

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: P214638

Luminaire Tested: **ARCH-AF16-20-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214638
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-20-D-U-T2R-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2233.3 lumens
Efficiency: N/A
Efficacy: 93.1 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 (A_{in}): 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

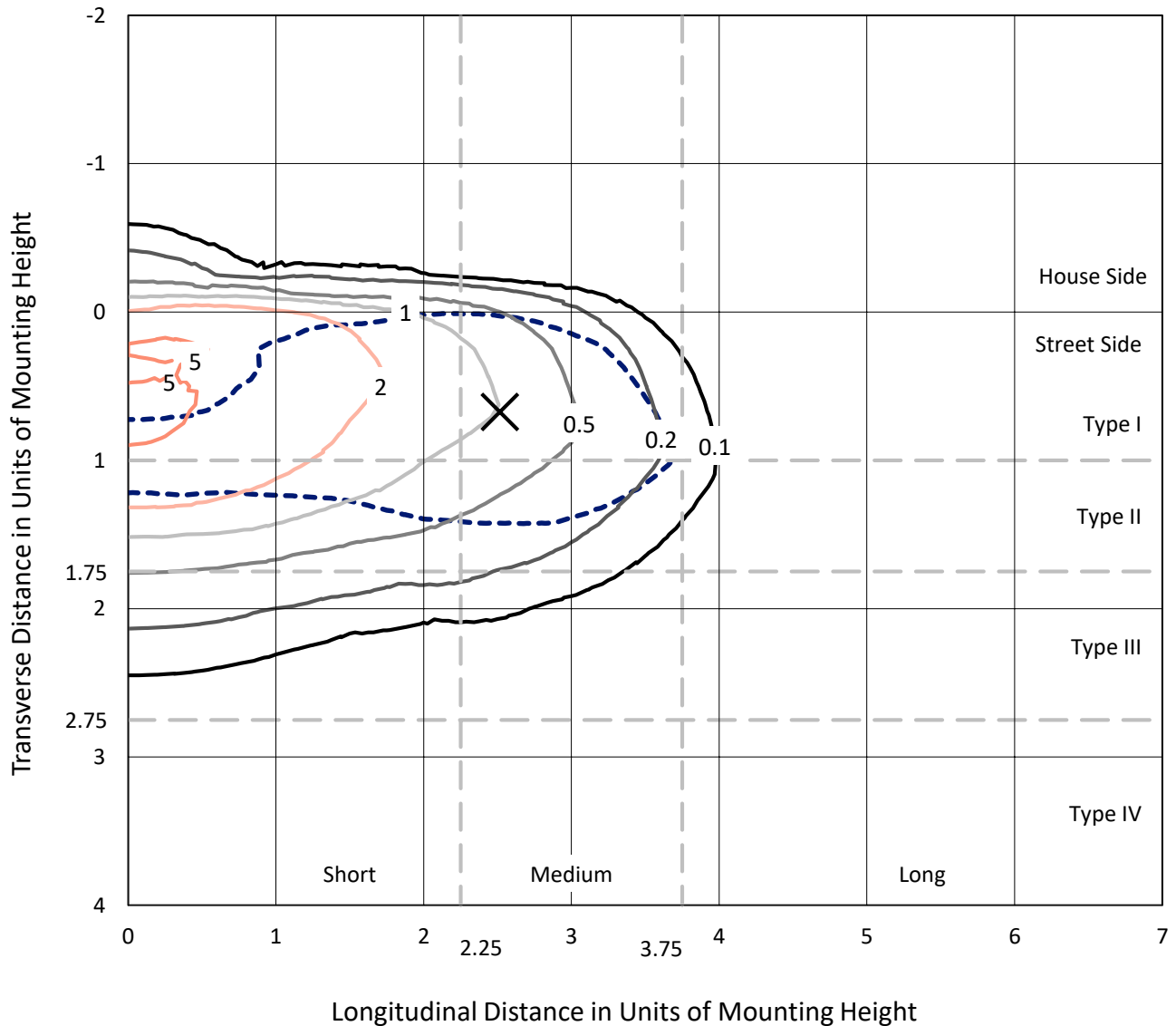


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

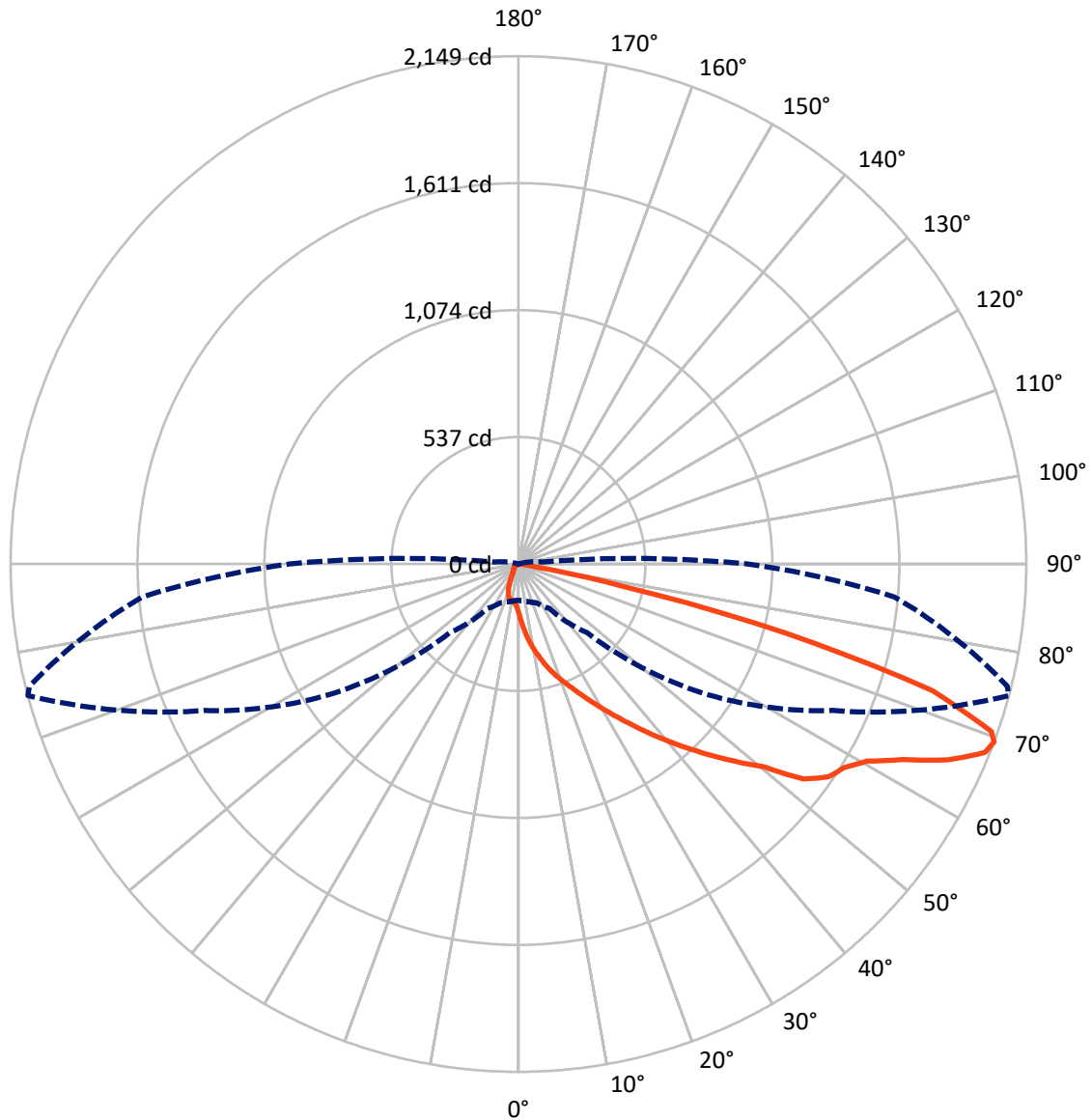


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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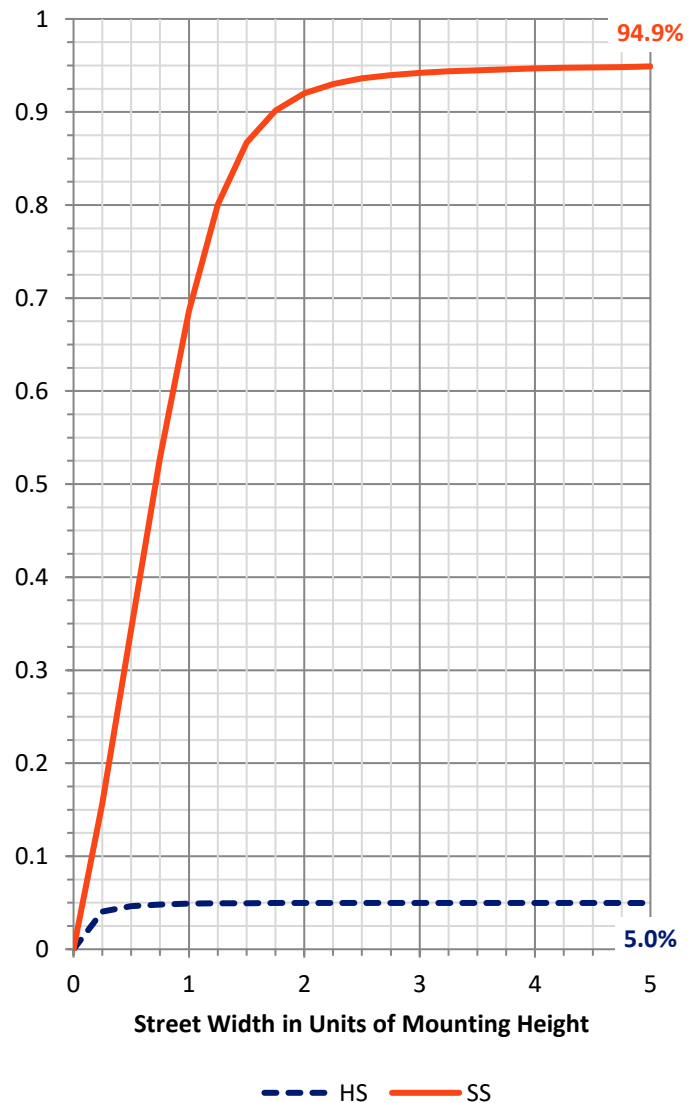
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	111.4	0.0	111.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2121.8	0.0	2121.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	2233.3	0.0	2233.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.2	1.1
10°-20°	86.6	3.9
20°-30°	165.4	7.4
30°-40°	296.7	13.3
40°-50°	454.5	20.4
50°-60°	528.3	23.7
60°-70°	467.8	20.9
70°-80°	201.8	9.0
80°-90°	8.1	0.4
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°	2233.3	100.0
0°-180°	2233.3	100.0

Coefficient of Utilization



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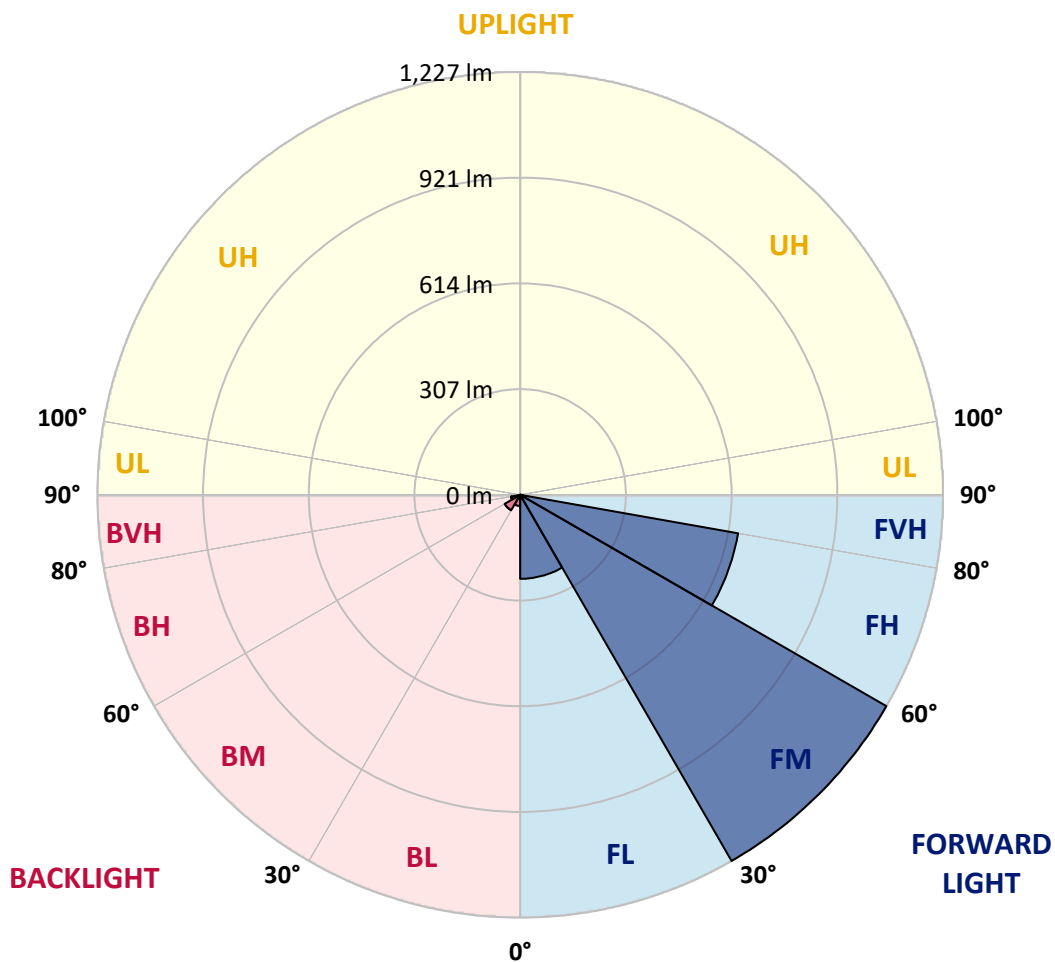
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	243.9	10.9			
FM	(30°-60°)	1227.5	55.0			
FH	(60°-80°)	642.5	28.8			G0/660
FVH	(80°-90°)	8.0	0.4			G0/10
BL	(0°-30°)	32.4	1.4	B0/110		
BM	(30°-60°)	52.0	2.3	B0/220		
BH	(60°-80°)	27.0	1.2	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°	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
2.5°	342.3	338.9	335.5	331.7	323.1	308.1	289.3	269.0	243.9	239.6	219.4
5°	415.6	414.2	410.9	405.5	395.8	379.4	358.3	328.4	286.4	279.1	236.2
7.5°	467.2	466.2	463.4	457.0	448.4	432.0	409.8	377.5	328.9	320.6	257.5
10°	513.5	513.0	510.6	504.8	496.1	478.3	454.6	420.8	369.3	360.1	282.1
12.5°	555.5	555.9	554.9	552.1	545.8	529.0	501.9	465.2	408.4	398.2	311.5
15°	580.0	581.5	585.3	591.1	593.1	579.5	551.5	511.2	448.4	439.8	345.3
17.5°	571.9	573.3	585.3	605.1	623.9	625.8	600.7	554.5	488.0	479.2	378.5
20°	552.1	554.0	566.5	593.5	630.2	655.7	645.6	601.7	525.5	514.9	410.3
22.5°	574.2	574.2	578.1	594.5	627.8	667.8	681.2	649.0	564.1	551.1	442.2
25°	650.4	649.0	640.8	634.0	644.6	680.3	708.2	697.2	609.4	594.5	475.9
27.5°	746.8	753.6	738.1	713.6	689.4	704.9	732.4	744.9	659.6	644.2	510.6
30°	854.9	857.6	839.4	806.7	764.2	749.3	760.8	785.9	714.0	697.2	546.8
32.5°	952.2	949.8	934.3	900.2	847.7	815.3	797.5	818.7	773.3	754.1	583.9
35°	1038.5	1040.4	1021.7	982.1	930.6	896.3	853.9	855.8	839.8	817.7	626.8
37.5°	1116.2	1112.8	1095.0	1055.5	1008.7	971.6	926.6	894.4	912.8	889.6	675.0
40°	1179.4	1175.9	1157.2	1118.6	1074.7	1044.3	1009.1	945.9	989.4	962.8	726.6
42.5°	1229.5	1225.6	1209.7	1172.6	1130.2	1103.2	1086.2	1009.5	1071.3	1044.8	784.5
45°	1254.1	1250.7	1241.0	1213.1	1175.9	1152.3	1160.6	1082.9	1159.0	1136.9	848.1
47.5°	1225.2	1223.7	1234.7	1229.9	1208.7	1196.2	1224.7	1162.9	1251.1	1229.5	921.4
50°	1137.4	1139.8	1172.2	1212.1	1222.3	1237.2	1277.2	1247.3	1350.0	1326.9	1005.7
52.5°	920.9	937.3	1034.6	1131.2	1205.9	1262.3	1338.9	1367.8	1511.0	1488.3	1137.4
55°	687.6	694.3	800.4	965.3	1139.8	1260.3	1384.8	1438.7	1590.6	1567.5	1172.2
57.5°	545.3	547.7	600.3	768.5	1003.9	1216.9	1408.8	1464.3	1625.3	1606.0	1223.7
60°	428.2	431.0	469.2	584.9	812.5	1099.8	1374.2	1486.5	1693.3	1677.9	1313.9
62.5°	333.1	336.1	359.3	427.2	609.4	919.4	1304.2	1522.1	1822.6	1815.3	1461.4
65°	258.0	259.0	274.8	306.7	430.6	724.2	1218.9	1555.5	1997.0	1990.8	1581.0
67.5°	190.4	191.9	203.0	222.8	290.7	520.2	1079.1	1529.8	2128.7	2110.4	1624.3
69°	153.8	155.2	164.9	180.9	229.6	409.8	951.3	1466.7	2148.5	2131.1	1596.9
70°	131.6	132.6	142.2	155.7	195.8	348.1	850.0	1412.1	2122.4	2105.5	1534.2
72.5°	84.3	89.1	98.9	107.5	129.7	230.4	573.7	1171.1	1831.1	1802.2	1201.6
75°	46.8	48.2	65.5	76.2	86.4	149.9	319.1	730.4	1164.8	1144.6	642.7
77.5°	38.6	39.6	46.3	57.9	57.9	83.9	120.5	287.8	443.0	399.7	174.0
80°	27.0	28.0	35.2	38.1	41.5	47.2	39.0	63.2	68.5	60.7	26.0
82.5°	18.8	19.7	24.1	31.3	33.3	22.2	14.4	18.8	19.7	19.7	10.2
85°	3.4	4.8	17.8	26.0	19.7	6.8	8.2	6.8	6.2	6.8	2.4
87.5°	0.0	0.0	11.0	12.6	10.6	2.8	3.4	2.4	1.4	1.9	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°	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
2.5°	209.2	199.2	181.8	169.3	158.7	150.4	147.1	141.7	137.8	139.9	137.4
5°	215.0	197.2	169.3	151.5	138.9	128.3	119.5	112.9	107.5	106.5	105.6
7.5°	224.2	198.7	162.0	139.9	121.1	104.7	91.1	81.0	73.3	73.3	70.4
10°	236.8	202.4	157.7	128.3	100.3	78.1	64.6	54.9	51.2	50.6	49.7
12.5°	254.1	209.8	154.3	113.3	78.1	57.0	48.7	45.4	43.9	43.3	42.9
15°	277.7	220.3	150.4	94.9	59.3	46.8	43.3	40.5	39.0	38.6	38.1
17.5°	300.4	230.0	142.2	76.2	48.2	42.4	38.6	36.2	34.2	33.8	33.8
20°	321.6	238.1	128.3	59.3	43.3	38.1	34.2	31.3	29.4	29.0	29.0
22.5°	343.7	245.0	110.9	48.2	39.6	33.8	29.9	27.0	25.0	24.6	24.1
25°	367.4	249.7	91.1	42.9	35.7	29.9	25.5	23.2	21.8	21.2	20.8
27.5°	392.9	251.8	72.3	39.0	31.3	26.0	22.2	19.7	18.8	18.3	18.3
30°	416.1	249.7	55.9	34.8	27.6	22.6	19.3	17.4	16.4	16.0	16.0
32.5°	440.2	245.0	44.8	30.8	24.1	19.3	16.4	15.0	14.4	13.9	13.9
35°	465.8	238.6	38.6	27.6	20.8	16.8	14.4	13.5	13.0	12.6	12.6
37.5°	495.6	231.0	35.2	24.6	18.3	15.0	12.6	12.0	11.6	11.6	11.6
40°	529.4	221.2	32.8	22.2	16.4	13.0	11.0	10.6	10.2	10.2	10.2
42.5°	565.1	210.3	30.4	19.7	14.4	11.0	9.7	9.7	9.2	9.2	8.6
45°	605.1	199.2	28.0	17.4	12.6	9.7	8.2	7.7	7.7	7.2	7.2
47.5°	652.4	189.0	25.5	15.4	11.0	8.2	7.2	6.8	6.2	5.8	5.8
50°	718.9	188.0	22.6	13.5	10.2	6.8	5.8	5.4	4.8	4.4	4.4
52.5°	784.9	179.4	19.3	11.0	8.2	5.8	4.4	3.9	3.4	3.4	2.8
55°	799.9	164.9	16.8	9.7	6.2	4.4	3.4	2.4	2.4	1.9	1.9
57.5°	832.7	158.1	14.4	7.7	4.8	3.4	1.9	1.4	1.4	1.4	1.4
60°	897.2	156.2	12.6	6.8	3.4	2.4	1.4	1.0	1.0	0.4	0.4
62.5°	986.5	154.3	10.6	5.8	2.4	1.4	1.0	0.4	0.0	0.0	0.0
65°	1035.7	141.3	8.6	4.4	1.9	1.4	0.4	0.0	0.0	0.0	0.0
67.5°	1022.6	116.7	7.7	2.8	1.4	1.0	0.4	0.0	0.0	0.0	0.0
69°	968.1	98.4	6.2	2.4	1.4	1.0	0.4	0.0	0.0	0.0	0.0
70°	902.6	84.9	5.8	1.9	1.0	0.4	0.4	0.0	0.0	0.0	0.0
72.5°	640.8	44.4	3.9	1.4	1.0	0.4	0.0	0.0	0.0	0.0	0.0
75°	299.4	19.7	2.4	1.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
77.5°	66.1	9.2	1.4	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	12.6	3.4	1.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.4	1.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.0	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)