

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: P969304

Luminaire Tested: **NAV-SB5D-735-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52228.9 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B5 - 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



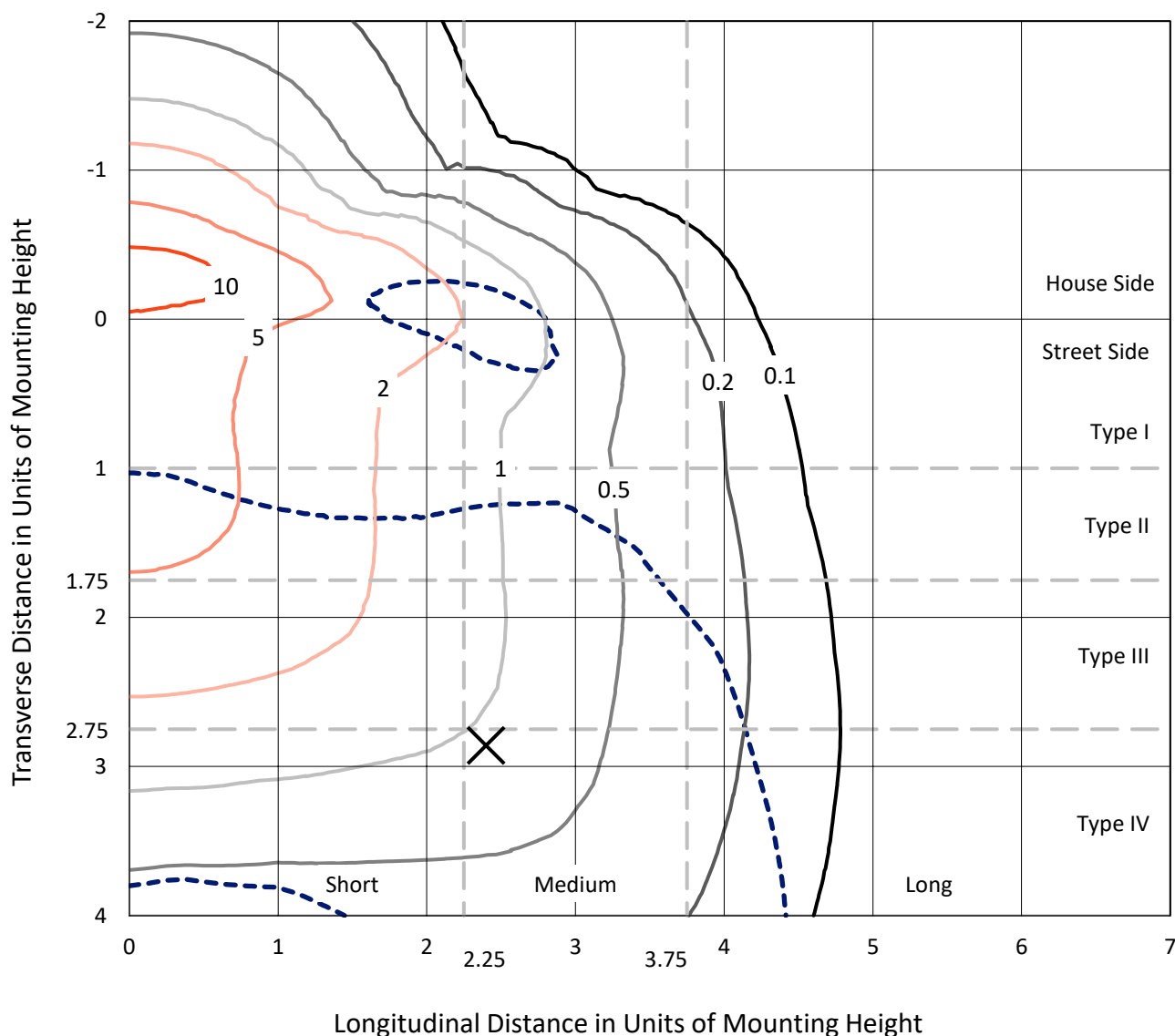
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

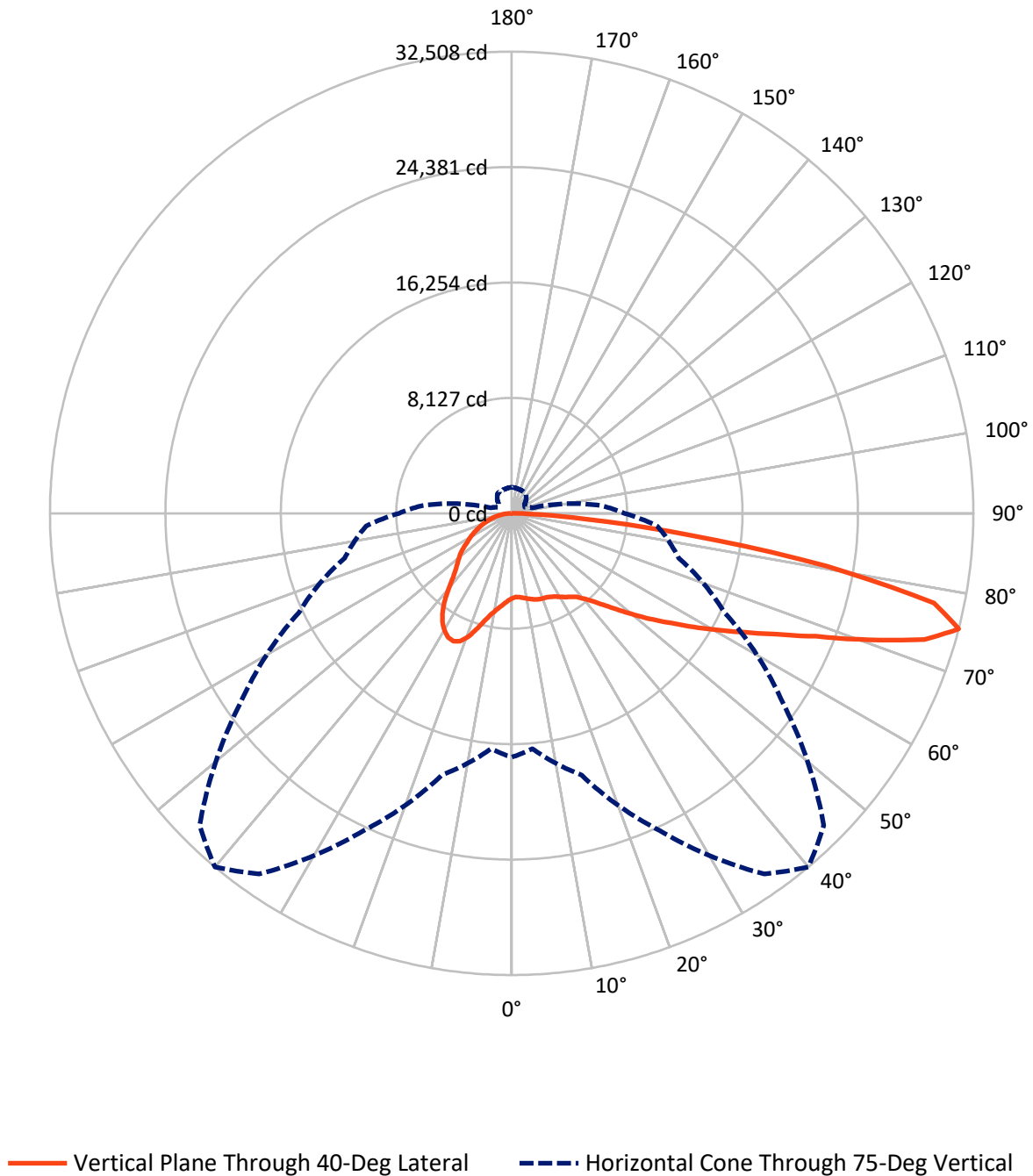
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 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	16182.2	0.0	16182.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	36046.6	0.0	36046.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	52228.9	0.0	52228.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	596.2	1.1
10°-20°	2001.6	3.8
20°-30°	3654.8	7.0
30°-40°	5183.4	9.9
40°-50°	6999.2	13.4
50°-60°	9415.8	18.0
60°-70°	11950.8	22.9
70°-80°	10846.1	20.8
80°-90°	1581.0	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°	52228.9	100.0
0°-180°	52228.9	100.0

Coefficient of Utilization



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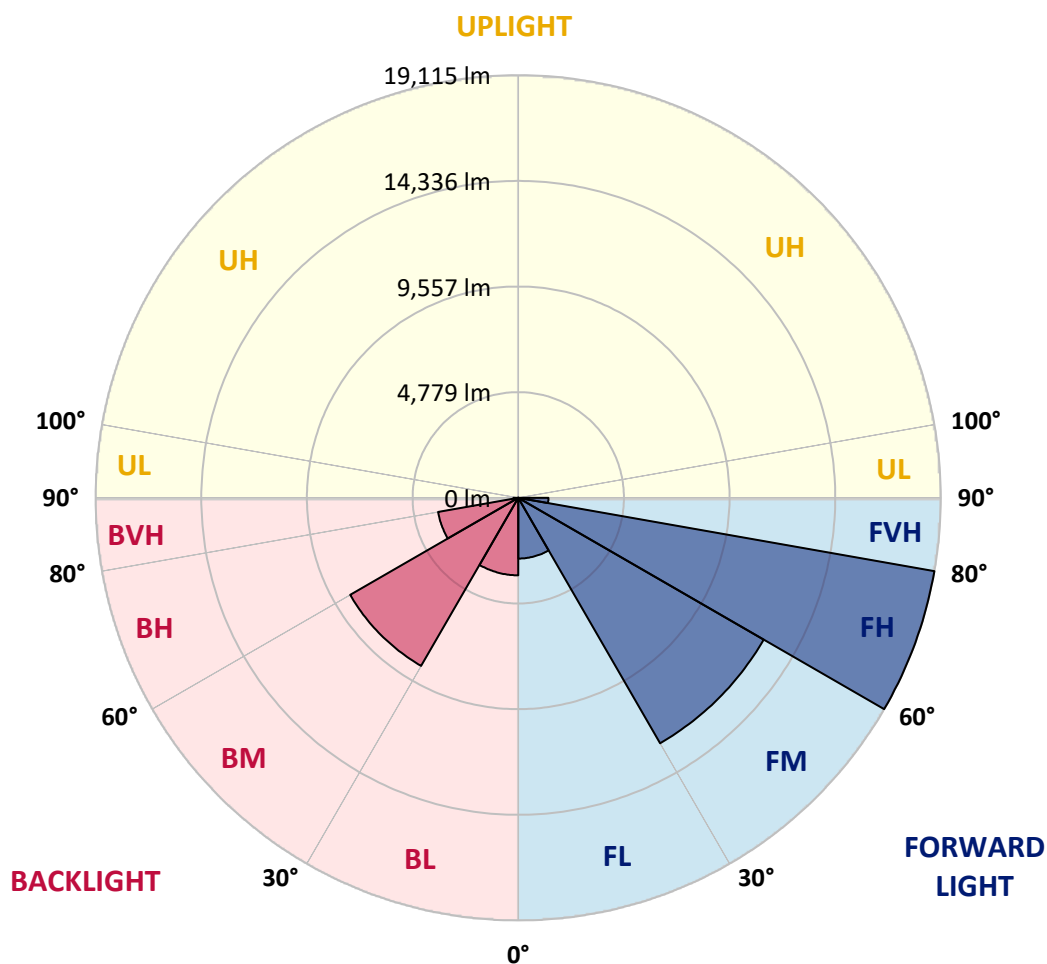
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2747.3	5.3			
FM	(30°-60°)	12821.0	24.5			
FH	(60°-80°)	19115.0	36.6			G5
FVH	(80°-90°)	1363.4	2.6			G5
BL	(0°-30°)	3505.2	6.7	B4/5000		
BM	(30°-60°)	8777.4	16.8	B5		
BH	(60°-80°)	3681.9	7.0	B4/5000		G4/5000
BVH	(80°-90°)	217.7	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5
2.5°	5881.0	5914.2	5905.9	5894.9	5894.9	5897.6	5894.9	5914.2	5933.6	5953.1	5983.5
5°	5941.9	5975.2	5958.6	5944.7	5933.6	5930.9	5922.6	5919.8	5930.9	5955.9	5997.4
7.5°	6061.1	6094.3	6069.4	6044.4	6022.3	6011.2	6000.1	5983.5	5975.2	5989.1	6047.2
10°	6194.1	6227.3	6196.8	6152.5	6116.5	6102.6	6091.6	6075.0	6063.9	6072.2	6135.9
12.5°	6327.0	6360.2	6318.7	6257.7	6210.7	6202.4	6188.5	6183.0	6180.2	6177.5	6241.1
15°	6451.7	6479.3	6426.7	6354.7	6304.9	6291.0	6277.2	6285.5	6299.3	6315.9	6388.0
17.5°	6548.6	6576.3	6498.8	6404.6	6357.5	6351.9	6343.6	6371.3	6410.1	6451.7	6540.3
20°	6637.3	6665.0	6565.2	6437.8	6382.5	6382.5	6385.2	6443.4	6498.8	6559.7	6681.6
22.5°	6761.9	6784.1	6662.2	6487.7	6407.4	6412.9	6435.1	6493.3	6562.5	6645.6	6814.6
25°	6947.6	6964.2	6814.6	6581.8	6490.5	6507.1	6526.5	6554.2	6620.7	6717.6	6944.8
27.5°	7246.7	7260.6	7063.9	6748.1	6609.6	6637.3	6665.0	6645.6	6676.0	6759.2	7050.1
30°	7667.8	7676.1	7426.7	7008.4	6811.8	6825.7	6831.2	6750.9	6692.6	6759.2	7124.8
32.5°	8166.4	8163.6	7867.2	7324.2	7041.7	7027.9	6980.8	6822.9	6687.1	6745.3	7191.3
35°	8939.2	8908.8	8526.6	7767.4	7302.1	7216.2	7105.4	6903.2	6714.9	6731.5	7249.5
37.5°	10219.0	10124.8	9595.8	8493.3	7690.0	7471.1	7307.6	7033.4	6775.8	6725.9	7318.7
40°	11662.3	11543.2	10961.5	9487.8	8271.6	7919.9	7656.6	7219.0	6875.5	6750.9	7421.2
42.5°	13374.3	13205.3	12579.2	10659.5	9008.5	8498.8	8102.7	7454.5	7022.4	6831.2	7559.8
45°	15476.8	15252.4	14366.0	11980.9	9936.6	9257.8	8728.7	7811.8	7246.7	6986.3	7767.4
47.5°	17601.5	17657.0	16396.5	13493.4	11050.1	10194.1	9512.7	8349.2	7573.6	7235.7	8102.7
50°	19859.2	19898.0	18416.0	15169.4	12313.3	11252.3	10393.6	8950.4	8027.9	7590.2	8604.1
52.5°	21621.0	21626.6	20249.8	16922.9	13629.1	12415.8	11343.8	9637.4	8554.2	8061.1	9271.7
55°	22723.5	22709.7	21535.1	18582.1	15141.6	13637.4	12396.5	10418.5	9196.9	8615.1	10111.0
57.5°	23524.1	23482.5	22421.6	20008.8	16753.8	15080.7	13587.6	11304.9	9955.9	9274.5	11216.4
60°	23828.8	23803.9	23022.7	21241.5	18449.2	16676.3	14961.6	12296.7	10817.4	10052.9	12637.4
62.5°	23945.1	23992.3	23612.7	22435.4	20263.6	18443.6	16471.3	13482.3	11787.0	10933.8	14136.1
65°	24355.1	24441.0	24363.4	23997.8	22313.5	20512.9	18474.1	14892.3	12845.2	11878.4	15701.2
67.5°	25166.8	25252.7	25285.9	25867.6	24817.8	23091.9	20972.8	16648.6	14083.4	12859.0	16878.5
70°	25147.5	25122.4	25709.8	27355.2	27953.6	26662.7	24341.3	18809.3	15559.9	13673.5	17028.1
72.5°	22889.8	22690.3	24078.2	27338.6	30563.0	30391.4	28454.9	21596.0	16834.2	13773.2	14776.0
75°	17172.1	16640.3	19091.9	24637.7	30997.9	32507.7	31070.0	23324.7	16532.2	12169.3	10282.8
77.5°	7343.7	6809.1	9698.2	18238.6	27743.1	30388.6	28671.0	20349.5	13197.0	8047.3	5050.0
80°	1922.5	1919.7	2930.8	8268.9	18867.5	22440.9	19687.5	13141.6	7540.3	2875.4	1393.4
82.5°	795.0	775.6	1077.6	3216.1	9219.1	12593.0	10277.3	5861.7	2723.0	778.4	462.6
85°	296.4	293.7	523.6	1110.8	3252.1	5194.0	3759.1	1498.7	678.7	379.6	207.8
87.5°	83.1	80.4	113.6	385.1	792.2	1202.2	642.7	246.5	191.2	149.5	61.0
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°	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5	5972.5
2.5°	5991.8	6005.7	6030.6	6050.0	6075.0	6102.6	6141.4	6166.4	6191.3	6207.9	6196.8
5°	6016.7	6047.2	6110.9	6174.7	6249.4	6318.7	6399.1	6457.2	6504.3	6518.2	6523.7
7.5°	6072.2	6122.0	6230.1	6338.1	6457.2	6570.8	6687.1	6786.8	6867.2	6897.6	6900.4
10°	6169.2	6235.6	6388.0	6540.3	6698.2	6872.7	7022.4	7166.4	7280.0	7327.0	7329.8
12.5°	6291.0	6374.1	6573.5	6784.1	7002.9	7244.0	7437.8	7615.1	7756.4	7820.1	7820.1
15°	6448.9	6556.9	6811.8	7094.3	7415.7	7750.8	7997.5	8194.1	8352.0	8429.6	8424.1
17.5°	6620.7	6764.7	7086.0	7512.6	7972.4	8412.9	8701.0	8845.1	9008.5	9083.3	9080.6
20°	6786.8	6964.2	7424.0	8044.5	8656.7	9124.9	9357.5	9396.4	9407.4	9415.8	9437.9
22.5°	6958.6	7196.8	7847.8	8714.9	9371.4	9695.5	9728.8	9562.5	9329.9	9221.8	9252.3
25°	7147.0	7462.8	8401.8	9454.5	9986.4	10025.2	9770.3	9365.8	8925.4	8723.2	8753.7
27.5°	7329.8	7770.2	9066.7	10160.9	10429.6	10088.9	9540.4	8967.0	8435.1	8221.8	8246.7
30°	7512.6	8122.1	9800.7	10778.7	10631.8	9931.0	9177.5	8537.6	8003.0	7778.6	7803.5
32.5°	7698.3	8532.1	10645.6	11224.7	10595.8	9595.8	8725.9	8055.6	7584.7	7349.2	7379.7
35°	7908.8	9036.2	11446.3	11468.4	10354.9	9102.7	8130.4	7479.4	7069.4	6881.0	6922.6
37.5°	8183.0	9676.1	12152.6	11529.4	9933.8	8379.7	7390.8	6797.9	6460.0	6374.1	6435.1
40°	8523.8	10446.2	12692.8	11432.4	9310.5	7501.6	6581.8	6108.2	5917.0	5936.4	6002.9
42.5°	8967.0	11307.7	13072.3	11183.1	8443.4	6595.8	5872.7	5662.2	5753.6	5831.1	5903.2
45°	9543.2	12202.5	13307.8	10759.2	7462.8	5828.4	5454.4	5504.2	5573.5	5581.8	5637.3
47.5°	10280.0	13108.3	13463.0	10119.3	6462.7	5288.2	5188.4	5199.6	5185.7	5127.6	5171.8
50°	11199.7	13989.3	13601.4	9271.7	5612.3	4950.2	4817.3	4778.5	4587.4	4399.0	4423.9
52.5°	12246.8	14798.1	13659.6	8219.1	4950.2	4667.7	4451.7	4207.8	3850.5	3792.3	3811.8
55°	13410.3	15546.1	13510.0	6925.4	4393.5	4304.8	3977.9	3684.3	3645.5	3595.7	3604.0
57.5°	14800.9	16352.2	13205.3	5482.1	3822.8	3881.0	3562.4	3595.7	3526.4	3448.8	3435.0
60°	16321.7	17186.0	12670.6	4166.3	3232.7	3351.9	3454.4	3451.6	3432.2	3368.5	3346.3
62.5°	17690.2	17734.4	11618.0	3191.2	2714.7	2941.9	3221.7	3218.9	3202.3	3166.3	3152.4
65°	18504.6	17651.4	9861.7	2512.5	2288.1	2603.9	2905.9	2928.0	2930.8	2928.0	2928.0
67.5°	18360.5	16679.1	7451.7	2000.1	1936.3	2260.4	2592.8	2623.3	2645.5	2651.1	2656.6
70°	16731.7	14543.3	4858.8	1595.6	1623.3	1958.5	2296.4	2327.0	2346.3	2368.5	2379.5
72.5°	13041.9	10692.8	2781.2	1290.9	1349.1	1698.1	2002.8	2038.8	2049.9	2091.5	2108.1
75°	7947.5	6288.3	1501.4	1016.6	1108.0	1451.6	1712.0	1753.5	1772.9	1822.8	1828.3
77.5°	3778.5	2723.0	856.0	792.2	892.0	1185.6	1446.0	1493.1	1440.4	1468.2	1446.0
80°	1277.0	1011.1	540.2	603.9	681.4	925.3	1157.9	1205.0	1094.2	1088.7	1077.6
82.5°	446.0	410.0	343.5	401.7	440.4	662.0	875.4	936.3	814.5	811.7	772.8
85°	174.6	166.3	191.2	218.8	263.1	407.2	576.2	606.7	501.4	404.5	398.9
87.5°	36.0	38.7	47.0	49.8	80.4	141.2	207.8	254.8	202.2	171.8	157.8
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)