

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: P883479

Luminaire Tested: **NAV-SB3D-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883479
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-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 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: 26725 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

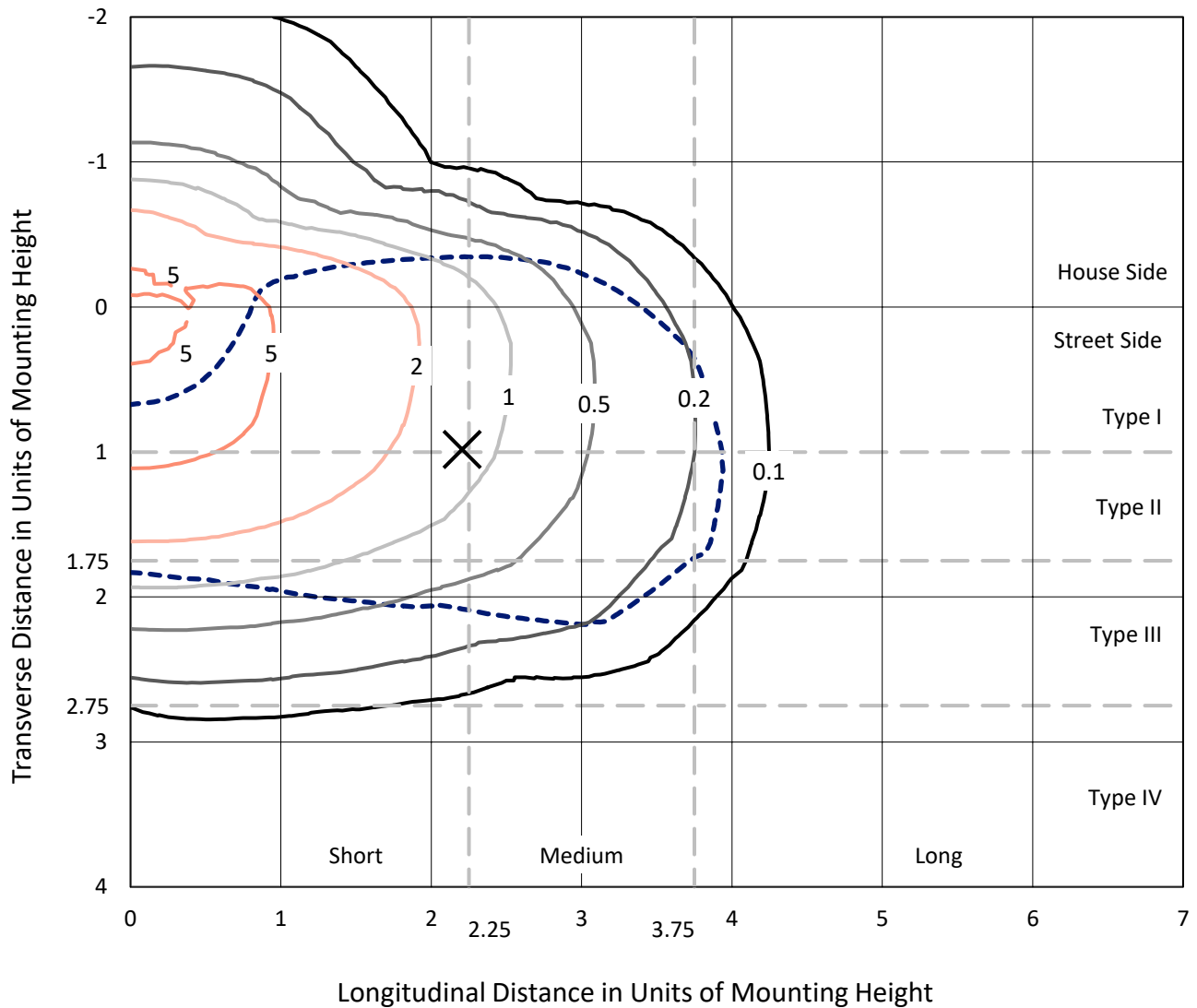
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

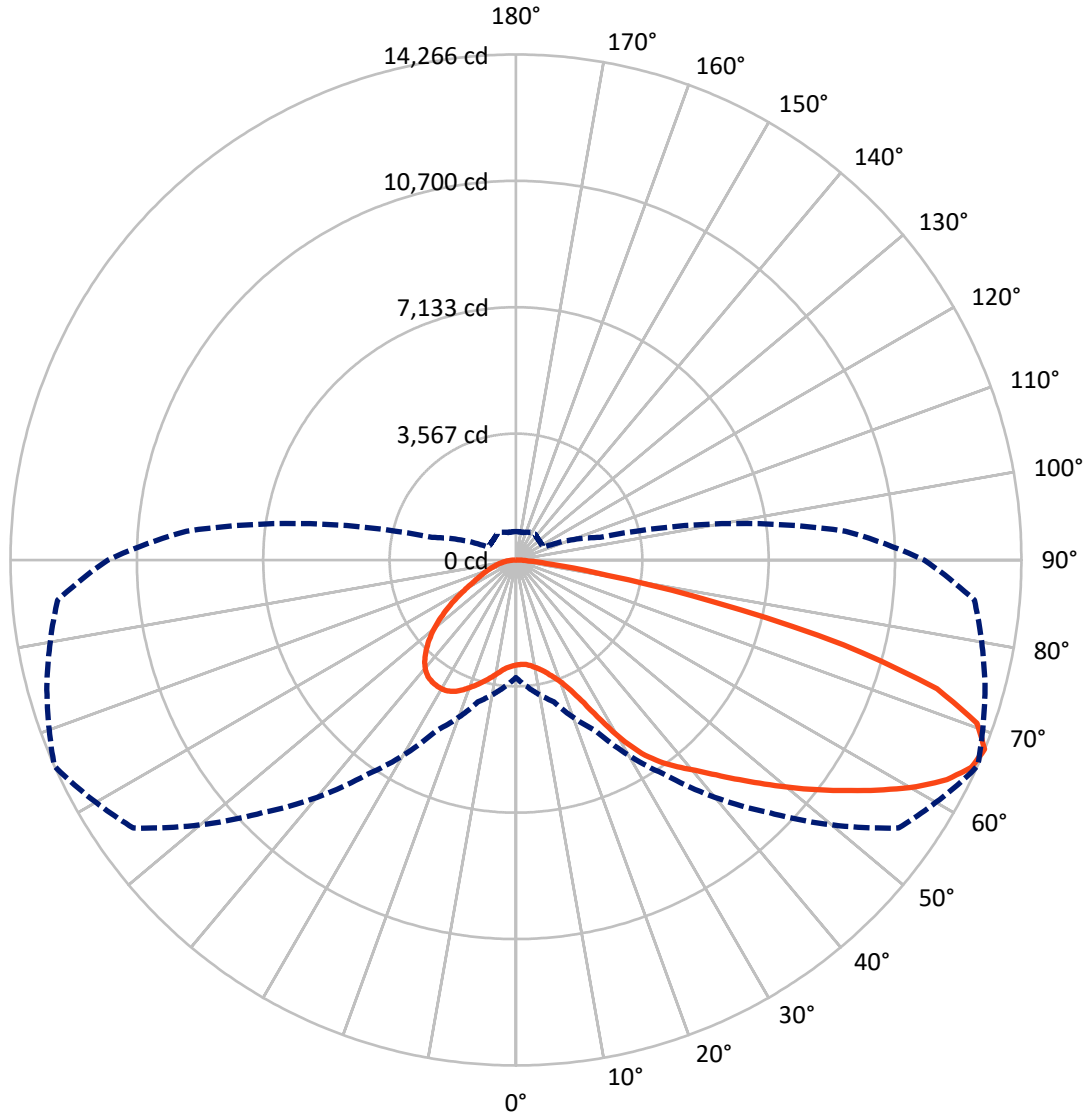
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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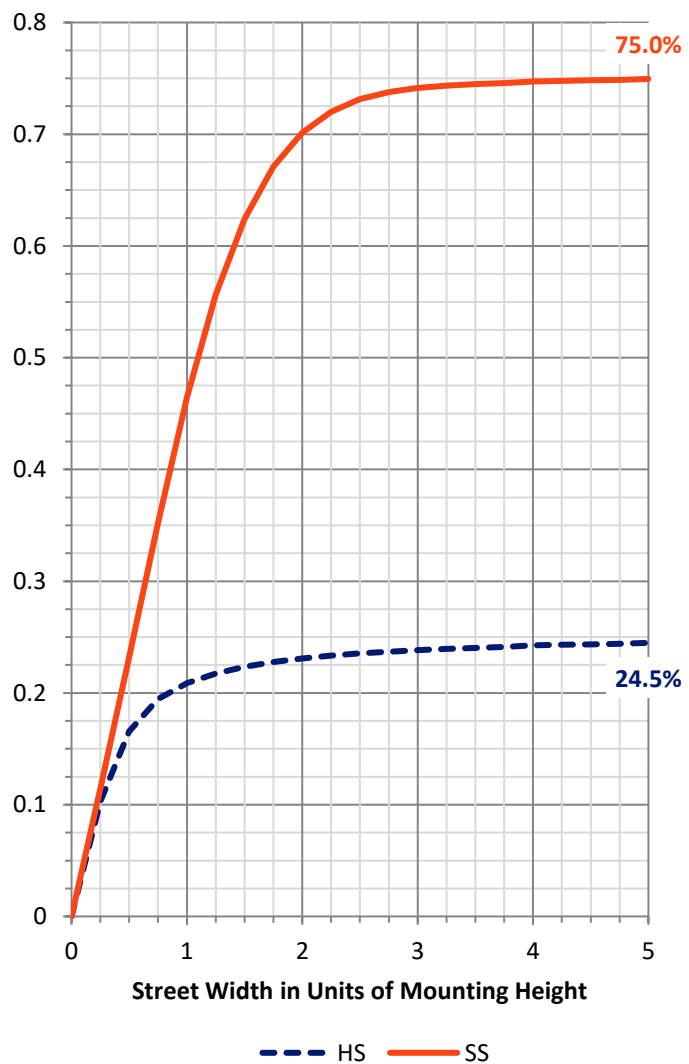
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6645.1	0.0	6645.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	20079.9	0.0	20079.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	26725.0	0.0	26725.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.9	1.1
10°-20°	971.0	3.6
20°-30°	1871.5	7.0
30°-40°	3281.4	12.3
40°-50°	4878.3	18.3
50°-60°	6183.7	23.1
60°-70°	6050.6	22.6
70°-80°	2886.2	10.8
80°-90°	308.5	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°	26725.0	100.0
0°-180°	26725.0	100.0

Coefficient of Utilization



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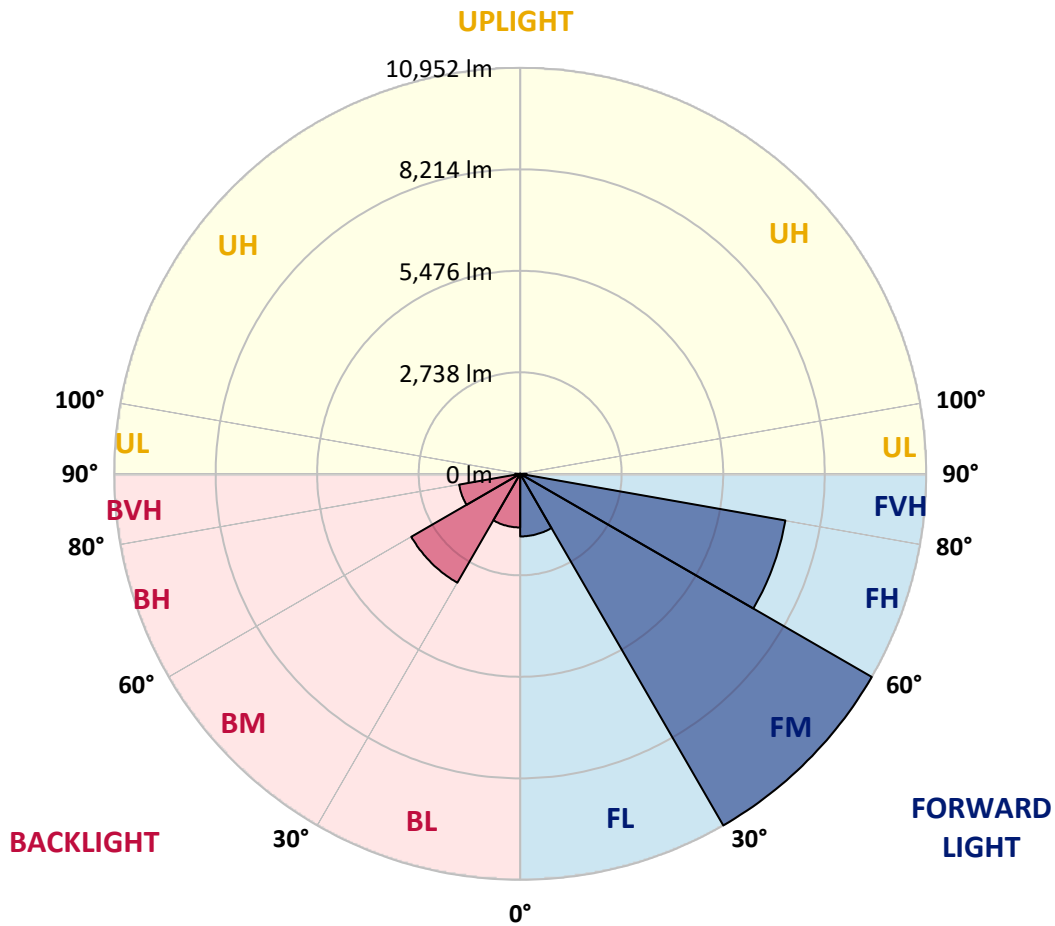
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1688.8	6.3			
FM (30°-60°)	10951.7	41.0			
FH (60°-80°)	7264.6	27.2			G3/7500
FVH (80°-90°)	174.9	0.7			G2/225
BL (0°-30°)	1447.5	5.4	B3/2500		
BM (30°-60°)	3391.7	12.7	B3/5000		
BH (60°-80°)	1672.2	6.3	B3/2500		G3/2500
BVH (80°-90°)	133.6	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2
2.5°	2933.3	2950.1	2945.9	2938.9	2937.5	2940.3	2944.5	2948.7	2947.3	2954.3	2965.6
5°	2924.8	2941.7	2940.3	2940.3	2945.9	2957.1	2964.2	2971.2	2964.2	2972.6	2988.0
7.5°	2930.5	2943.1	2948.7	2954.3	2968.4	2989.4	3006.3	3021.7	3013.3	3023.1	3042.8
10°	3002.1	3011.9	3017.5	3017.5	3027.3	3051.2	3068.1	3096.1	3089.1	3104.6	3129.8
12.5°	3132.7	3142.5	3142.5	3136.9	3143.9	3159.3	3164.9	3195.8	3183.2	3208.5	3233.8
15°	3292.7	3312.4	3296.9	3287.1	3289.9	3305.4	3304.0	3327.8	3315.2	3336.3	3358.7
17.5°	3469.6	3494.9	3469.6	3468.2	3462.6	3479.5	3480.9	3501.9	3479.5	3494.9	3510.4
20°	3678.9	3714.0	3692.9	3699.9	3687.3	3694.3	3701.3	3732.2	3697.1	3708.4	3704.1
22.5°	3973.7	4015.9	3993.4	4020.1	4011.6	4006.0	4004.6	4059.4	4004.6	4008.8	3968.1
25°	4403.4	4454.0	4414.6	4451.1	4451.1	4469.4	4490.5	4560.7	4469.4	4442.7	4337.4
27.5°	5038.1	5088.6	5011.4	5033.9	5026.8	5071.8	5049.3	5223.4	5125.1	5081.6	4869.6
30°	5801.9	5891.8	5745.8	5740.2	5733.1	5804.7	5837.0	5952.2	5852.5	5809.0	5553.4
32.5°	6627.6	6721.7	6547.5	6497.0	6470.3	6513.8	6487.2	6579.8	6511.0	6443.6	6127.7
35°	7501.0	7593.6	7427.9	7329.7	7222.9	7131.7	7036.2	7060.1	6995.5	6893.0	6565.8
37.5°	8326.6	8496.5	8321.0	8215.7	8019.1	7840.8	7574.0	7463.0	7402.7	7308.6	6978.6
40°	9167.7	9264.6	9131.2	9041.3	8827.9	8548.5	8121.6	7887.1	7805.7	7714.4	7435.0
42.5°	9786.9	9879.6	9808.0	9746.2	9579.1	9254.7	8702.9	8409.4	8291.5	8189.0	7951.7
45°	10278.4	10347.2	10302.2	10324.7	10253.1	9938.6	9305.3	8969.7	8847.5	8722.6	8535.8
47.5°	10476.3	10549.4	10621.0	10754.4	10876.5	10644.8	9952.6	9576.3	9447.1	9319.3	9135.4
50°	10453.9	10528.3	10736.1	11019.8	11398.9	11321.6	10635.0	10222.2	10102.8	9956.8	9786.9
52.5°	10274.1	10358.4	10625.2	11097.0	11700.8	11828.5	11330.1	10889.2	10776.8	10602.7	10432.8
55°	9802.4	9852.9	10253.1	10921.5	11772.4	12182.4	12011.1	11599.7	11487.3	11244.4	11059.1
57.5°	8927.6	9000.6	9583.3	10448.3	11592.6	12422.5	12609.2	12346.7	12238.6	11888.9	11695.1
60°	7786.0	7902.5	8569.5	9653.5	11134.9	12421.1	13152.7	13081.0	12991.2	12523.6	12321.4
62.5°	6494.2	6629.0	7270.7	8530.2	10334.5	12068.6	13492.5	13696.1	13649.7	13109.1	12850.8
65°	4987.5	5080.2	5719.1	7076.9	9089.0	11311.8	13531.8	14115.9	14124.3	13554.2	13127.4
67.5°	3320.8	3587.6	4142.2	5310.5	7420.9	10074.8	13186.4	14184.7	14266.1	13707.3	12988.4
70°	1620.4	1971.4	2514.8	3451.4	5310.5	8177.8	12283.5	13620.2	13801.4	13260.8	12159.9
72.5°	672.6	786.3	1082.6	1703.2	3048.4	5518.3	10469.3	12089.7	12425.3	11749.9	10223.6
75°	453.5	491.5	619.2	873.4	1388.7	2721.2	7550.1	9014.6	9555.2	8874.2	7253.8
77.5°	349.6	373.5	450.7	610.8	825.6	1029.2	4041.1	5432.6	5712.1	5288.0	3774.3
80°	275.2	293.5	337.0	445.1	585.5	550.4	1377.5	2461.5	2622.9	2200.3	1213.2
82.5°	238.7	245.7	241.5	301.9	388.9	321.5	452.1	908.5	1002.6	727.3	396.0
85°	172.7	192.4	200.8	186.8	206.4	162.9	185.3	321.5	353.8	315.9	223.3
87.5°	70.2	103.9	127.8	120.8	75.8	46.3	57.6	94.1	108.1	117.9	73.0
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°	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2	2964.2
2.5°	2967.0	2976.8	2983.8	2992.2	2997.9	3006.3	3023.1	3033.0	3034.4	3041.4	3040.0
5°	2993.6	3007.7	3023.1	3045.6	3070.9	3091.9	3124.2	3146.7	3155.1	3162.1	3160.7
7.5°	3051.2	3070.9	3099.0	3138.3	3174.8	3202.9	3242.2	3268.9	3295.5	3305.4	3306.8
10°	3136.9	3164.9	3205.7	3259.0	3298.3	3334.9	3375.6	3398.0	3424.7	3435.9	3441.6
12.5°	3243.6	3273.1	3326.4	3400.8	3437.4	3462.6	3476.7	3471.1	3476.7	3486.5	3489.3
15°	3365.7	3398.0	3458.4	3538.5	3563.7	3541.3	3510.4	3482.3	3478.1	3480.9	3490.7
17.5°	3510.4	3534.2	3604.4	3671.8	3653.6	3560.9	3493.5	3448.6	3426.1	3419.1	3428.9
20°	3712.6	3712.6	3770.1	3812.3	3690.1	3532.8	3427.5	3354.5	3308.2	3288.5	3284.3
22.5°	3958.3	3935.8	3972.3	3942.8	3683.1	3454.2	3308.2	3181.8	3111.6	3083.5	3079.3
25°	4270.0	4243.3	4233.5	4051.0	3632.5	3329.2	3091.9	2938.9	2877.1	2861.7	2864.5
27.5°	4740.4	4673.0	4545.2	4109.9	3539.9	3132.7	2839.2	2697.4	2662.3	2663.7	2667.9
30°	5366.7	5231.9	4918.7	4119.8	3388.2	2854.6	2580.8	2479.7	2462.9	2469.9	2493.8
32.5°	5946.6	5818.8	5300.7	4074.8	3155.1	2582.2	2349.1	2281.7	2256.5	2264.9	2276.1
35°	6401.5	6366.4	5654.5	4011.6	2868.7	2326.7	2141.3	2083.8	2034.6	2023.4	2031.8
37.5°	6831.2	6817.1	5919.9	3923.2	2585.0	2145.5	1974.2	1898.4	1826.8	1787.5	1788.9
40°	7303.0	7288.9	6094.0	3787.0	2333.7	1988.3	1824.0	1724.3	1635.8	1564.2	1571.2
42.5°	7833.7	7750.9	6176.8	3591.8	2120.3	1854.9	1701.8	1567.0	1450.5	1384.5	1388.7
45°	8413.7	8226.9	6175.4	3343.3	1940.5	1732.7	1571.2	1380.3	1272.2	1210.4	1207.6
47.5°	9028.7	8681.8	6099.6	3068.1	1766.4	1597.9	1369.0	1223.0	1151.4	1113.5	1105.1
50°	9663.3	9107.3	5970.4	2752.1	1588.1	1444.9	1242.7	1143.0	1088.2	1053.1	1040.5
52.5°	10260.1	9493.4	5814.6	2394.1	1407.0	1296.0	1186.5	1109.3	1051.7	1012.4	995.5
55°	10814.7	9826.2	5594.1	2027.6	1259.5	1196.3	1159.8	1095.2	1029.2	982.9	964.6
57.5°	11307.6	10042.5	5213.6	1683.6	1154.2	1127.5	1131.7	1071.4	995.5	956.2	930.9
60°	11717.6	10201.1	4650.5	1364.8	1068.6	1060.1	1088.2	1026.4	938.0	893.0	873.4
62.5°	11963.3	10198.3	3959.7	1117.7	995.5	998.3	1030.6	970.3	880.4	838.3	825.6
65°	11942.3	9948.4	3201.5	956.2	925.3	928.1	970.3	908.5	832.7	807.4	806.0
67.5°	11519.6	9339.0	2455.9	850.9	848.1	860.7	909.9	866.4	803.2	800.4	804.6
70°	10375.2	8073.8	1769.2	766.7	768.1	786.3	850.9	839.7	787.7	793.3	791.9
72.5°	8319.6	6155.8	1187.9	678.2	679.6	709.1	794.7	818.6	772.3	846.7	857.9
75°	5540.8	3838.9	763.9	584.1	585.5	623.4	745.6	777.9	730.2	843.9	850.9
77.5°	2662.3	1725.7	553.2	491.5	491.5	526.6	644.5	696.5	622.0	655.7	601.0
80°	919.7	648.7	435.3	396.0	387.5	411.4	543.4	603.8	536.4	494.3	463.4
82.5°	362.3	337.0	349.6	307.5	279.4	294.9	422.6	498.5	394.6	356.7	355.2
85°	207.8	219.0	247.1	203.6	161.5	181.1	310.3	358.1	297.7	262.6	268.2
87.5°	56.2	77.2	113.7	105.3	73.0	77.2	147.4	198.0	171.3	132.0	136.2
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)