

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: P884074

Luminaire Tested: **NAV-SB4D-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32576 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

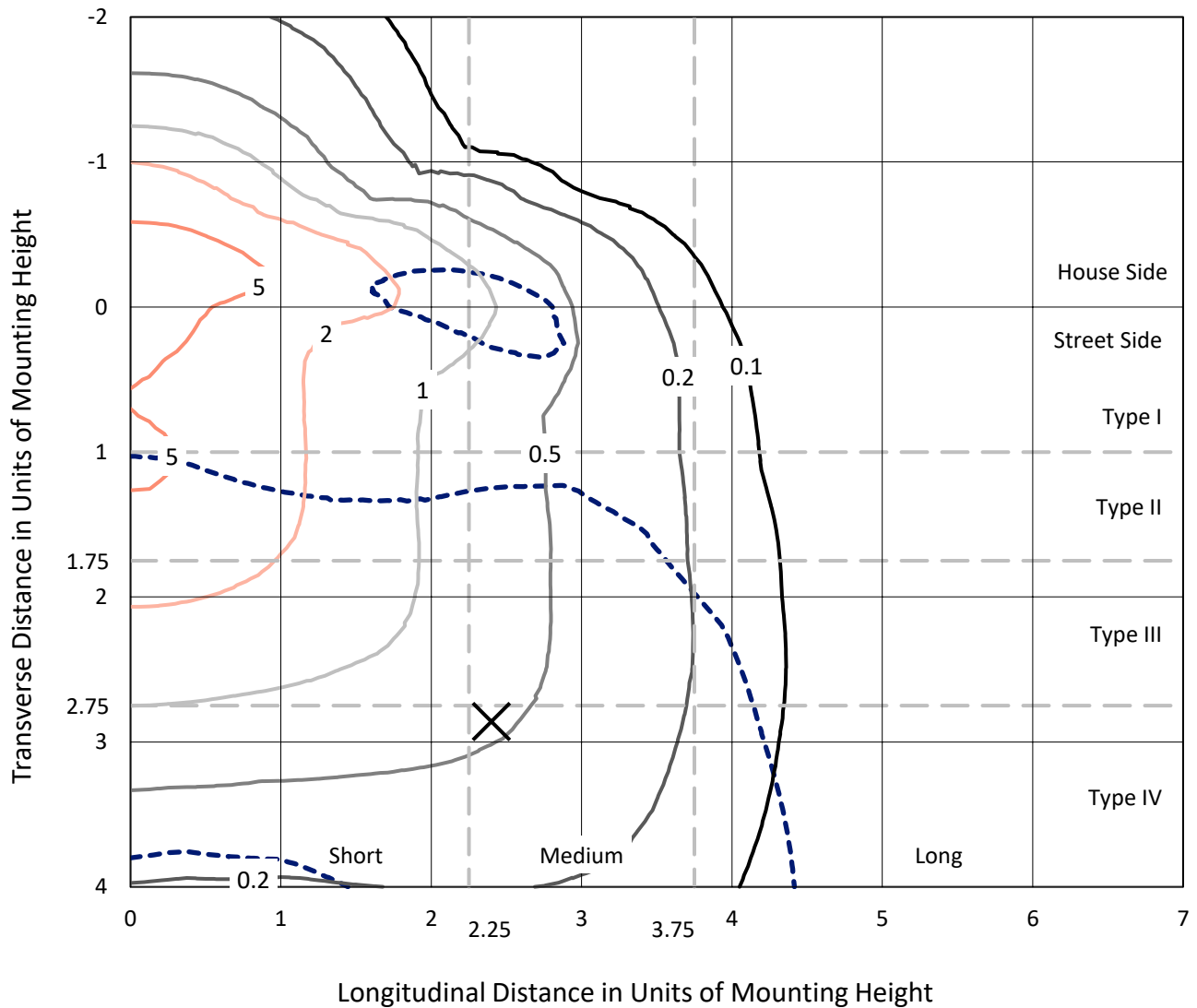
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884074
 CATALOG NUMBER: NAV-SB4D-722-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

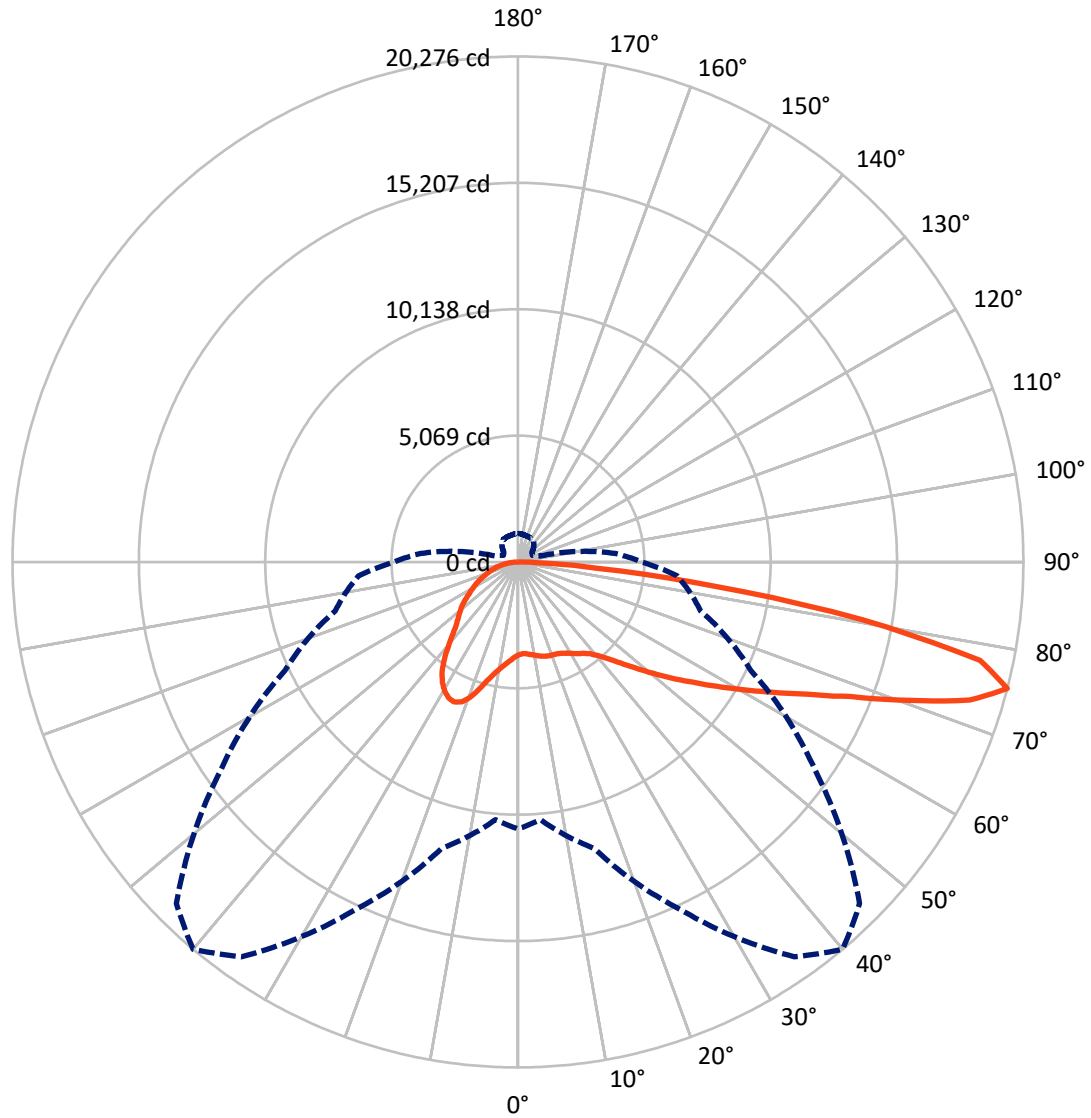
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type IV - Medium - N/A

REPORT NUMBER: P884074
CATALOG NUMBER: NAV-SB4D-722-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P884074

CATALOG NUMBER: NAV-SB4D-722-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10093.1	0.0	10093.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	22482.9	0.0	22482.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	32576.0	0.0	32576.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.8	1.1
10°-20°	1248.4	3.8
20°-30°	2279.5	7.0
30°-40°	3233.0	9.9
40°-50°	4365.5	13.4
50°-60°	5872.8	18.0
60°-70°	7453.9	22.9
70°-80°	6764.9	20.8
80°-90°	986.1	3.0
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°	32576.0	100.0
0°-180°	32576.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884074

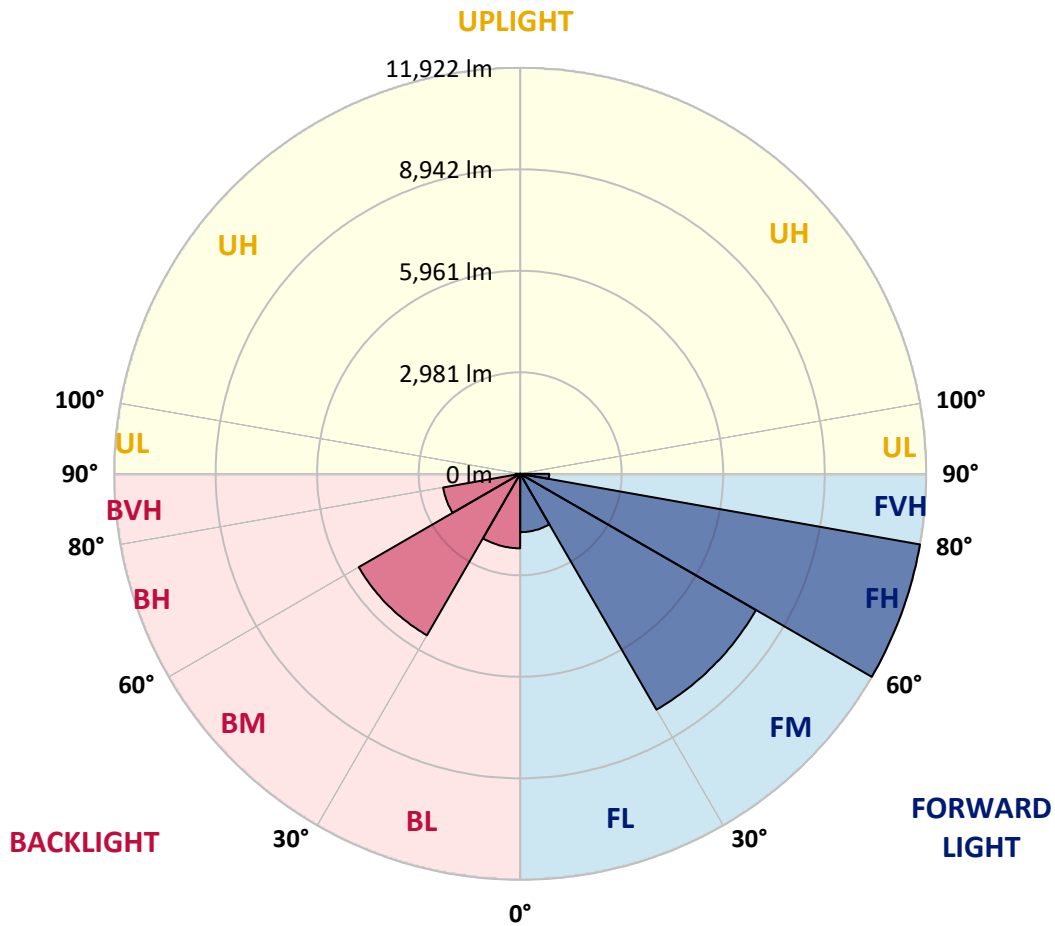
CATALOG NUMBER: NAV-SB4D-722-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1713.5	5.3			
FM (30°-60°)	7996.7	24.5			
FH (60°-80°)	11922.3	36.6			G4/12000
FVH (80°-90°)	850.3	2.6			G5
BL (0°-30°)	2186.3	6.7	B3/2500		
BM (30°-60°)	5474.6	16.8	B4/8500		
BH (60°-80°)	2296.5	7.0	B3/2500		G3/2500
BVH (80°-90°)	135.8	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



REPORT NUMBER: P884074

CATALOG NUMBER: NAV-SB4D-722-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1
2.5°	3668.1	3688.8	3683.6	3676.7	3676.7	3678.5	3676.7	3688.8	3700.9	3713.0	3732.0
5°	3706.1	3726.8	3716.5	3707.8	3700.9	3699.2	3694.0	3692.3	3699.2	3714.7	3740.7
7.5°	3780.4	3801.1	3785.6	3770.0	3756.2	3749.3	3742.4	3732.0	3726.8	3735.5	3771.8
10°	3863.3	3884.1	3865.1	3837.4	3815.0	3806.3	3799.4	3789.0	3782.1	3787.3	3827.0
12.5°	3946.3	3967.0	3941.1	3903.1	3873.7	3868.5	3859.9	3856.4	3854.7	3853.0	3892.7
15°	4024.0	4041.3	4008.5	3963.5	3932.4	3923.8	3915.2	3920.3	3929.0	3939.4	3984.3
17.5°	4084.5	4101.8	4053.4	3994.6	3965.3	3961.8	3956.6	3973.9	3998.1	4024.0	4079.3
20°	4139.8	4157.1	4094.9	4015.4	3980.8	3980.8	3982.5	4018.8	4053.4	4091.4	4167.4
22.5°	4217.5	4231.4	4155.3	4046.5	3996.4	3999.8	4013.6	4049.9	4093.1	4145.0	4250.4
25°	4333.3	4343.7	4250.4	4105.2	4048.2	4058.6	4070.7	4087.9	4129.4	4189.9	4331.6
27.5°	4519.9	4528.5	4405.9	4208.9	4122.5	4139.8	4157.1	4145.0	4164.0	4215.8	4397.2
30°	4782.5	4787.7	4632.2	4371.3	4248.6	4257.3	4260.7	4210.6	4174.3	4215.8	4443.9
32.5°	5093.5	5091.8	4906.9	4568.3	4392.0	4383.4	4354.0	4255.5	4170.9	4207.2	4485.3
35°	5575.6	5556.6	5318.1	4844.7	4554.4	4500.9	4431.8	4305.6	4188.2	4198.5	4521.6
37.5°	6373.8	6315.1	5985.1	5297.4	4796.3	4659.8	4557.9	4386.9	4226.2	4195.1	4564.8
40°	7274.0	7199.7	6836.9	5917.7	5159.2	4939.7	4775.6	4502.6	4288.4	4210.6	4628.7
42.5°	8341.8	8236.4	7845.9	6648.5	5618.8	5300.9	5053.8	4649.5	4379.9	4260.7	4715.1
45°	9653.1	9513.2	8960.3	7472.7	6197.6	5774.3	5444.3	4872.4	4519.9	4357.5	4844.7
47.5°	10978.4	11012.9	10226.8	8416.1	6892.1	6358.3	5933.2	5207.6	4723.8	4513.0	5053.8
50°	12386.5	12410.7	11486.3	9461.4	7680.0	7018.3	6482.7	5582.5	5007.1	4734.1	5366.5
52.5°	13485.4	13488.8	12630.1	10555.1	8500.7	7743.9	7075.3	6011.0	5335.4	5027.9	5782.9
55°	14173.0	14164.4	13431.8	11590.0	9444.1	8505.9	7731.8	6498.2	5736.3	5373.4	6306.4
57.5°	14672.4	14646.5	13984.7	12479.8	10449.7	9406.1	8474.8	7051.1	6209.7	5784.6	6995.8
60°	14862.4	14846.9	14359.6	13248.7	11507.1	10401.3	9331.8	7669.6	6747.0	6270.1	7882.2
62.5°	14935.0	14964.4	14727.7	13993.3	12638.8	11503.6	10273.4	8409.1	7351.7	6819.6	8816.9
65°	15190.7	15244.3	15195.9	14967.8	13917.3	12794.3	11522.6	9288.6	8011.7	7408.8	9793.1
67.5°	15696.9	15750.5	15771.2	16134.1	15479.2	14402.8	13081.1	10384.0	8784.1	8020.4	10527.4
70°	15684.9	15669.3	16035.6	17061.9	17435.1	16630.0	15182.1	11731.7	9705.0	8528.4	10620.7
72.5°	14276.7	14152.3	15017.9	17051.5	19062.7	18955.6	17747.8	13469.8	10499.8	8590.6	9216.0
75°	10710.6	10378.8	11907.9	15366.9	19333.9	20275.6	19378.9	14548.0	10311.4	7590.2	6413.5
77.5°	4580.4	4246.9	6049.0	11375.8	17303.8	18953.8	17882.6	12692.3	8231.2	5019.2	3149.8
80°	1199.1	1197.4	1828.0	5157.4	11768.0	13996.8	12279.4	8196.6	4703.0	1793.4	869.1
82.5°	495.9	483.8	672.1	2006.0	5750.1	7854.5	6410.1	3656.0	1698.4	485.5	288.5
85°	184.9	183.1	326.6	692.8	2028.4	3239.6	2344.6	934.7	423.3	236.7	129.6
87.5°	51.8	50.1	70.8	240.2	494.1	749.9	400.8	153.8	119.2	93.3	38.0
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: P884074

CATALOG NUMBER: NAV-SB4D-722-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1	3725.1
2.5°	3737.2	3745.8	3761.4	3773.5	3789.0	3806.3	3830.5	3846.1	3861.6	3872.0	3865.1
5°	3752.8	3771.8	3811.5	3851.2	3897.9	3941.1	3991.2	4027.5	4056.8	4065.5	4068.9
7.5°	3787.3	3818.4	3885.8	3953.2	4027.5	4098.3	4170.9	4233.1	4283.2	4302.2	4303.9
10°	3847.8	3889.2	3984.3	4079.3	4177.8	4286.6	4379.9	4469.8	4540.6	4570.0	4571.7
12.5°	3923.8	3975.6	4100.0	4231.4	4367.8	4518.2	4639.1	4749.7	4837.8	4877.5	4877.5
15°	4022.3	4089.7	4248.6	4424.9	4625.3	4834.3	4988.1	5110.8	5209.3	5257.7	5254.2
17.5°	4129.4	4219.3	4419.7	4685.8	4972.6	5247.3	5427.0	5516.8	5618.8	5665.4	5663.7
20°	4233.1	4343.7	4630.5	5017.5	5399.3	5691.3	5836.5	5860.7	5867.6	5872.7	5886.6
22.5°	4340.2	4488.8	4894.8	5435.6	5845.1	6047.3	6068.0	5964.3	5819.2	5751.8	5770.8
25°	4457.7	4654.7	5240.4	5896.9	6228.7	6252.9	6093.9	5841.6	5566.9	5440.8	5459.8
27.5°	4571.7	4846.4	5655.0	6337.5	6505.1	6292.6	5950.5	5592.8	5261.1	5128.1	5143.6
30°	4685.8	5065.9	6112.9	6722.8	6631.2	6194.1	5724.2	5325.0	4991.6	4851.6	4867.2
32.5°	4801.5	5321.6	6639.9	7001.0	6608.8	5985.1	5442.5	5024.4	4730.7	4583.8	4602.8
35°	4932.8	5636.0	7139.2	7153.0	6458.5	5677.5	5071.1	4665.0	4409.3	4291.8	4317.7
37.5°	5103.9	6035.2	7579.8	7191.0	6195.8	5226.6	4609.7	4240.0	4029.2	3975.6	4013.6
40°	5316.4	6515.5	7916.7	7130.6	5807.1	4678.8	4105.2	3809.8	3690.6	3702.6	3744.1
42.5°	5592.8	7052.8	8153.4	6975.1	5266.3	4113.9	3662.9	3531.6	3588.6	3637.0	3681.9
45°	5952.2	7610.9	8300.3	6710.7	4654.7	3635.3	3402.0	3433.1	3476.3	3481.5	3516.0
47.5°	6411.8	8175.9	8397.0	6311.6	4030.9	3298.3	3236.1	3243.1	3234.4	3198.1	3225.8
50°	6985.4	8725.3	8483.4	5782.9	3500.5	3087.6	3004.6	2980.4	2861.2	2743.7	2759.3
52.5°	7638.5	9229.8	8519.7	5126.3	3087.6	2911.3	2776.6	2624.5	2401.6	2365.3	2377.4
55°	8364.2	9696.3	8426.4	4319.5	2740.3	2685.0	2481.1	2298.0	2273.8	2242.7	2247.9
57.5°	9231.6	10199.1	8236.4	3419.3	2384.3	2420.6	2221.9	2242.7	2199.5	2151.1	2142.5
60°	10180.1	10719.2	7902.9	2598.6	2016.3	2090.6	2154.6	2152.8	2140.7	2101.0	2087.2
62.5°	11033.6	11061.3	7246.3	1990.4	1693.2	1834.9	2009.4	2007.7	1997.3	1974.9	1966.2
65°	11541.6	11009.5	6150.9	1567.1	1427.2	1624.1	1812.4	1826.3	1828.0	1826.3	1826.3
67.5°	11451.8	10403.0	4647.7	1247.5	1207.7	1409.9	1617.2	1636.2	1650.0	1653.5	1656.9
70°	10435.8	9070.9	3030.5	995.2	1012.5	1221.5	1432.3	1451.3	1463.4	1477.3	1484.2
72.5°	8134.4	6669.3	1734.7	805.1	841.4	1059.1	1249.2	1271.7	1278.6	1304.5	1314.8
75°	4957.0	3922.1	936.5	634.1	691.1	905.4	1067.8	1093.7	1105.8	1136.9	1140.3
77.5°	2356.7	1698.4	533.9	494.1	556.3	739.5	901.9	931.3	898.4	915.7	901.9
80°	796.5	630.6	336.9	376.7	425.0	577.1	722.2	751.6	682.5	679.0	672.1
82.5°	278.2	255.7	214.2	250.5	274.7	412.9	546.0	584.0	508.0	506.2	482.1
85°	108.9	103.7	119.2	136.5	164.1	254.0	359.4	378.4	312.7	252.3	248.8
87.5°	22.5	24.2	29.4	31.1	50.1	88.1	129.6	159.0	126.1	107.1	98.5
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)