522.8	496.4	466.1
15°	656.3	654.3	641.7	628.0	611.4	594.9	593.9	573.4	549.0	517.9	484.6
17.5°	673.9	672.9	661.2	647.5	633.8	621.2	620.2	598.8	572.4	540.3	503.2
20°	676.9	677.7	668.0	656.3	648.4	641.7	641.7	622.2	593.9	559.7	522.8
22.5°	677.7	680.6	673.9	658.3	656.3	657.3	659.3	643.6	614.4	582.2	543.1
25°	684.6	688.6	683.6	665.0	663.0	670.0	671.9	665.0	638.8	606.5	566.7
27.5°	698.3	702.1	698.3	674.8	671.9	678.7	680.6	684.6	665.0	630.0	590.9
30°	725.6	726.5	717.7	688.6	682.6	691.4	694.3	705.1	689.4	652.3	614.4
32.5°	773.4	763.6	737.2	698.3	693.3	703.2	706.1	717.7	711.8	673.9	638.8
35°	870.8	820.2	759.6	711.8	707.1	716.8	720.7	737.2	740.2	704.1	669.0
37.5°	869.9	824.0	812.3	738.2	731.4	738.2	743.1	763.6	775.2	744.1	712.9
40°	931.4	911.8	911.8	788.0	765.5	775.2	780.2	800.6	821.1	796.7	764.5
42.5°	1124.4	1111.7	1098.1	883.6	813.3	840.6	843.6	856.3	880.6	872.9	834.7
45°	1339.9	1328.2	1275.6	1045.4	895.3	900.1	906.8	927.4	962.5	977.1	932.4
47.5°	1508.7	1496.9	1452.1	1240.5	1023.0	980.1	980.1	1020.0	1074.6	1111.7	1068.9
50°	1644.2	1630.6	1603.2	1448.2	1232.7	1095.2	1089.3	1136.0	1217.1	1274.5	1245.3
52.5°	1775.8	1735.9	1719.3	1662.8	1469.6	1261.8	1246.3	1279.5	1391.7	1462.8	1438.5
55°	1863.7	1857.8	1840.2	1859.8	1718.3	1464.7	1451.1	1457.9	1598.4	1646.1	1616.0
57.5°	1945.5	1944.6	1983.5	2074.2	1989.3	1696.9	1675.3	1664.6	1798.2	1786.5	1812.9
60°	2047.0	2029.5	2120.1	2249.7	2238.0	1923.1	1898.7	1877.3	1951.4	1918.2	2048.9
62.5°	2051.8	2047.0	2231.2	2417.5	2484.8	2153.2	2124.9	2048.0	2085.0	2047.0	2274.1
65°	1865.6	1889.9	2278.0	2506.2	2691.5	2355.0	2321.0	2200.9	2203.9	2178.6	2539.4
67.5°	1823.6	1836.2	2149.4	2601.9	2840.7	2558.9	2526.8	2377.5	2342.4	2344.3	2696.4
70°	1719.3	1738.8	1989.3	2595.1	2958.7	2831.0	2798.8	2637.0	2552.1	2457.6	2575.5
72.5°	1313.6	1346.7	1676.3	2275.1	2926.6	3186.9	3178.2	2965.6	2635.9	2256.6	1948.5
75°	444.8	443.8	880.6	1528.1	2629.1	3296.2	3313.7	2924.6	2299.5	1556.5	967.4
77.5°	95.6	96.6	181.4	619.2	1746.6	2646.6	2714.0	2205.9	1483.3	693.3	221.3
80°	46.8	47.8	75.1	163.9	698.3	1484.3	1589.6	1134.2	548.1	138.5	37.1
82.5°	23.4	24.3	38.9	86.7	258.4	527.6	563.6	417.4	157.1	78.1	18.5
85°	8.8	8.8	19.6	51.7	117.9	123.8	152.2	120.9	94.6	63.4	4.9
87.5°	1.9	1.9	10.7	25.3	52.7	38.9	38.9	37.1	57.5	42.8	1.9
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°	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8	440.8
2.5°	439.8	435.9	429.1	422.3	417.4	411.6	408.5	405.7	404.6	403.7	405.7
5°	434.9	429.1	416.5	405.7	396.0	388.2	382.3	376.4	373.4	371.5	372.5
7.5°	434.9	426.2	407.7	391.0	375.4	358.9	342.3	329.6	319.8	314.0	314.9
10°	439.8	428.1	403.7	381.3	352.0	316.9	280.9	253.5	235.0	224.2	224.2
12.5°	450.5	434.9	404.6	369.7	319.8	258.4	203.8	170.7	157.1	149.2	150.1
15°	465.1	446.6	409.5	354.0	275.1	192.1	142.4	120.9	120.9	122.9	123.8
17.5°	481.8	461.3	413.5	330.5	217.5	137.5	112.2	110.2	113.1	117.9	117.9
20°	498.3	475.9	415.5	293.6	162.9	109.2	106.3	106.3	108.2	113.1	114.2
22.5°	518.9	494.4	413.5	247.8	121.9	103.3	102.3	102.3	102.3	108.2	108.2
25°	540.3	515.8	405.7	199.0	103.3	99.4	98.5	97.6	97.6	102.3	103.3
27.5°	564.7	538.4	387.2	152.2	97.6	95.6	94.6	92.6	92.6	96.6	96.6
30°	589.0	563.6	358.9	115.1	92.6	91.6	89.7	87.8	85.8	89.7	89.7
32.5°	615.3	589.9	321.9	91.6	85.8	85.8	84.8	81.9	79.9	81.9	83.0
35°	650.5	620.2	279.9	79.9	77.1	77.1	77.1	76.0	72.1	74.1	74.1
37.5°	697.3	662.2	231.1	74.1	70.2	68.4	68.4	68.4	65.3	66.4	66.4
40°	756.7	710.9	184.3	69.2	65.3	60.5	58.5	59.5	57.5	57.5	56.6
42.5°	837.7	763.6	138.5	65.3	61.4	54.5	50.8	49.8	47.8	46.8	46.8
45°	953.7	828.0	99.4	61.4	58.5	47.8	43.8	41.0	36.1	33.1	33.1
47.5°	1103.9	901.1	74.1	57.5	55.5	42.0	37.1	31.3	24.3	22.5	22.5
50°	1287.2	982.9	62.4	51.7	50.8	37.1	29.3	20.5	13.7	11.7	12.7
52.5°	1465.8	1060.0	55.5	45.9	44.8	32.2	21.5	10.7	5.8	5.8	5.8
55°	1616.0	1114.6	50.8	41.0	38.9	25.3	11.7	4.9	3.0	3.0	3.0
57.5°	1751.4	1145.9	45.9	36.1	31.3	17.5	4.9	1.9	1.9	1.0	1.0
60°	1875.3	1164.5	40.0	31.3	24.3	9.7	1.9	1.0	1.0	0.0	0.0
62.5°	1997.2	1178.0	34.1	25.3	18.5	4.0	1.0	1.0	0.0	0.0	0.0
65°	2089.8	1173.1	27.3	20.5	11.7	1.9	1.0	0.0	0.0	0.0	0.0
67.5°	2086.9	1106.8	20.5	15.6	5.8	1.0	0.0	0.0	0.0	0.0	0.0
70°	1866.5	932.4	13.7	9.7	1.9	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1324.3	597.8	8.8	5.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	583.2	181.4	4.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	114.2	42.0	3.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.3	4.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.0	0.0	0.0	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)