

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: P214715

Luminaire Tested: **ARCH-AF24-40-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214715
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-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4546 lumens
Efficiency: N/A
Efficacy: 113.6 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 - G1

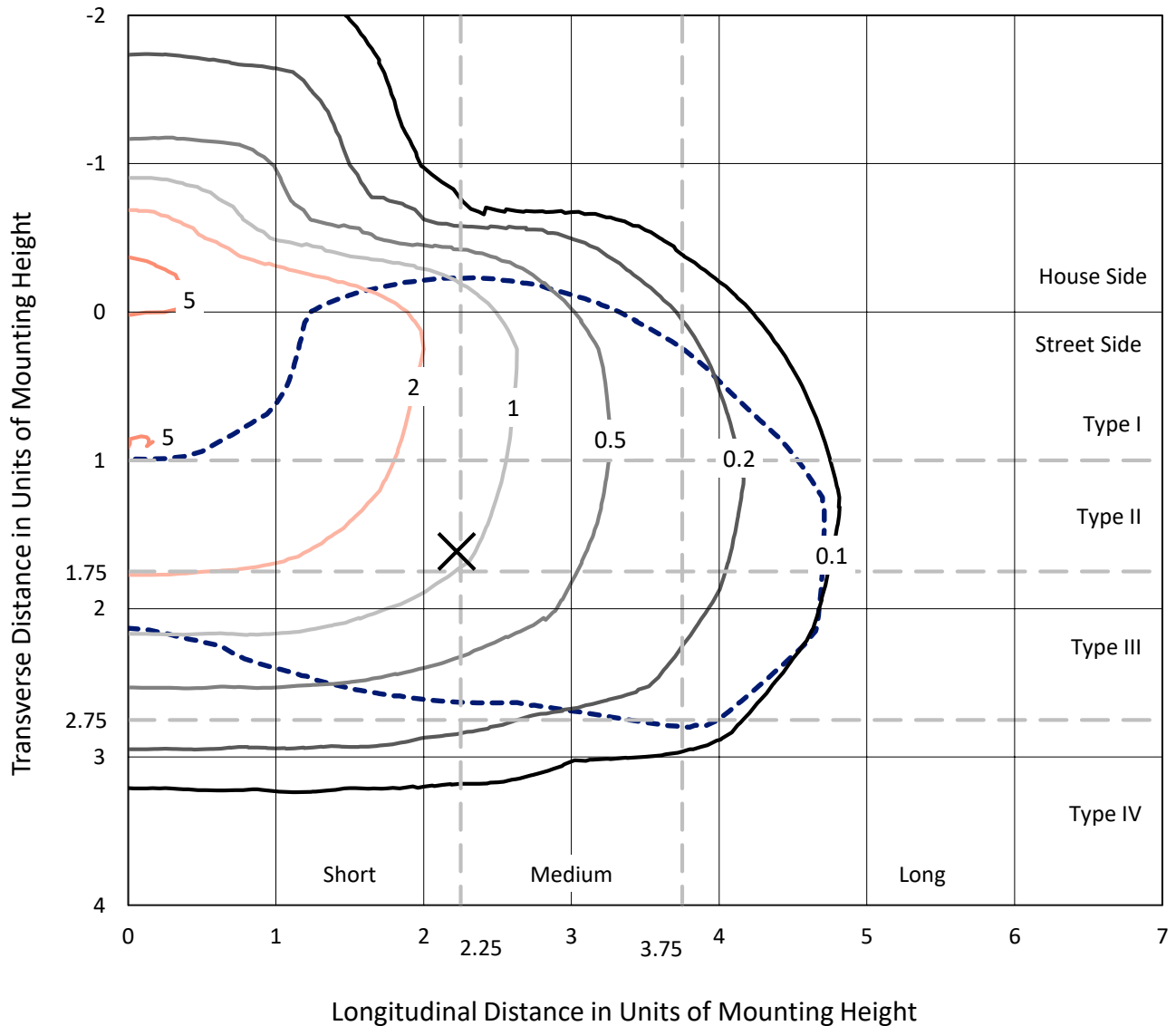
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

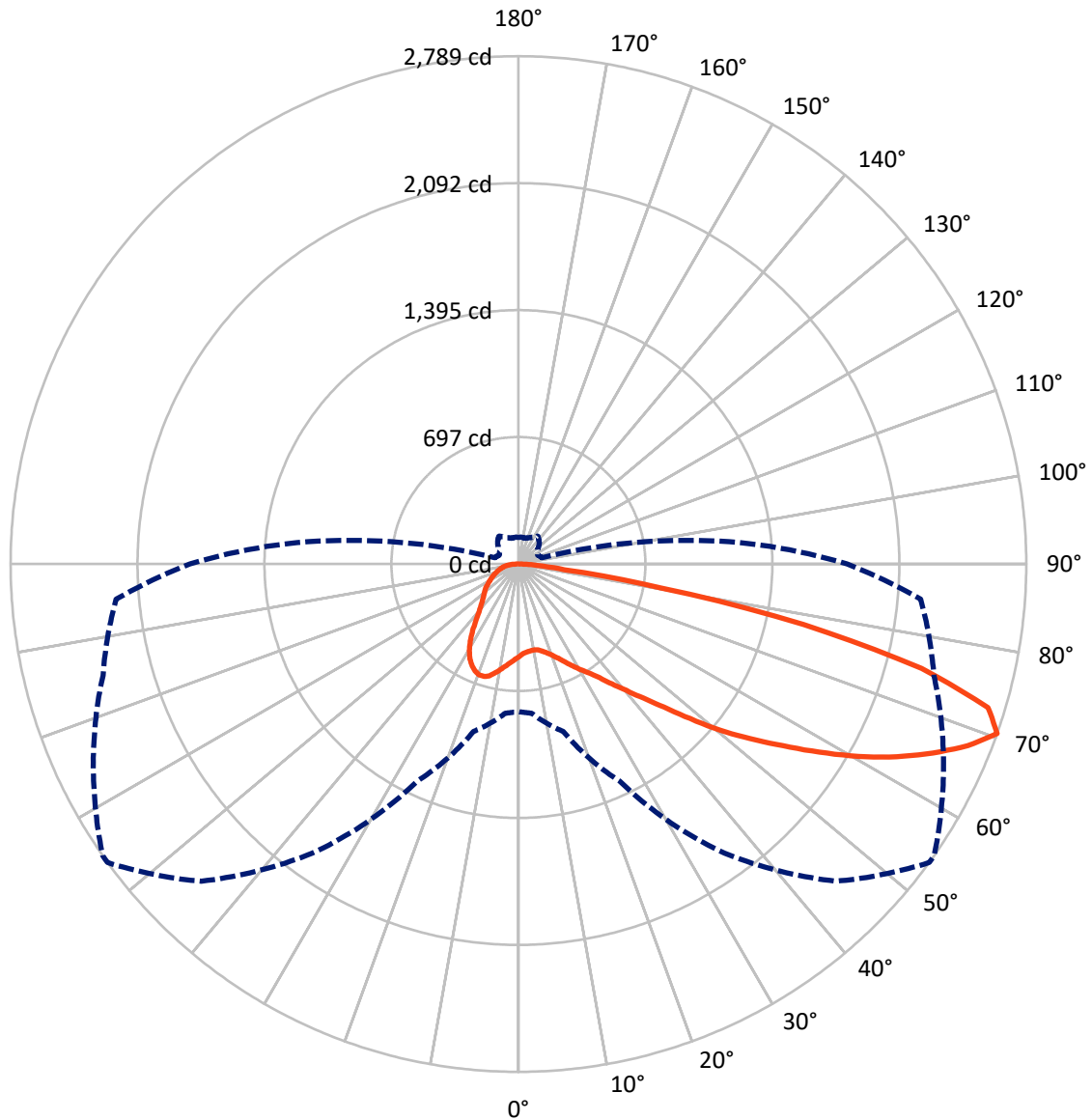
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 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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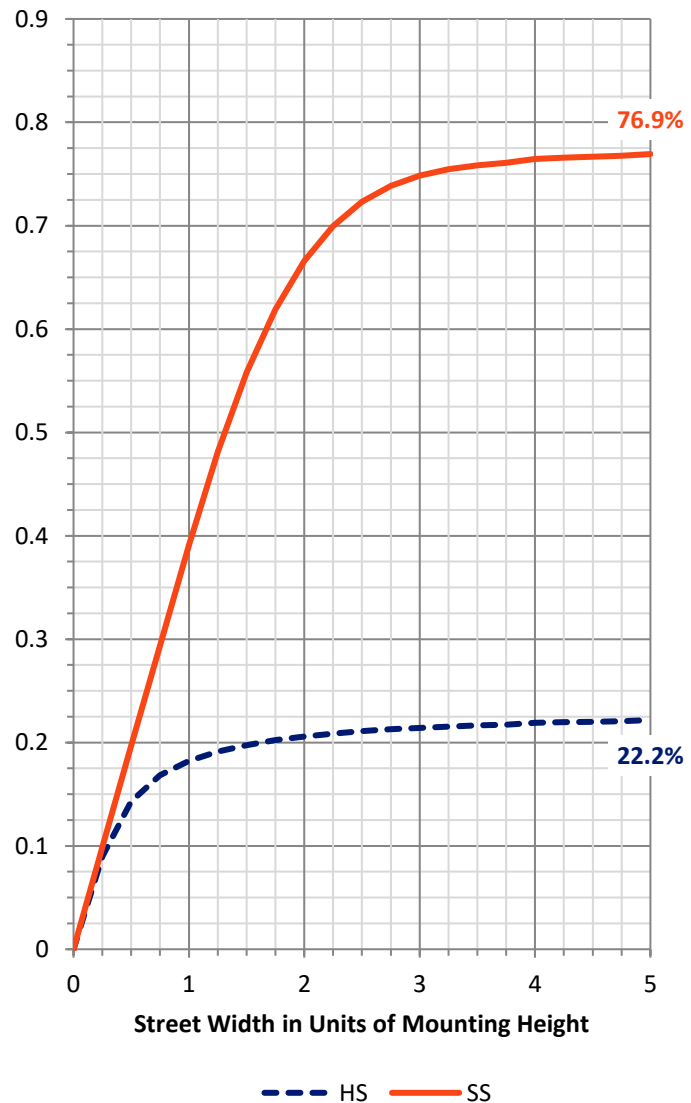
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1031.0	0.0	1031.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3515.0	0.0	3515.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	4546.0	0.0	4546.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	1.1
10°-20°	159.5	3.5
20°-30°	277.1	6.1
30°-40°	404.9	8.9
40°-50°	635.5	14.0
50°-60°	977.3	21.5
60°-70°	1194.0	26.3
70°-80°	740.3	16.3
80°-90°	107.5	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°	4546.0	100.0
0°-180°	4546.0	100.0

Coefficient of Utilization



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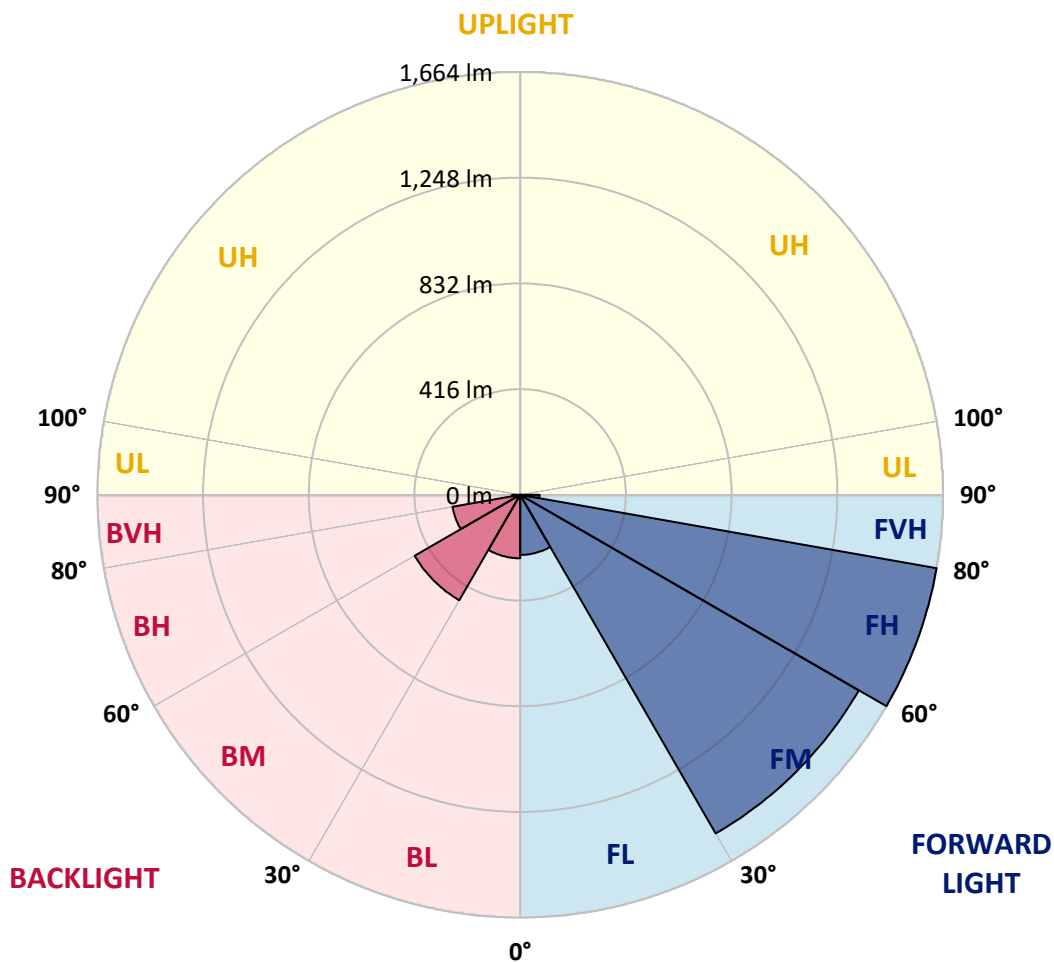
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	236.5	5.2			
FM	(30°-60°)	1538.6	33.8			
FH	(60°-80°)	1663.9	36.6			G1/1800
FVH	(80°-90°)	75.9	1.7			G1/100
BL	(0°-30°)	250.0	5.5	B1/500		
BM	(30°-60°)	479.1	10.5	B1/1000		
BH	(60°-80°)	270.4	5.9	B1/500		G1/500
BVH	(80°-90°)	31.6	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6
2.5°	488.6	487.0	487.0	489.5	490.3	492.8	492.8	493.6	496.1	500.3	505.3
5°	473.6	472.8	473.6	477.0	478.6	483.6	485.3	486.1	491.1	497.8	505.3
7.5°	458.7	457.8	459.5	464.5	469.5	477.0	481.1	482.0	489.5	498.6	508.6
10°	453.7	452.8	455.3	459.5	464.5	472.8	479.5	480.3	491.1	501.9	516.1
12.5°	460.3	459.5	462.0	466.2	471.1	477.0	484.5	485.3	499.4	513.6	528.6
15°	477.0	477.0	477.8	480.3	485.3	490.3	497.0	497.8	512.8	529.4	544.4
17.5°	502.8	501.1	501.1	500.3	503.6	506.1	514.4	515.3	531.1	546.1	561.0
20°	534.4	533.6	530.2	526.1	525.3	526.9	535.2	536.1	551.9	564.4	578.5
22.5°	572.7	573.5	566.0	556.9	552.7	555.2	562.7	563.5	575.2	586.0	598.5
25°	623.5	621.0	610.2	596.8	588.5	588.5	596.0	596.0	606.8	613.5	621.8
27.5°	671.8	666.8	656.8	637.6	624.3	626.8	634.3	634.3	644.3	646.8	650.9
30°	724.2	719.2	706.7	682.6	665.1	663.4	672.6	671.8	685.1	684.2	680.9
32.5°	788.3	785.8	765.0	734.2	710.9	705.1	713.4	714.2	722.5	720.0	709.2
35°	878.2	877.4	858.2	804.1	773.3	762.5	767.5	767.5	773.3	766.7	748.3
37.5°	991.4	993.1	976.4	896.5	853.2	834.9	835.7	834.9	836.6	829.1	809.9
40°	1104.6	1108.8	1107.9	1011.4	956.4	924.8	913.2	911.5	915.7	912.3	894.0
42.5°	1253.6	1263.6	1240.3	1152.9	1091.3	1038.0	1006.4	1002.2	1011.4	1015.5	998.1
45°	1408.4	1405.1	1368.5	1305.2	1249.5	1181.2	1121.3	1114.6	1121.3	1133.7	1115.4
47.5°	1489.2	1486.7	1477.5	1445.9	1437.6	1359.3	1268.6	1262.8	1250.3	1267.8	1246.1
50°	1622.4	1624.9	1587.4	1584.1	1619.0	1575.8	1435.1	1421.8	1399.3	1413.4	1395.1
52.5°	1718.9	1708.1	1684.8	1713.9	1823.0	1799.7	1591.6	1585.8	1564.9	1561.6	1553.3
55°	1758.1	1758.1	1762.2	1829.6	1985.3	1954.5	1761.4	1767.2	1738.9	1715.6	1726.4
57.5°	1769.7	1774.7	1810.5	1922.0	2175.9	2075.2	1948.7	1957.0	1916.2	1869.6	1903.7
60°	1712.3	1727.3	1813.0	1974.5	2283.3	2203.4	2146.0	2148.5	2089.4	2021.1	2081.0
62.5°	1564.9	1583.3	1736.4	1996.1	2265.8	2334.9	2332.4	2338.3	2257.5	2172.6	2247.5
65°	1384.3	1402.6	1565.8	1935.4	2252.5	2429.0	2503.1	2518.9	2414.8	2300.8	2351.6
67.5°	1118.8	1142.9	1297.7	1730.6	2187.6	2506.4	2662.9	2679.5	2536.4	2367.4	2342.4
70°	810.8	822.4	952.3	1315.2	1922.9	2463.9	2789.4	2788.6	2576.3	2362.4	2217.6
72.5°	390.4	399.6	511.9	816.6	1375.1	2091.0	2697.9	2713.7	2521.4	2290.0	1932.0
75°	160.7	169.8	207.3	344.6	721.7	1381.8	2286.6	2324.1	2290.0	2055.2	1511.7
77.5°	99.9	103.2	121.5	178.1	329.6	645.1	1600.7	1651.5	1814.7	1646.5	998.1
80°	74.9	77.4	90.7	124.9	208.1	238.1	795.0	859.1	1099.6	944.8	452.0
82.5°	62.4	63.3	72.4	90.7	141.5	136.5	254.7	283.9	512.8	360.4	155.7
85°	58.3	59.9	64.9	64.9	89.9	85.7	105.7	110.7	149.0	123.2	54.1
87.5°	30.0	28.3	57.4	50.8	46.6	41.6	45.0	48.3	55.8	59.1	24.1
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°	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6	508.6
2.5°	506.9	509.4	513.6	517.8	522.8	528.6	531.9	536.1	539.4	537.7	536.9
5°	509.4	513.6	522.8	531.1	541.1	552.7	560.2	568.5	575.2	576.9	574.4
7.5°	513.6	521.1	533.6	548.6	561.9	576.9	588.5	600.2	608.5	610.2	610.2
10°	523.6	531.9	548.6	568.5	584.4	600.2	613.5	622.6	630.1	633.5	633.5
12.5°	537.7	547.7	567.7	591.8	609.3	624.3	631.8	636.0	639.3	642.6	643.5
15°	554.4	565.2	589.3	615.2	633.5	641.0	641.0	640.1	640.1	641.8	643.5
17.5°	571.0	582.7	607.7	635.1	646.8	642.6	636.8	634.3	632.6	631.8	634.3
20°	588.5	600.2	625.1	650.9	647.6	630.1	621.8	616.0	611.0	608.5	611.8
22.5°	607.7	618.5	644.3	661.8	636.8	610.2	594.3	585.2	576.9	571.9	575.2
25°	630.1	641.0	665.9	665.1	617.7	580.2	555.2	540.2	531.1	526.1	526.1
27.5°	656.8	665.9	690.1	656.8	591.0	540.2	503.6	489.5	487.0	482.8	482.8
30°	684.2	691.7	712.5	637.6	554.4	487.8	447.8	441.2	442.0	437.9	438.7
32.5°	712.5	720.0	725.9	609.3	506.9	428.7	402.1	397.1	396.2	392.9	389.6
35°	752.5	763.3	727.5	571.0	449.5	379.6	360.4	355.4	350.4	338.8	338.8
37.5°	813.3	824.9	723.4	523.6	390.4	341.3	323.8	317.2	308.8	297.2	293.0
40°	896.5	896.5	714.2	470.3	343.0	310.5	293.8	285.5	276.4	264.7	262.2
42.5°	994.7	971.4	700.1	416.2	308.0	289.7	274.7	265.5	254.7	241.4	239.7
45°	1109.6	1046.3	680.1	367.9	282.2	277.2	268.0	252.2	233.9	219.8	217.3
47.5°	1221.2	1113.8	660.9	333.8	260.5	272.2	264.7	238.1	213.1	193.1	190.6
50°	1343.5	1173.7	638.5	305.5	243.9	268.9	260.5	217.3	189.8	175.6	174.0
52.5°	1465.9	1234.5	614.3	275.5	229.7	262.2	250.6	202.3	189.0	169.8	167.3
55°	1594.9	1305.2	586.0	242.2	213.1	248.9	237.2	201.4	194.8	169.8	164.0
57.5°	1720.6	1383.5	540.2	209.8	194.8	228.9	232.2	196.4	182.3	168.1	161.5
60°	1859.6	1466.7	464.5	182.3	179.0	212.3	225.6	185.6	168.1	163.2	159.8
62.5°	1971.2	1541.6	362.9	163.2	165.7	198.9	217.3	179.0	162.3	158.2	157.3
65°	2019.4	1543.3	260.5	146.5	152.3	186.5	208.9	173.1	157.3	155.7	154.8
67.5°	1968.7	1458.4	183.1	130.7	138.2	174.8	198.1	167.3	152.3	153.2	151.5
70°	1804.7	1279.4	134.0	115.7	124.9	162.3	186.5	159.8	146.5	148.2	145.7
72.5°	1510.0	997.2	107.4	103.2	114.0	149.0	174.8	151.5	137.3	138.2	133.2
75°	1115.4	660.9	89.9	92.4	101.6	136.5	159.8	140.7	127.4	124.0	120.7
77.5°	663.4	339.6	74.1	80.7	90.7	121.5	143.2	127.4	116.5	110.7	108.2
80°	273.9	137.3	60.8	68.3	79.1	108.2	126.5	111.5	104.1	98.2	94.9
82.5°	109.0	67.4	48.3	55.8	66.6	94.1	110.7	98.2	90.7	86.6	77.4
85°	41.6	33.3	32.5	39.1	49.9	72.4	91.6	82.4	76.6	65.8	63.3
87.5°	16.6	15.0	15.0	19.1	28.3	45.8	65.8	57.4	59.9	47.4	48.3
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)