

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: LUMARK

Report Number: P966615

Luminaire Tested: **NAV-SB4C-727-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-727-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29064.9 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

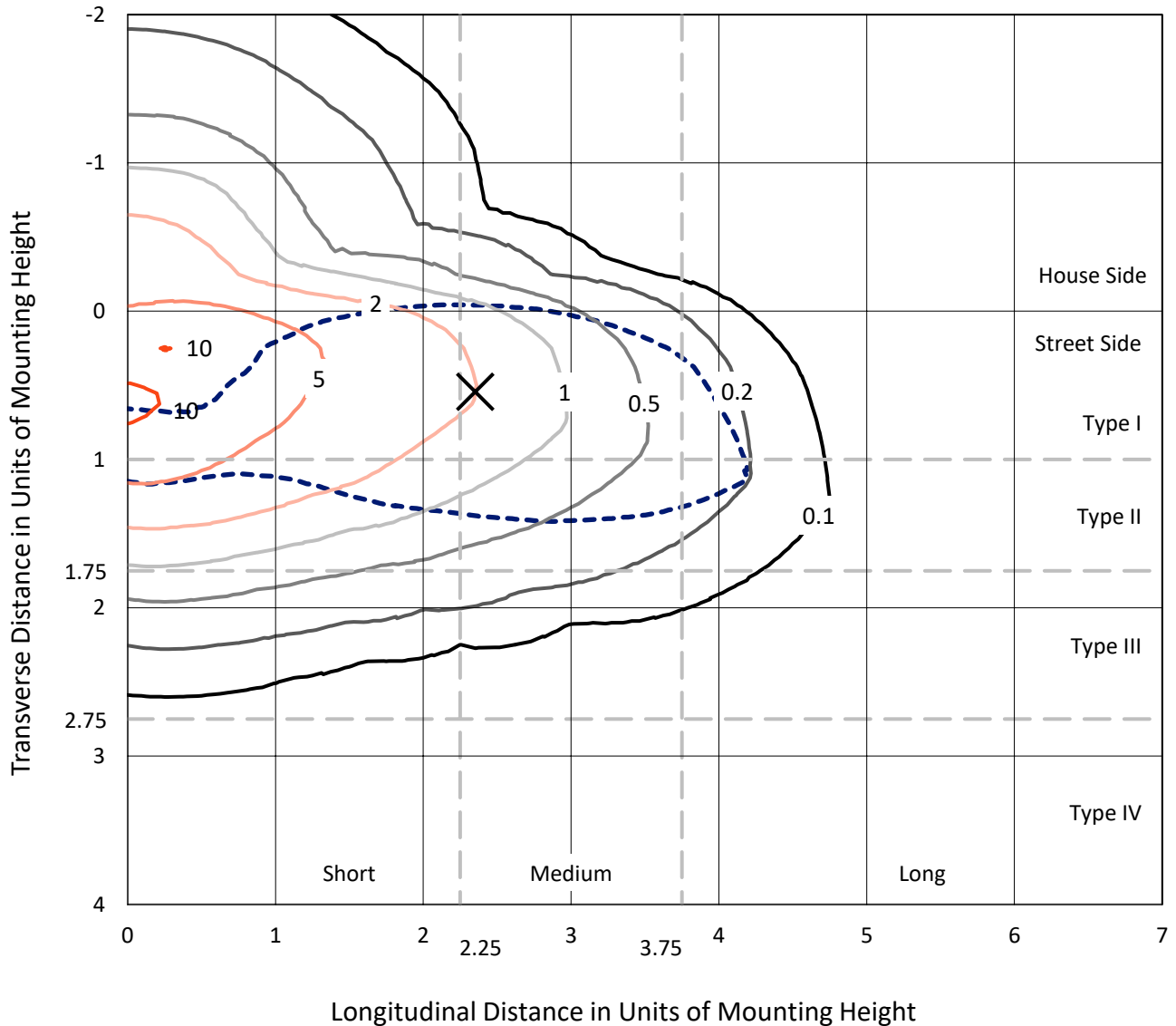
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966615
 CATALOG NUMBER: NAV-SB4C-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

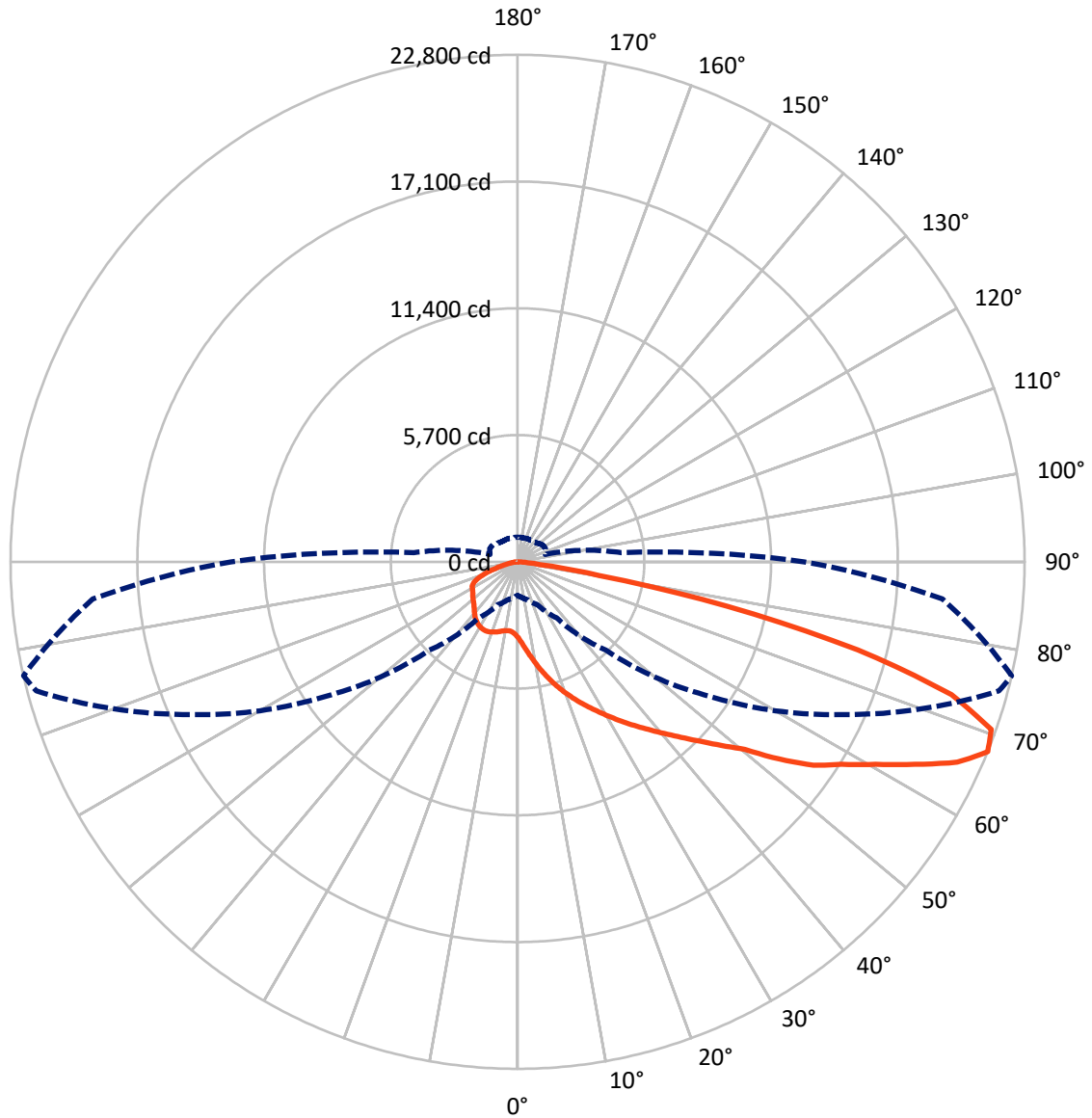
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P966615
CATALOG NUMBER: NAV-SB4C-727-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P966615
 CATALOG NUMBER: NAV-SB4C-727-U-T2R

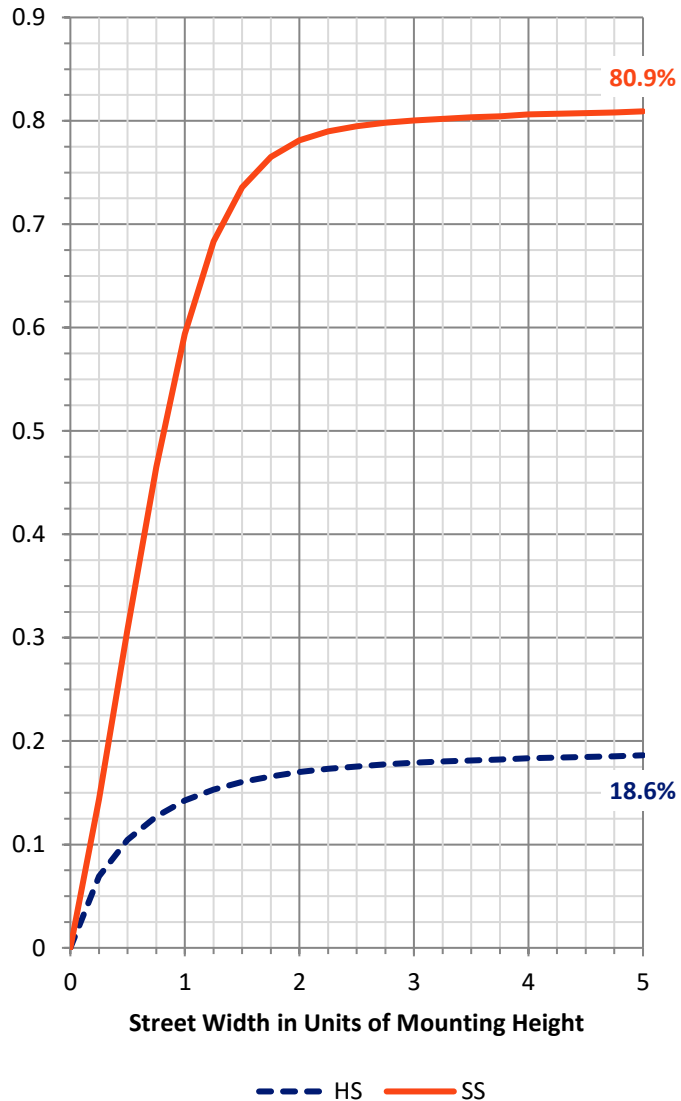
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5497.9	0.0	5497.9
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	23567.0	0.0	23567.0
	% Fixture	81.1	0.0	81.1
Total	Lumens	29064.9	0.0	29064.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.5	1.3
10°-20°	1313.2	4.5
20°-30°	2479.4	8.5
30°-40°	3994.3	13.7
40°-50°	5463.5	18.8
50°-60°	6162.9	21.2
60°-70°	5752.3	19.8
70°-80°	3153.2	10.8
80°-90°	380.4	1.3
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°	29064.9	100.0
0°-180°	29064.9	100.0

Coefficient of Utilization

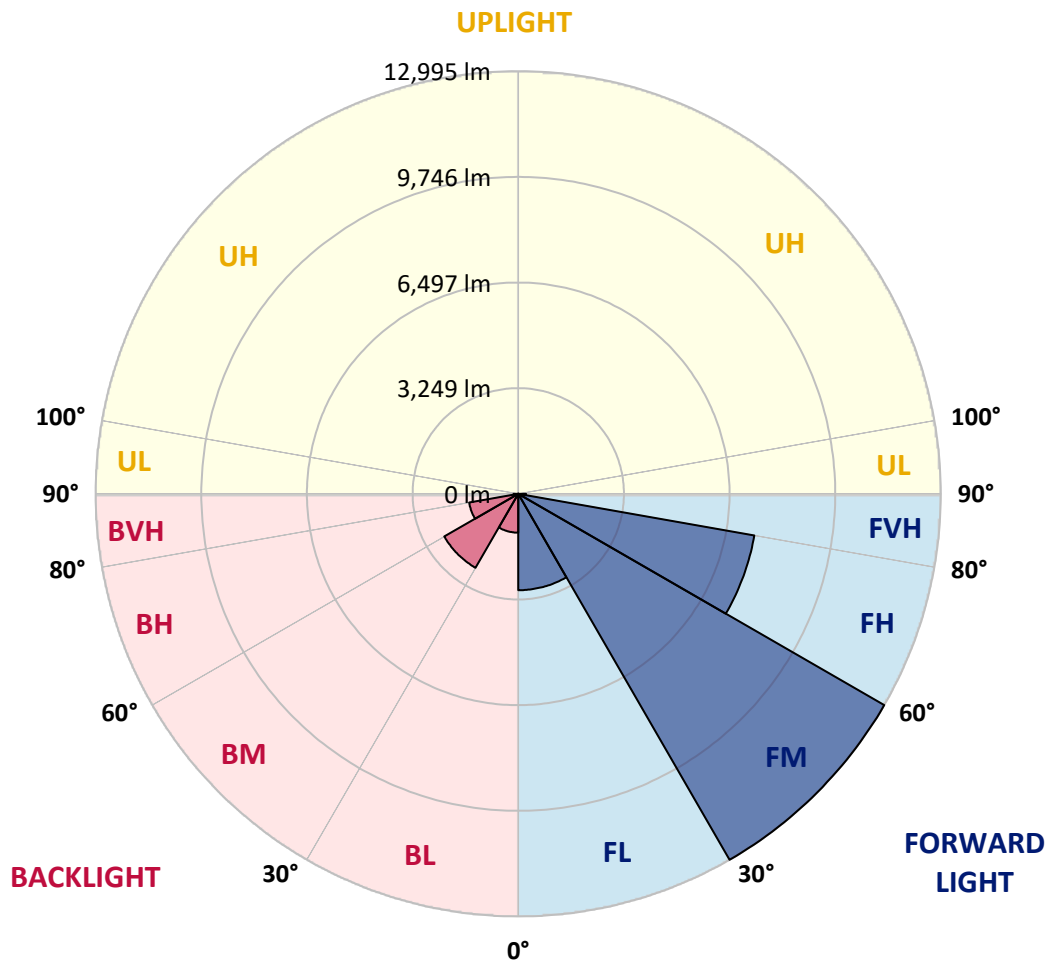


REPORT NUMBER: P966615
 CATALOG NUMBER: NAV-SB4C-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2962.8	10.2			
FM (30°-60°)	12994.6	44.7			
FH (60°-80°)	7371.7	25.4			G3/7500
FVH (80°-90°)	237.9	0.8			G3/500
BL (0°-30°)	1195.4	4.1	B3/2500		
BM (30°-60°)	2626.2	9.0	B3/5000		
BH (60°-80°)	1533.8	5.3	B3/2500		G3/2500
BVH (80°-90°)	142.5	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type II Medium



REPORT NUMBER: P966615
 CATALOG NUMBER: NAV-SB4C-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2
2.5°	4269.9	4299.9	4262.4	4262.4	4136.4	4070.4	3944.3	3848.3	3675.8	3645.7	3531.7
5°	5047.1	5084.6	5032.0	5009.6	4861.1	4724.5	4513.0	4304.4	3996.9	3965.3	3696.8
7.5°	5648.7	5696.7	5650.2	5626.2	5494.1	5341.1	5093.5	4802.5	4369.0	4307.4	3918.8
10°	6139.2	6146.8	6131.8	6140.8	6037.2	5911.3	5657.7	5318.6	4777.0	4693.0	4187.3
12.5°	6416.8	6451.3	6481.4	6535.4	6517.4	6439.4	6211.3	5806.2	5209.0	5101.1	4480.0
15°	6547.4	6607.4	6674.9	6799.4	6900.0	6919.5	6745.4	6329.8	5648.7	5518.2	4775.5
17.5°	6593.9	6650.9	6757.4	6937.4	7153.5	7299.0	7221.0	6838.4	6083.8	5933.7	5086.0
20°	6829.5	6846.0	6910.4	7081.5	7315.5	7557.1	7615.6	7327.5	6514.4	6344.9	5407.2
22.5°	7333.6	7300.6	7318.5	7396.5	7564.6	7798.6	7932.2	7759.7	6957.0	6761.9	5731.2
25°	8166.2	8070.2	7974.2	7884.2	7969.7	8101.7	8253.2	8191.7	7420.6	7173.1	6058.3
27.5°	9217.9	9100.9	8889.4	8593.8	8490.3	8536.8	8604.3	8592.3	7849.7	7599.1	6395.8
30°	10253.2	10116.6	9864.6	9437.0	9163.9	9040.9	8989.9	8955.4	8316.2	8049.2	6736.4
32.5°	11079.8	10971.8	10724.3	10245.7	9849.5	9639.5	9470.0	9347.0	8803.8	8536.8	7096.5
35°	11803.0	11702.4	11418.9	10896.8	10466.2	10242.6	10020.6	9758.0	9311.0	9040.9	7483.5
37.5°	12463.1	12362.6	11974.0	11430.9	10997.3	10842.8	10644.7	10199.2	9819.6	9564.5	7893.1
40°	12880.3	12857.7	12494.6	11879.4	11429.4	11352.9	11286.9	10710.7	10383.7	10146.7	8343.3
42.5°	12986.7	13036.3	12748.1	12242.6	11813.4	11751.9	11906.5	11289.9	11016.8	10790.3	8853.3
45°	12730.2	12872.7	12683.7	12340.1	12086.5	12053.5	12455.6	11923.0	11717.5	11510.4	9468.4
47.5°	12080.5	12322.0	12244.0	12196.1	12160.1	12302.6	12938.7	12595.1	12511.2	12331.1	10170.7
50°	10769.3	11226.8	11363.4	11666.4	12014.5	12496.1	13378.3	13328.8	13438.4	13256.7	11025.8
52.5°	8502.3	9132.4	9924.6	10683.8	11567.4	12431.6	13861.4	14382.0	14844.2	14745.1	12385.1
55°	7018.5	7302.0	7911.2	9303.4	10700.3	12160.1	14079.0	15232.7	16239.4	16150.9	13415.8
57.5°	5878.3	6131.8	6506.9	7669.6	9389.0	11543.4	14214.0	15751.8	17195.1	17186.1	14433.0
60°	4655.4	4924.0	5308.1	6131.8	7857.1	10478.2	14184.0	16342.9	18414.8	18489.9	15673.8
62.5°	3275.2	3570.8	3996.9	4765.0	6292.3	9097.9	13571.8	16770.5	19850.7	20054.7	17166.6
65°	2152.9	2348.0	2669.1	3332.2	4688.5	7323.0	12403.1	16826.0	21387.0	21732.0	18567.9
67.5°	1509.3	1584.3	1773.4	2133.4	3090.7	5615.7	10541.2	16251.4	22411.7	22800.3	19175.5
70°	1177.7	1215.2	1311.3	1455.3	1941.5	3776.3	8077.7	14757.1	22192.7	22597.8	18540.9
72.5°	1017.2	1053.2	1089.3	1107.2	1302.3	2331.5	5471.7	12338.5	20129.8	20404.3	16120.9
75°	922.7	931.7	961.7	955.7	993.2	1512.3	3158.1	8989.9	15882.4	15787.8	11900.5
77.5°	775.6	787.7	837.2	829.6	882.2	1033.7	1639.8	5801.7	10296.6	9654.6	6623.9
80°	657.1	663.2	717.2	708.2	766.7	748.7	837.2	2957.1	4367.4	3699.7	1909.9
82.5°	228.1	282.1	547.7	564.2	585.2	453.0	483.1	1206.2	1333.7	1021.7	400.6
85°	111.0	118.5	279.1	396.1	394.6	228.1	235.5	430.6	420.0	330.0	133.6
87.5°	18.0	22.5	33.0	154.6	123.0	60.0	81.0	84.0	87.0	75.0	30.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P966615
 CATALOG NUMBER: NAV-SB4C-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2	3410.2
2.5°	3447.7	3372.7	3215.2	3069.7	2955.6	2846.1	2784.6	2732.0	2702.1	2696.1	2696.1
5°	3540.8	3386.2	3099.6	2858.1	2700.6	2583.5	2522.0	2483.1	2463.5	2451.5	2450.1
7.5°	3674.3	3447.7	3039.6	2765.0	2600.0	2516.1	2484.5	2478.6	2477.0	2478.6	2483.1
10°	3858.8	3548.2	3033.6	2742.6	2604.5	2558.0	2556.6	2558.0	2564.0	2565.6	2567.0
12.5°	4058.4	3651.8	3057.7	2762.1	2661.5	2636.1	2631.6	2630.0	2634.6	2637.5	2639.1
15°	4275.9	3788.3	3098.2	2804.1	2724.6	2697.6	2693.1	2684.1	2682.5	2681.1	2679.6
17.5°	4499.4	3923.3	3143.2	2849.1	2765.0	2727.5	2711.0	2690.1	2673.6	2669.1	2673.6
20°	4726.0	4056.8	3174.6	2871.6	2768.1	2715.5	2682.5	2646.5	2618.1	2601.6	2607.5
22.5°	4967.6	4196.3	3194.2	2865.6	2741.1	2669.1	2609.0	2567.0	2523.5	2495.1	2496.5
25°	5203.1	4317.9	3192.7	2834.1	2688.6	2597.0	2520.6	2466.6	2406.5	2376.5	2376.5
27.5°	5429.6	4427.4	3155.2	2778.6	2613.5	2511.6	2420.0	2355.4	2297.0	2268.4	2267.0
30°	5663.6	4518.9	3096.6	2697.6	2525.0	2412.5	2312.0	2256.4	2204.0	2177.0	2175.5
32.5°	5896.2	4603.0	3014.1	2597.0	2423.0	2315.0	2215.9	2165.0	2133.4	2133.4	2135.0
35°	6142.3	4661.5	2904.6	2480.0	2315.0	2211.4	2133.4	2103.4	2100.4	2082.4	2078.0
37.5°	6401.8	4699.0	2771.1	2360.0	2208.5	2111.0	2086.9	2050.9	2020.9	1981.9	1975.9
40°	6674.9	4736.5	2610.6	2235.4	2095.9	2041.9	2031.4	1983.4	1897.9	1801.8	1788.4
42.5°	7006.5	4762.0	2444.0	2111.0	1977.4	1959.4	1974.5	1891.9	1755.4	1683.4	1684.9
45°	7390.6	4804.0	2291.0	1987.9	1855.9	1855.9	1918.9	1810.9	1698.3	1653.3	1660.8
47.5°	7888.6	4901.5	2148.4	1852.9	1743.3	1773.4	1795.9	1713.4	1650.4	1594.8	1593.4
50°	8608.8	5135.6	2001.4	1716.4	1657.8	1717.9	1686.3	1638.4	1564.9	1519.9	1515.4
52.5°	9503.0	5273.6	1870.9	1593.4	1584.3	1644.3	1599.3	1554.3	1498.9	1438.8	1426.8
55°	10112.1	5299.1	1761.4	1503.3	1534.8	1528.8	1512.3	1471.8	1441.8	1362.3	1363.8
57.5°	10793.2	5350.1	1671.4	1449.4	1503.3	1437.3	1431.3	1396.8	1357.8	1303.8	1285.8
60°	11607.9	5429.6	1593.4	1428.3	1476.3	1377.3	1347.3	1333.7	1294.8	1267.7	1275.3
62.5°	12496.1	5501.7	1513.8	1431.3	1444.8	1318.8	1273.8	1269.3	1245.3	1236.3	1236.3
65°	13102.3	5305.1	1414.8	1428.3	1395.3	1258.8	1201.7	1200.3	1180.7	1177.7	1176.3
67.5°	12890.7	4682.5	1281.2	1386.3	1344.3	1198.7	1135.7	1129.8	1104.2	1105.8	1105.8
70°	11831.5	3794.3	1096.8	1282.8	1281.2	1144.7	1066.7	1047.2	1012.7	1018.7	1024.7
72.5°	9845.0	2811.6	849.2	1110.3	1180.7	1095.2	987.2	955.7	912.1	918.2	916.7
75°	7110.0	1911.4	618.2	844.7	1027.7	1036.7	909.2	855.2	802.7	811.7	814.7
77.5°	3638.2	1083.2	454.6	582.1	807.2	942.2	838.7	766.7	754.7	838.7	826.7
80°	1186.7	543.1	315.1	408.1	529.6	771.2	735.1	652.6	649.6	669.1	574.6
82.5°	354.0	229.5	202.5	268.5	292.5	591.1	634.7	493.6	424.6	447.1	462.1
85°	121.6	111.0	115.5	133.6	139.5	346.6	444.1	327.1	309.0	340.6	336.1
87.5°	28.5	39.1	33.0	30.0	30.0	84.0	172.5	136.5	189.0	126.1	121.6
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)