

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: P800264

Luminaire Tested: **ARCH2-90-727-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7925 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.7
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

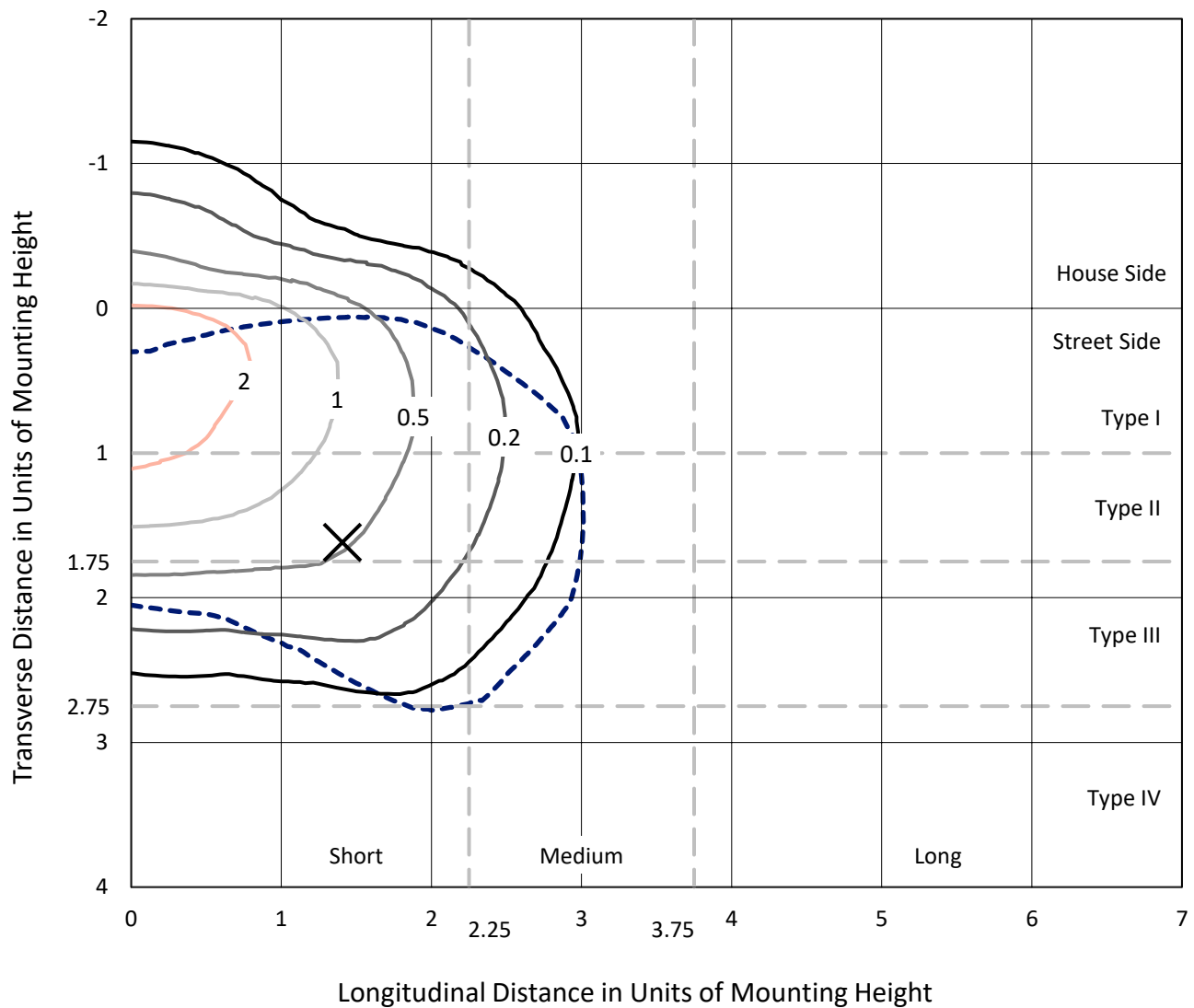


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

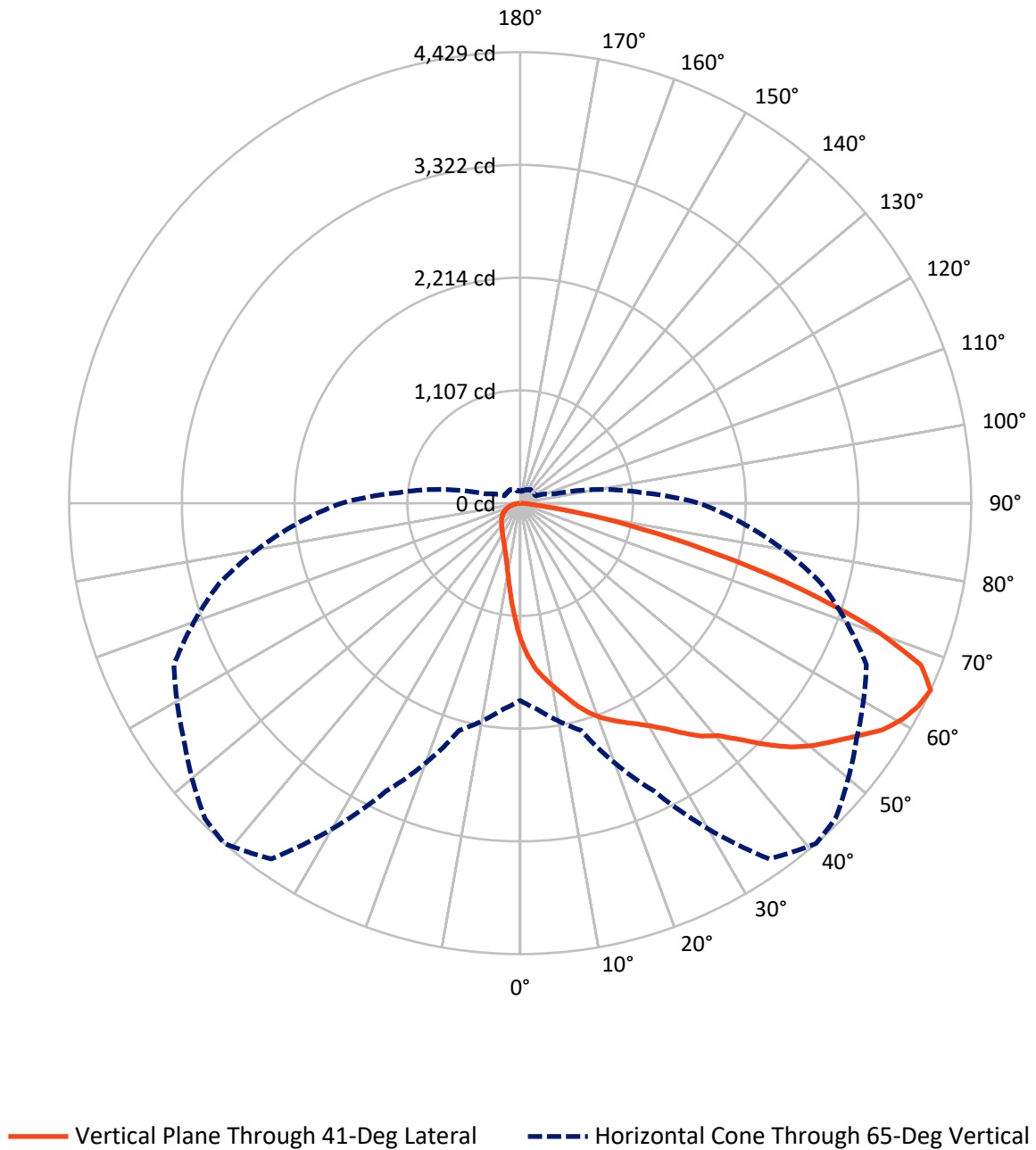


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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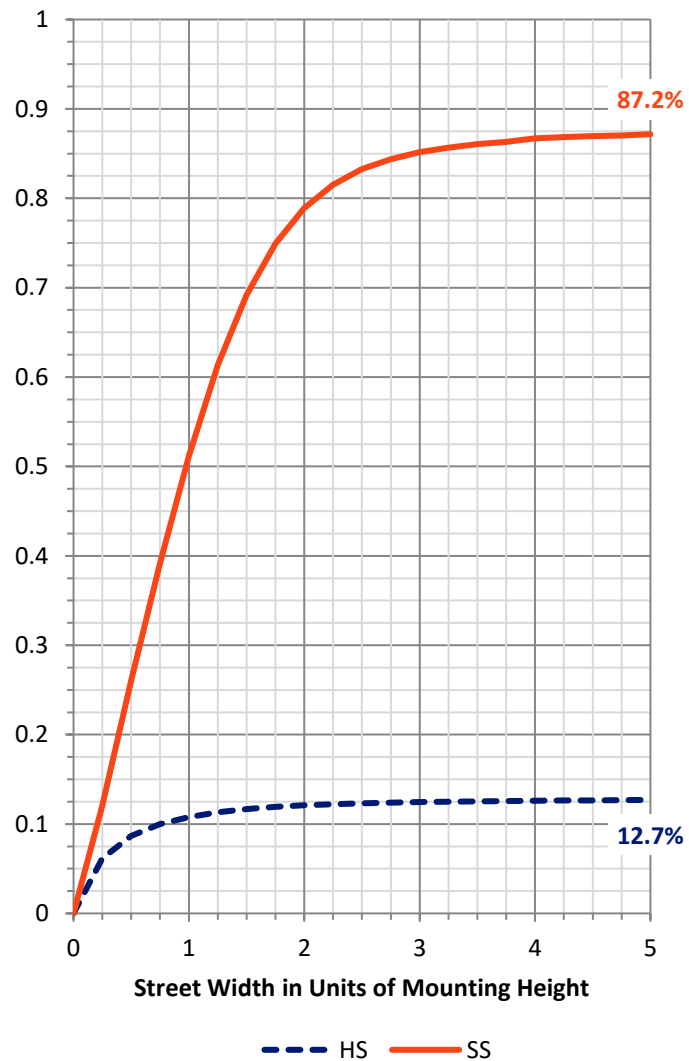
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1017.4	0.0	1017.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	6907.6	0.0	6907.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	7925.0	0.0	7925.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	1.6
10°-20°	377.3	4.8
20°-30°	649.1	8.2
30°-40°	984.4	12.4
40°-50°	1442.2	18.2
50°-60°	1821.1	23.0
60°-70°	1707.7	21.5
70°-80°	761.1	9.6
80°-90°	56.4	0.7
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°	7925.0	100.0
0°-180°	7925.0	100.0

Coefficient of Utilization



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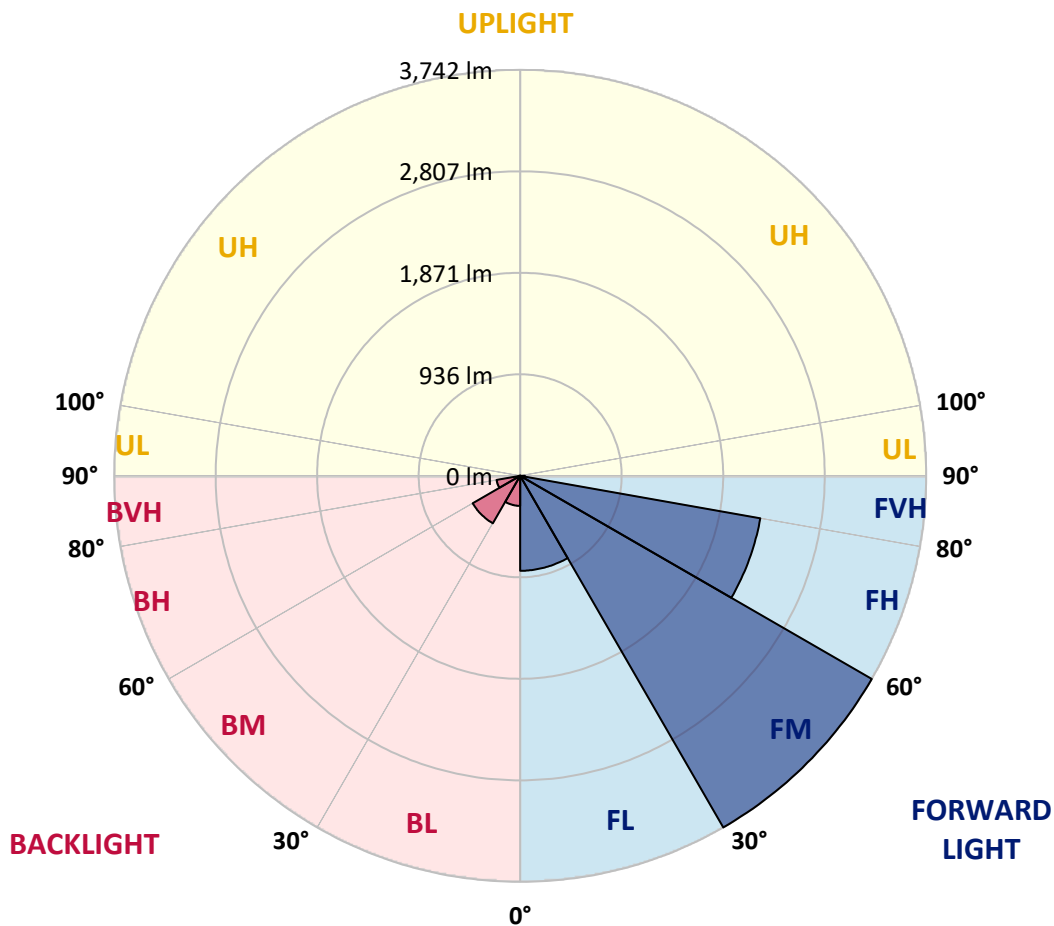
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	875.2	11.0			
FM	(30°-60°)	3742.5	47.2			
FH	(60°-80°)	2247.7	28.4			G2/5000
FVH	(80°-90°)	42.1	0.5			G1/100
BL	(0°-30°)	276.9	3.5	B1/500		
BM	(30°-60°)	505.2	6.4	B1/1000		
BH	(60°-80°)	221.0	2.8	B1/500		G1/500
BVH	(80°-90°)	14.3	0.2			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4
2.5°	1557.6	1552.6	1549.3	1530.9	1530.9	1505.8	1507.5	1484.1	1455.7	1410.5	1362.1
5°	1704.7	1698.0	1689.6	1671.3	1664.6	1639.5	1636.2	1602.7	1554.3	1475.7	1388.8
7.5°	1833.4	1826.7	1815.0	1788.2	1769.9	1739.8	1731.4	1688.0	1634.5	1537.6	1415.6
10°	1950.4	1945.3	1930.3	1896.9	1871.8	1835.0	1820.0	1761.5	1694.7	1587.7	1437.3
12.5°	2069.0	2062.3	2042.3	2013.9	1983.8	1940.3	1921.9	1846.7	1761.5	1642.8	1469.0
15°	2179.3	2169.3	2154.3	2124.2	2097.4	2055.7	2035.6	1947.0	1843.4	1704.7	1510.8
17.5°	2251.2	2242.8	2229.5	2212.7	2191.0	2159.3	2139.2	2052.3	1925.3	1764.9	1554.3
20°	2294.6	2291.3	2286.3	2276.3	2266.2	2244.5	2229.5	2147.6	2013.9	1823.3	1596.1
22.5°	2328.1	2324.7	2323.1	2323.1	2324.7	2316.4	2306.3	2236.1	2099.1	1885.2	1634.5
25°	2379.9	2378.2	2374.9	2371.5	2383.2	2384.9	2381.5	2333.1	2206.1	1967.1	1683.0
27.5°	2451.7	2446.7	2440.0	2436.7	2448.4	2456.8	2463.4	2430.0	2319.7	2050.6	1738.1
30°	2562.0	2547.0	2530.3	2518.6	2526.9	2540.3	2555.4	2535.3	2436.7	2154.3	1794.9
32.5°	2692.4	2674.0	2635.6	2613.9	2635.6	2645.6	2657.3	2647.3	2558.7	2266.2	1851.8
35°	2851.2	2829.4	2789.3	2757.6	2796.0	2774.3	2769.3	2759.3	2674.0	2376.5	1915.3
37.5°	3115.2	3083.5	3020.0	2949.8	2949.8	2903.0	2884.6	2854.5	2777.6	2475.1	1977.1
40°	3421.1	3379.3	3297.4	3193.8	3098.5	3001.6	2989.9	2968.2	2899.6	2588.8	2047.3
42.5°	3757.0	3676.8	3563.1	3437.8	3284.0	3173.7	3147.0	3085.1	3018.3	2704.1	2117.5
45°	4129.7	3962.6	3797.1	3733.6	3479.6	3379.3	3329.2	3217.2	3142.0	2824.4	2191.0
47.5°	4189.9	4059.5	3949.2	3939.2	3661.7	3578.2	3521.3	3360.9	3275.7	2953.1	2267.9
50°	4156.4	4077.9	4089.6	4049.5	3795.4	3740.3	3696.8	3514.7	3407.7	3076.8	2338.1
52.5°	4016.0	4059.5	4126.3	4052.8	3922.4	3877.3	3855.6	3680.1	3531.4	3190.4	2401.6
55°	3848.9	3879.0	4022.7	4113.0	4069.5	4029.4	4009.4	3872.3	3653.4	3285.7	2460.1
57.5°	3604.9	3591.5	3750.3	4102.9	4223.3	4199.9	4178.2	4061.2	3767.0	3354.2	2496.9
60°	3238.9	3210.5	3411.0	3902.4	4273.4	4310.2	4300.2	4186.5	3853.9	3352.5	2481.8
62.5°	2605.5	2675.7	2953.1	3574.8	4295.1	4388.7	4370.3	4196.5	3882.3	3255.6	2386.6
65°	1937.0	2037.3	2309.7	3123.6	4265.1	4428.8	4378.7	4032.8	3750.3	3063.4	2177.7
67.5°	1395.5	1484.1	1683.0	2570.4	3975.9	4245.0	4186.5	3765.4	3446.1	2791.0	1888.5
70°	954.3	1017.8	1153.2	1871.8	3394.3	3670.1	3633.3	3365.9	2966.5	2466.8	1534.2
72.5°	673.5	700.3	787.2	1235.1	2578.8	2879.6	2836.1	2769.3	2383.2	2050.6	1193.3
75°	504.7	521.4	568.2	798.9	1739.8	1995.5	1955.4	1993.8	1779.9	1552.6	869.1
77.5°	190.5	207.2	322.6	509.7	1029.5	1225.0	1184.9	1208.3	989.4	783.8	432.9
80°	51.8	55.2	107.0	242.3	468.0	610.0	554.9	476.3	367.7	361.0	229.0
82.5°	21.7	25.1	48.5	130.4	167.1	167.1	140.4	173.8	140.4	168.8	110.3
85°	8.4	10.0	11.7	33.4	21.7	23.4	25.1	33.4	28.4	35.1	25.1
87.5°	0.0	0.0	0.0	1.7	1.7	3.3	1.7	3.3	5.0	5.0	5.0
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°	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4	1350.4
2.5°	1342.0	1323.6	1296.9	1253.4	1208.3	1183.3	1151.5	1146.5	1113.1	1109.7	1096.3
5°	1350.4	1311.9	1243.4	1159.9	1078.0	1014.5	967.7	942.6	894.1	894.1	880.8
7.5°	1357.1	1296.9	1186.6	1062.9	950.9	865.7	802.2	775.5	732.0	728.7	718.6
10°	1358.7	1278.5	1124.8	964.3	827.3	740.4	678.5	648.4	610.0	606.7	600.0
12.5°	1372.1	1268.5	1069.6	879.1	738.7	645.1	584.9	559.9	529.8	526.4	519.8
15°	1393.8	1268.5	1022.8	807.2	660.1	573.2	521.4	498.0	476.3	473.0	469.6
17.5°	1415.6	1265.1	976.0	740.4	595.0	516.4	471.3	452.9	436.2	434.5	431.2
20°	1435.6	1263.5	929.2	683.5	544.8	469.6	434.5	417.8	404.4	404.4	402.8
22.5°	1455.7	1260.1	884.1	630.1	501.4	434.5	404.4	386.1	376.0	376.0	374.4
25°	1485.8	1260.1	842.3	584.9	466.3	407.8	377.7	364.3	356.0	354.3	354.3
27.5°	1520.8	1270.2	805.5	544.8	436.2	381.0	357.6	344.3	334.3	330.9	332.6
30°	1559.3	1278.5	772.1	509.7	407.8	361.0	335.9	322.6	312.5	309.2	310.9
32.5°	1597.7	1288.5	742.0	478.0	379.4	342.6	317.5	302.5	292.5	290.8	290.8
35°	1639.5	1298.6	712.0	451.2	356.0	324.2	300.8	284.1	277.4	274.1	275.8
37.5°	1681.3	1315.3	683.5	426.2	339.3	307.5	285.8	269.1	264.1	262.4	262.4
40°	1731.4	1340.4	671.8	409.5	324.2	292.5	274.1	257.4	252.4	252.4	252.4
42.5°	1773.2	1360.4	661.8	391.1	312.5	279.1	262.4	249.0	245.7	244.0	245.7
45°	1815.0	1378.8	648.4	374.4	297.5	265.7	252.4	239.0	235.6	235.6	235.6
47.5°	1856.8	1388.8	630.1	357.6	284.1	254.0	242.3	230.6	227.3	227.3	227.3
50°	1890.2	1397.2	603.3	339.3	269.1	244.0	232.3	220.6	217.3	217.3	217.3
52.5°	1923.6	1398.8	574.9	317.5	254.0	232.3	222.3	210.6	207.2	205.6	205.6
55°	1953.7	1397.2	541.5	292.5	237.3	218.9	210.6	200.6	193.9	187.2	190.5
57.5°	1975.4	1395.5	503.0	267.4	220.6	205.6	202.2	188.9	175.5	158.8	162.1
60°	1967.1	1377.1	461.3	235.6	202.2	192.2	192.2	173.8	150.4	142.1	143.7
62.5°	1913.6	1325.3	417.8	202.2	183.8	178.8	177.2	157.1	138.7	130.4	132.0
65°	1753.2	1195.0	354.3	172.1	165.5	163.8	163.8	145.4	128.7	118.7	120.3
67.5°	1509.1	1002.8	289.1	145.4	147.1	150.4	150.4	133.7	117.0	107.0	108.6
70°	1210.0	783.8	230.6	125.3	127.0	132.0	135.4	120.3	105.3	95.3	95.3
72.5°	910.8	595.0	185.5	105.3	113.6	113.6	118.7	107.0	91.9	81.9	83.6
75°	660.1	426.2	147.1	88.6	98.6	96.9	96.9	90.2	78.5	71.9	71.9
77.5°	312.5	223.9	117.0	63.5	76.9	75.2	76.9	71.9	66.9	60.2	61.8
80°	153.8	110.3	75.2	45.1	53.5	55.2	60.2	56.8	55.2	50.1	50.1
82.5°	73.5	43.5	35.1	31.8	36.8	38.4	41.8	41.8	43.5	40.1	40.1
85°	20.1	11.7	15.0	20.1	23.4	25.1	28.4	30.1	30.1	28.4	30.1
87.5°	5.0	5.0	6.7	10.0	11.7	13.4	15.0	15.0	6.7	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)