

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: P968956

Luminaire Tested: **NAV-SB5C-835-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968956
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-SB5C-835-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36579.2 lumens
Efficiency: N/A
Efficacy: 146.6 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): 249.5
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

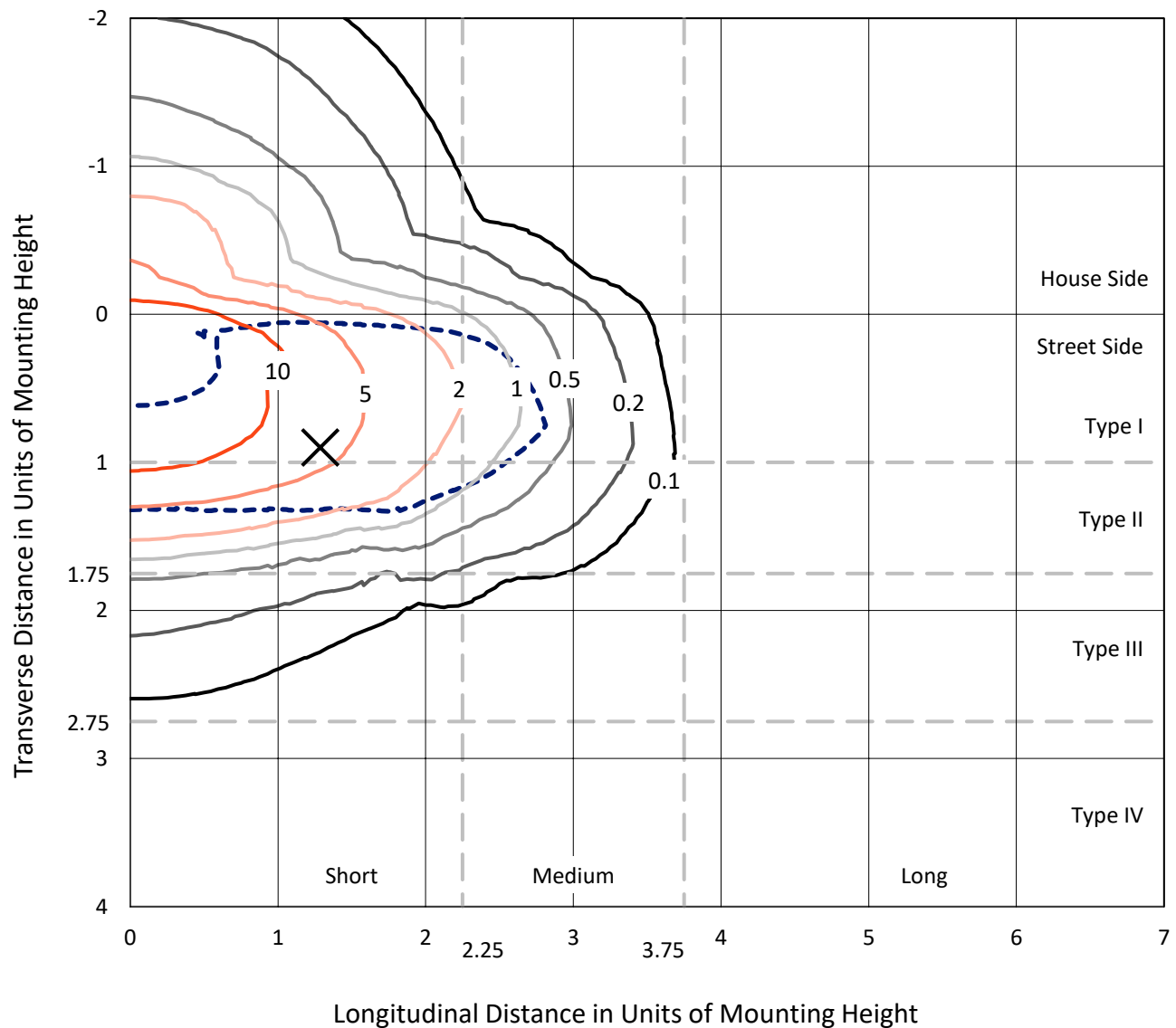


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Iso-Footcandle Lines of Horizontal Illumination

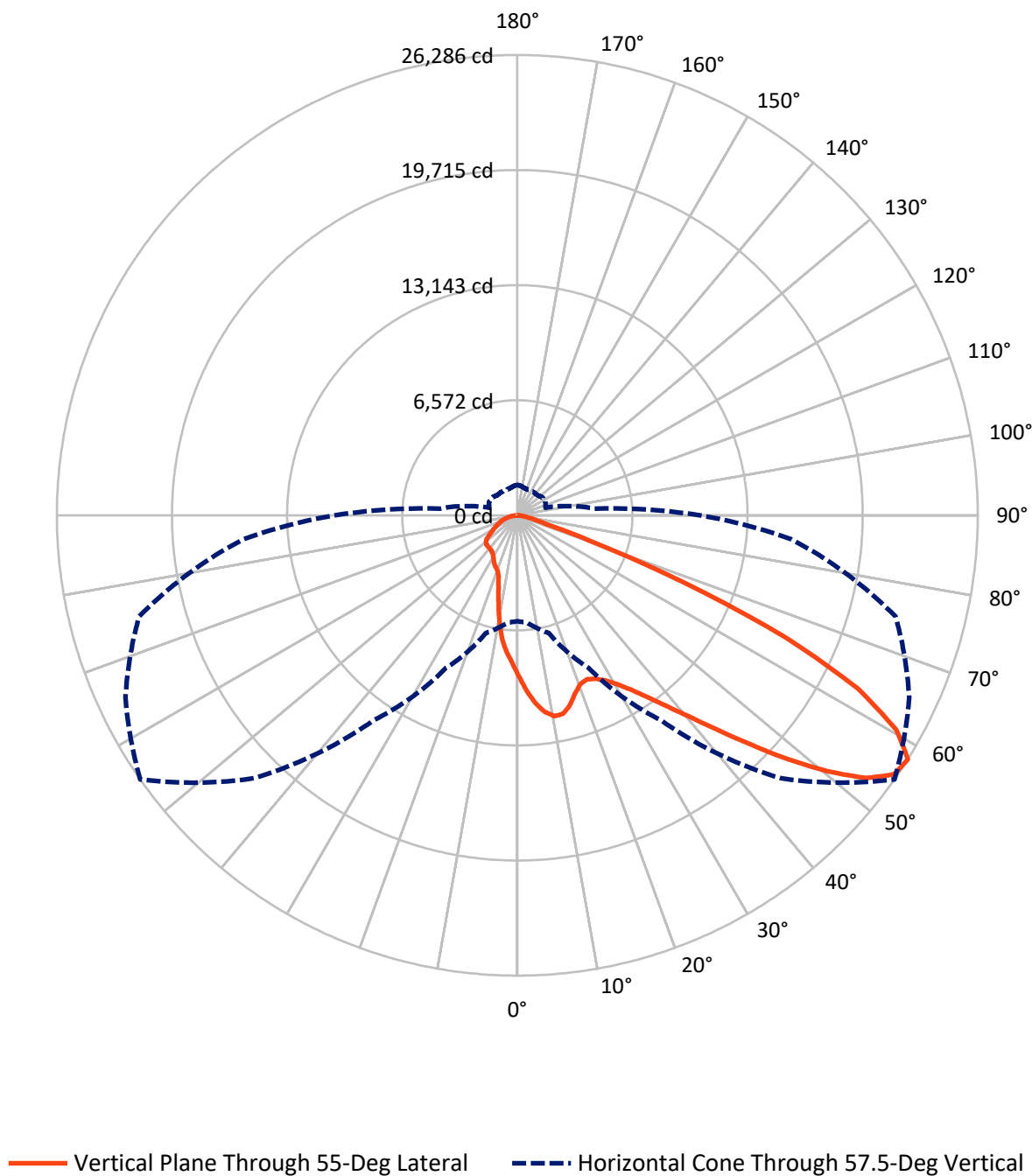
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6618.8	0.0	6618.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	29960.4	0.0	29960.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	36579.2	0.0	36579.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	850.5	2.3
10°-20°	2146.7	5.9
20°-30°	3425.6	9.4
30°-40°	5423.5	14.8
40°-50°	8301.2	22.7
50°-60°	8891.4	24.3
60°-70°	5593.6	15.3
70°-80°	1654.1	4.5
80°-90°	292.5	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°	36579.2	100.0
0°-180°	36579.2	100.0

Coefficient of Utilization



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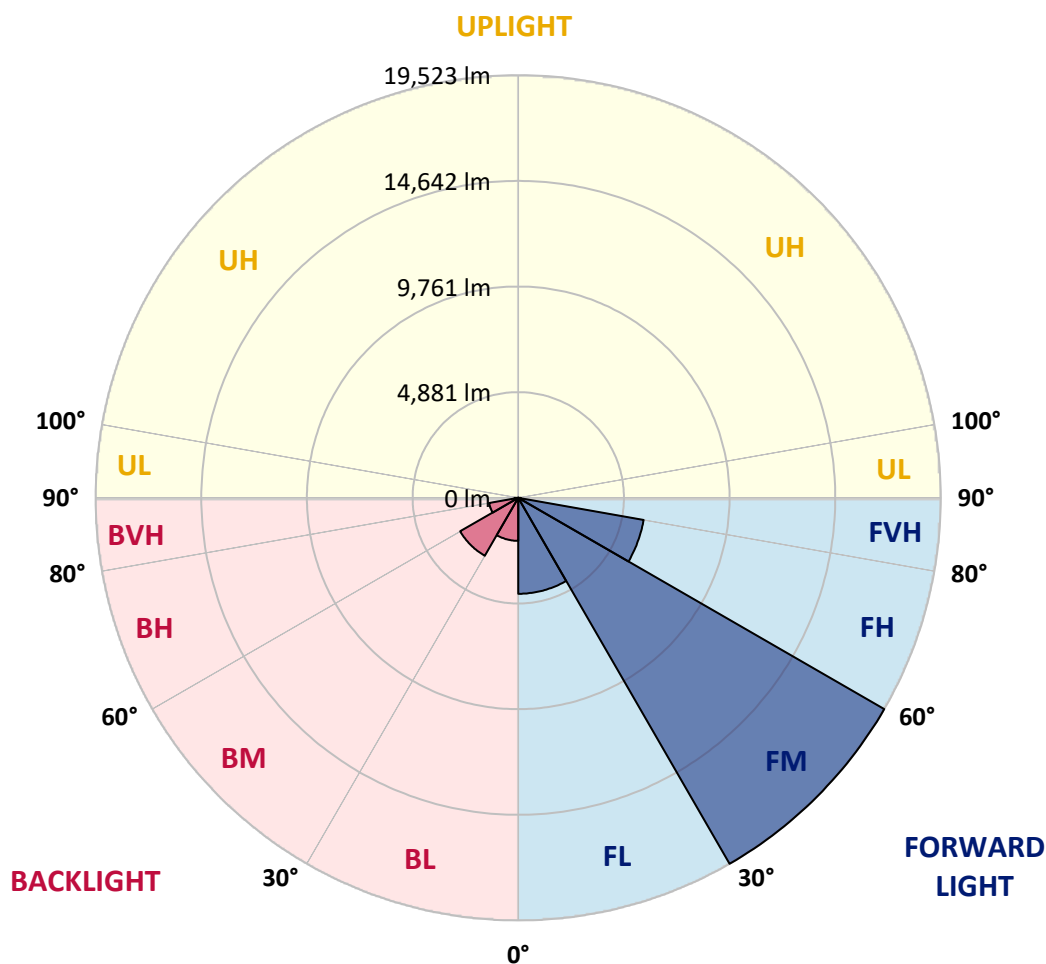
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4433.4	12.1			
FM	(30°-60°)	19522.6	53.4			
FH	(60°-80°)	5880.8	16.1			G3/7500
FVH	(80°-90°)	123.6	0.3			G2/225
BL	(0°-30°)	1989.4	5.4	B3/2500		
BM	(30°-60°)	3093.6	8.5	B3/5000		
BH	(60°-80°)	1366.9	3.7	B3/2500		G3/2500
BVH	(80°-90°)	168.9	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°	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6
2.5°	10515.7	10508.1	10549.7	10408.0	10311.5	10181.0	10008.9	9789.6	9553.2	9303.6	9195.8
5°	11463.1	11396.9	11440.4	11334.6	11228.6	11032.0	10776.6	10419.2	9982.5	9485.1	9220.4
7.5°	11313.7	11268.3	11379.9	11474.5	11553.9	11529.3	11342.0	10967.6	10404.2	9681.7	9297.9
10°	10109.2	10058.1	10215.0	10542.2	11022.4	11440.4	11667.3	11434.7	10835.3	9897.4	9373.5
12.5°	9046.4	9021.8	9125.9	9390.5	9923.8	10725.6	11625.8	11843.2	11283.4	10152.6	9475.7
15°	8592.6	8562.3	8628.6	8762.8	9103.1	9850.0	11247.5	12123.1	11724.1	10447.6	9638.3
17.5°	8492.3	8458.3	8486.7	8556.7	8776.0	9345.2	10676.4	12261.0	12183.6	10776.6	9774.4
20°	8677.6	8649.4	8653.0	8649.4	8802.5	9254.4	10279.3	12208.2	12584.4	11079.2	9906.8
22.5°	9125.9	9078.5	9080.5	8980.2	9063.5	9413.3	10175.4	12066.3	12941.9	11344.0	10007.1
25°	9855.8	9770.7	9787.7	9532.4	9509.7	9768.8	10337.9	11956.6	13297.3	11555.7	10025.9
27.5°	10854.2	10757.8	10706.7	10326.6	10145.0	10273.7	10668.9	11994.4	13633.9	11739.1	9978.7
30°	12102.3	11985.0	11881.0	11342.0	11013.0	10965.8	11183.3	12244.0	14031.0	11932.0	9897.4
32.5°	13632.0	13495.9	13306.8	12592.0	12128.7	11881.0	11848.9	12688.5	14496.2	12177.9	9855.8
35°	15453.0	15275.3	15006.8	14082.1	13495.9	12989.1	12726.3	13329.5	15133.5	12548.5	9903.0
37.5°	17328.9	17128.5	16882.7	15782.0	15061.7	14314.6	13796.5	14199.3	15982.5	13051.5	10027.9
40°	19059.2	18834.1	18605.3	17625.8	16852.3	15952.3	15107.0	15299.9	17020.6	13652.8	10239.6
42.5°	20080.3	19913.8	19826.9	19297.4	18699.9	17786.5	16737.0	16604.7	18187.4	14345.0	10481.6
45°	20034.9	19966.8	20235.3	20454.7	20312.8	19806.1	18646.9	18047.5	19357.9	14944.4	10704.8
47.5°	18964.6	19010.0	19609.4	20842.4	21385.0	21649.7	20821.5	19463.8	20375.3	15392.5	10805.0
50°	16052.5	16090.3	17478.3	20136.9	21661.1	23153.1	22979.2	20846.1	21163.8	15666.7	10782.4
52.5°	13747.4	13772.0	14367.6	18045.5	20749.7	23909.5	24923.1	22149.0	21740.6	15742.4	10655.6
55°	10355.0	10440.0	11107.6	14157.7	18378.4	23310.0	26106.7	23491.6	22105.5	15749.9	10523.3
57.5°	6049.2	6141.9	6966.3	9609.9	14284.4	21220.5	26286.4	24682.9	22353.2	15689.4	10443.8
60°	2963.2	3002.8	3362.1	5050.8	8808.1	17194.7	24841.7	25259.7	22491.3	15657.3	10440.0
62.5°	1996.9	1991.2	2006.3	2492.3	4339.7	11047.0	21831.3	24249.9	22417.5	15534.4	10402.2
65°	1717.0	1696.2	1639.5	1749.2	2248.3	5052.6	16867.5	21235.6	21855.9	15226.2	10143.2
67.5°	1484.4	1486.4	1488.2	1454.2	1605.5	2331.6	10307.7	16727.6	19840.1	13766.3	9144.7
70°	1229.2	1246.2	1253.7	1253.7	1308.5	1529.8	4400.3	11464.9	15649.7	10793.7	7365.3
72.5°	1119.5	1083.5	1087.3	1068.4	1068.4	1164.8	1771.8	6499.3	9859.6	6071.9	4494.8
75°	913.4	936.0	939.8	926.6	883.0	888.8	1051.3	2726.8	4218.8	2518.7	2221.9
77.5°	788.5	788.5	796.1	786.7	752.7	665.6	701.5	1057.1	1435.2	1032.5	1110.0
80°	633.4	631.6	663.7	682.6	629.7	491.7	448.1	584.4	637.2	453.9	576.8
82.5°	308.2	327.2	455.7	520.0	478.4	355.5	274.2	363.1	340.4	200.5	259.0
85°	179.7	170.1	204.2	289.4	274.2	196.7	132.3	189.1	177.7	102.1	104.0
87.5°	56.7	53.0	41.6	98.3	79.4	54.8	36.0	54.8	49.2	22.7	22.7
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°	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6	9165.6
2.5°	9061.5	8838.4	8617.2	8414.8	8291.9	8212.5	8133.1	8044.2	8010.2	7959.1
5°	8970.8	8539.7	8155.8	7824.8	7524.2	7287.9	7049.5	6856.6	6769.7	6828.3
7.5°	8917.8	8293.8	7702.0	7094.9	6510.6	6043.6	5637.0	5351.4	5222.9	5255.0
10°	8870.6	8015.8	7113.8	6155.1	5315.5	4736.9	4320.9	4103.4	4022.1	4039.1
12.5°	8827.1	7703.8	6404.7	5143.4	4250.9	3869.0	3749.8	3751.7	3766.8	3778.2
15°	8819.5	7327.5	5612.4	4258.5	3676.1	3651.5	3780.1	3861.4	3904.8	3918.1
17.5°	8808.1	6877.4	4805.0	3655.3	3536.1	3702.5	3821.6	3874.6	3908.6	3910.6
20°	8762.8	6306.4	4059.9	3367.8	3505.9	3649.6	3723.3	3764.9	3793.3	3802.7
22.5°	8622.8	5671.0	3479.4	3239.2	3384.9	3500.2	3587.2	3634.4	3651.5	3662.8
25°	8371.4	4960.1	3078.5	3116.3	3216.6	3362.1	3432.1	3441.5	3435.9	3452.9
27.5°	8042.4	4198.0	2828.9	2950.0	3078.5	3203.3	3241.2	3235.4	3224.1	3243.0
30°	7645.2	3513.4	2670.0	2762.7	2938.6	3052.0	3086.1	3072.8	3050.1	3070.9
32.5°	7225.4	2953.7	2539.5	2632.2	2823.3	2934.8	2968.8	2955.6	2938.6	2955.6
35°	6834.0	2562.3	2418.6	2545.3	2732.4	2842.1	2885.6	2887.5	2887.5	2908.3
37.5°	6474.7	2333.4	2318.3	2490.4	2670.0	2768.4	2830.7	2834.5	2753.3	2758.9
40°	6141.9	2237.1	2272.9	2454.5	2609.5	2704.1	2707.8	2496.1	2346.7	2342.9
42.5°	5869.6	2218.1	2286.2	2450.7	2566.1	2569.9	2303.2	2138.7	2097.0	2099.0
45°	5614.3	2212.5	2316.4	2450.7	2501.7	2220.0	2040.4	1996.9	2000.7	2015.8
47.5°	5328.8	2189.7	2322.1	2416.6	2316.4	1974.2	1921.3	1902.3	1894.7	1898.5
50°	5016.8	2108.4	2250.3	2348.6	1998.7	1868.3	1802.1	1796.4	1805.8	1811.6
52.5°	4687.7	1976.1	2127.4	2225.7	1853.2	1775.6	1701.9	1715.1	1756.7	1770.0
55°	4472.2	1821.0	1964.7	1979.9	1751.0	1688.7	1626.3	1656.5	1734.0	1758.6
57.5°	4415.4	1656.5	1779.4	1762.4	1620.5	1613.0	1575.2	1601.7	1700.0	1735.9
60°	4398.4	1509.0	1597.9	1584.6	1493.8	1529.8	1520.4	1533.6	1567.6	1579.0
62.5°	4266.0	1391.7	1435.2	1416.3	1380.4	1442.8	1465.5	1437.2	1463.6	1476.8
65°	3929.4	1297.2	1276.4	1263.2	1278.3	1335.1	1380.4	1323.7	1348.3	1386.1
67.5°	3373.5	1168.6	1111.9	1127.0	1174.3	1204.6	1263.2	1198.8	1219.6	1284.0
70°	2728.7	1006.0	955.0	998.5	1043.9	1106.2	1115.7	1072.1	1121.4	1193.2
72.5°	1930.7	841.5	805.5	894.4	909.6	990.9	970.1	949.3	1017.3	1041.9
75°	1338.9	678.9	658.0	726.1	780.9	851.0	835.8	860.4	1004.1	1015.5
77.5°	847.2	527.6	514.3	557.8	633.4	711.0	735.5	1015.5	1715.1	1783.2
80°	491.7	393.3	378.2	412.3	478.4	550.3	709.1	1246.2	1130.8	1117.6
82.5°	274.2	270.4	251.5	261.0	319.6	397.1	1002.2	877.4	712.9	735.5
85°	128.6	158.9	136.1	130.5	179.7	465.1	669.4	501.1	332.8	325.2
87.5°	34.0	30.2	30.2	34.0	75.6	400.9	266.6	213.7	126.7	122.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)