

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: P968721

Luminaire Tested: **NAV-SB5C-727-U-T2-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968721  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

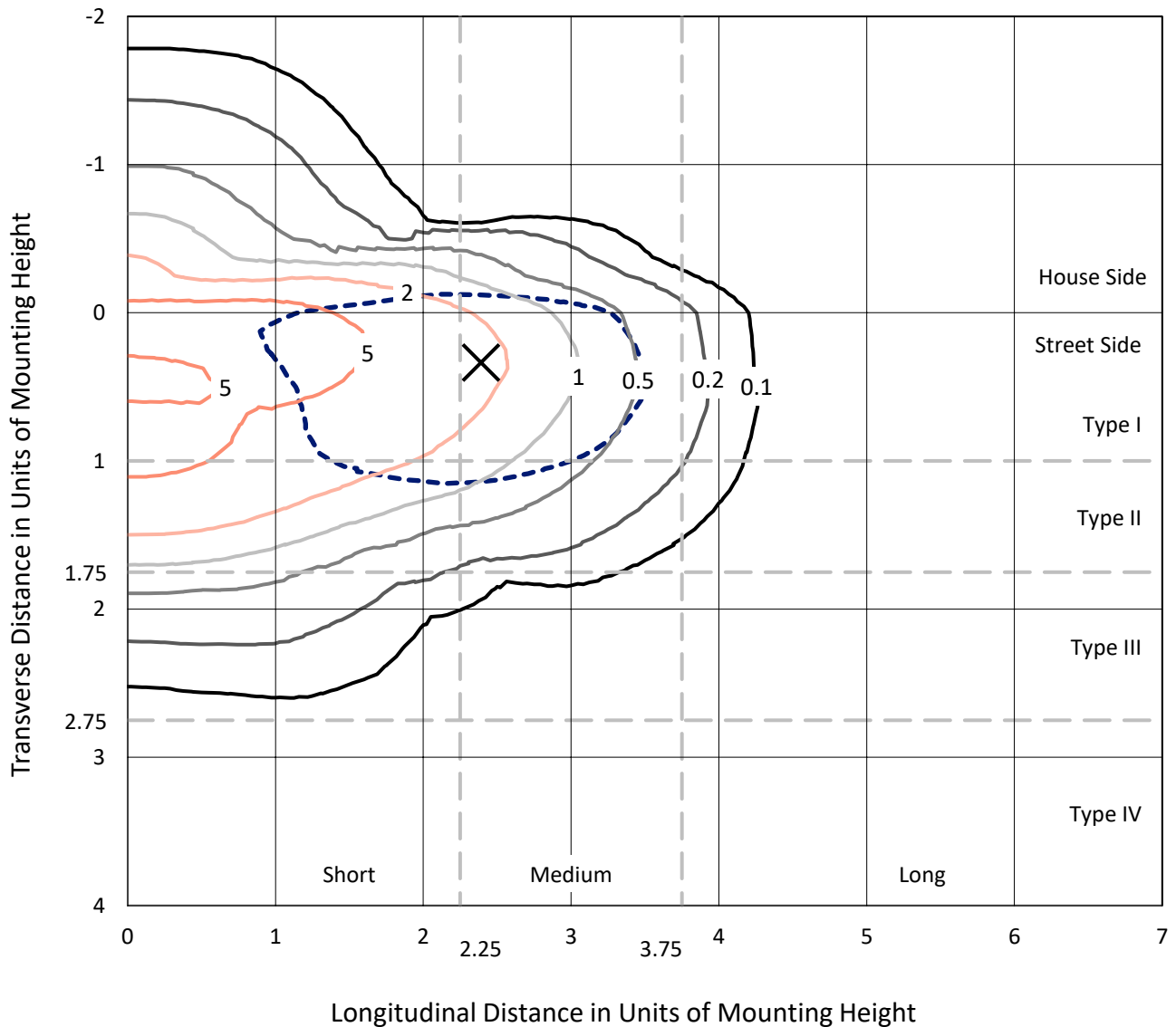
Lumens per Lamp: N/A  
Luminaire Lumens: 26263.6 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 249.5  
Input Voltage (V): NR  
Input Current (Ain): 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

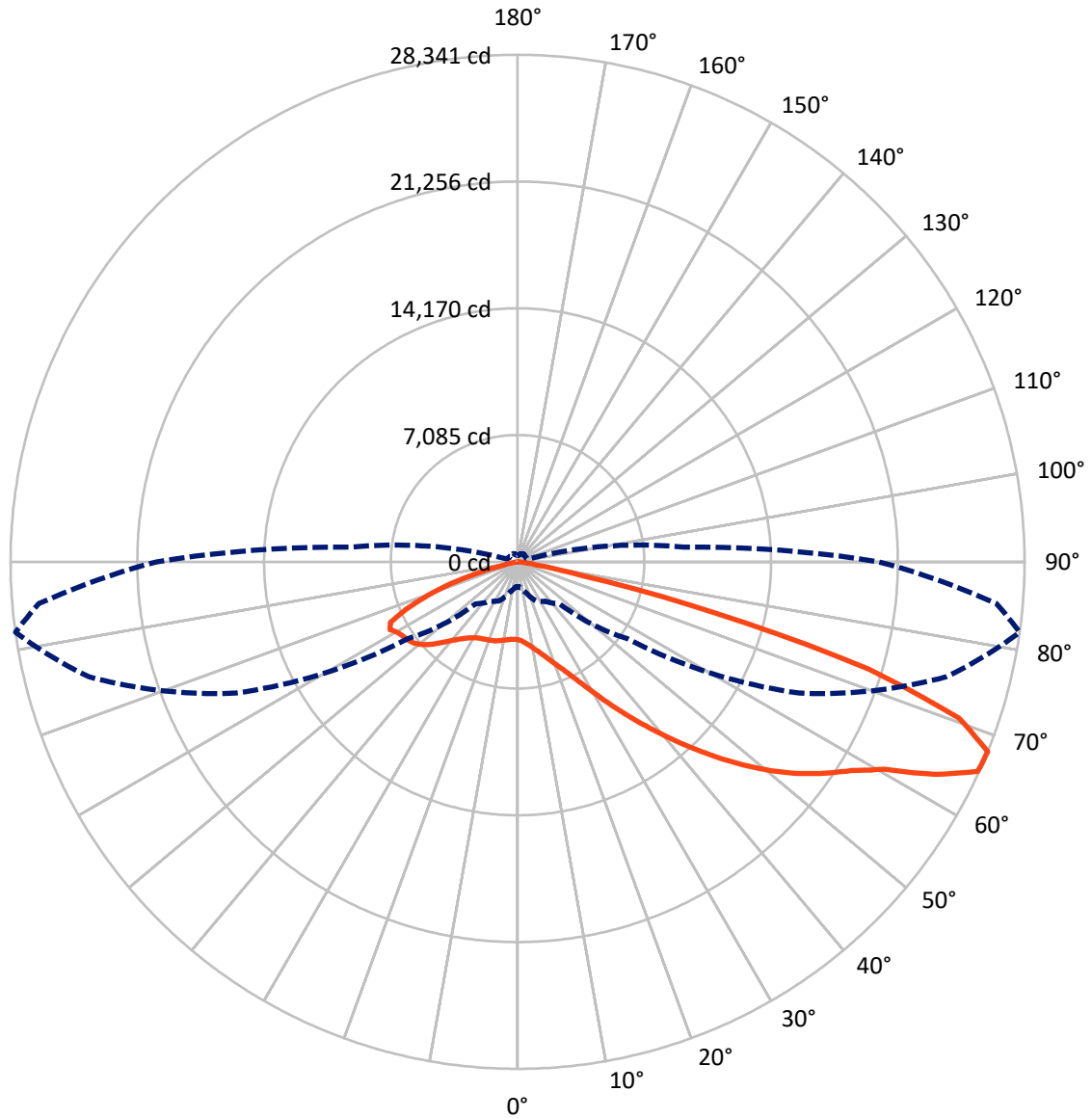
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4757.4	0.0	4757.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	21506.2	0.0	21506.2
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	26263.6	0.0	26263.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.6	1.5
10°-20°	1007.3	3.8
20°-30°	1613.4	6.1
30°-40°	2853.0	10.9
40°-50°	4998.7	19.0
50°-60°	6666.9	25.4
60°-70°	6206.5	23.6
70°-80°	2382.1	9.1
80°-90°	147.9	0.6
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°	26263.6	100.0
0°-180°	26263.6	100.0

**Coefficient of Utilization**



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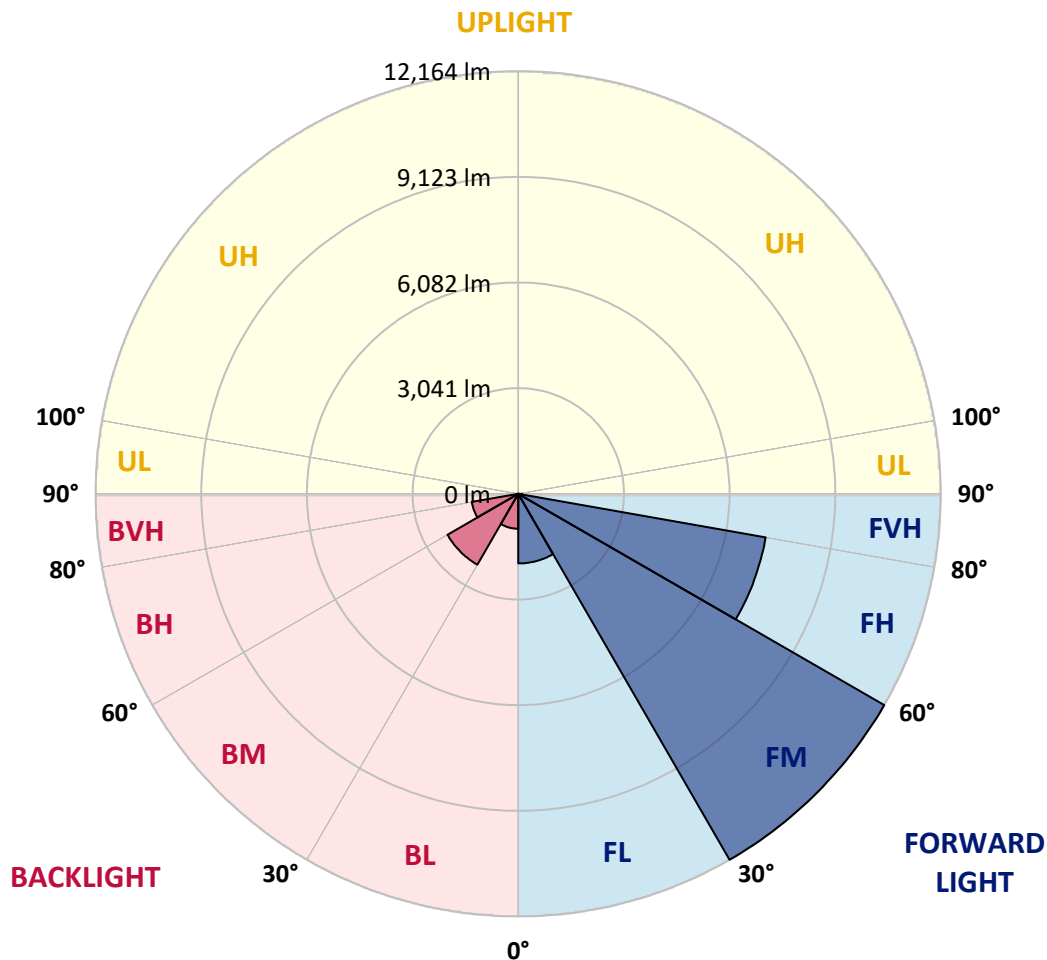
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2003.6	7.6			
FM (30°-60°)	12164.2	46.3			
FH (60°-80°)	7230.8	27.5			G3/7500
FVH (80°-90°)	107.6	0.4			G2/225
BL (0°-30°)	1004.8	3.8	B3/2500		
BM (30°-60°)	2354.4	9.0	B2/2500		
BH (60°-80°)	1357.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	40.4	0.2			G1/100
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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0
2.5°	4598.7	4625.2	4610.0	4602.5	4589.2	4570.4	4555.2	4508.0	4458.8	4426.7	4415.3
5°	4691.3	4717.9	4715.9	4723.5	4732.9	4738.6	4734.9	4681.9	4611.9	4557.0	4525.0
7.5°	4611.9	4642.2	4666.7	4704.5	4770.8	4840.8	4874.8	4863.4	4791.6	4715.9	4676.3
10°	4386.9	4419.1	4477.7	4566.6	4706.5	4857.8	4984.5	5043.1	4997.7	4914.5	4859.6
12.5°	3974.7	4006.8	4122.1	4315.0	4549.6	4812.4	5054.4	5211.3	5222.7	5139.5	5075.2
15°	3511.4	3543.5	3666.4	3908.5	4265.8	4687.5	5092.2	5389.1	5489.3	5417.4	5339.9
17.5°	3224.0	3252.3	3345.0	3539.7	3912.3	4437.9	5079.0	5578.2	5807.0	5750.2	5657.6
20°	3137.0	3161.6	3205.1	3341.2	3651.4	4178.9	4992.0	5755.9	6149.3	6117.1	6013.1
22.5°	3229.7	3252.3	3265.6	3326.1	3520.9	4008.8	4882.4	5937.4	6546.4	6550.2	6423.5
25°	3443.4	3466.0	3450.9	3488.7	3573.9	3955.8	4840.8	6151.1	7045.5	7087.2	6943.5
27.5°	3795.1	3796.9	3761.0	3759.1	3772.4	4035.2	4884.2	6379.9	7675.2	7752.7	7575.0
30°	4500.4	4472.0	4334.0	4184.6	4116.5	4273.4	5005.3	6650.3	8418.3	8556.4	8333.2
32.5°	5587.7	5546.1	5292.7	4935.3	4576.0	4657.3	5222.7	6958.5	9227.7	9477.3	9204.9
35°	6767.6	6756.2	6491.5	5960.2	5332.4	5203.8	5576.3	7363.2	10110.7	10507.8	10184.4
37.5°	7864.3	7858.7	7707.4	7081.4	6317.5	5965.8	6143.5	7892.7	11056.2	11631.0	11249.1
40°	8866.5	8883.5	8732.2	8172.5	7403.0	6943.5	6915.1	8547.0	12107.5	12854.4	12400.6
42.5°	9732.5	9751.4	9598.3	9184.1	8475.1	8025.0	7862.4	9348.6	13134.2	14168.6	13631.6
45°	10320.6	10437.8	10415.1	10084.3	9575.6	9108.6	9000.7	10354.7	14304.7	15562.2	14932.5
47.5°	10487.0	10594.8	10765.0	10810.4	10500.2	10040.7	10169.3	11566.7	15488.5	16957.7	16241.0
50°	10076.7	10176.9	10530.4	11001.3	11216.9	11075.0	11305.7	12865.8	16700.5	18349.4	17524.9
52.5°	9267.3	9369.4	9815.7	10560.8	11440.0	11886.3	12446.0	14145.9	17874.8	19667.4	18740.8
55°	8096.9	8204.6	8777.6	9621.0	11014.5	12221.0	13397.1	15424.2	18950.7	20853.0	19837.5
57.5°	6504.8	6584.2	7179.8	8359.7	9944.3	11888.2	14098.7	16819.6	19964.2	22017.7	20924.9
60°	4239.4	4309.4	5001.5	6317.5	8170.6	10776.3	14238.6	18375.9	21310.6	23532.4	22390.3
62.5°	2819.4	2866.6	3276.9	4243.2	5754.0	8641.5	13419.8	19618.2	23284.7	26168.4	24903.3
65°	1934.4	1981.6	2392.0	3065.2	3717.6	5716.2	11065.6	19453.7	25073.4	28261.5	26765.8
67.5°	1380.4	1420.0	1768.0	2403.3	2690.7	3320.5	7501.3	17351.0	24816.3	28340.9	26866.1
70°	988.9	1011.7	1299.1	1872.0	2138.7	1995.0	4171.3	13270.4	21728.5	26170.2	24820.1
72.5°	692.1	699.7	902.0	1425.8	1722.6	1456.0	1985.4	8847.6	16433.9	20541.0	19241.9
75°	468.9	478.4	607.0	1045.7	1382.2	1111.8	1051.3	4744.3	9647.4	11370.0	10192.0
77.5°	287.4	291.2	391.4	714.7	1034.3	847.2	676.9	2010.0	3732.6	3664.6	3123.8
80°	162.7	162.7	249.6	444.3	705.3	546.4	474.6	854.6	1181.8	1038.1	915.2
82.5°	90.7	92.7	181.5	276.0	467.1	323.4	261.0	395.2	510.6	451.9	393.3
85°	37.8	41.6	111.5	130.5	223.1	160.7	105.9	166.4	189.1	168.3	122.9
87.5°	3.8	5.6	34.0	24.6	26.4	32.2	15.2	32.2	26.4	26.4	18.9
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°	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0
2.5°	4379.3	4351.0	4279.2	4195.9	4086.3	4033.3	3961.4	3912.3	3870.7	3874.5	3836.7
5°	4464.5	4392.5	4231.8	4031.4	3781.8	3604.1	3415.0	3284.5	3178.6	3156.0	3104.8
7.5°	4581.6	4468.2	4186.5	3825.3	3403.6	3084.1	2798.6	2615.1	2484.7	2443.1	2401.5
10°	4732.9	4568.4	4127.9	3566.3	2959.3	2552.8	2246.4	2102.7	2013.8	1983.6	1960.8
12.5°	4908.8	4683.7	4050.3	3250.5	2501.7	2110.3	1915.5	1843.7	1815.3	1805.8	1800.1
15°	5130.0	4827.5	3933.1	2876.0	2114.1	1839.9	1756.6	1747.2	1751.0	1747.2	1745.3
17.5°	5392.8	4984.5	3742.1	2490.3	1853.1	1701.8	1671.6	1679.2	1688.6	1686.7	1682.9
20°	5680.3	5139.5	3498.2	2148.1	1675.4	1603.5	1586.5	1594.1	1601.6	1597.8	1595.9
22.5°	6007.4	5305.9	3227.8	1881.5	1556.3	1512.7	1493.8	1495.7	1495.7	1488.2	1484.4
25°	6398.9	5489.3	2944.1	1692.4	1465.4	1431.4	1408.8	1401.2	1389.8	1367.1	1363.4
27.5°	6865.9	5684.0	2671.9	1560.0	1393.6	1361.4	1335.0	1316.1	1287.7	1249.9	1246.1
30°	7391.6	5920.4	2441.1	1476.8	1336.9	1304.7	1274.5	1246.1	1204.5	1157.2	1153.4
32.5°	8009.9	6173.8	2272.8	1422.0	1285.9	1251.8	1215.9	1181.8	1136.4	1089.2	1091.0
35°	8747.3	6480.2	2174.5	1384.2	1246.1	1200.7	1161.0	1123.2	1089.2	1047.6	1043.8
37.5°	9547.2	6805.4	2144.3	1365.2	1219.6	1149.6	1104.3	1077.8	1074.0	1049.5	1047.6
40°	10422.7	7191.1	2167.0	1353.9	1191.3	1100.5	1051.3	1045.7	1055.1	1011.7	1013.5
42.5°	11349.2	7648.8	2204.8	1340.7	1151.6	1051.3	1004.1	1004.1	996.5	936.0	936.0
45°	12351.5	8176.3	2242.6	1308.5	1104.3	1002.1	966.3	953.0	920.9	862.2	860.4
47.5°	13361.2	8713.3	2271.0	1249.9	1047.6	960.6	928.4	898.2	851.0	798.0	796.1
50°	14319.9	9195.5	2240.8	1162.9	983.3	920.9	886.8	845.2	794.2	758.3	752.6
52.5°	15176.5	9613.4	2112.1	1060.8	915.2	879.2	849.0	805.5	763.9	726.1	722.3
55°	15921.4	9951.8	1885.3	964.3	854.6	843.4	813.1	758.3	701.5	669.4	665.6
57.5°	16636.3	10209.0	1601.6	885.0	799.8	803.6	758.3	709.1	656.1	622.1	618.3
60°	17587.4	10553.2	1314.2	811.2	741.3	752.6	703.5	667.5	601.3	557.8	552.2
62.5°	19107.6	11088.3	1043.8	720.5	673.1	676.9	656.1	612.6	533.2	482.2	478.4
65°	20314.1	10891.6	822.6	622.1	595.6	601.3	601.3	554.0	468.9	410.3	404.7
67.5°	20177.9	9326.0	656.1	525.7	521.9	525.7	538.9	499.2	416.0	368.7	361.2
70°	18587.7	7418.0	525.7	436.8	453.8	444.3	482.2	455.7	374.4	327.1	321.4
72.5°	15167.0	5343.7	400.9	361.2	347.9	363.1	434.9	410.3	312.0	259.0	253.4
75°	8862.7	2851.4	298.8	285.6	251.5	302.6	385.7	349.8	238.2	191.0	185.3
77.5°	2885.6	994.7	219.4	209.9	187.2	244.0	329.0	295.0	194.7	151.3	145.5
80°	773.4	300.6	149.3	138.1	121.1	181.5	261.0	234.5	139.9	98.3	96.5
82.5°	310.1	126.7	87.0	77.5	66.2	124.8	206.1	189.1	104.0	62.4	62.4
85°	100.2	41.6	32.2	24.6	30.2	77.5	122.9	128.5	73.7	32.2	24.6
87.5°	13.2	5.6	5.6	7.6	5.6	13.2	37.8	36.0	20.8	3.8	0.0
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)