

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: P968787

Luminaire Tested: **NAV-SB5C-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39296.5 lumens
Efficiency: N/A
Efficacy: 157.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 249.5
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



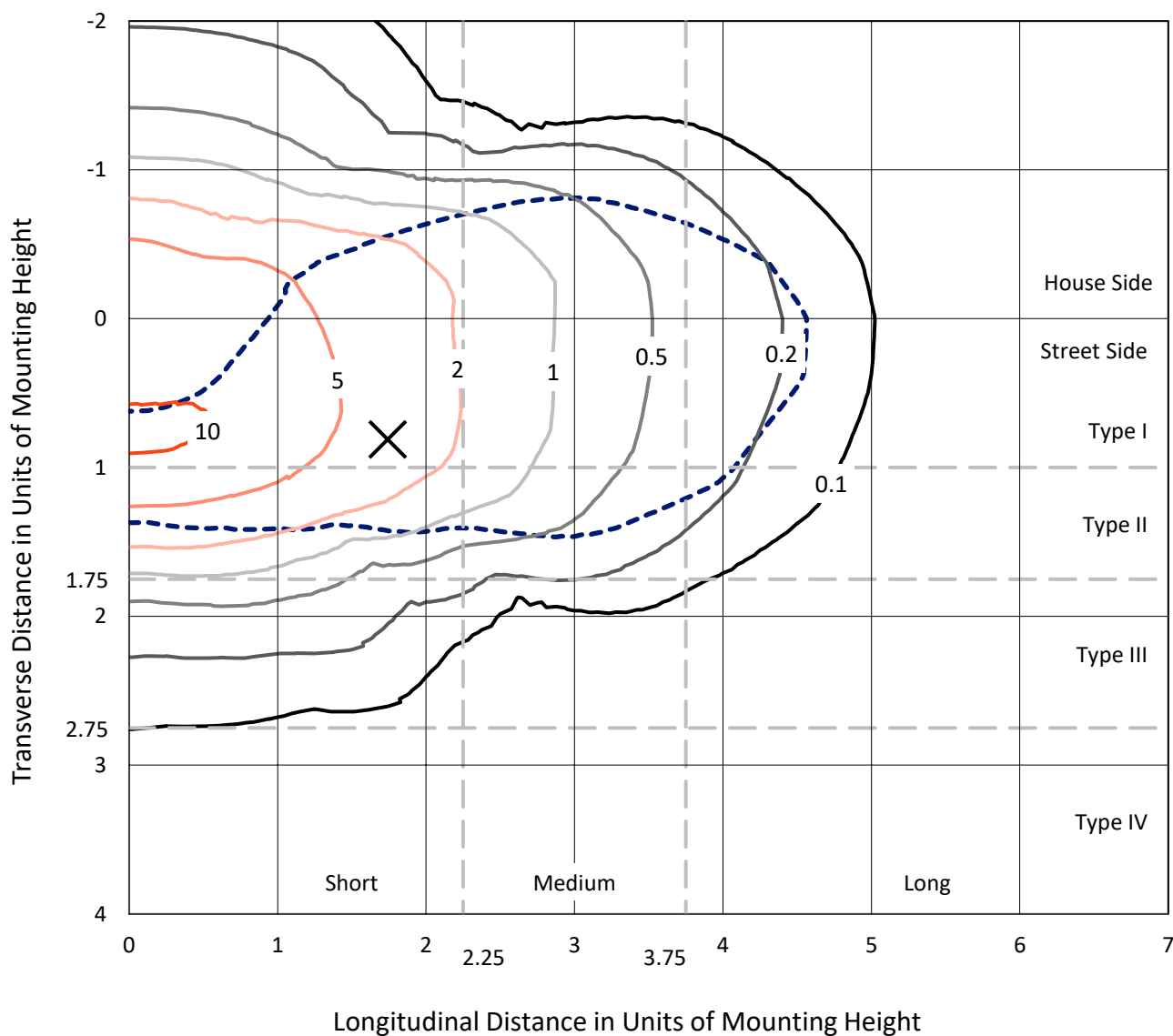
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

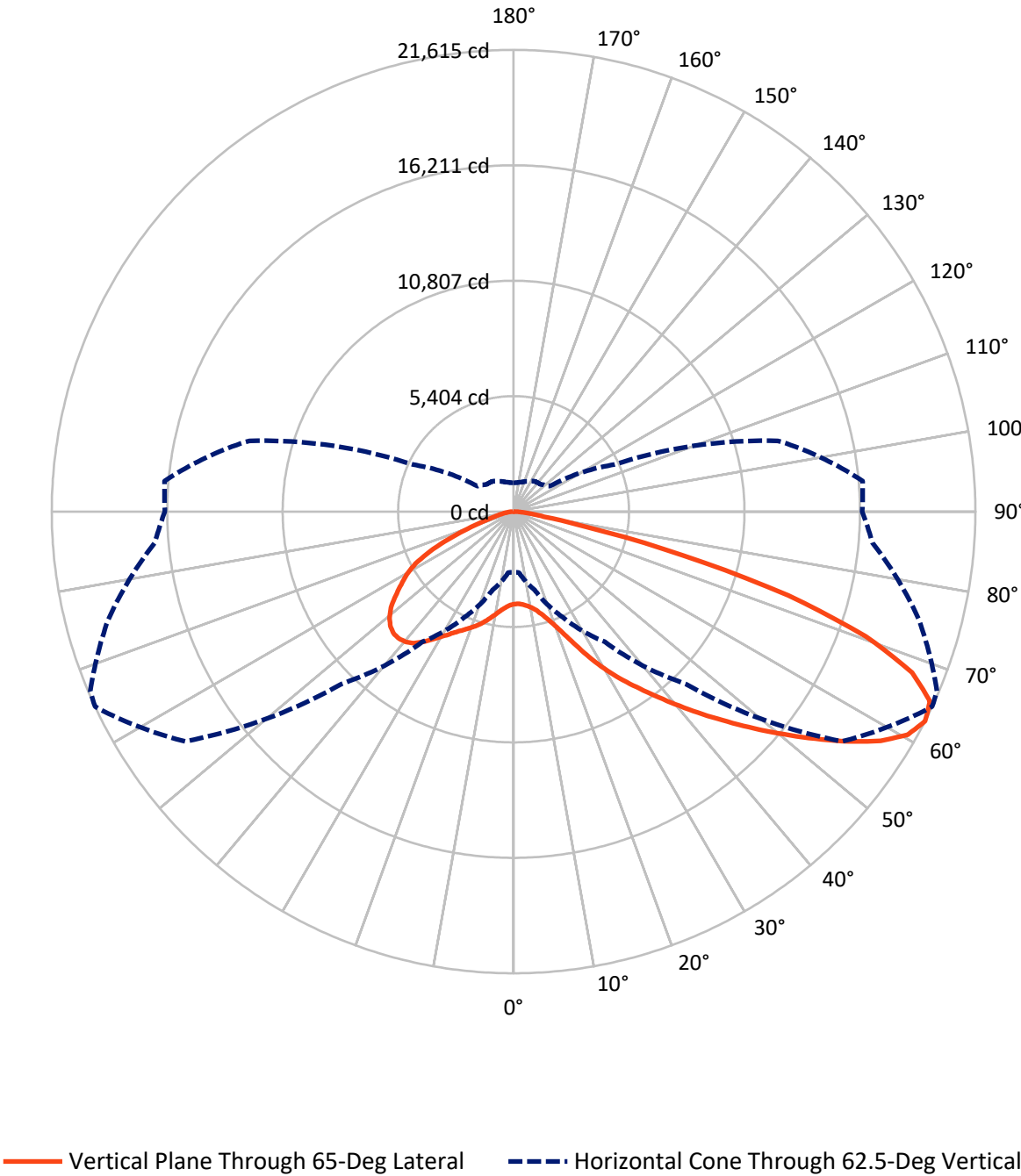


Based on 25 foot mounting height. Maximum calculated value = 11 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12400.3	0.0	12400.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	26896.2	0.0	26896.2
	% Fixture	68.4	0.0	68.4
Total	Lumens	39296.5	0.0	39296.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.7	1.1
10°-20°	1464.0	3.7
20°-30°	2968.5	7.6
30°-40°	5136.9	13.1
40°-50°	7773.7	19.8
50°-60°	9114.1	23.2
60°-70°	7641.1	19.4
70°-80°	4218.5	10.7
80°-90°	548.0	1.4
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°	39296.5	100.0
0°-180°	39296.5	100.0

Coefficient of Utilization



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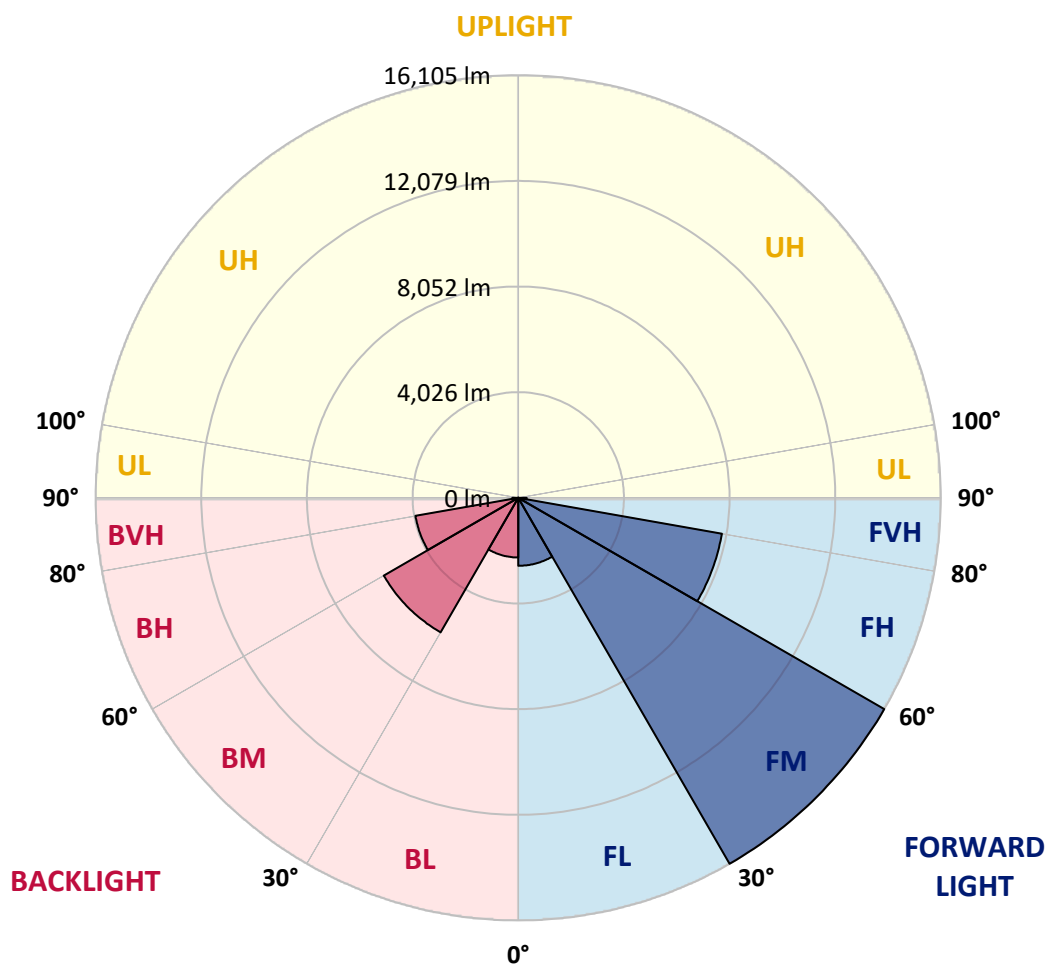
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2590.2	6.6			
FM	(30°-60°)	16105.0	41.0			
FH	(60°-80°)	7881.7	20.1			G4/12000
FVH	(80°-90°)	319.4	0.8			G3/500
BL	(0°-30°)	2274.1	5.8	B3/2500		
BM	(30°-60°)	5919.7	15.1	B4/8500		
BH	(60°-80°)	3977.9	10.1	B4/5000		G4/5000
BVH	(80°-90°)	228.6	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3
2.5°	4301.7	4289.5	4299.7	4299.7	4303.8	4301.7	4316.1	4320.1	4326.2	4338.4	4338.4
5°	4259.0	4256.9	4275.3	4291.6	4307.9	4322.1	4340.5	4367.0	4371.1	4385.4	4403.7
7.5°	4244.6	4232.4	4261.0	4281.3	4320.1	4354.7	4403.7	4448.5	4466.8	4473.0	4507.6
10°	4354.7	4334.4	4360.9	4373.2	4405.8	4440.4	4497.5	4568.8	4589.2	4613.7	4652.4
12.5°	4542.3	4519.9	4558.7	4577.0	4607.6	4638.1	4676.9	4746.2	4756.4	4801.2	4837.9
15°	4799.3	4772.7	4797.2	4819.5	4870.6	4899.1	4937.8	5005.1	5005.1	5039.8	5066.3
17.5°	5147.9	5113.2	5131.6	5139.7	5172.3	5215.1	5280.4	5339.4	5370.1	5357.8	5321.1
20°	5667.7	5624.9	5624.9	5584.1	5571.9	5606.5	5692.1	5773.7	5806.3	5743.2	5653.5
22.5°	6448.6	6387.4	6352.7	6214.1	6159.0	6163.1	6248.8	6348.6	6375.2	6263.1	6061.2
25°	7441.4	7345.6	7298.7	7094.8	6970.5	6862.4	6929.7	7058.2	7094.8	6956.2	6630.0
27.5°	8434.3	8440.4	8395.6	8150.9	7945.0	7747.3	7712.6	7847.1	7885.8	7728.9	7325.3
30°	9826.8	9682.0	9596.4	9302.8	9009.2	8732.0	8589.2	8644.3	8654.5	8466.9	7998.0
32.5°	11027.6	10990.9	10807.4	10550.5	10173.3	9739.1	9500.5	9412.9	9396.6	9129.5	8572.9
35°	12395.5	12375.2	12181.5	11875.6	11467.9	10864.5	10434.3	10183.6	10163.2	9788.0	9141.8
37.5°	13786.0	13786.0	13596.4	13262.1	12840.1	12085.7	11431.2	11033.7	10968.4	10479.2	9720.8
40°	14895.1	14827.9	14862.5	14721.8	14238.6	13437.3	12538.3	11961.3	11873.7	11286.5	10336.4
42.5°	15525.1	15502.6	15710.6	15867.6	15669.8	15029.7	13757.4	12966.5	12844.1	12175.4	11045.9
45°	15665.7	15641.3	16012.3	16587.3	16864.5	16601.5	15082.7	14024.6	13875.7	13105.0	11806.4
47.5°	15341.6	15292.6	15837.0	16744.2	17633.1	18096.0	16518.0	15172.4	14956.3	14010.3	12587.2
50°	14367.0	14320.2	15143.9	16348.7	17892.1	19111.2	18075.6	16389.4	16059.2	14980.7	13376.2
52.5°	12248.7	12271.2	13561.8	15217.3	17551.6	19743.2	19417.0	17671.8	17274.3	15973.6	14116.3
55°	9541.3	9590.3	11176.4	12999.0	16189.7	19647.4	20332.4	18992.9	18597.5	16907.4	14880.8
57.5°	6831.8	7047.9	8534.2	10338.5	13574.0	18128.6	20532.2	20248.9	19865.5	17926.7	15629.0
60°	4428.2	4466.8	5995.9	7814.5	10336.4	15429.2	20126.5	21200.9	20901.2	18966.5	16255.0
62.5°	2837.9	2864.5	3796.2	5465.9	7439.3	11414.9	18760.6	21614.8	21523.1	19653.6	16856.3
65°	2085.7	2065.3	2550.5	3612.6	5011.2	7039.8	16108.2	21415.0	21596.4	20083.6	17353.8
67.5°	1741.1	1712.6	1951.1	2501.5	3692.2	3998.0	11918.5	20116.3	20781.0	20034.8	17718.8
70°	1586.2	1561.7	1706.4	1857.3	2880.8	2676.9	6008.1	17488.3	18511.8	19478.2	17659.6
72.5°	1343.6	1300.7	1498.4	1649.3	2240.5	2053.0	2483.2	13433.3	14681.0	17694.3	16827.8
75°	1041.8	1013.2	1182.4	1451.6	1684.0	1602.5	1569.8	8157.1	9518.9	13684.1	14721.8
77.5°	825.7	787.0	941.9	1131.5	1514.7	1209.0	1143.7	3512.8	4862.4	8736.1	11015.4
80°	621.9	587.1	715.6	895.0	1164.1	911.3	740.0	1433.3	1832.8	4426.2	5539.3
82.5°	442.4	411.8	499.5	656.5	782.9	817.5	454.7	803.3	903.1	1706.4	1237.5
85°	283.4	265.1	334.4	411.8	497.4	526.0	277.3	419.9	460.7	703.4	515.8
87.5°	155.0	126.4	179.4	191.7	230.4	210.0	132.5	152.9	165.1	254.8	218.1
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°	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3	4330.3
2.5°	4346.6	4352.8	4373.2	4379.2	4393.5	4411.8	4424.1	4436.3	4436.3	4448.5	4448.5
5°	4405.8	4420.0	4462.8	4485.2	4521.9	4558.7	4581.0	4607.6	4623.9	4632.1	4636.1
7.5°	4519.9	4542.3	4603.5	4642.2	4705.5	4756.4	4791.1	4827.8	4836.0	4858.3	4850.2
10°	4674.8	4701.4	4770.7	4844.0	4919.5	4982.7	5015.3	5041.8	5052.0	5056.1	5045.9
12.5°	4852.2	4891.0	4980.7	5070.4	5149.9	5205.0	5213.0	5207.0	5178.4	5153.9	5153.9
15°	5070.4	5105.0	5205.0	5302.7	5380.2	5390.5	5339.4	5306.8	5272.2	5266.0	5266.0
17.5°	5331.3	5349.7	5441.4	5537.3	5543.3	5508.7	5433.2	5402.7	5370.1	5347.6	5349.7
20°	5635.1	5629.0	5694.2	5735.0	5692.1	5586.1	5472.0	5421.0	5388.4	5361.9	5363.9
22.5°	5998.0	5951.2	5943.0	5932.8	5818.6	5596.4	5441.4	5376.1	5325.2	5288.5	5300.8
25°	6526.1	6346.6	6222.3	6153.0	5896.0	5541.4	5343.5	5198.8	5103.0	5039.8	5064.2
27.5°	7186.6	6884.8	6570.9	6401.6	5896.0	5429.2	5107.1	4872.6	4715.6	4650.4	4683.0
30°	7816.5	7500.5	7037.8	6701.3	5881.8	5245.7	4725.9	4399.6	4216.1	4150.8	4189.6
32.5°	8354.8	8010.3	7533.1	7029.6	5847.1	4948.1	4252.8	3891.9	3714.6	3637.1	3675.9
35°	8854.3	8487.3	8030.7	7390.5	5755.4	4511.7	3732.9	3457.7	3259.9	3135.6	3176.4
37.5°	9366.0	8929.7	8501.6	7716.6	5590.2	4002.0	3333.3	3098.9	2866.5	2699.3	2744.1
40°	9922.6	9400.7	9005.1	7910.3	5319.1	3516.9	3023.4	2809.4	2562.7	2385.4	2420.0
42.5°	10573.0	9965.4	9565.8	8010.3	4948.1	3172.3	2821.6	2611.6	2379.2	2234.5	2263.0
45°	11251.8	10587.2	10077.5	8008.2	4534.2	3011.2	2756.4	2548.5	2291.6	2140.7	2165.1
47.5°	11963.4	11237.6	10520.0	7877.7	4175.3	3033.7	2719.7	2411.8	2128.4	1981.6	2002.0
50°	12676.9	11949.1	10948.0	7633.1	4022.4	2984.7	2583.1	2220.1	1885.8	1753.4	1761.5
52.5°	13384.3	12705.5	11317.1	7284.5	3867.5	2803.3	2407.7	1971.5	1786.0	1694.2	1694.2
55°	14095.9	13453.7	11718.7	6776.8	3480.2	2591.2	2114.2	1877.7	1706.4	1622.9	1614.7
57.5°	14809.5	14318.1	12099.9	6269.1	2992.9	2330.3	1953.1	1763.5	1626.9	1555.5	1543.3
60°	15551.6	15306.9	12493.4	5802.3	2511.8	1996.0	1834.9	1671.8	1533.1	1453.7	1447.5
62.5°	16316.1	16395.6	12801.3	5200.8	2069.4	1792.0	1728.9	1561.7	1427.1	1351.7	1349.6
65°	17086.8	17445.6	13003.2	4367.0	1677.9	1598.4	1614.7	1441.4	1304.8	1239.5	1237.5
67.5°	17667.8	18201.9	12946.1	3304.8	1376.2	1414.9	1472.0	1315.0	1186.5	1135.6	1137.6
70°	17733.0	18112.3	12383.3	2263.0	1151.9	1235.4	1312.9	1190.6	1058.1	1021.4	1023.5
72.5°	16864.5	16889.0	10815.6	1478.0	974.6	1084.7	1145.7	1064.3	935.8	899.1	897.1
75°	14587.2	13967.5	7940.9	974.6	815.5	931.7	988.8	931.7	807.4	815.5	787.0
77.5°	11052.1	9892.0	4821.6	693.2	680.9	782.9	860.4	819.6	713.6	801.2	705.4
80°	5694.2	5351.7	2150.9	517.8	538.2	625.9	707.5	654.5	564.8	538.2	491.4
82.5°	1304.8	1516.8	848.1	371.0	389.4	450.6	540.3	491.4	405.7	342.6	338.5
85°	456.6	499.5	375.2	232.4	228.4	281.4	367.0	328.2	275.2	220.2	232.4
87.5°	144.7	189.6	140.6	93.8	97.9	126.4	169.2	155.0	128.4	83.5	87.6
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)