

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: P967721

Luminaire Tested: **NAV-SB5A-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22699.6 lumens
Efficiency: N/A
Efficacy: 160.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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

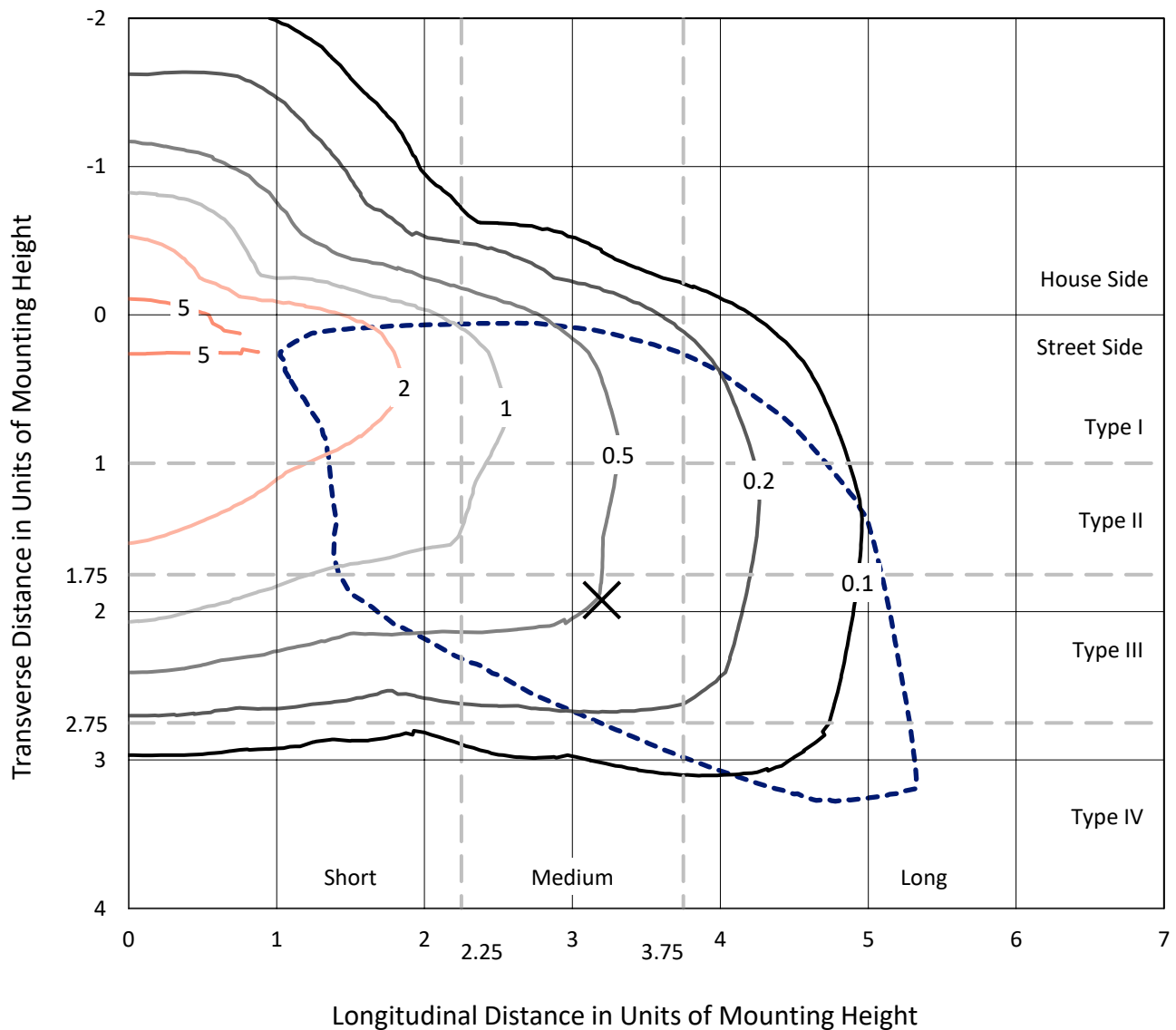


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

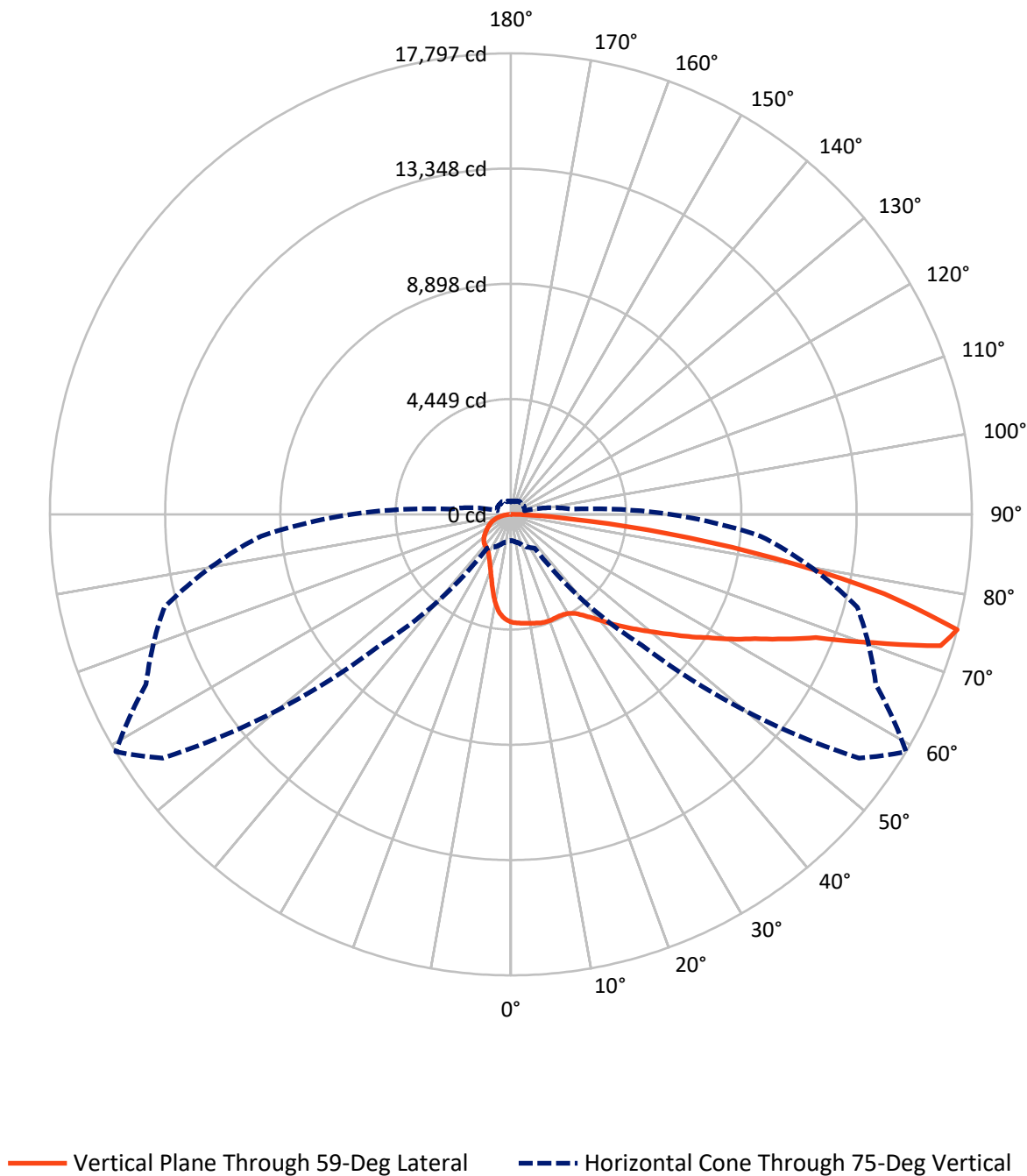


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4257.5	0.0	4257.5
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	18442.2	0.0	18442.2
	% Fixture	81.2	0.0	81.2
Total	Lumens	22699.6	0.0	22699.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.6	1.6
10°-20°	954.9	4.2
20°-30°	1450.5	6.4
30°-40°	2156.1	9.5
40°-50°	3206.4	14.1
50°-60°	4352.4	19.2
60°-70°	5313.5	23.4
70°-80°	4170.0	18.4
80°-90°	722.3	3.2
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°	22699.6	100.0
0°-180°	22699.6	100.0

Coefficient of Utilization



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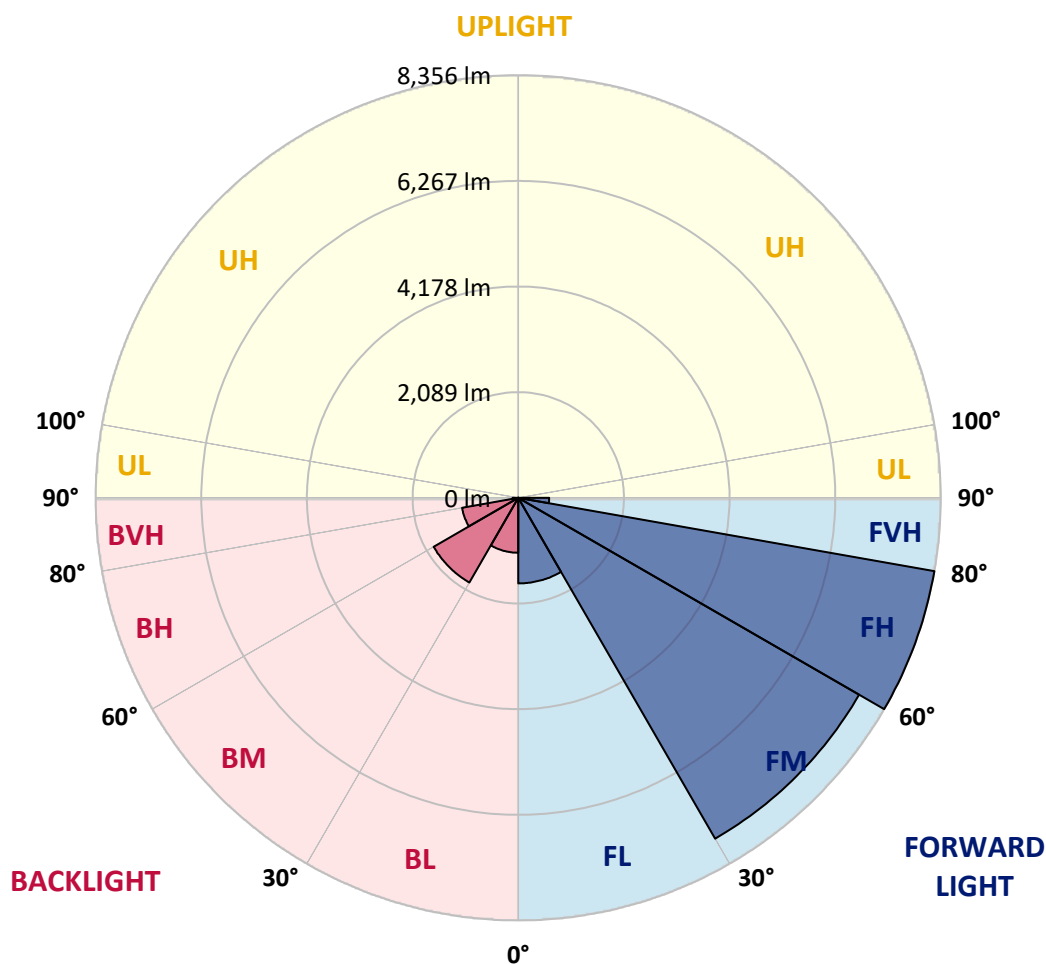
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1692.5	7.5			
FM	(30°-60°)	7782.4	34.3			
FH	(60°-80°)	8355.5	36.8			G4/12000
FVH	(80°-90°)	611.8	2.7			G4/750
BL	(0°-30°)	1086.5	4.8	B3/2500		
BM	(30°-60°)	1932.5	8.5	B2/2500		
BH	(60°-80°)	1128.0	5.0	B3/2500		G3/2500
BVH	(80°-90°)	110.6	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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4
2.5°	4201.9	4187.2	4201.9	4195.7	4193.4	4188.5	4189.7	4198.2	4193.4	4199.4	4178.7
5°	4173.8	4165.3	4180.0	4176.3	4192.1	4194.5	4210.4	4220.2	4226.3	4227.5	4211.6
7.5°	4127.4	4118.9	4139.6	4156.7	4190.9	4200.7	4233.7	4249.5	4258.1	4272.7	4249.5
10°	3957.6	3954.0	4005.3	4070.0	4150.6	4200.7	4250.8	4277.6	4291.1	4330.1	4303.3
12.5°	3657.3	3662.1	3729.3	3853.9	4015.0	4176.3	4270.3	4309.3	4330.1	4378.9	4366.7
15°	3370.3	3369.1	3442.4	3575.4	3801.3	4068.7	4280.0	4347.2	4382.6	4454.6	4444.9
17.5°	3204.3	3199.3	3250.6	3352.0	3562.0	3903.9	4255.6	4367.9	4443.7	4534.0	4525.5
20°	3173.7	3164.0	3190.8	3240.8	3389.9	3723.2	4192.1	4367.9	4492.5	4609.7	4604.8
22.5°	3284.8	3268.9	3258.0	3251.8	3317.8	3574.2	4120.1	4353.3	4564.5	4718.4	4709.9
25°	3508.3	3483.9	3427.7	3372.8	3353.2	3507.0	4056.5	4349.6	4672.1	4865.0	4833.2
27.5°	3869.8	3839.2	3725.7	3593.8	3475.4	3541.3	4028.5	4371.6	4790.4	5020.0	4956.5
30°	4317.9	4284.9	4142.0	3939.4	3726.9	3668.3	4063.9	4436.3	4941.8	5226.4	5101.8
32.5°	4719.6	4683.0	4560.9	4354.5	4067.6	3888.0	4176.3	4559.7	5180.0	5513.4	5320.5
35°	5076.2	5033.5	4923.6	4733.0	4485.2	4197.0	4378.9	4778.2	5518.3	5979.8	5617.2
37.5°	5425.4	5375.4	5255.7	5054.3	4880.8	4608.5	4658.6	5059.1	5967.7	6546.5	6010.4
40°	5816.2	5744.2	5598.9	5399.8	5231.3	5090.9	5026.2	5403.5	6424.3	7179.0	6501.3
42.5°	6194.8	6126.3	5953.0	5783.3	5572.0	5531.7	5452.3	5806.4	6923.8	7873.8	6999.5
45°	6602.6	6520.8	6310.7	6095.9	5962.7	5824.8	5865.0	6209.4	7413.4	8582.0	7522.1
47.5°	6984.9	6893.2	6645.4	6406.0	6332.8	6071.4	6243.6	6652.7	7922.6	9300.0	8039.9
50°	7191.2	7100.8	6894.5	6678.3	6620.9	6375.5	6653.9	7139.9	8456.2	10015.7	8536.9
52.5°	7363.4	7265.7	6995.8	6876.1	6859.1	6706.4	7159.4	7696.7	8989.9	10648.2	9016.7
55°	7546.6	7437.8	7093.5	6986.1	7064.2	7077.6	7759.0	8328.0	9554.0	11264.9	9469.8
57.5°	7757.8	7619.8	7187.5	7078.9	7264.5	7512.3	8447.7	8982.6	10108.4	11836.3	9872.8
60°	7956.9	7817.7	7368.2	7226.6	7480.6	8016.6	9237.8	9775.1	10736.2	12345.5	10253.8
62.5°	7995.9	7881.1	7512.3	7511.1	7773.7	8605.3	10173.1	10574.9	11284.4	12848.7	10595.6
65°	7319.4	7247.4	7028.7	7500.1	8193.7	9452.8	11214.8	11598.2	11981.6	13288.3	10896.1
67.5°	5570.8	5580.5	5564.6	6474.4	7854.3	10670.1	12722.9	12693.6	12842.5	13781.6	11241.7
70°	2547.2	2604.6	2978.3	4469.3	6292.5	10810.6	15216.4	14836.7	13923.2	14420.2	11540.8
72.5°	1376.2	1420.1	1572.8	2165.0	3783.1	9611.4	17079.9	17349.7	15360.5	14850.1	11212.4
75°	1009.8	1034.3	1140.5	1376.2	1588.6	7143.5	16411.9	17796.7	15540.0	13847.5	9682.3
77.5°	755.8	766.9	853.5	1090.5	813.2	3766.0	13113.6	14739.0	13302.9	11377.2	7152.1
80°	548.3	560.5	625.2	818.2	570.3	1377.4	9004.5	10345.3	9110.8	7252.3	3564.4
82.5°	378.5	383.5	411.5	556.9	398.1	534.8	5109.2	6066.6	5085.9	2544.9	962.3
85°	228.4	234.4	246.7	324.8	225.9	254.0	2205.4	2281.0	1520.3	608.1	299.2
87.5°	94.0	100.1	109.9	136.7	89.2	70.8	363.9	456.7	284.5	178.2	92.8
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°	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4	4166.4
2.5°	4172.6	4164.1	4140.8	4109.1	4079.8	4043.1	4027.2	4013.8	4001.6	3978.4	3967.5
5°	4198.2	4175.0	4112.7	4032.1	3940.6	3840.5	3742.8	3675.5	3618.1	3575.4	3540.0
7.5°	4237.2	4193.4	4079.8	3914.9	3704.9	3489.9	3295.8	3157.8	3054.0	3016.2	2950.3
10°	4277.6	4225.0	4027.2	3736.6	3374.0	3043.0	2785.3	2643.7	2560.7	2533.8	2492.3
12.5°	4325.2	4248.3	3945.4	3488.8	3004.0	2641.3	2416.6	2333.5	2290.9	2276.2	2279.8
15°	4394.8	4267.8	3822.1	3178.6	2651.1	2348.2	2202.9	2145.5	2123.5	2122.3	2127.2
17.5°	4447.4	4271.5	3630.4	2846.4	2379.9	2171.2	2051.4	2029.5	2044.2	2066.1	2074.7
20°	4505.9	4238.5	3378.8	2543.6	2189.5	2016.1	1966.1	1980.7	2016.1	2047.8	2058.8
22.5°	4547.4	4178.7	3074.8	2307.9	2024.6	1926.9	1924.5	1955.0	1974.6	1990.4	1999.0
25°	4584.1	4077.3	2752.4	2110.1	1889.1	1873.2	1900.0	1890.3	1876.9	1890.3	1898.8
27.5°	4611.0	3917.3	2464.2	1936.7	1793.9	1836.6	1820.7	1798.7	1797.5	1804.8	1817.0
30°	4602.5	3703.6	2227.3	1771.8	1726.7	1768.2	1730.3	1726.7	1723.0	1726.7	1740.1
32.5°	4602.5	3460.7	2045.4	1658.2	1684.0	1668.1	1664.4	1655.9	1641.2	1640.0	1655.9
35°	4628.1	3217.7	1889.1	1597.3	1648.5	1610.7	1613.1	1592.3	1561.8	1547.1	1561.8
37.5°	4680.6	3022.3	1734.0	1567.9	1586.2	1585.1	1575.2	1539.9	1486.1	1439.7	1455.6
40°	4807.6	2964.9	1627.8	1554.5	1557.0	1571.6	1545.9	1477.5	1355.5	1279.7	1289.6
42.5°	5006.6	3061.4	1604.5	1521.5	1537.4	1552.1	1501.9	1343.3	1256.5	1211.3	1211.3
45°	5259.4	3229.9	1654.7	1473.8	1491.0	1516.6	1367.7	1291.9	1252.9	1254.1	1260.2
47.5°	5579.3	3406.9	1747.4	1432.3	1423.8	1438.5	1278.5	1232.2	1178.3	1191.8	1226.0
50°	5949.3	3586.5	1835.4	1376.2	1349.3	1301.8	1221.1	1177.2	1108.7	1077.1	1085.6
52.5°	6349.9	3759.8	1870.7	1307.8	1268.7	1213.8	1182.0	1128.3	1045.3	992.8	991.6
55°	6729.6	3917.3	1831.7	1226.0	1188.2	1145.4	1140.5	1107.5	1018.4	945.2	945.2
57.5°	7088.6	4049.3	1734.0	1143.0	1106.4	1080.7	1113.7	1097.8	985.4	891.4	886.5
60°	7392.7	4139.6	1592.3	1058.7	1033.1	1019.7	1069.7	1064.8	939.0	834.0	830.4
62.5°	7634.5	4175.0	1436.0	978.2	972.0	947.6	1008.6	1008.6	880.5	777.9	774.2
65°	7823.7	4140.8	1277.3	898.7	910.9	874.3	934.2	926.8	818.2	727.7	722.9
67.5°	7991.0	4028.5	1101.5	820.6	848.7	802.3	856.0	838.9	749.8	677.7	672.8
70°	8065.5	3767.2	901.2	742.4	776.6	731.4	777.9	746.1	672.8	624.0	614.2
72.5°	7467.1	3131.0	709.5	660.6	689.9	653.3	693.6	656.9	589.8	567.8	549.5
75°	6177.7	2349.4	545.8	571.4	593.5	565.4	592.2	565.4	504.3	520.2	475.0
77.5°	4486.4	1586.2	417.6	477.4	487.2	472.5	495.8	465.2	410.3	406.6	388.3
80°	2231.0	929.3	327.3	377.3	373.6	363.9	390.7	376.1	329.7	349.2	345.5
82.5°	646.0	398.1	238.1	265.0	257.7	260.1	279.6	287.0	429.9	426.2	435.9
85°	202.7	156.3	142.9	147.8	140.4	144.1	164.8	327.3	302.9	177.0	191.7
87.5°	52.5	53.7	35.4	37.8	39.1	46.4	52.5	199.1	95.2	62.3	65.9
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)