

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: P966869

Luminaire Tested: **NAV-SB4C-835-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966869
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-SB4C-835-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29294.5 lumens
Efficiency: N/A
Efficacy: 146.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

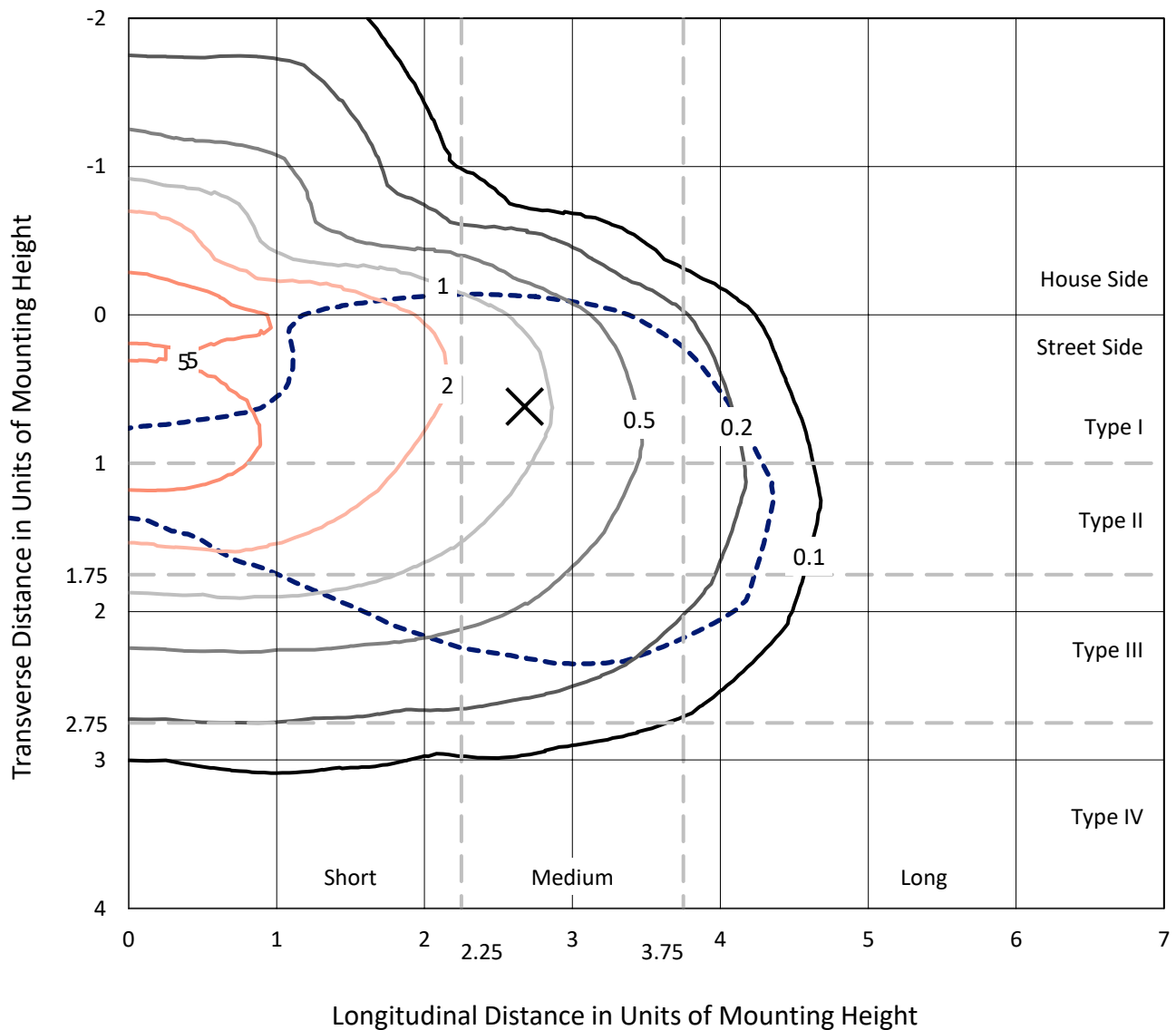
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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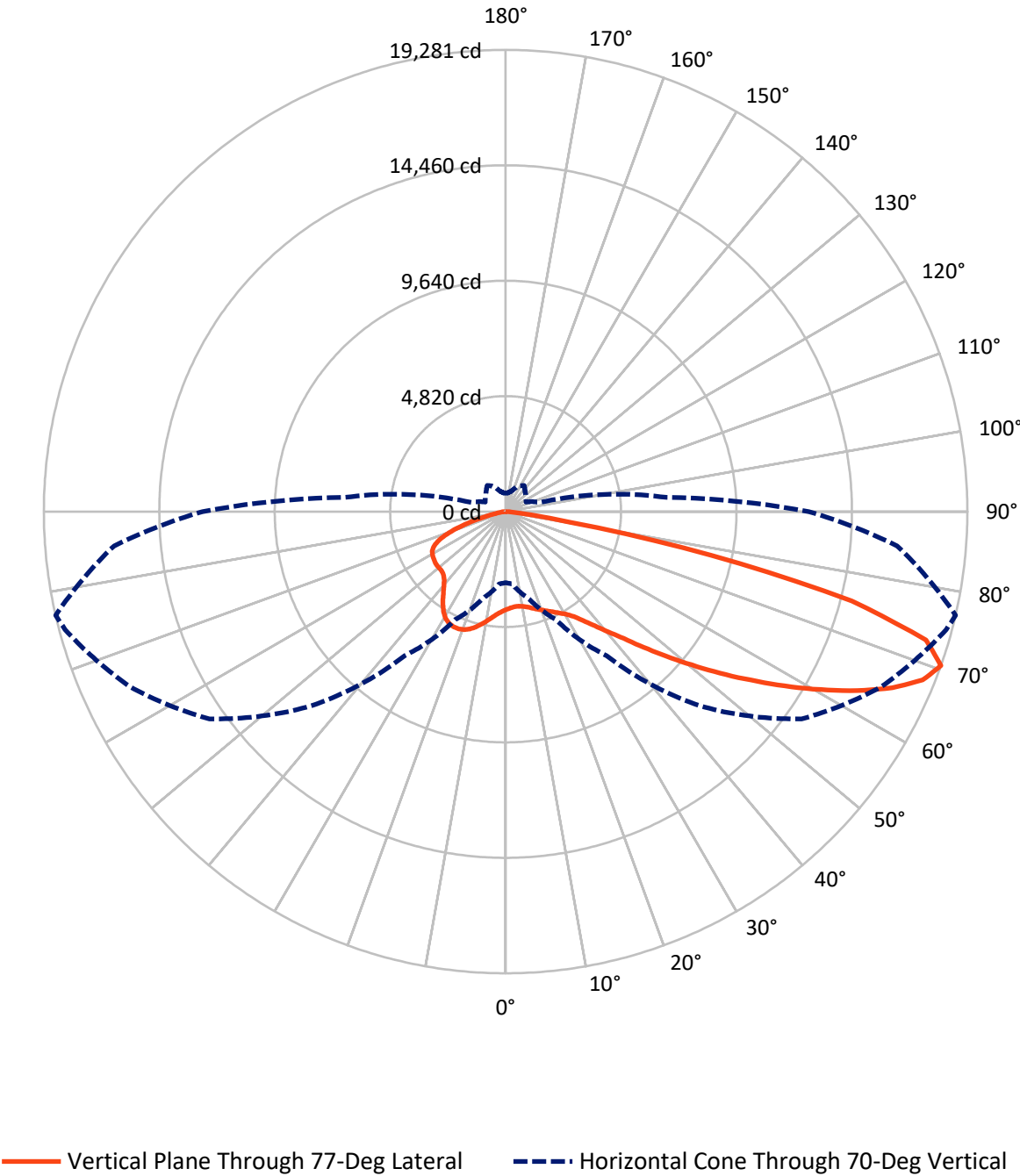
Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6415.0	0.0	6415.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	22879.5	0.0	22879.5
	% Fixture	78.1	0.0	78.1
Total	Lumens	29294.5	0.0	29294.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.8	1.3
10°-20°	1124.9	3.8
20°-30°	1923.8	6.6
30°-40°	3093.6	10.6
40°-50°	4830.0	16.5
50°-60°	6451.7	22.0
60°-70°	6876.5	23.5
70°-80°	4233.2	14.5
80°-90°	370.9	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°	29294.5	100.0
0°-180°	29294.5	100.0

Coefficient of Utilization



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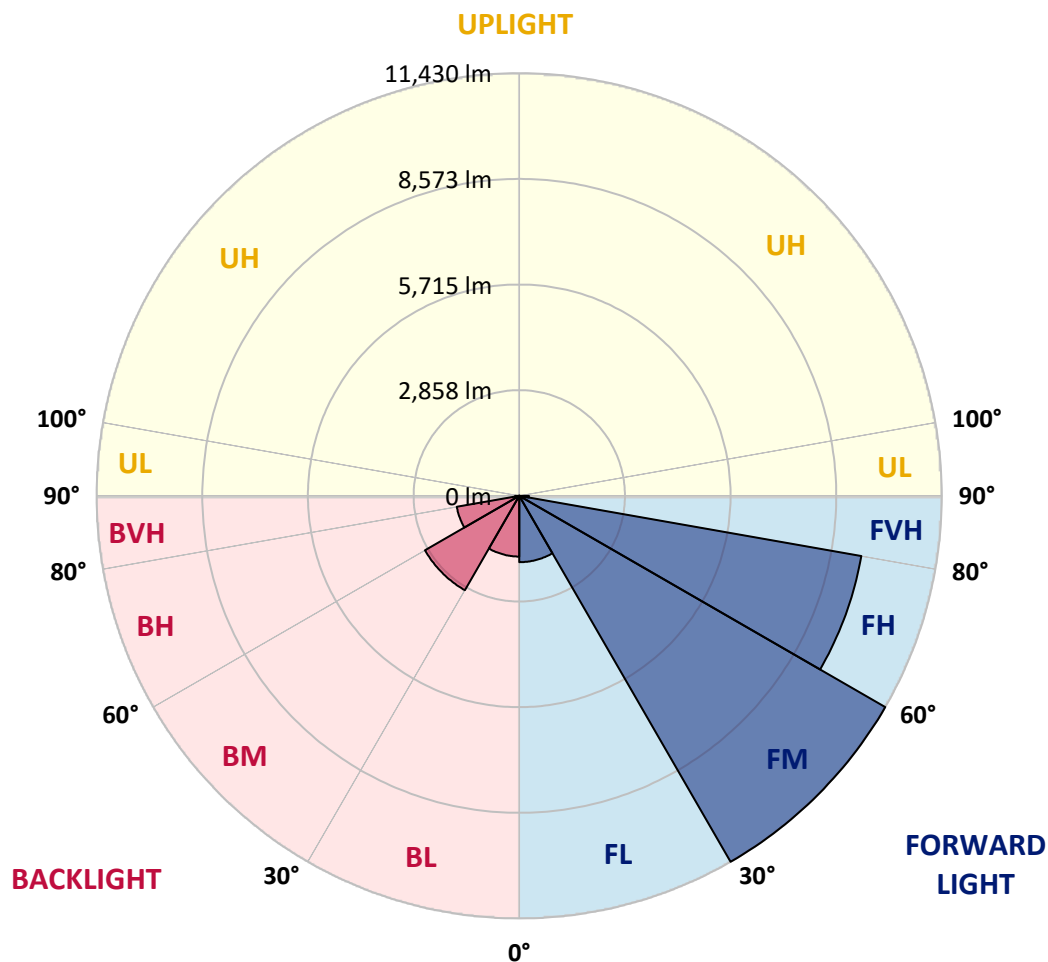
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1794.8	6.1			
FM	(30°-60°)	11430.1	39.0			
FH	(60°-80°)	9395.2	32.1			G4/12000
FVH	(80°-90°)	259.4	0.9			G3/500
BL	(0°-30°)	1643.7	5.6	B3/2500		
BM	(30°-60°)	2945.3	10.1	B3/5000		
BH	(60°-80°)	1714.5	5.9	B3/2500		G3/2500
BVH	(80°-90°)	111.6	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°	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9
2.5°	3767.3	3765.7	3785.3	3791.3	3827.2	3852.8	3900.8	3951.8	4017.8	4025.4	4065.9
5°	3549.8	3549.8	3572.2	3596.2	3642.7	3693.8	3767.3	3855.8	3969.8	3987.9	4088.3
7.5°	3365.2	3377.2	3396.7	3443.2	3497.2	3570.8	3683.2	3809.3	3959.4	3987.9	4149.8
10°	3216.7	3230.2	3254.2	3291.7	3372.7	3474.7	3621.7	3783.8	3984.8	4029.8	4239.9
12.5°	3170.1	3183.6	3197.2	3225.7	3300.7	3420.7	3596.2	3795.8	4046.4	4091.4	4362.9
15°	3278.2	3294.7	3284.2	3276.7	3315.7	3425.2	3608.2	3839.3	4122.9	4187.3	4514.4
17.5°	3527.2	3533.3	3509.2	3438.7	3432.7	3491.3	3665.3	3899.3	4218.9	4289.4	4667.4
20°	3929.3	3918.8	3869.3	3729.8	3650.2	3638.2	3762.8	3989.3	4317.9	4392.9	4832.5
22.5°	4475.5	4463.5	4364.4	4143.9	3966.9	3849.8	3903.8	4106.4	4428.9	4513.0	4993.1
25°	5156.6	5140.1	4994.5	4694.5	4419.9	4130.3	4095.9	4260.9	4565.5	4643.5	5161.1
27.5°	5951.8	5938.2	5780.7	5384.6	4988.6	4514.4	4334.4	4442.5	4708.0	4796.5	5350.1
30°	6806.9	6846.0	6566.9	6140.8	5639.7	5015.5	4655.4	4666.0	4892.5	4972.1	5579.7
32.5°	7812.1	7879.7	7543.6	7003.4	6319.3	5560.1	5060.5	4978.0	5161.1	5227.1	5869.3
35°	8808.3	8884.8	8605.8	8008.6	7221.0	6202.3	5483.6	5336.6	5518.2	5590.1	6253.3
37.5°	9669.5	9771.5	9627.5	9108.4	8185.8	6976.5	6035.7	5758.2	5957.7	6047.8	6769.4
40°	10349.1	10505.2	10494.7	10170.7	9323.0	7915.7	6736.4	6278.8	6503.8	6601.4	7395.1
42.5°	10901.3	11036.3	11153.3	11136.8	10509.7	8982.4	7560.1	6955.4	7126.5	7239.0	8098.7
45°	11282.4	11426.4	11678.4	11950.0	11651.4	10124.1	8503.8	7758.1	7914.1	8083.7	8937.4
47.5°	11622.9	11786.5	12113.6	12544.2	12620.6	11270.4	9537.5	8692.8	8835.3	9010.9	9779.0
50°	11652.9	11794.0	12301.0	12911.7	13309.3	12371.5	10647.7	9741.5	9875.1	10062.6	10680.7
52.5°	10928.2	11150.4	12035.6	12901.2	13625.8	13292.8	11750.4	10832.3	10982.3	11207.3	11613.9
55°	8482.8	8808.3	11256.9	12499.1	13513.3	13888.3	12799.2	11992.0	12184.1	12419.6	12553.1
57.5°	7306.5	7449.1	8935.8	11766.9	13000.2	14042.9	13684.4	13163.8	13472.8	13730.9	13546.3
60°	6566.9	6685.4	7564.6	10628.2	12325.1	13798.3	14368.4	14256.0	14790.0	15097.6	14562.1
62.5°	5774.7	5887.2	6686.9	8874.3	11460.8	13391.8	14800.6	15264.2	16140.4	16476.5	15519.2
65°	4988.6	5084.5	5851.2	7456.6	10362.6	12985.2	15024.1	16135.9	17390.1	17738.2	16314.4
67.5°	4112.4	4191.8	4916.5	6290.8	9027.4	12428.5	15135.1	16821.5	18477.9	18776.4	16707.5
70°	2967.6	3029.1	3777.7	4975.0	7351.5	11471.4	15090.2	17307.6	19041.9	19280.6	16410.5
72.5°	1402.8	1458.3	2337.5	3230.2	5192.5	9608.0	14179.4	16922.0	18468.9	18350.3	14592.0
75°	748.7	796.6	1342.7	1771.9	2742.6	6586.3	11603.4	14577.0	15508.8	14932.6	10784.2
77.5°	507.1	544.6	831.2	1063.7	1252.8	3126.7	7458.0	10092.6	9710.0	8758.8	5401.1
80°	402.1	441.1	681.1	720.2	606.1	1129.8	3081.7	4672.0	3356.2	2684.1	1536.3
82.5°	309.0	352.6	573.1	522.1	330.0	463.6	897.2	1477.8	859.7	654.2	372.1
85°	189.0	235.5	450.1	333.0	186.0	211.6	304.5	411.1	262.6	219.0	133.6
87.5°	96.0	135.0	228.1	121.6	84.0	49.5	81.0	81.0	69.0	60.0	34.5
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°	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9	4086.9
2.5°	4101.8	4131.9	4182.8	4230.9	4268.4	4304.4	4340.4	4359.9	4365.9	4389.9	4403.4
5°	4149.8	4205.4	4304.4	4397.5	4455.9	4492.0	4517.5	4532.4	4535.4	4542.9	4555.0
7.5°	4238.4	4326.9	4464.9	4558.0	4601.4	4598.5	4588.0	4550.5	4535.4	4521.9	4525.0
10°	4362.9	4480.0	4649.5	4714.0	4687.0	4615.0	4521.9	4412.4	4361.4	4311.9	4296.9
12.5°	4517.5	4666.0	4832.5	4829.5	4695.9	4511.4	4295.4	4127.4	4020.9	3944.3	3926.4
15°	4705.0	4876.0	5003.5	4901.5	4608.9	4277.4	3960.8	3741.8	3645.7	3561.8	3552.8
17.5°	4898.5	5081.5	5140.1	4879.0	4389.9	3930.8	3572.2	3399.7	3305.2	3260.2	3273.6
20°	5087.6	5269.1	5221.0	4750.0	4056.8	3537.7	3218.2	3123.7	3104.1	3114.7	3110.2
22.5°	5287.1	5449.1	5237.5	4501.0	3632.3	3135.7	2960.1	2963.1	3006.6	3038.1	3045.6
25°	5491.1	5600.7	5194.1	4140.9	3176.2	2840.1	2796.6	2844.6	2930.1	2991.7	3008.2
27.5°	5687.7	5735.7	5099.6	3695.2	2784.6	2628.5	2636.1	2735.1	2864.1	2949.6	2970.7
30°	5909.7	5855.7	4918.1	3194.2	2513.0	2447.0	2510.0	2625.5	2754.6	2831.0	2849.1
32.5°	6160.2	5959.2	4629.9	2730.6	2321.0	2301.4	2405.0	2480.0	2537.0	2559.5	2571.5
35°	6472.4	6104.8	4260.9	2405.0	2148.4	2194.9	2294.0	2256.4	2234.0	2222.0	2234.0
37.5°	6877.4	6301.3	3828.8	2193.5	2008.9	2118.5	2159.0	2041.9	1953.4	1909.9	1920.4
40°	7365.0	6589.4	3413.2	2029.9	1920.4	2052.5	1981.9	1840.9	1728.4	1666.9	1671.4
42.5°	7906.6	6891.0	3063.6	1906.9	1870.9	1998.4	1851.4	1683.4	1501.8	1482.4	1501.8
45°	8475.2	7201.5	2825.1	1812.4	1846.8	1951.9	1776.3	1504.8	1375.8	1455.3	1497.3
47.5°	9043.9	7486.6	2681.1	1741.9	1834.9	1899.4	1710.3	1405.8	1314.3	1429.8	1483.8
50°	9677.0	7741.6	2616.5	1690.8	1821.4	1878.4	1611.3	1380.3	1249.8	1326.2	1383.2
52.5°	10305.7	7939.6	2568.5	1639.8	1801.8	1861.9	1563.3	1350.2	1171.8	1176.3	1207.8
55°	10932.8	8068.7	2516.1	1572.4	1758.4	1825.8	1558.8	1317.2	1113.3	1092.2	1107.2
57.5°	11601.9	8142.2	2451.5	1497.3	1683.4	1734.4	1554.3	1291.8	1095.2	1060.7	1065.2
60°	12283.1	8250.2	2367.4	1405.8	1582.8	1624.8	1543.9	1282.8	1084.8	1026.2	1030.7
62.5°	12893.7	8287.7	2267.0	1318.8	1453.8	1516.8	1521.3	1275.3	1056.3	955.7	955.7
65°	13294.2	8125.7	2091.4	1219.8	1314.3	1405.8	1477.8	1249.8	1005.2	904.7	904.7
67.5°	13277.7	7663.6	1816.9	1092.2	1179.3	1282.8	1414.8	1206.2	943.7	841.6	846.1
70°	12659.7	6751.4	1468.8	943.7	1030.7	1150.8	1333.7	1141.7	870.2	772.6	781.7
72.5°	10857.7	5284.1	1066.7	769.7	858.1	1014.2	1228.8	1063.7	795.2	711.1	706.6
75°	7756.6	3344.2	723.1	591.1	667.7	859.7	1098.2	972.2	726.1	714.1	673.6
77.5°	3962.3	1597.9	478.6	432.1	465.1	678.1	922.7	868.7	736.7	589.6	525.1
80°	1288.7	589.6	301.6	294.1	309.0	451.6	714.1	712.7	558.1	400.6	354.0
82.5°	411.1	253.6	196.5	189.0	181.5	283.5	498.2	564.2	376.6	253.6	252.0
85°	163.5	151.5	115.5	106.5	76.5	133.6	261.1	375.0	280.5	183.1	187.6
87.5°	60.0	60.0	31.5	22.5	16.5	45.0	70.5	112.5	160.5	94.5	93.1
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)