

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: P967874

Luminaire Tested: **NAV-SB5A-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20742.9 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - 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



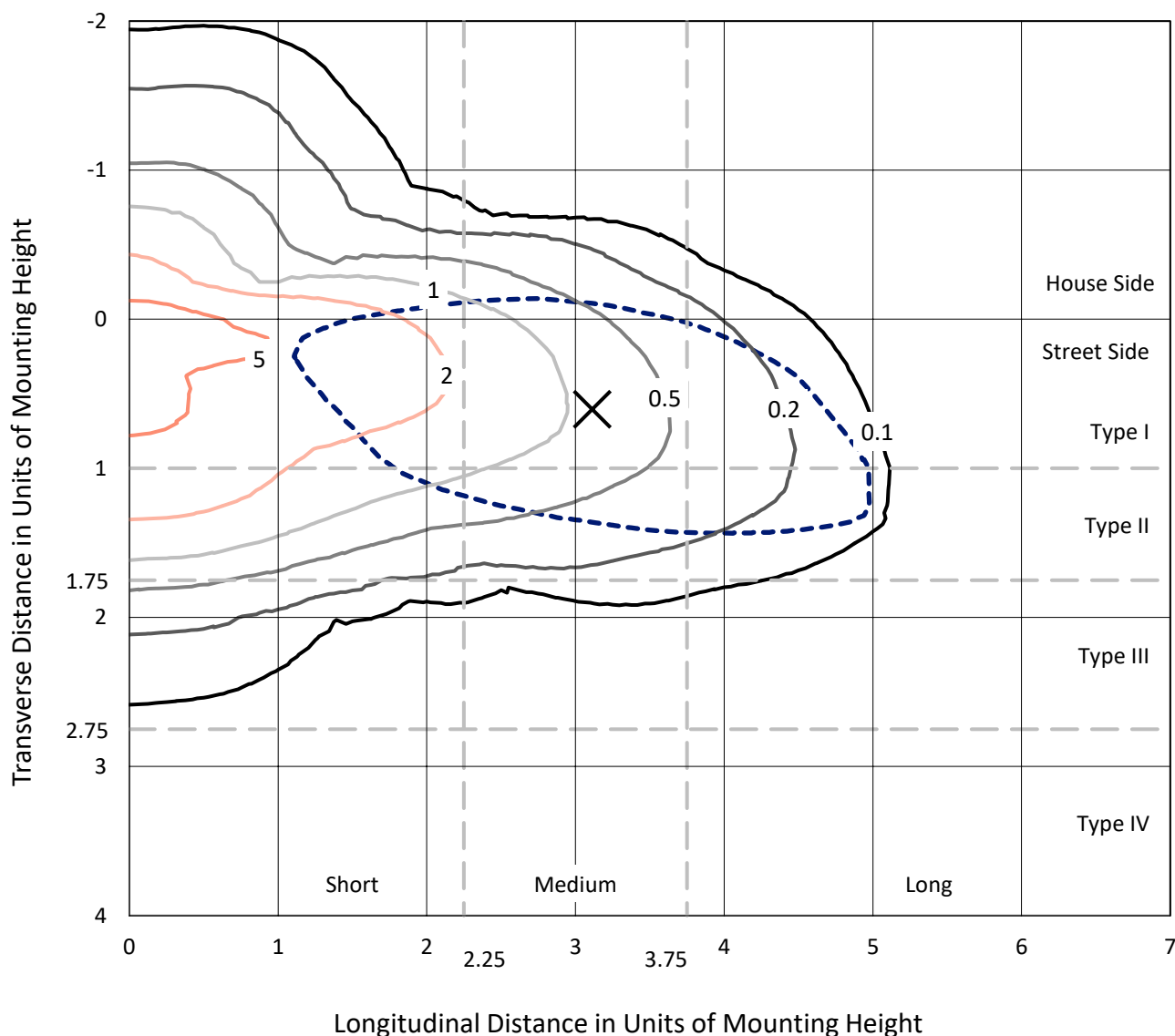
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

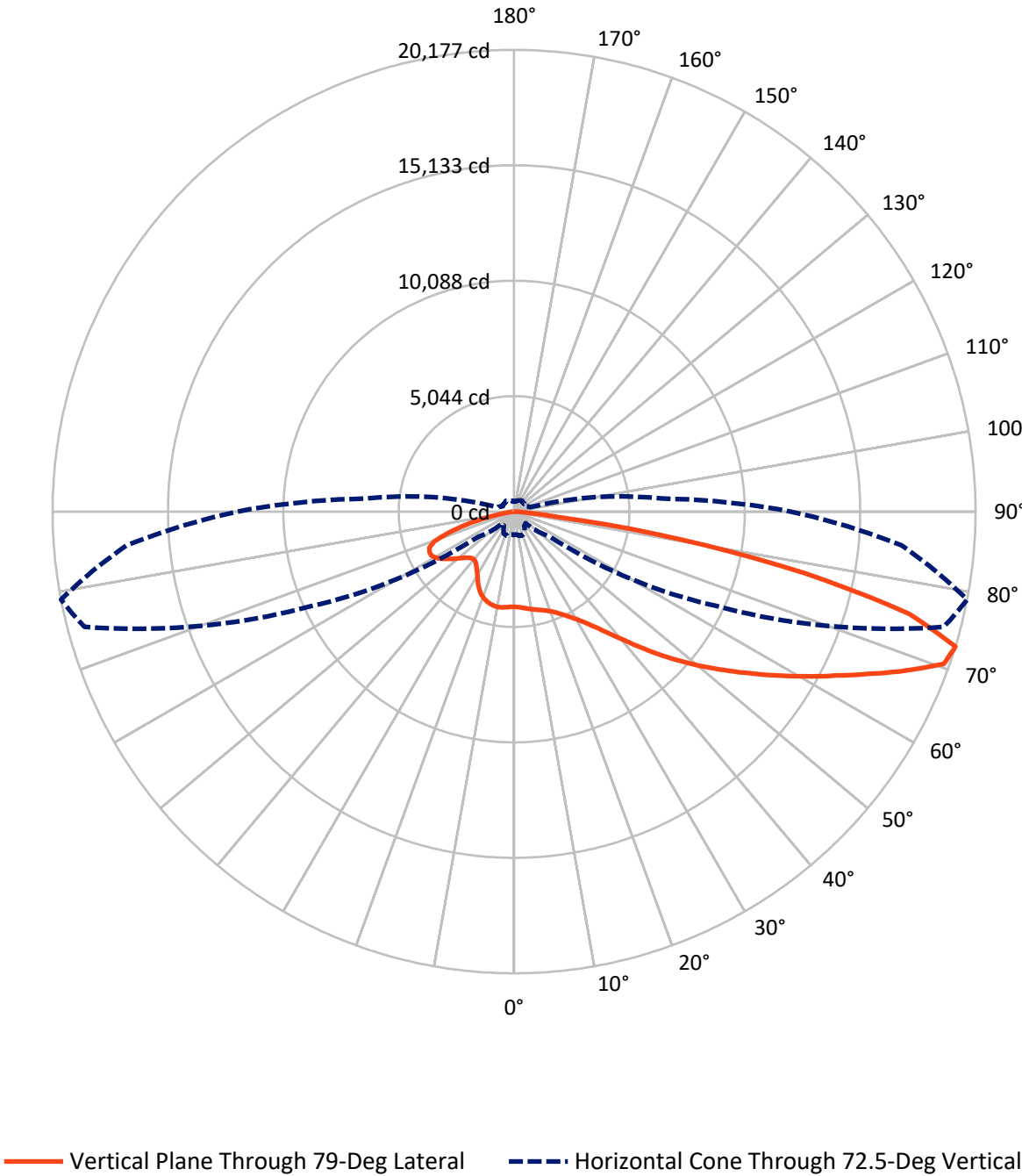
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4564.6	0.0	4564.6
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	16178.3	0.0	16178.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	20742.9	0.0	20742.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	378.0	1.8
10°-20°	988.2	4.8
20°-30°	1594.5	7.7
30°-40°	2393.2	11.5
40°-50°	3394.9	16.4
50°-60°	4287.3	20.7
60°-70°	4354.3	21.0
70°-80°	2967.6	14.3
80°-90°	385.0	1.9
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°	20742.9	100.0
0°-180°	20742.9	100.0

Coefficient of Utilization



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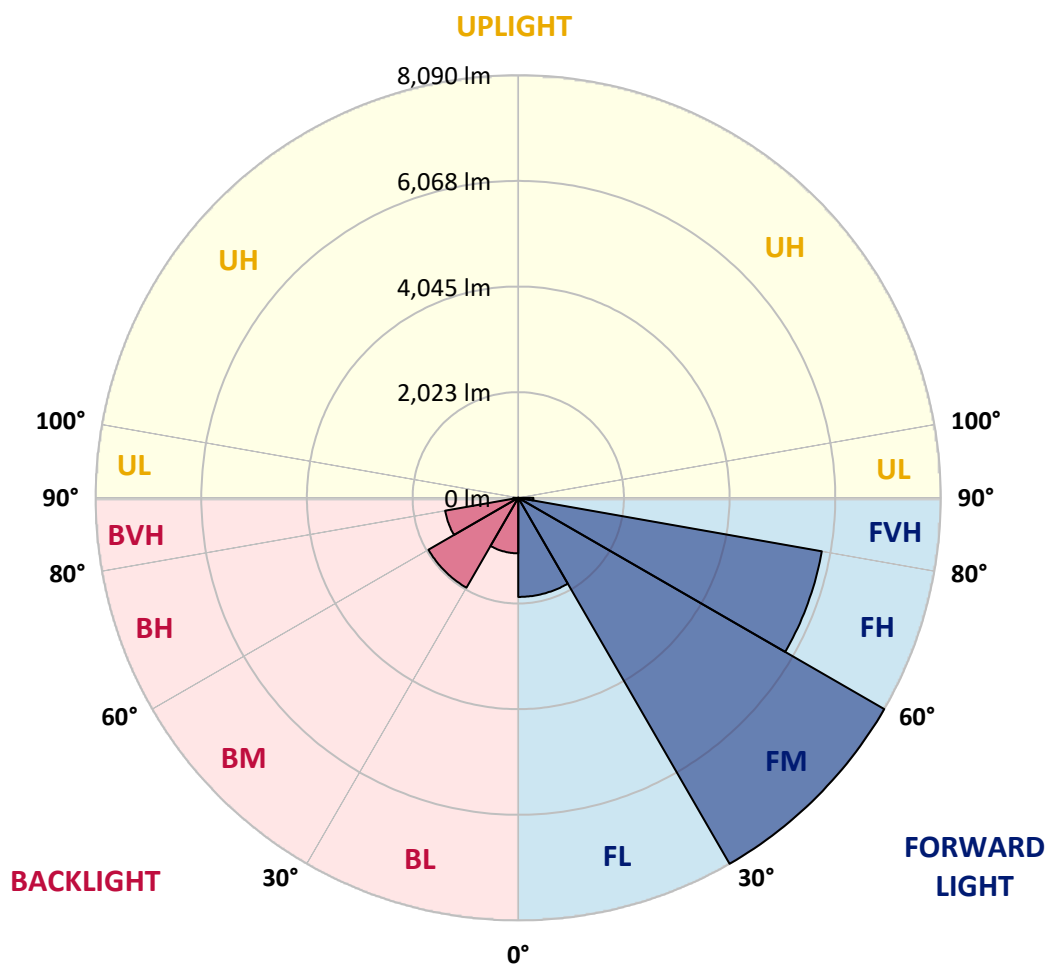
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1897.5	9.1			
FM	(30°-60°)	8090.2	39.0			
FH	(60°-80°)	5900.7	28.4			G3/7500
FVH	(80°-90°)	290.0	1.4			G3/500
BL	(0°-30°)	1063.2	5.1	B3/2500		
BM	(30°-60°)	1985.1	9.6	B2/2500		
BH	(60°-80°)	1421.3	6.9	B3/2500		G3/2500
BVH	(80°-90°)	95.0	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0
2.5°	4166.1	4146.4	4158.4	4154.1	4159.6	4166.1	4168.4	4171.6	4182.6	4181.5	4180.4
5°	4157.4	4137.6	4154.1	4148.6	4162.8	4178.2	4191.3	4203.4	4221.0	4228.6	4217.7
7.5°	4138.7	4125.5	4142.0	4158.4	4184.8	4207.8	4226.5	4254.0	4279.2	4283.6	4291.3
10°	4030.1	4020.3	4058.6	4101.4	4173.8	4236.3	4276.9	4308.8	4336.2	4340.6	4351.5
12.5°	3917.0	3905.0	3947.8	4005.9	4123.4	4236.3	4321.9	4363.6	4387.8	4402.1	4418.5
15°	3898.4	3888.5	3912.7	3963.2	4060.8	4206.7	4352.7	4429.4	4450.3	4466.7	4473.4
17.5°	3988.4	3969.7	3979.6	3997.2	4054.2	4179.3	4376.9	4504.1	4535.9	4553.5	4553.5
20°	4196.9	4170.5	4155.1	4120.1	4110.1	4183.7	4374.6	4594.0	4635.8	4657.7	4663.1
22.5°	4474.4	4456.9	4424.0	4335.1	4238.6	4237.5	4416.3	4709.3	4787.2	4808.0	4794.8
25°	4810.2	4783.9	4742.2	4621.5	4436.1	4343.8	4486.5	4856.2	4986.8	4992.4	4953.9
27.5°	5196.4	5156.9	5099.9	4940.8	4690.6	4510.6	4594.0	5025.3	5216.2	5214.0	5134.9
30°	5603.5	5564.0	5503.6	5310.5	4995.6	4735.6	4743.3	5207.4	5488.3	5476.3	5341.3
32.5°	5900.8	5871.2	5859.1	5710.0	5346.7	5001.1	4914.5	5409.3	5824.0	5813.1	5624.4
35°	6129.1	6090.7	6104.9	6029.3	5729.6	5298.4	5124.0	5649.6	6232.2	6231.1	5996.2
37.5°	6355.1	6321.1	6333.2	6282.6	6084.1	5675.9	5379.7	5943.7	6738.0	6762.1	6446.1
40°	6561.3	6525.2	6573.4	6526.3	6359.5	6077.5	5670.4	6276.1	7323.9	7370.1	6990.4
42.5°	6685.4	6656.9	6736.9	6738.0	6598.6	6416.5	5989.7	6642.5	8002.0	8105.2	7659.7
45°	6728.1	6718.3	6839.0	6864.2	6810.4	6612.9	6277.2	7042.0	8732.8	8917.1	8422.2
47.5°	6682.1	6663.4	6830.2	6923.5	6966.2	6705.1	6515.3	7474.3	9478.9	9748.8	9253.9
50°	6449.4	6413.2	6661.2	6857.7	7010.2	6765.4	6755.6	7973.5	10327.0	10622.2	10090.0
52.5°	6031.4	6003.9	6285.9	6627.2	6913.6	6795.0	7025.5	8518.8	11132.4	11514.2	10947.0
55°	5497.1	5460.9	5771.4	6216.8	6673.3	6785.2	7295.4	9128.9	12082.6	12469.8	11832.4
57.5°	4650.0	4577.5	4970.4	5497.1	6281.6	6773.1	7576.3	9735.7	13048.1	13512.3	12777.1
60°	3414.6	3307.1	3788.7	4413.0	5515.7	6655.7	7924.1	10415.9	14206.8	14624.8	13808.5
62.5°	1988.2	1925.7	2240.5	2823.2	4157.4	5964.5	8119.4	11207.0	15345.7	15784.6	14822.3
65°	1543.8	1526.2	1553.7	1598.7	2314.0	4465.7	7517.0	11978.4	16794.0	17101.2	15879.0
67.5°	1412.1	1398.9	1411.0	1326.6	1174.0	2487.4	5946.9	12173.6	18345.4	18532.0	16804.0
70°	1255.2	1239.8	1279.4	1206.9	923.8	1131.2	3842.4	11464.8	19579.9	19929.9	17507.2
72.5°	1022.6	1005.0	1097.3	1064.3	778.0	726.3	1930.0	9780.7	19450.4	20176.7	17003.6
75°	785.6	775.7	885.5	912.9	634.2	571.6	926.1	7270.1	17116.6	17848.4	14654.4
77.5°	610.1	602.4	658.4	758.2	511.3	443.3	569.5	4611.6	12898.9	13027.2	10098.8
80°	457.6	435.6	487.2	587.0	398.3	323.7	386.2	2689.3	8153.5	7390.9	4395.5
82.5°	286.4	275.4	318.2	391.8	280.8	222.7	251.2	1485.6	3267.5	1924.5	848.2
85°	163.5	159.1	173.3	223.9	152.5	128.3	143.7	656.1	596.9	410.4	255.6
87.5°	65.8	63.7	79.0	99.8	56.0	47.2	50.4	158.0	131.7	121.8	84.5
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°	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0	4164.0
2.5°	4176.1	4176.1	4160.7	4136.5	4109.1	4091.5	4063.0	4055.3	4025.7	4016.9	4031.2
5°	4226.5	4217.7	4170.5	4102.5	4009.3	3923.7	3829.3	3770.1	3686.6	3657.0	3678.9
7.5°	4290.1	4265.9	4184.8	4035.5	3840.3	3648.3	3448.5	3297.1	3152.3	3100.7	3107.3
10°	4348.3	4314.2	4176.1	3914.9	3576.9	3244.4	2926.3	2703.5	2534.6	2465.4	2480.8
12.5°	4406.5	4343.8	4117.8	3714.1	3202.8	2751.8	2412.7	2239.4	2135.2	2051.8	2079.2
15°	4461.3	4373.5	4027.8	3445.2	2792.4	2334.8	2084.7	1946.5	1863.0	1808.2	1818.0
17.5°	4525.0	4398.8	3893.0	3104.0	2401.8	2046.3	1842.2	1758.8	1742.4	1735.8	1740.1
20°	4613.8	4421.7	3715.2	2722.2	2114.4	1815.9	1710.5	1702.8	1701.8	1698.5	1709.5
22.5°	4709.3	4449.2	3480.4	2375.4	1869.7	1672.2	1653.5	1638.2	1628.3	1627.2	1639.3
25°	4822.3	4458.0	3186.3	2091.3	1661.2	1604.1	1582.2	1559.1	1552.6	1552.6	1559.1
27.5°	4932.0	4428.4	2844.0	1844.4	1543.8	1541.6	1513.1	1505.4	1504.3	1507.6	1516.4
30°	5041.8	4372.4	2503.9	1616.2	1475.8	1475.8	1465.9	1471.4	1475.8	1486.8	1494.4
32.5°	5189.9	4313.2	2219.6	1447.2	1416.6	1405.6	1415.4	1426.4	1430.8	1445.0	1457.1
35°	5407.1	4271.5	1993.6	1355.0	1355.0	1340.8	1346.3	1344.1	1334.2	1327.7	1343.0
37.5°	5694.6	4269.2	1807.1	1312.3	1303.5	1301.3	1302.4	1288.1	1249.8	1203.7	1204.8
40°	6040.2	4328.6	1663.4	1282.7	1276.0	1289.2	1282.7	1244.2	1138.9	1058.8	1056.7
42.5°	6504.3	4497.5	1571.2	1246.4	1266.2	1282.7	1256.3	1123.5	1052.3	998.5	996.3
45°	7050.8	4771.8	1524.1	1208.1	1247.5	1267.3	1140.0	1081.9	1024.8	960.1	955.7
47.5°	7669.6	5117.4	1513.1	1171.8	1205.8	1217.9	1090.6	1064.3	999.6	929.4	923.8
50°	8343.3	5526.7	1542.7	1129.0	1145.5	1103.8	1074.2	1050.0	983.1	914.0	906.3
52.5°	9040.0	5977.7	1602.0	1070.9	1085.2	1039.0	1067.6	1046.7	973.2	880.0	873.4
55°	9724.7	6431.9	1659.0	1002.9	1023.7	980.9	1049.0	1033.6	928.2	822.9	817.4
57.5°	10420.3	6883.9	1714.9	942.5	964.4	925.0	1019.4	998.5	877.8	770.3	768.0
60°	11143.4	7322.8	1741.3	884.4	899.7	873.4	974.4	938.1	820.7	716.5	713.2
62.5°	11820.3	7688.2	1698.5	826.3	836.1	825.1	915.1	866.8	763.6	656.1	655.1
65°	12499.5	7905.4	1566.8	769.2	771.3	765.9	831.7	790.0	696.7	603.5	596.9
67.5°	13115.1	8027.3	1357.3	707.7	702.2	700.1	753.8	706.6	632.0	550.8	544.2
70°	13245.7	7717.8	1036.9	635.3	635.3	629.8	668.2	619.9	560.7	494.9	492.6
72.5°	12098.0	6492.2	736.3	553.0	561.8	550.8	582.6	542.0	488.3	444.3	431.2
75°	9755.3	4760.8	535.5	468.5	483.9	465.2	494.9	466.3	420.2	419.1	377.4
77.5°	6702.9	2943.8	388.4	386.2	397.2	373.1	407.0	391.8	350.0	331.4	310.5
80°	2860.5	1174.0	283.1	298.5	298.5	276.5	316.0	320.4	284.1	275.4	275.4
82.5°	569.5	333.5	198.6	205.2	193.1	186.5	223.9	247.9	342.3	380.7	381.8
85°	171.2	122.9	119.6	111.9	98.7	99.8	131.7	249.1	307.2	175.6	151.4
87.5°	47.2	30.7	31.8	25.2	20.8	27.5	45.0	188.7	103.1	43.9	37.3
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)