

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: P214729

Luminaire Tested: **ARCH-AF24-40-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214729
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-AF24-40-D-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5252.8 lumens
Efficiency: N/A
Efficacy: 131.3 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): 40
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

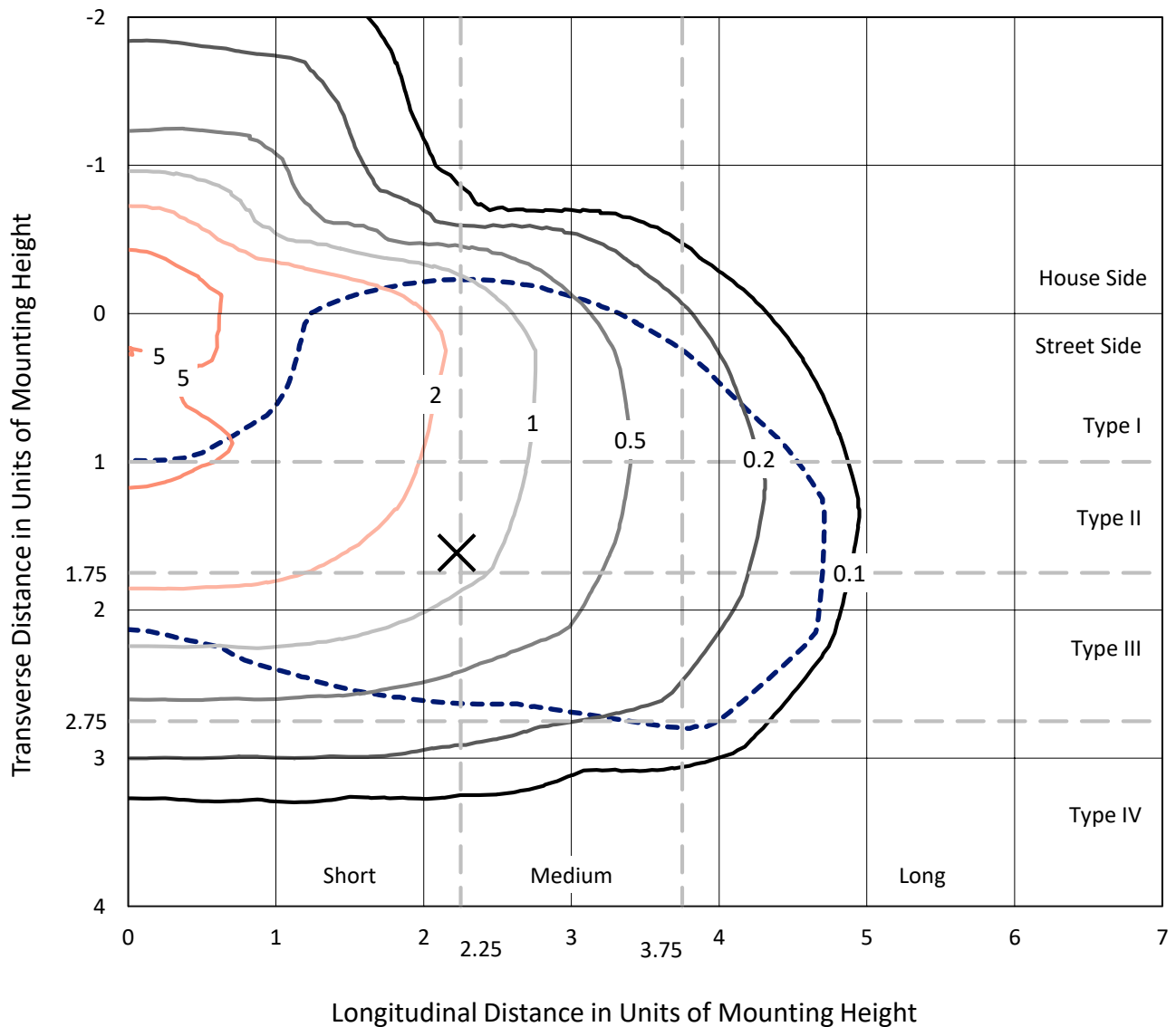


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

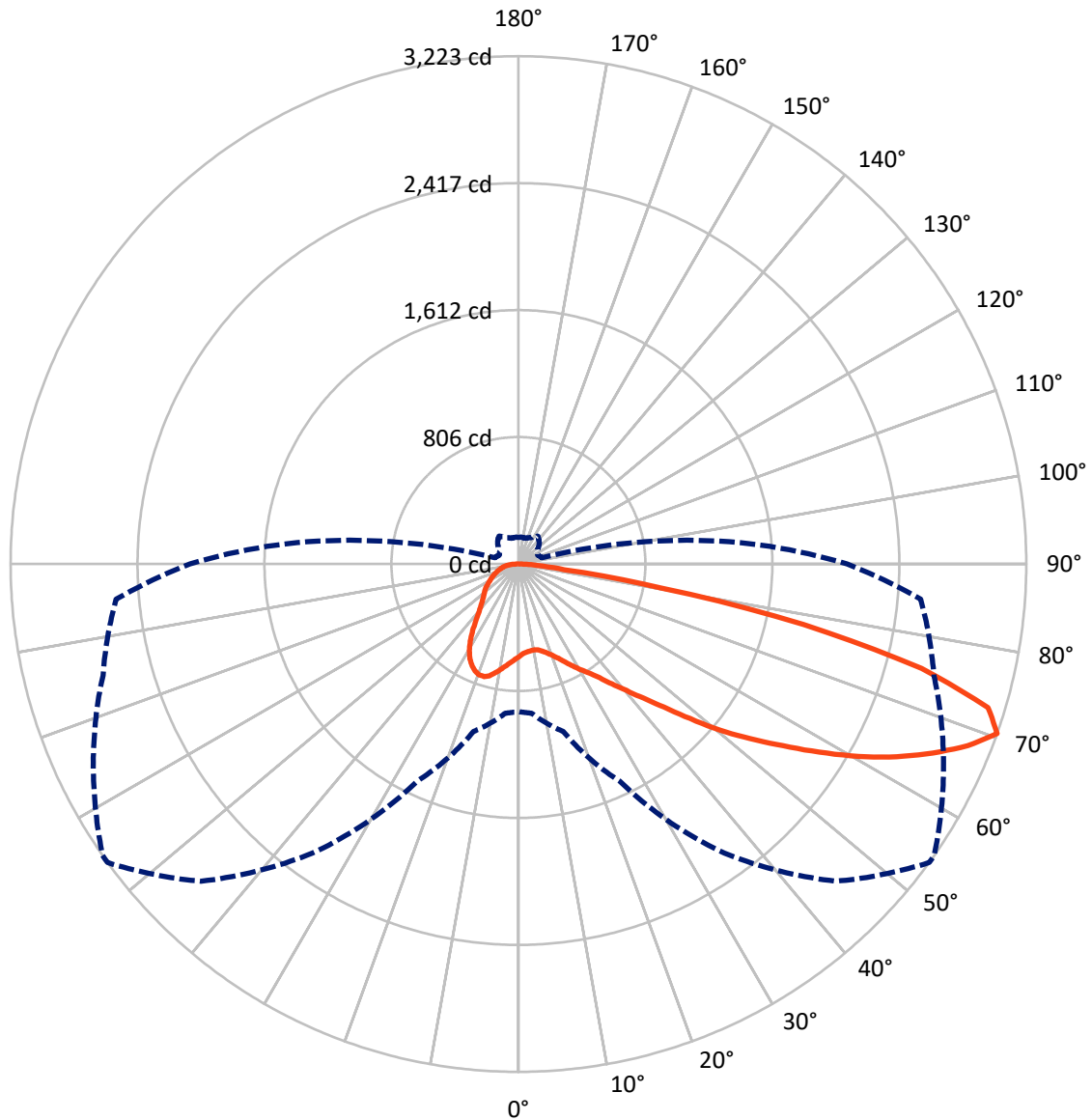


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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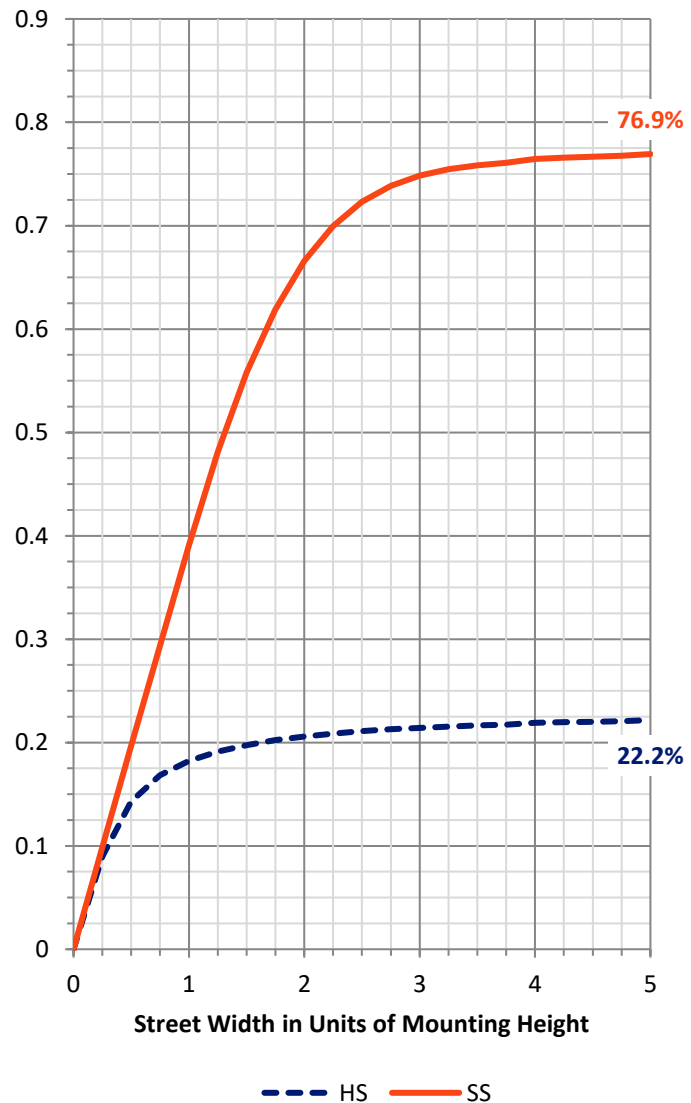
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1191.3	0.0	1191.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4061.5	0.0	4061.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	5252.8	0.0	5252.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.1
10°-20°	184.3	3.5
20°-30°	320.2	6.1
30°-40°	467.9	8.9
40°-50°	734.3	14.0
50°-60°	1129.2	21.5
60°-70°	1379.6	26.3
70°-80°	855.4	16.3
80°-90°	124.3	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°	5252.8	100.0
0°-180°	5252.8	100.0



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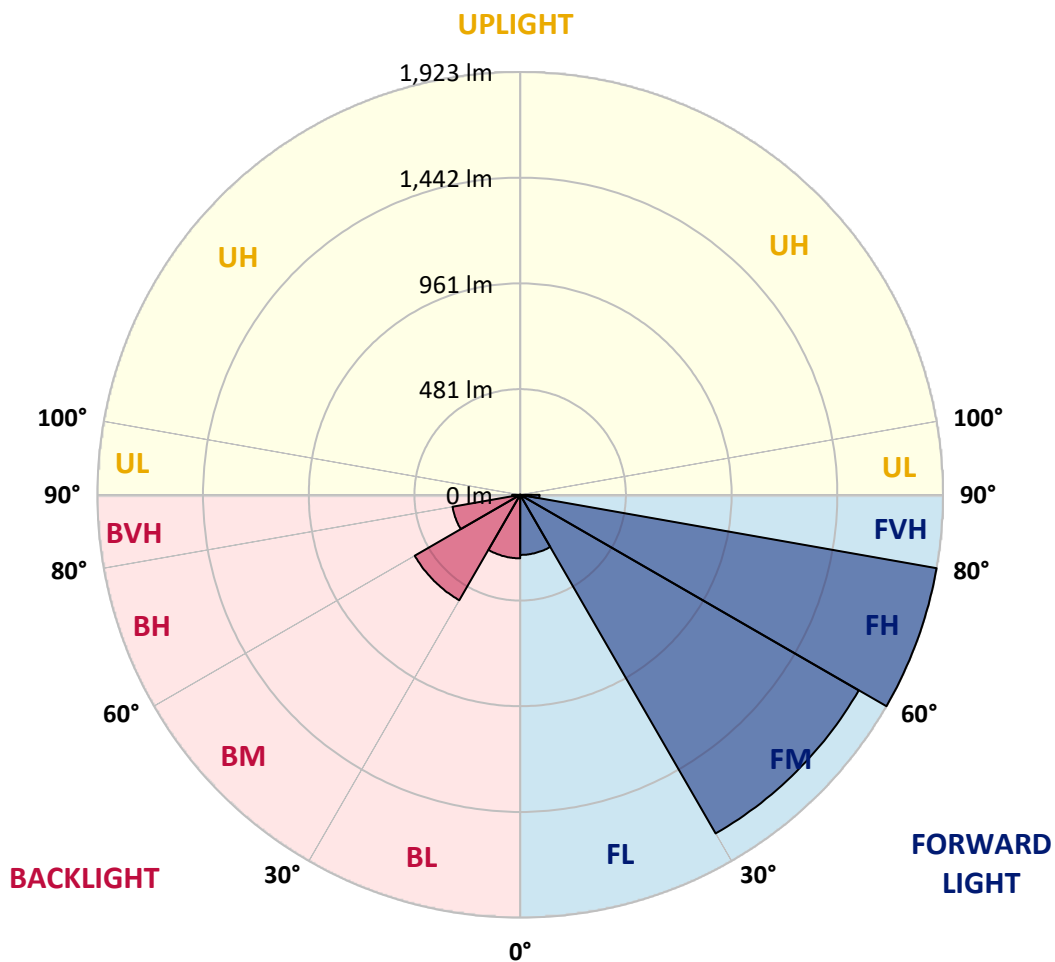
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	273.3	5.2			
FM	(30°-60°)	1777.8	33.8			
FH	(60°-80°)	1922.6	36.6			G2/5000
FVH	(80°-90°)	87.7	1.7			G1/100
BL	(0°-30°)	288.8	5.5	B1/500		
BM	(30°-60°)	553.6	10.5	B1/1000		
BH	(60°-80°)	312.4	5.9	B1/500		G1/500
BVH	(80°-90°)	36.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7
2.5°	564.6	562.7	562.7	565.6	566.5	569.4	569.4	570.4	573.3	578.1	583.8
5°	547.3	546.4	547.3	551.2	553.1	558.8	560.8	561.7	567.5	575.2	583.8
7.5°	530.0	529.0	530.9	536.7	542.5	551.2	556.0	556.9	565.6	576.1	587.7
10°	524.2	523.2	526.1	530.9	536.7	546.4	554.0	555.0	567.5	580.0	596.4
12.5°	531.9	530.9	533.8	538.6	544.4	551.2	559.8	560.8	577.1	593.4	610.8
15°	551.2	551.2	552.1	555.0	560.8	566.5	574.2	575.2	592.5	611.7	629.0
17.5°	580.9	579.0	579.0	578.1	582.0	584.8	594.4	595.4	613.7	631.0	648.2
20°	617.6	616.5	612.6	607.8	606.9	608.9	618.5	619.4	637.7	652.1	668.5
22.5°	661.7	662.7	654.1	643.4	638.6	641.6	650.2	651.2	664.6	677.1	691.6
25°	720.5	717.5	705.0	689.7	680.1	680.1	688.7	688.7	701.2	708.9	718.5
27.5°	776.2	770.5	758.9	736.7	721.4	724.2	732.9	732.9	744.5	747.4	752.2
30°	836.8	831.0	816.6	788.7	768.5	766.6	777.1	776.2	791.6	790.6	786.8
32.5°	910.8	908.0	883.9	848.3	821.4	814.7	824.3	825.2	834.9	832.0	819.5
35°	1014.8	1013.7	991.6	929.1	893.5	881.1	886.8	886.8	893.5	885.9	864.7
37.5°	1145.6	1147.4	1128.2	1035.9	985.9	964.7	965.7	964.7	966.7	958.0	935.9
40°	1276.3	1281.1	1280.2	1168.6	1105.2	1068.6	1055.2	1053.2	1058.0	1054.2	1033.0
42.5°	1448.5	1460.1	1433.2	1332.2	1261.0	1199.4	1162.9	1158.1	1168.6	1173.4	1153.3
45°	1627.4	1623.6	1581.3	1508.1	1443.7	1364.8	1295.6	1287.9	1295.6	1310.0	1288.9
47.5°	1720.7	1717.8	1707.3	1670.7	1661.1	1570.7	1465.9	1459.1	1444.7	1464.9	1439.9
50°	1874.7	1877.5	1834.3	1830.4	1870.8	1820.8	1658.2	1642.9	1616.9	1633.2	1612.1
52.5°	1986.3	1973.7	1946.8	1980.4	2106.5	2079.6	1839.1	1832.3	1808.3	1804.4	1794.8
55°	2031.4	2031.4	2036.2	2114.1	2294.0	2258.4	2035.3	2042.0	2009.3	1982.4	1994.9
57.5°	2044.9	2050.6	2092.0	2220.9	2514.3	2397.9	2251.7	2261.3	2214.2	2160.3	2199.8
60°	1978.5	1995.9	2094.9	2281.5	2638.4	2546.0	2479.6	2482.5	2414.3	2335.4	2404.7
62.5°	1808.3	1829.4	2006.4	2306.5	2618.1	2697.9	2695.1	2701.8	2608.5	2510.4	2597.0
65°	1599.6	1620.7	1809.2	2236.3	2602.8	2806.7	2892.3	2910.5	2790.3	2658.5	2717.3
67.5°	1292.7	1320.6	1499.5	1999.7	2527.7	2896.1	3076.9	3096.2	2930.8	2735.5	2706.6
70°	936.8	950.3	1100.4	1519.7	2221.8	2847.1	3223.1	3222.2	2976.9	2729.7	2562.4
72.5°	451.1	461.7	591.6	943.6	1588.9	2416.1	3117.3	3135.7	2913.5	2646.1	2232.5
75°	185.7	196.2	239.5	398.2	833.9	1596.6	2642.2	2685.5	2646.1	2374.8	1746.7
77.5°	115.4	119.3	140.5	205.8	380.8	745.4	1849.6	1908.3	2096.8	1902.5	1153.3
80°	86.5	89.4	104.9	144.2	240.5	275.1	918.6	992.7	1270.6	1091.7	522.3
82.5°	72.1	73.1	83.7	104.9	163.5	157.7	294.3	328.0	592.5	416.4	179.8
85°	67.3	69.3	75.0	75.0	103.8	99.0	122.1	128.0	172.2	142.4	62.5
87.5°	34.6	32.7	66.4	58.7	53.9	48.1	52.0	55.8	64.4	68.3	27.9
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°	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7
2.5°	585.7	588.6	593.4	598.2	604.1	610.8	614.6	619.4	623.3	621.3	620.4
5°	588.6	593.4	604.1	613.7	625.2	638.6	647.3	656.9	664.6	666.6	663.7
7.5°	593.4	602.1	616.5	633.8	649.3	666.6	680.1	693.5	703.1	705.0	705.0
10°	605.0	614.6	633.8	656.9	675.2	693.5	708.9	719.4	728.1	731.9	731.9
12.5°	621.3	632.9	656.0	683.8	704.1	721.4	730.1	734.9	738.7	742.6	743.5
15°	640.6	653.1	681.0	710.8	731.9	740.6	740.6	739.7	739.7	741.5	743.5
17.5°	659.8	673.3	702.2	733.9	747.4	742.6	735.8	732.9	731.0	730.1	732.9
20°	680.1	693.5	722.3	752.2	748.3	728.1	718.5	711.8	706.0	703.1	707.0
22.5°	702.2	714.6	744.5	764.7	735.8	705.0	686.8	676.2	666.6	660.8	664.6
25°	728.1	740.6	769.5	768.5	713.7	670.4	641.6	624.2	613.7	607.8	607.8
27.5°	758.9	769.5	797.4	758.9	682.9	624.2	582.0	565.6	562.7	557.9	557.9
30°	790.6	799.3	823.4	736.7	640.6	563.6	517.5	509.7	510.8	506.0	506.9
32.5°	823.4	832.0	838.7	704.1	585.7	495.3	464.5	458.8	457.9	454.0	450.1
35°	869.5	882.0	840.7	659.8	519.4	438.6	416.4	410.7	405.0	391.5	391.5
37.5°	939.7	953.2	835.9	605.0	451.1	394.3	374.2	366.4	356.8	343.4	338.6
40°	1035.9	1035.9	825.2	543.5	396.3	358.7	339.5	329.9	319.4	305.9	303.0
42.5°	1149.4	1122.5	808.9	480.9	355.9	334.7	317.4	306.8	294.3	279.0	277.0
45°	1282.2	1209.0	785.8	425.1	326.1	320.3	309.7	291.4	270.3	253.9	251.0
47.5°	1411.1	1287.0	763.7	385.7	301.1	314.6	305.9	275.1	246.2	223.1	220.2
50°	1552.4	1356.2	737.8	353.0	281.8	310.7	301.1	251.0	219.3	203.0	201.0
52.5°	1693.8	1426.4	709.8	318.3	265.5	303.0	289.5	233.7	218.3	196.2	193.3
55°	1842.9	1508.1	677.1	279.9	246.2	287.6	274.2	232.7	225.0	196.2	189.5
57.5°	1988.1	1598.6	624.2	242.3	225.0	264.5	268.3	227.0	210.6	194.3	186.6
60°	2148.8	1694.7	536.7	210.6	206.8	245.3	260.6	214.5	194.3	188.5	184.6
62.5°	2277.7	1781.4	419.4	188.5	191.4	229.9	251.0	206.8	187.6	182.8	181.8
65°	2333.5	1783.3	301.1	169.3	176.0	215.4	241.4	200.1	181.8	179.8	178.9
67.5°	2274.7	1685.1	211.6	151.0	159.7	202.0	228.9	193.3	176.0	177.0	175.0
70°	2085.3	1478.4	154.9	133.7	144.2	187.6	215.4	184.6	169.3	171.2	168.3
72.5°	1744.7	1152.3	124.1	119.3	131.8	172.2	202.0	175.0	158.7	159.7	153.9
75°	1288.9	763.7	103.8	106.8	117.3	157.7	184.6	162.5	147.2	143.3	139.4
77.5°	766.6	392.4	85.6	93.3	104.9	140.5	165.4	147.2	134.6	128.0	125.0
80°	316.4	158.7	70.2	78.9	91.3	125.0	146.2	128.9	120.2	113.5	109.7
82.5°	126.0	77.9	55.8	64.4	76.9	108.7	128.0	113.5	104.9	100.0	89.4
85°	48.1	38.5	37.5	45.2	57.7	83.7	105.8	95.2	88.5	76.0	73.1
87.5°	19.2	17.3	17.3	22.1	32.7	52.9	76.0	66.4	69.3	54.8	55.8
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)