

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: P965040

Luminaire Tested: **NAV-SB3D-727-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965040  
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-SB3D-727-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 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: 29799.8 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

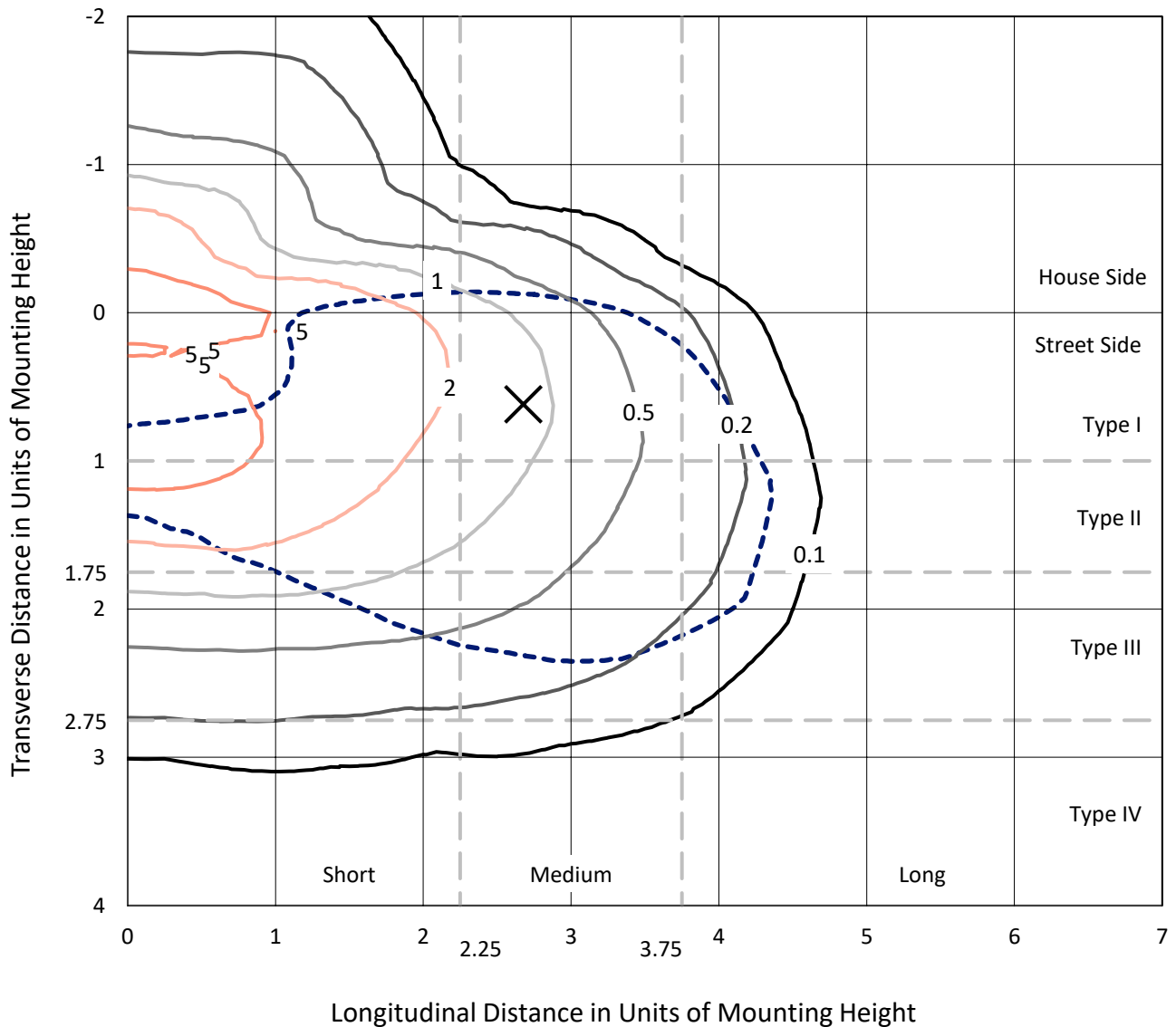
Input Watts (W): 218.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

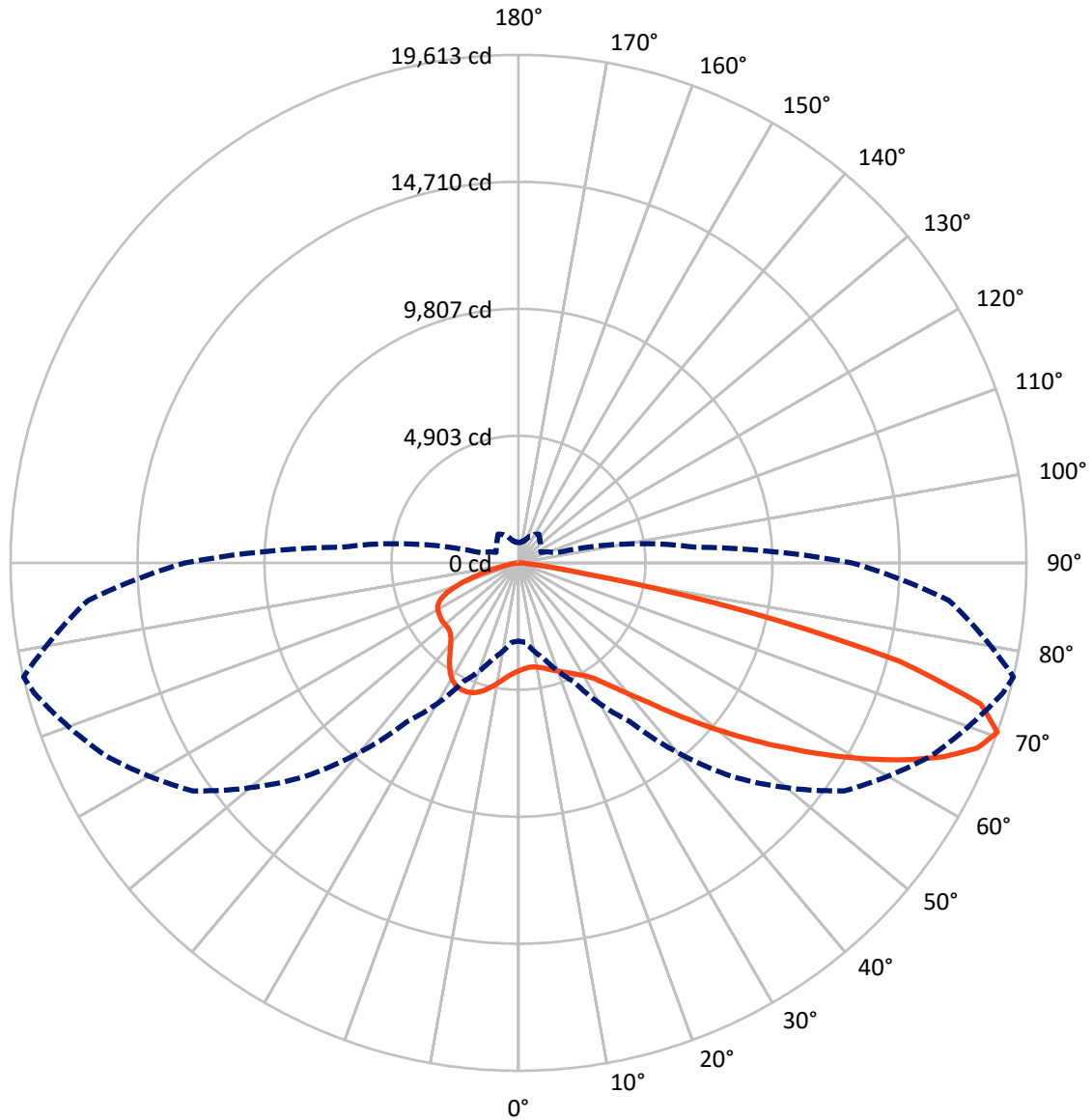
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 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
<b>House Side</b>	Lumens	6525.7	0.0	6525.7
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	23274.1	0.0	23274.1
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	29799.8	0.0	29799.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	396.5	1.3
10°-20°	1144.3	3.8
20°-30°	1957.0	6.6
30°-40°	3147.0	10.6
40°-50°	4913.3	16.5
50°-60°	6563.0	22.0
60°-70°	6995.2	23.5
70°-80°	4306.2	14.5
80°-90°	377.3	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°	29799.8	100.0
0°-180°	29799.8	100.0

**Coefficient of Utilization**

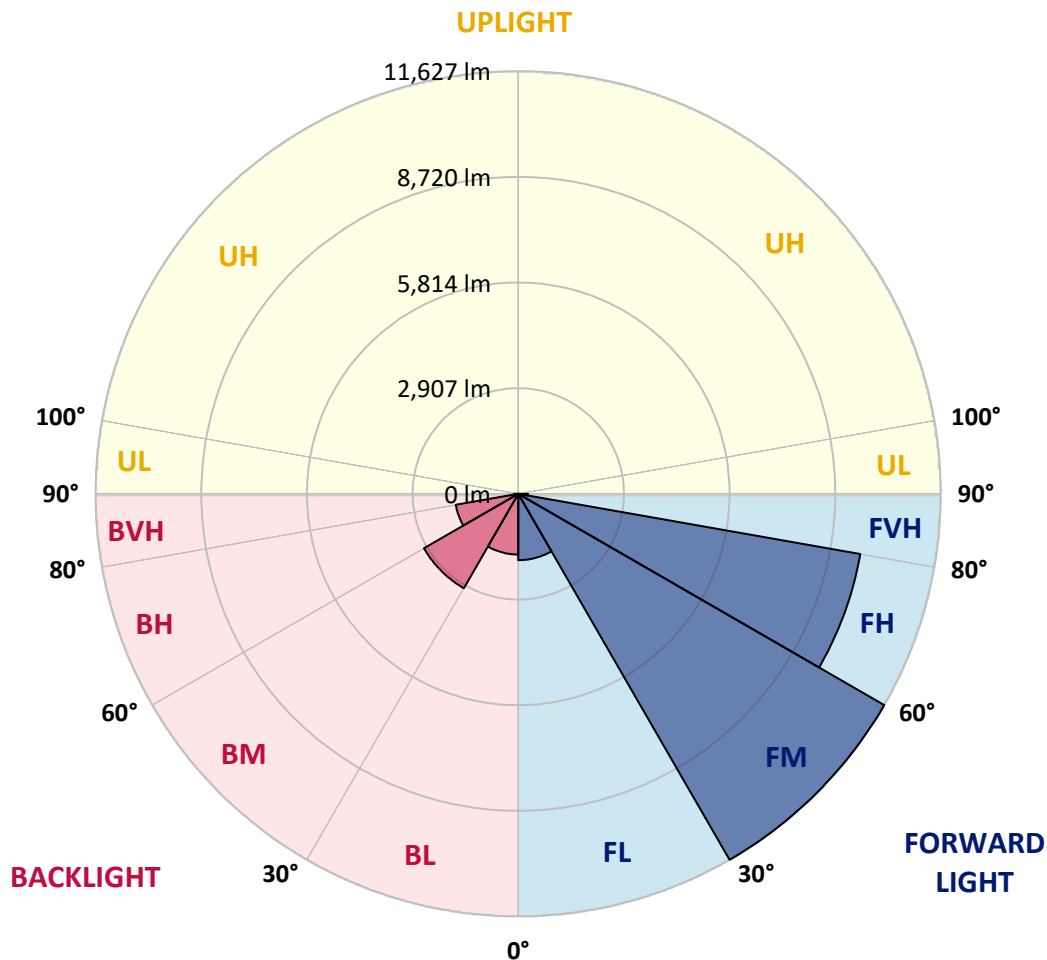


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1825.7	6.1			
FM (30°-60°)	11627.2	39.0			
FH (60°-80°)	9557.3	32.1			G4/12000
FVH (80°-90°)	263.9	0.9			G3/500
BL (0°-30°)	1672.1	5.6	B3/2500		
BM (30°-60°)	2996.1	10.1	B3/5000		
BH (60°-80°)	1744.0	5.9	B3/2500		G3/2500
BVH (80°-90°)	113.5	0.4			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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3
2.5°	3832.3	3830.7	3850.6	3856.7	3893.4	3919.3	3968.1	4019.9	4087.2	4094.8	4136.0
5°	3611.0	3611.0	3633.8	3658.3	3705.6	3757.4	3832.3	3922.3	4038.3	4056.6	4158.8
7.5°	3423.3	3435.5	3455.3	3502.6	3557.6	3632.3	3746.8	3875.0	4027.6	4056.6	4221.5
10°	3272.1	3285.8	3310.3	3348.5	3430.9	3534.6	3684.3	3849.1	4053.6	4099.4	4313.0
12.5°	3224.9	3238.6	3252.3	3281.3	3357.6	3479.7	3658.3	3861.3	4116.1	4161.9	4438.1
15°	3334.7	3351.5	3340.9	3333.2	3372.9	3484.3	3670.5	3905.6	4194.0	4259.6	4592.3
17.5°	3588.1	3594.2	3569.8	3498.0	3492.0	3551.4	3728.4	3966.5	4291.7	4363.4	4748.0
20°	3997.1	3986.4	3936.0	3794.1	3713.3	3701.0	3827.7	4058.2	4392.3	4468.7	4915.9
22.5°	4552.6	4540.4	4439.7	4215.3	4035.2	3916.2	3971.2	4177.2	4505.3	4590.8	5079.2
25°	5245.5	5228.7	5080.7	4775.5	4496.2	4201.6	4166.5	4334.4	4644.2	4723.6	5250.0
27.5°	6054.4	6040.6	5880.4	5477.5	5074.6	4592.3	4409.1	4519.0	4789.2	4879.2	5442.4
30°	6924.3	6964.1	6680.1	6246.7	5736.9	5102.0	4735.8	4746.5	4976.9	5057.8	5675.9
32.5°	7946.9	8015.6	7673.7	7124.3	6428.3	5656.1	5147.9	5063.9	5250.0	5317.3	5970.4
35°	8960.2	9038.1	8754.2	8146.8	7345.6	6309.3	5578.3	5428.7	5613.3	5686.6	6361.2
37.5°	9836.3	9940.0	9793.6	9265.5	8326.9	7096.8	6139.9	5857.6	6060.5	6152.0	6886.2
40°	10527.7	10686.4	10675.7	10346.0	9483.7	8052.2	6852.6	6387.1	6616.1	6715.3	7522.6
42.5°	11089.3	11226.6	11345.7	11328.9	10691.0	9137.4	7690.5	7075.5	7249.4	7363.9	8238.3
45°	11476.9	11623.5	11879.9	12156.1	11852.4	10298.8	8650.5	7892.0	8050.7	8223.2	9091.5
47.5°	11823.4	11989.7	12322.4	12760.5	12838.3	11464.7	9702.0	8842.8	8987.7	9166.3	9947.7
50°	11853.9	11997.4	12513.2	13134.5	13538.8	12584.9	10831.4	9909.6	10045.4	10236.2	10865.0
52.5°	11116.7	11342.6	12243.1	13123.7	13860.9	13522.1	11953.1	11019.1	11171.7	11400.7	11814.3
55°	8629.1	8960.2	11451.0	12714.7	13746.4	14128.0	13020.0	12198.8	12394.2	12633.8	12769.7
57.5°	7432.6	7577.5	9090.0	11969.9	13224.4	14285.1	13920.4	13390.8	13705.2	13967.7	13780.0
60°	6680.1	6800.7	7695.1	10811.5	12537.7	14036.4	14616.3	14501.9	15045.2	15358.1	14813.2
62.5°	5874.3	5988.8	6802.2	9027.4	11658.6	13622.8	15055.9	15527.5	16418.8	16760.6	15786.9
65°	5074.6	5172.3	5952.2	7585.2	10541.4	13209.2	15283.3	16414.2	17690.1	18044.2	16595.8
67.5°	4183.3	4264.2	5001.3	6399.3	9183.1	12643.0	15396.2	17111.7	18796.6	19100.3	16995.6
70°	3018.8	3081.4	3842.9	5060.8	7478.3	11669.2	15350.4	17606.1	19370.4	19613.1	16693.5
72.5°	1427.0	1483.5	2377.8	3285.8	5282.1	9773.8	14424.0	17214.0	18787.4	18666.9	14843.7
75°	761.6	810.4	1365.9	1802.5	2789.8	6700.0	11803.6	14828.5	15776.3	15190.2	10970.3
77.5°	515.9	554.0	845.5	1082.1	1274.4	3180.6	7586.7	10266.7	9877.5	8909.9	5494.3
80°	409.0	448.7	692.9	732.6	616.5	1149.2	3134.8	4752.5	3414.1	2730.4	1562.8
82.5°	314.4	358.6	583.0	531.2	335.8	471.6	912.7	1503.3	874.5	665.4	378.5
85°	192.3	239.6	457.9	338.9	189.2	215.1	309.9	418.2	267.1	222.8	135.8
87.5°	97.7	137.4	232.0	123.6	85.5	50.3	82.4	82.4	70.2	61.1	35.1
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°	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3	4157.3
2.5°	4172.6	4203.1	4255.0	4303.9	4342.0	4378.6	4415.3	4435.1	4441.2	4465.6	4479.4
5°	4221.5	4277.9	4378.6	4473.3	4532.8	4569.4	4595.4	4610.7	4613.7	4621.3	4633.5
7.5°	4311.5	4401.6	4542.0	4636.6	4680.9	4677.8	4667.1	4628.9	4613.7	4599.9	4603.0
10°	4438.1	4557.3	4729.7	4795.3	4767.8	4694.6	4599.9	4488.6	4436.6	4386.3	4371.0
12.5°	4595.4	4746.5	4915.9	4912.8	4777.0	4589.2	4369.5	4198.6	4090.2	4012.4	3994.0
15°	4786.1	4960.1	5089.8	4986.1	4688.5	4351.1	4029.2	3806.3	3708.7	3623.2	3614.0
17.5°	4983.0	5169.2	5228.7	4963.2	4465.6	3998.6	3633.8	3458.4	3362.2	3316.4	3330.1
20°	5175.3	5360.0	5311.1	4832.0	4126.9	3598.8	3273.6	3177.5	3157.7	3168.4	3163.8
22.5°	5378.3	5543.1	5328.0	4578.6	3694.9	3189.7	3011.1	3014.2	3058.5	3090.6	3098.2
25°	5585.8	5697.3	5283.7	4212.3	3230.9	2889.1	2844.8	2893.7	2980.7	3043.2	3060.0
27.5°	5785.8	5834.6	5187.5	3759.0	2832.6	2673.9	2681.5	2782.3	2913.5	3000.5	3021.9
30°	6011.6	5956.7	5002.8	3249.2	2556.4	2489.2	2553.3	2670.8	2802.0	2879.9	2898.3
32.5°	6266.5	6062.1	4709.9	2777.6	2361.0	2341.2	2446.5	2522.8	2580.7	2603.7	2615.9
35°	6584.0	6210.1	4334.4	2446.5	2185.5	2232.9	2333.5	2295.4	2272.5	2260.3	2272.5
37.5°	6996.0	6410.0	3894.8	2231.3	2043.5	2155.0	2196.2	2077.2	1987.1	1942.9	1953.5
40°	7492.0	6703.0	3472.1	2065.0	1953.5	2087.8	2016.1	1872.7	1758.2	1695.6	1700.2
42.5°	8043.1	7009.8	3116.5	1939.8	1903.1	2032.9	1883.3	1712.4	1527.8	1507.9	1527.8
45°	8621.5	7325.7	2873.8	1843.7	1878.7	1985.5	1807.0	1530.7	1399.5	1480.4	1523.1
47.5°	9199.9	7615.7	2727.3	1771.9	1866.5	1932.1	1739.8	1430.1	1336.9	1454.5	1509.4
50°	9843.9	7875.2	2661.7	1720.1	1852.8	1910.8	1639.2	1404.1	1271.3	1349.1	1407.1
52.5°	10483.4	8076.6	2612.8	1668.1	1833.0	1894.0	1590.3	1373.6	1192.0	1196.6	1228.6
55°	11121.4	8207.9	2559.4	1599.4	1788.7	1857.4	1585.7	1340.0	1132.4	1111.1	1126.4
57.5°	11802.1	8282.6	2493.8	1523.1	1712.4	1764.2	1581.2	1314.0	1114.1	1079.0	1083.6
60°	12495.0	8392.5	2408.3	1430.1	1610.2	1652.9	1570.4	1304.9	1103.4	1044.0	1048.5
62.5°	13116.1	8430.7	2306.0	1341.5	1478.9	1542.9	1547.5	1297.2	1074.4	972.2	972.2
65°	13523.5	8265.9	2127.5	1240.8	1336.9	1430.1	1503.3	1271.3	1022.5	920.2	920.2
67.5°	13506.8	7795.7	1848.2	1111.1	1199.6	1304.9	1439.2	1227.0	960.0	856.2	860.8
70°	12878.0	6867.9	1494.1	960.0	1048.5	1170.6	1356.8	1161.4	885.2	786.0	795.2
72.5°	11045.1	5375.2	1085.2	782.9	873.0	1031.7	1250.0	1082.1	808.9	723.4	718.8
75°	7890.4	3401.9	735.6	601.4	679.2	874.5	1117.1	989.0	738.7	726.4	685.2
77.5°	4030.7	1625.4	486.9	439.5	473.1	689.8	938.6	883.7	749.4	599.8	534.1
80°	1311.0	599.8	306.8	299.1	314.4	459.4	726.4	725.0	567.7	407.5	360.2
82.5°	418.2	257.9	200.0	192.3	184.7	288.4	506.7	573.9	383.0	257.9	256.4
85°	166.4	154.2	117.6	108.3	77.8	135.8	265.6	381.5	285.4	186.2	190.8
87.5°	61.1	61.1	32.1	22.9	16.8	45.8	71.8	114.5	163.3	96.1	94.6
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)