

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: P257691

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257691
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-AF16-60-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4669.8 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

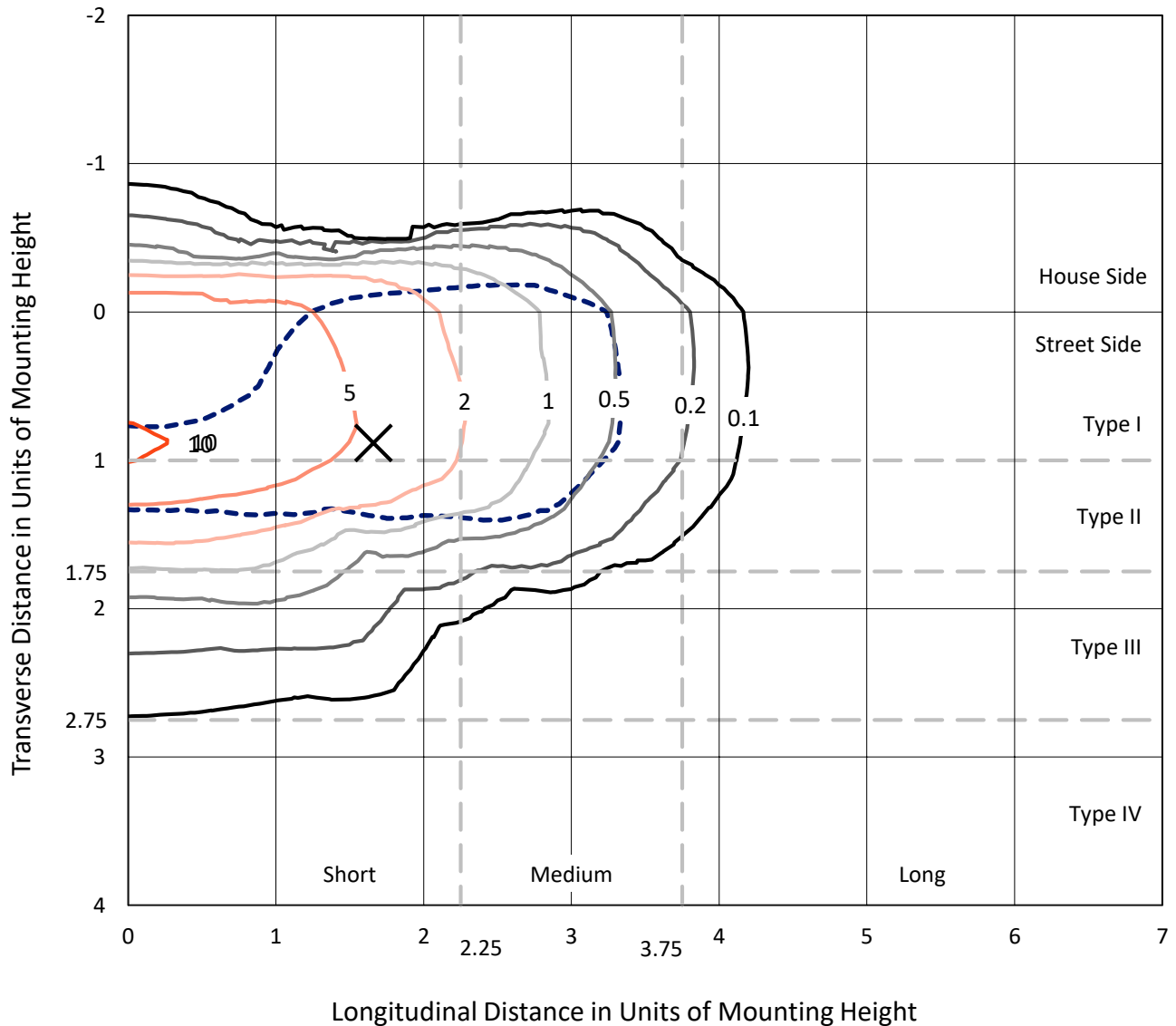
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P257691
 CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

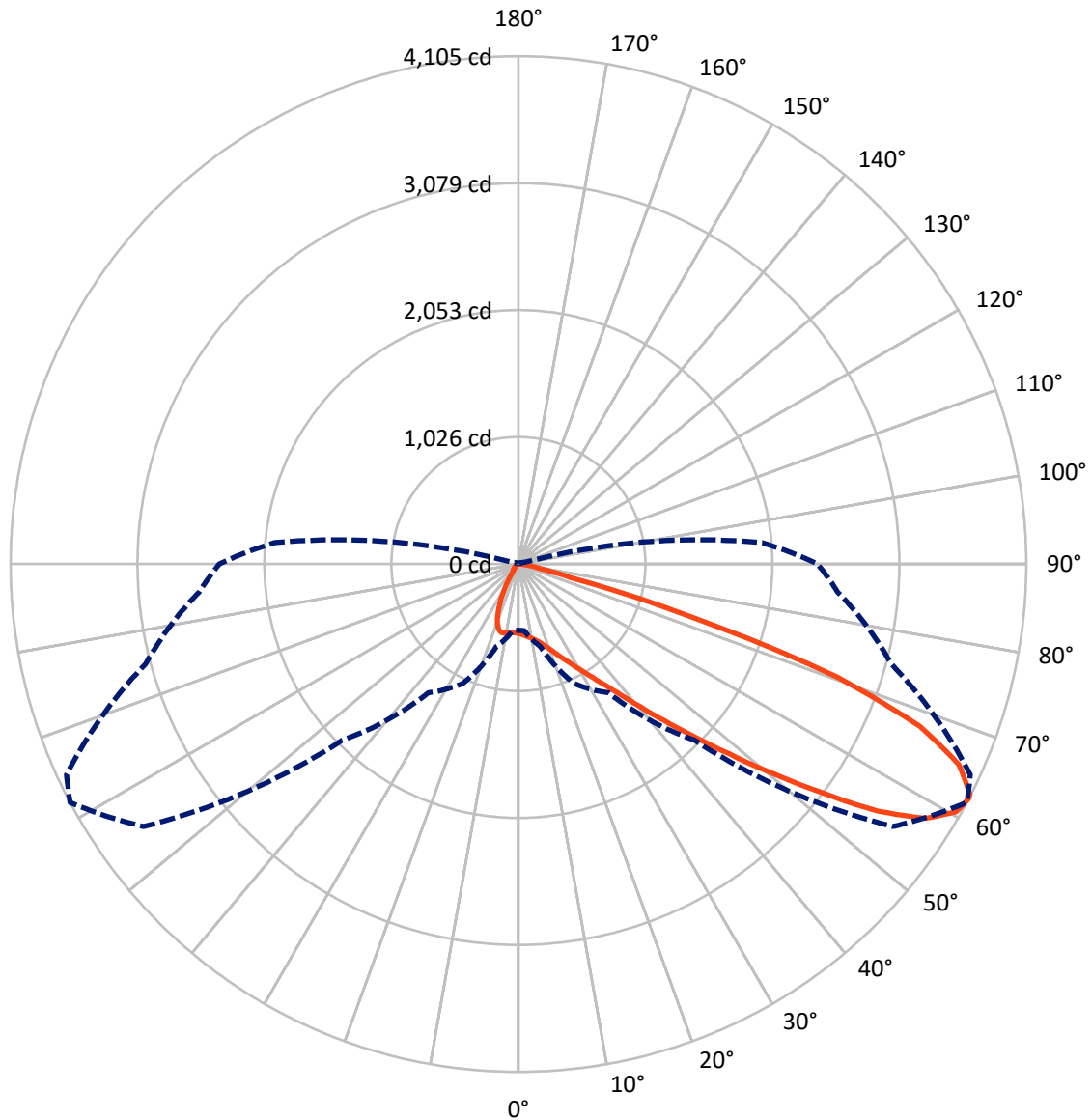
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P257691
CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P257691

CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

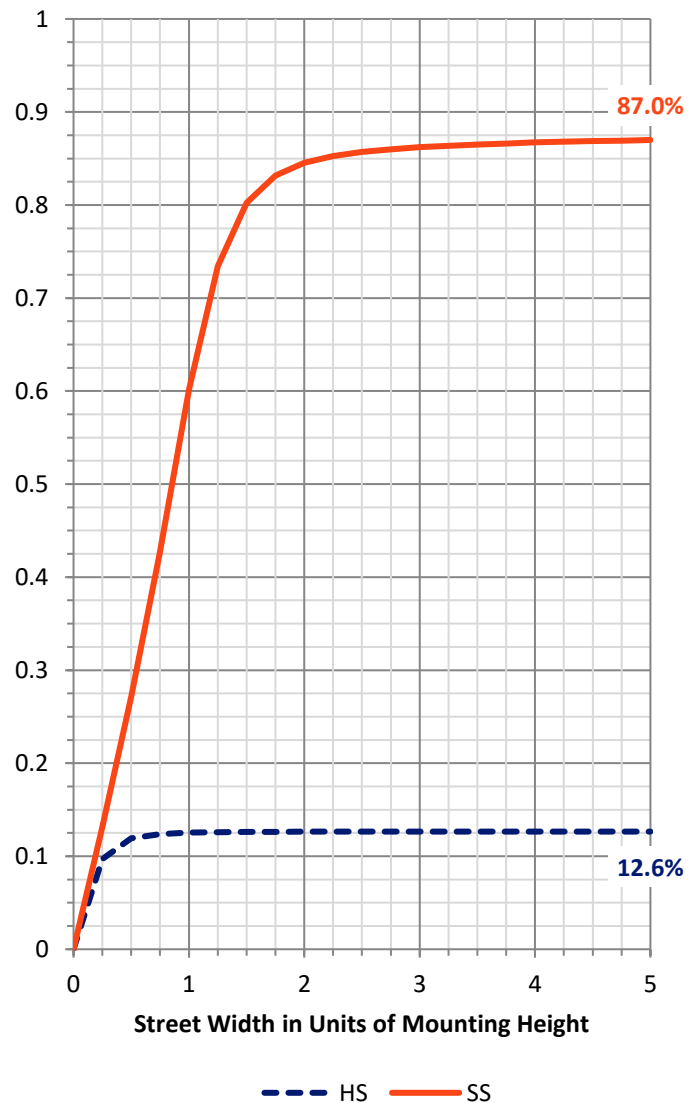
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	597.1	0.0	597.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4072.7	0.0	4072.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	4669.8	0.0	4669.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	1.2
10°-20°	151.2	3.2
20°-30°	253.9	5.4
30°-40°	486.7	10.4
40°-50°	994.1	21.3
50°-60°	1315.5	28.2
60°-70°	1021.9	21.9
70°-80°	368.9	7.9
80°-90°	23.5	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°	4669.8	100.0
0°-180°	4669.8	100.0

Coefficient of Utilization



REPORT NUMBER: P257691

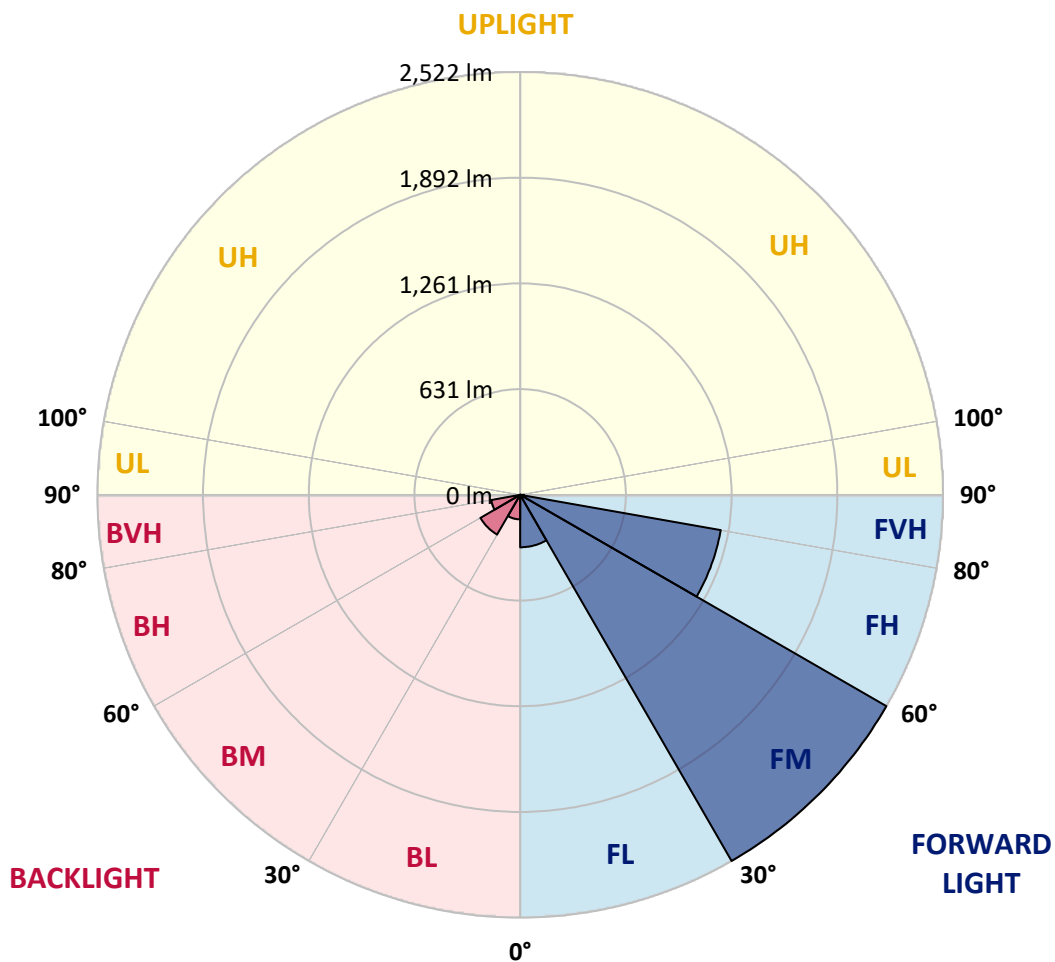
CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	313.1	6.7			
FM	(30°-60°)	2522.2	54.0			
FH	(60°-80°)	1215.0	26.0			G1/1800
FVH	(80°-90°)	22.5	0.5			G1/100
BL	(0°-30°)	146.1	3.1	B1/500		
BM	(30°-60°)	274.1	5.9	B1/1000		
BH	(60°-80°)	175.8	3.8	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P257691

CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5
2.5°	577.5	576.3	575.2	574.0	574.0	572.9	571.7	569.4	567.1	564.9	563.6
5°	587.8	586.7	585.5	586.7	585.5	585.5	584.3	582.1	579.7	576.3	572.9
7.5°	595.9	594.6	593.5	594.6	595.9	597.0	598.1	595.9	594.6	590.0	586.7
10°	606.2	605.0	603.8	606.2	606.2	611.9	613.1	611.9	610.7	607.3	601.6
12.5°	621.0	622.3	622.3	624.5	626.9	633.7	636.0	632.6	632.6	628.0	621.0
15°	648.7	648.7	648.7	650.9	652.1	661.2	663.6	660.1	662.5	654.4	647.5
17.5°	675.0	676.2	678.5	683.1	683.1	691.1	695.7	695.7	700.3	690.0	680.8
20°	701.4	702.6	706.0	716.4	716.4	726.7	734.8	738.2	742.8	732.4	716.4
22.5°	730.2	730.2	735.9	752.0	748.5	769.2	784.1	789.8	794.4	780.6	755.4
25°	773.8	769.2	773.8	788.7	786.4	815.1	842.6	848.4	854.2	838.1	800.2
27.5°	856.4	849.6	833.5	834.6	834.6	867.9	906.9	915.0	918.4	904.7	857.5
30°	1021.7	1021.7	962.1	921.9	895.5	925.4	980.4	994.2	998.8	978.1	916.2
32.5°	1309.9	1309.9	1199.7	1097.5	997.7	997.7	1060.8	1086.1	1090.7	1066.5	994.2
35°	1677.2	1675.0	1509.7	1369.6	1174.4	1101.0	1154.9	1197.4	1211.2	1179.1	1095.2
37.5°	2067.6	2052.7	1874.8	1714.1	1446.6	1266.3	1282.4	1338.6	1351.2	1324.8	1226.1
40°	2384.5	2367.2	2223.7	2089.4	1797.8	1530.3	1466.0	1517.6	1532.6	1495.9	1382.2
42.5°	2671.4	2629.0	2530.3	2433.8	2201.9	1987.3	1710.6	1731.2	1747.3	1708.2	1557.9
45°	2879.3	2813.8	2763.3	2733.4	2610.6	2488.9	2027.4	1986.1	1991.8	1943.6	1749.6
47.5°	2885.0	2839.1	2843.7	2921.8	2972.3	2967.7	2439.5	2292.6	2270.8	2190.4	1953.9
50°	2609.4	2635.8	2719.7	2942.4	3215.6	3381.0	2929.7	2655.4	2589.9	2445.3	2157.2
52.5°	2150.2	2191.6	2348.9	2724.3	3251.2	3653.1	3438.3	3069.9	2952.7	2697.8	2313.3
55°	1684.2	1686.4	1851.7	2234.0	3013.6	3702.4	3844.8	3525.6	3346.5	2889.6	2416.6
57.5°	1158.4	1221.5	1431.6	1688.8	2477.5	3456.8	3997.5	3879.2	3648.5	3007.9	2488.9
60°	758.8	762.3	1006.8	1304.2	1686.4	2812.7	3904.5	4066.3	3892.9	3077.9	2538.2
62°	535.0	540.7	692.2	1065.4	1270.9	2015.9	3699.0	4105.3	4030.7	3119.2	2589.9
62.5°	495.9	500.5	628.0	1005.7	1194.0	1808.2	3625.4	4096.2	4051.4	3133.0	2608.3
65°	364.0	364.0	411.0	691.1	874.8	977.0	3072.1	3913.6	4023.9	3243.2	2677.2
67.5°	281.3	283.6	299.6	426.0	660.1	592.4	1960.8	3502.7	3736.8	3406.2	2716.2
70°	242.2	241.1	252.6	282.4	476.4	393.7	863.3	2733.4	3129.5	3364.9	2680.6
72.5°	179.1	180.2	206.6	248.0	331.7	256.0	390.4	1451.2	2029.7	2633.6	2297.2
75°	114.8	115.9	145.8	195.2	238.8	167.7	225.0	432.8	831.1	1460.3	1405.2
77.5°	76.9	79.2	95.2	136.7	209.0	104.4	141.2	181.4	250.3	547.6	504.0
80°	51.7	51.7	60.9	91.9	132.1	87.3	75.8	120.5	129.7	169.9	84.9
82.5°	34.5	34.5	40.2	60.9	86.1	78.1	45.9	65.5	75.8	84.9	29.9
85°	20.7	20.7	27.5	37.8	56.3	43.6	29.9	36.7	39.1	53.9	16.1
87.5°	12.6	11.5	18.4	26.4	29.9	26.4	19.5	19.5	20.7	29.9	8.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P257691

CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5	562.5
2.5°	561.4	560.3	559.0	556.8	553.3	551.1	548.7	546.5	544.2	544.2	547.6
5°	571.7	568.2	563.6	559.0	552.2	547.6	544.2	539.6	537.3	537.3	538.4
7.5°	584.3	580.9	572.9	564.9	554.5	546.5	538.4	528.0	520.1	516.6	520.1
10°	598.1	593.5	582.1	569.4	557.9	537.3	510.9	478.7	451.2	438.5	444.3
12.5°	615.3	609.6	595.9	578.6	552.2	501.7	436.3	361.6	314.6	292.8	297.4
15°	640.6	632.6	613.1	586.7	528.0	419.0	312.3	226.2	182.5	164.2	166.4
17.5°	670.4	660.1	633.7	584.3	466.1	302.0	186.0	132.1	113.6	109.0	109.0
20°	702.6	688.9	654.4	567.1	371.9	189.5	115.9	101.1	94.1	90.7	90.7
22.5°	735.9	717.5	671.6	526.9	265.1	118.3	95.2	84.9	76.9	73.4	73.4
25°	776.1	752.0	688.9	457.0	168.8	95.2	81.5	71.2	63.1	58.5	59.7
27.5°	823.2	792.2	703.8	369.7	109.0	82.7	67.7	57.4	50.5	48.2	48.2
30°	872.5	835.8	707.2	276.7	88.4	71.2	56.3	47.1	42.5	40.2	40.2
32.5°	940.2	892.0	696.8	183.7	74.6	59.7	47.1	39.1	35.6	34.5	34.5
35°	1029.8	965.5	672.8	113.6	63.1	49.4	39.1	34.5	31.0	29.9	29.9
37.5°	1143.5	1067.7	630.2	78.1	53.9	40.2	33.2	29.9	27.5	26.4	26.4
40°	1295.0	1191.6	575.2	67.7	45.9	34.5	28.7	26.4	24.1	24.1	24.1
42.5°	1455.7	1342.0	504.0	59.7	39.1	29.9	25.3	22.9	21.8	20.7	20.7
45°	1631.3	1495.9	415.6	52.8	33.2	26.4	22.9	19.5	18.4	18.4	18.4
47.5°	1805.8	1654.3	319.2	45.9	28.7	22.9	19.5	17.2	16.1	14.9	14.9
50°	1984.9	1797.8	234.2	40.2	25.3	20.7	17.2	14.9	12.6	11.5	11.5
52.5°	2114.6	1883.9	171.0	34.5	21.8	17.2	13.8	11.5	9.2	8.1	8.1
55°	2210.0	1936.8	125.1	28.7	19.5	14.9	11.5	9.2	6.9	6.9	5.7
57.5°	2284.6	1962.0	94.1	25.3	17.2	12.6	9.2	6.9	5.7	4.6	4.6
60°	2341.9	1963.1	70.1	20.7	14.9	10.3	6.9	4.6	3.5	3.5	3.5
62°	2417.7	1978.1	57.4	17.2	13.8	9.2	5.7	3.5	2.3	1.1	1.1
62.5°	2439.5	1983.8	55.1	17.2	12.6	8.1	4.6	3.5	2.3	1.1	1.1
65°	2540.6	1994.1	42.5	13.8	10.3	6.9	3.5	2.3	0.0	0.0	0.0
67.5°	2632.5	1978.1	31.0	10.3	8.1	4.6	3.5	1.1	0.0	0.0	0.0
70°	2623.3	1867.8	21.8	6.9	5.7	3.5	2.3	0.0	0.0	0.0	0.0
72.5°	2161.7	1398.3	14.9	5.7	3.5	2.3	1.1	0.0	0.0	0.0	0.0
75°	1305.3	611.9	10.3	3.5	3.5	2.3	1.1	0.0	0.0	0.0	0.0
77.5°	428.2	221.6	6.9	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0
80°	70.1	36.7	3.5	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0
82.5°	21.8	9.2	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
85°	8.1	3.5	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	2.3	2.3	2.3	1.1	1.1	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)