

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: P965130

Luminaire Tested: **NAV-SB3D-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32806.1 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

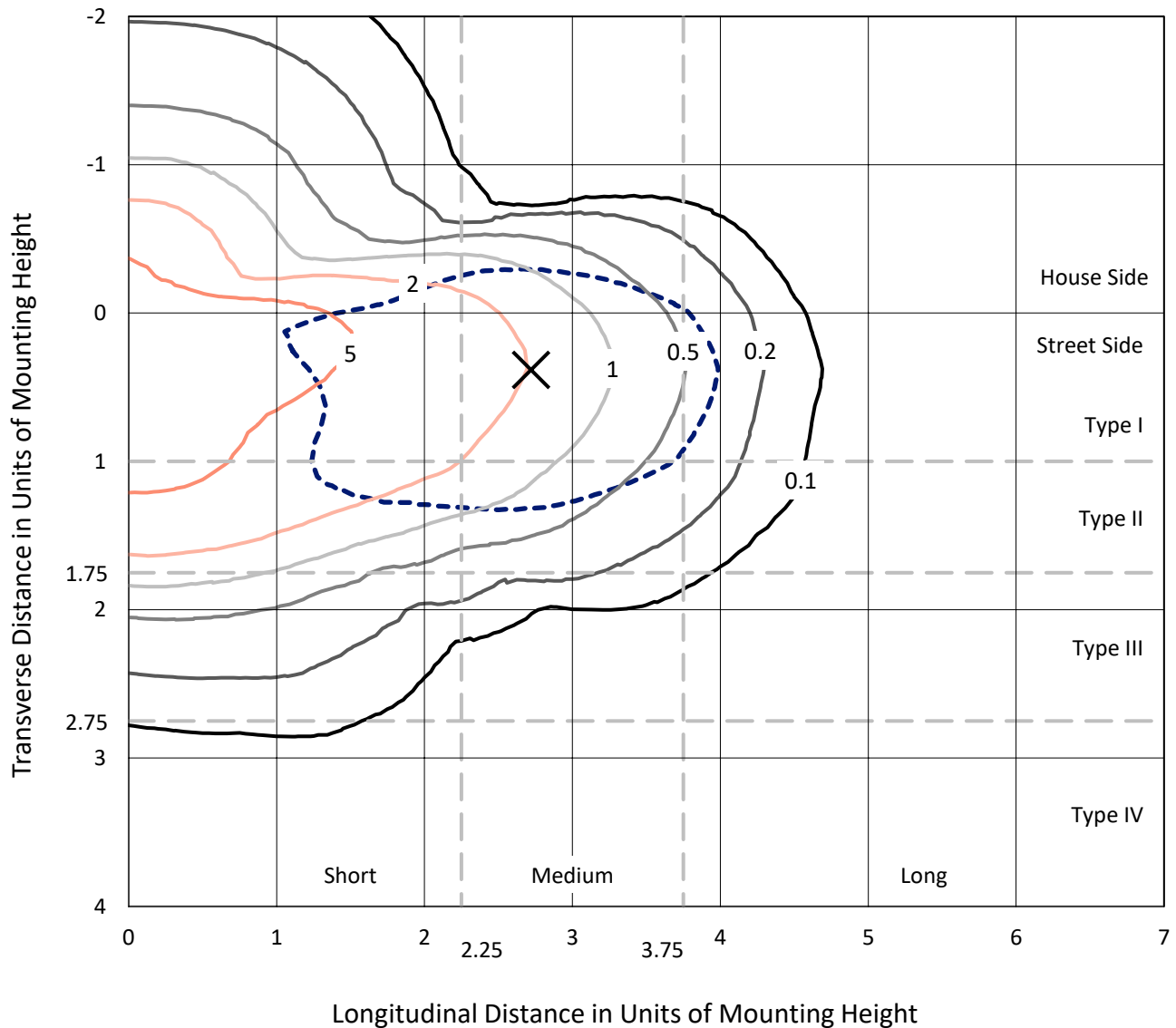
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

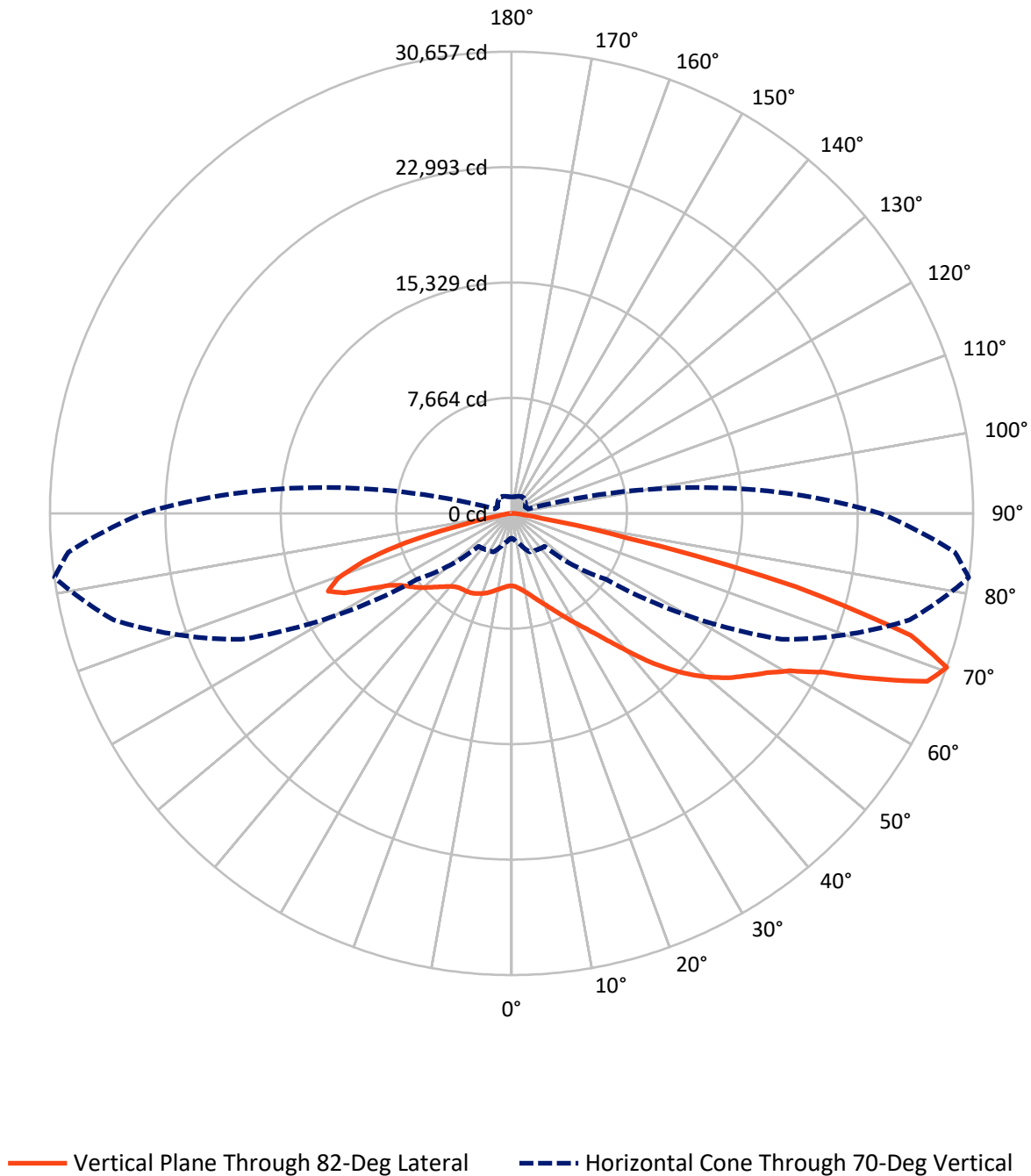
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	8087.5	0.0	8087.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	24718.6	0.0	24718.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	32806.1	0.0	32806.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.1	1.4
10°-20°	1304.7	4.0
20°-30°	2182.7	6.7
30°-40°	3409.9	10.4
40°-50°	5430.7	16.6
50°-60°	7557.5	23.0
60°-70°	7905.5	24.1
70°-80°	4131.8	12.6
80°-90°	429.0	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°	32806.1	100.0
0°-180°	32806.1	100.0

Coefficient of Utilization



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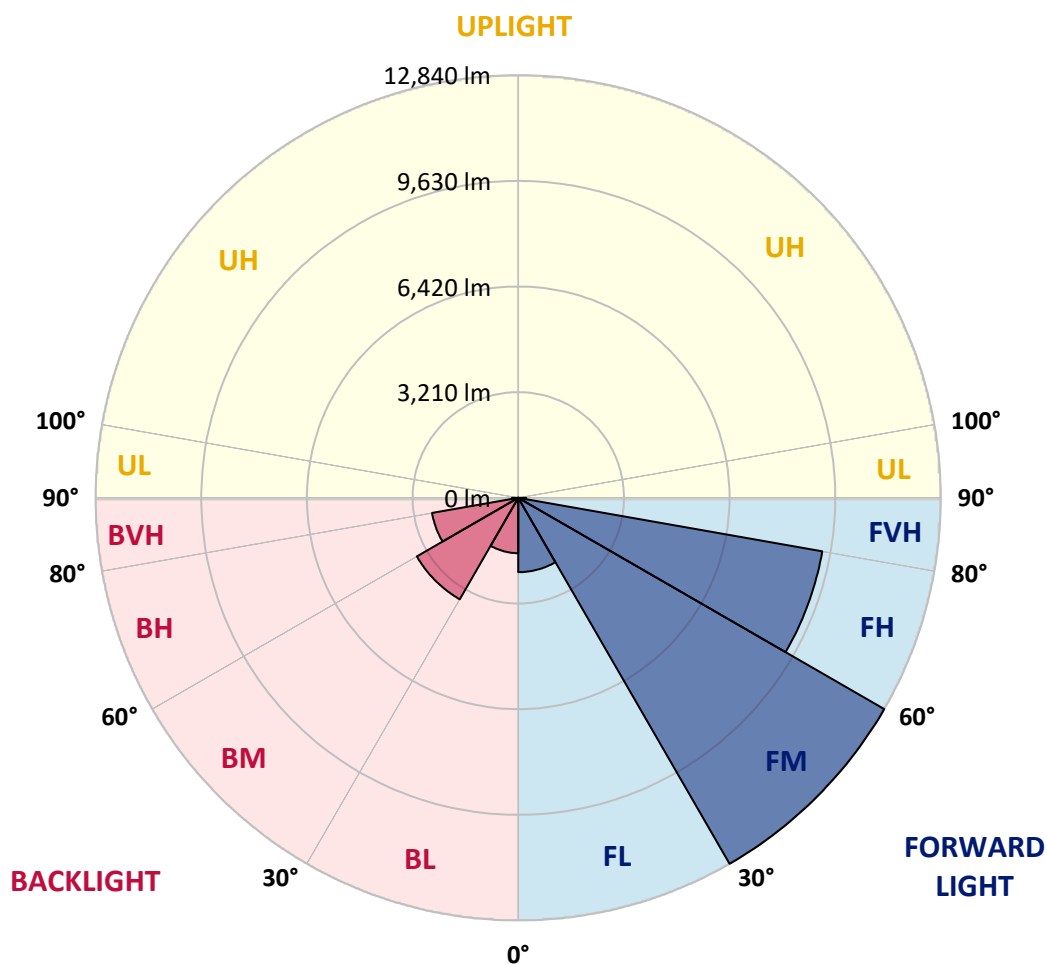
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2259.1	6.9			
FM	(30°-60°)	12840.0	39.1			
FH	(60°-80°)	9379.4	28.6			G4/12000
FVH	(80°-90°)	240.2	0.7			G3/500
BL	(0°-30°)	1682.5	5.1	B3/2500		
BM	(30°-60°)	3558.2	10.8	B3/5000		
BH	(60°-80°)	2658.0	8.1	B4/5000		G4/5000
BVH	(80°-90°)	188.9	0.6			G2/225
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8
2.5°	4924.7	4952.5	4943.9	4935.2	4935.2	4923.0	4921.2	4903.8	4889.9	4867.2	4862.0
5°	4987.3	5017.0	5013.5	5020.4	5043.1	5048.3	5053.5	5043.1	5015.2	4987.3	4975.1
7.5°	4931.7	4964.7	4975.1	5017.0	5086.6	5149.3	5196.2	5215.4	5189.3	5149.3	5130.1
10°	4743.6	4780.2	4816.8	4916.0	5039.6	5187.5	5312.9	5387.7	5382.5	5344.2	5311.1
12.5°	4362.4	4400.7	4479.0	4672.3	4898.6	5159.6	5392.9	5549.7	5603.6	5575.7	5518.3
15°	4057.8	4090.9	4150.0	4348.5	4642.6	5039.6	5422.6	5727.2	5864.7	5849.1	5779.4
17.5°	4049.1	4063.0	4099.6	4193.6	4419.9	4851.5	5391.2	5901.2	6164.1	6162.4	6075.4
20°	4202.3	4207.5	4228.3	4247.5	4376.3	4708.8	5311.1	6045.8	6500.1	6500.1	6406.0
22.5°	4414.7	4411.2	4432.0	4414.7	4477.3	4696.7	5260.6	6172.9	6874.4	6902.2	6783.9
25°	4733.2	4715.8	4710.6	4670.5	4682.7	4809.8	5316.4	6317.3	7318.3	7375.7	7227.8
27.5°	5157.9	5130.1	5111.0	5018.7	4987.3	5043.1	5486.9	6491.4	7812.7	7911.9	7723.9
30°	5711.5	5661.1	5633.2	5473.0	5359.9	5368.5	5744.6	6722.9	8329.7	8489.8	8251.4
32.5°	6467.0	6388.7	6313.8	6051.0	5843.8	5776.0	6077.1	7043.2	8890.2	9146.1	8839.7
35°	7313.1	7250.3	7170.3	6764.7	6446.1	6289.5	6526.2	7490.6	9546.4	9952.0	9553.4
37.5°	8127.7	8073.7	8112.1	7565.4	7154.6	6926.5	7114.6	8091.1	10356.0	10954.8	10448.2
40°	8970.3	8928.5	8933.7	8411.5	7932.8	7676.8	7828.3	8844.9	11283.8	12147.2	11524.0
42.5°	9885.9	9854.6	9750.1	9287.1	8749.2	8510.7	8650.0	9715.4	12279.5	13505.0	12704.3
45°	10911.2	10892.1	10794.6	10263.6	9647.4	9379.4	9567.3	10676.2	13280.4	14782.8	13889.8
47.5°	11797.3	11813.0	11800.8	11353.4	10714.5	10321.1	10545.7	11679.0	14211.7	15983.8	15026.5
50°	12223.8	12305.6	12425.8	12286.5	11889.6	11489.2	11532.7	12646.9	15099.6	17110.2	16116.2
52.5°	12001.0	12155.9	12483.2	12706.0	12859.1	12775.6	12659.0	13607.7	15935.2	18126.8	17146.7
55°	11170.7	11388.3	11931.3	12469.2	13250.9	13858.4	14011.5	14673.1	16749.8	19021.5	18121.6
57.5°	9657.9	10011.3	10498.7	11586.7	12902.7	14382.4	15588.7	16151.0	17613.3	19977.2	19141.7
60°	7064.1	7537.6	8143.4	9762.3	11684.2	14102.2	16930.8	18421.0	18840.5	21214.9	20469.9
62.5°	4520.9	4813.3	5370.3	6895.3	9104.4	12665.9	17341.7	21258.5	20920.8	23244.7	22461.3
65°	3095.1	3283.1	3793.2	4649.6	5885.5	9428.1	16241.5	23385.7	24224.7	26461.7	25866.4
67.5°	2249.1	2391.8	2827.1	3577.4	3834.9	5579.2	12603.3	23288.2	27436.5	29776.1	28850.1
70°	1639.8	1740.8	2106.4	2827.1	2950.7	3103.8	7635.1	19796.2	27366.9	30657.0	29548.1
72.5°	1215.0	1284.7	1530.1	2193.4	2388.4	2095.9	3779.3	14387.6	23516.3	27729.0	26839.4
75°	879.1	931.3	1112.3	1678.1	1911.4	1596.3	1885.3	8408.0	16403.4	19505.5	19662.2
77.5°	672.0	712.0	830.4	1229.0	1530.1	1197.6	1169.8	3868.0	7777.8	7816.1	8254.8
80°	539.7	565.8	630.2	865.2	1173.3	896.5	762.5	1561.5	2458.0	2080.2	2182.9
82.5°	396.9	440.4	532.7	607.5	839.1	618.0	464.8	788.5	934.8	804.2	811.2
85°	226.3	255.9	322.1	435.2	536.2	377.7	266.3	349.9	435.2	356.9	318.6
87.5°	80.1	104.4	113.2	170.6	233.3	156.6	102.7	101.0	142.8	106.2	88.8
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°	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8	4809.8
2.5°	4844.6	4836.0	4801.1	4754.1	4705.4	4658.3	4642.6	4609.6	4587.0	4574.8	4588.7
5°	4942.1	4914.3	4832.5	4728.0	4618.3	4500.0	4416.4	4339.7	4284.1	4231.8	4252.7
7.5°	5081.3	5032.6	4891.6	4708.8	4513.9	4317.2	4170.9	4059.5	3984.7	3935.9	3946.4
10°	5243.3	5168.4	4952.5	4679.2	4378.1	4096.1	3923.7	3828.0	3781.0	3754.9	3761.9
12.5°	5429.5	5323.3	5015.2	4611.4	4170.9	3848.9	3730.5	3702.6	3704.3	3706.1	3709.6
15°	5659.3	5511.3	5065.7	4463.4	3901.2	3659.1	3638.2	3683.5	3730.5	3753.1	3751.4
17.5°	5918.7	5709.8	5074.4	4219.6	3636.5	3537.3	3603.4	3700.9	3772.3	3803.6	3810.5
20°	6197.2	5911.7	5011.7	3875.0	3418.9	3438.1	3556.4	3681.8	3760.1	3800.1	3810.5
22.5°	6515.7	6127.6	4862.0	3512.9	3241.4	3330.1	3469.4	3591.3	3673.1	3713.1	3723.5
25°	6879.6	6369.6	4627.1	3208.2	3088.1	3208.2	3347.5	3448.5	3514.6	3551.2	3561.7
27.5°	7283.4	6621.9	4313.7	2966.4	2954.2	3082.9	3197.8	3276.2	3311.0	3338.8	3349.3
30°	7689.0	6851.7	3934.2	2783.5	2837.5	2959.4	3041.2	3075.9	3086.4	3091.6	3103.8
32.5°	8127.7	7050.2	3535.5	2632.1	2726.1	2839.2	2887.9	2903.6	2854.9	2821.8	2832.3
35°	8658.7	7262.5	3145.6	2512.0	2616.4	2713.9	2729.6	2715.6	2658.1	2590.3	2593.8
37.5°	9315.0	7527.2	2834.0	2426.7	2513.7	2578.1	2558.9	2555.4	2560.7	2480.6	2485.8
40°	10119.2	7871.8	2606.0	2360.5	2430.2	2444.1	2390.1	2419.7	2445.9	2324.0	2327.5
42.5°	11012.2	8287.8	2461.4	2315.3	2360.5	2327.5	2243.8	2276.9	2273.4	2113.3	2111.6
45°	11922.6	8740.5	2411.0	2282.2	2296.1	2230.0	2137.6	2146.4	2073.3	1928.7	1934.0
47.5°	12827.9	9226.1	2442.4	2254.3	2216.0	2141.1	2069.8	2031.4	1923.6	1815.7	1815.7
50°	13715.6	9736.2	2557.2	2198.6	2106.4	2062.8	2010.6	1942.7	1827.8	1735.5	1728.6
52.5°	14539.0	10249.8	2686.0	2106.4	1968.8	1995.0	1961.8	1883.5	1770.4	1676.4	1678.1
55°	15318.9	10763.3	2736.5	1979.3	1840.0	1935.7	1916.6	1772.1	1636.3	1559.7	1552.8
57.5°	16168.5	11381.3	2680.8	1817.4	1735.5	1867.9	1794.8	1634.6	1556.3	1498.9	1493.6
60°	17345.2	12350.8	2560.7	1617.1	1636.3	1766.9	1641.5	1575.4	1490.1	1425.7	1422.2
62.5°	19300.1	14159.6	2367.4	1418.7	1519.7	1617.1	1568.5	1502.3	1415.2	1352.6	1352.6
65°	22189.8	16673.3	2003.7	1263.8	1389.2	1471.0	1490.1	1423.9	1333.4	1267.3	1270.8
67.5°	24626.9	18250.4	1516.2	1135.0	1255.1	1352.6	1406.5	1342.1	1246.4	1182.0	1183.8
70°	24492.9	17105.0	1157.6	1007.9	1136.7	1235.9	1305.5	1255.1	1152.4	1091.5	1096.6
72.5°	21754.6	14309.3	936.5	879.1	1016.6	1114.1	1197.6	1159.4	1054.9	995.7	995.7
75°	15982.1	10157.4	748.6	748.6	866.9	987.1	1079.3	1054.9	959.2	917.4	905.2
77.5°	6736.8	4261.4	586.6	621.5	720.7	847.8	962.7	971.4	887.8	940.0	853.0
80°	1791.3	1175.1	447.4	489.1	565.8	699.8	837.3	833.8	743.3	694.5	645.9
82.5°	682.3	463.1	318.6	344.7	409.1	536.2	663.3	684.1	593.6	513.5	513.5
85°	262.8	198.4	196.7	207.2	238.5	355.2	501.3	518.8	447.4	379.5	391.7
87.5°	67.9	59.1	73.1	69.6	109.7	189.7	287.2	297.7	273.3	158.4	226.3
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)