

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: P884457

Luminaire Tested: **NAV-SB5B-740-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884457  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-740-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30524 lumens  
Efficiency: N/A  
Efficacy: 167.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

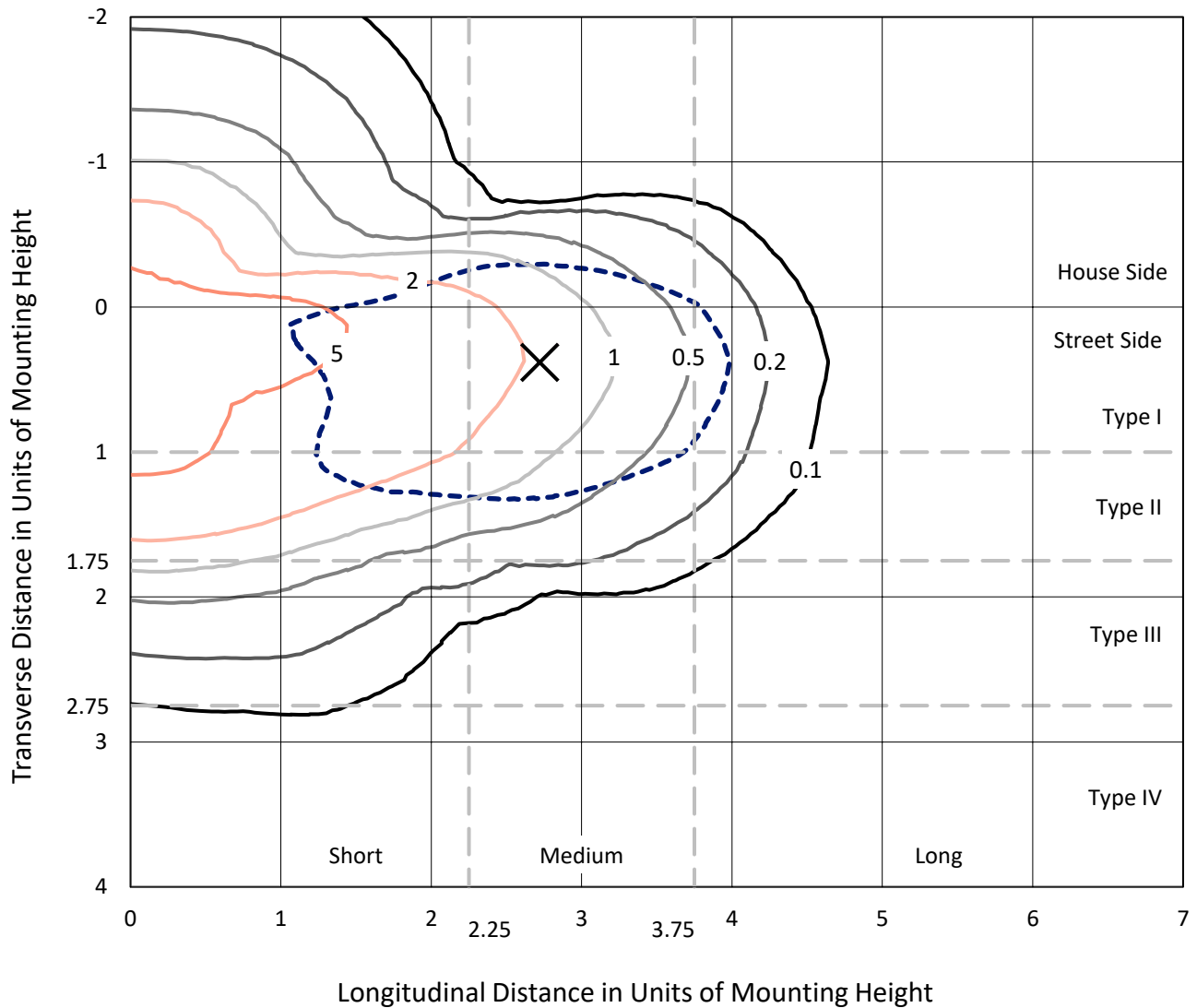
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

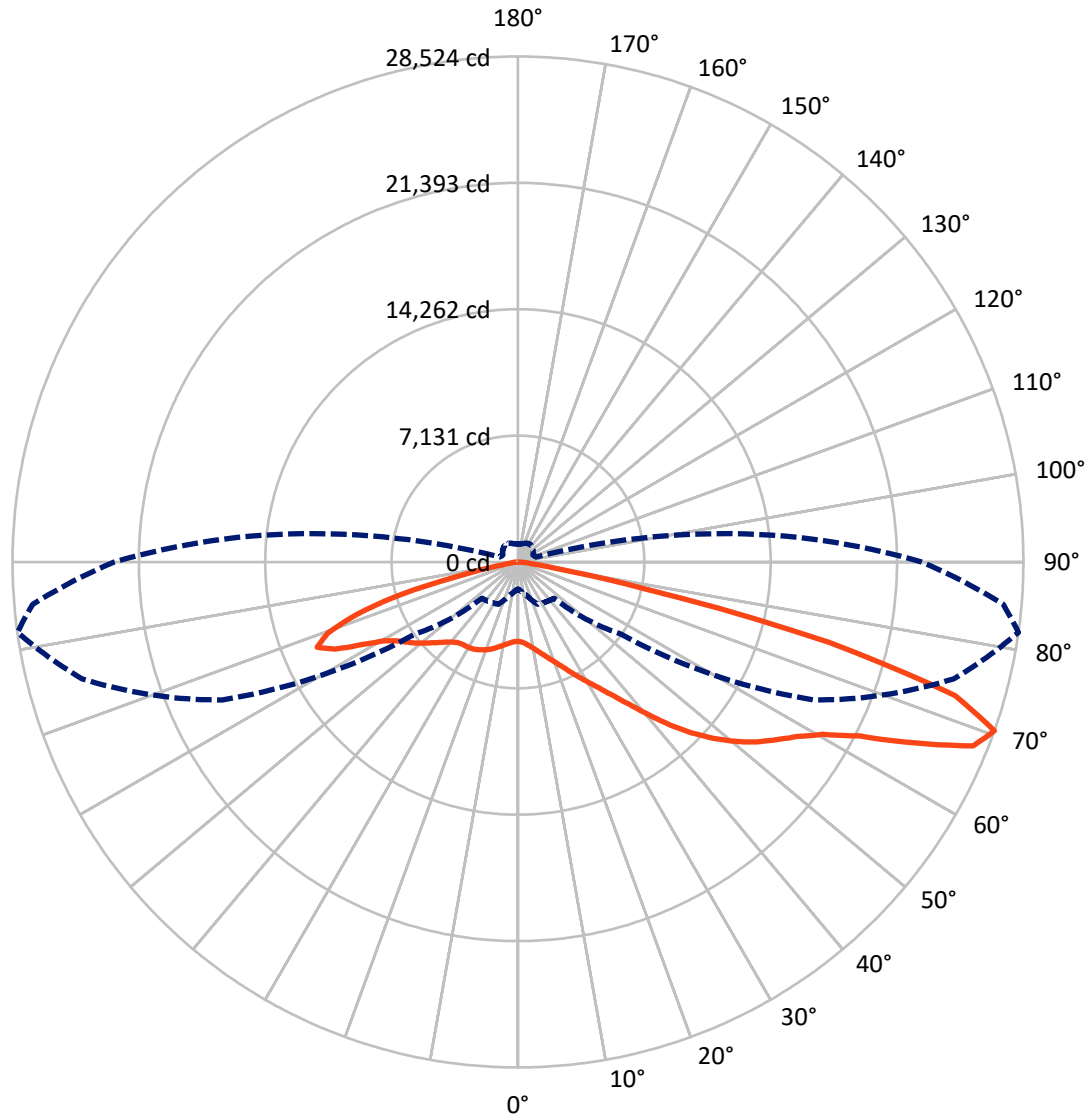
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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
<b>House Side</b>	Lumens	7524.9	0.0	7524.9
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	22999.1	0.0	22999.1
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	30524.0	0.0	30524.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	422.5	1.4
10°-20°	1214.0	4.0
20°-30°	2030.9	6.7
30°-40°	3172.7	10.4
40°-50°	5052.9	16.6
50°-60°	7031.8	23.0
60°-70°	7355.6	24.1
70°-80°	3844.4	12.6
80°-90°	399.2	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°	30524.0	100.0
0°-180°	30524.0	100.0

**Coefficient of Utilization**



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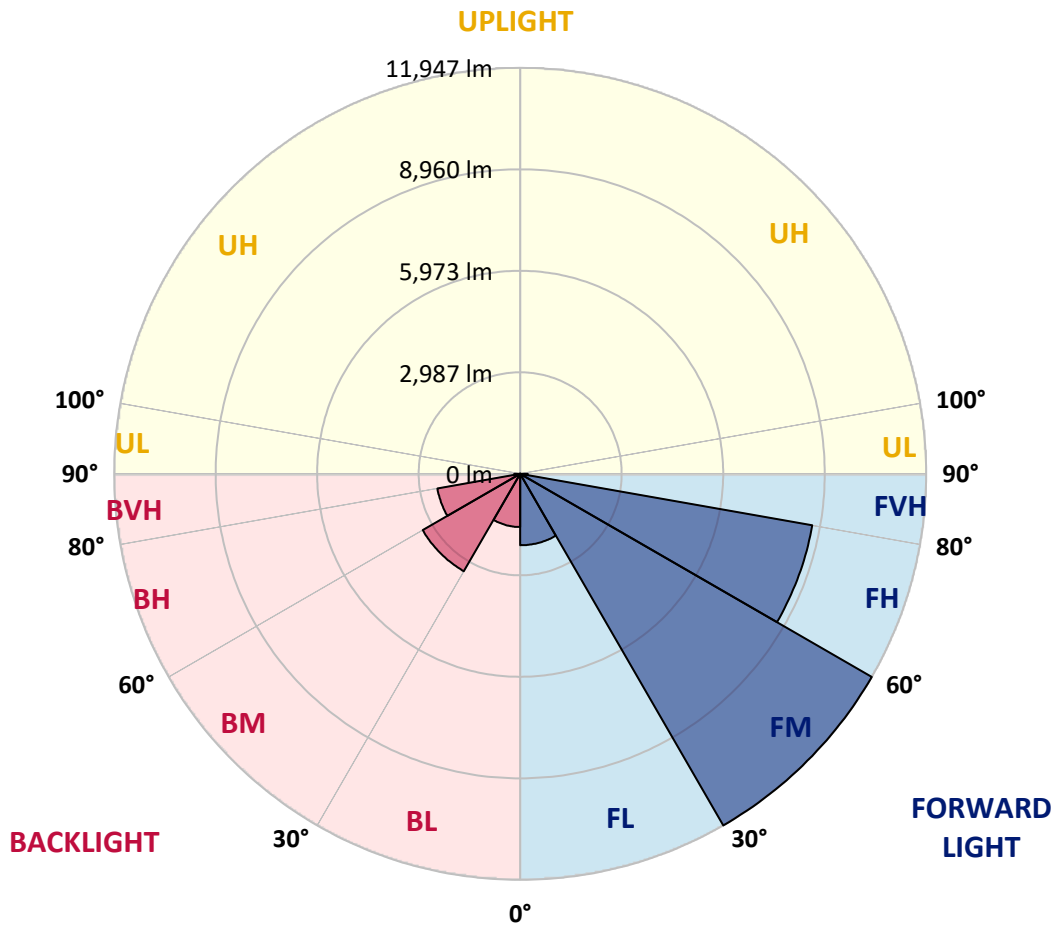
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2101.9	6.9			
FM (30°-60°)	11946.8	39.1			
FH (60°-80°)	8726.9	28.6			G4/12000
FVH (80°-90°)	223.5	0.7			G2/225
BL (0°-30°)	1565.5	5.1	B3/2500		
BM (30°-60°)	3310.7	10.8	B3/5000		
BH (60°-80°)	2473.1	8.1	B3/2500		G3/2500
BVH (80°-90°)	175.7	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2
2.5°	4582.1	4608.0	4599.9	4591.8	4591.8	4580.5	4578.9	4562.7	4549.7	4528.6	4523.8
5°	4640.4	4667.9	4664.7	4671.2	4692.2	4697.1	4702.0	4692.2	4666.3	4640.4	4629.1
7.5°	4588.6	4619.4	4629.1	4667.9	4732.7	4791.0	4834.8	4852.6	4828.3	4791.0	4773.2
10°	4413.7	4447.7	4481.7	4574.0	4689.0	4826.7	4943.3	5012.9	5008.1	4972.4	4941.7
12.5°	4058.9	4094.6	4167.5	4347.2	4557.8	4800.8	5017.8	5163.6	5213.8	5187.9	5134.4
15°	3775.5	3806.3	3861.3	4046.0	4319.7	4689.0	5045.3	5328.8	5456.7	5442.2	5377.4
17.5°	3767.4	3780.4	3814.4	3901.8	4112.4	4514.1	5016.2	5490.7	5735.3	5733.7	5652.7
20°	3909.9	3914.8	3934.2	3952.0	4071.9	4381.3	4941.7	5625.2	6047.9	6047.9	5960.5
22.5°	4107.5	4104.3	4123.7	4107.5	4165.8	4369.9	4894.7	5743.4	6396.2	6422.1	6311.9
25°	4403.9	4387.7	4382.9	4345.6	4357.0	4475.2	4946.5	5877.9	6809.2	6862.6	6724.9
27.5°	4799.1	4773.2	4755.4	4669.6	4640.4	4692.2	5105.3	6039.8	7269.2	7361.5	7186.6
30°	5314.2	5267.2	5241.3	5092.3	4987.0	4995.1	5345.0	6255.2	7750.2	7899.2	7677.3
32.5°	6017.1	5944.3	5874.6	5630.0	5437.3	5374.1	5654.3	6553.3	8271.8	8509.8	8224.8
35°	6804.3	6746.0	6671.5	6294.1	5997.7	5851.9	6072.2	6969.5	8882.4	9259.8	8888.9
37.5°	7562.3	7512.1	7547.7	7039.2	6656.9	6444.7	6619.7	7528.3	9635.5	10192.7	9721.4
40°	8346.3	8307.4	8312.2	7826.3	7380.9	7142.8	7283.7	8229.6	10498.8	11302.2	10722.3
42.5°	9198.2	9169.1	9071.9	8641.0	8140.6	7918.7	8048.2	9039.5	11425.3	12565.5	11820.5
45°	10152.2	10134.4	10043.7	9549.7	8976.3	8726.9	8901.8	9933.6	12356.6	13754.4	12923.5
47.5°	10976.6	10991.2	10979.9	10563.6	9969.2	9603.1	9812.1	10866.5	13223.1	14872.0	13981.2
50°	11373.5	11449.6	11561.3	11431.8	11062.5	10689.9	10730.4	11767.0	14049.2	15919.9	14995.1
52.5°	11166.1	11310.3	11614.8	11822.1	11964.6	11886.9	11778.4	12661.1	14826.6	16865.8	15953.9
55°	10393.5	10596.0	11101.3	11601.8	12329.1	12894.3	13036.9	13652.4	15584.6	17698.3	16861.0
57.5°	8986.0	9314.8	9768.3	10780.6	12005.1	13381.9	14504.3	15027.5	16388.0	18587.5	17810.1
60°	6572.7	7013.3	7576.9	9083.2	10871.4	13121.1	15753.1	17139.5	17529.9	19739.1	19045.9
62.5°	4206.3	4478.4	4996.7	6415.6	8471.0	11784.9	16135.3	19779.6	19465.4	21627.7	20898.8
65°	2879.8	3054.7	3529.3	4326.2	5476.2	8772.2	15111.7	21758.9	22539.6	24620.9	24067.0
67.5°	2092.6	2225.5	2630.4	3328.5	3568.2	5191.1	11726.5	21668.2	25527.9	27704.8	26843.1
70°	1525.7	1619.7	1959.8	2630.4	2745.4	2887.9	7104.0	18419.1	25463.1	28524.3	27492.6
72.5°	1130.5	1195.3	1423.7	2040.8	2222.2	1950.1	3516.3	13386.7	21880.4	25800.0	24972.4
75°	817.9	866.5	1035.0	1561.4	1778.4	1485.3	1754.1	7823.1	15262.3	18148.6	18294.4
77.5°	625.2	662.5	772.6	1143.5	1423.7	1114.3	1088.4	3598.9	7236.8	7272.4	7680.6
80°	502.1	526.4	586.3	805.0	1091.7	834.1	709.4	1452.9	2287.0	1935.5	2031.1
82.5°	369.3	409.8	495.6	565.3	780.7	575.0	432.5	733.7	869.8	748.3	754.8
85°	210.6	238.1	299.6	404.9	498.9	351.5	247.8	325.6	404.9	332.0	296.4
87.5°	74.5	97.2	105.3	158.7	217.0	145.8	95.6	93.9	132.8	98.8	82.6
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°	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2	4475.2
2.5°	4507.6	4499.5	4467.1	4423.4	4378.0	4334.3	4319.7	4288.9	4267.9	4256.5	4269.5
5°	4598.3	4572.4	4496.3	4399.1	4297.0	4186.9	4109.2	4037.9	3986.1	3937.5	3956.9
7.5°	4727.9	4682.5	4551.3	4381.3	4199.9	4016.8	3880.8	3777.1	3707.5	3662.1	3671.8
10°	4878.5	4808.9	4608.0	4353.7	4073.5	3811.1	3650.8	3561.7	3518.0	3493.7	3500.1
12.5°	5051.8	4953.0	4666.3	4290.6	3880.8	3581.1	3471.0	3445.1	3446.7	3448.3	3451.6
15°	5265.6	5127.9	4713.3	4152.9	3629.7	3404.6	3385.1	3427.3	3471.0	3492.0	3490.4
17.5°	5506.9	5312.6	4721.4	3926.1	3383.5	3291.2	3352.8	3443.5	3509.9	3539.0	3545.5
20°	5766.1	5500.5	4663.1	3605.4	3181.1	3198.9	3309.0	3425.6	3498.5	3535.8	3545.5
22.5°	6062.5	5701.3	4523.8	3268.5	3015.9	3098.5	3228.0	3341.4	3417.5	3454.8	3464.5
25°	6401.0	5926.4	4305.1	2985.1	2873.3	2985.1	3114.7	3208.6	3270.2	3304.2	3313.9
27.5°	6776.8	6161.3	4013.6	2759.9	2748.6	2868.5	2975.4	3048.3	3080.6	3106.6	3116.3
30°	7154.2	6375.1	3660.5	2589.9	2640.1	2753.5	2829.6	2862.0	2871.7	2876.6	2887.9
32.5°	7562.3	6559.7	3289.6	2449.0	2536.4	2641.7	2687.1	2701.6	2656.3	2625.5	2635.2
35°	8056.3	6757.3	2926.8	2337.2	2434.4	2525.1	2539.7	2526.7	2473.3	2410.1	2413.3
37.5°	8667.0	7003.5	2636.9	2257.8	2338.8	2398.8	2380.9	2377.7	2382.6	2308.1	2312.9
40°	9415.3	7324.2	2424.7	2196.3	2261.1	2274.0	2223.8	2251.4	2275.7	2162.3	2165.5
42.5°	10246.2	7711.3	2290.2	2154.2	2196.3	2165.5	2087.8	2118.6	2115.3	1966.3	1964.7
45°	11093.2	8132.5	2243.3	2123.4	2136.4	2074.8	1989.0	1997.1	1929.0	1794.6	1799.5
47.5°	11935.5	8584.4	2272.4	2097.5	2061.9	1992.2	1925.8	1890.2	1789.8	1689.3	1689.3
50°	12761.5	9058.9	2379.3	2045.7	1959.8	1919.3	1870.7	1807.6	1700.7	1614.8	1608.4
52.5°	13527.6	9536.7	2499.2	1959.8	1831.9	1856.2	1825.4	1752.5	1647.2	1559.8	1561.4
55°	14253.3	10014.5	2546.2	1841.6	1712.0	1801.1	1783.3	1648.8	1522.5	1451.2	1444.8
57.5°	15043.7	10589.5	2494.3	1691.0	1614.8	1737.9	1669.9	1520.9	1448.0	1394.6	1389.7
60°	16138.6	11491.7	2382.6	1504.7	1522.5	1644.0	1527.4	1465.8	1386.5	1326.5	1323.3
62.5°	17957.5	13174.5	2202.8	1320.0	1414.0	1504.7	1459.3	1397.8	1316.8	1258.5	1258.5
65°	20646.2	15513.4	1864.3	1175.9	1292.5	1368.6	1386.5	1324.9	1240.7	1179.1	1182.4
67.5°	22913.7	16980.8	1410.7	1056.0	1167.8	1258.5	1308.7	1248.8	1159.7	1099.8	1101.4
70°	22789.0	15915.1	1077.1	937.8	1057.7	1150.0	1214.8	1167.8	1072.2	1015.5	1020.4
72.5°	20241.3	13313.8	871.4	817.9	945.9	1036.6	1114.3	1078.7	981.5	926.5	926.5
75°	14870.4	9450.9	696.5	696.5	806.6	918.4	1004.2	981.5	892.4	853.6	842.2
77.5°	6268.2	3965.0	545.8	578.2	670.6	788.8	895.7	903.8	826.0	874.6	793.6
80°	1666.7	1093.3	416.3	455.1	526.4	651.1	779.1	775.8	691.6	646.3	600.9
82.5°	634.9	430.8	296.4	320.7	380.6	498.9	617.1	636.5	552.3	477.8	477.8
85°	244.6	184.6	183.0	192.7	221.9	330.4	466.5	482.7	416.3	353.1	364.4
87.5°	63.2	55.1	68.0	64.8	102.0	176.5	267.2	277.0	254.3	147.4	210.6
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)