

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: P969204

Luminaire Tested: **NAV-SB5D-722-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969204  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-722-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

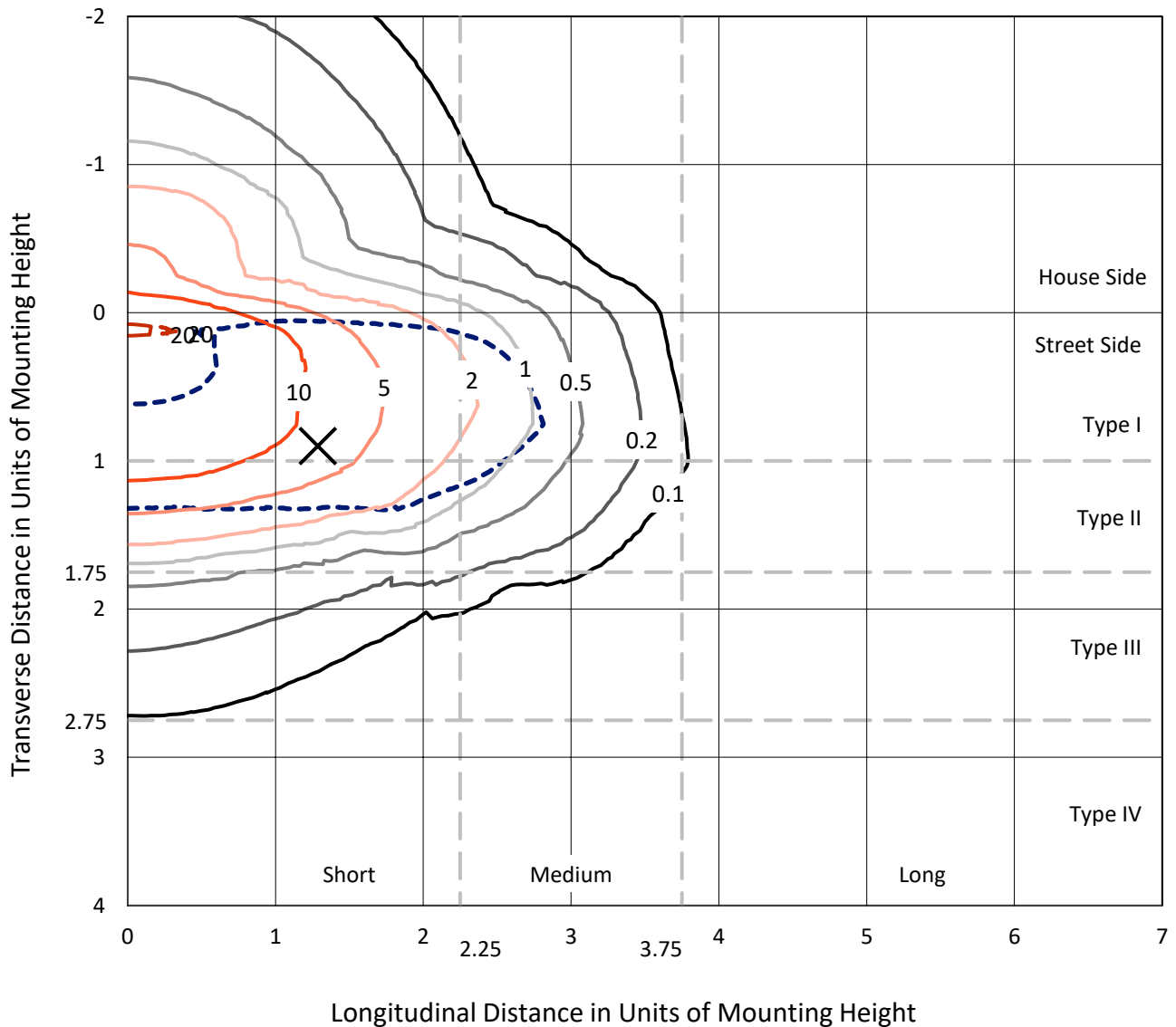
Lumens per Lamp: N/A  
Luminaire Lumens: 44266.7 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 364.9  
Input Voltage (V): NR  
Input Current (Ain): 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

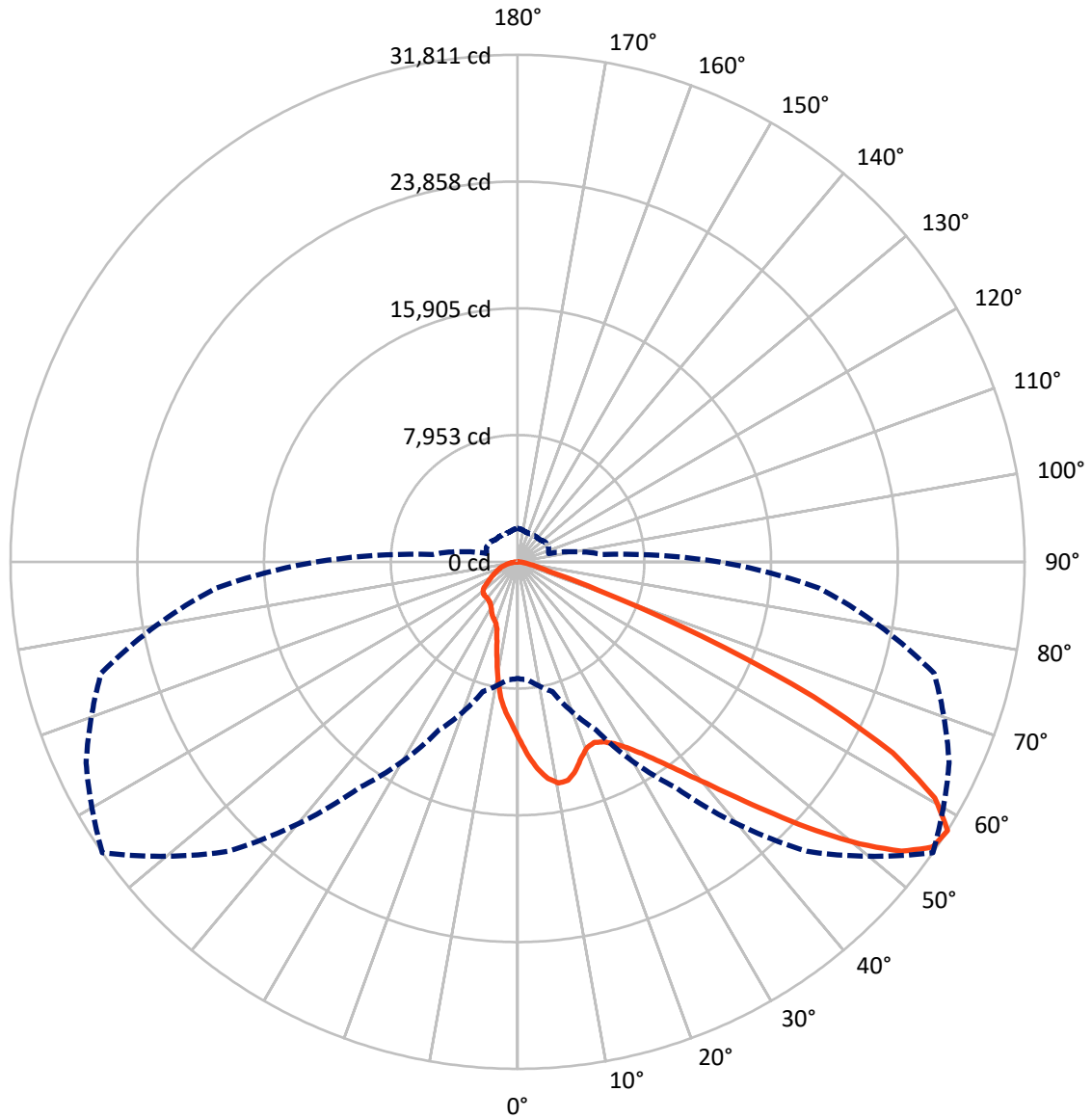
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8009.8	0.0	8009.8
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	36256.8	0.0	36256.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	44266.7	0.0	44266.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1029.2	2.3
10°-20°	2597.9	5.9
20°-30°	4145.5	9.4
30°-40°	6563.3	14.8
40°-50°	10045.8	22.7
50°-60°	10760.0	24.3
60°-70°	6769.2	15.3
70°-80°	2001.8	4.5
80°-90°	353.9	0.8
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°	44266.7	100.0
0°-180°	44266.7	100.0

**Coefficient of Utilization**



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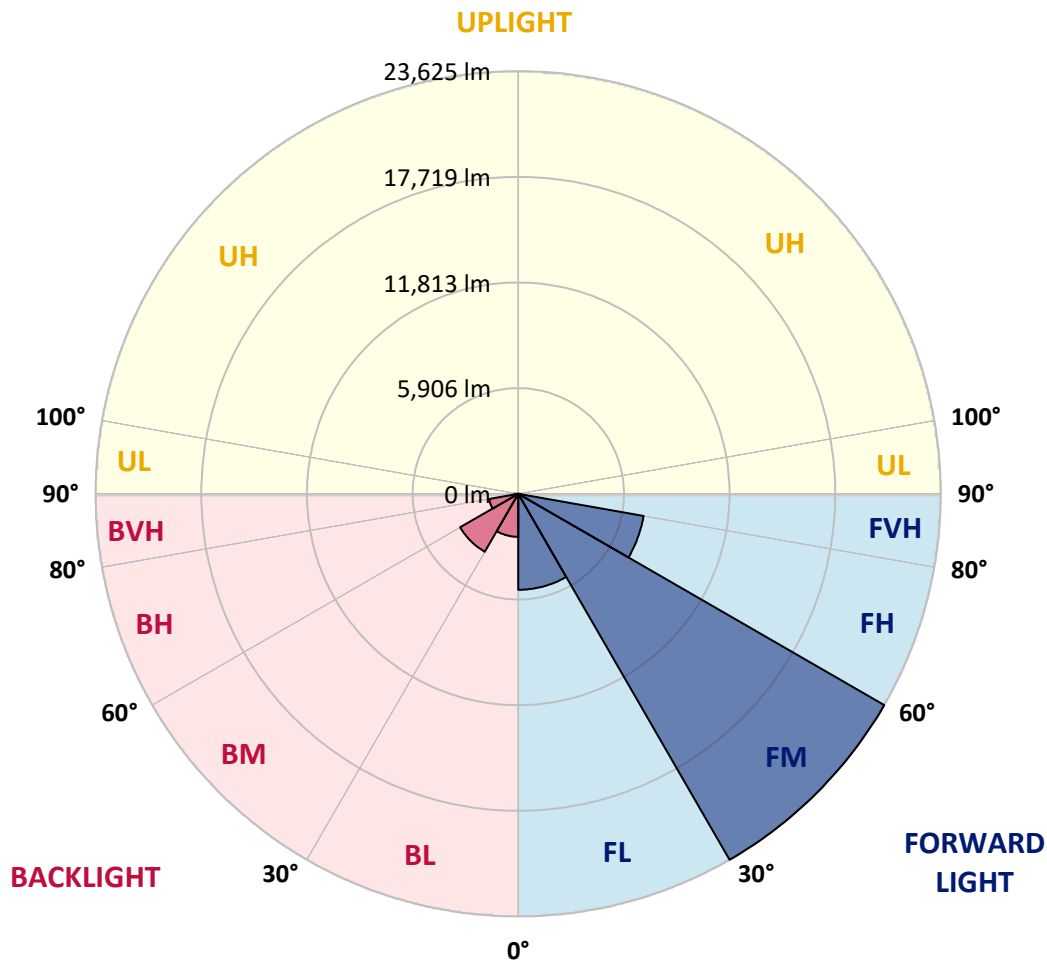
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5365.1	12.1			
FM (30°-60°)	23625.4	53.4			
FH (60°-80°)	7116.7	16.1			G3/7500
FVH (80°-90°)	149.5	0.3			G2/225
BL (0°-30°)	2407.5	5.4	B3/2500		
BM (30°-60°)	3743.7	8.5	B3/5000		
BH (60°-80°)	1654.2	3.7	B3/2500		G3/2500
BVH (80°-90°)	204.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8
2.5°	12725.7	12716.6	12766.9	12595.3	12478.6	12320.6	12112.4	11846.9	11560.9	11258.8	11128.4
5°	13872.1	13792.1	13844.7	13716.6	13588.4	13350.4	13041.5	12609.0	12080.3	11478.6	11158.2
7.5°	13691.4	13636.5	13771.5	13885.9	13982.0	13952.3	13725.7	13272.6	12590.7	11716.6	11251.9
10°	12233.7	12171.9	12361.8	12757.8	13338.9	13844.7	14119.3	13837.8	13112.4	11977.4	11343.5
12.5°	10947.6	10917.9	11043.8	11364.1	12009.4	12979.7	14068.9	14332.2	13654.7	12286.4	11467.1
15°	10398.4	10361.8	10441.9	10604.3	11016.3	11920.2	13611.3	14670.8	14187.9	12643.3	11663.9
17.5°	10277.2	10236.0	10270.3	10355.0	10620.4	11309.2	12920.2	14837.9	14744.0	13041.5	11828.6
20°	10501.4	10467.1	10471.6	10467.1	10652.4	11199.4	12439.6	14773.8	15229.1	13407.6	11988.8
22.5°	11043.8	10986.6	10988.8	10867.6	10968.2	11391.5	12313.8	14602.2	15661.7	13728.0	12110.2
25°	11927.0	11824.1	11844.7	11535.8	11508.3	11821.7	12510.6	14469.4	16091.9	13984.3	12133.0
27.5°	13135.3	13018.6	12956.8	12496.9	12277.1	12432.7	12911.1	14515.2	16499.2	14206.3	12075.8
30°	14645.6	14503.7	14377.9	13725.7	13327.6	13270.4	13533.5	14817.3	16979.8	14439.7	11977.4
32.5°	16497.0	16332.1	16103.4	15238.4	14677.7	14377.9	14339.0	15355.0	17542.8	14737.1	11927.0
35°	18700.7	18485.6	18160.6	17041.5	16332.1	15718.9	15400.8	16130.8	18313.9	15185.7	11984.3
37.5°	20970.8	20728.2	20430.7	19098.8	18227.0	17323.0	16696.0	17183.5	19341.4	15794.4	12135.3
40°	23064.7	22792.3	22515.4	21330.0	20394.1	19304.7	18281.9	18515.3	20597.8	16522.1	12391.6
42.5°	24300.3	24099.0	23993.7	23353.0	22629.8	21524.5	20254.5	20094.3	22009.6	17359.7	12684.5
45°	24245.5	24163.0	24488.0	24753.4	24581.9	23968.5	22565.8	21840.3	23426.2	18085.1	12954.6
47.5°	22950.2	23005.1	23730.5	25222.6	25879.3	26199.7	25197.4	23554.3	24657.3	18627.4	13075.8
50°	19426.1	19471.8	21151.5	24369.0	26213.5	28019.0	27808.5	25227.1	25611.6	18959.2	13048.4
52.5°	16636.6	16666.3	17387.2	21838.0	25110.4	28934.3	30160.9	26803.9	26309.5	19050.8	12895.0
55°	12531.1	12634.2	13442.0	17133.1	22240.8	28208.9	31593.4	28428.6	26751.2	19060.0	12734.8
57.5°	7320.6	7432.7	8430.4	11629.5	17286.4	25680.2	31810.8	29870.2	27051.0	18986.7	12638.8
60°	3585.9	3633.9	4068.7	6112.3	10659.3	20808.2	30062.5	30568.3	27218.1	18947.8	12634.2
62.5°	2416.5	2409.7	2428.0	3016.1	5251.8	13368.8	26419.4	29346.3	27128.8	18799.1	12588.4
65°	2077.9	2052.7	1984.0	2116.7	2720.9	6114.5	20412.4	25698.5	26449.1	18426.0	12274.9
67.5°	1796.4	1798.7	1800.9	1759.7	1942.9	2821.6	12473.9	20243.0	24009.7	16659.4	11066.6
70°	1487.5	1508.1	1517.2	1517.2	1583.5	1851.3	5325.1	13874.5	18938.6	13062.1	8913.3
72.5°	1354.7	1311.3	1315.8	1292.9	1292.9	1409.7	2144.2	7865.1	11931.6	7348.0	5439.5
75°	1105.3	1132.7	1137.3	1121.4	1068.7	1075.5	1272.3	3299.9	5105.4	3048.1	2688.9
77.5°	954.3	954.3	963.4	951.9	910.8	805.5	849.0	1279.2	1736.9	1249.5	1343.3
80°	766.6	764.3	803.2	826.2	762.0	595.0	542.3	707.1	771.2	549.2	697.9
82.5°	373.0	395.9	551.4	629.3	578.9	430.2	331.8	439.4	411.9	242.6	313.5
85°	217.4	205.9	247.1	350.1	331.8	238.0	160.2	228.9	215.1	123.6	125.9
87.5°	68.7	64.1	50.3	119.0	96.1	66.3	43.5	66.3	59.4	27.5	27.5
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8	11091.8
2.5°	10966.0	10695.9	10428.1	10183.3	10034.5	9938.4	9842.4	9734.7	9693.6	9631.8
5°	10856.1	10334.4	9869.8	9469.4	9105.5	8819.4	8531.1	8297.7	8192.4	8263.3
7.5°	10792.0	10036.8	9320.6	8586.0	7878.9	7313.7	6821.7	6476.2	6320.6	6359.4
10°	10734.8	9700.5	8608.9	7448.7	6432.7	5732.4	5228.9	4965.8	4867.4	4888.0
12.5°	10682.1	9322.9	7750.7	6224.4	5144.3	4682.0	4537.9	4540.1	4558.5	4572.2
15°	10673.0	8867.5	6792.0	5153.4	4448.6	4418.9	4574.5	4672.9	4725.6	4741.5
17.5°	10659.3	8322.9	5814.8	4423.5	4279.3	4480.7	4624.8	4688.9	4730.1	4732.4
20°	10604.3	7631.7	4913.1	4075.6	4242.7	4416.6	4505.8	4556.1	4590.5	4601.9
22.5°	10435.0	6862.9	4210.6	3920.0	4096.2	4235.8	4341.1	4398.3	4418.9	4432.6
25°	10130.7	6002.4	3725.5	3771.3	3892.5	4068.7	4153.4	4164.9	4158.0	4178.6
27.5°	9732.5	5080.2	3423.4	3569.9	3725.5	3876.6	3922.3	3915.4	3901.7	3924.6
30°	9252.0	4251.8	3231.2	3343.3	3556.1	3693.5	3734.7	3718.6	3691.1	3716.3
32.5°	8743.9	3574.5	3073.3	3185.4	3416.5	3551.5	3592.7	3576.7	3556.1	3576.7
35°	8270.2	3100.7	2926.9	3080.1	3306.8	3439.5	3492.1	3494.3	3494.3	3519.5
37.5°	7835.4	2823.9	2805.5	3013.8	3231.2	3350.2	3425.8	3430.3	3331.9	3338.7
40°	7432.7	2707.1	2750.6	2970.3	3157.9	3272.4	3276.9	3020.7	2839.9	2835.4
42.5°	7103.1	2684.3	2766.7	2965.7	3105.3	3110.0	2787.3	2588.1	2537.8	2540.2
45°	6794.2	2677.4	2803.3	2965.7	3027.5	2686.5	2469.1	2416.5	2421.2	2439.4
47.5°	6448.7	2649.9	2810.1	2924.5	2803.3	2389.1	2325.0	2302.1	2292.9	2297.5
50°	6071.1	2551.5	2723.2	2842.2	2418.8	2260.9	2180.8	2173.9	2185.4	2192.3
52.5°	5672.9	2391.3	2574.4	2693.4	2242.6	2148.8	2059.5	2075.5	2126.0	2141.9
55°	5412.0	2203.8	2377.6	2395.9	2119.1	2043.5	1968.0	2004.6	2098.5	2128.2
57.5°	5343.3	2004.6	2153.3	2132.8	1961.1	1952.0	1906.2	1938.3	2057.3	2100.7
60°	5322.8	1826.1	1933.7	1917.7	1807.8	1851.3	1839.9	1855.9	1897.1	1910.8
62.5°	5162.6	1684.3	1736.9	1714.0	1670.5	1746.0	1773.5	1739.2	1771.2	1787.2
65°	4755.3	1569.8	1544.7	1528.7	1546.9	1615.6	1670.5	1601.9	1631.6	1677.4
67.5°	4082.5	1414.2	1345.6	1363.9	1421.1	1457.7	1528.7	1450.8	1476.0	1553.8
70°	3302.1	1217.4	1155.6	1208.3	1263.2	1338.8	1350.1	1297.5	1357.0	1444.0
72.5°	2336.5	1018.3	974.9	1082.4	1100.7	1199.1	1173.9	1148.7	1231.1	1260.9
75°	1620.2	821.5	796.3	878.7	945.2	1029.8	1011.5	1041.2	1215.1	1228.9
77.5°	1025.2	638.5	622.5	675.1	766.6	860.4	890.2	1228.9	2075.5	2157.9
80°	595.0	476.0	457.7	498.9	578.9	665.9	858.1	1508.1	1368.5	1352.4
82.5°	331.8	327.3	304.3	315.8	386.7	480.5	1212.9	1061.8	862.7	890.2
85°	155.6	192.2	164.7	157.8	217.4	562.9	810.1	606.4	402.7	393.6
87.5°	41.2	36.6	36.6	41.2	91.5	485.1	322.7	258.6	153.3	148.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)