

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: P799302

Luminaire Tested: **ARCH2-100-750-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-100-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 760mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9238 lumens
Efficiency: N/A
Efficacy: 89.4 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): 103.3
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



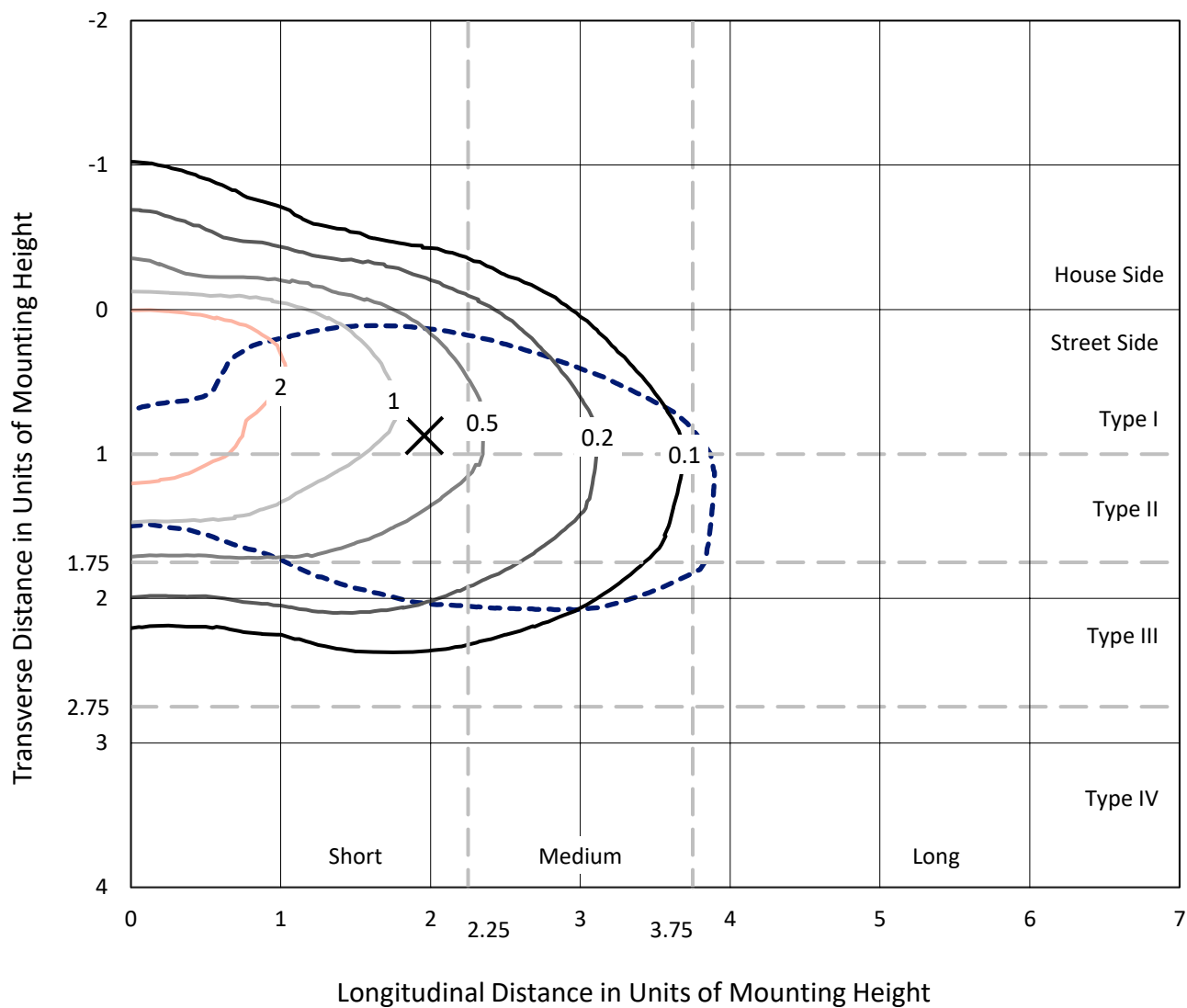
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

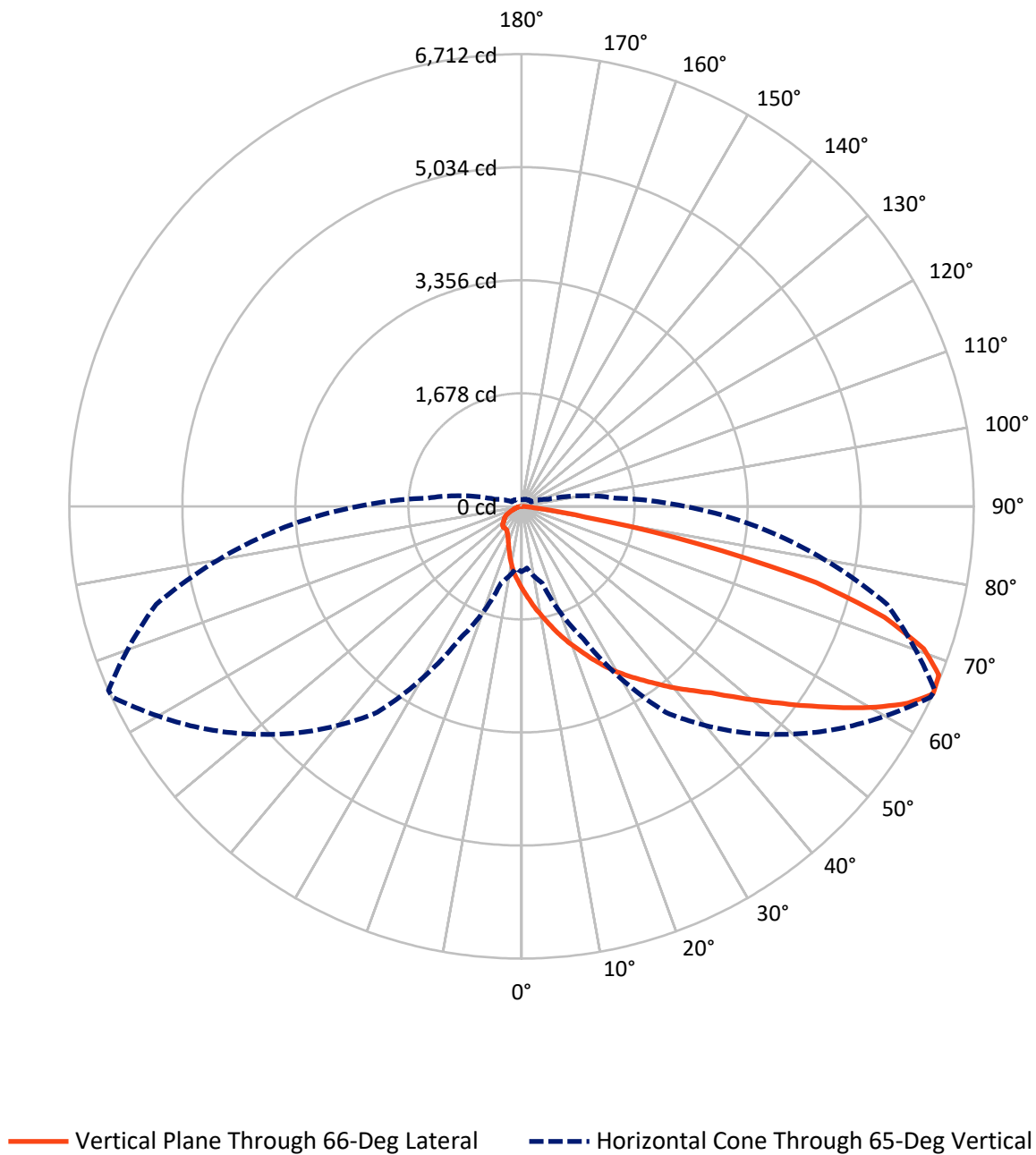


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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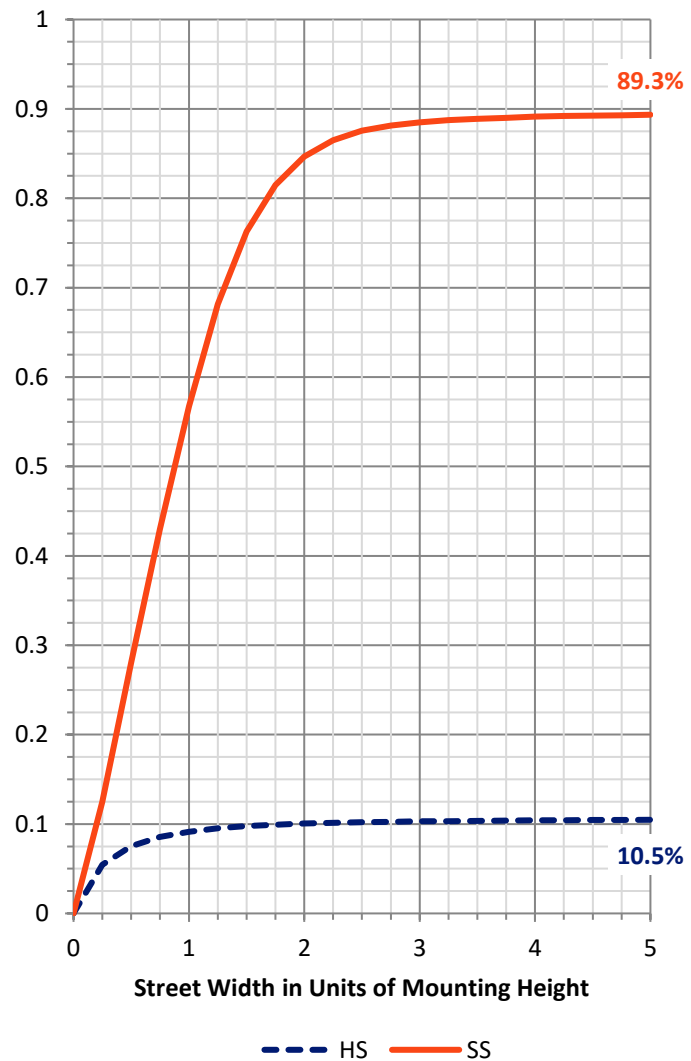
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	977.1	0.0	977.1
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	8260.9	0.0	8260.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	9238.0	0.0	9238.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	1.3
10°-20°	393.3	4.3
20°-30°	711.6	7.7
30°-40°	1112.8	12.0
40°-50°	1688.0	18.3
50°-60°	2144.7	23.2
60°-70°	2004.0	21.7
70°-80°	996.0	10.8
80°-90°	66.9	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°	9238.0	100.0
0°-180°	9238.0	100.0

Coefficient of Utilization



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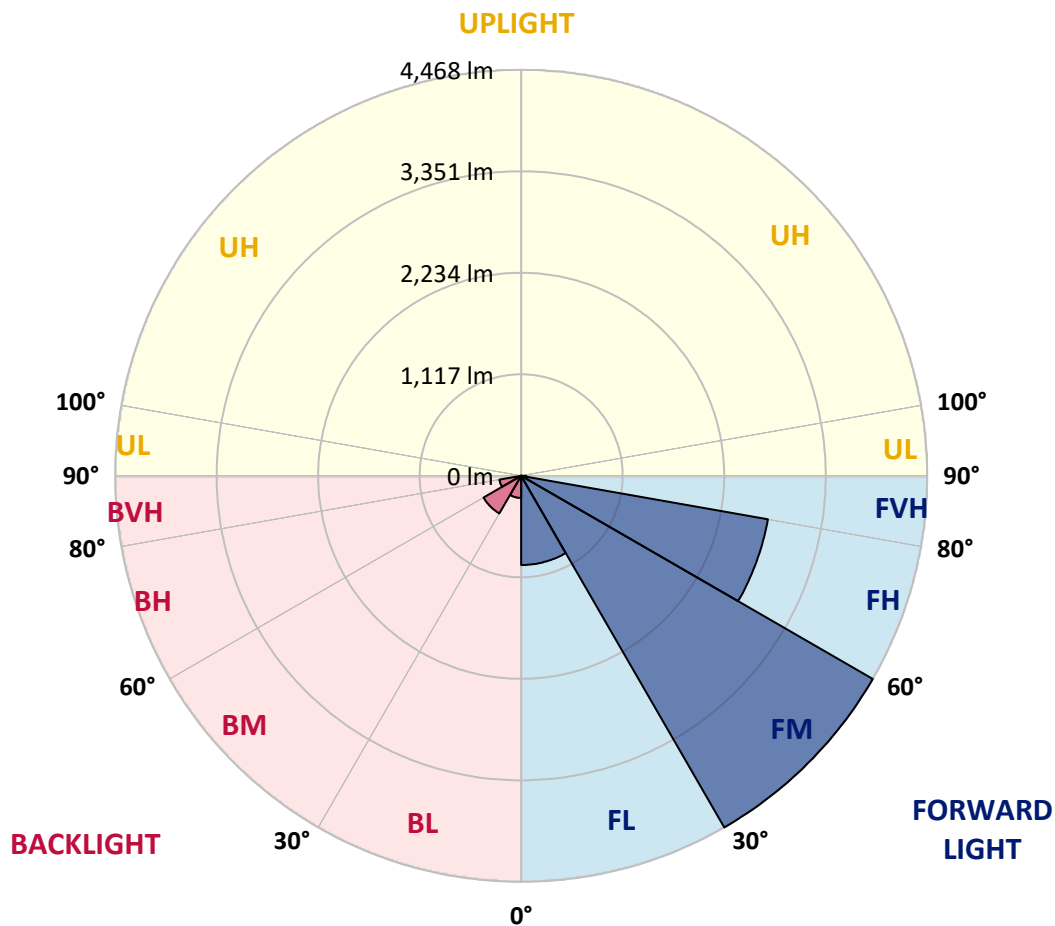
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	981.5	10.6			
FM	(30°-60°)	4467.6	48.4			
FH	(60°-80°)	2756.6	29.8			G2/5000
FVH	(80°-90°)	55.1	0.6			G1/100
BL	(0°-30°)	244.0	2.6	B1/500		
BM	(30°-60°)	477.9	5.2	B1/1000		
BH	(60°-80°)	243.3	2.6	B1/500		G1/500
BVH	(80°-90°)	11.8	0.1			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°	45°	55°	65°	66°	75°	85°
0°	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6
2.5°	1428.0	1439.6	1445.4	1447.4	1402.8	1383.4	1364.0	1319.5	1309.8	1284.6	1251.7
5°	1679.9	1695.4	1691.5	1683.7	1629.5	1567.5	1517.1	1433.8	1420.2	1360.2	1286.5
7.5°	1927.9	1941.4	1937.6	1908.5	1848.4	1761.2	1677.9	1555.9	1536.5	1439.6	1321.4
10°	2135.2	2146.8	2144.9	2115.8	2044.1	1937.6	1836.8	1674.0	1650.8	1513.2	1350.5
12.5°	2305.7	2321.2	2319.3	2299.9	2235.9	2119.7	2005.4	1809.7	1780.6	1602.4	1391.2
15°	2439.4	2458.8	2458.8	2451.0	2406.4	2309.6	2179.8	1958.9	1924.0	1705.1	1441.5
17.5°	2520.8	2536.3	2549.8	2563.4	2532.4	2458.8	2340.6	2108.1	2071.2	1805.8	1493.9
20°	2563.4	2578.9	2588.6	2617.6	2623.5	2586.6	2493.6	2255.3	2216.6	1920.1	1553.9
22.5°	2633.1	2646.7	2648.6	2673.8	2685.5	2695.1	2637.0	2400.6	2369.6	2046.1	1621.7
25°	2749.4	2764.9	2759.1	2770.7	2772.6	2784.3	2778.5	2567.3	2536.3	2189.4	1703.1
27.5°	2898.6	2918.0	2914.1	2902.5	2885.0	2875.3	2900.5	2735.8	2706.8	2332.8	1786.4
30°	3059.4	3082.7	3076.8	3053.6	3007.1	2966.4	3001.3	2894.7	2867.6	2480.1	1879.4
32.5°	3222.2	3249.3	3247.3	3208.6	3129.2	3059.4	3111.7	3043.9	3024.5	2639.0	1980.2
35°	3328.7	3363.6	3359.7	3336.5	3233.8	3173.7	3237.7	3197.0	3183.4	2832.7	2125.5
37.5°	3501.2	3538.0	3505.0	3446.9	3328.7	3297.7	3375.2	3369.4	3359.7	3038.1	2278.6
40°	3919.7	3973.9	3886.7	3648.4	3454.7	3427.5	3538.0	3561.2	3551.5	3241.5	2416.1
42.5°	4357.6	4438.9	4303.3	3973.9	3683.3	3584.5	3716.2	3749.2	3737.5	3415.9	2540.1
45°	4623.0	4657.9	4522.3	4266.5	4088.2	3774.4	3906.1	3960.4	3950.7	3625.2	2699.0
47.5°	4840.0	4826.5	4671.5	4499.0	4531.9	4041.7	4121.2	4227.7	4220.0	3855.7	2873.4
50°	4886.5	4855.5	4793.5	4685.0	4772.2	4313.0	4347.9	4531.9	4524.2	4111.5	3049.7
52.5°	4559.1	4518.4	4687.0	4778.0	4749.0	4510.6	4597.8	4865.2	4861.3	4388.6	3218.3
55°	3741.4	3708.5	4161.9	4632.7	4723.8	4650.1	4874.9	5212.0	5233.3	4683.1	3371.3
57.5°	2943.1	2908.3	3353.9	4268.4	4630.8	4778.0	5198.5	5609.2	5636.4	5002.8	3516.7
60°	2346.4	2294.1	2635.1	3694.9	4456.4	4876.8	5510.4	6045.2	6049.1	5295.3	3605.8
62.5°	1594.6	1536.5	1914.3	2968.3	4163.8	4892.3	5750.7	6421.1	6436.6	5514.3	3621.3
65°	968.8	920.3	1176.1	2168.1	3731.7	4760.6	5754.5	6698.1	6711.7	5615.0	3528.3
67.5°	561.9	542.5	672.3	1350.5	3014.8	4406.0	5512.4	6655.5	6680.7	5572.4	3317.1
70°	327.4	325.5	373.9	668.5	2127.4	3702.7	4971.8	6297.1	6333.9	5349.6	2993.5
72.5°	240.3	244.1	263.5	358.4	1232.3	2666.1	4210.3	5576.3	5632.5	4913.6	2532.4
75°	189.9	191.8	209.3	244.1	647.1	1507.4	3154.3	4475.8	4520.3	4136.7	1978.2
77.5°	141.4	145.3	158.9	172.4	300.3	691.7	1774.8	2757.1	2683.5	2270.8	955.2
80°	102.7	112.4	118.2	124.0	158.9	267.4	532.8	961.0	953.3	992.0	451.5
82.5°	65.9	73.6	79.4	83.3	94.9	127.9	158.9	215.1	232.5	385.6	180.2
85°	29.1	32.9	36.8	44.6	40.7	44.6	65.9	42.6	36.8	58.1	32.9
87.5°	0.0	0.0	5.8	9.7	7.8	3.9	11.6	7.8	5.8	5.8	5.8
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°	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6	1222.6
2.5°	1234.2	1212.9	1168.3	1125.7	1100.5	1067.6	1038.5	1011.4	1009.5	1001.7	988.2
5°	1249.7	1209.0	1125.7	1046.3	986.2	922.3	868.0	825.4	809.9	798.3	782.8
7.5°	1265.2	1201.3	1077.3	961.0	866.1	777.0	713.0	654.9	637.5	622.0	612.3
10°	1271.0	1187.7	1021.1	866.1	742.1	647.1	579.3	536.7	521.2	513.5	507.6
12.5°	1288.5	1180.0	968.8	777.0	633.6	546.4	498.0	472.8	467.0	461.1	455.3
15°	1311.7	1180.0	916.5	689.8	548.3	478.6	449.5	432.1	428.2	426.3	422.4
17.5°	1336.9	1180.0	866.1	616.1	486.3	434.0	412.7	403.0	401.1	399.1	397.2
20°	1371.8	1181.9	811.8	552.2	441.8	401.1	383.6	372.0	370.1	368.1	368.1
22.5°	1406.7	1185.8	759.5	503.8	412.7	375.9	354.6	342.9	339.1	339.1	339.1
25°	1451.2	1197.4	711.1	463.1	387.5	352.6	325.5	315.8	313.9	313.9	311.9
27.5°	1503.5	1211.0	668.5	432.1	362.3	325.5	298.4	288.7	284.8	284.8	282.9
30°	1559.7	1224.5	633.6	408.8	337.1	298.4	273.2	261.6	257.7	259.6	257.7
32.5°	1621.7	1243.9	606.5	393.3	313.9	275.1	251.9	238.3	236.4	236.4	234.4
35°	1726.4	1298.2	602.6	385.6	294.5	257.7	234.4	220.9	218.9	218.9	217.0
37.5°	1838.7	1360.2	620.0	381.7	279.0	242.2	220.9	207.3	205.4	205.4	205.4
40°	1933.7	1406.7	639.4	381.7	269.3	228.6	209.3	197.6	197.6	197.6	197.6
42.5°	1997.6	1410.5	635.5	381.7	261.6	218.9	201.5	189.9	189.9	191.8	189.9
45°	2092.6	1429.9	620.0	375.9	255.8	211.2	193.8	184.1	182.1	184.1	184.1
47.5°	2204.9	1464.8	604.5	352.6	253.8	203.4	187.9	176.3	174.4	176.3	174.4
50°	2311.5	1495.8	596.8	321.6	249.9	195.7	180.2	168.6	166.6	168.6	166.6
52.5°	2400.6	1509.4	583.2	300.3	240.3	187.9	172.4	160.8	156.9	158.9	158.9
55°	2472.3	1505.5	563.8	282.9	222.8	180.2	162.8	153.1	147.3	147.3	145.3
57.5°	2538.2	1507.4	546.4	265.4	203.4	168.6	155.0	143.4	135.6	133.7	131.8
60°	2563.4	1497.7	515.4	242.2	184.1	158.9	145.3	131.8	124.0	122.1	120.1
62.5°	2528.5	1462.9	474.7	201.5	166.6	147.3	135.6	122.1	114.3	112.4	110.4
65°	2429.7	1397.0	412.7	158.9	151.1	133.7	124.0	114.3	104.6	100.8	98.8
67.5°	2261.1	1302.0	335.2	127.9	133.7	122.1	116.3	104.6	93.0	89.1	87.2
70°	2020.9	1176.1	251.9	108.5	118.2	108.5	104.6	93.0	83.3	79.4	77.5
72.5°	1683.7	972.7	176.3	93.0	102.7	94.9	91.1	83.3	73.6	67.8	67.8
75°	1273.0	697.5	116.3	79.4	85.3	81.4	75.6	69.8	63.9	60.1	58.1
77.5°	548.3	271.3	71.7	60.1	69.8	67.8	60.1	56.2	54.3	50.4	50.4
80°	236.4	110.4	44.6	44.6	50.4	48.4	46.5	42.6	42.6	40.7	38.8
82.5°	87.2	44.6	27.1	32.9	36.8	32.9	32.9	32.9	32.9	31.0	31.0
85°	21.3	13.6	13.6	19.4	21.3	19.4	21.3	19.4	19.4	19.4	17.4
87.5°	5.8	5.8	7.8	7.8	7.8	7.8	7.8	5.8	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)