

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: P397780

Luminaire Tested: **ARCH-S-PA1-40-750-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397780
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-PA1-40-750-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6136 lumens
Efficiency: N/A
Efficacy: 153.4 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 - G2

Input Watts (W): 40
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

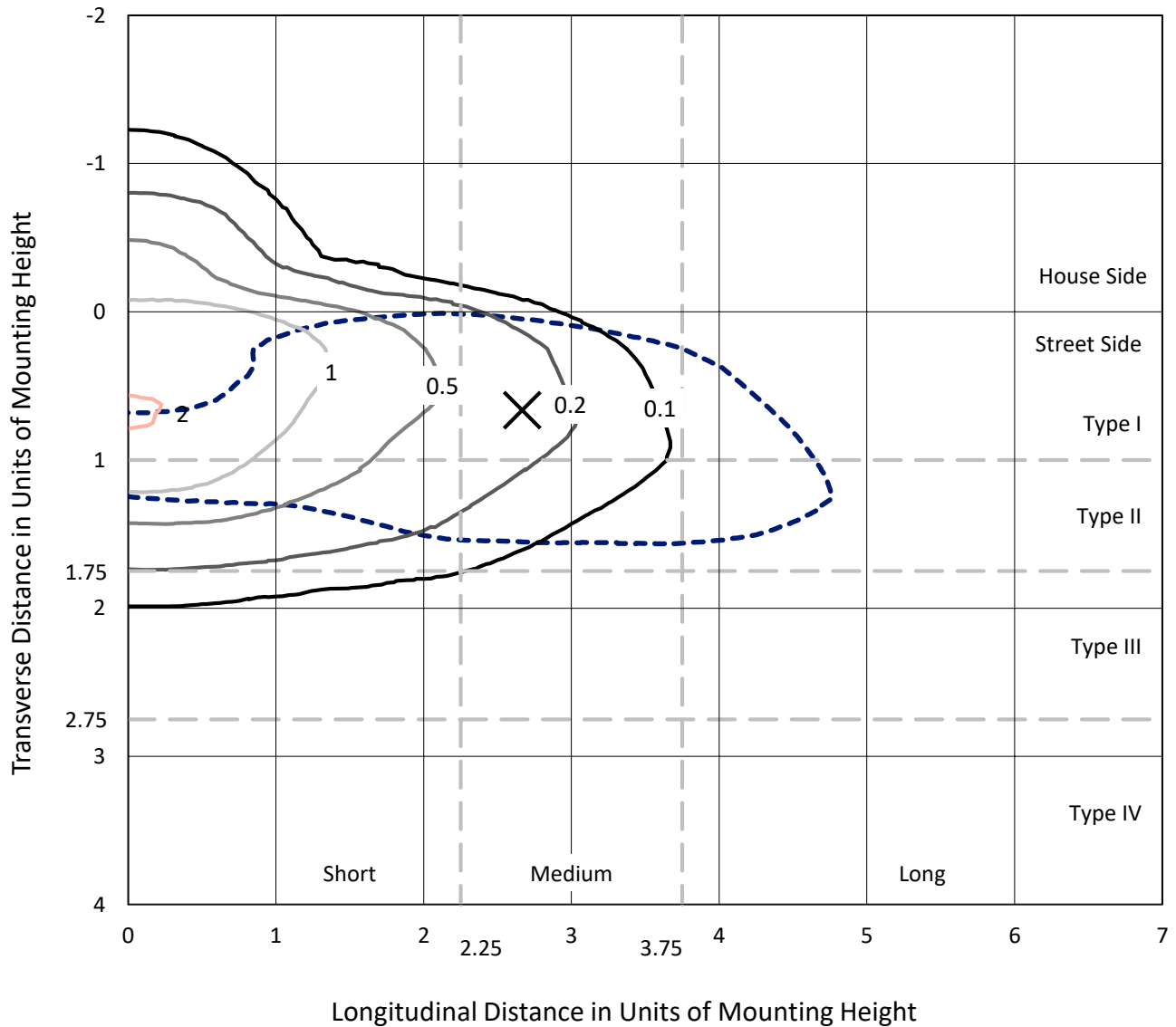


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

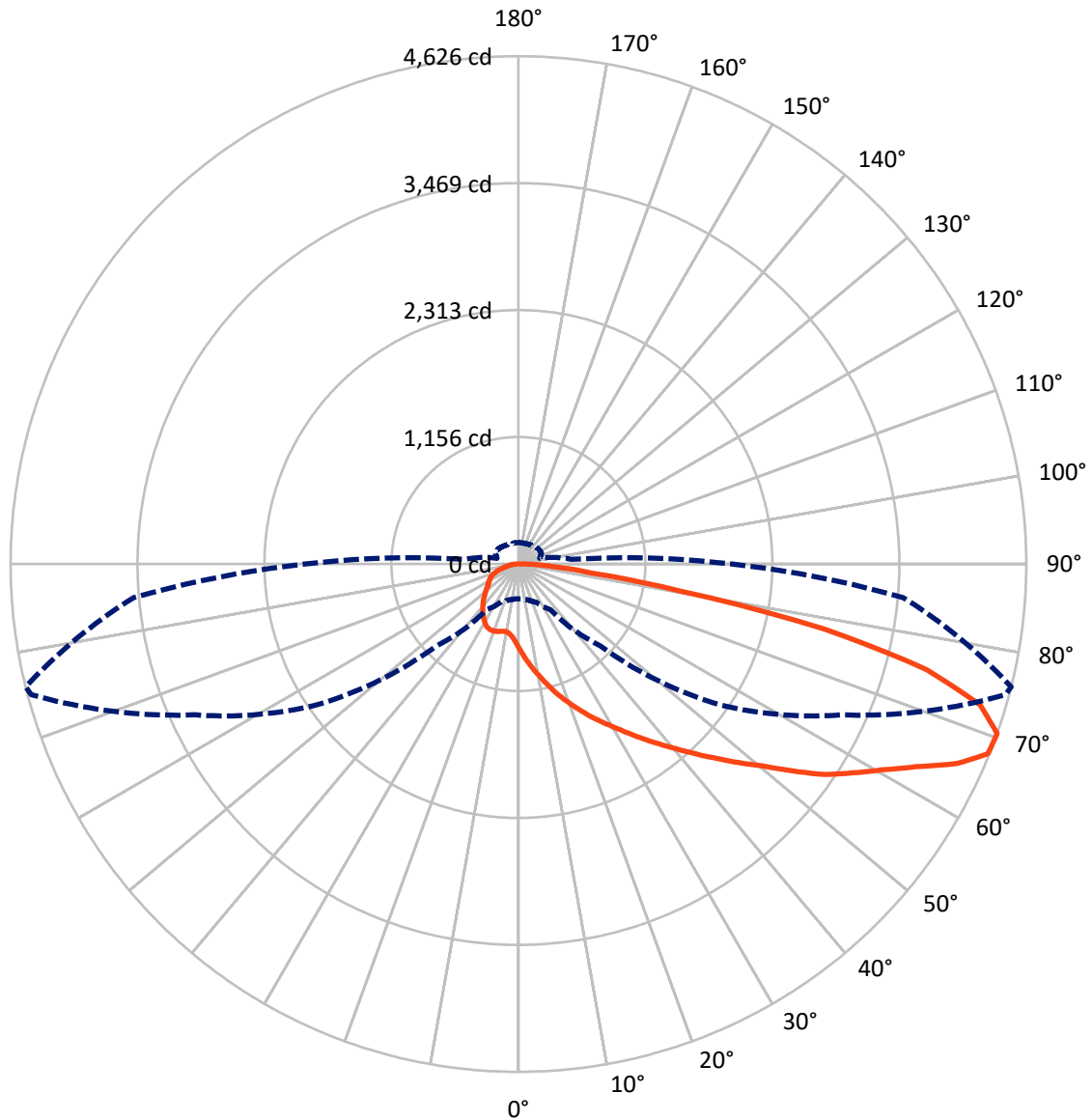


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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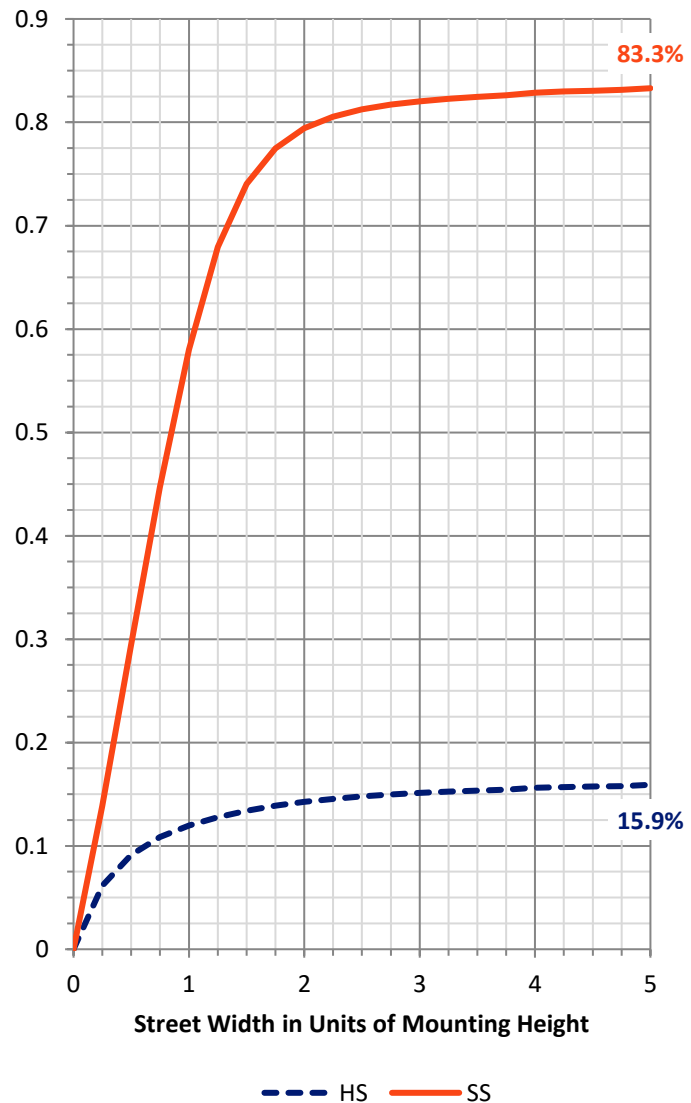
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1001.8	0.0	1001.8
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	5134.2	0.0	5134.2
	% Fixture	83.7	0.0	83.7
Total	Lumens	6136.0	0.0	6136.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	1.3
10°-20°	271.0	4.4
20°-30°	484.8	7.9
30°-40°	784.2	12.8
40°-50°	1134.5	18.5
50°-60°	1298.5	21.2
60°-70°	1194.5	19.5
70°-80°	738.7	12.0
80°-90°	150.0	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°	6136.0	100.0
0°-180°	6136.0	100.0

Coefficient of Utilization



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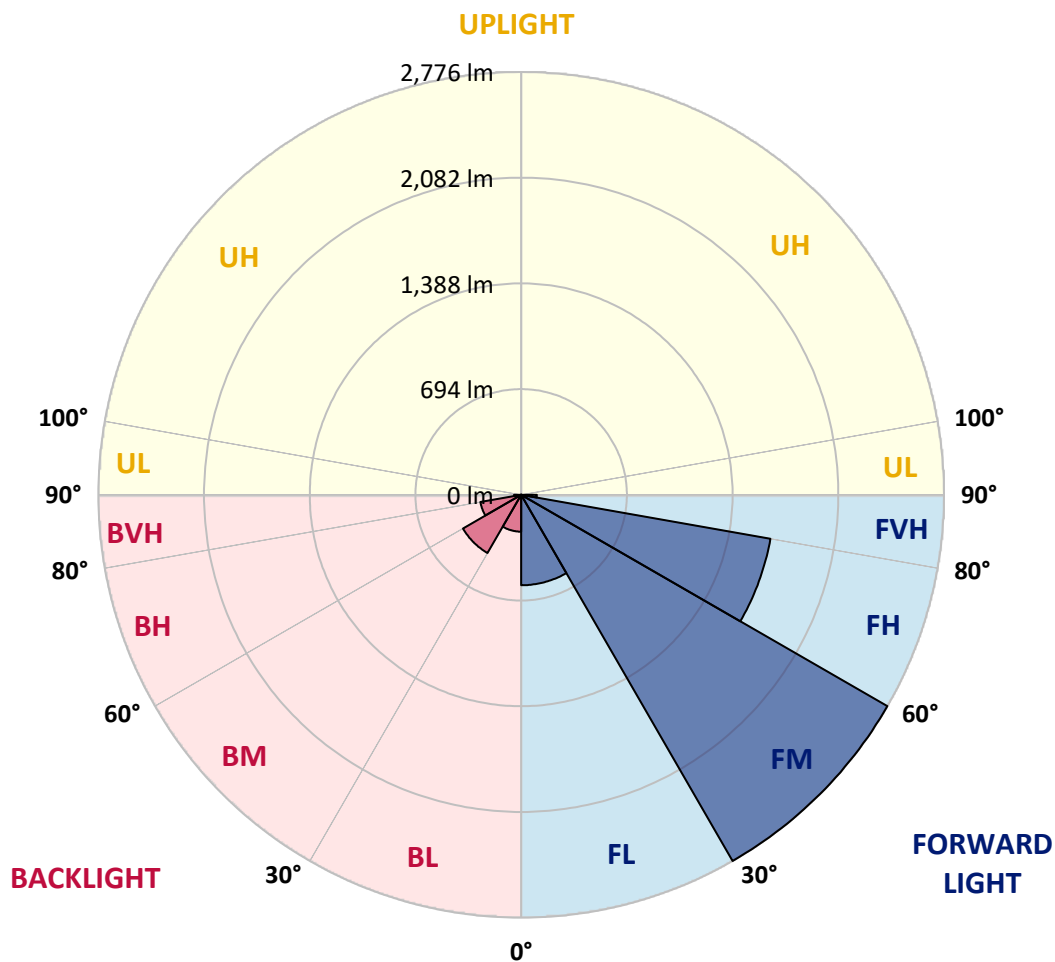
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	593.6	9.7			
FM (30°-60°)	2776.2	45.2			
FH (60°-80°)	1661.5	27.1			G1/1800
FVH (80°-90°)	103.0	1.7			G2/225
BL (0°-30°)	242.0	3.9	B1/500		
BM (30°-60°)	441.1	7.2	B1/1000		
BH (60°-80°)	271.7	4.4	B1/500		G1/500
BVH (80°-90°)	47.0	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3
2.5°	977.9	970.7	969.9	958.6	948.1	919.8	899.7	864.2	828.7	827.8	792.3
5°	1130.4	1123.2	1119.1	1105.4	1087.7	1050.5	1014.2	959.4	898.9	894.8	827.8
7.5°	1233.7	1227.2	1219.2	1213.5	1196.6	1163.5	1119.1	1053.8	970.7	962.6	869.0
10°	1303.1	1299.1	1297.4	1293.4	1282.9	1256.3	1213.5	1144.1	1042.5	1033.6	912.6
12.5°	1332.9	1331.3	1338.6	1349.9	1353.9	1343.4	1302.3	1236.9	1121.5	1111.9	965.0
15°	1298.3	1299.9	1318.4	1357.2	1398.3	1420.9	1396.7	1332.9	1211.1	1197.4	1026.3
17.5°	1282.1	1284.5	1297.4	1334.6	1392.7	1462.9	1474.2	1424.1	1297.4	1278.1	1090.9
20°	1310.4	1313.6	1323.3	1352.3	1392.7	1467.7	1526.6	1511.3	1382.2	1362.0	1153.0
22.5°	1382.2	1386.2	1385.4	1404.0	1431.4	1483.0	1555.6	1593.6	1470.9	1448.3	1217.6
25°	1535.5	1532.2	1504.8	1495.9	1503.2	1536.3	1594.4	1672.6	1563.7	1541.1	1285.3
27.5°	1743.6	1739.6	1689.6	1644.4	1604.1	1618.6	1649.2	1736.4	1658.1	1632.3	1349.9
30°	1966.3	1961.5	1903.4	1830.0	1740.4	1719.4	1715.4	1792.1	1753.3	1725.9	1418.5
32.5°	2183.4	2179.4	2117.2	2031.7	1908.2	1845.3	1806.6	1854.2	1861.4	1834.8	1493.5
35°	2381.1	2381.1	2327.8	2226.2	2086.6	1991.4	1927.6	1930.8	1985.7	1955.0	1579.0
37.5°	2557.0	2556.2	2498.1	2398.0	2264.1	2155.1	2076.1	2023.6	2104.3	2077.7	1668.6
40°	2696.6	2690.9	2648.1	2561.0	2426.3	2318.1	2238.3	2132.6	2236.6	2212.4	1763.8
42.5°	2798.2	2795.0	2765.9	2690.1	2561.8	2460.1	2405.3	2269.7	2386.7	2362.5	1875.2
45°	2837.8	2844.2	2844.2	2772.4	2670.7	2577.9	2553.7	2420.6	2548.9	2524.7	1994.6
47.5°	2774.0	2791.0	2825.7	2830.5	2740.9	2678.0	2686.1	2572.3	2715.9	2703.0	2125.3
50°	2574.7	2606.2	2682.0	2819.2	2769.2	2754.7	2799.0	2727.2	2895.0	2891.0	2284.2
52.5°	2060.7	2137.4	2373.8	2619.9	2749.8	2790.2	2911.2	2901.5	3125.8	3132.3	2491.6
55°	1580.7	1609.7	1883.2	2302.0	2631.2	2778.9	2986.2	3071.8	3375.9	3384.0	2682.0
57.5°	1278.1	1297.4	1446.7	1883.2	2360.9	2717.5	3045.1	3171.0	3568.0	3589.0	2851.5
60°	1012.6	1040.9	1140.9	1441.1	1982.5	2569.9	3086.3	3281.5	3774.5	3806.0	3054.0
62.5°	752.8	766.5	860.9	1067.5	1569.4	2304.4	3064.5	3401.8	4027.9	4065.8	3297.7
65°	535.8	547.9	614.8	759.3	1160.3	1945.4	2937.8	3491.3	4345.8	4384.5	3543.0
67.5°	401.0	405.9	443.8	530.9	781.9	1511.3	2681.2	3476.0	4578.2	4612.9	3641.4
70°	317.1	318.7	337.3	384.1	508.3	1052.2	2231.8	3250.9	4595.1	4625.8	3517.1
72.5°	263.0	262.2	272.7	295.3	354.2	665.7	1653.3	2832.9	4377.3	4398.2	3170.2
75°	217.0	218.7	225.9	238.8	270.3	438.9	1071.5	2260.0	3861.7	3839.1	2660.2
77.5°	182.4	181.5	184.8	196.1	218.7	315.5	627.7	1633.1	2862.0	2850.7	1746.1
80°	146.9	148.5	153.3	163.0	184.0	240.4	371.2	1019.1	1535.5	1494.3	834.3
82.5°	98.4	113.8	123.5	134.7	159.0	177.5	235.6	518.0	686.6	676.2	378.4
85°	46.8	62.1	92.0	104.9	129.1	111.3	159.8	246.9	343.7	339.7	136.4
87.5°	9.7	9.7	49.2	58.9	79.9	47.6	88.8	107.3	166.2	155.7	55.7
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°	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3	767.3
2.5°	771.4	749.6	706.0	671.3	635.8	615.6	590.6	578.5	576.1	569.6	574.5
5°	785.1	742.3	660.0	606.0	569.6	551.9	543.0	539.8	539.0	537.4	537.4
7.5°	803.6	738.3	631.0	576.1	552.7	547.1	549.5	554.3	555.1	556.7	555.9
10°	826.2	739.1	614.8	568.8	557.5	558.4	566.4	572.9	576.1	578.5	577.7
12.5°	857.7	748.8	612.4	573.7	568.8	572.1	580.1	586.6	589.8	590.6	590.6
15°	898.9	768.9	618.1	584.2	580.1	582.6	587.4	589.8	590.6	589.8	589.8
17.5°	944.0	793.2	626.1	590.6	584.2	581.8	580.1	577.7	572.9	569.6	569.6
20°	987.6	814.9	630.2	589.8	578.5	568.8	559.2	547.1	539.0	532.5	532.5
22.5°	1031.2	835.1	630.2	580.9	563.2	544.6	524.5	505.1	493.0	484.9	484.9
25°	1077.2	854.5	625.3	565.6	539.0	512.4	484.9	460.7	448.6	440.6	438.9
27.5°	1115.9	865.8	612.4	543.8	509.1	475.2	443.8	418.8	409.9	402.6	402.6
30°	1157.1	873.0	588.2	515.6	475.2	436.5	404.2	384.1	374.4	363.9	363.1
32.5°	1203.0	877.9	560.8	485.7	440.6	399.4	372.0	355.8	334.9	323.6	321.9
35°	1256.3	884.3	531.7	451.8	405.9	368.7	352.6	326.0	305.8	296.1	295.3
37.5°	1312.8	889.2	500.3	422.0	374.4	348.6	332.4	301.0	283.2	268.7	267.1
40°	1372.5	889.2	468.0	392.9	349.4	339.7	309.0	280.8	250.9	243.7	242.1
42.5°	1438.6	887.6	435.7	364.7	326.0	319.5	295.3	265.5	250.1	243.7	242.1
45°	1508.8	881.9	405.0	332.4	301.8	288.9	270.3	262.2	255.8	255.8	255.8
47.5°	1588.7	877.1	370.4	303.4	284.0	269.5	255.8	250.9	250.1	252.6	255.0
50°	1691.2	875.5	341.3	282.4	270.3	253.4	251.7	247.7	248.5	248.5	248.5
52.5°	1815.5	860.9	313.9	267.1	256.6	236.4	241.3	245.3	246.9	246.1	245.3
55°	1906.6	835.1	290.5	256.6	246.9	230.0	236.4	242.9	244.5	242.1	242.1
57.5°	1988.9	798.8	271.9	248.5	240.4	225.9	233.2	239.6	238.0	237.2	236.4
60°	2083.3	764.1	257.4	244.5	234.0	224.3	230.8	234.8	232.4	230.8	230.0
62.5°	2185.8	730.2	246.9	244.5	229.2	223.5	228.3	230.0	225.1	223.5	223.5
65°	2233.4	677.0	235.6	244.5	226.7	221.9	223.5	221.9	217.0	217.0	216.2
67.5°	2155.1	589.0	221.1	241.3	230.0	219.5	216.2	213.8	208.2	208.2	206.6
70°	1938.9	484.1	200.1	230.8	230.8	218.7	206.6	200.9	194.5	196.9	193.6
72.5°	1656.5	384.1	174.3	213.0	225.9	217.9	196.1	187.2	181.5	184.0	179.1
75°	1341.8	297.7	143.6	184.8	213.8	213.8	185.6	173.5	167.0	167.0	161.4
77.5°	855.3	220.3	117.0	153.3	192.0	208.2	176.7	158.1	148.5	146.0	142.0
80°	423.6	154.9	96.0	121.8	163.8	195.3	170.2	140.4	126.7	121.8	114.6
82.5°	225.1	107.3	76.7	95.2	130.7	175.9	162.2	121.0	104.1	96.8	88.8
85°	100.9	66.2	61.3	72.6	99.2	144.4	146.0	99.2	79.9	95.2	70.2
87.5°	37.1	29.9	29.9	37.1	57.3	60.5	103.3	63.7	50.8	34.7	27.4
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)