

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: P509108

Luminaire Tested: **VERD-CA2-110-727-U-T2-HSS**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509108  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-110-727-U-T2-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1020mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12383 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

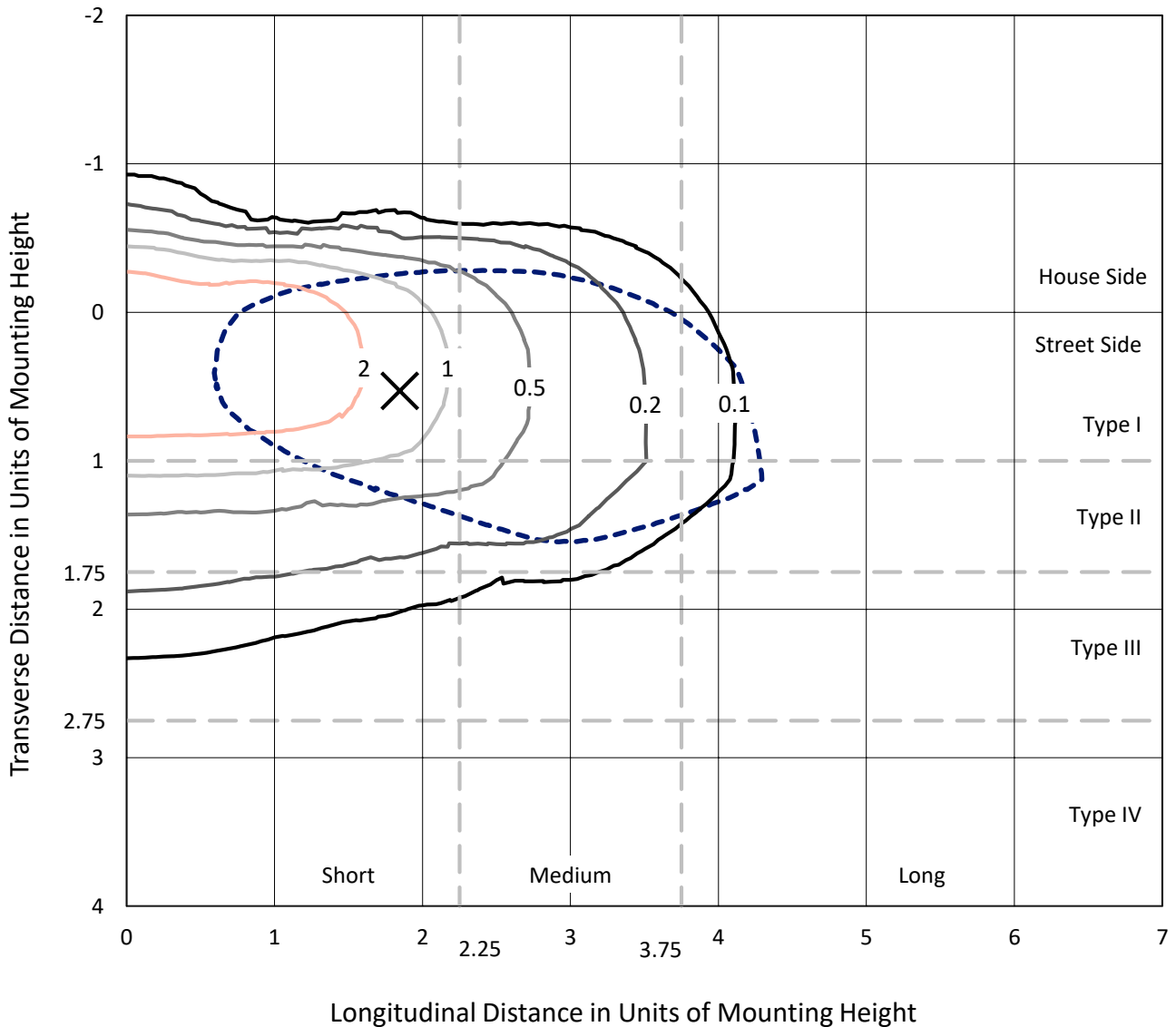
Input Watts (W): 113.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

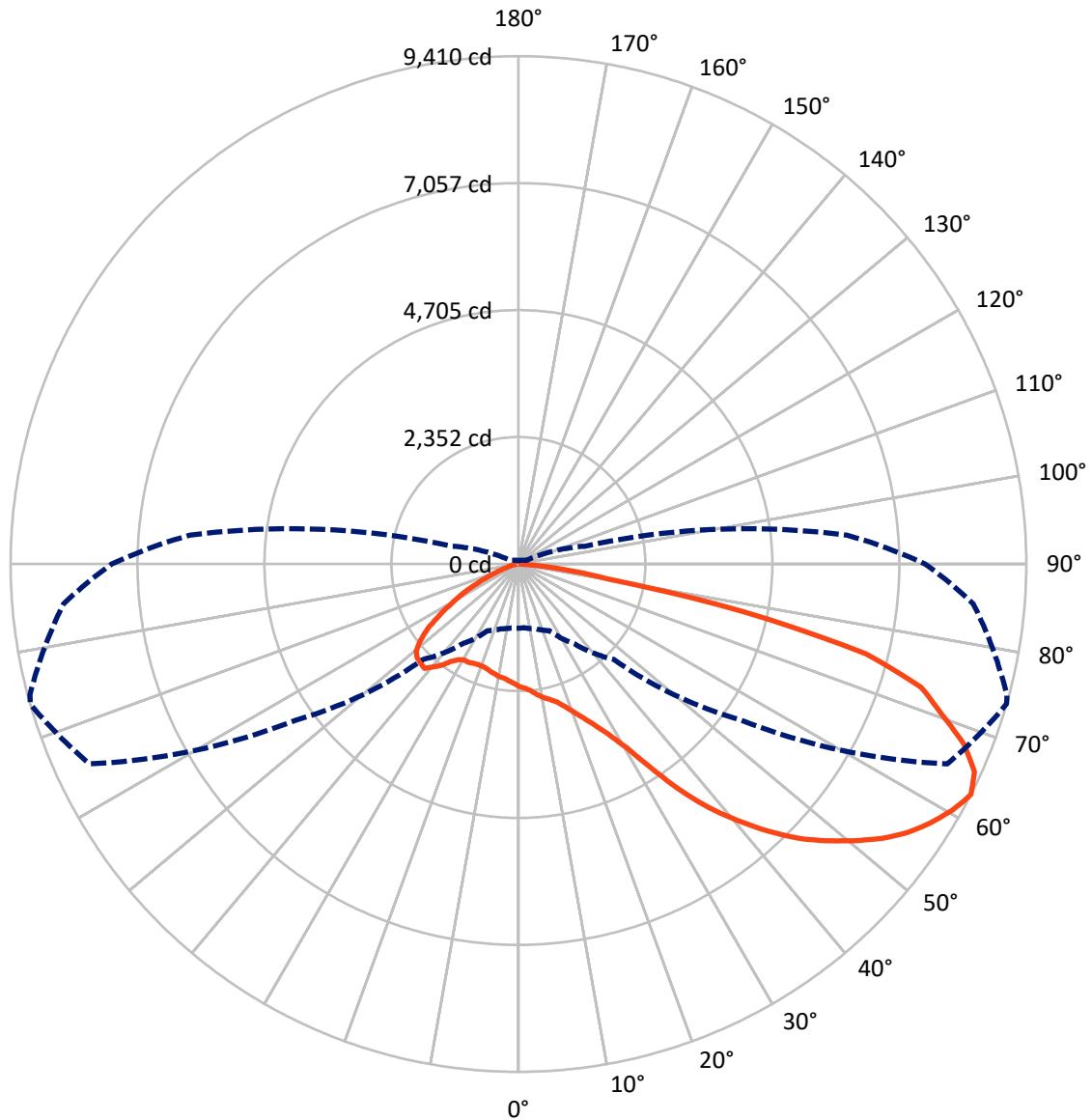
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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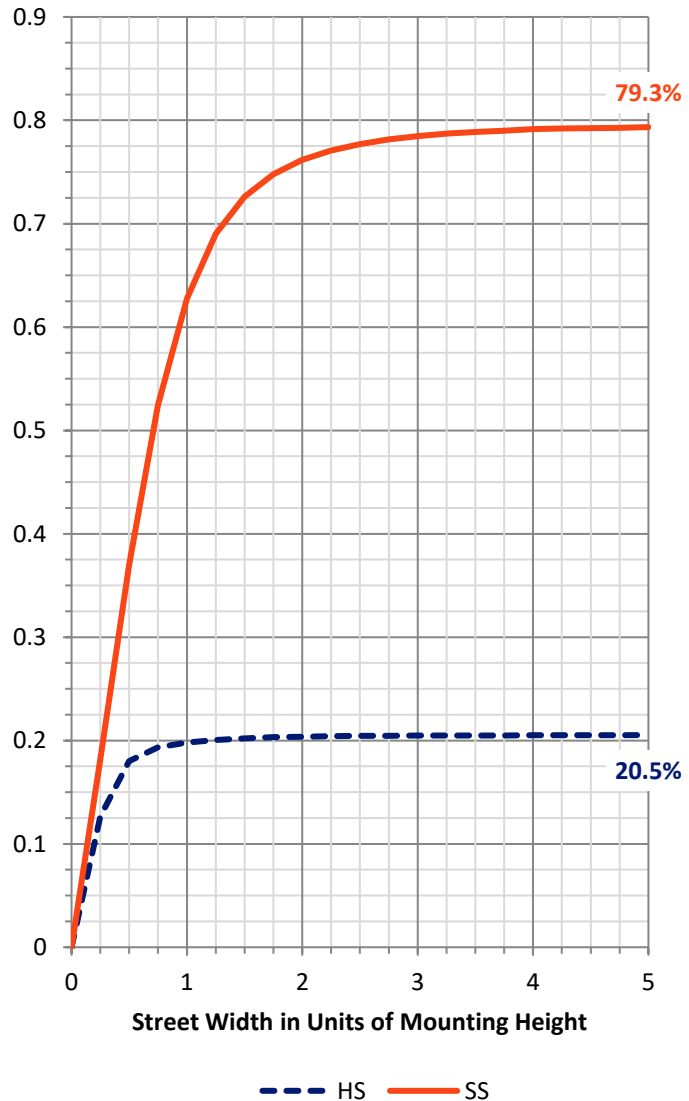
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2571.4	0.0	2571.4
	% Fixture	20.8	0.0	20.8
<b>Street Side</b>	Lumens	9811.6	0.0	9811.6
	% Fixture	79.2	0.0	79.2
<b>Total</b>	Lumens	12383.0	0.0	12383.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.4	1.7
10°-20°	653.6	5.3
20°-30°	1103.4	8.9
30°-40°	1641.2	13.3
40°-50°	2221.3	17.9
50°-60°	2555.6	20.6
60°-70°	2466.8	19.9
70°-80°	1396.6	11.3
80°-90°	128.1	1.0
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°	12383.0	100.0
0°-180°	12383.0	100.0

**Coefficient of Utilization**



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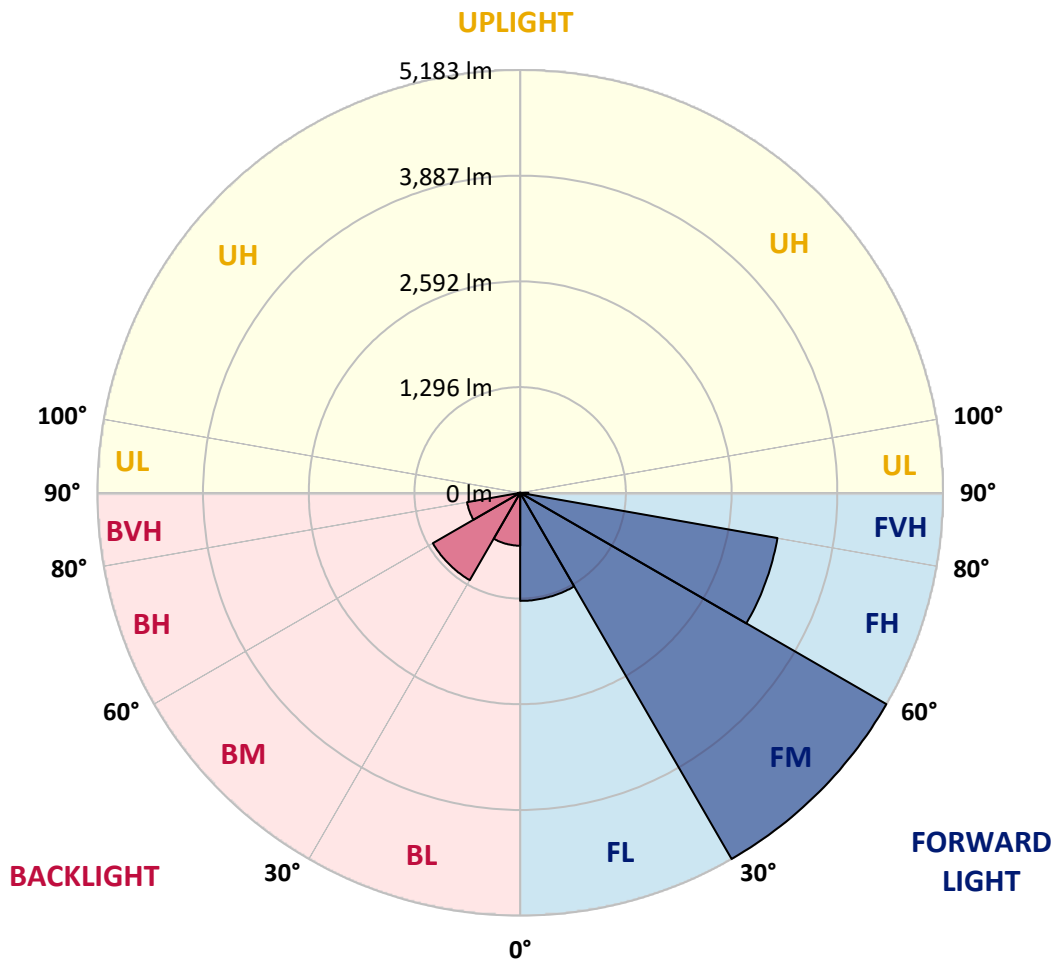
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1325.0	10.7			
FM	(30°-60°)	5183.3	41.9			
FH	(60°-80°)	3202.4	25.9			G2/5000
FVH	(80°-90°)	101.0	0.8			G2/225
BL	(0°-30°)	648.4	5.2	B2/1000		
BM	(30°-60°)	1234.8	10.0	B2/2500		
BH	(60°-80°)	661.0	5.3	B2/1000		G2/1000
BVH	(80°-90°)	27.2	0.2			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°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2474.9	2458.6	2445.4	2438.0	2417.3	2399.6	2364.2	2327.3	2302.2	2300.7	2277.1
5°	2578.2	2576.7	2547.2	2541.3	2513.2	2504.4	2469.0	2415.8	2353.9	2346.5	2283.0
7.5°	2714.0	2697.7	2665.3	2652.0	2619.5	2595.9	2548.7	2498.5	2436.5	2429.1	2318.4
10°	2845.3	2836.4	2817.3	2818.7	2773.0	2728.7	2657.9	2572.3	2513.2	2504.4	2368.6
12.5°	2997.3	2969.3	2936.8	2919.1	2873.3	2845.3	2777.4	2665.3	2572.3	2563.4	2427.7
15°	3102.1	3087.3	3057.8	3046.0	3001.7	2956.0	2877.8	2790.7	2650.5	2641.6	2488.2
17.5°	3214.2	3206.9	3172.9	3165.5	3122.7	3068.1	3007.6	2894.0	2771.5	2756.7	2560.5
20°	3289.5	3276.2	3271.8	3270.3	3258.5	3224.6	3147.8	3059.3	2923.5	2896.9	2653.4
22.5°	3389.9	3376.6	3382.5	3388.4	3404.6	3389.9	3339.7	3234.9	3100.6	3077.0	2799.5
25°	3400.2	3391.3	3431.2	3513.8	3546.3	3562.5	3524.2	3443.0	3313.1	3282.1	2973.7
27.5°	3428.2	3414.9	3457.7	3544.8	3690.9	3716.0	3723.4	3685.0	3575.8	3558.1	3209.8
30°	3378.0	3369.2	3435.6	3584.7	3748.5	3890.1	3944.7	3997.9	3947.7	3916.7	3538.9
32.5°	3255.6	3261.5	3348.5	3546.3	3848.8	4067.2	4208.9	4396.3	4486.4	4480.5	4121.8
35°	3077.0	3074.0	3220.1	3499.1	3857.7	4234.0	4498.2	4878.9	5131.3	5113.6	4734.3
37.5°	2925.0	2917.6	3082.9	3379.5	3865.1	4366.8	4837.6	5405.8	5726.0	5708.3	5234.6
40°	2739.0	2750.8	2898.4	3240.8	3803.1	4465.7	5132.7	5917.9	6245.5	6245.5	5752.6
42.5°	2551.6	2561.9	2708.0	3047.5	3713.1	4538.0	5410.2	6428.5	6762.0	6769.4	6108.2
45°	2387.8	2392.2	2525.1	2830.5	3550.7	4549.8	5665.5	6940.6	7246.1	7226.9	6514.1
47.5°	2100.0	2148.7	2356.8	2635.7	3329.3	4498.2	5881.0	7396.6	7662.2	7622.4	6900.7
50°	1673.5	1673.5	1961.3	2449.8	3075.5	4360.9	6050.7	7812.8	8057.7	8020.8	7238.7
52.5°	1537.8	1540.7	1629.3	2188.6	2818.7	4124.8	6148.1	8226.0	8445.9	8420.8	7558.9
55°	1465.4	1469.9	1511.2	1773.9	2585.6	3763.2	6151.0	8546.2	8775.0	8718.9	7829.0
57.5°	1356.2	1348.9	1435.9	1580.6	2312.5	3296.9	6006.4	8794.1	9030.3	8987.5	8050.4
60°	1279.5	1267.7	1326.7	1456.6	2018.9	2814.3	5621.2	8974.2	9248.7	9273.8	8267.3
62.5°	1189.5	1185.0	1241.1	1363.6	1801.9	2498.5	5042.7	8764.6	9409.5	9369.7	8459.1
65°	1099.5	1090.6	1143.7	1239.7	1592.4	2240.2	4459.8	8454.7	9285.6	9321.0	8497.5
67.5°	981.4	979.9	1030.1	1100.9	1363.6	1951.0	3615.6	8047.4	8901.9	8876.8	8149.2
70°	838.2	838.2	888.4	950.4	1139.3	1664.7	2775.9	7349.4	8311.6	8457.7	7553.0
72.5°	677.4	680.3	730.5	801.3	940.1	1356.2	2046.9	6391.6	7799.5	7564.8	6711.8
75°	361.6	324.7	572.6	644.9	758.5	1081.7	1400.5	4155.8	6651.3	6489.0	5568.1
77.5°	87.1	91.5	180.0	335.0	404.4	599.2	689.2	1924.4	4288.6	4546.9	3971.3
80°	57.6	63.5	97.4	237.6	270.1	318.8	273.0	838.2	1663.2	1772.4	2305.2
82.5°	29.5	32.5	60.5	94.4	95.9	82.6	103.3	422.1	879.6	953.4	1108.3
85°	10.3	16.2	31.0	41.3	38.4	31.0	25.1	104.8	208.1	231.7	240.6
87.5°	0.0	0.0	4.4	4.4	3.0	3.0	4.4	4.4	5.9	4.4	4.4
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°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2257.9	2241.7	2216.6	2190.1	2162.0	2138.4	2125.1	2132.5	2141.3	2113.3	2103.0
5°	2253.5	2225.5	2178.2	2122.2	2079.4	2036.6	1986.4	1974.6	1962.8	1948.0	1931.8
7.5°	2274.2	2232.8	2136.9	2085.3	1995.2	1915.6	1871.3	1838.8	1809.3	1782.7	1766.5
10°	2312.5	2235.8	2128.1	2023.3	1924.4	1827.0	1731.1	1711.9	1706.0	1667.6	1639.6
12.5°	2337.6	2243.2	2097.1	1970.2	1828.5	1723.7	1627.8	1573.2	1568.7	1551.0	1531.9
15°	2377.5	2272.7	2076.4	1903.8	1731.1	1620.4	1531.9	1461.0	1425.6	1424.1	1409.4
17.5°	2449.8	2306.6	2043.9	1835.9	1652.9	1528.9	1402.0	1375.4	1316.4	1282.4	1273.6
20°	2523.6	2356.8	2035.1	1768.0	1551.0	1397.6	1300.2	1226.4	1179.1	1143.7	1121.6
22.5°	2619.5	2429.1	2038.0	1728.1	1468.4	1298.7	1171.8	1062.6	975.5	932.7	912.0
25°	2758.2	2513.2	2060.2	1667.6	1371.0	1192.4	1008.0	863.3	740.8	709.8	695.1
27.5°	2935.3	2631.3	2091.2	1605.6	1281.0	1049.3	810.2	647.9	546.0	522.4	507.7
30°	3206.9	2808.4	2095.6	1567.3	1199.8	863.3	606.5	479.6	399.9	374.8	377.8
32.5°	3717.5	3187.7	2154.6	1487.6	1055.2	662.6	445.7	349.8	289.3	280.4	295.2
35°	4310.7	3634.8	2268.3	1446.3	889.9	479.6	318.8	256.8	218.4	230.2	236.1
37.5°	4693.0	4028.9	2449.8	1351.8	696.6	352.7	222.8	200.7	193.3	200.7	214.0
40°	5138.6	4349.1	2604.7	1255.9	494.4	242.0	178.6	183.0	174.1	172.7	178.6
42.5°	5500.2	4678.2	2770.0	1098.0	343.9	180.0	163.8	166.8	160.9	153.5	153.5
45°	5844.1	4963.0	2768.6	885.5	227.3	159.4	150.5	156.4	155.0	144.6	143.2
47.5°	6145.1	5250.8	2770.0	643.4	172.7	146.1	140.2	146.1	146.1	137.2	135.8
50°	6518.5	5489.9	2725.8	411.7	157.9	135.8	134.3	132.8	138.7	126.9	124.0
52.5°	6747.2	5664.0	2526.5	277.4	146.1	128.4	125.4	122.5	125.4	115.1	115.1
55°	6998.1	5881.0	2266.8	219.9	138.7	119.5	118.1	115.1	115.1	103.3	104.8
57.5°	7271.1	6058.1	1917.0	193.3	132.8	113.6	110.7	106.3	100.4	91.5	90.0
60°	7468.9	6095.0	1568.7	175.6	128.4	110.7	98.9	93.0	82.6	76.7	75.3
62.5°	7535.3	6114.1	1272.1	157.9	121.0	101.8	88.5	78.2	66.4	62.0	62.0
65°	7480.7	5892.8	953.4	143.2	112.2	94.4	78.2	63.5	51.7	47.2	45.7
67.5°	7129.5	5485.5	693.6	128.4	98.9	85.6	67.9	51.7	41.3	36.9	36.9
70°	6490.5	5005.8	469.3	107.7	85.6	75.3	63.5	41.3	33.9	29.5	28.0
72.5°	5793.9	4244.3	299.6	87.1	66.4	59.0	45.7	35.4	28.0	22.1	22.1
75°	4582.3	3333.8	208.1	63.5	47.2	44.3	35.4	29.5	23.6	17.7	17.7
77.5°	3189.2	2166.4	163.8	48.7	32.5	29.5	26.6	22.1	19.2	14.8	13.3
80°	1849.1	1303.1	98.9	32.5	22.1	19.2	17.7	17.7	14.8	10.3	10.3
82.5°	917.9	543.1	42.8	20.7	14.8	13.3	11.8	10.3	10.3	7.4	7.4
85°	180.0	93.0	16.2	10.3	7.4	7.4	5.9	5.9	4.4	3.0	3.0
87.5°	5.9	4.4	4.4	4.4	3.0	3.0	1.5	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)