

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: P885511

Luminaire Tested: **NAV-SB6D-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49601 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

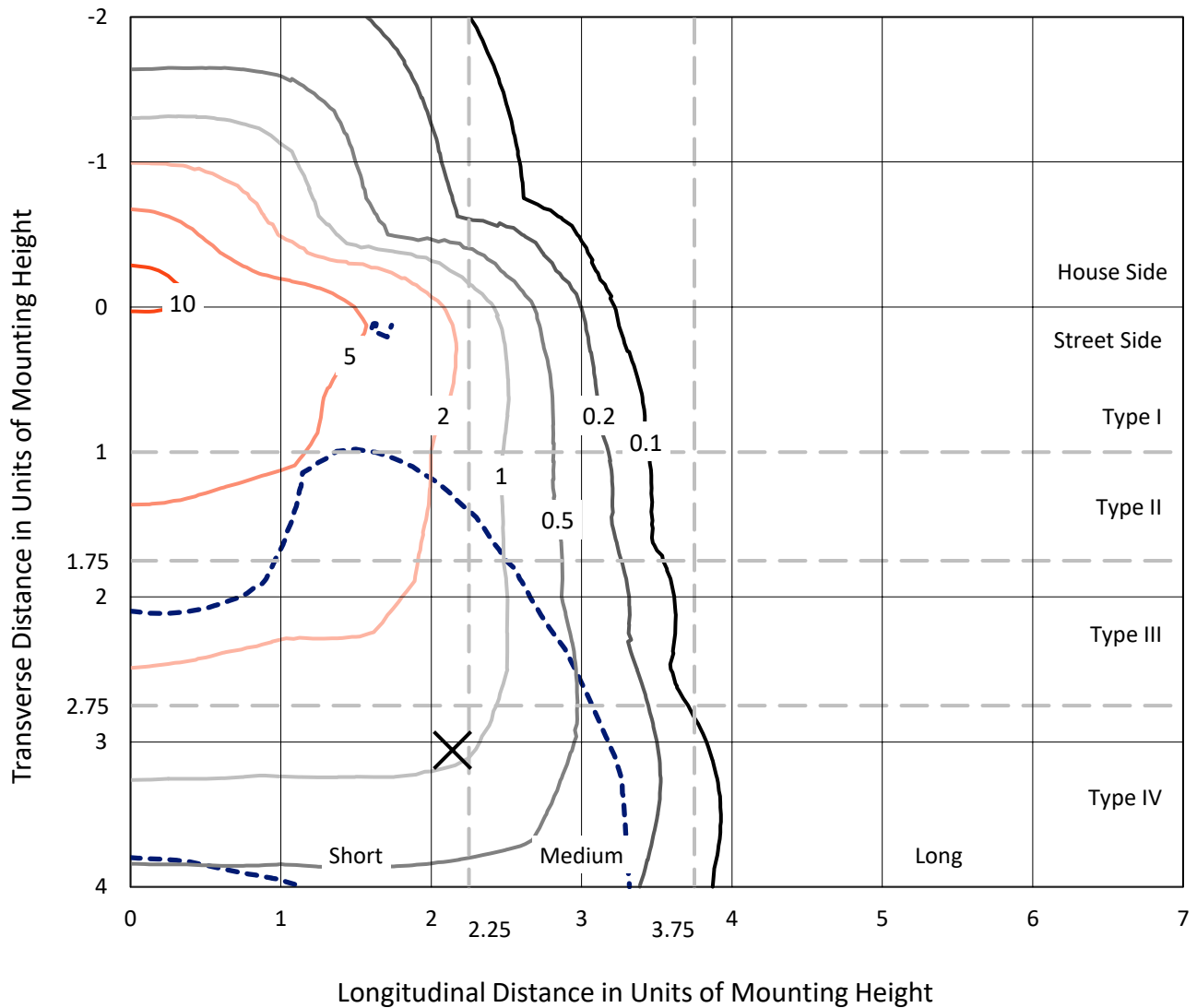
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

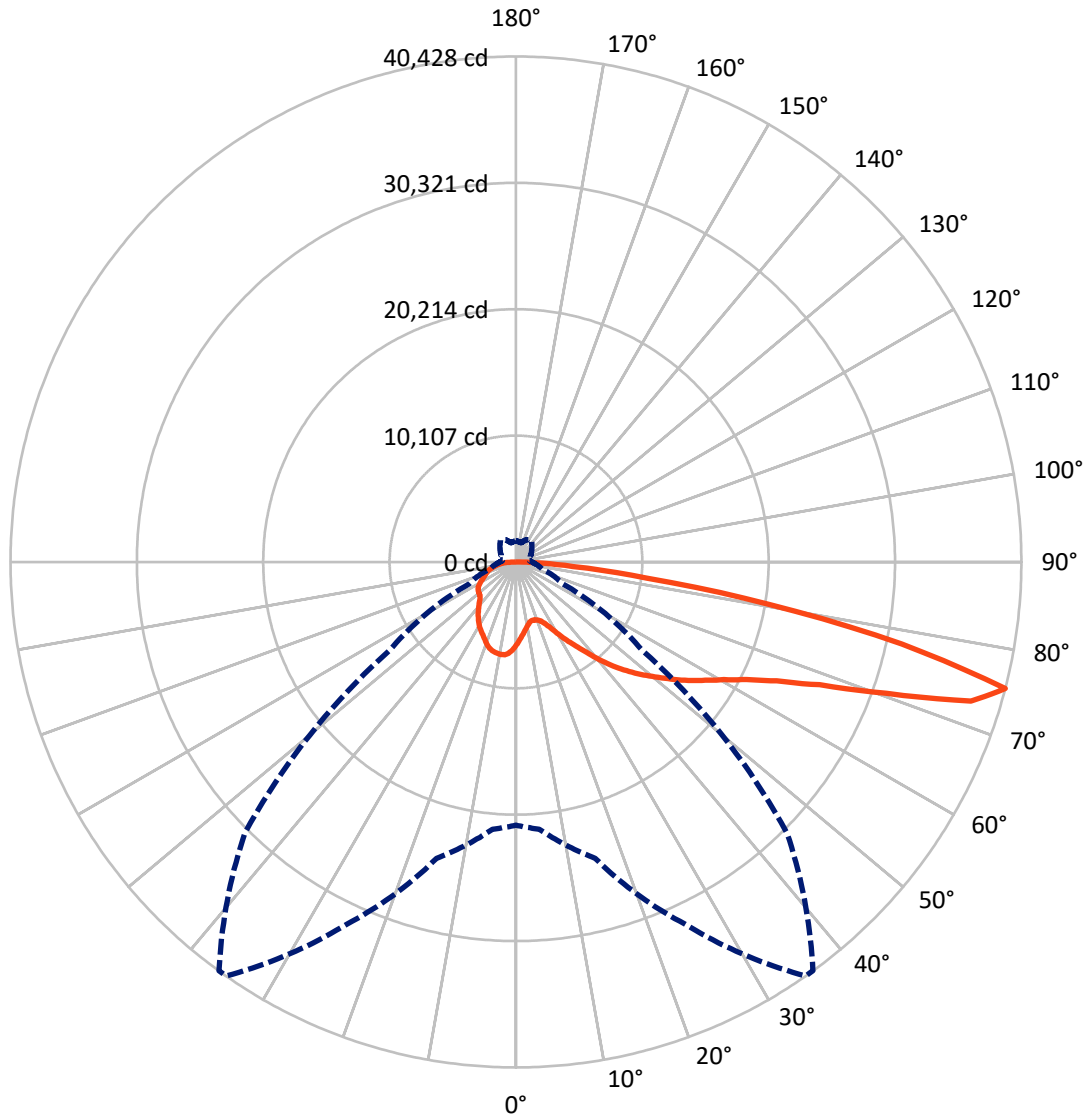
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11803.8	0.0	11803.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	37797.2	0.0	37797.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	49601.0	0.0	49601.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	625.8	1.3
10°-20°	1805.1	3.6
20°-30°	3031.2	6.1
30°-40°	4710.9	9.5
40°-50°	6992.3	14.1
50°-60°	9653.3	19.5
60°-70°	11711.6	23.6
70°-80°	9678.7	19.5
80°-90°	1392.1	2.8
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°	49601.0	100.0
0°-180°	49601.0	100.0



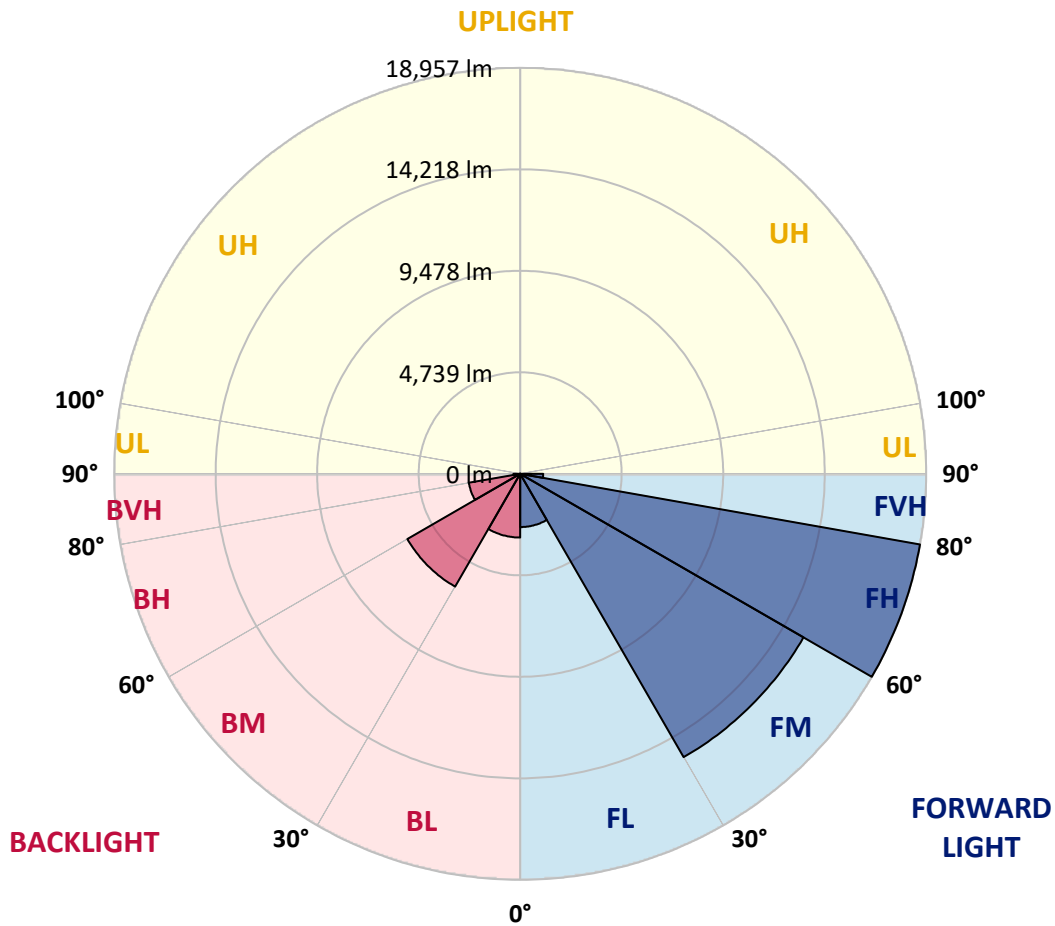
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2487.4	5.0			
FM (30°-60°)	15274.4	30.8			
FH (60°-80°)	18956.8	38.2			G5
FVH (80°-90°)	1078.6	2.2			G5
BL (0°-30°)	2974.7	6.0	B4/5000		
BM (30°-60°)	6082.0	12.3	B4/8500		
BH (60°-80°)	2433.6	4.9	B3/2500		G3/2500
BVH (80°-90°)	313.5	0.6			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7
2.5°	6094.8	6132.4	6148.5	6140.4	6180.6	6175.3	6231.6	6301.3	6397.8	6491.7	6628.4
5°	5625.6	5665.8	5700.7	5732.8	5810.6	5834.7	5923.2	6057.3	6234.3	6413.9	6639.2
7.5°	5188.5	5223.4	5277.0	5336.0	5467.4	5491.5	5639.0	5848.1	6094.8	6357.6	6668.7
10°	4831.9	4866.8	4923.1	4990.1	5153.7	5183.2	5370.9	5649.7	5971.5	6304.0	6700.8
12.5°	4679.1	4689.8	4722.0	4789.0	4931.1	4949.9	5156.3	5475.4	5850.8	6263.8	6749.1
15°	4671.0	4692.5	4695.1	4730.0	4848.0	4856.0	5046.4	5362.8	5775.8	6255.7	6821.5
17.5°	4751.5	4767.5	4743.4	4764.9	4864.1	4877.5	5027.6	5309.2	5751.6	6290.6	6944.8
20°	4966.0	4979.4	4907.0	4877.5	4949.9	4960.6	5108.1	5344.0	5775.8	6363.0	7113.8
22.5°	5421.8	5429.8	5252.9	5132.2	5137.6	5142.9	5271.6	5486.2	5869.6	6494.4	7328.3
25°	6132.4	6127.0	5845.5	5612.2	5478.1	5448.6	5534.4	5716.8	6027.8	6668.7	7604.5
27.5°	6963.6	6923.4	6641.8	6293.3	6001.0	5958.1	5939.3	6017.1	6253.0	6899.3	7942.3
30°	7902.1	7864.6	7561.6	7105.7	6700.8	6631.1	6454.1	6413.9	6588.2	7213.0	8411.6
32.5°	8931.8	8907.6	8545.6	7993.3	7451.6	7371.2	7073.6	6966.3	7103.0	7687.6	9065.8
35°	9795.2	9773.7	9473.4	8905.0	8242.6	8143.4	7840.4	7719.8	7789.5	8296.3	9921.2
37.5°	10575.5	10564.7	10307.3	9859.5	9175.8	9055.1	8714.6	8674.4	8660.9	9098.0	10958.9
40°	11299.5	11272.6	11004.5	10768.5	10261.7	10151.8	9851.5	9816.6	9714.7	10084.8	12133.4
42.5°	12101.2	12031.5	11642.7	11532.7	11396.0	11304.8	11125.2	11130.5	10905.3	11197.6	13377.5
45°	12755.5	12715.2	12315.7	12251.3	12398.8	12361.3	12516.8	12557.0	12120.0	12364.0	14670.0
47.5°	13458.0	13420.4	13082.6	13037.0	13436.5	13447.3	13996.9	14010.4	13305.1	13576.0	15965.1
50°	14324.1	14270.4	13935.3	13991.6	14439.4	14479.6	15485.1	15394.0	14396.5	14806.7	17249.5
52.5°	14895.2	14927.4	14855.0	14946.2	15557.5	15595.1	16949.2	16715.9	15477.1	16021.4	18509.8
55°	15316.2	15380.6	15605.8	15814.9	16737.3	16774.9	18330.1	17973.5	16372.7	17147.6	19694.9
57.5°	15857.8	15766.7	16187.7	16595.2	17858.2	17957.4	19673.5	19185.5	17166.4	18118.3	20507.4
60°	16635.5	16571.1	16898.2	17501.5	19113.1	19271.3	21094.6	20276.8	17748.2	18887.8	20665.6
62.5°	18212.1	18051.2	18102.2	18635.8	20695.1	20904.3	22698.1	21228.7	18037.8	19188.2	19818.3
65°	20569.1	20292.9	20035.5	20405.5	22923.4	23129.8	24508.1	21976.8	17930.6	18606.3	17568.6
67.5°	23537.4	23263.9	22947.5	23296.1	26205.4	26369.0	26741.7	22397.8	17085.9	16364.6	13592.1
70°	25985.5	25883.6	26261.7	27696.3	31447.5	31452.9	29605.4	22049.2	14771.9	11602.4	7864.6
72.5°	25661.1	25599.4	27591.7	32026.7	38054.5	37912.4	32316.3	19410.7	9950.7	5234.1	2946.9
75°	21051.7	21451.3	24537.6	31949.0	40427.6	40408.8	30656.5	12339.8	4116.0	2169.3	1523.0
77.5°	11288.7	11921.5	15930.2	23588.3	31560.2	32034.8	21553.2	4317.1	1767.0	1389.0	1053.8
80°	3681.6	4233.9	6349.6	12010.0	20507.4	20418.9	9237.4	1694.6	1209.3	984.1	729.3
82.5°	1563.3	1627.6	2836.9	5671.2	10524.5	10361.0	2941.5	973.4	850.0	673.0	450.5
85°	611.4	683.8	1252.2	2622.4	4558.4	4459.2	1061.8	482.7	544.3	439.8	268.1
87.5°	201.1	244.0	447.8	898.3	1418.5	1367.5	260.1	166.2	236.0	201.1	96.5
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°	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7	6609.7
2.5°	6666.0	6708.9	6759.8	6834.9	6899.3	6952.9	7009.2	7044.1	7057.5	7097.7	7095.0
5°	6714.2	6808.1	6934.1	7057.5	7178.1	7250.5	7314.9	7347.1	7376.6	7398.0	7403.4
7.5°	6794.7	6915.3	7113.8	7274.7	7376.6	7435.5	7478.4	7467.7	7478.4	7483.8	7491.9
10°	6864.4	7033.3	7269.3	7422.1	7499.9	7502.6	7491.9	7454.3	7435.5	7438.2	7443.6
12.5°	6947.5	7135.2	7390.0	7518.7	7540.1	7481.1	7435.5	7371.2	7347.1	7336.3	7331.0
15°	7060.1	7274.7	7521.3	7569.6	7516.0	7440.9	7363.1	7258.6	7204.9	7162.0	7175.4
17.5°	7196.9	7432.9	7623.2	7588.4	7473.1	7349.7	7223.7	7065.5	6955.6	6910.0	6912.7
20°	7387.3	7599.1	7701.0	7548.2	7373.9	7186.2	6971.7	6778.6	6676.7	6631.1	6625.8
22.5°	7617.9	7821.7	7776.1	7478.4	7231.8	6931.4	6663.3	6521.2	6470.2	6438.1	6443.4
25°	7894.1	8068.4	7829.7	7376.6	6998.5	6593.6	6387.1	6341.5	6317.4	6293.3	6293.3
27.5°	8253.4	8347.2	7869.9	7226.4	6633.8	6234.3	6159.2	6167.2	6159.2	6119.0	6127.0
30°	8728.0	8709.2	7907.5	6982.4	6215.5	5909.8	5915.2	5950.0	5955.4	5928.6	5942.0
32.5°	9352.7	9162.4	7926.2	6666.0	5816.0	5625.6	5631.0	5668.5	5695.3	5649.7	5671.2
35°	10108.9	9690.6	7896.7	6269.1	5507.6	5354.8	5314.5	5325.3	5333.3	5290.4	5319.9
37.5°	10991.1	10283.2	7765.4	5829.4	5252.9	5089.3	5003.5	4931.1	4888.2	4848.0	4874.8
40°	11959.1	10929.4	7524.0	5400.4	4968.6	4807.8	4679.1	4542.3	4397.5	4343.9	4368.0
42.5°	12972.6	11594.4	7231.8	4990.1	4641.5	4510.1	4373.4	4175.0	3957.8	3847.8	3861.2
45°	14023.8	12275.5	6944.8	4585.2	4306.3	4250.0	4091.8	3853.2	3617.2	3477.8	3467.1
47.5°	15053.4	12919.0	6523.9	4177.6	3992.6	4054.3	3930.9	3711.1	3448.3	3228.4	3204.3
50°	16037.5	13522.3	5834.7	3764.7	3737.9	3995.3	3877.3	3560.9	3260.6	2979.0	2954.9
52.5°	17013.5	14010.4	4952.6	3389.3	3601.1	3979.2	3807.6	3459.0	3091.7	2796.7	2764.5
55°	17842.1	14262.4	4102.6	3067.5	3402.7	3842.5	3724.5	3338.4	2853.0	2539.3	2512.5
57.5°	18314.0	14058.6	3394.7	2751.1	3129.2	3617.2	3582.4	3080.9	2568.8	2327.5	2295.3
60°	18110.2	13232.7	2815.5	2474.9	2869.1	3373.2	3335.7	2826.2	2351.6	2123.7	2091.5
62.5°	16986.7	11658.8	2357.0	2233.6	2633.1	3123.8	3089.0	2630.5	2185.3	1965.5	1930.6
65°	14723.6	9484.1	2000.3	2032.5	2394.5	2823.5	2874.5	2466.9	2054.0	1839.4	1804.6
67.5°	11229.7	6869.8	1721.5	1858.2	2161.2	2528.6	2676.0	2348.9	1944.0	1740.2	1708.1
70°	6400.5	3901.4	1485.5	1689.3	1954.7	2255.1	2523.2	2255.1	1826.0	1657.1	1635.7
72.5°	2426.7	1791.2	1284.4	1520.4	1756.3	2024.5	2354.3	2107.6	1689.3	1563.3	1541.8
75°	1295.1	1091.3	1080.6	1321.9	1528.4	1799.2	2142.4	1962.8	1587.4	1651.7	1705.4
77.5°	882.2	772.2	903.6	1131.6	1279.0	1549.9	1917.2	1742.9	1375.6	1370.2	1262.9
80°	611.4	547.0	734.7	911.7	989.4	1303.2	1673.2	1496.2	1120.8	1045.7	1000.2
82.5°	367.4	356.6	549.7	681.1	699.8	1005.5	1386.3	1254.9	917.0	799.1	804.4
85°	201.1	211.8	351.3	399.5	407.6	702.5	1086.0	970.7	705.2	592.6	598.0
87.5°	56.3	72.4	128.7	158.2	195.7	364.7	646.2	576.5	353.9	246.7	246.7
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)