

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: P348573

Luminaire Tested: **ARCH-N-PA1-50-830-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5443 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

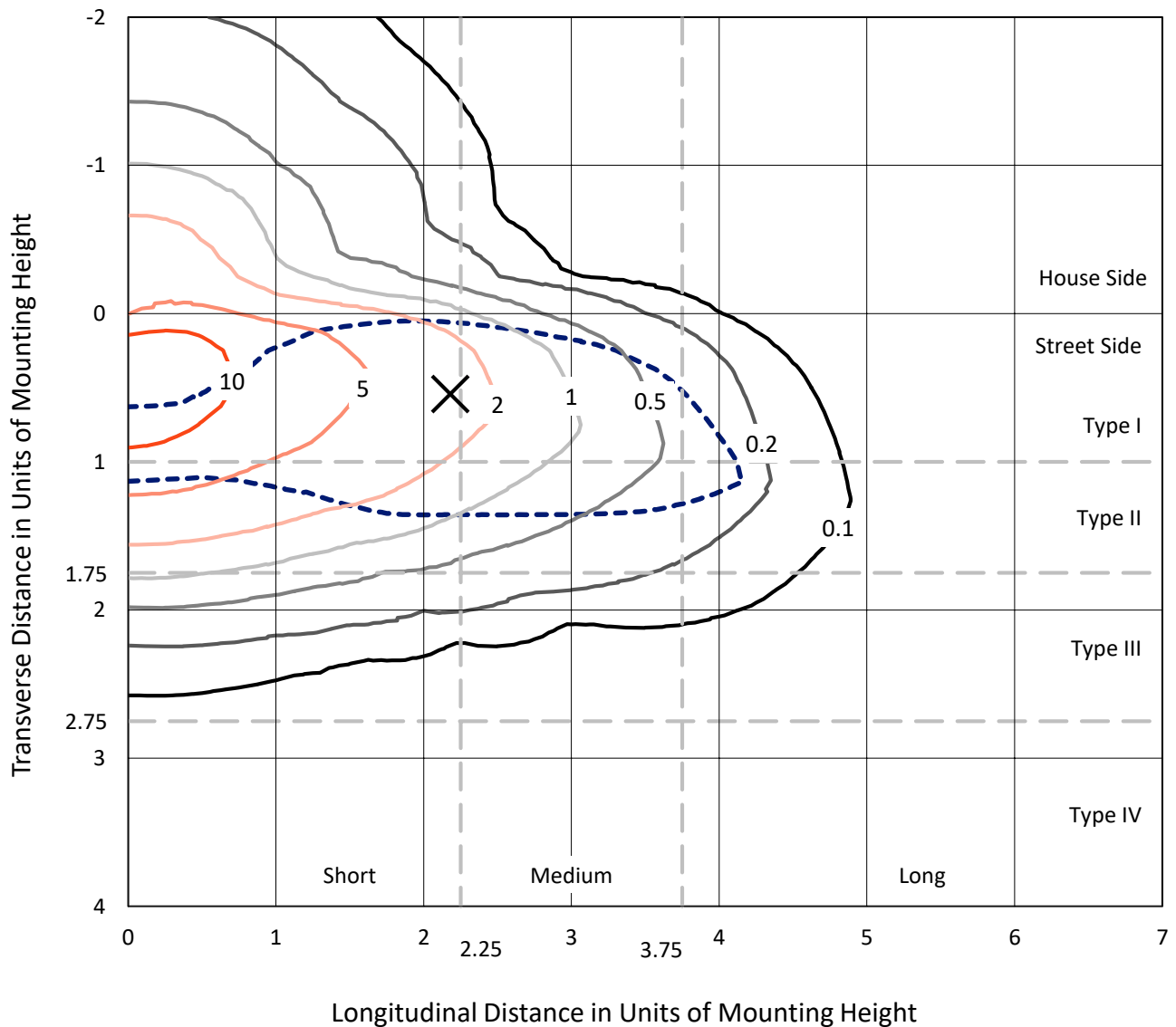
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P348573
 CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

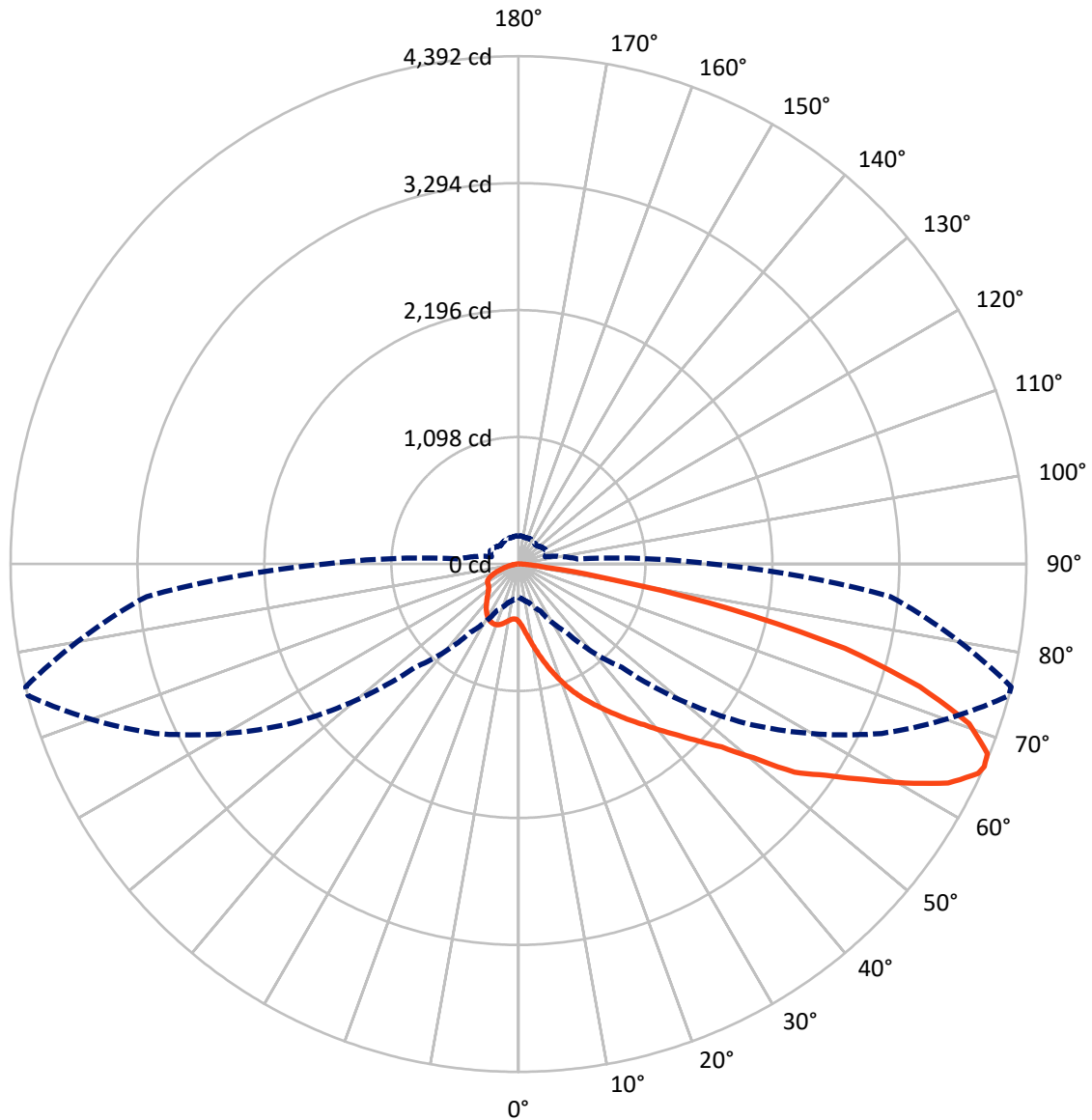


Based on 10 foot mounting height. Maximum calculated value = 13.2 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P348573

CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P348573

CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

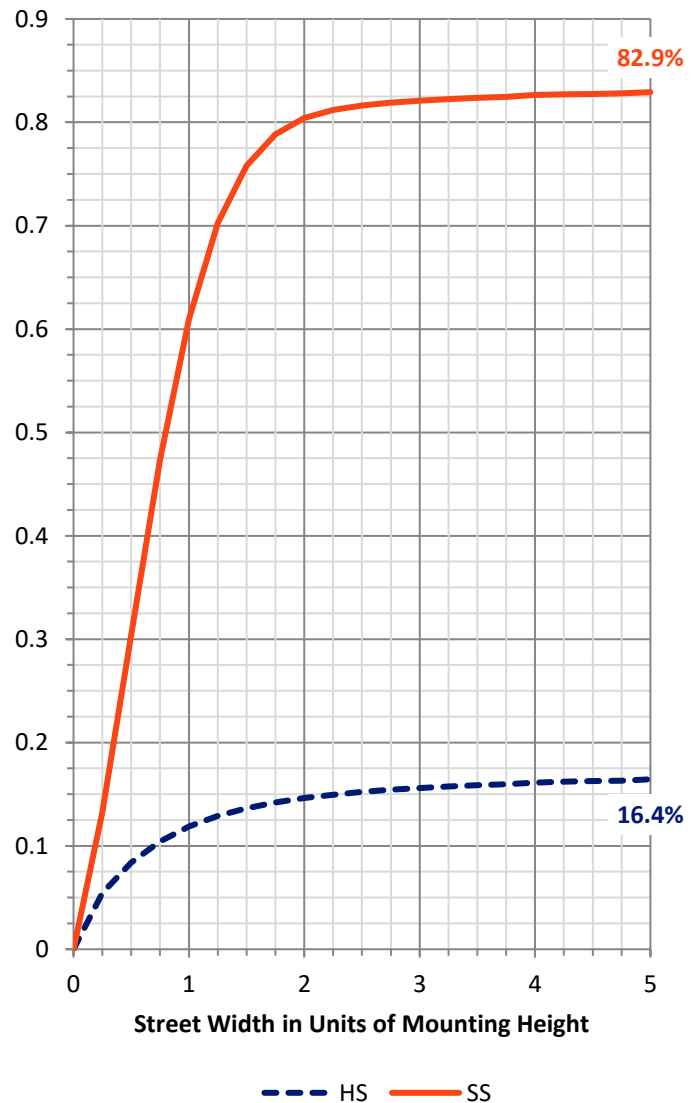
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	915.9	0.0	915.9
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	4527.1	0.0	4527.1
	% Fixture	83.2	0.0	83.2
Total	Lumens	5443.0	0.0	5443.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	1.1
10°-20°	237.4	4.4
20°-30°	461.3	8.5
30°-40°	752.9	13.8
40°-50°	1028.6	18.9
50°-60°	1198.1	22.0
60°-70°	1074.1	19.7
70°-80°	542.8	10.0
80°-90°	87.7	1.6
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°	5443.0	100.0
0°-180°	5443.0	100.0



REPORT NUMBER: P348573

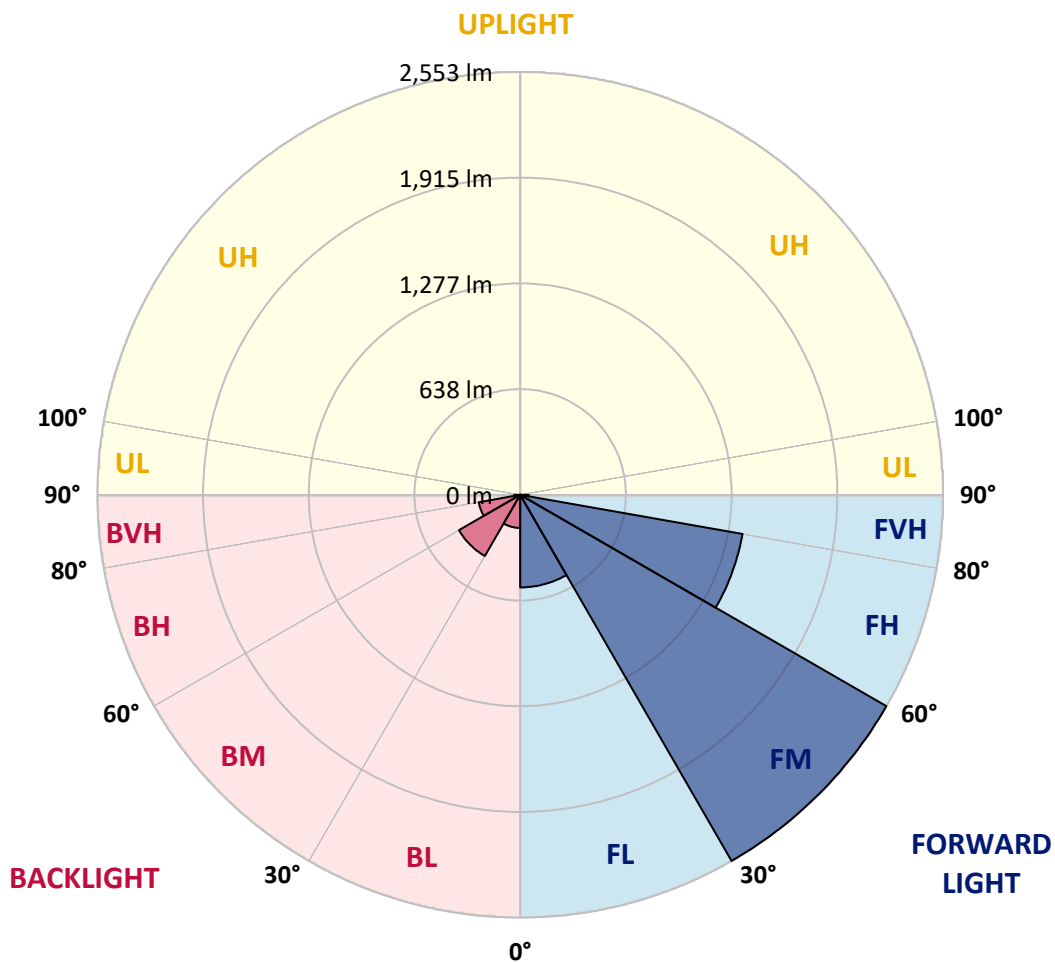
CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	559.0	10.3			
FM (30°-60°)	2553.1	46.9			
FH (60°-80°)	1363.2	25.0			G1/1800
FVH (80°-90°)	51.8	1.0			G1/100
BL (0°-30°)	199.8	3.7	B1/500		
BM (30°-60°)	426.5	7.8	B1/1000		
BH (60°-80°)	253.7	4.7	B1/500		G1/500
BVH (80°-90°)	35.9	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 II Short





REPORT NUMBER: P348573

CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1
2.5°	659.9	649.9	649.0	634.4	631.0	603.1	582.6	561.2	536.8	532.0	512.8
5°	847.6	846.7	833.9	810.1	791.4	743.8	696.6	646.7	592.0	583.2	539.9
7.5°	1016.5	1015.0	1005.2	979.5	952.6	894.0	826.7	750.2	661.5	648.4	576.7
10°	1144.7	1144.2	1140.9	1122.0	1099.1	1042.9	968.6	864.2	742.3	724.4	622.7
12.5°	1243.8	1244.9	1247.1	1240.5	1229.6	1181.7	1105.6	985.1	828.4	810.6	673.9
15°	1310.9	1314.2	1325.6	1335.1	1340.8	1311.4	1237.7	1108.7	924.8	903.6	730.6
17.5°	1344.7	1348.4	1368.1	1396.6	1422.8	1419.9	1361.3	1226.6	1017.4	996.9	791.6
20°	1373.9	1376.6	1398.8	1433.0	1479.4	1499.9	1467.0	1340.1	1118.9	1094.5	856.3
22.5°	1458.5	1462.0	1468.7	1488.1	1529.1	1566.8	1550.9	1447.4	1211.8	1189.1	917.6
25°	1621.8	1626.1	1611.7	1595.2	1603.0	1629.2	1632.2	1545.3	1306.1	1280.4	983.6
27.5°	1818.6	1824.7	1800.2	1757.8	1720.9	1710.7	1707.2	1625.5	1396.0	1366.3	1048.8
30°	2011.4	2021.9	1989.9	1935.1	1867.2	1819.6	1784.3	1704.1	1484.7	1456.3	1110.4
32.5°	2199.7	2195.4	2149.0	2095.4	2016.0	1956.3	1870.9	1788.3	1584.5	1551.8	1171.5
35°	2328.6	2330.1	2287.1	2223.5	2147.7	2101.9	1987.0	1879.3	1686.3	1656.2	1241.0
37.5°	2438.4	2431.6	2382.8	2323.5	2258.2	2238.7	2122.8	1979.4	1796.7	1763.8	1314.9
40°	2475.0	2467.0	2435.1	2392.4	2340.1	2338.4	2272.7	2092.9	1921.4	1888.9	1398.3
42.5°	2452.8	2442.7	2429.5	2417.9	2401.8	2409.2	2413.5	2225.9	2058.5	2022.1	1494.7
45°	2371.0	2355.6	2364.9	2390.2	2425.1	2466.9	2540.6	2373.2	2212.0	2181.6	1608.0
47.5°	2245.1	2231.3	2260.1	2314.2	2409.2	2514.9	2660.9	2535.8	2395.4	2365.0	1769.3
50°	2068.1	2072.2	2113.4	2211.9	2355.4	2537.1	2809.1	2751.1	2661.8	2633.5	1989.4
52.5°	1777.6	1778.4	1894.4	2056.1	2260.1	2525.6	2891.3	3026.2	3025.7	2991.5	2198.9
55°	1507.8	1524.3	1616.1	1831.0	2105.6	2479.8	2948.8	3160.0	3264.6	3224.5	2394.2
57.5°	1244.3	1253.9	1341.0	1556.8	1885.2	2357.7	3007.7	3320.6	3539.9	3514.6	2637.1
60°	944.6	959.4	1049.4	1248.8	1603.2	2140.9	3013.3	3488.2	3869.0	3843.5	2908.1
62.5°	613.1	638.6	722.9	909.7	1262.1	1829.2	2884.7	3597.7	4180.9	4171.9	3148.7
65°	352.4	371.6	430.2	574.3	870.7	1437.8	2578.8	3555.6	4372.9	4367.7	3238.7
66°	287.9	299.9	344.8	448.8	718.4	1262.6	2401.1	3466.7	4391.9	4392.1	3228.4
67.5°	230.2	235.6	255.7	321.3	530.1	1000.8	2083.4	3270.7	4368.3	4374.8	3161.7
70°	190.5	193.3	199.6	215.5	289.4	603.5	1478.8	2761.2	4130.8	4135.8	2901.3
72.5°	170.9	172.6	175.0	177.2	204.2	337.2	903.2	2208.9	3621.8	3628.2	2504.6
75°	154.8	155.8	155.4	155.6	171.3	214.9	466.8	1649.2	2928.5	2915.5	1918.6
77.5°	136.0	136.9	135.1	135.4	151.5	165.2	232.3	1154.5	1976.3	1885.0	1081.0
80°	114.9	115.7	114.9	116.2	131.9	124.7	135.1	649.5	873.8	826.5	384.4
82.5°	86.8	90.0	92.2	97.4	108.7	88.7	90.4	253.0	266.1	253.3	117.9
85°	38.1	46.4	69.5	74.5	81.7	53.2	59.3	103.1	108.3	105.0	42.9
87.5°	10.0	10.9	34.4	43.2	45.3	24.0	30.9	46.9	49.5	46.9	14.2
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: P348573

CATALOG NUMBER: ARCH-N-PA1-50-830-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1	497.1
2.5°	502.6	493.6	477.3	462.9	452.0	444.6	437.2	433.5	431.3	429.1	429.4
5°	518.7	500.4	472.5	452.7	441.6	434.6	430.9	429.4	428.5	426.3	426.3
7.5°	542.9	517.0	478.6	458.3	449.6	444.2	442.0	441.3	440.2	437.6	437.9
10°	573.4	537.2	491.3	471.6	463.6	457.7	454.6	453.5	451.4	448.5	448.8
12.5°	609.2	562.1	508.2	487.5	477.9	469.9	464.7	461.6	458.1	454.2	454.4
15°	648.4	589.3	526.3	501.7	488.6	477.5	469.2	463.8	458.3	453.5	453.3
17.5°	688.1	615.5	540.1	509.4	491.7	477.1	465.8	457.5	450.7	444.8	444.2
20°	731.0	639.2	547.9	508.7	485.8	468.4	453.5	443.1	435.5	429.6	428.7
22.5°	774.6	661.3	549.2	501.1	472.7	451.4	435.7	424.3	416.5	410.4	408.2
25°	814.5	678.5	543.8	486.5	454.4	431.5	416.1	404.5	398.2	391.0	388.8
27.5°	850.9	690.5	533.1	467.9	433.9	411.3	396.9	386.9	380.1	374.6	372.7
30°	883.6	697.0	515.5	445.7	412.8	392.3	380.1	373.3	367.4	360.3	359.0
32.5°	914.7	697.0	493.0	421.5	391.9	375.5	368.3	364.0	357.4	350.5	348.7
35°	945.7	692.8	466.4	396.2	372.7	363.5	363.1	358.1	347.9	338.7	336.3
37.5°	978.4	684.1	436.5	372.5	357.0	358.1	361.3	350.2	335.8	322.6	319.1
40°	1015.4	672.1	405.4	352.0	343.9	355.7	356.3	338.7	310.6	298.6	295.5
42.5°	1058.8	660.0	376.6	333.9	333.5	348.5	346.8	313.9	297.1	291.0	289.4
45°	1115.9	653.2	349.2	316.7	325.4	336.9	330.8	300.3	293.3	289.7	288.3
47.5°	1205.9	656.7	324.1	303.0	317.3	325.2	300.8	294.7	289.7	285.5	284.0
50°	1318.6	654.7	303.8	293.6	308.0	313.0	287.3	287.5	284.9	280.1	277.9
52.5°	1403.4	638.8	290.7	288.3	299.9	291.4	278.8	280.5	279.2	272.2	269.8
55°	1485.3	625.1	284.0	286.2	294.0	264.4	268.9	272.9	271.6	264.8	263.7
57.5°	1587.1	622.5	279.9	286.8	289.0	250.9	259.3	264.6	263.7	260.7	260.2
60°	1711.8	623.3	276.3	287.7	283.5	241.0	250.2	257.0	257.6	257.0	256.7
62.5°	1780.4	603.1	267.0	285.1	273.7	232.3	240.8	250.8	250.9	252.0	251.9
65°	1722.2	542.9	249.8	276.1	257.2	225.1	232.6	243.5	240.8	245.8	245.8
66°	1665.6	508.2	241.3	270.2	250.2	222.3	230.1	239.8	236.3	243.2	243.2
67.5°	1550.2	449.6	226.0	257.6	240.2	218.4	227.1	233.8	228.9	239.1	238.4
70°	1339.1	347.8	195.1	229.1	223.8	212.7	223.0	221.6	214.5	230.1	227.1
72.5°	1129.0	264.2	156.7	191.8	198.8	205.5	217.3	206.0	197.2	208.1	201.6
75°	876.1	198.6	123.8	149.1	168.0	194.2	210.5	188.1	175.4	174.3	170.7
77.5°	473.6	136.4	98.1	113.8	133.4	180.2	205.8	168.9	149.7	145.2	142.5
80°	187.6	88.7	71.3	86.3	93.3	159.8	194.8	146.5	123.4	119.0	114.8
82.5°	77.4	52.5	46.0	57.8	60.8	136.7	174.8	120.1	95.3	131.9	140.1
85°	33.3	28.8	27.3	29.9	34.4	95.9	139.1	91.7	102.9	91.8	73.0
87.5°	10.0	12.2	11.6	11.5	12.6	22.9	74.1	51.0	75.6	28.6	21.4
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)