

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: P969253

Luminaire Tested: **NAV-SB5D-727-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969253
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48423 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

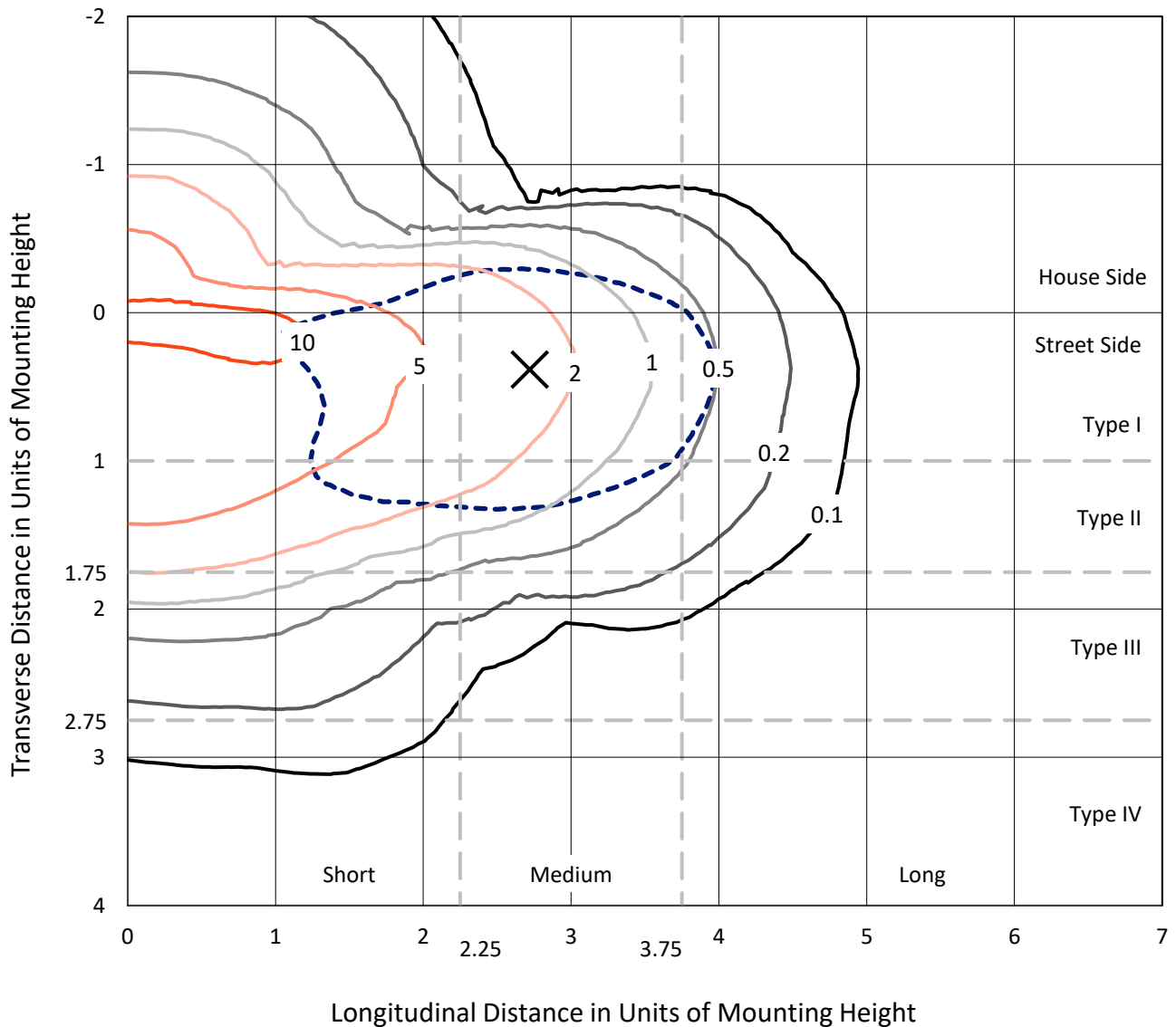
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

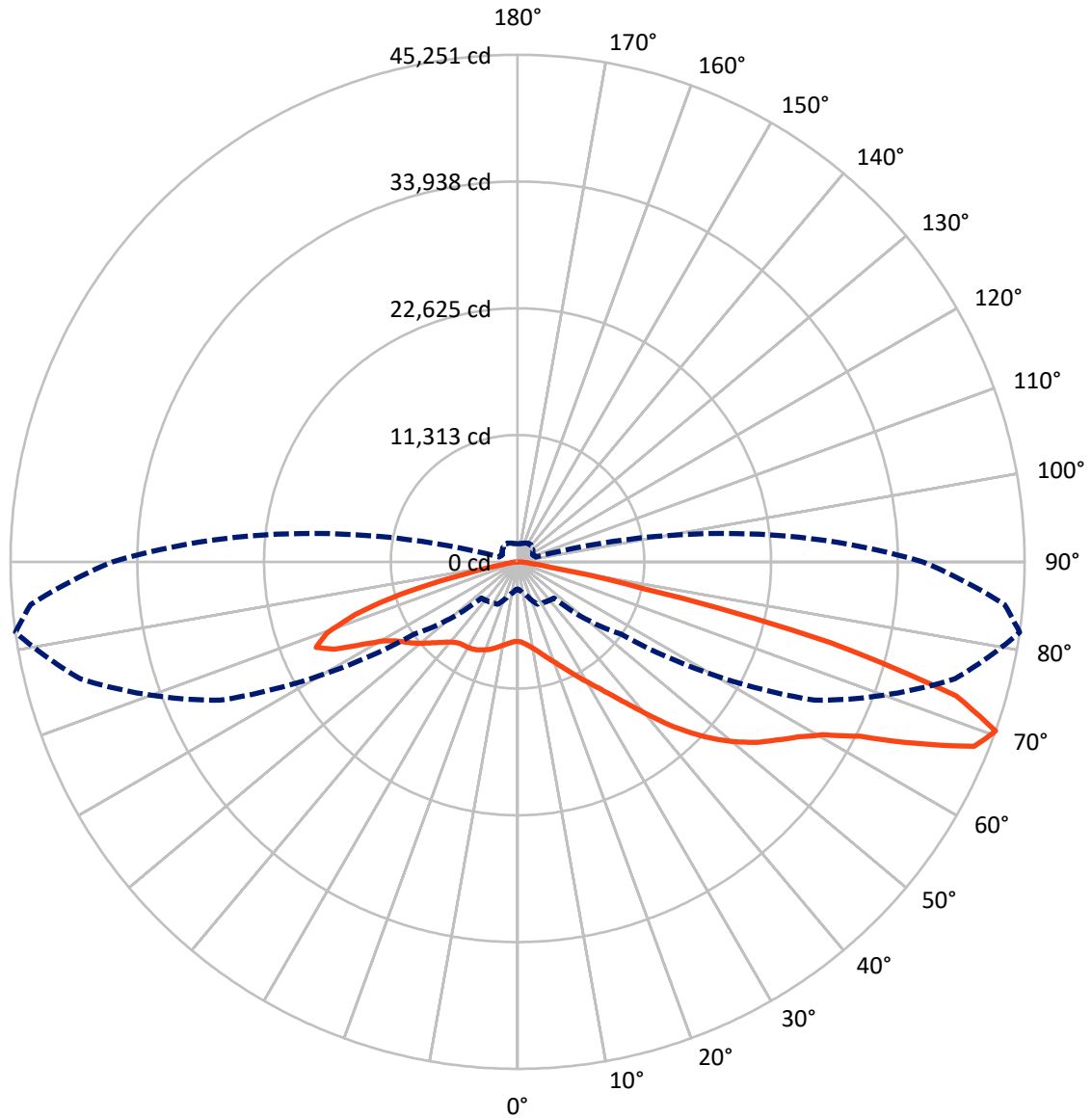
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11937.5	0.0	11937.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	36485.6	0.0	36485.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	48423.0	0.0	48423.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	670.3	1.4
10°-20°	1925.8	4.0
20°-30°	3221.7	6.7
30°-40°	5033.2	10.4
40°-50°	8015.9	16.6
50°-60°	11155.2	23.0
60°-70°	11668.8	24.1
70°-80°	6098.7	12.6
80°-90°	633.3	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°	48423.0	100.0
0°-180°	48423.0	100.0

Coefficient of Utilization

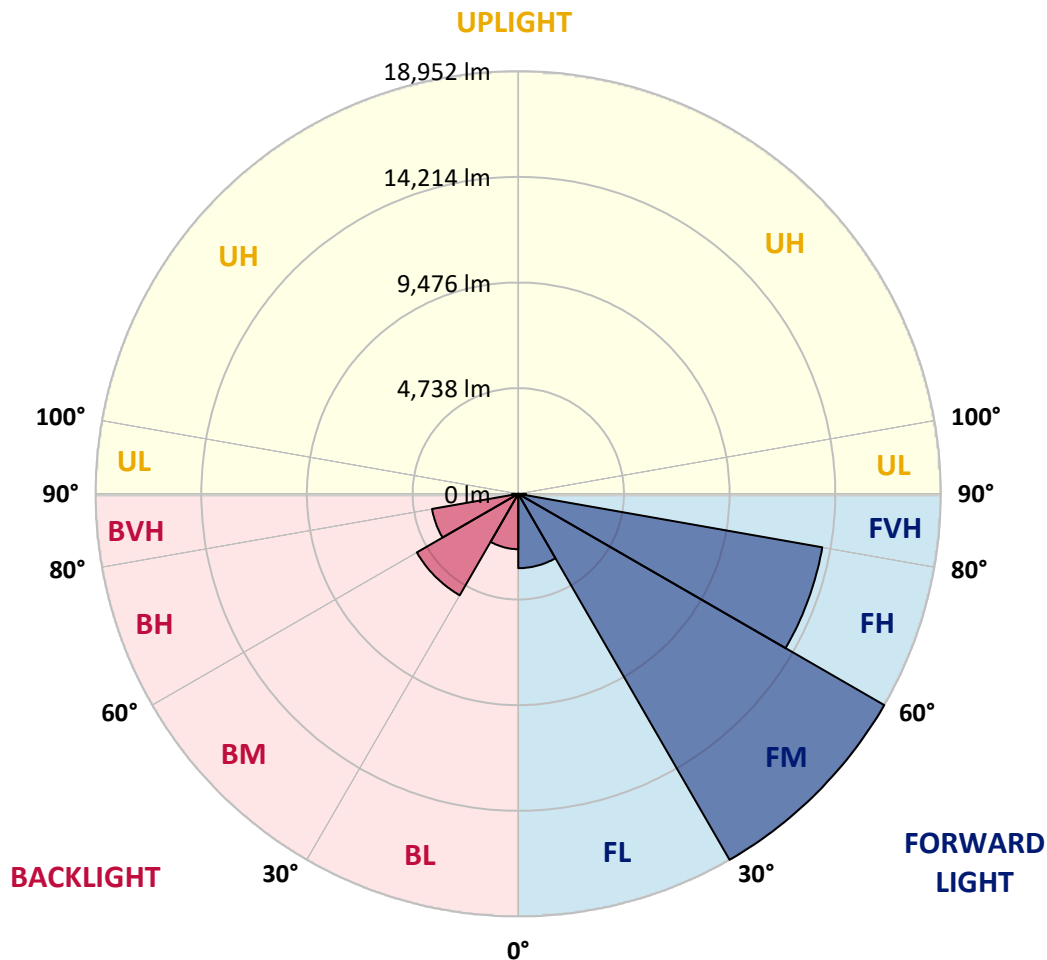


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3334.5	6.9			
FM (30°-60°)	18952.3	39.1			
FH (60°-80°)	13844.3	28.6			G5
FVH (80°-90°)	354.5	0.7			G3/500
BL (0°-30°)	2483.4	5.1	B3/2500		
BM (30°-60°)	5252.0	10.8	B4/8500		
BH (60°-80°)	3923.3	8.1	B4/5000		G4/5000
BVH (80°-90°)	278.8	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5
2.5°	7269.0	7310.1	7297.3	7284.5	7284.5	7266.4	7263.9	7238.1	7217.6	7184.2	7176.5
5°	7361.6	7405.2	7400.1	7410.3	7443.8	7451.4	7459.1	7443.8	7402.7	7361.6	7343.5
7.5°	7279.2	7328.1	7343.5	7405.2	7507.9	7600.5	7669.9	7698.2	7659.5	7600.5	7572.2
10°	7001.8	7055.8	7109.7	7256.2	7438.6	7657.0	7842.0	7952.5	7944.8	7888.3	7839.4
12.5°	6439.0	6495.6	6611.2	6896.4	7230.5	7615.9	7960.2	8191.5	8271.1	8230.0	8145.2
15°	5989.4	6038.3	6125.6	6418.5	6852.7	7438.6	8003.9	8453.5	8656.5	8633.4	8530.7
17.5°	5976.6	5997.2	6051.1	6189.9	6523.8	7161.1	7957.6	8710.4	9098.5	9095.8	8967.4
20°	6202.7	6210.4	6241.2	6269.5	6459.7	6950.4	7839.4	8923.8	9594.4	9594.4	9455.6
22.5°	6516.1	6511.0	6541.9	6516.1	6608.7	6932.4	7764.9	9111.3	10146.8	10187.9	10013.2
25°	6986.4	6960.7	6953.0	6893.8	6911.9	7099.5	7847.1	9324.6	10802.1	10886.8	10668.4
27.5°	7613.3	7572.2	7543.9	7407.8	7361.6	7443.8	8098.9	9581.5	11531.8	11678.2	11400.7
30°	8430.4	8355.9	8314.8	8078.4	7911.4	7924.2	8479.2	9923.2	12294.9	12531.2	12179.3
32.5°	9545.5	9429.9	9319.4	8931.4	8625.7	8525.4	8970.0	10396.1	13122.3	13500.0	13047.7
35°	10794.3	10701.8	10583.6	9984.9	9514.8	9283.4	9632.9	11056.4	14091.0	14689.6	14101.2
37.5°	11996.8	11917.2	11973.7	11166.9	10560.5	10223.9	10501.4	11942.9	15285.7	16169.6	15421.9
40°	13240.4	13178.7	13186.5	12415.6	11709.1	11331.4	11554.8	13055.4	16655.2	17929.7	17009.9
42.5°	14592.0	14545.8	14391.5	13708.0	12914.1	12562.1	12767.7	14340.2	18125.0	19933.9	18752.0
45°	16105.4	16077.1	15933.2	15149.5	14239.9	13844.3	14121.7	15758.6	19602.4	21819.9	20501.7
47.5°	17413.2	17436.4	17418.3	16758.0	15815.0	15234.4	15565.8	17238.6	20977.1	23592.8	22179.6
50°	18042.8	18163.5	18340.8	18135.2	17549.4	16958.4	17022.7	18667.1	22287.5	25255.3	23788.1
52.5°	17713.8	17942.5	18425.6	18754.5	18980.6	18857.3	18685.1	20085.5	23520.9	26755.8	25309.2
55°	16488.3	16809.4	17611.1	18405.1	19558.7	20455.5	20681.6	21658.0	24723.4	28076.5	26748.1
57.5°	14255.4	14777.0	15496.5	17102.3	19044.8	21228.9	23009.5	23839.4	25997.8	29487.2	28253.8
60°	10426.9	11125.8	12020.0	14409.6	17246.2	20815.2	24990.6	27190.1	27809.3	31314.1	30214.3
62.5°	6672.9	7104.6	7926.8	10177.6	13438.3	18695.4	25597.0	31378.3	30879.8	34310.0	33153.7
65°	4568.5	4846.0	5598.9	6863.0	8687.4	13916.2	23973.1	34518.2	35756.6	39058.4	38179.6
67.5°	3319.8	3530.4	4172.8	5280.3	5660.6	8235.2	18602.9	34374.3	40497.3	43950.7	42583.7
70°	2420.4	2569.5	3109.0	4172.8	4355.2	4581.3	11269.7	29219.9	40394.5	45250.8	43614.1
72.5°	1793.4	1896.2	2258.6	3237.6	3525.3	3093.7	5578.3	21236.6	34710.9	40929.0	39615.9
75°	1297.5	1374.6	1641.8	2476.9	2821.3	2356.2	2782.8	12410.5	24212.0	28790.8	29022.1
77.5°	991.8	1050.9	1225.6	1814.0	2258.6	1767.8	1726.7	5709.4	11480.3	11536.9	12184.4
80°	796.5	835.1	930.2	1277.0	1731.8	1323.3	1125.4	2304.8	3628.1	3070.5	3222.1
82.5°	585.8	650.1	786.3	896.8	1238.5	912.1	686.0	1164.0	1379.8	1187.1	1197.4
85°	334.0	377.7	475.4	642.4	791.4	557.6	393.1	516.5	642.4	526.7	470.2
87.5°	118.2	154.2	167.0	251.8	344.3	231.2	151.6	149.0	210.7	156.7	131.0
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°	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5	7099.5
2.5°	7150.8	7138.0	7086.5	7017.3	6945.3	6875.9	6852.7	6804.0	6770.5	6752.6	6773.1
5°	7294.7	7253.6	7132.9	6978.6	6816.8	6642.1	6518.7	6405.6	6323.4	6246.3	6277.2
7.5°	7500.2	7428.3	7220.2	6950.4	6662.6	6372.2	6156.5	5991.9	5881.4	5809.6	5825.0
10°	7739.3	7628.8	7310.1	6906.8	6462.2	6046.0	5791.6	5650.2	5580.9	5542.4	5552.6
12.5°	8014.2	7857.4	7402.7	6806.5	6156.5	5681.1	5506.4	5465.2	5467.9	5470.4	5475.5
15°	8353.3	8134.9	7477.2	6588.1	5758.1	5401.0	5370.2	5437.0	5506.4	5539.7	5537.2
17.5°	8736.2	8427.9	7490.0	6228.4	5367.6	5221.1	5318.8	5462.6	5568.0	5614.2	5624.6
20°	9147.3	8725.9	7397.5	5719.6	5046.4	5074.7	5249.4	5434.4	5550.1	5609.1	5624.6
22.5°	9617.5	9044.5	7176.5	5185.2	4784.3	4915.4	5120.9	5300.8	5421.5	5480.7	5496.0
25°	10154.5	9401.7	6829.7	4735.5	4558.3	4735.5	4941.1	5090.2	5187.7	5241.7	5257.1
27.5°	10750.6	9774.2	6367.1	4378.4	4360.3	4550.5	4720.1	4835.7	4887.1	4928.2	4943.7
30°	11349.3	10113.4	5807.0	4108.6	4188.3	4368.0	4488.9	4540.2	4555.6	4563.4	4581.3
32.5°	11996.8	10406.3	5218.6	3885.1	4023.7	4190.8	4262.8	4285.8	4213.9	4165.1	4180.6
35°	12780.5	10719.8	4643.0	3707.7	3861.9	4005.8	4029.0	4008.4	3923.6	3823.4	3828.5
37.5°	13749.1	11110.4	4183.1	3581.9	3710.3	3805.4	3777.1	3772.0	3779.7	3661.5	3669.2
40°	14936.3	11619.1	3846.5	3484.2	3587.0	3607.5	3527.8	3571.5	3610.0	3430.3	3435.4
42.5°	16254.4	12233.2	3633.2	3417.4	3484.2	3435.4	3312.1	3360.9	3355.7	3119.3	3116.7
45°	17598.2	12901.3	3558.7	3368.6	3389.2	3291.5	3155.3	3168.2	3060.2	2846.9	2854.6
47.5°	18934.4	13618.2	3604.9	3327.5	3270.9	3160.5	3055.1	2998.5	2839.2	2680.0	2680.0
50°	20244.8	14371.0	3774.6	3245.3	3109.0	3044.8	2967.7	2867.5	2697.9	2561.8	2551.4
52.5°	21460.1	15129.0	3964.7	3109.0	2906.1	2944.6	2895.8	2780.1	2613.1	2474.4	2476.9
55°	22611.3	15887.0	4039.2	2921.5	2715.9	2857.3	2829.0	2615.7	2415.3	2302.3	2292.0
57.5°	23865.2	16799.1	3957.0	2682.5	2561.8	2757.0	2649.1	2412.7	2297.1	2212.3	2204.6
60°	25602.1	18230.3	3779.7	2387.0	2415.3	2608.0	2423.0	2325.3	2199.4	2104.4	2099.2
62.5°	28487.6	20900.1	3494.4	2094.1	2243.1	2387.0	2315.1	2217.5	2089.0	1996.5	1996.5
65°	32753.0	24610.4	2957.4	1865.4	2050.4	2171.2	2199.4	2101.9	1968.2	1870.5	1875.7
67.5°	36350.2	26938.2	2238.0	1675.3	1852.6	1996.5	2076.1	1981.0	1839.8	1744.7	1747.2
70°	36152.4	25247.5	1708.7	1487.7	1677.8	1824.3	1927.1	1852.6	1701.0	1611.1	1618.8
72.5°	32110.6	21120.9	1382.4	1297.5	1500.6	1644.4	1767.8	1711.2	1557.1	1469.7	1469.7
75°	23590.3	14992.8	1104.8	1104.8	1279.6	1456.9	1593.1	1557.1	1415.7	1354.1	1336.1
77.5°	9943.8	6290.0	865.9	917.3	1063.7	1251.3	1421.0	1433.8	1310.5	1387.5	1259.0
80°	2644.0	1734.4	660.3	722.0	835.1	1032.9	1235.9	1230.8	1097.2	1025.2	953.2
82.5°	1007.3	683.5	470.2	508.7	603.8	791.4	979.0	1009.8	876.2	758.0	758.0
85°	388.0	292.9	290.4	305.8	352.0	524.2	740.0	765.7	660.3	560.2	578.1
87.5°	100.2	87.3	107.9	102.8	161.8	280.0	423.9	439.4	403.4	233.8	334.0
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)