

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: P836099

Luminaire Tested: **ARCH3-140-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13889 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 142.5
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: 24 FT

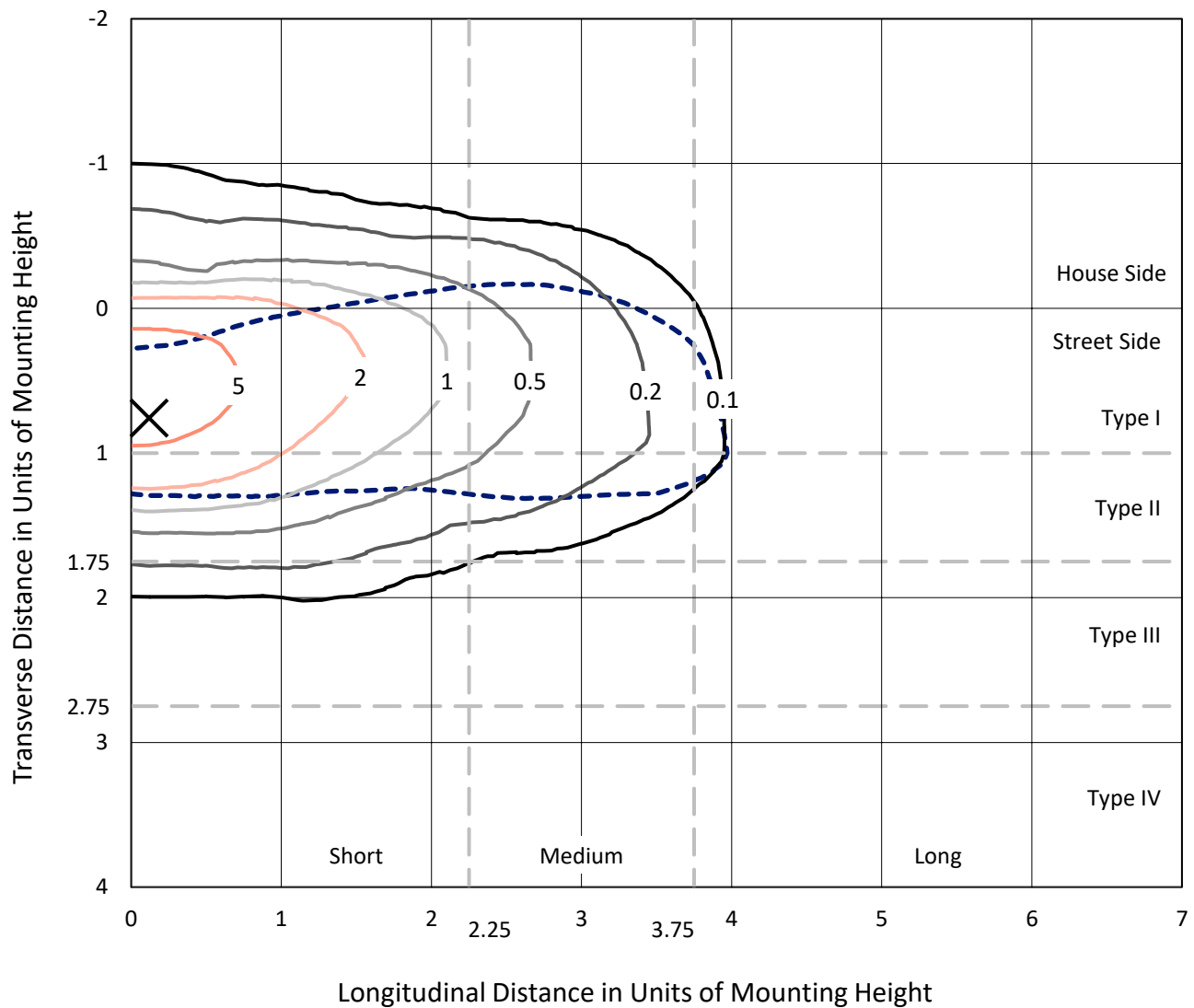


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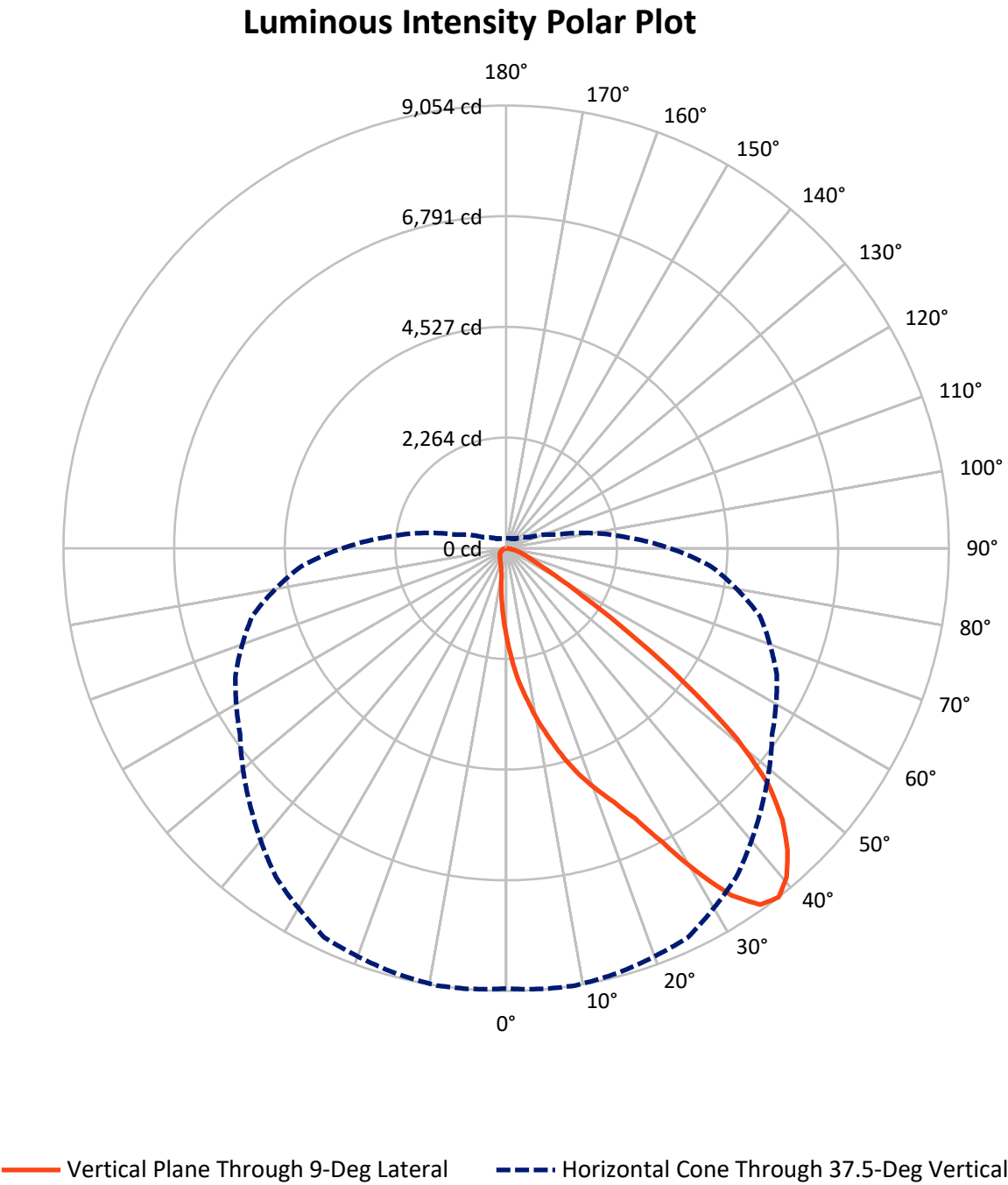
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Short - N/A

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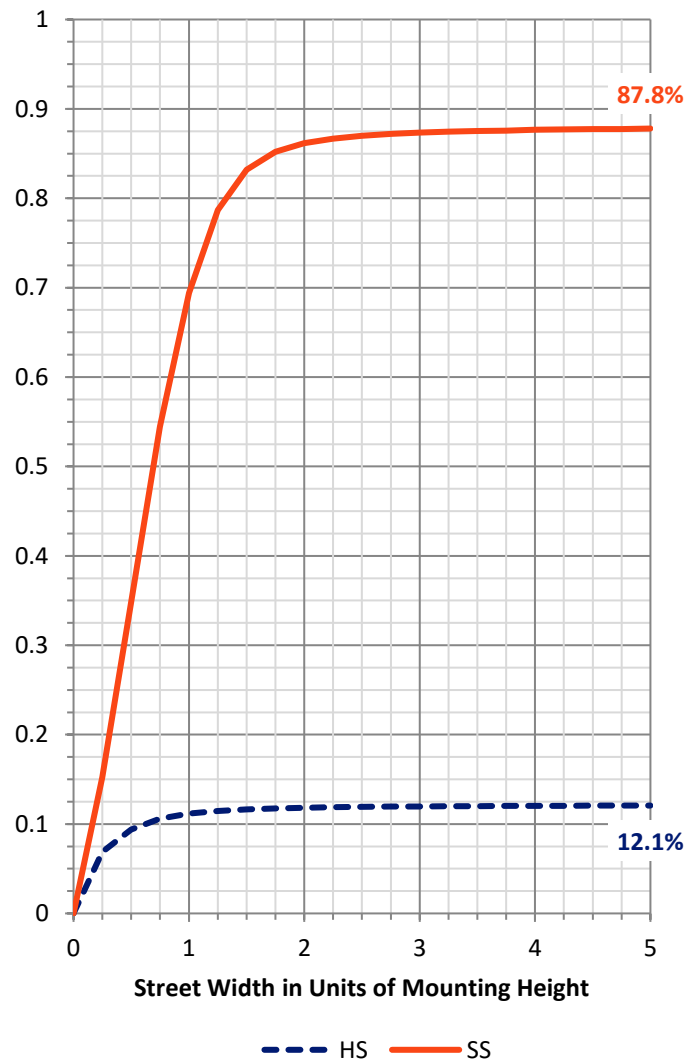
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1689.2	0.0	1689.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	12199.9	0.0	12199.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	13889.0	0.0	13889.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.5	1.3
10°-20°	641.4	4.6
20°-30°	1317.9	9.5
30°-40°	2329.6	16.8
40°-50°	3094.6	22.3
50°-60°	2935.1	21.1
60°-70°	2239.2	16.1
70°-80°	1085.6	7.8
80°-90°	61.1	0.4
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°	13889.0	100.0
0°-180°	13889.0	100.0

Coefficient of Utilization



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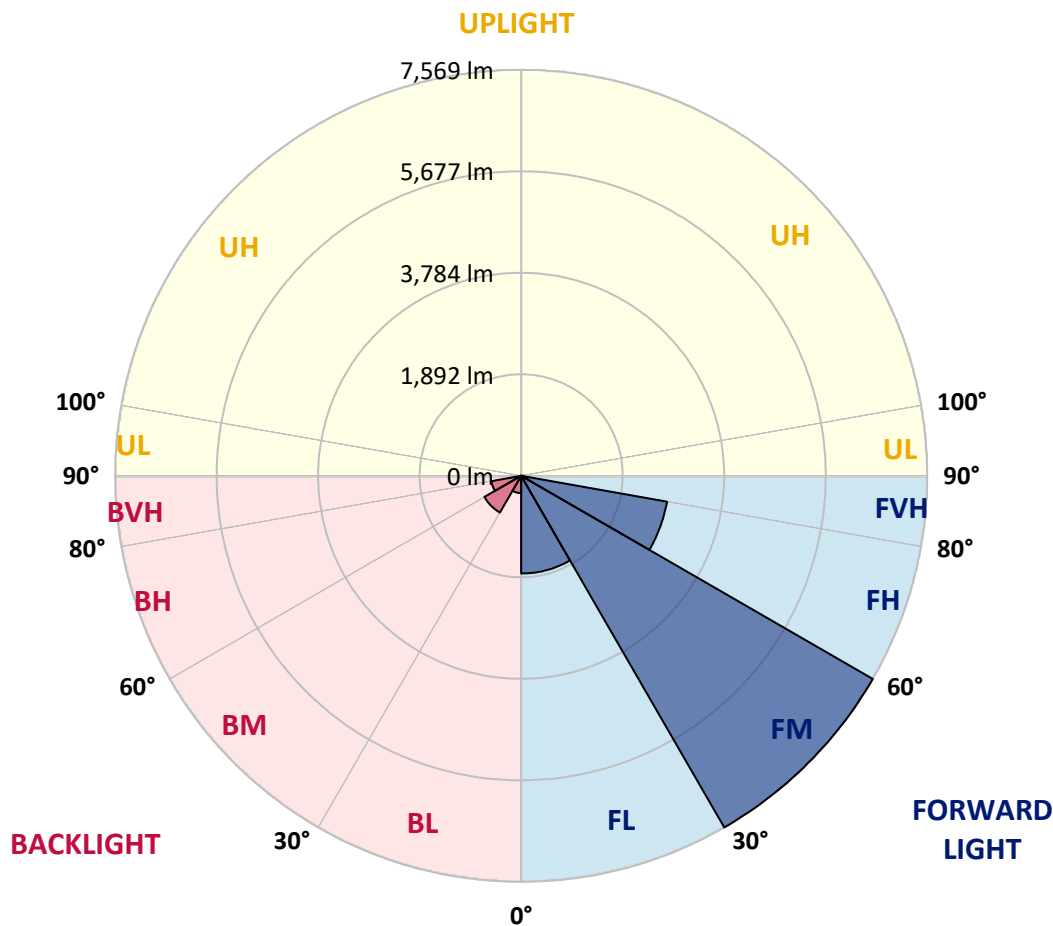
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1821.5	13.1			
FM	(30°-60°)	7568.8	54.5			
FH	(60°-80°)	2761.1	19.9			G2/5000
FVH	(80°-90°)	48.4	0.3			G1/100
BL	(0°-30°)	322.4	2.3	B1/500		
BM	(30°-60°)	790.4	5.7	B1/1000		
BH	(60°-80°)	563.7	4.1	B2/1000		G2/1000
BVH	(80°-90°)	12.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	2275.0	2235.1	2280.7	2275.0	2235.1	2209.4	2129.6	2103.9	2009.9	1941.4	1881.6
5°	2742.5	2702.6	2742.5	2731.1	2674.1	2611.4	2480.3	2394.7	2226.5	2078.3	1944.3
7.5°	3130.3	3130.3	3147.4	3150.2	3081.8	2984.9	2822.4	2694.1	2457.4	2229.4	2015.6
10°	3549.3	3552.2	3589.2	3563.6	3472.4	3341.2	3136.0	2973.5	2688.4	2389.0	2084.0
12.5°	3996.9	3999.8	4011.2	3999.8	3891.4	3723.2	3475.2	3261.4	2933.5	2571.5	2178.1
15°	4444.5	4447.4	4461.6	4441.6	4321.9	4125.2	3843.0	3580.7	3193.0	2776.7	2292.1
17.5°	4863.6	4869.3	4880.7	4855.0	4729.6	4495.8	4207.9	3891.4	3469.5	2996.3	2420.4
20°	5239.9	5245.6	5254.1	5219.9	5094.5	4860.7	4550.0	4219.3	3751.7	3221.5	2560.1
22.5°	5619.1	5624.8	5639.0	5593.4	5453.7	5185.7	4880.7	4538.6	4051.1	3469.5	2722.6
25°	6103.7	6109.4	6120.8	6055.2	5864.2	5550.6	5228.5	4877.8	4376.1	3748.9	2922.1
27.5°	6813.6	6807.9	6807.9	6688.1	6360.3	5952.6	5579.1	5222.8	4726.7	4048.2	3141.7
30°	7691.6	7677.4	7668.8	7506.3	7038.8	6405.9	5938.4	5544.9	5063.1	4364.7	3378.3
32.5°	8478.5	8478.5	8461.4	8290.3	7794.3	7016.0	6320.4	5858.5	5388.1	4684.0	3623.5
35°	8943.2	8963.1	8954.6	8826.3	8464.2	7671.7	6836.4	6234.8	5730.2	5017.5	3917.1
37.5°	9005.9	9045.8	9054.4	8977.4	8786.4	8207.6	7409.4	6642.5	6106.6	5376.7	4202.2
40°	8752.2	8837.7	8837.7	8826.3	8757.9	8461.4	7891.2	7115.8	6494.3	5750.2	4490.1
42.5°	8361.6	8450.0	8438.6	8481.3	8464.2	8401.5	8162.0	7557.6	6882.0	6135.1	4752.4
45°	7851.3	7942.5	7919.7	7996.7	8030.9	8099.3	8133.5	7865.5	7264.0	6554.1	5046.0
47.5°	7033.1	7187.0	7221.2	7358.1	7500.6	7714.4	7876.9	7976.7	7620.4	7004.6	5365.3
50°	5824.3	6041.0	6109.4	6397.3	6787.9	7229.8	7492.1	7839.9	7871.2	7466.4	5710.3
52.5°	4170.8	4421.7	4527.2	5000.4	5804.4	6574.1	7047.3	7537.7	7968.2	7908.3	6083.7
55°	2696.9	2910.7	3013.4	3458.1	4527.2	5735.9	6522.8	7147.1	7914.0	8313.1	6511.4
57.5°	1662.1	1784.6	1853.1	2235.1	3218.6	4661.2	5835.7	6787.9	7748.7	8663.8	6956.1
60°	1120.4	1191.7	1225.9	1405.5	2186.6	3483.8	4892.1	6411.6	7532.0	8900.4	7360.9
62.5°	744.1	766.9	801.1	912.3	1442.5	2446.0	3757.4	5738.8	7369.5	8914.7	7660.3
65°	575.9	587.3	601.5	650.0	889.5	1710.5	2642.8	4649.8	7127.2	8612.5	7754.4
67.5°	453.3	464.7	481.8	507.5	644.3	1160.3	1798.9	3406.8	6631.1	8139.2	7600.4
70°	356.4	364.9	376.3	399.1	501.8	841.0	1188.8	2263.6	5630.5	7688.8	7115.8
72.5°	282.2	290.8	302.2	325.0	407.7	615.8	815.3	1411.2	4341.9	7138.6	6183.5
75°	222.4	228.1	236.6	259.4	327.8	478.9	553.1	843.9	2950.6	6132.2	4818.0
77.5°	111.2	136.8	156.8	179.6	239.5	330.7	367.8	467.5	1245.8	3147.4	2297.8
80°	65.6	79.8	85.5	99.8	156.8	199.6	199.6	188.2	393.4	1208.8	937.9
82.5°	37.1	51.3	54.2	57.0	94.1	114.0	91.2	68.4	79.8	404.8	273.7
85°	11.4	17.1	20.0	22.8	31.4	34.2	31.4	28.5	22.8	39.9	25.7
87.5°	0.0	0.0	0.0	0.0	2.9	5.7	5.7	5.7	8.6	8.6	8.6
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°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1847.4	1810.3	1739.0	1673.5	1610.7	1565.1	1522.4	1482.5	1453.9	1431.1	1428.3
5°	1873.0	1798.9	1662.1	1533.8	1416.9	1320.0	1237.3	1171.7	1123.2	1089.0	1086.2
7.5°	1907.2	1793.2	1585.1	1394.1	1220.2	1080.5	960.7	872.4	809.6	784.0	764.0
10°	1935.7	1787.5	1508.1	1254.4	1026.3	849.6	707.0	618.6	573.0	555.9	547.4
12.5°	1984.2	1793.2	1442.5	1126.1	858.1	650.0	541.7	493.2	473.2	459.0	456.1
15°	2055.5	1818.9	1379.8	1000.7	687.1	524.6	461.8	430.5	410.5	407.7	404.8
17.5°	2126.7	1841.7	1322.8	872.4	570.2	456.1	413.4	387.7	373.5	370.6	370.6
20°	2209.4	1870.2	1260.1	749.8	487.5	410.5	376.3	356.4	339.3	336.4	336.4
22.5°	2306.4	1910.1	1200.2	641.4	433.3	376.3	347.8	325.0	310.7	307.9	307.9
25°	2437.5	1969.9	1151.7	561.6	396.3	347.8	322.1	302.2	290.8	285.1	285.1
27.5°	2582.9	2052.6	1117.5	513.2	370.6	325.0	299.3	282.2	270.8	265.1	265.1
30°	2745.4	2143.9	1094.7	493.2	356.4	305.0	282.2	265.1	250.9	248.0	248.0
32.5°	2925.0	2249.3	1080.5	496.1	353.5	290.8	265.1	248.0	236.6	230.9	230.9
35°	3124.5	2366.2	1071.9	513.2	359.2	279.4	250.9	233.8	222.4	216.7	216.7
37.5°	3346.9	2503.1	1071.9	530.3	373.5	276.5	236.6	219.5	211.0	205.3	205.3
40°	3555.0	2648.5	1083.3	550.2	387.7	276.5	225.2	211.0	199.6	193.9	193.9
42.5°	3717.5	2731.1	1091.9	570.2	396.3	273.7	213.8	199.6	191.0	185.3	185.3
45°	3902.8	2819.5	1074.8	578.7	396.3	268.0	205.3	191.0	182.5	176.8	176.8
47.5°	4108.1	2927.8	1071.9	584.4	387.7	256.6	196.7	182.5	176.8	171.1	171.1
50°	4316.2	3047.6	1077.6	581.6	376.3	239.5	185.3	176.8	168.2	162.5	162.5
52.5°	4552.8	3173.0	1089.0	575.9	350.7	219.5	176.8	168.2	159.6	153.9	151.1
55°	4815.1	3309.9	1111.8	564.5	316.4	199.6	168.2	159.6	148.2	142.5	139.7
57.5°	5117.3	3478.1	1137.5	541.7	279.4	182.5	159.6	148.2	131.1	122.6	119.7
60°	5405.2	3669.1	1166.0	487.5	242.3	165.4	151.1	134.0	116.9	111.2	108.3
62.5°	5676.1	3857.2	1180.3	390.6	205.3	151.1	142.5	122.6	105.5	99.8	96.9
65°	5850.0	4062.5	1148.9	265.1	168.2	139.7	131.1	114.0	96.9	88.4	88.4
67.5°	5861.4	4159.4	1040.6	173.9	136.8	125.4	119.7	102.6	85.5	79.8	77.0
70°	5573.4	4014.0	795.4	136.8	114.0	108.3	108.3	91.2	74.1	68.4	65.6
72.5°	4912.0	3555.0	507.5	111.2	96.9	91.2	91.2	77.0	65.6	57.0	54.2
75°	3877.2	2742.5	270.8	91.2	79.8	77.0	71.3	62.7	54.2	48.5	45.6
77.5°	1781.8	1208.8	125.4	65.6	59.9	59.9	54.2	45.6	42.8	37.1	37.1
80°	704.2	410.5	62.7	42.8	39.9	39.9	39.9	31.4	31.4	25.7	22.8
82.5°	193.9	85.5	31.4	25.7	25.7	25.7	22.8	20.0	20.0	17.1	17.1
85°	20.0	14.3	14.3	14.3	14.3	11.4	11.4	8.6	5.7	5.7	5.7
87.5°	8.6	8.6	8.6	8.6	8.6	5.7	2.9	0.0	0.0	0.0	0.0
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)