

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: P966872

Luminaire Tested: **NAV-SB4C-835-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966872
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28203.9 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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

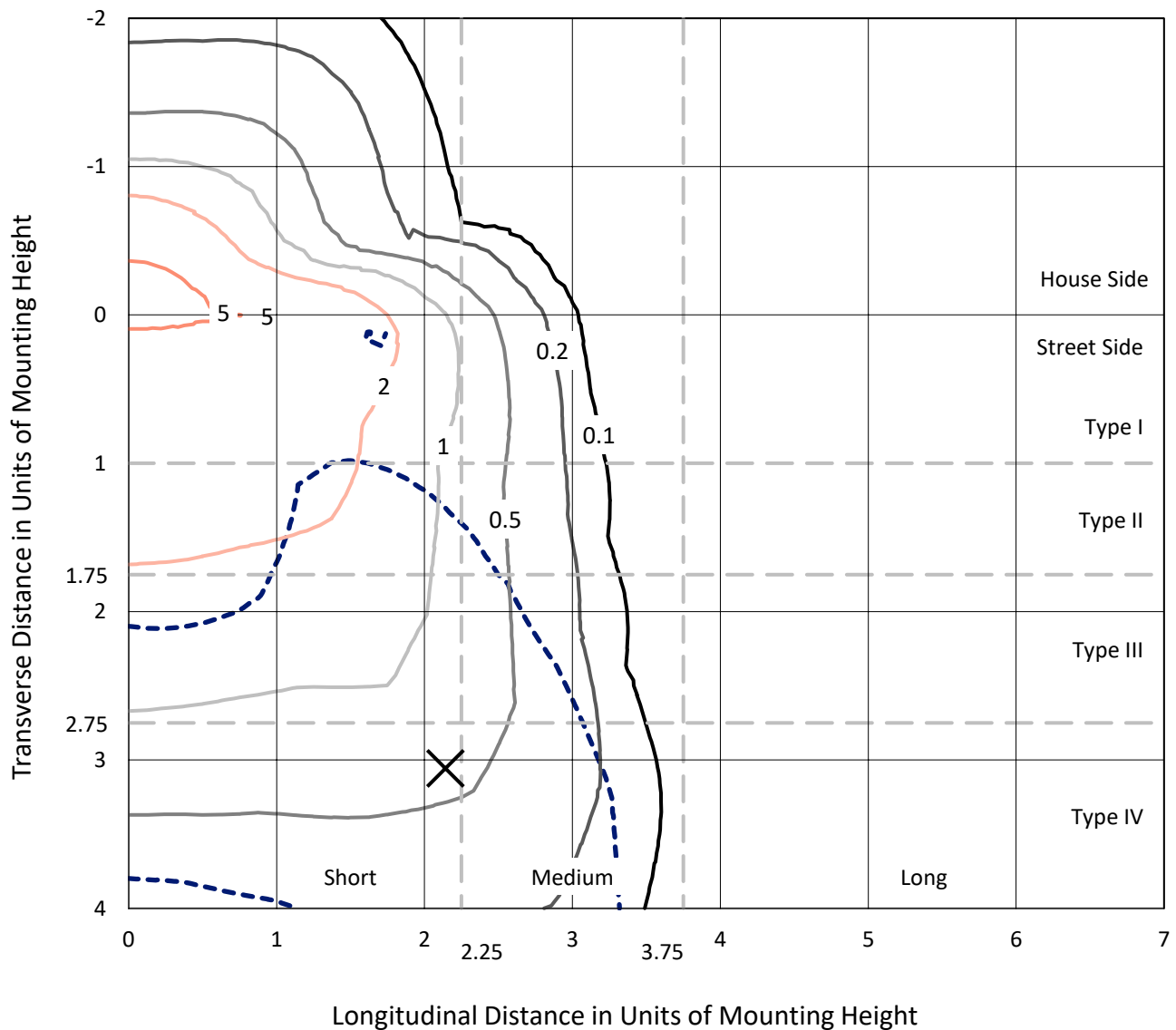


REPORT NUMBER: P966872

CATALOG NUMBER: NAV-SB4C-835-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

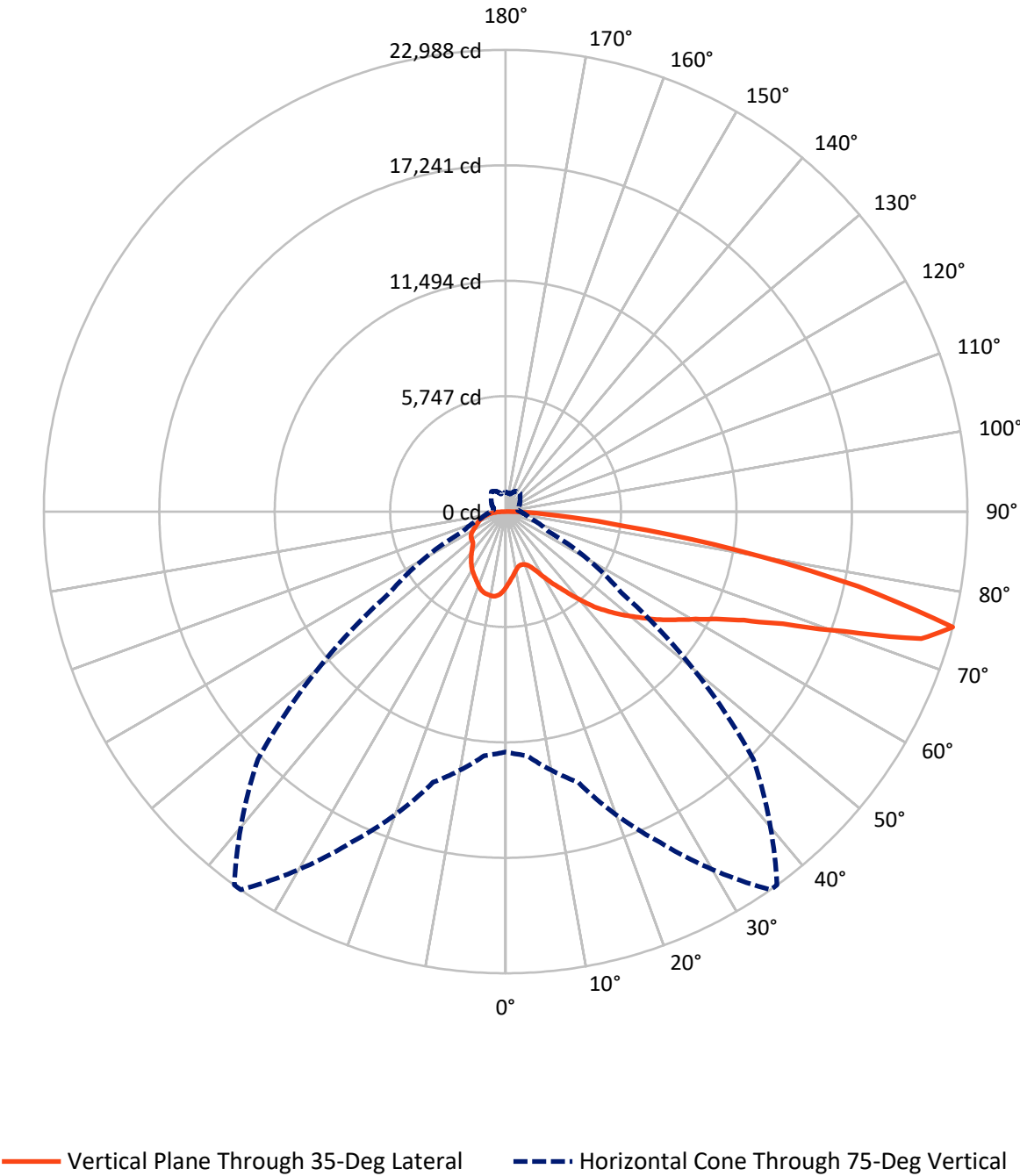
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type IV - Short - N/A

REPORT NUMBER: P966872
CATALOG NUMBER: NAV-SB4C-835-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P966872

CATALOG NUMBER: NAV-SB4C-835-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6711.8	0.0	6711.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	21492.1	0.0	21492.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	28203.9	0.0	28203.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.8	1.3
10°-20°	1026.4	3.6
20°-30°	1723.6	6.1
30°-40°	2678.7	9.5
40°-50°	3975.9	14.1
50°-60°	5489.0	19.5
60°-70°	6659.4	23.6
70°-80°	5503.5	19.5
80°-90°	791.6	2.8
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°	28203.9	100.0
0°-180°	28203.9	100.0

Coefficient of Utilization



REPORT NUMBER: P966872

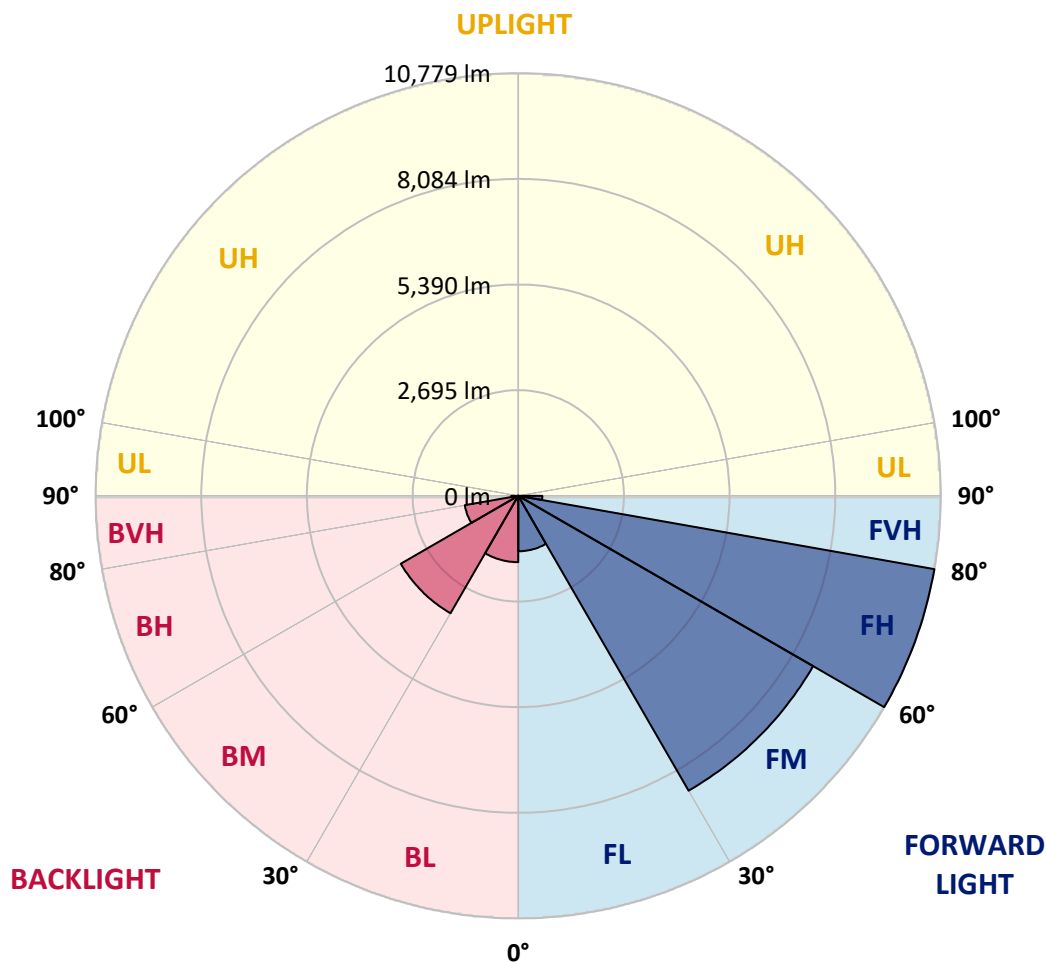
CATALOG NUMBER: NAV-SB4C-835-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1414.4	5.0			
FM	(30°-60°)	8685.3	30.8			
FH	(60°-80°)	10779.1	38.2			G4/12000
FVH	(80°-90°)	613.3	2.2			G4/750
BL	(0°-30°)	1691.5	6.0	B3/2500		
BM	(30°-60°)	3458.3	12.3	B3/5000		
BH	(60°-80°)	1383.8	4.9	B3/2500		G3/2500
BVH	(80°-90°)	178.2	0.6			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 IV Short



REPORT NUMBER: P966872

CATALOG NUMBER: NAV-SB4C-835-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4
2.5°	3465.6	3486.9	3496.1	3491.6	3514.4	3511.3	3543.4	3583.0	3637.9	3691.2	3769.0
5°	3198.8	3221.7	3241.5	3259.8	3304.0	3317.7	3368.0	3444.3	3544.9	3647.1	3775.2
7.5°	2950.3	2970.1	3000.6	3034.1	3108.8	3122.6	3206.4	3325.3	3465.6	3615.1	3791.9
10°	2747.5	2767.3	2799.4	2837.4	2930.5	2947.2	3054.0	3212.6	3395.5	3584.5	3810.2
12.5°	2660.6	2666.6	2685.0	2723.1	2803.9	2814.5	2932.0	3113.4	3326.8	3561.7	3837.6
15°	2656.0	2668.2	2669.7	2689.6	2756.6	2761.2	2869.5	3049.4	3284.2	3557.1	3878.8
17.5°	2701.8	2710.9	2697.2	2709.4	2765.8	2773.4	2858.8	3018.9	3270.5	3576.9	3948.9
20°	2823.8	2831.4	2790.2	2773.4	2814.5	2820.7	2904.5	3038.7	3284.2	3618.0	4045.0
22.5°	3082.9	3087.5	2986.8	2918.3	2921.4	2924.3	2997.5	3119.5	3337.5	3692.8	4166.9
25°	3486.9	3483.9	3323.9	3191.1	3115.0	3098.2	3147.0	3250.7	3427.5	3791.9	4324.1
27.5°	3959.6	3936.7	3776.6	3578.5	3412.2	3387.8	3377.2	3421.4	3555.6	3923.0	4516.2
30°	4493.3	4471.9	4299.7	4040.4	3810.2	3770.6	3669.9	3647.1	3746.2	4101.4	4783.0
32.5°	5078.8	5065.0	4859.2	4545.1	4237.1	4191.3	4022.1	3961.1	4038.9	4371.3	5154.9
35°	5569.6	5557.4	5386.7	5063.5	4686.9	4630.4	4458.2	4389.6	4429.2	4717.4	5641.4
37.5°	6013.4	6007.3	5861.0	5606.2	5217.5	5148.9	4955.3	4932.4	4924.7	5173.3	6231.4
40°	6425.0	6409.8	6257.3	6123.1	5835.0	5772.5	5601.7	5581.8	5523.9	5734.4	6899.2
42.5°	6880.9	6841.3	6620.2	6557.6	6479.9	6428.1	6325.9	6329.0	6200.9	6367.1	7606.6
45°	7252.9	7230.0	7002.9	6966.3	7050.2	7028.8	7117.3	7140.2	6891.6	7030.4	8341.6
47.5°	7652.4	7631.0	7438.9	7413.0	7640.2	7646.3	7958.9	7966.5	7565.5	7719.5	9078.0
50°	8144.9	8114.4	7923.8	7955.8	8210.5	8233.3	8805.1	8753.3	8186.1	8419.3	9808.3
52.5°	8469.7	8487.9	8446.8	8498.6	8846.3	8867.6	9637.6	9504.9	8800.5	9110.0	10524.9
55°	8709.0	8745.6	8873.7	8992.6	9517.1	9538.4	10422.8	10220.0	9309.8	9750.4	11198.8
57.5°	9017.0	8965.2	9204.6	9436.4	10154.5	10210.8	11186.6	10909.2	9761.1	10302.4	11660.8
60°	9459.2	9422.6	9608.6	9951.6	10868.0	10958.0	11994.8	11529.7	10091.9	10739.9	11750.8
62.5°	10355.7	10264.2	10293.2	10596.6	11767.5	11886.5	12906.5	12071.0	10256.6	10910.7	11269.0
65°	11695.9	11538.8	11392.5	11602.9	13034.6	13152.0	13935.7	12496.4	10195.6	10579.8	9989.8
67.5°	13383.7	13228.2	13048.2	13246.5	14900.8	14993.8	15205.8	12735.7	9715.4	9305.2	7728.6
70°	14775.8	14717.9	14932.8	15748.5	17881.5	17884.6	16834.1	12537.5	8399.6	6597.3	4471.9
72.5°	14591.3	14556.2	15689.1	18210.9	21638.4	21557.6	18375.6	11037.2	5658.1	2976.2	1675.7
75°	11970.4	12197.5	13952.4	18166.7	22987.8	22977.1	17431.8	7016.6	2340.4	1233.5	866.0
77.5°	6419.0	6778.7	9058.2	13412.7	17945.6	18215.5	12255.4	2454.8	1004.8	789.8	599.2
80°	2093.4	2407.5	3610.5	6829.1	11660.8	11610.5	5252.5	963.6	687.7	559.5	414.7
82.5°	888.9	925.5	1613.1	3224.8	5984.4	5891.4	1672.6	553.5	483.3	382.7	256.1
85°	347.7	388.8	712.1	1491.2	2592.0	2535.5	603.8	274.5	309.5	250.1	152.5
87.5°	114.4	138.8	254.6	510.8	806.6	777.6	147.9	94.5	134.2	114.4	54.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P966872

CATALOG NUMBER: NAV-SB4C-835-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4	3758.4
2.5°	3790.3	3814.7	3843.7	3886.4	3923.0	3953.5	3985.5	4005.4	4013.0	4035.8	4034.3
5°	3817.8	3871.2	3942.9	4013.0	4081.6	4122.8	4159.3	4177.7	4194.4	4206.6	4209.7
7.5°	3863.5	3932.2	4045.0	4136.5	4194.4	4227.9	4252.3	4246.3	4252.3	4255.4	4260.0
10°	3903.2	3999.2	4133.4	4220.3	4264.5	4266.0	4260.0	4238.7	4227.9	4229.5	4232.5
12.5°	3950.5	4057.2	4202.1	4275.3	4287.5	4253.9	4227.9	4191.3	4177.7	4171.5	4168.5
15°	4014.5	4136.5	4276.7	4304.2	4273.7	4231.0	4186.8	4127.4	4096.8	4072.4	4080.1
17.5°	4092.3	4226.5	4334.7	4314.8	4249.3	4179.1	4107.5	4017.6	3955.1	3929.1	3930.7
20°	4200.6	4321.0	4378.9	4292.0	4192.9	4086.2	3964.2	3854.4	3796.5	3770.6	3767.5
22.5°	4331.6	4447.5	4421.6	4252.3	4112.1	3941.3	3788.8	3708.0	3679.0	3660.8	3663.9
25°	4488.7	4587.8	4452.1	4194.4	3979.5	3749.2	3631.8	3605.8	3592.2	3578.5	3578.5
27.5°	4693.0	4746.4	4474.9	4109.0	3772.1	3544.9	3502.2	3506.8	3502.2	3479.4	3483.9
30°	4962.8	4952.2	4496.3	3970.3	3534.2	3360.5	3363.4	3383.3	3386.3	3371.1	3378.7
32.5°	5318.1	5209.9	4507.0	3790.3	3307.1	3198.8	3201.9	3223.2	3238.5	3212.6	3224.8
35°	5748.1	5510.2	4490.2	3564.7	3131.7	3044.8	3021.9	3028.1	3032.6	3008.2	3025.0
37.5°	6249.7	5847.2	4415.5	3314.6	2986.8	2893.9	2845.1	2803.9	2779.5	2756.6	2771.9
40°	6800.2	6214.7	4278.2	3070.7	2825.2	2733.8	2660.6	2582.8	2500.5	2470.0	2483.7
42.5°	7376.4	6592.8	4112.1	2837.4	2639.3	2564.5	2486.8	2373.9	2250.5	2188.0	2195.5
45°	7974.1	6980.0	3948.9	2607.2	2448.6	2416.6	2326.6	2190.9	2056.8	1977.5	1971.4
47.5°	8559.6	7346.0	3709.6	2375.4	2270.3	2305.3	2235.2	2110.2	1960.7	1835.8	1822.0
50°	9119.2	7689.0	3317.7	2140.7	2125.4	2271.8	2204.7	2024.8	1854.0	1693.9	1680.2
52.5°	9674.2	7966.5	2816.1	1927.2	2047.6	2262.7	2165.1	1966.9	1758.0	1590.3	1571.9
55°	10145.2	8109.8	2332.8	1744.2	1934.8	2184.9	2117.8	1898.2	1622.3	1443.9	1428.6
57.5°	10413.6	7994.0	1930.3	1564.4	1779.3	2056.8	2037.0	1751.8	1460.6	1323.5	1305.1
60°	10297.8	7524.3	1600.9	1407.3	1631.4	1918.1	1896.8	1607.0	1337.1	1207.6	1189.3
62.5°	9658.9	6629.4	1340.2	1270.1	1497.2	1776.2	1756.4	1495.7	1242.6	1117.6	1097.8
65°	8372.1	5392.8	1137.4	1155.7	1361.5	1605.5	1634.5	1402.7	1167.9	1045.9	1026.1
67.5°	6385.4	3906.3	978.9	1056.6	1228.9	1437.8	1521.6	1335.7	1105.4	989.5	971.2
70°	3639.5	2218.4	844.7	960.5	1111.5	1282.3	1434.7	1282.3	1038.3	942.3	930.1
72.5°	1379.9	1018.5	730.3	864.5	998.7	1151.2	1338.6	1198.4	960.5	888.9	876.7
75°	736.5	620.5	614.5	751.6	869.1	1023.1	1218.2	1116.1	902.6	939.2	969.8
77.5°	501.6	439.1	513.8	643.4	727.2	881.3	1090.2	991.1	782.2	779.1	718.1
80°	347.7	311.1	417.8	518.4	562.6	741.0	951.4	850.7	637.3	594.6	568.7
82.5°	208.9	202.7	312.5	387.2	397.9	571.7	788.2	713.6	521.4	454.4	457.5
85°	114.4	120.4	199.8	227.1	231.8	399.4	617.5	552.0	401.0	336.9	340.0
87.5°	32.0	41.2	73.2	90.0	111.3	207.4	367.5	327.8	201.3	140.3	140.3
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)