

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: P214725

Luminaire Tested: **ARCH-AF16-50-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214725
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-AF16-50-D-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6119.3 lumens
Efficiency: N/A
Efficacy: 115.5 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): 53
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

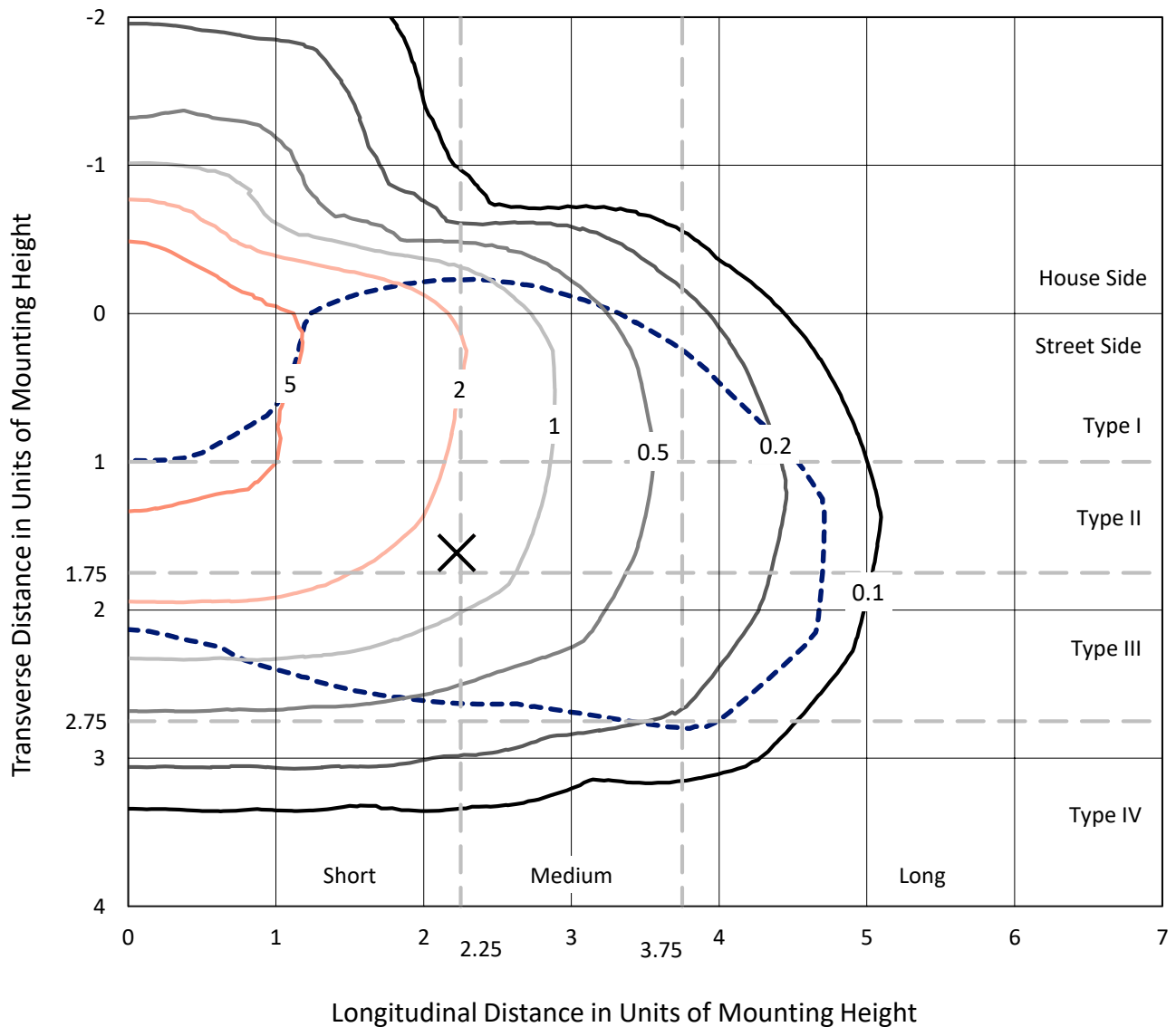


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

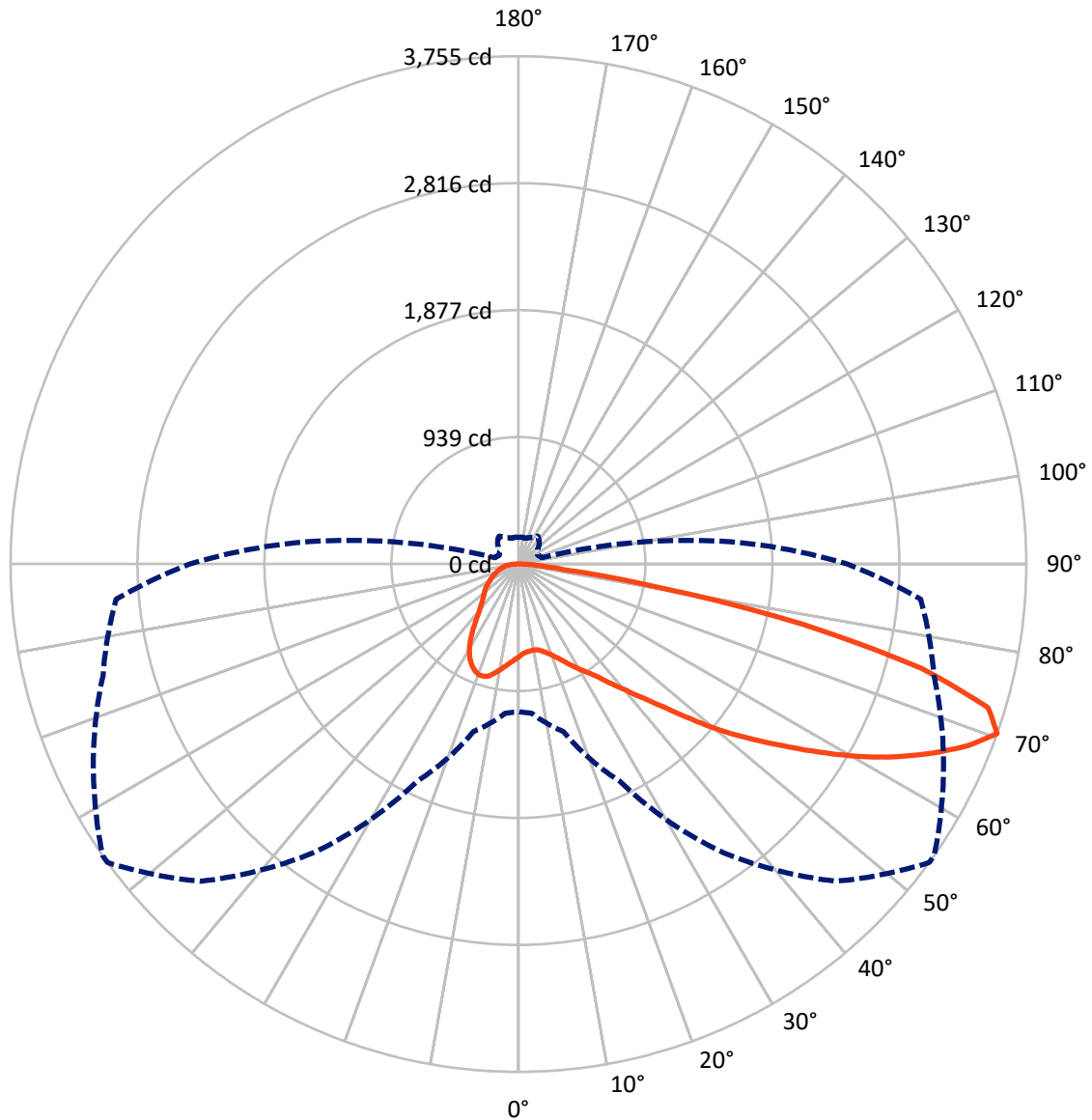


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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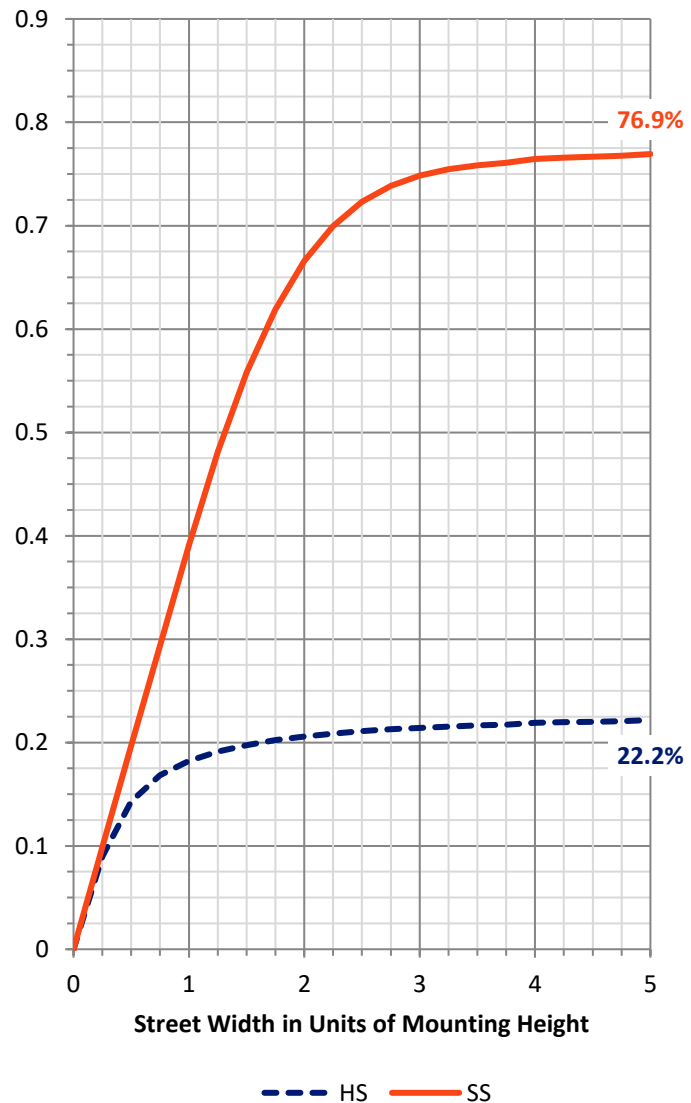
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1387.8	0.0	1387.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4731.5	0.0	4731.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	6119.3	0.0	6119.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	1.1
10°-20°	214.7	3.5
20°-30°	373.0	6.1
30°-40°	545.1	8.9
40°-50°	855.5	14.0
50°-60°	1315.5	21.5
60°-70°	1607.2	26.3
70°-80°	996.5	16.3
80°-90°	144.8	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°	6119.3	100.0
0°-180°	6119.3	100.0

Coefficient of Utilization



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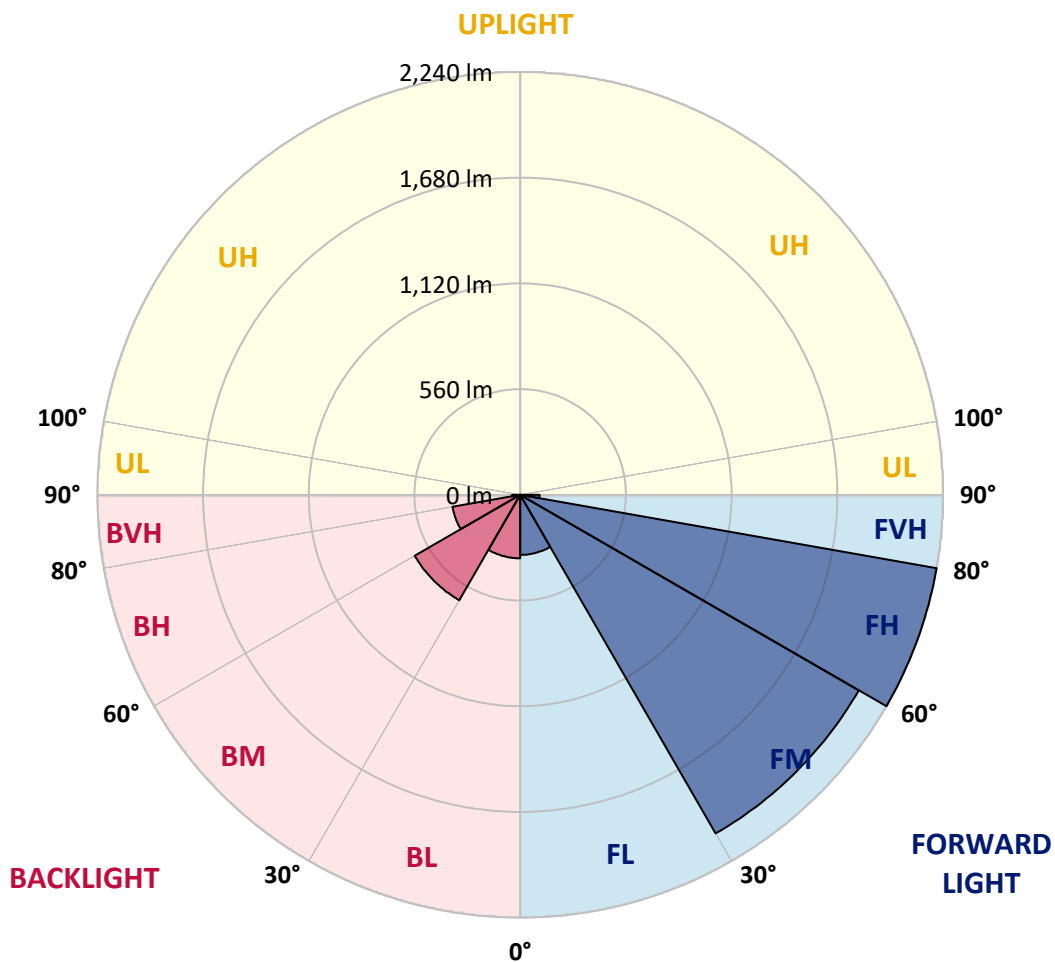
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	318.4	5.2			
FM	(30°-60°)	2071.1	33.8			
FH	(60°-80°)	2239.8	36.6			G2/5000
FVH	(80°-90°)	102.2	1.7			G2/225
BL	(0°-30°)	336.5	5.5	B1/500		
BM	(30°-60°)	644.9	10.5	B1/1000		
BH	(60°-80°)	363.9	5.9	B1/500		G1/500
BVH	(80°-90°)	42.5	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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	657.8	655.5	655.5	658.9	660.0	663.4	663.4	664.4	667.8	673.4	680.2
5°	637.6	636.5	637.6	642.0	644.3	651.0	653.3	654.4	661.1	670.0	680.2
7.5°	617.4	616.2	618.5	625.2	632.0	642.0	647.6	648.8	658.9	671.2	684.7
10°	610.7	609.6	613.0	618.5	625.2	636.5	645.4	646.5	661.1	675.7	694.7
12.5°	619.6	618.5	621.9	627.5	634.2	642.0	652.1	653.3	672.3	691.3	711.6
15°	642.0	642.0	643.1	646.5	653.3	660.0	668.9	670.0	690.2	712.6	732.8
17.5°	676.8	674.5	674.5	673.4	677.9	681.3	692.4	693.6	714.8	735.1	755.2
20°	719.3	718.2	713.7	708.2	707.1	709.3	720.5	721.6	742.9	759.7	778.8
22.5°	770.9	772.0	761.9	749.6	744.0	747.4	757.5	758.6	774.3	788.8	805.7
25°	839.2	835.9	821.3	803.4	792.2	792.2	802.3	802.3	816.8	825.8	837.0
27.5°	904.3	897.5	884.0	858.3	840.4	843.7	853.9	853.9	867.3	870.6	876.3
30°	974.9	968.1	951.3	918.8	895.3	893.0	905.4	904.3	922.2	921.1	916.6
32.5°	1061.1	1057.7	1029.7	988.3	956.9	949.1	960.2	961.4	972.6	969.2	954.6
35°	1182.1	1181.0	1155.2	1082.4	1041.0	1026.3	1033.1	1033.1	1041.0	1032.0	1007.3
37.5°	1334.5	1336.8	1314.4	1206.8	1148.5	1123.8	1124.9	1123.8	1126.1	1116.0	1090.3
40°	1486.9	1492.5	1491.4	1361.4	1287.5	1244.8	1229.2	1226.9	1232.6	1228.1	1203.4
42.5°	1687.5	1701.0	1669.6	1551.9	1469.0	1397.2	1354.7	1349.1	1361.4	1367.0	1343.4
45°	1895.8	1891.4	1842.1	1756.9	1681.8	1590.0	1509.3	1500.4	1509.3	1526.1	1501.5
47.5°	2004.6	2001.2	1988.9	1946.3	1935.1	1829.8	1707.6	1699.8	1683.0	1706.5	1677.4
50°	2183.9	2187.2	2136.8	2132.3	2179.4	2121.1	1931.7	1913.8	1883.6	1902.6	1877.9
52.5°	2313.8	2299.3	2267.9	2307.1	2453.9	2422.6	2142.4	2134.6	2106.6	2102.1	2090.8
55°	2366.5	2366.5	2372.1	2462.9	2672.4	2630.9	2371.0	2378.8	2340.7	2309.3	2323.9
57.5°	2382.1	2388.9	2437.1	2587.2	2929.0	2793.4	2623.1	2634.3	2579.4	2516.7	2562.6
60°	2304.9	2325.1	2440.5	2657.8	3073.6	2965.9	2888.6	2892.0	2812.5	2720.5	2801.2
62.5°	2106.6	2131.2	2337.3	2687.0	3050.0	3143.0	3139.6	3147.5	3038.8	2924.5	3025.4
65°	1863.4	1888.1	2107.7	2605.1	3032.0	3269.7	3369.3	3390.7	3250.5	3097.1	3165.4
67.5°	1506.0	1538.4	1746.9	2329.6	2944.7	3373.8	3584.5	3606.9	3414.2	3186.7	3153.0
70°	1091.4	1107.0	1281.9	1770.4	2588.4	3316.7	3754.8	3753.7	3467.9	3179.9	2985.0
72.5°	525.5	537.9	689.1	1099.2	1851.0	2814.6	3631.6	3652.9	3393.9	3082.5	2600.6
75°	216.3	228.6	279.0	463.9	971.5	1860.0	3078.1	3128.4	3082.5	2766.5	2034.9
77.5°	134.4	138.9	163.6	239.8	443.8	868.4	2154.7	2223.1	2442.7	2216.3	1343.4
80°	100.9	104.2	122.1	168.1	280.1	320.5	1070.1	1156.3	1480.2	1271.7	608.5
82.5°	84.1	85.1	97.5	122.1	190.5	183.7	342.9	382.1	690.2	485.2	209.5
85°	78.5	80.7	87.4	87.4	121.0	115.4	142.3	149.0	200.6	165.8	72.8
87.5°	40.3	38.1	77.3	68.3	62.7	56.1	60.5	65.0	75.1	79.6	32.5
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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	682.4	685.8	691.3	696.9	703.7	711.6	716.0	721.6	726.1	723.8	722.7
5°	685.8	691.3	703.7	714.8	728.3	744.0	754.1	765.3	774.3	776.5	773.1
7.5°	691.3	701.4	718.2	738.4	756.4	776.5	792.2	807.9	819.1	821.3	821.3
10°	704.8	716.0	738.4	765.3	786.5	807.9	825.8	838.1	848.2	852.7	852.7
12.5°	723.8	737.2	764.1	796.7	820.2	840.4	850.5	856.1	860.5	865.0	866.1
15°	746.2	760.8	793.3	828.1	852.7	862.8	862.8	861.6	861.6	863.9	866.1
17.5°	768.6	784.4	818.0	855.0	870.6	865.0	857.2	853.9	851.6	850.5	853.9
20°	792.2	807.9	841.5	876.3	871.8	848.2	837.0	829.2	822.5	819.1	823.6
22.5°	818.0	832.6	867.3	890.8	857.2	821.3	800.0	787.7	776.5	769.8	774.3
25°	848.2	862.8	896.4	895.3	831.5	781.0	747.4	727.2	714.8	708.2	708.2
27.5°	884.0	896.4	928.9	884.0	795.5	727.2	677.9	658.9	655.5	649.9	649.9
30°	921.1	931.1	959.1	858.3	746.2	656.6	602.8	593.8	594.9	589.4	590.5
32.5°	959.1	969.2	977.1	820.2	682.4	577.0	541.2	534.5	533.4	528.9	524.4
35°	1012.9	1027.5	979.3	768.6	605.1	511.0	485.2	478.4	471.7	456.0	456.0
37.5°	1094.8	1110.4	973.7	704.8	525.5	459.4	435.9	426.9	415.7	400.0	394.4
40°	1206.8	1206.8	961.4	633.1	461.7	418.0	395.6	384.3	372.0	356.3	352.9
42.5°	1339.0	1307.6	942.3	560.3	414.6	389.9	369.8	357.4	342.9	325.0	322.7
45°	1493.6	1408.5	915.4	495.2	379.8	373.2	360.8	339.5	314.9	295.8	292.5
47.5°	1643.8	1499.2	889.7	449.3	350.7	366.4	356.3	320.5	286.8	259.9	256.6
50°	1808.5	1579.9	859.4	411.2	328.3	361.9	350.7	292.5	255.4	236.4	234.2
52.5°	1973.2	1661.7	827.0	370.9	309.2	352.9	337.3	272.3	254.3	228.6	225.3
55°	2146.9	1756.9	788.8	326.0	286.8	335.0	319.4	271.2	262.2	228.6	220.8
57.5°	2316.1	1862.3	727.2	282.3	262.2	308.1	312.6	264.4	245.4	226.4	217.4
60°	2503.2	1974.3	625.2	245.4	240.9	285.7	303.6	249.9	226.4	219.6	215.1
62.5°	2653.3	2075.2	488.6	219.6	223.0	267.8	292.5	240.9	218.5	212.9	211.8
65°	2718.3	2077.4	350.7	197.2	205.1	251.0	281.2	233.0	211.8	209.5	208.4
67.5°	2650.0	1963.1	246.5	175.9	186.0	235.3	266.7	225.3	205.1	206.1	204.0
70°	2429.2	1722.2	180.4	155.8	168.1	218.5	251.0	215.1	197.2	199.5	196.1
72.5°	2032.6	1342.3	144.5	138.9	153.5	200.6	235.3	204.0	184.8	186.0	179.3
75°	1501.5	889.7	121.0	124.4	136.7	183.7	215.1	189.3	171.4	166.9	162.4
77.5°	893.0	457.2	99.7	108.6	122.1	163.6	192.7	171.4	156.9	149.0	145.7
80°	368.7	184.8	81.8	91.9	106.5	145.7	170.3	150.2	140.0	132.3	127.8
82.5°	146.8	90.7	65.0	75.1	89.6	126.6	149.0	132.3	122.1	116.5	104.2
85°	56.1	44.8	43.7	52.7	67.2	97.5	123.3	110.9	103.1	88.5	85.1
87.5°	22.4	20.2	20.2	25.8	38.1	61.6	88.5	77.3	80.7	63.8	65.0
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)