

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: P967675

Luminaire Tested: **NAV-SB5A-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967675
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-SB5A-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22116.4 lumens
Efficiency: N/A
Efficacy: 156.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

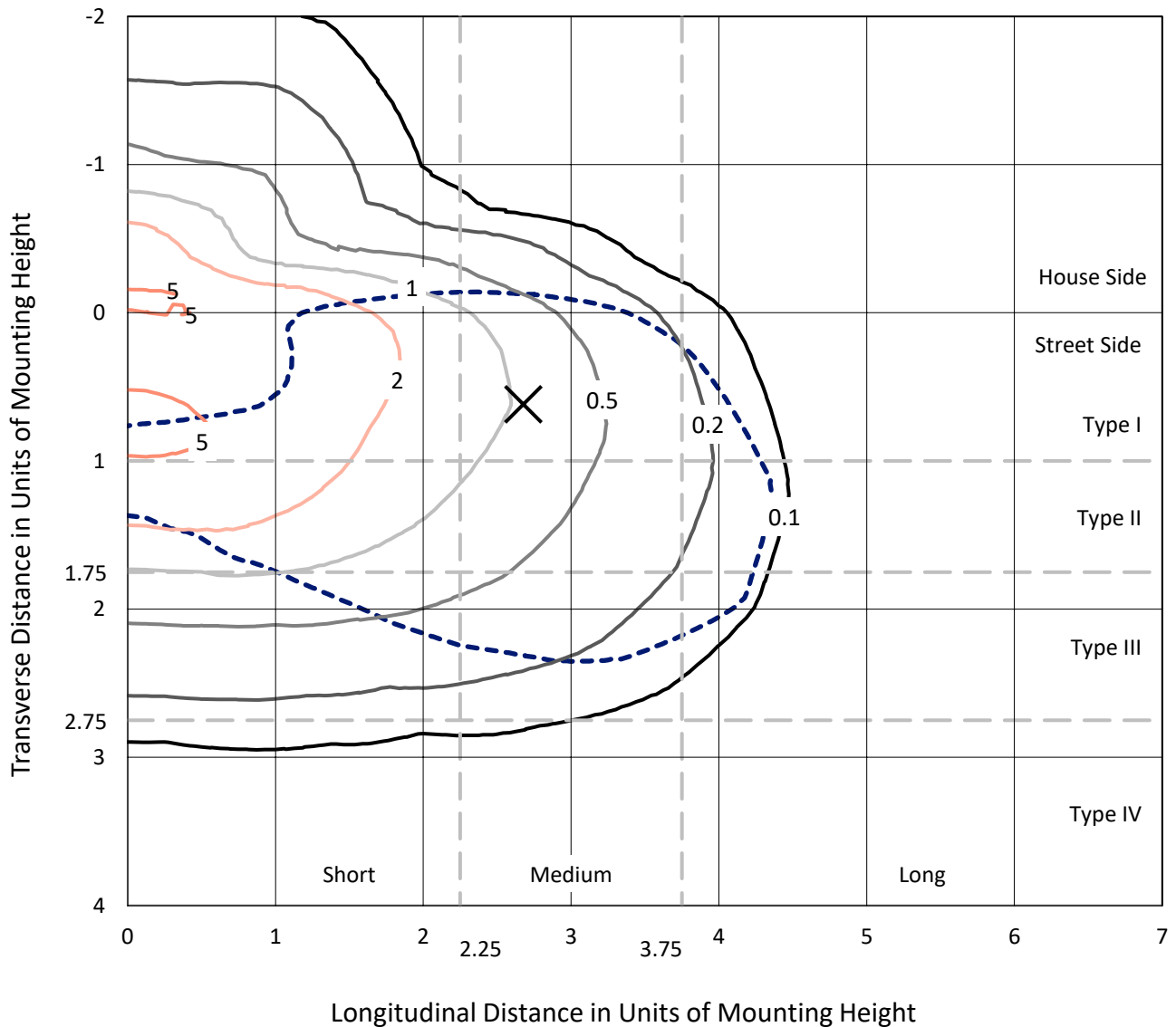
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

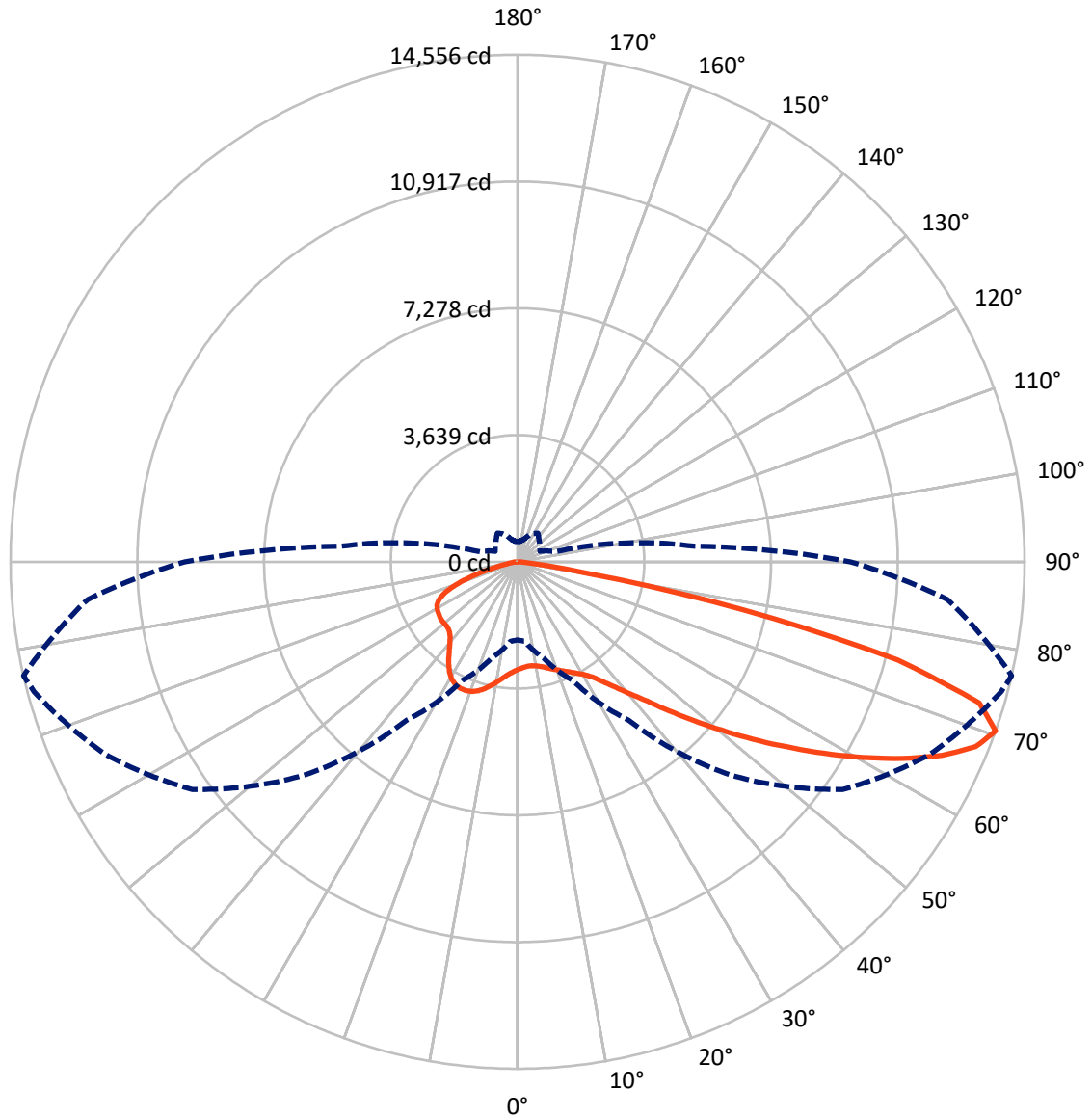
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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
House Side	Lumens	4843.2	0.0	4843.2
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	17273.3	0.0	17273.3
	% Fixture	78.1	0.0	78.1
Total	Lumens	22116.4	0.0	22116.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.3	1.3
10°-20°	849.3	3.8
20°-30°	1452.4	6.6
30°-40°	2335.6	10.6
40°-50°	3646.5	16.5
50°-60°	4870.9	22.0
60°-70°	5191.6	23.5
70°-80°	3195.9	14.5
80°-90°	280.1	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°	22116.4	100.0
0°-180°	22116.4	100.0

Coefficient of Utilization

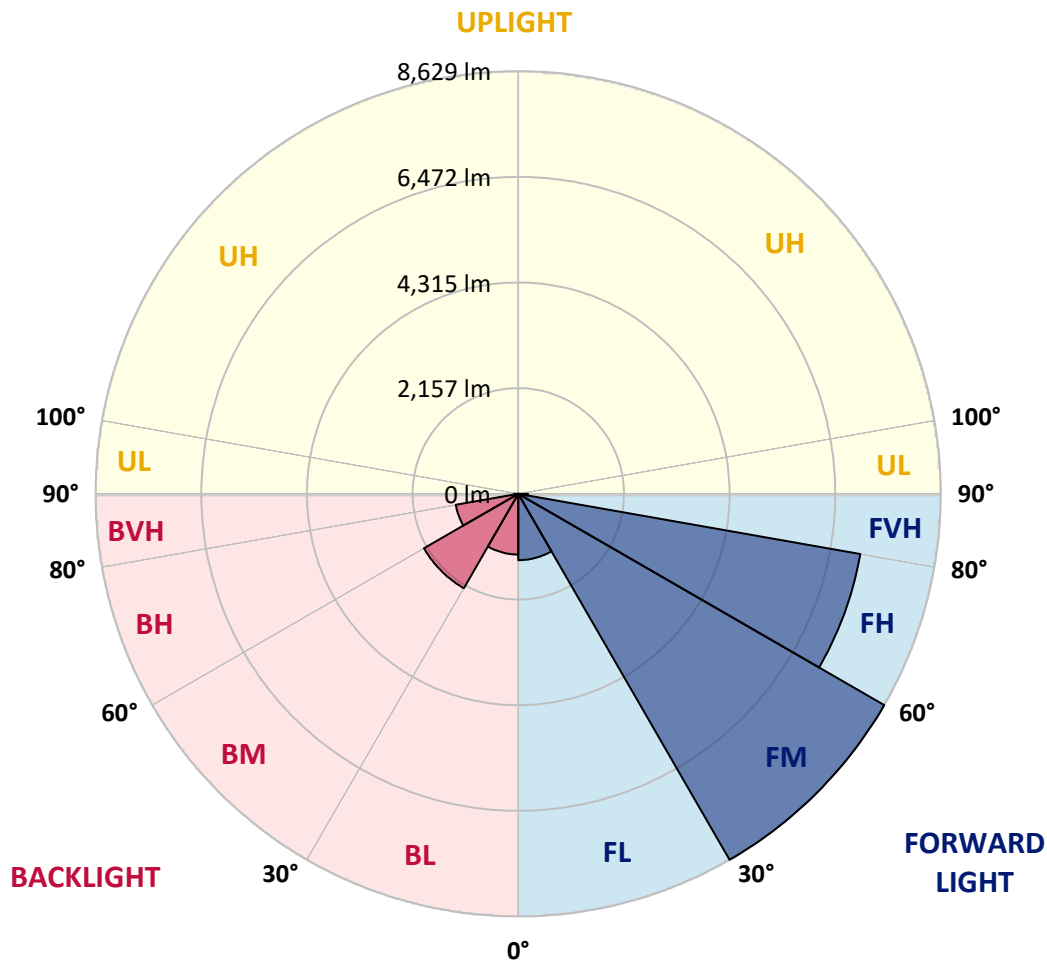


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1355.0	6.1			
FM (30°-60°)	8629.4	39.0			
FH (60°-80°)	7093.1	32.1			G3/7500
FVH (80°-90°)	195.8	0.9			G2/225
BL (0°-30°)	1241.0	5.6	B3/2500		
BM (30°-60°)	2223.6	10.1	B2/2500		
BH (60°-80°)	1294.4	5.9	B3/2500		G3/2500
BVH (80°-90°)	84.2	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5
2.5°	2844.2	2843.0	2857.8	2862.3	2889.5	2908.7	2945.0	2983.5	3033.4	3039.0	3069.6
5°	2680.0	2680.0	2697.0	2715.0	2750.2	2788.7	2844.2	2911.0	2997.1	3010.7	3086.6
7.5°	2540.7	2549.7	2564.4	2599.5	2640.3	2695.7	2780.7	2875.9	2989.2	3010.7	3133.0
10°	2428.5	2438.7	2456.8	2485.1	2546.3	2623.3	2734.3	2856.7	3008.4	3042.4	3201.0
12.5°	2393.4	2403.5	2413.8	2435.3	2491.9	2582.5	2715.0	2865.7	3054.9	3088.8	3293.8
15°	2475.0	2487.4	2479.5	2473.8	2503.3	2586.0	2724.1	2898.6	3112.6	3161.3	3408.2
17.5°	2663.0	2667.5	2649.3	2596.1	2591.6	2635.8	2767.2	2943.9	3185.1	3238.4	3523.7
20°	2966.6	2958.6	2921.2	2815.9	2755.8	2746.8	2840.8	3011.9	3259.9	3316.5	3648.4
22.5°	3378.8	3369.8	3295.0	3128.5	2994.8	2906.5	2947.3	3100.2	3343.7	3407.1	3769.5
25°	3893.1	3880.5	3770.8	3544.1	3336.9	3118.3	3092.2	3216.9	3446.8	3505.7	3896.4
27.5°	4493.4	4483.1	4364.2	4065.3	3766.2	3408.2	3272.3	3353.9	3554.4	3621.2	4039.2
30°	5139.0	5168.5	4957.8	4636.1	4257.7	3786.6	3514.7	3522.6	3693.7	3753.8	4212.4
32.5°	5898.0	5948.9	5695.2	5287.4	4770.9	4197.8	3820.6	3758.3	3896.4	3946.2	4431.1
35°	6650.0	6707.8	6497.1	6046.3	5451.7	4682.5	4140.0	4029.0	4166.0	4220.4	4721.0
37.5°	7300.2	7377.2	7268.5	6876.5	6179.9	5267.0	4556.8	4347.2	4497.9	4565.9	5110.6
40°	7813.3	7931.0	7923.1	7678.5	7038.6	5976.1	5085.7	4740.3	4910.2	4983.9	5583.0
42.5°	8230.1	8332.0	8420.4	8408.0	7934.5	6781.4	5707.6	5251.2	5380.2	5465.2	6114.2
45°	8517.9	8626.6	8816.8	9021.8	8796.4	7643.4	6420.1	5857.2	5974.9	6103.0	6747.5
47.5°	8774.9	8898.4	9145.4	9470.4	9528.2	8508.7	7200.5	6562.8	6670.4	6802.9	7382.9
50°	8797.6	8904.1	9286.9	9748.0	10048.1	9340.1	8038.7	7354.6	7455.3	7596.9	8063.6
52.5°	8250.5	8418.1	9086.4	9740.0	10287.1	10035.6	8871.2	8178.0	8291.3	8461.2	8768.2
55°	6404.2	6650.0	8498.6	9436.5	10202.1	10485.3	9663.0	9053.6	9198.6	9376.4	9477.3
57.5°	5516.2	5623.8	6746.2	8883.7	9814.8	10602.0	10331.3	9938.2	10171.6	10366.3	10227.0
60°	4957.8	5047.3	5711.0	8024.0	9305.1	10417.4	10847.8	10762.8	11166.0	11398.2	10993.8
62.5°	4359.7	4444.7	5048.4	6699.8	8652.6	10110.4	11173.9	11524.0	12185.5	12439.2	11716.6
65°	3766.2	3838.7	4417.4	5629.5	7823.5	9803.4	11342.8	12182.0	13129.0	13391.7	12316.8
67.5°	3104.7	3164.7	3711.8	4749.3	6815.4	9383.2	11426.6	12699.7	13950.1	14175.5	12613.6
70°	2240.4	2286.9	2852.1	3756.0	5550.2	8660.5	11392.6	13066.7	14376.0	14556.1	12389.4
72.5°	1059.0	1101.0	1764.7	2438.7	3920.2	7253.7	10705.0	12775.6	13943.4	13853.9	11016.5
75°	565.2	601.5	1013.7	1337.7	2070.6	4972.5	8760.2	11005.2	11708.6	11273.7	8141.8
77.5°	382.8	411.1	627.5	803.1	945.8	2360.5	5630.6	7619.6	7330.8	6612.7	4077.7
80°	303.6	333.0	514.2	543.7	457.6	852.9	2326.5	3527.2	2533.8	2026.4	1159.9
82.5°	233.3	266.2	432.7	394.2	249.2	350.0	677.3	1115.7	649.0	493.8	281.0
85°	142.7	177.8	339.8	251.4	140.4	159.7	229.9	310.4	198.2	165.3	100.9
87.5°	72.5	102.0	172.2	91.7	63.4	37.4	61.2	61.2	52.1	45.3	26.0
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°	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5	3085.5
2.5°	3096.7	3119.4	3157.9	3194.2	3222.5	3249.7	3276.8	3291.6	3296.1	3314.2	3324.5
5°	3133.0	3174.9	3249.7	3319.9	3364.0	3391.3	3410.5	3421.9	3424.1	3429.8	3438.9
7.5°	3199.8	3266.7	3370.9	3441.1	3473.9	3471.7	3463.8	3435.5	3424.1	3414.0	3416.2
10°	3293.8	3382.2	3510.2	3558.9	3538.5	3484.2	3414.0	3331.2	3292.7	3255.3	3244.0
12.5°	3410.5	3522.6	3648.4	3646.1	3545.3	3406.0	3242.9	3116.0	3035.6	2977.8	2964.2
15°	3552.1	3681.3	3777.5	3700.5	3479.6	3229.3	2990.3	2824.9	2752.4	2689.0	2682.2
17.5°	3698.2	3836.4	3880.5	3683.5	3314.2	2967.7	2697.0	2566.7	2495.4	2461.3	2471.5
20°	3841.0	3978.0	3941.7	3586.1	3062.8	2670.8	2429.7	2358.2	2343.6	2351.5	2348.1
22.5°	3991.6	4113.9	3954.2	3398.1	2742.3	2367.3	2234.8	2237.1	2269.9	2293.7	2299.4
25°	4145.6	4228.3	3921.3	3126.2	2397.9	2144.2	2111.3	2147.6	2212.2	2258.6	2271.0
27.5°	4294.0	4330.3	3850.0	2789.8	2102.3	1984.5	1990.1	2064.9	2162.3	2226.9	2242.7
30°	4461.6	4420.9	3713.0	2411.5	1897.3	1847.5	1895.0	1982.2	2079.6	2137.4	2151.0
32.5°	4650.8	4499.0	3495.5	2061.5	1752.2	1737.6	1815.7	1872.4	1915.4	1932.3	1941.5
35°	4886.4	4608.9	3216.9	1815.7	1622.0	1657.1	1731.8	1703.6	1686.5	1677.5	1686.5
37.5°	5192.2	4757.3	2890.6	1656.0	1516.7	1599.3	1630.0	1541.6	1474.8	1441.9	1449.9
40°	5560.3	4974.7	2576.8	1532.5	1449.9	1549.5	1496.3	1389.8	1304.8	1258.4	1261.8
42.5°	5969.3	5202.4	2312.9	1439.6	1412.4	1508.7	1397.7	1270.9	1133.9	1119.1	1133.9
45°	6398.6	5436.9	2132.8	1368.3	1394.3	1473.6	1341.1	1136.1	1038.6	1098.7	1130.5
47.5°	6827.8	5652.2	2024.1	1315.1	1385.3	1434.0	1291.3	1061.3	992.2	1079.4	1120.2
50°	7305.8	5844.7	1975.4	1276.5	1375.0	1418.1	1216.5	1042.1	943.5	1001.3	1044.4
52.5°	7780.5	5994.2	1939.2	1238.0	1360.4	1405.7	1180.3	1019.5	884.7	888.1	911.8
55°	8253.9	6091.6	1899.5	1187.1	1327.5	1378.5	1176.9	994.5	840.5	824.6	835.9
57.5°	8759.0	6147.1	1850.8	1130.5	1270.9	1309.4	1173.4	975.3	826.9	800.8	804.2
60°	9273.3	6228.6	1787.4	1061.3	1194.9	1226.7	1165.5	968.4	819.0	774.8	778.2
62.5°	9734.3	6257.0	1711.4	995.6	1097.6	1145.1	1148.5	962.8	797.4	721.5	721.5
65°	10036.8	6134.6	1579.0	920.9	992.2	1061.3	1115.7	943.5	758.9	683.1	683.1
67.5°	10024.3	5785.8	1371.7	824.6	890.3	968.4	1068.2	910.7	712.5	635.4	638.9
70°	9557.6	5097.1	1108.9	712.5	778.2	868.8	1007.0	862.0	656.9	583.3	590.1
72.5°	8197.2	3989.3	805.3	581.1	647.9	765.7	927.6	803.1	600.3	536.9	533.5
75°	5856.0	2524.8	545.9	446.3	504.1	649.0	829.1	734.0	548.2	539.2	508.6
77.5°	2991.5	1206.3	361.3	326.3	351.2	512.0	696.6	655.8	556.2	445.2	396.5
80°	972.9	445.2	227.7	222.0	233.3	340.9	539.2	538.0	421.4	302.5	267.3
82.5°	310.4	191.5	148.4	142.7	137.0	214.1	376.1	425.9	284.3	191.5	190.3
85°	123.5	114.4	87.2	80.5	57.8	100.9	197.1	283.2	211.8	138.2	141.6
87.5°	45.3	45.3	23.8	17.0	12.5	34.0	53.2	85.0	121.2	71.3	70.2
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)