

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: P397874

Luminaire Tested: **ARCH-S-PA1-50-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
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-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5784 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - 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

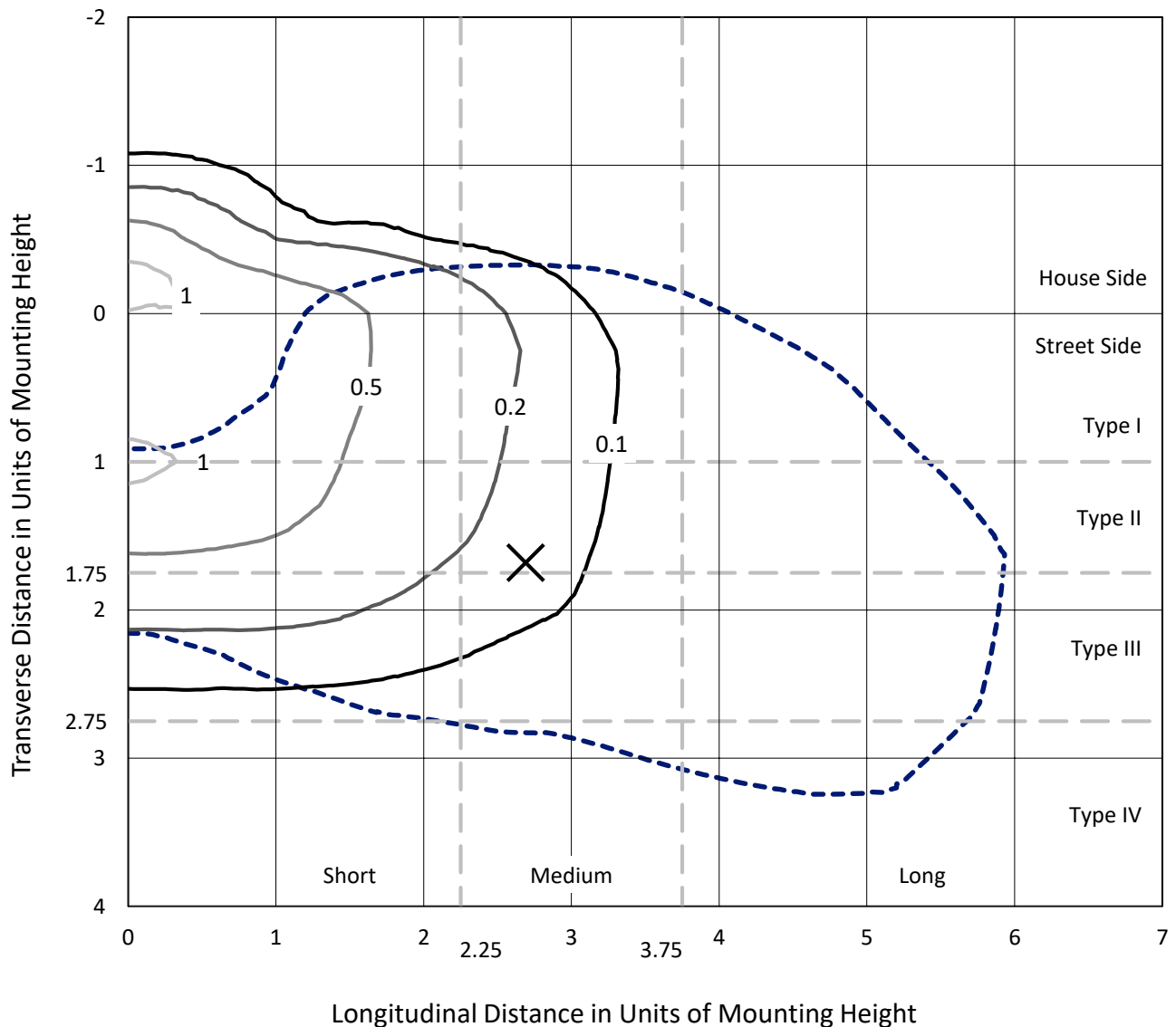


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

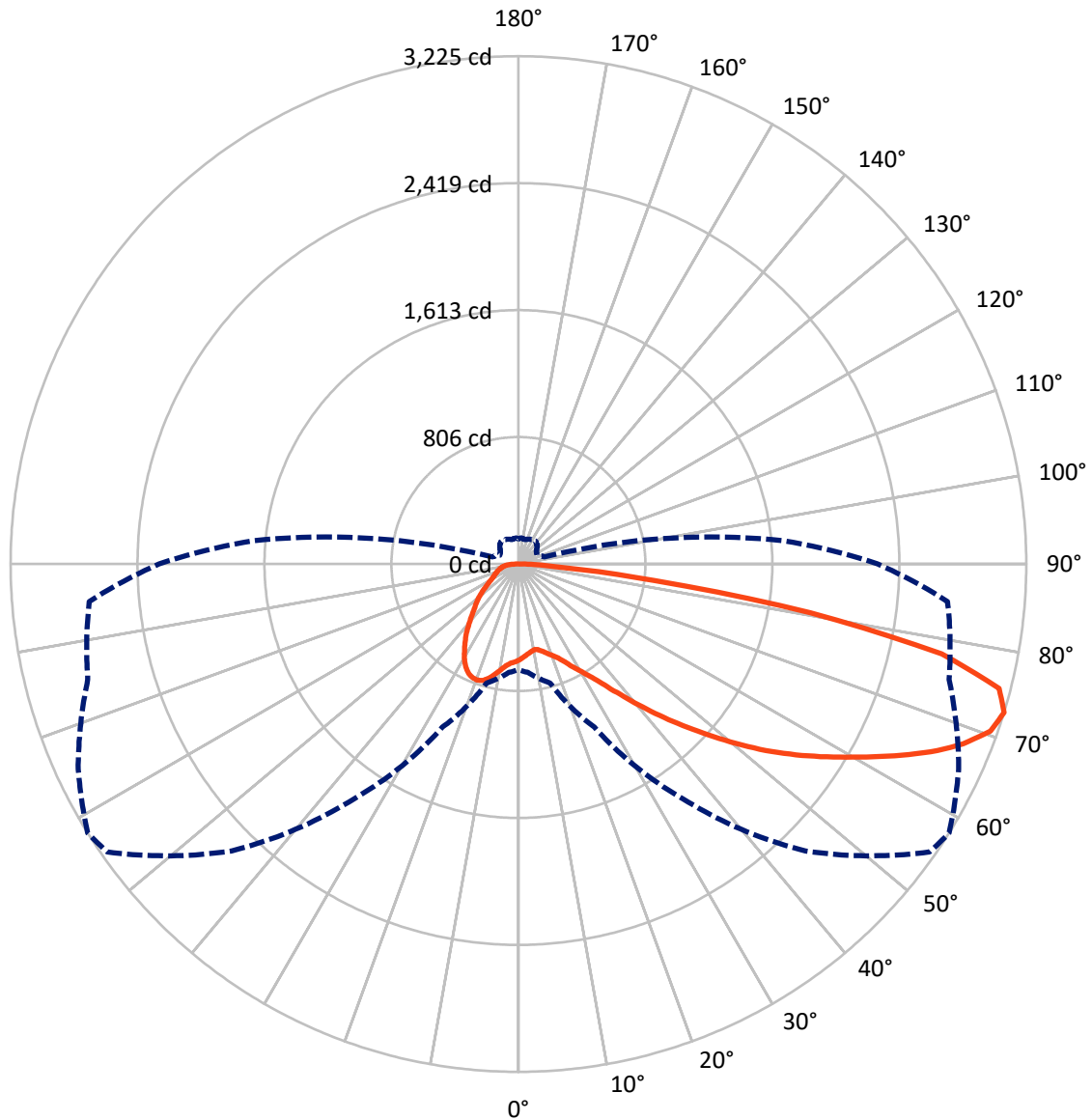


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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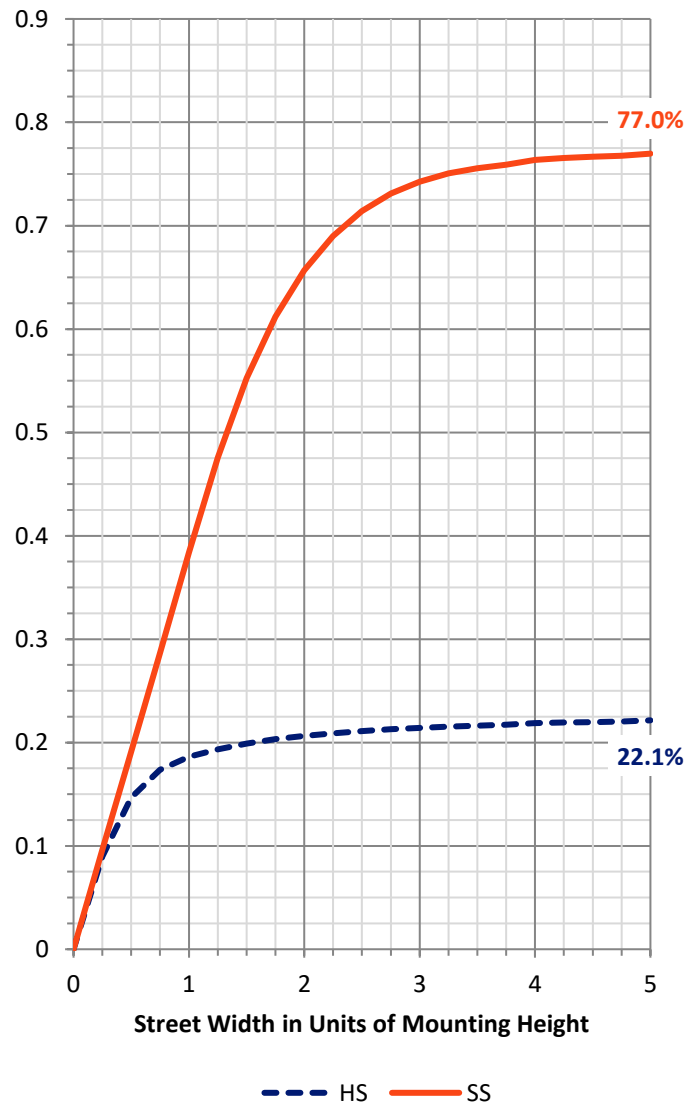
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1311.8	0.0	1311.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4472.3	0.0	4472.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	5784.0	0.0	5784.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	1.0
10°-20°	186.6	3.2
20°-30°	334.3	5.8
30°-40°	502.9	8.7
40°-50°	814.4	14.1
50°-60°	1226.0	21.2
60°-70°	1442.8	24.9
70°-80°	1023.1	17.7
80°-90°	195.0	3.4
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°	5784.0	100.0
0°-180°	5784.0	100.0



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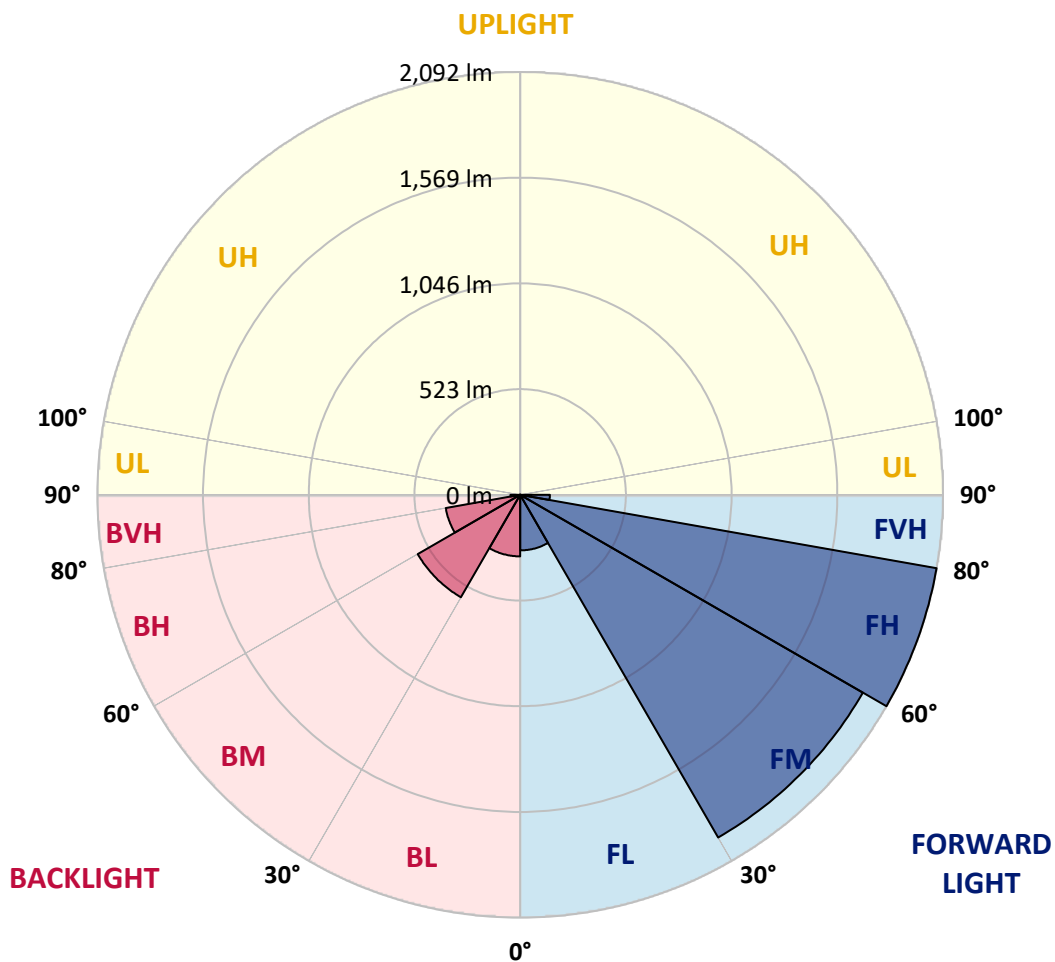
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	275.1	4.8			
FM	(30°-60°)	1958.0	33.9			
FH	(60°-80°)	2092.1	36.2			G2/5000
FVH	(80°-90°)	147.1	2.5			G2/225
BL	(0°-30°)	304.7	5.3	B1/500		
BM	(30°-60°)	585.3	10.1	B1/1000		
BH	(60°-80°)	373.9	6.5	B1/500		G1/500
BVH	(80°-90°)	47.9	0.8			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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1
2.5°	587.2	584.1	584.9	584.9	587.9	589.5	590.2	592.5	594.1	597.9	603.2
5°	559.7	557.4	558.2	558.9	564.3	569.6	574.2	577.3	581.8	587.9	595.6
7.5°	539.8	538.3	539.1	540.6	545.2	551.3	558.9	563.5	570.4	581.8	594.8
10°	525.3	525.3	526.1	529.2	533.7	541.4	547.5	552.8	566.6	587.2	607.0
12.5°	513.9	513.9	516.2	522.3	529.9	537.6	552.1	558.2	576.5	604.7	628.4
15°	513.1	513.9	514.6	520.0	528.4	545.2	566.6	575.7	597.9	631.5	659.0
17.5°	525.3	526.1	523.0	524.6	534.5	558.2	586.4	597.1	625.4	662.0	690.3
20°	562.7	562.7	553.6	545.2	552.1	578.0	610.1	620.8	652.1	692.6	720.8
22.5°	639.1	642.9	621.5	603.2	592.5	607.0	636.1	647.5	682.6	726.2	754.4
25°	731.5	735.3	706.3	680.3	660.5	658.2	677.3	689.5	718.5	763.6	787.2
27.5°	820.8	814.0	787.2	762.8	737.6	717.0	731.5	742.2	775.8	810.1	824.7
30°	891.1	885.7	859.8	842.2	818.5	791.8	783.4	794.9	822.4	854.4	862.1
32.5°	969.0	965.1	939.2	916.3	896.4	871.2	852.9	858.2	873.5	896.4	901.0
35°	1068.2	1076.6	1049.1	1002.6	980.4	956.0	943.0	944.5	956.0	970.5	962.9
37.5°	1172.8	1182.8	1184.3	1111.0	1081.2	1059.1	1045.3	1050.7	1064.4	1074.3	1050.7
40°	1366.8	1356.9	1317.2	1262.9	1217.1	1195.7	1176.7	1175.9	1185.8	1203.4	1160.6
42.5°	1624.1	1614.9	1534.8	1464.5	1392.0	1367.5	1330.1	1314.1	1318.7	1340.8	1281.3
45°	1870.7	1866.9	1802.8	1721.1	1634.0	1586.7	1501.2	1462.2	1458.4	1476.0	1405.0
47.5°	2089.9	2073.1	2026.5	1963.1	1954.0	1830.3	1673.0	1620.3	1602.0	1611.9	1532.5
50°	2324.3	2267.0	2202.9	2163.9	2230.4	2115.1	1846.3	1791.3	1746.3	1753.1	1670.7
52.5°	2448.8	2352.5	2310.5	2322.0	2411.3	2367.1	2034.9	1967.7	1895.2	1905.1	1808.1
55°	2341.9	2341.1	2359.4	2430.4	2554.9	2503.7	2214.3	2138.7	2059.3	2061.6	1966.2
57.5°	2195.3	2225.0	2319.7	2476.2	2732.8	2647.3	2390.7	2310.5	2238.0	2226.6	2145.6
60°	2061.6	2094.5	2231.9	2468.6	2794.7	2778.6	2558.7	2488.5	2429.7	2396.1	2334.2
62.5°	1858.5	1883.0	2077.7	2419.7	2742.7	2873.3	2729.0	2680.9	2636.6	2567.1	2537.3
65°	1619.5	1627.9	1833.3	2258.6	2677.8	2909.9	2898.5	2877.1	2834.4	2732.0	2738.1
67.5°	1360.7	1377.5	1557.7	2001.3	2535.8	2893.2	3029.8	3047.4	2997.0	2843.5	2866.4
70°	1085.0	1105.6	1242.3	1645.5	2294.5	2820.6	3151.2	3179.5	3082.5	2880.2	2890.1
72.5°	671.2	691.0	782.7	1143.1	1818.8	2577.0	3188.7	3225.3	3084.8	2831.3	2735.9
75°	232.1	234.4	306.2	548.2	1079.7	1945.6	3066.5	3152.8	2987.8	2653.4	2380.8
77.5°	106.1	110.0	135.9	226.0	478.8	1049.9	2532.0	2748.1	2693.1	2375.5	1832.6
80°	73.3	74.8	93.9	135.2	276.4	369.6	1598.1	1879.9	1976.1	1839.4	1174.4
82.5°	55.0	56.5	72.5	91.6	199.3	179.4	608.6	873.5	1085.8	1065.9	491.0
85°	52.7	51.9	56.5	61.1	132.9	106.9	197.0	270.3	423.8	362.7	123.7
87.5°	22.9	25.2	58.0	34.4	69.5	49.6	85.5	100.0	129.0	112.2	44.3
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°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1
2.5°	605.5	607.0	611.6	618.5	622.3	629.9	635.3	638.3	640.6	641.4	641.4
5°	600.2	603.2	613.1	624.6	635.3	651.3	665.8	674.2	680.3	682.6	683.4
7.5°	601.7	609.3	623.8	640.6	654.4	675.0	692.6	709.4	723.1	728.4	728.4
10°	616.2	626.9	646.7	668.9	686.4	707.8	726.2	740.7	756.7	765.9	767.4
12.5°	638.3	651.3	677.3	701.7	721.6	738.4	755.2	765.9	773.5	780.4	781.9
15°	669.6	685.7	711.6	736.8	754.4	765.1	769.7	769.7	768.9	769.7	771.2
17.5°	701.0	716.2	742.2	767.4	775.8	769.7	764.3	762.8	762.0	760.5	761.3
20°	731.5	746.0	768.1	787.2	780.4	759.0	752.1	751.3	749.1	747.5	746.0
22.5°	762.0	772.7	791.1	797.9	770.4	739.9	731.5	726.9	723.9	720.0	716.2
25°	797.2	800.2	814.0	803.3	746.0	704.8	692.6	685.7	682.6	678.8	675.8
27.5°	830.0	830.0	832.3	794.9	710.1	658.2	639.9	627.7	626.9	626.1	625.4
30°	859.8	856.0	848.3	769.7	663.5	600.9	573.4	561.2	565.8	569.6	570.4
32.5°	894.9	887.3	865.9	735.3	607.8	536.8	503.2	497.8	503.2	507.8	504.7
35°	949.9	936.1	884.2	695.6	554.3	478.0	445.9	438.3	436.8	436.0	429.9
37.5°	1028.5	1004.9	898.7	652.8	501.7	426.1	402.4	386.4	371.9	356.6	354.3
40°	1124.7	1084.3	908.6	604.0	445.9	382.5	357.3	336.7	312.3	285.6	282.5
42.5°	1230.1	1169.8	913.2	549.8	397.1	346.7	315.4	289.4	261.9	241.3	237.5
45°	1343.9	1262.2	909.4	497.8	357.3	316.1	281.0	252.7	230.6	216.1	213.0
47.5°	1454.6	1368.3	898.7	456.6	326.8	290.2	254.3	228.3	211.5	195.5	191.7
50°	1596.6	1469.9	885.7	424.5	293.2	264.2	237.5	210.0	190.9	183.3	181.7
52.5°	1753.9	1571.4	870.5	384.1	260.4	243.6	226.8	202.3	196.2	181.7	179.4
55°	1924.2	1692.1	867.4	332.9	231.4	229.1	216.1	209.2	210.7	181.7	177.9
57.5°	2103.6	1821.1	874.3	281.8	207.7	216.1	220.7	215.3	213.0	185.5	177.9
60°	2290.7	1945.6	853.7	234.4	189.4	205.4	226.0	212.3	195.5	184.0	178.7
62.5°	2472.4	2050.2	764.3	200.8	175.6	202.3	223.0	200.8	181.7	181.7	179.4
65°	2604.5	2096.8	597.9	176.4	166.5	198.5	217.6	193.2	177.9	183.3	180.2
67.5°	2619.8	2048.6	401.6	157.3	158.8	191.7	205.4	186.3	174.1	187.8	183.3
70°	2525.9	1923.4	245.9	142.8	148.9	179.4	194.7	179.4	168.7	184.0	177.1
72.5°	2282.3	1689.8	173.3	130.6	138.2	168.0	184.8	173.3	161.1	166.5	159.6
75°	1872.3	1309.5	137.4	119.1	127.5	157.3	176.4	164.2	151.9	149.7	145.1
77.5°	1326.3	839.2	110.7	110.0	116.1	144.3	164.9	153.5	141.3	136.7	133.6
80°	762.8	411.6	95.4	99.3	105.4	131.3	151.2	141.3	129.8	122.9	118.4
82.5°	291.7	143.6	84.0	86.3	93.2	117.6	137.4	129.0	117.6	123.7	103.8
85°	94.7	78.6	68.7	71.0	77.9	97.7	121.4	114.5	101.6	90.1	83.2
87.5°	42.0	42.8	36.7	40.5	48.9	64.9	88.6	84.0	74.1	61.8	59.6
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)