

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: P966045

Luminaire Tested: **NAV-SB4B-722-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966045
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-722-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18993.2 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

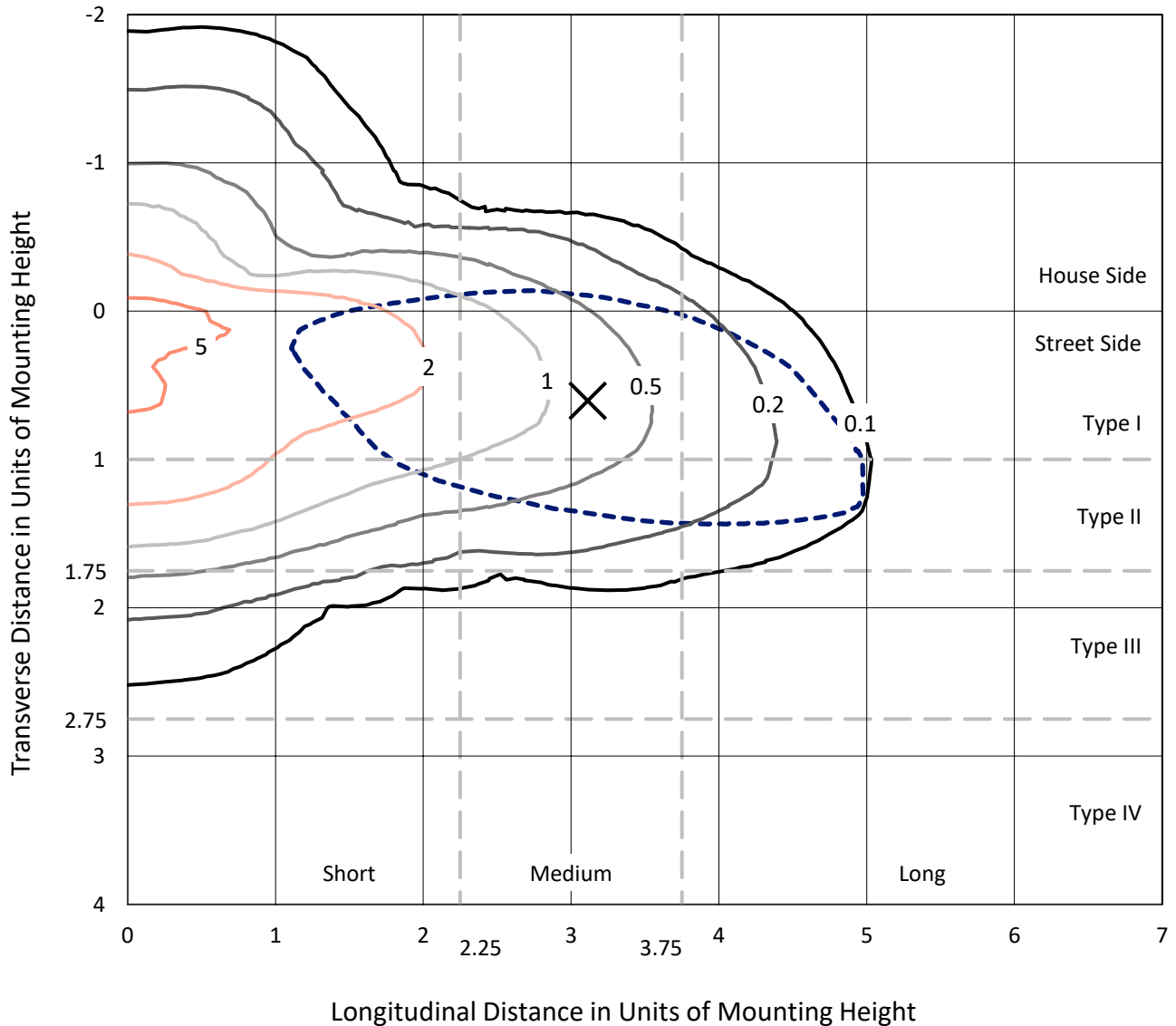
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

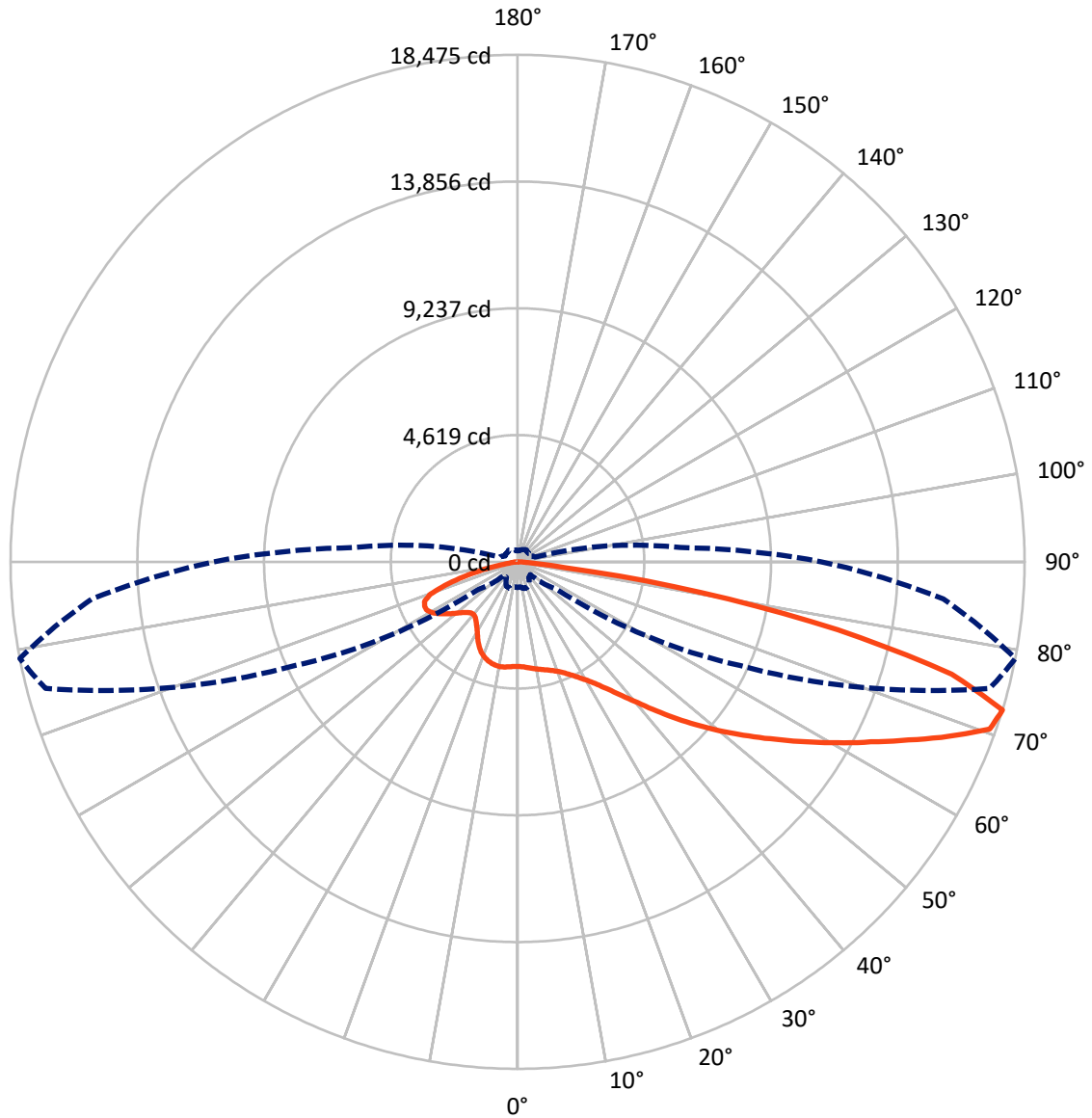
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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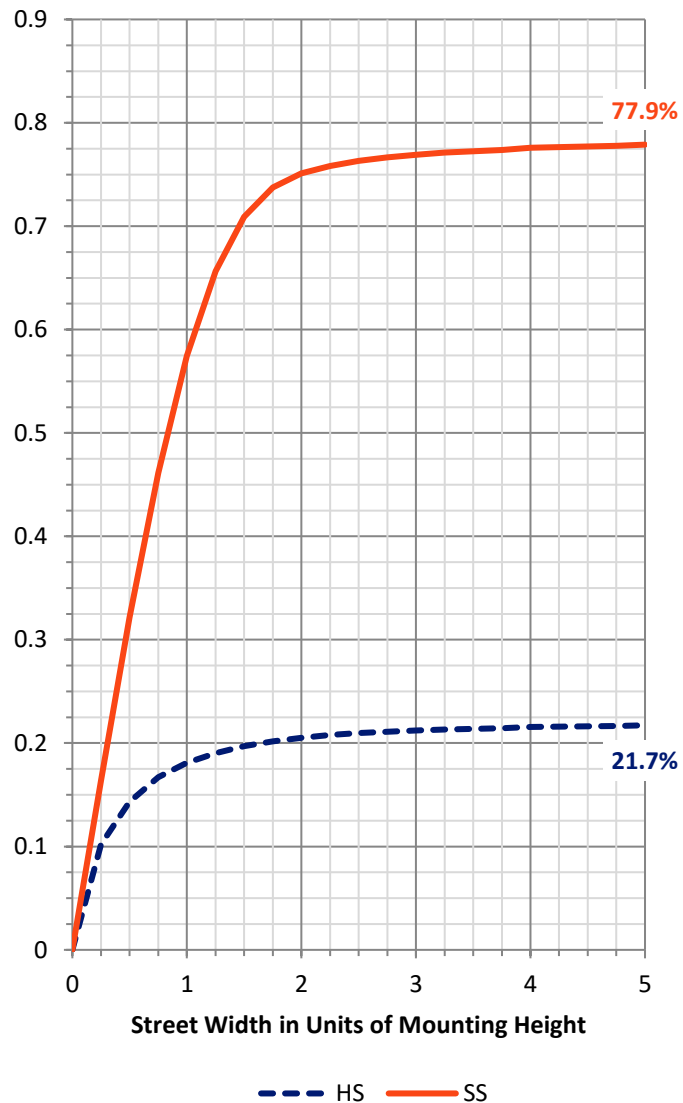
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4179.6	0.0	4179.6
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	14813.7	0.0	14813.7
	% Fixture	78.0	0.0	78.0
Total	Lumens	18993.2	0.0	18993.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.1	1.8
10°-20°	904.8	4.8
20°-30°	1460.0	7.7
30°-40°	2191.3	11.5
40°-50°	3108.5	16.4
50°-60°	3925.6	20.7
60°-70°	3987.0	21.0
70°-80°	2717.3	14.3
80°-90°	352.5	1.9
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°	18993.2	100.0
0°-180°	18993.2	100.0

Coefficient of Utilization

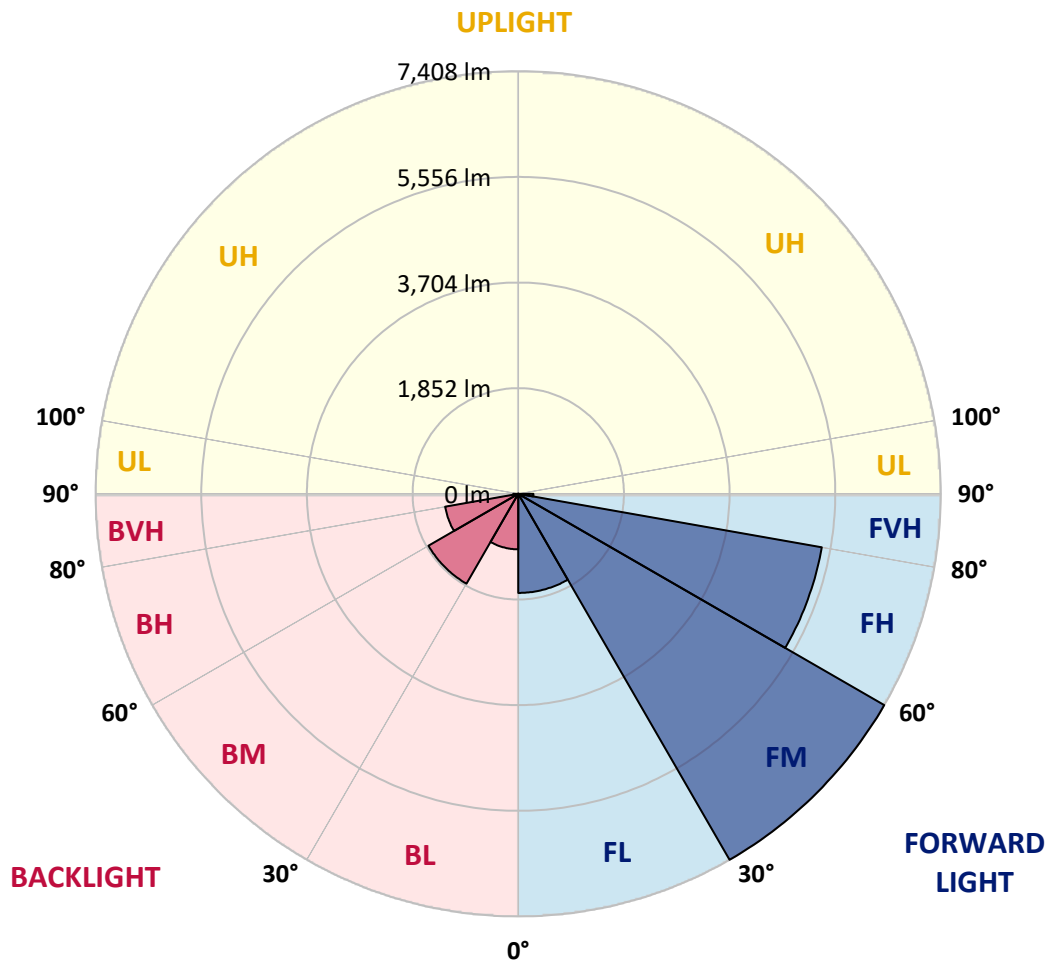


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1737.4	9.1			
FM (30°-60°)	7407.8	39.0			
FH (60°-80°)	5402.9	28.4			G3/7500
FVH (80°-90°)	265.6	1.4			G3/500
BL (0°-30°)	973.5	5.1	B2/1000		
BM (30°-60°)	1817.7	9.6	B2/2500		
BH (60°-80°)	1301.4	6.9	B3/2500		G3/2500
BVH (80°-90°)	87.0	0.5			G1/100
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7
2.5°	3814.7	3796.6	3807.7	3803.7	3808.7	3814.7	3816.7	3819.8	3829.8	3828.8	3827.8
5°	3806.6	3788.6	3803.7	3798.6	3811.7	3825.8	3837.8	3848.9	3865.0	3872.0	3861.9
7.5°	3789.6	3777.5	3792.6	3807.7	3831.8	3852.9	3870.0	3895.1	3918.2	3922.3	3929.2
10°	3690.1	3681.1	3716.2	3755.5	3821.7	3879.0	3916.2	3945.3	3970.4	3974.4	3984.5
12.5°	3586.7	3575.6	3614.8	3668.1	3775.6	3879.0	3957.4	3995.6	4017.7	4030.7	4045.8
15°	3569.6	3560.5	3582.7	3628.9	3718.3	3851.8	3985.5	4055.8	4074.9	4090.0	4096.0
17.5°	3652.0	3634.9	3644.0	3660.0	3712.2	3826.7	4007.6	4124.2	4153.3	4169.4	4169.4
20°	3842.8	3818.7	3804.7	3772.5	3763.5	3830.8	4005.6	4206.5	4244.7	4264.8	4269.8
22.5°	4097.0	4080.9	4050.8	3969.4	3881.1	3880.0	4043.8	4312.1	4383.4	4402.5	4390.4
25°	4404.4	4380.3	4342.2	4231.6	4061.9	3977.5	4108.1	4446.7	4566.2	4571.2	4536.0
27.5°	4758.2	4722.0	4669.7	4524.0	4295.0	4130.2	4206.5	4601.3	4776.2	4774.1	4701.9
30°	5130.8	5094.7	5039.4	4862.6	4574.3	4336.2	4343.1	4768.2	5025.4	5014.3	4890.7
32.5°	5403.1	5376.0	5365.0	5228.3	4895.7	4579.3	4500.0	4953.0	5332.8	5322.7	5149.9
35°	5612.1	5576.9	5589.9	5520.6	5246.4	4851.5	4691.8	5173.1	5706.5	5705.5	5490.5
37.5°	5819.0	5787.9	5798.9	5752.7	5570.9	5197.2	4925.8	5442.2	6169.7	6191.7	5902.5
40°	6007.9	5974.7	6019.0	5975.7	5823.0	5564.8	5192.1	5746.7	6706.2	6748.4	6400.7
42.5°	6121.4	6095.4	6168.7	6169.7	6042.1	5875.3	5484.5	6082.2	7327.0	7421.5	7013.6
45°	6160.7	6151.5	6262.1	6285.2	6236.0	6055.1	5747.7	6448.0	7996.1	8164.9	7711.8
47.5°	6118.4	6101.3	6254.0	6339.4	6378.7	6139.5	5965.7	6843.8	8679.3	8926.5	8473.4
50°	5905.4	5872.3	6099.4	6279.2	6418.9	6194.8	6185.8	7300.9	9455.9	9726.2	9238.9
52.5°	5522.7	5497.6	5755.8	6068.2	6330.4	6222.0	6432.9	7800.2	10193.3	10542.9	10023.6
55°	5033.4	5000.3	5284.6	5692.4	6110.4	6212.8	6680.0	8358.9	11063.4	11418.1	10834.4
57.5°	4257.7	4191.4	4551.1	5033.4	5751.7	6201.9	6937.2	8914.4	11947.5	12372.5	11699.3
60°	3126.6	3028.1	3469.1	4040.8	5050.5	6094.3	7255.7	9537.3	13008.5	13391.2	12643.8
62.5°	1820.5	1763.2	2051.5	2585.0	3806.6	5461.4	7434.5	10261.7	14051.3	14453.1	13572.0
65°	1413.6	1397.5	1422.6	1463.8	2118.9	4089.0	6883.0	10967.9	15377.5	15658.7	14539.5
67.5°	1293.0	1280.9	1292.0	1214.6	1075.0	2277.5	5445.3	11146.8	16798.0	16968.9	15386.5
70°	1149.3	1135.3	1171.5	1105.2	845.9	1035.8	3518.3	10497.7	17928.3	18248.8	16030.5
72.5°	936.3	920.2	1004.7	974.6	712.3	665.1	1767.2	8955.6	17809.8	18474.8	15569.3
75°	719.3	710.3	810.8	835.9	580.7	523.5	848.0	6657.0	15672.9	16342.9	13418.4
77.5°	558.6	551.6	602.8	694.2	468.2	405.9	521.4	4222.6	11810.9	11928.4	9246.9
80°	418.9	398.8	446.1	537.5	364.7	296.3	353.6	2462.5	7465.7	6767.5	4024.7
82.5°	262.2	252.2	291.3	358.6	257.2	204.0	230.1	1360.3	2991.9	1762.2	776.6
85°	149.6	145.7	158.8	205.0	139.6	117.6	131.6	600.8	546.5	375.8	234.1
87.5°	60.3	58.2	72.4	91.4	51.2	43.2	46.2	144.6	120.5	111.5	77.4
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°	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7	3812.7
2.5°	3823.8	3823.8	3809.7	3787.6	3762.5	3746.4	3720.2	3713.3	3686.1	3678.1	3691.1
5°	3870.0	3861.9	3818.7	3756.4	3671.0	3592.7	3506.3	3452.0	3375.7	3348.6	3368.7
7.5°	3928.2	3906.2	3831.8	3695.1	3516.4	3340.5	3157.7	3019.0	2886.4	2839.1	2845.2
10°	3981.5	3950.3	3823.8	3584.6	3275.2	2970.8	2679.5	2475.5	2320.8	2257.5	2271.6
12.5°	4034.7	3977.5	3770.6	3400.8	2932.6	2519.8	2209.3	2050.5	1955.1	1878.7	1903.8
15°	4084.9	4004.6	3688.2	3154.6	2556.9	2137.9	1908.9	1782.3	1705.9	1655.7	1664.7
17.5°	4143.3	4027.7	3564.5	2842.2	2199.2	1873.7	1686.8	1610.5	1595.4	1589.4	1593.4
20°	4224.6	4048.9	3401.8	2492.6	1936.0	1662.8	1566.3	1559.2	1558.2	1555.2	1565.3
22.5°	4312.1	4074.0	3186.8	2175.2	1712.0	1531.1	1514.0	1500.0	1491.0	1489.9	1501.0
25°	4415.5	4082.0	2917.6	1914.9	1521.1	1468.8	1448.7	1427.6	1421.6	1421.6	1427.6
27.5°	4515.9	4054.8	2604.1	1688.9	1413.6	1411.5	1385.4	1378.4	1377.4	1380.4	1388.5
30°	4616.5	4003.6	2292.6	1479.9	1351.3	1351.3	1342.2	1347.3	1351.3	1361.3	1368.4
32.5°	4752.1	3949.3	2032.5	1325.1	1297.0	1287.0	1296.0	1306.1	1310.1	1323.2	1334.2
35°	4951.0	3911.2	1825.5	1240.8	1240.8	1227.7	1232.8	1230.7	1221.7	1215.6	1229.7
37.5°	5214.2	3909.1	1654.7	1201.6	1193.5	1191.6	1192.6	1179.5	1144.3	1102.1	1103.1
40°	5530.7	3963.4	1523.0	1174.4	1168.4	1180.5	1174.4	1139.3	1042.8	969.5	967.5
42.5°	5955.7	4118.1	1438.7	1141.3	1159.4	1174.4	1150.4	1028.8	963.5	914.2	912.2
45°	6456.0	4369.3	1395.4	1106.2	1142.3	1160.4	1043.9	990.6	938.4	879.0	875.0
47.5°	7022.6	4685.8	1385.4	1073.0	1104.1	1115.2	998.7	974.6	915.2	851.0	845.9
50°	7639.5	5060.5	1412.6	1033.8	1048.9	1010.6	983.6	961.4	900.2	836.9	829.8
52.5°	8277.5	5473.4	1466.8	980.5	993.6	951.4	977.5	958.5	891.1	805.8	799.7
55°	8904.4	5889.3	1519.0	918.3	937.4	898.2	960.4	946.4	849.9	753.5	748.5
57.5°	9541.3	6303.2	1570.3	863.0	883.1	847.0	933.4	914.2	803.7	705.3	703.3
60°	10203.4	6705.1	1594.4	809.7	823.8	799.7	892.2	859.0	751.5	656.0	653.0
62.5°	10823.3	7039.7	1555.2	756.6	765.6	755.5	837.9	793.7	699.3	600.8	599.8
65°	11445.2	7238.7	1434.7	704.3	706.3	701.3	761.6	723.3	638.0	552.6	546.5
67.5°	12008.8	7350.2	1242.8	648.0	643.0	640.9	690.2	647.0	578.7	504.3	498.4
70°	12128.3	7066.9	949.5	581.7	581.7	576.7	611.8	567.6	513.4	453.2	451.1
72.5°	11077.5	5944.6	674.1	506.4	514.3	504.3	533.5	496.3	447.1	406.9	394.8
75°	8932.5	4359.2	490.3	429.0	443.1	426.0	453.2	427.0	384.8	383.8	345.6
77.5°	6137.5	2695.5	355.7	353.6	363.7	341.6	372.7	358.6	320.5	303.4	284.3
80°	2619.2	1075.0	259.2	273.3	273.3	253.2	289.4	293.4	260.2	252.2	252.2
82.5°	521.4	305.4	181.8	187.9	176.8	170.8	205.0	227.0	313.4	348.6	349.6
85°	156.7	112.5	109.5	102.5	90.4	91.4	120.5	228.1	281.3	160.7	138.7
87.5°	43.2	28.1	29.1	23.1	19.1	25.1	41.2	172.8	94.4	40.2	34.1
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)