

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: P884447

Luminaire Tested: **NAV-SB5B-735-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884447  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-735-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

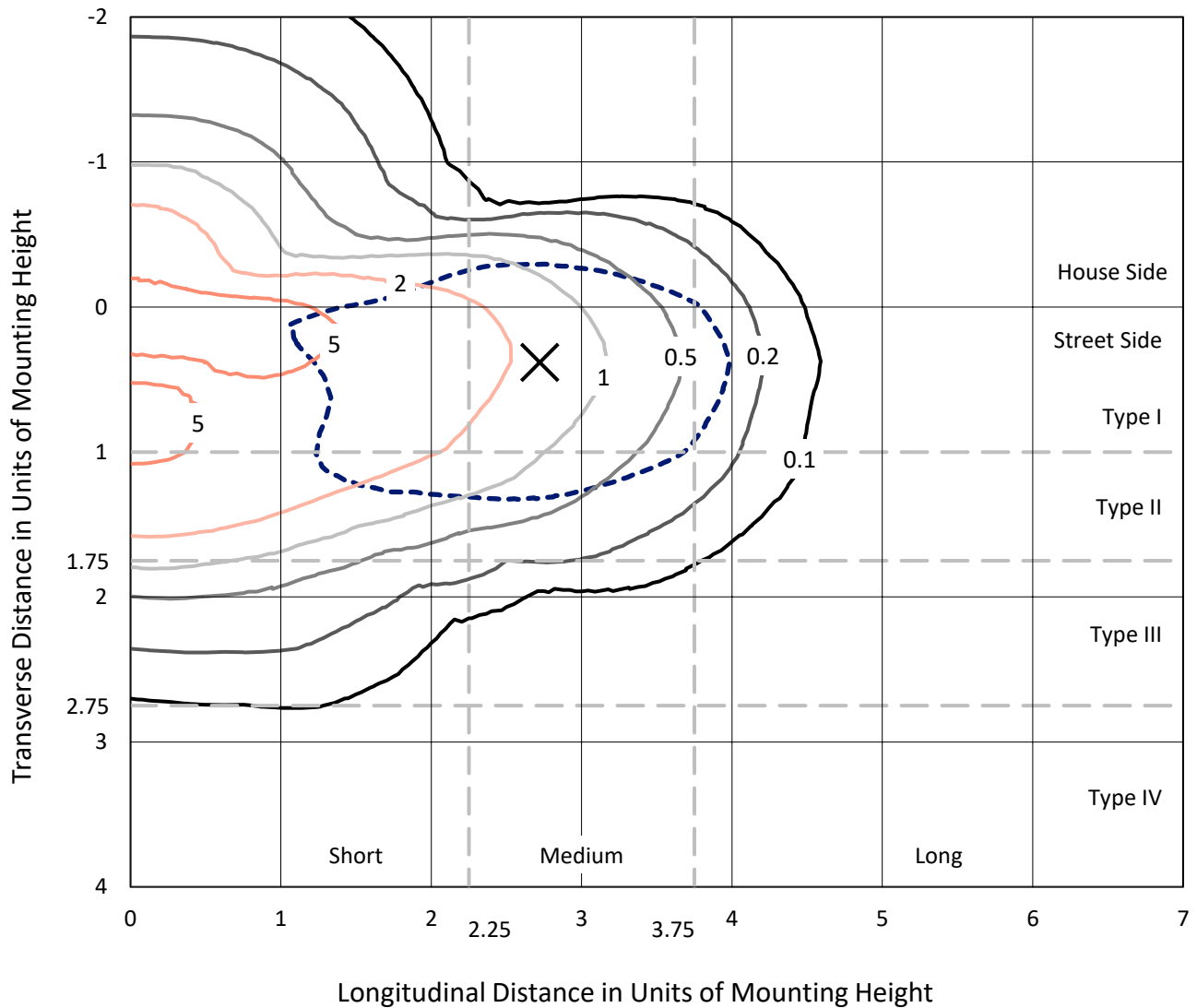
Lumens per Lamp: N/A  
Luminaire Lumens: 28312 lumens  
Efficiency: N/A  
Efficacy: 155.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
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

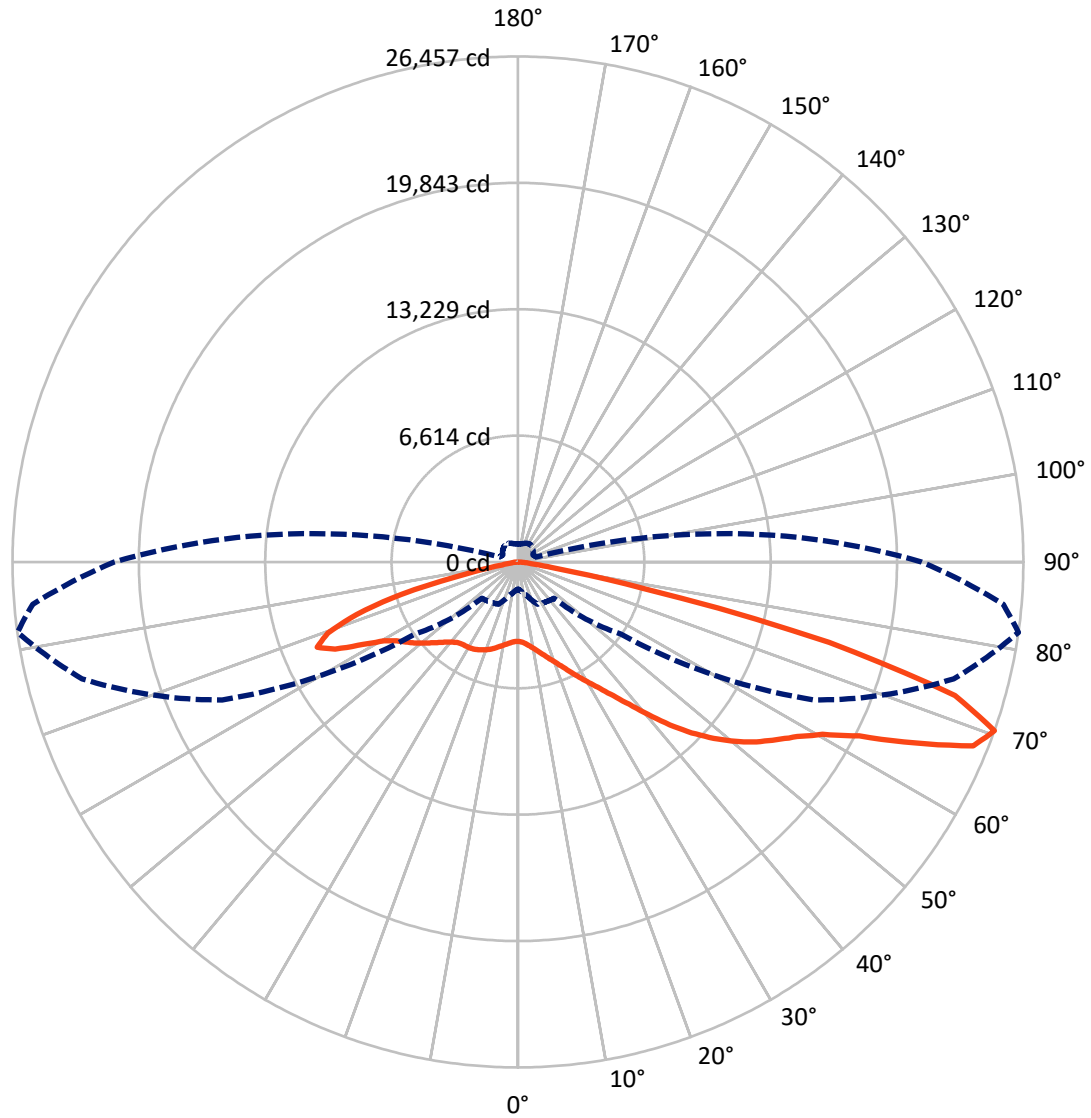
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6979.6	0.0	6979.6
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	21332.4	0.0	21332.4
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	28312.0	0.0	28312.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.9	1.4
10°-20°	1126.0	4.0
20°-30°	1883.7	6.7
30°-40°	2942.8	10.4
40°-50°	4686.8	16.6
50°-60°	6522.2	23.0
60°-70°	6822.5	24.1
70°-80°	3565.8	12.6
80°-90°	370.3	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°	28312.0	100.0
0°-180°	28312.0	100.0

**Coefficient of Utilization**



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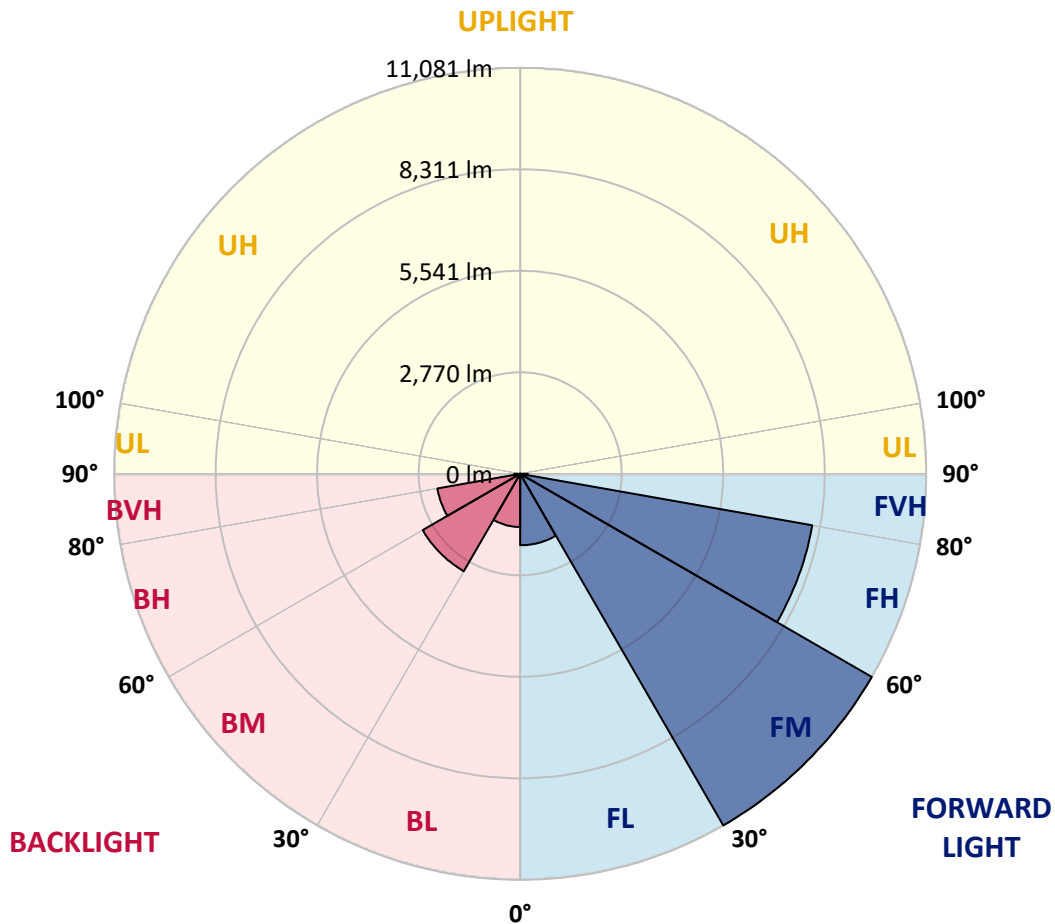
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1949.6	6.9			
FM (30°-60°)	11081.0	39.1			
FH (60°-80°)	8094.5	28.6			G4/12000
FVH (80°-90°)	207.3	0.7			G2/225
BL (0°-30°)	1452.0	5.1	B3/2500		
BM (30°-60°)	3070.7	10.8	B3/5000		
BH (60°-80°)	2293.9	8.1	B3/2500		G3/2500
BVH (80°-90°)	163.0	0.6			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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9
2.5°	4250.0	4274.1	4266.6	4259.1	4259.1	4248.5	4247.0	4232.0	4220.0	4200.5	4196.0
5°	4304.1	4329.7	4326.7	4332.7	4352.2	4356.7	4361.2	4352.2	4328.2	4304.1	4293.6
7.5°	4256.1	4284.6	4293.6	4329.7	4389.8	4443.8	4484.4	4500.9	4478.4	4443.8	4427.3
10°	4093.8	4125.4	4156.9	4242.5	4349.2	4476.9	4585.1	4649.7	4645.2	4612.1	4583.6
12.5°	3764.8	3797.8	3865.5	4032.2	4227.5	4452.9	4654.2	4789.4	4835.9	4811.9	4762.3
15°	3501.9	3530.4	3581.5	3752.8	4006.7	4349.2	4679.7	4942.6	5061.3	5047.8	4987.7
17.5°	3494.4	3506.4	3537.9	3619.1	3814.4	4186.9	4652.7	5092.8	5319.7	5318.2	5243.1
20°	3626.6	3631.1	3649.1	3665.6	3776.8	4063.8	4583.6	5217.5	5609.6	5609.6	5528.5
22.5°	3809.9	3806.9	3824.9	3809.9	3864.0	4053.2	4540.0	5327.2	5932.6	5956.7	5854.5
25°	4084.8	4069.8	4065.3	4030.7	4041.2	4150.9	4588.1	5451.9	6315.7	6365.3	6237.6
27.5°	4451.4	4427.3	4410.8	4331.2	4304.1	4352.2	4735.3	5602.1	6742.4	6828.0	6665.8
30°	4929.1	4885.5	4861.5	4723.3	4625.6	4633.1	4957.6	5801.9	7188.6	7326.8	7121.0
32.5°	5581.1	5513.5	5448.9	5222.0	5043.3	4984.7	5244.6	6078.4	7672.3	7893.2	7628.7
35°	6311.2	6257.1	6188.0	5838.0	5563.1	5427.9	5632.2	6464.5	8238.7	8588.7	8244.7
37.5°	7014.3	6967.7	7000.8	6529.1	6174.5	5977.7	6140.0	6982.8	8937.3	9454.1	9016.9
40°	7741.4	7705.4	7709.9	7259.2	6846.0	6625.2	6755.9	7633.3	9738.0	10483.1	9945.3
42.5°	8531.6	8504.6	8414.5	8014.8	7550.6	7344.8	7465.0	8384.4	10597.3	11655.0	10963.9
45°	9416.5	9400.0	9315.8	8857.6	8325.8	8094.5	8256.7	9213.7	11461.2	12757.6	11987.0
47.5°	10181.2	10194.7	10184.2	9798.1	9246.7	8907.2	9101.0	10079.0	12264.9	13794.2	12968.0
50°	10549.2	10619.9	10723.5	10603.3	10260.8	9915.3	9952.8	10914.3	13031.1	14766.2	13908.4
52.5°	10357.0	10490.7	10773.1	10965.4	11097.6	11025.5	10924.8	11743.6	13752.2	15643.6	14797.8
55°	9640.3	9828.1	10296.9	10761.1	11435.6	11959.9	12092.1	12663.0	14455.3	16415.8	15639.1
57.5°	8334.8	8639.8	9060.5	9999.4	11135.2	12412.1	13453.2	13938.5	15200.4	17240.6	16519.4
60°	6096.4	6505.0	7027.8	8425.0	10083.5	12170.2	14611.5	15897.5	16259.5	18308.7	17665.7
62.5°	3901.5	4153.9	4634.6	5950.7	7857.1	10930.8	14966.1	18346.3	18054.8	20060.4	19384.4
65°	2671.1	2833.4	3273.5	4012.7	5079.3	8136.5	14016.6	20182.1	20906.2	22836.7	22322.9
67.5°	1941.0	2064.2	2439.8	3087.3	3309.6	4814.9	10876.8	20098.0	23678.0	25697.1	24897.8
70°	1415.2	1502.3	1817.8	2439.8	2546.4	2678.6	6589.1	17084.3	23617.9	26457.2	25500.3
72.5°	1048.6	1108.7	1320.5	1892.9	2061.2	1808.8	3261.5	12416.6	20294.8	23930.4	23162.7
75°	758.7	803.7	960.0	1448.2	1649.5	1377.6	1627.0	7256.2	14156.3	16833.4	16968.6
77.5°	579.9	614.4	716.6	1060.6	1320.5	1033.6	1009.6	3338.1	6712.3	6745.4	7124.0
80°	465.7	488.3	543.8	746.6	1012.6	773.7	658.0	1347.6	2121.3	1795.3	1883.9
82.5°	342.5	380.1	459.7	524.3	724.1	533.3	401.1	680.5	806.7	694.1	700.1
85°	195.3	220.8	277.9	375.6	462.7	326.0	229.9	302.0	375.6	308.0	274.9
87.5°	69.1	90.1	97.7	147.2	201.3	135.2	88.6	87.1	123.2	91.6	76.6
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°	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9	4150.9
2.5°	4180.9	4173.4	4143.4	4102.8	4060.8	4020.2	4006.7	3978.1	3958.6	3948.1	3960.1
5°	4265.1	4241.0	4170.4	4080.3	3985.6	3883.5	3811.4	3745.3	3697.2	3652.1	3670.2
7.5°	4385.3	4343.2	4221.5	4063.8	3895.5	3725.7	3599.5	3503.4	3438.8	3396.7	3405.7
10°	4525.0	4460.4	4274.1	4038.2	3778.3	3534.9	3386.2	3303.6	3263.0	3240.5	3246.5
12.5°	4685.7	4594.1	4328.2	3979.6	3599.5	3321.6	3219.5	3195.4	3196.9	3198.4	3201.4
15°	4884.0	4756.3	4371.7	3851.9	3366.7	3157.9	3139.8	3178.9	3219.5	3239.0	3237.5
17.5°	5107.9	4927.6	4379.2	3641.6	3138.3	3052.7	3109.8	3193.9	3255.5	3282.6	3288.6
20°	5348.2	5101.9	4325.2	3344.2	2950.5	2967.1	3069.2	3177.4	3245.0	3279.6	3288.6
22.5°	5623.2	5288.1	4196.0	3031.7	2797.3	2873.9	2994.1	3099.3	3169.9	3204.4	3213.4
25°	5937.1	5497.0	3993.2	2768.8	2665.1	2768.8	2888.9	2976.1	3033.2	3064.7	3073.7
27.5°	6285.7	5714.8	3722.7	2559.9	2549.4	2660.6	2759.8	2827.4	2857.4	2881.4	2890.5
30°	6635.7	5913.1	3395.2	2402.2	2448.8	2553.9	2624.5	2654.6	2663.6	2668.1	2678.6
32.5°	7014.3	6084.4	3051.2	2271.5	2352.6	2450.3	2492.3	2505.9	2463.8	2435.3	2444.3
35°	7472.5	6267.7	2714.7	2167.8	2258.0	2342.1	2355.6	2343.6	2294.0	2235.4	2238.4
37.5°	8038.9	6496.0	2445.8	2094.2	2169.3	2224.9	2208.4	2205.4	2209.9	2140.8	2145.3
40°	8733.0	6793.5	2249.0	2037.1	2097.2	2109.2	2062.7	2088.2	2110.8	2005.6	2008.6
42.5°	9503.6	7152.5	2124.3	1998.1	2037.1	2008.6	1936.5	1965.0	1962.0	1823.8	1822.3
45°	10289.3	7543.1	2080.7	1969.5	1981.6	1924.5	1844.8	1852.4	1789.3	1664.6	1669.1
47.5°	11070.6	7962.3	2107.7	1945.5	1912.4	1847.8	1786.3	1753.2	1660.1	1566.9	1566.9
50°	11836.7	8402.4	2206.9	1897.4	1817.8	1780.2	1735.2	1676.6	1577.4	1497.8	1491.8
52.5°	12547.3	8845.6	2318.1	1817.8	1699.1	1721.7	1693.1	1625.5	1527.9	1446.7	1448.2
55°	13220.4	9288.8	2361.6	1708.1	1587.9	1670.6	1654.0	1529.4	1412.2	1346.1	1340.1
57.5°	13953.5	9822.1	2313.6	1568.4	1497.8	1612.0	1548.9	1410.7	1343.1	1293.5	1289.0
60°	14969.1	10658.9	2209.9	1395.6	1412.2	1524.8	1416.7	1359.6	1286.0	1230.4	1227.4
62.5°	16656.2	12219.8	2043.1	1224.4	1311.5	1395.6	1353.6	1296.5	1221.4	1167.3	1167.3
65°	19150.0	14389.2	1729.2	1090.7	1198.8	1269.5	1286.0	1228.9	1150.8	1093.7	1096.7
67.5°	21253.2	15750.3	1308.5	979.5	1083.2	1167.3	1213.9	1158.3	1075.7	1020.1	1021.6
70°	21137.6	14761.7	999.0	869.8	981.0	1066.6	1126.7	1083.2	994.5	942.0	946.5
72.5°	18774.4	12349.0	808.2	758.7	877.4	961.5	1033.6	1000.5	910.4	859.3	859.3
75°	13792.7	8766.0	646.0	646.0	748.2	851.8	931.4	910.4	827.8	791.7	781.2
77.5°	5814.0	3677.7	506.3	536.3	622.0	731.6	830.8	838.3	766.2	811.2	736.1
80°	1545.9	1014.1	386.1	422.2	488.3	603.9	722.6	719.6	641.5	599.4	557.4
82.5°	588.9	399.6	274.9	297.5	353.0	462.7	572.4	590.4	512.3	443.2	443.2
85°	226.8	171.3	169.8	178.8	205.8	306.5	432.7	447.7	386.1	327.5	338.0
87.5°	58.6	51.1	63.1	60.1	94.6	163.8	247.9	256.9	235.9	136.7	195.3
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)