

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: P968419

Luminaire Tested: **NAV-SB5B-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968419
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-SB5B-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26895 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 182.7
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



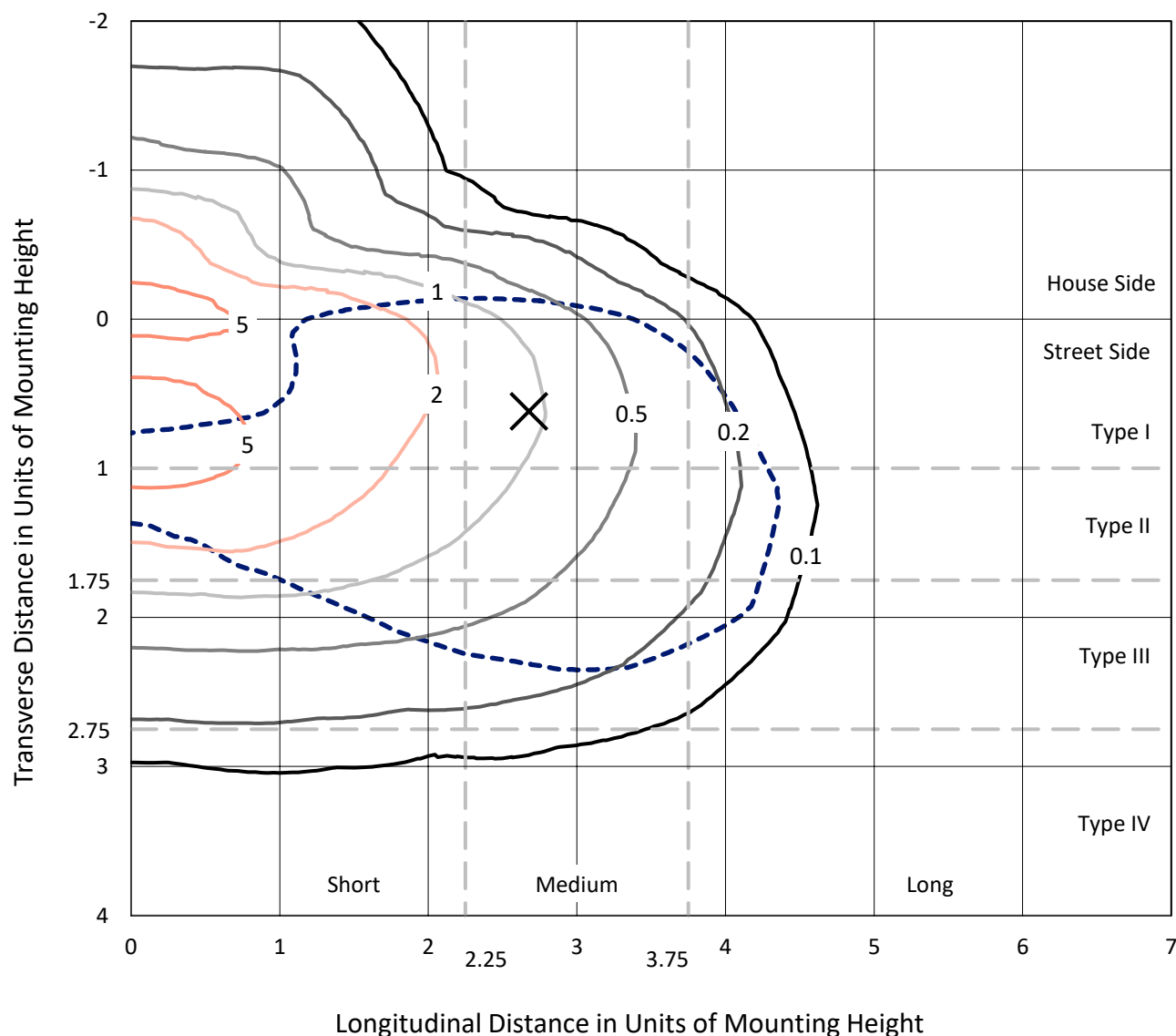
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

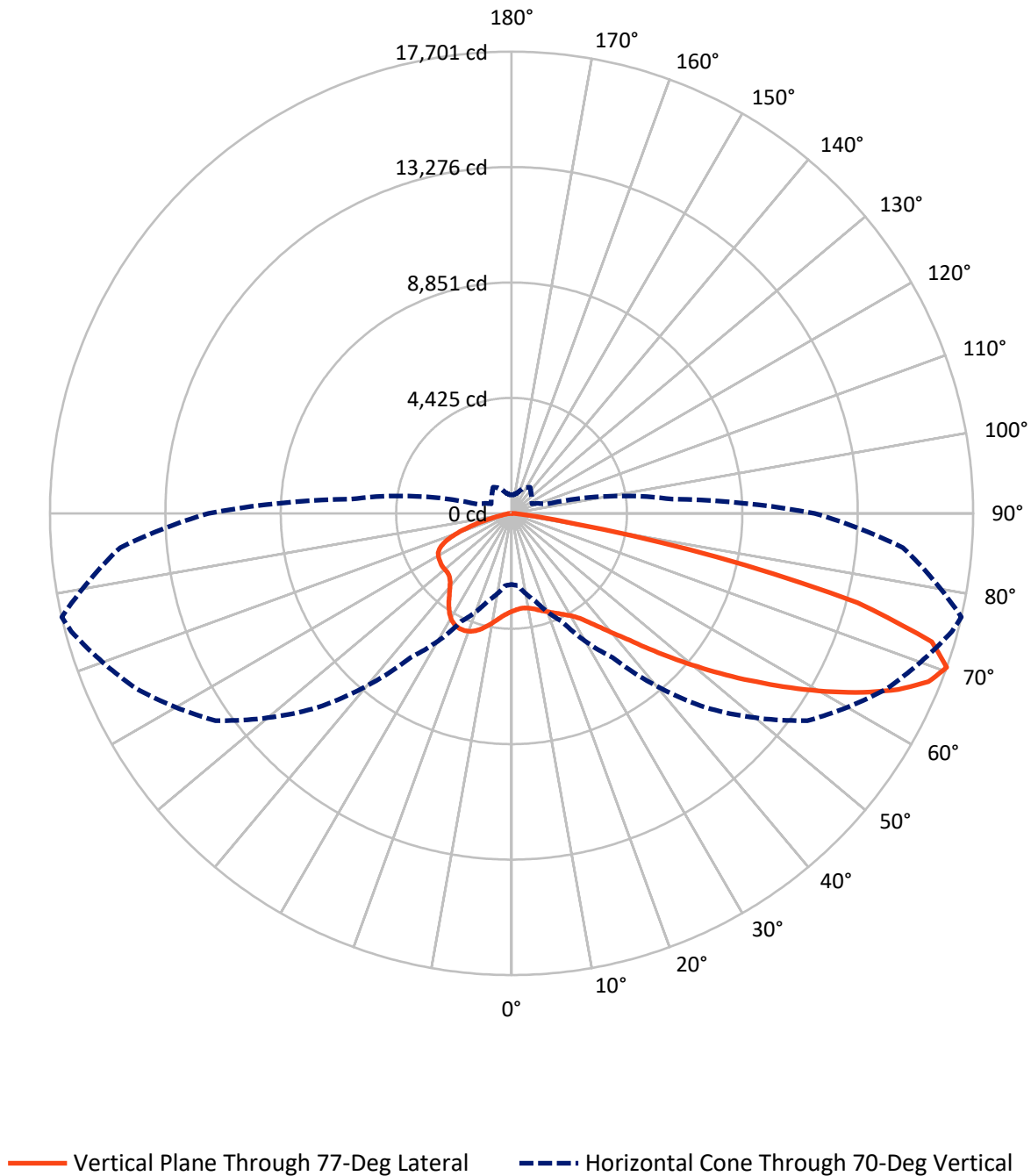


Based on 25 foot mounting height. Maximum calculated value = 7.1 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5889.6	0.0	5889.6
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	21005.4	0.0	21005.4
	% Fixture	78.1	0.0	78.1
Total	Lumens	26895.0	0.0	26895.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.8	1.3
10°-20°	1032.8	3.8
20°-30°	1766.2	6.6
30°-40°	2840.2	10.6
40°-50°	4434.4	16.5
50°-60°	5923.3	22.0
60°-70°	6313.3	23.5
70°-80°	3886.4	14.5
80°-90°	340.6	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°	26895.0	100.0
0°-180°	26895.0	100.0

Coefficient of Utilization



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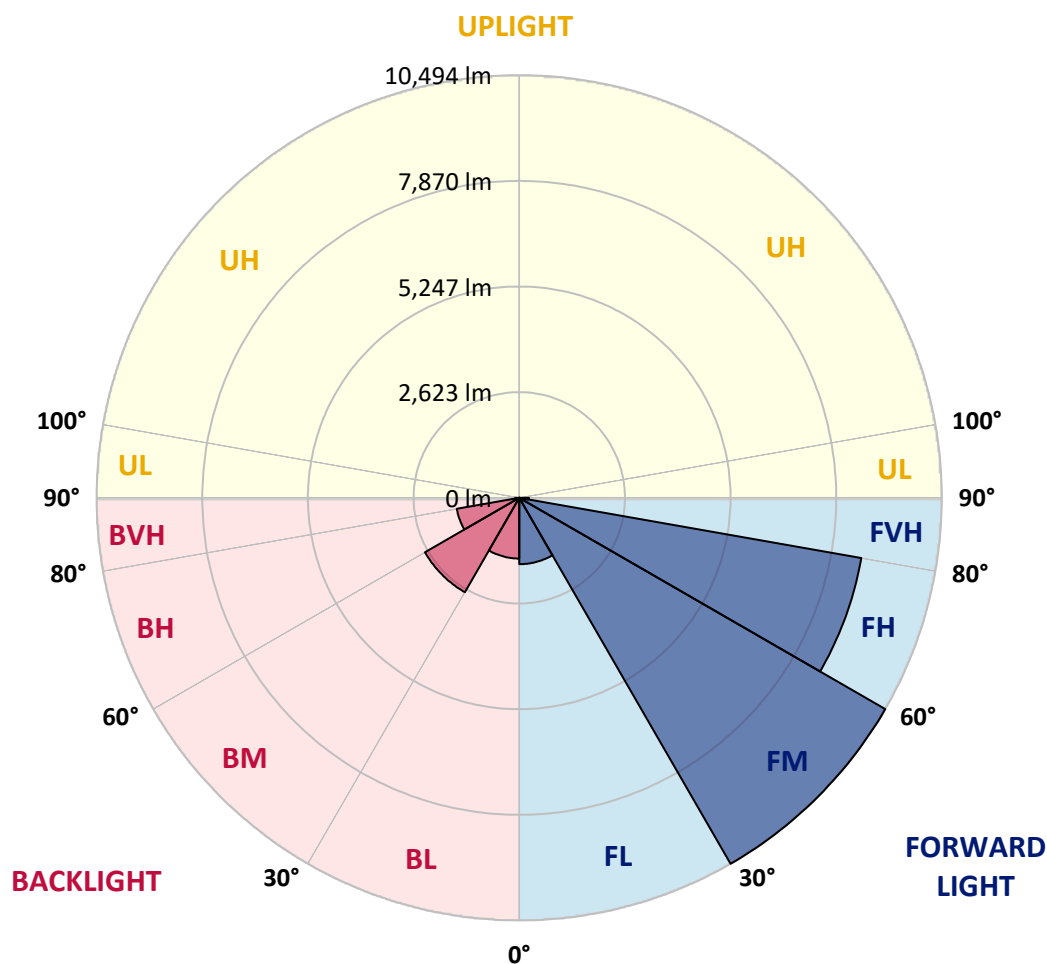
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1647.7	6.1			
FM	(30°-60°)	10493.8	39.0			
FH	(60°-80°)	8625.7	32.1			G4/12000
FVH	(80°-90°)	238.1	0.9			G3/500
BL	(0°-30°)	1509.1	5.6	B3/2500		
BM	(30°-60°)	2704.0	10.1	B3/5000		
BH	(60°-80°)	1574.0	5.9	B3/2500		G3/2500
BVH	(80°-90°)	102.4	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°	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1
2.5°	3458.7	3457.3	3475.3	3480.7	3513.8	3537.2	3581.2	3628.1	3688.8	3695.6	3732.8
5°	3259.0	3259.0	3279.6	3301.6	3344.4	3391.2	3458.7	3539.9	3644.7	3661.2	3753.4
7.5°	3089.6	3100.6	3118.5	3161.2	3210.8	3278.3	3381.6	3497.3	3635.1	3661.2	3809.9
10°	2953.2	2965.6	2987.7	3022.1	3096.4	3190.1	3325.1	3473.8	3658.4	3699.7	3892.6
12.5°	2910.5	2922.9	2935.3	2961.4	3030.3	3140.5	3301.6	3484.9	3714.9	3756.2	4005.5
15°	3009.7	3024.8	3015.1	3008.3	3044.1	3144.7	3312.7	3524.8	3785.1	3844.4	4144.7
17.5°	3238.3	3243.8	3221.8	3157.0	3151.6	3205.3	3365.1	3579.9	3873.3	3938.0	4285.1
20°	3607.5	3597.9	3552.3	3424.2	3351.2	3340.3	3454.6	3662.5	3964.2	4033.1	4436.7
22.5°	4108.8	4097.8	4006.9	3804.4	3641.9	3534.5	3584.0	3770.0	4066.2	4143.3	4584.1
25°	4734.2	4719.0	4585.4	4309.9	4057.9	3792.1	3760.3	3911.9	4191.5	4263.1	4738.4
27.5°	5464.3	5451.9	5307.2	4943.6	4579.9	4144.7	3979.4	4078.6	4322.3	4403.6	4911.9
30°	6249.3	6285.2	6028.9	5637.8	5177.7	4604.7	4274.1	4283.8	4491.8	4564.7	5122.6
32.5°	7172.2	7234.2	6925.7	6429.8	5801.7	5104.7	4646.0	4570.3	4738.4	4798.9	5388.4
35°	8086.8	8157.1	7900.9	7352.6	6629.5	5694.3	5034.5	4899.5	5066.2	5132.3	5741.1
37.5°	8877.5	8971.1	8838.9	8362.4	7515.2	6405.0	5541.4	5286.5	5469.7	5552.4	6214.9
40°	9501.4	9644.7	9635.1	9337.5	8559.3	7267.2	6184.6	5764.5	5971.1	6060.6	6789.3
42.5°	10008.3	10132.3	10239.8	10224.6	9648.8	8246.6	6940.8	6385.7	6542.8	6646.1	7435.4
45°	10358.2	10490.5	10721.8	10971.2	10697.0	9294.8	7807.2	7122.6	7265.9	7421.5	8205.3
47.5°	10670.9	10821.0	11121.2	11516.6	11586.9	10347.2	8756.3	7980.8	8111.6	8272.8	8978.1
50°	10698.4	10827.9	11293.4	11854.1	12219.1	11358.2	9775.5	8943.6	9066.2	9238.3	9805.9
52.5°	10033.1	10237.0	11049.7	11844.5	12509.7	12204.0	10787.9	9945.0	10082.7	10289.4	10662.7
55°	7787.9	8086.8	10334.8	11475.3	12406.4	12750.8	11750.8	11009.7	11186.0	11402.3	11524.9
57.5°	6708.0	6838.9	8203.9	10803.1	11935.3	12892.7	12563.4	12085.5	12369.3	12606.2	12436.7
60°	6028.9	6137.8	6945.0	9757.7	11315.5	12668.2	13191.5	13088.2	13578.6	13861.0	13369.3
62.5°	5301.7	5405.0	6139.1	8147.4	10522.1	12294.9	13588.2	14013.9	14818.3	15126.8	14248.0
65°	4579.9	4668.1	5371.9	6845.8	9513.8	11921.6	13793.5	14814.1	15965.7	16285.2	14978.1
67.5°	3775.5	3848.5	4513.8	5775.6	8287.9	11410.5	13895.4	15443.7	16964.4	17238.4	15338.9
70°	2724.6	2781.0	3468.4	4567.5	6749.3	10531.8	13854.1	15890.0	17482.2	17701.2	15066.3
72.5°	1287.9	1338.9	2146.0	2965.6	4767.3	8821.0	13018.0	15535.9	16956.1	16847.2	13396.7
75°	687.4	731.4	1232.8	1626.8	2517.9	6046.9	10652.9	13383.0	14238.4	13709.5	9900.9
77.5°	465.6	500.0	763.1	976.6	1150.2	2870.5	6847.2	9265.9	8914.6	8041.4	4958.7
80°	369.1	405.0	625.4	661.1	556.5	1037.2	2829.2	4289.3	3081.3	2464.2	1410.5
82.5°	283.7	323.7	526.1	479.4	303.0	425.6	823.7	1356.8	789.2	600.5	341.6
85°	173.5	216.3	413.2	305.8	170.8	194.2	279.6	377.4	241.1	201.1	122.6
87.5°	88.1	123.9	209.4	111.5	77.2	45.4	74.4	74.4	63.3	55.1	31.7
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°	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1	3752.1
2.5°	3765.8	3793.4	3840.3	3884.3	3918.8	3951.8	3984.9	4002.8	4008.3	4030.3	4042.7
5°	3809.9	3860.9	3951.8	4037.3	4091.0	4124.0	4147.5	4161.2	4164.0	4170.8	4181.9
7.5°	3891.2	3972.5	4099.2	4184.6	4224.5	4221.8	4212.1	4177.7	4164.0	4151.6	4154.3
10°	4005.5	4113.0	4268.6	4327.9	4303.1	4236.9	4151.6	4051.0	4004.2	3958.8	3944.9
12.5°	4147.5	4283.8	4436.7	4433.9	4311.4	4141.9	3943.6	3789.3	3691.5	3621.2	3604.7
15°	4319.6	4476.6	4593.7	4500.1	4231.4	3927.0	3636.4	3435.3	3347.1	3270.0	3261.8
17.5°	4497.3	4665.3	4719.0	4479.4	4030.3	3608.8	3279.6	3121.2	3034.4	2993.1	3005.5
20°	4670.8	4837.5	4793.4	4361.0	3724.5	3247.9	2954.6	2867.7	2849.9	2859.5	2855.3
22.5°	4854.0	5002.8	4808.6	4132.3	3334.7	2878.8	2717.7	2720.5	2760.3	2789.2	2796.2
25°	5041.4	5141.9	4768.6	3801.7	2916.0	2607.5	2567.5	2611.6	2690.1	2746.6	2761.8
27.5°	5221.8	5265.8	4681.9	3392.5	2556.5	2413.3	2420.1	2511.0	2629.5	2708.0	2727.3
30°	5425.6	5376.0	4515.2	2932.5	2307.2	2246.6	2304.4	2410.5	2529.0	2599.2	2615.7
32.5°	5655.6	5471.1	4250.7	2506.9	2130.9	2112.9	2208.1	2276.8	2329.2	2349.9	2360.9
35°	5942.2	5604.7	3911.9	2208.1	1972.5	2015.2	2106.1	2071.6	2051.0	2040.0	2051.0
37.5°	6314.1	5785.2	3515.1	2013.8	1844.4	1944.9	1982.1	1874.6	1793.4	1753.5	1763.1
40°	6761.7	6049.7	3133.6	1863.7	1763.1	1884.4	1819.6	1690.1	1586.8	1530.3	1534.4
42.5°	7259.0	6326.5	2812.7	1750.7	1717.7	1834.7	1699.8	1545.5	1378.8	1360.9	1378.8
45°	7781.1	6611.7	2593.7	1663.9	1695.6	1792.0	1630.9	1381.6	1263.1	1336.1	1374.6
47.5°	8303.1	6873.3	2461.4	1599.2	1684.6	1743.8	1570.3	1290.7	1206.6	1312.7	1362.2
50°	8884.4	7107.5	2402.2	1552.4	1672.2	1724.6	1479.4	1267.2	1147.4	1217.6	1270.0
52.5°	9461.5	7289.3	2358.1	1505.5	1654.2	1709.4	1435.3	1239.6	1075.7	1079.9	1108.8
55°	10037.3	7407.8	2309.9	1443.5	1614.4	1676.3	1431.1	1209.4	1022.0	1002.8	1016.5
57.5°	10651.6	7475.2	2250.7	1374.6	1545.5	1592.3	1427.0	1185.9	1005.5	973.9	978.0
60°	11276.9	7574.4	2173.6	1290.7	1453.1	1491.8	1417.4	1177.7	995.9	942.2	946.3
62.5°	11837.5	7608.9	2081.3	1210.7	1334.8	1392.6	1396.7	1170.9	969.8	877.4	877.4
65°	12205.3	7460.2	1920.1	1119.8	1206.6	1290.7	1356.8	1147.4	922.9	830.6	830.6
67.5°	12190.2	7035.9	1668.1	1002.8	1082.6	1177.7	1298.9	1107.4	866.4	772.7	776.8
70°	11622.7	6198.4	1348.5	866.4	946.3	1056.5	1224.6	1048.3	798.9	709.4	717.6
72.5°	9968.4	4851.3	979.4	706.6	787.9	931.1	1128.1	976.6	730.0	652.9	648.7
75°	7121.3	3070.3	663.9	542.7	612.9	789.2	1008.3	892.6	666.7	655.7	618.5
77.5°	3637.7	1467.0	439.4	396.7	427.0	622.6	847.2	797.6	676.3	541.3	482.1
80°	1183.2	541.3	276.9	270.0	283.7	414.6	655.7	654.3	512.4	367.8	325.0
82.5°	377.4	232.8	180.4	173.5	166.7	260.3	457.3	517.9	345.7	232.8	231.4
85°	150.2	139.1	106.1	97.8	70.2	122.6	239.6	344.4	257.6	168.0	172.2
87.5°	55.1	55.1	28.9	20.7	15.2	41.3	64.8	103.3	147.4	86.8	85.4
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)