

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: P397870

Luminaire Tested: **ARCH-S-PA1-50-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
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-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5816 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 54
Input Voltage (V): NR
Input Current (A_{in}): 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

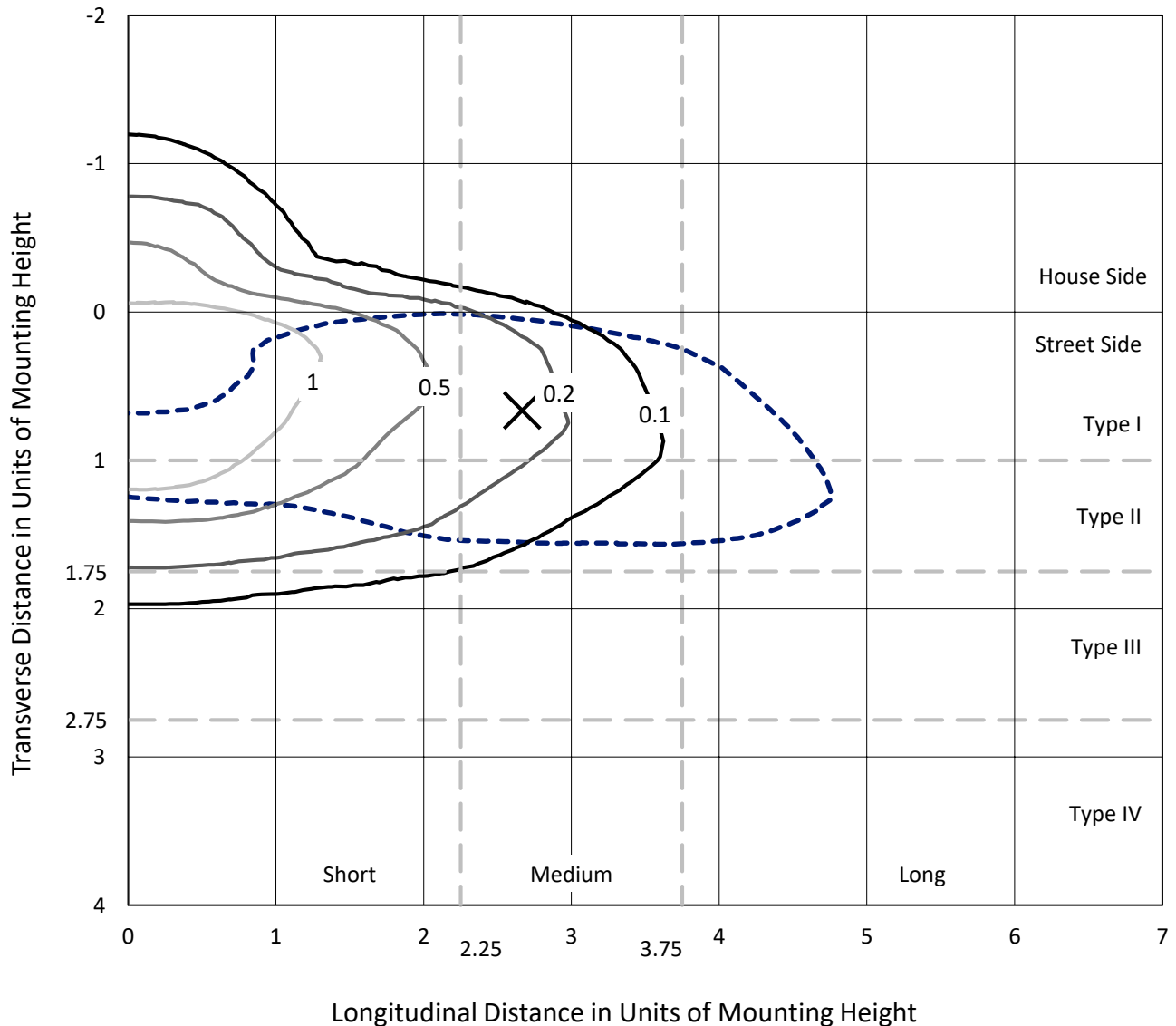


REPORT NUMBER: P397870

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

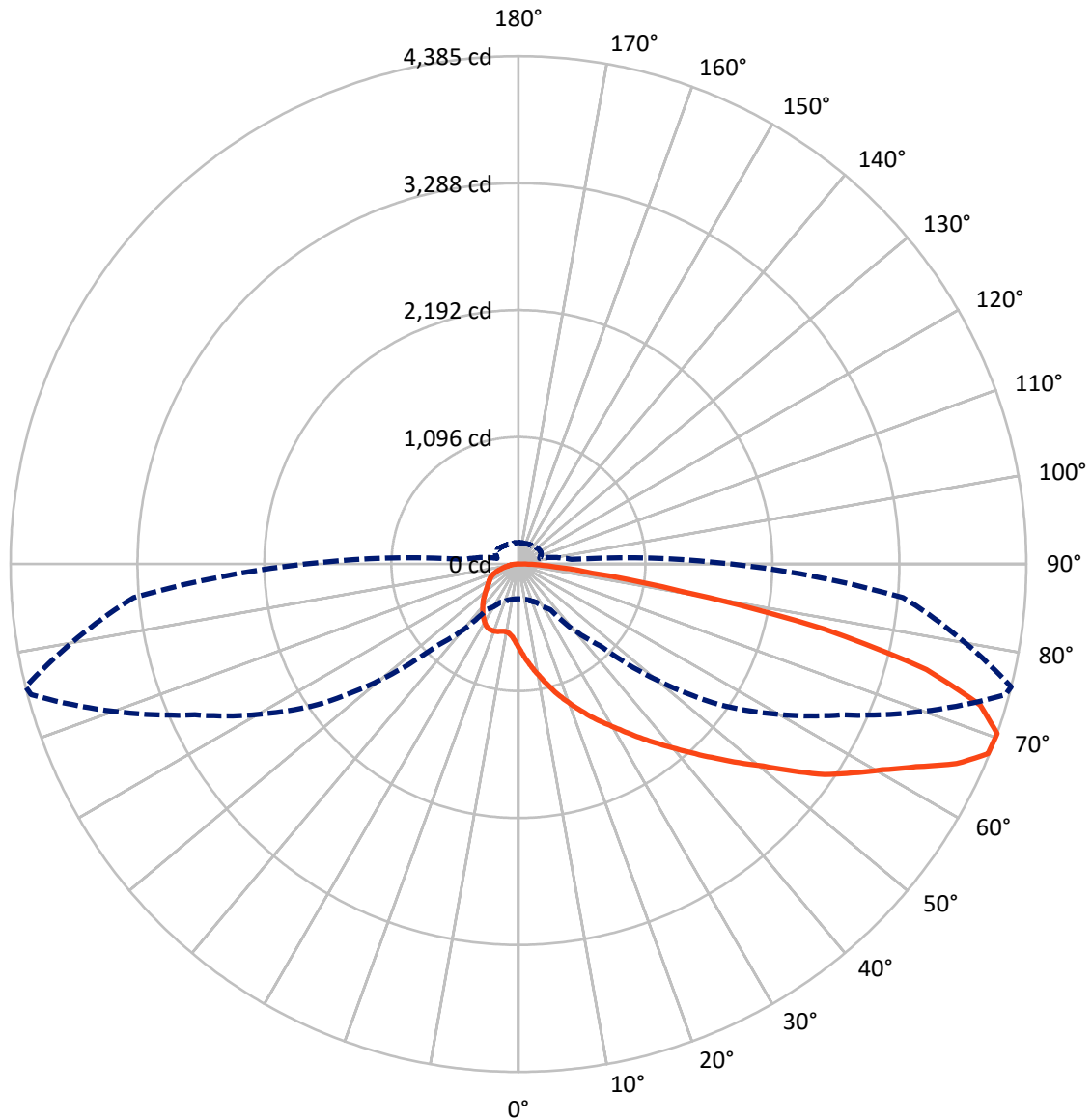


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P397870

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P397870

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2R

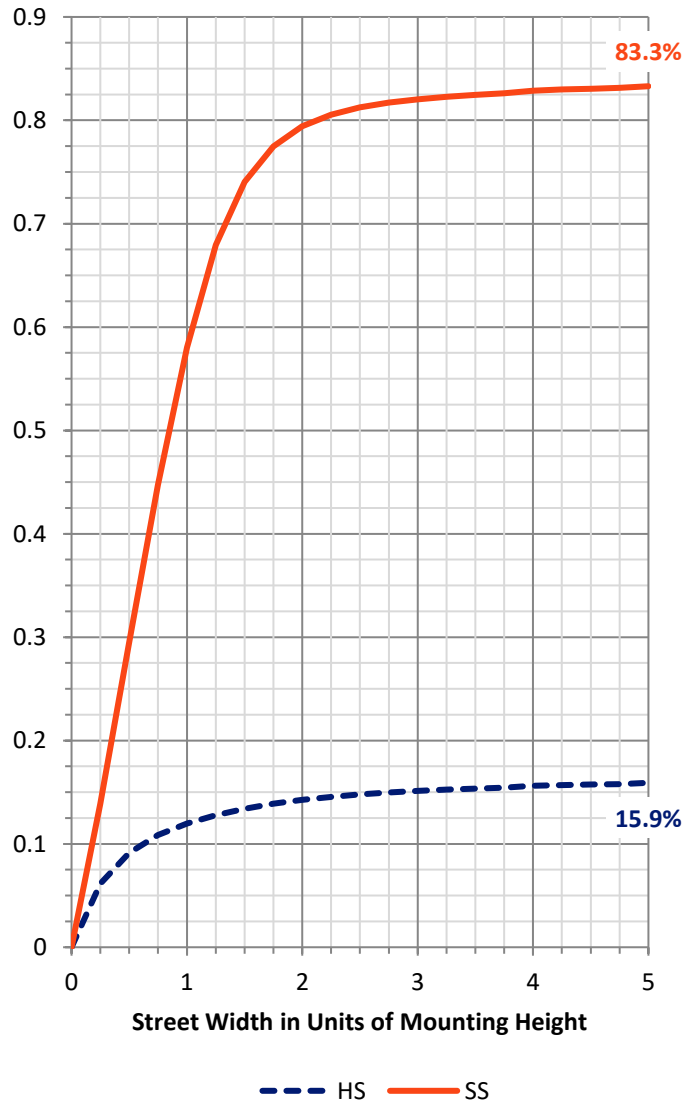
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	949.5	0.0	949.5
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	4866.5	0.0	4866.5
	% Fixture	83.7	0.0	83.7
Total	Lumens	5816.0	0.0	5816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	1.3
10°-20°	256.8	4.4
20°-30°	459.5	7.9
30°-40°	743.3	12.8
40°-50°	1075.4	18.5
50°-60°	1230.8	21.2
60°-70°	1132.2	19.5
70°-80°	700.1	12.0
80°-90°	142.2	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°	5816.0	100.0
0°-180°	5816.0	100.0

Coefficient of Utilization



REPORT NUMBER: P397870

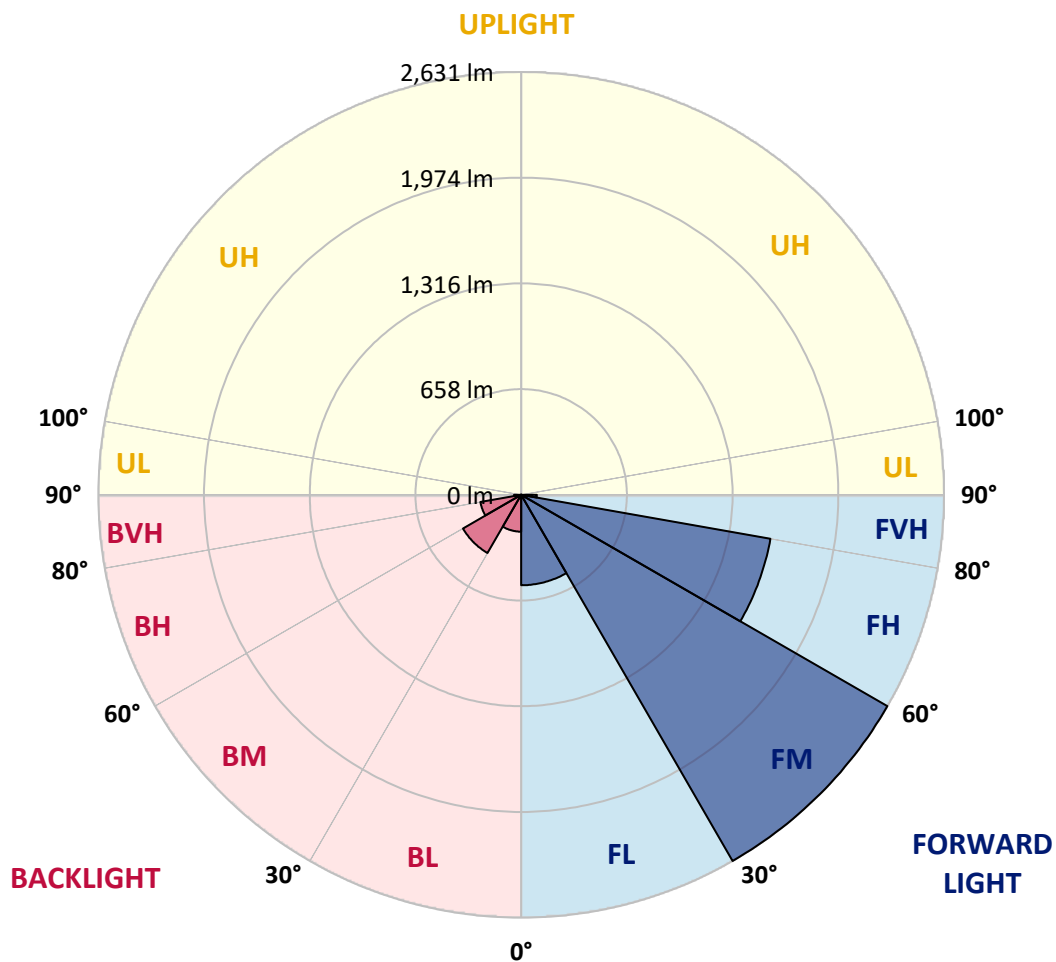
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	562.6	9.7			
FM (30°-60°)	2631.5	45.2			
FH (60°-80°)	1574.8	27.1			G1/1800
FVH (80°-90°)	97.6	1.7			G1/100
BL (0°-30°)	229.3	3.9	B1/500		
BM (30°-60°)	418.1	7.2	B1/1000		
BH (60°-80°)	257.5	4.4	B1/500		G1/500
BVH (80°-90°)	44.6	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-G1

Type II Medium





REPORT NUMBER: P397870

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	926.9	920.0	919.3	908.6	898.6	871.9	852.7	819.1	785.4	784.7	751.0
5°	1071.5	1064.6	1060.8	1047.8	1030.9	995.8	961.3	909.3	852.0	848.2	784.7
7.5°	1169.4	1163.2	1155.6	1150.2	1134.2	1102.8	1060.8	998.8	920.0	912.4	823.7
10°	1235.1	1231.3	1229.8	1226.0	1216.0	1190.8	1150.2	1084.5	988.1	979.7	865.0
12.5°	1263.4	1261.9	1268.8	1279.5	1283.3	1273.4	1234.4	1172.4	1063.1	1053.9	914.7
15°	1230.5	1232.1	1249.7	1286.4	1325.4	1346.8	1323.9	1263.4	1148.0	1134.9	972.8
17.5°	1215.3	1217.5	1229.8	1265.0	1320.0	1386.6	1397.3	1349.9	1229.8	1211.4	1034.0
20°	1242.0	1245.1	1254.3	1281.8	1320.0	1391.2	1447.0	1432.5	1310.1	1291.0	1092.9
22.5°	1310.1	1313.9	1313.1	1330.7	1356.7	1405.7	1474.5	1510.5	1394.2	1372.8	1154.1
25°	1455.4	1452.3	1426.3	1417.9	1424.8	1456.2	1511.2	1585.4	1482.2	1460.7	1218.3
27.5°	1652.7	1648.9	1601.5	1558.6	1520.4	1534.2	1563.2	1645.8	1571.6	1547.2	1279.5
30°	1863.8	1859.2	1804.1	1734.5	1649.7	1629.8	1625.9	1698.6	1661.9	1635.9	1344.5
32.5°	2069.5	2065.7	2006.8	1925.7	1808.7	1749.1	1712.4	1757.5	1764.4	1739.1	1415.6
35°	2256.9	2256.9	2206.4	2110.1	1977.7	1887.5	1827.1	1830.1	1882.1	1853.1	1496.7
37.5°	2423.6	2422.9	2367.8	2273.0	2146.0	2042.8	1967.8	1918.1	1994.6	1969.3	1581.6
40°	2555.9	2550.6	2510.0	2427.4	2299.7	2197.2	2121.5	2021.3	2120.0	2097.1	1671.8
42.5°	2652.3	2649.2	2621.7	2549.8	2428.2	2331.8	2279.8	2151.4	2262.3	2239.3	1777.4
45°	2689.8	2695.9	2695.9	2627.8	2531.5	2443.5	2420.6	2294.4	2416.0	2393.0	1890.6
47.5°	2629.3	2645.4	2678.3	2682.9	2598.0	2538.3	2546.0	2438.2	2574.3	2562.0	2014.5
50°	2440.4	2470.3	2542.2	2672.2	2624.8	2611.0	2653.1	2585.0	2744.1	2740.2	2165.1
52.5°	1953.3	2025.9	2250.0	2483.3	2606.4	2644.6	2759.4	2750.2	2962.8	2968.9	2361.7
55°	1498.2	1525.8	1785.0	2181.9	2494.0	2633.9	2830.5	2911.6	3199.9	3207.5	2542.2
57.5°	1211.4	1229.8	1371.3	1785.0	2237.8	2575.8	2886.3	3005.6	3381.9	3401.8	2702.8
60°	959.8	986.6	1081.4	1365.9	1879.1	2435.9	2925.3	3110.4	3577.7	3607.5	2894.7
62.5°	713.5	726.6	816.0	1011.8	1487.5	2184.2	2904.7	3224.4	3817.8	3853.8	3125.7
65°	507.8	519.3	582.8	719.7	1099.8	1843.9	2784.6	3309.2	4119.2	4155.9	3358.2
67.5°	380.1	384.7	420.6	503.2	741.1	1432.5	2541.4	3294.7	4339.4	4372.3	3451.5
70°	300.6	302.1	319.7	364.0	481.8	997.3	2115.4	3081.3	4355.5	4384.5	3333.7
72.5°	249.3	248.6	258.5	279.9	335.7	631.0	1567.1	2685.2	4149.0	4168.9	3004.9
75°	205.7	207.3	214.1	226.4	256.2	416.0	1015.6	2142.2	3660.3	3638.9	2521.5
77.5°	172.8	172.1	175.1	185.8	207.3	299.0	595.0	1547.9	2712.7	2702.0	1655.0
80°	139.2	140.7	145.3	154.5	174.4	227.9	351.8	965.9	1455.4	1416.4	790.8
82.5°	93.3	107.8	117.0	127.7	150.7	168.3	223.3	491.0	650.8	640.9	358.7
85°	44.4	58.9	87.2	99.4	122.4	105.5	151.4	234.0	325.8	322.0	129.2
87.5°	9.2	9.2	46.7	55.8	75.7	45.1	84.1	101.7	157.5	147.6	52.8
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: P397870

CATALOG NUMBER: ARCH-S-PA1-50-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	731.1	710.5	669.2	636.3	602.7	583.5	559.8	548.4	546.1	539.9	544.5
5°	744.1	703.6	625.6	574.4	539.9	523.1	514.7	511.6	510.9	509.4	509.4
7.5°	761.7	699.8	598.1	546.1	523.9	518.5	520.8	525.4	526.2	527.7	526.9
10°	783.1	700.5	582.8	539.2	528.5	529.2	536.9	543.0	546.1	548.4	547.6
12.5°	813.0	709.7	580.5	543.8	539.2	542.2	549.9	556.0	559.1	559.8	559.8
15°	852.0	728.8	585.8	553.7	549.9	552.2	556.8	559.1	559.8	559.1	559.1
17.5°	894.8	751.8	593.5	559.8	553.7	551.4	549.9	547.6	543.0	539.9	539.9
20°	936.1	772.4	597.3	559.1	548.4	539.2	530.0	518.5	510.9	504.8	504.8
22.5°	977.4	791.6	597.3	550.6	533.8	516.2	497.1	478.8	467.3	459.6	459.6
25°	1021.0	809.9	592.7	536.1	510.9	485.6	459.6	436.7	425.2	417.6	416.0
27.5°	1057.7	820.6	580.5	515.5	482.6	450.5	420.6	396.9	388.5	381.6	381.6
30°	1096.7	827.5	557.5	488.7	450.5	413.8	383.2	364.0	354.9	344.9	344.2
32.5°	1140.3	832.1	531.5	460.4	417.6	378.6	352.6	337.3	317.4	306.7	305.2
35°	1190.8	838.2	504.0	428.3	384.7	349.5	334.2	309.0	289.9	280.7	279.9
37.5°	1244.3	842.8	474.2	400.0	354.9	330.4	315.1	285.3	268.4	254.7	253.1
40°	1300.9	842.8	443.6	372.5	331.2	322.0	292.9	266.1	237.8	231.0	229.4
42.5°	1363.6	841.3	413.0	345.7	309.0	302.9	279.9	251.6	237.1	231.0	229.4
45°	1430.2	835.9	383.9	315.1	286.0	273.8	256.2	248.6	242.4	242.4	242.4
47.5°	1505.9	831.3	351.0	287.6	269.2	255.4	242.4	237.8	237.1	239.4	241.7
50°	1603.0	829.8	323.5	267.7	256.2	240.1	238.6	234.8	235.6	235.6	235.6
52.5°	1720.8	816.0	297.5	253.1	243.2	224.1	228.7	232.5	234.0	233.3	232.5
55°	1807.2	791.6	275.3	243.2	234.0	218.0	224.1	230.2	231.7	229.4	229.4
57.5°	1885.2	757.1	257.7	235.6	227.9	214.1	221.0	227.1	225.6	224.8	224.1
60°	1974.7	724.3	244.0	231.7	221.8	212.6	218.7	222.6	220.3	218.7	218.0
62.5°	2071.8	692.1	234.0	231.7	217.2	211.8	216.4	218.0	213.4	211.8	211.8
65°	2116.9	641.7	223.3	231.7	214.9	210.3	211.8	210.3	205.7	205.7	205.0
67.5°	2042.8	558.3	209.6	228.7	218.0	208.0	205.0	202.7	197.3	197.3	195.8
70°	1837.8	458.9	189.7	218.7	218.7	207.3	195.8	190.4	184.3	186.6	183.5
72.5°	1570.1	364.0	165.2	201.9	214.1	206.5	185.8	177.4	172.1	174.4	169.8
75°	1271.8	282.2	136.1	175.1	202.7	202.7	175.9	164.4	158.3	158.3	153.0
77.5°	810.7	208.8	110.9	145.3	182.0	197.3	167.5	149.9	140.7	138.4	134.6
80°	401.5	146.8	91.0	115.5	155.3	185.1	161.4	133.1	120.1	115.5	108.6
82.5°	213.4	101.7	72.7	90.2	123.9	166.7	153.7	114.7	98.7	91.8	84.1
85°	95.6	62.7	58.1	68.8	94.1	136.9	138.4	94.1	75.7	90.2	66.5
87.5°	35.2	28.3	28.3	35.2	54.3	57.4	97.9	60.4	48.2	32.9	26.0
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)