

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: P509412

Luminaire Tested: **VERD-CA2-90-740-U-T2-HSS**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509412
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-CA2-90-740-U-T2-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1250mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11783 lumens
Efficiency: N/A
Efficacy: 125.1 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

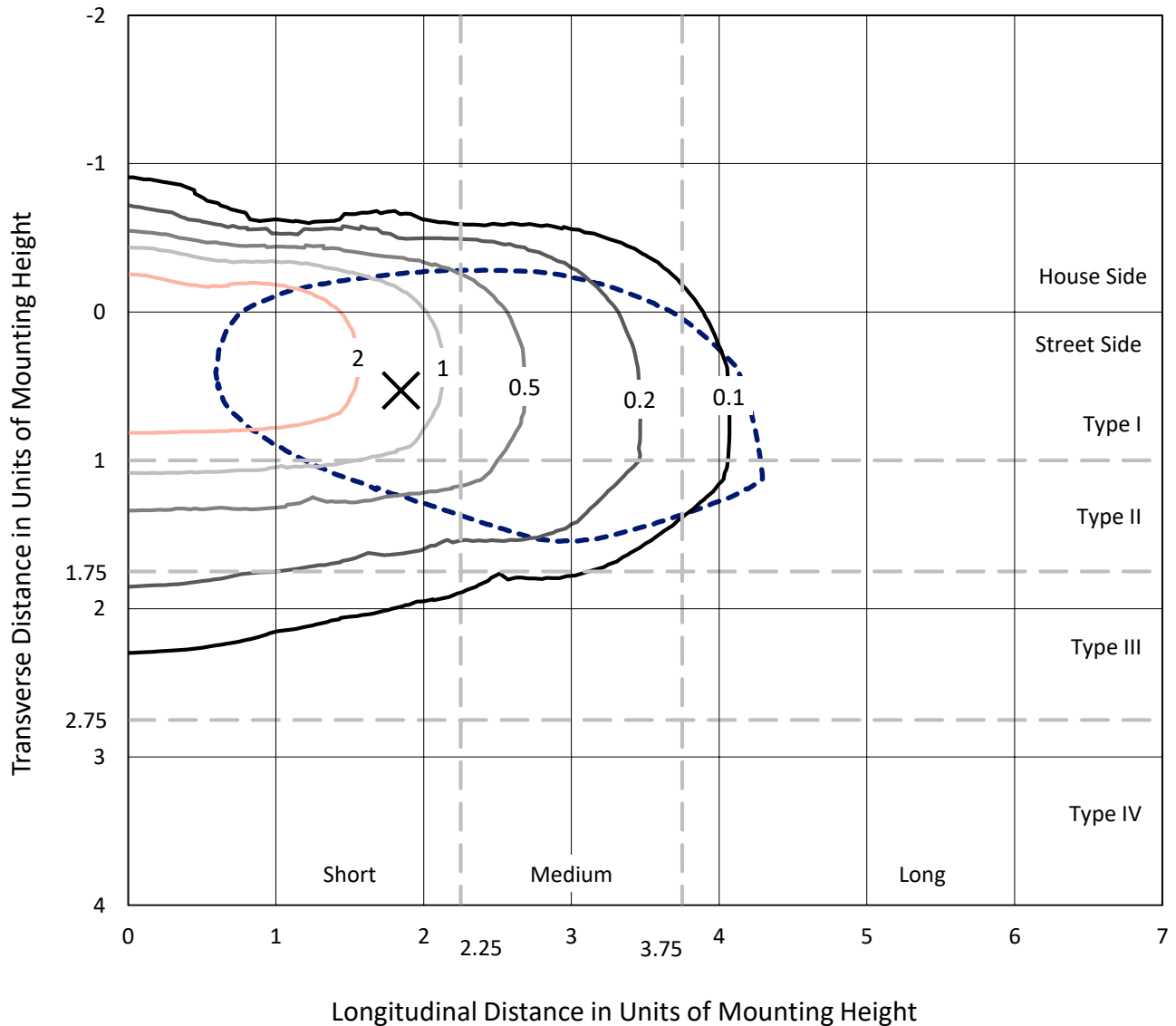
Input Watts (W): 94.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

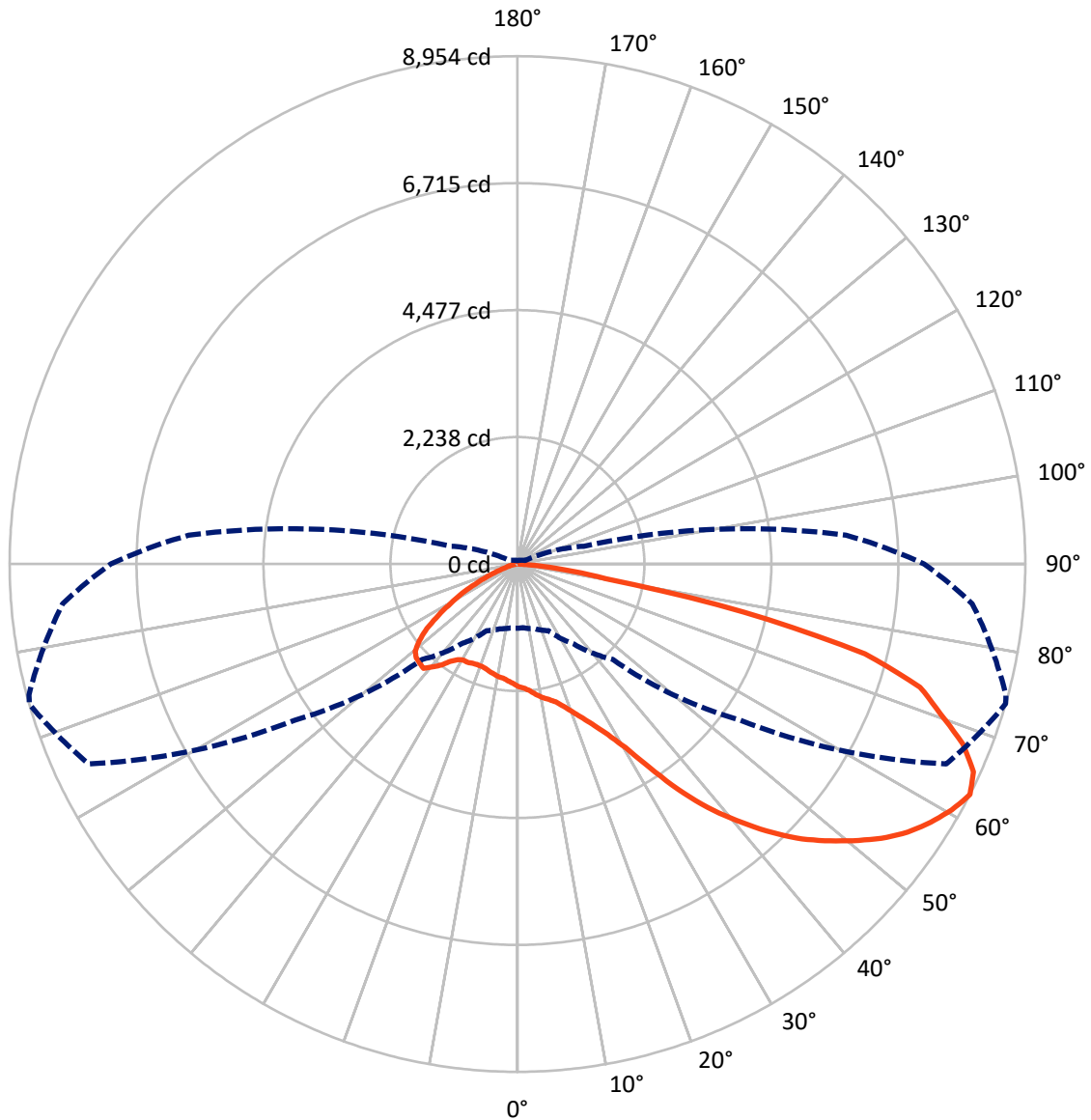
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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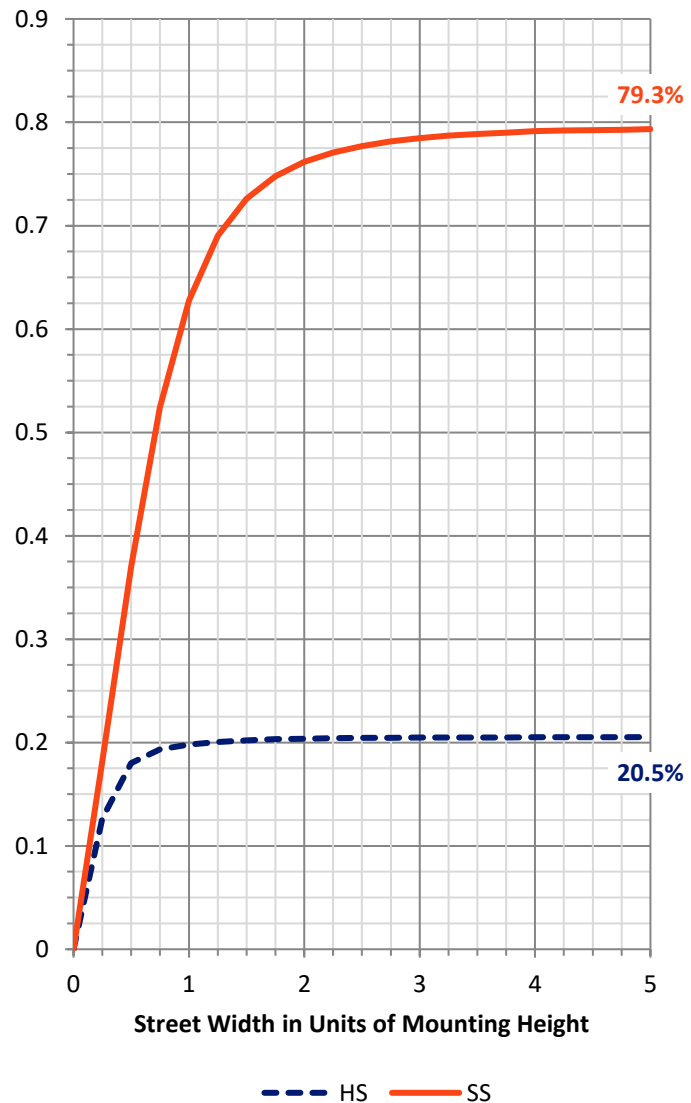
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2446.8	0.0	2446.8
	% Fixture	20.8	0.0	20.8
Street Side	Lumens	9336.2	0.0	9336.2
	% Fixture	79.2	0.0	79.2
Total	Lumens	11783.0	0.0	11783.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.9	1.7
10°-20°	621.9	5.3
20°-30°	1049.9	8.9
30°-40°	1561.7	13.3
40°-50°	2113.7	17.9
50°-60°	2431.8	20.6
60°-70°	2347.3	19.9
70°-80°	1329.0	11.3
80°-90°	121.9	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°	11783.0	100.0
0°-180°	11783.0	100.0



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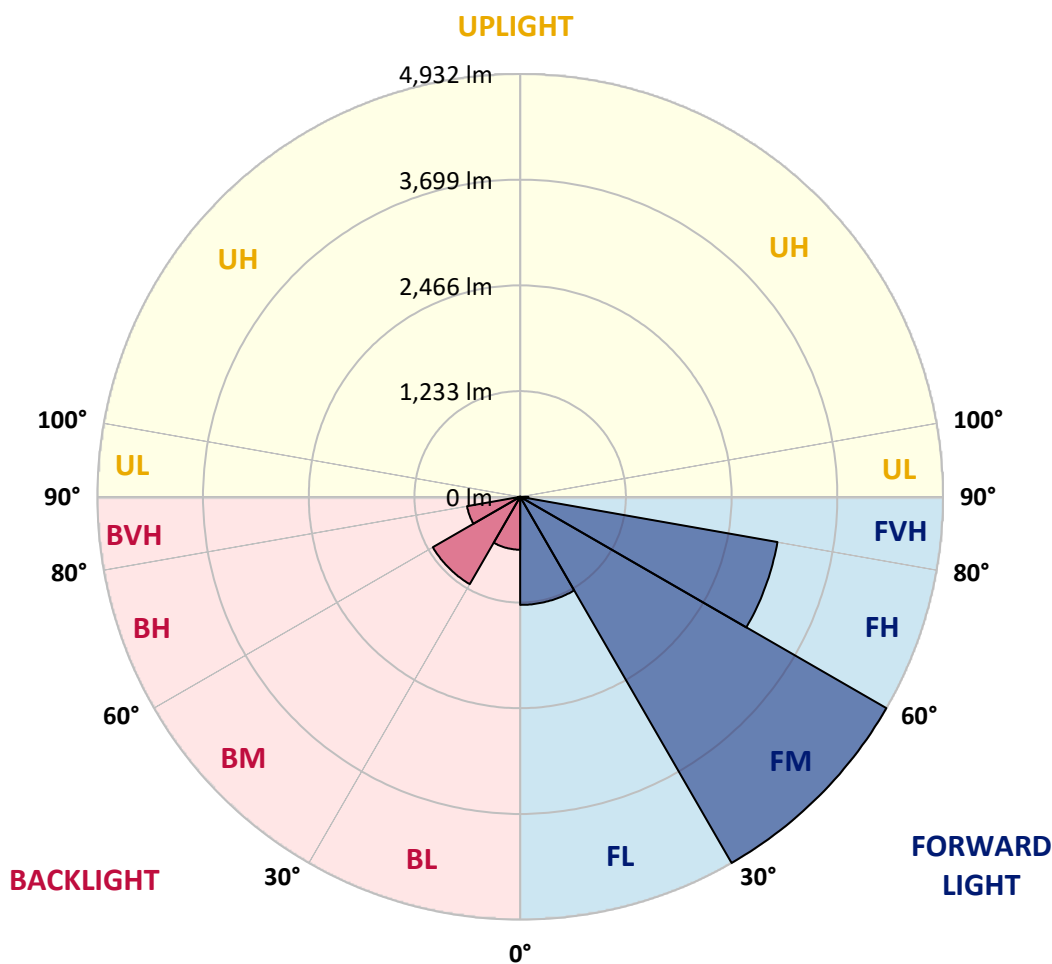
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1260.8	10.7			
FM	(30°-60°)	4932.1	41.9			
FH	(60°-80°)	3047.2	25.9			G2/5000
FVH	(80°-90°)	96.1	0.8			G1/100
BL	(0°-30°)	617.0	5.2	B2/1000		
BM	(30°-60°)	1175.0	10.0	B2/2500		
BH	(60°-80°)	629.0	5.3	B2/1000		G2/1000
BVH	(80°-90°)	25.8	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°	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8
2.5°	2355.0	2339.5	2326.9	2319.9	2300.2	2283.3	2249.6	2214.5	2190.7	2189.3	2166.8
5°	2453.3	2451.9	2423.8	2418.2	2391.5	2383.0	2349.3	2298.8	2239.8	2232.8	2172.4
7.5°	2582.5	2567.0	2536.1	2523.5	2492.6	2470.1	2425.2	2377.4	2318.4	2311.4	2206.1
10°	2707.4	2699.0	2680.7	2682.2	2638.6	2596.5	2529.1	2447.6	2391.5	2383.0	2253.9
12.5°	2852.1	2825.4	2794.5	2777.6	2734.1	2707.4	2642.8	2536.1	2447.6	2439.2	2310.0
15°	2951.8	2937.7	2909.6	2898.4	2856.3	2812.8	2738.3	2655.5	2522.1	2513.6	2367.6
17.5°	3058.5	3051.5	3019.2	3012.2	2971.4	2919.5	2861.9	2753.8	2637.2	2623.2	2436.4
20°	3130.1	3117.5	3113.3	3111.9	3100.6	3068.3	2995.3	2911.0	2781.9	2756.6	2524.9
22.5°	3225.6	3213.0	3218.6	3224.2	3239.6	3225.6	3177.9	3078.2	2950.4	2927.9	2663.9
25°	3235.4	3227.0	3264.9	3343.6	3374.5	3389.9	3353.4	3276.2	3152.6	3123.1	2829.6
27.5°	3262.1	3249.5	3290.2	3373.1	3512.1	3535.9	3543.0	3506.5	3402.5	3385.7	3054.3
30°	3214.4	3205.9	3269.1	3411.0	3566.8	3701.7	3753.6	3804.2	3756.4	3726.9	3367.4
32.5°	3097.8	3103.4	3186.3	3374.5	3662.3	3870.2	4005.0	4183.3	4269.0	4263.4	3922.1
35°	2927.9	2925.1	3064.1	3329.5	3670.8	4028.8	4280.2	4642.5	4882.6	4865.8	4504.9
37.5°	2783.3	2776.2	2933.5	3215.8	3677.8	4155.2	4603.2	5143.8	5448.6	5431.7	4980.9
40°	2606.3	2617.6	2758.0	3083.8	3618.8	4249.3	4884.0	5631.1	5942.9	5942.9	5473.8
42.5°	2428.0	2437.8	2576.8	2899.8	3533.1	4318.1	5148.0	6117.0	6434.4	6441.4	5812.3
45°	2272.1	2276.3	2402.7	2693.4	3378.7	4329.4	5391.0	6604.3	6895.0	6876.7	6198.4
47.5°	1998.3	2044.6	2242.6	2508.0	3168.0	4280.2	5596.0	7038.2	7291.0	7253.0	6566.4
50°	1592.4	1592.4	1866.3	2331.1	2926.5	4149.6	5757.5	7434.2	7667.3	7632.2	6887.9
52.5°	1463.2	1466.1	1550.3	2082.5	2682.2	3924.9	5850.2	7827.4	8036.6	8012.8	7192.7
55°	1394.4	1398.7	1438.0	1687.9	2460.3	3580.9	5853.0	8132.1	8349.8	8296.4	7449.6
57.5°	1290.5	1283.5	1366.4	1504.0	2200.5	3137.1	5715.4	8368.0	8592.7	8552.0	7660.3
60°	1217.5	1206.3	1262.4	1386.0	1921.0	2677.9	5348.9	8539.4	8800.6	8824.4	7866.7
62.5°	1131.8	1127.6	1181.0	1297.5	1714.6	2377.4	4798.4	8340.0	8953.6	8915.7	8049.3
65°	1046.2	1037.8	1088.3	1179.6	1515.2	2131.7	4243.7	8045.1	8835.7	8869.4	8085.8
67.5°	933.8	932.4	980.2	1047.6	1297.5	1856.4	3440.5	7657.5	8470.5	8446.7	7754.4
70°	797.6	797.6	845.4	904.3	1084.1	1584.0	2641.4	6993.3	7908.8	8047.9	7187.0
72.5°	644.6	647.4	695.1	762.5	894.5	1290.5	1947.7	6081.9	7421.6	7198.3	6386.6
75°	344.0	308.9	544.9	613.7	721.8	1029.3	1332.7	3954.4	6329.0	6174.6	5298.3
77.5°	82.9	87.1	171.3	318.8	384.8	570.1	655.8	1831.2	4080.8	4326.6	3778.9
80°	54.8	60.4	92.7	226.1	257.0	303.3	259.8	797.6	1582.6	1686.5	2193.5
82.5°	28.1	30.9	57.6	89.9	91.3	78.6	98.3	401.6	836.9	907.2	1054.6
85°	9.8	15.4	29.5	39.3	36.5	29.5	23.9	99.7	198.0	220.5	228.9
87.5°	0.0	0.0	4.2	4.2	2.8	2.8	4.2	4.2	5.6	4.2	4.2
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°	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8	2159.8
2.5°	2148.5	2133.1	2109.2	2083.9	2057.3	2034.8	2022.1	2029.2	2037.6	2010.9	2001.1
5°	2144.3	2117.6	2072.7	2019.3	1978.6	1937.9	1890.1	1878.9	1867.7	1853.6	1838.2
7.5°	2164.0	2124.7	2033.4	1984.2	1898.6	1822.7	1780.6	1749.7	1721.6	1696.4	1680.9
10°	2200.5	2127.5	2025.0	1925.3	1831.2	1738.5	1647.2	1629.0	1623.3	1586.8	1560.1
12.5°	2224.4	2134.5	1995.5	1874.7	1739.9	1640.2	1548.9	1497.0	1492.7	1475.9	1457.6
15°	2262.3	2162.6	1975.8	1811.5	1647.2	1541.9	1457.6	1390.2	1356.5	1355.1	1341.1
17.5°	2331.1	2194.9	1944.9	1746.9	1572.8	1454.8	1334.1	1308.8	1252.6	1220.3	1211.9
20°	2401.3	2242.6	1936.5	1682.3	1475.9	1329.8	1237.2	1166.9	1122.0	1088.3	1067.2
22.5°	2492.6	2311.4	1939.3	1644.4	1397.2	1235.8	1115.0	1011.1	928.2	887.5	867.8
25°	2624.6	2391.5	1960.4	1586.8	1304.6	1134.6	959.1	821.5	704.9	675.5	661.4
27.5°	2793.1	2503.8	1989.8	1527.8	1218.9	998.4	770.9	616.5	519.6	497.1	483.1
30°	3051.5	2672.3	1994.1	1491.3	1141.7	821.5	577.2	456.4	380.6	356.7	359.5
32.5°	3537.4	3033.2	2050.2	1415.5	1004.1	630.5	424.1	332.8	275.2	266.8	280.9
35°	4101.9	3458.7	2158.4	1376.2	846.8	456.4	303.3	244.3	207.8	219.1	224.7
37.5°	4465.6	3833.7	2331.1	1286.3	662.8	335.6	212.0	191.0	184.0	191.0	203.6
40°	4889.7	4138.4	2478.5	1195.0	470.4	230.3	169.9	174.1	165.7	164.3	169.9
42.5°	5233.7	4451.5	2635.8	1044.8	327.2	171.3	155.9	158.7	153.1	146.0	146.0
45°	5560.9	4722.6	2634.4	842.6	216.3	151.7	143.2	148.9	147.4	137.6	136.2
47.5°	5847.4	4996.4	2635.8	612.3	164.3	139.0	133.4	139.0	139.0	130.6	129.2
50°	6202.7	5223.9	2593.7	391.8	150.3	129.2	127.8	126.4	132.0	120.8	118.0
52.5°	6420.3	5389.6	2404.1	264.0	139.0	122.2	119.4	116.6	119.4	109.5	109.5
55°	6659.0	5596.0	2157.0	209.2	132.0	113.7	112.3	109.5	109.5	98.3	99.7
57.5°	6918.8	5764.5	1824.1	184.0	126.4	108.1	105.3	101.1	95.5	87.1	85.7
60°	7107.0	5799.6	1492.7	167.1	122.2	105.3	94.1	88.5	78.6	73.0	71.6
62.5°	7170.2	5817.9	1210.5	150.3	115.2	96.9	84.3	74.4	63.2	59.0	59.0
65°	7118.2	5607.2	907.2	136.2	106.7	89.9	74.4	60.4	49.1	44.9	43.5
67.5°	6784.0	5219.7	660.0	122.2	94.1	81.4	64.6	49.1	39.3	35.1	35.1
70°	6176.0	4763.3	446.6	102.5	81.4	71.6	60.4	39.3	32.3	28.1	26.7
72.5°	5513.2	4038.7	285.1	82.9	63.2	56.2	43.5	33.7	26.7	21.1	21.1
75°	4360.3	3172.2	198.0	60.4	44.9	42.1	33.7	28.1	22.5	16.9	16.9
77.5°	3034.6	2061.5	155.9	46.3	30.9	28.1	25.3	21.1	18.3	14.0	12.6
80°	1759.5	1240.0	94.1	30.9	21.1	18.3	16.9	16.9	14.0	9.8	9.8
82.5°	873.5	516.8	40.7	19.7	14.0	12.6	11.2	9.8	9.8	7.0	7.0
85°	171.3	88.5	15.4	9.8	7.0	7.0	5.6	5.6	4.2	2.8	2.8
87.5°	5.6	4.2	4.2	4.2	2.8	2.8	1.4	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)