

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: P265909

Luminaire Tested: **ARCH-AF16-60-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5832 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

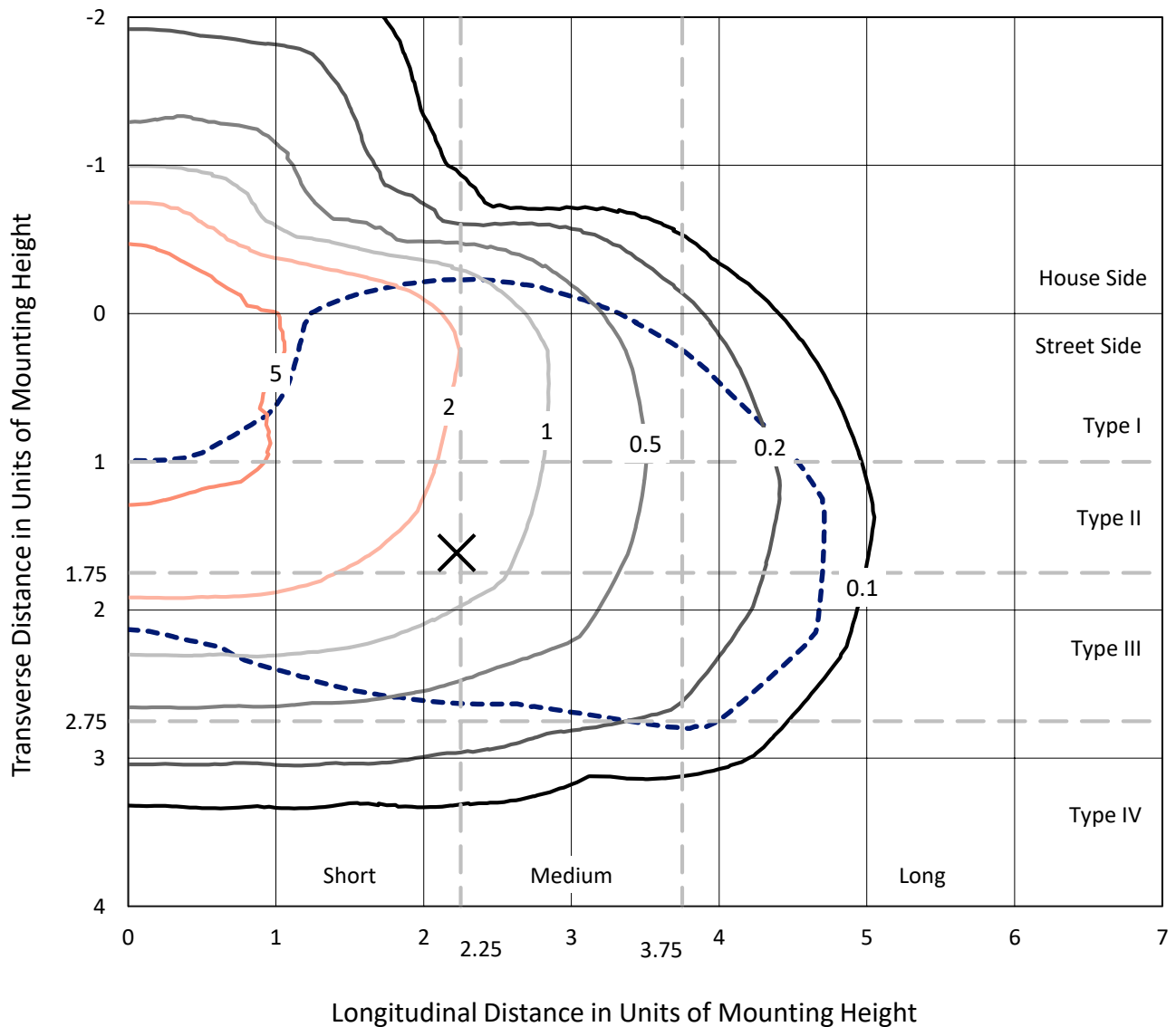
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265909
 CATALOG NUMBER: ARCH-AF16-60-D-U-T3-7027

Iso-Footcandle Lines of Horizontal Illumination

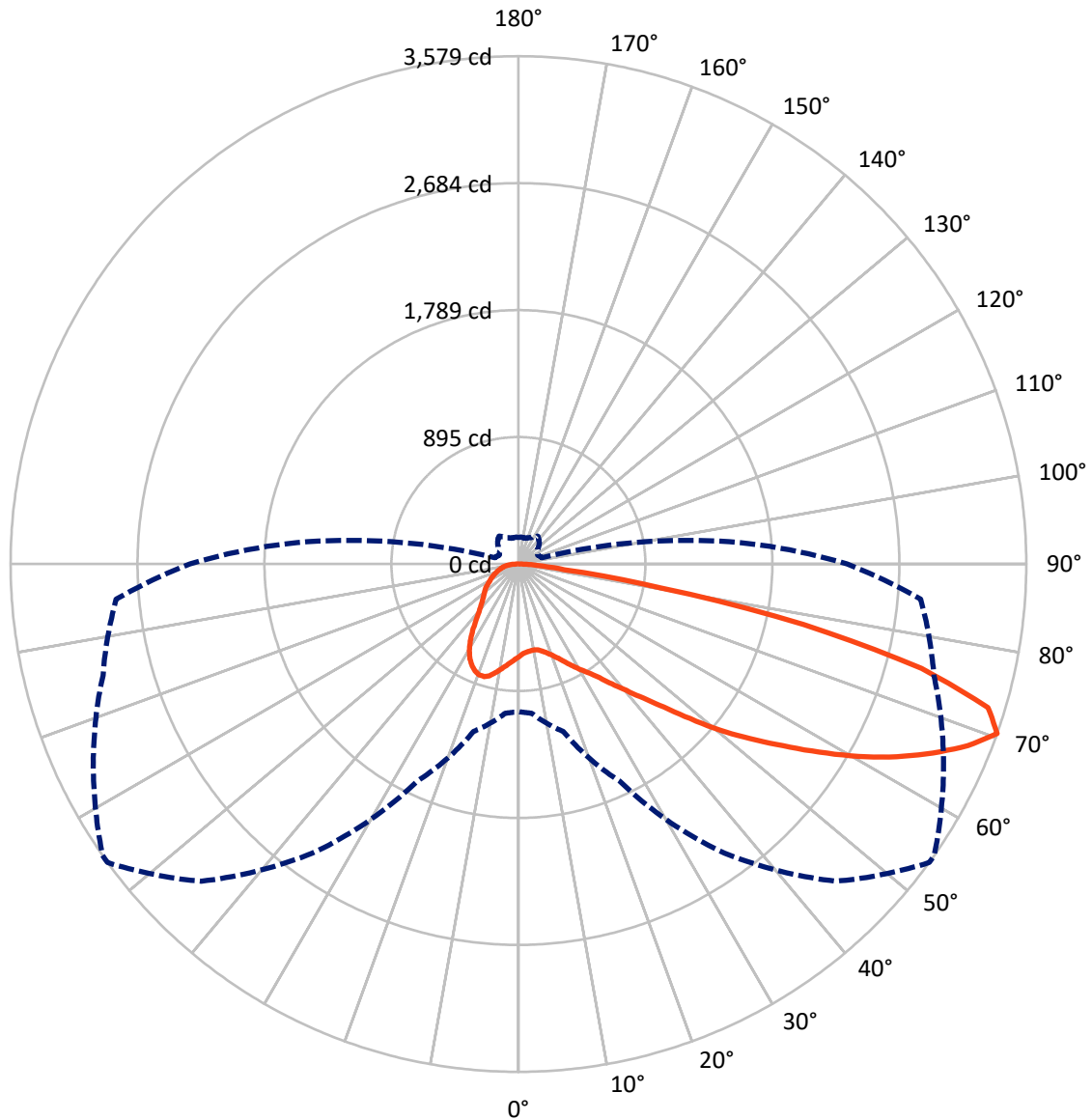
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265909
CATALOG NUMBER: ARCH-AF16-60-D-U-T3-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P265909

CATALOG NUMBER: ARCH-AF16-60-D-U-T3-7027

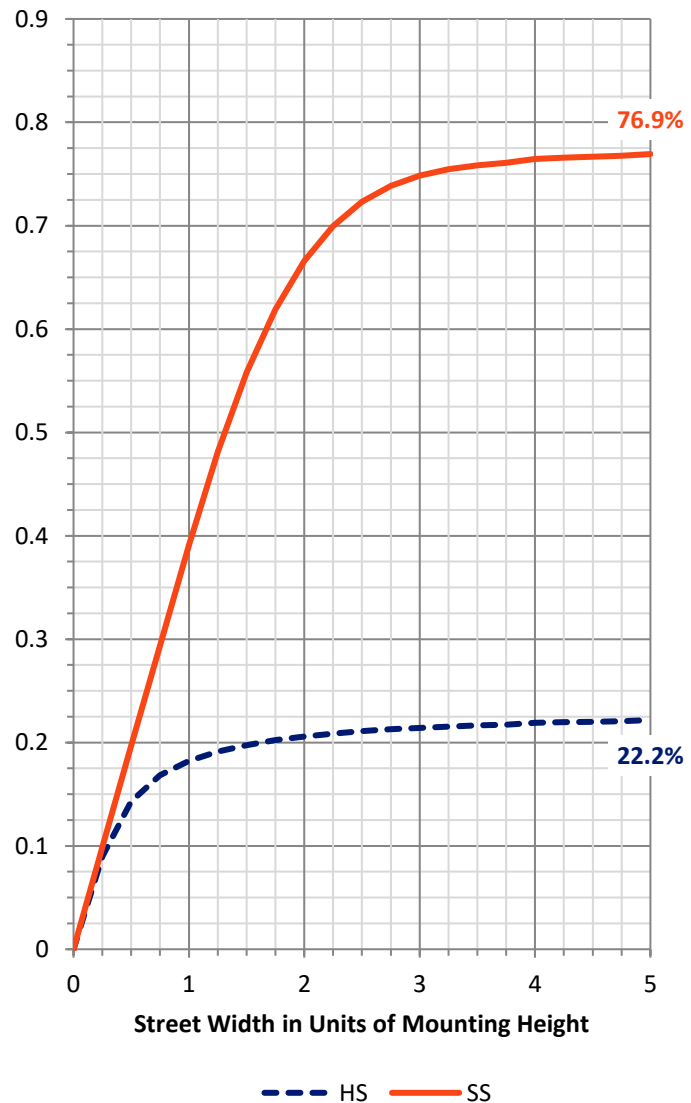
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1322.7	0.0	1322.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4509.3	0.0	4509.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	5832.0	0.0	5832.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	1.1
10°-20°	204.6	3.5
20°-30°	355.5	6.1
30°-40°	519.5	8.9
40°-50°	815.3	14.0
50°-60°	1253.7	21.5
60°-70°	1531.7	26.3
70°-80°	949.7	16.3
80°-90°	138.0	2.4
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°	5832.0	100.0
0°-180°	5832.0	100.0

Coefficient of Utilization



REPORT NUMBER: P265909

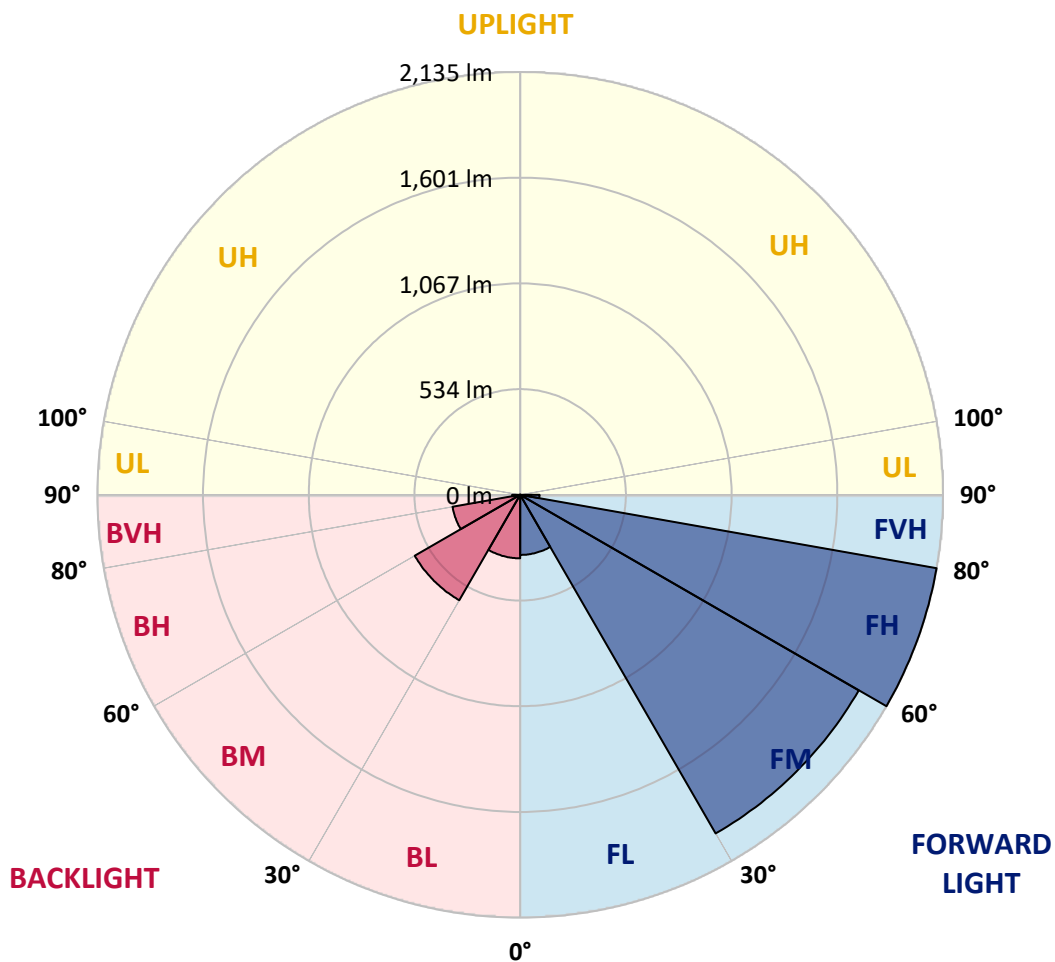
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	303.4	5.2			
FM	(30°-60°)	1973.9	33.8			
FH	(60°-80°)	2134.6	36.6			G2/5000
FVH	(80°-90°)	97.4	1.7			G1/100
BL	(0°-30°)	320.7	5.5	B1/500		
BM	(30°-60°)	614.6	10.5	B1/1000		
BH	(60°-80°)	346.8	5.9	B1/500		G1/500
BVH	(80°-90°)	40.5	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P265909

CATALOG NUMBER: ARCH-AF16-60-D-U-T3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	626.8	624.7	624.7	627.9	629.1	632.1	632.1	633.2	636.4	641.7	648.1
5°	607.7	606.5	607.7	611.8	614.0	620.4	622.5	623.7	630.0	638.5	648.1
7.5°	588.4	587.3	589.5	595.8	602.4	611.8	617.2	618.4	627.9	639.7	652.4
10°	582.0	580.9	584.2	589.5	595.8	606.5	615.1	616.1	630.0	643.9	662.1
12.5°	590.5	589.5	592.7	598.0	604.4	611.8	621.4	622.5	640.8	658.8	678.1
15°	611.8	611.8	613.0	616.1	622.5	629.1	637.5	638.5	657.7	679.2	698.4
17.5°	645.1	642.8	642.8	641.7	646.2	649.3	660.0	661.1	681.4	700.6	719.7
20°	685.5	684.5	680.2	674.8	673.9	676.0	686.7	687.7	708.0	724.0	742.2
22.5°	734.8	735.8	726.2	714.4	709.1	712.3	721.9	723.0	737.9	751.8	767.8
25°	799.9	796.6	782.8	765.6	754.9	754.9	764.5	764.5	778.6	787.0	797.8
27.5°	861.7	855.4	842.6	817.9	800.8	804.2	813.8	813.8	826.5	829.8	835.1
30°	929.0	922.6	906.6	875.7	853.2	851.1	862.8	861.7	878.9	877.9	873.5
32.5°	1011.3	1008.1	981.4	941.9	912.0	904.6	915.2	916.2	927.0	923.7	909.9
35°	1126.7	1125.5	1101.1	1031.6	992.1	978.2	984.6	984.6	992.1	983.6	960.0
37.5°	1271.9	1273.9	1252.6	1150.1	1094.6	1071.0	1072.1	1071.0	1073.3	1063.7	1039.1
40°	1417.0	1422.5	1421.4	1297.5	1227.1	1186.4	1171.5	1169.4	1174.7	1170.4	1147.0
42.5°	1608.2	1621.0	1591.2	1479.0	1400.0	1331.6	1291.0	1285.7	1297.5	1302.8	1280.4
45°	1806.9	1802.5	1755.6	1674.4	1602.8	1515.4	1438.5	1429.9	1438.5	1454.4	1431.0
47.5°	1910.4	1907.2	1895.6	1854.9	1844.2	1743.9	1627.5	1620.1	1604.0	1626.4	1598.7
50°	2081.4	2084.4	2036.5	2032.1	2077.1	2021.5	1841.0	1824.0	1795.2	1813.3	1789.8
52.5°	2205.2	2191.2	2161.4	2198.8	2338.6	2308.7	2041.8	2034.3	2007.6	2003.4	1992.7
55°	2255.4	2255.4	2260.8	2347.2	2547.0	2507.3	2259.6	2267.1	2230.9	2200.8	2214.9
57.5°	2270.3	2276.8	2322.7	2465.8	2791.5	2662.2	2500.0	2510.7	2458.3	2398.5	2442.2
60°	2196.6	2215.8	2325.8	2533.0	2929.3	2826.6	2753.0	2756.2	2680.5	2592.9	2669.8
62.5°	2007.6	2031.1	2227.5	2560.8	2906.7	2995.4	2992.3	2999.7	2896.1	2787.3	2883.3
65°	1775.9	1799.3	2008.7	2482.8	2889.7	3116.1	3211.1	3231.5	3098.0	2951.7	3016.8
67.5°	1435.2	1466.3	1664.7	2220.2	2806.5	3215.5	3416.2	3437.5	3253.8	3037.1	3005.0
70°	1040.1	1055.1	1221.7	1687.2	2466.8	3161.0	3578.5	3577.4	3305.1	3030.6	2844.8
72.5°	500.9	512.7	656.8	1047.7	1764.1	2682.5	3461.0	3481.3	3234.6	2937.7	2478.6
75°	206.2	217.8	265.9	442.1	925.9	1772.6	2933.4	2981.6	2937.7	2636.6	1939.4
77.5°	128.2	132.4	155.9	228.4	422.9	827.6	2053.5	2118.7	2328.0	2112.3	1280.4
80°	96.1	99.4	116.4	160.2	266.9	305.5	1019.8	1102.1	1410.7	1212.1	579.9
82.5°	80.0	81.1	93.0	116.4	181.5	175.1	326.8	364.2	657.7	462.4	199.8
85°	74.7	76.8	83.4	83.4	115.3	110.0	135.6	142.0	191.2	158.0	69.3
87.5°	38.4	36.3	73.8	65.1	59.7	53.4	57.8	62.0	71.5	75.8	31.0
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: P265909

CATALOG NUMBER: ARCH-AF16-60-D-U-T3-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	650.4	653.5	658.8	664.2	670.7	678.1	682.4	687.7	692.0	689.9	688.8
5°	653.5	658.8	670.7	681.4	694.1	709.1	718.6	729.3	737.9	740.1	736.8
7.5°	658.8	668.5	684.5	703.7	720.8	740.1	754.9	769.9	780.6	782.8	782.8
10°	671.8	682.4	703.7	729.3	749.6	769.9	787.0	798.9	808.4	812.6	812.6
12.5°	689.9	702.7	728.3	759.2	781.6	800.8	810.5	815.9	820.2	824.5	825.5
15°	711.2	725.1	756.1	789.3	812.6	822.3	822.3	821.2	821.2	823.3	825.5
17.5°	732.6	747.5	779.5	814.9	829.8	824.5	816.9	813.8	811.6	810.5	813.8
20°	754.9	769.9	801.9	835.1	830.8	808.4	797.8	790.1	783.9	780.6	784.8
22.5°	779.5	793.5	826.5	849.0	816.9	782.8	762.5	750.8	740.1	733.6	737.9
25°	808.4	822.3	854.3	853.2	792.3	744.3	712.3	693.0	681.4	674.8	674.8
27.5°	842.6	854.3	885.3	842.6	758.2	693.0	646.2	627.9	624.7	619.4	619.4
30°	877.9	887.4	914.1	817.9	711.2	625.8	574.6	566.0	567.0	561.7	562.8
32.5°	914.1	923.7	931.3	781.6	650.4	549.9	515.7	509.3	508.4	504.0	499.7
35°	965.4	979.2	933.2	732.6	576.6	486.9	462.4	456.0	449.6	434.6	434.6
37.5°	1043.3	1058.3	927.9	671.8	500.9	437.8	415.3	406.8	396.2	381.2	375.9
40°	1150.1	1150.1	916.2	603.3	440.0	398.3	377.0	366.2	354.6	339.6	336.3
42.5°	1276.1	1246.2	898.0	534.0	395.2	371.5	352.4	340.6	326.8	309.6	307.6
45°	1423.5	1342.3	872.4	472.0	361.9	355.5	343.8	323.6	300.0	281.9	278.7
47.5°	1566.6	1428.8	847.9	428.2	334.3	349.3	339.6	305.5	273.4	247.8	244.6
50°	1723.6	1505.6	819.1	391.9	312.9	344.9	334.3	278.7	243.5	225.4	223.1
52.5°	1880.5	1583.7	788.2	353.5	294.7	336.3	321.5	259.5	242.5	217.8	214.7
55°	2046.1	1674.4	751.8	310.8	273.4	319.3	304.3	258.4	249.9	217.8	210.4
57.5°	2207.3	1774.8	693.0	269.1	249.9	293.7	298.0	252.1	233.9	215.8	207.1
60°	2385.7	1881.6	595.8	233.9	229.5	272.2	289.4	238.1	215.8	209.3	205.1
62.5°	2528.8	1977.7	465.6	209.3	212.4	255.2	278.7	229.5	208.2	202.8	201.8
65°	2590.7	1979.9	334.3	187.9	195.4	239.2	268.1	222.2	201.8	199.8	198.6
67.5°	2525.6	1870.9	234.9	167.7	177.2	224.2	254.2	214.7	195.4	196.5	194.4
70°	2315.2	1641.4	171.9	148.4	160.2	208.2	239.2	205.1	187.9	190.1	186.8
72.5°	1937.1	1279.4	137.8	132.4	146.3	191.2	224.2	194.4	176.2	177.2	170.9
75°	1431.0	847.9	115.3	118.5	130.3	175.1	205.1	180.5	163.4	159.1	154.9
77.5°	851.1	435.7	95.0	103.6	116.4	155.9	183.7	163.4	149.5	142.0	138.8
80°	351.3	176.2	78.0	87.6	101.5	138.8	162.4	143.1	133.5	126.0	121.7
82.5°	139.9	86.4	62.0	71.5	85.3	120.6	142.0	126.0	116.4	111.1	99.4
85°	53.4	42.7	41.6	50.1	64.0	93.0	117.5	105.7	98.3	84.4	81.1
87.5°	21.4	19.3	19.3	24.6	36.3	58.7	84.4	73.8	76.8	60.8	62.0
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)