

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: P966714

Luminaire Tested: **NAV-SB4C-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966714
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-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33414 lumens
Efficiency: N/A
Efficacy: 166.5 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

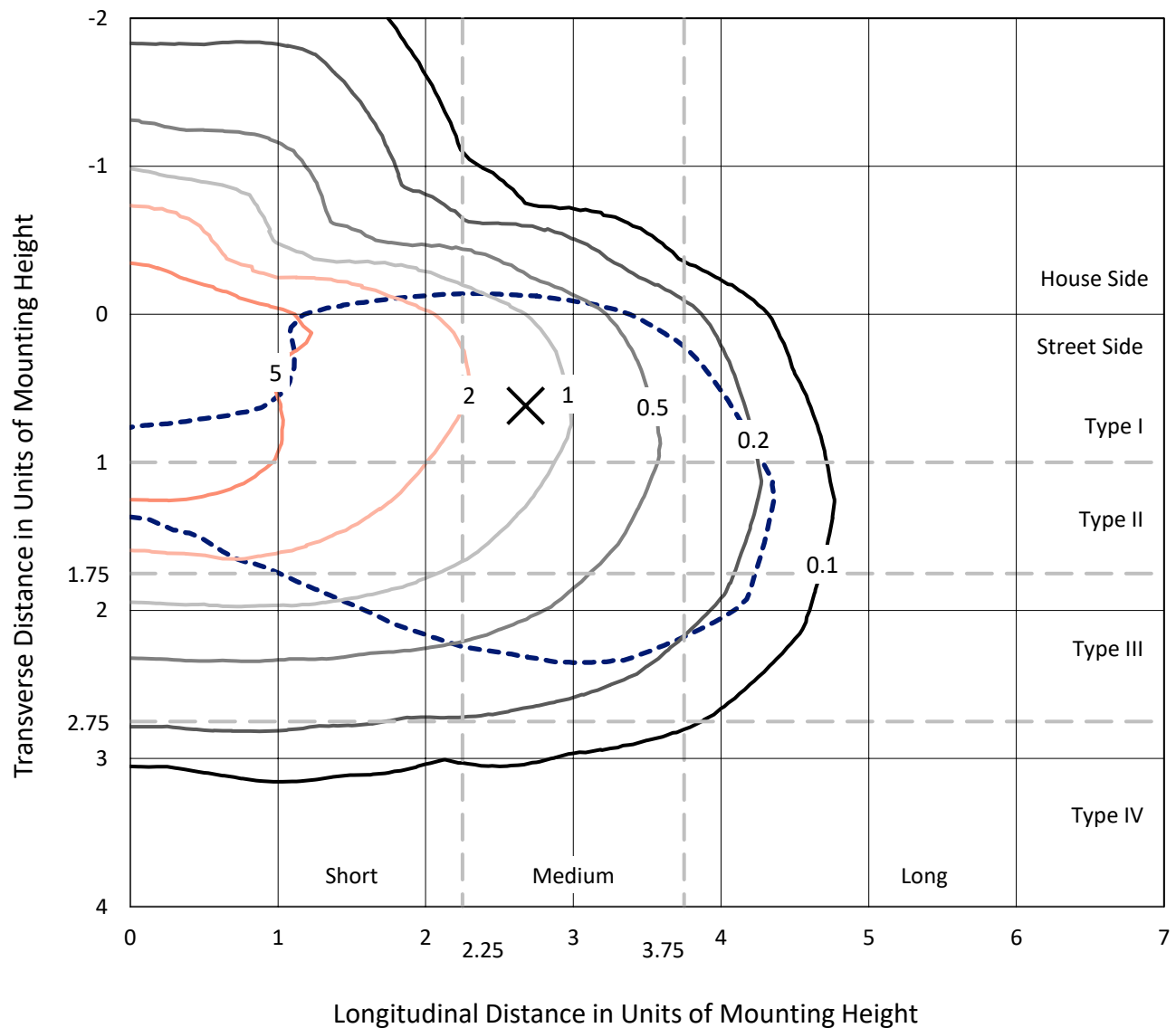


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Iso-Footcandle Lines of Horizontal Illumination

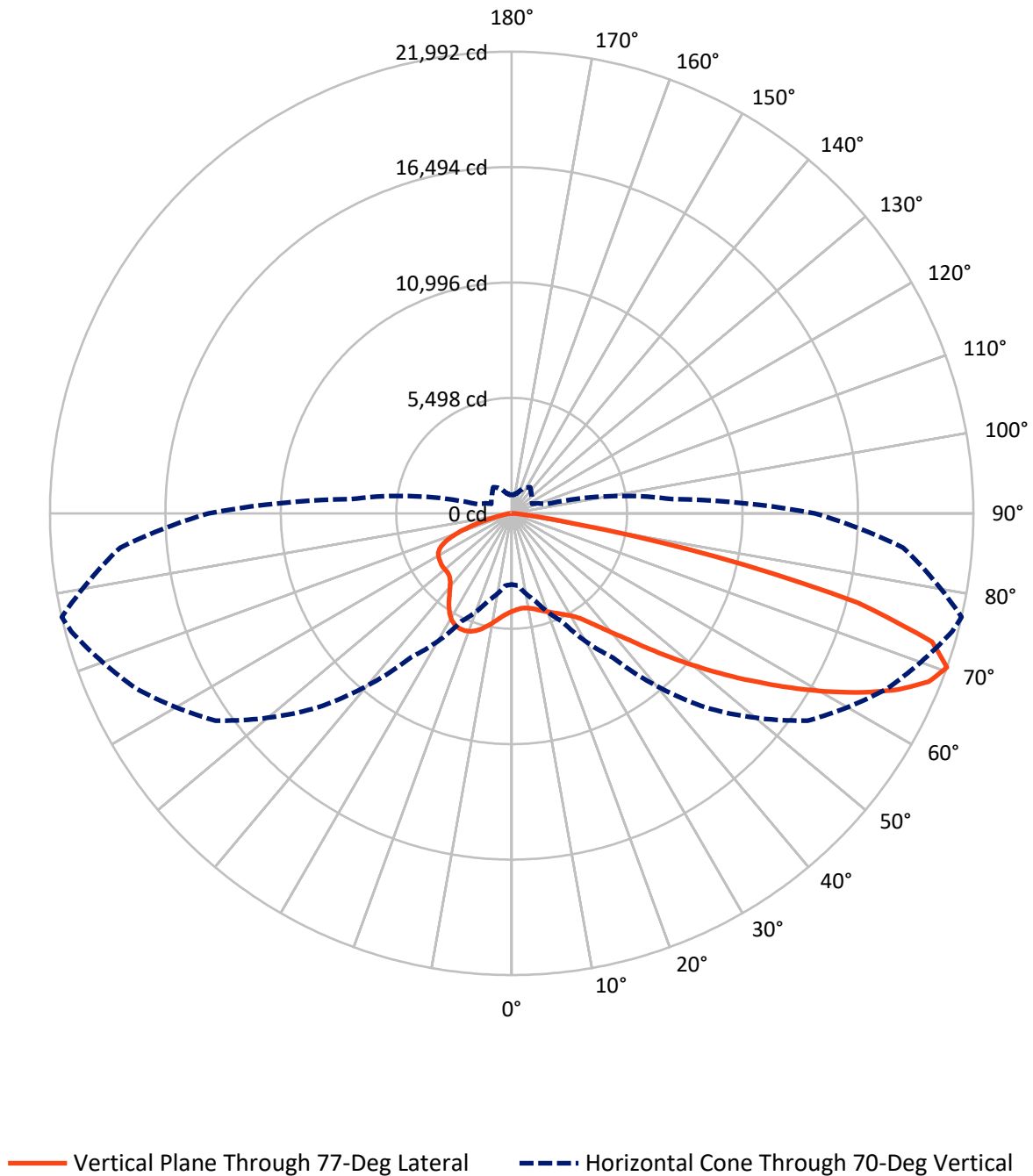
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7317.2	0.0	7317.2
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	26096.8	0.0	26096.8
	% Fixture	78.1	0.0	78.1
Total	Lumens	33414.0	0.0	33414.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.6	1.3
10°-20°	1283.1	3.8
20°-30°	2194.3	6.6
30°-40°	3528.7	10.6
40°-50°	5509.2	16.5
50°-60°	7359.0	22.0
60°-70°	7843.5	23.5
70°-80°	4828.4	14.5
80°-90°	423.1	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°	33414.0	100.0
0°-180°	33414.0	100.0

Coefficient of Utilization



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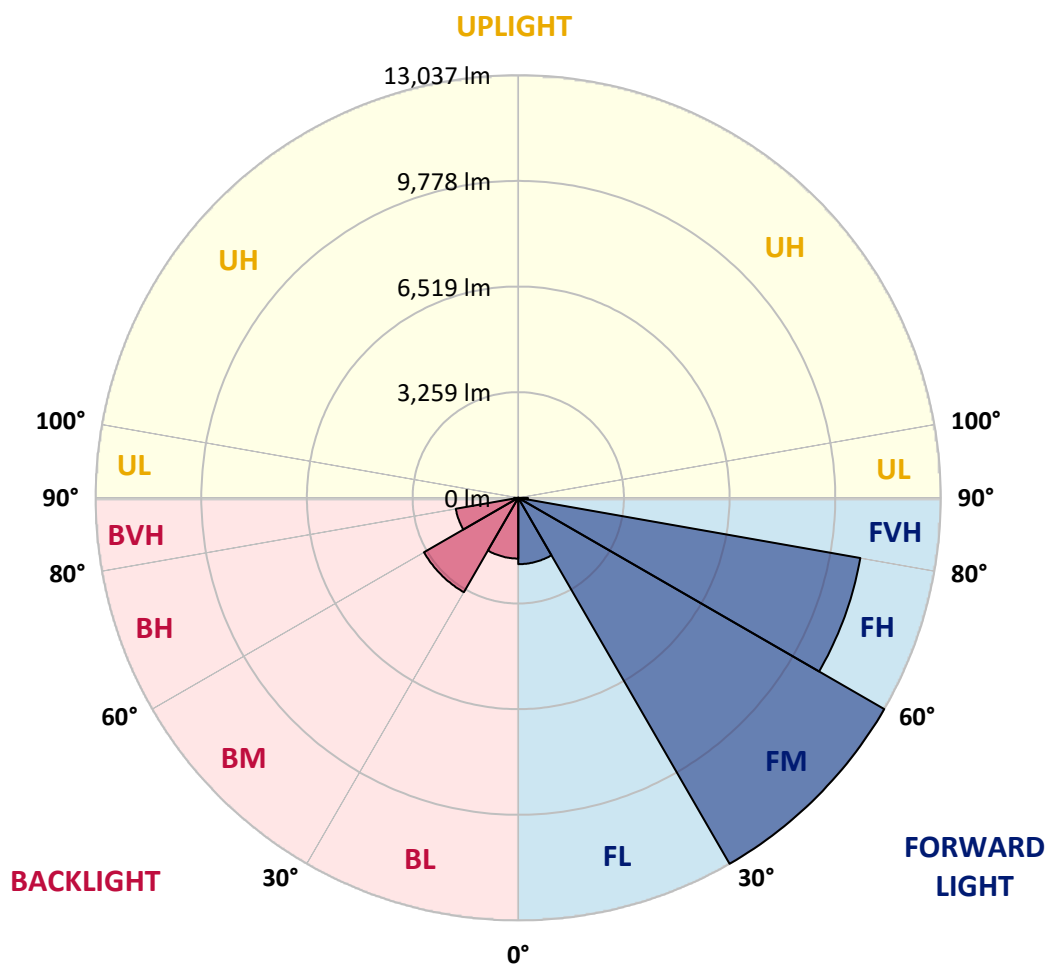
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2047.1	6.1			
FM	(30°-60°)	13037.4	39.0			
FH	(60°-80°)	10716.4	32.1			G4/12000
FVH	(80°-90°)	295.9	0.9			G3/500
BL	(0°-30°)	1874.9	5.6	B3/2500		
BM	(30°-60°)	3359.5	10.1	B3/5000		
BH	(60°-80°)	1955.6	5.9	B3/2500		G3/2500
BVH	(80°-90°)	127.2	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°	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6
2.5°	4297.0	4295.4	4317.6	4324.5	4365.5	4394.6	4449.3	4507.5	4582.9	4591.4	4637.6
5°	4049.0	4049.0	4074.6	4101.9	4155.0	4213.2	4297.0	4398.0	4528.0	4548.6	4663.2
7.5°	3838.4	3852.2	3874.4	3927.4	3989.0	4072.8	4201.2	4345.0	4516.0	4548.6	4733.4
10°	3669.0	3684.4	3711.8	3754.6	3847.0	3963.4	4131.1	4315.9	4545.2	4596.5	4836.2
12.5°	3616.0	3631.4	3646.7	3679.2	3764.8	3901.8	4101.9	4329.6	4615.4	4666.7	4976.5
15°	3739.2	3758.0	3746.0	3737.5	3781.9	3906.9	4115.7	4379.2	4702.6	4776.2	5149.3
17.5°	4023.2	4030.1	4002.7	3922.3	3915.4	3982.1	4180.7	4447.7	4812.2	4892.5	5323.8
20°	4481.9	4469.9	4413.4	4254.3	4163.5	4149.9	4291.9	4550.3	4925.1	5010.6	5512.0
22.5°	5104.8	5091.1	4978.1	4726.6	4524.7	4391.2	4452.8	4683.8	5051.7	5147.5	5695.2
25°	5881.7	5862.9	5696.8	5354.6	5041.5	4711.2	4671.8	4860.0	5207.4	5296.5	5886.9
27.5°	6788.7	6773.3	6593.6	6141.8	5690.1	5149.3	4943.9	5067.1	5370.1	5471.0	6102.4
30°	7764.2	7808.7	7490.3	7004.3	6432.7	5720.8	5310.1	5322.1	5580.5	5671.2	6364.3
32.5°	8910.7	8987.7	8604.4	7988.3	7208.0	6342.1	5772.2	5678.1	5886.9	5962.1	6694.6
35°	10046.9	10134.3	9815.9	9134.9	8236.5	7074.4	6254.8	6087.1	6294.1	6376.2	7132.7
37.5°	11029.3	11145.6	10981.3	10389.2	9336.8	7957.5	6884.5	6567.9	6795.5	6898.2	7721.3
40°	11804.5	11982.5	11970.5	11600.8	10634.0	9028.8	7683.7	7161.8	7418.4	7529.6	8434.9
42.5°	12434.3	12588.2	12721.7	12702.9	11987.6	10245.5	8623.2	7933.5	8128.7	8257.0	9237.5
45°	12868.9	13033.2	13320.7	13630.4	13289.8	11547.8	9699.6	8849.1	9027.1	9220.4	10194.1
47.5°	13257.4	13443.9	13817.0	14308.1	14395.4	12855.2	10878.6	9915.2	10077.8	10278.0	11154.2
50°	13291.6	13452.4	14030.9	14727.4	15180.9	14111.3	12145.0	11111.4	11263.7	11477.6	12182.6
52.5°	12465.0	12718.3	13727.9	14715.4	15542.0	15162.0	13402.8	12355.6	12526.6	12783.3	13247.1
55°	9675.6	10046.9	12839.8	14256.7	15413.5	15841.4	14599.0	13678.3	13897.4	14166.0	14318.3
57.5°	8334.0	8496.5	10192.4	13421.7	14828.4	16017.7	15608.7	15014.8	15367.4	15661.7	15451.3
60°	7490.3	7625.5	8628.3	12122.8	14058.3	15738.8	16389.0	16260.7	16869.9	17220.7	16609.8
62.5°	6586.8	6715.1	7627.2	10122.3	13072.5	15275.0	16881.9	17410.6	18410.0	18793.4	17701.5
65°	5690.1	5799.6	6674.1	8505.1	11819.9	14811.2	17136.9	18404.9	19835.6	20232.6	18608.6
67.5°	4690.6	4781.3	5607.9	7175.4	10296.8	14176.4	17263.5	19187.0	21076.3	21416.8	19056.9
70°	3385.0	3455.1	4309.0	5674.6	8385.3	13084.5	17212.1	19741.4	21719.6	21991.8	18718.1
72.5°	1600.0	1663.4	2666.2	3684.4	5922.8	10959.1	16173.4	19301.7	21066.0	20930.8	16644.1
75°	853.9	908.7	1531.6	2021.0	3128.2	7512.5	13235.1	16626.9	17689.7	17032.4	12300.7
77.5°	578.4	621.2	948.0	1213.3	1429.0	3566.3	8506.8	11511.9	11075.4	9990.5	6160.7
80°	458.6	503.1	776.9	821.4	691.4	1288.6	3515.0	5329.0	3828.2	3061.5	1752.3
82.5°	352.5	402.1	653.7	595.5	376.5	528.8	1023.4	1685.6	980.6	746.1	424.4
85°	215.7	268.7	513.4	379.9	212.2	241.3	347.4	468.9	299.5	249.9	152.3
87.5°	109.6	154.1	260.1	138.6	95.8	56.5	92.5	92.5	78.7	68.5	39.4
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°	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6	4661.6
2.5°	4678.7	4712.8	4771.1	4825.8	4868.6	4909.6	4950.8	4973.0	4979.9	5007.2	5022.6
5°	4733.4	4796.8	4909.6	5015.8	5082.6	5123.6	5152.7	5169.8	5173.3	5181.8	5195.5
7.5°	4834.4	4935.4	5092.8	5198.9	5248.5	5245.1	5233.1	5190.3	5173.3	5157.8	5161.3
10°	4976.5	5109.9	5303.2	5376.8	5346.1	5263.9	5157.8	5033.0	4974.7	4918.3	4901.1
12.5°	5152.7	5322.1	5512.0	5508.7	5356.3	5145.8	4899.4	4707.7	4586.3	4499.0	4478.4
15°	5366.6	5561.6	5707.2	5590.8	5257.1	4878.9	4517.8	4268.0	4158.4	4062.6	4052.3
17.5°	5587.4	5796.2	5862.9	5565.1	5007.2	4483.6	4074.6	3877.8	3770.0	3718.6	3734.1
20°	5802.9	6010.1	5955.2	5417.9	4627.4	4035.2	3670.7	3562.9	3540.7	3552.6	3547.5
22.5°	6030.6	6215.4	5974.1	5133.9	4143.0	3576.6	3376.4	3379.8	3429.4	3465.3	3473.9
25°	6263.4	6388.2	5924.5	4723.2	3622.8	3239.5	3189.8	3244.6	3342.1	3412.3	3431.2
27.5°	6487.5	6542.3	5816.7	4214.9	3176.2	2998.2	3006.7	3119.7	3266.9	3364.4	3388.3
30°	6740.8	6679.2	5609.6	3643.4	2866.4	2791.1	2863.0	2994.7	3141.9	3229.2	3249.8
32.5°	7026.6	6797.3	5281.0	3114.6	2647.4	2625.1	2743.2	2828.8	2893.8	2919.5	2933.1
35°	7382.5	6963.2	4860.0	2743.2	2450.6	2503.7	2616.5	2573.8	2548.1	2534.4	2548.1
37.5°	7844.5	7187.4	4367.2	2501.9	2291.4	2416.3	2462.6	2329.1	2228.1	2178.4	2190.4
40°	8400.7	7516.0	3893.2	2315.4	2190.4	2341.0	2260.6	2099.7	1971.4	1901.3	1906.4
42.5°	9018.5	7859.9	3494.4	2175.0	2133.9	2279.4	2111.7	1920.0	1713.0	1690.7	1713.0
45°	9667.1	8214.1	3222.4	2067.2	2106.6	2226.4	2026.1	1716.5	1569.3	1660.0	1707.9
47.5°	10315.7	8539.4	3058.1	1986.8	2092.9	2166.5	1950.9	1603.5	1499.1	1630.9	1692.5
50°	11037.8	8830.3	2984.5	1928.6	2077.5	2142.6	1837.9	1574.4	1425.5	1512.8	1577.8
52.5°	11754.8	9056.2	2929.8	1870.4	2055.2	2123.7	1783.2	1540.2	1336.5	1341.6	1377.6
55°	12470.2	9203.3	2869.8	1793.4	2005.6	2082.6	1778.1	1502.5	1269.8	1245.8	1262.9
57.5°	13233.4	9287.2	2796.2	1707.9	1920.0	1978.2	1772.9	1473.4	1249.3	1209.9	1215.0
60°	14010.3	9410.4	2700.5	1603.5	1805.4	1853.3	1761.0	1463.2	1237.3	1170.6	1175.7
62.5°	14706.8	9453.2	2585.8	1504.2	1658.2	1730.1	1735.2	1454.6	1204.8	1090.1	1090.1
65°	15163.7	9268.4	2385.6	1391.2	1499.1	1603.5	1685.6	1425.5	1146.6	1031.9	1031.9
67.5°	15144.9	8741.3	2072.3	1245.8	1345.1	1463.2	1613.8	1375.9	1076.4	960.0	965.1
70°	14439.9	7700.8	1675.4	1076.4	1175.7	1312.5	1521.3	1302.3	992.5	881.3	891.5
72.5°	12384.6	6027.2	1216.8	877.9	978.9	1156.8	1401.6	1213.3	907.0	811.2	806.1
75°	8847.4	3814.4	824.8	674.2	761.6	980.6	1252.7	1108.9	828.3	814.6	768.3
77.5°	4519.5	1822.6	545.9	492.8	530.5	773.5	1052.5	990.9	840.2	672.5	598.9
80°	1470.0	672.5	344.0	335.4	352.5	515.1	814.6	812.8	636.6	456.9	403.8
82.5°	468.9	289.3	224.2	215.7	207.0	323.4	568.2	643.5	429.6	289.3	287.5
85°	186.5	172.8	131.8	121.5	87.2	152.3	297.8	427.8	320.0	208.8	213.9
87.5°	68.5	68.5	36.0	25.6	18.9	51.4	80.5	128.3	183.1	107.8	106.1
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)