

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: P969302

Luminaire Tested: **NAV-SB5D-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51494 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

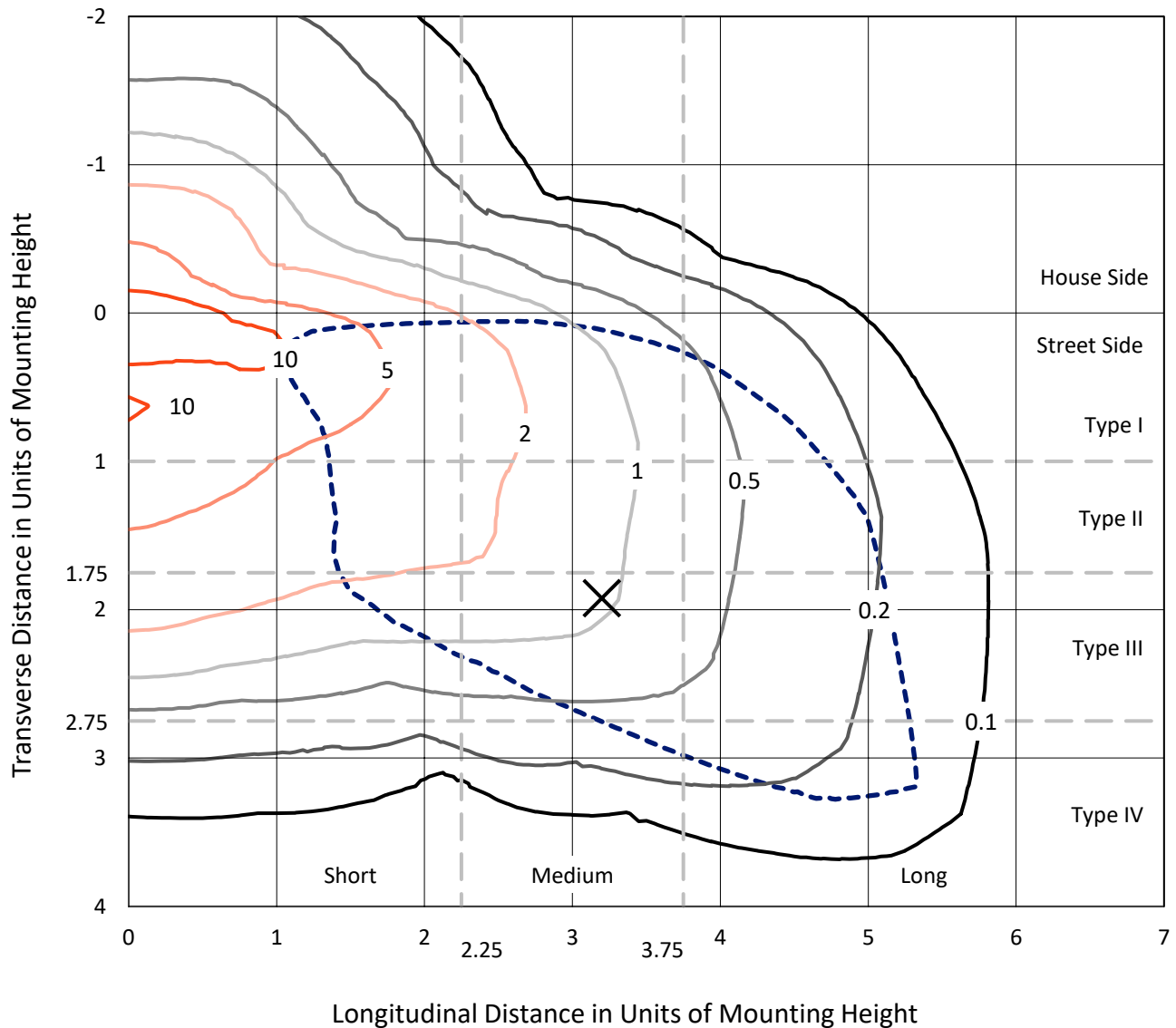
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

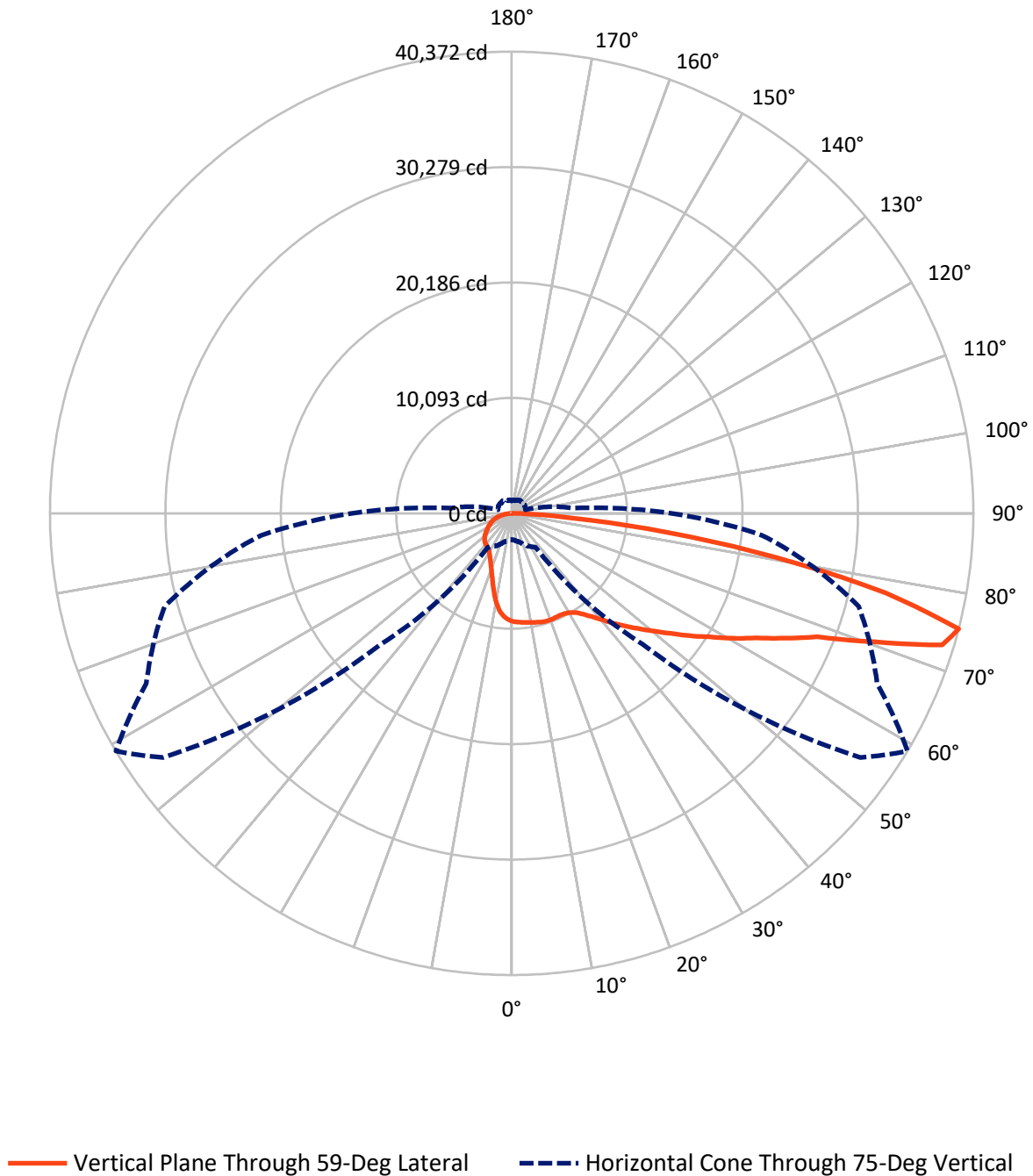
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9658.0	0.0	9658.0
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	41835.9	0.0	41835.9
	% Fixture	81.2	0.0	81.2
Total	Lumens	51494.0	0.0	51494.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	847.5	1.6
10°-20°	2166.2	4.2
20°-30°	3290.3	6.4
30°-40°	4891.0	9.5
40°-50°	7273.8	14.1
50°-60°	9873.3	19.2
60°-70°	12053.7	23.4
70°-80°	9459.6	18.4
80°-90°	1638.6	3.2
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°	51494.0	100.0
0°-180°	51494.0	100.0

Coefficient of Utilization



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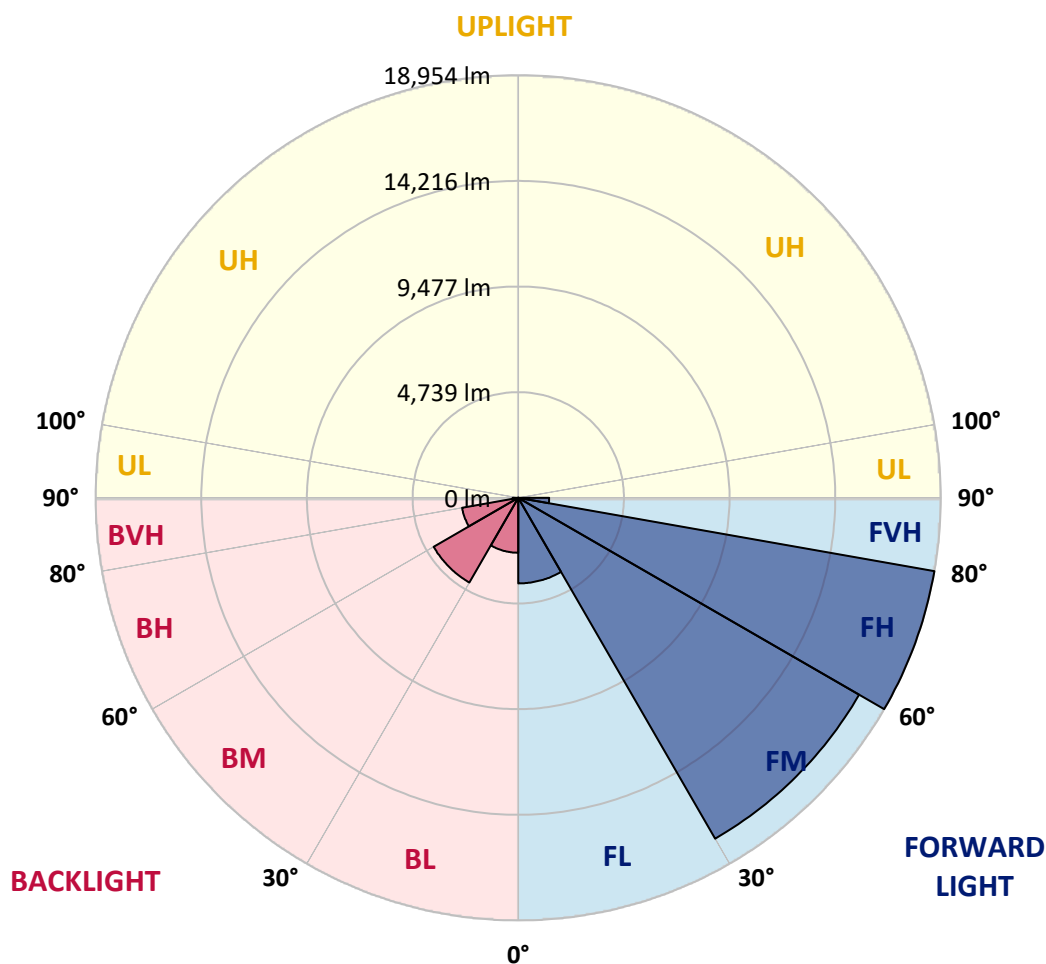
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3839.4	7.5			
FM	(30°-60°)	17654.3	34.3			
FH	(60°-80°)	18954.4	36.8			G5
FVH	(80°-90°)	1387.8	2.7			G5
BL	(0°-30°)	2464.6	4.8	B3/2500		
BM	(30°-60°)	4383.8	8.5	B3/5000		
BH	(60°-80°)	2558.8	5.0	B4/5000		G4/5000
BVH	(80°-90°)	250.8	0.5			G3/500
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6
2.5°	9531.9	9498.7	9531.9	9518.0	9512.5	9501.4	9504.2	9523.6	9512.5	9526.3	9479.3
5°	9468.2	9448.9	9482.1	9473.8	9509.7	9515.3	9551.4	9573.5	9587.3	9590.1	9554.1
7.5°	9363.0	9343.6	9390.6	9429.5	9507.0	9529.1	9603.9	9639.9	9659.4	9692.6	9639.9
10°	8977.9	8969.6	9085.9	9232.8	9415.5	9529.1	9642.7	9703.7	9734.1	9822.8	9761.9
12.5°	8296.5	8307.5	8459.9	8742.4	9108.2	9473.8	9687.1	9775.7	9822.8	9933.6	9905.9
15°	7645.5	7642.7	7809.0	8110.8	8623.3	9230.0	9709.2	9861.5	9941.9	10105.4	10083.2
17.5°	7268.8	7257.7	7374.1	7604.0	8080.4	8856.0	9653.9	9908.7	10080.4	10285.4	10266.0
20°	7199.5	7177.4	7238.2	7351.8	7689.9	8446.1	9509.7	9908.7	10191.3	10457.2	10446.1
22.5°	7451.5	7415.6	7390.7	7376.8	7526.4	8108.1	9346.4	9875.5	10354.7	10703.7	10684.3
25°	7958.5	7903.2	7775.6	7651.0	7606.7	7955.7	9202.2	9867.2	10598.4	11036.1	10964.1
27.5°	8778.5	8709.2	8451.6	8152.4	7883.7	8033.3	9138.6	9917.0	10867.2	11387.9	11243.8
30°	9795.1	9720.3	9396.2	8936.4	8454.4	8321.4	9219.0	10063.8	11210.6	11856.1	11573.5
32.5°	10706.4	10623.3	10346.3	9878.2	9227.3	8820.0	9473.8	10343.6	11750.8	12507.0	12069.4
35°	11515.4	11418.4	11169.0	10737.0	10174.6	9520.8	9933.6	10839.4	12518.1	13565.2	12742.5
37.5°	12307.6	12194.0	11922.5	11465.4	11072.2	10454.4	10568.0	11476.5	13537.5	14850.5	13634.4
40°	13194.0	13030.6	12701.0	12249.4	11867.1	11548.6	11401.8	12257.7	14573.6	16285.4	14748.0
42.5°	14052.7	13897.7	13504.3	13119.2	12640.0	12548.6	12368.5	13171.9	15706.5	17861.6	15878.3
45°	14977.9	14792.4	14315.9	13828.4	13526.4	13213.4	13304.8	14086.0	16817.3	19468.3	17063.9
47.5°	15845.0	15637.2	15074.9	14531.9	14365.8	13772.9	14163.6	15091.5	17972.5	21097.2	18238.3
50°	16313.2	16108.2	15640.1	15149.7	15019.5	14462.7	15094.4	16196.8	19183.0	22720.4	19365.8
52.5°	16703.7	16482.1	15870.0	15598.4	15559.7	15213.5	16241.1	17460.0	20393.5	24155.4	20454.5
55°	17119.2	16872.7	16091.6	15847.7	16025.1	16055.5	17601.3	18892.1	21673.3	25554.2	21482.2
57.5°	17598.4	17285.5	16304.9	16058.3	16479.3	17041.6	19163.6	20376.9	22930.9	26850.6	22396.4
60°	18050.0	17734.2	16714.8	16393.4	16969.7	18185.8	20955.8	22174.6	24354.7	28005.8	23260.5
62.5°	18138.6	17878.3	17041.6	17038.9	17634.5	19520.9	23077.8	23989.1	25598.6	29147.0	24036.2
65°	16604.0	16440.6	15944.7	17014.0	18587.5	21443.4	25440.6	26310.4	27180.2	30144.3	24717.7
67.5°	12637.2	12659.4	12623.4	14687.1	17817.3	24205.2	28861.7	28795.2	29133.2	31263.4	25501.6
70°	5778.4	5908.6	6756.3	10138.6	14274.4	24523.7	34518.3	33656.8	31584.8	32712.2	26180.2
72.5°	3121.9	3221.7	3567.9	4911.4	8581.8	21803.5	38745.5	39357.6	34845.2	33687.2	25435.1
75°	2290.9	2346.3	2587.3	3121.9	3603.9	16205.1	37230.3	40371.5	35252.3	31413.0	21964.2
77.5°	1714.7	1739.6	1936.3	2473.7	1844.9	8543.0	29748.2	33435.2	30177.5	25809.1	16224.5
80°	1243.7	1271.5	1418.3	1856.0	1293.7	3124.7	20426.7	23468.3	20667.8	16451.7	8085.9
82.5°	858.7	869.8	933.6	1263.2	903.0	1213.3	11590.1	13761.9	11537.5	5772.9	2182.8
85°	518.0	531.9	559.5	736.9	512.5	576.2	5002.8	5174.5	3448.8	1379.5	678.7
87.5°	213.3	227.1	249.3	310.3	202.2	160.6	825.5	1036.1	645.4	404.5	210.5
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°	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6	9451.6
2.5°	9465.5	9446.1	9393.4	9321.5	9254.9	9171.8	9135.8	9105.4	9077.6	9025.0	9000.1
5°	9523.6	9471.0	9329.8	9146.9	8939.1	8712.0	8490.4	8338.1	8207.8	8110.8	8030.6
7.5°	9612.2	9512.5	9254.9	8880.9	8404.5	7917.0	7476.6	7163.5	6928.1	6842.2	6692.5
10°	9703.7	9584.6	9135.8	8476.5	7653.8	6903.1	6318.6	5997.3	5808.9	5748.0	5653.8
12.5°	9811.7	9637.2	8950.2	7914.2	6814.5	5991.7	5482.0	5293.7	5196.8	5163.4	5171.7
15°	9969.6	9681.5	8670.5	7210.6	6013.9	5326.9	4997.3	4867.1	4817.2	4814.4	4825.5
17.5°	10088.8	9689.8	8235.6	6457.1	5399.0	4925.2	4653.8	4603.9	4637.2	4687.0	4706.4
20°	10221.7	9615.0	7664.8	5770.1	4966.8	4573.4	4459.9	4493.1	4573.4	4645.5	4670.4
22.5°	10315.9	9479.3	6975.1	5235.5	4592.8	4371.2	4365.7	4435.0	4479.2	4515.2	4534.7
25°	10398.9	9249.4	6243.8	4786.8	4285.3	4249.3	4310.3	4288.1	4257.6	4288.1	4307.6
27.5°	10459.9	8886.5	5590.0	4393.4	4069.2	4166.2	4130.2	4080.3	4077.6	4094.3	4121.9
30°	10440.5	8401.7	5052.6	4019.4	3916.9	4011.1	3925.2	3916.9	3908.6	3916.9	3947.4
32.5°	10440.5	7850.5	4640.0	3761.9	3820.0	3784.0	3775.7	3756.2	3723.0	3720.2	3756.2
35°	10498.7	7299.2	4285.3	3623.3	3739.6	3653.8	3659.4	3612.2	3543.0	3509.7	3543.0
37.5°	10617.8	6856.0	3933.5	3556.9	3598.4	3595.6	3573.5	3493.1	3371.2	3266.0	3301.9
40°	10905.9	6725.8	3692.6	3526.3	3531.8	3565.2	3506.9	3351.9	3074.8	2903.1	2925.2
42.5°	11357.4	6944.7	3639.9	3451.6	3487.6	3520.8	3407.2	3047.1	2850.4	2747.9	2747.9
45°	11930.8	7326.9	3753.4	3343.6	3382.3	3440.5	3102.5	2930.8	2842.1	2844.9	2858.7
47.5°	12656.6	7728.6	3964.0	3249.4	3230.0	3263.2	2900.3	2795.1	2673.2	2703.6	2781.2
50°	13496.0	8135.8	4163.4	3121.9	3061.0	2952.9	2770.1	2670.4	2515.2	2443.2	2462.7
52.5°	14404.5	8529.1	4243.8	2966.8	2878.1	2753.5	2681.5	2559.5	2371.2	2252.1	2249.4
55°	15266.0	8886.5	4155.1	2781.2	2695.3	2598.4	2587.3	2512.5	2310.2	2144.1	2144.1
57.5°	16080.5	9185.6	3933.5	2592.8	2509.7	2451.5	2526.3	2490.3	2235.5	2022.2	2011.0
60°	16770.2	9390.6	3612.2	2401.7	2343.6	2313.0	2426.6	2415.5	2130.3	1891.9	1883.6
62.5°	17318.7	9471.0	3257.7	2218.8	2205.0	2149.6	2288.1	2288.1	1997.2	1764.5	1756.2
65°	17748.1	9393.4	2897.6	2038.8	2066.5	1983.4	2119.1	2102.5	1856.0	1651.0	1639.9
67.5°	18127.5	9138.6	2498.6	1861.5	1925.3	1820.0	1941.9	1903.0	1700.9	1537.4	1526.3
70°	18296.6	8545.7	2044.4	1684.2	1761.8	1659.3	1764.5	1692.6	1526.3	1415.5	1393.4
72.5°	16939.1	7102.5	1609.5	1498.7	1565.1	1482.0	1573.4	1490.4	1337.9	1288.1	1246.5
75°	14014.0	5329.7	1238.2	1296.4	1346.2	1282.6	1343.5	1282.6	1144.0	1180.1	1077.6
77.5°	10177.3	3598.4	947.4	1083.1	1105.3	1072.0	1124.6	1055.4	930.8	922.4	880.9
80°	5060.9	2108.0	742.4	856.0	847.7	825.5	886.4	853.2	747.9	792.2	783.9
82.5°	1465.3	903.0	540.2	601.2	584.5	590.0	634.4	651.0	975.1	966.8	988.9
85°	459.8	354.5	324.1	335.2	318.6	326.9	373.9	742.4	687.0	401.7	434.9
87.5°	119.1	121.9	80.4	85.9	88.7	105.3	119.1	451.5	216.1	141.2	149.5
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)