

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: P968296

Luminaire Tested: **NAV-SB5B-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30866.8 lumens
Efficiency: N/A
Efficacy: 168.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

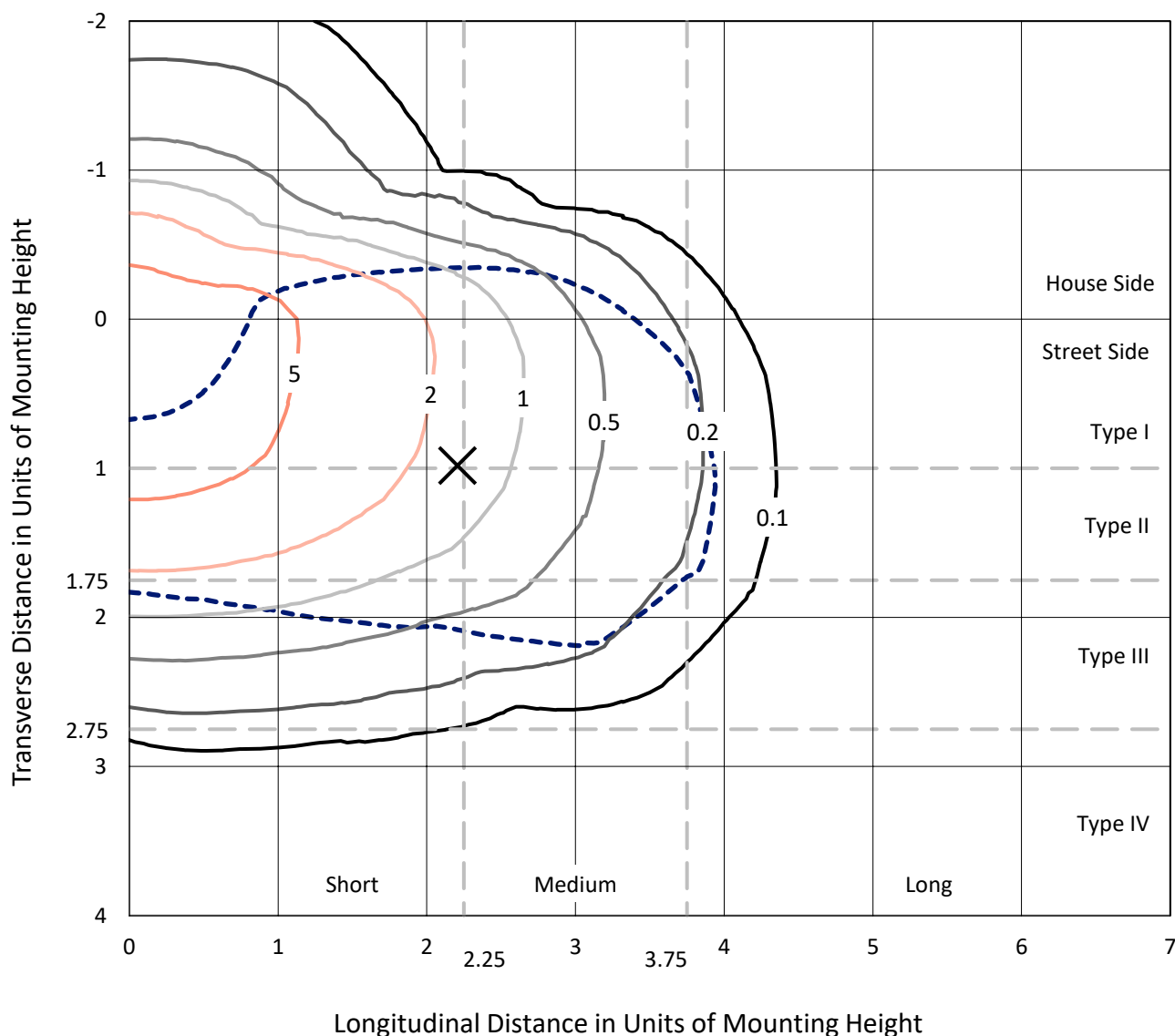
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

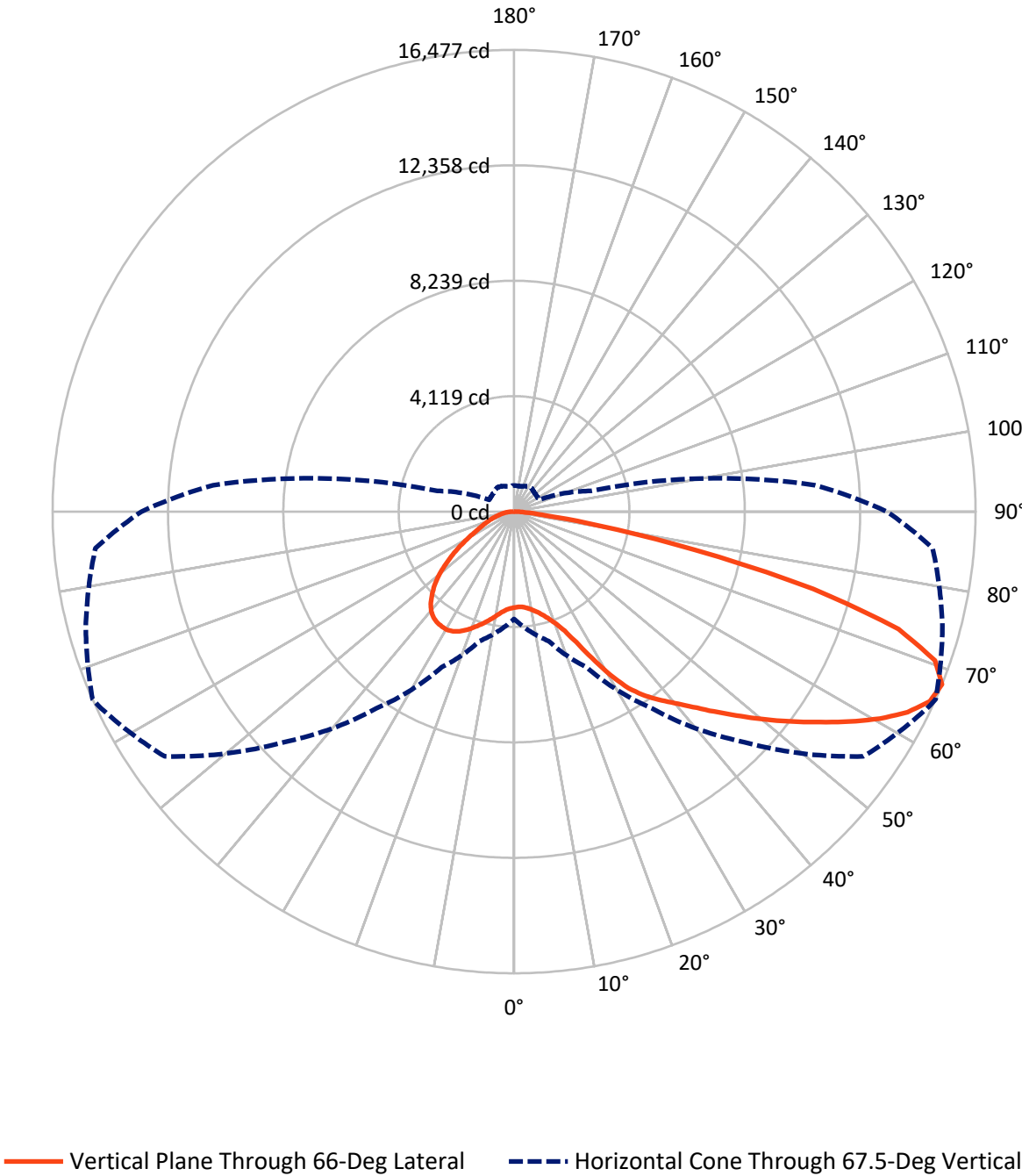
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7675.0	0.0	7675.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	23191.9	0.0	23191.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	30866.8	0.0	30866.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.4	1.1
10°-20°	1121.4	3.6
20°-30°	2161.5	7.0
30°-40°	3789.9	12.3
40°-50°	5634.3	18.3
50°-60°	7142.1	23.1
60°-70°	6988.3	22.6
70°-80°	3333.5	10.8
80°-90°	356.3	1.2
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°	30866.8	100.0
0°-180°	30866.8	100.0

Coefficient of Utilization



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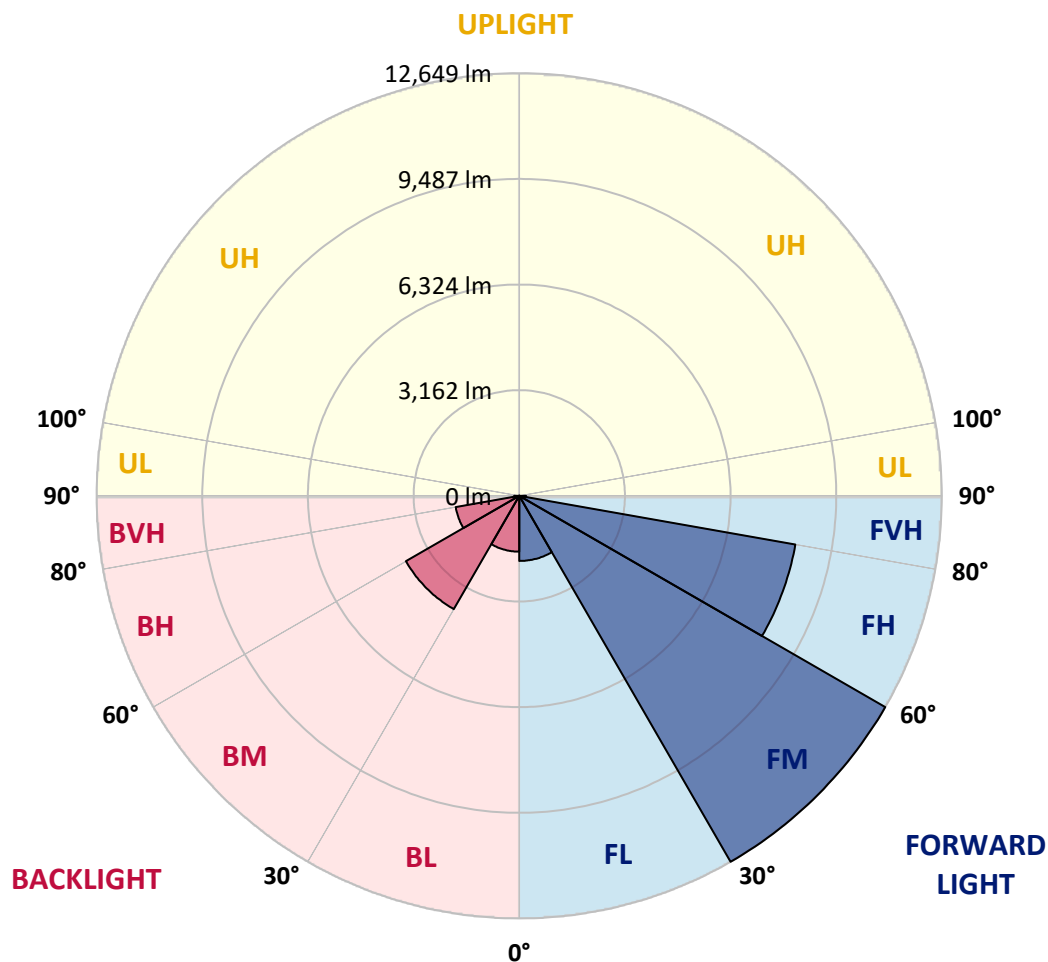
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1950.5	6.3			
FM	(30°-60°)	12649.0	41.0			
FH	(60°-80°)	8390.5	27.2			G4/12000
FVH	(80°-90°)	202.0	0.7			G2/225
BL	(0°-30°)	1671.9	5.4	B3/2500		
BM	(30°-60°)	3917.4	12.7	B3/5000		
BH	(60°-80°)	1931.4	6.3	B3/2500		G3/2500
BVH	(80°-90°)	154.3	0.5			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5
2.5°	3387.8	3407.3	3402.5	3394.4	3392.7	3395.9	3400.8	3405.7	3404.1	3412.2	3425.1
5°	3378.1	3397.6	3395.9	3395.9	3402.5	3415.4	3423.5	3431.7	3423.5	3433.2	3451.1
7.5°	3384.7	3399.2	3405.7	3412.2	3428.4	3452.7	3472.2	3490.0	3480.3	3491.7	3514.3
10°	3467.4	3478.6	3485.2	3485.2	3496.5	3524.1	3543.5	3576.0	3567.9	3585.8	3614.9
12.5°	3618.1	3629.5	3629.5	3623.1	3631.2	3649.0	3655.5	3691.1	3676.6	3705.7	3734.9
15°	3803.1	3825.7	3807.9	3796.5	3799.8	3817.6	3816.0	3843.5	3829.0	3853.3	3879.2
17.5°	4007.3	4036.6	4007.3	4005.8	3999.2	4018.7	4020.4	4044.6	4018.7	4036.6	4054.4
20°	4249.0	4289.5	4265.2	4273.3	4258.8	4266.9	4275.0	4310.6	4270.2	4283.1	4278.2
22.5°	4589.5	4638.2	4612.3	4643.1	4633.4	4626.8	4625.3	4688.6	4625.3	4630.1	4583.1
25°	5085.8	5144.3	5098.9	5141.0	5141.0	5162.1	5186.4	5267.5	5162.1	5131.3	5009.6
27.5°	5818.9	5877.2	5788.1	5814.0	5805.9	5857.8	5831.8	6032.9	5919.5	5869.2	5624.3
30°	6701.1	6804.9	6636.3	6629.8	6621.7	6704.3	6741.6	6874.7	6759.5	6709.2	6414.0
32.5°	7654.7	7763.4	7562.2	7503.9	7473.1	7523.4	7492.5	7599.6	7520.1	7442.3	7077.4
35°	8663.5	8770.5	8579.1	8465.6	8342.4	8236.9	8126.6	8154.2	8079.7	7961.3	7583.4
37.5°	9617.1	9813.2	9610.6	9488.9	9261.9	9055.9	8747.8	8619.6	8549.9	8441.3	8060.2
40°	10588.5	10700.4	10546.3	10442.5	10196.0	9873.3	9380.3	9109.5	9015.4	8909.9	8587.2
42.5°	11303.7	11410.7	11328.0	11256.7	11063.6	10689.0	10051.7	9712.7	9576.5	9458.1	9184.0
45°	11871.3	11950.8	11898.9	11924.8	11842.1	11478.9	10747.4	10359.8	10218.7	10074.4	9858.7
47.5°	12100.0	12184.3	12267.0	12421.1	12562.2	12294.6	11495.1	11060.5	10911.2	10763.6	10551.1
50°	12074.0	12160.0	12400.0	12727.6	13165.5	13076.2	12283.2	11806.5	11668.6	11499.9	11303.7
52.5°	11866.4	11963.7	12271.9	12816.8	13514.1	13661.7	13086.0	12576.7	12447.0	12246.0	12049.7
55°	11321.5	11380.0	11842.1	12614.1	13596.8	14070.4	13872.6	13397.4	13267.6	12987.1	12773.0
57.5°	10311.2	10395.6	11068.6	12067.5	13389.3	14347.7	14563.4	14260.2	14135.3	13731.5	13507.7
60°	8992.6	9127.3	9897.6	11149.6	12860.6	14346.1	15191.0	15108.3	15004.6	14464.5	14231.0
62.5°	7500.6	7656.3	8397.5	9852.2	11936.1	13939.1	15583.5	15818.7	15765.1	15140.8	14842.4
65°	5760.5	5867.5	6605.4	8173.7	10497.6	13065.0	15628.9	16303.5	16313.3	15654.9	15161.9
67.5°	3835.4	4143.6	4784.2	6133.5	8571.0	11636.1	15230.0	16383.1	16477.1	15831.6	15001.3
70°	1871.5	2276.9	2904.5	3986.3	6133.5	9445.2	14187.2	15731.1	15940.3	15316.0	14044.4
72.5°	776.8	908.2	1250.4	1967.2	3520.9	6373.6	12091.8	13963.4	14351.0	13570.9	11808.1
75°	523.9	567.6	715.2	1008.7	1603.9	3143.0	8720.2	10411.7	11036.1	10249.6	8378.0
77.5°	403.8	431.4	520.6	705.5	953.6	1188.8	4667.4	6274.6	6597.3	6107.6	4359.3
80°	317.9	339.0	389.2	514.1	676.3	635.7	1590.9	2842.9	3029.5	2541.3	1401.2
82.5°	275.7	283.8	278.9	348.7	449.3	371.4	522.2	1049.3	1157.9	840.1	457.4
85°	199.5	222.2	232.0	215.7	238.4	188.1	214.1	371.4	408.7	364.9	257.9
87.5°	81.1	120.0	147.6	139.5	87.5	53.5	66.5	108.6	124.8	136.2	84.4
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°	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5	3423.5
2.5°	3426.8	3438.2	3446.3	3456.0	3462.4	3472.2	3491.7	3503.0	3504.7	3512.8	3511.1
5°	3457.6	3473.8	3491.7	3517.6	3546.8	3571.1	3608.4	3634.3	3644.1	3652.2	3650.5
7.5°	3524.1	3546.8	3579.2	3624.6	3666.8	3699.2	3744.6	3775.5	3806.2	3817.6	3819.3
10°	3623.1	3655.5	3702.5	3764.1	3809.5	3851.6	3898.7	3924.6	3955.5	3968.5	3975.0
12.5°	3746.3	3780.3	3842.0	3927.9	3970.0	3999.2	4015.4	4009.0	4015.4	4026.8	4030.1
15°	3887.4	3924.6	3994.4	4086.9	4116.0	4090.1	4054.4	4022.0	4017.1	4020.4	4031.7
17.5°	4054.4	4082.0	4163.0	4240.9	4219.8	4112.8	4034.9	3983.0	3957.1	3949.0	3960.4
20°	4288.0	4288.0	4354.4	4403.1	4262.0	4080.3	3958.8	3874.4	3820.9	3798.1	3793.3
22.5°	4571.7	4545.8	4588.0	4553.9	4253.9	3989.5	3820.9	3674.9	3593.9	3561.4	3556.5
25°	4931.8	4900.9	4889.7	4678.8	4195.5	3845.2	3571.1	3394.4	3322.9	3305.1	3308.4
27.5°	5475.0	5397.2	5249.6	4746.9	4088.4	3618.1	3279.2	3115.4	3074.9	3076.4	3081.4
30°	6198.4	6042.7	5681.1	4758.3	3913.3	3297.0	2980.8	2864.1	2844.6	2852.7	2880.2
32.5°	6868.1	6720.6	6122.1	4706.4	3644.1	2982.4	2713.2	2635.4	2606.2	2615.9	2628.9
35°	7393.6	7353.0	6530.9	4633.4	3313.3	2687.2	2473.2	2406.7	2349.9	2337.0	2346.7
37.5°	7889.8	7873.6	6837.4	4531.2	2985.6	2478.0	2280.2	2192.6	2110.0	2064.6	2066.1
40°	8434.8	8418.5	7038.5	4373.9	2695.3	2296.4	2106.7	1991.6	1889.4	1806.7	1814.8
42.5°	9047.8	8952.1	7134.1	4148.5	2448.8	2142.4	1965.5	1809.8	1675.3	1599.1	1603.9
45°	9717.6	9502.0	7132.5	3861.4	2241.3	2001.2	1814.8	1594.2	1469.3	1398.0	1394.7
47.5°	10427.9	10027.4	7044.9	3543.5	2040.2	1845.6	1581.3	1412.6	1329.8	1286.1	1276.3
50°	11161.0	10518.8	6895.7	3178.6	1834.2	1668.8	1435.3	1320.1	1256.9	1216.4	1201.7
52.5°	11850.2	10964.7	6715.7	2765.1	1625.0	1496.9	1370.4	1281.1	1214.7	1169.3	1149.8
55°	12490.9	11349.1	6461.1	2341.8	1454.7	1381.7	1339.6	1265.0	1188.8	1135.2	1114.2
57.5°	13060.0	11598.8	6021.6	1944.5	1333.1	1302.3	1307.2	1237.4	1149.8	1104.4	1075.2
60°	13533.6	11782.1	5371.3	1576.3	1234.2	1224.5	1256.9	1185.5	1083.3	1031.5	1008.7
62.5°	13817.4	11778.9	4573.3	1290.9	1149.8	1153.0	1190.3	1120.6	1016.8	968.2	953.6
65°	13793.1	11490.1	3697.6	1104.4	1068.8	1071.9	1120.6	1049.3	961.7	932.5	930.9
67.5°	13304.9	10786.4	2836.5	982.8	979.6	994.1	1050.9	1000.6	927.6	924.4	929.3
70°	11983.2	9325.1	2043.4	885.5	887.1	908.2	982.8	969.9	909.8	916.2	914.7
72.5°	9609.0	7109.8	1372.0	783.3	784.9	819.0	917.9	945.5	892.0	978.0	990.9
75°	6399.5	4433.9	882.2	674.7	676.3	720.1	861.2	898.4	843.3	974.7	982.8
77.5°	3074.9	1993.1	639.0	567.6	567.6	608.1	744.4	804.4	718.4	757.4	694.1
80°	1062.2	749.3	502.8	457.4	447.6	475.2	627.6	697.3	619.5	570.8	535.2
82.5°	418.4	389.2	403.8	355.2	322.8	340.6	488.1	575.7	455.7	411.9	410.3
85°	240.1	253.0	285.5	235.1	186.5	209.2	358.4	413.6	343.8	303.3	309.8
87.5°	64.9	89.2	131.4	121.7	84.4	89.2	170.3	228.7	197.8	152.4	157.3
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)