

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: P967113

Luminaire Tested: **NAV-SB4D-722-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34995.6 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

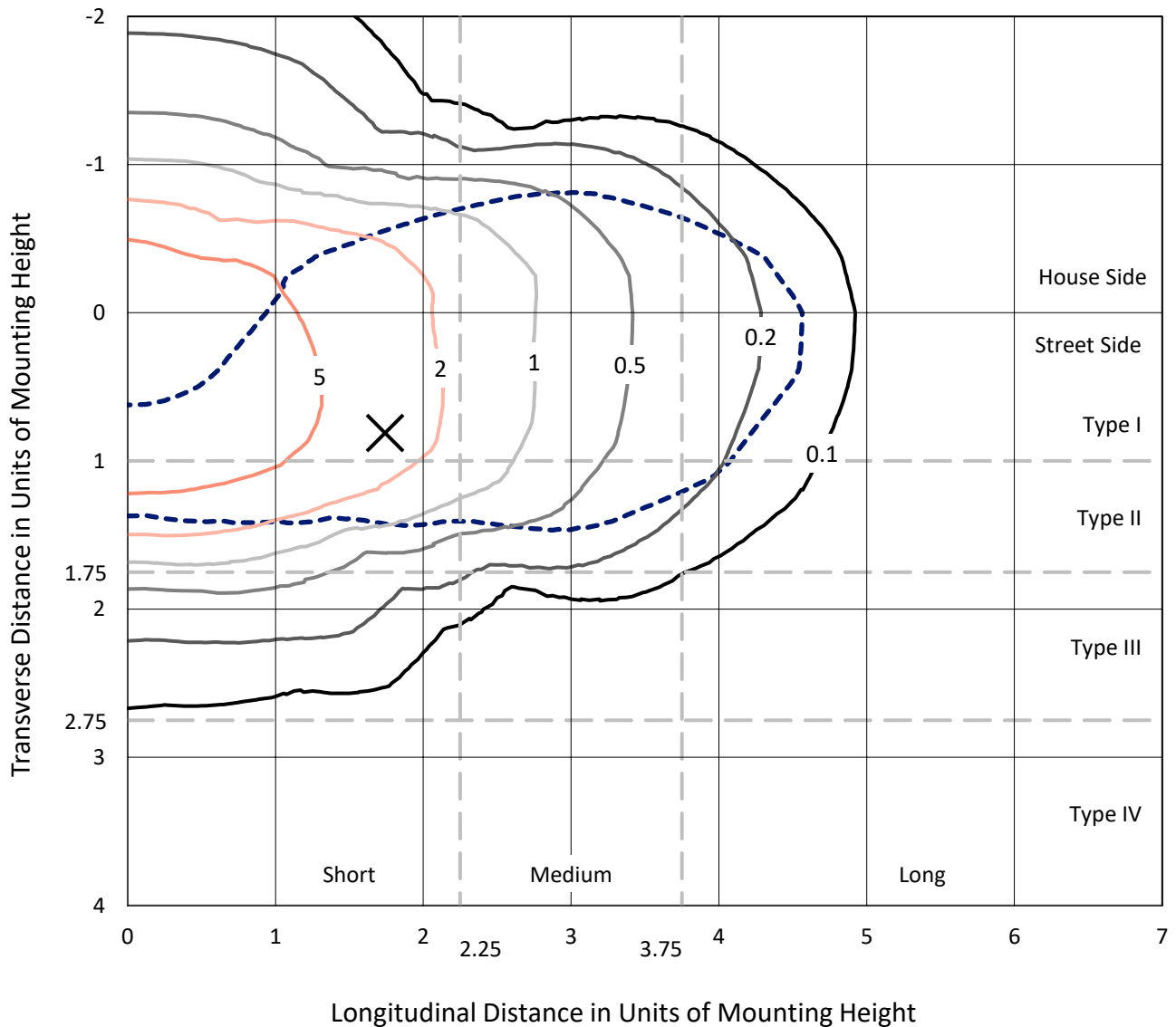
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967113
 CATALOG NUMBER: NAV-SB4D-722-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

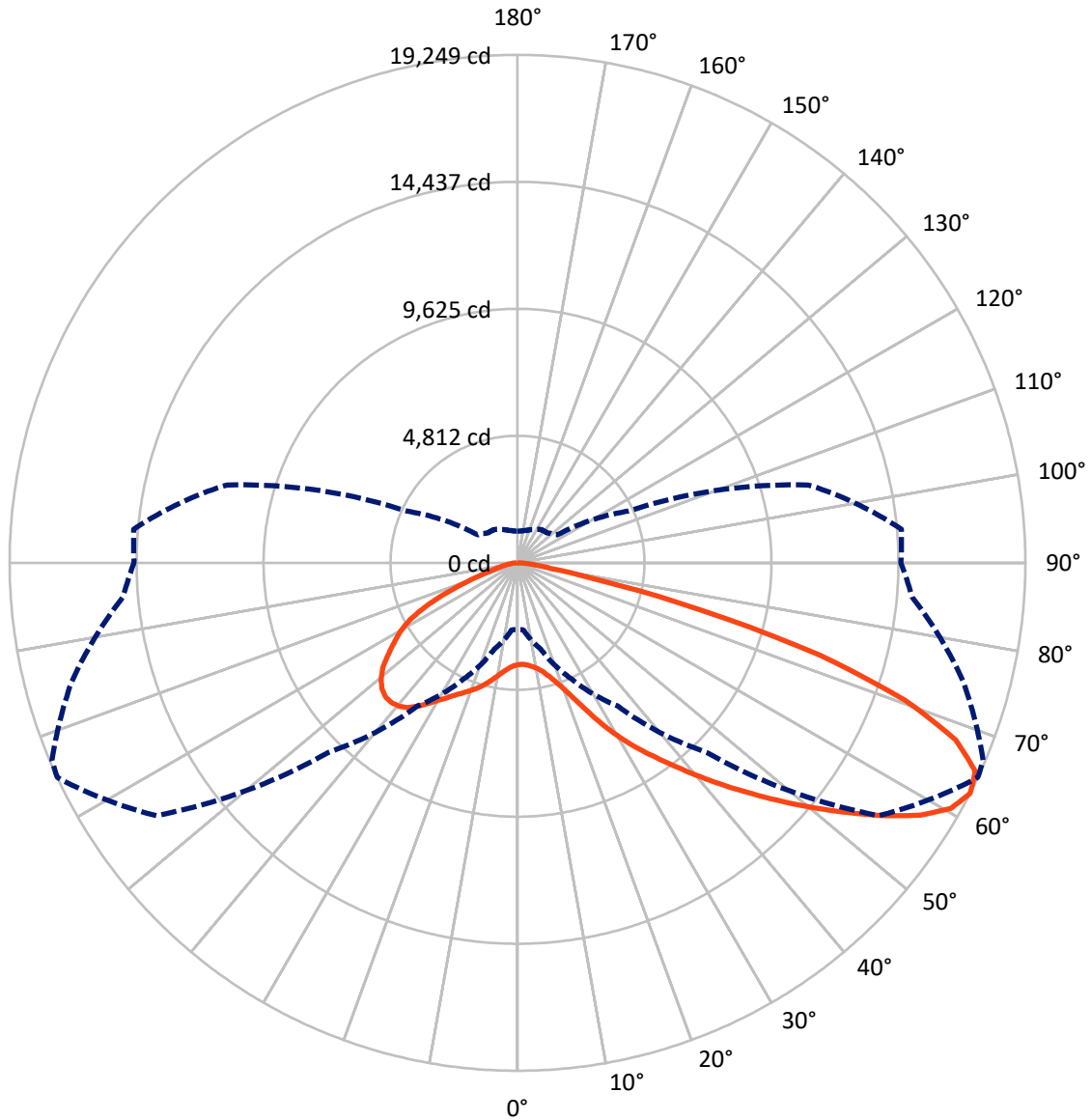
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - N/A

REPORT NUMBER: P967113
CATALOG NUMBER: NAV-SB4D-722-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P967113
 CATALOG NUMBER: NAV-SB4D-722-U-T2U

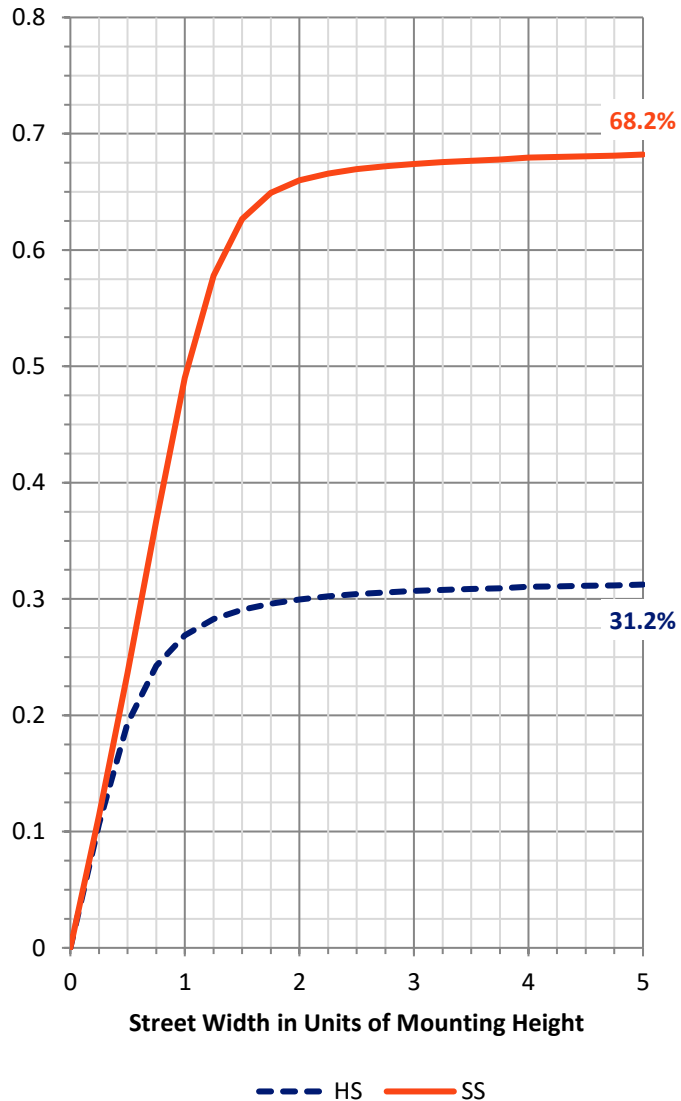
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11043.1	0.0	11043.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	23952.5	0.0	23952.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	34995.6	0.0	34995.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.5	1.1
10°-20°	1303.8	3.7
20°-30°	2643.6	7.6
30°-40°	4574.6	13.1
40°-50°	6922.9	19.8
50°-60°	8116.6	23.2
60°-70°	6804.8	19.4
70°-80°	3756.8	10.7
80°-90°	488.0	1.4
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°	34995.6	100.0
0°-180°	34995.6	100.0

Coefficient of Utilization

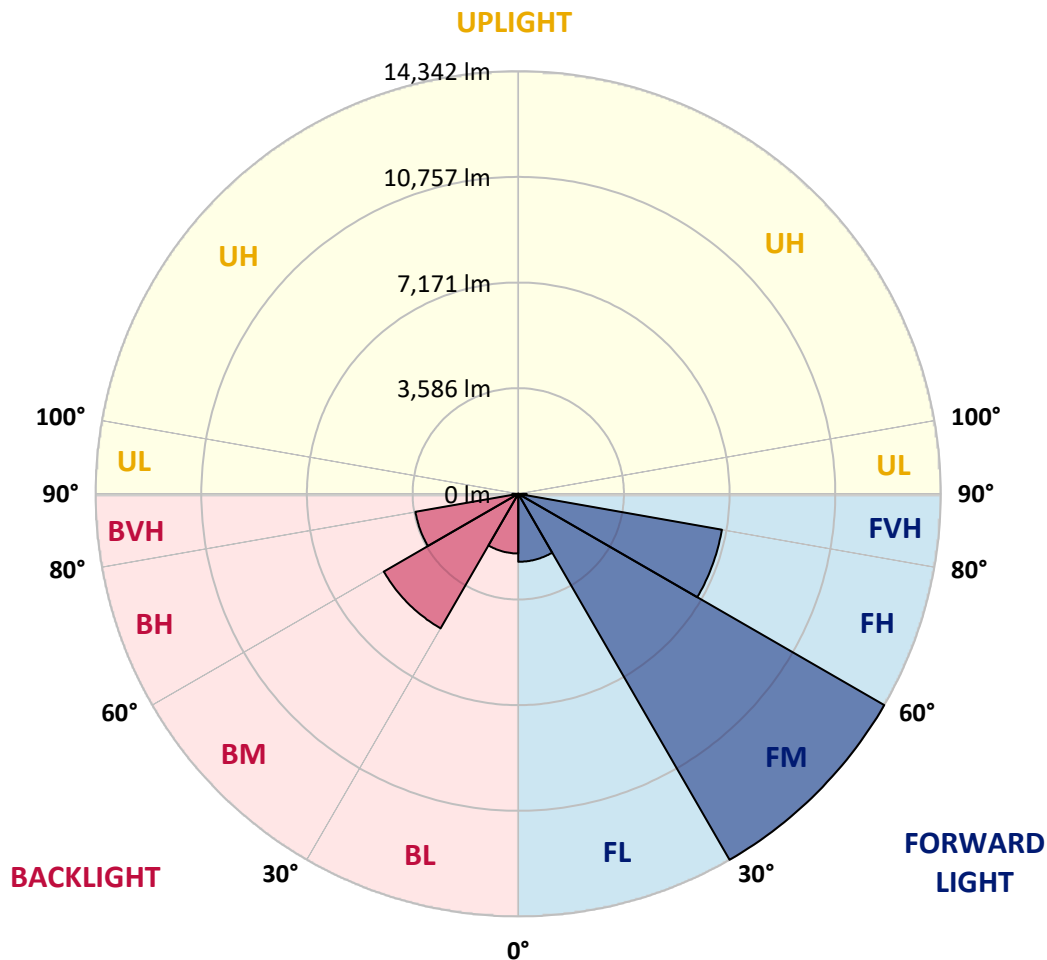


REPORT NUMBER: P967113
 CATALOG NUMBER: NAV-SB4D-722-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2306.7	6.6			
FM (30°-60°)	14342.3	41.0			
FH (60°-80°)	7019.1	20.1			G3/7500
FVH (80°-90°)	284.4	0.8			G3/500
BL (0°-30°)	2025.2	5.8	B3/2500		
BM (30°-60°)	5271.8	15.1	B4/8500		
BH (60°-80°)	3542.5	10.1	B4/5000		G4/5000
BVH (80°-90°)	203.6	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short



REPORT NUMBER: P967113
 CATALOG NUMBER: NAV-SB4D-722-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4
2.5°	3830.9	3820.1	3829.1	3829.1	3832.8	3830.9	3843.6	3847.2	3852.8	3863.6	3863.6
5°	3792.8	3791.0	3807.4	3821.8	3836.4	3849.1	3865.5	3889.1	3892.6	3905.4	3921.8
7.5°	3780.1	3769.2	3794.7	3812.8	3847.2	3878.2	3921.8	3961.6	3978.0	3983.5	4014.3
10°	3878.2	3859.9	3883.6	3894.5	3923.5	3954.4	4005.2	4068.7	4087.0	4108.7	4143.3
12.5°	4045.2	4025.2	4059.7	4076.0	4103.3	4130.5	4165.0	4226.8	4235.8	4275.8	4308.5
15°	4273.9	4250.4	4272.1	4292.1	4337.5	4362.9	4397.5	4457.3	4457.3	4488.2	4511.7
17.5°	4584.4	4553.6	4569.9	4577.1	4606.2	4644.4	4702.4	4755.1	4782.3	4771.4	4738.8
20°	5047.4	5009.3	5009.3	4973.0	4962.0	4993.0	5069.1	5141.8	5170.8	5114.5	5034.7
22.5°	5742.8	5688.3	5657.5	5534.0	5485.0	5488.6	5564.8	5653.8	5677.4	5577.5	5397.9
25°	6626.9	6541.7	6499.9	6318.3	6207.6	6111.4	6171.2	6285.6	6318.3	6194.9	5904.4
27.5°	7511.2	7516.6	7476.7	7258.8	7075.5	6899.3	6868.4	6988.2	7022.8	6883.0	6523.5
30°	8751.2	8622.3	8546.0	8284.7	8023.2	7776.3	7649.2	7698.2	7707.3	7540.2	7122.6
32.5°	9820.6	9787.9	9624.5	9395.8	9059.9	8673.1	8460.8	8382.7	8368.2	8130.3	7634.6
35°	11038.9	11020.8	10848.3	10575.9	10212.8	9675.4	9292.3	9069.0	9050.9	8716.7	8141.2
37.5°	12277.1	12277.1	12108.3	11810.6	11434.7	10762.9	10180.1	9826.1	9767.9	9332.2	8656.8
40°	13264.8	13205.0	13235.8	13110.6	12680.3	11966.7	11166.0	10652.2	10574.1	10051.3	9205.1
42.5°	13825.9	13805.9	13991.1	14130.9	13954.8	13384.7	12251.7	11547.2	11438.4	10842.9	9837.0
45°	13951.2	13929.3	14259.8	14771.8	15018.7	14784.5	13431.9	12489.6	12357.1	11670.8	10514.2
47.5°	13662.4	13618.9	14103.7	14911.6	15703.2	16115.4	14710.1	13511.8	13319.4	12476.9	11209.6
50°	12794.6	12752.8	13486.3	14559.4	15933.8	17019.5	16097.2	14595.7	14301.5	13341.1	11912.2
52.5°	10908.2	10928.1	12077.5	13551.7	15630.6	17582.3	17291.9	15737.7	15383.7	14225.4	12571.3
55°	8497.0	8540.6	9953.2	11576.3	14417.8	17497.1	18107.1	16914.2	16562.1	15056.8	13252.1
57.5°	6084.1	6276.6	7600.2	9207.0	12088.3	16144.4	18285.0	18032.6	17691.3	15964.7	13918.5
60°	3943.5	3978.0	5339.7	6959.2	9205.1	13740.5	17923.7	18880.5	18613.7	16890.7	14475.9
62.5°	2527.3	2550.9	3380.7	4867.6	6625.2	10165.6	16707.3	19249.1	19167.4	17502.5	15011.4
65°	1857.4	1839.3	2271.3	3217.3	4462.7	6269.3	14345.2	19071.1	19232.8	17885.6	15454.4
67.5°	1550.5	1525.1	1737.6	2227.7	3288.1	3560.4	10614.1	17914.6	18506.5	17842.0	15779.5
70°	1412.6	1390.7	1519.7	1654.0	2565.5	2383.9	5350.6	15574.4	16485.8	17346.4	15726.8
72.5°	1196.5	1158.4	1334.4	1468.8	1995.4	1828.3	2211.4	11963.1	13074.2	15757.7	14986.0
75°	927.7	902.3	1053.1	1292.7	1499.7	1427.1	1398.0	7264.3	8477.1	12186.4	13110.6
77.5°	735.3	700.8	838.9	1007.7	1349.0	1076.7	1018.5	3128.3	4330.2	7779.9	9809.8
80°	553.8	522.9	637.2	797.0	1036.7	811.6	659.1	1276.3	1632.2	3941.7	4933.0
82.5°	394.0	366.7	444.8	584.7	697.2	728.1	404.9	715.3	804.3	1519.7	1102.1
85°	252.4	236.1	297.8	366.7	443.0	468.4	246.9	374.0	410.3	626.4	459.3
87.5°	138.0	112.5	159.8	170.7	205.2	187.0	118.0	136.1	147.1	226.9	194.2
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: P967113
 CATALOG NUMBER: NAV-SB4D-722-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4	3856.4
2.5°	3870.9	3876.3	3894.5	3899.9	3912.6	3929.0	3939.9	3950.8	3950.8	3961.6	3961.6
5°	3923.5	3936.2	3974.3	3994.3	4027.0	4059.7	4079.7	4103.3	4117.8	4125.1	4128.7
7.5°	4025.2	4045.2	4099.7	4134.1	4190.4	4235.8	4266.7	4299.4	4306.6	4326.6	4319.3
10°	4163.2	4186.8	4248.5	4313.9	4381.1	4437.3	4466.4	4490.0	4499.1	4502.7	4493.6
12.5°	4321.2	4355.6	4435.6	4515.4	4586.3	4635.3	4642.5	4637.1	4611.7	4589.8	4589.8
15°	4515.4	4546.3	4635.3	4722.4	4791.4	4800.5	4755.1	4726.1	4695.2	4689.7	4689.7
17.5°	4747.8	4764.2	4845.9	4931.2	4936.6	4905.8	4838.6	4811.3	4782.3	4762.4	4764.2
20°	5018.4	5012.9	5071.0	5107.3	5069.1	4974.7	4873.1	4827.8	4798.6	4775.1	4776.9
22.5°	5341.5	5299.8	5292.5	5283.5	5181.8	4983.9	4845.9	4787.8	4742.4	4709.7	4720.6
25°	5811.7	5652.0	5541.3	5479.5	5250.8	4934.9	4758.8	4629.8	4544.4	4488.2	4510.0
27.5°	6400.0	6131.3	5851.7	5701.0	5250.8	4834.9	4548.1	4339.3	4199.5	4141.4	4170.4
30°	6961.1	6679.6	6267.5	5968.0	5238.1	4671.5	4208.5	3918.1	3754.7	3696.6	3731.1
32.5°	7440.4	7133.5	6708.7	6260.2	5207.2	4406.5	3787.4	3466.0	3308.1	3239.0	3273.5
35°	7885.2	7558.4	7151.7	6581.6	5125.5	4017.9	3324.4	3079.3	2903.2	2792.4	2828.7
37.5°	8340.9	7952.4	7571.1	6872.1	4978.4	3564.0	2968.5	2759.7	2552.8	2403.8	2443.8
40°	8836.6	8371.8	8019.6	7044.6	4736.9	3131.9	2692.6	2501.9	2282.3	2124.3	2155.2
42.5°	9415.8	8874.8	8518.9	7133.5	4406.5	2825.1	2512.8	2325.8	2118.8	1989.9	2015.4
45°	10020.4	9428.5	8974.6	7131.7	4037.9	2681.7	2454.7	2269.6	2040.8	1906.4	1928.2
47.5°	10654.1	10007.7	9368.6	7015.5	3718.4	2701.6	2422.1	2147.9	1895.5	1764.7	1782.9
50°	11289.5	10641.3	9749.8	6797.7	3582.2	2658.0	2300.4	1977.2	1679.5	1561.4	1568.7
52.5°	11919.5	11314.9	10078.4	6487.2	3444.2	2496.5	2144.2	1755.7	1590.5	1508.8	1508.8
55°	12553.2	11981.2	10436.1	6035.1	3099.3	2307.7	1882.8	1672.2	1519.7	1445.2	1438.0
57.5°	13188.6	12751.0	10775.6	5583.0	2665.3	2075.2	1739.3	1570.5	1448.8	1385.3	1374.4
60°	13849.5	13631.6	11126.1	5167.2	2236.9	1777.5	1634.1	1488.8	1365.3	1294.6	1289.0
62.5°	14530.3	14601.1	11400.3	4631.7	1842.8	1595.9	1539.7	1390.7	1270.9	1203.8	1201.9
65°	15216.6	15536.2	11579.9	3889.1	1494.2	1423.4	1438.0	1283.6	1161.9	1103.9	1102.1
67.5°	15734.1	16209.8	11529.1	2943.1	1225.5	1260.0	1310.9	1171.1	1056.7	1011.3	1013.1
70°	15792.2	16129.9	11028.0	2015.4	1025.8	1100.2	1169.2	1060.4	942.3	909.6	911.4
72.5°	15018.7	15040.5	9631.8	1316.3	867.9	965.9	1020.4	947.7	833.3	800.7	798.9
75°	12990.7	12438.8	7071.8	867.9	726.2	829.7	880.6	829.7	718.9	726.2	700.8
77.5°	9842.5	8809.4	4293.9	617.4	606.4	697.2	766.2	729.9	635.5	713.5	628.2
80°	5071.0	4765.9	1915.5	461.1	479.3	557.4	630.1	582.8	503.0	479.3	437.6
82.5°	1161.9	1350.8	755.3	330.5	346.8	401.3	481.1	437.6	361.3	305.0	301.3
85°	406.7	444.8	334.0	206.9	203.4	250.5	326.8	292.3	245.1	196.1	206.9
87.5°	128.9	168.8	125.3	83.5	87.1	112.5	150.7	138.0	114.4	74.4	78.1
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)