

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: P968918

Luminaire Tested: **NAV-SB5C-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968918
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-SB5C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33326.8 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 249.5
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

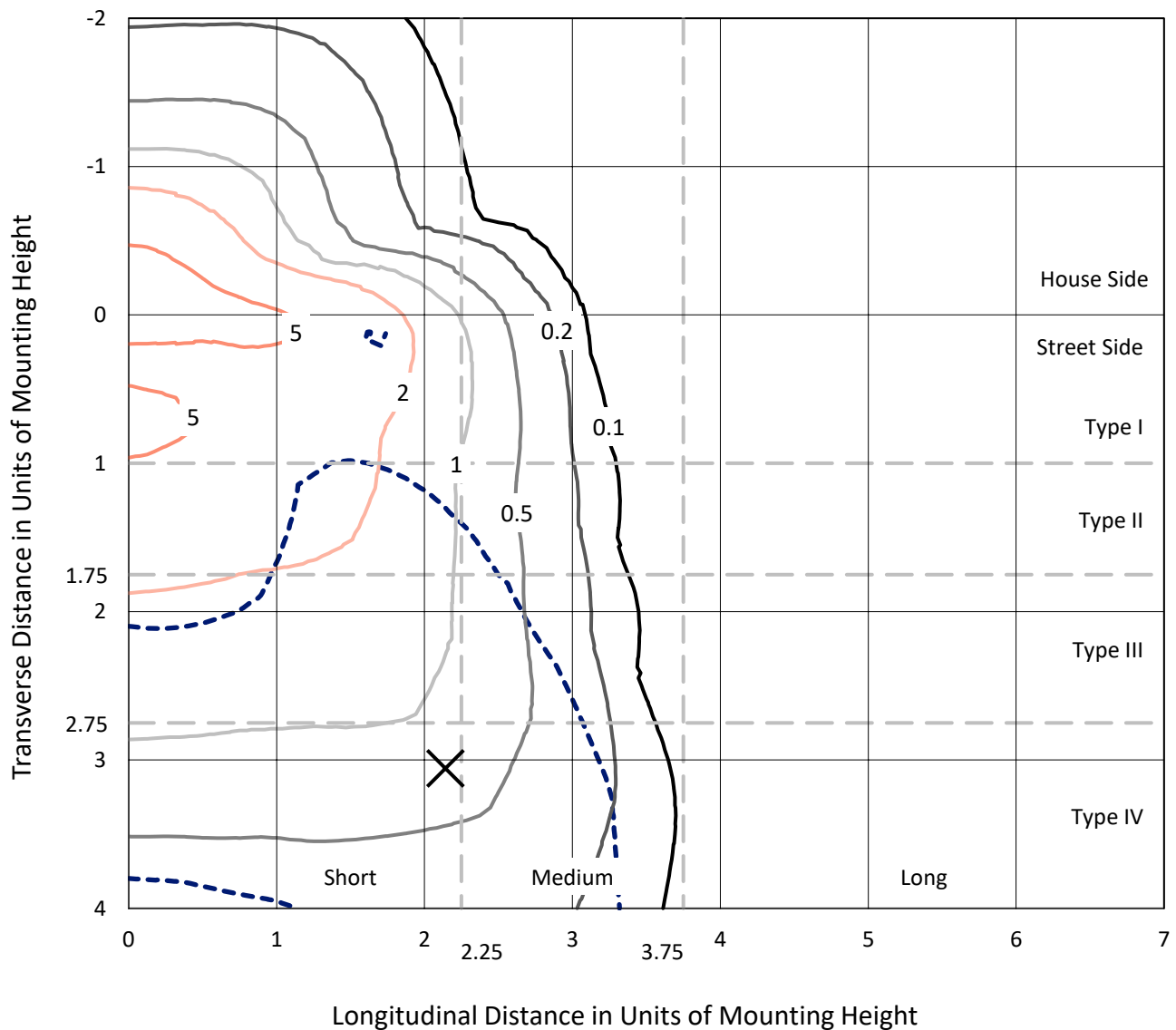


REPORT NUMBER: P968918

CATALOG NUMBER: NAV-SB5C-827-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

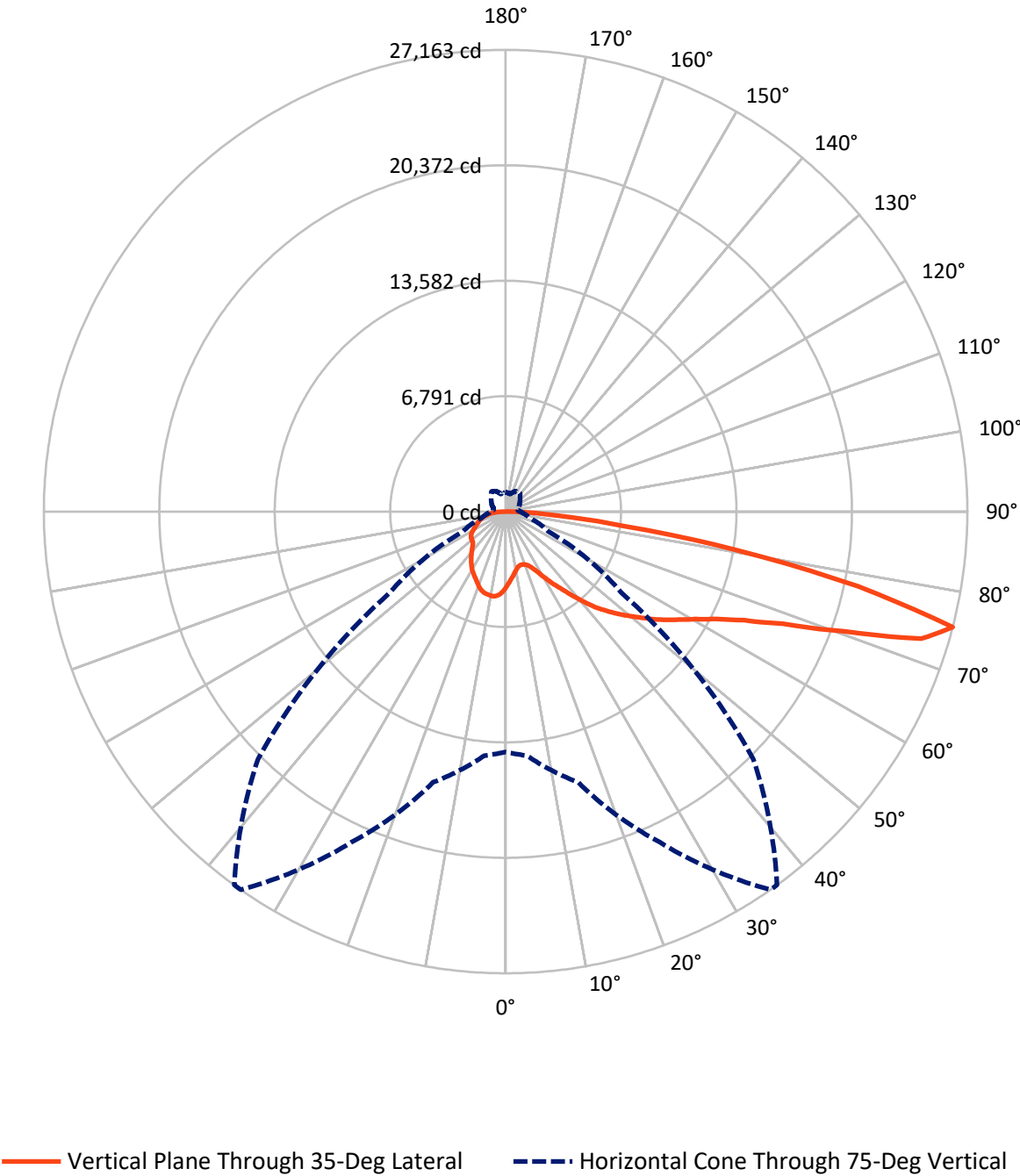
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type IV - Short - N/A

REPORT NUMBER: P968918
CATALOG NUMBER: NAV-SB5C-827-U-T4FT

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7931.0	0.0	7931.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	25395.9	0.0	25395.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	33326.8	0.0	33326.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.5	1.3
10°-20°	1212.8	3.6
20°-30°	2036.7	6.1
30°-40°	3165.3	9.5
40°-50°	4698.1	14.1
50°-60°	6486.0	19.5
60°-70°	7869.0	23.6
70°-80°	6503.1	19.5
80°-90°	935.3	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°	33326.8	100.0
0°-180°	33326.8	100.0

Coefficient of Utilization



REPORT NUMBER: P968918

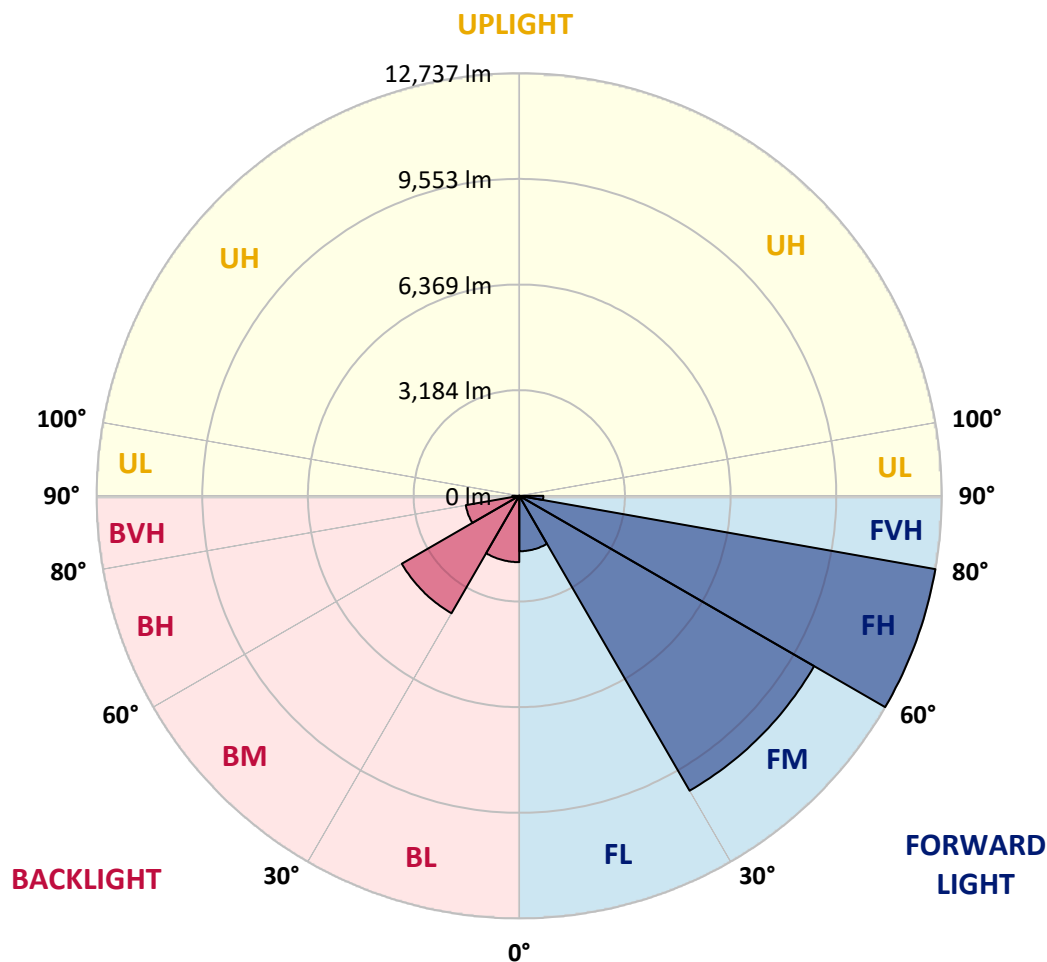
CATALOG NUMBER: NAV-SB5C-827-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1671.3	5.0			
FM	(30°-60°)	10262.9	30.8			
FH	(60°-80°)	12737.0	38.2			G5
FVH	(80°-90°)	724.7	2.2			G4/750
BL	(0°-30°)	1998.7	6.0	B3/2500		
BM	(30°-60°)	4086.5	12.3	B3/5000		
BH	(60°-80°)	1635.1	4.9	B3/2500		G3/2500
BVH	(80°-90°)	210.6	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-G5

Type IV Short



REPORT NUMBER: P968918

CATALOG NUMBER: NAV-SB5C-827-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0
2.5°	4095.1	4120.3	4131.2	4125.7	4152.8	4149.2	4187.0	4233.9	4298.7	4361.8	4453.6
5°	3779.8	3806.8	3830.3	3851.8	3904.1	3920.3	3979.8	4069.9	4188.8	4309.5	4460.8
7.5°	3486.1	3509.6	3545.6	3585.2	3673.5	3689.8	3788.8	3929.3	4095.1	4271.7	4480.7
10°	3246.6	3270.0	3307.8	3352.9	3462.8	3482.5	3608.7	3796.1	4012.3	4235.6	4502.3
12.5°	3143.9	3151.1	3172.7	3217.7	3313.2	3325.8	3464.5	3678.9	3931.2	4208.6	4534.7
15°	3138.4	3152.9	3154.6	3178.1	3257.3	3262.8	3390.7	3603.3	3880.8	4203.2	4583.4
17.5°	3192.5	3203.3	3187.1	3201.5	3268.2	3277.1	3378.1	3567.2	3864.5	4226.6	4666.2
20°	3336.6	3345.6	3297.0	3277.1	3325.8	3333.0	3432.1	3590.7	3880.8	4275.3	4779.8
22.5°	3643.0	3648.3	3529.4	3448.3	3451.9	3455.6	3542.0	3686.1	3943.8	4363.5	4923.9
25°	4120.3	4116.7	3927.6	3770.8	3680.8	3660.9	3718.6	3841.1	4050.1	4480.7	5109.4
27.5°	4678.8	4651.9	4462.6	4228.4	4032.0	4003.2	3990.6	4042.9	4201.4	4635.6	5336.5
30°	5309.4	5284.2	5080.6	4774.3	4502.3	4455.5	4336.6	4309.5	4426.6	4846.4	5651.7
32.5°	6001.3	5985.1	5741.8	5370.7	5006.7	4952.7	4752.7	4680.7	4772.5	5165.3	6091.4
35°	6581.3	6567.0	6365.1	5983.2	5538.2	5471.6	5268.0	5186.9	5233.8	5574.3	6666.1
37.5°	7105.6	7098.4	6925.5	6624.6	6165.2	6084.1	5855.3	5828.3	5819.2	6112.9	7363.3
40°	7592.1	7574.0	7393.9	7235.4	6894.9	6821.0	6619.2	6595.8	6527.3	6776.0	8152.4
42.5°	8130.8	8084.0	7822.7	7748.8	7657.0	7595.7	7475.0	7478.6	7327.2	7523.6	8988.3
45°	8570.3	8543.4	8274.9	8231.7	8330.8	8305.6	8410.0	8437.1	8143.4	8307.3	9856.7
47.5°	9042.4	9017.1	8790.2	8759.5	9028.0	9035.2	9404.6	9413.5	8939.7	9121.7	10726.9
50°	9624.3	9588.3	9363.1	9400.9	9701.8	9728.8	10404.5	10343.2	9672.9	9948.6	11589.9
52.5°	10008.1	10029.7	9981.0	10042.3	10453.1	10478.3	11388.2	11231.4	10399.0	10764.8	12436.6
55°	10290.9	10334.2	10485.5	10626.1	11245.8	11271.0	12316.0	12076.3	11000.8	11521.4	13233.0
57.5°	10654.9	10593.6	10876.5	11150.4	11998.9	12065.6	13218.6	12890.7	11534.0	12173.6	13778.9
60°	11177.3	11134.1	11353.9	11759.3	12842.0	12948.3	14173.5	13624.0	11925.1	12690.7	13885.2
62.5°	12236.7	12128.6	12162.9	12521.4	13905.0	14045.6	15250.9	14263.5	12119.6	12892.4	13315.9
65°	13820.4	13634.8	13461.8	13710.4	15402.2	15540.9	16466.9	14766.1	12047.5	12501.5	11804.3
67.5°	15814.7	15630.9	15418.4	15652.6	17607.3	17717.2	17967.7	15049.0	11480.0	10995.4	9132.4
70°	17459.6	17391.2	17645.2	18609.1	21129.6	21133.1	19891.9	14814.8	9925.2	7795.6	5284.2
72.5°	17241.6	17200.2	18538.8	21518.7	25568.8	25473.3	21713.3	13042.0	6685.9	3516.8	1980.0
75°	14144.6	14413.0	16486.7	21466.5	27163.2	27150.6	20598.1	8291.1	2765.6	1457.6	1023.4
77.5°	7584.9	8010.1	10703.5	15849.0	21205.2	21524.1	14481.5	2900.6	1187.3	933.3	708.1
80°	2473.6	2844.8	4266.3	8069.5	13778.9	13719.4	6206.6	1138.7	812.5	661.2	490.1
82.5°	1050.3	1093.6	1906.1	3810.4	7071.4	6961.5	1976.4	653.9	571.1	452.2	302.7
85°	410.8	459.4	841.3	1762.0	3062.8	2996.1	713.4	324.3	365.7	295.5	180.2
87.5°	135.1	163.9	300.8	603.5	953.0	918.8	174.8	111.7	158.6	135.1	64.9
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: P968918

CATALOG NUMBER: NAV-SB5C-827-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0	4441.0
2.5°	4478.8	4507.6	4541.9	4592.4	4635.6	4671.6	4709.5	4732.9	4741.9	4768.9	4767.2
5°	4511.3	4574.4	4659.0	4741.9	4822.9	4871.6	4914.9	4936.5	4956.3	4970.7	4974.3
7.5°	4565.3	4646.4	4779.8	4887.8	4956.3	4996.0	5024.8	5017.6	5024.8	5028.3	5033.8
10°	4612.2	4725.7	4884.2	4986.9	5039.2	5041.0	5033.8	5008.6	4996.0	4997.7	5001.4
12.5°	4668.1	4794.1	4965.3	5051.8	5066.2	5026.6	4996.0	4952.7	4936.5	4929.2	4925.6
15°	4743.7	4887.8	5053.6	5086.0	5050.0	4999.5	4947.3	4877.1	4841.0	4812.2	4821.2
17.5°	4835.5	4994.1	5122.0	5098.7	5021.2	4938.2	4853.6	4747.3	4673.5	4642.8	4644.6
20°	4963.5	5105.8	5174.3	5071.6	4954.5	4828.4	4684.2	4554.5	4486.1	4455.5	4451.9
22.5°	5118.4	5255.4	5224.7	5024.8	4859.0	4657.2	4477.1	4381.6	4347.3	4325.7	4329.3
25°	5304.0	5421.1	5260.8	4956.3	4702.3	4430.3	4291.5	4260.8	4244.6	4228.4	4228.4
27.5°	5545.5	5608.5	5287.8	4855.4	4457.2	4188.8	4138.3	4143.8	4138.3	4111.4	4116.7
30°	5864.3	5851.7	5313.0	4691.4	4176.2	3970.8	3974.4	3997.8	4001.4	3983.5	3992.4
32.5°	6284.1	6156.2	5325.6	4478.8	3907.7	3779.8	3783.5	3808.7	3826.6	3796.1	3810.4
35°	6792.2	6511.1	5305.8	4212.2	3700.6	3597.9	3570.8	3578.1	3583.4	3554.6	3574.5
37.5°	7384.9	6909.2	5217.6	3916.7	3529.4	3419.5	3361.9	3313.2	3284.4	3257.3	3275.4
40°	8035.3	7343.5	5055.4	3628.5	3338.4	3230.3	3143.9	3051.9	2954.7	2918.7	2934.9
42.5°	8716.3	7790.3	4859.0	3352.9	3118.7	3030.3	2938.5	2805.1	2659.3	2585.4	2594.4
45°	9422.5	8247.9	4666.2	3080.8	2893.5	2855.5	2749.3	2588.9	2430.4	2336.7	2329.5
47.5°	10114.4	8680.3	4383.4	2807.0	2682.6	2724.0	2641.2	2493.4	2316.9	2169.2	2152.9
50°	10775.6	9085.6	3920.3	2529.5	2511.5	2684.5	2605.1	2392.6	2190.8	2001.6	1985.4
52.5°	11431.4	9413.5	3327.7	2277.2	2419.6	2673.6	2558.3	2324.1	2077.3	1879.1	1857.5
55°	11988.1	9582.9	2756.5	2061.1	2286.3	2581.8	2502.4	2243.0	1917.0	1706.1	1688.2
57.5°	12305.1	9446.0	2280.8	1848.5	2102.5	2430.4	2407.0	2070.1	1726.0	1563.8	1542.2
60°	12168.3	8891.1	1891.7	1662.9	1927.7	2266.5	2241.3	1898.9	1580.0	1426.9	1405.3
62.5°	11413.4	7833.5	1583.6	1500.8	1769.3	2098.9	2075.5	1767.4	1468.3	1320.6	1297.1
65°	9892.8	6372.4	1344.0	1365.6	1608.8	1897.1	1931.3	1657.5	1380.1	1235.9	1212.5
67.5°	7545.2	4615.8	1156.6	1248.6	1452.1	1698.9	1798.1	1578.2	1306.2	1169.2	1147.6
70°	4300.5	2621.3	998.1	1135.0	1313.4	1515.2	1695.4	1515.2	1226.9	1113.5	1099.0
72.5°	1630.5	1203.5	862.9	1021.5	1180.1	1360.3	1581.9	1416.0	1135.0	1050.3	1036.0
75°	870.2	733.3	726.0	888.2	1026.9	1208.9	1439.5	1318.8	1066.6	1109.8	1145.8
77.5°	592.8	518.9	607.1	760.2	859.4	1041.3	1288.1	1171.1	924.2	920.7	848.6
80°	410.8	367.6	493.6	612.5	664.8	875.6	1124.2	1005.3	753.1	702.6	672.0
82.5°	246.8	239.6	369.3	457.7	470.3	675.6	931.4	843.2	616.1	536.9	540.5
85°	135.1	142.4	236.1	268.4	273.9	472.0	729.7	652.2	473.9	398.1	401.8
87.5°	37.8	48.7	86.5	106.3	131.5	245.0	434.2	387.3	237.8	165.7	165.7
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)