

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: P968447

Luminaire Tested: **NAV-SB5B-835-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26795.5 lumens
Efficiency: N/A
Efficacy: 146.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - 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



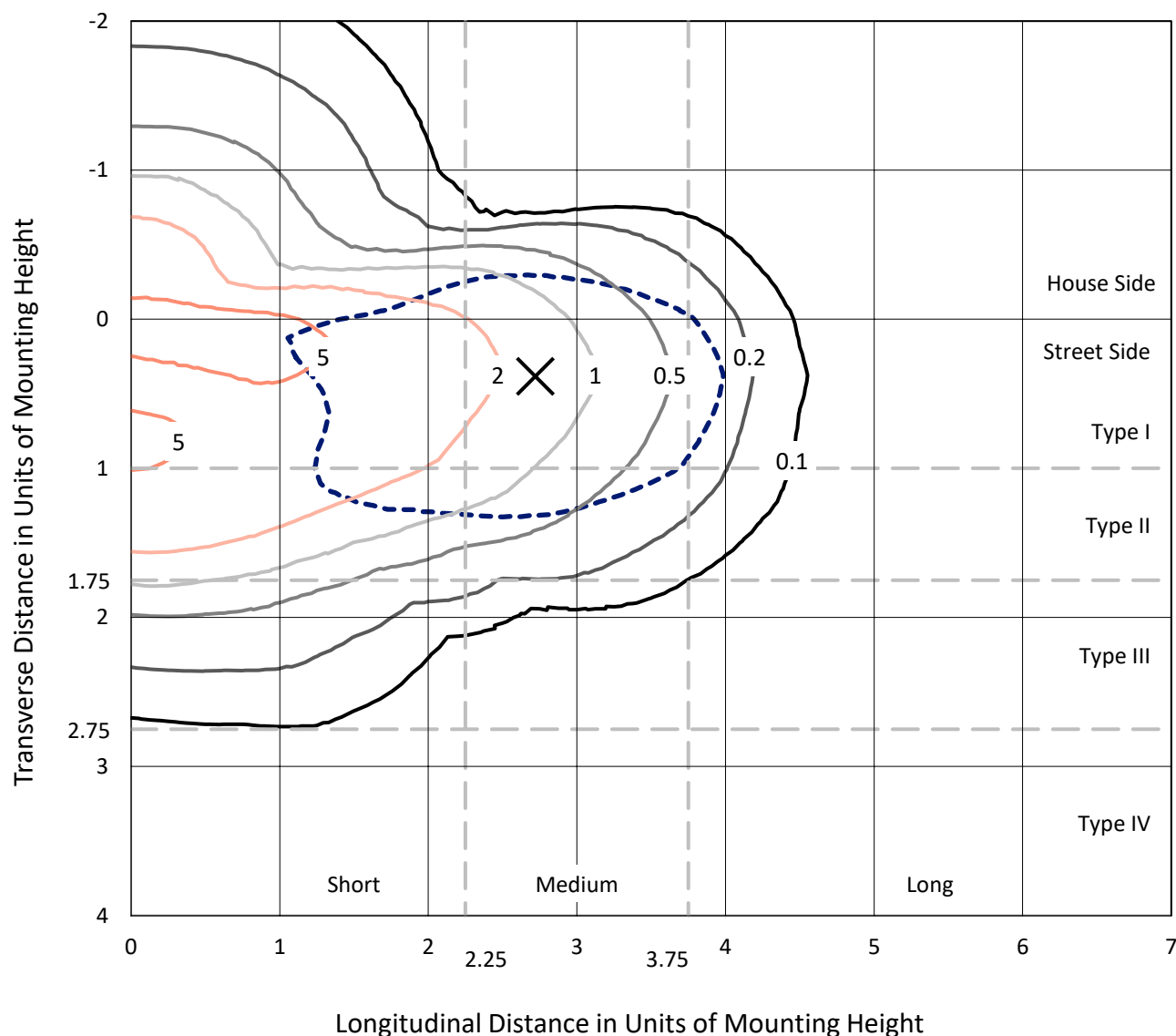
REPORT NUMBER: P968447

CATALOG NUMBER: NAV-SB5B-835-U-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

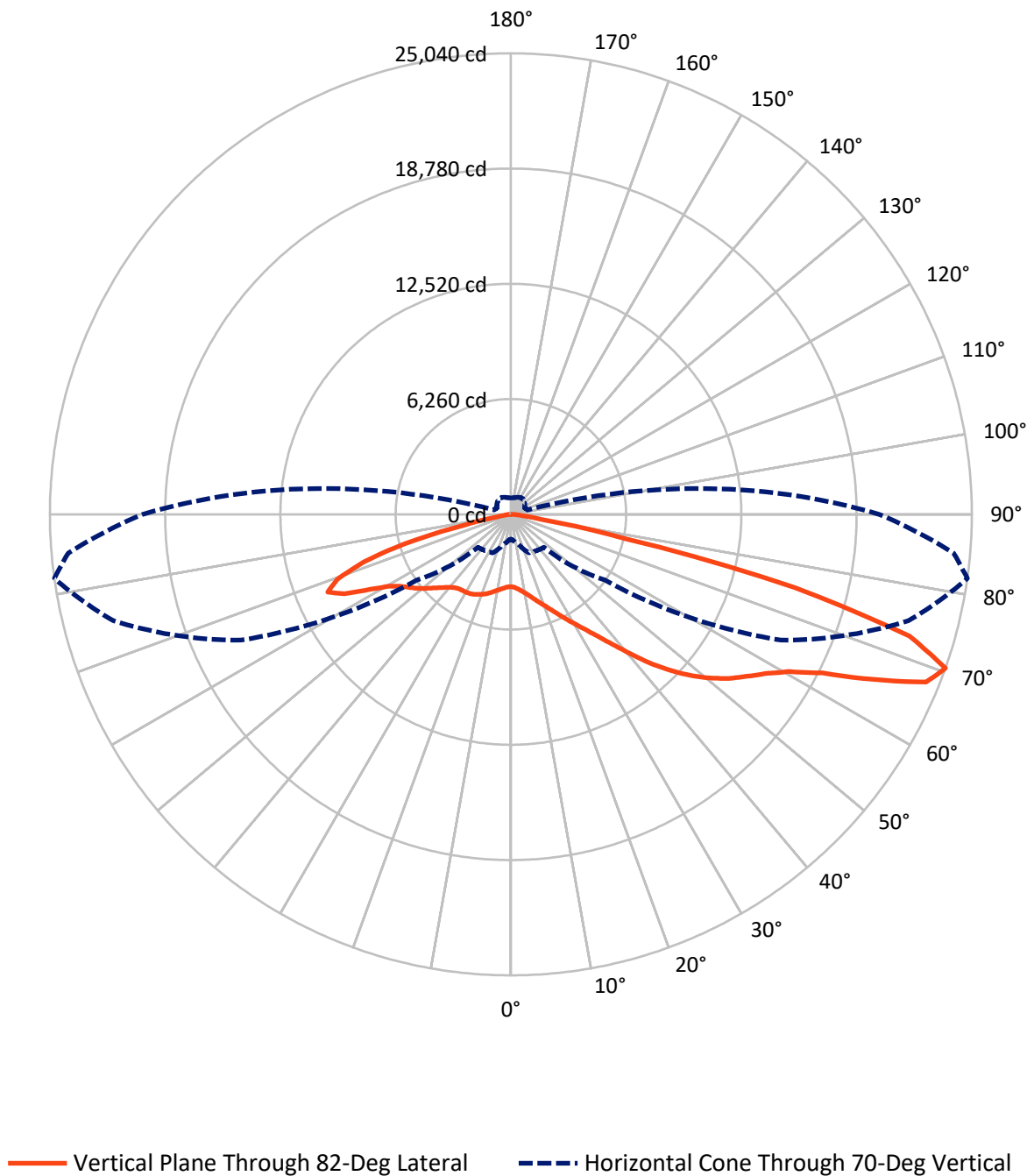
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type II - Medium - N/A

REPORT NUMBER: P968447
CATALOG NUMBER: NAV-SB5B-835-U-T2

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6605.8	0.0	6605.8
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	20189.8	0.0	20189.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	26795.5	0.0	26795.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.9	1.4
10°-20°	1065.7	4.0
20°-30°	1782.8	6.7
30°-40°	2785.2	10.4
40°-50°	4435.7	16.6
50°-60°	6172.9	23.0
60°-70°	6457.1	24.1
70°-80°	3374.8	12.6
80°-90°	350.4	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°	26795.5	100.0
0°-180°	26795.5	100.0

Coefficient of Utilization



REPORT NUMBER: P968447

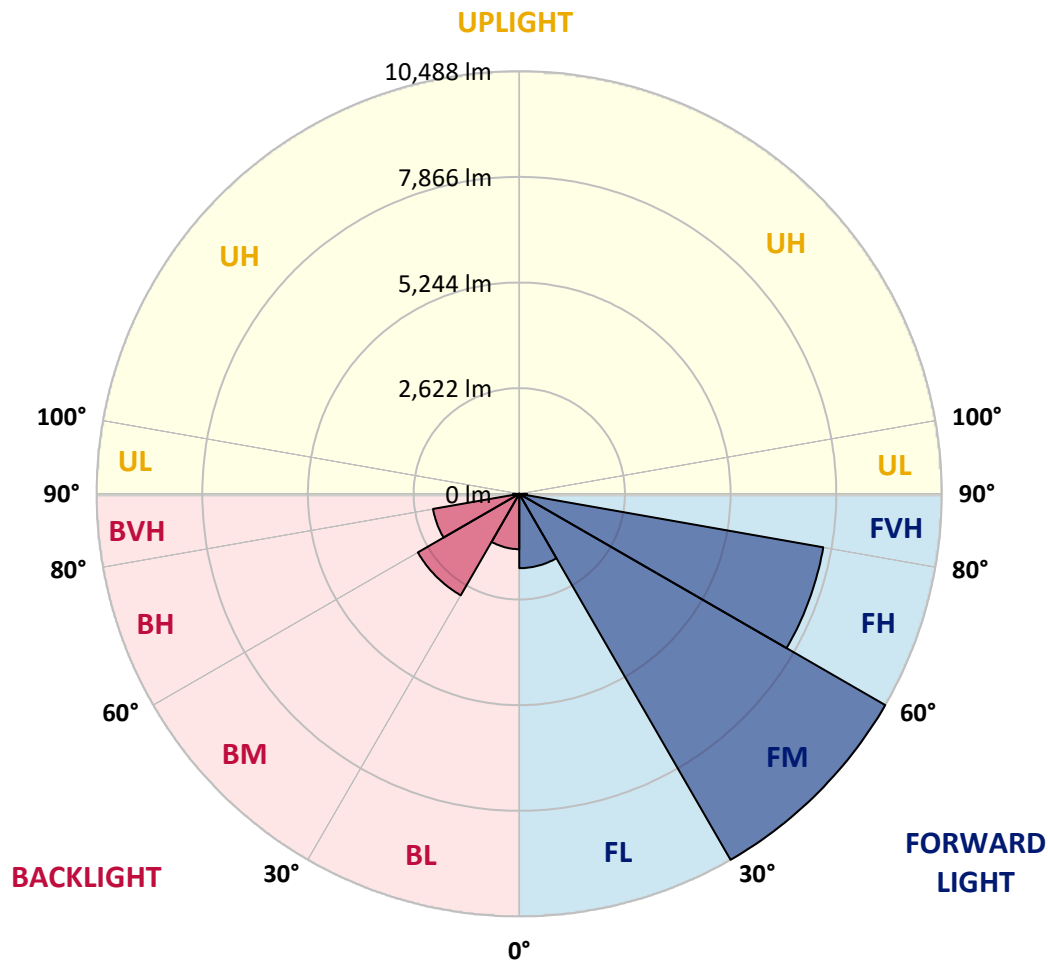
CATALOG NUMBER: NAV-SB5B-835-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1845.2	6.9			
FM	(30°-60°)	10487.5	39.1			
FH	(60°-80°)	7660.9	28.6			G4/12000
FVH	(80°-90°)	196.2	0.7			G2/225
BL	(0°-30°)	1374.2	5.1	B3/2500		
BM	(30°-60°)	2906.3	10.8	B3/5000		
BH	(60°-80°)	2171.0	8.1	B3/2500		G3/2500
BVH	(80°-90°)	154.3	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 II Medium



REPORT NUMBER: P968447

CATALOG NUMBER: NAV-SB5B-835-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5
2.5°	4022.4	4045.2	4038.1	4030.9	4030.9	4021.0	4019.5	4005.4	3994.0	3975.5	3971.3
5°	4073.6	4097.7	4094.9	4100.6	4119.1	4123.4	4127.6	4119.1	4096.3	4073.6	4063.6
7.5°	4028.0	4055.1	4063.6	4097.7	4154.6	4205.8	4244.2	4259.9	4238.5	4205.8	4190.2
10°	3874.5	3904.4	3934.3	4015.3	4116.3	4237.1	4339.4	4400.6	4396.3	4365.1	4338.0
12.5°	3563.1	3594.5	3658.4	3816.3	4001.1	4214.4	4404.8	4532.9	4576.9	4554.2	4507.2
15°	3314.3	3341.3	3389.7	3551.7	3792.1	4116.3	4429.0	4677.9	4790.2	4777.4	4720.5
17.5°	3307.3	3318.5	3348.5	3425.2	3610.0	3962.6	4403.5	4820.1	5034.8	5033.4	4962.2
20°	3432.3	3436.6	3453.6	3469.3	3574.5	3846.1	4338.0	4938.0	5309.2	5309.2	5232.4
22.5°	3605.8	3603.0	3620.0	3605.8	3657.0	3836.2	4296.8	5041.9	5614.8	5637.6	5540.9
25°	3866.0	3851.7	3847.5	3814.8	3824.8	3928.5	4342.3	5159.8	5977.5	6024.3	5903.5
27.5°	4213.0	4190.2	4174.5	4099.2	4073.6	4119.1	4481.7	5302.0	6381.2	6462.3	6308.8
30°	4665.1	4623.9	4601.1	4470.3	4377.9	4385.0	4692.1	5491.1	6803.5	6934.3	6739.6
32.5°	5282.1	5218.2	5157.1	4942.3	4773.1	4717.7	4963.7	5752.8	7261.4	7470.4	7220.1
35°	5973.2	5922.0	5856.5	5525.3	5265.1	5137.1	5330.5	6118.2	7797.4	8128.7	7803.1
37.5°	6638.6	6594.5	6625.8	6179.3	5843.8	5657.5	5811.1	6608.8	8458.6	8947.6	8533.9
40°	7326.8	7292.7	7296.9	6870.4	6479.3	6270.3	6394.1	7224.4	9216.4	9921.7	9412.6
42.5°	8074.6	8049.1	7963.7	7585.5	7146.2	6951.4	7065.1	7935.3	10029.7	11030.6	10376.6
45°	8912.2	8896.5	8816.8	8383.2	7879.9	7661.0	7814.5	8720.2	10847.3	12074.3	11344.9
47.5°	9635.8	9648.6	9638.7	9273.3	8751.4	8430.1	8613.6	9539.2	11607.9	13055.4	12273.3
50°	9984.2	10051.0	10149.1	10035.4	9711.3	9384.2	9419.8	10329.7	12333.1	13975.4	13163.5
52.5°	9802.2	9928.8	10196.1	10378.0	10503.2	10434.9	10339.7	11114.6	13015.6	14805.7	14005.2
55°	9124.0	9301.8	9745.3	10184.7	10823.1	11319.3	11444.4	11984.7	13681.0	15536.5	14801.4
57.5°	7888.4	8177.0	8575.2	9463.8	10538.7	11747.3	12732.7	13191.9	14386.3	16317.1	15634.6
60°	5769.8	6156.6	6651.4	7973.7	9543.5	11518.3	13828.9	15046.0	15388.6	17328.0	16719.5
62.5°	3692.6	3931.4	4386.4	5632.0	7436.3	10345.3	14164.5	17363.6	17087.8	18985.9	18346.1
65°	2528.1	2681.6	3098.2	3797.7	4807.2	7700.7	13265.9	19101.1	19786.4	21613.5	21127.2
67.5°	1837.0	1953.6	2309.1	2921.9	3132.3	4557.0	10294.2	19021.4	22409.7	24320.7	23564.2
70°	1339.4	1421.9	1720.5	2309.1	2410.0	2535.1	6236.2	16169.3	22352.9	25040.1	24134.4
72.5°	992.4	1049.3	1249.8	1791.5	1950.8	1711.9	3086.8	11751.5	19207.7	22648.6	21922.1
75°	718.0	760.7	908.6	1370.6	1561.2	1303.8	1539.9	6867.5	13398.1	15931.8	16059.8
77.5°	548.8	581.6	678.2	1003.8	1249.8	978.3	955.5	3159.4	6352.8	6384.1	6742.3
80°	440.7	462.1	514.8	706.6	958.4	732.3	622.8	1275.4	2007.7	1699.1	1783.0
82.5°	324.2	359.8	435.1	496.2	685.3	504.7	379.7	644.1	763.5	656.9	662.6
85°	184.8	209.0	263.0	355.5	437.9	308.5	217.5	285.8	355.5	291.5	260.2
87.5°	65.4	85.3	92.5	139.3	190.5	127.9	83.8	82.5	116.5	86.7	72.5
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: P968447

CATALOG NUMBER: NAV-SB5B-835-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5	3928.5
2.5°	3957.0	3949.9	3921.4	3883.1	3843.2	3804.9	3792.1	3765.0	3746.6	3736.6	3748.0
5°	4036.7	4013.9	3947.1	3861.7	3772.2	3675.4	3607.2	3544.7	3499.1	3456.5	3473.6
7.5°	4150.3	4110.6	3995.3	3846.1	3686.8	3526.2	3406.8	3315.8	3254.6	3214.8	3223.3
10°	4282.6	4221.5	4045.2	3821.9	3575.9	3345.6	3204.9	3126.7	3088.2	3066.9	3072.6
12.5°	4434.8	4348.0	4096.3	3766.5	3406.8	3143.7	3047.0	3024.3	3025.7	3027.1	3030.0
15°	4622.4	4501.6	4137.6	3645.6	3186.3	2988.7	2971.7	3008.6	3047.0	3065.5	3064.0
17.5°	4834.3	4663.6	4144.7	3446.6	2970.2	2889.2	2943.2	3022.8	3081.1	3106.8	3112.4
20°	5061.8	4828.6	4093.5	3165.0	2792.5	2808.2	2904.8	3007.2	3071.2	3103.9	3112.4
22.5°	5322.0	5004.9	3971.3	2869.3	2647.5	2720.0	2833.7	2933.2	3000.1	3032.8	3041.4
25°	5619.2	5202.5	3779.3	2620.4	2522.3	2620.4	2734.2	2816.7	2870.7	2900.5	2909.1
27.5°	5949.0	5408.7	3523.3	2422.8	2412.8	2518.1	2611.9	2675.9	2704.4	2727.1	2735.6
30°	6280.3	5596.4	3213.4	2273.6	2317.6	2417.2	2484.0	2512.4	2520.9	2525.2	2535.1
32.5°	6638.6	5758.4	2887.7	2149.8	2226.6	2319.1	2358.8	2371.6	2331.9	2304.8	2313.3
35°	7072.3	5932.0	2569.3	2051.7	2137.0	2216.7	2229.5	2218.1	2171.2	2115.7	2118.6
37.5°	7608.3	6148.1	2314.8	1982.0	2053.2	2105.8	2090.1	2087.3	2091.5	2026.1	2030.4
40°	8265.2	6429.6	2128.5	1928.0	1984.9	1996.3	1952.2	1976.4	1997.7	1898.2	1901.0
42.5°	8994.6	6769.4	2010.5	1891.0	1928.0	1901.0	1832.8	1859.8	1856.9	1726.1	1724.7
45°	9738.2	7139.1	1969.2	1864.1	1875.4	1821.4	1746.0	1753.2	1693.4	1575.4	1579.6
47.5°	10477.6	7535.8	1994.9	1841.3	1810.0	1748.9	1690.5	1659.3	1571.1	1483.0	1483.0
50°	11202.7	7952.4	2088.6	1795.8	1720.5	1684.9	1642.3	1586.8	1492.9	1417.6	1411.9
52.5°	11875.2	8371.8	2193.9	1720.5	1608.1	1629.4	1602.4	1538.4	1446.0	1369.2	1370.6
55°	12512.3	8791.3	2235.1	1616.6	1502.9	1581.1	1565.5	1447.4	1336.5	1274.0	1268.3
57.5°	13206.1	9296.0	2189.6	1484.4	1417.6	1525.6	1466.0	1335.2	1271.1	1224.3	1220.0
60°	14167.2	10088.0	2091.5	1320.9	1336.5	1443.2	1340.8	1286.8	1217.1	1164.5	1161.6
62.5°	15764.0	11565.3	1933.7	1158.8	1241.3	1320.9	1281.0	1227.0	1156.0	1104.7	1104.7
65°	18124.3	13618.5	1636.5	1032.3	1134.7	1201.5	1217.1	1163.1	1089.2	1035.1	1037.9
67.5°	20114.9	14906.7	1238.4	927.0	1025.1	1104.7	1148.8	1096.2	1018.0	965.4	966.9
70°	20005.3	13971.1	945.6	823.3	928.4	1009.5	1066.4	1025.1	941.3	891.5	895.7
72.5°	17768.8	11687.6	765.0	718.0	830.4	910.0	978.3	947.0	861.6	813.3	813.3
75°	13054.0	8296.5	611.4	611.4	708.1	806.2	881.5	861.6	783.4	749.3	739.3
77.5°	5502.5	3480.7	479.2	507.6	588.7	692.5	786.3	793.3	725.2	767.8	696.7
80°	1463.1	959.7	365.4	399.5	462.1	571.5	683.9	681.1	607.1	567.3	527.5
82.5°	557.4	378.2	260.2	281.6	334.2	437.9	541.7	558.8	484.8	419.4	419.4
85°	214.7	162.1	160.6	169.2	194.7	290.1	409.5	423.7	365.4	310.0	319.9
87.5°	55.5	48.4	59.8	56.9	89.6	155.0	234.6	243.1	223.2	129.4	184.8
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)