

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: P969256

Luminaire Tested: **NAV-SB5D-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969256
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50170.7 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

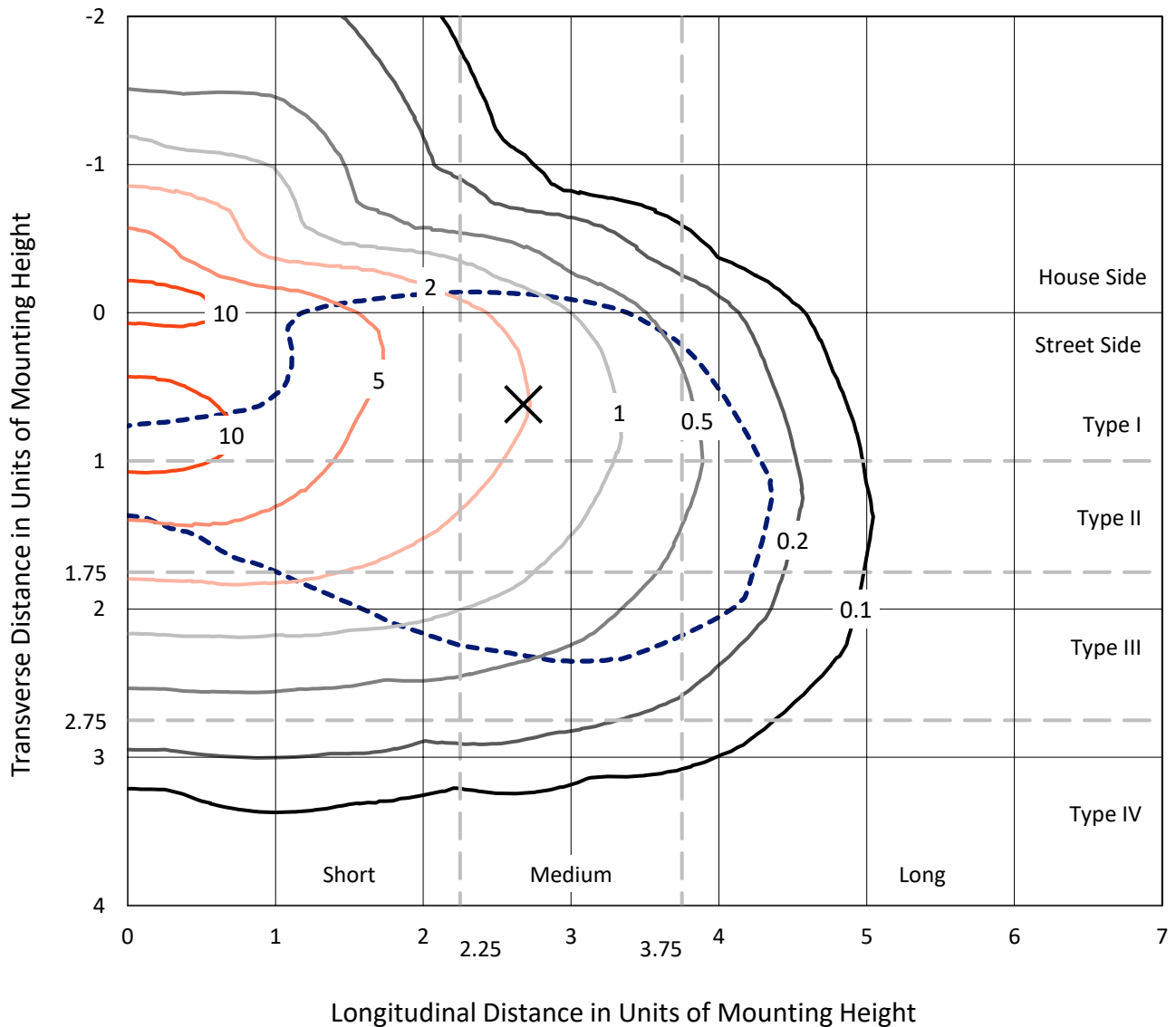
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

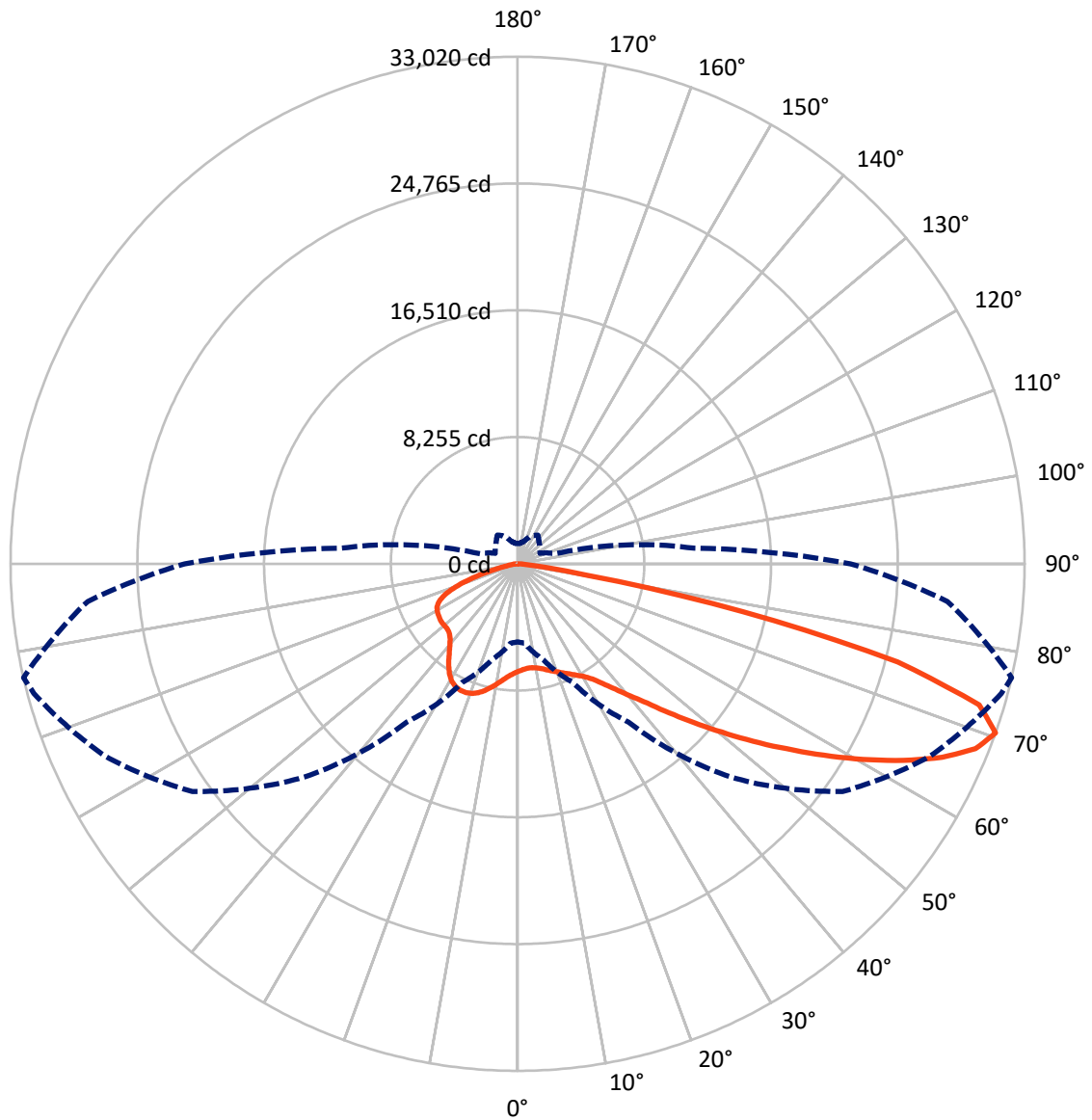
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10986.6	0.0	10986.6
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	39184.1	0.0	39184.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	50170.7	0.0	50170.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.5	1.3
10°-20°	1926.6	3.8
20°-30°	3294.7	6.6
30°-40°	5298.3	10.6
40°-50°	8272.0	16.5
50°-60°	11049.4	22.0
60°-70°	11777.0	23.5
70°-80°	7249.8	14.5
80°-90°	635.3	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°	50170.7	100.0
0°-180°	50170.7	100.0

Coefficient of Utilization

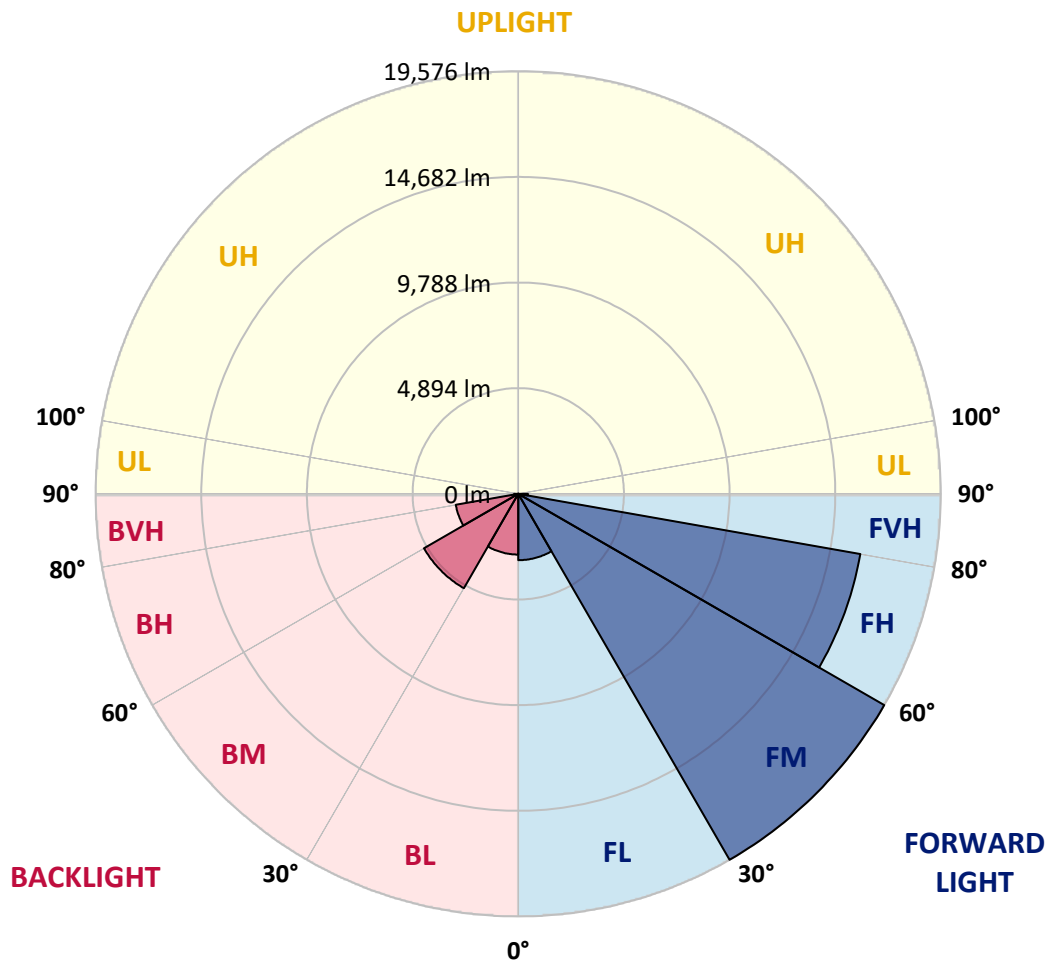


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3073.8	6.1			
FM (30°-60°)	19575.5	39.0			
FH (60°-80°)	16090.6	32.1			G5
FVH (80°-90°)	444.2	0.9			G3/500
BL (0°-30°)	2815.1	5.6	B4/5000		
BM (30°-60°)	5044.2	10.1	B4/8500		
BH (60°-80°)	2936.2	5.9	B4/5000		G4/5000
BVH (80°-90°)	191.1	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3
2.5°	6452.0	6449.4	6482.8	6493.1	6554.8	6598.4	6680.6	6768.0	6881.0	6893.9	6963.3
5°	6079.4	6079.4	6117.9	6159.0	6238.7	6326.1	6452.0	6603.6	6798.8	6829.7	7001.9
7.5°	5763.4	5783.9	5817.3	5896.9	5989.5	6115.4	6308.1	6523.9	6780.9	6829.7	7107.1
10°	5509.0	5532.1	5573.2	5637.4	5776.2	5950.9	6202.7	6480.3	6824.6	6901.6	7261.3
12.5°	5429.3	5452.5	5475.5	5524.3	5652.9	5858.4	6159.0	6500.8	6929.9	7007.0	7472.0
15°	5614.3	5642.6	5624.6	5611.8	5678.6	5866.1	6179.6	6575.3	7060.9	7171.4	7731.6
17.5°	6040.8	6051.1	6010.0	5889.2	5879.0	5979.1	6277.2	6678.1	7225.4	7346.2	7993.7
20°	6729.4	6711.5	6626.7	6387.7	6251.6	6231.0	6444.3	6832.2	7395.0	7523.4	8276.3
22.5°	7664.7	7644.2	7474.6	7096.9	6793.7	6593.3	6685.8	7032.6	7585.1	7729.0	8551.3
25°	8831.3	8803.0	8553.8	8039.9	7569.7	7073.8	7014.7	7297.3	7818.9	7952.6	8839.0
27.5°	10193.1	10170.0	9900.2	9221.8	8543.5	7731.6	7423.3	7608.3	8063.1	8214.7	9162.8
30°	11657.7	11724.6	11246.6	10516.9	9658.7	8589.8	7973.1	7991.1	8379.1	8515.3	9555.9
32.5°	13379.3	13494.9	12919.3	11994.3	10822.7	9522.5	8666.9	8525.5	8839.0	8952.0	10051.8
35°	15085.4	15216.4	14738.6	13715.9	12366.9	10622.3	9391.5	9139.6	9450.6	9573.9	10709.6
37.5°	16560.3	16735.1	16488.4	15599.3	14019.1	11948.1	10337.0	9861.6	10203.4	10357.6	11593.5
40°	17724.3	17991.5	17973.5	17418.5	15966.7	13556.5	11537.0	10753.3	11138.7	11305.7	12665.0
42.5°	18669.9	18901.1	19101.5	19073.3	17999.2	15383.5	12947.6	11912.1	12205.1	12397.8	13870.1
45°	19322.5	19569.2	20000.8	20465.9	19954.6	17338.9	14563.8	13286.8	13554.0	13844.4	15306.4
47.5°	19905.8	20185.8	20746.0	21483.4	21614.5	19302.0	16334.2	14887.6	15131.7	15432.3	16747.9
50°	19957.2	20198.6	21067.1	22112.9	22793.8	21188.0	18235.6	16683.6	16912.3	17233.5	18292.1
52.5°	18716.1	19096.4	20612.3	22095.0	23336.1	22765.6	20124.1	18551.7	18808.6	19194.0	19890.3
55°	14527.8	15085.4	19278.8	21406.3	23143.3	23785.6	21920.2	20537.8	20866.7	21270.2	21498.9
57.5°	12513.4	12757.5	15303.9	20152.4	22264.5	24050.4	23436.2	22544.7	23074.0	23515.9	23199.8
60°	11246.6	11449.6	12955.3	18202.2	21108.3	23631.5	24607.9	24415.2	25329.9	25856.6	24939.4
62.5°	9889.9	10082.6	11452.2	15198.5	19628.2	22935.2	25347.9	26141.9	27642.5	28218.0	26578.8
65°	8543.5	8708.0	10021.0	12770.4	17747.4	22238.8	25730.8	27634.8	29782.8	30379.0	27940.6
67.5°	7043.0	7179.1	8420.2	10773.9	15460.6	21285.6	25920.9	28809.1	31645.7	32157.0	28613.7
70°	5082.5	5187.8	6469.9	8520.4	12590.5	19646.3	25843.8	29641.6	32611.8	33020.4	28105.0
72.5°	2402.5	2497.5	4003.2	5532.1	8893.0	16454.9	24284.2	28981.2	31630.3	31427.3	24990.7
75°	1282.2	1364.4	2299.7	3034.5	4697.1	11280.0	19872.4	24965.1	26560.7	25574.1	18469.5
77.5°	868.5	932.7	1423.5	1821.7	2145.5	5354.8	12772.9	17284.9	16629.7	15000.7	9250.1
80°	688.6	755.4	1166.6	1233.4	1038.1	1934.8	5277.7	8001.4	5747.9	4596.8	2631.2
82.5°	529.3	603.8	981.5	894.2	565.3	794.0	1536.6	2530.9	1472.3	1120.3	637.2
85°	323.8	403.4	770.8	570.4	318.6	362.3	521.6	704.1	449.7	375.2	228.7
87.5°	164.4	231.2	390.5	208.2	143.9	84.8	138.8	138.8	118.2	102.8	59.1
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°	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3	6999.3
2.5°	7024.9	7076.4	7163.7	7245.9	7310.2	7371.8	7433.5	7466.9	7477.2	7518.3	7541.4
5°	7107.1	7202.3	7371.8	7531.2	7631.3	7693.0	7736.7	7762.4	7767.6	7780.4	7801.0
7.5°	7258.7	7410.3	7646.8	7806.1	7880.6	7875.5	7857.4	7793.3	7767.6	7744.4	7749.5
10°	7472.0	7672.4	7962.8	8073.3	8027.1	7903.8	7744.4	7556.8	7469.5	7384.7	7359.0
12.5°	7736.7	7991.1	8276.3	8271.1	8042.5	7726.4	7356.4	7068.6	6886.3	6755.2	6724.3
15°	8057.9	8350.8	8569.2	8394.5	7893.4	7325.6	6783.4	6408.3	6243.9	6100.0	6084.5
17.5°	8389.3	8702.9	8803.0	8355.9	7518.3	6732.0	6117.9	5822.4	5660.6	5583.5	5606.6
20°	8713.1	9024.0	8941.8	8135.0	6947.9	6058.9	5511.5	5349.7	5316.3	5334.2	5326.5
22.5°	9054.8	9332.3	8970.1	7708.4	6220.7	5370.2	5069.5	5074.8	5149.2	5203.2	5216.0
25°	9404.3	9591.8	8895.6	7091.8	5439.6	4864.0	4789.5	4871.7	5018.2	5123.6	5151.9
27.5°	9740.9	9823.1	8733.7	6328.7	4768.9	4501.7	4514.6	4684.1	4905.1	5051.6	5087.6
30°	10121.2	10028.7	8422.7	5470.4	4303.9	4190.8	4298.7	4496.6	4717.6	4848.7	4879.4
32.5°	10550.3	10206.0	7929.4	4676.5	3975.0	3941.5	4118.9	4247.4	4345.0	4383.5	4404.1
35°	11084.8	10455.2	7297.3	4118.9	3679.5	3759.2	3928.7	3864.5	3825.9	3805.4	3825.9
37.5°	11778.5	10791.8	6557.3	3756.6	3440.5	3628.1	3697.5	3497.1	3345.5	3271.0	3288.9
40°	12613.5	11285.1	5845.6	3476.5	3288.9	3515.0	3394.3	3152.8	2960.0	2854.7	2862.4
42.5°	13541.2	11801.6	5246.9	3265.9	3204.1	3422.6	3170.7	2882.9	2572.0	2538.6	2572.0
45°	14515.0	12333.5	4838.3	3103.9	3163.0	3342.9	3042.3	2577.2	2356.2	2492.4	2564.3
47.5°	15488.9	12821.7	4591.7	2983.2	3142.4	3252.9	2929.2	2407.6	2250.9	2448.7	2541.2
50°	16573.1	13258.5	4481.2	2895.8	3119.4	3217.0	2759.6	2364.0	2140.4	2271.4	2369.1
52.5°	17649.8	13597.6	4399.0	2808.4	3086.0	3188.8	2677.4	2312.5	2006.7	2014.4	2068.4
55°	18723.8	13818.6	4309.0	2692.8	3011.4	3127.1	2669.7	2256.0	1906.6	1870.6	1896.2
57.5°	19869.8	13944.6	4198.5	2564.3	2882.9	2970.3	2662.0	2212.4	1875.7	1816.6	1824.3
60°	21036.4	14129.6	4054.6	2407.6	2710.8	2782.8	2644.0	2196.9	1857.7	1757.6	1765.3
62.5°	22082.1	14193.8	3882.5	2258.6	2489.8	2597.8	2605.4	2184.1	1808.9	1636.7	1636.7
65°	22768.2	13916.3	3581.9	2089.0	2250.9	2407.6	2530.9	2140.4	1721.6	1549.4	1549.4
67.5°	22739.9	13124.9	3111.6	1870.6	2019.7	2196.9	2423.0	2065.9	1616.2	1441.5	1449.1
70°	21681.3	11562.6	2515.6	1616.2	1765.3	1970.8	2284.3	1955.4	1490.4	1323.3	1338.6
72.5°	18595.3	9049.7	1826.9	1318.1	1469.7	1737.0	2104.4	1821.7	1361.8	1217.9	1210.2
75°	13284.2	5727.4	1238.5	1012.4	1143.4	1472.3	1880.9	1665.0	1243.6	1223.0	1153.7
77.5°	6786.0	2736.5	819.7	740.0	796.5	1161.4	1580.2	1487.7	1261.6	1009.8	899.3
80°	2207.2	1009.8	516.5	503.6	529.3	773.5	1223.0	1220.5	955.8	686.0	606.4
82.5°	704.1	434.3	336.6	323.8	310.9	485.6	853.1	966.2	644.9	434.3	431.6
85°	280.0	259.5	197.8	182.4	131.0	228.7	447.1	642.4	480.5	313.4	321.2
87.5°	102.8	102.8	53.9	38.5	28.3	77.1	120.7	192.7	274.9	161.8	159.3
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)