

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: P883419

Luminaire Tested: **NAV-SB3D-730-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-730-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30066 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

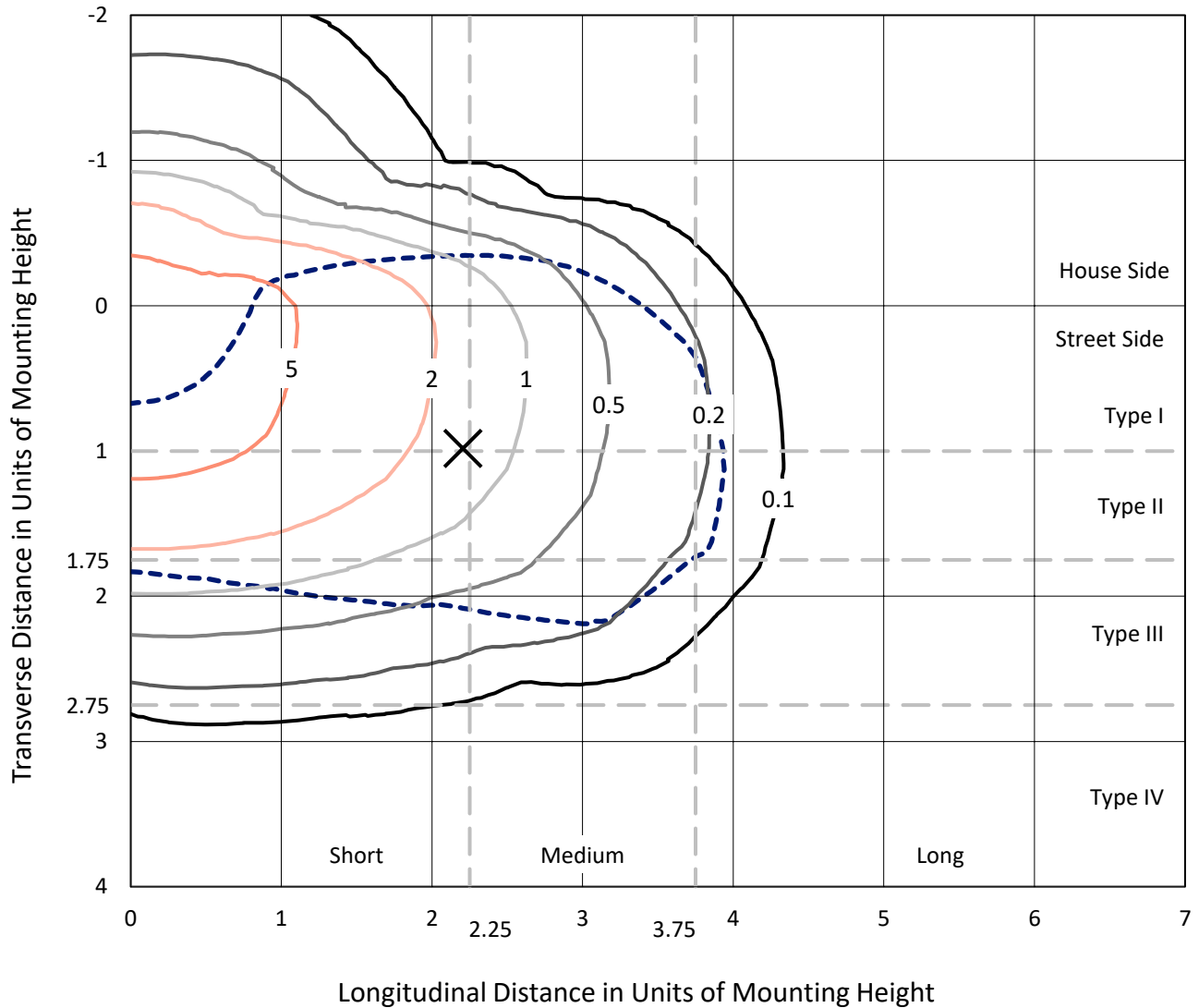
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

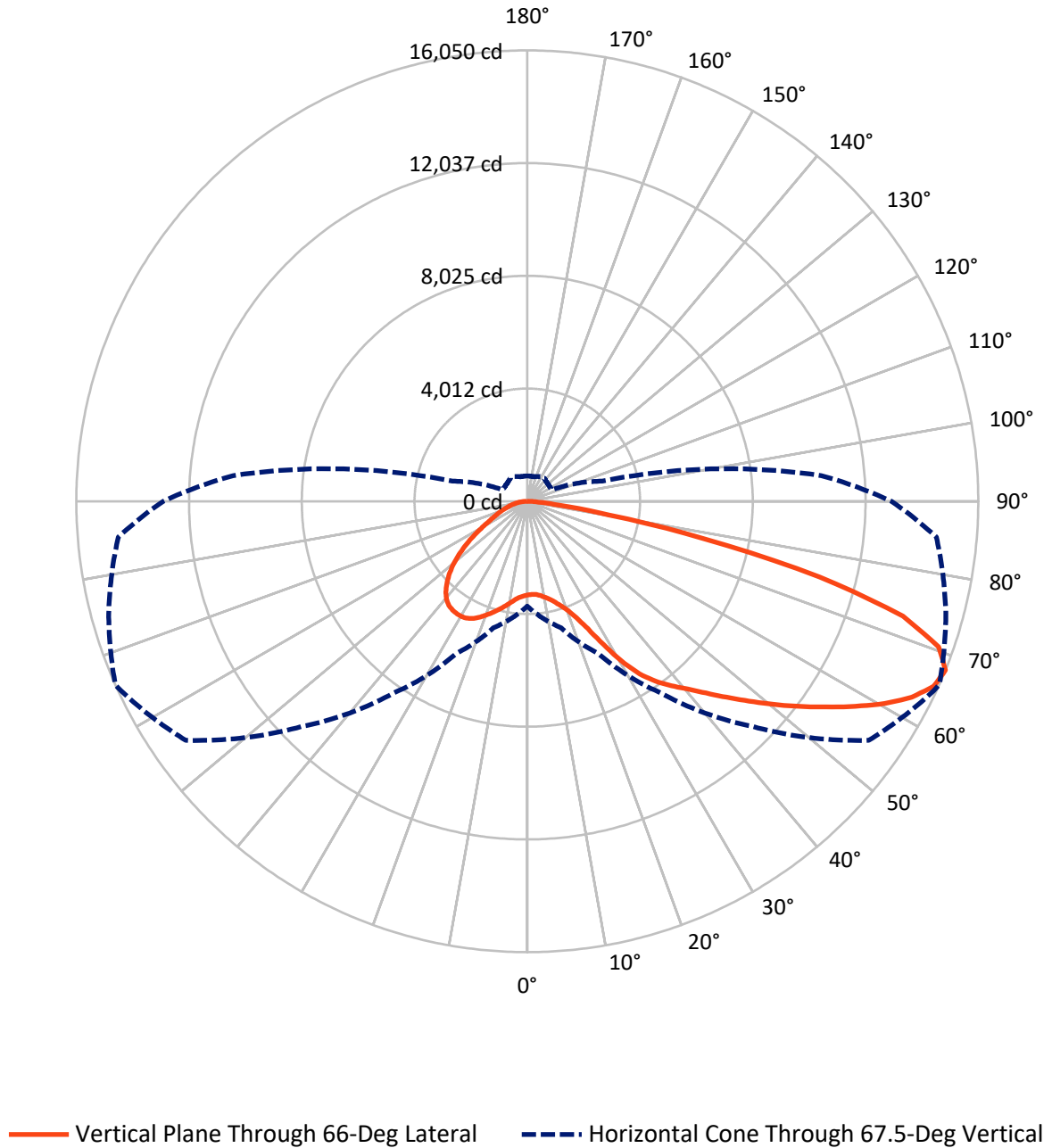
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7475.8	0.0	7475.8
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	22590.2	0.0	22590.2
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	30066.0	0.0	30066.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.6	1.1
10°-20°	1092.3	3.6
20°-30°	2105.4	7.0
30°-40°	3691.6	12.3
40°-50°	5488.2	18.3
50°-60°	6956.8	23.1
60°-70°	6807.0	22.6
70°-80°	3247.0	10.8
80°-90°	347.0	1.2
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°	30066.0	100.0
0°-180°	30066.0	100.0

**Coefficient of Utilization**



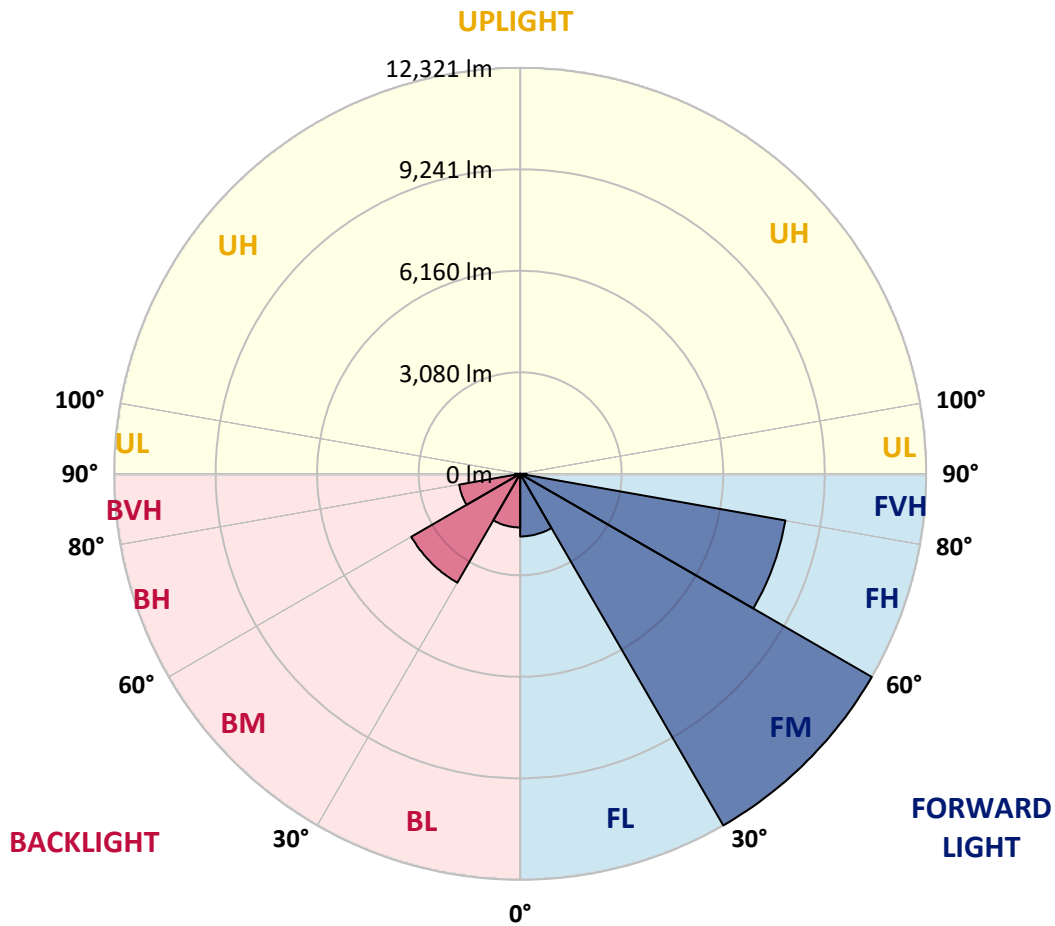
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1899.9	6.3			
FM (30°-60°)	12320.8	41.0			
FH (60°-80°)	8172.8	27.2			G4/12000
FVH (80°-90°)	196.7	0.7			G2/225
BL (0°-30°)	1628.5	5.4	B3/2500		
BM (30°-60°)	3815.7	12.7	B3/5000		
BH (60°-80°)	1881.3	6.3	B3/2500		G3/2500
BVH (80°-90°)	150.3	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-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7
2.5°	3300.0	3318.9	3314.2	3306.3	3304.7	3307.9	3312.6	3317.3	3315.8	3323.7	3336.3
5°	3290.5	3309.4	3307.9	3307.9	3314.2	3326.8	3334.7	3342.6	3334.7	3344.2	3361.6
7.5°	3296.8	3311.0	3317.3	3323.7	3339.5	3363.2	3382.1	3399.5	3390.0	3401.1	3423.2
10°	3377.4	3388.4	3394.7	3394.7	3405.8	3432.7	3451.6	3483.2	3475.3	3492.7	3521.1
12.5°	3524.3	3535.3	3535.3	3529.0	3536.9	3554.3	3560.6	3595.4	3581.1	3609.6	3638.0
15°	3704.4	3726.5	3709.1	3698.0	3701.2	3718.6	3717.0	3743.9	3729.6	3753.3	3778.6
17.5°	3903.4	3931.8	3903.4	3901.8	3895.5	3914.5	3916.0	3939.7	3914.5	3931.8	3949.2
20°	4138.8	4178.3	4154.6	4162.5	4148.3	4156.2	4164.1	4198.8	4159.3	4172.0	4167.2
22.5°	4470.5	4517.9	4492.6	4522.6	4513.2	4506.8	4505.3	4566.9	4505.3	4510.0	4464.2
25°	4953.9	5010.8	4966.5	5007.6	5007.6	5028.1	5051.8	5130.8	5028.1	4998.1	4879.6
27.5°	5667.9	5724.8	5637.9	5663.2	5655.3	5705.8	5680.6	5876.4	5765.9	5716.9	5478.4
30°	6527.3	6628.4	6464.1	6457.8	6449.9	6530.4	6566.8	6696.3	6584.1	6535.2	6247.7
32.5°	7456.1	7562.0	7366.1	7309.2	7279.2	7328.2	7298.1	7402.4	7325.0	7249.2	6893.7
35°	8438.7	8542.9	8356.5	8246.0	8125.9	8023.2	7915.8	7942.7	7870.0	7754.7	7386.6
37.5°	9367.5	9558.7	9361.2	9242.7	9021.6	8821.0	8520.8	8396.0	8328.1	8222.3	7851.0
40°	10313.8	10422.8	10272.7	10171.6	9931.5	9617.1	9136.9	8873.1	8781.5	8678.8	8364.4
42.5°	11010.4	11114.7	11034.1	10964.6	10776.6	10411.7	9790.9	9460.7	9328.0	9212.7	8945.8
45°	11563.3	11640.7	11590.2	11615.4	11534.9	11181.0	10468.6	10091.0	9953.6	9813.0	9602.9
47.5°	11786.0	11868.2	11948.7	12098.8	12236.2	11975.6	11196.8	10773.5	10628.1	10484.4	10277.4
50°	11760.8	11844.5	12078.3	12397.4	12823.9	12737.0	11964.5	11500.1	11365.8	11201.6	11010.4
52.5°	11558.6	11653.3	11953.5	12484.3	13163.5	13307.3	12746.5	12250.5	12124.1	11928.2	11737.1
55°	11027.8	11084.7	11534.9	12286.8	13244.1	13705.4	13512.6	13049.8	12923.4	12650.1	12441.6
57.5°	10043.6	10125.8	10781.4	11754.4	13041.9	13975.5	14185.6	13890.2	13768.5	13375.2	13157.2
60°	8759.4	8890.5	9640.8	10860.3	12526.9	13973.9	14796.9	14716.4	14615.3	14089.2	13861.7
62.5°	7306.0	7457.7	8179.6	9596.6	11626.5	13577.4	15179.2	15408.3	15356.1	14747.9	14457.3
65°	5611.0	5715.3	6434.1	7961.6	10225.3	12725.9	15223.4	15880.6	15890.1	15248.7	14768.5
67.5°	3736.0	4036.1	4660.1	5974.4	8348.6	11334.2	14834.8	15958.0	16049.6	15420.9	14612.1
70°	1823.0	2217.9	2829.2	3882.9	5974.4	9200.1	13819.1	15323.0	15526.7	14918.6	13680.1
72.5°	756.7	884.6	1217.9	1916.2	3429.5	6208.2	11778.1	13601.1	13978.6	13218.8	11501.7
75°	510.2	552.9	696.6	982.6	1562.3	3061.4	8494.0	10141.6	10749.8	9983.6	8160.7
77.5°	393.3	420.2	507.1	687.2	928.9	1157.9	4546.3	6111.8	6426.2	5949.1	4246.2
80°	309.6	330.2	379.1	500.8	658.7	619.2	1549.7	2769.2	2950.9	2475.4	1364.8
82.5°	268.5	276.4	271.7	339.6	437.6	361.7	508.7	1022.1	1127.9	818.3	445.5
85°	194.3	216.4	225.9	210.1	232.2	183.2	208.5	361.7	398.1	355.4	251.2
87.5°	79.0	116.9	143.8	135.9	85.3	52.1	64.8	105.8	121.6	132.7	82.1
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°	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7	3334.7
2.5°	3337.9	3348.9	3356.8	3366.3	3372.6	3382.1	3401.1	3412.1	3413.7	3421.6	3420.0
5°	3367.9	3383.7	3401.1	3426.3	3454.8	3478.5	3514.8	3540.1	3549.6	3557.5	3555.9
7.5°	3432.7	3454.8	3486.4	3530.6	3571.7	3603.3	3647.5	3677.5	3707.5	3718.6	3720.2
10°	3529.0	3560.6	3606.4	3666.5	3710.7	3751.8	3797.6	3822.8	3852.9	3865.5	3871.8
12.5°	3649.1	3682.2	3742.3	3826.0	3867.1	3895.5	3911.3	3905.0	3911.3	3922.4	3925.5
15°	3786.5	3822.8	3890.8	3980.8	4009.2	3984.0	3949.2	3917.6	3912.9	3916.0	3927.1
17.5°	3949.2	3976.1	4055.1	4130.9	4110.3	4006.1	3930.3	3879.7	3854.4	3846.5	3857.6
20°	4176.7	4176.7	4241.5	4288.8	4151.4	3974.5	3856.0	3773.9	3721.7	3699.6	3694.9
22.5°	4453.1	4427.9	4468.9	4435.8	4143.5	3886.0	3721.7	3579.6	3500.6	3469.0	3464.3
25°	4803.8	4773.8	4762.8	4557.4	4086.6	3745.4	3478.5	3306.3	3236.8	3219.4	3222.6
27.5°	5333.0	5257.2	5113.4	4623.7	3982.4	3524.3	3194.1	3034.6	2995.1	2996.7	3001.4
30°	6037.6	5885.9	5533.6	4634.8	3811.8	3211.5	2903.5	2789.7	2770.8	2778.7	2805.5
32.5°	6690.0	6546.2	5963.3	4584.2	3549.6	2905.0	2642.8	2567.0	2538.6	2548.0	2560.7
35°	7201.8	7162.3	6361.4	4513.2	3227.3	2617.5	2409.0	2344.3	2289.0	2276.3	2285.8
37.5°	7685.2	7669.4	6660.0	4413.6	2908.2	2413.8	2221.0	2135.7	2055.2	2010.9	2012.5
40°	8215.9	8200.1	6855.8	4260.4	2625.4	2236.8	2052.0	1939.9	1840.3	1759.8	1767.7
42.5°	8813.1	8719.9	6949.0	4040.8	2385.3	2086.8	1914.6	1762.9	1631.8	1557.6	1562.3
45°	9465.5	9255.4	6947.5	3761.2	2183.1	1949.3	1767.7	1552.8	1431.2	1361.7	1358.5
47.5°	10157.4	9767.2	6862.2	3451.6	1987.2	1797.7	1540.2	1375.9	1295.3	1252.7	1243.2
50°	10871.4	10245.8	6716.8	3096.2	1786.6	1625.5	1398.0	1285.9	1224.3	1184.8	1170.5
52.5°	11542.8	10680.3	6541.5	2693.4	1582.8	1458.0	1334.8	1248.0	1183.2	1139.0	1120.0
55°	12166.7	11054.6	6293.5	2281.1	1417.0	1345.9	1304.8	1232.2	1157.9	1105.8	1085.2
57.5°	12721.2	11297.9	5865.4	1894.0	1298.5	1268.5	1273.2	1205.3	1120.0	1075.8	1047.3
60°	13182.5	11476.4	5231.9	1535.5	1202.1	1192.7	1224.3	1154.8	1055.2	1004.7	982.6
62.5°	13458.9	11473.3	4454.7	1257.4	1120.0	1123.2	1159.5	1091.6	990.5	943.1	928.9
65°	13435.2	11192.1	3601.7	1075.8	1041.0	1044.2	1091.6	1022.1	936.8	908.3	906.7
67.5°	12959.7	10506.5	2762.9	957.3	954.1	968.3	1023.6	974.7	903.6	900.4	905.2
70°	11672.3	9083.2	1990.4	862.5	864.1	884.6	957.3	944.7	886.2	892.5	890.9
72.5°	9359.6	6925.3	1336.4	763.0	764.6	797.7	894.1	921.0	868.8	952.6	965.2
75°	6233.4	4318.9	859.3	657.1	658.7	701.4	838.8	875.1	821.4	949.4	957.3
77.5°	2995.1	1941.4	622.4	552.9	552.9	592.4	725.1	783.5	699.8	737.7	676.1
80°	1034.7	729.8	489.7	445.5	436.0	462.8	611.3	679.3	603.4	556.0	521.3
82.5°	407.6	379.1	393.3	346.0	314.4	331.7	475.5	560.8	443.9	401.2	399.7
85°	233.8	246.4	278.0	229.1	181.7	203.8	349.1	402.8	334.9	295.4	301.7
87.5°	63.2	86.9	128.0	118.5	82.1	86.9	165.9	222.7	192.7	148.5	153.2
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)