

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: P397872

Luminaire Tested: **ARCH-S-PA1-50-827-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397872
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-827-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5796 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 54
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

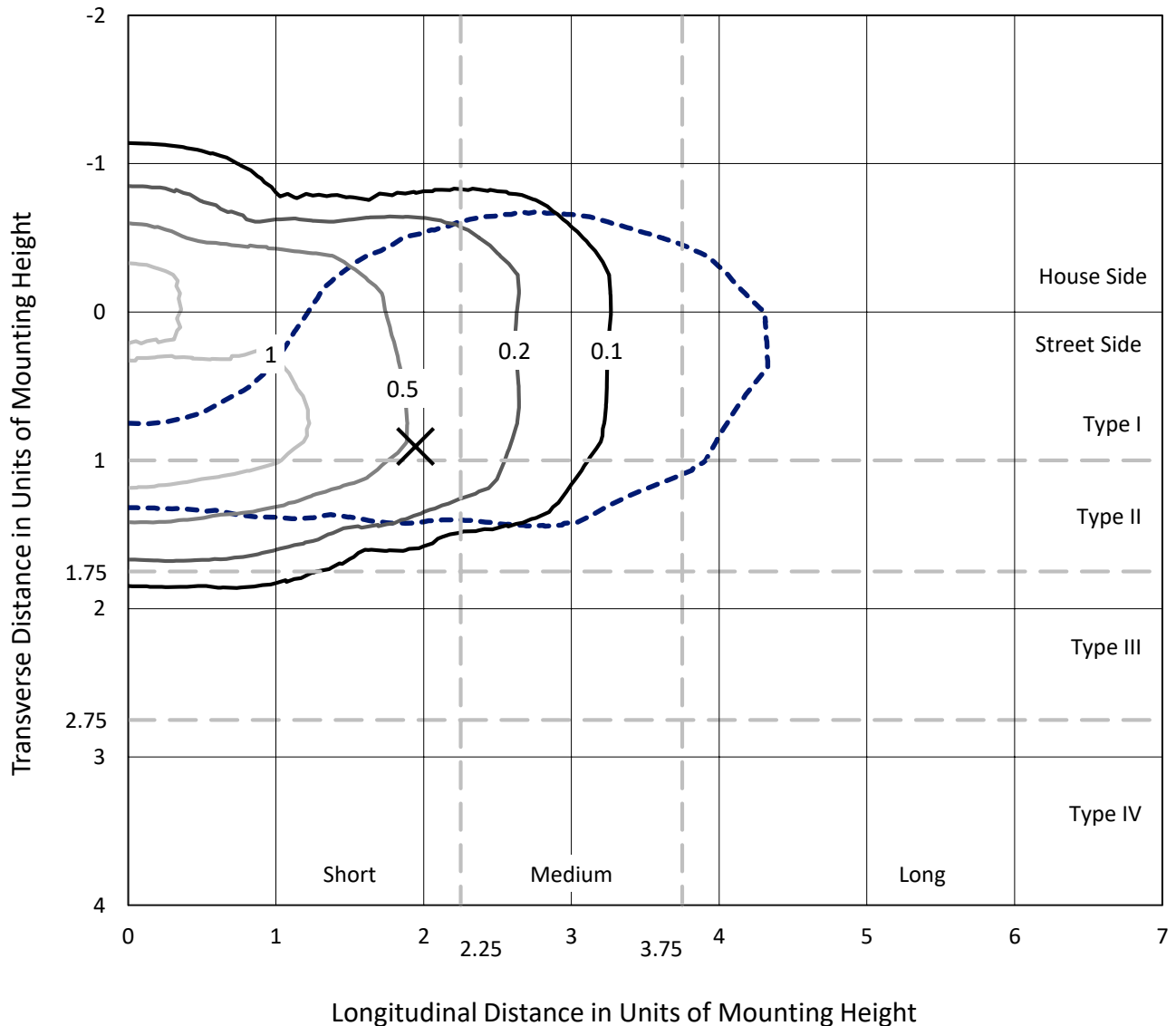


REPORT NUMBER: P397872

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

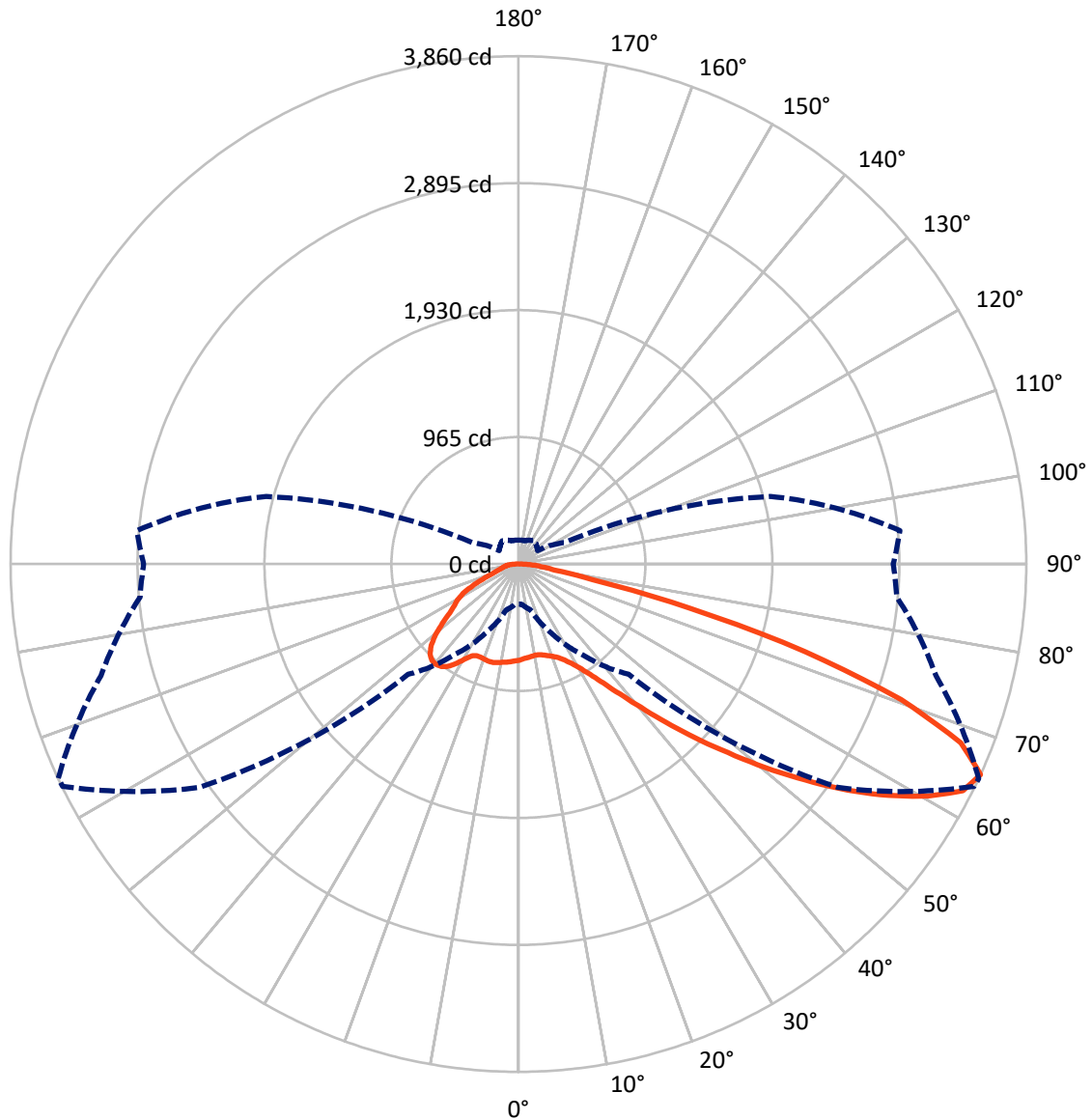


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P397872

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P397872

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

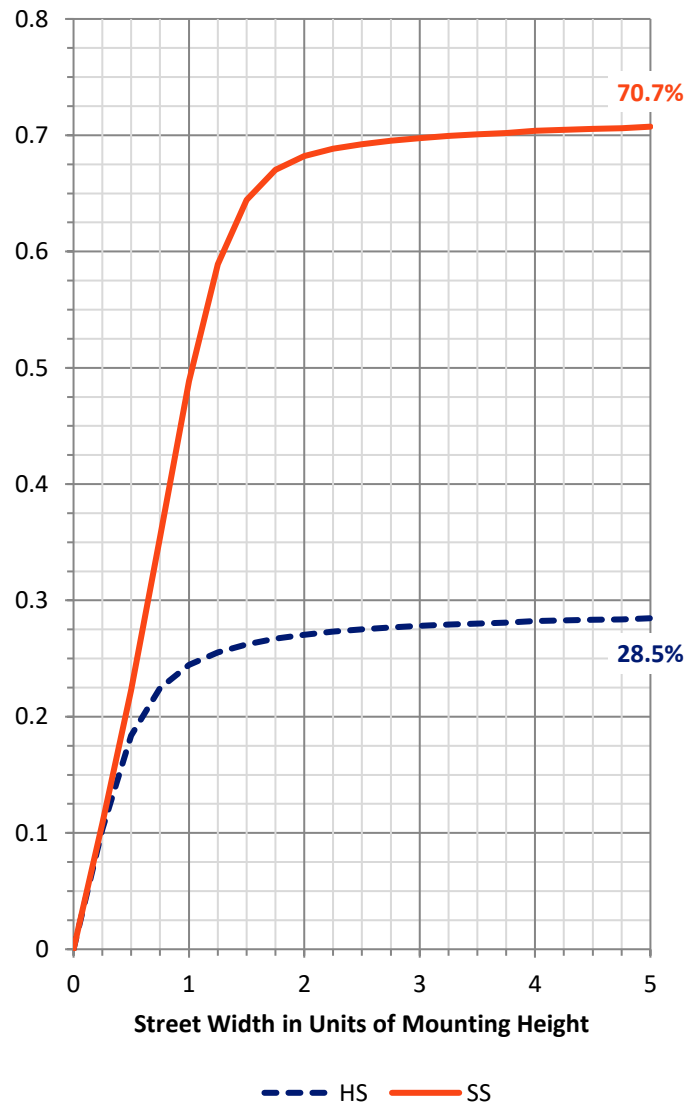
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1675.7	0.0	1675.7
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	4120.3	0.0	4120.3
	% Fixture	71.1	0.0	71.1
Total	Lumens	5796.0	0.0	5796.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	1.2
10°-20°	208.3	3.6
20°-30°	370.0	6.4
30°-40°	626.0	10.8
40°-50°	1089.8	18.8
50°-60°	1408.3	24.3
60°-70°	1232.4	21.3
70°-80°	670.3	11.6
80°-90°	121.1	2.1
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°	5796.0	100.0
0°-180°	5796.0	100.0



REPORT NUMBER: P397872

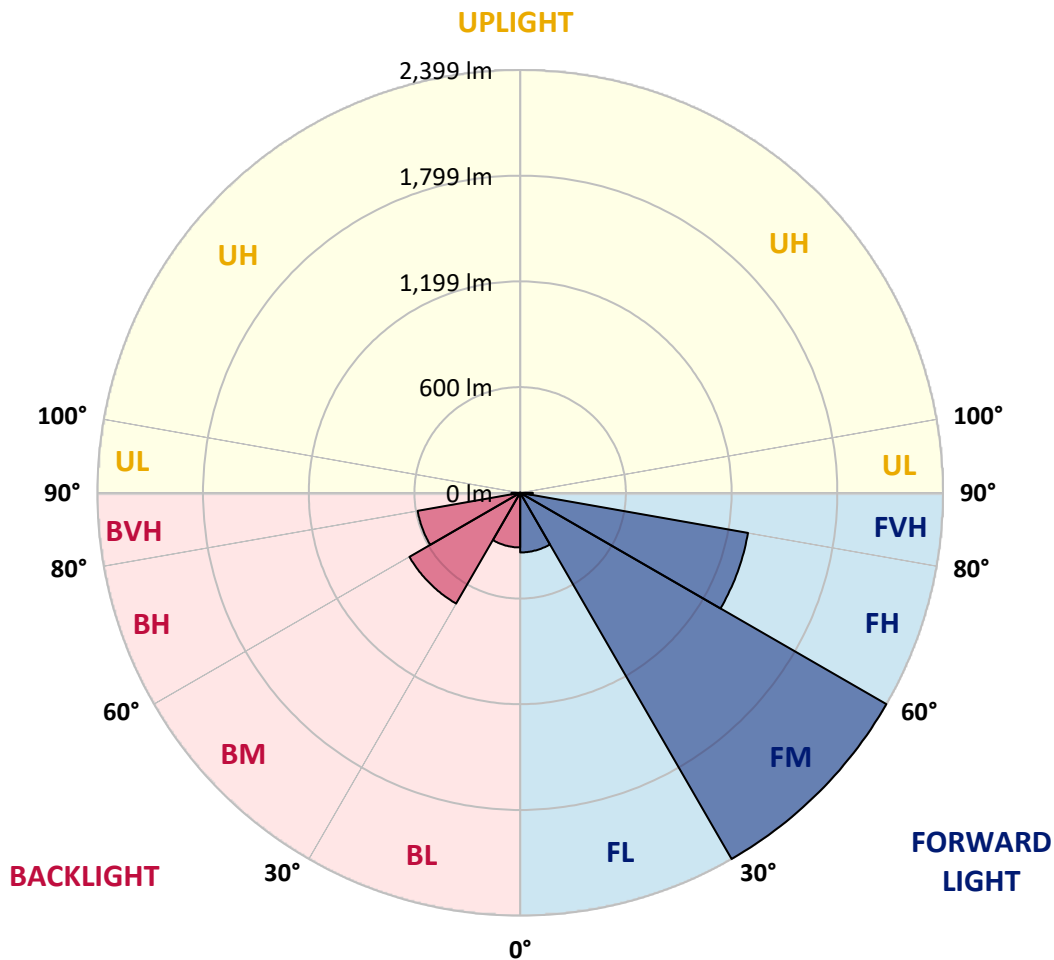
CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	338.2	5.8			
FM	(30°-60°)	2398.5	41.4			
FH	(60°-80°)	1312.3	22.6			G1/1800
FVH	(80°-90°)	71.3	1.2			G1/100
BL	(0°-30°)	309.9	5.3	B1/500		
BM	(30°-60°)	725.5	12.5	B1/1000		
BH	(60°-80°)	590.4	10.2	B2/1000		G2/1000
BVH	(80°-90°)	49.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P397872

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4
2.5°	719.4	718.6	717.1	718.6	719.4	720.9	720.2	721.7	720.9	723.2	727.0
5°	701.1	699.6	698.8	702.6	704.9	708.7	710.3	715.6	714.8	718.6	724.8
7.5°	680.5	680.5	679.7	684.3	687.4	694.2	699.6	708.7	709.5	716.4	723.2
10°	664.5	665.2	664.5	668.3	672.9	681.3	690.4	703.4	704.2	714.1	720.9
12.5°	658.4	658.4	658.4	663.7	669.8	681.3	691.9	705.7	707.2	717.9	724.0
15°	666.8	667.5	666.0	671.3	678.2	691.9	701.9	716.4	717.9	727.8	731.6
17.5°	696.5	699.6	695.8	698.8	697.3	708.0	717.1	731.6	732.4	740.8	742.3
20°	755.3	758.3	752.2	748.4	734.7	733.9	737.7	749.2	749.2	754.5	750.7
22.5°	846.1	849.1	838.4	823.9	791.1	775.1	766.7	772.1	771.3	773.6	763.7
25°	966.6	965.8	952.9	926.2	873.5	834.6	814.0	805.6	805.6	801.0	788.8
27.5°	1116.1	1104.7	1081.8	1049.7	976.5	922.3	878.1	856.7	852.9	839.2	816.3
30°	1275.6	1267.2	1234.4	1187.8	1103.1	1033.7	960.5	917.8	915.5	885.7	851.4
32.5°	1463.2	1449.5	1412.9	1357.2	1255.7	1158.1	1066.5	1001.7	997.9	950.6	903.3
35°	1704.3	1692.9	1621.9	1566.2	1435.8	1307.6	1199.3	1113.1	1110.0	1052.0	991.8
37.5°	1993.4	1963.7	1895.0	1790.5	1653.2	1501.4	1364.1	1255.7	1251.9	1187.8	1111.5
40°	2251.3	2224.6	2163.6	2067.4	1920.2	1751.6	1565.5	1434.2	1430.4	1352.6	1256.5
42.5°	2442.0	2423.7	2384.1	2328.4	2223.1	2120.9	1822.6	1650.1	1643.3	1542.6	1422.8
45°	2552.7	2538.2	2515.3	2529.0	2527.5	2508.4	2129.2	1907.2	1885.1	1754.7	1608.2
47.5°	2525.9	2513.0	2522.1	2628.9	2776.2	2886.8	2486.3	2170.4	2140.7	1970.6	1805.8
50°	2332.9	2338.3	2386.3	2590.8	2921.1	3166.8	2882.2	2470.3	2430.6	2188.0	1993.4
52.5°	1981.2	1994.2	2110.9	2397.0	2905.1	3348.4	3240.0	2780.0	2727.4	2400.1	2164.3
55°	1573.9	1606.7	1757.7	2058.3	2696.1	3361.3	3510.1	3091.3	3033.3	2599.2	2313.1
57.5°	1164.2	1213.0	1387.7	1663.9	2295.6	3156.1	3645.1	3388.8	3318.6	2796.8	2470.3
60°	738.5	768.2	969.6	1295.4	1757.0	2654.1	3627.6	3642.1	3581.0	2993.6	2634.3
62.5°	471.5	486.0	587.4	923.9	1228.3	1965.2	3436.1	3833.6	3792.4	3172.9	2789.9
65°	302.9	309.0	360.8	568.4	836.1	1186.3	2959.3	3854.2	3859.5	3285.0	2886.0
67.5°	246.4	249.5	268.5	350.9	591.2	655.3	2061.3	3561.2	3626.0	3256.0	2853.2
70°	224.3	228.1	247.9	280.0	457.7	452.4	997.9	2979.9	3085.9	3089.0	2707.5
72.5°	189.2	194.5	221.2	264.7	354.0	357.0	422.6	2122.4	2278.8	2760.9	2488.6
75°	157.9	161.0	183.9	233.4	299.8	285.3	296.8	1125.3	1351.1	2213.9	2255.9
77.5°	128.2	131.2	148.0	186.1	266.3	222.0	233.4	466.1	576.0	1502.9	1843.9
80°	91.5	94.6	113.7	145.0	201.4	199.9	173.2	257.1	279.2	812.5	1197.7
82.5°	65.6	67.9	86.2	103.8	139.6	200.6	130.5	174.7	183.1	360.1	482.9
85°	44.2	44.2	59.5	68.7	90.0	126.6	105.3	118.2	123.6	170.9	130.5
87.5°	19.1	19.1	32.0	35.1	47.3	58.7	78.6	59.5	61.0	92.3	53.4
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: P397872

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4	732.4
2.5°	729.3	730.1	731.6	736.2	739.2	743.8	746.1	749.2	749.2	747.6	748.4
5°	727.8	730.1	735.4	743.8	749.2	757.6	763.7	768.2	769.8	768.2	769.0
7.5°	727.0	730.9	740.0	752.2	759.8	770.5	778.9	784.3	788.1	786.5	787.3
10°	724.8	730.9	742.3	757.6	769.0	779.7	787.3	789.6	791.9	790.4	789.6
12.5°	727.8	734.7	746.9	765.2	778.2	786.5	788.8	785.0	779.7	776.6	775.9
15°	733.9	740.8	753.0	772.1	783.5	786.5	781.2	769.0	756.8	749.9	749.2
17.5°	742.3	746.9	756.8	773.6	782.7	778.9	768.2	753.7	744.6	739.2	740.0
20°	747.6	747.6	755.3	768.2	775.9	772.8	759.8	743.8	729.3	722.5	720.2
22.5°	755.3	751.5	752.2	763.7	774.3	769.8	742.3	714.1	693.5	685.8	685.1
25°	775.9	765.2	758.3	765.2	790.4	753.0	698.1	665.2	646.2	639.3	640.1
27.5°	801.0	786.5	772.1	783.5	803.3	714.8	641.6	604.2	592.8	587.4	589.7
30°	826.2	807.1	788.1	829.3	794.2	655.3	569.1	532.5	522.6	518.8	521.8
32.5°	872.8	841.5	818.6	890.3	765.9	587.4	490.5	457.0	447.8	443.2	441.7
35°	950.6	910.9	888.0	943.7	726.3	511.9	418.8	395.2	385.3	375.3	373.8
37.5°	1062.7	1014.7	994.1	974.2	670.6	437.1	363.9	347.9	333.4	318.1	317.4
40°	1197.0	1134.4	1119.2	988.0	593.5	367.0	325.8	310.5	292.2	277.7	278.5
42.5°	1351.9	1271.7	1238.9	984.1	498.2	329.6	298.3	281.5	265.5	252.5	251.8
45°	1517.4	1426.6	1351.1	957.4	403.6	303.6	281.5	261.7	245.7	231.2	229.6
47.5°	1700.5	1599.0	1454.8	905.6	333.4	285.3	271.6	243.4	228.9	219.7	219.7
50°	1885.1	1763.8	1550.2	827.0	292.2	271.6	257.1	233.4	222.0	214.4	214.4
52.5°	2043.0	1935.5	1628.8	733.1	266.3	260.1	247.2	228.9	216.7	209.8	209.0
55°	2196.4	2094.9	1699.0	640.1	244.9	244.9	244.9	225.1	211.3	205.2	204.5
57.5°	2349.0	2262.8	1772.2	579.0	225.8	231.9	240.3	220.5	206.7	201.4	200.6
60°	2521.4	2464.2	1856.9	536.3	209.0	218.2	234.2	215.1	199.1	194.5	193.8
62.5°	2704.5	2704.5	1933.9	476.0	193.8	206.7	225.1	208.3	192.2	188.4	187.7
65°	2847.9	2909.7	1983.5	386.0	178.5	195.3	214.4	199.1	183.1	182.3	180.8
67.5°	2864.7	2961.6	1952.3	291.4	164.8	183.1	203.7	189.2	173.9	173.9	171.7
70°	2744.1	2842.6	1854.6	218.2	154.9	170.9	190.0	177.0	162.5	164.0	160.2
72.5°	2542.7	2567.1	1612.0	172.4	143.4	157.9	173.2	163.3	150.3	150.3	145.0
75°	2277.2	2141.4	1171.0	144.2	129.7	142.7	156.4	148.0	136.6	132.7	129.7
77.5°	1812.6	1551.7	680.5	124.4	118.2	128.2	137.3	131.2	121.3	112.9	112.9
80°	1104.7	909.4	300.6	107.6	104.5	112.1	118.2	111.4	103.0	94.6	92.3
82.5°	420.4	350.9	145.7	92.3	91.5	96.1	100.7	93.8	87.7	83.9	72.5
85°	115.2	106.0	99.9	77.1	75.5	74.8	80.1	77.1	68.7	56.5	50.4
87.5°	43.5	49.6	54.2	47.3	50.4	46.5	53.4	48.8	43.5	28.2	25.2
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)