

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: P234697

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234697
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-AF16-30-D-U-T2R-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA 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: 2277 lumens
Efficiency: N/A
Efficacy: 71.2 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): 32
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

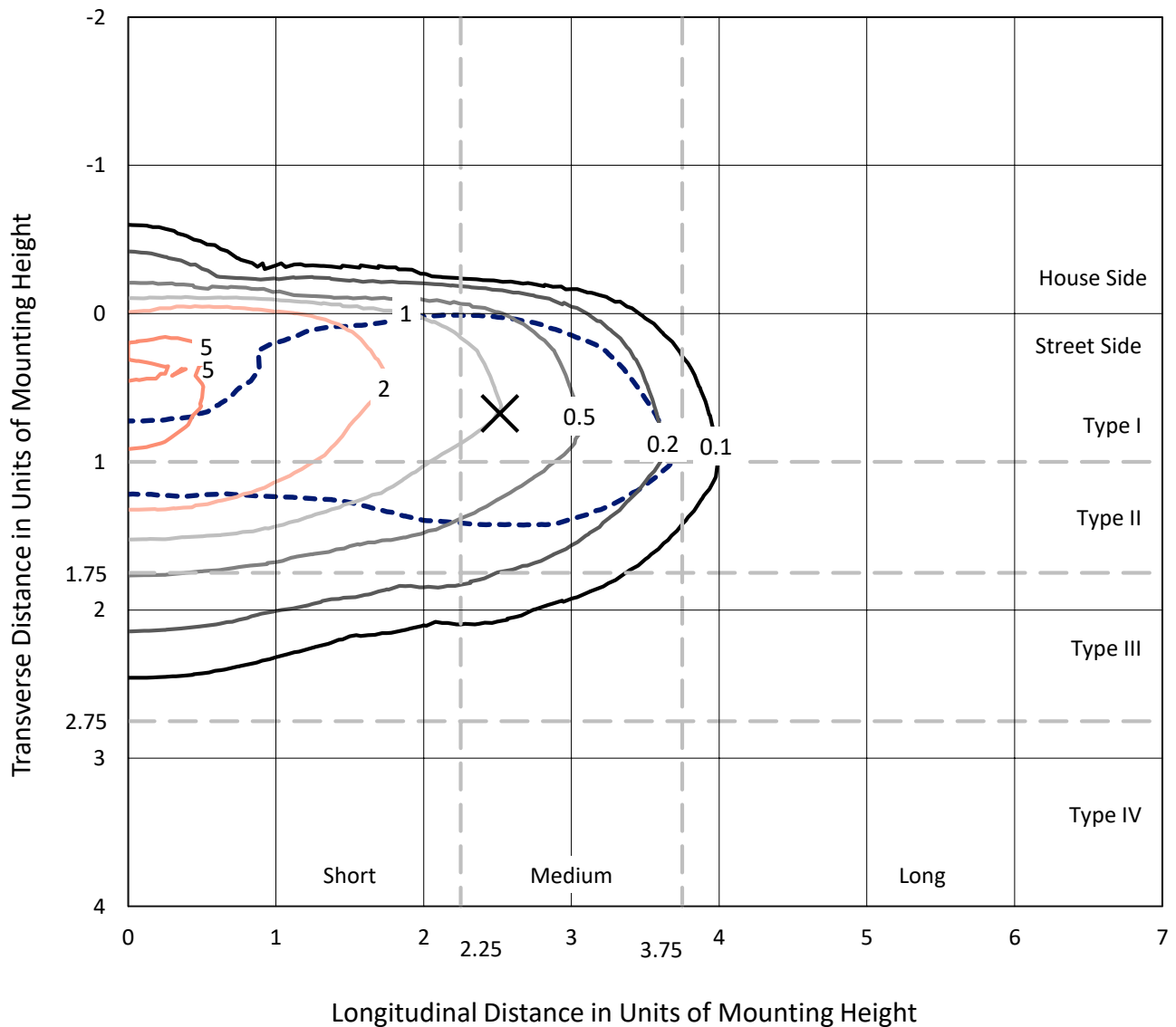


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

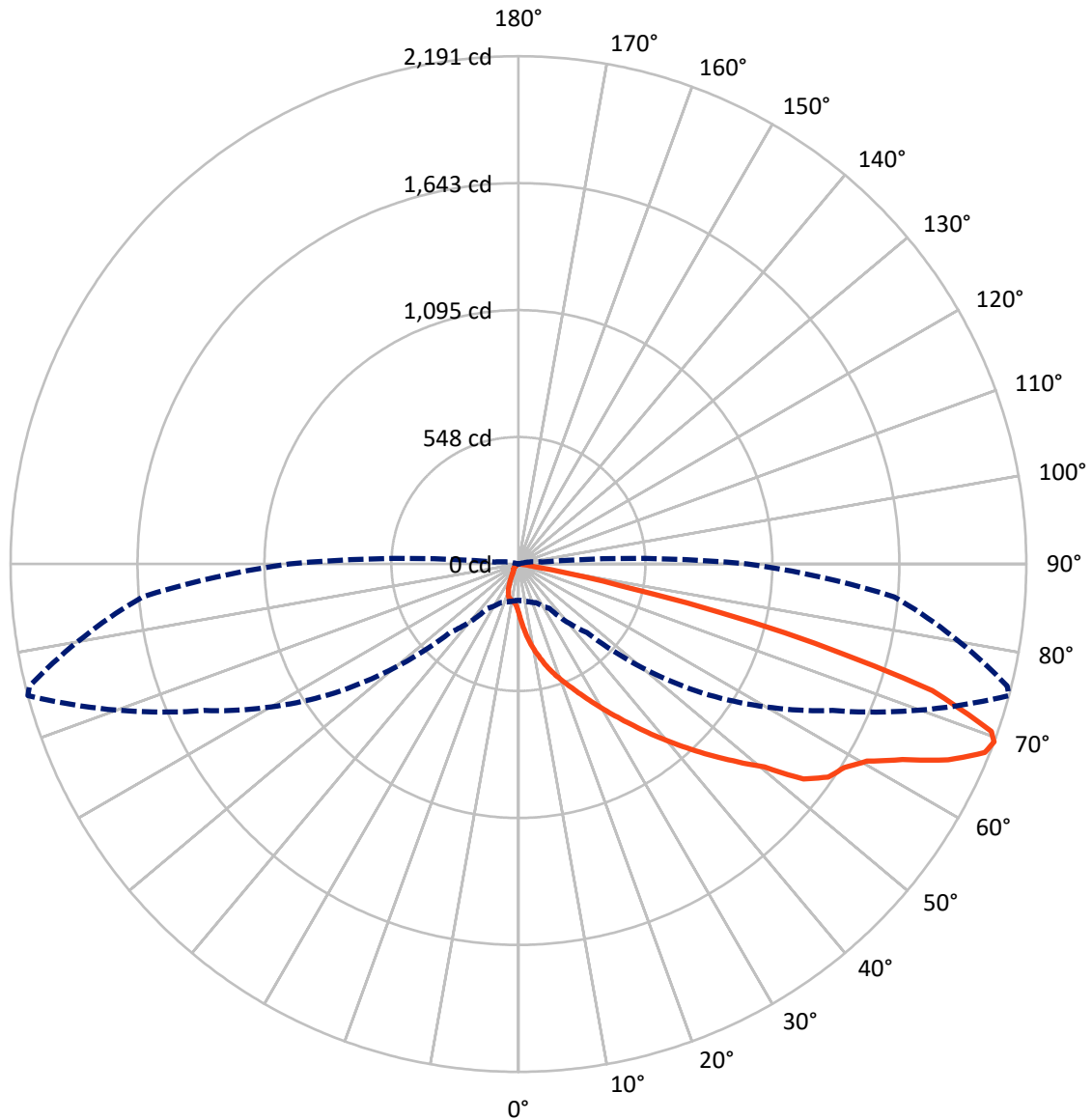


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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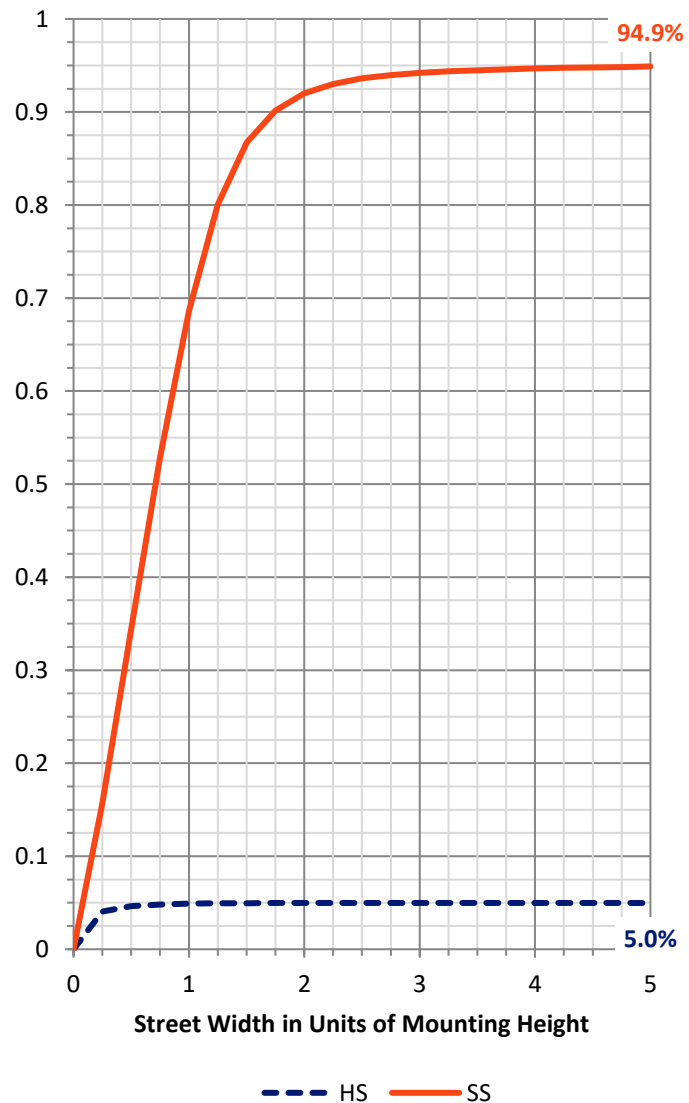
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	113.6	0.0	113.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2163.4	0.0	2163.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	2277.0	0.0	2277.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	1.1
10°-20°	88.3	3.9
20°-30°	168.6	7.4
30°-40°	302.5	13.3
40°-50°	463.4	20.4
50°-60°	538.6	23.7
60°-70°	476.9	20.9
70°-80°	205.7	9.0
80°-90°	8.2	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°	2277.0	100.0
0°-180°	2277.0	100.0



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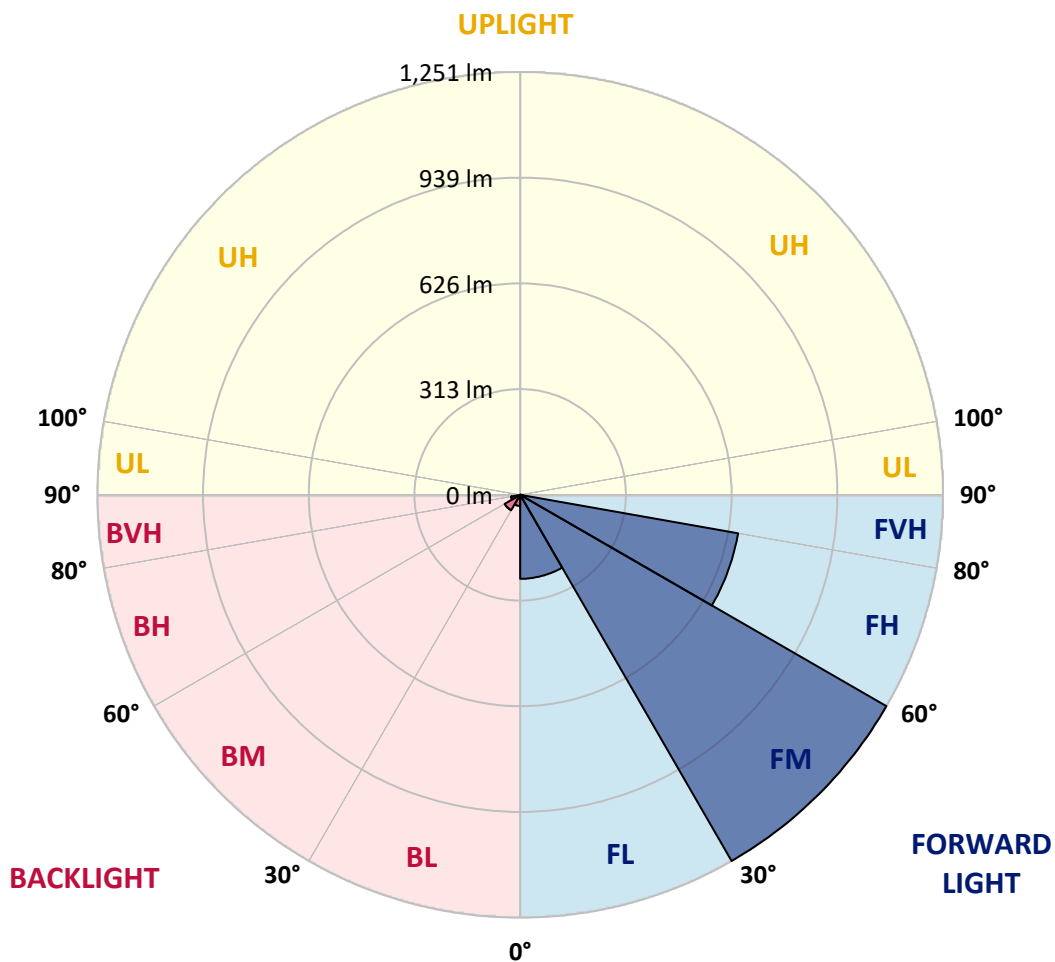
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	248.7	10.9			
FM (30°-60°)	1251.5	55.0			
FH (60°-80°)	655.1	28.8			G0/660
FVH (80°-90°)	8.1	0.4			G0/10
BL (0°-30°)	33.0	1.4	B0/110		
BM (30°-60°)	53.0	2.3	B0/220		
BH (60°-80°)	27.5	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°	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9
2.5°	349.0	345.6	342.1	338.2	329.4	314.1	295.0	274.3	248.7	244.3	223.7
5°	423.7	422.3	418.8	413.4	403.6	386.9	365.2	334.8	292.0	284.6	240.9
7.5°	476.3	475.4	472.4	466.0	457.2	440.5	417.8	384.9	335.3	326.9	262.5
10°	523.5	523.0	520.6	514.7	505.8	487.7	463.6	429.2	376.6	367.2	287.6
12.5°	566.3	566.8	565.8	562.9	556.5	539.3	511.7	474.4	416.4	406.1	317.6
15°	591.4	592.9	596.8	602.7	604.7	590.9	562.4	521.1	457.2	448.3	352.0
17.5°	583.0	584.5	596.8	616.9	636.1	638.1	612.5	565.3	497.5	488.6	385.9
20°	562.9	564.8	577.6	605.1	642.5	668.6	658.2	613.5	535.8	525.0	418.3
22.5°	585.5	585.5	589.4	606.1	640.0	680.8	694.6	661.7	575.2	561.9	450.8
25°	663.2	661.7	653.3	646.4	657.3	693.6	722.1	710.8	621.4	606.1	485.2
27.5°	761.5	768.4	752.6	727.5	703.0	718.7	746.7	759.5	672.5	656.8	520.6
30°	871.6	874.5	855.9	822.4	779.2	763.9	775.7	801.3	728.0	710.8	557.5
32.5°	970.9	968.4	952.7	917.8	864.2	831.3	813.1	834.7	788.5	768.8	595.3
35°	1058.9	1060.8	1041.7	1001.4	948.8	913.9	870.6	872.6	856.3	833.7	639.1
37.5°	1138.0	1134.6	1116.4	1076.1	1028.4	990.5	944.8	911.9	930.6	907.0	688.2
40°	1202.4	1199.0	1179.8	1140.5	1095.7	1064.8	1028.9	964.5	1008.7	981.7	740.8
42.5°	1253.5	1249.6	1233.4	1195.5	1152.3	1124.8	1107.5	1029.4	1092.3	1065.3	799.8
45°	1278.6	1275.2	1265.3	1236.8	1199.0	1174.9	1183.2	1104.1	1181.8	1159.2	864.7
47.5°	1249.1	1247.6	1259.0	1254.0	1232.4	1219.6	1248.6	1185.7	1275.7	1253.5	939.4
50°	1159.7	1162.1	1195.0	1235.8	1246.2	1261.4	1302.2	1271.7	1376.4	1352.8	1025.5
52.5°	938.9	955.6	1054.9	1153.3	1229.5	1287.0	1365.1	1394.6	1540.6	1517.5	1159.7
55°	701.0	707.9	816.0	984.2	1162.1	1285.0	1411.8	1466.9	1621.7	1598.1	1195.0
57.5°	556.0	558.4	612.0	783.6	1023.5	1240.8	1436.4	1492.9	1657.1	1637.5	1247.6
60°	436.5	439.5	478.3	596.3	828.3	1121.3	1401.0	1515.6	1726.5	1710.7	1339.6
62.5°	339.7	342.6	366.2	435.5	621.4	937.5	1329.7	1551.9	1858.2	1850.8	1490.0
65°	263.0	264.0	280.2	312.6	439.0	738.4	1242.7	1585.9	2036.2	2029.8	1611.9
67.5°	194.2	195.7	207.0	227.1	296.4	530.4	1100.2	1559.8	2170.4	2151.7	1656.2
69°	156.8	158.3	168.1	184.3	234.0	417.8	969.9	1495.4	2190.5	2172.8	1628.1
70°	134.2	135.2	145.0	158.8	199.6	354.9	866.7	1439.9	2164.0	2146.8	1564.2
72.5°	86.0	90.9	100.8	109.6	132.2	235.0	585.0	1194.1	1867.0	1837.6	1225.0
75°	47.7	49.2	66.9	77.7	88.0	152.9	325.4	744.8	1187.7	1167.0	655.3
77.5°	39.3	40.3	47.2	59.0	59.0	85.5	122.9	293.5	451.8	407.5	177.5
80°	27.5	28.5	35.9	38.8	42.3	48.2	39.8	64.4	69.8	61.9	26.5
82.5°	19.2	20.2	24.6	32.0	33.9	22.6	14.7	19.2	20.2	20.2	10.3
85°	3.4	4.9	18.2	26.5	20.2	6.9	8.4	6.9	6.4	6.9	2.5
87.5°	0.0	0.0	11.3	12.8	10.8	2.9	3.4	2.5	1.5	2.0	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°	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9
2.5°	213.3	203.0	185.3	172.5	161.7	153.4	149.9	144.5	140.6	142.6	140.1
5°	219.2	201.1	172.5	154.4	141.6	130.8	121.9	115.0	109.6	108.6	107.7
7.5°	228.6	202.5	165.2	142.6	123.4	106.7	92.9	82.6	74.7	74.7	71.8
10°	241.4	206.5	160.7	130.8	102.3	79.6	65.9	56.0	52.1	51.6	50.6
12.5°	259.1	213.8	157.3	115.5	79.6	58.0	49.7	46.2	44.7	44.2	43.8
15°	283.2	224.7	153.4	96.8	60.5	47.7	44.2	41.3	39.8	39.3	38.8
17.5°	306.3	234.5	145.0	77.7	49.2	43.3	39.3	36.9	34.9	34.4	34.4
20°	327.9	242.8	130.8	60.5	44.2	38.8	34.9	32.0	30.0	29.5	29.5
22.5°	350.5	249.7	113.1	49.2	40.3	34.4	30.5	27.5	25.6	25.1	24.6
25°	374.6	254.6	92.9	43.8	36.4	30.5	26.1	23.6	22.1	21.6	21.1
27.5°	400.6	256.6	73.7	39.8	32.0	26.5	22.6	20.2	19.2	18.7	18.7
30°	424.2	254.6	57.0	35.4	28.0	23.1	19.7	17.7	16.7	16.2	16.2
32.5°	448.8	249.7	45.7	31.5	24.6	19.7	16.7	15.2	14.7	14.3	14.3
35°	474.9	243.3	39.3	28.0	21.1	17.2	14.7	13.8	13.3	12.8	12.8
37.5°	505.4	235.5	35.9	25.1	18.7	15.2	12.8	12.3	11.8	11.8	11.8
40°	539.8	225.6	33.4	22.6	16.7	13.3	11.3	10.8	10.3	10.3	10.3
42.5°	576.1	214.3	31.0	20.2	14.7	11.3	9.8	9.8	9.3	9.3	8.8
45°	616.9	203.0	28.5	17.7	12.8	9.8	8.4	7.9	7.9	7.4	7.4
47.5°	665.1	192.7	26.1	15.7	11.3	8.4	7.4	6.9	6.4	5.9	5.9
50°	733.0	191.7	23.1	13.8	10.3	6.9	5.9	5.4	4.9	4.4	4.4
52.5°	800.3	182.9	19.7	11.3	8.4	5.9	4.4	3.9	3.4	3.4	2.9
55°	815.5	168.1	17.2	9.8	6.4	4.4	3.4	2.5	2.5	2.0	2.0
57.5°	849.0	161.2	14.7	7.9	4.9	3.4	2.0	1.5	1.5	1.5	1.5
60°	914.8	159.3	12.8	6.9	3.4	2.5	1.5	1.0	1.0	0.5	0.5
62.5°	1005.8	157.3	10.8	5.9	2.5	1.5	1.0	0.5	0.0	0.0	0.0
65°	1055.9	144.0	8.8	4.4	2.0	1.5	0.5	0.0	0.0	0.0	0.0
67.5°	1042.7	119.0	7.9	2.9	1.5	1.0	0.5	0.0	0.0	0.0	0.0
69°	987.1	100.3	6.4	2.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0
70°	920.3	86.5	5.9	2.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
72.5°	653.3	45.2	3.9	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
75°	305.3	20.2	2.5	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	67.3	9.3	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	12.8	3.4	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.4	1.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	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)