

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: P971451

Luminaire Tested: **NAV-SB6D-740-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-740-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 68158.4 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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

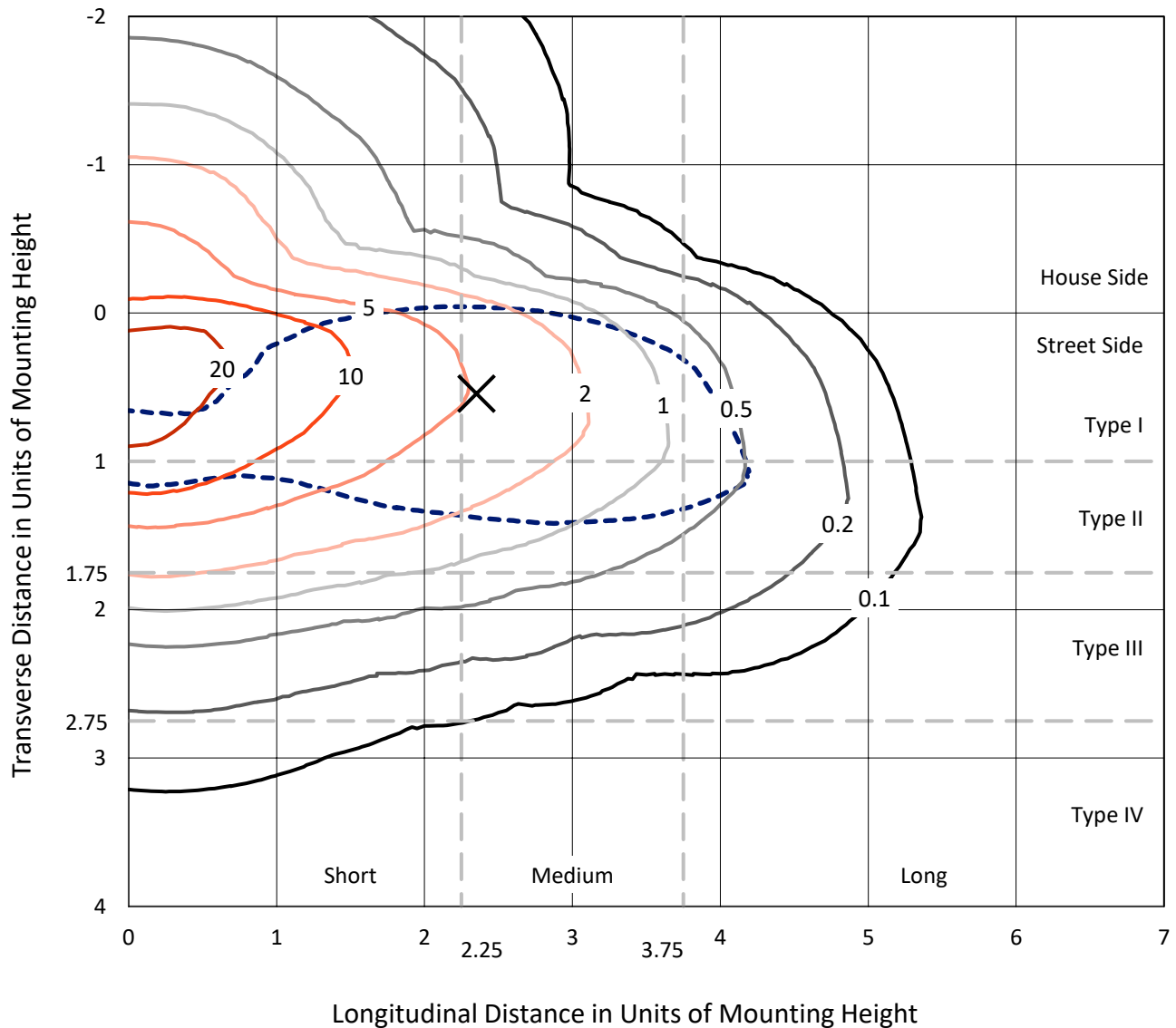


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Iso-Footcandle Lines of Horizontal Illumination

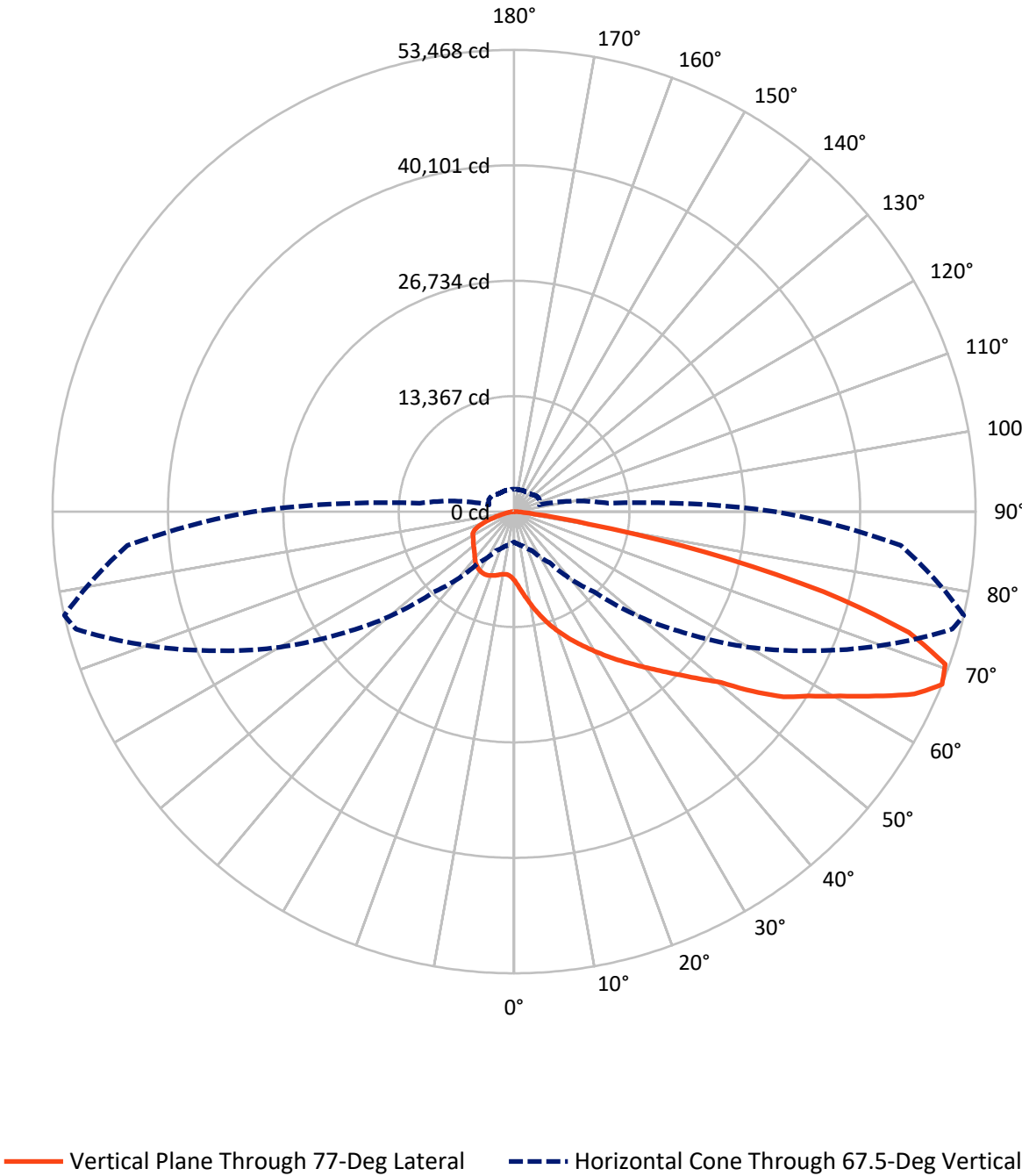
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12892.8	0.0	12892.8
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	55265.6	0.0	55265.6
	% Fixture	81.1	0.0	81.1
Total	Lumens	68158.4	0.0	68158.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	857.2	1.3
10°-20°	3079.5	4.5
20°-30°	5814.4	8.5
30°-40°	9366.9	13.7
40°-50°	12812.2	18.8
50°-60°	14452.3	21.2
60°-70°	13489.4	19.8
70°-80°	7394.5	10.8
80°-90°	891.9	1.3
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°	68158.4	100.0
0°-180°	68158.4	100.0

Coefficient of Utilization



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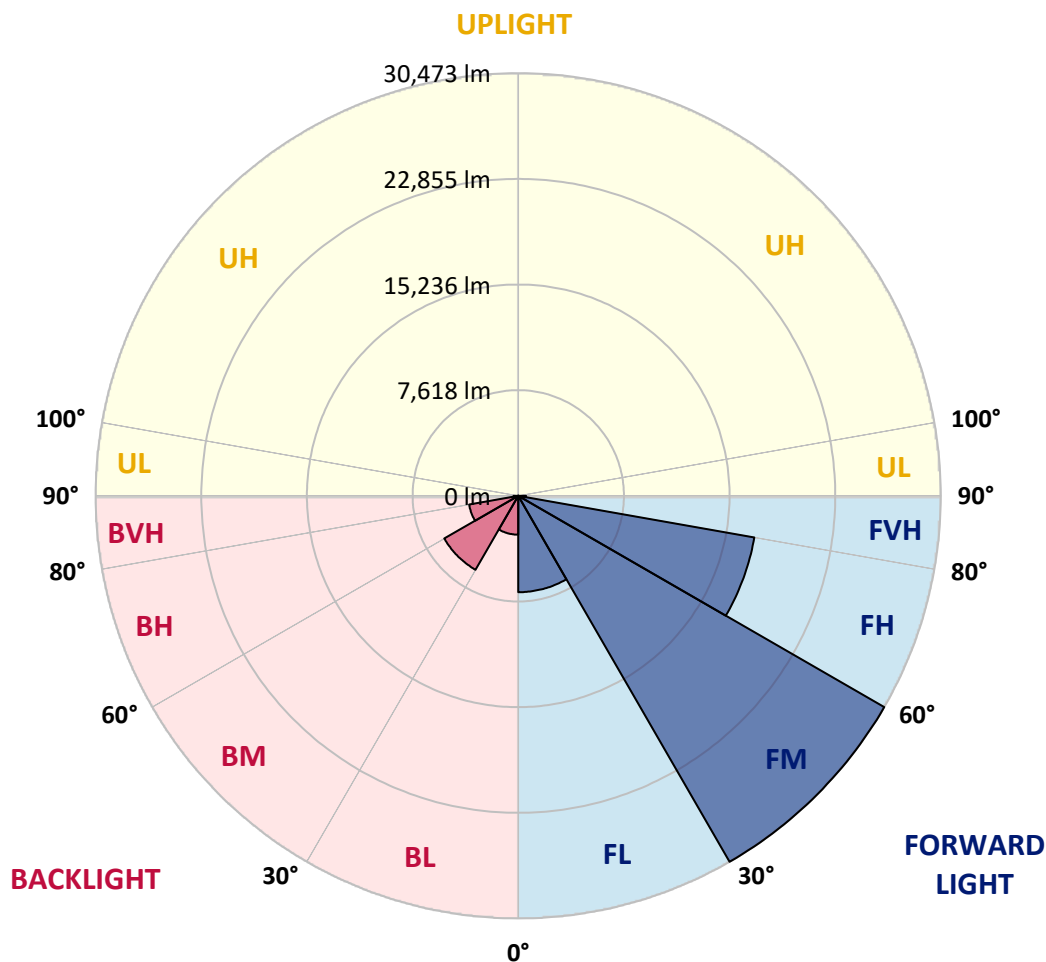
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6947.9	10.2			
FM	(30°-60°)	30472.9	44.7			
FH	(60°-80°)	17287.0	25.4			G5
FVH	(80°-90°)	557.8	0.8			G4/750
BL	(0°-30°)	2803.2	4.1	B4/5000		
BM	(30°-60°)	6158.6	9.0	B4/8500		
BH	(60°-80°)	3596.9	5.3	B4/5000		G4/5000
BVH	(80°-90°)	334.1	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0
2.5°	10013.1	10083.4	9995.5	9995.5	9700.0	9545.1	9249.6	9024.4	8619.8	8549.4	8282.1
5°	11835.6	11923.5	11800.4	11747.6	11399.3	11079.1	10583.0	10094.0	9372.7	9298.9	8669.1
7.5°	13246.4	13359.0	13250.0	13193.6	12884.0	12525.2	11944.6	11262.1	10245.3	10101.1	9189.8
10°	14396.8	14414.5	14379.3	14400.4	14157.6	13862.1	13267.5	12472.4	11202.2	11005.2	9819.6
12.5°	15047.8	15128.7	15199.1	15325.7	15283.5	15100.5	14565.8	13615.8	12215.5	11962.3	10505.6
15°	15353.9	15494.6	15652.9	15944.9	16180.6	16226.4	15818.3	14843.7	13246.4	12940.3	11198.7
17.5°	15462.9	15596.6	15846.4	16268.6	16775.3	17116.6	16933.6	16036.4	14266.7	13914.9	11927.0
20°	16015.3	16054.0	16205.2	16606.3	17155.2	17721.6	17858.9	17183.4	15276.5	14878.9	12680.0
22.5°	17197.4	17120.1	17162.3	17345.3	17739.3	18288.2	18601.3	18196.6	16314.3	15857.0	13439.9
25°	19150.1	18925.0	18699.8	18488.6	18689.2	18998.8	19354.2	19209.9	17401.5	16821.0	14206.9
27.5°	21616.4	21342.0	20845.9	20152.8	19910.1	20019.2	20177.4	20149.3	18407.8	17820.2	14998.5
30°	24044.0	23723.9	23132.8	22130.2	21489.7	21201.3	21081.7	21000.7	19502.0	18875.7	15797.2
32.5°	25982.6	25729.3	25148.8	24026.5	23097.7	22605.0	22207.5	21919.0	20645.3	20019.2	16641.6
35°	27678.5	27442.7	26777.8	25553.5	24543.6	24019.4	23498.7	22883.0	21834.6	21201.3	17549.3
37.5°	29226.5	28990.8	28079.6	26805.9	25789.1	25426.8	24962.3	23917.5	23027.2	22429.2	18509.8
40°	30204.6	30151.8	29300.4	27857.9	26802.4	26622.9	26468.2	25117.1	24350.2	23794.2	19565.3
42.5°	30454.4	30570.5	29895.0	28709.3	27703.1	27558.9	27921.2	26475.2	25834.9	25303.7	20761.5
45°	29852.8	30187.1	29743.8	28938.0	28343.4	28266.0	29208.9	27960.0	27477.9	26992.5	22204.0
47.5°	28329.4	28895.8	28712.8	28600.3	28515.8	28850.1	30341.8	29536.1	29339.1	28916.9	23850.5
50°	25254.4	26327.4	26647.6	27358.3	28174.6	29303.9	31372.7	31256.6	31513.4	31087.7	25856.0
52.5°	19938.2	21415.9	23273.5	25053.9	27126.1	29152.6	32505.6	33726.4	34810.0	34577.9	29043.6
55°	16458.6	17123.5	18552.0	21817.0	25092.5	28515.8	33015.8	35721.4	38082.1	37874.5	31460.6
57.5°	13784.7	14379.3	15258.9	17985.6	22017.5	27069.8	33332.4	36938.6	40323.3	40302.2	33846.0
60°	10917.3	11547.0	12447.7	14379.3	18425.3	24571.8	33262.0	38324.9	43183.7	43359.5	36755.7
62.5°	7680.4	8373.5	9372.7	11174.1	14755.8	21335.0	31826.6	39327.6	46550.7	47029.2	40256.4
65°	5048.7	5506.1	6259.1	7814.2	10994.7	17172.8	29085.8	39457.8	50153.4	50962.6	43542.5
67.5°	3539.4	3715.3	4158.6	5003.0	7247.7	13169.0	24719.6	38110.2	52556.4	53467.6	44967.4
70°	2761.9	2849.8	3075.0	3412.7	4552.6	8855.6	18942.5	34606.0	52042.7	52992.6	43479.2
72.5°	2385.4	2469.8	2554.3	2596.5	3053.9	5467.5	12831.3	28934.5	47205.0	47848.8	37804.2
75°	2163.8	2184.9	2255.2	2241.2	2329.1	3546.4	7406.0	21081.7	37244.7	37023.1	27907.2
77.5°	1819.0	1847.2	1963.2	1945.7	2068.8	2424.1	3845.5	13605.2	24146.1	22640.3	15533.3
80°	1541.0	1555.1	1681.7	1660.6	1797.8	1755.6	1963.2	6934.5	10241.8	8676.1	4478.8
82.5°	534.7	661.4	1284.2	1322.9	1372.2	1062.5	1132.9	2828.7	3127.8	2395.9	939.4
85°	260.3	278.0	654.4	928.9	925.3	534.7	552.4	1009.7	985.1	774.0	313.1
87.5°	42.2	52.8	77.4	362.3	288.5	140.7	190.0	197.0	204.1	175.9	70.3
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°	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0	7997.0
2.5°	8085.1	7909.1	7539.7	7198.5	6931.0	6674.2	6530.0	6406.9	6336.4	6322.4	6322.4
5°	8303.2	7940.8	7268.8	6702.4	6333.0	6058.5	5914.2	5822.8	5777.0	5748.9	5745.4
7.5°	8616.4	8085.1	7128.1	6484.3	6097.2	5900.2	5826.3	5812.3	5808.7	5812.3	5822.8
10°	9049.1	8320.7	7114.0	6431.5	6107.8	5998.7	5995.2	5998.7	6012.8	6016.3	6019.8
12.5°	9517.0	8563.6	7170.3	6477.2	6241.4	6181.7	6171.1	6167.6	6178.2	6185.2	6188.6
15°	10027.2	8883.7	7265.3	6575.7	6389.2	6325.9	6315.3	6294.2	6290.7	6287.2	6283.7
17.5°	10551.3	9200.4	7370.9	6681.3	6484.3	6396.3	6357.6	6308.4	6269.6	6259.1	6269.6
20°	11082.6	9513.4	7444.7	6734.0	6491.2	6368.1	6290.7	6206.3	6139.4	6100.7	6114.8
22.5°	11649.1	9840.7	7490.5	6720.0	6428.0	6259.1	6118.3	6019.8	5917.7	5850.9	5854.5
25°	12201.5	10125.7	7486.9	6646.1	6304.8	6090.1	5910.8	5784.1	5643.3	5573.0	5573.0
27.5°	12732.8	10382.5	7399.0	6515.9	6128.9	5889.6	5675.0	5523.7	5386.5	5319.6	5316.2
30°	13281.5	10597.2	7261.8	6325.9	5921.3	5657.4	5421.7	5291.6	5168.4	5105.0	5101.5
32.5°	13826.9	10794.2	7068.3	6090.1	5682.1	5428.7	5196.5	5076.9	5003.0	5003.0	5006.5
35°	14403.9	10931.3	6811.4	5815.7	5428.7	5186.0	5003.0	4932.6	4925.6	4883.4	4872.8
37.5°	15012.6	11019.4	6498.3	5534.3	5178.9	4950.2	4894.0	4809.5	4739.2	4647.7	4633.6
40°	15652.9	11107.3	6121.8	5242.3	4915.1	4788.4	4763.8	4651.1	4450.7	4225.5	4193.8
42.5°	16430.4	11167.1	5731.3	4950.2	4637.1	4594.9	4630.1	4436.6	4116.4	3947.6	3951.1
45°	17331.1	11265.6	5372.4	4661.7	4352.2	4352.2	4500.0	4246.6	3982.7	3877.2	3894.8
47.5°	18499.2	11494.2	5038.2	4345.1	4088.3	4158.6	4211.4	4017.9	3870.1	3739.9	3736.4
50°	20188.0	12043.1	4693.4	4025.0	3887.7	4028.5	3954.6	3842.0	3669.6	3564.0	3553.5
52.5°	22284.9	12366.8	4387.3	3736.4	3715.3	3856.0	3750.5	3645.0	3514.8	3374.1	3345.9
55°	23713.4	12426.6	4130.4	3525.4	3599.2	3585.1	3546.4	3451.5	3381.1	3194.6	3198.1
57.5°	25310.6	12546.3	3919.4	3398.7	3525.4	3370.5	3356.5	3275.5	3184.1	3057.4	3015.1
60°	27221.1	12732.8	3736.4	3349.4	3462.0	3229.8	3159.5	3127.8	3036.3	2973.0	2990.5
62.5°	29303.9	12901.6	3550.0	3356.5	3388.1	3092.6	2987.1	2976.5	2920.2	2899.1	2899.1
65°	30725.3	12440.7	3317.7	3349.4	3272.0	2951.9	2818.1	2814.6	2768.9	2761.9	2758.4
67.5°	30229.2	10980.6	3004.6	3250.9	3152.4	2811.2	2663.4	2649.3	2589.5	2592.9	2592.9
70°	27745.3	8897.8	2571.8	3008.2	3004.6	2684.5	2501.5	2455.8	2374.8	2389.0	2403.0
72.5°	23087.1	6593.3	1991.4	2603.5	2768.9	2568.3	2315.1	2241.2	2139.2	2153.2	2149.7
75°	16673.3	4482.3	1449.6	1980.8	2410.1	2431.1	2132.1	2005.4	1882.3	1903.4	1910.4
77.5°	8531.9	2540.3	1066.0	1365.1	1892.9	2209.5	1966.8	1797.8	1769.7	1966.8	1938.6
80°	2783.0	1273.7	738.8	956.9	1242.0	1808.4	1723.9	1530.4	1523.5	1569.2	1347.5
82.5°	830.4	538.3	475.0	629.8	686.0	1386.2	1488.2	1157.5	995.7	1048.5	1083.6
85°	285.0	260.3	270.9	313.1	327.2	812.7	1041.4	767.0	724.8	798.7	788.1
87.5°	66.8	91.4	77.4	70.3	70.3	197.0	404.6	320.2	443.3	295.5	285.0
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)