

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: P509921

Luminaire Tested: **VERD-M-CA3-170-722-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-170-722-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1060mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19881 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

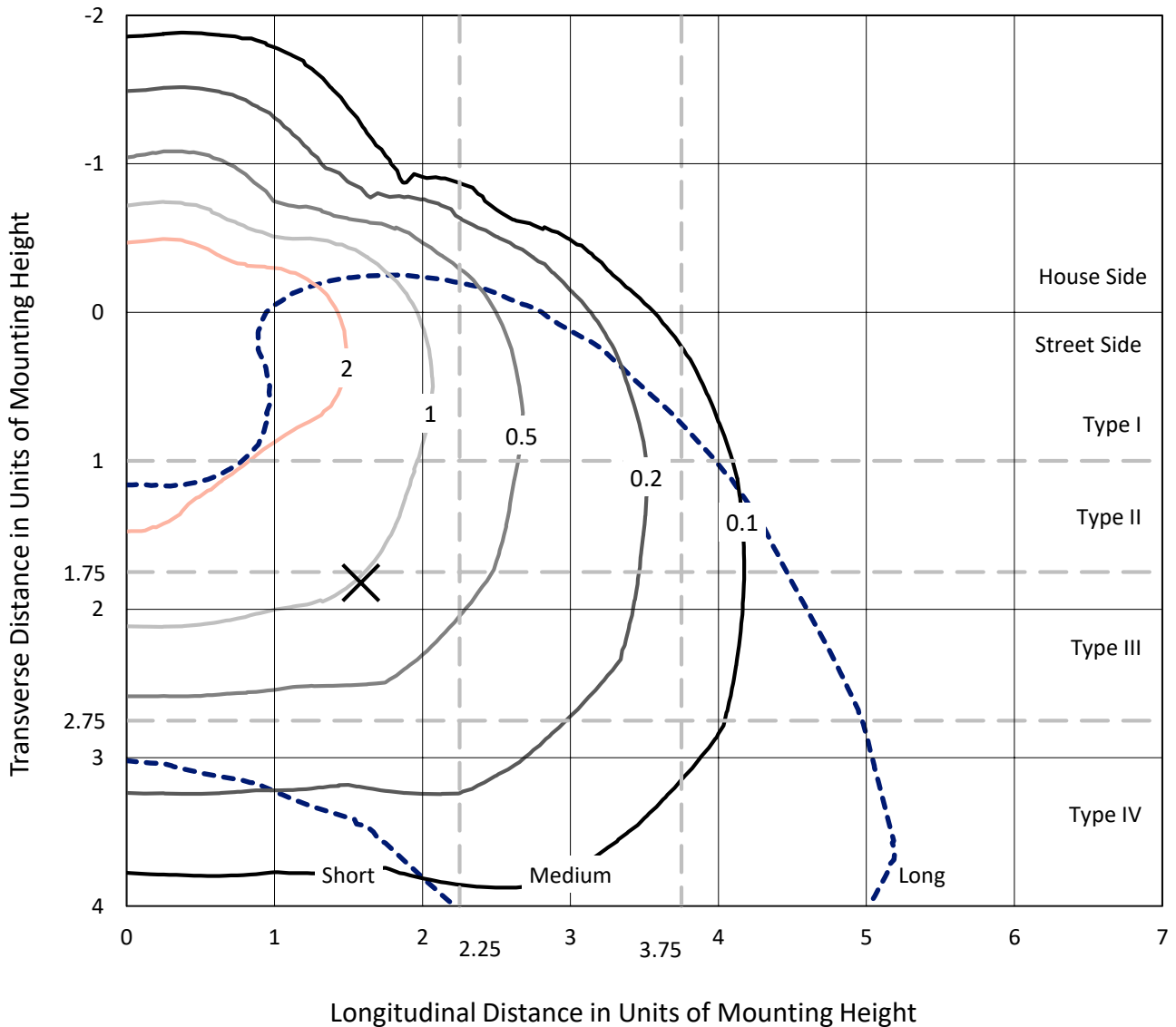
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

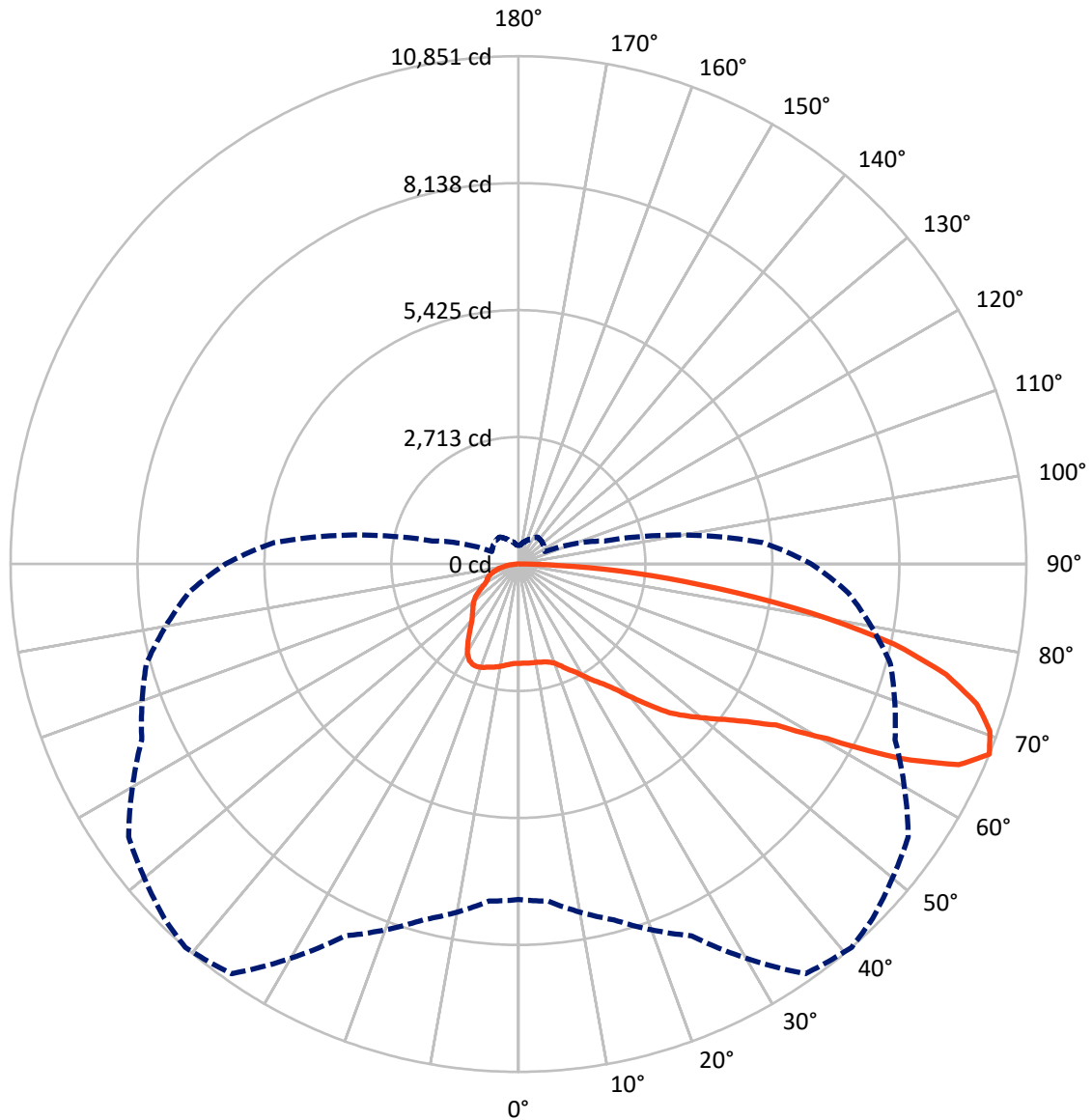
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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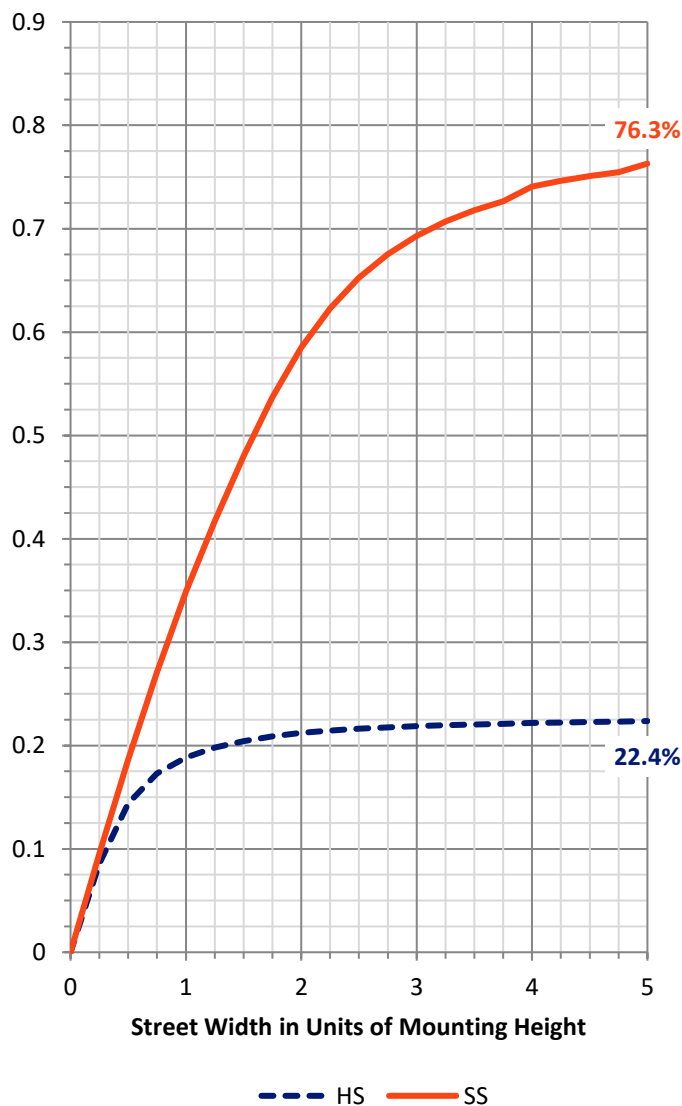
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4499.0	0.0	4499.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	15382.0	0.0	15382.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	19881.0	0.0	19881.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.1	1.0
10°-20°	636.1	3.2
20°-30°	1137.6	5.7
30°-40°	1783.8	9.0
40°-50°	2766.1	13.9
50°-60°	3899.5	19.6
60°-70°	4971.0	25.0
70°-80°	3719.9	18.7
80°-90°	761.9	3.8
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°	19881.0	100.0
0°-180°	19881.0	100.0

Coefficient of Utilization



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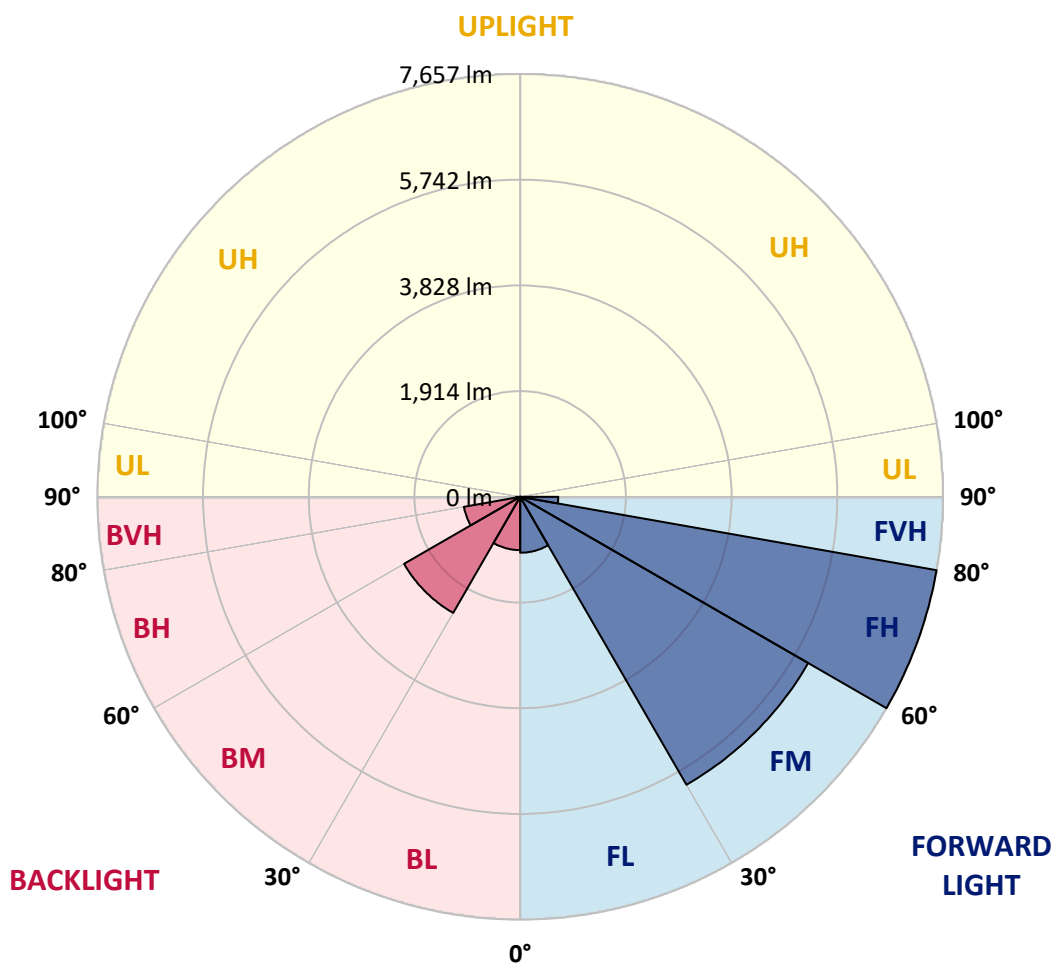
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1012.9	5.1			
FM	(30°-60°)	6021.8	30.3			
FH	(60°-80°)	7656.6	38.5			G4/12000
FVH	(80°-90°)	690.7	3.5			G4/750
BL	(0°-30°)	965.9	4.9	B2/1000		
BM	(30°-60°)	2427.6	12.2	B2/2500		
BH	(60°-80°)	1034.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	71.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2096.5	2120.8	2117.2	2112.7	2119.9	2120.8	2100.1	2108.2	2112.7	2119.9	2131.6
5°	2101.9	2126.2	2124.4	2116.3	2121.7	2124.4	2105.5	2119.9	2119.9	2122.6	2136.1
7.5°	2090.2	2113.6	2113.6	2110.9	2122.6	2133.4	2116.3	2128.9	2136.1	2143.3	2152.3
10°	2079.4	2099.2	2106.4	2104.6	2131.6	2134.3	2122.6	2153.2	2164.9	2172.1	2182.9
12.5°	2067.8	2092.0	2101.9	2111.8	2140.6	2150.5	2144.2	2175.7	2200.0	2212.6	2224.3
15°	2062.4	2089.3	2105.5	2119.9	2151.4	2169.4	2169.4	2217.1	2245.9	2262.1	2282.8
17.5°	2100.1	2128.0	2140.6	2152.3	2181.1	2205.4	2203.6	2259.4	2301.7	2326.9	2364.7
20°	2193.7	2227.0	2234.2	2238.7	2256.7	2265.7	2263.0	2323.3	2381.8	2429.5	2471.8
22.5°	2356.6	2376.4	2380.0	2362.0	2366.5	2373.7	2369.2	2402.5	2469.1	2524.9	2600.4
25°	2489.8	2521.3	2512.3	2486.2	2489.8	2499.7	2486.2	2537.4	2585.1	2658.0	2734.5
27.5°	2630.1	2653.5	2643.6	2627.4	2623.8	2616.6	2613.9	2679.6	2749.8	2807.4	2920.8
30°	2801.1	2813.7	2784.9	2777.7	2784.0	2788.5	2771.4	2855.1	2919.0	3001.7	3154.7
32.5°	3089.0	3100.7	3059.3	2948.7	2951.4	2972.1	2957.7	3062.9	3183.5	3284.3	3440.0
35°	3456.2	3456.2	3423.8	3268.1	3150.2	3151.1	3154.7	3303.2	3527.2	3753.1	3913.3
37.5°	3827.8	3840.4	3779.2	3637.0	3487.6	3408.5	3341.9	3532.6	3826.0	4329.9	4568.3
40°	4214.7	4234.5	4142.7	4012.2	3840.4	3750.4	3673.0	3789.1	4185.0	4901.2	5090.2
42.5°	4553.0	4580.9	4486.4	4348.8	4229.1	4127.4	4010.4	4057.2	4580.0	5443.8	5550.9
45°	4867.9	4883.2	4803.2	4689.8	4590.8	4535.0	4453.1	4507.1	5031.7	5974.7	5954.9
47.5°	5100.1	5122.6	5049.7	4988.5	4886.8	4853.5	4852.6	5001.1	5540.1	6397.6	6305.8
50°	5477.1	5460.0	5296.3	5221.6	5159.5	5170.3	5196.4	5452.8	6137.6	6805.2	6601.0
52.5°	6109.7	6078.2	5714.7	5559.0	5482.5	5517.6	5531.1	5862.2	6740.4	7157.0	6844.8
55°	6927.6	6826.8	6562.3	6144.8	5904.5	5937.8	5922.5	6302.2	7222.7	7492.7	7025.7
57.5°	7468.4	7562.9	7436.0	7197.5	6601.0	6492.1	6456.1	6737.7	7669.0	7813.9	7212.8
60°	7938.1	8094.6	8296.2	8143.2	7982.2	7574.6	7238.9	7232.6	8062.3	8028.1	7288.4
62.5°	8433.9	8516.7	8827.1	8921.6	9220.3	9145.6	8695.7	7858.9	8455.5	8184.6	7332.5
65°	7932.7	8043.4	8608.4	9124.0	10229.9	10337.9	10191.2	9023.2	8728.1	8264.7	7269.5
67.5°	7169.6	7230.8	7870.6	8765.0	10687.0	10850.7	10703.2	10166.0	8879.3	8229.6	7075.2
70°	6191.6	6263.5	6874.5	8094.6	10663.6	10685.2	10627.6	10271.3	8819.0	8065.0	6585.7
72.5°	5020.0	5110.9	5648.1	6915.0	10152.5	10246.1	10155.2	10062.5	8649.8	7604.3	5742.6
75°	3798.1	3918.6	4398.2	5513.1	8972.0	9443.5	9455.1	9741.3	7993.0	6519.1	4167.9
77.5°	2590.5	2705.7	3160.1	4200.3	7447.7	8200.8	8397.0	8710.1	6678.4	4817.6	2273.8
80°	1458.6	1447.8	2024.6	3000.8	5680.5	6341.8	6588.4	6575.8	4689.8	2473.6	463.4
82.5°	674.0	675.8	1035.7	1915.7	3845.8	4282.2	4382.0	3814.3	1645.7	419.3	147.6
85°	335.6	339.2	498.5	961.0	2171.2	2508.7	2384.5	1587.3	352.7	122.4	88.2
87.5°	133.2	127.8	197.1	395.0	783.7	830.5	725.2	317.6	63.9	43.2	29.7
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°	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2128.9	2130.7	2138.8	2122.6	2127.1	2123.5	2120.8	2135.2	2134.3	2137.0	2132.5
5°	2135.2	2139.7	2147.8	2140.6	2147.8	2144.2	2146.9	2166.7	2169.4	2168.5	2168.5
7.5°	2152.3	2156.8	2172.1	2163.1	2179.3	2174.8	2175.7	2194.6	2198.2	2192.8	2191.0
10°	2188.3	2191.9	2213.5	2211.7	2218.0	2214.4	2210.8	2218.9	2217.1	2209.0	2205.4
12.5°	2229.7	2239.6	2263.9	2264.8	2272.9	2254.9	2236.0	2233.3	2227.9	2215.3	2212.6
15°	2291.8	2303.5	2340.4	2331.4	2326.0	2287.3	2255.8	2230.6	2209.0	2198.2	2188.3
17.5°	2380.9	2400.7	2452.0	2424.1	2384.5	2327.8	2272.9	2218.0	2172.1	2133.4	2118.1
20°	2494.3	2516.8	2559.9	2523.1	2462.8	2378.2	2289.1	2190.1	2090.2	2004.8	1992.2
22.5°	2629.2	2665.2	2696.7	2612.1	2523.1	2416.0	2289.1	2146.9	1981.4	1853.6	1822.1
25°	2786.7	2814.6	2804.7	2685.9	2557.2	2422.3	2263.9	2070.5	1836.5	1688.0	1662.8
27.5°	2957.7	2970.3	2893.8	2721.0	2560.8	2385.4	2192.8	1934.6	1667.3	1550.4	1526.1
30°	3168.2	3130.4	2984.7	2742.6	2524.9	2303.5	2066.0	1735.7	1529.7	1427.1	1399.2
32.5°	3395.0	3325.7	3049.4	2727.3	2445.7	2166.7	1869.8	1595.4	1437.9	1312.8	1289.4
35°	3826.9	3629.8	3143.9	2681.4	2308.0	1984.1	1679.9	1487.4	1340.7	1206.6	1185.0
37.5°	4409.9	4067.1	3276.2	2617.5	2145.1	1806.8	1538.7	1372.2	1245.3	1106.8	1072.6
40°	4863.4	4508.9	3488.5	2549.1	1994.9	1638.5	1436.1	1311.9	1182.3	1034.8	1005.1
42.5°	5295.4	4912.9	3749.5	2472.7	1840.1	1521.6	1391.1	1298.4	1165.2	1015.0	987.1
45°	5676.9	5239.6	3974.4	2396.2	1665.5	1413.6	1357.8	1272.3	1141.0	989.8	962.8
47.5°	5985.5	5520.3	4169.7	2313.4	1507.2	1331.7	1314.6	1224.6	1094.2	938.5	906.1
50°	6264.4	5757.9	4304.7	2225.2	1352.4	1265.1	1243.5	1137.4	1001.5	863.8	843.1
52.5°	6436.3	5918.9	4385.6	2239.6	1205.7	1190.4	1155.3	1046.5	920.5	802.6	775.6
55°	6616.3	6071.0	4384.7	2158.6	1083.4	1078.0	1044.7	961.0	862.0	763.0	746.8
57.5°	6690.0	6084.5	4302.9	1778.0	975.4	941.2	934.0	889.9	803.5	709.9	691.9
60°	6739.5	6025.1	4148.1	1213.8	839.5	815.2	850.3	820.6	742.3	644.3	626.3
62.5°	6690.9	5960.3	3742.3	876.4	736.0	749.5	782.8	750.4	668.6	579.5	564.2
65°	6574.9	5712.9	2955.0	683.0	690.2	719.8	745.9	691.9	541.7	453.5	444.5
67.5°	6258.1	5242.3	1901.3	626.3	664.1	694.6	703.6	585.8	490.4	405.8	395.9
70°	5591.4	4208.4	732.4	590.3	638.0	651.5	614.6	537.2	450.8	377.9	368.9
72.5°	4374.0	2763.3	422.9	539.9	582.2	569.6	570.5	482.3	406.7	337.4	330.2
75°	2718.3	1000.6	376.1	480.5	493.1	516.5	486.8	418.4	350.0	308.6	299.6
77.5°	898.9	284.3	348.2	413.9	441.8	424.7	407.6	357.2	299.6	267.2	262.7
80°	217.8	213.3	312.2	323.9	346.4	317.6	315.8	296.9	252.8	233.9	229.5
82.5°	134.1	153.0	248.3	201.6	231.2	233.9	266.3	244.7	184.5	191.7	185.4
85°	82.8	117.9	130.5	97.2	98.1	131.4	159.3	147.6	110.7	104.4	103.5
87.5°	27.9	24.3	27.9	20.7	27.9	47.7	72.0	68.4	45.9	31.5	29.7
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)